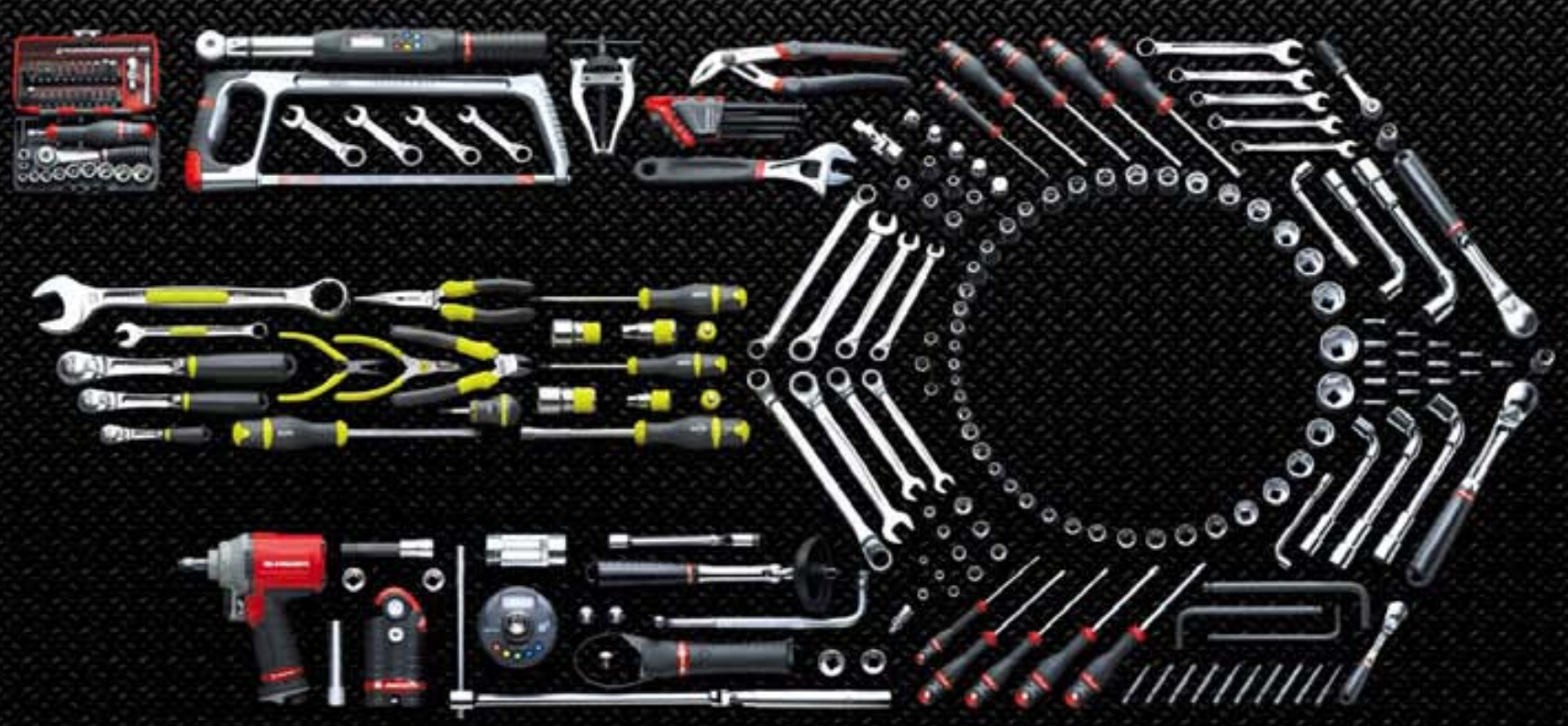
F13



FACOM®



GENERATING **SOLUTIONS ADAPTED** TO YOUR JOB

Supporting professionals for effectiveness and productivity gains : that is the spirit of our new catalogue.

Beyond listing FACOM tools, we hope it will help you to select the most effective tool for each operation.

This is why we added the **FACOM F13 application,** a new digital tool, available permanently, for easier searching for the ideal tool.

Supported by the values of our brand: passion, excellence, innovation, proximity and service, our engineers permanently search for new innovating solutions anticipating technological evolutions in your professions. Finally, FACOM leverages the power of the Industrial & Automotive Repair (IAR) division of the Stanley Black&Decker group: investment, creation, penetration of local and global markets, answers to specific needs in industry and automotive markets.



SUMMARY

- *HISTORY* **IV**
- *EXPERTISE* **VI**
- *INNOVATION* **VIII**
- *SMART TOOLS* **X**
- *SOLUTIONS* **XII**
- *EXCELLENCE* **XIV**
- *QUALITY* **XVI**
- *INTERNATIONAL CLIENTS* **XVIII**
- *SPONSORSHIP* **XX**
- *CONNECTED SERVICES* **XXII**
- *PRACTICAL INFORMATION* **XXIV**
- **PRODUCT CONTENTS** **1**









95 YEARS INNOVATION

1918



FACOM was incorporated with its 1st tool, the 101 wrench, for rail network maintenance.

1924



The 1st brand catalogue, including a range of 532 tools.

1946



FACOM launches its 1st demonstration vehicles, a strong value for customer contact.

1950



1st "Isoryl" handle screwdrivers, a quantum leap compared with wood handles.

1952



Creation of the lifetime guarantee for all tools, often copied, never equalled.

1960



The "type 500" lockgrip pliers, a new FACOM patent.

1964



New 72-teeth ratchet allowing 5° increments.



HISTORY

1987



U.306 patented puller, combining safety and easy fitting.

1988



CHRONO 1 roller cabinet: the 1st of a long series.

1997



The T5 vice pliers : 1st trigger vice pliers.

2004



779.CL1: heavy duty battery-operated LED lamp.

2009



R2NANO box: a ultra compact concentrate for tightening-torquing.

2012



TITANIUM impact wrench: the best weight-power ratio in the market.

2013



FACOM RFID: new range of smart tools.



A EUROPEAN MANAGEMENT TEAM **AVAILABLE TO YOU**

With several European cultures, FACOM's management team adapts to the multicultural environment of its markets and specifics of their user segments. This diversity allows us to better understand your needs.



AVAILABLE TO YOU TO MOVE FORWARD TOGETHER



FACOM PROXIMITY:
OUR ADVISORS BY YOUR SIDE DAY AFTER DAY

- **150,000 annual visits** to know and anticipate your needs.
- **A customer panel** evaluates new products before they are marketed.
- **200 demonstration vehicles** to stay in contact with your needs.
- **5,500 points of sales** serving you in 120 countries.
- The **user clubs and distributors** to communicate with you.

CERCLE D'ÉCHANGES FACOM

L'atelier
Le Club des Pros







FACOM-
INNOVATION
IN FIGURES

200+ Research & Development engineers.

10 Engineering Offices.

1 Design Laboratory dedicated to product ergonomics and design.

OUR INNOVATIONS SUPPORT YOUR DEVELOPMENT

Your work environment changes every day. New technologies transform your work. FACOM research centers permanently anticipate the emergence of these technologies, and the tools you will need tomorrow.

New designs, material science, innovating processes, progress in methods… everything is used to offer the **most adapted tools** which meet the **highest level of professional requirements.**

- More effective tools which increase your productivity.
- Smart tools simplifying daily operations.
- Ergonomic tools reducing efforts.
- Reliable tools ensuring total safety of use.
- Storage systems which help you gain time and prevent tool loss.





SMART TOOLING
SOLUTIONS AT YOUR SERVICE

As losing a tool can indeed result in a waste of time and a major risk of accident, the CribMaster® tool and storage management system, associated with FACOM smart tools, provides quality expertise and a global smart tooling solution. FACOM and CribMaster® combining to ensure your productivity and safety, supporting you permanently.

GLOBAL SAFETY & PRODUCTIVITY SOLUTION

FACOM® CribMaster Inventory Management System

Two brands of the division
Industrial & Automotive Repairfrom
the Stanley Black&Decker group.

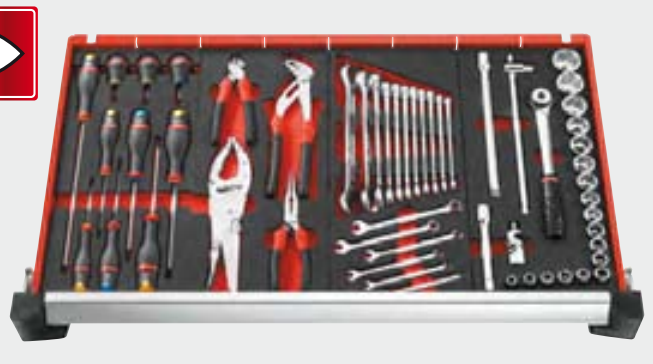
TODAY

1st GENERATION

- **Easily found fluorescent tools.**



- Controlled storage by coloured foam indicating when the tools are absent.



SMART TOOLING



TOMORROW

2nd GENERATION

- Tools directly **detectable.**

FACOM RFID



- A smart system indicating the presence of tools in their storage.





3rd GENERATION

- Tools **communicating** permanently.

FACOM RFID



- A smart system controlling the use made of each tool.





COMPREHENSIVE SOLUTIONS REGARDLESS OF YOUR FIELD

- Industry (maintenance and production).
- Automotive (checking and repair).
- Electricity.
- Electronics.
- Aeronautical.
- ...

FACOM engineers develop the most effective and most adapted tools to each technological universe.

YOUR CUSTOMISED **TOOLS**

To ensure your expectations are met, FACOM adapts its tools to your specifications sheets, even the most specific. Finally, as you are unique, we offer to customise your tools to the colours of your brand.

ALWAYS A FACOM TOOL SUITED TO YOUR REQUIREMENTS









- **Your workshop in your colours.**
- **Tool storage modules** adapted per product selection.
- **Workshop roller cabinets** with a set of specific drawers.
- **Special bits** for torque wrenches.
- **Finish** and marking of specific products.
- **Material** change.





FACOM-MANUFACTURING: A GUARANTEE OF COMPLIANCE

- More than 60 % FACOM tools are manufactured in our 11 French and European plants.
- More than 35 % FACOM tools are manufactured by industrial partners in the Stanley Black&Decker Group, according to strict specifications written by FACOM engineers.

TO MAKE THE **BEST TOOLS,** YOU NEED THE **BEST PLANTS**

Whatever their field of expertise, our production centers use the most advanced technologies. This excellence guarantees permanent reliability of your FACOM tools.

Flexibility of our European plants allows us to provide solutions within short lead times.

Main specialties:

- Cold forging.
- Hot forging.
- Machining.
- Thermal treatment.
- Surface treatment.
- Plastic injection.

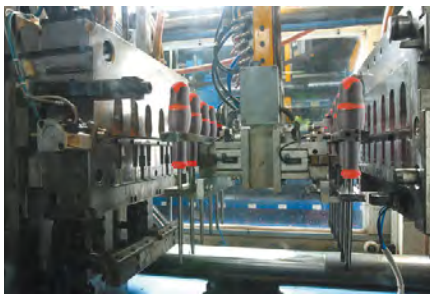


THE REQUIREMENT OF A DESIGNER-MANUFACTURER

The group's SFS permanent improvement system guarantees that the production tool is optimum in terms of:

- Quality exceeding standards required in all our plants.
- Reliability based on permanent investment.
- Safety on all levels of our plants.
- Ergonomics ensuring work in optimum conditions.

Stanley Black & Decker SFS





ENVIRONMENT-FRIENDLY MANUFACTURING

FACOM guarantees effective compliance with environmental standards. We build environmental awareness in our employees in all our company's sectors of activity. We commit to apply existing environmental laws and ensure our suppliers and service providers working on site also apply the standards, such as Reach regulations as well as the WEEE (Waste of Electric and Electronic Equipment) and RoHS (Restriction of Hazardous Substance) standards.



LIFETIME GUARANTEE BY FACOM

Tested in extreme conditions, FACOM tools benefit from a free replacement or repair lifetime guarantee.

The FACOM distributors network is in charge of applying this guarantee for you, mainly by immediate standard replacement.

Tools received in repair integrate an established process, based on traceability and regular auditing.

GARANTIE FACOM GUARANTEE

QUALITY AT YOUR SERVICE

Over the last **95 years,** FACOM has imposed an unequalled **quality standard.** This **search for excellence** is the obsession of FACOM teams.



TRAINING:

FACOM provides its employees and distributors with the training module(s) adapted to their specifics and expectations.

TECHNICAL SUPPORT:

Whatever your question, our advisors have access to the most comprehensive data to offer a reliable and precise answer, either directly or within 24h maximum.

CONTROL LABORATORY:

FACOM has its own control laboratory in its Morangis site. This laboratory offers different levels of services within the framework of its Cofrac certification No.2-1934 for torque measuring.



CLOSE TO YOUR NEEDS EVERYWHERE IN THE WORLD

Wherever you deploy your business, our international distribution network and our partners provide access to the best tooling and all FACOM services you need.



SELECTION **OF REFERENCES:**
AIR FRANCE, ALSTOM, AREVA, BOMBARDIER, EADS, PEUGEOT CITROËN, RENAULT NISSAN, ROLLS-ROYCE, SAFRAN, THALES, TOTAL, TOYOTA, VALEO, VINCI.

INTERNATIONAL CUSTOMERS



CUSTOM-MADE SOLUTIONS FOR INTERNATIONAL COMPANIES

As a trustworthy partner in the industry and automotive sectors, FACOM has a vast experience in business to business relations with major international companies and offers customised solutions. FACOM operates more particularly in the following industrial segments:

- Electrical energy and transmission.
- Automobile production and maintenance.
- Heavy goods vehicles, buses, construction equipment and fleet management.
- Rail and public transportation.
- Aeronautical.
- Offshore and marine.
- Military and government.

FACOM accompany their customers in their international development, by adapting their product and services offer to their local or global requirements.

GLOBAL SOLUTIONS FOR INDUSTRIAL & AUTOMOTIVE REPAIR

Throughout the world, you benefit from the power of the Stanley Black&Decker group and its 40,000 staff. With excellent control of local markets, the IAR international division and its 18 subsidiaries adapt our offer to the particular needs of each region.

WITH YOU
IN ALL YOUR
CHALLENGES



“Back when I was working on mopeds in my garage, FACOM was already the reference, the lifetime guarantee tool brand. We are truly proud to work for and represent a brand such as yours. We share the same colours, drive, eagerness for victory. There is a true reciprocity: in our workshops, our pits, FACOM tools support quality of our work in the eyes of our partners or visitors. For a young team such as ours, it is important. It's a win-win partnership.”

Sébastien Loeb

SPONSORSHIP

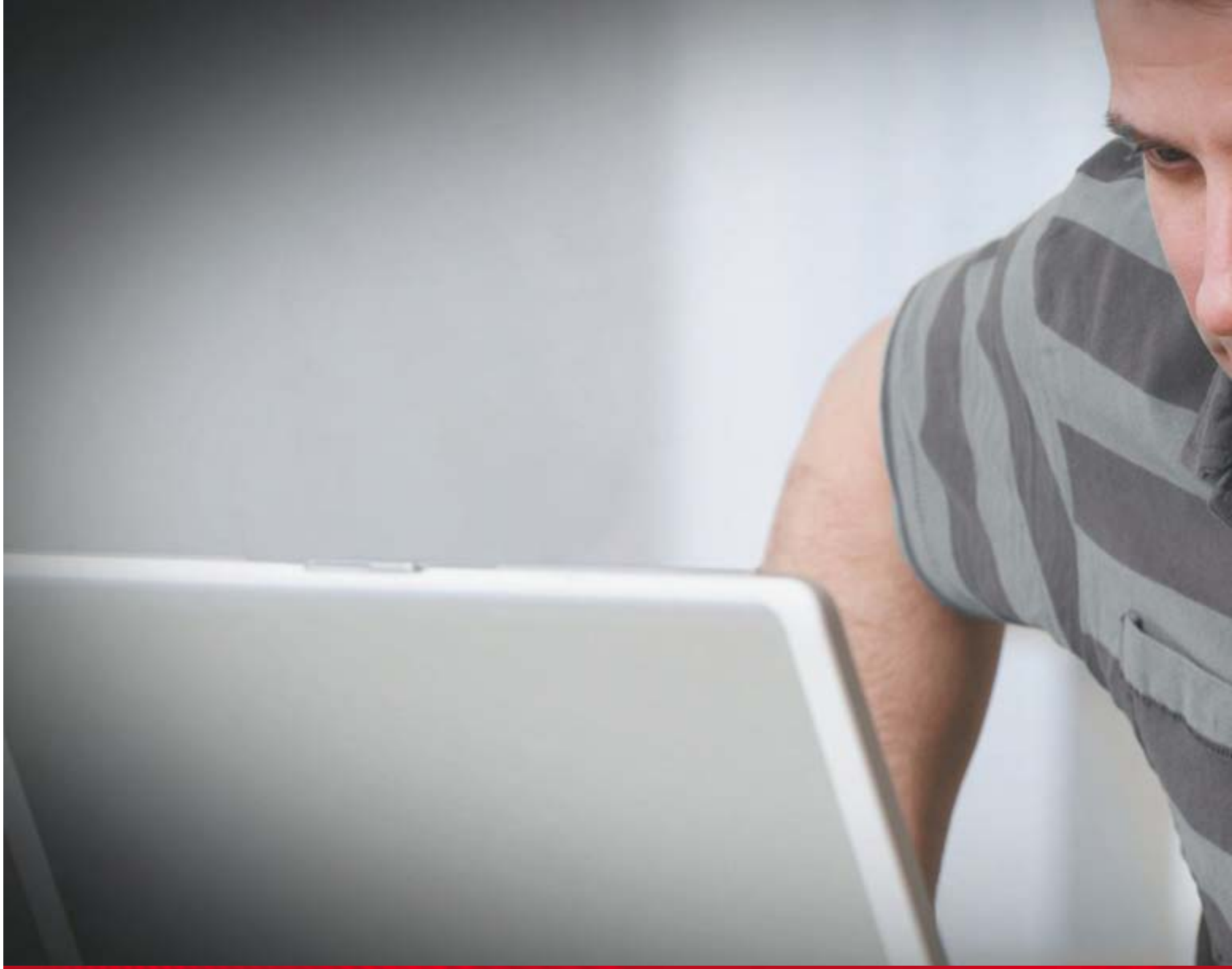


As a partner at the heart of the action, FACOM associates its values to those of sports teams to accompany them successfully.

Since 2011, FACOM has been the sports and commercial partner of the recent Sébastien Loeb Racing team, created by the nine-time WRC world champion. In red and black, SLR defends FACOM's colours in three events: Porsche Carrera Cup France with four cars racing, GT France with a Mercedes SLS AMG, European Le Mans Series with an Oreca prototype. This partnership with Sébastien Loeb highlights the values shared by FACOM and car racing: competition, passion for excellence, will to win year after year, and never rely on its Leader position.

Just like FACOM, to retain his champion's standing every year, Sébastien Loeb seeks the highest level of excellency day after day.

SÉBASTIENLOEBRACING



THE FACOM F13 APPLICATION





FACOM innovates to always ensure increasingly better access to the best in tooling.

COMPREHENSIVE
8,000 tool catalogue is available permanently.

DEMONSTRATION VIDEOS
Discover or share our latest innovations.

SCANNER
Access enriched information by scanning the pages of the printed catalogue.

GEOLOCALISATION
Find the sales point closest to you in a few seconds.



ALWAYS **HANDY** TO CHOOSE **THE RIGHT TOOL**

FACOM EXTRANET

FACOM quality of service up to your distributor: direct checking of availability of your tool, monitoring in real time the progress status of your orders or after-sales returns, order spare parts and accessories.



FACOM.COM

COMPREHENSIVE FACOM CATALOGUE

Updated permanently, for even more precise and reliable information.

ONLINE PRESELECTION

Transmitted directly to your FACOM distributor to ensure you get an offer adapted to your specific conditions.

VEHICLE GUIDE

To find instantly the tool suited to your application, according to the make and model of the vehicle.

DEMONSTRATION VIDEOS

Discover FACOM innovations.

ONLINE CUSTOMISATION

Customise your roller cabinet according to your needs.



AN INTERNATIONAL PRESENCE

Eastern Europe, North West Africa, Middle East
FACOM SAS
6/8 rue Gustave Eiffel - BP 99
91423 MORANGIS CEDEX - FRANCE
Tél. +33 (0)1 64 54 45 45
Fax +33 (0)1 69 09 60 93
www.facom.com

South East Asia, Singapore, China, Thailand, Indonesia, Malaisia
The Stanleyworks (Shanghai) Co.
Ltd8/F,Lujiazui Fund Tower
No.101,Zhulin Road,PuDong
District Shanghai,20122,China.
Tél. 8621-6162 1858
Fax 8621-5080 5101

USA
Stanley Black & Decker, Inc.
505 North Cleveland Ave
Westerville, OH 43082
Phone 800-800-TOOL
Fax 770-648-9108

Latin America
FACOM S.L.A
9786 Premier Parkway
Miramar, Florida 33025 USA
Tél. +1 954 624 1110
Fax +1 954 624 1152

Belgium
Luxembourg
Stanley Black&Decker Belgium BVBA
Egide Walschaertsstraat 14-16
2800 Mechelen
Tél. +32 (0)15 47 39 30
Fax +32 (0)15 47 39 70
Facom.Belgium@sbdinc.com

Scandinavia
FACOM Nordic
Flöjelbergsgatan 1c
SE-431 35 Mölndal, Sweden
Box 94, SE-431 22 Mölndal, Sweden
Tel. +45 7020 1510
Tel. +46 (0)31 68 60 60
Tel. +47 22 90 99 10
Tel. +358 (0)10 400 4333
Facom-Nordic@sbdinc.com

Spain
FACOM HERRAMIENTAS SRLU
C/Luis 1°, n° 60 - Nave 95 - 2ª Pta
Polígono Industrial de Vallecas
28031 MADRID
Tél. 91,778,21,13
Fax 91,778,27,53
facom@facomherramientas.com

The Netherlands
Stanley Black & Decker Netherlands B.V.
Holtum Noordweg 35
6121 RE BORN - NEDERLAND
Tél. 0800 236 23 62
Fax 0800 237 60 20
Facom.Netherlands@sbdinc.com

Switzerland
Stanley Works Europe Gmbh
Sitz: Dübendorf
In der Luberzen 42
CH-8902 Urdorf
Tél. +41-44-755-60-70
Fax +41-44-730-70-67
verkaufch.sbd@sbdinc.com
www.facom.com

Portugal
FACOM S.A.S.
6/8 rue Gustave Eiffel - BP 99
91423 MORANGIS CEDEX - France
Tél. +33 (0)1 64 54 45 45
Fax +33 (0)1 69 09 60 93
www.facom.com

CONTACTS



Germany
STANLEY BLACK & DECKER
Deutschland GmbH
Geschäftsbereich FACOM
Black & Decker Str. 40
65510 Idstein
Tel. +49 (0) 6126 21 0
Fax +49 (0) 6126 21 2114
verkaufde.facom@sbdinc.com
www.facom.com

Czech Republic
Slovakia
Stanley Black & Decker
Czech Republic s.r.o.
Türkova 5b
149 00 Praha 4 - Chodov
Tél. +420 261 009 780
Fax +420 261 009 784

Italy
SWK UTENSILERIE S.R.L.
Sede Operativa : Via Volta 3
21020 MONVALLE (VA)
Tél. 0332.790284 / 0332.790320
Fax 0332.790330
www.facom-tools.it

Austria
STANLEY BLACK & DECKER Austria GmbH
Oberlaaerstrasse 248
A-1230 Wien
Tel. +43 (0) 1 66116-0
Fax. +43 (0) 1 66116-613
verkaufat.sbd@sbdinc.com
www.facom.at

Poland
Stanley Black & Decker Polska Sp. z o.o
ul. Postępu 21D, 02-676 Warszawa
Tél. +48 22 46 42 700
Fax +48 22 46 42 701
facom@facom.pl

United Kingdom
Stanley Black & Decker UK Limited
3 Europa Court-Sheffield Business Park
Sheffield, S9 1XE
Tél. +44 1142 917266
Fax +44 1142 917131
www.facom.com

Greece
ΜΠΑΡΜΠΕΡΗΣ ΕΠΕ
Αργοναυτών 7-9
151 26 ΜΑΡΟΥΣΙ
Τηλ. 210-8062811 ή 12
Fax 210-8029352
www.facom.gr

France
FACOM S.A.S.
6/8 rue Gustave Eiffel - BP 99
91423 MORANGIS CEDEX - France
Tél. +33 (0)1 64 54 45 45
Fax +33 (0)1 69 09 60 93
www.facom.com

Technical information :
+33 (0)1 64 54 45 14
Monday to Friday, 8.00 to 12.30 and 13.15 to 18.00

Customised tools :
+33 (0)1 64 54 46 70
Fax : 33 (0)1 69 74 29 04
Monday to Friday, 8.00 to 12.15 and 13.30 à 17.00

Your Facom contact or distributor :

Name : .....

Tel. : .....

@ .....

CONTACT FACOM EXPERTS

Whatever your question, our advisors have access to the most comprehensive data to offer a reliable and precise answer, either directly or within 24h maximum.

- **Technical** information,
- **Search** for a product or a spare part,
- **Recommendations** of use,
- **Technical** documentation requests.



Technical information
Tel. (33) 01 64 54 45 14
8:00 to 12:30 - 13:15 to 18:00

Special tools
Tel. (33) 01 64 54 46 70
Fax 01 69 74 29 04
8:15 to 12:15 - 13:30 to 17:00

DOWNLOAD THE F13 APPLICATION

Download the FACOM F13 application, by scanning the QR Code below.





Available on the App Store

KEY PAGES

2 PRACTICAL INDEXES:

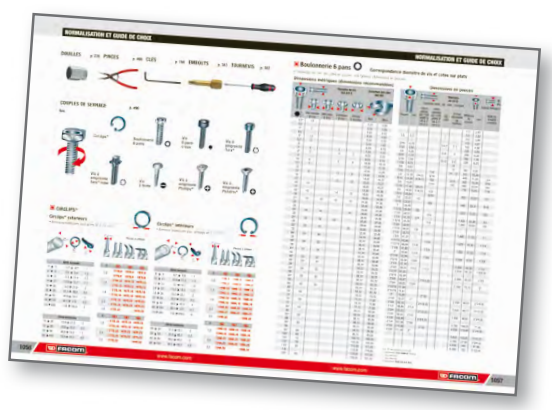
ALPHABETIC 1062
ALPHANUMERIC 1068

FACOM GUARANTEE

1060

FACOM AVAILABLE TO YOU:

ONLINE SERVICES XXIII
CLIENT CONTACT 1082
TECHNICAL INFORMATION 1083
SPECIAL TOOLS 1083



TECHNIQUE AND SAFETY:

SAFETY INSTRUCTIONS 1048
MEASUREMENT UNIT CONVERSION 1052
FACOM AND STANDARDS 1053
MECHANICAL ADJUSTMENTS 1054
LIGHTING STANDARDISATION 1055
SCREW AND CIRCLIP STANDARDISATION 1056

TABLE OF CONTENTS

WORKSTATIONS AND TOOL STORAGE

1	TOOL SETS	2
2	ROLLER CABINETS AND WORKSHOP FURNITURE	52
3	TOOLBOXES, CASES AND CHESTS	142

GENERAL TOOLING

4	FIXED-SIZE AND ADJUSTABLE WRENCHES	166
5	RATCHETS - SOCKETS - ACCESSORIES	226
6	TORQUE CONTROL	340
7	SCREWDRIVERS - KEYS - BITS	382
8	PLIERS - CIRCLIPS® PLIERS - LOCK-GRIP PLIERS	466
9	METROLOGY - MEASURING - MARKING-OUT	520
10	HAMMERS - IMPACT TOOLS	560
11	SAWING - DRILLING - CUTTING	584
12	PULLERS	626
13	LIGHTING	668
14	POWER TOOLS	676
15	PERSONAL EQUIPMENT - MAINTENANCE	714
16	NON-SPARKING TOOLS	736

SPECIALIST TOOLING

17	ELECTRICITY	758
18	ELECTRONICS	814
19	AUTOMOTIVE	856
20	HEAVY GOODS VEHICLES - INDUSTRIAL VEHICLES	988
21	AEROSPACE	1018



MECHANICAL ENGINEERING 4



ELECTRONICS 23



ELECTROMECHANICAL - SERVICING 18



ELECTRICITY 30





GENERAL SERVICES - PROPERTY MAINTENANCE 35



PLANT AND EQUIPMENT MAINTENANCE 38



AUTOMOTIVE 40



HEAVY GOODS VEHICLES 44



PW - AGRICULTURAL MAINTENANCE 46



DRIVERS SETS 51





CM.160A 527-piece mechanical tool set

• Metric and inch set supplied loose, as below.
Weight: 117.030 kg.



JET8.M160A Set CM.160A with 8-drawer roller cabinet JET.8GM3 and chest JET.C4GM3

Weight: 239 kg.





	Qtys	Set Description
440.JE18	18	Combination wrenches 6 to 24 mm
440.JU12	12	Combination wrenches 1/4" to 15/16"
440	6	Combination wrenches 26 to 30 and 32 mm
40LA	4	Long combination wrenches 33, 35, 36, 38 mm
39.JE10T	10	Roll set of short combination wrenches 3.2 to 11 mm
44.JE12	12	Open-end wrenches 6 to 32 mm
31.JE6T	6	Roll set of low profile open-end wrenches 8 to 19 mm
43.JE5T	5	Roll set of flare-nut wrenches 7 to 19 mm
113A	2	Adjustable wrenches 6" and 10"
115A.100	1	Pin wrench
S.440AP	29	1/2" Sockets and accessories: 8 to 32 mm (in a case)
S.40U	7	Rack socket-set 3/8" to 21/32"
S.41U	6	Rack socket-set 11/16" to 1"
S.141A	1	1/2" long drive hinged handle
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories (in a case)
R.40U	11	Rack socket-set 3/16" to 9/16"
K.432E	16	3/4" "truck" sockets and accessories: 30 to 55 mm (in a case)
NS.500A	26	1/2" impact sockets and accessories: 8 to 27 mm
NS.265M	21	Impact screwdriver set with bits
S.306A200	1	Torque wrench 40 to 200 Nm
AN	5	Screwdrivers for slotted heads: 3.5x75 - 4x100 - 5.5x100 mm and short: 4x35 - 6.5x35 mm
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
AWH10X175	1	Hexagonal blade screwdriver for slotted heads with hexagon shoulder
ANP	5	Screwdrivers with Phillips® PH 0-1-2 head and short: 1x35 - 2x35 mm
AWPH3X150	1	Hexagonal blade PH 3 screwdriver with hexagon shoulder
AND	3	Screwdrivers for Pozidriv® PZ heads no. 0-1-2
AWDH3X150	1	Hexagonal blade screwdriver for Pozidriv® PZ 3 with hexagon shoulder
A.VE	3	1,000 V insulated screwdrivers slotted head 3.5x100 - 4x100 - 6.5x150 mm
AP.VE	2	1,000 V insulated screwdrivers Phillips® PH 1x100 - 2x125
701B	1	Multifunction tester
AV.HT1B	1	Voltage tester screwdriver 90 to 480 Volts
AF	1	Screw starter for slotted heads
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
89.JP8A	8	Torx® keys no. 10 to 45
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
84E.J1	5	Case-set of nut spinners
AEF.J1	5	Case set of Micro-Tech® screwdrivers
94A.JE13T	13	Roll set of nut spinners 3.2 to 14 mm
187.18CPE	1	Sheathed combination pliers
192.16CPE	1	Piano wire diagonal cutters
181A.25CPE	1	Lockable multigrip pliers
181A.30G	1	Lockable multigrip pliers
185.20CPE	1	Sheathed straight half-round nose pliers
195.20CPE	1	Sheathed angled half-round nose pliers
189.17CPE	1	Sheathed round-nose pliers
188.16CPE	1	Sheathed flat-nose pliers
495A.22EL	1	Heavy-duty end nippers
191A.18EL	1	Compound-leverage end nippers
T5.L65	1	Trigger-release lock-grip pliers (with aluminium griping)
501	1	Long-nose lock-grip pliers
507A	1	Compact lock-grip pliers
509	1	Compact lock-grip pliers
521.200	1	Sliding jaw lock-grip clamp

	Qtys	Set Description
169A	3	Inside-circlip® pliers 13 - 18 - 23
167A	3	Outside-circlip® pliers 13 - 18 - 23
405.12MT	1	Precision diagonal cutters
401.MT	1	Extra-long flat-nose precision pliers
403.MT	1	Precision angled half-round nose pliers
893.316	1	Locking tape measure 3 m
234	1	Scriber
DELA.1051.05	1	Rule 300 mm
804	1	Feeler gauge, 19 blades
311B.60	1	Level with protractor dial
809.J2	8	Measuring and scribing instrument kit
603F	1	Hacksaw frame
668B.8	10	Bimetal hacksaw blades
STG	5	Files
AP6X80	1	Square punch
883B	1	Right-cut scroll shears
237.A	1	Thread restoring tool
996.5	1	Steel cable cutters
990.B1	1	Bolt cropper
980C	1	Serrated shears
887A	1	Nibblers
231	1	Three-square scraper
222A.TJ19	19	Box set of drill-bits 1 to 10 mm
221.227J2	41	Tap and die set (in a case)
830A.10	1	Ratchet tool-holder
830A.10L	1	Long ratchet tool-holder
AS.12LTP180T2A	12	Wallet set of needle files, 180 mm
245.J2	26	Set of gasket punches in a case
200H	2	Riveting hammers 24 and 32 mm
208A.32CBA	1	Interchangeable-tip mallets
212A.40	1	Dead-blow hammer
247.G	5	Sheathed nail-sets: 2 - 3 - 4 - 6 - 8 mm
249.G	5	Sheathed drift punches set: 2 - 3 - 4 - 6 - 8 mm
265.20	1	Constant-profile cape chisel
263.18	1	Chisel
256.4	1	Precision centre punch 4 mm
257.G	1	Sheathed automatic centre punch
134A.18	1	Pipe wrench
138A.18	1	Strap wrench 4"
334B.35	1	Tube cutter 3 to 35mm
239.EA	1	Inch dies
239	1	Refrigeration" flaring tool (in a case)
Y.RIV1	1	Riveting kit
374A.20	1	Double-action oil can
269	1	Crowbar
777B.230	1	Inspection lamp
U.306A140	1	3-leg puller Ø 7 to 140 mm
U.306G2	3	Legs for inside application
U.306M	1	Slide hammer
U.302	1	3-leg puller 6 to 80 mm
285.JS10	10	Set of stud extractors
840.1	1	Electricians knife with wire stripper
841	1	Electricians scissors
985761	1	Automatic wire cutter-stripper
449.Z3A	1	Crimping plier and terminal set
827B	1	Magnetic retriever
834.R2	1	Articulated mirror

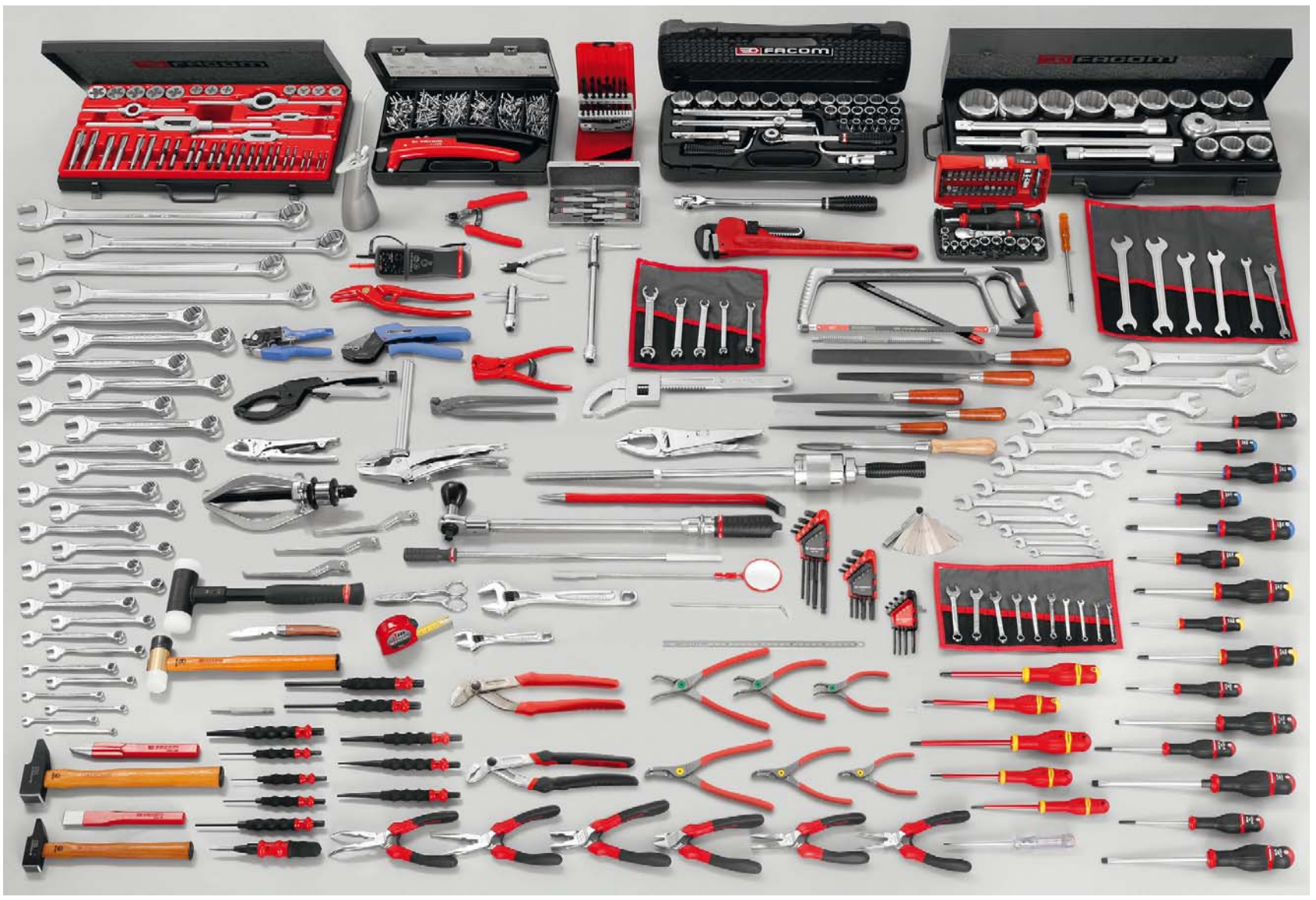
2000.BBM160A Set CM.160A with workbench 2000.BB1 and cabinet 2210

- Supplied with set of hooks CKS.2230-160.



CM.150A 343-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 83.930 kg.



JET7.M150A Set CM.150A with 7-drawer roller cabinet JET.7GM3 and chest JET.C4GM3

Weight: 218.5 kg.



	Qtys	Set Description
440.JE18	18	Combination wrenches 6 to 24 mm
440	6	Combination wrenches 26 to 30 and 32 mm
40LA	4	Long combination wrenches 33, 35, 36, 38 mm
39.JE10T	10	Roll set of short combination wrenches 3.2 to 11 mm
44.JE12	12	Open-end wrenches 6 to 32 mm
43.JE5T	5	Roll set of flare-nut wrenches 7 to 19 mm
31.JE6T	6	Roll set of low profile open-end wrenches 8 to 19 mm
113A.C	2	Adjustable wrenches 6" and 10"
115A.100	1	Pin wrench
S.440AP	29	1/2" Sockets and accessories: 8 to 32 mm (in a case)
S.141A	1	1/2" long drive hinged handle
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories (in a case)
K.432E	16	3/4" Sockets and accessories: 30 to 55 mm (in a case)
S.306A200	1	Torque wrench 40 to 200 Nm
AN	3	Screwdrivers for slotted heads: 3.5x75 - 4x100 - 5.5x100 mm
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
AWH10X175	1	Hexagonal blade screwdriver for slotted heads with hexagon shoulder
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
AWDH3X150	1	Hexagonal blade PH 3 screwdriver with hexagon shoulder
AND	3	Screwdrivers for Pozidriv® PZ heads no. 0-1-2
AWPH3X150	1	Hexagonal blade screwdriver for Pozidriv® PZ 3 with hexagon shoulder
A.VE	3	1,000 Volt insulated screwdrivers: slotted head 3.5x100 - 4x100 - 6.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers: Phillips® 1x100 - 2x125 mm
701B	1	Multifunction tester
AV.HT1B	1	Voltsage tester screwdriver 90 to 480 Volts
AF	1	Screw starter for slotted heads
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
89.JP8A	8	Torx® keys no. 10 to 45
AEF.J1	5	Case set of Micro-Tech® screwdrivers
187.18CPE	1	Sheathed combination pliers
192.16CPE	1	Piano wire diagonal cutters
181A.25CPE	1	Lockable multigrip pliers
181A.30G	1	Lockable multigrip pliers
185.20CPE	1	Sheathed straight half-round nose pliers
195.20CPE	1	Sheathed angled half-round nose pliers
189.17CPE	1	Sheathed round-nose pliers
188.16CPE	1	Sheathed flat-nose pliers
495A.22EL	1	Heavy-duty end nippers
191A.22EL	1	Compound-leverage end nippers
501	1	Long-nose lock-grip pliers
507A	1	Compact lock-grip pliers

	Qtys	Set Description
521.200	1	Sliding jaw lock-grip clamp
T5.L65	1	Trigger-release lock-grip pliers (with aluminium griping)
169A	3	Inside-circlip® pliers 13 - 18 - 23
167A	3	Outside-circlip® pliers 13 - 18 - 23
405.12MT	1	Precision diagonal cutters
893.316	1	Locking tape measure 3m
234	1	Scriber
DELA.1051.05	1	Rule 300 mm
804	1	Feeler gauge, 19 blades
603F	1	Hacksaw frame
668B.8	10	Bimetal hacksaw blades
STG	5	Files
AP6X80	1	Square punch
883B	1	Right-cut scroll shears
237.A	1	Thread restoring tool
996.5	1	Steel cable cutters
231	1	Three-square scraper
222A.JT19	19	Box set of drill-bits 1 to 10 mm
221.227J2	41	Tap and die set (in a case)
830A.10	1	Ratchet tool-holder
830A.10L	1	Long ratchet tool-holder
200H	2	Riveting hammers 26 and 32 mm
208A.32CBA	1	Plastic-tip mallet
212A.40	1	Dead-blow hammer
247.G	5	Sheathed nail-sets: 2 - 3 - 4 - 6 - 8 mm
249.G	5	Sheathed drift punches set: 2 - 3 - 4 - 6 - 8 mm
265.20	1	Constant-profile cape chisel
263.18	1	Chisel
256.4	1	Precision centre punch 4 mm
257.G	1	Sheathed automatic centre punch
134A.18	1	Pipe wrench
Y.RIV1	1	Riveting kit
374A.20	1	Double-action oil can
269	1	Crowbar
U.306A140	1	3-leg puller Ø 7 to 140 mm
U.306G2	3	Legs for inside application
U.306M	1	Slide hammer
840.1	1	Electricians knife with wire stripper
841	1	Electricians scissors
985761	1	Automatic wire cutter-stripper
827B	1	Magnetic retriever
834.R2	1	Articulated mirror
673838	1	Pre-insulated terminal crimping pliers

2000.BBM150A Set CM.150A with workbench 2000.BB1 and cabinet 2210

- Supplied with set of hooks CKS.2230-150.



CM.140A 202-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 31.650 kg.



	Qtys	Set Description
440.JE18	18	Combination wrenches 6 to 24 mm
440	6	Combination wrenches 26 to 30 and 32 mm
39.JE10T	10	Roll set of short combination wrenches 3.2 to 11 mm
44.JE12	12	Open-end wrenches 6 to 32 mm
113A.10C	1	Adjustable wrench 10"
S.440AP	29	1/2" Sockets and accessories: 8 to 32 mm (in a case)
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories (in a case)
AN	3	Screwdrivers for slotted heads: 3x75 - 4x100 - 5.5x100 mm
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
AWH10X175	1	Hexagonal blade screwdriver for slotted heads with hexagon shoulder
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
AWPH3X150	1	Hexagonal blade PH 3 screwdriver with hexagon shoulder
AND	3	Screwdrivers for Pozidriv® PZ heads no. 0-1-2
AWDH3X150	1	Hexagonal blade screwdriver for Pozidriv® PZ 3 with hexagon shoulder
A.VE	3	1,000 Volt insulated screwdrivers: slotted head 3.5x100 - 4x100 - 6.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers: Phillips® 1x100 - 2x125
701B	1	Multifunction tester
AV.HT1B	1	Voltsage tester screwdriver 90 to 480 Volts
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
89.JP8A	8	Torx® keys no. 10 to 45
187.18CPE	1	Sheathed combination pliers
192.16CPE	1	Piano wire diagonal cutters
181A.25CPE	1	Lockable multigrip pliers
185.20CPE	1	Sheathed straight half-round nose pliers
188.16CPE	1	Sheathed flat-nose pliers

	Qtys	Set Description
495A.22EL	1	Heavy-duty end nippers
501	1	Long-nose lock-grip pliers
T5.L65	1	Trigger-release lock-grip pliers (with aluminium griping)
169A	3	Inside-circlip® pliers 13 - 18 - 23
167A	3	Outside-circlip® pliers 13 - 18 - 23
893.316	1	Locking tape measure 3 m
234	1	Scriber
DELA.1051.05	1	Rule 300 mm
804	1	Feeler gauge, 19 blades
603F	1	Hacksaw frame
668B.8	10	Bimetal hacksaw blades
STG	5	Files
AP8X125	1	Square punch
200H	2	Riveting hammers 26 and 32 mm
208A.32CBA	1	Plastic-tip mallet
247.G	2	Sheathed nail sets 2 - 4 mm
249.G	2	Sheathed drift punches 2 - 4 mm
263.18	1	Chisel
256.4	1	Precision centre punch 4 mm
134A.18	1	Pipe wrench
Y.RIV1	1	Riveting kit
374A.20	1	Double-action oil can
840.1	1	Electricians knife with wire stripper
841	1	Electricians scissors
834.R2	1	Articulated mirror

2074.M140A Set CM.140A with 4-drawer chest BT.64

Weight: 63.7 kg.



CU.140A 190-piece inch mechanical tool set

- As CM.140A, but with inch sizes replacing metric tools (detail below).
- Supplied without content.

Weight: 32.960 kg.



	Qtys	Set Description
440.JU17	17	Combination wrenches 1/4" to 1"1/4
39.JU10T	10	Short combination wrenches 1/8" to 7/16" roll-set
44.JU8T	8	Open-end wrenches: 1/4"x5/16" to 1" 1/8"x1" 1/4" in roll set
44	3	Open-end wrenches 7/16"x1/2", 9/16"x5/8" and 11/16"x3/4"
S.440AUP	24	1/2" socket set 3/8" to 1 1/4" and accessories (in a case)

	Qtys	Set Description
RL.NANO-U1	38	1/4" sockets: 7/32" to 9/16" with accessories
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
800A.EX	1	Tape measure 2m/6Ft
804.U	1	Feeler gauge to 1/10 000"
202H	2	Engineers" hammers 1/2 and 1"

JET7.M140A Set CM.140A with 7-drawer roller cabinet JET.7GM3

Weight: 119.5 kg.



2000.BBM140A Set CM.140A with workbench 2000.BB1 and cabinet 2210

- Supplied with set of hooks CKS.2230-140.



CM.130A 168-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 19.965 kg.



	Qtys	Set Description
440.JE18	18	Combination wrenches 6 to 24 mm
44.JE12	12	Open-end wrenches 6 to 32 mm
113A.10C	1	Adjustable wrench 10"
S.440AP	29	1/2" sockets: 8 to 32 mm and accessories (in a case)
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories (in a case)
AN	3	Screwdrivers for slotted heads: 3x75 - 4x100 - 5.5x100 mm
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
AND	3	Screwdrivers for Pozidriv® PZ heads no. 0-1-2
A.VE	2	1,000 Volt insulated screwdrivers: slotted head 4x100 - 6.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers: Phillips® PH 1-2
AV.HT1B	1	Voltsage tester screwdriver 90 to 480 Volts
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
89.JP8A	8	Torx® keys no. 10 to 45
187.18CPE	1	Sheathed combination pliers
192.16CPE	1	Piano wire diagonal cutters
181A.25CPE	1	Lockable multigrip pliers

	Qtys	Set Description
185.20CPE	1	Sheathed straight half-round nose pliers
188.16CPE	1	Sheathed flat-nose pliers
501	1	Long-nose lock-grip pliers
169A	2	Inside-circlip® pliers13 - 18
167A	2	Outside-circlip® pliers 13 - 18
893.316	1	Locking tape measure 3 m
603F	1	Hacksaw frame
668B.8	10	Bimetal hacksaw blades
STG	5	Files
AP6X80	1	Square punch
200H.32	1	Riveting hammer 32 mm
208A.32CBA	1	Interchangeable-tip mallets
247.G	2	Sheathed nail-sets: 2 - 4 mm
249.G	2	Sheathed drift punches set: 2 - 4 mm
263.18	1	Chisel
256.4	1	Precision centre punch 4 mm
840.1	1	Electricians knife with wire stripper

2074.M130A Set CM.130A with 4-drawer chest BT.64

Weight: 50.9 kg.



JET6.M130A Set CM.130A with 6-drawer roller cabinet JET.6GM3

Weight: 102.7 kg.



CU.130A 155-piece inch mechanical tool set

- As CM.130A, but with inch sizes replacing metric tools (detail below).
- Supplied without content.

Weight: 21.510 kg.



	Qtys	Set Description
440.JU12	12	Combination wrenches 1/4" to 15/16"
44.JU8T	8	Open-end wrenches: 1/4"x5/16" to 1" 1/8"x1" 1/4" in roll set
44	1	Open-end wrenches 11/32"x13/32"
S.440AUP	24	1/2" socket set 3/8" to 1 1/4" and accessories (in a case)
RL.NANO-U1	38	1/4" sockets 7/32" to 9/16", bits with accessories (in a case)
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
800A.EX	1	Tape measure 2m/6Ft
202H.1	1	1" engineers hammer

2092.M130A Set CM.130A with roller chest 2092A

Weight: 54.2 kg.



2201.M130A Set CM.130A with cabinet 2201

- Supplied with set of hooks CKS.2082-130.



CM.120A 142-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 15.820 kg.



	Qtys	Set Description
440.JE14	14	Combination wrenches 7 to 24 mm
44.JE12	12	Open-end wrenches 6 to 32 mm
113A.10C	1	Adjustable wrench 10"
RL.NANO1	38	1/4" sockets: 5.5 to 14 mm and accessories (in a case)
SL.DBOX1	21	1/2" sockets: 8, 10 to 19, 21, 22, 24, 27, 30, 32 and accessories (in a case)
AN	3	Screwdrivers for slotted heads: 3x75 - 4x100 - 5.5x100
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
AND	3	Screwdrivers for Pozidriv® PZ heads no. 0-1-2
A4X100VE	1	1,000 Volt insulated screwdriver for 4 mm slotted heads
AP1X100VE	1	1,000 Volt screwdrivers for Phillips® PH 1 head
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
187.18CPE	1	Sheathed combination pliers
192.16CPE	1	Piano wire diagonal cutters
181A.25CPE	1	Lockable multigrip pliers

	Qtys	Set Description
185.20CPE	1	Sheathed straight half-round nose pliers
188.16CPE	1	Sheathed flat-nose pliers
501	1	Long-nose lock-grip pliers
169A.18	1	Inside-circlip® pliers
167A.18	1	Outside-circlip® pliers
893.316	1	Locking tape measure 3 m
603F	1	Hacksaw frame
668B.8	10	Bimetal hacksaw blades
STG	5	Files
AP6X80	1	Square punch
200H.32	1	Riveting hammer
208A.32CBA	1	Plastic-tip mallet
247.G	2	Sheathed nail-sets: 2 - 4 mm
249.G	2	Sheathed drift-punch sets: 2 - 4 mm
256.4	1	Precision centre punch 4 mm
840.1	1	Electricians knife with wire stripper

2070.M120A Set CM.120A with 2-drawer chest BT.62A

Weight: 39.2 kg.



2092.M120A Set CM.120A with roller chest 2092A

Weight: 52.7 kg.



CU.120A 102-piece inch mechanical tool set

- As CM.120A, but with inch sizes replacing metric tools. No 1/4" sockets and accessories (detail below).
- Supplied without content.

Weight: 18.630 kg.



	Qtys	Set Description
440.JU12	12	Combination wrenches 1/4" to 15/16"
44.JU8T	8	Open-end wrenches 1/4"x5/16" to 1"1/8x1"1/4
S.440AUP	24	1/2" socket set 3/8" to 1 1/4" and accessories (in a case)

	Qtys	Set Description
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
800A.EX	1	Tape measure 2m/6Ft stainless steel casing
202H.1	1	1" engineers hammer

JET5.M120A Set CM.120A with 5-drawer roller cabinet JET.5GM3

Weight: 94.1 kg.



2201.M120A Set CM.120A with cabinet 2201

Weight: 49.6 kg



CM.110A 122-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 11.980 kg.



	Qtys	Set Description
440.JE14	14	Combination wrenches 7 to 24 mm
113A.10C	1	Adjustable wrench 10"
RL.NANO1	38	1/4" sockets: 5.5 to 14 mm and accessories
SL.DBOX1	21	1/2" sockets: 8, 10 to 19, 21, 22, 24, 27, 30, 32 mm and accessories (in a case)
AN	3	Screwdrivers for slotted heads 3x75 - 4x100 - 5.5x100 mm
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
ANP	3	Screwdrivers for Phillips® heads PH0-1-2
AND2X125	1	Screwdrivers for Pozidriv® PZ 2 heads
A4X100VE	1	1,000 Volt insulated screwdriver for 4 mm slotted heads
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
187.18CPE	1	Sheathed combination pliers
192.16CPE	1	Piano wire diagonal cutters
181A.25CPE	1	Lockable multigrip pliers
185.20CPE	1	Sheathed straight half-round nose pliers

	Qtys	Set Description
188.16CPE	1	Sheathed flat-nose pliers
501	1	Long-nose lock-grip pliers
169A.18	1	Inside-circlip® pliers
167A.18	1	Outside-circlip® pliers
893.316	1	Locking tape measure 3 m
603F	1	Hacksaw frame
668B.8	10	Bimetal hacksaw blades
AP6X80	1	Square punch
200H.32	1	Riveting hammer 32 mm
208A.32CBA	1	Plastic-tip mallet
247.G	2	Sheathed nail sets 2 - 4 mm
249.G	2	Sheathed drift punches 2 - 4 mm
256.4	1	Precision centre punch 4 mm
840.1	1	Electricians knife with wire stripper

2050.M110-A Set CM.110A with 5-compartment toolbox BT.11A

Weight: 19.5 kg.





2120.M110A Set CM.110A with tool bag BS.T20

Weight: 16.3 kg.



CU.110A 84-piece inch mechanical tool set

- As CM.110A, but with inch sizes replacing metric tools (detail below).
- Supplied without content.

Weight: 14.720 kg.



	Qtys	Set Description
202H.1	1	1" engineers hammer
440.JU12	12	12-piece combination wrench set 1/4" to 15/16"
800A.EX	1	Tape measure 2m/6Ft stainless steel casing

	Qtys	Set Description
S.440AUP	24	1/2" 12-point sockets and accessories from 3/8" to 1"1/4
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"

CR4.M110A Set CM.110A with roller chest JET. CR4GM3

Weight: 86 kg.



CM.100A 59-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 10.320 kg.



	Qtys	Set Description
181A.25CPE	1	Locking power outlet block
187.18CPE	1	Combination pliers
192.16CPE	1	Diagonal cutters
200H.32	1	Riveting hammer
247.G	2	Nail sets 2 - 4 mm
249.G	2	Drift punches 2 - 4 mm
440.JE14	14	Combination wrenches 7 to 24 mm

	Qtys	Set Description
603F	1	Hacksaw frame
893.316	1	Tape measure 3 m
AV.E	1	1,000 Volt insulated for slotted head screws 4x100 mm
AN	3	Screwdrivers for slotted heads 3x75, 4x100, 5.5x100 mm
ANF	2	Forged blade screwdrivers for slotted heads 6.5x150 - 8x200 mm
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
S.430ADP	26	Box of 1/2" 12-point sockets

CU.100A 55-piece inch mechanical tool set

• As CM.100A, but with inch sizes replacing metric tools (detail below).
• Supplied without content.
Weight: 10.230 kg.



	Qtys	Set Description
440.JU12	12	Combination wrenches 1/4" to 15/16"
S.440AUP	24	1/2" socket set 3/8" to 1"1/4" and accessories (in a case)

	Qtys	Set Description
202H.1	1	1" engineers hammer
800A.EX	1	Tape measure 2m/6Ft

2026.M100A Set CM.100A with 66 cm plastic toolbox BP.P26

Weight: 14 kg.



2050.M100A Set CM.100A with 5-compartment toolbox BT.11A

Weight: 14.9 kg.



CM.LT3 39-piece mechanical tool set

• Metric set supplied loose, as below.
Weight: 5.370 kg.



	Qtys	Set Description
181A.25CPE	1	Locking power outlet block
187.18G	1	Combination pliers
192.16G	1	Diagonal cutters
200H.32	1	Riveting hammer
249	2	Drift punches 4 - 6 mm
263.18	1	Chisel

	Qtys	Set Description
440.JE9	9	Combination wrenches 7 to 19 mm
75.JN10	10	Open-socket wrenches 8 to 19 mm
82H.JP9A	9	Keys 1.5 to 10 mm
AN	2	Slotted head screwdrivers 5,5x100 - 6,5x150 mm
AND	2	Screwdrivers for Pozidriv® PZ heads 1-2

2060.LT3 Set CM.LT3 with 2-compartment toolbox BT.6A

Weight: 7.8 kg.





2050.LT3 Set CM.LT3 with 5-compartment toolbox BT.11A

Weight: 9.5 kg.





ELECTROMECHANICAL TOOL SETS

DEDICATED KITS

Each tool set is available with or without a service case.

STURDY AND COMPACT:

- These cases are designed to transform into genuine on-site workstations.
- Tidy storage arrangements and instant tool identification.
- Save time and avoid leaving tools between servicing jobs.



TROLLEY SYSTEM:

- Sturdy integral folding and lockable trolley system.
- For quickly and effortlessly transporting tools between servicing jobs.



TROLLEY-MOUNTED CASE:

- Makes transport easier and allows unrestricted working, with the tools always at the right height.



For details of our complete range of cases see p. 156









CM.EM40A 80-piece electromechanical set

• Supplied without content, detail below.
Weight: 4.700 kg.



	Qtys	Set Description
44.JE9T	9	Roll set of open-end wrenches 3.2 to 19 mm
113A.6C	1	Adjustable wrench
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories
AN4X35	1	Short screwdriver for slotted heads 4 mm
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x125 - 6.5x150 mm
AP.VE	3	1,000 Volt insulated screwdrivers for Phillips® PH head 0-1-2
AFU.2	1	Screw starter for slotted heads
83H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
193.16CPE	1	Sheathed straight half-round nose"telephone"pliers
194.17CPE	1	Sheathed end-entry wire stripper

	Qtys	Set Description
181A.25CPE	1	Lockable multigrip pliers
405.15	1	Precision diagonal cutters, axial cut
841	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
251A	3	Drift punches 2 - 3 - 4 mm
893.213	1	Locking tape measure 2 m
149.Y	1	Precision tweezers
834.R1	1	Articulated mirror
835A	1	Spring hook
836	1	Pen light

2238.EM40A Set CM.EM40A with trolley case BV.21TR1

Weight: 15 kg.



2038.EM40A Set CM.EM40A with trolley case BV.21ST

• Dimensions: 475 x 360 x 180 mm.
Weight: 11 kg.



CM.EM41A 122-piece electromechanical - servicing tool set

• Supplied without content, detail below.
Weight: 6.380 kg.



	Qtys	Set Description
39.JE16T	16	Roll set of combination wrenches 3.2 to 17 mm
113A.6C	1	Adjustable wrench
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 3.5x100 - 4x100 - 5.5x125 - 6.5x150 mm
AN4X35	1	Short screwdriver for slotted heads 4 mm
ANP1X35	1	Stubby screwdriver for Phillips PH 1 heads
AP.VE	3	1,000 Volt insulated screwdrivers for Phillips® PH 0-1-2 heads
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 1-2 heads
AFU.2	1	Screw starter for slotted heads
AFUX.1	1	Screw starter for cross-heads
94A	4	Box nutrunners 4 - 5 - 6 - 8 mm
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
181A.18G	1	Lockable multigrip pliers
179A.13	1	Inside-circlip® pliers
177A.13	1	Outside-circlip® pliers
405.MT	2	Precision diagonal cutters
401.MT	1	Extra-long flat-nose precision pliers
402.MT	1	Precision half-roundnose pliers
403.MT	1	Precision angled half-roundnose pliers

	Qtys	Set Description
449B	1	Crimping pliers
841	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
AS.6L160T2A	6	Needle files length 160 mm
200H.26	1	Riveting hammer
251A	4	Drift punches 1 - 2 - 3 - 4 mm
256.2,5	1	Precision centre punch
234	1	Scriber
893.213	1	Locking tape measure 2 m
804	1	Feeler gauge, 19 blades
AE.J1	8	Micro-Tech® screwdriver 1 to 2.5 mm and crossheads 000 and 00 (in a case)
149.Y	1	Precision tweezers
152.Y	1	Angled tweezers
153	1	Cross nose tweezers
834	1	Inspection mirror
835A	1	Spring hook
836	1	Pen light
827.1	1	Magnetic retriever

2029.EM41A Set CM.EM41A with case BV.29P and trolley BV.C1

Weight: 16.6 kg.



2208.EM41A Set CM.EM41A with case BV.51A



• Dimensions: 475 x 360 x 180 mm.
Weight: 14,1 kg.

2061.EM41A Set CM.EM41A with trolley case BV.51A



• Dimensions: 470 x 390 x 347 mm.
Weight: 16 kg.

CM.INFO 119-piece metric and inch electromechanical - servicing tool set

• Supplied without content, detail below.
Weight: 6.200 kg.



	Qtys	Set Description
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
22.JU5T	5	Roll set of "micromechanic" open end wrenches 3/16" to 9/16"
44.14X15	1	Open-end wrenches 14 x 15 mm
113A.8C	1	Adjustable wrench
R.420MU	29	1/4" socket set 3.2 to 14 mm and 3/16" to 9/16" and accessories
A.VE	5	1,000 Volt insulated screwdrivers 3.5x75 - 4x100 - 5.5x125 - 6.5x150 - 8x150 mm
AN5,5X35	1	Short screwdriver for slotted heads 5.5 mm
ANF10X200	1	Screwdrivers for slotted heads 10 mm
AP.VE	3	1000 Volt insulated screwdrivers for Phillips® PH 0-1-2 head
ANP1X35	1	Stubby screwdriver for Phillips® heads no. 1
AMR	1	Multiple blade "radio" screwdriver
AEF.J1	5	Case set of Micro-Tech® screwdrivers
AFU.1	1	Screw starter for slotted heads
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
82H.JU7	7	Wallet set of short hexagonal keys 0.028 to 3/32"
83H.JU10	10	Wallet set of long-reach hexagonal keys 1/16" to 3/8"
188.16CPE	1	Sheathed flat-nose pliers
195A.20CPE	1	Sheathed angled half-round nose pliers
181A.25CPE	1	Lockable multigrip pliers
405.10MT	1	High performance diagonal cutters
405.MT	1	Precision diagonal cutters

	Qtys	Set Description
432.LMT	1	Electronic holder pliers
433.LMT	1	Angled half-round nose pliers
405.15	1	Precision diagonal cutters, axial cut
163	1	Wire cutter and stripper
1230.40	1	Electronic soldering iron 40 W
839A.1	1	Desoldering pump
1802A	2	Black and red mini wire-holders
826.0	1	Mechanical finger
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
AS.6L140T2A	6	Roll set of needle files
207A.32CB	1	Plastic-tip mallet
251A	3	Drift punches 1.5 - 2.5 - 3.5 mm
893.213	1	Locking tape measure 2 m
804	1	Feeler gauge, 19 blades
804.U	1	Feeler gauge to 1/10 000"
149.Y	1	Precision tweezers
836	1	Pen light
834.R1	1	Articulated mirror
835A	1	Spring hook

2038.INFO Set CM.INFO with trolley case BV.21ST

• Dimensions: 530 x 390 x 180 mm.
Weight: 12,9 kg.



CM.BUR1 113-piece electromechanical - servicing tool set

• Supplied without content, detail below.
Weight: 6.730 kg.



	Qtys	Set Description
440	13	Combination wrenches 5.5 - 6 to 14 - 16 to 18 mm
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
AN	3	Screwdrivers for slotted heads 3.5x75 - 5.5x100 - 6.5x150 mm
A4X100VE	1	1,000 Volt insulated screwdriver for 4 mm slotted heads
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
AFU.2	1	Screw starter for slotted heads
AFUX.1	1	Screw starter for cross-heads
ARZ.4	1	Round blade angled screwdriver for slotted head screws 4 mm
MT.J3	11	Micro-Tech® tools
83H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
187.18CPE	1	Sheathed combination pliers
188.20CPE	1	Sheathed flat-nose pliers
183.20CPE	1	Sheathed angled half-round nose pliers
391.16CPE	1	Sheathed diagonal cutters
181A.18G	1	Lockable multigrip pliers
467	1	Set of pliers + bits for outside circlips®
469	1	Set of pliers + bits for inside circlips®
163	1	Wire cutter and stripper
1230.40	1	Electronic soldering iron 40 W
839A	1	Desoldering pump
1802A	2	Black and red mini wire-holders
840.1	1	Electricians knife with wire stripper
AS.6L160T0A	6	Roll set of needle files
200H.26	1	Riveting hammer
207A.32CB	1	Interchangeable-tip mallets
251A	5	Drift punches 1.5 - 2 - 3 - 4 - 5 mm
256.2,5	1	Precision centre punch
234	1	Scriber
893.213	1	Locking tape measure 2 m
804	1	Feeler gauge, 19 blades
827B	1	Magnetic retriever
AN6,5X35	1	Short screwdriver for slotted heads 6.5 mm

2038.BUR1 Set CM.BUR1 with trolley case BV.21ST

• Dimensions: 530 x 390 x 180 mm.
Weight: 13,05 kg.



2029.BUR1 Set CM.BUR1 with case BV.29P and trolley BV.C1

Weight: 16.5 kg.



CM.EL35 144-piece metric and inch electronic tool set

- Same composition as CM.EL34 plus the following tools.
- Supplied without content.

Weight: 11.030 kg.



	Qtys	Set Description
APZ.A	1	Angled screwdrives with double head Phillips® PH 0-1
ARZ.4	1	Round blade angled screwdriver 4 mm
HT.3X4	1	Tuning screwdrivers
827.2	1	Magnetic retriever
82H.JU7	7	Wallet set of short hexagonal keys 0.028 to 3/32"
432.MT	1	Precision half-roundstraight pliers
1130.1	1	Desoldering harness
AS.6L140T2A	6	Roll set of needle files

	Qtys	Set Description
200H.26	1	Riveting hammer
251A.JT9	9	Drift punch with guide sleeve 1 to 6 mm
AE.J1	8	Micro-Tech® screwdriver 1 to 2.5 mm and crossheads PH 000 and 00 (in a case)
84E.J1	6	Case-set of nut spinners
146.2Y	1	Tweezers for component outlet
372	1	Pen oil can

2138.EL35 Set CM.EL35 with case BV.21SX

- Dimensions: 530 x 390 x 180 mm.

Weight: 11,9 kg.





CM.EL34 99-piece metric and inch electronic tool set

• Supplied without content, detail below.
Weight: 4.685 kg.



	Qtys	Set Description
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
22.JU5T	5	Roll set of "micromechanic" open end wrenches 3/16" to 9/16"
113A.6C	1	Adjustable wrench
R.420MU	28	1/4" socket set 3.2 to 14 mm and 3/16" to 9/16" and accessories
A.VE	3	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x150 mm
AN4X35	1	Stubby screwdriver for slotted heads 4x35 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 0-1 heads
ANP1X35	1	Stubby screwdriver with Phillips® PH1 head
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 0-1 heads
AMR	1	Multiple blade "radio" screwdriver
AFUX.1	1	Screw starter for cross-heads
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
82H.JE10	10	Wallet set of hexagonal keys 0.9 to 6 mm
181A.18G	1	Lockable multigrip pliers
405.12MT	1	Precision diagonal cutters
405.MT	1	Precision diagonal cutters
416.PMT	1	Semi-flush cutter
431.MT	1	Short-nose pliers
433.LMT	1	Angled half-round nose pliers

	Qtys	Set Description
449B	1	Crimping pliers
1230.30	1	Soldering iron 30 W
839A	1	Desoldering pump
1802A	2	Black and red mini wire-holders
1803A	2	Black and red probes
1804B	2	Black and red connection leads
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
897.216	1	Tape measure 2 m
AFU.0	1	Screw starter-"electronic"
153	1	Cross nose tweezers
149.Y	1	Precision tweezers
152.Y	1	Angled tweezers
826.0	1	Mechanical finger
834	1	Inspection mirror
835A	1	Spring hook
836	1	Pen light
1830.1	1	Extra-soft silk brush
HT.2X2,4	1	Tuning screwdriver for slotted heads 2 and 2.4 mm

2138.EL34 Set CM.EL34 with case BV.21SX

• Dimensions: 530 x 390 x 180 mm.
Weight: 10,2 kg.



CM.EL33 103-piece metric electronic tool set

• Supplied without content, detail below.
Weight: 4.510 kg.



	Qtys	Set Description
39.JE10T	10	Roll set of short combination wrenches 3.2 to 11 mm
113A.6C	1	Adjustable wrench
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 2.5x50 - 3.5x75 - 4x100 - 5.5x150 mm
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 0-1 heads
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 0-1 heads
AN4X35	1	Short screwdriver for slotted heads 4 mm
ANP1X35	1	Stubby screwdriver for Phillips® PH 1 heads
AMR	1	Multiblade screwdriver 1.5 - 2 - 2.5 mm
HT.3	2	Tuning screwdrivers
AFU.1	1	Screw starter for slotted heads
AFUX.1	1	Screw starter for cross-heads
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
181A.18G	1	Lockable multigrip pliers
194.17VE	1	1,000 Volt insulated strippers
405.12MT	1	Precision diagonal cutters
406.MT	1	Diagonal cutters
431.MT	1	Short-nose pliers

	Qtys	Set Description
420.MT	1	Shaping pliers
403.MT	1	Precision angled half-roundnose pliers
1230.30	1	Soldering iron 30 W
839A.0	1	Desoldering pump
1802A	2	Black and red mini wire-holders
1803A	2	Black and red probes
1804B	2	Black and red connection leads
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
AS.6L140T2A	6	Roll set of needle files
897.216	1	Tape measure 2 m
149.Y	1	Precision tweezers
827.2	1	Magnetic retriever
834.R1	1	Articulated mirror
835A	1	Spring hook
836	1	Pen light
1830.1	1	Extra-soft silk brush

2138.EL33 Set CM.EL33 with case BV.21SX

• Dimensions 530 x 390 x 180 mm.
Weight: 14,8 kg.



CM.EL32 94-piece metric electronic tool set

• Supplied without content, detail below.
Weight: 4.075 kg.



	Qtys	Set Description
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
113A.6C	1	Adjustable wrench
R2NAN0	38	1/4" sockets: 3.2 to 14 mm and accessories
A.VE	3	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 0-1 heads
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 0-1 heads
AN4X35	1	Short screwdriver for slotted heads 4 mm
AMR	1	Multiple blade "radio" screwdriver
AFU.0	1	Screw starter-"electronic"
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
181A.18G	1	Lockable multigrip pliers
405.12MT	1	Precision diagonal cutters
406.MT	1	Diagonal cutters
431.MT	1	Short-nose pliers
420.MT	1	Shaping pliers
433.LMT	1	Angled half-round nose pliers
449B	1	Crimping pliers
1230.30	1	Soldering iron 30 W
839A.1	1	Desoldering pump
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
AS.6L140T2A	6	Flat needle file 140 mm
AS.6L160T2A	6	Round needle file 160 mm
897.216	1	Tape measure 2 m
149.Y	1	Precision tweezers
834.R2	1	Inspection mirror
835A	1	Spring hook
836	1	Pen light
1830.1	1	Extra-soft silk brush
HT.2X2,4	1	Tuning screwdriver for slotted heads 2 and 2.4 mm

2208.EL32 Set CM.EL32 with case BV.51A

• Dimensions: 475 x 360 x 180 mm.
Weight: 12,3 kg.



CM.EL31 69-piece metric electronic tool set

• Supplied without content, detail below.
Weight: 3.685 kg.



	Qtys	Set Description
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories (in a case)
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 2.5x50 - 3x75 - 4x100 - 5.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 0-1 heads
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 0-1 heads
AEF.J1	5	Case set of Micro-Tech® screwdrivers
176A.CPY	1	Compact multigrip pliers
405.12MT	1	Precision diagonal cutters
406.MT	1	Diagonal cutters

	Qtys	Set Description
420.MT	1	Shaping pliers
431.LMT	1	Electronics flat-nose pliers
433.LMT	1	Angled half-round nose pliers
449B	1	Crimping pliers
1230.30	1	Soldering iron 30 W
839A.1	1	Desoldering pump
AFU.0	1	Screw starter-"electronic"
1830.1	1	Extra-soft silk brush
HT.2X2,4	1	Tuning screwdriver for slotted heads 2 and 2.4 mm

2132.EL31 Set CM.EL31 with 3-compartment box BT.9

• Dimensions: 470 x 220 x 180 mm.
Weight: 8 kg.



CM.EL30 50-piece electronic tool set

• Supplied without content, detail below.
Weight: 3.795 kg.



	Qtys	Set Description
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x150 - 6.5x150 mm
AP.VE	3	1,000 Volt insulated screwdrivers for Phillips® PH 0-1-2 head
AD.VE	3	1,000 Volt insulated screwdrivers for Pozidriv® PZ 0-1-2 heads
AMR	1	Multiblade screwdrivers1.5 - 2 and 2.5 mm
74A.JL9	9	Nut spinners 3.2 to 10 mm
405.12MT	1	Precision diagonal cutters
406.MT	1	Diagonal cutters
431.MT	1	Short-nose pliers
433.LMT	1	Angled half-round nose pliers

	Qtys	Set Description
449B	1	Crimping pliers
1230.30	1	Soldering iron 30 W
839A.1	1	Desoldering pump
841.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
AS.6L140T2A	6	Flat needle file 140 mm
AS.6L160T2A	6	Round needle file 160 mm
149.Y	1	Precision tweezers
1830.1	1	Extra-soft silk brush
HT.2X2,4	1	Tuning screwdriver for slotted heads 2 and 2.4 mm

2132.EL30 Set CM.EL30 with 3-compartment toolbox BT.9

• Dimensions: 470 x 220 x 170 mm.
Weight: 8,75 kg.





CM.EL29 30-piece electronic tool set

• Supplied without content, detail below.
Weight: 2.055 kg.



	Qtys	Set Description
AN	3	Screwdrivers for slotted heads 3x75 - 4x100 - 5.5x150 mm
ANP	3	Screwdrivers for Phillips® PH head 0-1-2
406.8MT	1	Semi-flush diagonal cutter
432.MT	1	Precision half-round straight pliers
149.Y	1	Precision tweezers
AEF.J3	8	Case set of Micro-Tech® screwdrivers
841.2	1	Scissors

	Qtys	Set Description
845.1	1	Interchangeable-blade scalpel
1230.30	1	Soldering iron 30 W
839A.1	1	Desoldering pump
DELA.1021.02	1	Rule 150mm
113A.6C	1	Adjustable wrench
AS.6L160T2A	6	Roll set of needle files
181A.18G	1	Lockable multigrip pliers

2138.EL29 Set CM.EL29 with soft case BV.16

• Dimensions: 440 x 315 x 75 mm.
Weight: 2,9 kg.





SEE SECTION 17

ELECTRICITY P. 758

CM.E18 115-piece metric electricity tool set

• Supplied without content, detail below.
Weight: 11.190 kg.



	Qtys	Set Description
440.JE9	9	Set of combination wrenches 8 to 19 mm
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
113A.6C	1	Adjustable wrench
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x150 and 6.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 1-2 heads
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 1-2 heads
AF	1	Screw starter for slotted heads
AFP.1	1	Crosshead screw starter
AKZ	2	Offset screwdrivers 6 and 8 mm
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
188.16CPE	1	Sheathed flat-nose pliers
187.18CPE	1	Sheathed combination pliers
195.20CPE	1	Sheathed angled half-round nose pliers
185A.20CPE	1	Sheathed straight half-round nose pliers
391.16CPE	1	Sheathed diagonal cutters
190.20CPE	1	Sheathed end cutters
181A.25CPE	1	Lockable multigrip pliers
500	1	Lock-grip pliers
194.17CPE	1	Sheathed end-entry wire stripper

	Qtys	Set Description
985956	1	Jivaro LC 28 mm sheath stripper
673838	1	Pre-insulated terminal crimping pliers
1230.40	1	Electronic soldering iron 40 W
826.1	1	Flexible mechanical finger
701A	1	Multifunction tester
412B.10	1	Cable cutters
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
601	1	Hacksaw frame
668B.10	10	Saw blades
AP6X80	1	Square punch
200H.32	1	Riveting hammer 32 mm
203H.18	1	Electricians hammer
249	3	Drift punches 2 - 3 - 4 mm
259	1	Slim-profile chisel
256.6	1	Precision centre punch
805.1	1	Slide rule
320B.40	1	Level 400 mm
893.316	1	Locking tape measure 3 m
803.200M	1	Stainless steel rule 200 mm

2070.E18 Set CM.E18 with 5-compartment toolbox BT.13A

• Dimensions: 550 x 220 x 235 mm.
Weight: 16 kg.



2120.E18 Set CM.E18 with tool bag BS.T20

Weight: 15.8 kg.



CM.E17 103-piece metric electricity tool set

• Supplied without content, detail below.
Weight: 9.665 kg.



	Qtys	Set Description
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
44	4	Open end wrenches: 16x17 - 18x19 - 21x23 - 22x24 mm
113A.6C	1	Adjustable wrench
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x150 - 6.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 1-2 heads
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PZ 1-2 heads
AF	1	Screw starter for slotted heads
AKZ	2	Offset screwdrivers 6 - 8 mm
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
188.16CPE	1	Sheathed flat-nose pliers
187.18CPE	1	Sheathed combination pliers
195.20CPE	1	Sheathed angled half-round nose pliers
391.16CPE	1	Sheathed diagonal cutters
190.20CPE	1	Sheathed end cutters
181A.25CPE	1	Lockable multigrip pliers
509	1	Compact lock-grip pliers

	Qtys	Set Description
194.17CPE	1	Sheathed end-entry wire stripper
985956	1	Jivaro LC 28 mm sheath stripper
449B	1	Crimping pliers
1230.40	1	Electronic soldering iron 40 W
701A	1	Multifunction tester
412B.10	1	Cable cutters
256.6	1	Precision centre punch
259	1	Lateral cutting edge chisel
893.316	1	Locking tape measure 3 m
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
601	1	Hacksaw frame
668B.10	10	Saw blades
AP6X80	1	Square punch
200H.32	1	Riveting hammer 32 mm
203H.18	1	Electricians hammer
249	2	Drift punches 2 - 4 mm

2050.E17 Set CM.E17 with 5-compartment toolbox BT.11A

• Dimensions:470 x 220 x 235 mm.
Weight: 13.7 kg.





CM.E16 87-piece metric electricity tool set

• Supplied without content, detail below.
Weight: 7.715 kg.



	Qtys	Set Description
44	5	Open end wrenches 14x15 - 16x17 - 18x19 - 21x23 - 22x24 mm
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
113A.8C	1	Adjustable wrench 8"
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories
A.VE	4	1,000 Volt insulated screwdrivers 2.5x50 - 3.5x100 - 4x100 - 5.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 0-1 heads
AMS	1	Multiple blade screwdrivers: 5.5 mm / PH1 and 6.5 mm / PH2.
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
256.6	1	Precision centre punch
263.15	1	Chisel

	Qtys	Set Description
187.18CPE	1	Sheathed combination pliers
391.16CPE	1	Sheathed diagonal cutters
181A.25CPE	1	Lockable multigrip pliers
194.17CPE	1	Sheathed end-entry wire stripper
449B	1	Crimping pliers
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
601	1	Hacksaw frame
668B.10	10	Saw blades
203H.18	1	Electricians hammer

2163.E16 Set CM.E16 with leather case BV.7A

Weight: 11.5 kg.





CM.E15 59-piece metric electricity tool set

• Supplied without content, detail below.
Weight: 7.050 kg.



	Qtys	Set Description
22.JE6T	6	Roll set of "micromechanic" open-end wrenches 3.2 to 13 mm
113A.6C	1	Adjustable wrench
A.VE	4	1,000 Volt insulated screwdrivers for slotted heads 3.5x75 - 4x100 - 5.5x150 - 6.5x150 mm
AP.VE	2	1,000 Volt insulated screwdrivers for Phillips® PH 1-2 heads
AD.VE	2	1,000 Volt insulated screwdrivers for Pozidriv® PH 1-2 heads
AN4X35	1	Short screwdriver for slotted heads 4 mm
ANP1X35	1	Stubby screwdriver for Phillips® PH 1 heads
AF	1	Screw starter
AKZ	2	Offset screwdrivers 6 and 8 mm
83SH.JP9A	9	Sleeve set of spherical head hex keys 1.5 to 10 mm
188.16CPE	1	Sheathed flat-nose pliers
195.20CPE	1	Sheathed angled half-round nose pliers
391.16CPE	1	Sheathed diagonal cutters
190.20CPE	1	Sheathed end cutters

	Qtys	Set Description
181A.25CPE	1	Lockable multigrip pliers
194.17CPE	1	Sheathed end-entry wire stripper
673838	1	Pre-insulated terminal crimping pliers
1230.40	1	Electronic soldering iron 40 W
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
601	1	Hacksaw frame
668B.10	10	Saw blades
AP6X80	1	Square punch
200H.32	1	Riveting hammer 32 mm
203H.18	1	Electricians hammer
249	3	Drift punches 2 - 3 - 4 mm
256.6	1	Precision centre punch
259	1	Chisel
893.316	1	Locking tape measure 3 m

2050.E15 Set CM.E15 with 5-compartment toolbox BT.11A

• Dimensions: 470 x 220 x 235 mm.
Weight: 11.7 kg.





CM.SE 15-piece electricity tool set

• Supplied without content, detail below.
Weight: 1.855 kg.



	Qtys	Set Description
A.VE	5	1,000 Volt insulated screwdrivers for slotted heads 2.5x50 - 3.5x75 - 4x100 - 5.5x125 - 6.5x150 mm
AP.VE	3	1,000 Volt insulated screwdrivers for Phillips® PH 0-1-2 head
391.16VE	1	1,000 Volt insulated cutters
187.18VE	1	1,000 Volt insulated combination pliers
194.17VE	1	1,000 Volt insulated strippers
449B	1	Crimping pliers
840.1	1	Electricians knife with wire stripper
405.12MT	1	Precision diagonal cutters
442.MT	1	Precision half-round nose pliers

2180.SE Set CM.SE with compact leather bag BV.100

Weight: 2.6 kg.



CM.SG4A 68-piece property maintenance set

• Supplied without content, detail below.
Weight: 10.815 kg.



	Qtys	Set Description
44	9	Open-end wrenches 6 to 24 mm
113A.12C	1	Adjustable wrench 12"
AN	2	Slotted head screwdrivers 5,5x100 - 6,5x150 mm
ANF	2	Screwdrivers for slotted head screws 8x150 - 10x200 mm
ANP	2	Screwdrivers for Phillips® PH head 1-2
A4X100VE	1	Insulated screwdrivers for slotted heads 4 mm.
AP2X125VE	1	1,000 Volt insulated screwdrivers for Phillips® PH 2 head
AV.HT1B	1	Voltsage tester screwdriver 90 to 480 Volts
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
185.20G	1	Half-round nose pliers
192.16G	1	Diagonal cutters
495A.25EL	1	Heavy-duty end nippers
181A.25CPE	1	Lockable multigrip pliers
501	1	Long-nose lock-grip pliers
92A	9	Angled box wrenches 5.5 to 13 mm
269	1	Crowbar

	Qtys	Set Description
841A.4	1	Electricians scissors
840.1	1	Electricians knife with wire stripper
844.D	1	Retractable utility knife
601	1	Hacksaw frame
668B.10	10	Saw blades
PAM.B250EMA	1	Flat bastard file 250 mm
DRD.MD250EMA	1	Half-round second-cut file 250 mm
RD.MD200EMA	1	Flat second-cut file 200 mm
RAB.MD250EMA	1	Half-round second-cut wood rasp 250 mm
200H.32	1	Riveting hammer
256.4	1	Precision centre punch 4 mm
263.18	1	Chisel
234	1	Scriber
307B.40	1	Construction level 400 mm
893.316	1	Locking tape measure 3 m
131A.14	1	Stillson pipe wrench

2046.SG4A Set CM.SG4A with 5-compartment toolbox BT.13A

• Dimensions: 550 x 220 x 215 mm.
Weight: 17.1 kg.





MAINTENANCE AND INSTALLATION

PLUMBING.
INDUSTRIAL NETWORKS...

• This set contains all the basic plumbing tools and can be extended to suit specific needs.

Pipework tools. p. 720
See section 15



CM.SG3A 61-piece plumbing tool set

• Supplied without content, detail below.
Weight: 16.430 kg.



	Qtys	Set Description
44.JE12	12	Open-end wrenches 6 to 32 mm
113A.12C	1	Adjustable wrench 12"
105.280	1	Monkey wrench capacity 70 mm
AN	2	Slotted head screwdrivers 3.5x75 - 4.5x100 mm
ATHH	3	Wood handle screwdrivers for slotted head screws: 5.5x100 - 6.5x125 - 8x150 mm
ATHH.P	2	Wood handle screwdrivers for Phillips® PH head 1-2
83H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
192.16G	1	Diagonal cutters
495A.25EL	1	Heavy-duty end nippers
181A.25CPE	1	Lockable multigrip pliers
883B	1	Right-cut scroll shears
601	1	Hacksaw frame
668B.10	10	Saw blades
AP6X80	1	Square punch
231	1	Three-square scraper

	Qtys	Set Description
DRD.MD250EMA	1	Half-round second-cut file 250 mm
RD.MD200EMA	1	Flat second-cut file 200 mm
PAM.B300EMA	1	Flat bastard file 300 mm
200H.32	1	Riveting hammer 32 mm
1262H.100	1	Construction mallet
256.4	1	Precision centre punch 4 mm
263.18	1	Chisel
307B.40	1	Construction level 400 mm
DELA.401.00	1	Plastic folding rule 2 m
131A.18	1	Stillson pipe wrench
136A.2	1	Chain pipe wrench
336.28	1	Sliding pipe cutter
239.EA	1	Inch dies
239.M	1	Die for flange device for tubes 6 to 14 mm

2046.SG3A Set CM.SG3A with 5-compartment toolbox BT.13A

• Dimensions: 550 x 220 x 215 mm.
Weight: 24 kg.





INSTALLATION AND REPAIR

AIR-CONDITIONING. VENTILATION UNITS. REFRIGERATION UNITS…

- This set caters for most on-site repairs, including electromechanical, electrical and pipework.

Pipework tools. p. 720
See section 15



CM.RFCL 107-piece refridgeration and cooling tool set

- Supplied without content, detail below.

Weight: 11.430 kg.



Qtys	Set Description
440	11 Combination wrenches 6 to 14 - 17 - 19 mm
44.JE12	12 Open-end wrenches 6 to 32 mm
113A.10C	1 Adjustable wrench 10"
42	4 Flare-nut wrenches: 14x17 - 19x22 - 24x27 - 30x32
RL.NAN01	38 1/4" sockets: 5.5 to 14 mm and accessories
J.210	1 3/8" extension 125 mm
J.120A	1 3/8" drive sliding tee
J	3 3/8" 12-point sockets 13 - 17 and 19 mm
AN	4 Screwdrivers 3.5x75 - 4x100 - 5.5x150 and 8x150 mm
AN.35	2 Stubby screwdrivers 4 and 6.5 mm
ANP	2 Screwdrivers for Phillips® PH head 1-2
ARZ	3 Round blade offset screwdrivers 4 - 5.5 and 6.5 mm
AKZ	2 Offset hexagonal blade screwdrivers 6 and 8 mm
AV.HT2B	1 Tester screwdriver 110-250 Volts
187.18CPE	1 Sheathed combination pliers
193.16CPE	1 Sheathed straight half-round nose"telephone"pliers
192.16CPE	1 Piano wire diagonal cutters
181A.25CPE	1 Lockable multigrip pliers
840.1	1 Electricians knife with wire stripper
601	1 Hacksaw frame
CLE.MDAM100A	6 Wallet set of files
200H.32	1 Riveting hammer 32 mm
256.4	1 Precision centre punch 4 mm
263.15	1 Chisel
249	2 Precision drift punches, 2 and 4 mm
893.316	1 Locking tape measure 3 m
238B.16	1 Copper mini pipe cutter 16mm
239.EA	1 Inch dies
239.M	1 Die for flange device for tubes 6 to 14 mm
334B.35	1 Precision" copper pipe cutter

2163.RFCL Set CM.RFCL with leather case BV.7A

- Dimensions: 480 x 200 x 350 mm.

Weight: 16,4 kg.





INSTALLATION AND REPAIR

MOWERS.
MINI-TRACTORS.
BRUSH CUTTERS.
CHAINSAWS…

• Set contains metric and inch tools to cover all popular makes.



CM.JA 118-piece garden equipment tool set

• Supplied without content, detail below.
Weight: 18.800 kg.



	Qtys	Set Description
440.JE18	18	Combination wrenches 6 to 24 mm
440.JU12	12	Combination wrenches 1/4" to 15/16"
34.JT8	8	"Micromechanic" open-end wrenches 3.2 to 8 mm
75.JE16	16	Open-socket wrenches 8 to 24 mm
75.JU10	10	Open-socket wrenches 5/16" to 7/8"
75	4	Tube wrenches 6 and 7 mm, 1/4" and 15/16"
AN	4	Screwdrivers for slotted heads: 3.5x75 - 4x100 - 5.5x100 - 6.5x150 mm
ANF	2	Screwdrivers for slotted head screws 8x150 - 10x200 mm
ANP	3	Screwdrivers for Phillips® PH 1-2-3 head
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
188.20CPE	1	Sheathed flat-nose pliers

	Qtys	Set Description
195.20CPE	1	Sheathed angled half-round nose pliers
192.18CPE	1	Sheathed diagonal cutters
181A.25CPE	1	Lockable multigrip pliers
500	1	Lock-grip pliers
179A	2	Inside-circlip® pliers 13 - 18
177A	2	Outside-circlip® pliers 13 - 18
200H	2	Riveting hammers 26 and 40 mm
248.JT7	7	Long drift punches 2 to 6 - 8 - 10 mm
256.4	1	Precision centre punch 4 mm
262A.18	1	Constant-profile chisel
893.316	1	Locking tape measure 3 m
804	1	Feeler gauge, 19 blades

2046.JA Set CM.JA with 5-compartment toolbox BT.13A

Weight: 23.9 kg.





SERVICE AND REPAIR OF

COMBUSTION ENGINE OR ELECTRIC MOTOR-DRIVEN HANDLING EQUIPMENT.

• Full set of tools or any warehouse or site without a workshop.

Multimeters see section 19 p. 893

Tools for internal combustion engines p. 901 see section 19



CM.MAN 130-piece handling machines tool set

• Supplied without content, detail below.
Weight: 16.545 kg.



	Qtys	Set Description
440.JE11	11	Combination wrenches 7 to 19 mm
42	3	Flare-nut wrenches: 11x13 - 14x17 - 19x22 mm
113A.12C	1	Adjustable wrench 12"
RL.NAN01	38	1/4" sockets: 5.5 to 14 mm and accessories
SL.DBOX1	21	1/2" sockets: 8, 10 to 19, 21, 22, 24, 27, 30, 32 mm and accessories
AN	3	Screwdrivers for slotted heads: 4x100 - 5.5x100 - 6.5x150 mm
ANF8X150	1	Screwdrivers for slotted heads: 8 mm
A.VE	2	1,000 Volt insulated screwdrivers for slotted heads 3.5x100 - 5.5x150 mm
ANP	3	Screwdrivers for Phillips® PH head 1-2-3
AP1X100VE	1	1,000 Volt insulated screwdrivers for Phillips® PH 1 head
83H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
192.16G	1	Diagonal cutters
391.16VE	1	1,000 Volt insulated cutters
181A.25CPE	1	Lockable multigrip pliers
185.20G	1	Half-round nose pliers
187.16G	1	Combination pliers
187.18VE	1	1,000 Volt insulated combination pliers
177A	2	Outside-circlip® pliers 13 - 18
179A	2	Inside-circlip® pliers 13 - 18
501	1	Long-nose lock-grip pliers
803.300M	1	Flexible stainless 2-sided rule
805.1	1	Slide rule
601	1	Hacksaw frame
DRD.MD250EMA	1	Half-round second-cut file 250 mm

	Qtys	Set Description
RD.MD200EMA	1	Flat second-cut file 200 mm
249	3	Drift punches 3, 4 and 6 mm
263.20	1	Chisel
200H.32	1	Riveting hammer 32 mm
374A.20	1	Double-action oil can
378A	1	Lever grease pump
194.17VE	1	1,000 Volt insulated strippers
276	1	Contact file
449.Z3A	1	Crimping plier and terminal set
784B	1	Battery acid hydrometer
405.10MT	1	High performance diagonal cutters
AEF.J1	5	Case set of Micro-Tech® screwdrivers
840.1	1	Electricians knife with wire stripper
827.1	1	Magnetic retriever
834.R2	1	Articulated mirror
237.A	1	Thread restoring tool

CR4.MAN Set CM.MAN with 4-drawer rolling chest JET.CR4GM4

Weight: 90.7 kg.



SEE SECTION 19

AUTOMOTIVE P. 856

CM.A2 153-piece metric automotive tool set

• Supplied without content, detail below.
Weight: 17.390 kg.



	Qtys	Set Description
440.JE16T	16	Roll set of combination wrenches 8 to 24 mm
39.JE16T	16	Roll set of combination wrenches 3.2 to 17 mm
43.8X10	1	Flare-nut wrench
113A.8C	1	Adjustable wrench
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
SL.DBOX1	21	1/2" sockets: 8, 10 to 19, 21, 22, 24, 27, 30, 32 and accessories
AN	2	Slotted head screwdrivers 3.5x100 - 5.5x100 mm
AN5,5X35	1	Stubby screwdriver for slotted heads 5.5x35 mm
ANF	2	Screwdrivers for slotted heads 6.5x150 - 8x200 mm
ANP	2	Screwdrivers for Phillips® PH head 1-2
AND	2	Screwdrivers for Pozidriv® PZ heads 1-2
ANP1X35	1	Stubby screwdriver for Phillips® PH 1 heads
APZ.B	1	Offset screwdrivers for Phillips® PH 1-2 head
AV.BT1	1	Very low voltage detector screwdriver 6-24 Volts
82H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
181A.25CPE	1	Lockable multigrip pliers
192.16CPE	1	Piano wire diagonal cutters
187.20CPE	1	Combination pliers
185.20CPE	1	Sheathed straight half-round nose pliers
475A.J1	2	Circlip® reversible pliers
507A	1	Compact lock-grip pliers
DRD. MD200EMA	1	Half-round second-cut file 200 mm
803.300M	1	Flexible stainless 2-sided rule

	Qtys	Set Description
234	1	Scriber
805.1	1	Slide rule
603F	1	Hacksaw frame
231	1	Three-square scraper
840.1	1	Electricians knife with wire stripper
200H.32	1	Riveting hammer 32 mm
208A.32CBA	1	Mallet with plastic tips
249	2	Drift punches 2 - 4 mm
247	2	Nail sets 2 - 4 mm
256.6	1	Precision centre punch
263.15	1	Chisel
Y.105B	1	Riventing pliers
U.301	1	Outside puller Ø 80 mm
285.JS5	5	Stud extractors
449B	1	Crimping pliers
834.R2	1	Articulated mirror
827.1	1	Magnetic retriever
U.48	1	Automatic oil-filter wrench
NS.17X19	1	Reversible impact socket
804	1	Feeler gauge, 19 blades
777B.230	1	Inspection lamp
D.3-7	1	Power lever
DM.34	1	Hose clamps
D.169	1	Set of adapters

CM.S1 86-piece service station tool set

• Supplied without content, detail below.
Weight: 20.235 kg.



	Qtys	Set Description
440	10	Combination wrenches 13 - 14 - 17 - 19 - 21 to 25 - 32 mm
113A	2	Adjustable wrenches 6" and 10"
S.151	1	Ratchet 1/2"
S.215	1	1/2" extension: 250 mm
S	7	1/2" sockets 13 - 17 - 22 - 24 - 30 -32 - 34 mm
AN	2	Slotted head screwdrivers 3.5x100 - 5.5x100 mm
ANF	2	Screwdrivers for slotted heads 6.5x100 - 8x200 mm
AND	4	Screwdrivers for Pozidriv® PZ heads 1 to 4
ANX	3	Screwdrivers for Torx® heads 20, 25 and 27
AGT	1	T" handle screwdrivers
83H	3	Offset male keys 8, 10 and 17 mm
89	3	Torx® keys T8, T10, T15
181A.25CPE	1	Lockable multigrip pliers
187.16CPE	1	Sheathed combination pliers
500	1	Lock-grip pliers
200H.32	1	Riveting hammer 32 mm
263.15	1	Chisel
373.25	1	Oil can
827B	1	Magnetic retriever
B.J14	2	Spark plug sockets 14 mm 3/8" - 90 and 250 mm

	Qtys	Set Description
B.J16	2	Spark plug sockets 16 mm 3/8" - 90 and 250 mm
B.J16R	2	Jointed spark plug wrenches 16 mm - short and long
B.J21R	2	Jointed spark plug wrenches 21 mm - short and long
DM.28-9	1	Spark plug lead pliers
J.161	1	Palm control ratchet
DM.20	1	Spark plug starter
D.48-KIT	17	Drain set: wrenches and magnetic bits
J.210RC	1	Extension
J.240A	1	3/8" universal joint
J.153A	1	Long jointed ratchet
D.151A	1	Automatic tightening oil-filter wrench
U.48	1	Automatic oil-filter wrench
D.155	1	Oil filter wrench Ø 76 mm
D.156	1	Oil filter wrench Ø 86 mm
D.157	1	Oil filter wrench Ø 96 mm
804	1	Feeler gauge, 19 blades
276	1	Contact file
D.3-7	1	Power lever
77A.T0	1	Cross brace

2201.MS1 Service station cabinet

• Set CM.S1 with wall cupboard 2201 fitted with perforated panels and 2 drawers inside.
• Supplied with the hook system and 2 storage trays PL.399 and PL.346A.



CM.A1 42-piece metric automotive tool set

• Supplied without content, detail below.
Weight: 9.460 kg.



	Qtys	Set Description
440.JE11	11	Combination wrenches 7 to 19 mm
440	2	Combination wrenches 22 to 24 mm
AN	2	Slotted head screwdrivers 3.5x100 - 5.5x100 mm
ANF	2	Screwdrivers for slotted heads 6.5x1500 - 8x200 mm
ANP	2	Screwdrivers for Phillips® PH head 1-2
AND	2	Screwdrivers for Pozidriv® PZ heads 1-2
AV.BT1	1	Voltage tester screwdriver 6 to 24 Volts
181A.25CPE	1	Lockable multigrip pliers
192.16G	1	Diagonal cutters
187.18G	1	Combination pliers
185.20G	1	Half-round nose pliers
475A.20	1	Reversible circlip® pliers
507A	1	Compact lock-grip pliers

	Qtys	Set Description
840.1	1	Electricians knife with wire stripper
205H.50	1	Hammer
208A.32CBA	1	Mallet with interchangeable tips
248	3	Extra-long drift punches 2 - 4 - 6 mm
256.6	1	Precision centre punch
263.18	1	Chisel
449B	1	Crimping pliers
827.1	1	Magnetic retriever
U.48	1	Automatic oil-filter wrench
804	1	Feeler gauge, 19 blades
J.430AP	1	Set of sockets 8 to 22 mm
B.J16A1	1	Hinged spark plug wrench

2143.M 41-piece starter equipment tool set with 5-compartment box BT.11A

• Base set for workshop, technical school and learning.
• Detail below.
• Dimensions: 470 x 220 x 215 mm.
Weight: 12.375 kg.



	Qtys	Set Description
44.JE8T	8	Roll set of open-end wrenches 8 to 24 mm
J.431AP	19	Set of 3/8" sockets 7 to 24 mm and accessories
AR	3	Screwdrivers for slotted heads 3.5x75 - 5.5x100 - 6.5x150 mm
181A.25CPE	1	Lockable multigrip pliers
192.16G	1	Diagonal cutters
187.16G	1	Combination pliers
188.16G	1	Flat pliers

	Qtys	Set Description
501	1	Long-nose lock-grip pliers
200H.30	1	Riveting hammer 30 mm
249	2	Drift punches 2 - 4 mm
263.18	1	Chisel
B.J16A1	1	3/8" short socket for spark plugs 16 mm
B.J21A1	1	3/8" short socket for spark plugs 21 mm

SEE SECTION 19

BODYWORK P. 958

CR.CM92 135-piece bodywork tool set

- Set of forming tools.
- Supplied without content, detail below.

Weight: 20.340 kg.



	Qtys	Set Description
440.JP9	9	Combination wrenches 8 to 19 mm
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
SL.DBOX1	21	1/2" sockets: 8, 10 to 19, 21, 22, 24, 27, 30, 32 mm and accessories
AMZ.M1	1	Short bit holder
BP.102	1	Plastic case
ED.T	3	1/4" Pozidriv® tips 101-102-103
EH	4	1/4" 6-point tips 103 - 104 - 105 - 106
EP.T	3	1/4" Phillips® tips 101 - 102 - 103
ES.T	3	1/4" bits for slotted heads 134.5 - 136.5 - 148
EXR	6	1/4" Resistorx® tips 110 to 140
PL.400A	1	Plate for screwing bits
181A.25CPE	1	Lockable multigrip pliers
192.16CPE	1	Piano wire diagonal cutters
185.20CPE	1	Sheathed straight half-round nose pliers
501	1	Long-nose lock-grip pliers
893.316	1	Locking tape measure 3 m
234	1	Scriber
601	1	Hacksaw frame
668B.10	10	Saw blades
882A	1	Metal shears
RD.MD200EMA	1	Flat second-cut file 200 mm
DRD.MD200EMA	1	Half-round second-cut file 200 mm

	Qtys	Set Description
200H.50	1	Riveting hammer
208A.32CBA	1	Interchangeable-tip mallets
249	2	Drift punches 2 - 4 mm
256.6	1	Precision centre punch
259.P	1	Extra-flat chisel
861D.RPC	1	Round, flat, and convex head hammer
871B.45	1	Slim wedge dolly
861D.30	1	Bumping hammer
866D.32	1	Finishing hammer
868D.40BOC	1	Offset peening hammer
862D.60	1	Flat dresser
870B	1	Thin toe dolly
906A	1	Flat wedge dolly
875.3	1	Long single spoon
895A	1	Short single spoon
518.3	1	Lock-grip pliers
518.4	1	Lock-grip pliers
225.J3	3	End mills
851B	1	Frame for milled files
850.S350	1	Standard file
CR.D10	1	Windshield wiper arm remover
CR.D1	1	Trip removal tool

SEE SECTION 20

HEAVY GOODS VEHICLES P. 988

CM.159 171-piece heavy goods vehicle tool set with storage trays

- Set of 13 modules compatible with Facom rolling cabinet drawers.
- Detail below.

Weight: 21.365 Kg.







	Qtys	Set Description
R	17	1/4" 12-point sockets 5.5 to 14 mm, palm-control ratchet and accessories
S	21	1/2" 12-point sockets 10 to 32 mm, palm-control ratchet and accessories
440	20	Combination wrenches 6 to 24 and 27 to 32 mm
83H	10	Long-reach male keys 2 to 10 mm
ED	2	1/4" bits for Pozidriv® heads 101 - 102
EH	4	1/4" 6-point tips 103 - 104 - 105 - 106
ES	3	1/4" bits for slotted heads 134.5 - 136.5 - 148
EXR	6	1/4" Resistorx® tips 110 to 140
E	4	5/16" Torx® tips 240 to 255
181A.25CPE	1	Lockable multigrip pliers
185.20CPE	1	Half-round nose pliers
192.16CPE	1	Cutters
187.18CPE	1	Sheathed combination pliers
501	1	Long-nose lock-grip pliers
AND0X75	1	Screwdrivers for Pozidriv® PZ 0 heads
AW	4	Hexagonal blade screwdrivers for slotted heads 4X100 - 5.5X150 - 6.5X150 - 10X200 mm
AWP	3	Hexagonal blade screwdriver for Phillips® PH 1-2-3 heads
AWD	2	Hexagona blade screwdrivers for Pozidriv® PZ 1-2 heads
ANXR	7	Resistorx® screwdrivers 10 to 40
AN3,5X75	1	Screwdriver for slotted heads 3.5 mm
AN	2	Stubby screwdrivers for slotted heads 4 and 5.5 mm
ANP	2	Stubby screwdriver for Phillips® PH 1-2 heads
205H.50	1	DIN engineers hammer

	Qtys	Set Description
208A.32CBA	1	Heavyweight series mallet
263.18	1	Chisel
256.6	1	Precision centre punch
249	3	Drift punches 4 - 5 - 6 mm
601	1	Hacksaw frame
668B.10	10	Saw blades
893.213	1	Tape measure 2 m
234.S	1	Scriber
803.300M	1	Flexible stainless 2-sided rule
PAM.B250EMA	1	Flat bastard file 300 mm
DRD. MD250EMA	1	Half-round second-cut file 250 mm
RD.MD200EMA	1	Flat second-cut file 200 mm
CAR. MD200EMA	1	Square second-cut file 200 mm
TRI.MD200EMA	1	Triangular second-cut file 200 mm
177A.18	1	Straight-nose outside-circlip® pliers
179A.18	1	Straight-nose inside-circlip® pliers
197A.18	1	90°-nose outside-circlip® pliers
199A.18	1	90°-nose inside-circlip® pliers
59TX	4	Torx® ring wrenches 6 to 24 mm
JTX	5	3/8" sockets Torx® 8 to 16
STX	2	1/2" Torx® sockets 18 and 20
R. J ET S	3	Accessories for sockets
PL	13	Storage trays (314 - 321 - 323 - 325 - 326 - 327 - 330 - 332 - 333 - 335 - 348A - 360 - 627)

CM.105 114-piece heavy goods vehicle tool set with storage trays

- Set of 9 modules compatible with Facom rolling cabinet drawers.
- Detail below.

Weight: 14.260 Kg.





	Qtys	Set Description
R	17	1/4" 12-point sockets 5.5 to 14 mm, palm-control ratchet and accessories
S	21	1/2" 12-point sockets 10 to 32 mm, palm-control ratchet and accessories
440	20	Combination wrenches 6 to 24 and 27 to 32 mm
83H	10	Long-reach male keys 2 to 10 mm
ED	2	1/4" bits for Pozidriv® heads 101 - 102
EH	4	1/4" 6-point tips 103 - 104 - 105 - 106
ES	3	1/4" bits for slotted heads 134.5 - 136.5 - 148
181A.25CPE	1	Lockable multigrip pliers
185.20CPE	1	Half-round nose pliers
192.16CPE	1	Cutters
187.18CPE	1	Sheathed combination pliers
501	1	Long-nose lock-grip pliers

	Qtys	Set Description
AW	4	Hexagonal blade screwdrivers for slotted heads 4X100 - 5.5X100 - 6.5X150 - 10X200 mm
ANP0X75	1	Phillips® screwdriver PH 0
AWP	3	Hexagonal blade screwdriver for Phillips® PH 1-2-3 heads
ANXR	4	Resistorx® screwdrivers 10 to 30
AN	2	Stubby screwdrivers for slotted heads 4 and 5.5 mm
ANP	2	Stubby screwdrivers for Phillips® PH head 1-2
205H.50	1	DIN engineers hammer
208A.32CBA	1	Heavyweight series mallet
263.18	1	Chisel
256.6	1	Precision centre punch
249	3	Drift punches 4 - 5 - 6 mm
PL	9	Storage modules (321 - 323 - 330 - 627 - 670 - 671- 325 - 326 - 333)

HEAVY MECHANICAL
SHOP FURNITURE

THE VOLUME, STRENGTH, LOAD CAPACITY AND MANOEUVRABILITY OF THIS RANGE MAKE IT IDEAL FOR WORKSHOPS SERVICING:

Heavy goods vehicles - Civil engineering plant - Farming machinery - Industrial equipment



JET.T6M3



JET.8M5



JET.CR4GM3

For details of these products, see “workstations and storage”





Compatible with the FACOM modular storage system

CM.V9 174-piece metric agricultural maintenance tool set

• Supplied without content, detail below.
Weight: 40,000 kg.



	Qtys	Set Description
440.JE29	29	Combination wrenches 7 to 19, 21 to 24, 26 to 30, 32 to 36, 38 and 41 mm
44.JE8	8	Open-end wrenches 8 to 24 mm
RL.NAN01	38	1/4" sockets 5.5 to 14 mm and accessories
S.141A	1	1/2" long drive hinged handle
S.208	1	1/2" extension
S.232B	1	1/2" - 3/4" coupler
SL.440E	28	1/2" sockets 8 to 32 mm and accessories
K.230B	1	3/4"-1/2" coupler
K.151B	1	3/4" reversible ratchet
K.120B	1	3/4" drive sliding tee
K.210B-K.215B	2	3/4" extensions
K	12	3/4" sockets 30 - 32 - 33 - 34 - 36 - 38 - 41 - 42 - 46 - 50 - 54 - 55 mm
AN	2	Round-blade screwdrivers 3.5x75 and 4x100 mm
ANF	3	Forged-blade screwdrivers 5.5x150 - 6.5x150 and 8x200 mm
ANP	2	Screwdrivers for Phillips® PH head 1-2
AND	2	Screwdrivers for Pozidriv® PZ heads 1-2
82H.JL10	10	Wallet set of hexagonal keys 2 to 10 mm
181A.25CPE	1	Lockable multigrip pliers

	Qtys	Set Description
192.16CPE	1	Piano wire diagonal cutters
187.20CPE	1	Combination pliers
188.20CPE	1	Sheathed flat-nose pliers
501	1	Long-nose lock-grip pliers
T5.L100	1	Large-capacity lock-grip pliers
893.316	1	Locking tape measure 3 m
804	1	Feeler gauge, 19 blades
804.P	1	Feeler gauges to 1/100 mm
603F	1	Hacksaw frame
668B.10	10	Saw blades
200H	2	Riveting hammers 28 and 40 mm
208A.32CBA	1	Plastic-tip mallet
249	2	Drift punches 4 - 6 mm
247	2	Nail sets 4 - 6 mm
256.6	1	Precision centre punch
263.20	1	Chisel
252.10	1	Precision chisel
827B	1	Magnetic retriever
276	1	Contact file

2068.MV9 Set CM.V9 with site chest BT.28

• Dimensions: 615 x 398 x 392 mm.
Weight: 92,2 kg.





CU.V12 151-piece inch Caterpillar equipment tool set

• Supplied without content, detail below.
Weight: 42.340 kg.



	Qtys	Set Description
440.JU17T	17	Sleeve combination wrenches 1/4" to 1"1/4
40.LA	3	Long combination wrenches 1" 1/8, 1" 5/16 and 1"3/8
44	6	Open-end wrenches: 3/8x7/16 - 7/8x15/16 - 1/2x9/16 - 3/4x13/16 - 1"x1"1/4 to 1"1/8x1"1/4
34	4	Open-end wrenches 3/8", 7/16", 1/2", 9/16"
55A.JU10	10	Offset-ring wrenches 1/4" to 11/4"
113A.8C	1	Adjustable wrench
S.145	1	1/2" long drive hinged handle
S.232B	1	1/2" - 3/4" coupler
S.440AUP	24	1/2" socket set 3/8" to 1 1/4" and accessories (in a case)
K.140A	1	3/4" drive hinged adaptor
K.230B	1	3/4"- 1/2" coupler
K.151B	1	3/4" reversible ratchet
K.210B-K.215B	2	3/4" extensions
K.120B	1	3/4" drive sliding tee
K	11	3/4" sockets 1"1/4 - 1"5/16 - 1"7/16 - 1"1/2 - 1"5/8 - 1"11/16 - 1"13/16 to 2" - 2"3/16 - 2"1/4
K.125A	1	3/4" bar
AWH	2	Power screwdrivers for slotted heads 6.5x150 and 8x175 mm
AN	3	Round blade screwdriver 4x100 - 5.5x150 - 6.5x150 mm
ANP	5	Screwdrivers for Phillips® PH head 0 to 4
82H.JU13	13	Wallet set of offset hexagonal keys 32/32" to 3/4"
181A.25CPE	1	Lockable multigrip pliers
192.16CPE	1	Piano wire diagonal cutters
187.18CPE	1	Sheathed combination pliers
189.17CPE	1	Sheathed round-nose pliers
188.16CPE	1	Sheathed flat-nose pliers
500	1	Lock-grip pliers
893.316	1	Locking tape measure 3 m
804	1	Feeler gauge, 19 blades
816	1	Vernier caliper to 1/20 mm
603F	1	Hacksaw frame
668B.10	10	Saw blades
237.C	1	Thread restoring tool
882A	1	Metal shears
840B	1	Electricians knife
RD.MD200EMA	1	Flat second-cut file 200 mm
PAM.MD200A	1	Flat file with handle
DRD.MD200EMA	1	Half-round second-cut file 200 mm
TRI.MD200EMA	1	Triangular second-cut file 200 mm
200H.40	1	Riveting hammer 40 mm
202H.1/4	1	Engineers hammer
208A.32CBA	1	Mallet with interchangeable tips
248.JT7	7	Long drift punches 2 to 6 - 8 - 10 mm
256.8	1	Punch
263.20	1	Chisel
265.20	1	Constant-profile cape chisel
254A.10	1	Precision cape chisel
827B	1	Magnetic retriever
276	1	Contact file

2068.UV12 Set CM.V12 with site chest BT.28

• Dimensions: 615 x 398 x 392 mm.
Weight: 95 kg.





2174.MAG5 160-piece metric tool set with chest BT.66

- Detail below.
- Dimensions: 670 x 415 x 361 mm.

Weight: 82.925 kg.



Qtys	Set Description
440.JE25	25	Combination wrenches 6 to 34 mm
75.JE16	16	Open-socket wrenches 8 to 24 mm
75	4	Box wrenches 26 - 27 - 30 and 32 mm
113A	2	Adjustable wrench 6" and 15"
SL.161	1	Ratchet 1/2"
S.110	1	1/2" crank
S.120A	1	1/2" drive sliding tee
S.240A	1	1/2" universal joint
S.210-S.215	2	1/2" extension
S	22	1/2" sockets 8 to 19, 21 to 24, 26 to 30 and 32 mm
K.151B	1	3/4" reversible ratchet
K.210B-K.215B	2	3/4" extensions
K.120B	1	3/4" drive sliding tee
K	12	3/4" sockets 30 - 32 - 33 - 34 - 36 - 38 - 41 - 42 - 46 - 50 - 54 - 55 mm
AN	2	Screwdrivers for slotted heads 3.5x75 - 4x100 mm
AWH	5	Hexagonal blade screwdriver 5.5x125 - 6.5x150 - 8Ex175 - 10x175 and 12x250 mm
AND	3	Screwdrivers for Pozidriv® PZ heads no. 1-2-3
83H.JP9A	9	Sleeve set of hexagonal keys: 1.5 to 10 mm
181A.25CPE	1	Lockable multigrip pliers
181A.30G	1	Lockable multigrip pliers
192.16CPE	1	Sheathed piano wire diagonal cutters
187.16CPE	1	Sheathed combination pliers
495A.22EL	1	Heavy-duty end nippers

Qtys	Set Description
475A.J1	2	Circlip® reversible pliers
501	1	Long-nose lock-grip pliers
893.316	1	Locking tape measure 3 m
234	1	Scriber
805.1	1	Slide rule
603F	1	Hacksaw frame
668B.10	10	Saw blades
990.B0	1	Compact bolt cropper
882A	1	Metal shears
844.D	1	Knife
PAM.MD200EMA	1	Flat second-cut file 200 mm
RD.MD200EMA	1	Round second-cut file 200 mm
RAB. DRDMD250EMA	1	Half-round second-cut rasp 250 mm
200H	2	Riveting hammers 32 and 50 mm
249.JT7	7	Roll set of drift punches 2 to 10 mm
247	6	Nail sets 2 to 6 and 8 mm with roll
262A.20	1	Chisel
269	1	Crowbar
121A.1'	1	Pipe wrench
Y.RIV1	1	Riveting kit
449B	1	Crimping pliers
701B	1	Multifunction tester
U.48	1	Automatic oil-filter wrench

CM.AG4 57-piece metric farm machinery tool set

• Supplied without content, detail below.
Weight: 13.810 kg.



	Qtys	Set Description
440.JE9	9	Combination wrenches 8 to 19 mm
113A	2	Adjustable wrench 6" and 15"
SL.DB0X1	21	1/2" sockets 8 to 32 mm and accessories
AN4X100	1	Round-blade screwdriver
AWH	2	Hexagonal-blade screwdriver 6.5x150 - 8x175 mm
ANP	2	Screwdrivers for Phillips® PH head 1-2
AND	2	Screwdrivers for Pozidriv® PZ heads 1-2
82H	5	Hexagonal keys 4 - 5 - 6 - 8 - 10 mm
181A.25CPE	1	Lockable multigrip pliers
187.16G	1	Combination pliers
495A.22EL	1	Heavy-duty end nippers

	Qtys	Set Description
500	1	Lock-grip pliers
603F	1	Hacksaw frame
840.2	1	Knife
200H.40	1	Riveting hammer 40 mm
249	2	Drift punches 4 - 6 mm
263.20	1	Chisel
269	1	Crowbar
131A.18	1	Stillson pipe wrench 60 mm, 2"
DRD. MD200EMA	1	Half-round second-cut file 200 mm

2146.MAG4 Set CM.AG4 with 5-compartment toolbox BT.13A

• Dimensions: 550 x 220 x 215 mm.
Weight: 20,6 kg.





2145.MAG1 29-piece metric tool set with 3-compartment box BT.9

• Detail below.
• Dimensions: 470 x 220 x 170 mm.
Weight: 13.730 kg.



	Qtys	Set Description
44.JE8	8	Open-end wrenches 8 to 24 mm
75.JN8	8	Open-socket wrenches 8 to 24 mm
113A	2	Adjustable wrench 6" and 12"
AR	3	Round-blade screwdrivers 3.5x75 - 6.5x150 and 8x200 mm
181A.25CPE	1	Lockable multigrip pliers
192.20G	1	Diagonal cutters
187.20G	1	Combination pliers
893.316	1	Tape measure 3 m
603F	1	Hacksaw frame
200H.42	1	Riveting hammer 42 mm
263.18	1	Chisel
374A.20	1	Double-action oil can

2013.M 13-piece vehicle tool bag



• 13-piece metric tool set in a soft roll bag (N.38A- 10C).
Weight: 1.945 kg.

	Qtys	Set Description
44	4	Open-end wrenches: 8X9 - 10X11 - 12X13 - 17X19 mm
AM.D	1	Blade handle
AMZ	4	Reversible blades: Torx® 10x15 - 20x25, slotted head 4x6.5 mm and PZ 1x2
181A.25CPE	1	Lockable multigrip pliers
192.18CPE	1	Sheathed diagonal cutters
113A.10C	1	Adjustable wrench 10"
DF.3	1	Wire brush.

2024.M 23-piece touring kit



• 24-piece metric tool set in a soft case 450 x 353 x 80 mm (BV.16).
Weight: 4.770 kg.

	Qtys	Set Description
44	7	Open-end wrenches: 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 mm
AM.D	1	Blade handle
AMZ	5	Reversible blades: Torx® 10x15 - 20x25 - 30x40, Slotted head 4x6.5 mm and PZ 1x2
181A.25CPE	1	Lockable multigrip pliers
192.18CPE	1	Sheathed diagonal cutters
113A.10C	1	Adjustable wrench 10"
500	1	Lock-grip pliers
200H.30	1	Riveting hammer 30 mm
249.4	1	Drift punches 4 mm
DF.3	1	Wire brush.
L.16AM	1	Box wrench for spark plugs
804	1	Feeler gauge, 19 blades
D.3-7	1	Power lever

2049.M 48-piece over land kit



• 48-piece metric tool set in a double access soft case 420 x 300 x 110 mm (BS.12).
Weight: 8.300 kg.

	Qtys	Set Description
44	9	Open-end wrenches 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 mm
AM.D	1	Blade handle
AMZ	9	Reversible blades: Torx® 10x15 - 20x25 - 30x40, slotted head 4x6.5, PZ 1x2, PH 1X2, 6-point 4-5-6
181A.25CPE	1	Lockable multigrip pliers
185A.20CPE	1	Sheathed straight half-round nose pliers
192.18CPE	1	Sheathed diagonal cutters
500	1	Lock-grip pliers
113A.10C	1	Adjustable wrench 10"
200H.30	1	Riveting hammer 30 mm
249.4	1	Drift punches 4 mm
J.161	1	3/8" palm control ratchet
J	4	3/8" socket accessories: 2 extensions, cardan, sliding handle
J.H	13	3/8" metric sockets on rack 8 to 19 and 21 mm
L.16AM	1	Box wrench for spark plugs
804	1	Feeler gauge, 19 blades
D.3-7	1	Power lever
DF.3	1	Wire brush.



MOBILE STORAGE

54



JET+ roller cabinet selection guide **54**
JET+ roller cabinets **56**
JET+ safety cabinets **62**
JET+ mobile workbenches **63**
Additional chests for JET+ roller cabinets **65**
Roller chests **66**
Workstations **68**
CHRONO+ roller cabinets **70**
Roller cabinet accessories selection guide **72**
Roller cabinet accessories **73**

JETLINE MODULAR FIXED STORAGE

80



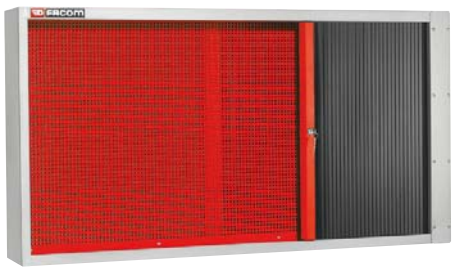


Base units **82**
Top units **85**
Top cabinets **87**
Vertical fastening boards **89**
Worktops **91**
Feet and spacers **91**
Assembly kits and accessories **92**

ROLLER CABINETS AND WORKSHOP FURNITURE 2



CLASSICAL FIXED STORAGE 94











Workbenches 94
Roller cabinets and tool trolleys 100
Drawer cabinets 102
Large size cabinets 106
Worktop cabinets and wall storage units 107

TOOL STORAGE 109





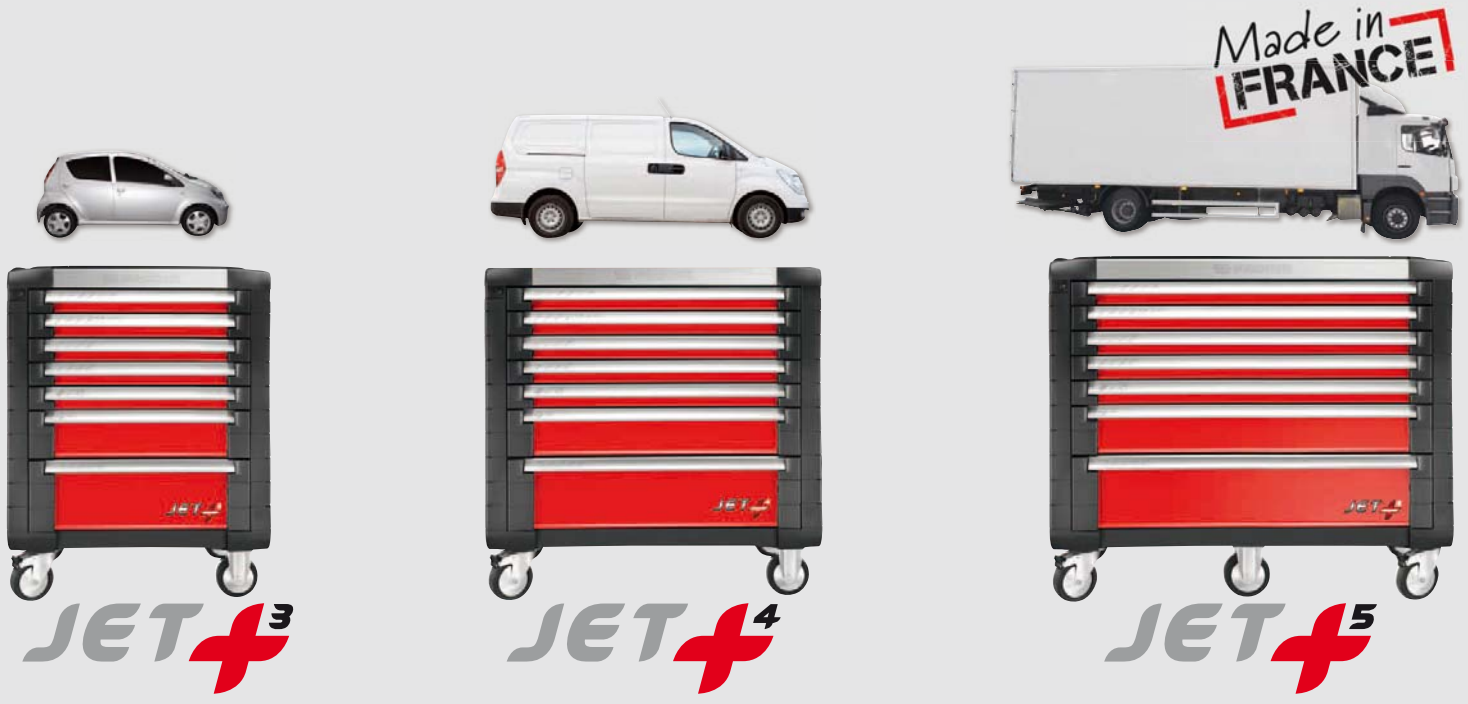


Tool storage panels 109
CKS storage and fastening system 109
Drawer tool storage 116

JET+ roller cabinets

MOBILE STORAGE

THE CHOICE OF SIZE IS YOURS



3 modules per drawer

4 modules per drawer

5 modules per drawer

choice

28 possibilities: 3 widths, 6 drawer sets, 2 colours.



storage

Storage capacity **suited to your needs** (3 to 5 modules per drawer).



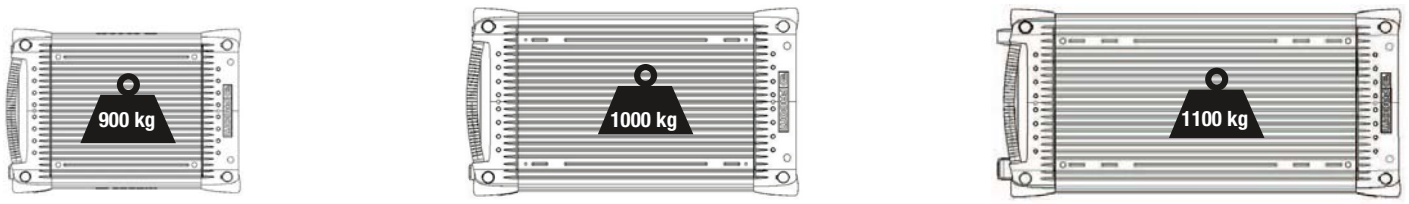
20 to 35 kg per drawer - 15 to 65 litres per drawer

25 to 45 kg per drawer - 20 to 85 litres per drawer

35 to 60 kg per drawer - 25 to 110 litres per drawer

strength

Stamped aluminium (2 mm) reinforced with a 15 mm wood worktop, grooved for increased scratch resistance, fastened with stainless steel screws; Worktop angles in **shock-proof polypropylene.**



JET+ MOBILE STORAGE



Innovation for more space







2 folding edges: under heavy load, the edges slide into the worktop to allow long objects to be laid on top (tool, pallet, mechanical part, ...).

2 retaining lips at the front and back to prevent objects from falling when moving.

Worktop with integral handle,
storage compartment for 16 screwdrivers,
can be fitted with a vice, tube accessories.

Locking



MORE PROTECTION: integral lock in a dedicated location, avoiding key breakage.
MORE SAFETY: centralised folding-key locking system.

Wheels



MORE PERFORMANCE: Low start-up effort, (less than 7kg thrust load).*SFlb*
Long lifetime (resistant to most usual hydrocarbons).
High resistance to heavy loads.

Drawers



SAFER: New hook in injected aluminium (reinforcement ribs and shot-blasted treatment for long-lasting strength (8 mm thick).
MORE ACCESSIBLE: full opening.

Soft Bumpers



MORE PROTECTION: new polymer bumpers with shock dampener effect on all 4 angles and drawers protecting the aluminium hook.

Handles

+ **MORE STRENGTH:** oxidization resistant anodized aluminium.
+ **MORE COMFORTABLE:** EXCLUSIVE FACOM DESIGN FOR SMOOTH GRIP.
+ **MORE PRACTICAL:** serves as tag holder.



Paint

EPOXY powder PAINT: available in **2 colours:** red and black.
BESPOKE COLOURS on request. No limit: all RAL shades available.

Use all surfaces



- **Multiple compartments** sides, back, worktop: numerous compartments to store your accessories and turn **your roller cabinet into a genuine workstation.**



- **Fast installation** Pre-drilled sides and back allow for **free and fast placing of lateral accessories.** For tube accessories, just **place the tubes** in the appropriate locations **on the workstation.**

Organise your storage space



- **Comes with a set of tags** for easy identification of drawer contents.
- **Removable drawer partitions for complete freedom of arrangement.**
- **Effective tool organisation with FACOM Modular System.**

	12 to 15 Modules		18 to 20 Modules		21 to 25 Modules			27 to 32 Modules				36 to 40 Modules		45 Modules
	12	15	18	20	24	24	25	27	32	30	30	36	40	45
Total LOAD in kg	125	140	155	175	170	195	235	185	210	240	265	230	290	320
Effective storage VOLUME in litres	155	155	155	205	150	205	255	150	200	230	255	200	250	250
Effective worktop SURFACE	0,22 m²	0,22 m²	0,22 m²	0,30 m²	0,22 m²	0,30 m²	0,40 m²	0,22 m²	0,30 m²	0,22 m²	0,40 m²	0,30 m²	0,40 m²	0,40 m²
	5 drawers	6 drawers	7 drawers	6 drawers	8 drawers	7 drawers	6 drawers	9 drawers	8 drawers	11 drawers	7 drawers	9 drawers	8 drawers	9 drawers
MODEL	JET.5M3 JET.5GM3	JET.6M3 JET.6GM3	JET.7M3 JET.7GM3	JET.6M4 JET.6GM4	JET.8M3 JET.8GM3	JET.7M4 JET.7GM4	JET.6M5 JET.6GM5	JET.9M3 JET.9GM3	JET.8M4 JET.8GM4	JET.11M3 JET.11GM3	JET.7M5 JET.7GM5	JET.9M4 JET.9GM4	JET.8M5 JET.8GM5	JET.9M5 JET.9GM5

M3 ROLLER CABINET

PERFORMANCE AT ITS BEST.

- **3 modules per drawer**
- **12 to 27 modules** distributed in 60 and 130 mm high drawers (200 and 270 mm drawers can also be fitted with modules)
- **125 to 185 kg** total acceptable load in the drawers according to drawer composition (240 kg for 11-drawer unit)
- **150 to 155 litres** effective volume according to drawer composition (230 litres for the 11-drawer unit)
- **0.22m² effective working surface** (440 X 496 mm)
- **4 wheels diameter 125mm**, 2 fixed, 2 castors, one with brake

TECHNICAL DATA

Overall dimensions (including wheels and worktop): L774 x D546 x H971 mm.
Effective drawer dimensions: L569 x D421 x H60 / 130 / 200 / 270 mm.

LOAD PER DRAWER

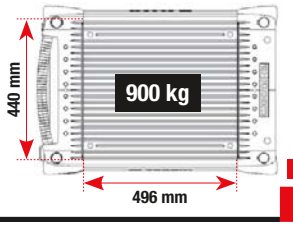
- drawer 60 mm high: 20 kg
- drawer 130 mm high: 25 kg
- drawer 200 mm high: 30 kg
- drawer 270 mm high: 35 kg

EFFECTIVE VOLUME PER DRAWER

- drawer 60 mm high: 15 l
- drawer 130 mm high: 30 l
- drawer 200 mm high: 50 l
- drawer 270 mm high: 65 l







Standard 3 module width roller cabinets

JET+ 5-drawer roller cabinets - 3 modules per drawer



- 5 drawers = 12 modules distributed in the 60 and 130 mm drawers:
- 2 drawers 60 mm wall = 6 modules.
- 2 drawers 130 mm wall = 6 modules.
- 1 drawer 270 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 4 partitions for 60 mm drawers and 4 partitions for 130 mm drawers.
- Total load in the drawers: 125 kg.
- Wall storage capacity: 155 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 270 mm.

	Colour	⚖ [kg]
JET.5M3	Red 3020	73,50
JET.5GM3	Black 9004	73,50

JET+ 6-drawer roller cabinets - 3 modules per drawer



- 6 drawers = 15 modules distributed in the 60 and 130 mm drawers:
- 4 drawers 60 mm wall = 12 modules.
- 1 drawer 130 mm wall = 3 modules.
- 1 drawer 270 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- Total load in the drawers: 140 kg.
- Wall storage capacity: 155 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 270 mm.

	Colour	⚖ [kg]
JET.6M3	Red 3020	75,50
JET.6GM3	Black 9004	75,50

JET+ 7-drawer roller cabinets - 3 modules per drawer





- 7 drawers = 18 modules distributed in the 60 and 130 mm drawers:
- 5 drawers 60 mm wall = 15 modules.
- 1 drawer 130 mm wall = 3 modules.
- 1 drawer 200 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- Total load in the drawers: 155 kg.
- Wall storage capacity: 155 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 200 mm.

	Colour	⚖ [kg]
JET.7M3	Red 3020	77,50
JET.7GM3	Black 9004	77,50

JET+ 8-drawer roller cabinets - 3 modules per drawer





- 8 drawers = 24 modules distributed in the 60 and 130 mm drawers:
- 6 drawers 60 mm wall = 18 modules.
- 2 drawers 130 mm wall = 6 modules.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 10 partitions for drawers 60 mm wall.
- Total load in the drawers: 170 kg.
- Wall storage capacity: 150 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.8M3	Red 3020	79,50
JET.8GM3	Black 9004	79,50

JET+ 9-drawer roller cabinets - 3 modules per drawer





- 9 drawers = 27 modules distributed in the 60 and 130 mm drawers:
- 8 drawers 60 mm wall = 24 modules.
- 1 drawer 130 mm wall = 3 modules.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 10 partitions for drawers 60 mm wall.
- Total load in the drawers: 185 kg.
- Wall storage capacity: 150 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.9M3	Red 3020	81,50
JET.9GM3	Black 9004	81,50

JET+ 11-drawer roller cabinets - 3 modules per drawer



- 11 drawers = 30 modules distributed in the 60 and 130 mm drawers:
- 8 drawers 60 mm wall = 24 modules.
- 2 drawers 130 mm wall = 6 modules.
- 1 drawer 200 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 2 sets of partitions for drawers 60 mm wall and 2 sets of partitions for drawers 130 mm wall.
- Total load in the drawers: 240 kg.
- Wall storage capacity: 230 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.1325 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 200 mm.

	Colour	[kg]
JET.11M3	Red 3020	99
JET.11GM3	Black 9004	99

M4 ROLLER CABINET

THE BEST COMBINATION OF STORAGE CAPACITY AND WORK SURFACE.

- **4 modules per drawer**
- **20 to 36 modules** distributed in 60 and 130 mm high drawers (200 and 270 mm drawers can also be fitted with modules)
- **175 to 230 kg** total acceptable load in the drawers according to drawer composition
- **200 to 205 litres** effective volume according to drawer composition
- **0.30m² effective working surface** (440 X 686 mm)
- **4 wheels diameter 125mm**, 2 fixed, 2 castors, one with brake

TECHNICAL DATA

Overall dimensions (including wheels and worktop): L964 x D546 x H971 mm.
Effective drawer dimensions: L759 x D421 x H60 / 130 / 200 / 270 mm

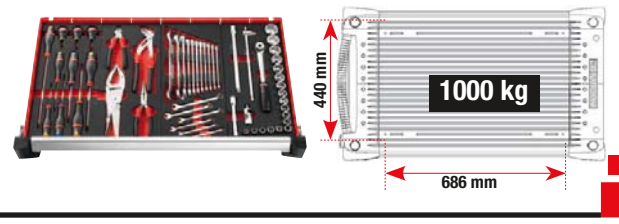
LOAD PER DRAWER

- drawer 60 mm high: 25 kg
- drawer 130 mm high: 30 kg
- drawer 200 mm high: 40 kg
- drawer 270 mm high: 45 kg

EFFECTIVE VOLUME PER DRAWER

- drawer 60 mm high: 20 l
- drawer 130 mm high: 40 l
- drawer 200 mm high: 65 l
- drawer 270 mm high: 85 l





Standard 4 module width roller cabinets

JET+ 6-drawer roller cabinets - 4 modules per drawer



- 6 drawers = 20 modules distributed in the 60 and 130 mm drawers:
- 4 drawers 60 mm wall = 16 modules.
- 1 drawer 130 mm wall = 4 modules.
- 1 drawer 270 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 9 partitions for 60 mm drawers and 3 partitions for 130 mm drawers.
- Total load in the drawers: 175 kg.
- Wall storage capacity: 205 litres.
- Overall dimensions (including wheels and worktop): L.964 x D.546 x H.971 mm.
- Drawer useful size: L.759 x D.421 x H.60 / 130 / 270 mm.

	Colour	[kg]
JET.6M4	Red 3020	90
JET.6GM4	Black 9004	90

JET+ 7-drawer roller cabinets - 4 modules per drawer





- 7 drawers = 24 modules distributed in the 60 and 130 mm drawers:
- 5 drawer 60 mm wall = 20 modules.
- 1 drawer 130 mm wall = 4 modules.
- 1 drawer 200 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 9 partitions for 60 mm drawers and 3 partitions for 130 mm drawers.
- Total load in the drawers: 195 kg.
- Wall storage capacity: 205 litres.
- Overall dimensions (including wheels and worktop): L.964 x D.546 x H.971 mm.
- Drawer useful size: L.759 x D.421 x H.60 / 130 / 200 mm.

	Colour	⚖ [kg]
JET.7M4	Red 3020	92,50
JET.7GM4	Black 9004	92,50

JET+ 8-drawer roller cabinets - 4 modules per drawer





- 8 drawers = 32 modules distributed in the 60 and 130 mm drawers:
- 6 drawers 60 mm wall = 24 modules.
- 2 drawers 130 mm wall = 8 modules.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 12 partitions for drawers 60 mm wall.
- Total load in the drawers: 210 kg.
- Wall storage capacity: 200 litres.
- Overall dimensions (including wheels and worktop): L.964 x D.546 x H.971 mm.
- Drawer useful size: L.759 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.8M4	Red 3020	95
JET.8GM4	Black 9004	95

JET+ 9-drawer roller cabinets - 4 modules per drawer





- 9 drawers = 36 modules distributed in the 60 and 130 mm drawers:
- 8 drawers 60 mm wall = 32 modules.
- 1 drawer 130 mm wall = 4 modules.
- Supplied with 12 partitions for drawers 60 mm wall.
- Total load in the drawers: 230 kg.
- Wall storage capacity: 200 litres.
- Overall dimensions (including wheels and worktop): L.964 x D.546 x H.971 mm.
- Drawer useful size: L.759 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.9M4	Red 3020	97
JET.9GM4	Black 9004	97

M5 ROLLER CABINET

EXTRA WIDE WORKTOP.

The ultimate storage capacity with exceptional handling.

- **Extra-wide drawers - 5 modules per drawer.**
- **25 to 45 modules** distributed in 60 and 130 mm high drawers (200 and 270 mm drawers can also be fitted with modules).
- **235 to 320 kg** total acceptable load in the drawers according to drawer composition.
- **250 to 255 litres** effective volume according to drawer composition.
- **0.40m² effective working surface** (440 X 876 mm).

TECHNICAL DATA

Overall dimensions (including wheels and worktop): L1154 x D546 x H1000 mm.
Effective drawer dimensions: L948 x D421 x H60 / 130 / 200 / 270 mm.

LOAD PER DRAWER

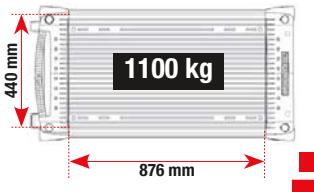
- drawer 60 mm high: 35 kg
- drawer 130 mm high: 40 kg
- drawer 200 mm high: 50 kg
- drawer 270 mm high: 60 kg

EFFECTIVE VOLUME PER DRAWER

- drawer 60 mm high: 25 l
- drawer 130 mm high: 50 l
- drawer 200 mm high: 80 l
- drawer 270 mm high: 110 l









EXCEPTIONAL handling

- **6 wheels diameter 160 mm** very high performance.
- **4 castors** (2 with brakes) and **2 fixed.**
- **360° function**: very easy to manoeuvre, ride over obstacles.
- Stability ensured with the 2 brakes.

Standard 5 module width roller cabinets

JET+ 6-drawer roller cabinets - 5 modules per drawer



- 6 drawers = 25 modules distributed in the 60 and 130 mm drawers:
- 3 drawer 60 mm wall = 15 modules.
- 2 drawer 130 mm wall = 10 modules.
- 1 drawer 200 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 12 partitions for 60 mm drawers and 4 partitions for 130 mm drawers.
- Total load in the drawers: 235 kg.
- Wall storage capacity: 255 litres.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 / 200 mm.

	Colour	⚖ [kg]
JET.6M5	Red 3020	104,50
JET.6GM5	Black 9004	104,50

JET+ 7-drawer roller cabinets - 5 modules per drawer



- 7 drawers = 30 modules distributed in the 60 and 130 mm drawers:
- 5 drawers 60 mm wall = 25 modules.
- 1 drawer 130 mm wall = 5 modules.
- 1 drawer 200 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 12 partitions for 60 mm drawers and 4 partitions for 130 mm drawers.
- Total load in the drawers: 265 kg.
- Wall storage capacity: 255 litres.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 / 200 mm.

	Colour	⚖ [kg]
JET.7M5	Red 3020	107
JET.7GM5	Black 9004	107

JET+ 8-drawer roller cabinets - 5 modules per drawer



- 8 drawers = 40 modules distributed in the 60 and 130 mm drawers:
- 6 drawers 60 mm wall = 30 modules.
- 2 drawers 130 mm wall = 10 modules.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 16 partitions for drawers 60 mm wall.
- Total load in the drawers: 290 kg.
- Wall storage capacity: 250 litres.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.8M5	Red 3020	110
JET.8GM5	Black 9004	110

JET+ 9-drawer roller cabinets - 5 modules per drawer



- 9 drawers = 45 modules distributed in the 60 and 130 mm drawers:
- 8 drawers 60 mm wall = 40 modules.
- 1 drawer 130 mm wall = 5 modules.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 16 partitions for drawers 60 mm wall.
- Total load in the drawers: 320 kg.
- Wall storage capacity: 250 litres.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.9M5	Red 3020	113
JET.9GM5	Black 9004	113

JET+

SAFETY ROLLER CABINETS

SAFETY LOCK SYSTEM

- **3 modules per drawer**
- **12 to 27 modules** distributed in 60 and 130 mm high drawers (200 and 270 mm drawers can also be fitted with modules)
- **125 to 185 kg** total acceptable load in the drawers according to drawer composition (240 kg for 11-drawer unit)
- **150 to 155 litres** effective volume according to drawer composition (230 litres for the 11-drawer unit)
- **0.22m² effective working surface** (440 X 496 mm)
- **4 wheels diameter 125mm**, 2 fixed, 2 castors, one with brake

TECHNICAL DATA

Overall dimensions (including wheels and worktop): L774 x D546 x H971 mm.
Effective drawer dimensions: L569 x D421 x H60 / 130 / 200 / 270 mm.

LOAD PER DRAWER

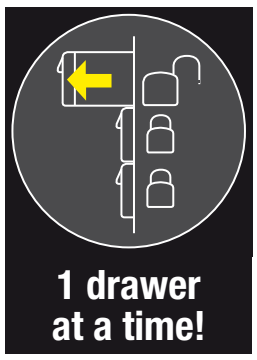
- drawer 60 mm high: 20 kg
- drawer 130 mm high: 25 kg
- drawer 200 mm high: 30 kg
- drawer 270 mm high: 35 kg

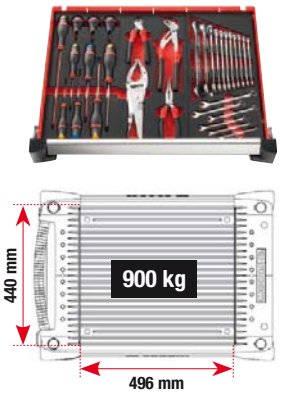
EFFECTIVE VOLUME PER DRAWER

- drawer 60 mm high: 15 l
- drawer 130 mm high: 30 l
- drawer 200 mm high: 50 l
- drawer 270 mm high: 65 l









Safety roller cabinets

JET.6GM3S JET+ 6-drawer roller cabinets - 3 modules per drawer - safety range



- Supplied with the SAFETY LOCK SYSTEM preventing simultaneous opening of several drawers:
- 1 drawer at a time.
- prevents the roller cabinet from tipping over.
- 6 drawers = 15 modules distributed in the 60 and 130 mm wall drawers:
- 4 drawer 60 mm wall = 12 modules.
- 1 drawer 130 mm wall = 3 modules.
- 1 drawer 270 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- Total load in the drawers: 140 kg.
- Wall storage capacity: 155 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 210 / 270 mm.
- 4 wheels 125 mm diameter: 2 fixed, 2 castors, one with brake.

JET.8GM3S JET+ 8-drawer roller cabinets - 3 modules per drawer - safety range



- Supplied with the SAFETY LOCK SYSTEM preventing simultaneous opening of several drawers:
- 1 drawer at a time.
- prevents the roller cabinet from tipping over.
- 8 drawers = 24 modules distributed in the 60 and 130 mm wall drawers:
- 6 drawers 60 mm wall = 18 modules.
- 2 drawers 130 mm wall = 6 modules.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 10 partitions for drawers 60 mm wall.
- Total load in the drawers: 17 kg.
- Wall storage capacity: 150 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 210 / 270 mm.
- 4 wheels 125 mm diameter: 2 fixed, 2 castors, one with brake.

MOBILE WORKBENCHES

RESISTANCE, VOLUME AND MAXIMUM HANDLING

Storage volume:

- 6 or 7 drawers for a capacity of 15 to 18 modules distributed in the 60 and 130 mm high drawers.
- 1 large-size closed locker for bulky items and reception of the plastic inspection lamp (supplied in standard).

Worktop:

- Stamped aluminium (thickness 2 mm) reinforced with a 15 mm wood top.
- Worktop angles in antishock polypropylene.
- For a wooden surface, just add the wooden top JET.A14M5.

TECHNICAL DATA
Overall dimensions (including wheels and worktop): L1154 x D546 x H1000 mm.
Effective drawer dimensions: L569 x D421 x H60 / 130 / 200 / 270 mm.

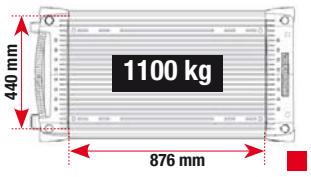
LOAD PER DRAWER
- drawer 60 mm high: 20 kg
- drawer 130 mm high: 25 kg
- drawer 200 mm high: 30 kg
- drawer 270 mm high: 35 kg

EFFECTIVE VOLUME PER DRAWER
- drawer 60 mm high: 15 l
- drawer 130 mm high: 30 l
- drawer 200 mm high: 50 l
- drawer 270 mm high: 65 l









Mobile workbenches

Jet+ 6-drawer mobile workbenches - 3 modules per drawer





- 6 drawers = 15 modules distributed in the 60 and 130 mm drawers:
- 4 drawers 60 mm high = 12 modules.
- 1 drawer 130 mm high = 3 modules.
- 1 drawer 270 mm high.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- Total load in the drawers: 140 kg.
- High storage capacity drawers: 155 litres.
- 1 full-length closed compartment for storing long tools:
- Door with key lock.
- Identical key for the drawers and the compartment.
- Supplied with the plastic carrier tray.
- For the wood top version, just add wood top JET.A14M5.
- Can be fitted with a JET.C4GM5 chest
- Compatible with the JET+ and JET.XL range of accessories.
- 4 very high performance wheels 160 mm diameter - 2 castors (including 2 with brakes) and 2 fixed.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.569 x D.421 x H.60/130/200 mm.
- Compartment dimensions: L.378 x D.430 x H.679 mm (passage width with door open 310 mm).

	Colour	⚖ [kg]
JET.T6M3	Red 3020	100
JET.T6GM3	Black 9004	100

JET+ 7-drawer mobile workbenches - 3 modules per drawer



- 7 drawers (useful dimensions): 18 modules distributed in the 60 and 130 mm high drawers:
- 5 drawers 60 mm high = 15 modules.
- 1 drawers 130 mm high = 3 modules.
- 1 drawer 200 mm high.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- The 200 and 270 mm drawers can also be fitted with modules.
- Total load in the drawers: 155 kg.
- High storage capacity: 155 litres.
- 1 full-length closed compartment for storing long tools:
- Door with key lock.
- Identical key for the drawers and the compartment.
- Supplied with the plastic slider.
- For the wood top version, just add wood top JET.A14M5.
- Can be fitted with a JET.C4GM5 chest
- Compatible with the JET+ and JET.XL range of accessories.
- 4 very high performance wheels 160 mm diameter - 2 castors (including 2 with brakes) and 2 fixed.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.569 x D.421 x H.60/130/200 mm.
- Compartment dimensions: L.378 x D.430 x H. 679 mm (passage width with door open 310 mm).

	Colour	⚖ [kg]
JET.T7M3	Red 3020	103
JET.T7GM3	Black 9004	103

JET+ CHESTS

TO BE USED ALONE OR IN ADDITION TO A ROLLER CABINET OR CHEST FOR MAXIMUM STORAGE.

- All benefits of the JET+ range
- Can be stacked on a roller cabinet of identical dimension for the 3 ranges and the roller chest for the M3 version - supplied with the linking kit for fast and secured assembly of the unit
- Capacity 12 modules (M3), 16 modules (M4), 20 modules (M5)
- Roller version (M3) ideal for travelling maintenance, highly manoeuvrable through high performance wheels

JET+3 TECHNICAL DATA

Roller version: *overall dimensions (including wheels and worktop):*
L774 x D546 x H621 mm.

Fixed version: *overall dimensions (including worktop): L774 x D546 x H480 mm.*

Effective drawer dimensions:
L569 x D421 x H60-130 mm.

JET+4 TECHNICAL DATA

Overall dimensions (including wheels and worktop): L964 x D546 x H480 mm.

Effective drawer dimensions:
L759 x D421 x H60-130 mm.

JET+5 TECHNICAL DATA

Overall dimensions (including wheels and worktop): L1154 x D546 x H480 mm.

Effective drawer dimensions:
L948 x D421 x H60-130 mm.

Option:

*- drawers can be fit with **removable partitions** JET2.15 and JET2.16 (not supplied with the chest)*
*- the sides can be fitted with **lateral accessories** such as bottle holder (JET.A1GXL), waste bin (JET.A5-2XL), paper roll holder (JET.A5-3GXL)...*
*- the workstation can be fitted with **tube accessories** and the wooden tops JET.A14M3/M4/M5.*





Roller chests p. 153

Additional chests

JET+ 4-drawer chest - 3 modules per drawer



- 4 drawers = 12 modules distributed in the 60 and 130 mm drawers:
- 3 drawers 60 mm high = 9 modules.
- 1 drawer 130 mm high = 3 modules.
- The 200 mm drawers can also be fitted with modules. (can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied).
- Acceptable load and useful volume per drawer of M3 versions:
- 60mm drawer: 20 kg - 15 litres.
- 130mm drawer: 25 kg - 30 litres.
- Total load in the drawers: 85 kg.
- High storage capacity: 75 litres.
- Total load on the worktop in static position: 500 kg
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.480 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.C4M3	Red 3020	45
JET.C4GM3	Black 9004	45

JET+ 4-drawer chest - 4 modules per drawer



- 4 drawers = 16 modules distributed in the 60 and 130 mm drawers:
- 3 drawers 60 mm high = 12 modules.
- 1 drawer 130 mm high = 4 modules.
- The 200 mm drawers can also be fitted with modules. (can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied).
- Acceptable load and useful volume per drawer of M4 versions:
- 60 mm drawer: 25 kg - 20 litres.
- 130 mm drawer: 30 kg - 40 litres.
- Total load in the drawers: 105 kg.
- High storage capacity: 100 litres.
- Total load on the worktop in static position: 600 kg
- Overall dimensions (including wheels and worktop): L.964 x D.546 x H.480 mm.
- Drawer useful size: L.759 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.C4M4	Red 3020	51,50
JET.C4GM4	Black 9004	51,50

JET+ 4-drawer chest - 5 modules per drawer



- 4 drawers = 20 modules distributed in the 60 and 130 mm drawers:
- 3 drawers 60 mm high = 15 modules.
- 1 drawer 130 mm high = 5 modules.
- The 200 mm drawers can also be fitted with modules. (can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied).
- Acceptable load and useful volume per drawer of M4 versions:
- 60 mm drawer: 35 kg - 25 litres.
- 130 mm drawer: 40 kg - 50 litres.
- Total load in the drawers: 145 kg.
- High storage capacity: 125 litres.
- Total load on the worktop in static position: 700 kg.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.480 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.C4M5	Red 3020	60,50
JET.C4GM5	Black 9004	60,50

Roller chests

ROLLER CHESTS

NOT JUST A CHEST, A MINI ROLLER CABINET!

Ideal for travelling maintenance.
Highly manoeuvrable with high performance wheels.
To be combined with a fixed chest for maximum storage.

JET+3 TECHNICAL DATA
Overall dimensions (including wheels and worktop): L774 x D546 x H621 mm.
Capacity 12 modules.



JET+ 4-drawer roller cabinets - 3 modules per drawer





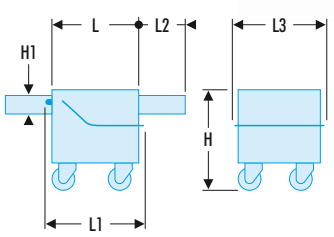
- Ideal for mobile maintenance.
- Retractable handle for travelling.
- Easy handling thanks to its high performance wheels (diameter 125 mm, 2 fixed and 2 castors including one with brake.
- 4 drawers = 12 modules distributed in the 60 and 130 mm high drawers.
- 3 drawers 60 mm high = 9 modules.
- 1 drawer 130 mm high = 3 modules.
- The 200 mm drawers can also be fitted with modules.
- Can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied
- Acceptable load and useful volume per drawer of M3 versions:
- 60 mm drawer: 20 kg - 15 litres.
- 130 mm drawer: 25 kg - 30 litres.
- Total load in the drawers: 85 kg.
- High storage capacity: 75 litres.
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.621 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.CR4M3	Red 3020	48,50
JET.CR4GM3	Black 9004	48,50

Roller chest







- Vertical access model.
- Particularly interesting combination of size and volume.
- Transportable in a vehicle.
- Wheels = 125 mm allowing for long distances without tiring.
- 2 drawers, dim. (L. x D. x H.): 100 x 360 x 300 mm.
- Each drawer is includes a mobile compartment, dim. (L. x D. x H.): 360 x 148 x 40 mm (for small tool storage).
- 2 compartments, dim. (L. x D. x H.): 440 x 140 x 60 mm.
- The roller cabinet lid includes a storage for documents or flat objects.
- Large size chest, dim. (L. x D. x H.): 668 x 443 x 248 mm.
- Locking possible by padlock (not supplied).
- Achiles heels protection on the chest.

	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2092A	550	100	670	740	252	512

JET POWER

JET+ POWER, THE 3-IN-1 SOLUTION FOR YOUR POWER TOOLS

- **Store your power tools** to have them handy permanently,
- **Recharge the batteries** of your tools, your lamp, phone, laptop,…
- Shutter open or closed,
- During work time or overnight,
- Safely.

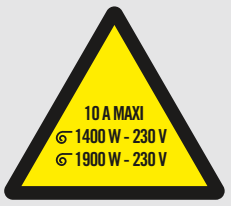


Finally a power source on your roller cabinet!

- **Power bar**
- 6 sockets On/Off button







- Automatic **winding cable** with locking device

Perfectly protected tools!

- **General-purpose storage:**
  - Can be fitted with **3 tools of all makes**
  - **Double holding:** your tools easily find their location in a **dedicated foam compartment** and rest **on an aluminium bar**. Tools securely held



- **Secured closing:** A shutter with keylock protects your tools



- **Simple and fast hanging:** The cabinet mounts in the recesses of JET+ and JETXL roller cabinets.

JET + POWER



- Built-in professional electric winder, 5 metres cable 3*1.5, NF/Schuko male connector.
- Automatic cable winder with locking device.
- Max amperage 10 A - Surge protection.
- 6-socket multiple connector with On/Off button.
- Closing secured by shutter with keylock (supplied with 2 keys) .
- The cabinet is fastened in the recess of JET+ but also JETXL roller cabinets.
- Dimensions: L.543 x D.332 x H 811 mm.

	Colour	⚖ [kg]
JET.A8POWER	Red 3020	15
JET.A8GPOWER	Black 9004	15

Workstations

TALL ROLLER CABINET

Saves time

- Always close-by.
  Whether to repair a machine or vehicle,
  be as close as possible to the place of intervention.

- All tools and consumables are available at all times.
  The cabinet lateral drawers, doors and drawers can stay open permanently without risk of tipping over and the bin is open for direct access.

Ideal even in confined spaces

- Minimum footprint for maximum tool storage.

Comfortable work position

- Most tools are stored in the cabinet and lateral drawers, the user has access to them without bending down.







▣ JET.3H Wall roller cabinet



Workstation composed of:
• A roller cabinet base:
- 3 drawers 100% opening, 1 compartment.
- Galvanised, robust and easy maintenance worktop.
- Centralised key-locking of the 3 drawers.
- 4 wheels 125 mm diameter, 2 castors, including one with brake and 2 fixed.
- Compatible with the FACOM JETXL lateral accessories.
• A 2201 cabinet.
• A set of fastening tubes for easy and safe assembly.
• Overall dimensions: L.780 x D.520 x H.1780 mm.
Weight: 89 kg.

▣ JET.3WS Base of JET.3H station only



- 3 drawers 100% opening, 1 compartment.
- Galvanised, robust and easy maintenance worktop.
- Centralised key-locking of the 3 drawers.
- 4 wheels 125 mm diameter, 2 castors, including one with brake and 2 fixed.
- Compatible with the FACOM JETXL lateral accessories.

CR.T3XL Surface preparation workstation



- Workstation comprising:
- 2 sloping upper shelves for storing consumables.
- 1 drawer 130 mm high with padlock for expensive items, safety items, etc.
- 1 2-way sloping shelf for ordinary tools.
- 1 storage area for bulky consumables.
- Perforated recessed side panels for attaching accessories: 2 bottle-shelves, 1 paper-roll holder, wire supports to hold paint guns, 1 waste bag holder.
- Dimensions, without handle (L. x D. x H.): 825 x 546 x 1645 mm.

Weight: 51 kg.

CR.T4XL Bodywork repair workstation



- A lid:
- Containing a panel fitted with a system for securing dressers and hammers.
- PK perforations for freely hanging other tools.
- 2 gas springs for comfort of use.
- 2 trays that pull out sideways to reveal a large bin for storing heavier tools such as dollies and spoons. The bottom of the trays and the bin are fitted with non-slip mats.
- 3 drawers (2 x 60 + 1 x 130 mm) compatible with the Facom modular storage system and 1 bin drawer (270 mm high) for storing bulky items and pneumatic tools.
- Galvanised steel worktop: easy-to-maintain and high resistance.
- Safe: central key locking of lid and drawers.
- Corner bumpers to avoid damage to vehicles in case of accidental contact.
- Manoeuvrability ensured by 4 large diameter wheels, 2 fixed, 2 castors, one with a brake.
- Dimensions, handle excluded (L. x D. x H.): 825 x 546 x 1,035 mm.

Weight: 77 kg.

CHRONO roller cabinets

CHRONO+ | 3-MODULE ROLLER CABINETS

HIGHLY RESISTANT WORKTOP:

- Polypropylene **resistant to impacts and hydrocarbons.**
- **Resistance to a static load of 850 kg.**
- **2 integral handles;** one for moving the roller cabinet and one to lift it and ride over obstacles.

SERVICES:

- **Hollow sides panels** to be fitted with the JETXL range of side-mounted accessories.
- Supplied with **sets of removable partitions.**

MANOEUVRABILITY:

- Wheel diameter 125mm (2 castors, one with a brake, and 2 fixed wheels).









▣ CHRONO.5M3 CHRONO + roller cabinet with 5 drawers - 3 modules per drawer



- 5 drawers = 12 modules distributed in the 60 and 130 mm drawers:
- 2 drawer 60 mm high = 6 modules.
- 2 drawer 130 mm high = 6 modules.
- 1 drawer 270 mm high.
- Supplied with 4 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- The 200 and 270 mm drawers can also be fitted with modules.
- Overall dimensions (including wheels and worktop): L.787 x D.518 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 200 / 270 mm.
- Load per drawer: 20/25/30kg.

Weight: 66 kg.

▣ CHRONO.6M3 CHRONO + 6-drawer roller cabinet - 3 modules per drawer



- 6 drawers = 15 modules distributed in the 60 and 130 mm drawers:
- 3 drawer 60 mm high = 9 modules.
- 2 drawers 130 mm high = 6 modules.
- 1 drawer 200 mm high.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- The 200 and 270 mm drawers can also be fitted with modules.
- Overall dimensions (including wheels and worktop): 787 x D.518 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 200 mm.
- Load per drawer: 20/25/30kg.

Weight: 67.5kg.

CHRONO+

3-MODULE ROLLER CABINETS

ADAPTED STORAGE CAPACITY:

- **4 different arrangements:** from 5 to 8 full opening drawers with ball sliders.
- **3 modules per drawer:** Effective dimensions L569 x D420 x H60 -130-210-270 mm.
- **Acceptable loads distributed per drawer:** 20 kg for drawers 60 high; 25 kg for drawers 130 mm high; 30 kg for drawers 270 mm high and 35 kg for drawers 270 mm high.



SAFETY ENSURED

- **Secured drawer opening: lift the handle in the front of each drawer to open - drawers cannot open while moving.**
- **Centralised drawer key-locking (supplied with 2 keys, one folding).**

Overall dimensions: L787x D518x H971mm.





CHRONO.7M3 CHRONO + 7-drawer roller cabinet - 3 modules per drawer



- 7 drawers (useful dimensions) = 18 modules distributed in the 60 and 130 mm drawers:
- 5 drawers 60 mm high = 15 modules.
- 1 drawer 130 mm high = 3 modules.
- 1 drawer 200 mm high.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- The 200 and 270 mm drawers can also be fitted with modules.
- Overall dimensions (including wheels and worktop): L.787 x D.518 x H.971 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 200 mm.
- Load per drawer: 20/25/30kg.

Weight: 69.5kg.

CHRONO.8M3 CHRONO + 8-drawer roller cabinet - 3 modules per drawer



- 8 drawers (useful dimensions) = 24 modules distributed in the 60 and 130mm drawers:
- 6 drawers 60 mm high = 18 modules .
- 2 drawers 130 mm high = 6 modules.
- Supplied with 10 partitions for drawers 60 mm high.
- The 200 and 270 mm drawers can also be fitted with modules.
- Overall dimensions (including wheels and worktop): L787x D518x H971mm .
- Drawer useful size: L.569 x D.421 x H.60 / 130 / 200 mm.
- Load per drawer: 20/25/30kg.

Weight: 71 kg.

Roller cabinet accessories

CHOOSING YOUR ACCESSORIES

	JET POWER	Vertical panel	Nuts and screws stand	Side cupboard	Anti-theftbar	Carry tray and holder	Pivoting shelf	Bottle holder	Document holder	Wooden worktop
JET+3 	JET.A8 POWER	JET.A6M3	JET.A7GXL	JET.A8GXL	JET.A9M	JET.A11	JET.A3	JET.A1GXL	JET. A2GXL	JET.A14 M3
JET+4 	JET.A8 POWER	JET.A6M4		JET.A8GXL	JET.A9M	JET.A11	JET.A3	JET.A1GXL	JET. A2GXL	JET.A14 M4
JET+5 	JET.A8 POWER	JET.A6M5		JET.A8GXL	JET.A9M	JET.A11	JET.A3	JET.A1GXL	JET. A2GXL	JET.A14 M5
JETXL 	JET.A8 POWER	JET.A6M3	JET.A7GXL	JET.A8GXL		JET.A11	JET.A3	JET.A1GXL	JET. A2GXL	JET. A4XL
CHRONO + 	JET.A8 POWER			JET.A8GXL		JET.A11		JET.A1GXL	JET. A2GXL	

	Galvanized worktop	Repair order holder	Cleaning accessories	Side shelf	Waste bin	Paper roll holder	Rubber matting	Sheet of tags	Partitions D60mm	Partitions D130mm
JET+3 		JET.A13XL	JET. A5GXL	JET. A5-1 GXL	JET.A5-2XL	JET.A5-3GXL	2600.A2	2225.A1	JET2.15	JET2.16
JET+4 		JET.A13XL	JET. A5GXL	JET. A5-1 GXL	JET.A5-2XL	JET.A5-3GXL	2600.A2	2225.A1	JET2.15	JET2.16
JET+5 		JET.A13XL	JET. A5GXL	JET. A5-1 GXL	JET.A5-2XL	JET.A5-3GXL	2600.A2	2225.A1	JET2.15	JET2.16
JETXL 	JET. A12XL	JET.A13XL	JET. A5GXL	JET. A5-1 GXL	JET.A5-2XL	JET.A5-3GXL	2600.A2	2225.A1	JET2.15	JET2.16
CHRONO + 			JET. A5GXL	JET. A5-1 GXL	JET.A5-2XL	JET.A5-3GXL	2600.A2	2225.A1	JET2.15	JET2.16

ACCESSORIES

FULL RANGE FOR MAXIMUM FLEXIBILITY.

Multiple compartments

Sides, back, worktop, can all receive your accessories and transform your roller cabinet into a workstation.



Fast installation

Pre-drilled sides and back allow for free and fast placing of side-mounted accessories.
For tube accessories, just place the tubes in the appropriate locations on the workstation.



See section 2, p.72

JET.A6M3 Vertical panel for JET+3



- Vertical fastening panel for JET+3 roller cabinet.
- To fasten plans, procedures or tools (compatible with FACOM CKS system).
- Supplied with data sheet holder (folder rings, without sheet or tooling).
- Dimensions: L.743 x D.38 x H.400 mm.

Weight: 4.3 kg.

JET.A6M4 Vertical panel for JET+4



- Vertical fastening panel for JET+4 roller cabinet.
- To fasten plans, procedures or tools (compatible with FACOM CKS system).
- Supplied with data sheet holder (folder rings, without sheet or tooling).
- Dimensions: L.932 x D.38 x H.400 mm.

Weight: 9 kg.

JET.A6M5 Vertical panel for JET+5



- Vertical fastening panel for JET+5 roller cabinet.
- To fasten plans, procedures or tools (compatible with FACOM CKS system).
- Supplied with data sheet holder (folder rings, without sheet or tooling).
- Dimensions: L.1123 x D.38 x H.400 mm.

Weight: 10.5 kg.

JET.A14M3 Wood worktop for JET+3



- Designed to be fitted on the aluminum worktop of JET+ roller cabinets.
- Beech multiply worktop tinted with linseed oil - thickness 15 mm.
- Screwed on.
- Dimensions: L.500 x D.498 mm.

Weight: 2.58 kg.

JET.A14M4 Wood worktop for JET+4



- Designed to be fitted on the aluminum worktop of JET+ roller cabinets:
- Beech multiply worktop tinted with linseed oil - thickness 15 mm.
- Screwed on.
- Dimensions: L.690 x D.498 mm.

Weight: 3.56 kg.

JET.A14M5 Wooden worktop for JET+5



- Designed to be fitted on the aluminum worktop of JET+ roller cabinets:
- Beech multiply worktop tinted with linseed oil - thickness 15 mm.
- Screwed on.
- Dimensions: L.880 x D.498 mm.

Weight: 4.54 kg.

JET.A3 Pivoting shelf



- For laptop computer reception + scriber function.
- Secured deposit thanks to large edges and possibility of locking.
- For JET+ and JETXL roller cabinet.
- Dimensions: L.515 x D.480 x H.200 mm.

Weight: 1 kg.

JET.A7GXL XL nuts and screws panel



- Panel with 2 rows of tip-out bins for nuts and screws.
- 1 row of 6 bins: 600 x 110 mm.
- 1 row of 9 bins: 600 x 70 mm.
- Fasteners cannot fall out, even when moving the cabinet.
- For JET+ and JETXL roller cabinet.
- Dimensions: L.690 x D.120 x H.220 mm.
- Tube: 755 mm.

Weight: 6.2 kg.

JET.A9M Anti-theft bar



- In addition to central locking of drawers. Padlock clasp (padlock not supplied).
- Easy and fast positioning.
- Dissuasive and cosmetic.
- For JET+ roller cabinet.
- Dimensions: L.120 x D.25 x H.795 mm.

JET.A8GXL XL side cabinet



- For storage of long and/or valuable tools.
- Compatible with FACOM CKS system.
- Keylock.
- For JET+ and JETXL roller cabinet
- Dimensions: L.380 x D.85 x H.685 mm.

Weight: 7 kg.

JET.A12XL Patterned aluminum worktop



- High strength.
- Fits easily into the worktop recess of JETXL roller cabinets.
- Dimensions: L.588 x D.439 mm.

Weight: 1.105 kg.

JET.A11 Carry tray and holder



- High strength plastic carry tray.
- Very handy to carry tools on the intervention site.
- Easy installation on the roller cabinet thanks to its fastening kit.
- Dimensions excluding handle: L.115 x D.385 x H.255 mm.

Weight: 3 kg.

JET.A1GXL XL bottle holder



- For storing aerosols, cleaning products, sprays, etc.
- Dimensions: L.380 x D.112 x H.125 mm.
- Compatible with JET+, JETXL, CHRONO+ and CHRONOXL roller cabinets.

Weight: 1.2 kg.

JET.A2GXL Grey XL document holder



- No agressivity: shelved edges and protection gasket.
- Allows storage of a A4 format folder.
- Dimensions: L.340 x D.55 x H.315 mm.
- Compatible with JET+, JETXL, CHRONO+ and CHRONOXL roller cabinets.

Weight: 0.800 kg.

JET.A13GXL Repair order holder



- Work forms, technical data sheets are always handy.
- The A4 panel holder fitted with a clamp is fastened directly in the work surface with tubes.
- Compatible with JET+ and JETXL roller cabinets.

JET.A5GXL XL Cleaning kit



- Compartmented magnetic shelf + paper roll holder.
- Easy to unroll, blocks the paper between pulls.
- Supplied without paper.
- Dimensions: L.410 x D.300 x H.185 mm.
- Metal plate waste bin. Easy to empty
- Dimensions: L.380 x D.160 x H.250 mm.
- Compatible with JET+, JETXL, CHRONO+ and CHRONOXL roller cabinets.

Weight: 5.2 kg.

JET.A5-1GXL Compartmented magnetic shelf + paper roll holder



- Easy to unroll, blocks the paper between pulls.
- Supplied without paper.
- Dimensions: L.410 x D.300 x H.185 mm.
- Compatible with JET+, JETXL, CHRONO+ and CHRONOXL roller cabinets.

Weight: 3 kg.

JET.A5-2XL Waste bin



- Dimensions: L.380 x D.160 x H.250 mm.
- Compatible with JET+, JETXL, CHRONO+ and CHRONOXL roller cabinets.

Weight: 2.2 kg.

JET.A5-3GXL Paper roll holder only



- Easy to unroll, blocks the paper between pulls.
- Supplied without paper.
- Dimensions: 340 x 150 mm.
- Compatible with JET+, JETXL, CHRONO+ and CHRONOXL roller cabinets.

Weight: 0.600 kg.

2225.A1 Pictogram plate



- Drawer organization and identification.
- Tag labels to be affixed to the drawer handles.

Weight: 0.210 kg.

2600.A2 Rubber matting



- Easy to cut.
- Dimensions: L.534 x D.390 mm.
- To line drawers.

Drawer partitions



- galvanised metal partitions held by rubber pad:

- 2 small drawer heights (H mm) for JET+, JETXL OR CHRONOXL.

	H [mm]
JET2.15	60
JET2.16	130

HOW SHOULD STORAGE TRAYS BE USED WITH OUR THERMOFORMED MODULES?

Roller cabinets until 2005



Roller cabinets from 2006





- If you have separable modules, remove the break-off part and fit your modules.
- If you have older non separable modules, just position them.

Add the PL.636 gutter at the front and back of your drawer.



INFORMATION

For XL modules (thermoformed and foam), storage trays are not necessary.

With separable modules

Fit your modules and the PL.655 tray to the right or left of your drawer.





With older non separable modules

Install your modules, the PL.655 tray on the side and the PL.656 tray to the front or back of the drawer.







PL.636 Storage tray



- For securing modules and storing small tools and components.

Weight: 0.150 kg.

PL.655 Side storage tray for XL drawer



- For securing modules and storing small tools and components.
- Fitted to the right or left of the drawer.
- For JET+, JETXL, CHRONOXL drawer.

Weight: 0.056 kg.

PL.656 Front storage tray for XL drawer



- For securing modules and storing small tools and components.
- Fitted to the front or back of the drawer.
- For JET+, JETXL, CHRONOXL drawer.

Weight: 0.098 kg.

PL.656M4 Front storage tray for JET+M4 drawer



- For securing modules and storing small tools and components.
- Fitted to the front or back of the drawer.
- For JET+ drawer with 4 modules.

PL.656M5 Front storage tray for JET+M5 drawer



- For securing modules and storing small tools and components.
- Fitted to the front or back of the drawer.
- For JET+ drawer with 5 modules.

JETLINE fixed modular storage system

Jetline System

YOUR NEW GENERATION WORK SPACE, CUSTOMISED AND UPGRADEABLE

Gain space!

A customised, modular and upgradeable workshop:

- Using the many storage units offered, you will find the level of services and prices you need.
- As they are modular, the units can be juxtaposed, stacked, and adapted to your needs.
- Upgrade your equipment according to changes in organisation and/or work methods and distribute costs over time.

A well-organised workshop:

- Thanks to multiple combinations offered, you can implement a tailor-made organisation for all types of work activity.
- More practical and organised, your workshop will gain in effectiveness.

No walls required!

Thanks to its exclusive self-bearing structure:

- Units are fitted independently from a wall.
- The wall is not straight, pipes or cables are running along the floor! Free of all constraints, install your furniture where you wish.

Daily enjoyment

- The workshop is a space for work and life.
- With Jetline System, work safely in a pleasant, user-friendly and functional environment.

Choose comfort and ergonomics

Our objective:

- Offer space which is optimised, functional and comfortable to have more results for minimised effort.

The solution:

- A more comfortable work position thanks to a furniture height exceeding that of standard units.
- It responds to the increase in average size.
- It also allows storage space optimisation: the roller cabinet finally finds its place under the worktop!





Modular



Upgradeable



Innovating



Adaptable

Jetline System

BE THE ARCHITECT OF YOUR WORKSHOP…



Customise the organisation of your workstation!



Gain space!



No wall fastening required!





40 components
A comprehensive solution for all arrangement needs.



Specialised brochure
Download it on the **www.facom.com**



Configurator
Create your JETLINE work space in 3D.
Download it on the www.facom.com site

Easy assembly
- The units are designed “ready to be installed“ and completely factory-assembled.
- No specialist skills required, assembly is fast and easy.

FACOM quality
- Acknowledged manufacturing quality meetings the needs of the most demanding users.
- 5-year guarantee.

Doors
- The doors are tested for 10,000 open/close cycles.

Steel sheet
- All units are manufactured in epoxy painted steel sheet (thickness 12/10th).

Drawers
- The sliders have a 100% opening.
- They are tested for 50,000 open/close cycles i.e. 10 years use.



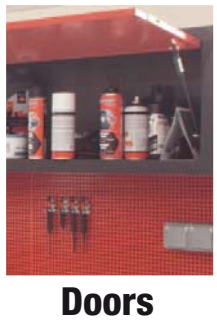
Glazed doors



Swing doors



Steel sheet



Doors up-and-in doors



Sliding doors



Drawers

Low units

MBSPP Jetline low unit - single solid door



- Unit in epoxy painted steel panel (thickness 12/10th).
- 2 swinging doors, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 10000 opening/closing cycles.
- 1 epoxy painted shelf adjustable in height (100 mm steps) withstanding 50 kg loads.
- Fitted with a multifunction technical tray:

- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.

- Side perforated panels to fasten JET.XL accessories.
- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.721.4 x D.507.4 x H.985 (including feet 168.7) mm.

Weight: 58.5 kg.

MBDPP Jetline low unit - double solid doors



- Unit in epoxy painted steel panel (thickness 12/10th).
- 2 metal sliding panels.
- 1 epoxy painted shelf adjustable in height (100mm steps) withstanding 75 kg loads.
- Fitted with a multifunction technical tray:

- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.

- Side perforated panels to fasten JET.XL accessories.
- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.1448.8 x D.507.4 x H.985 (including feet 168.7) mm.

Weight: 91 kg.

MBAPP Jetline low angle unit - solid door



- Unit in epoxy painted steel panel (thickness 12/10th).
- 1 swinging door, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 10000 opening/closing cycles.
- 1 epoxy painted shelf adjustable in height (100mm steps) withstanding 50 kg loads.
- Fitted in standard with a beech-ply worktop, treated with linseed oil, 40 mm thickness.
- Fitted with a multifunction technical tray:

- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.

- Side perforated panels to fasten JET.XL accessories.
- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.819 x D.556 x H.985 (including feet 168.7) mm.

Weight: 62 kg.

MBSPV Jetline low unit - single glazed door



- Unit in epoxy painted steel panel (thickness 12/10th).
- 2 transparent swinging doors in plexiglas, thickness 3mm, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 10000 opening/closing cycles.
- 1 epoxy painted shelf adjustable in height (100 mm steps) withstanding 50 kg loads.
- Fitted with a multifunction technical tray:

- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.

- Side perforated panels to fasten JET.XL accessories.
- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.721.4 x D.507.4 x H.985 (including feet 168.7) mm.

Weight: 57 kg.

MBDPV Jetline low unit - double glazed doors



- Unit in epoxy painted steel panel. (thickness 12/10th).
- 2 transparent sliding panels in plexiglas thickness 3 mm.
- 1 epoxy painted shelf adjustable in height (100 mm steps) withstanding 75 kg loads.
- Fitted with a multifunction technical tray:

- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.

- Side perforated panels to fasten JET.XL accessories.
- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.1448.8 x D.507.4 x H.985 (including feet 168.7) mm.

Weight: 88 kg.

MBS6T Jetline low unit - 6 drawers



- Drawer composition: 6 drawers
- 4 drawers 60 mm high.
- 1 drawer 130 mm high.
- 1 drawer 270 mm high.

- Load per drawer: 50 kg.
- Drawers:

- Drawers fitted with a selective opening system.
- Full drawer opening.
- Centralised locking, jointed keylock.
- Drawer facade in composite materials used as actual impact protections.
- Optimum storage organisation.
- Compatible with the Facom modular storage system.
- Customisable partitioning with removable partitions, held by rubber pad (supplied with 3 sets of partitions for drawers 60 mm high and 1 set of partitions for drawers 130 mm high).

- Drawer content identification thanks to the pictogram plate supplied with the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Fitted with a multifunction technical tray:

- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.

- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.721.4 x D.507.4 x H.985 (including feet 168.7) mm.
- Drawer useful size: L.569 x D.421 x H.60 mm.

Weight: 79 kg.

MBS7T Jetline low unit - 7 drawers



- Drawer composition: 7 drawers
- 5 drawers 60 mm high.
- 1 drawer 130 mm high.
- 1 drawer 200 mm high.
- Load per drawer: 50 kg.
- Drawers:
- Drawers fitted with a selective opening system.
- Full drawer opening.
- Centralised locking, jointed keylock.
- Drawer facade in composite materials used as actual impact protections.
- Optimum storage organisation.
- Compatible with the Facom modular storage system.
- Customisable partitioning with removable partitions, held by rubber pad (supplied with 3 sets of partitions for drawers 60 mm high and 1 set of partitions for drawers 130 mm high).
- Drawer content identification thanks to the pictogram plate supplied with the unit.
- Keylock, supplied with 2 keys, including 1 jointed.
- Fitted with a multifunction technical tray:
- Allowing to run and protect electric cables in an extremely discreet way and protected from dust.
- Allowing fast and easy assembly of high units thanks to pre-holes for passing the assembly tubes.
- Used as fall protection edge.
- Unit fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Grey framework ELIAN, red doors 3010.
- Overall dimensions: L.721.4 x D.507.4 x H.985 (including feet 168.7) mm.
- Drawer useful size: L.569 x D.421 x H.60 mm.

Weight: 82.5 kg.

Wall units

MHSPP Jetline wall unit - single solid door



- Unit in epoxy painted steel panel. (thickness 12/10th).
- 2 swinging doors, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 10000 opening/closing cycles.
- 2 epoxy painted shelf adjustable in height (100 mm steps) withstanding 20 kg loads.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.719 x D.277.8 x H.810 mm.

Weight: 27.5 kg.

MHSPV Jetline wall unit - single glazed door



- Unit in epoxy painted steel panel. (thickness 12/10th).
- 2 swinging doors, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 1000 opening/closing cycles.
- 2 epoxy painted shelf adjustable in height (100 mm steps) withstanding 20 kg loads.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.719 x D.277.8 x H.810 mm.

Weight: 26 kg.

MHDPV Jetline wall unit - double glazed doors



- Unit in epoxy painted steel panel. (thickness 12/10th).
- 2 transparent sliding panels in plexiglas thickness 3 mm.
- Fitted with a perforated panel (6x6mm with step 12 mm) to fasten tools with the CKS hook range.
- Keylock, supplied with 2 keys, including 1 jointed.
- Grey framework ELIAN, red doors 3010.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.1446.4 x D.277.8 x H.810 mm.

Weight: 31 kg.

2201 Jetline wall cabinet - 1 drawer - 810 mm wall



- Cabinet with vertical hanging and drawer sections.

- Vertical fastening part:

- Storage surface area: 1 m².
- The base and sides of the cabinet, door liners, are perforated for hanging tools using the CKS system.
- Opening at 180° of the 2 swinging doors for maximum visibility and accessibility.

- Drawer section:

- 1 drawer with heavy-duty ball-bearing slides, 100% opening.
- Drawer useful dimensions: L.569 x H.60 x D.210 mm.
- Centralised locking of the doors and drawer by keylock.
- Wall mounted (through holes provided) or on a workbench.
- Dimensions: L.720 x D.280 x H.810 mm.

Weight: 31 kg.

CHS Jetline wall unit - single opening



- Unit in epoxy painted steel panel. (thickness 12/10th).
- Acceptable load 30 kg.
- Grey framework ELIAN.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.719 x D.277.8 x H.405 mm.

Weight: 8.5 kg.

CHD Jetline wall unit - double opening



- Unit in epoxy painted steel panel. (thickness 12/10th).
- Acceptable load 50 kg.
- Grey framework ELIAN.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.1446.4 x D.277.8 x H.405 mm

Weight: 14 kg.

CHA Jetline wall unit - open angle



- Unit in epoxy painted steel panel. (thickness 12/10th).
- Acceptable load 30 kg.
- Grey framework ELIAN.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.815 x D.391.6 x H.405 mm.

Weight: 10 kg.

CHSPP Jetline wall chest - single with door



- Unit in epoxy painted steel panel. (thickness 12/10th).
- Metal sheet lift door fitted with holding compass tested for 10000 opening/closing cycles.
- Acceptable load 30 kg.
- Keylock.
- Grey framework ELIAN.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.719 x D.277.8 x H.405 mm.

Weight: 13.5 kg.

CHDPP Jetline wall chest - double with door



- Unit in epoxy painted steel panel. (thickness 12/10th).
- Metal sheet lift door fitted with holding compass tested for 10000 opening/closing cycles.
- Acceptable load 50 kg.
- Keylock.
- Grey framework ELIAN.
- Easy and fast fastening on a low unit thanks to the “KIT-TUBES" or “KIT-TUBESUP" fitting kit.
- Overall dimensions: L.1446.4 x D.277.8 x H.405 mm.

Weight: 19 kg.

Wall cabinets

A500PP Jetline wall unit - 1 solid door



- Unit in epoxy painted steel panel. (thickness 12/10th).
- 1 swinging door, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 10000 opening/closing cycles.
- 3 epoxy painted shelves adjustable in height (100mm steps) withstanding 35 kg loads.
- 1 wardrobe bar for use as locker.
- Keylock, 2 points.
- Grey framework ELIAN, red doors 3010.
- Cabinet fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Overall dimensions: L.500 x D.507.4 x H.1835 mm (including feet 168.7).

Weight: 70 kg.

A500PV Jetline wall unit - 1 transparent door



- Cabinet in epoxy painted steel panel. (thickness 12/10th).
- 1 transparent swinging door in plexiglas, thickness 3 mm, mounted on invisible pin hinges offering a 110-degree opening. The doors are tested for 10000 opening/closing cycles.
- 3 epoxy painted shelves adjustable in height (100mm steps) withstanding 35 kg loads.
- 1 wardrobe bar for use as locker.
- Keylock, 2 points.
- Grey framework ELIAN, red doors 3010.
- Cabinet fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Overall dimensions: L.500 x D.507.4 x H.1835 mm (including feet 168.7 mm).

Weight: 66.5 kg.

A1000PP Jetline wall unit - 2 solid doors



- Unit in epoxy painted steel panel. (thickness 12/10th).
- Swinging doors mounted on invisible pin hinges offering a 110-degree opening.
- To ensure the cabinet is rigid and safe, the doors are tested for 10000 opening/closing cycles.
- 3 epoxy painted shelves adjustable in height (100mm steps) withstanding 75 kg loads.
- Handle fully integrated to the door for comfortable and ergonomic opening.
- Keylock, 2 points high and low.
- Grey framework ELIAN, red doors 3010.
- Cabinet fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Overall dimensions: L.1000 x D.507.4 x H.1835 mm (including feet 168.7 mm).

Weight: 102 kg.

A1000PV Jetline wall unit - 2 glazed doors



- Cabinet in epoxy painted steel panel. (thickness 12/10th).
- 2 transparent swinging doors in Plexiglas, thickness 3 mm, mounted on invisible pin hinges offering a 110-degree opening.
- The doors are tested for 10000 opening/closing cycles.
- 3 epoxy painted shelves adjustable in height (100mm steps) withstanding 75 kg loads.
- To ensure the cabinet is rigid and safe, the doors are fully lined with 12/10ths metal sheet.
- Keylock, 2 points.
- Grey framework ELIAN, red doors 3010.
- Cabinet fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- The unit is fitted with plinths for perfect finish. Produced in painted metal sheet, they are just screwed, and are easy to remove for cleaning or moving the unit.
- Overall dimensions: L.1000 x D.507.4 x H.1835 mm (including feet 168.7 mm).

Weight: 95 kg.

Vertical organizer panel

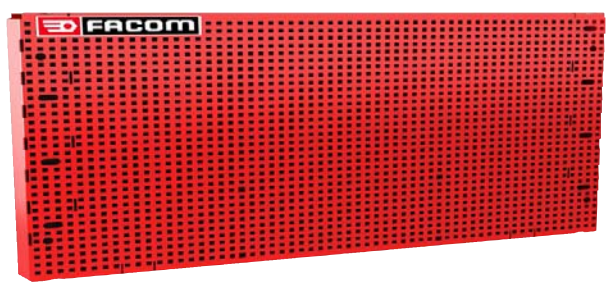
PAV1 Jetline wall-mounted hook panel - 1 module



- Perforated panel: L.6 x 6 mm with 12 mm step.
- Tools fastened with the CKS hook range.
- Can also be fitted with shelves (perforations designed for shelf holders).
- Fastening with the KIT-TUBES fitting tubes (for installation in addition to a unit) or KIT-TUBESUP (for installation on basic worktop).
- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Overall dimensions: L.724.5 x H.805 x D. 45 mm.

Weight: 5.3 kg.

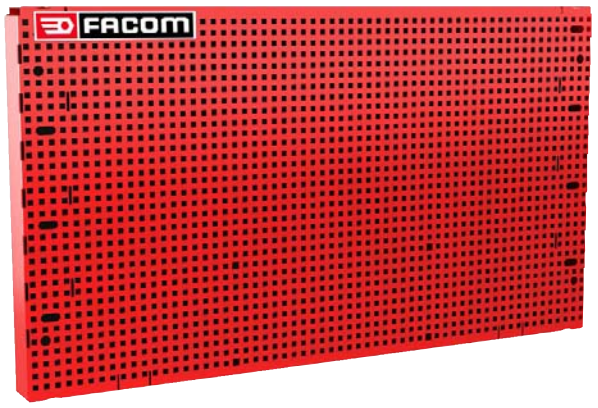
PAV2 Jetline wall-mounted hook panel - 2 modules



- Perforated panel: L.6 x 6 mm with 12 mm step.
- Tools fastened with the CKS hook range.
- Can also be fitted with shelves (perforations designed for shelf holders).
- Fastening with the KIT-TUBES fitting tubes (for installation in addition to a unit) or KIT-TUBESUP (for installation on basic worktop).
- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Overall dimensions: L.1452 x H.805 x D.45 mm.

Weight: 9.1 kg.

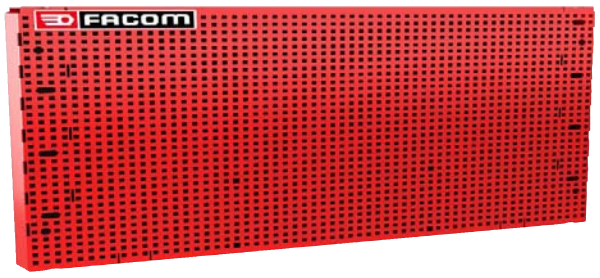
PPAV1 Jetline wall-mounted hook half-panel - 1 module



- Perforated panel: L.6 x 6 mm with 12 mm step.
- Tools fastened with the CKS hook range.
- Can also be fitted with shelves (perforations designed for shelf holders).
- Fastening with the KIT-TUBES fitting tubes (for installation in addition to a unit) or KIT-TUBESUP (for installation on basic worktop).
- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Overall dimensions: L.724.5 x H.402.5 x D.45 mm.

Weight: 3.5 kg.

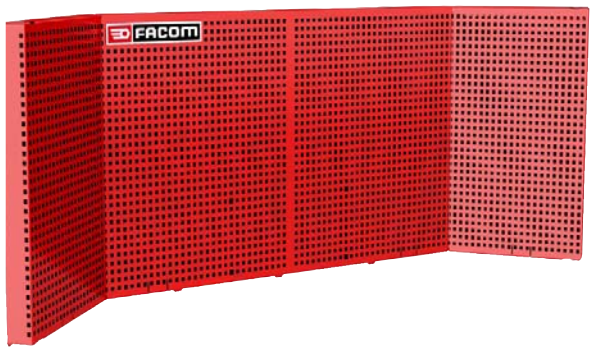
PPAV2 Jetline wall-mounted hook half-panel - 2 modules



- Perforated panel: L.6 x 6 mm with 12 mm step.
- Tools fastened with the CKS hook range.
- Can also be fitted with shelves (perforations designed for shelf holders).
- Fastening with the KIT-TUBES fitting tubes (for installation in addition to a unit) or KIT-TUBESUP (for installation on basic worktop).
- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Overall dimensions: L.1452 x H.402.5 x D.45 mm.

Weight: 6 kg.

PPAVA Jetline wall-mounted hook half-panel - angle



- Perforated panel: L.6 x 6 mm with 12 mm step.
- Tools fastened with the CKS hook range.
- Can also be fitted with shelves (perforations designed for shelf holders).
- Fastening with the KIT-TUBES fitting tubes (for installation in addition to a unit) or KIT-TUBESUP (for installation on basic worktop).
- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Overall dimensions: L.816 x H.402.5 x D.45 mm.

Weight: 5 kg.

PPAV1ELEC Jetline wall-mounted hook half-panel - 1 module + socket block



- Perforated panel: L.6 x 6 mm with 12 mm step.
- Fitted with 6-socket multiple connector with On/Off switch.
- Tools fastened with the CKS hook range.
- Can also be fitted with shelves (perforations designed for shelf holders).
- Fastening with the KIT-TUBES fitting tubes (for installation in addition to a unit) or KIT-TUBESUP (for installation on basic worktop).
- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Overall dimensions: L.724.5 x H.402.5 x D.45 mm.

Weight: 4.1 kg.

Worktops

JLS-PB - Jetline wood worktops

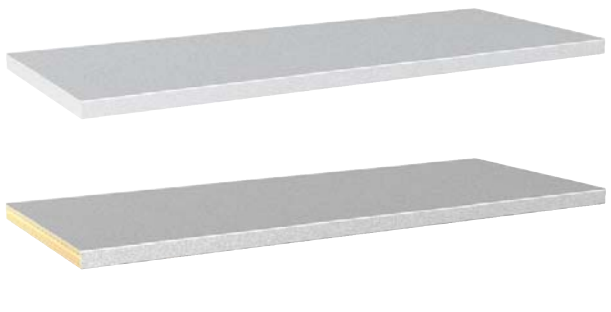


- Beech-ply worktop:
- Thickness 40 mm for strength and durability.
- Linseed oil treatment for better resistance to liquids and easy maintenance.
- 3 different lengths adapting perfectly to the dimensions of low units.
- Easy and fast assembly thanks to pre-positioned metallic inserts.
- Load resistance:
- 500 kg for JLS-PB1 .
- 1 tonne for JLS-PB2 and JLS-PB3.
- Depth of worktop only: 570 mm.
- Depth with KIT-GTECH tray: 635 m.

*When designing a simple workbench made of a worktop, feet and a cross brace, always add the KIT-GTECH technical tray.
- Example: for a 1455 mm workbench, you need 1 JLS-PB2 + 2 KIT-GTECH.

	L [mm]	⚖ [kg]
JLS-PB1	727	12
JLS-PB2	1455	24
JLS-PB3	2182	36

JLS-PB - Jetline wood and galvanised worktops



- Beech-ply worktop 40 mm thick covered with galvanised steel 12/10th for improved resistance to impact and heat. (Edge also covered).
- 3 different lengths adapting perfectly to the dimensions of low units.
- Easy and fast assembly thanks to pre-positioned metallic inserts.
- Load resistance:
- 500 kg for JLS-PBG1.
- 1 tonne for JLS-PBG2 and JLS-PBG3.
- Depth of worktop only: 570 mm.
- Depth with KIT-GTECH tray: 635 m.

*When designing a simple workbench made of a worktop, feet and a cross brace, always add the KIT-GTECH technical tray.
- Example: for a 1455 mm workbench, you need 1 JLS-PB2 + 2 KIT-GTECH.

	L [mm]	⚖ [kg]
JLS-PBG1	727	16,20
JLS-PBG2	1455	32,30
JLS-PBG3	2182	48,50

Basic feet and braces

JLS-PS Single base for Jetline workbench



- Built in epoxy painted steel panel. (thickness 12/10th).
- Grey ELIAN.
- Fitted with jack feet for an adjustment ensuring perfect stability regardless of the type of floor.
- Perforated sides to store the JETXL roller cabinet accessories.
- Easy and fast fastening of the worktop.
- Overall dimensions: L.497 x D.100 x H.985.

Weight: 14.5 kg.

JLS-TRAA2 Cross brace for 2 feet for Jetline workbench size 1455 mm



- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Easy and fast fastening of the feet on the workbench.
- Overall dimensions: L.1053 x D.40 x H.240 mm.

Weight: 4.3 kg.

JLS-TRAA3 Cross brace for 2 feet for Jetline workbench size 1780 mm



- Built in epoxy painted steel panel. (thickness 12/10th).
- Colour red 3010.
- Easy and fast fastening of the feet on the workbench.
- Overall dimensions: L.1780 x D.40 x H.240 mm.

Weight: 4.3 kg.

Assembly and accessories

KIT-TUBES Single Jetline assembly kit



- The KIT-TUBES is used to assemble high elements on a basic worktop.

(Use KIT-TUBESUP to install high units on a basic workbench when you do not have low units)

- The KIT-TUBES is composed of:

- 2 tubes in epoxy painted metal

- Dimensions: Ø 30 mm / L: 1188 mm.

Weight: 2.55 kg.

KIT-TUBESUP Jetline with holder assembly kit



- The KIT-TUBESUP is used to assemble high elements on a basic worktop.

(Warning: Use the KIT-TUBES if you have low units).

- The KIT-TUBESUP is composed of:

- 2 epoxy paint metal tubes with a worktop fastening system.

- A multifunction technical tray.

- Dimensions: Ø 30 mm / L: 841mm.

Weight: 4.1 kg.

KIT-GTECH Jetline technical tray kit



- Use KIT-GTECH in association with worktops when you do not wish to have high units (indeed, when choosing high units, use KIT-TUBES or KIT-TUBESUP).
- Built in galvanised steel.
- To avoid any risk of damage, the tray is fitted with rubber cable passages.
- The length of a tray corresponds to a 727 mm long module.

- For a worktop 727 mm long, use 1 KIT-GTECH.
- For a worktop 1,455mm long, use 2 KIT-GTECH.
- For a worktop 2,182 mm long, use 3 KIT-GTECH.

- Dimensions: L.727 x D.65 x H.70 mm.

Weight: 1.98 kg.

JLS-LIGHT Jetline light kit



- Fasten the JLS-LIGHT kit:

- Either directly under one of the wall chests (CHS, CHD, ….)
- Or in applique on a vertical hook panel (PAV1, PAV2, PPAV1, …) sing the metallic holder supplied.

- White light.
- Power: 13 W / 230V.
- ON/OFF button.
- Neon tube length 515 mm (724.5 mm with the holder).

Weight: 1.4 kg.

A1000PP.04 Shelves for Jetline A1000PP and A1000PV cabinets



- Metal sheet shelf and fastening kit.

A500PP.03 Shelf for Jetline A500PP and A500PV cabinets



- Metal sheet shelf and fastening kit.

MBSPP.04 Shelf for Jetline MBS unit



- Metal sheet shelf and fastening kit.

MHSPP.01 Shelf for Jetline MHS unit



- Metal sheet shelf and fastening kit.

MBAPP.06 Galvanised top for angle unit Jetline MBAPP



- To be fitted on the angle worktop MBAPP.

Classical fixed storage

Heavy-duty

HEAVY-DUTY WORKBENCHES

BENEFITS OF JET+ DRAWERS ADAPTED TO WORKBENCHES

- **3 modules per drawer.**
- **Each drawer unit can contain 15 modules** distributed in the 60 and 130 mm high drawers.
- **50 kg** total acceptable static load in the drawers.

TECHNICAL DATA
Overall dimensions of the drawer unit: L721 x D540 x H815 mm.
Effective drawer dimensions: L569 x D421 x H60 / 130 / 270 mm.







2000.AA1 Heavy-duty workbench 2 m



- Beech-ply worktop 40 mm thick, linseed oil-treated for easy maintenance.
- Worktop length: 2 m.
- Worktop width: 750 mm.
- Standard height: 850 mm.
- Colour: grey RAL 9006.

Weight: 99 kg.

1500.AA1 Heavy-duty workbench 1.5 m

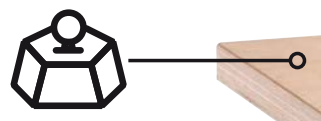


- Beech-ply worktop, linseed oil-treated for easy maintenance.
- Worktop length: 1.5 m.
- Worktop width: 750 mm.
- Standard height: 850 mm.
- Colour: grey RAL 9006.

Weight: 95 kg.

HEAVY-DUTY WORKBENCHES

Resistance
- Sturdy beech-ply worktop 40 mm thick
- Linseed oil-treated for increased resistance to liquids and easy maintenance
- Rigid structure: 12/10 mm and 15/10 mm metal sheet
- Drawers fitted on reinforced ball sliders accepting a 50 kg static load per drawer.

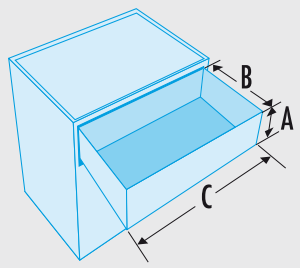


Static load resistance 1000 kg



Large storage capacity
- 6 fully-opening drawers giving 100 % access to contents.

A mm	B mm	C mm
60	421	569
130	421	569
270	421	569





Compatible with the FACOM modular system

2000.AB1M3 Heavy-duty workbench 2 m - 6 drawers



- Worktop length: 2 m.
- Worktop width: 750 mm.
- Standard height: 850 mm.
- Colour: grey RAL 9006.
- Complete with one 6-drawer unit:
- Drawer useful size: L.569 x D.421 mm.
- 4 x 60 mm + 1 x 130 mm + 1 x 270 mm.
- Supplied with 3 sets of removable partitions for small drawers.

Weight: 105 kg.

1500.AB1M3 Heavy-duty workbench 1.5 m - 6 drawers



- Worktop length: 1.5 m.
- Worktop width: 750 mm.
- Standard height: 850 mm.
- Colour: grey RAL 9006.
- Complete with one 6-drawer unit:
- Drawer useful size: L.569 x D.421 mm.
- 4 x 60 mm + 1 x 130 mm + 1 x 270 mm.
- Supplied with 3 sets of removable partitions for small drawers.

Weight: 102 kg.

▣ 2000.BB1M3 Heavy-duty workbench 2 m - 12 drawers



- Worktop length: 2 m.
- Worktop width: 750 mm.
- Standard height: 850 mm.
- Colour: grey RAL 9006.
- Complete with one 6-drawer unit:

- Drawer useful size: L.569 x D.421 mm.
- 4 x 60 mm + 1 x 130 mm + 1 x 270 mm.
- Supplied with 6 sets of removable partitions for small drawers.

Weight: 120.5 kg.

▣ 2000.AB32M3 Heavy-duty workbench 2 m - 6 drawers and cabinet 2210



- Workstation 2 m long.
- Unit comprising a workbench 2000.AB1 and a shutter cabinet 2210.
- Workbench 2000.AB1:

- Complete with one 6-drawer unit:
- Drawer useful size: L.569 x D.421 mm.
- 4 x 60 mm + 1 x130 mm + 1 x 270 mm.
- Worktop length: 2 m. Worktop width: 750 mm.
- Standard height: 850 mm.
- Beech-ply worktop 40 mm thick, linseed oil-treated for easy maintenance.
- Colour: grey RAL 9006.
- Supplied with 3 sets of removable partitions for small drawers.

- A 2210 cabinet: shutter cabinet 2 m long.

- Hook fastening useful dimensions: L.1875 x D.714 x H.145 mm.
- Tools hung by CKS system.
- Keylock.
- Dimensions: L.2000 x D.800 x H.240 mm.
- Colour: grey RAL 9006.

Weight: 135 kg.

Maintenance

MAINTENANCE WORKBENCHES

Stable
- 40mm thick linseed treated beech worktop (40 mm thick): increased resistance to liquids.
- Base in steel sheet “U” profiles.
- Workbench can be fastened to the floor.

Simple
- Easy and fast assembly.
- Centre “footrest“ cross-piece.
- Possibility to mount a 2nd drawer unit 2235.AT on 2m workbenches.



Resistance static 500 kg



Compatible with the FACOM modular storage system

2250.AT3 Maintenance workbench 2 m long with drawers



- Worktop length: 2 m.
- Surface width: 750 mm.
- Height: 860 mm.
- Treated beech-ply worktop 40 mm thick.
- 2235.AT3 3-drawer unit with partitions.
- Possibility to fasten a 2nd 2235.AT drawer unit.
- Drawer size: L.534 x D.358 mm.

Weight: 96.5 kg.

2250 Maintenance workbench 2 m long



- Worktop length: 2 m.
- Surface width: 750 mm.
- Height: 860 mm.
- Treated beech-ply worktop 40 mm thick.
- Possibility to fasten 2 2235.AT drawer units.

Weight: 70.5 kg.

2245.PVAT3 Maintenance workbench 1.5 m long with vertical panel



- Worktop length: 1.5 m.
- Surface width: 750 mm.
- Height: 860 mm.
- Treated beech-ply worktop 40 mm thick.
- Tools hung with CKS system on vertical panel: 1500 x 510 x 50 mm.
- 2235.AT3 3-drawer unit with partitions.
- Drawer size: L.534 x D.358 mm.

Weight: 97.3 kg.

2245 Maintenance workbench 1.5 m long



- Worktop length: 1.5 m.
- Surface width: 750 mm.
- Height: 860 mm.
- Treated beech-ply worktop 40 mm thick.
- Possibility to fasten a 2235.AT drawer unit.

Weight: 59.5 kg.

2235.AT2 Double drawer unit



- Drawer unit to fit either side under worktop.
- Fittings supplied.
- Keylock.
- Overall dimensions: L.670 x H.426 x D.315 mm.
- Drawer dimensions:

- L.534 x H.50 x D.358 mm (x2).
- L.534 x H.100 x D.358 mm (x1).

Weight: 26 kg.

2235.AT3 Triple drawer unit



- Drawer unit to fit either side under worktop.
- Fittings supplied.
- Keylock.
- Overall dimensions: L.670 x H.426 x D.315 mm.
- Drawer dimensions:

- L.534 x H.50 x D.358 mm (x2).
- L.534 x H.100 x D.358 mm (x1).

Weight: 26 kg.

Standard

STANDARD WORKBENCHES

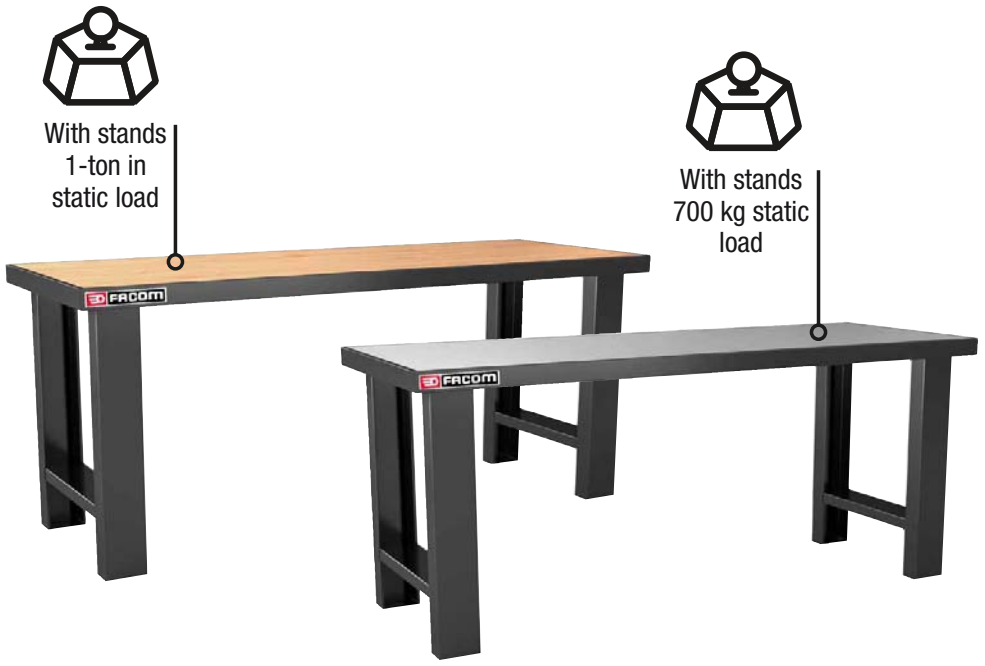
Assembly
- The top is factory-fitted.
- Only the feet must be assembled.
- Floor fastening possible.

Workbench with wooden top
- Beech-ply worktop 30 mm thick, linseed-oil treated.
- Vice-fitting option.
- Dimension 2000 x 750 x 850 mm.
- Weight 49 kg.

Workbench with galvanised top
- Top in 20/10th galvanised sheet.
- Dimension 2000 x 750 x 850 mm.
- Weight 50.5 kg.



Sturdy
- Metallic construction.
- Welded and bolted.



OPTION

Adaptable drawer option.
WB. DRAWER



WB.2000W Workbench 2 m long with wood top



- Beech-ply worktop 30 mm thick, linseed oil-treated for high strength and easy maintenance.
- Heavy-duty welded and bolted metallic construction.
- Static load resistance 1 tonne.
- Vice-fitting option.
- Ground-anchoring option.
- Easy and fast fitting.
- Colour: grey ELIAN / epoxy paint.
- Worktop length: 2 m.
- Worktop depth: 750 mm.
- Standard height: 850 mm.

Weight: 49 kg.

WB.2000GS Workbench 2 m long in galvanised metal sheet



- Worktop in galvanised steel 20/10th thick resistant to impacts and heat.
- Heavy-duty wheel and bolted metallic construction.
- The top is fitted on 3 metallic cross braces in galvanised metal sheet 20/10th thickness ensuring rigidity of the unit.
- Static resistance 700 kg.
- Ground-anchoring option.
- Easy and fast fitting.
- Colour: grey ELIAN / epoxy paint.
- Worktop length: 2 m.
- Worktop depth: 750 mm.
- Height: 850 mm.

Weight: 50.5 kg.

WB.DRAWER Drawer



- Drawer unit 140mm long to fit either side under worktop.
- Can be fitted with 3 modules.
- Keylock.
- Useful dimensions: L.569 x D.421 x H.140 mm.

Mobile workstations and tables

HEAVY LOAD MOBILE WORKBENCHES

Maximum resistance:
- Acceptable load 500 kg - extremely strong welded steel tubular structure.
- Upper top and lower shelf in 20/10th steel.

Maximum manoeuvrability:
- 4 large wheels: 2 castors with brake and 2 fixed wheels, Ø 160 mm, rubber tread, for easy manoeuvrability even with heavy load.
- Sturdy and comfortable manoeuvring handle.

Multifunctional:
- Laying surface (receiving a 600 x 800 mm pallet).
- Worktop (wheels locked).
- And transport.

Maximum safety:
- Upper worktop with retaining lips on 3 sides (including 2 folding), 25 mm high preventing objects/tools from falling while moving.
- Rounded base providing ankle protection.







2702 Heavy-duty roller table



- Ideal to deposit and transport heavy loads.
- Max strength and handling:
- Load acceptable 500 kg - extreme resistance mechanically welded steel tubular structure.
- Upper surface and lower shelf in steel 20/10th.
- Handling:
- 4 large size wheels: 2 castors with brake and 2 fixed rollers, Ø 160 mm, rubber tire, for easy handling of the trolley, even when heavily loaded.
- Robust and comfortable handle.
- Multi function:
- Laying surface (for pallet 600x800 mm), worktop (locked wheels) and transport.
- Max safety:
- Worktop with edges on 3 sides (including 2 retractible), height 25 mm to avoid prevent objects/tools from falling during transport.
- Lower panel rounded to protect ankles.
- Colours: grey ELIAN.
- Dimensions: L.1092 x D.617 x H.903 mm.

Accessories:
- Additional shelf in galvanised metal sheet thickness 2 mm with anti-fall edges dimensions: L.960 x D.546 x H.20mm / 9kg.

Weight: 42 kg.



2703 Heavy-duty trolley





- Ideal for secured transport or storage of tools and components.
- Max strength and handling:

- Load acceptable 500 kg - extreme resistance mechanically welded steel tubular structure.
- Upper surface and lower shelf in steel 20/10th.

- Handling:

- 4 large size wheels: 2 castors with brake and 2 fixed rollers, Ø 160 mm, rubber tire, for easy handling of the trolley, even when heavily loaded.
- Robust and comfortable handle.

- Multi function:

- Laying surface (for pallet 600x800 mm), worktop (locked wheels) and transport.

- Max safety:

- Worktop with edges on 3 sides (including 2 retractible), height 25 mm to avoid prevent objects/ tools from falling during transport.
- Lower panel rounded to protect ankles.

- Steel grid sides. (deployed metal 40*23 thickness 1.5mm).
- Padlock clasp (padlock not supplied).
- Acceptable load 500 kg.
- Extreme resistance steel tubular structure.
- Colours: grey ELIAN.
- Dimensions: L.1092 x D.617 x H.903 mm.

Accessories:
- Additional shelf in galvanised metal sheet thickness 2 mm with anti-fall edges.
- L.960 x D.546 x H.20mm / 9kg.

Weight: 54 kg.

2702.TAB Additional shelf



- In galvanised metal sheet thickness 2 mm with anti-fall edges.
- Dimensions: L.960 x D.546 x H.20 mm.

Weight: 9 kg.

2701 Roller table





- Rolling 100 mm, 2 fixed, 2 castors, 1 with brake.
- Intermediate shelf for storing long-size tools.
- Can be fitted with BT.66, BT.63, BT.62, BT.28 chests.
- Dimensions (LxDxH): 670 x 427 x 881 mm.
- Shelf useful dimensions (LxDxH) 558 x 400 x 30 mm.
- Bin useful dimensions (LxDxH) 665 x 400 x 70 mm.
- Red 3020 and grey Elian.

Weight: 20 kg.

Drawer cabinets

DRAWER CABINET

Heavy loads
- High strength telescopic ball sliders with **full opening**.
- **75 kg** for small drawers (50/75/100).
- **120 kg** for large drawers (125/175/225) - 2 pairs of sliders.

Large storage capacity
- Effective drawer dimensions: L 840 mm x D 570 mm x H 50/75/125/175/225 mm.
- Stackable (supplied with a linking kit).

Organised storage
❶ The drawers are fitted with **6 "XL" modules**.
❷ As an option: Transversal and longitudinal galvanised sheet partition system.
❸ And modular tray sets.

SAFETY
- **Central drawer locking: the drawers are locked simultaneously. (cabinet supplied with 2 keys).**
- **Anti-tilt system: with selective drawer opening, opening one drawer locks all others. This prevents the cabinet from tilting.**
- **Floor anchoring possible.**



☐ 2936B Heavy load industrial unit with 6 drawers





- 2 drawers H.50 mm.
- 1 drawer H.75 mm.
- 2 drawers H.175 mm.
- 1 drawer H.25 mm.
- The drawers can also be fitted with 'XL' modules.
- High strength 100% opening ball bearing telescopic sliders.
- 75 kg for small drawers (50/75/100).
- 120 kg for large drawers (125/175/225) - 2 pairs of sliders.
- Drawer useful dimensions: L.840 xD.570 x H.50/75/125/175/225 mm.
- The cabinets are stackable (supplied with linking kit).
- Safety:

- Drawer centralised locking: the drawers are locked simultaneously. (cabinet supplied with 2 keys).
- Anti-tilting system: when opened individually, each drawer locks all others. This prevents the cabinet from tipping over.
- Ground-anchoring option.

- Overall dimensions: L.980 x D.680 x H.1000 mm.

Weight: 139 kg.

2937B Heavy-duty industrial unit with 7 drawers





- High storage and load capacity.
- 4 drawers H.75 mm.
- 2 drawers H.125 mm.
- 1 drawer H.175 mm.
- The drawers can also be fitted with 'XL' modules.
- High strength 100% opening ball bearing telescopic sliders.
- 75 kg for small drawers (50/75/100).
- 120 kg for large drawers (125/175/225) - 2 pairs of sliders.
- Drawer useful dimensions: L.840 x D.570 x H.50/75/125/175/225 mm.
- The cabinets are stackable (supplied with linking kit).
- Safety:

- Drawer centralised locking: the drawers are locked simultaneously. (cabinet supplied with 2 keys).
- Anti-tilting system: when opened individually, each drawer locks all others. This prevents the cabinet from tipping over.
- Ground-anchoring option.

- Overall dimensions: L.980 x D.680 x H.1000 mm.

Weight: 154 kg.

2938B Heavy-duty industrial unit with 8 drawers





- High storage and load capacity.
- 4 drawers H.50 mm.
- 1 drawer H.75 mm.
- 2 drawers H.125 mm.
- 1 drawer H.175 mm.
- The drawers can also be fitted with 'XL' modules.
- High strength 100% opening ball bearing telescopic sliders.
- 75 kg for small drawers (50/75/100).
- 120 kg for large drawers (125/175/225) - 2 pairs of sliders.
- Drawer useful dimensions: L.840 x D.570 x H.50/75/125/175/225 mm.
- The cabinets are stackable (supplied with linking kit).
- Safety:

- Drawer centralised locking: the drawers are locked simultaneously. (cabinet supplied with 2 keys).
- Anti-tilting system: when opened individually, each drawer locks all others. This prevents the cabinet from tipping over.
- Ground-anchoring option.

- Overall dimensions: L.980 x D.680 x H.1000 mm.

Weight: 161.5 kg.

2939B Heavy-duty industrial unit with 9 drawers



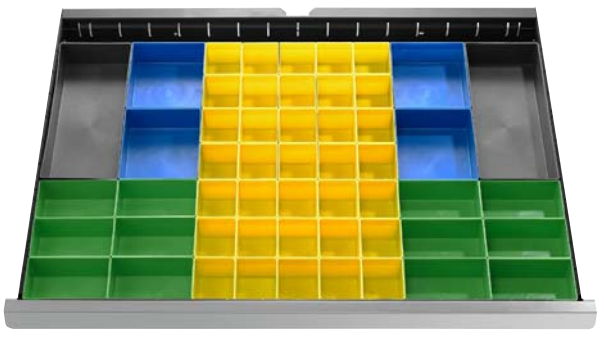
- High storage and load capacity.
- 4 drawers H.50 mm.
- 3 drawers H.75 mm.
- 2 drawers H.125 mm.
- The drawers can also be fitted with 'XL' modules.
- High strength 100% opening ball bearing telescopic sliders.
- 75 kg for small drawers (50/75/100).
- 120 kg for large drawers (125/175/225) - 2 pairs of sliders.
- Drawer useful dimensions: L.840 x D.570 x H.50/75/125/175/225 mm.
- The cabinets are stackable (supplied with linking kit).
- Safety:

- Drawer centralised locking: the drawers are locked simultaneously. (cabinet supplied with 2 keys).
- Anti-tilting system: when opened individually, each drawer locks all others. This prevents the cabinet from tipping over.
- Ground-anchoring option.

- Overall dimensions: L.980 x D.680 x H.1000 mm.

Weight: 172.5 kg.

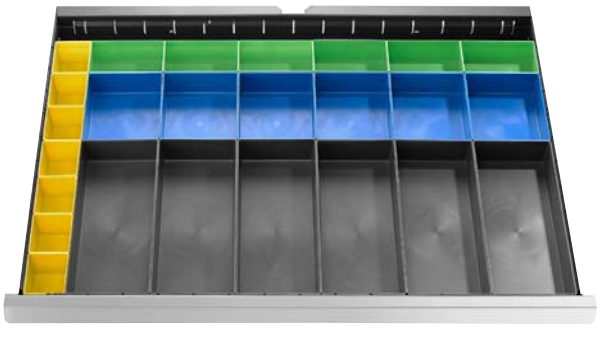
2930.B1 Set of 53 plastic trays





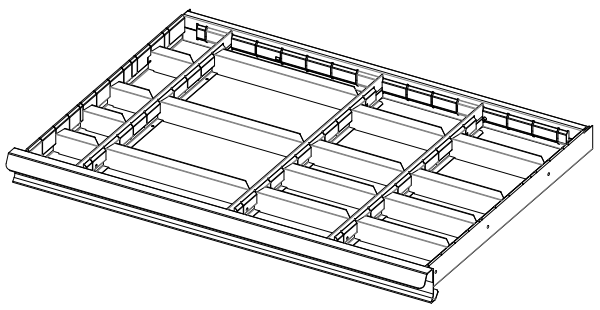
- Different coloured plastic modular trays.
- Kit of 53 trays (35 yellow, 12 green, 4 blue, 2 grey).
- Yellow 64 x 74 x 51 mm – green 128 x 74 x 51 mm – blue 148 x 128 x 51 mm- grey 296 x 128 x 51 mm.

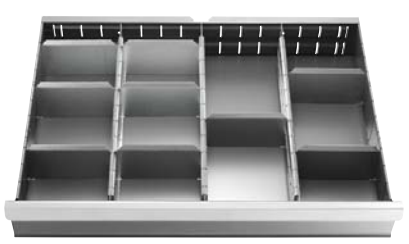
2930.B2 Set of 25 plastic trays



- Different coloured plastic modular trays.
- Kit of 25 trays (7 yellow, 6 green, 6 blue, 6 grey).
- Yellow 64 x 74 x 51 mm – green 128 x 74 x 51 mm – blue 148 x 128 x 51 mm- grey 296 x 128 x 51 mm.

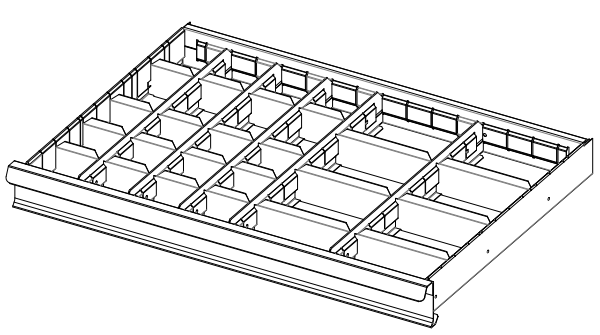
2930.C1 Supplied with 18 partitions for drawers 80 and 75 mm wall

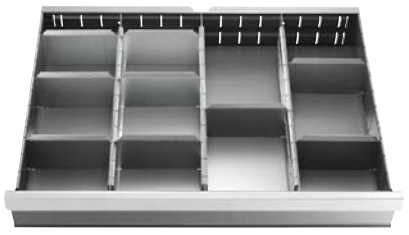




- Partitioning system in galvanised metal sheet.
- 3 separations.
- 4 partitions 100 mm high.
- 3 partitions 300 mm high.
- 8 partitions 200 mm high.

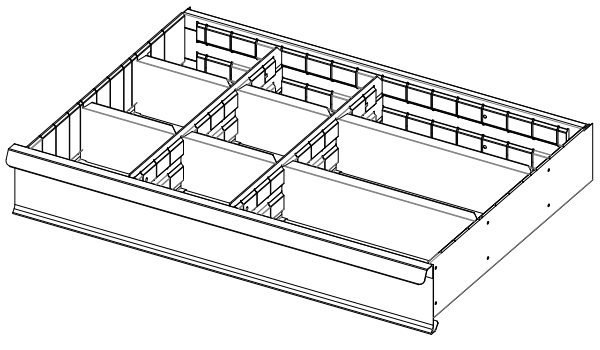
2930.C2 Set of 27 partitions for drawers 75 mm wall

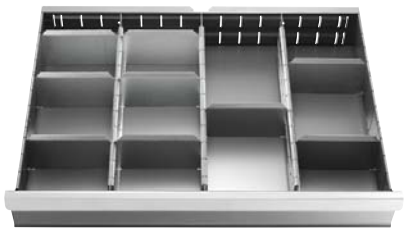




- Partitioning system in galvanised metal sheet.
- 5 separations.
- 16 partitions 100 mm high.
- 6 partitions 200 mm high.

2930.C3 Set of 8 partitions for drawers 125 mm wall





- Partitioning system in galvanised metal sheet.
- 2 separations.
- 4 partitions 200 mm high.
- 2 partitions 400 mm high.

Large capacity cabinets

2940B Cabinet with folding doors





- Full access thanks to the 2 folding doors.
- Optimum storage organization.
- 5 shelves in galvanised steel:
- Free positioning.
- Acceptable load 150 kg.
- 8 intermediate partitions - free positioning, height: 195 mm, length 440 mm.
- 2 small tilting tray-drawers - grey ELIAN:
- Free positioning.
- Acceptable load 20 kg.
- Height: 130 mm (240 x 395 mm).
- 2 large tilting tray-drawers - grey ELIAN:
- Free positioning.
- Acceptable load 20 kg.
- Height: 130 mm (130 x 395 mm).

Safety:

- An anti-tilting system is built-in as the cabinet can be fitted with optional drawers.
- Overall dimensions: L.1000 x D.650 x H.1950mm.
- Colours: grey 9006 and grey ELIAN.

Weight: 180 kg.

2940B-75 Drawer 75 mm wall for 2940B cabinet



- Drawer with ball-bearing slides - 100% opening.
- Acceptable load 100 kg.
- Useful dimensions: L.775 x D.415 mm.
- Compatible with the modules of the FACOM Modular System range (foam or heat-formed plastic).

2940B-135 Drawer 135 mm wall for 2940B cabinet



- Drawer with ball-bearing slides - 100% opening.
- Acceptable load 100 kg.
- Useful dimensions: L.775 x D.415 mm.
- Compatible with the modules of the FACOM Modular System range (foam or heat-formed plastic).

Worktop cabinets and wall storage units

WORKTOP CABINETS AND WALL STORAGE UNITS

Maximum visibility and accessibility
• Shutters open fully and doors to 180°.

Compact, optimised storage
• Walls, sides and door panels are perforated on wall-mounted units.

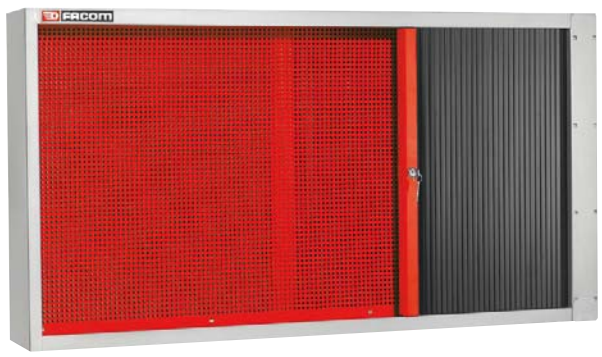
Modular
• Walls, sides and door panels are perforated on wall-mounted units.

SECURITY
• **Centralised key-locking of wall unit doors and drawers.**



Wall-mounted or mounted on worktop

2205 Shutter cabinet 1.50 m long

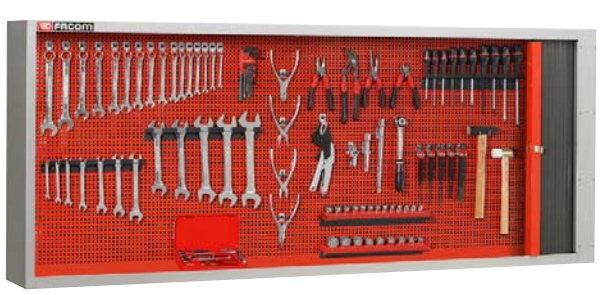


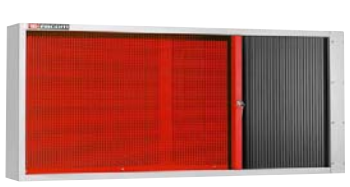


• Hook fastening useful dimensions: L.1375 x H.714 x D.145 mm.
• Tools hung by CKS system.
• Keylock.
• Dimensions: L.1500 x H.800 x D.240 mm.
Weight: 25 kg.

Delivered without tools.

2210 Shutter cabinet 2 m long





• Hook fastening useful dimensions: L.1875 x D.714 x H.145 mm.
• Tools hung by CKS system.
• Keylock.
• Dimensions: L.2000 x H.800 x D.240 mm.
Weight: 30 kg.

Delivered without tools.

2201 Wall unit - 1 drawer - 810 mm wall





- Cabinet with vertical hanging and drawer sections.

- Vertical fastening part:
- Storage surface area: 1 m².
- The base and sides of the cabinet, door liners, are perforated for hanging tools using the CKS system.
- Opening at 180° of the 2 swinging doors for maximum visibility and accessibility.

- Drawer section:
- 1 drawer with heavy-duty ball-bearing slides, 100% opening.
- Drawer useful dimensions: L.569 x H.60 x D.210 mm.
- Centralised locking of the doors and drawer by keylock.
- Wall mounted (through holes provided) or on a workbench.
- Dimensions: L.720 x D.280 x H.810 mm.

Weight: 31 kg.

Delivered without tools.

2202XL Wall unit with 2 drawers and shutters - 1000 mm wall





- Vertical fastening part:
- Storage surface area: 1.8 m².
- The base and sides of the cabinet, door liners, as well as the 2 additional panels, are perforated for hanging tools using the CKS system.
- Opening at 180° of the 2 swinging doors for maximum visibility and accessibility.
- Drawer section:
- 2 drawers with heavy-duty ball-bearing slides, 100% opening.
- Drawer useful size: L.569 x H.60 x D.210 mm.
- Centralised locking of the doors and drawers by keylock.
- Wall mounted (through holes provided) or on a workbench.
- Dimensions: L.720 x D.280 x H.1.000 mm.

Weight: 42.5 kg.

Delivered without tools.

2216 Shutter cabinet



- Compact cabinet for organizing a tooling set.
- Shutter with keylock.
- Tools hung by CKS system.
- Can be screwed to a wall (through holes provided).
- Dimensions: L.550 x D.150 x H.800 mm.

Weight: 12 kg.

Delivered without tools.

Tool storage

CKS Panels and hook system

VERTICAL TOOL STORAGE

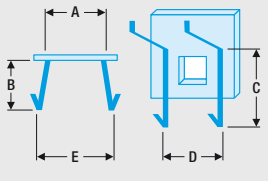
A HOOK FOR EACH TOOL!

Space-saving:
- Wall surfaces are transformed into storage surfaces.

Ergonomic:
- Direct tool access.

CKS hook system
- Installation of retaining clip CKLA.

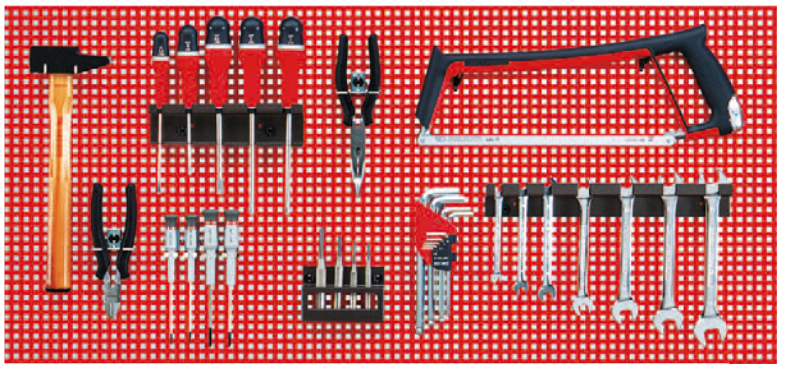


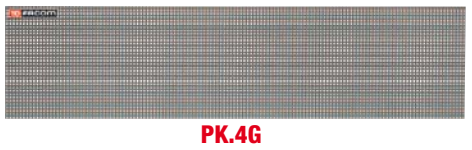


Perforated panels
- Perforation: L 6 x 6 mm.
- Pitch: 12 mm.

	L mm	H mm	W mm	Weight kg
PK.1	444	888	10	2,350
PK.2	444	444	10	1,160
PK.4	1665	444	10	4,360

	L mm	H mm	W mm	Weight kg
PK.1G	444	888	10	2,350
PK.2G	444	444	10	1,160
PK.4G	1665	444	10	4,360




PK.4G


PK.4


PK.1G


PK.1


PK.2


PK.2G

Hooks

CK Standard hook



CK: Standard hook length: 50 mm.
Weight: 10 g.

CKLA Locking clips



- Very useful in case of modification of hook implantation. (Packaging unit: 10).

Weight: 15 g.

Tool hook for combination wrenches

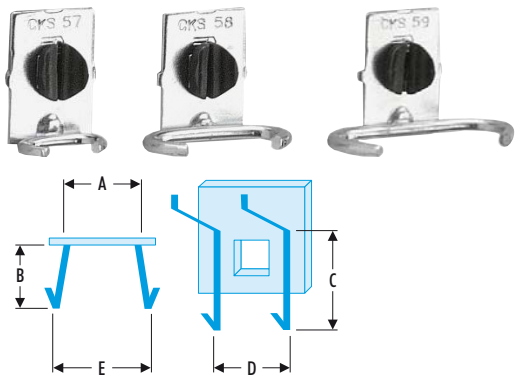




- Hook Ø 15 mm.

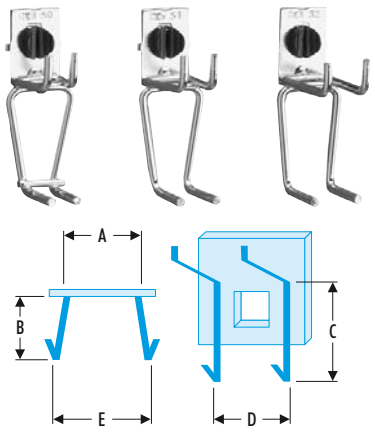
	Dimension [mm]
CKS.60A	Hook Ø 30 mm.
CKS.61A	Hook Ø 15 mm.

Tool hook for open end wrenches



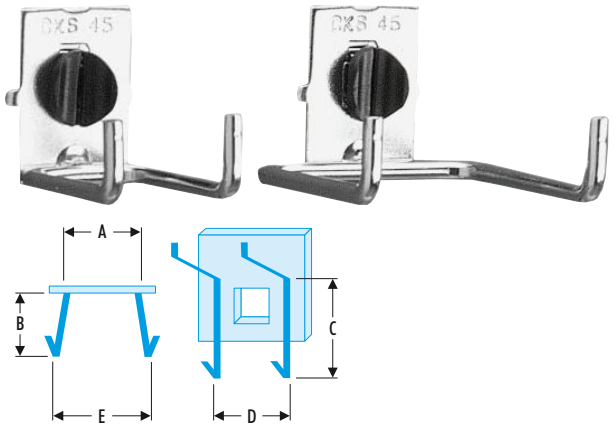
	A [mm]	B [mm]
CKS.57A	13	5
CKS.58A	25	8
CKS.59A	36	12

Tool hook for screwdrivers



	A [mm]	C [mm]	D [mm]
CKS.50A	13	35	7
CKS.51A	13	35	10
CKS.52A	14	35	13

Tool hook for hammers



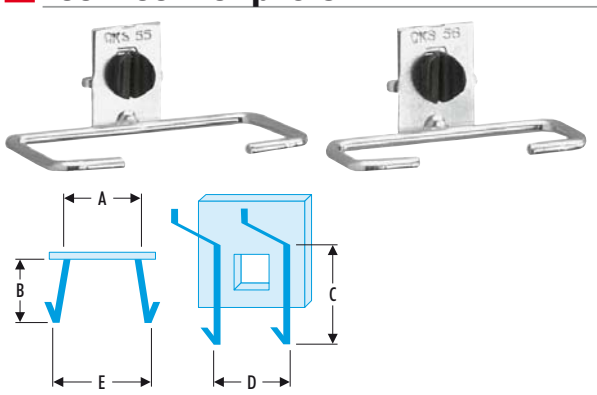
	A [mm]	B [mm]
CKS.45A	17	28
CKS.46A	33	36

Tool hooks for cylindrical tools



	L2 [mm]	L3 [mm]	Dimension [mm]
CKS.64A	PH.0		Ø 7 to 9
CKS.65A	PH.1		Ø 8 to 12
CKS.66A	PH.2		Ø 12 to 15
CKS.67A	PH.3		Ø 15 to 25
CKS.68A		PZ.0	Ø 25 to 32

Tool hook for pliers



	A [mm]	B [mm]	L3 [mm]
CKS.55A	61	28	PZ.1
CKS.56A	50	17	PZ.2

Tool hook kits



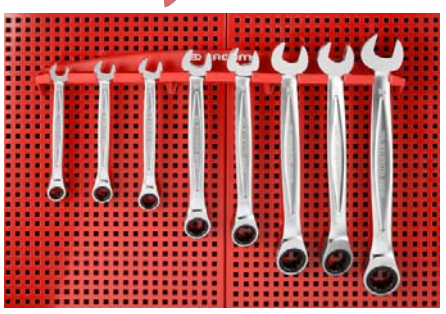
- CKS.K1: kit comprising 65 hooks: 20 x CKS.60A, 20 x CKS.61A, 5 x CKS.67A, 5 x CKS68A, 5 x CKS.50A, 5 x CKS.51A, 5 x CKS.52A.
- CKS.K2: kit comprising 40 hooks: 5 x CKS.45A, 5 x CKS.46A, 5 x CKS.55A, 5 x CKS56A, 10 x CKS.66A, 10 x CKS.67A.
- CKS.K3: kit comprising 65 hooks: 20 x CKS.60A, 20 x CKS.61A, 5 x CKS.67A, 5 x CKS68A, 5 x CKS.50A, 5 x CKS.51A, 5 x CKS.52A.

CKS.K1
CKS.K2
CKS.K3

Tool racks

Versatile wrench rack





- Easy to install: very easy fastening on the perforated sides of the roller cabinet or on a wall-mounted panel (fastening system supplied).
- Easy use and time gain.
- No specific location, wrenches can be positioned in any cell.

- No risk of damaging tools: polypropylene rack and appropriate design ensure risk-free contact.
- Broad range coverage.

	For	Dimension [mm]	⚖ [g]
CKS.100	8 open end wrenches	6 to 14	40
CKS.101	8 open end wrenches	14 to 27	40
CKS.102	4 open end wrenches	24 to 42	40

Versatile screwdriver rack





- Easy use and time gain.
- No specific location, wrenches can be positioned in any cell.

- No risk of damaging tools: polypropylene rack and appropriate design ensure risk-free contact.
- Broad range coverage.
- Dimensions: L.238 x D.38 x P.50 mm.

	For
CKS.08	6 screwdrivers all dimensions.

Versatile drift punch rack





- Easy to install: very easy fastening on the perforated sides of the roller cabinet or on a wall-mounted panel (fastening system supplied).
- Easy use and time gain.
- No specific location, drift punches can be positioned in any cell.

- No risk of damaging tools: polypropylene rack and appropriate design ensure risk-free contact.
- Broad range coverage: compatible with sheathed drift punches
- Dimensions: L.170 x D.35 x H.70 mm.

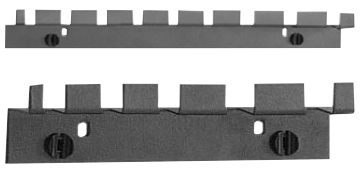
	For	⚖ [g]
CKS.103	6 drift punches	95

Versatile stud puller rack



	For	Dimension [mm]	⚖ [g]
CKS.25A	5 stud pullers	Ø 4 - 11	52

File rack



	For	⚖ [g]
CKS.34A	9 handle files	140
CKS.35A	5 handle files	68

Rack for angled socket wrenches no.1



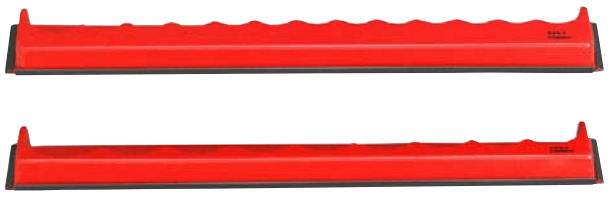
	For	Dimension [mm]	⚖ [g]
CKS.37A	9 angled socket wrenches 75 or 76	8 to 19	186

Rack for angled socket wrenches no.2



	For	Dimension [mm]	⚖ [g]
CKS.39A	16 angled socket wrenches 75 - 76 - 92	8 to 24	780

Socket rack



	For	Dimension [mm]	⚖ [g]
CKS.1A	13 1/2" - 3/8" sockets	8 to 21	280
CKS.2A	9 1/2“ sockets	22 to 32	286

Chisel rack

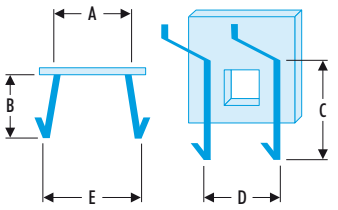


	For	⚖ [g]
CKS.80B	4 chisels	145
CKS.81A	5 caped chisels	210

Other tool racks

Pneumatic tool rack

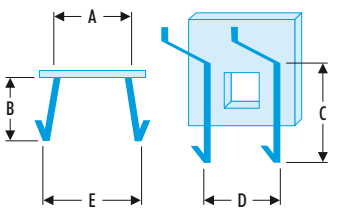




	A [mm]	B [mm]	⚖ [g]
CKS.71A	48	60	200
CKS.79A	48	60	200

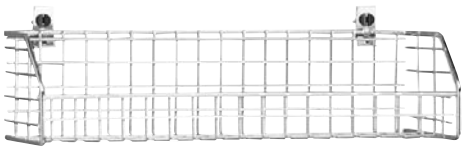
Electric tool rack





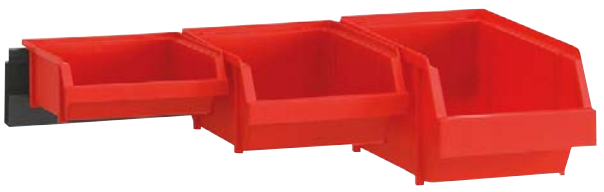
	A [mm]	B [mm]	⚖ [g]
CKS.77A	55	100	190

CKS.78A Wire basket



• Dimensions (L. x P. x H.): 355 x 92 x 105 mm.
Weight: 208 g.

CKS.85A Tray holder



• Length: 400 mm.
Weight: 320 g.

Plastic trays



	Dimension [mm]	⚖ [g]
CKS.86	110 x 110 x 40	50
CKS.87	110 x 150 x 60	90
CKS.88	110 x 200 x 85	165

WORKTOP CABINETS AND WALL STORAGE UNITS
HOOK REFERENCE TABLE

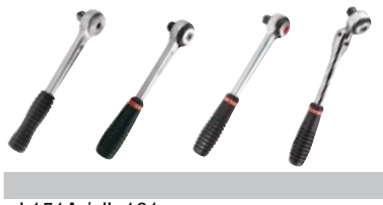
- Using the reference tables, start with the tool family, e.g. Wrenches.
- Select the tool reference, e.g. 440.26.
- Hook reference appears opposite the tool reference: CKS.60A.

If more than one tool reference goes in the same hook, the symbol / indicates the reference covered, e.g. 41.6 / 41.24 means that wrenches 6 to 24 can be stored on hook CKS.61A.





22.3,2X5,5 / 22.4X5	CKS.64A
22.6X7 / 22.10X11	CKS.57A
22.12X13	CKS.58A
22.3/16X1/4 / 22.11/32X7/16	CKS.57A
22.1/2X9/16	CKS.58A
31.6X7 / 31.10X11	CKS.57A
31.12X13 / 31.18X19	CKS.58A
31.20X22 / 31.21X23	CKS.59A
34.3,2 / 34.5,5	CKS.64A
34.6 / 34.11	CKS.57A
34.12 / 34.17	CKS.58A
34.3/16 / 34.7/32	CKS.64A
34.1/4 / 34.7/16	CKS.57A
34.1/2 / 34.11/16	CKS.58A
39.3,2H / 39.17	CKS.61A
39.1/8H / 39.11/16	CKS.61A
40.19LA / 40.22LA	CKS.61A
40.23LA / 40.50LA	CKS.60A
40.3/4LA / 40.7/8L1	CKS.61A
40.15/16LA / 40.2'LA	CKS.60A
41.6 / 41.22	CKS.61A
41.22 / 41.32	CKS.60A
41.46L / 41.65L	CKS.60A
42.8X10 / 21.11X13	CKS.57A
42.12X14 / 42.17X19	CKS.58A
42.19X22 / 42.30X32	CKS.59A
42.36X41	CKS.56A
42.5/16X3/8 / 42.7/16X1/2	CKS.57A
42.9/16X5/8 / 42.11/16X3/4	CKS.58A
42.3/4X7/8 / 42.1'X1'1/8	CKS.59A
43.7X9 / 43.8X10	CKS.66A
43.10X11 / 43.11X13	CKS.57A
43.12X14 / 43.17X19	CKS.58A
44.3,2X5,5 / 44.4X5	CKS.64A
44.5,5X7 / 44.10X11	CKS.57A
44.10X13 / 44.18X19	CKS.58A
44.20X22 / 44.26X28	CKS.59A
44.27X29 / 44.38X42	CKS.56A
44.1/4X5/16 / 44.3/8X7/16	CKS.57A
44.1/2X9/16 / 44.11/16X3/4	CKS.58A
44.3/4X13/16 / 44.1'X1'1/16	CKS.59A
44.1'1/8X1'1/4 / 44.1'7/16X1'5/8	CKS.56A
45.30 / 45.75	CKS.60A
54.24 / 54.70	CKS.60A
55A.6X7 / 55A.20X22	CKS.61A
55A.21X23 / 55A.46X50	CKS.60A
57.10X12 / 57.19X22	CKS.61A
59.6X7 / 59.22X24	CKS.61A
59.26X28 / 59.30X32	CKS.60A
59TX.6X8 / 59TX.20X24	CKS.61A
64.6X7 / 64.22X24	CKS.61A
64.1/4X5/16 / 64.7/8X15/16	CKS.61A
65.6X7 / 65.14X15	CKS.61A
65.16X18 / 65.22X24	CKS.60A
65.1/4X5/16 / 65.7/8X15/16	CKS.60A
66A.6X7	CKS.65A
66A.8X9 / 66A.14X15	CKS.66A
66A.16X17 / 66A.30X32	CKS.67A
66A.3/8X7/16 / 66A.1/2X9/16	CKS.66A
66A.5/8X11/16 / 66A.5/8X3/4	CKS.67A
66TX.6X8	CKS.65A
66TX.10X12 / 66TX.14X18	CKS.66A
66TX.20X24	CKS.67A
70A7 / 70A19	CKS.61A
70A22 / 70A32	CKS.60A
74A30.2 / 74A9	CKS.51A
74A10 / 74A14	CKS.52A
74T.5 / 74T.10	CKS.51A
74T.11 / 74T.14	CKS.52A
75.6 / 75.38	2 x CK
76.6 / 76.38	2 x CK
82.JP9A	CKS.61A
82H.JP9A / 83SH.JP9A	CKS.61A
84TC.2 / 84TC.14	CKS.45A
84TCS.3 / 84TCS.6	CKS.45A
84TZ.2,5 / 84TZ.8	CKS.51A
84TZ.10	CKS.52A
84TZ.5/32 / 84TZ.1/4	CKS.51A
84TZ.5/16	CKS.46A
84TZ.3/8	CKS.52A
84TZS.4 / 84TZS.8	CKS.51A
84TZS.10	CKS.52A
86A.JE7A / 86H.JU7	CK
87H.JE8 / 87HL.JU8	CKS.61A
89TX.6 / 89TX.10	CKS.50A
89TX.15 / 89TX.27	CKS.51A
89TX.30 / 89TX.50	CKS.52A
92A4 / 92A32	2 x CK
94A.3,2 / 94A.5,5	CKS.64A
94A6 / 94A9	CKS.65A
94A10 / 94A11	CKS.66A
94A12 / 94A14	CKS.67A
97.6X7	CKS.64A
97.8X9 / 97.14X15	CKS.66A
97.16X17 / 97.30X32	CKS.67A
98B6 / 98B17	CKS.45A
99C.6 / 99C.19	CKS.45A
105.230 / 105.280	CKS.61A
105.375	CKS.60A
113A.4C / 113A.10C	CKS.61A
113A.12C / 113A.24C	CKS.60A
113A.4CG / 113A.8CG	CKS.61A
113A.10CG / 113A.12CG	CKS.60A
113A.4T / 113A.10T	CKS.61A
113A.12T / 113A.24T	CKS.60A
113.4TG / 113A.8TG	CKS.61A
113A.10TG / 113A.12TG	CKS.60A
115A50 / 115A200	CKS.61A
116.50 / 116.200	CKS.61A
117.B	CKS.61A
118A	CKS.61A
119.3/8 / 119.3/4	CKS.61A
120.1/2 / 120.1'	CKS.61A
120.1'1/2 / 120.2'	CKS.60A
121A.1'	CKS.61A
121A.1'1/2 / 121A.2'	CKS.60A
125A35 / 125A80	CKS.61A
125A120 / 125A180	CKS.60A
126A35 / 126A80	CKS.61A
126A120 / 126A180	CKS.60A
131A.8 / 131A10	CKS.61A
131A14 / 131A36	CKS.60A
133A14 / 133A36	CKS.60A
134A.8 / 134A10	CKS.61A
134A14 / 134A36	CKS.60A
135A14 / 135A24	CKS.60A
136A2 / 136B4	CKS.60A
138A17 / 138A48	CKS.60A
440.4H / 440.22	CKS.61A
440.23 / 440.41	CKS.60A
440.1/4 / 440.7/8	CKS.61A
440.15/16 / 440.1'1/2	CKS.60A
467.6 / 467.22	CKS.61A
467.24 / 467.32	CKS.60A
467F.8 / 467F.19	CKS.61A
467S.7 / 467S.17	CKS.61A



J.151A / JL.161	CKS.67A
S.143A / S.161	CKS.68A
S.171 / SJ.171	CKS.67A
SL.161	CKS.68A



A2,5X50VE / 4X150VE	CKS.51A
A5,5X125VE / 10X200VE	CKS.50A
AD.0X50	CKS.50A
AGT.10X100	CKS.52A
AGT.8X100	CKS.51A
AN3,5X75 / 4X400	CKS.50A
AN4X25 / 6,5X35	CKS.68A
AN5,5X100 / 8X175	CKS.51A
AND0X75 / 1X75	CKS.50A
AND1X100	CKS.51A
AND1X25 / 2X35	CKS.68A
AND1X250	CKS.50A
AND1X400 / 3X150	CKS.51A
AND4X200	CKS.52A
ANDH2X125 / 3X150	CKS.51A
ANDH4X200	CKS.67A
ANF4X100 / 5,5X100	CKS.50A
ANF5,5X150 / 8X200	CKS.51A
ANF8EX200 / 10X250	CKS.52A

WORKTOP CABINETS AND WALL STORAGE UNITS
HOOK REFERENCE TABLE

ANP0X75 / 1X250	CKS.50A
ANP1X25 / 2X35	CKS.68A
ANP2X100 / 3X150	CKS.51A
ANP4X200	CKS.52A
ANX10X35 / 20X35	CKS.68A
ANX10X75 / 20X100	CKS.50A
ANX25X100 / 40X150	CKS.51A
ANXR10X175 / 20X100	CKS.50A
ANXR25X100 / 40X150	CKS.51A
AP. 1X75 / 4X200	CKS.51A
AP.0X50 / 0X75	CKS.50A
APB. 0X40 / 2X40	CKS.66A
AR. 2,5X75 / 3,5X100	CKS.50A
AR. 2X40 / 2,5X50	CKS.64A
AR. 4X100 / 8X150	CKS.51A
ARA. 2,5X50 / 3,5X75	CKS.64A
ARB. 4X40 / 6,5X40	CKS.66A
ATH. 5,5X100 / 8X150	CKS.51A
ATH. 8EX175 / 12X250	CKS.52A
ATHH. 10X175 / 14X250	CKS.52A
ATHH. D1 / D2	CKS.51A
ATHH. D3	CKS.52A
ATHH. P1 / P2	CKS.51A
ATHH. P3	CKS.52A
ATHH.4X90 / ATHH.8X150	CKS.51A
AW5,5X100	CKS.51A
AW8X150	CKS.51A
AWDH1X75 / 2X100	CKS.51A
AWFH5,5X125 / 8X175	CKS.51A
AWFH8EX175 / 14X250	CKS.52A
AWPH2X125 / 3X150	CKS.51A
AWPH4X200	CKS.52A



167A0.9 / 167A0.23	CKS.61A
167A0.18 / 167A0.23	CKS.56A
167A0.9 / 167A0.13	CKS.59A
169A0.9 / 169A0.23	CK
169A0.13	CKS.59A
169A0.23	CKS.56A
170A	CKS.61A
171.20EL	CK
176A.CPY	CKS.61A
177A0.23	CKS.56A
177E.24 / 177E.32	CKS.61A
177A0.9 / 177A0.23	CKS.61A
177A0.18 / 177A0.23	CKS.56A
177A0.9 / 177A0.13	CKS.59A
179E.19	CKS.61A
179E.23	CKS.56A
179A0.18 / 179A0.23	CKS.56A
179G.9 / 179G.13	CK
180	CKS.61A
180.CPE	CKS.61A
180.VE	CKS.61A
181A.18CPE	CKS.61A
181A.18G	CKS.61A
181A.25CPE	CKS.61A
181A.25G	CKS.61A
181A.30G	CKS.61A
182A.CP	CKS.60A
185.20 CPE	CKS.56A
186.7CPG	CKS.59A
187.18 CPE / TE / VE	CK
191A.18EL / 191A.22EL	CK
192.16 CPE / TE	CK
194.17 CPE / TE / VE	CKS.56A
195.20 CPE / TE / VE	CKS.56A
197A0.9 / 197A0.32	CKS.61A
197A0.23	CKS.56A
197A0.9 / 197A.18	CKS.59A
199A0.23	CKS.56A
199A0.32	CKS.61A
199A0.9 / 199A.18	CK
199A0.18 / 199A0.23	CKS.56A
199A0.9 / 199A0.13	CKS.59A
391.16 CPE / TE / VE	CK
395.14 / 395.16	CKS.59A
396	CKS.56A
401 / 404	CKS.56A
405.10	CK
405.12	CKS.59A
410	CKS.61A
410.S	CKS.61A
411A0.17	CKS.59A
411A0.20	CKS.56A
416	CK
421	CKS.59A
425 / 435	CK
442	CKS.56A
505	CKS.61A
477.32 / 479.32	CKS.61A
480.ECG	CKS.61A
481.40	CKS.60A
482.CPY / 482.EG	CKS.61A
484A	CK
484A.30	CKS.61A
491.18G	CKS.61A
491.20G	CKS.61A
491.22G	CKS.61A
495A.20EL	CKS.61A
495A.22EL	CKS.61A
495A.25EL	CKS.61A
495A.28EL	CKS.60A
495A.30EL	CKS.60A
497.32 / 499.32	CKS.61A
500 / 503	CKS.60A
504A0.100	CKS.61A
504A0.180	CKS.46A
506	CKS.60A
507A / 509	CKS.61A
511 / 512	CKS.60A
513.5 / 514A0.65	CKS.61A
514A0.240 / 516	CKS.60A
517.6 / 517.10	CK
520A0.70 / 520A0.170	CKS.61A
521.100 / 521.200	CKS.60A
507A / 509	CKS.61A
511 / 512	CKS.60A
513.5 / 514A0.65	CKS.61A
514A0.240 / 516	CKS.60A
517.6 / 517.10	CK
520A0.70 / 520A0.170	CKS.61A
521.100 / 521.200	CKS.60A



207A0.25 / 207A0.50	CKS.46A
209.50 / 209.60	CKS.46A
212A0.35 / 212A0.60	CKS.46A
214.10 / 214.R25	CKS.66A
214.R30	CKS.67A
214.R35	CKS.68A
216.40 / 216.60	CKS.46A
246.2 / 246.4	CKS.64A
246.5 / 246.6	CKS.65A
246.8	CKS.66A
248.2 / 248.6	CKS.64A
248.8 / 248.10	CKS.66A
249.2 / 249.3	CKS.64A
249.4 / 249.5	CKS.65A
249.6 / 249.G8	CKS.65A
249.G10 / 249.G16	CKS.67A
251A0.1,5	CKS.64A
251A.2,5 / 251A.5	CKS.64A
251A0.6	CKS.65A
247.2 / 247.6	CKS.64A
247.G8	CKS.66A
255.G2,5 / 255.G10	CKS.66A
256.2,5	CKS.64A
256.4 / 256.8	CKS.65A
256.10 / 257	CKS.66A



CAR.MD200EMA	CKS.60A
DRD.B200EMA / MD250EMA	CKS.60A
PAM.B200EMA / MD250EMA	CKS.60A
RAB.DRDB.300EMA	CKS.61A
RAB.DRDMD250A	CKS.61A
RAB.DRDMD250EMA	CKS.60A
RAB.RD250EMA	CKS.60A
RD.B250EMA / RD.MD200EMA	CKS.60A
TRI.MD150EMA / .MD200EMA	CKS.60A
603F 2 X CK	2 X CK
841A0.4	CKS.56A
841A0.9	CKS.56A
841.7	CKS.46A
880	CK
883B.G	CKS.60A
883.32	CKS.60A
884.30 / 884B	CKS.60A

Internet.
Keep up to date with our latest products, browse our electronic catalogue, search for tools by vehicle make visit our web site at **www.facom.com.**



Tool-set organizers

FACOM MODULAR SYSTEM

Effective tool organisation with FACOM Modular System

- Stored tools = productivity, comfort and safety.
- Instant access to all your tools without wasting time. Optimum safety: no more rummaging through loose tools in a drawer.

INFORMATION

Modules are available in 3 dimensions




❶

❶ Break-off modules

- Universal **modules compatible with all FACOM roller cabinets**.
- Thermoformed shock polystyrene.
- Dimensions 175 x 418 mm (355 mm without the tray).



For ROLL and CHRONO, detach the break-off section.

❷ Modules XL

- Modules compatible only with XL drawers (JET +3, JET +4, JET +5, CHRONO+ ranges, but also JETXL and CHRONOXL).
- Thermoformed shock polystyrene.
- Dimensions 188 x 418 mm


❷

Wrenches

▣ MOD.440-1 16 OGV® combination wrenches sizes 6 to 22 and 24 mm module



- 440. 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24 mm.
- Heat-formed tray PL.670.

Weight: 1.790 kg.

▣ MOD.440-1XL 17 combination wrenches 440 module (XL tray)



XL

- 440. 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 mm.
- Heat-formed tray PL.313.

Weight: 1.938 kg.

▣ MOD.440-2 4 OGV® combination wrenches large sizes 27 to 30 and 32 mm module



- 440. 27 - 29 - 30 - 32 mm.
- Heat-formed tray PL.314A.

Weight: 2.065 kg.

▣ MOD.440-2XL 5 OGV® combination wrenches large size 27 to 32 and 34 mm module



XL

- 440. 27 - 29 - 30 - 32 - 34 mm.
- Heat-formed tray XL PL.671.

Weight: 2.920 kg.

MOD.440-4 13 inch combination wrenches module



- 440. 1/4 - 5/16 - 11/32 3/8 - 7/16 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8 - 15/16.
- Heat-formed tray PL.673.

Weight: 1.593 kg.

MOD.467J12 12 ratchet combination wrenches module



- 467. 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm.
- Heat-formed tray PL.652.

Weight: 1.675 kg.

MOD.467XL 6 ratchet combination wrenches large size module



XL

- 467.21 - 22 - 24 - 27 - 30 - 32 mm.
- Heat-formed tray XL PL.653.

Weight: 4.220 kg.

MOD.467J13 13-piece module of ratchet combination wrenches and adaptors



- 467.8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 + 1/4" square drive 10 mm wrench + 1/2" square drive wrench adaptor.
- Heat-formed tray PL.682.

Weight: 1.700 kg.

MOD.467FJ12 12-piece module of hinged combination wrenches and adaptors



- 467F.8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm.
- 3 adaptors: 1/4" 1/2" sockets, 1/4" bits.
- Heat-formed tray PL.680.

Weight: 1.750 kg.

MOD.64J7 7-piece 12-point ratchet ring wrench module, 6 to19 mm



- 64. 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19 mm.
- Heat-formed tray PL.608A.

Weight: 0.925 kg.

MOD.65J7 7-piece 12-point 15° head ring wrench module



- 65. 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19 mm.
- Heat-formed tray PL.608A.

Weight: 1.153 kg.

MOD.44-1 9 open-end wrenches module, 6 to 24 mm



- 44. 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 mm.
- Heat-formed tray PL.315.

Weight: 1.315 kg.

MOD.44-2 3 open end wrenches large size module



- 44. 26x28 - 27x29 - 30x32 mm.
- Heat-formed tray PL.316

Weight: 1.578 kg.

MOD.55-1 7 offset-ring wrenches module, 6 to 19 mm



- 55A. 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 mm.
- Heat-formed tray PL.317A.

Weight: 0.920 kg.

MOD.55-2 3 ring wrenches module, 22 to 28 mm



- 55A. 21x23 - 22x24 - 26x28 mm.
- Heat-formed tray PL.318A.

Weight: 1.450 kg.

MOD.55-3 7 offset-ring wrenches module



- 55A. 1/2x9/16 - 1/4x5/16 - 11/32x13/32 - 19/32x25/32 - 3/4x13/16 - 3/8x7/16 - 5/8x11/16.
- Heat-formed tray PL.600A.

Weight: 1.020 kg.

MOD.75-1 10 6-point OGV® tubular socket wrenches module



- 75. 8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 mm.
- Heat-formed tray PL.625.

Weight: 2.500 kg.

MOD.97 6 tubular box wrenches module, 8 to 19 mm



- 97. 8x9 - 10x11 - 12x13 - 14x15 -16x17 - 18x19 mm.
- Heat-formed tray PL.359.

Weight: 0.900 kg.

MOD.99B 7 universal joint socket wrenches module, 7 to 19 mm



- 99C. 7 - 8 - 10 - 11 - 13 - 17 - 19 mm.
- Heat-formed tray PL.304 (value 3 modules).

Weight: 4.010 kg.

MOD.66A-1 6 hinged socket wrenches module, 6 to 17 mm



- 66A. 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 mm.
- Heat-formed tray PL.319A.

Weight: 0.940 kg.

MOD.66A-2 3 hinged socket wrenches module, 18 to 23 mm



- 66A. 18x19 - 20x22 - 21x23 mm.
- Heat-formed tray PL.320.

Weight: 1.600 kg.

MOD.43 Flare nut wrenches module, 7 to 19 mm



- 43. 7x9 - 8x10 - 11x13 - 12x14 - 17x19 mm.
- Heat-formed tray PL.635.

Weight: 0.960 kg.

MOD.TX1 Torx® wrench sockets and bit module



- J.235: bit holder.
- R.235: 1/4" bit holder socket / S.236: 1/2" bit holder socket.
- EX.2 40 - 45 - 50 - 55: bits 5/16 / EXR drives. 10-15-20-25-30-40 1/4 drives.
- JTX. 8 - 10 - 12 - 14 - 16: 3/8"/ STX 18-20 sockets: 1/2" sockets.
- 59TX 6x8 - 10x12 - 14x18 - 20x24: ring wrenches.
- Heat-formed tray: PL.360.

Weight: 0.995 kg.

Sockets

MOD.R1 1/4" drive sockets with Pozidriv® head module



- R.161: “palm- control" 1/4" ratchet.
- R.209 and R.215: 55 and 150 mm extensions.
- R.236A: 1/4" ratchet with handle - 158 mm.
- R.240A: 1/4" universal joint.
- R.120A: 1/4" sliding tee.
- R. 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm and R.235: sockets.
- 82H. 2 to 10 mm: short male wrenches.
- Pozidriv® Torsion drives: 1 and 2.
- Torsion Slot drives: ES.T 4.5, 6.5 and 8; EH.3 - 4 - 5 - 6 - 10.
- Heat-formed tray: PL.321.

Weight: 0.920 kg

MOD.RL1 1/4" drive sockets with Phillips®-Pozidriv® head module



- RL.161: ratchet.
- R.209-R.215: extensions.
- R.240A: universal joint.
- R.120A: sliding tee.
- R.235: 1/4" drive holder socket.
- R.236A: sliding tee.
- Sockets R.5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14.
- ECR socket holder drive.
- 83SH. 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10.
- Pozidriv® 1 - 2 - 3, Phillips® 1 - 2 -3, slotted head 4.5 - 6.5.
- Heat-formed tray PL.321.

MOD.R2 1/4" drive sockets with Pozidriv®-Resistorx® head module



- R.161: “palm- control" 1/4" ratchet.
- R.209 and R.215: 55 and 150 mm extensions.
- R.236A: 1/4 ratchet with handle - 158 mm.
- R.240A: 1/4" universal joint.
- R.120A: 1/4" sliding tee.
- R. 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm
- R.235: drive holder sockets.
- 83SH. 3 - 4 - 5 - 6 - 7 - 8 mm: spherical head long male wrenches.
- Pozidriv® drives: 1 and 2.
- Resistorx® drives: 10 - 15 - 20 - 25 - 27 - 30 - 40.
- Heat-formed tray: PL.321.

Weight: 0.990 kg

MOD.R3 1/4" inch sockets module



- R.161: “palm- control" 1/4" ratchet.
- R.209 and R.215: 55 and 150 mm extensions.
- R.236A: with handle 158 mm.
- R.240A: 1/4" universal joint.
- R.120A: 1/4" sliding tee.
- R 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 13/32 - 7/16 - 1/2 and R.235: Sockets.
- 82H. 1/4 - 1/8 - 3/8 - 3/16 - 3/32 - 5/16 - 5/32 - 5/64 - 7/32 - 9/64: short male wrenches.
- Bits:

- Torsion slot 4.5, 6.5 and 8.
- hex 1/8 - 5/32 - 3/16 - 7/32.
- Pozidriv® 1 and 2.

- Heat-formed tray: PL.603.

Weight: 0.950 kg.

MOD.R5 1/4" sockets, male keys, TORX® wrenches and bits module



- R.161: “palm-control" 1/4" ratchet.
- R.209 and R.215: 55 and 150 mm extensions.
- R.236A: with handle 158 mm.
- R.240A: 1/4" universal joint.
- R.120A: 1/4" sliding tee.
- 83SH.JPA: set of 9 spherical head keys (1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 mm).
- 89S.JP8: set of 8 spherical head TORX® wrenches (10 - 15 - 20 - 25 - 27 - 30 - 45).
- R. 5.5 to 14 mm and R.235 (bit holder socket).

Bits:

- Slotted head 6.5 - 8.
- Hex 3 - 4 - 5 - 6 - 7 mm.
- Resistorx® 10 - 15 - 20 - 25 - 30 - 40 .
- Phillips® 1 - 2 -3 .
- Pozidriv® 1 and 2.

- XL heat-formed tray: PL.658.

Weight: 1.413 kg.

XL

MOD.HLA Long hex socket module



- J.HLA 7 - 8 - 9 - 10 - 11mm: 3/8".
- S.HLA 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19mm: 1/2".
- Heat-formed tray: PL.609.

Weight: 1.600 kg.

MOD.J1 3/8" J1 hex socket module



- J.161: “palm- control" 3/8" ratchet.
- J.240A: 3/8" universal joint.
- J.120A: 3/8" sliding tee.
- J.215 and J.210: 2 extensions 125 and 250 mm long.
- J.H 8 to 19 - 21 - 22 mm.
- Heat-formed tray PL.322A.

Weight: 1.800 kg.

MOD.JL1 3/8" socket ratchet module



XL

- JL.161 ratchet.
- J.210-215 extensions.
- J.240A universal joint.
- J.120A sliding tee.
- J.232 3/8" to 1/2" adaptor.
- J.235 3/8" bit holder sockets.
- Sockets JH.8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22.
- Heat-formed tray XL PL.686.

MOD.J2 3/8" inch J2 sockets module



- J.161: “palm- control" 3/8" ratchet.
- J.215 and J.210: 2 extensions 125 and 250 mm long.
- J.240A: 3/8" universal joint.
- J.120A: 3/8" sliding tee.
- J.1/2 to J.13/16: 10 Junior 12-point 3/8" sockets.
- Heat-formed tray: PL.601.

Weight: 1.520 kg.

MOD.J5 3/8" J5 hex socket module



- J.171: 3/8" locked ratchets.
- J.210RC, J.215RC: 3/8" extensions 125 and 250 mm long.
- J.240A: 3/8" universal joint.
- J.120A: 3/8" sliding tee.
- J.H 8 to 22: sockets 8 to 19 - 21 - 22 mm set.
- Heat-formed tray: PL.322A.

Weight: 1.750 kg.

MOD.J6 3/8" J6 hex socket module



- J.360: 3/8" rotating handle ratchet.
- J.210 and J.215: 2 extensions.
- J.240A: 3/8" universal joint.
- J.H 8 to 22: hex sockets 8 to 19 - 21 - 22 mm set.
- Heat-formed tray: PL.674.

Weight: 1.660 kg.

MOD.J7 3/8" J7 hex socket module



- J.161: “palm- control" 3/8" ratchet.
- J.174: 3/8" long-reach locked ratchet.
- J.210RC and J.215RC: 2 extensions.
- J.240A: 3/8" universal joint.
- J.120A: 3/8"sliding tee.
- J.H 8 to 24: sockets 8 to 19, 21 to 24 mm set.
- Heat-formed tray: PL.665.

Weight: 2.172 kg.

MOD.S1 1/2" hex socket set and accessories module



- S.161: “palm- control" 1/2" ratchet.
- S.210 and S.215: 125 and 250 mm extensions.
- S.240A: 1/2" universal joint.
- SH.10 to 19 - 21 to 24 - 27 - 30 - 32 mm.
- Heat-formed tray PL.323.

Weight: 3.320 kg.

MOD.SL1 1/2" socket ratchet module



- SH. 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 27 - 30 - 32.
- SL.161: ratchet.
- S.210 - 215: 125 and 250 mm extensions.
- S.240A: 1/2" universal joint.
- S.230: 1/2" to 3/8" coupler.
- S.232B: 1/2" to 3/4" coupler.
- Heat-formed tray: PL.687.

Weight: 3.350 kg.

MOD.SM1 1/2" metric socket module



- SM.161A: ratchet.
- S.210 and S.215: 125 and 250 mm extensions.
- S.240A: 1/2" universal joint.
- S.H 10 to 19 - 21 to 24 - 27 - 30 - 32: OGV® metric sockets.
- Heat-formed tray PL.323.

Weight: 3.320 kg.

MOD.S2 1/2" 12-point socket set and accessories module



- S.161 ratchet.
- S.210 and S.215: 125 and 250 mm extensions.
- S.240A: 1/2" universal joint.
- S. 3/8 - 7/16 - 1/2 - 9/16 - 19/32 - 5/8 - 21/32 - 11/16 - 3/4 - 13/16 - 7/8.
- Heat-formed tray: PL.604.

Weight: 2.950 kg.

MOD.SM2 1/2" inch 12-face socket module



- SM.161A: ratchet.
- S.210 and S.215: extensions 125 long and 250 mm long.
- S.240A: 1/2" universal joint.
- S 3/8 - 7/16 - 1/2 - 9/16 - 19/32 - 5/8 - 21/32 - 11/16 - 3/4 - 13/16 - 7/8: OGV® inch sockets.
- Heat-formed tray PL.604.

Weight: 2.950 kg.

MOD.SHP 1/2" 6-point sockets with long-reach one-piece bits module



- Sockets for VL cylinder head screws.
- SX.LA 40 - 45 - 55 - 70.
- SHP.LA 5 - 6 - 7 - 8.
- SV.LB 6 - 8 - 10 - 12.
- Heat-formed tray: PL.336.

Weight: 1.630 kg.

MOD.K1 3/4" 6-point sockets K1 34 to 55 mm module



XL

2 modules size:
- K.151B: 3/4" ratchet.
- K.210B: 3/4" extension.
- K.120B: Sliding tee.
- K.230B: Reducer.
- K.HB 34 - 36 - 41 - 46 - 50 - 55 mm.
- XL heat-formed tray: PL.324.

Weight: 8.290 kg.

MOD.K2 3/4" 6-point sockets K2 34 to 55 mm module



XL

- K.152: 3/4" increment compact ratchet.
- K.210B: 3/4" Extension 200 mm long.
- K.240A: 3/4" universal joint.
- K.HB 34 - 36 - 41 - 46 - 50 - 55 mm.
- XL heat-formed tray: PL.662.

Weight: 7.460 kg.

MOD.NS1 1/2" drive impact socket module NS1



- Comprising:

- 1/2" drive impact sockets: NSA 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 mm.
- 1/2" extension: NS215A 125 mm.
- Tray PL610.

Weight: 2 kg.

MOD.NS2 1/2" drive metric 6-point impact socket module



- Comprising:

- Impact short sockets 1/2": NS.A 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 - 27 - 30 - 32 mm
- Impact sockets 1/2" bit holders: NS.236A and NS.237A
- Impact bits: ENH.3 6 - 7 - 8 - 10 - 12 - 14; ENP.2 2 - 3 - 4; NEX.A 30 - 40 - 45 - 50 - 55.
- Tray PL.623.

Weight: 985 g.

Screwdrivers

MOD.A1 8 Protwist®-No.1 screwdrivers module



- AN 3x75 - 3.5x100 - 5.5x25 - 4x100.
- AWH 6.5x150 - 8x175.
- ANP 1x100 - 2x125.
- Heat-formed tray PL.325.

Weight: 0.985 kg.

MOD.A1VE 8 Protwist® 1000V insulated screwdrivers module



- AVE 3.5 - 4 - 5.5 - 6.5 mm.
- AP1x100VE - AP2x125VE.
- AD1x100VE - AD2x125VE.
- Heat-formed tray PL.325.

Weight: 0.907 kg.

MOD.A2 8 Protwist®-No.2 screwdrivers module



- AN 2x75 - 2,5x75.
- ANP 0x75.
- AWPH 3x150.
- AWDH 3x150.
- AND 0x75 - 1x100 - 2x125.
- Heat-formed tray PL.631.

Weight: 0.750 kg.

MOD.A7 8 Protwist®-No.3 screwdrivers module



- AN 3.5x75 - 4x100 - 5.5x150 - 6.5x150 mm.
- AWH 8x175 mm.
- AND 1x100 - 2x125.
- ANP 0x75.
- Heat-formed tray PL.325.

Weight: 1.020 kg.

MOD.A3 8 Protwist®-No.2 screwdrivers module including 4 ball handles



- AN 4x25 - 5.5x35 mm.
- ANP 0x75 - 1x25.
- AND 0x75 - 1x100 - 2x35 - 2x125.
- Heat-formed tray PL.326.

Weight: 0.785 kg.

MOD.A4 9 Protwist® screwdrivers module



XL

- 2. x75 - 3.5x75 - 4x35 - 4x100 - 4x300 - 5.5x35 - 5.5x100 - 6.5x100 - 8x175 mm.
- Heat-formed tray XL PL.676.

Weight: 0.995 kg.

MOD.A5 10 Protwist® screwdrivers module including 3 ball handles



XL

- ANP 0x75 - 1x25 - 1x100 - 2x35 - 2x125 - 2x250 - 3x150.
- AND 1x100 - 2x125 - 2x35.
- Heat-formed tray XL PL.677.

Weight: 0.900 kg.

MOD.A6 7 Protwist® and 3 Micro-Tech® screwdrivers module



XL

- AEX 6x35 - 7x35 - 8x75.
- ANXR 10x75 - 15x75 - 30x125 - 40x150 - 20x100 - 25x100 - 27x100.
- Heat-formed tray XL PL.678.

Weight: 0.900 kg.

MOD.ANX 7 Protwist® Torx® screwdrivers module size 10 to 40



- ANX 10x75 - 15x75 - 20x100 - 25x100 - 27x100 - 30x125 - 40x150.
- Heat-formed tray PL.327A.

Weight: 0.840 kg.

MOD.ANXR 7 Protwist® Resistorx® screwdrivers module size 10 to 40



- ANXR 10x75 - 15x75 - 20x100 - 25x100 - 27x100 - 30x125 - 40x150.
- Heat-formed tray PL.327A.

Weight: 0.840 kg.

MOD.84TZS 7 spherical head tee-handle hexagon keys module



- 84TZS. 3 - 4 - 5 - 6 - 7 - 8 - 10 mm.
- Heat-formed tray PL.329.

Weight: 0.996 kg.

MOD.89TX 7 tee-handle Torx® keys module



- 89TX. 10 - 15 - 20 - 25 - 27 - 30 - 40.
- Heat-formed tray: PL.328.

Weight: 0.648 kg.

MOD.E20L 20 drive bits module



- 6-point: EH.2L 4 - 5 - 6 - 7 - 8 - 10 mm.
- XZN: EV.2L 5 - 6 - 8 - 10.
- EX.2L 30 - 40 - 45 - 50.
- EXR.1L 10 - 15 - 20 - 25 - 30 - 40.
- SJ.236: CDX 5/16 bit holder socket.
- R.235: 1/4" bit holder socket.
- S.236: 1/2" bit holder 5/16 socket.
- Heat-formed tray PL.624.

Weight: 0.755 kg.

MOD.E41 41 bits and 3 bit holders module



- EH.2L 4 - 5 - 6 - 7 - 8 - 10 / EH. 4 - 5 - 6 - 7 / EH.2 8 - 10 mm.
- EV.2L 5 - 6 - 8 - 10 /EV. 6 - 8 - 10.
- EX.2L 30 - 40 - 45 - 50 / EX.2 45 - 50 - 55.
- EXR.1L 10 - 15 - 20 - 25 - 30 - 40 / EXR.1 10 - 15 - 20 - 25 - 30 - 40.
- Bits no. 1 - 2 - 3.
- SJ.236: 5/16" bit holder socket.
- R.235: 1/4" bit holder socket.
- S.236: 1/2" bit holder 5/16 socket.
- Heat-formed tray PL.621.

Weight: 0.895 kg.

MOD.NS260 Impact screwdrivers module



- NS.260A: 1/2" impact screwdrivers.
- NS.236A: 1/2" bit holder 5/16" socket.
- 15 impact bits:
-ENH. 5 - 6 - 8 - 10 mm. -END.2 no. 2 - 3.
-ENP.2 no. 2 - 3 - 4. -ENX.2 20 - 25 - 30 - 40 - 45 - 55.
- Heat-formed tray PL.380.

Weight: 1.250 kg.

Pliers

MOD.CPE 3-piece mechanic pliers module



- 185.20CPE: half-round nose pliers.
- 187.18CPE: universal pliers.
- 192.16CPE: diagonal cutting pliers.
- Heat-formed tray PL.627.

Weight: 0.942 kg.

MOD.TE 3-piece engineers TE pliers module



- 185.20TE: half-round nose pliers.
- 187.18TE: universal pliers.
- 192.16TE: diagonal cutting pliers.
- Heat-formed tray PL.627.

Weight: 0.942 kg.

MOD.CPE5 5-piece pliers module



XL

- 181A.25CPE: lockable multigrip pliers.
- 501: long-nose pliers.
- 192.16CPE: diagonal cutting pliers.
- 195.20CPE: half-round nose long pliers.
- 185.20CPE: half-round nose long pliers.
- Heat-formed tray XL PL.657.

Weight: 1.770 kg.

MOD.PR11 2-piece adjustable pliers module PR11



- 181A.25CPE: lockable multigrip pliers.
- T5.L: trigger-release lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 1.160 kg.

MOD.PR12 2-piece adjustable pliers module PR12



- 181A.25CPE: lockable multigrip pliers.
- 580.10: angled nose lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 1.140 kg.

MOD.PR4 2-piece adjustable pliers module PR4



- 180.CPE: multigrip pliers.
- T5.L: trigger-release lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 1.158 kg.

MOD.PR5 2-piece adjustable pliers module PR5



- 180.TE: multigrip pliers.
- 500: short-nose lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 1.094 kg.

MOD.PR7 2-piece adjustable pliers module PR7



- 180.TE: multigrip pliers.
- T5.L: trigger-release lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 1.158 kg.

MOD.PR8 2-piece adjustable pliers module PR8



- 180.CPE: multigrip pliers.
- 500: short-nose lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 1.094 kg.

MOD.PR9 2-piece adjustable pliers module PR9



- 181A.25CPE: Multigrip pliers.
- 501: Lock-grip pliers.
- Heat-formed tray PL.330.

Weight: 0.504 kg.

MOD.PC Module of 4 straight and round nose Circlip® closing / opening pliers



- For Circlips® 18 to 60 mm:
- 177A.18 straight nose - 197A.18 90° nose - for exterior Circlips®.
- 179A.18 straight nose - 199A.18 90° nose - for interior Circlips®.
- Heat-formed tray PL.332A.

Weight: 0.780 kg.

MOD.PCSN 4-piece Circlip® pliers module



- For Circlips® diameter 10-25, 12-25,18-60 mm.
- 177A.13 (10-25) - 177A.18 (18-60) straight nose - Exterior Circlips®.
- 179A.13 (12-25) - 179A.18 (18-60) straight nose - Interior Circlips®.
- Heat-formed tray PL.332A.

Weight: 0.650 kg.

MOD.VE 3-piece 1000V insulated pliers module



- 180.VE: multigrip pliers.
- 391.16VE: diagonal cutting pliers.
- 194.17VE: wire stripper.
- Heat-formed tray PL.622.

Weight: 0.950 kg.

MOD.MT1 Micro-Tech® pliers module



- 402.MT: extra-long nose pliers.
- 405.MT: compact axial cutting pliers.
- 405.12MT: power axial cutting pliers.
- 406.MT: end nippers.
- 406.8MT: fine end nippers.
- 433.LMT: half-round nose pliers 45.
- Heat-formed tray PL.612.

Weight: 0.650 kg.

MOD.Y105 Riveting module



- Y.105B: rivet pliers.
- 600 alu rivets.
- Standard head: 4x8 - 4x10 - 4.8x8 - 4.8x10.
- Black lacquered standard head: 4x8 - 4x10.
- Heat-formed tray PL.377.

Weight: 1.984 kg.

Hammer, impact tools

MOD.MI1 Impact tools module 200H



- Comprising:
- 200H.32: hickory riveting hammer 32 mm.
- 208A.32CBA: steel mallet 32 mm.
- 263.20: chisel.
- 256.6: punch.
- 248. 4 - 5 - 6 mm: long drift punches.
- Heat-formed tray PL.333.

Weight: 1.800 kg.

MOD.MI3 Impact tools module 205H



• Comprising:
- 205H.50: DIN 500 g hickory hammer.
- 208A.32CBA: steel mallet 32 mm.
- 263.18: chisel.
- 256.6: punch.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Heat-formed tray PL.333.

Weight: 1.710 kg

MOD.MI7 Impact tools module 205C



• Comprising:
- 205C.50: composite hammer 500 g.
- 208A.32CBA: steel mallet 32 mm.
- 248. 4-5-6 mm: long drift punches.
- 263.18: chisel.
- 256.6: punch.
- Heat-formed tray PL.333.

Weight: 1.660 kg.

MOD.MI4 Impact tools module 202H



• Comprising:
- 202H.1/2: hickory American hammer.
- 208A.32CBA: steel mallet 32 mm.
- 263.18: chisel.
- 256.6: punch.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Heat-formed tray PL.333.

Weight: 1.450 kg.

MOD.CG Sheathed drift punches module



• Comprising:
- 249.G 2 - 3 - 4 - 5 - 6 - 8 mm: 6 drift punches.
- 247.G. 4 - 5 - 6 - 8 mm: 4 nail sets.
- 255.G6: punch.
- Heat-formed tray PL.334.

Weight: 1.470 kg.

MOD.CG1 Drift punch - chisels - sheathed cape chisel module



• Comprising:
- 249.G 12 - 14 - 16 mm: 3 sheathed drift punches.
- 263G. 19 - 20 - 22: 3 sheathed chisels.
- 265.G 18: 1 sheathed cape chisel.
- Heat-formed tray PL.611.

Weight: 3.000 kg.

Cutting and measuring

MOD.MET Metrology module



- 805.1: slide rule 1/50 mm capacity 150 mm.
- 806.F: palmer 1/100 mm capacity 25 mm.
- 814.M: screw pitch gauge 23 blades 25 to 300.
- 804: metric feeler gauges 4/100 to 1 mm.
- Heat-formed tray PL.634.

Weight: 0.930 kg.

MOD.234 Measuring and scribing module



- 257G: automatic centre punch.
- 234: scriber.
- 893.316: tape measure 3 m.
- DELA.1051.05: rule 300 mm.
- 1885.00: protactor dial.
- DELA.1223.02: straight and flanged square 300 mm.
- Heat-formed tray PL.633.

Weight: 1.050 kg.

MOD.601 Saw, measuring, file module



- 601: hacksaw frame.
- 666B.10: 10 saw blades.
- 234.S: scriber.
- 803.300M: flexible stainless 2-sided rule.
- 5 files with handle: PAM.B250EMA-DRD.MD250EMA-CAR.MD200EMA-TRI.MD200EMA-RD. MD200EMA.
- 893.316: tape measure 3m.
- Tray PL.335 (full drawer).

Weight: 2.300 kg.

MOD.LIM 5-piece file module



- PAM.B200EMA: flat file.
- DRD.MD200EMA: semi-round file.
- CAR.MD200EMA: square file.
- TRI.MD200EMA: triangular file.
- RD.MD200EMA: round file.
- Heat-formed tray: PL.606.

Weight: 0.950 kg.

Pullers

MOD.U306 Puller module



- Inside and outside puller.
- U.306A140: puller (7 to 140 mm).
- U.306G2: 3 legs for inside puller (23 to 130 mm).
- U.306G10: 3 long outside legs (10 to 180 mm).
- U.14L: compact puller (10 to 45 mm).
- Heat-formed tray PL.354.

Weight: 4.400 kg.

Automotive

MOD.U48 Oil change and filter module



- U.48: adjustable oil-filter wrench.
- D.105 - 8 - 10 - 10.5 - 13.1: 3/8" square drain plug bits.
- D.107- 8 - 10 - 12 - 13 - 14 - 17: 3/8" male drain plug bits.
- D.106-10: 3/8" female square drain plug bits.
- D.109-10: 3/8" male triangle drain plug bits.
- D.120-16: countersunk 16mm XZN pattern bit.
- S.230: 1/2" - 3/8" adaptor.
- Heat-formed tray PL.399.

Weight: 1.013 kg.

MOD.U46CL Oil change and filter module 1



- U.46ACL: fast oil-filter wrench.
- S.230: 1/2" - 3/8" adaptor.
- 13 3/8" drain plug bits.
- D.105 - 8 - 10 - 10.5 - 13.1.
- D.106 - 10.
- D.107- 8 - 10 - 12 - 13 - 14 - 17.
- D.109 - 10.
- D.120 - 16.
- Heat-formed tray PL.399.

Weight: 1.100 kg.

MOD.BJ-GM Complete spark plug module



- Fitting and removal of spark plugs: 14 - 16 - 21 mm; and glow plugs: 8 - 9 - 10 - 12 mm.
- Comprising:

- B.J14BH 1 - 2 / B.J16A 1 - 2 / B.J21A1: Spark-plug sockets.
- B.10R8L - B.10R9L: Hinged glow plug wrenches.
- B.10R10A - B.10R12AL: Hinged glow plug wrenches.
- J.161: Ratchet.
- D.110: Fitter.
- Thermoformed module PL661A (value 2 modules).

Weight: 2.160 kg.

MOD.BJC Spark plug service module



- Including:

- B.J14BH1 - B.J14BH2 - B.J16A1 - B.J16A2 - B.J18A1 - B.J21A1: Spark-plug sockets.
- DM0.20: Flexible spark-plug fitter.
- Thermoformed module PL669A.

Weight: 1.485 kg.

MOD.BSB Spark plug service module



- Including:

- B.S16A1 - B.S16A2 - B.S18A1 - B.S21A1: 1/2" spark plug socket.
- DM0.20: Flexible spark-plug fitter.
- Thermoformed module PL668A.

Weight: 1.200 kg.

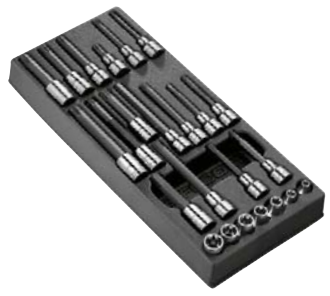
MOD.BRA Glow plug module



- Indispensable to intervene on glow plugs in modern diesel vehicles.
- Comprising:
- D.110: Fitter.
- B.10R8L - B.10R9L: Hinged glow plug wrenches.
- B.10R10A - B.10R12AL: Hinged glow plug wrenches.
- D.133A6: Flexible screwdriver 6 mm.
- Thermoformed module PL667.

Weight: 910 g.

MOD.CH Module of 24 cylinder head tightening and loosening tools



XL

- D.34B L 7 - 9 - 10 - 12 - 14 - 16: 1/2" groove screwdriver sockets.
- SV. LB 6 - 8 - 10 - 12 - 14: 1/2" XZN long-reach screwdriver sockets.
- JTX. 8 - 10: 3/8" TORX® sockets.
- STX.12 - 14 - 16 - 18 - 20: 1/2" TORX® sockets.
- SX. LA 55 - 70: 1/2" TORX® long-reach screwdriver sockets.
- SHP.LA 6 - 8 - 10 - 12: 1/2" 6-point sockets.
- Heat-formed tray: PL.663.

Weight: 2.612 kg

MOD.DFD Disc brake module



- 31.14X15 and 31.16X17: extra-flat open-end wrench for removing locknuts from the caliper yokes.
- 467F.12 - 13 - 14: 3 jointed ratchet combination wrenches for removing caliper yokes.
- NJ.260: impact screwdriver + bit holder sockets.
- NJ.236A: 3/8" bit holder impact socket.
- 83SH.7: spherical head 6-point key 7 mm.
- 249.G4: sheathed drift punch diameter 4 mm.
- Bits:
- Torx® ENX.230 - ENX.240.
- Phillips® No.2.
- 6-point ENH.205 5 mm.
- Heat-formed tray.

Weight: 1.670 kg.

MOD.DFT Drum brake module



- D.104A: screwdriver for spring pressing cup.
- DF.2: cable locking screwdriver for handbrake.
- D.79A: clamp for fitting handbrake cables.
- 43. 8x10 - 11x132: flare-nut wrenches.
- Heat-formed tray PL.684.

Weight: 0.855 kg.

D.83C Module of 28 tools for Mac Pherson® shock absorber head



XL

- D.83CTS12: adaptor.
- D.83C 13L - 14L - 15L - 17L - 18L - 19L - 21L - 22L - 24L: long-reach sockets.
- D.83C 8H - 9H - 11H: 6-point sockets.
- D.83C 5S - 6S - 8S: slotted head sockets.
- D.83CJ794M - D.83CJ635 - D.83CJ8: extensions.
- J.120A: 3/8" sliding tee.
- 64.17x19: ratchet wrench.
- Bits: EH.108 - 107 - 106: 1/4 25 mm bit: EXR.140, EX.245 - XZN: EV.2 M12, 36 mm.
- XL heat-formed tray: PL.647.

Weight: 3.750 kg.

MOD.208 Wheel nut tightening module



3 modules size:
- 77AT0D: cross braces.
- S.208-200: torque wrench 40-200 N.m.
- NSB.17 - 19 - 21 mm: long-reach impact sockets.
- SH.17 - 19 - 21: 6-point sockets.
- Heat-formed tray: PL.337.

Weight: 5.470 kg.

MOD.CAR1A Bodywork module no.1



- Comprising:

- 861D.RPC: Hammer with round, flat and convex heads.
- 902B: Thin toe dolly.
- 909A: Slim shaping dolly.
- 906A: Pinch wedge dolly.
- Tray PL.396B.

- Spare handle and wedge: 211.MH26.

MOD.CAR2 Bodywork module no.2



- Comprising:

- 259: Slim-profile chisel 235 mm.
- 209.50: Wooden mallet 50 mm.
- 225.J3: Set of 3 end mills.
- 850.S350: Standard angled milled file.
- 851B: Frame for milled files.
- 860H.28: Round head hammer 28 mm.
- 861D.30: Bumping hammer.
- 862D.60: Flat dresser.
- 867D: Shrinking dresser.
- 870B: Thin toe dolly.
- 871B0.55: Wedge dolly.
- 874A: Dished dolly.
- 875.3: Long single spoon.
- 906A: Pinch wedge dolly.
- Thermoformed module PL.679 (value 3 modules).

MOD.CARA Bodywork module no.3



- Comprising:

- 225.J3: Set of 3 end mills.
- 259.P: Slim-profile chisel with guard.
- 501: Long nose self-tightening adjustable wrench.
- 850.S350: Standard milled file.
- 851B: Frame for milled files.
- 862D.60: Flat dresser.
- 875.3: Long single spoon.
- 875.4: Angled spoon.
- 884B: Panel shears.
- 874A: Dished dolly.
- Thermoformed module PL.379B (value 3 modules).

- Spare handle and wedge: 211.MH26.

Fastener storage

PL.384 Storage module for small components



- 12 compartments of 3 different sizes for organised storage of fasteners, lugs, rivets and gaskets.

Weight: 0.217 kg.

Foam trays

FACOM MODULAR SYSTEM / FOAM

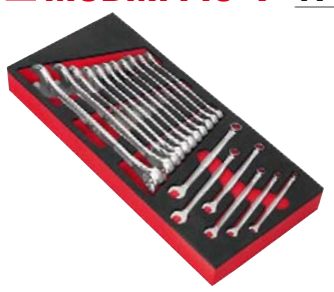
Effective tool organisation with FACOM Modular System
- Stored tools = productivity, comfort and safety.
- Instant access to all your tools without wasting time.
- Optimum safety: no more rummaging through loose tools in a drawer.

Foam modules FACOM Control System XL MODULE MOUSSE
- Two-colour system: helps immediate identification of missing tools.
- High density foam: resistant to crushing, hydrocarbons, hydraulic fluids and detergents.
- Finger recesses for easy pick-up.
- Tools securely held during transport.
- Dimensions 188 x 418 mm.
- Only for the JET+3, JET+4, JET+5, JETXL, CHRONOXL and CHRONO+ ranges.



Wrenches

MODM.440-1 17 OGV® combination wrenches sizes 6 to 22 and 24 mm in foam tray



- 440. 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 mm.
- Foam tray PM.MOD440-1.

Weight: 1.910 kg.

MODM.440-2 5 OGV® combination wrenches sizes 27 to 22 and 34 mm in foam tray



- 440. 27 - 29 - 30 - 32 - 34 mm.
- Foam tray PM.MOD440-2.

Weight: 2.144 kg.

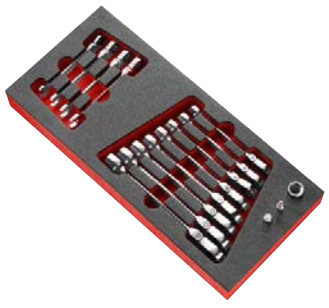
MODM.467J12 12 ratchet combination wrenches set in foam tray



- 467. 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm.
- Foam tray PM.MOD467J12.

Weight: 1.535 kg.

▣ MODM.467FJ12 12 ratchet combination wrenches and adaptor set in foam tray



- 467F. 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm.
- 3 adaptors: 1/4" 1/2" sockets, 1/4" bits.
- Foam tray PM.MOD467FJ12.

Weight: 1.710 kg.

▣ MODM.75 13 6-point tubular socket wrenches set in foam tray



- 75. 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm.
- Foam tray PM.MOD75.

Weight: 2.690 kg.

▣ MODM.99B 7 universal joint socket wrenches set 7 to 19 mm in foam tray



3 modules size:
- 99C.7 - 8 - 10 - 11 - 13 - 17 - 19 mm.
- Foam tray PM.MOD99B.

Weight: 3.500 kg.

▣ MODM.R1A 1/4" 6-point metric sockets - keys and bits set in foam tray



- R.161: “palm-control" 1/4" ratchet.
- R.209 and R.215: 55 and 150 mm extensions.
- R.235: drive holder socket.
- R.236A: 1/4" ratchet with handle - 158 mm.
- R.240A: 1/4" universal joint.
- R.120A: 1/4" sliding tee.
- R.5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm.

Bits:
- slotted head 4.5-6.5-8 mm. - Phillips® 1 - 2 - 3. - Pozidriv® 1 - 2 - 3.
  - HEX 3 - 4 - 5 - 6 - 7 mm. - Resistorx 15 - 20 - 25 - 30 - 40. - 83SH.JP9: keys 1.5 to 10 mm.
- Foam tray: PM.MODR1A.

Weight: 1.095 kg.

▣ MODM.RL1 1/4" socket ratchet set in foam tray



- RL.161: ratchet.
- R.209-R.215: extensions.
- R.240A: universal joint.
- R.120A: sliding tee.
- R.235: 1/4" drive holder socket.
- R.236A: sliding tee.
- Sockets R.5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm.
- ECR socket holder drive.
- 83SH.JP9 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm.
- Pozidriv® 1 - 2 - 3, Phillips® 1 - 2 - 3, slotted head 4.5 - 6.5 mm, HEX 3 - 4 - 5 - 6 - 7 mm, Torx® T15 - 20 - 25 - 30 - 40.
- Foam tray PM.MODR1A.

Weight: 1.095 kg.

MODM.JL1 3/8" socket ratchet set in foam tray



- JL.161: ratchet.
- J.240A: universal joint.
- J.120A: sliding tee.
- J.232: 3/8" to 1/2" coupler.
- J.235: 3/8" bit holder socket.
- J.210 - 215: 125 et 250 mm extensions.
- Sockets JH.8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 mm.
- foam tray PM.MODJL1.

Weight: 1.700 kg.

MODM.J5 3/8" 6-point sockets set 8 to 22 mm set in foam tray



- J.171: 3/8" locked ratchet.
- J.210RC, J.215RC: 3/8" extension 125 and 250 mm long.
- J.240A: 3/8" universal joint bare.
- J.120A: 3/8" sliding tee.
- J.H 8 to 22: sockets 8 to 19 - 21 - 22 mm set.
- Foam tray PM.MODJ5.

Weight: 1.700 kg.

MODM.HLA Long-reach 6-point socket set foam tray



- J.HLA 7 - 8 - 9 - 10 - 11 mm: 3/8".
- S.HLA 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm: 1/2".
- Foam tray PM.MODHLA.

Weight: 1.420 kg.

MODM.S1A 1/2" 6-point socket and accessories set in foam tray



- S.161: “palm-control" 1/2" ratchet.
- S.210 and S.215: extensions.
- S.240A: 1/2" universal joint.
- S.120A: 1/2" sliding tee.
- SH. 8 to 19 - 21 to 24 - 27 - 30 - 32 mm.
- Foam tray PM.MODS1A.

Weight: 3.450 kg.

MODM.SL1 1/2" socket ratchet set in foam tray



- SL.161 ratchet.
- S.210-215 extensions.
- S.240A universal joint.
- S.120A sliding tee.
- Sockets SH.8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 27 - 30 - 32.
- Foam tray PM.MODS1A.

Weight: 3.450 kg.

Screwdrivers

MODM.A1 8 Protwist®-No.1 screwdrivers set in foam tray



- AN 3.5x75 - 3.5x100 - 4x100 - 5.5x100.
- AWH 6.5x150 - 8x175.
- ANP 1x100 - 2x125.
- Foam tray: PM.MODA1.

Weight: 0.900 kg.

MODM.A2 8 Protwist®-No.2 screwdrivers set in foam tray



- AN 2x75 - 2.5x75.
- ANP 0x75 - AWPH 3x50.
- AND 1x100 - 2x125 - 3x150 nut.
- Foam tray PM.MODA2.

Weight: 0.900 kg.

MODM.A3 8 Protwist® screwdrivers set including 4 ball handles in foam tray



- AN 4x25 - 5.5x35.
- ANP 0x75 - 1x25.
- AND 0x75 - 1x100 - 2x35 - 2x125.
- Foam tray PM.MODA3.

Weight: 0.763 kg.

MODM.A4 9 Protwist® screwdrivers set including 2 ball handles in foam tray



- AN. 2.5x75 - 3.5x75 - 4x35 - 4x100 - 4x300 - 5.5x35 - 5.5x100.
- AWH. 6.5x150 - 8x175.
- Foam tray: PM.MODA4.

Weight: 0.900 kg.

MODM.A5 10 Protwist® screwdrivers set including 3 ball handles in foam tray



- ANP 0x75 - 1x25 - 1x100 - 2x35 - 2x125 - 2x250 - 3x150.
- AND 1x100 - 2x125 - 2x35.

Weight: 0.900 kg.

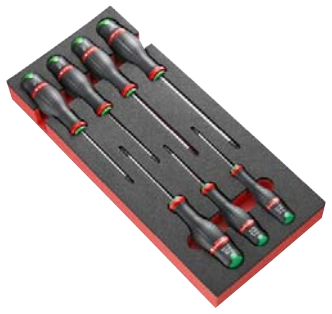
MODM.A6 7 Protwist® and 3 Micro-Tech® screwdrivers set in foam tray



- AEX 6x35 - 7x35 - 8x75.
- ANXR 10x75 - 15x75 - 30x125 - 40x150 - 20x100 - 25x100 - 27x100.
- Foam tray: PM.MODA6.

Weight: 0.900 kg.

MODM.ANXR 7 Protwist® Resistorx® screwdrivers set size 10 to 40 in foam tray



- ANXR 10x75 - 15x75 - 20x100 - 25x100 - 27x100 - 30x125 - 40x150.
- Foam tray PM.MODANXR.

Weight: 0.763 kg.

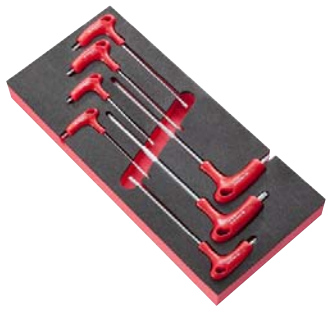
MODM.84TZS Tee-shaped keys set in foam tray



- 84TZ.3.
- 84TZS. 4 - 5 - 6 - 7 - 8 - 10 mm.
- PM.MOD84TZS foam tray.

Weight: 0.900 kg.

MODM.89TX TORX® keys set in foam tray



- 89TX. 10 - 15 - 20 - 25 - 27 - 30 - 40.
- PM.MOD89TX foam tray.

Weight: 0.600 kg.

Pliers

MODM.CPE 3-piece mechanic pliers set in foam tray



- 185.20CPE: half-round nose pliers.
- 187.18CPE: universal pliers.
- 192.16CPE: diagonal cutting pliers.
- Foam tray: PM.MODCPE.

Weight: 0.750 kg.

MODM.CPE1 4-piece pliers set in foam tray



- 181A.25CPE: multigrip pliers
- 185.20CPE: half-round nose pliers.
- 192.16CPE: diagonal cutting pliers.
- 501: lock-grip pliers
- Foam tray PM.MODCPE1.

Weight: 1.311 kg.

MODM.PR12 2-piece adjustable pliers set in foam tray



- 181A.25CPE: lockable multigrip pliers.
- 580.10: angled nose lock-grip pliers.
- Foam tray PM.MODPR12.

Weight: 1.200 kg.

▣ MODM.PCSN 4-piece pliers set for Circlips® in foam tray



- For Circlips® diameter 10-25, 12-25, 18-60 mm.
- 177A.13 (10-25) - 177A.18 (18-60) - straight nose - Exterior Circlips®.
- 179A.13 (12-25) - 179A.18: (18-60) - straight nose - Interior Circlips®.
- Foam tray PM.MODPCSN.

Weight: 0.700 kg.

Impact tools

▣ MODM.MI1 Impact tools 200H foam module



- Comprising:

- 200H.40: hickory riveting hammer 40 mm.
- 208A.32CBA: mallet.
- 263.20: chisel.
- 256.6: punch accuracy 6 mm.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Foam tray PM.MODMI1.

Weight: 1.800 kg.

▣ MODM.MI6 Impact tools 200C foam module



- Comprising:

- 200C.40: composite riveting hammer 40 mm.
- 208A.32CBA: steel mallet 32 mm.
- 256.6: punch accuracy 6 mm.
- 263.G19: sheathed chisel 190 mm.
- 249.G 4 - 5 - 6 mm: sheathed drift punches.
- Foam tray PM.MODMI6.

Weight: 2.150 kg.

▣ MODM.MI3 Impact tools 205H foam module



- Comprising:

- 205H.100: DIN 1 kg hickory hammer.
- 208A.32CBA: mallet.
- 263.20: chisel.
- 256.6: punch accuracy 6 mm.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Foam tray PM.MODMI3.

Weight: 1.800 kg.

▣ MODM.MI7 Impact tools 205C long drift punches foam module



- Comprising:

- 205C.50: DIN composite hammer 500 g.
- 208A.32CBA: steel mallet 32 mm.
- 256.6: punch accuracy 6 mm.
- 263.18: chisel.
- 248. 4 - 5 - 6 mm: long drift punches.
- Foam tray PM.MODMI7.

Weight: 1.700 kg.

MODM.MI5 Impact tools 205C long sheathed drift punches foam module



• Comprising:
- 205C.50: DIN composite hammer 500 g.
- 208A.32CB: steel mallet 32 mm.
- 263.G19: sheathed chisel 190 mm.
- 256.6: punch accuracy 6 mm.
- 249.G 4 - 5 - 6 mm: 3 long-reach sheathed drift punches.
- Foam tray PM.MODMI5.

Weight: 1.750 kg.

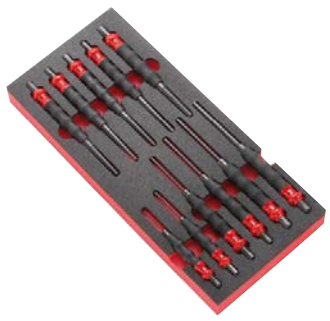
MODM.MI4 Impact tools 202H foam module



• Comprising:
- 202H.1: 1LB: hickory American hammer.
- 208A.32CB: steel mallet 32 mm.
- 263.20: chisel.
- 256.6: punch accuracy 6 mm.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Foam tray PM.MODMI4.

Weight: 1.800 kg.

MODM.CG Sheathed drift punches foam module



• Comprising:
- 249.G 2 - 3 - 4 - 5 - 6 - 8 mm: 6 drift punches.
- 247.G 4 - 5 - 6 - 8 mm: 4 nail sets.
- 255.G6: punch accuracy 6 mm.
- Foam tray PM.MODCG.

Weight: 1.470 kg.

Fastener storage

PM.384 Storage set for small components in foam tray



• Compartments of different sizes for organised storage of fasteners, lugs, rivets and gaskets.

PM.MOD3/3 Foam trays 3-3 to be cut



3 modules:
• High density dual color foam tray to be cut according to your needs.
• Dimensions: L.569 X D.420 mm.



TOOL BOXES

144











Fabric tool boxes **144**
Organiser **145**
Plastic tool boxes **146**
Plastic cases **148**
Metal sheet tool boxes **148**

MAINTENANCE CHESTS

151









Drawer chests **151**
"Construction" chests **152**
Roller chests **153**
Chests for roller cabinets **154**

TOOLBOXES - CASES AND CHESTS



SERVICE CASES 156

BAGS, SMOOTH CASES AND WALLETS 161















Electro cases **157**
Universal cases **158**
Roller cases **160**

Leather cases **161**
Leather bags **162**
Light maintenance soft cases **163**
Light maintenance wallets **164**

Tool bags

BS.T20 | FABRIC TOOL BOX



FACOM PROBAG!

Heavy duty design:

- Very high strength 1,200 x 1,200 denier fabric.
- Rigid, waterproof tool compartment.
- Aluminium handle.

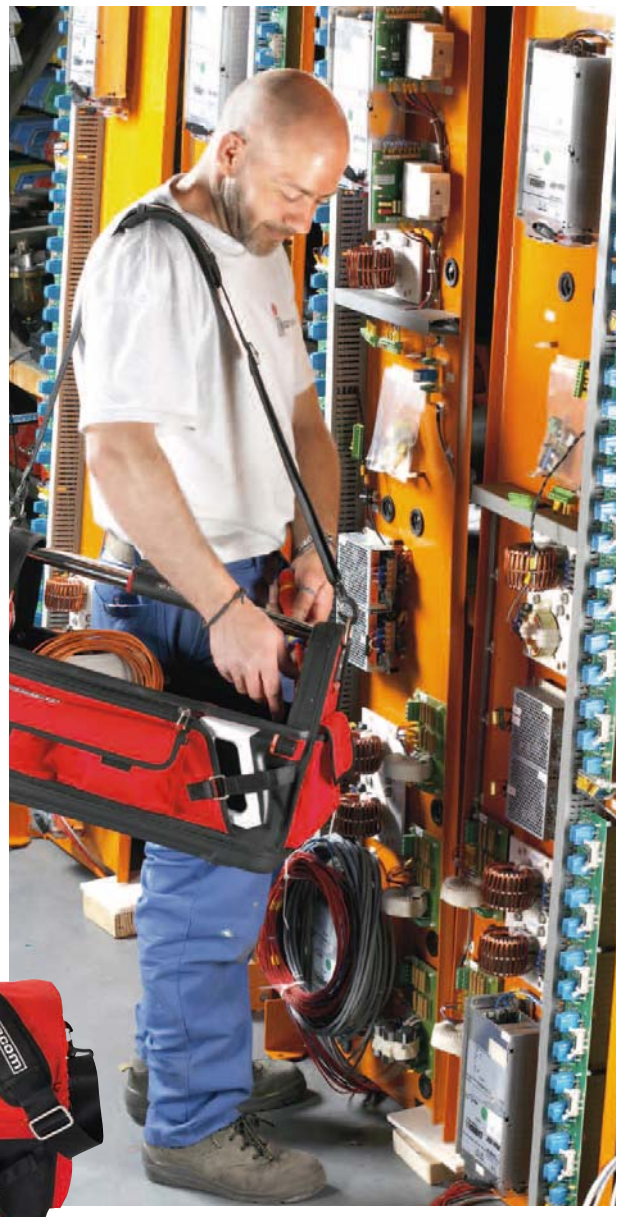
Protection and comfort:

- Leather grip.
- Padded shoulder strap.
- Closing flap.

Handy storage:

- Elastic tool retaining strap.
- Special screwdriver partition.
- Easy access to the tool compartment.
- Large number of side pockets.
- Adjustable saw compartment with self-adhesive strips.
- Flap top storage pouch.











BS.T14 Fabric tool box - Mini PROBAG





- Compact fabric tool box 14".

Strength and comfort:

- High strength polyester fabric 1200 x 1200 deniers.
- Rigid and waterproof polypropylene bin.
- Aluminum handle with gripping handle.
- Shoulder strap with reinforcement cushion on shoulder level. Stainless metal strap fastening hooks.
- Closed by flexible cover - holding straps to store the cover.

Handy storage:

- Vertical storage for instant access to tools.
- Elastic tool holding strap.
- Side rack for screwdrivers and drift punches.
- Many side pockets.
- High storage capacity: 34 litres.
- High storage capacity: 11 kg.
- Dimensions (L x W x H): 42 x 24 x 34 cm.

Weight: 2.237 kg.

BS.T20 Fabric tool box - PROBAG





- Large size fabric tool box 20".

Strength and comfort:
- High strength polyester fabric 1200 x 1200 deniers.
- Rigid and waterproof polypropylene bin.
- Aluminum handle with leather grip.
- Shoulder strap with reinforcement cushion on shoulder level. Stainless metal strap fastening hooks.
- Closed by flexible cover - built-in kangaroo pocket to store the cover.

Handy storage:
- Vertical storage for instant access to tools.
- Elastic tool holding strap.
- Side rack for screwdrivers and drift punches.
- Many side pockets.
- Saw compartment adjustable by self-adhesive tape.
- High storage capacity: 47 litres.
- High storage capacity: 15 kg.
- Overall dimensions (L x W x H): 51 x 22 x 37 cm.

Weight: 2.797 kg.

Organiser

BP.Z8 Eight-tray organiser



- Indispensable for workshop components.
- Transparent lid: instant content visibility.
- 8 removable and dividable compartments (up to 10 boxes).
- Polycarbonate cover.
- Cover locking the interior boxes: the parts stay in place during transport.
- Dimensions (L x W x H): 42.2 x 33.5 x 10.6 cm.

Weight: 1.8 kg.

BP.Z46 46-tray organiser



- Ideal for mobile maintenance.
- High capacity:

- 36 litres.
- 6 central storage drawers.
- 2 lateral storage trays (up to 16 compartments per tray).

- Modularity:

- Storage trays with personal organisation of the compartments: component and tool storage.
- Organisation possible using separators: up to 3 compartments per drawer.

- Safety:

- Safety closing preventing tray and drawer opening during transport.
- Dimensions (L x W x H): 45.4 x 24.4 x 32.4 cm.

Weight: 3.1 kg.

Plastic Toolboxes

FACOM PRO BOX | PLASTIC TOOL BOXES

THE PROFESSIONAL ANSWER!

Sturdy

- Reinforced polypropylene shell.
  - Impact resistant.
  - Resistant to common chemical agents.
- Metal hinges and fasteners.
  - Very durable.
- Safe, comfortable aluminium handle.

Safe

- Work environment protected by flexible corner bumpers.
- Metal padlock clasps.

Easy tool use

- Portable tool tray.
- Securing straps in the lid.
- Stores large objects (hacksaw frame, levels…).













BP.P20 PRO BOX tool box - 20" model - 51cm





- Reinforced polypropylene bin.
- Metal wire hinges.
- Metal padlock clasps (padlock not supplied).
- Flexible bumpers at the angles.
- Safe and comfortable aluminum handle.
- Fastening strap in the cover to store bulky objects (saw frame, levels...).
- Supplied with "slider" removable plate.
- High storage capacity: 36 litres.
- High storage capacity: 10 kg.
- Dimensions (L x W x H) 50.2 x 26.8 x 27.3 cm.
- Removable plate (L x W x H): 47.5 x 24 x 17.5 cm.

Weight: 2.340 kg.

BP.P26 PRO BOX tool box - 26" model - 56cm



- Reinforced polypropylene bin.
- Metal wire hinges.
- Metal padlock clasps (padlock not supplied).
- Flexible bumpers at the angles.
- Safe and comfortable aluminum handle.
- Fastening strap in the cover to store bulky objects (saw frame, levels...).
- Supplied with "slider" removable plate.
- High storage capacity: 47 litres.
- High storage capacity: 13 kg.
- Dimensions (L x W x H) 65 x 26.8 x 27.3 cm.
- Removable plate (L x W x H): 62.5 x 24 x 17.5 mm.

Weight: 2.965 kg.

BP.C16 TOOL BOX - small model 16"





- 2 storage compartments on the cover.
- High strength metal closures.
- Padlock clasp (padlock not supplied).
- Folding handle.
- Removable tray.
- Stackable toolboxes.
- Dimensions (L x W x H): 41.1 x 19.9 x 18.5 cm (15 dm³).

Weight: 1.1 kg.

BP.C19 TOOL BOX - medium model 19"





- 2 storage compartments on the cover.
- High strength metal closings, padlock clasp (padlock not supplied).
- Folding handle.
- Removable tray.
- Stackable toolboxes.
- Dimensions (L x W x H): 49.3 x 25.6 x 24.8 cm (31 dm³).

Weight: 1.95 kg.

BP.C24 TOOL BOX - large model 24"





- 2 storage compartments on the cover.
- High strength metal closings, padlock clasp (padlock not supplied).
- Folding handle.
- Removable tray.
- Stackable toolboxes.
- Dimensions (L x W x H): 61 x 27 x 28.4 cm (47 dm³).

Weight: 2.74 kg.

Plastic cases

PLASTIC CASES

FOR STORING TOOLS OR CONSUMABLES!



Fitted with non-slip studs.



Stackable.



Scratch-resistant.

These cases can fit into other Facom units: cases, tool boxes, roller cabinets, work benches, tool bags.

BP - Plastic cases



- Recyclable polypropylene material.
- Resistant to chemical agents and hydrocarbons.
- High impact and fall resistance.
- Ultra-strong hinges and clasps upon use.
- Easy to use: easy one-hand opening.
- Lightweight cases.

	Dimension [mm]	[g]
BP.102	204 x 122 x 52	172
BP.115	332 x 143 x 67	390
BP.112	389 x 164 x 66	458
BP.109	478 x 234 x 72	910

Metal toolboxes

"TRADITIONAL" METAL TOOL BOXES

INSTANT ACCESS TO COMPARTMENTS!



STURDY

❶ Heavy-duty hinges and anodized pins.
❷ Stiffened lid, fully riveted.

PRACTICAL

❸ Storage modules available.
❹ Padlock clasp.

ERGONOMIC

❺ Ergonomic handle.
❻ Edges carefully deburred for safety.

BT.13A Large 5-tray metal tool box - large volume



- Large storage capacity.
- Can contain a level or a hacksaw.
- Handle separation space provides instant access to all compartments.
- Base of compartments covered with foam.
- Padlock clasp (padlock not supplied).
- Bin dimensions (L x W x H): 518 x 200 x 98 mm.
- Compartment dimensions (L x W x H): 526 x 100 x 55 mm.
- Useful load: 30 kg.
- Volume: 18 dm³.
- Dimensions (L x W x H): 560 x 220 x 238 mm.
- Red 3020 and grey Elian.

Weight: 5 kg.

BT.11A 5-tray metal tool box





- Large storage capacity.
- Handle separation space provides instant access to all compartments.
- Base of compartments covered with foam.
- Padlock clasp (padlock not supplied).
- Bin dimensions (L x W x H): 448 x 200 x 98 mm.
- Compartment dimensions (L x W x H): 448 x 100 x 55 mm.
- Useful load: 25 kg.
- Volume: 17 dm³.
- Dimensions (L x W x H): 475 x 220 x 238 mm.
- Red 3020 and grey Elian.

Weight: 4.5 kg.

BT.9 3-tray metal tool box





- Particularly interesting size/useful capacity combination.
- Handle separation space provides instant access to all compartments.
- Base of compartments covered with foam.
- Padlock clasp (padlock not supplied).
- Bin dimensions (L x W x H): 448 x 205 x 98 mm.
- Compartment dimensions (L x W x H): 448 x 100 x 55 mm.
- Useful load: 20 kg.
- Volume: 13 dm³.
- Dimensions (L x W x H): 475 x 220 x 185 mm.
- Red 3020 and grey Elian.

Weight: 3.4 kg.

BT.A2 Box carrier trolley



- Platform to take boxes and chests: BT.9-BT.11A-BT.13A.
- The box is held but can be removed if necessary.
- Retractible handle for easy storage.
- Wheels Ø 98 mm for easy displacement.
- Max load: 30 kg.
- Dimensions (L x W x H): 600/920 x 210 x 400 mm.
- Red 3020 and grey Elian.

Weight: 4.25 kg.

BT.6A 2-tray metal tool box





- Composed of a bin and tray jointed by tie-rods.
- Opening the cover automatically moves the tray from the bin.
- Base of compartments covered with foam.
- Padlock clasp (padlock not supplied).
- Transport handle, round-shaped and cartouche for customisation.
- Bin dimensions (L x W x H): 440 x 170 x 85 mm.
- Compartment dimensions (L x W x H): 440 x 170 x 50 mm.
- Useful load: 15 kg.
- Volume: 10 dm³.
- Dimensions (L x W x H): 467 x 185 x 155 mm.
- Red 3020 and grey Elian.

Weight: 3 kg.

BT.4A "Compact" metal tool box





- Steel box containing a tool tray with central partition, comfortable handle.
- Free volume bin dimensions (L x W x H): 290 x 155 x 45 mm.
- Tray compartment dimensions (L x W x H): 260 x 80 x 30 mm (x 2).
- Dimensions (L x W x H): 295 x 207 x 95 mm.
- Red 3020 and grey Elian.

Weight: 1.8 kg.

Service chests

BT.66 Metal 6-drawer chest



- 1 drawer: height 110 mm (x 297 x 534 mm).
- 2 drawers, including 1 partitioned: height 50 mm (x 297 x 534 mm).
- 2 drawers: height 50 mm (x 297 x 194 mm).
- 1 drawer: height 50 mm (x 297 x 82 mm).
- 1 upper compartment: height 45 mm.
- Closing the cover blocks the drawers in the closed position.
- Centralised keylock.
- Overall dimensions (L x D x H): 670 x 360 x 415mm.
- Red 3020 and grey Elian.

Weight: 27 kg.

BT.64 Metal 4-drawer chest



- 3 drawers, height: 50 mm (x 297 x 534 mm), including 2 partitioned.
- 1 drawer, height: 110 mm (x 297 x 534 mm).
- 1 upper compartment, height: 45 mm.
- Closing the cover blocks the drawers in the closed position.
- Centralised keylock.
- Overall dimensions (L x D x H): 670 x 360 x 415 mm.
- Red 3020 and grey Elian.

Weight: 26 kg.

BT.23L Metal 3-drawer chest





- 3 drawers: height 50 mm (x 475 x 185 mm).
- 1 upper compartment, dimensions (L x W x H): 535 x 220 x 100 mm.
- Padlock clasp (padlock not supplied).
- Dimensions (L x W x H): 550 x 230 x 315 mm.
- Red 3020 and grey Elian.

Weight: 12 kg.

BT.62A Metal 2-drawer chest



- 1 partitioned drawer, height: 50 mm (x 297 x 534 mm).
- 1 drawer, height: 110 mm (x 297 x 534 mm).
- Top covered with an ABS plate.
- Centralised keylock.
- Overall dimensions (L x D x H): 670 x 361 x 247 mm.
- Red 3020 and grey Elian.

Weight: 15 kg.

2701 Roller table





- Can be fitted with BT.66, BT.63, BT.62, BT.28 chests.
- Rolling 100 mm, 2 fixed, 2 castors, 1 with brake.
- Intermediate shelf for storing long-size tools.
- Dimensions (L x D x H): 670 x 427 x 881 mm.
- Shelf useful dimensions (L x D x H): 558 x 400 x 30 mm.
- Bin useful dimensions (L x D x H): 665 x 400 x 70 mm.
- Red 3020 and grey Elian.

Weight: 20 kg.

2220A Chest trolley



- Used to transport BT.63/64/66/28 chests.
- Wheels Ø 100 mm, 2 fixed and 2 castors.
- Dimensions (L x W x H): 860 x 430 x 190 mm.
- Red 3020.

Weight: 12 kg.

"Construction" chests

BT.28 Metal "Construction" chest



- High strength chest for heavy tool transport.
- Acceptable load: 80 kg.
- Ideal for worksite intervention vehicle.
- Can be carried using the lateral handles.
- Padlock clasp.
- Comprising:

- 1 drawer: height 38 mm (x 537 x 314 mm).
- 2 drawers: height 58 mm (x 537 x 314 mm).
- 1 drawer: height 78 mm (x 537 x 314 mm).

- Dimensions (L x W x H): 615 x 385 x 392 mm.
- Red 3020.

Weight: 35 kg.

Roller chests

ROLLER CHESTS

NOT JUST A CHEST, A MINI ROLLER CABINET!

- Ideal for travelling maintenance.
- Highly manoeuvrable with high performance wheels.
- Offers maximum storage space combined with a fixed chest.

JET+3 TECHNICAL DATA
Overall dimensions (including wheels and worktop): L774 x D546 x H621 mm.
Capacity 12 modules.

For the complete range of roller cabinets and chests, see p. 54



JET+ 4-drawer roller cabinets - 3 modules per drawer



- Ideal for mobile maintenance.
- Retractible handle for travelling.
- Easy handling thanks to its high performance wheels (diameter 125 mm, 2 fixed and 2 castors including one with brake).
- 4 drawers = 12 modules distributed in the 60 and 130 mm high drawers.
- 3 drawers 60 mm high = 9 modules.
- 1 drawer 130 mm high = 3 modules.
- The 200 mm drawers can also be fitted with modules.
- Can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied.
- Acceptable load and useful volume per drawer of M3 versions:

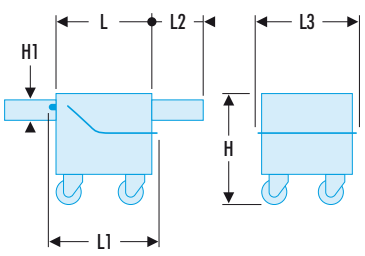
- 60 mm drawer: 20 kg - 15 litres.
- 130 mm drawer: 25 kg - 30 litres.

- Total load in the drawers: 85 kg.
- High storage capacity: 75 litres.
- Overall dimensions (L x D x H) (wheels and worktop included): 774 x 546 x 621 mm.
- Drawer useful dimensions (L x D x H): 569 x 421 x 60 / 130 mm.

	Colour	⚖[kg]
JET.CR4M3	Red 3020	48,50
JET.CR4GM3	Black 9004	48,50

2092A Roller chest







- Vertical access model.
- Particularly interesting combination of size and useful.
- Transportable in a vehicle.
- Wheels diameter 125 mm for tireless long distance rolling.
- 2 drawers height dimensions (L. x D. x H.): 100 x 360 x 300 mm.
- Each drawer is completed with a mobile tray, dimensions (L x D x H): 360 x 148 x 40 mm, for storing small tools.
- 2 compartments dimensions (L x D x H): 440 x 140 x 60 mm.
- Lid interior holds documents or flat items. Large size bin dimensions (L. x D. x H.): 668 x 443 x 248 mm.
- Padlock clasp (padlock not supplied).
- Ankle protection thanks to the shelved compartment.

Weight: 28.5 kg.

Chests for roller cabinets

JET+ CHESTS

CAN BE USED ALONE
or in addition to a roller cabinet or chest for maximum storage.

- All benefits of the JET+ range.
- Can be stacked on a roller cabinet of identical dimension for the 3 ranges and the roller chest for the M3 version - supplied with the linking kit for fast and secured assembly of the unit.
- Capacity 12 modules (M3), 16 modules (M4), 20 modules (M5).
- Roller version (M3) ideal for travelling maintenance, highly manoeuvrable through high performance wheels.

Option:
*- Drawers can be fit with removable partitions **JET2.15** and JET2.16 (not supplied with the chest),*
*- The sides can be fitted with **lateral accessories** such as bottle holder (JET.A1GXL), waste bin (JET.A5-2XL), paper roll holder (JET.A5-3GXL)...*
*- The worktop can be fitted with all **tube accessories** (vertical panel JET.A6GXL, screw support panel JET.A7GXL, swivel shelf JET.A3) and wooden top JET.A14M3/M4/M5.*





Roller chests p. 153

JET+ 4-drawer chest - 3 modules per drawer







- 4 drawers = 12 modules distributed in the 60 and 130 mm drawers:
- 3 drawers 60 mm high = 9 modules.
- 1 drawer 130 mm high = 3 modules.
- The 200 mm drawers can also be fitted with modules. (can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied).
- Acceptable load and useful volume per drawer of M3 versions:
- 60mm drawer: 20 kg - 15 litres.
- 130mm drawer: 25 kg - 30 litres.
- Total load in the drawers: 85 kg.
- High storage capacity: 75 litres.
- Total load on the worktop in static position: 500 kg
- Overall dimensions (including wheels and worktop): L.774 x D.546 x H.480 mm.
- Drawer useful size: L.569 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.C4M3	Red 3020	45
JET.C4GM3	Black 9004	45

JET+ 4-drawer chest - 4 modules per drawer







- 4 drawers = 16 modules distributed in the 60 and 130 mm drawers:
- 3 drawers 60 mm high = 12 modules.
- 1 drawer 130 mm high = 4 modules.
- The 200 mm drawers can also be fitted with modules. (can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied).
- Acceptable load and useful volume per drawer of M4 versions:
- 60 mm drawer: 25 kg - 20 litres.
- 130 mm drawer: 30 kg - 40 litres.
- Total load in the drawers: 105 kg.
- High storage capacity: 100 litres.
- Total load on the worktop in static position: 600 kg
- Overall dimensions (including wheels and worktop): L.964 x D.546 x H.480 mm.
- Drawer useful size: L.759 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.C4M4	Red 3020	51,50
JET.C4GM4	Black 9004	51,50

JET+ 4-drawer chest - 5 modules per drawer







- 4 drawers = 20 modules distributed in the 60 and 130 mm drawers:
- 3 drawers 60 mm high = 15 modules.
- 1 drawer 130 mm high = 5 modules.
- The 200 mm drawers can also be fitted with modules. (can be fitted with the JET2.15 and JET2.16 removable partitions - not supplied).
- Acceptable load and useful volume per drawer of M4 versions:
- 60 mm drawer: 35 kg - 25 litres.
- 130 mm drawer: 40 kg - 50 litres.
- Total load in the drawers: 145 kg.
- High storage capacity: 125 litres.
- Total load on the worktop in static position: 700 kg.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.480 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 mm.

	Colour	⚖ [kg]
JET.C4M5	Red 3020	60,50
JET.C4GM5	Black 9004	60,50

SELECTION GUIDE









Choosing a case

Facom cases are of sturdy design for carrying heavy loads and are laid out in such a way as to optimise the available storage space. All cases feature a keylock for the safety of your tools.

Protect your back, reduce fatigue:

- Wheeled cases. Most FACOM cases are compatible with the "FACOM case trolley" or are fitted as standard with wheels.

A case to suit every need:

	Hand-held	Workstation case (with adjustable trolley)	Roller cases
Standard	See p. 157  BV.21ST: clear bottom section BV.21SX: compartmented bottom section	See p. 159  BV.21ST + BV.C1 + BV.C1A1 BV.21SX + BV.C1 + BV.C1A1	See p. 160  BV.21TR1
Heavy- duty	See p. 157  BV.51A: rack tool holders BV.51APR: pouch tool storage	See p. 159  BV.51A + BV.C1 + BV.C1A1 BV.51APR + BV.C1 + BV.C1A1	
Seal tight	See p. 158  BV.29: without connecting plate BV.29P: with plate BV.C1A1	See p. 159  BV.29 + BV.C1 + BV.C1A1 BV.29P + BV.C1 + BV.C1A1	
Large capacity			See p. 160  BV.61
Leather	See p. 161  BV.7A : large BV.5A: with drawers		

Electrical service cases

BV.51A Technicians case



- Tool storage racks (8) with rubber holding straps distributed on 4 storage surfaces.
- 1 document holder in the cover.
- 1 fully modular bin with 5 unclipping partitions.
- Cover lockable in open position.
- Locking by numbered key (20 different lock numbers on special order).
- Bi-material handle.
- Polypropylene antishock shell.
- Anti-slide rubber feet.
- Dimensions of the 5 partitions:
- 1 partition 315 mm x 65 mm.
- 2 partitions 185 mm x 65 mm.
- 2 partitions 125 mm x 65 mm.
- Bin dimension (L x D x H): 435 x 315 x 65 mm.
- Overall dimensions (L x D x H): 486x 430 x 205 mm.
- Interior dimensions (L x D x H): 470x 345 x 190 mm.

Weight: 6.12 kg.

BV.51APR Technicians case + additional panels



- Identical to model BV.51A, but with additional internal storage panels.
- 4 tool holder faces.
- Tool storage racks (8) with rubber holding straps distributed on 4 storage surfaces.
- 1 document holder in the cover.
- 1 fully modular bin with 5 unclipping partitions.
- Cover lockable in open position.
- Locking by numbered key (20 different lock numbers on special order).
- Bi-material handle.
- Polypropylene antishock shell.
- Anti-slide rubber feet.
- Dimensions of the 5 partitions:
- 1 partition 315 mm x 65 mm.
- 2 partitions 185 mm x 65 mm.
- 2 partitions 125 mm x 65 mm.
- Bin dimension (L x D x H): 435 x 315 x 65 mm.
- Overall dimensions (L x D x H): 486x 430 x 205 mm.
- Interior dimensions (L x D x H): 470x 345 x 190 mm.

Weight: 5.3 kg.

BV.21SX Fitters case + accessories



- Shock-resistant polypropylene set. Airline approved. Capacity 28 dm³.
- Compartmented section.
- Modular storage of tools by sealed partition between compartments.
- 3 boxes to store small parts (BV.21BP).
- Soldering iron holder (BV.21-10).
- Keylocks (20 different lock numbers on special order).
- Max load: 25 kg.
- Interior dimensions (L x D x H): 500 x 360 x 165 mm.
- Overall dimensions (L x D x H): 530 x 390 x 180 mm.

Weight: 4.2 kg.

BV.21BP Set of 3 plastic boxes



- 3 boxes to store small parts with 3 different types of partition (L x W x H): 165 x 110 x 28 mm (each box).

BV.21M Foam bin divider



- Dimensions (L x W x H): 490 x 345 x 35 mm.

BV.21ST Fitters case





- Shock-resistant polypropylene set. Airline approved. Capacity 28 dm³.
- Modular storage of tools by sealed partition between compartments.
- Non partitioned bin, fully available.
- Keylocks (20 different lock numbers on special order).
- Interior dimensions (L x W x H): 500 x 360 x 165 mm.
- Overall dimensions (L x W x H): 530 x 390 x 180 mm.

Weight: 4.1 kg.

Versatile cases

BV.29 Universal seal-tight case





- Shells in copolymer polypropylene with built-in handle.
- 100% weather-sealed: sealing gasket and lateral locking.
- High impact and hydrocarbon resistance.
- High security locking by numbered key (100 different lock numbers on special order).
- 2 tool holder double face trays by elastic system.
- High volume compartment bin.
- Volume: 29 dm³.
- Interior dimensions (L x W x H): 525 x 310 x 185.
- Overall dimensions (L x W x H): 570 x 415 x 200.

Weight: 5 kg.

BV.29P Universal seal-tight case with mounting plate





- General specification as BV.29, but with a plate (BV.C1A2) with a lock for securing to a wall, inside a vehicle or on a motorbike.

Weight: 5.3 kg.

BV.C1 Workstation trolley and service case holder





- Case holder trolley only, compatible with BV.29P case or other case when fitted with the BV.C1A1 plate.
- Multifunction wheel, frame and head assembly.
- Easy to use.
- Anti-tilting system.
- Case secured on the trolley.
- Max load: 35 kg.
- Working height: 570 mm (+/- case).
- Length folded: 850 mm.
- Wheel base: 440 mm.
- Wheel Ø: 150 mm.

Weight: 4.5 kg.

BV.C2 Workstation trolley





- Multifunction wheel, frame and head assembly.
- Easy to use.
- Anti-tilting system.
- Case secured on the trolley.
- Max load: 35 kg.
- Working height: 570 mm (+/- case).
- Length folded: 850 mm.
- Wheel base: 440 mm.
- Wheel Ø: 150 mm.
- Supplied without case with BV.C1A1 adaptor plate.

Weight: 4.5 kg.

BV.C1A1 Plate





- Universal plate fitting all cases, for attachment to trolley BV.C1.

Weight: 8.5 kg.

Roller cases

BV.61 Fitters roller container case





- High Density Polyethylene (HDPE).
- Locking and folding built-in trolley system.
- 2 removable separator pages for optimised and organised storage.
- 1 large size bin for cumbersome tools and/or spare parts.
- 2 handles for 2 carrying solutions.
- Stability studs.
- 3 boxes to store small parts.
- Protection reinforcements.
- Large size wheels.
- Keylocks (20 different lock numbers on special order).
- Max load: 30 kg.
- Length opened: 850 mm.
- Interior dimensions (L x W x H): 470 x 390 x 347 mm.
- Overall dimensions (L x W x H): 550 x 440 x 365.

Weight: 8.5 kg.

BV.21TR1 Fitters service roller case





- Locking and folding steel trolley system.
- Modular storage of tools by sealed partition between compartments.
- Bin separation foam securing the tools during transport and used for knee protection.
- 2 small parts storage boxes.
- Keylocks (20 different lock numbers on special order).
- Max load: 25 kg.
- Interior dimensions (L x W x H): 500 x 360 x 165 mm.
- Overall dimensions (L x W x H): 530 x 390 x 180 mm, excluding trolley system.

Weight: 5.2 kg.

Leather cases

LEATHER CASES

Strong leather and convenient plastics for long life and user comfort.



Quality finish.



Optimum storage.



Comfort.



Security.

BV.7A Leather fold-down front case



- 1 removable double-sided tilting panel 400 x 280 mm, comprising:
- One tool holder panel and one panel with storage for A4 documents or miscellaneous products.
- A tool holder back panel with 11 patterns.
- One tool holder tilting face.
- Case bottom in galvanised metal sheet.
- Ground isolating feet.
- Dimensions (L x W x H): 445 x 330 x 185 mm.

Weight: 3.8 kg.

BV.5A Leather drawer case



- Sliding drawers including one fitted with 4 bins with 1 to 8 compartments possible, providing instant access to the contents dimensions (L x W x H): 375 x 116 x 40 mm.
- Removable bin with transport handle.
- Tool holder tilt back with 22 patterns.
- Dimensions (L x W x H): 425 x 320 x 215 mm.

Weight: 4.6 kg.

Leather bags

BV.100 Compact leather bag



- Tool transport for intervention on machine.
- High strength, suited to uses in aggressive environment.
- Closing by 2 adjustable loop straps.
- 1 interior compartment.
- Dimensions (L x W x H): 350 x 158 x 132 mm.

Weight: 510 g.

703232 Leather bag



- Leather panel bag with strap.
- Reinforced sides for stronger rigidity.
- Assembled by nickel-plated rivets.
- Closing by 3 adjustable loop straps.
- Dimensions (L x W x H): 405 x 145 x 125 mm.

Weight: 880 g.

BV.105 "Plumbers" leather bag



- Particularly strong for carrying large tools without risk of damage.
- Wide adjustable strap.
- Closing by 3 adjustable loop straps.
- 1 interior compartment.
- Reinforced base with protection pads.
- Dimensions (L x W x H): 500 x 160 x 160 mm.

Weight: 1.3 kg.

"Light maintenance" soft cases

SOFT CASES AND BACK-PACKS

❶ Highly resistant materials.
❷ Practical storage.
❸ Sturdy carrying straps.
❹ Additional pockets.



BV.16 Soft case





- This lightweight "light servicing" case can be fitted with different tool or equipment selections.
- Material resistant to hydrocarbons.
- Closed with a 2-slider zips to fit a padlock (padlock not supplied).
- An A4 document holder storage.
- 29 tool slots and a case or measuring device compartment, dimensions (L x W x H): 220 x 120 x 50 mm max.
- Stiff sides hold tools in position.
- Useful load: 10 kg.
- Dimensions (L x W x H): 440 x 315 x 75 mm.

Weight: 920 g.

BS.12 Flexible case with 4 flaps



- This "light servicing" case offers universal storage.
- 4 different surfaces planned for storing the tools (+ 40 tools).
- 1 side pocket with zipper and flap to protect documents.
- Full opening thanks to the 2-slider zippers.
- Padlock clasp (padlock not supplied).
- Exterior sides in anti impact and hydrocarbon resistant material.
- Supplied without tools.
- Overall dimensions (L x W x H): 430x 320 x 130 mm.

Weight: 1.848 kg.

BV.17 Soft back-pack







- Particularly suited to interventions requiring the user to cross obstacles or travel long distances in bad conditions (ladders to climb, major slopes, ...).
- Dimensions suited back transport without tiring, adjustable straps and belt.
- Tools held by adjustable straps.
- 2 side compartment dimensions (L x W x H): 220 x 110 x 40 mm.
- 1 pocket at the back of the pack, dimensions (L x W x H): 200 x 100 x 20 mm, zipper.
- 1 pocket at the top of the pack, dimensions (L x W x H): 190 x 100 x 35 mm.
- Strap to fasten ropes or long objects.
- Bag base designed to carry a toolbox or large objects.
- Padlock clasp (padlock not supplied).
- Useful load: 20 kg.
- Dimensions (L x W x H): 530 x 450 x 220 mm.

Weight: 1.3 kg.

"Light maintenance" roll bags

N.38A-4B Nylon roll bag - 4 compartments





- Material: nylon.
- 4 large PVC compartments.
- Resistant to chemical agents and hydrocarbons.
- Practical: folding.
- Safety: closing by clipped strap.
- Comfort: locations designed for the tool format.
- Dimensions: 310 x 530 mm.

Weight: 166g.

N.38A-6F Nylon roll bag - 6 compartments







- Material: nylon.
- 3 small and large PVC compartments.
- Resistant to chemical agents and hydrocarbons.
- Practical: folding.
- Safety: closing by clipped strap.
- Comfort: locations designed for the tool format.
- Dimensions: 360 x 520 mm.

Weight: 181g.

N.38A-10C Nylon roll bag - 10 compartments





- Material: nylon.
- 3 small, 1 medium and 6 large PVC compartments.
- Resistant to chemical agents and hydrocarbons.
- Practical: folding.
- Safety: closing by clipped strap.
- Comfort: locations designed for the tool format.
- Dimensions: 320 x 735 mm.

Weight: 223 g.

N.38A-12C Nylon roll bag - 12 compartments





- Material: nylon.
- 5 small and 7 large PVC compartments.
- Resistant to chemical agents and hydrocarbons.
- Practical: folding.
- Safety: closing by clipped strap.
- Comfort: locations designed for the tool format.
- Dimensions: 330 x 800 mm.

Weight: 258 g.



COMBINATION WRENCHES



Standard series 170
Fast series 174
Short series 175
Offset series 176
Power series 177

RATCHET WRENCHES



Combination series 179
Short combination series 184
Flexible head combination series 186
Straight ring series 187
Ring series 15 offset head 188
Multiple opening ring series 189

OPEN-END WRENCHES



Standard series 193
"Extra-Slim" series 195
Micro-mechanic series 195
Power series 197

RING WRENCHES



Offset series 198
Straight series 200
Half-moon series 201
Power series 202
Impact series 203

FIXED-SIZE AND ADJUSTABLE WRENCHES



ANGLED SOCKET WRENCHES

206



Standard series 206
Box wrench series 209
Tee socket series 210

SOCKET WRENCHES

211



Nut spinner series 211
Universal joint series 214
Jointed series 215

FLARE-NUT WRENCHES

217



Ratchet series 217
Standard series 218

VARIABLE OPENING WRENCHES

220



Adjustable series 220
Rack series 222

HOOK AND PIN WRENCHES

223



Series for side-slot nuts 223
Series for side-slot nuts 224
Series for top-hole nuts 225

Standard series

FACOM WRENCHES

A WIDE RANGE FOR ALL APPLICATIONS

Force



• Impact wrenches



• Offset ring wrenches



• Long-reach combination wrenches

Productivity



• Ratchet combination wrenches



• Ratchet ring wrenches



• Fast open end wrenches



• Standard combination wrenches



• Offset combination wrenches



• Standard angled socket wrenches



• Hinged ratchet wrenches



• Short ratchet wrenches



• Ratchet flare-nut wrenches



• Multi-opening ratchets



Specific access and uses



• Short combination wrenches



• Non-sparking wrenches
• Explosion-proof wrenches



• Socket wrenches



• Flare-nut wrenches



• Hook and pin wrenches



• "Micro" open-end wrenches

Lightweight and compact



• Variable opening wrenches



• Open-end wrenches

FACOM exclusive safety and productivity



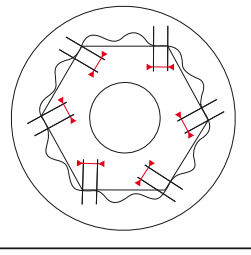
JP portable clip set for quick identification of the right wrench.



The safety accessory for impact wrenches.



Wrenches VSE insulated for work on live parts.



OGV® profile for more powerful tightening without damaging nuts.

SLEEVE SETS

A USEFUL INNOVATION!

PRACTICAL: SAVE TIME
- Immediately find the right wrench.
- No more loose wrenches in your tool box.
- Easy wrench selection.



SAFE
- No more tools left on site at the end of the job.
- Missing wrenches clearly identified.
- Compatible with the FOD concept (Foreign Object Damage).



OPTIMISED STORAGE
- Compact and organised wrench set in the sleeve hence saving space.
- Easy to store in any Facom roller cabinet drawer and tool box compartment.



AVAILABLE FOR ALL WRENCH FAMILIES
- Standard and short combination wrenches.
- Standard and short reversible ratchet wrenches.
- Hinged ratchet wrenches.
- Ratchet ring wrenches.



Standard series

440 COMBINATION WRENCH
"NEW GENERATION"

THE COMBINATION WRENCH REINVENTED FOR YOU



More control
During pre-tightening:
- More stable.
- Easier to guide.
- Wrench does not turn in the hand.

More comfort
- Variable handle cross section doubles the surface in contact with the hand.

Painless torque application

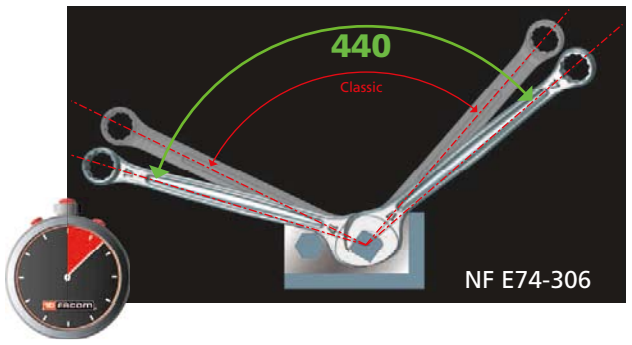


Better ring head accessibility
- Ring head provides better clearance for reaching recessed or closely spaced nuts.





More efficient open-end
The open-end / handle geometry:
- Saves 20% time.
- Save 15% space in highly confined zones.



More power, delivered safely
The combination wrench 440 was designed to combine compactness with strength:
- Dimensions meet the requirements of tooling standards NF ISO 1711-1 and aerospace standard SAE AS 954G.
- Tightening torques guaranteed significantly above specifications of high strength tooling and bolting standards ISO 898-1 (quality class 12.9).
- Combination wrench 440 was also designed to ensure maximum user safety. When critical tightening torques are reached, the wrench is distorted gradually. No brutal breaking likely to injure the user.

ISO 898-1* Bolting standards
ISO 1711-1 Standard tooling standard
SAE AS 954G Aerospace tooling standard
440 FACOM combination wrench

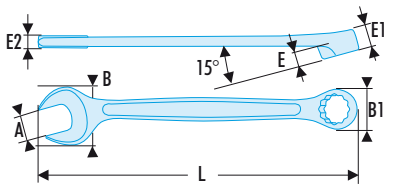


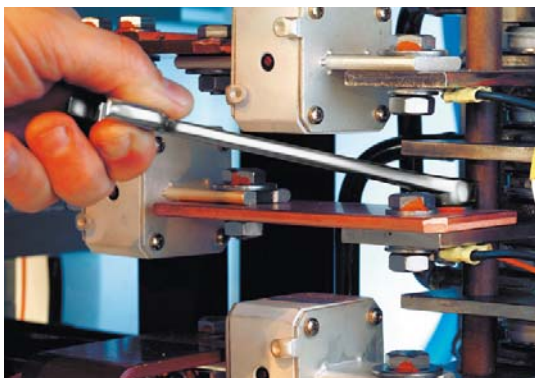
Maximum performance



440 - Metric combination wrenches







NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113, ASME B107.100

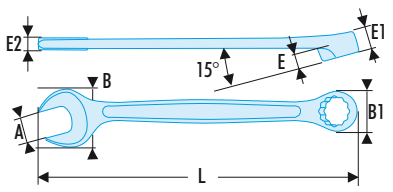
- Standard wrench for all current applications.
- High mechanical strength combined with compact size meeting aeronautical standards.
- Ring head:
- Ring open end (size E) designed for better access to series or embedded screws.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
- Ring head angled at 15°.
- Open end head:
- Open end angled at 15°.
- Open end head-handle geometry optimised for increased access.
- Metric sizes: 4 to 41 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⚖ [g]
440.4H	4	10,0	7,8	2,1	3,5	3,0	106	10
440.5H	5	13,3	9,2	3,1	6,0	3,6	115	16
440.5,5H	5,5	13,3	9,2	3,1	6,0	3,8	115	15
440.6	6	14,1	10,0	3,1	6,0	3,8	115	20
440.7	7	17,2	11,2	3,4	6,2	3,9	122	20
440.8	8	19,2	12,8	3,5	6,7	4,7	133	30
440.9	9	21,2	14,2	3,9	7,1	4,7	138	35
440.10	10	23,0	15,0	4,2	7,6	5,2	145	40
440.11	11	24,5	16,9	4,6	8,1	5,5	155	50
440.12	12	27,0	18,0	4,4	8,4	5,8	162	60
440.13	13	28,7	19,3	4,8	8,6	6,1	170	70
440.14	14	31,0	21,1	5,7	9,5	6,4	180	85
440.15	15	32,6	22,2	5,9	10,0	6,8	185	95
440.16	16	35,6	23,9	6,4	10,5	7,3	195	115
440.17	17	37,0	25,3	6,5	10,9	7,6	202	130
440.18	18	38,7	26,0	7,2	11,4	8,1	208	150
440.19	19	41,2	27,8	7,2	11,9	8,3	216	170
440.20	20	43,1	29,5	6,3	12,3	8,6	224	185

	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⚖ [g]
440.21	21	45,4	30,9	7,8	12,8	8,8	233	205
440.22	22	46,9	32,3	8,3	13,3	9,0	248	230
440.23	23	49,0	33,6	8,7	13,8	9,3	257	255
440.24	24	51,0	35,0	8,9	14,2	9,7	267	290
440.25	25	53,0	36,4	9,4	14,7	9,9	274	315
440.26	26	55,5	37,8	9,8	15,1	10,1	285	345
440.27	27	58,0	39,2	8,9	15,6	10,4	295	375
440.28	28	60,7	40,6	10,6	16,1	10,7	305	415
440.29	29	63,0	42,0	10,8	16,6	11,2	320	475
440.30	30	65,0	43,5	11,2	17,1	11,5	340	530
440.32	32	68,0	46,1	11,5	18,0	12,5	355	640
440.33	33	69,8	47,0	11,8	18,5	12,8	380	715
440.34	34	72,0	48,9	12,8	19,0	13,0	390	745
440.35	35	74,3	51,0	12,8	19,5	13,5	430	890
440.36	36	76,0	53,0	13,2	20,0	14,0	440	945
440.38	38	80,0	56,0	14,1	22,0	15,2	450	1130
440.41	41	85,0	58,3	14,7	23,0	16,0	460	1290

440 - Inch combination wrenches





ASME B107.100, SAE AS954G

- Standard wrench for all current applications.
- High mechanical strength combined with compact size meeting aeronautical standards.
- Ring head:
- Ring open end (size E) designed for better access to series or embedded screws.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
- Ring head angled at 15°.
- Open end head:
- Open end angled at 15°.
- Open end head-handle geometry optimised for increased access.
- Dimensions in inches: from 1/4" to 1"1/2.
- Presentation: satin chrome finish.

	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⚖ [g]
440.1/4	1/4	14,1	10,0	3,1	6,0	3,8	115	20
440.5/16	5/16	19,2	12,8	3,5	6,7	4,7	133	30
440.11/32	11/32	21,2	14,2	3,9	7,1	4,7	138	35
440.3/8	3/8	23,0	15,0	4,2	7,6	5,2	145	45
440.7/16	7/16	24,5	16,9	4,6	8,1	5,5	155	50
440.1/2	1/2	28,7	19,3	4,8	8,6	6,1	170	70
440.9/16	9/16	31,0	21,1	5,7	9,5	6,4	180	85
440.5/8	5/8	35,6	23,9	6,4	10,5	7,3	195	115
440.11/16	11/16	37,0	25,3	6,5	10,9	7,6	202	130
440.3/4	3/4	41,2	27,8	7,2	11,9	8,3	216	170
440.13/16	13/16	43,1	29,5	6,3	12,3	8,6	224	185

	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⚖ [g]
440.7/8	7/8	46,9	32,3	8,3	13,3	9,0	248	230
440.15/16	15/16	51,0	35,0	8,9	14,2	9,7	267	290
440.1'	1	53,0	36,4	9,4	14,7	9,9	274	315
440.1'1/16	1'1/16	58,0	39,2	8,9	15,6	10,4	295	375
440.1'1/8	1'1/8	60,7	40,6	10,6	16,1	10,7	305	415
440.1'1/4	1'1/4	68,0	46,1	11,5	18,0	12,5	355	640
440.1'5/16	1'5/16	69,8	47,0	11,8	18,5	12,8	380	715
440.1'3/8	1'3/8	74,3	51,0	12,8	19,5	13,5	430	890
440.1'7/16	1'7/16	76,0	53,0	13,2	20,0	14,0	440	945
440.1'1/2	1'1/2	80,0	56,0	14,1	22,0	15,2	450	1130

440 - Metric offset combination wrench sets in portable case





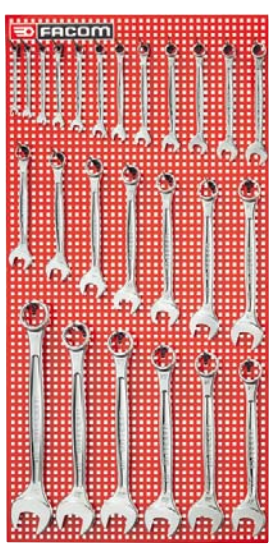
NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- Resistant to chemicals and impacts.

	A [mm]	Contents	⚖ [kg]
440.JP9	8 - 10 - 11 - 12 - 13 - 16 - 17 - 18 - 19	Etui : CK.440J1	0,940
440.JP12	7 - 8 - 10 - 11 - 12 - 13 - 16 - 17 - 18 - 19 - 22 - 24	Etui : CK.440J2	1,550
440.JP14	7 - 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24	Etui : CK.440J3	1,680

440 - Metric combination wrench sets







NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113, ASME B107.100

- Presentation: supplied as box, roll or panel sets.

	A [mm]	Contents	⚖ [kg]
440.JN8	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Box	1,010
440.JN8T	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Roll: N.38A-8C	1,135
440.JE9	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Box	0,660
440.JE11	7 - 8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Box	0,900
440.JE16	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17- 18 - 19 - 21 - 22 - 23 - 24	Box	1,990
440.JE16T	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Roll: N.38A-17A	2,165
440.JE18	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	1,990
440.JE25	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32- 34	Box	5,950
440.JE29	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32 - 33 - 34 - 35 - 36 - 38 - 41	Box	11,150
440.P25M	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Panel: PK.1	8,345

440 - Inch combination wrench sets



ASME B107.100,SAE AS954G

- Presentation: supplied as box or roll sets.

	A ["]	Contents	⚖ [kg]
440.JU9	1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4	Box	0,700
440.JU12	1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8 - 15/16	Box	1,540
440.JU21	1/4 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8 - 15/16 - 1" - 1"1/16 - 1"1/8 - 1"1/4 - 1"5/16 - 1"3/8 - 1"7/16 - 1"1/2	Box	7,250
440.JU6T	3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16	Roll: N.38A-6B	0,605
440.JU17T	1/4 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8 - 15/16 - 1" - 1 1/16" - 1 1/8" - 1 1/4"	Roll: N.38A-17A	3,350

MOD.440 - Combination wrench sets in heat formed tray



- Compatible with the Facom modular storage system:
- MOD.440-1XL and MOD.440-2XL: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.
- MOD.440-1, MOD.440-2 and MOD.440-4: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	A ["]	Contents	⧋ [kg]
MOD.440-1XL	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21- 22 - 24	-	Tray: PL.313	1,940
MOD.440-2XL	27 - 29 - 30 - 32 - 34	-	Tray: PL.671	3,200
MOD.440-1	6 - 7 - 8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24	-	Tray: PL.670	1,890
MOD.440-2	27 - 29 - 30 - 32	-	Tray: PL.314A	2,400
MOD.440-4	-	1/4 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16- 3/4 - 13/16 - 7/8 - 15/16	Tray: PL.673	1,595

MODM.440 - Combination wrench sets in foam tray



- Compatible with the FACOM modular storage system: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⧋ [kg]
MODM.440-1	6 - 7- 8 - 9 - 10 - 11- 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24	Tray: PM.MOD440-1	1,910
MODM.440-2	27 - 29 - 30 - 32 - 34	Tray: PM.MOD440-2	2,144

HIGH PRODUCTIVITY WRENCHES

GAIN TIME FOR REPETITIVE TIGHTENING OR IN DIFFICULT ACCESS ZONES.

For ratchet wrenches refer to p.179



Fast series

RATCHET EFFECT OPEN END COMBINATION WRENCH

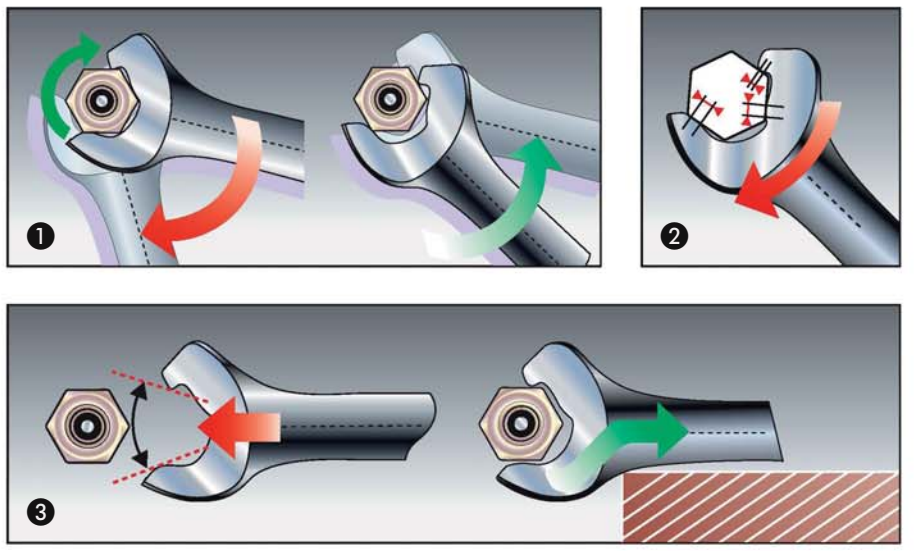
TWICE AS FAST

❶ Ratchet effect
- Firm pressure on fastener flats.
- Rewind action without removing the tool.

❷ 3 drive surfaces
- Less wear.
- Less risk of tool slippage.

❸ Easier positioning and withdrawal

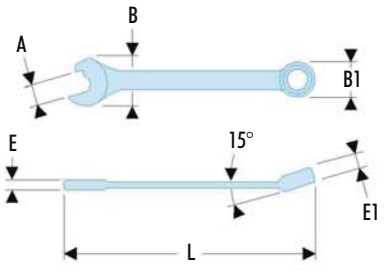
For our complete range see p. 174



40R - Metric fast-action open end combination wrenches



NF ISO 691, NF ISO 7738, NF ISO 1711-1, ISO 691, ISO 7738, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113
- Fast action open end wrench to gain time when the ring can no longer be used (piping...).
- OGV® 12-point ring head angled at 15°.
- Metric dimensions from 8 to 24 mm.
- Presentation: satin chrome finish.





	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	ΔΔ [g]
40R.8	8	18,5 x 12,9	4,3	6	126	25
40R.9	9	20,5 x 14	4,3	6,1	133	30
40R.10	10	22,9 x 15,9	4,8	6,6	141	40
40R.11	11	24,9 x 17	5,1	7	148	45
40R.12	12	26,8 x 18,4	5,3	7,5	157	55
40R.13	13	28,8 x 19,8	5,6	8	165	60
40R.14	14	30,6 x 21,2	6	8,5	172	75
40R.15	15	32 x 22,4	6,6	9,2	179	80
40R.16	16	34,8 x 23,8	6,9	9,8	187	95
40R.17	17	36,7 x 25	7	10,3	193	115
40R.18	18	38,5 x 26,4	7,4	10,9	201	120
40R.19	19	40,9 x 29,4	7,6	11,3	209	140
40R.20	20	42,5 x 29,4	8	11,6	217	165
40R.21	21	45 x 30,7	8,1	11,9	223	180
40R.22	22	47 x 32	8,2	12,3	240	205
40R.23	23	48,5 x 33,4	8,4	12,6	250	235
40R.24	24	50,5 x 34,7	8,5	12,9	260	260

40R - Metric fast-action open end combination wrenches sets



NF ISO 691, NF ISO 7738, NF ISO 1711-1, ISO 691, ISO 7738, ISO 1711-1, DIN ISO 691, DIN 1711-1, DIN 3113
- Presentation: supplied as box, roll or tray.

	A [mm]	Contents	ΔΔ [kg]
40R.JE9	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Box	0,610
40R.JE17	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24	Box	1,950
40R.JE9T	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Roll: N.38A-9E	0,740
MOD.40R	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 22 - 24	Tray: PL.352A	1,640

Short series

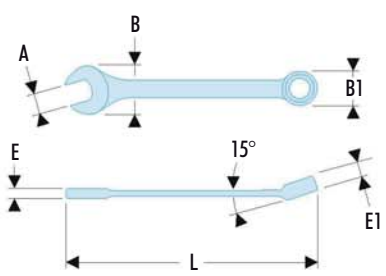
39 - Metric short-reach combination wrenches



NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 691, DIN 1711-1, ASME B107.100

- Short combination wrenches: the short handle and compact head allow for high handiness. Ideal for confined access.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 3.2 to 17 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	[mm]	L [mm]	[g]
39.3,2H	3,2	10,0 x 7,0	3,1	3,1	6	77	10
39.4H	4	10,0 x 8,0	3,1	3,1	6	77	10
39.5H	5	11,8 x 9,0	3,5	4,0	6	82	10
39.5,5H	5,5	11,8 x 9,5	3,5	4,0	6	84	10
39.6	6	15,0 x 10,4	4,1	5,0	12	90	15
39.7	7	15,0 x 11,5	4,1	5,0	12	90	15
39.8	8	17,2 x 12,5	4,5	5,8	12	94	20
39.9	9	19,4 x 14,0	4,8	6,0	12	98	25
39.10	10	21,5 x 15,3	5,1	6,4	12	103	30
39.11	11	23,7 x 16,8	5,3	6,8	12	109	35
39.12	12	26,0 x 18,0	5,5	7,5	12	127	50
39.13	13	28,0 x 19,5	5,8	8,0	12	141	55
39.14	14	30,2 x 20,8	6,0	8,5	12	147	70
39.15	15	32,3 x 22,1	6,4	9,0	12	152	80
39.16	16	34,4 x 23,6	6,7	9,6	12	158	90
39.17	17	36,5 x 25,0	6,9	10,0	12	165	100





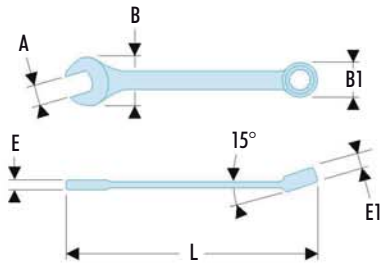
39 - Inch short-reach combination wrenches



ASME B107.100

- Short combination wrenches: the short handle and compact head allow for high handiness. Ideal for confined access.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut. H suffix = 6-point ring.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Dimensions in inches: from 1/8" to 11"16.
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	E [mm]	E1 [mm]	[mm]	L [mm]	[g]
39.1/8H	1/8	10,0 x 7,0	3,1	3,1	6	77	10
39.5/32H	5/32	10,0 x 8,0	3,1	3,1	6	77	10
39.3/16H	3/16	11,8 x 9,0	3,5	4,0	6	82	10
39.7/32H	7/32	11,8 x 9,5	3,5	4,0	6	84	10
39.1/4	1/4	15,0 x 10,4	4,1	5,0	6	90	15
39.9/32	9/32	15,0 x 11,5	4,1	5,0	6	90	15
39.5/16	5/16	17,2 x 12,5	4,5	5,8	6	94	20
39.11/32	11/32	19,4 x 14,0	4,8	6,0	6	98	25
39.3/8	3/8	21,5 x 15,3	5,1	6,4	6	103	30
39.7/16	7/16	23,7 x 16,8	5,3	6,8	6	109	35
39.1/2	1/2	28,0 x 19,5	5,8	8,0	12	141	50
39.9/16	9/16	30,2 x 20,8	6,0	8,5	12	147	70
39.5/8	5/8	34,4 x 23,6	6,7	9,6	12	158	90
39.11/16	11/16	36,5 x 25,0	6,9	10,0	12	165	100



39 - Metric short-reach combination wrench sets







NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Presentation: supplied as box or roll sets.

	A [mm]	Contents	⚖ [kg]
39.JP6	8 - 10- 11 - 12 - 13 -14	Case: CKS.67SJ1	0,285
39.JE9T	7 - 8 - 10 - 11 - 12 - 13 - 14 - 16 - 17	Roll: N.38A-9E	0,580
39.JE10	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11	Box BP.39VA + Tray PL.206	1,700
39.JE10T	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11	Roll: N.38A-10A	0,250
39.JE16T	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17	Roll: N.38A-16A	0,700

39 - Inch short-reach combination wrench sets



ASME B107.100

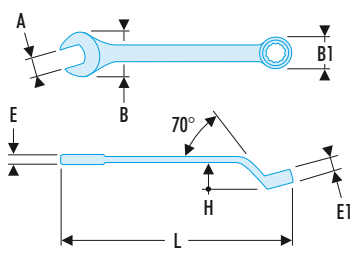
- Presentation: supplied in roll.

	A ["]	Contents	⚖ [kg]
39.JU10T	1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 7/16	Roll: N.38A-10A	0,250
39.JU14T	1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16	Roll: N.38A-16A	0,560

Offset series

41 - Metric offset combination wrenches





NF ISO 7738, ISO 7738, DIN 3113

- Offset combination wrenches: ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Open end head angled at 15°.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	⚖ [g]
41.6	6	14,5 x 11,0	4,0	6,0	12,5	113	30
41.7	7	18,5 x 13,0	4,5	7,0	15,0	127	35
41.8	8	18,5 x 13,0	4,5	7,0	15,0	127	35
41.9	9	23,5 x 15,5	5,0	8,0	16,5	142	50
41.10	10	23,5 x 15,5	5,0	8,0	16,5	142	50
41.11	11	27,5 x 18,5	5,5	8,6	18,5	160	75
41.12	12	27,5 x 18,5	5,5	8,6	18,5	160	75
41.13	13	31,5 x 21,5	5,5	9,0	18,5	180	100
41.14	14	31,5 x 21,5	5,5	9,0	18,5	180	100
41.15	15	36,5 x 24,5	6,6	10,3	20,5	200	130
41.16	16	36,5 x 24,5	6,6	10,3	20,5	200	130
41.17	17	40,5 x 27,0	7,3	11,2	22,0	224	195

	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	⚖ [g]
41.18	18	40,0 x 27,0	7,3	11,2	22,0	224	195
41.19	19	43,0 x 30,0	7,8	12,6	24,0	248	250
41.21	21	48,0 x 33,0	8,2	13,0	26,5	275	320
41.22	22	48,0 x 33,0	8,2	13,0	26,5	275	320
41.23	23	53,0 x 36,0	9,0	14,0	28,5	302	415
41.24	24	53,0 x 36,0	9,0	14,0	28,5	302	415
41.26	26	59,0 x 40,0	9,5	15,0	31,5	332	605
41.27	27	59,0 x 40,0	9,5	15,0	31,5	332	605
41.28	28	63,0 x 43,5	10,0	15.6	33,5	364	700
41.29	29	63,0 x 43,5	10,0	15.6	33,5	364	700
41.30	30	68,0 x 46,5	10.5	16.5	35,5	398	850
41.32	32	68,0 x 46,5	10.5	16.5	35,5	398	850

41 - Metric offset combination wrench sets





NF ISO 7738, ISO 7738, DIN 3113

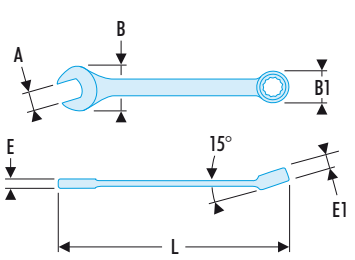
- Presentation: supplied as box, roll or panel sets.

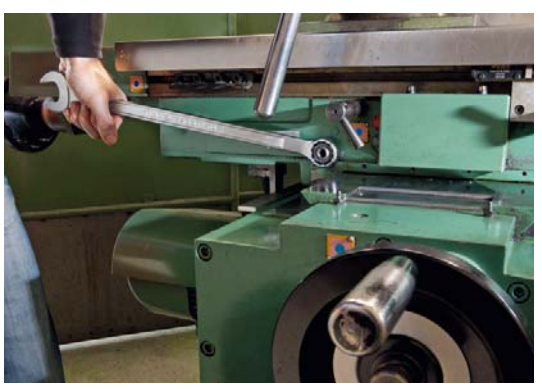
	A [mm]	Contents	⚖ [kg]
41.JE9	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Box	0,930
41.JE18	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	3,020
41.JE9T	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19	Roll: N.38A-9B	1,050
41.JE12T	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 - 21 - 22	Roll: N.38A-12B	2,095
41.P24M	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32	Panel: PK.1	9,380

Power series

40 .LA- Metric long-reach combination wrenches







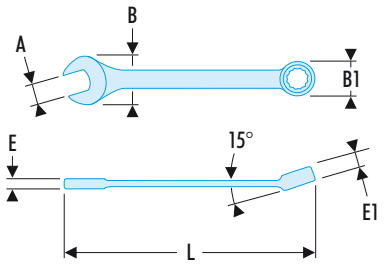
NF ISO 1711-1, NF ISO 3318, NF ISO 7738, ISO 1711-1, ISO 3318, ISO 7738, DIN ISO 691, DIN ISO 1711-1, DIN 3113, ASME B107.100

- Long combination wrenches: the extra-long handle passes high torque with minimum effort.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 19 to 50 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
40.19LA	19	45,0 x 29,6	8,7	12,0	329	240
40.21LA	21	49,0 x 32,3	9,5	13,0	355	305
40.22LA	22	51,0 x 33,8	9,9	14,0	368	360
40.23LA	23	53,0 x 35,4	10,3	14,5	381	370
40.24LA	24	55,0 x 36,9	10,7	15,0	394	455
40.26LA	26	59,0 x 39,4	11,5	15,5	420	520
40.27LA	27	61,0 x 40,6	11,9	16,0	433	590
40.28LA	28	62,4 x 42,2	12,3	16,5	446	600
40.29LA	29	62,4 x 42,2	12,3	16,5	446	600
40.30LA	30	65,0 x 45,2	13,1	17,0	472	800
40.32LA	32	69,5 x 47,8	13,2	18,0	498	850
40.33LA	33	49,0 x 32,3	9,5	13,0	498	850
40.34LA	34	51,0 x 33,8	9,9	14,0	524	1040
40.35LA	35	53,0 x 35,4	10,3	14,5	524	1040
40.36LA	36	55,0 x 36,9	10,7	15,0	550	1200
40.38LA	38	59,0 x 39,4	11,5	15,5	576	1435
40.41LA	41	61,0 x 40,6	11,9	16,0	615	1720
40.42LA	42	62,4 x 42,2	12,3	16,5	615	1720
40.46LA	46	62,4 x 42,2	12,3	16,5	680	2435
40.50LA	50	65,0 x 45,2	13,1	17,0	732	3500

40.LA- Inch long-reach combination wrenches





ASME B107.100

- Long combination wrenches: the extra-long handle passes high torque with minimum effort.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Ring head angled at 15°.
- Open end head angled at 15°.
- Dimensions in inches: from 3/4" to 2".
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
40.3/4LA	3/4	45,0 x 29,6	8,7	12,0	329	240
40.13/16LA	13/16	49,0 x 32,3	9,5	13,0	355	305
40.7/8LA	7/8	51,0 x 33,8	9,9	14,0	368	360
40.15/16LA	15/16	53,0 x 35,4	10,3	14,5	381	370
40.1'LA	1'	59,0 x 39,4	11,5	15,5	420	520
40.1'1/16LA	1'1/16	61,0 x 40,6	11,9	16,0	433	590
40.1'1/8LA	1'1/8	62,4 x 42,2	12,3	16,5	446	600
40.1'1/4LA	1'1/4	65,0 x 45,2	13,1	17,0	472	800
40.1'5/16LA	1'5/16	69,5 x 47,8	13,9	18,0	498	850
40.1'3/8LA	1'3/8	72,7 x 50,7	14,7	19,0	524	1040
40.1'7/16LA	1'7/16	76,0 x 53,6	15,5	20,0	550	1200
40.1'1/2LA	1'1/2	80,0 x 56,0	16,3	22,0	576	1435
40.1'5/8LA	1'5/8	86,0 x 59,2	17,5	23,0	615	1720
40.1'13/16LA	1'13/16	95,0 x 65,85	19,5	25,0	680	2435
40.2'LA	2'	103,0 x 71,0	21,1	30,0	732	3500

40.LA- Metric standard and long-reach combination wrenches set



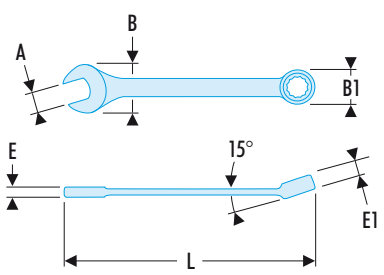
NF ISO 1711-1, NF ISO 3318, NF ISO 7738, ISO 1711-1, ISO 3318, ISO 7738, DIN ISO 691, DIN ISO 1711-1, DIN 3113, ASME B107.100

- Presentation: in box.

	A [mm]	⚖ [kg]
40LA.JE17	19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32 - 33 - 35 - 36 - 38 - 41 - 42	13,800

41.L - Long-reach metric offset combination wrenches





NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Long-reach offset combination wrenches: the extra-long handle passes high torque with minimum effort.
- Ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Open end head angled at 15°.
- Metric sizes: 46 to 65 mm.
- Presentation: burnt.

	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
41.46L	46	95,0 x 69,0	15,0	24,0	520	1300
41.50L	50	103,0 x 75,0	16,5	26,0	560	1450
41.55L	55	113,0 x 84,5	18,0	28,0	610	1580
41.60L	60	123,0 x 90,0	20,0	31,0	660	2300
41.65L	65	133,0 x 98,0	22,0	31,0	710	2650

Combination ratchet series

FACOM RATCHET WRENCHES

Cliquet 5 Ratchet System

INCREASE PRODUCTIVITY

FACOM offers a broad range of ratchet wrenches suited to all your needs: standard combination wrenches, short combination wrenches, hinged combination wrenches, straight ring wenches, offset ring and multi-opening wrenches.

SAVE TIME
- The ratchet mechanism increases productivity as you no longer have to reposition the wrench.

MAXIMUM ACCESSIBILITY
- The 5° increment (6° for the 8 and 9 mm dimensions) allow working in awkward spaces.
- Extremely compact mechanism.
- FACOM offers accessories optimising accessibility.

PERFORMANCE AND SAFETY
- FACOM guarantees very high performance for its ratchet wrenches: ISO 1711-1 + 50% guaranteed.
- Integral reversing lever avoiding accidental reversing.

To help you, use our selection guide in the next pages.



SELECTION GUIDE | COMBINATION WRENCHES
RATCHET

Cliquet 5 Ratchet System

3 MODELS OF RATCHET COMBINATION WRENCHES FOR THE ULTIMATE VERSATILITY IN ANY APPLICATION

467 S PRODUCTIVITY

Short combination wrenches
Productivity & accessibility
Ultra-compact:
- 40% more compact than the standard ratchet combination wrench.

467 F PRODUCTIVITY

Hinged combination wrenches
Productivity & manoeuvrability
- Ultra-manoeuvrable: overcomes the problems of tightening and loosening in applications where the operator must work “blind”.
- The hinged head offers unique accessibility as more compact than the ratchet-joint-socket association.

467 PRODUCTIVITY

Standard combination wrenches
Productivity & versatility
Ultra-versatile:
- Ring head: ratchet mechanism with 5° increment, with 15° angle.
- Open end oriented at 15°.







SELECTION GUIDE: RATCHET RING WRENCHES

2 TYPES OF RATCHET RING WRENCHES FOR SAFE TIGHTENING WITH THE RING

Use ratchet ring wrenches straight or angled by 15° according to accessibility requirements:

- Straight when height is limited.
- Angled by 15° when the nut is not clear.

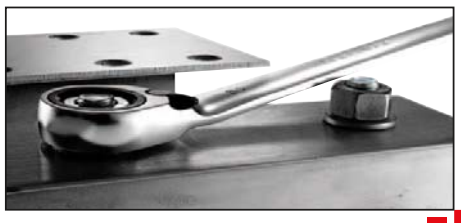
SERIES 64





SERIES 65





SELECTION GUIDE: ALL-IN-ONE RATCHET WRENCHES

THE ALL IN 1 SOLUTION FOR TRAVELLING MAINTENANCE

64 QUATTRO and 464.J1

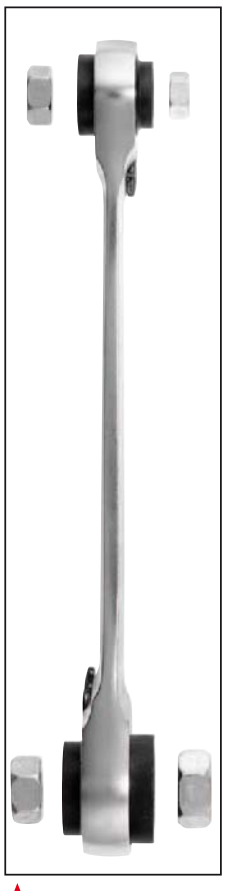
- The all in 1 wrench can be used in any application and eliminates the need for many wrenches.

467S.BOX

- The solution meeting all your needs: flat ratchet tightening, socket tightening, screwing.



464.J1 ▲



▲ 64 QUATTRO

467S.BOX ▼



SELECTION GUIDE: RATCHET WRENCH SETS AND MODULES

Productivity solution: ratchet wrench sets and modules for all your uses

	Characteristic	Reference	Page
Interventions on sites FOD prevention. Machine/operator safety. Max productivity 	**Versatile:** All flat tightening uses. **Ultra-compact / ultra-handy:** specific accessibility. **Ring** maximum safety thanks to ring tightening.	**467.JP10** **467S.JP6 /** **467F.JP10** **65.JP6**	183 184 186 188
General maintenance 	**Ring / versatile:** All flat tightening uses. Basic sets. Inches	**64.JE6T /** **64.JU6T /** **65.JU6T /** **467.J7**	187 189 183
Ultra Light maintenance 	**11 in 1 / Quattro:** Lightweight gain - extra flat head - complete set - compact diameter - access to embedded screws **Multi-service** All compact ratchet tightening solutions with maximum weight gain.	**464.J1 /** **64C.J2** **467.SBOX**	192 191 185
Workshop maintenance 	**Versatile:** All flat tightening uses. **Ultra-handy:** Specific accessibility. Fitted for socket tightening. **Ring:** Maximum safety thanks to ring tightening. 15° angle when required by access.	**MOD.467J12 /** **MOD.467J13** **MOD.467XL /** **MOD.467FJ12** **MOD.64J7 /** **MOD.65J7**	184 186 187 189





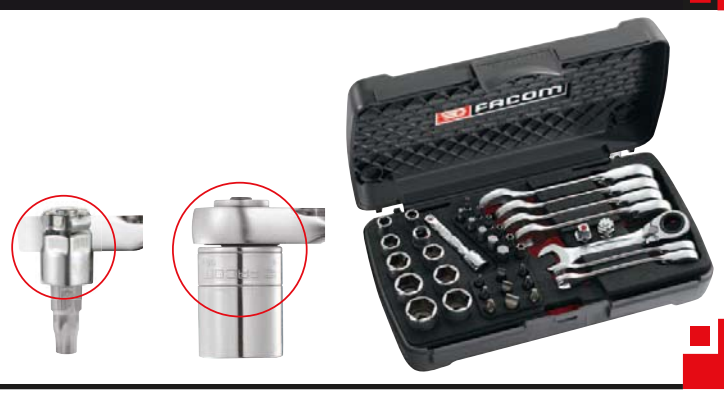


SELECTION GUIDE: 467S.BOX

COMBINE THE BENEFITS OF FLAT TIGHTENING WITH SOCKET TIGHTENING:

3 adapters for sockets or bits:
- Wrenches 10 mm <–> Bit ⎔ ¼" - 6.35 mm.
- Wrenches 10 mm <–> Socket ☐ ¼".
- Wrenches 19 mm <–> Socket ☐ ½".

467S.BOX. See p. 185



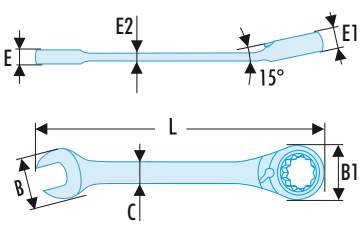
467 - Metric standard ratchet combination wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Standard ratchet combination wrenches: for all current applications.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (7.5° for dimension 6 mm ; 6° for dimensions 7, 8 and 9 mm).
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⚖ [g]
467.6	6	15,0	14,0	9,7	4,0	6,9	2,5	128	30
467.7	7	16,7	17,0	9,7	4,3	6,5	2,5	140	30
467.8	8	16,7	17,0	9,7	4,3	6,5	2,5	140	30
467.9	9	18,7	18,6	10,3	4,5	6,9	2,5	149	40
467.10	10	20,8	20,2	11,3	5,0	7,3	2,9	158	50
467.11	11	23,0	22,0	12,2	5,3	7,7	3,2	165	60
467.12	12	24,6	23,4	13,0	5,5	8,2	3,3	171	70
467.13	13	26,8	25,5	14,5	6,1	8,6	3,5	178	90
467.14	14	29,0	26,9	15,1	6,5	9,0	3,8	190	110
467.15	15	31,0	28,3	16,1	6,8	9,4	4,0	199	130
467.16	16	33,0	29,8	17,3	7,1	9,9	4,2	208	140
467.17	17	35,5	31,8	18,2	7,5	10,3	4,5	225	170
467.18	18	37,5	32,7	19,6	8,1	10,7	4,6	236	200
467.19	19	39,4	34,0	20,4	8,6	11,2	4,6	247	230
467.21	21	45,8	40,1	23,9	9,0	13,0	5,1	287,8	340
467.22	22	45,8	40,1	23,9	9,0	13,0	5,1	287,8	340
467.24	24	51,8	46,5	26,4	10,0	14,5	5,6	321	480
467.27	27	56,4	52,4	29,2	10,8	15,5	6,3	356,6	660
467.30	30	62,7	58,1	31,7	11,5	17,0	6,8	400,7	870
467.32	32	66,4	61,9	33,7	12,4	17,5	7,3	423,5	1080





467.JP10 Metric ratchet combination wrench sets in portable case



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- 6-piece set of standard ratchet combination wrenches:
- 467.8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.467J1.
- Weight: 1.380 kg.

467 - Metric standard ratchet combination wrench set



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Presentation: in box.

	A [mm]	⚖ [kg]
467.J7	8 - 10 - 12 - 13 - 14 - 17 - 19	0,860

MOD.467 - Standard metric ratchet combination wrench sets in heat formed tray



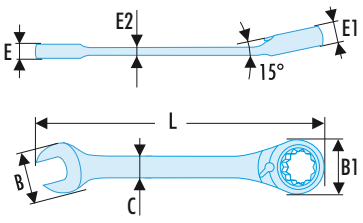
- Compatible with the FACOM modular storage system:
- MOD.467J12 and MOD.467J13: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.
- MOD.467XL: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	[kg]
MOD.467J12	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray: PL.652	1,675
MOD.467XL	21 - 22 - 24 - 27 - 30 - 32	Tray: PL.653	4,220
MOD.467J13	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 + Adapter for 10 mm wrench to 1/4" + Adapter for 19 mm wrench to 1/2"	Tray: PL.682	1,700
MODM.467J12	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray: PM.467J12	1,550

Short combination ratchet series

467S - Short metric ratchet combination wrenches







NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Extra-short handle ratchet combination wrenches: ideal in highly dense zones.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (6° for dimension 7, 8 and 9 mm).
- Ring head angled at 15°.
- Open end head angled at 15°.
- Metric sizes: 7 to 17 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	[g]
467S.7	7	16,7	17,0	6,5	4,0	6,5	2,8	90	25
467S.8	8	16,7	17,0	6,5	4,0	6,5	2,8	90	25
467S.9	9	18,7	18,6	6,9	4,4	6,9	3,0	93	30
467S.10	10	20,8	20,2	7,3	4,8	7,3	3,4	95	35
467S.11	11	23,0	22,0	7,7	5,2	7,7	3,7	103	50
467S.12	12	24,6	23,4	8,2	5,5	8,2	4,0	106	55
467S.13	13	26,8	25,5	8,6	5,8	8,6	4,0	108	65
467S.14	14	29,0	26,9	9,0	6,2	9,0	4,3	115	80
467S.15	15	31,0	28,3	9,4	6,5	9,4	4,5	119	90
467S.16	16	33,0	29,8	9,9	6,8	9,9	4,7	123	100
467S.17	17	35,5	31,8	10,3	7,2	10,3	5,0	127	115

467S.JP6 Short ratchet combination wrench sets in portable case





NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- 6-piece set of short ratchet combination wrenches: 467S.8 - 10 - 11 - 12 - 13 - 14 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.67SJ1.
- Weight: 0.420 kg.

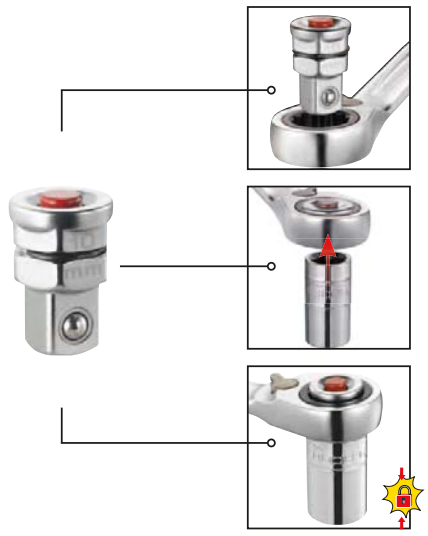
ULTRA COMPACT MULTI-TIGHTENING SET

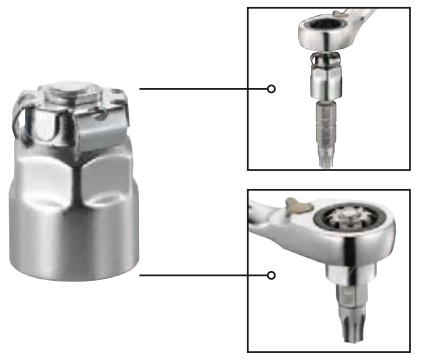
Maximum access thanks to the short ratchet wrench / socket / bit adapter system.

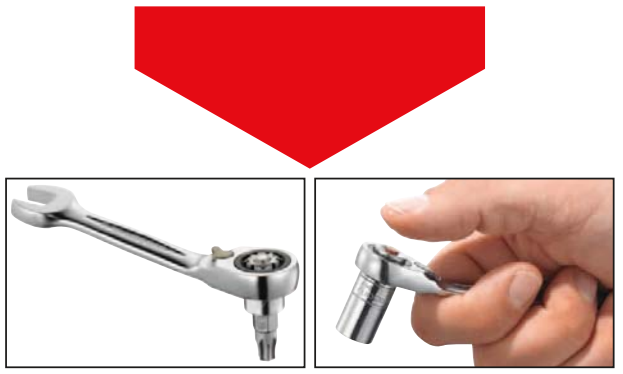
Ultra-compact
Ultra-accessible
Multi-tightening

- All compact ratchet tightening solutions for applications where access is limited.
- Using adapters, change the wrench into an ultra-compact ratchet for sockets and bits.









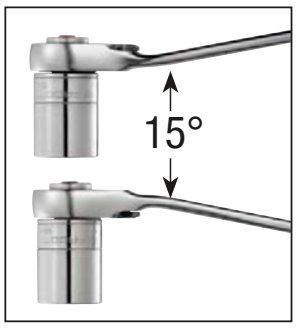


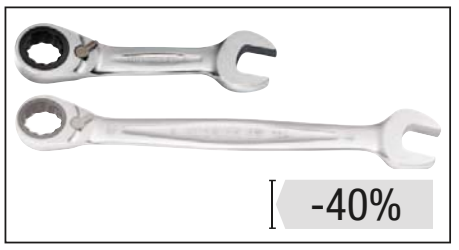
Access everywhere

- 72-teeth mechanism = 5° increments.









467S.BOX Ultra compact metric wrench, socket and bit set



- The flat tightening / socket tightening / versatile and ultra-compact screwing solution.

Comprising:

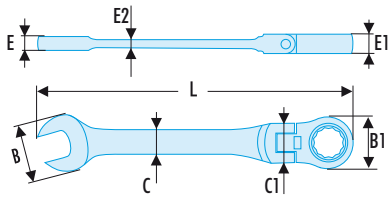
- 7 short ratchet combination wrenches: 467S.7 - 8 - 10 - 11 - 12 - 13 - 14 mm.
- 10 1/4" sockets: R.5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm.
- 1 1/4" extension 55 mm long: R.209.
- 2 10mm socket adaptors with 1/4" socket and 10 mm wench with 1/4" 6-point bits: 467. ADAPT10MM.
- 20 bits:
- For slotted screw: ES 4.5 - 6.5 - 8 mm.
- For Phillips® screw: EP 1 - 2 - 3.
- For Pozidriv® screw: ED 1 - 2 - 3.
- For Torx® and Resistorx® screw: EXR 10 - 15 - 20 - 25 - 30 - 40.
- For hex 6-point screw: EH 3 - 4 - 5 - 6 - 7 mm.
- Plastic box: BP.102.
- Foam tray: PM.467SBOX.
- Weight: 0.890 kg.

Angled combination ratchet series

467F - Metric hinged jointed combination wrenches







NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Hinged head ratchet combination wrenches: to reach difficult access nuts.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (6° for dimensions 8 and 9 mm).
- Ring head hinged at 180°.
- Open end head angled at 15°.
- Metric sizes: 8 to 19 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	L [mm]	[g]
467F.8	8	16,2	16,7	9,0	4,3	6,5	2,7	13,0	127,5	45
467F.9	9	18,2	18,6	10,0	4,6	6,9	2,9	14,6	132,0	50
467F.10	10	20,3	20,1	10,8	5,0	7,3	3,2	16,0	136,5	60
467F.11	11	22,5	21,8	11,8	5,4	7,7	3,6	17,0	141,5	65
467F.12	12	24,8	23,0	12,8	5,8	8,2	3,8	18,0	148,0	80
467F.13	13	26,8	25,2	13,6	6,1	8,6	3,9	19,0	155,0	95
467F.14	14	28,7	26,8	14,2	6,4	9,0	4,2	20,0	161,0	110
467F.15	15	30,5	28,3	15,4	6,9	9,4	4,4	21,0	170,0	130
467F.16	16	32,9	29,8	16,0	7,2	9,9	4,6	22,0	180,0	155
467F.17	17	34,5	31,8	16,9	7,6	10,3	4,9	23,0	191,0	175
467F.18	18	37,0	32,8	18,0	8,0	10,7	5,1	24,0	204,0	200
467F.19	19	39,2	33,9	19,5	8,6	11,2	5,4	25,0	216,0	230

467F.JP10 Metric hinged ratchet combination wrench set in portable case



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Productivity and safety = easy to organise, easy to spot, always with you.
- 10-piece set of hinged ratchet combination wrenches:

- 467F.8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19 mm.

- Resistant to chemicals and impacts.
- Portable case: CK.467FJ1.
- Weight: 1.450 kg.

MOD.467F - Hinged metric ratchet combination wrench sets in heat formed tray

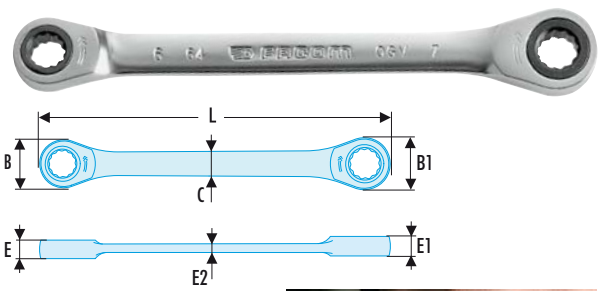


- Compatible with the FACOM modular storage system: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	[kg]
MOD.467FJ12	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray : PL.680	1,670
MODM.467FJ12	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray : PM.MOD467J12	1,710

Ring ratchet series

64 - Metric straight ratchet ring wrenches



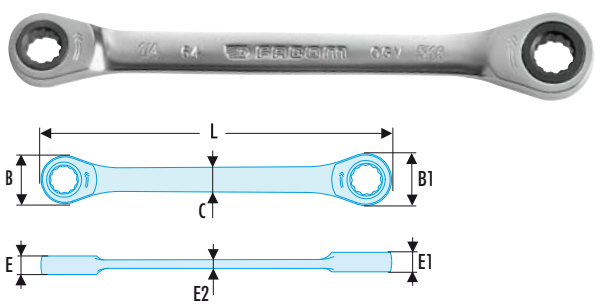


NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Straight ratchet ring wrenches: to reach the nut flat.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (7.5° for dimension 6 mm; 6° for dimensions 7, 8 and 9 mm).
- Metric sizes: 6 to 24 mm.
- Presentation: satin chrome finish.

	A [mm]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⧋ [g]
64.6X7	6x7	17,2	8,0	6,3	6,5	3,0	115	35
64.8X9	8x9	20,2	8,3	6,5	6,9	3,2	128	45
64.10X11	10x11	21,8	9,1	7,3	7,7	3,6	150	60
64.12X13	12x13	24,8	11,3	8,2	8,6	4,2	170	80
64.14X15	14x15	29,5	13,1	9,0	9,4	4,7	190	130
64.16X18	16x18	33,5	14,8	9,9	10,7	5,4	210	185
64.17X19	17x19	33,5	15,2	10,3	11,2	5,4	230	190
64.21X23	21x23	46,0	15,2	13,0	14,5	5,4	260	480
64.22X24	22x24	46,0	15,2	13,0	14,5	5,4	260	480

64 - Inch straight ratchet ring wrenches





ASME B107.100

- Straight ratchet ring wrenches: to reach the nut flat.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5° (7.5° for dimension 1/4" mm; 6° for dimensions 5/16" and 11/32").
- Dimensions in inches: from 1/4" to 5"16.
- Presentation: satin chrome finish.

	A ["]	B1 [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⧋ [g]
64.1/4X5/16	1/4x5/16	17,2	8,0	6,3	6,5	3,0	115	40
64.5/16X11/32	5/16x11/32	20,2	8,3	6,5	6,9	3,2	128	45
64.3/8X7/16	3/8x7/16	21,8	9,1	7,3	7,7	3,6	150	60
64.1/2X9/16	1/2x9/16	24,8	11,3	8,6	9,0	4,2	180	115
64.5/8X11/16	5/8x11/16	33,5	14,8	9,9	10,7	5,4	210	185
64.3/4X13/16	3/4x13/16	40,0	15,2	11,2	13,0	5,4	245	310
64.7/8X15/16	7/8x15/16	46,0	15,2	13,0	14,5	5,4	260	480

64 - Sets of metric and inch straight ratchet ring wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- Presentation: supplied as box or roll sets.

	A [mm]	A ["]	Contents	⧋ [kg]
64.J4	10x11 - 12x13 - 16x18- 17x19	-	Box	0,535
64.JE6T	8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	-	Roll: N.38A-6B	0,825
64.JU6T	-	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-6B	1,315

MOD.64 - Metric straight ratchet ring wrench sets in heat formed tray



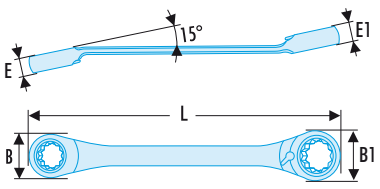
- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⧋ [g]
MOD.64J7	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	Tray: PL.608A	

Ring ratchet 15° head series

65 - Metric 15° hinged ratchet ring wrenches







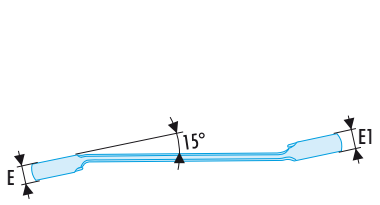
NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

- 15° hinged ratchet ring wrenches: ring offset to clear fingers or obstacles.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (7.5° for dimension 6 mm; 6° for dimensions 7, 8 and 9 mm).
- Ring head angled at 15°.
- Metric sizes: 6 to 24 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
65.6X7	6x7	14,0	17,0	6,3	6,5	115	30
65.8X9	8x9	17,0	20,2	6,5	6,9	128	45
65.10X11	10x11	20,2	22,0	7,3	7,7	150	65
65.12X13	12x13	23,4	25,5	8,2	8,6	170	90
65.14X15	14x15	26,9	29,8	9,0	9,4	190	130
65.16X18	16x18	29,8	34,0	9,9	10,7	210	190
65.17X19	17x19	31,8	34,0	10,3	11,2	230	210
65.21X23	21x23	40,1	46,0	13,0	14,5	260	430
65.22X24	22x24	40,1	46,5	13,0	14,5	260	425

65 - Inch 15° hinged ratchet ring wrenches







ASME B107.100

- 15° hinged ratchet ring wrenches: ring offset to clear fingers or obstacles.
- Compact ratchet mechanism and reversible by lever.
- Increment 5° (7.5° for dimension 1/4"; 6° for dimensions 5/16" and 11/32").
- Ring head angled at 15°.
- Dimensions in inches: from 1/4" to 15"16.
- Presentation: satin chrome finish.

	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
65.1/4X5/16	1/4x5/16	14,0	17,0	6,3	6,5	115	30
65.5/16X11/32	5/16x11/32	17,0	20,2	6,5	6,9	128	45
65.3/8X7/16	3/8x7/16	20,2	22,0	7,3	7,7	150	65
65.1/2X9/16	1/2x9/16	25,5	26,9	8,6	9,0	180	110
65.5/8X11/16	5/8x11/16	29,8	31,8	9,9	10,3	200	170
65.3/4X13/16	3/4x13/16	34,0	40,1	11,2	13,0	245	290
65.7/8X15/16	7/8x15/16	40,1	46,5	13,0	14,5	260	420

Metric 15° hinged ratchet combination wrenches set in portable case





NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Productivity and safety = easy to organise, easy to spot, always with you.
- 6-piece set of 15° hinged ratchet combination wrenches: 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19 mm.
- Resistant to chemicals and impacts.
- Portable case: CK.65J1
- Weight: 0.880 kg.

	A [mm]	⚖ [kg]
65.JP6	8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	0,830

Inch 15° hinged ratchet ring wrenches set



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Presentation: supplied in roll.

	A ["]	Contents	⚖ [kg]
65.JU6T	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-6B	1,315

Metric 15° hinged ratchet ring wrench sets in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [kg]
MOD.65J7	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x18 - 17x19	Tray: PL.608A	1,153

467.ADAPT10MM Set of 2 adaptors for 10 mm wrenches to 1/4" drive







- 2 adaptors to use your 10 mm ratchet wrench with 1/4" drive sockets and 1/4" 6-point bits.

467.ADAPT10-19 Set of 2 adaptors for 10 mm wrenches to 1/4" drive and for 19 mm wrenches to 1/2" drive









- 1 adaptor to use your 10 mm ratchet wrench with 1/4" drive sockets and 1/4" 6-point bits.
- 1 adaptor to use your 19 mm ratchet wrench with 1/2" drive sockets.

Ring ratchet multiple opening straight series

SPECIAL SOLUTIONS FOR TRAVELLING MAINTENANCE

QUATTRO CONCEPT & “11 IN 1” concept

- Ideal for interventions out of site, in high locations or requiring tool bags or boxes to be winched.
- The 2 FACOM all-in-1 wrench concepts meet weight constraints and facilitate travel.





ALL-IN-1 SOLUTIONS: “QUATTRO” concept

All-in-1 ratchet ring wrenches for minimum weight



Each head has 2 dimensions 1 wrench = 4 dimensions

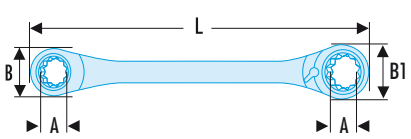


- 72-teeth mechanism = 5° increments
- FACOM guarantees very high performance for its ratchet wrenches: ISO 1711-1 + 50% guaranteed.
- Integral reversing lever avoids any risk of accidental reversal.
- Compact head.
- 8 sizes available: 8-10-12-13-16-17-18-19 mm.



64C - Metric multi-opening straight ratchet ring wrenches





NF ISO 1711-1, ISO 1711-1, DIN ISO 1711-1

- Straight multi-opening ratchet ring wrenches: highly versatile wrenches = 4 dimensions per wrench.

Saves weight: 1 single wrench in the tool box instead of 4.

- 4 metric dimensions per wrench:

- 64C.S1: 8x10 - 12x13 mm.
- 64C.S2: 16x17 - 18x19 mm.

- Compact ratchet mechanism and reversible by lever.
- Increment 5°.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	L [mm]	⚖ [g]
64C.S1	8x10 - 12x13	20,2	150	105
64C.S2	16x17 - 18x19	31,8	230	270

64C.J2 Metric multi-opening straight ratchet ring wrenches set



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100

- Set of 2 multi-opening straight ratchet ring wrenches (8 dimensions):

- 64C.S1: 8x10 - 12x13 mm.
- 64C.S2: 16x17 - 18x19 mm.

- Compact ratchet mechanism and reversible by lever.
- Increment 5°.
- Presentation: satin chrome finish.
- Supplied in cardboard box.
- Weight: 0.400 kg.

"11 IN 1" ratchet wrench set = 1 RATCHET RING WRENCH + 9 RINGS

Travelling maintenance special: save 60% weight compared with a set of 6 ratchet ring wrenches

Save time

- Ratchet mechanisms avoiding improductive repositioning.
- Easy fitting of adapter rings: **1 click is enough.**
- No time wasted trying to find the right dimension: **clear marking.**





Maximum accessibility:

- 72-teeth mechanism = 5° increments.
- Extra-slim head: 3 times more compact than the ratchet-socket system.
- Through ratchet function for long threads.





Performance and safety:

- FACOM guarantees very high performance for its ratchet wrenches: ISO1711-1 + 50% guaranteed.
- No more tools left on site at the end of the job thanks to instant checking system for missing tools.
- Single-handed effective locking system: no ring ejection thanks to the ring locking and release system.
- The rings stay in their foam compartments even when the box is tipped or dropped.
- Box and foam resistant to impact and chemical agents.





Dimensions / openings: 8-9-10-11-12-13-14-15-16-17-19 mm.





464.J1 Flat tightening case "11 in 1"





Ultra-light "11 in 1" set: 1 wrench + 9 bushes = 11 dimensions.
- Ideal for spaces with low access in height. The extra-flat wrench is 3 times slimmer than a traditional ratchet + socket system.
- Compact ratchet mechanism and reversible by lever.
- Increment 5°.
- Dimensions of the 2 ratchet heads without bush: 14 and 19 mm.
- 9 reducer bushes. Dimensions: 8 - 9 - 10 - 11 - 12 - 13 - 15 - 16 and 17 mm.
- Plastic box: BP.102.
- Foam tray: PM.464J1.

Weight: 0.530 kg.

Straight ratchet ring wrench opening 14 and 19 mm



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, ASME B107.100
- Ideal for spaces with low access in height. The extra-flat wrench is 3 times slimmer than a traditional ratchet + socket system.
- Compact ratchet mechanism and reversible by flipping the wrench.
- Increment 5°.
- Dimensions of the 2 ratchet heads without bush: 14 and 19 mm.
- Presentation: satin chrome finish.

	A [mm]	⚖ [g]
464.M14X19	14 x 19	170

464.MKIT Set of 9 reduction bushes for ratchet ring wrench 464.M14X19



- Set comprising the dimensions: 8 - 9 - 10 - 11 - 12 - 13 - 15 - 16 and 17 mm.

Weight: 100 g.

RATCHET TIGHTENING OF FEMALE HEAD SCREWS / NUTS

RATCHETS FOR BITS.
SEE P. 233



Standard series

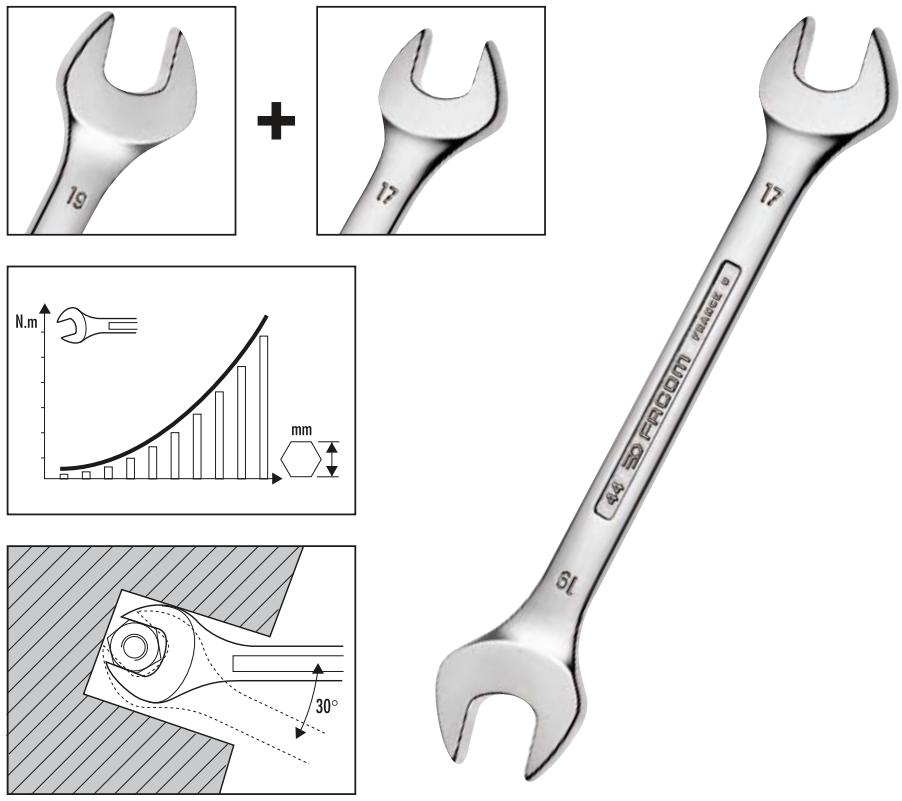
OPEN-END WRENCH

THE “DOUBLE-ENDED” WRENCH

2 sizes per wrench
- Reduces the number and weight of tools.

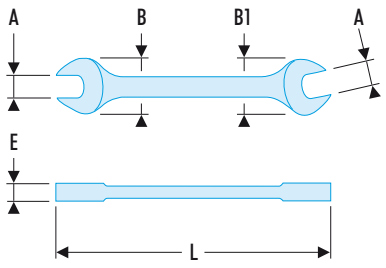
Power and precision
- FACOM guarantees very high performance for its open end wrenches: ISO 1711-1 + 30% guaranteed.
- Tight tolerances for a perfect fit on fasteners.

Slim profile and comfort
- Smaller shape and volume for better accessibility.
- Streamlined heads.
- 30° increments by flipping the wrench.



44 - Metric open end wrenches



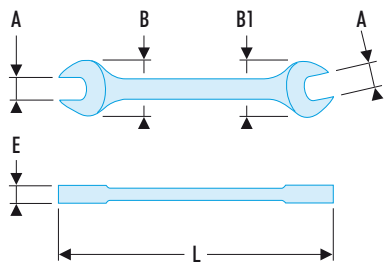


NF ISO 10102, NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 10102, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, DIN 3110
- Open end wrenches = the open ends are slimmer than a standard combination wrench for better thickness accessibility. Examples: brake calipers, hydraulic hose locknuts.
- Heads hinged at 15°.
- Metric sizes: 3.2 to 42 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	L [mm]	ΔΔ [g]
44.3,2X5,5	3,2x5,5	11,0 x 13,5	3,0	90	10
44.4X5	4x5	11,0 x 13,5	3,0	90	10
44.6X7	6x7	15,0 x 17,5	3,5	120	20
44.8X9	8x9	18,5 x 21,0	3,8	137	30
44.8X10	8x10	19,0 x 23,0	4,2	143	40
44.10X11	10x11	23,0 x 25,0	4,7	152	50
44.10X13	10x13	23,0 x 29,0	5,1	162	60
44.11X13	24x26	25,5 x 29,0	5,1	167	65
44.12X13	12x13	25,5 x 29,0	5,1	167	65
44.12X14	19x22	29,0 x 33,5	5,5	177	80
44.14X15	14x15	31,0 x 33,0	5,5	182	90
44.13X17	13x17	31,0 x 37,0	6,3	192	120
44.16X17	16x17	35,5 x 37,0	6,3	200	120
44.16X18	41x46	37,0 x 42,0	6,8	210	145
44.17X19	17x19	37,0 x 42,0	6,8	210	145
44.18X19	18x19	39,0 x 42,0	7,3	220	160
44.20X22	20x22	43,0 x 48,5	7,5	240	200
44.21X23	21x23	47,0 x 50,5	8,3	242	220
44.22X24	22x24	47,5 x 52,0	8,8	261	260
44.24X27	24x27	51,0 x 58,0	8,8	270	325
44.25X28	25x28	56,0 x 61,6	8,8	282	360
44.26X28	26x28	56,0 x 61,6	8,8	282	360
44.27X29	27x29	59,0 x 64,0	9,5	301	450
44.27X30	27x30	59,0 x 64,0	9,5	301	450
44.27X32	27x32	63,0 x 70,0	9,8	318	515
44.30X32	30x32	63,0 x 70,0	9,8	318	515
44.33X35	33x35	71,0 x 75,0	11,5	342	720
44.34X36	34x36	71,0 x 75,0	11,5	342	720
44.36X41	36x41	78,0 x 87,0	12,0	381	945
44.38X42	38x42	78,0 x 87,0	12,0	381	945

44 - Inch open end wrenches





- Open end wrenches = the open ends are slimmer than a standard combination wrench for better thickness accessibility. Examples: brake calipers, hydraulic hose locknuts.
- Heads hinged at 15°.
- Dimensions in inches: from 1/4" to 1"5/8.
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	E [mm]	L [mm]	⚖ [g]
44.1/4X5/16	1/4x5/16	15,0 x 17,5	3,5	120	20
44.11/32X13/32	11/32X13/32	19,0 x 23,0	4,2	143	40
44.3/8X7/16	3/8X7/16	23,0 x 25,0	4,7	152	50
44.1/2X9/16	1/2X9/16	29,0 x 33,5	5,5	177	80
44.5/8X11/16	5/8X11/16	37,0 x 42,0	6,8	210	145
44.11/16X3/4	11/16X3/4	37,0 x 42,0	6,8	210	145
44.3/4X13/16	3/4X13/16	43,0 x 48,5	7,5	240	200
44.7/8X15/16	7/8X15/16	47,5 x 52,0	8,3	251	260
44.1'X1'1/16	1'X1'1/16	56,0 x 61,6	8,8	282	360
44.1'1/8X1'1/4	1'1/8X1'1/4	63,0 x 70,0	9,8	318	515
44.1'3/16X1'5/16	1'3/16X1'5/16	63,0 x 70,0	9,8	318	515
44.1'3/8X1'1/2	1'3/8X1'1/2	78,0 x 87,0	12,0	381	945
44.1'7/16X1'5/8	1'7/16X1'5/8	78,0 x 87,0	12,0	381	945

44 - Metric open ring wrench sets

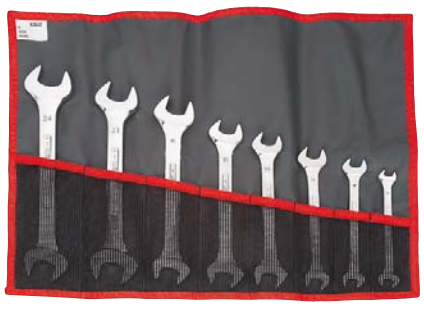


NF ISO 10102,NF ISO 3318,NF ISO 1711-1,NF ISO 691, ISO 10102,ISO 3318,ISO 1711-1,ISO 691, DIN ISO 1711-1,DIN ISO 691, DIN 3110

- Presentation: supplied as box, roll or panel sets.

	A [mm]	Contents	⚖ [kg]
44.JE9	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,550
44.JE8	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Box	0,980
44.JE12	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32	Box	2,290
44.JE17	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32 - 33x35 - 36x41 - 38x42	Box	4,930
44.JE8T	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Roll: N.38A-8C	1,050
44.JE9T	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Roll: N.38A-9E	0,580
44.P17E	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32 - 33x35 - 36x41 - 38x42	Panel: PK.1	7,480

44 - Inch open ring wrench sets



ASME B107.100

- Presentation: supplied as box or roll sets.

	A ["]	Contents	⚖ [kg]
44.JU6	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Box	0,650
44.JU8T	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16 - 1"x1''1/16 - 1''1/8x1''1/4	Roll: N.38A-8B	1,560

MOD.44 - Metric open ring wrench sets



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [kg]
MOD.44-1	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Tray: PL.315	1,315
MOD.44-2	26x28 - 27x29 - 30x32	Tray: PL.316	1,580

"Extra-slim" profile series

EXTRA-SLIM OPEN END WRENCHES

EXTRA-SLIM OPEN END WRENCHES

- 30% slimmer than classical open ends.
- Ideal for tightening extra-slim lock nuts or nuts.



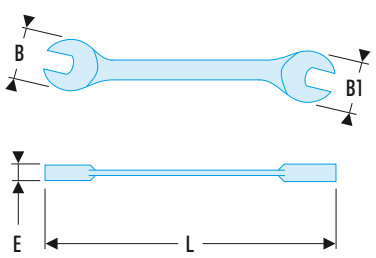


31 - Metric "extra-slim" end wrenches



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Metric "extra-slim" open end wrenches: 30 % slimmer than a classical open end wrench = maximum accessibility.
- Indispensable for confined access and locknuts.
- Heads hinged at 15°.
- Metric sizes: 6 to 24 mm.
- Presentation: satin chrome finish.



	A [mm]	B x B1 [mm]	E [mm]	L [mm]	⚖ [g]
31.6X7	6x7	16,6 x 19,6	2,2	147	20
31.8X9	8x9	20,5 x 24,5	2,6	176	30
31.10X11	10x11	20,5 x 24,5	2,6	176	30
31.12X13	12x13	29,0 x 33,5	3,6	209,5	70
31.14X15	14x15	29,0 x 33,5	3,6	209,5	70
31.16X17	16x17	38,0 x 42,5	4,6	250	140
31.18X19	18x19	38,0 x 42,5	4,6	250	140
31.22X24	22x24	48,0 x 52,0	5,6	290	270

31 - Metric "extra-slim" open-end wrench sets



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Presentation: supplied in roll.

	A [mm]	Contents	⚖ [kg]
31.JE6T	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Roll: N.38A-6B	0,680
31.JE8T	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 22x24	Roll: N.38A-8B	0,990

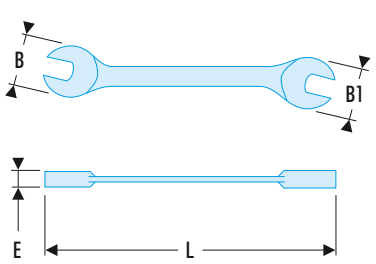
Micro-engineering series

22 - Metric 15° hinged "midget" open end wrenches



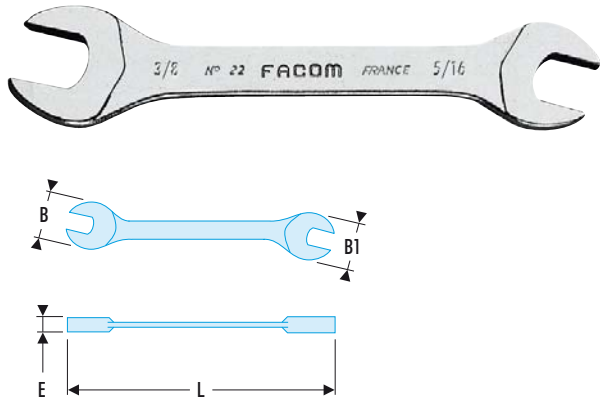
NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15°.
- Metric sizes: 3.2 to 13 mm.
- Presentation: satin chrome finish.



	A [mm]	B x B1 [mm]	E [mm]	L [mm]	⚖ [g]
22.3,2X5,5	3,2x5,5	10 x 13	2,4	70	10
22.4X5	4x5	10 x 13	2,4	70	10
22.6X7	6x7	14 x 16	2,7	80	10
22.8X9	8x9	18 x 20	3,0	90	20
22.10X11	10x11	21 x 23	3,0	100	25
22.12X13	12x13	26 x 28	3,5	110	35

22 - Inch 15° hinged "midget" open end wrenches



- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15°.
- Dimensions in inches: from 3/16" to 9/16".
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	E [mm]	L [mm]	⚖ [g]
22.3/16X1/4	3/16x1/4	14 x 16	2,7	80	10
22.7/32X9/32	7/32x9/32	14 x 16	2,7	80	10
22.5/16X3/8	5/16x3/8	18 x 20	3,0	90	20
22.11/32X7/16	11/32x7/16	21 x 23	3,0	100	25
22.1/2X9/16	1/2X9/16	26 x 28	3,5	110	35

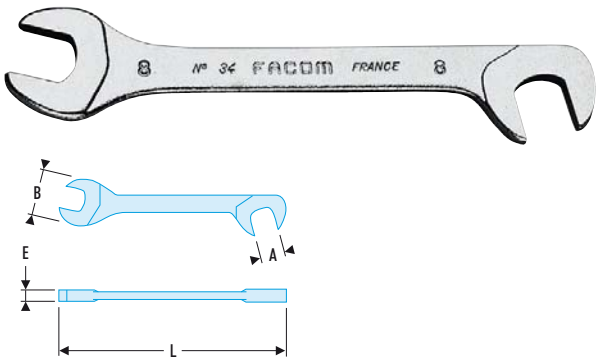
22 - Metric and inch 15° hinged "midget" open end wrench sets



- Presentation: supplied in roll.

	A [mm]	A ["]	Contents	⚖ [kg]
22.JE6T	3,2x5,5 - 4x5 - 6x7 - 8x9 - 10x11 - 12x13	-	Roll: N.38A-6A	0,140
22.JU5T	-	3/16x1/4 - 7/32x9/32 - 5/16x3/8 - 11/32x7/16 - 1/2x9/16	Roll: N.38A-5C	0,130

34 - Metric 15° and 75° hinged "midget" open end wrenches



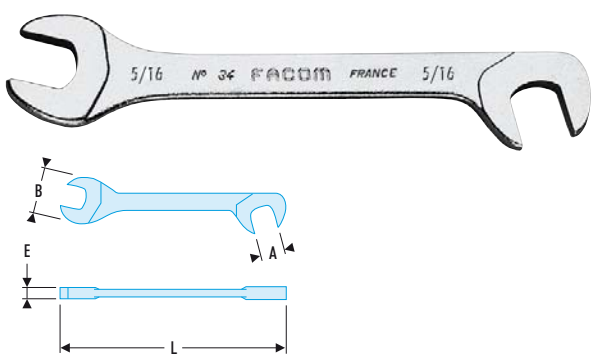
NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15° and 75° allow to intervene on nuts inaccessible with a standard wrench.
- Metric sizes: 3.2 to 17 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	E [mm]	L [mm]	⚖ [g]
34.3,2	3,2	10	2,4	70	10
34.4	4	10	2,4	70	10
34.5	5	13	2,4	75	10
34.5,5	5,5	13	2,4	75	10
34.6	6	15	2,7	80	15
34.7	7	15	2,7	80	15
34.8	8	18,5	3,0	90	20
34.9	9	18,5	3,0	90	20

	A [mm]	B [mm]	E [mm]	L [mm]	⚖ [g]
34.10	10	22	3,0	100	25
34.11	11	22	3,0	100	25
34.12	12	27	3,5	120	35
34.13	13	27	3,5	120	35
34.14	14	27	3,5	120	40
34.15	15	33	4,5	140	70
34.16	16	33	4,5	140	70
34.17	17	33	4,5	140	70

34 - Inch 15° and 75° hinged "midget" open end wrenches

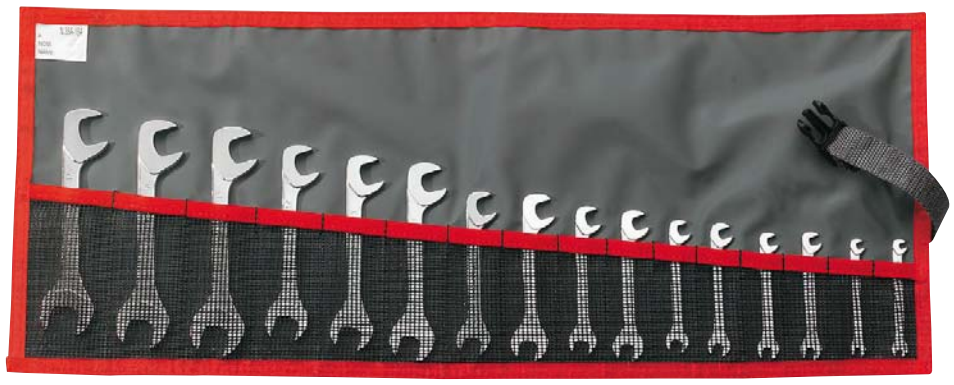


- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15° and 75° allow to intervene on nuts inaccessible with a standard wrench.
- Dimensions in inches: from 3/16" to 11/16".
- Presentation: satin chrome finish.

	A ["]	B [mm]	E [mm]	L [mm]	⚖ [g]
34.3/16	3/16	13	2,4	75	10
34.7/32	7/32	13	2,4	75	10
34.1/4	1/4	15	2,7	80	15
34.9/32	9/32	15	2,7	80	15
34.5/16	5/16	18,5	3,0	90	20
34.11/32	11/32	18,5	3,0	90	20
34.3/8	3/8	22	3,0	100	25

	A ["]	B [mm]	E [mm]	L [mm]	⚖ [g]
34.13/32	13/32	22	3,0	100	30
34.7/16	7/16	22	3,0	100	30
34.1/2	1/2	27	3,5	120	35
34.9/16	9/16	27	3,5	120	40
34.5/8	5/8	33	4,5	140	70
34.11/16	11/16	33	4,5	140	70

34 - Metric and inch "midget" open-end wrench sets in rolls



NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Presentation: supplied in roll.

	A [mm]	A ["]	Contents	ΔΔ [kg]
34.JL16T	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17	-	Roll: N.38A-6A	0,560
34.JU13T	-	3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 -3/8 - 13/32 - 7/16 -1/2 - 9/16 - 5/8 - 11/16	Roll: N.38A-5C	0,430

34.JT8 Metric "midget" open ring wrench sets



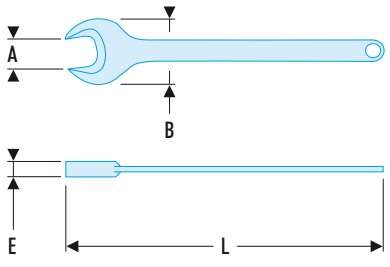
NF ISO 3318, NF ISO 691, ISO 3318, ISO 691, DIN ISO 691

- Comprising:
- 8 ultra-slim midget forged wrenches: 3.2 - 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 mm.
- 1 feeler gauge 5/10°.
- 1 screwdriver for slotted head screw.
- Presentation: satin chrome finish.
- Supplied in a storage roll.

Weight: 110 g.

45 - Open end wrenches





NF ISO 4229, NF ISO 1711-1, NF ISO 691, ISO 4229, ISO 1711-1, ISO 691, DIN 894, DIN ISO 691, DIN ISO 1711-1

- Single open end wrenches: the open end is thicker for very high tightening torques. Examples: public works, rail worksites, naval construction, agriculture, oil platforms, metallic constructions.
- Hanging hole at end of handle: wrenches stored on panel or hung to avoid loss or fall.
- Open end angled at 15°.
- Metric sizes: 30 to 75 mm.
- Presentation: burnt.

	A [mm]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
45.30	30	66,0	12,0	240	320
45.32	32	71,5	13,0	270	410
45.34	34	71,5	13,0	270	570
45.36	36	79,5	14,5	296	590
45.38	38	79,5	14,5	296	610
45.41	41	90,5	17,5	335	860
45.46	46	95,5	18,0	370	1050
45.50	50	106,5	19,5	410	1750
45.55	55	106,5	19,5	410	1950
45.60	60	121,5	21,5	488	2460
45.65	65	121,5	21,5	488	2310
45.70	70	153,0	24,0	595	3280
45.75	75	153,0	24,0	595	3350

Standard series

RING WRENCHES – 12-POINT RING

12-point OGV® ring
- 30° increments.
- Powerful tightening and less fastener wear.

3 configurations according to accessibility constraints:

❶ Straight ring wrenches.

❷ Offset ring wrenches.

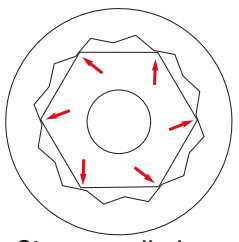
❸ Half-moon ring wrenches.



FACOM OGV® PROFILE

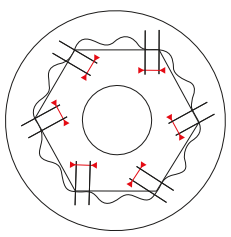
HIGHER POWER WITHOUT DAMAGING FASTENERS!
- More powerful tightening: socket/nut contact surface extended reducing stress.
- Reduced wear: the nut is driven on the faces, not the angles.
- Increased durability: the sharp angles of the wrench, concentrating stress, are removed.

Standard profile

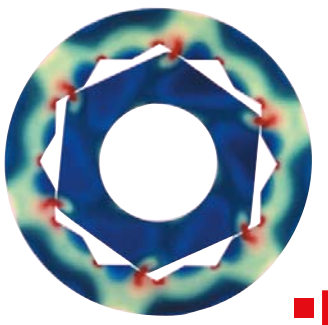


Stress applied to edges

FACOM OGV® profile

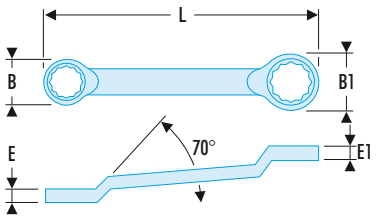


Bears against the side faces



55A - Metric offset-ring wrenches





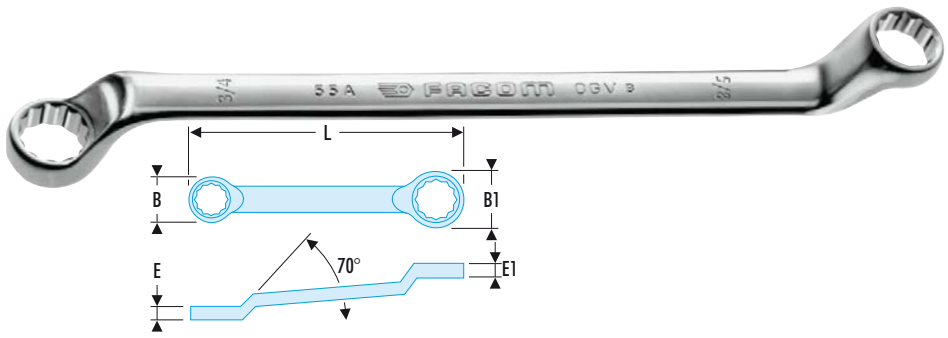
NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN 838, DIN ISO 1711-1, DIN ISO 691

- Offset-ring wrenches: ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point profile for powerful tightening while protecting the nut.
- Metric sizes: 6 to 50 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E x E1 [mm]	L [mm]	⚖ [g]
55A.6X7	6x7	10,7 x 12,2	5,5 x 6,2	167	40
55A.7X8	7x8	12,0 x 14,0	5,5 x 6,5	172	45
55A.8X9	8x9	13,7 x 15,5	6,5 x 7,2	182	60
55A.8X10	8x10	13,7 x 15,5	6,5 x 7,2	182	65
55A.10X11	10x11	16,5 x 18,0	7,5 x 17,0	197	85
55A.11X13	11x13	18,0 x 21,0	8,9 x 9,2	217	110
55A.12X13	12x13	19,5 x 21,5	8,9 x 9,2	218	120
55A.13X15	13x15	21,5 x 23,5	9,2 x 9,7	238	150
55A.14X15	14x15	22,0 x 23,5	9,2 x 9,7	238	135
55A.13X16	13x16	21,5 x 26,0	9,4 x 10,7	245	155
55A.13X17	13x17	21,0 x 26,0	9,4 x 10,7	245	150
55A.16X17	16x17	25,7 x 27,0	10,7 x 11,2	258	200
55A.16X18	16x18	25,7 x 27,2	10,7 x 11,2	258	195
55A.17X19	17x19	27,0 x 29,7	11,2 x 12,2	290	265
55A.18X19	18x19	27,0 x 29,7	11,2 x 12,2	290	260
55A.18X21	18x21	29,0 x 33,0	11,7 x 12,7	296	290
55A.19X22	19x22	29,0 x 33,7	11,7 x 12,7	296	285

	A [mm]	B x B1 [mm]	E x E1 [mm]	L [mm]	⚖ [g]
55A.20X22	20x22	32,0 x 35,0	12,2 x 13,2	316	365
55A.21X23	21x23	32,0 x 35,0	12,2 x 13,2	316	360
55A.22X24	22x24	33,7 x 36,7	12,2 x 13,2	324	390
55A.24X26	24x26	37,2 x 41,0	12,7 x 14,3	328	470
55A.24X27	24x27	37,2 x 41,2	12,7 x 14,3	328	465
55A.25X28	25x28	39,7 x 43,0	13,7 x 14,7	345	515
55A.26X28	26x28	39,7 x 43,0	13,7 x 14,7	345	510
55A.27X29	27x29	41,5 x 46,0	14,3 x 15,7	353	575
55A.27X30	27x30	41,5 x 46,0	14,3 x 15,7	353	570
55A.27X32	27x32	41,5 x 46,2	14,3 x 15,7	353	575
55A.30X32	30x32	45,3 x 48,7	15,2 x 16,7	360	640
55A.30X34	30x34	46,0 x 52,0	17,2 x 19,2	402	820
55A.34X36	34x36	52,0 x 55,0	18,2 x 20,2	440	1075
55A.36X41	36x41	53,7 x 61,7	18,2 x 20,2	440	1080
55A.38X42	38x42	41,5 x 46,0	14,3 x 15,7	455	1070
55A.46X50	46x50	70,7 x 76,7	20,7 x 21,7	510	1890

55A - Inch offset-ring wrenches



- Offset-ring wrenches: ring offset to clear fingers or obstacles. Ideal for series of nuts.
- OGV® profile with 12-point profile for powerful tightening while protecting the nut.
- Dimensions in inches: from 1/4" to 1"1/4.
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	E x E1 [mm]	L [mm]	⧋ [g]
55A.1/4X5/16	1/4X5/16	11,0 x 14,0	5,5 x 6,5	172	45
55A.11/32X13/32	11/32X13/32	15,5 x 18,0	7,5 x 8,7	197	80
55A.3/8X7/16	3/8X7/16	16,5 x 18,0	7,5 x 17,0	197	85
55A.7/16X1/2	7/16X1/2	18,0 x 21,0	8,9 x 9,2	217	110
55A.1/2X9/16	1/2X9/16	21,5 x 23,0	9,2 x 9,7	238	145
55A.9/16X5/8	9/16X5/8	22,0 x 23,5	9,2 x 9,7	238	135
55A.5/8X11/16	5/8X11/16	25,7 x 27,0	10,7 x 11,2	258	200
55A.19/32X25/32	19/32x25/32	25,7 x 27,2	10,7 x 11,2	258	195
55A.5/8X3/4	5/8X3/4	25,7 x 27,2	10,7 x 11,2	258	265
55A.11/16X3/4	11/16X3/4	27,0 x 29,7	11,2 x 12,2	290	260

	A ["]	B x B1 [mm]	E x E1 [mm]	L [mm]	⧋ [g]
55A.3/4X13/16	3/4X13/16	29,0 x 33,0	11,7 x 12,7	296	290
55A.13/16X7/8	13/16X7/8	32,0 x 35,0	12,2 x 13,2	316	365
55A.7/8X15/16	7/8X15/16	33,7 x 36,7	12,2 x 13,2	324	390
55A.15/16X1'	15/16X1''	37,2 x 41,0	12,7 x 14,3	328	470
55A.1'X1'1/16	1''X1''1/16	39,7 x 42,0	13,7 x 14,7	345	475
55A.1'1/16X1'1/8	1''1/16X1''1/8	41,5 x 46,0	14,3 x 15,7	353	575
55A.1'1/8X1'1/4	1"1/8 x 1"1/4	45,3 x 48,7	15,2 x 16,7	360	640

55A - Metric offset-ring wrench sets



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN 838, DIN ISO 1711-1, DIN ISO 691

- Presentation: supplied as box, roll or panel sets.

	A [mm]	Contents	⧋ [kg]
55A.JN6	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,740
55A.JD8	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22	Box	1,030
55A.JE8	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 24 x 26	Box	1,420
55A.JD10	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 24x27 - 30x32	Box	2,030
55A.JE12	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 24x26 - 26x28 - 27x29 - 30x32	Box	3,290
55A.JD12	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x26 - 25x28 - 27x32	Box	3,080
55A.JD12A	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32	Box	3,120

	A [mm]	Contents	⧋ [kg]
55A.JE14	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32 - 36x41 - 38x42	Box	6,180
55A.JN6T	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Roll: N.38A-6B	0,830
55A.JD8T	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22	Roll: N.38A-8B	1,120
55A.JE8T	8 x 9 - 10 x 11 - 12 x 13 - 14 x 15 - 16 x 17 - 18 x 19 - 21 x 23 - 24 x 26	Roll: N.38A-8B	1,510
55A.P14E	6 x 7 - 8 x 9 - 10 x 11 - 12 x 13 - 14 x 15 - 16 x 17 - 18 x 19 - 21 x 23 - 22 x 24 - 26 x 28 - 27 x 29 - 30 x 32 - 36 x 41 - 38 x 42	Panel: PK.1	8,550

55A - Inch offset-ring wrench sets



	A ["]	Contents	⧋ [kg]
55A.JU6AT	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-6B	1,080
55A.JU8T	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16 - 7/8x15/16	Roll: N.38A-8B	1,360
55A.JU8AT	1/4x5/116 - 3/8x7/16 - 1/2x9/16 - 2/8x11/16 - 3/4x13/16 - 7/8x15/16 - 1"x1"1/16 - 1''1/8"x1''1/4"	Roll: N.38A-8B	1,220
55A.JU6A	1/4x5/16 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 3/4x13/16 - 7/8x15/16	Box	0,990
55A.JU8	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16 - 7/8x15/16	Box	1,270
55A.JU10	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16 - 7/8x15/16 - 1"x1"1/16 - 1''1/8"x1''1/4"	Box	2,400

MOD.55 - Metric and inch offset-ring wrenches set in heat formed tray



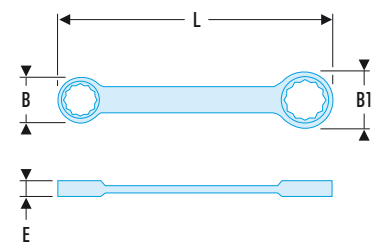
- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	A ["]	Contents	⧋ [kg]
MOD.55-1	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	-	Tray: PL.317A	0,920
MOD.55-2	21x23 - 22x24 - 26x28	-	Tray: PL.318	1,450
MOD.55-3	-	1/4x5/16 - 11/32x13/32 - 3/8x7/16 - 1/2x9/16 - 5/8x11/16 - 19/32x25/32 - 3/4x13/16	Tray: PL.600	1,020

Straight series

59 - Metric straight offset-ring wrenches







NF ISO 10103, NF ISO 1711-1, NF ISO 691, ISO 10103, ISO 1711-1, ISO 691, DIN 837, DIN ISO 1711-1, DIN ISO 691

- Straight offset-ring wrenches: the slim heads and short shank allows to work in dense mechanical assemblies.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	L [mm]	⧋ [g]
59.6X7	6X7	10,8 x 12,0	5,0	120	10
59.8X9	8X9	13,2 x 14,5	5,5	135	16
59.10X11	10X11	15,8 x 17,2	6,4	150	28
59.12X13	12X13	19,8 x 21,2	7,2	165	40
59.14X15	14X15	21,2 x 24,4	7,9	185	50
59.16X17	16X17	24,2 x 26,5	8,5	210	65
59.18X19	18X19	27,0 x 28,6	9,2	225	80
59.21X23	21X23	30,5 x 33,6	9,9	240	130
59.22X24	22X24	32,0 x 35,2	10,6	255	130
59.26X28	26X28	36,5 x 39,2	11,3	270	230
59.27X29	27X29	39,2 x 43,6	12,6	315	270
59.30X32	30X32	45,0 x 48,0	13,8	335	280

59 - Metric straight offset-ring wrenches sets



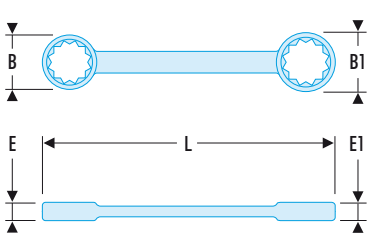
NF ISO 10103, NF ISO 1711-1, NF ISO 691, ISO 10103, ISO 1711-1, ISO 691, DIN 837, DIN ISO 1711-1, DIN ISO 691

- Presentation: supplied as box or roll sets.

	A [mm]	Contents	⧋ [kg]
59.JN6	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Box	0,280
59.JE12	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24 - 26x28 - 27x29 - 30x32	Box	1,330
59.JN8T	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 21x23 - 22x24	Roll: N.38A-8C	0,570

59TX - Straight ring wrenches with Torx® profile





- Straight ring wrenches with Torx® profile: ideal in locations where access in height is limited and/or impossible with a ratchet + socket.
- 30° increment by flipping the wrench thanks to special broaching.
- Torx dimensions: from E6 to E24.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E x E1 [mm]	L [mm]	⧋ [g]
59TX.6X8	E6XE8	9,1 x 11,1	5,2 x 6,3	113	15
59TX.10X12	E10XE12	12,7 x 14,8	7,0 x 8,2	141	35
59TX.14X18	E14XE18	17,3 x 21,8	8,0 x 9,5	181	65
59TX.20X24	E20XE24	24,6 x 28,7	11,0 x 13,5	224	190

59TX.J4 Set of 4 straight ring wrenches with Torx® profile

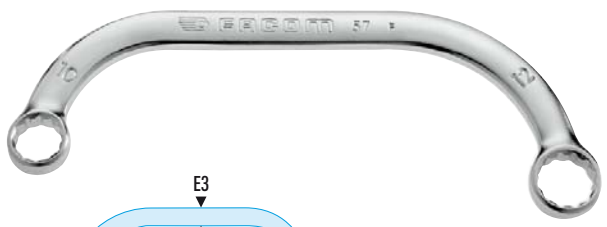


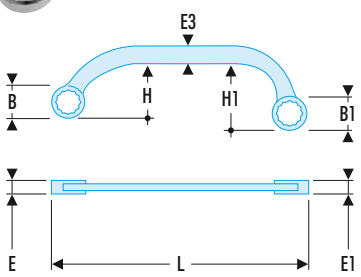
- Straight ring wrenches with Torx® profile: ideal in locations where access in height is limited and/or impossible with a ratchet + socket.
- 30° increment by flipping the wrench thanks to special broaching.
- Set of 4 wrenches: E6xE8 - E10xE12 - E14x18 - E20xE24.
- Presentation: satin chrome finish.

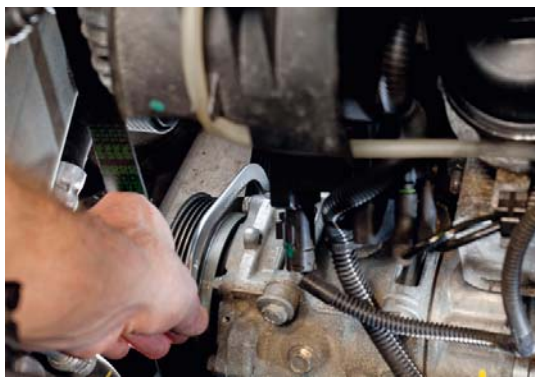
Weight: 0.315 kg.

Half-moon series

57 - Metric half-moon offset-ring wrenches







NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Half-moon offset-ring wrenches: the half-moon shape allows to manoeuvre nuts inaccessible with a classical tool.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Metric sizes: 10 to 22 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E3 [mm]	E x E1 [mm]	H x H1 [mm]	L [mm]	⚖ [g]
57.10X12	10X12	15,2 x 18,0	9,7	6,4 x 6,7	33,0 x 44,2	142	85
57.11X13	11X13	18,2 x 21,1	11,3	7,9 x 8,4	43,8 x 55,3	165	85
57.13X15	13X15	22,0 x 25,0	13,3	8,1 x 9,2	54,5 x 66,0	191	100
57.14X16	14X16	22,0 x 25,0	13,3	8,1 x 9,2	54,5 x 66,0	191	180
57.14X17	14X17	22,0 x 25,0	13,3	8,1 x 9,2	54,5 x 66,0	191	180
57.15X17	15X17	25,2 x 27,8	13,8	9,0 x 10,0	56,0 x 67,2	220	180
57.16X18	16X18	25,2 x 27,8	13,8	9,0 x 10,0	56,0 x 67,2	220	215
57.19X22	19X22	28,2 x 32,2	15,5	9,9 x 11,3	66,5 x 78,5	255	280

57.JE5 Set of 5 metric half-moon offset-ring wrenches



NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Half-moon offset-ring wrenches: the half-moon shape allows to manoeuvre nuts inaccessible with a classical tool.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Set of 5 wrenches: 10 x 12 - 11 x 13 - 14 x 17 - 16 x 18 - 19 x 22 mm.
- Presentation: satin chrome finish.

Weight: 0.850 kg.

RATCHET RING WRENCHES

SAVE TIME

For ratchet ring wrenches, see p. 187

SERIES 64



SERIES 65



Power series

"HEAVY-DUTY" OFFSET RING WRENCHES

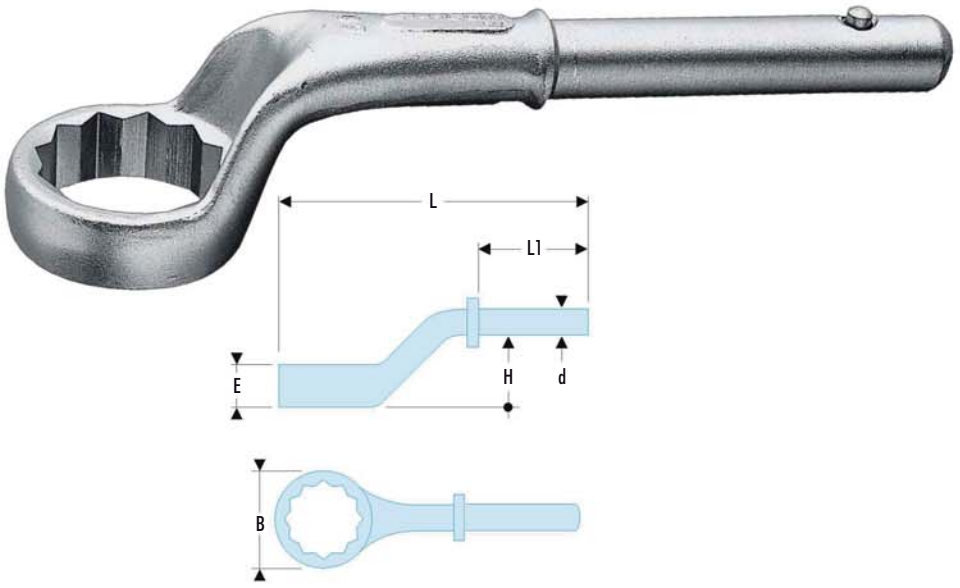
For powerful tightening with the extra-long handle

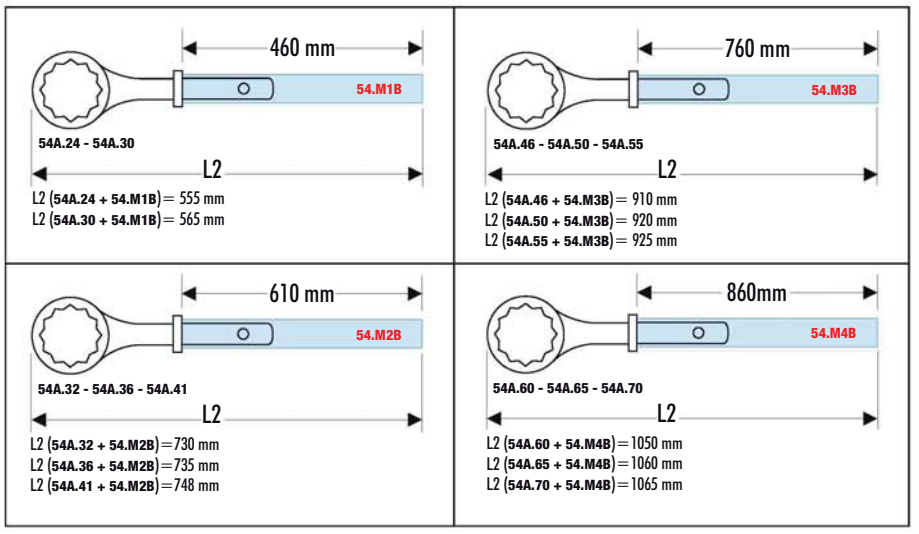
- Recess under the handle to clear fingers or obstacles.
- Ideal for series of fasteners.





54A - Metric "heavy-duty" offset-ring wrenches





NF ISO 691, ISO 691, DIN ISO 691

- "Heavy-duty" offset-ring wrenches: wrenches for tight (unlocking, thanks to high strength of the polygonal head and long adaptable handle (to be ordered separately).
- Ring offset to clear fingers or obstacles. Ideal for series of nuts.
- Handle to use: 54.M1B for the dimensions 24 and 30 mm; 54.M2B for the dimensions 32 to 41 mm; 54.M3B for the dimensions 46 to 55 mm; 54.M4B for the dimensions 60 to 70 mm.
- Metric sizes: 24 to 70 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	d [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
54A.24	24	38,0	18,5	17,0	29,5	180	85	380
54A.30	30	48,0	18,5	18,0	33,5	200	95	550
54A.32	32	49,0	21,5	18,0	34,0	235	116	700
54A.36	36	54,0	21,5	20,0	35,5	245	120	840
54A.41	41	62,0	21,5	22,0	39,5	265	127	1000
54A.46	46	69,0	24,5	23,0	40,0	280	129	1300
54A.50	50	76,0	24,5	25,5	42,5	290	129	1450
54A.55	55	81,0	24,5	28,0	45,5	300	136	1500
54A.60	60	90,0	29,5	30,5	49,0	345	156	2300
54A.65	65	98,0	29,5	33,0	53,0	355	158	2400
54A.70	70	105,0	29,5	35,5	55,0	365	160	2800

54.P9M Metric "heavy-duty" offset-ring wrenches set



NF ISO 691, ISO 691, DIN ISO 691

- Dimensions: 24 - 30 - 32 - 36 - 41 - 46 - 41 - 50 - 55 mm
- Supplied without handle: 54.M1B, 54.M2B, 54.M3B.
- Presentation: on panel.
- Weight: 15.400 kg.

Impact series

SLOGGING WRENCHES

For loosening on heavy equipment

• For use with a hammer or sledge hammer.

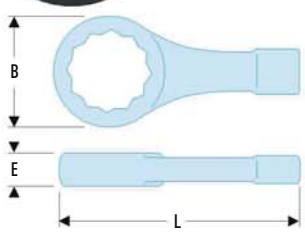






50 - Metric impact offset-ring wrenches



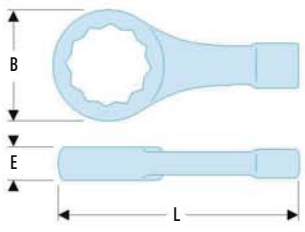


- Impact offset-ring wrenches use with a mallet or air hammer for heavy duty unlocking.
- Wrenches forged in high resilience steel to resist impact.
- Metric sizes: 24 to 120 mm.
- Presentation: burnt.

	A [mm]	A ["]	B [mm]	E [mm]	L [mm]	⚖ [g]
50.24	24	-	50	18	170	550
50.27	27	-	50	18	170	530
50.30	30	-	50	18	170	500
50.32	32	-	62	21	190	880
50.34	34	-	62	21	190	870
50.35	35	-	62	21	190	850
50.36	36	-	62	21	190	820
50.38	38	-	62	21	190	800
50.40	40	-	72	24	209	1450
50.41-1'5/8	41	1'5/8	72	24	209	1420
50.42	42	-	72	24	209	1270
50.43-1'11/16	43	1'11/16	72	24	209	1320
50.44	44	-	72	24	209	1270
50.45	45	-	72	24	209	1280
50.46-1'13/16	46	1'13/16	87,5	24	238	2140
50.47	47	-	87,5	24	238	2150
50.48	48	-	87,5	24	238	2190
50.50	50	-	87,5	24	238	2070
50.52	52	-	87,5	24	238	2030
50.54	54	-	86	25	267	2020
50.55	55	-	86	25	267	2970
50.56	56	-	86	25	267	2800
50.57-2'1/4	57	2'1/4	86	25	275	2730
50.58	58	-	86	25	267	2810
50.59	59	-	93	26	283	2730
50.60-2'3/8	60	2'3/8	93	26	275	2760
50.65-2'9/16	65	2'9/16	102	28	275	2550
50.67-2'5/8	67	2'5/8	102	28	275	4350
50.70-2'3/4	70	2'3/4	110	33	275	4220
50.75-2'15/16	75	2'15/16	112	33	275	4070
50.76-3'	76	3'	112	33	275	3960
50.78	78	-	112	33	330	6440
50.80	80	-	126	36	360	6300
50.85	85	-	126	36	363	6040
50.90	90	-	142	40	388	5750
50.95-3'3/4	95	3'3/4	142	40	388	9250
50.100	100	-	155	45	420	8950
50.105-4'1/8	105	4'1/8	155	45	420	8700
50.110	110	-	170	48	450	14630
50.115	115	-	170	48	450	13940
50.120	120	-	182	51	475	13700

50 - Inch impact offset-ring wrenches





- Impact offset-ring wrenches use with a mallet or air hammer for heavy duty unlocking.
- Wrenches forged in high resilience steel to resist impact.
- Dimensions in inches: from 1''5/8 to 4''1/8 mm.
- Presentation: burnt.

	A [mm]	A ["]	B [mm]	E [mm]	L [mm]	⚖ [g]
50.41-1'5/8	41	1'5/8	72	24	209	1420
50.43-1'11/16	43	1'11/16	72	24	209	1320
50.46-1'13/16	46	1'13/16	87,5	24	238	2140
50.57-2'1/4	57	2'1/4	86	25	275	2730
50.60-2'3/8	60	2'3/8	93	26	275	2760
50.65-2'9/16	65	2'9/16	102	28	275	2550
50.67-2'5/8	67	2'5/8	102	28	275	4350
50.70-2'3/4	70	2'3/4	110	33	275	4220
50.75-2'15/16	75	2'15/16	112	33	275	4070
50.76-3'	76	3'	112	33	275	3960
50.95-3'3/4	95	3'3/4	142	40	388	9250
50.105-4'1/8	105	4'1/8	155	45	420	8700

HOLDING HANDLE
FACOM EXCLUSIVE

SLOGGING WRENCH SAFETY HANDLE

Many accidents involve slogging wrenches. A survey led in large industrial sites (petrochemicals, heavy chemicals, cement plants, naval repair, metallurgy, PW and mining operations) show a high percentage of accidents.

FACOM has designed a protection handle for slogging wrenches:

- Fast and easy fitting for easy and stress free use.
- The FACOM handle combines maximum safety and minimum cost: adapts to all traditional slogging wrenches.

The handle allows access with maximum safety for a minimum cost: no need to change all slogging wrenches.

- Moves the operator's hand out of the impact zone.
- Key integral with the safety handle = no risk of wrench falling.
- Hand guard in “soft” material.
- Suited to all models:
  - Facom ring wrenches.
  - Ring wrenches by other manufacturers.
  - Open end wrenches.
- Suited to all opening dimensions from 24 mm to 75 mm.





OTHER SAFETY ADVICE

- **Wear safety goggles, gloves, shoes, hard hat.**



50.SH Safety handle for slogging wrenches



- Safety:
  - The user's hand is outside the impact zone.
  - Hand safety guard in "soft" material.
  - Safety instruction pictograms.
- Simple and fast execution:
  - Less than 10s to position the wrench on the safety handle.
  - Locking mechanism.
  - Adapts to all sizes from 24 mm to 75 mm.
  - Adapts to all for slogging wrench models.

Supplied with an additional strap.

IMPACT SOCKETS AND MANUAL IMPACT WRENCHES

FOR IMPACT SOCKETS AND MANUAL IMPACT WRENCHES, SEE P. 339

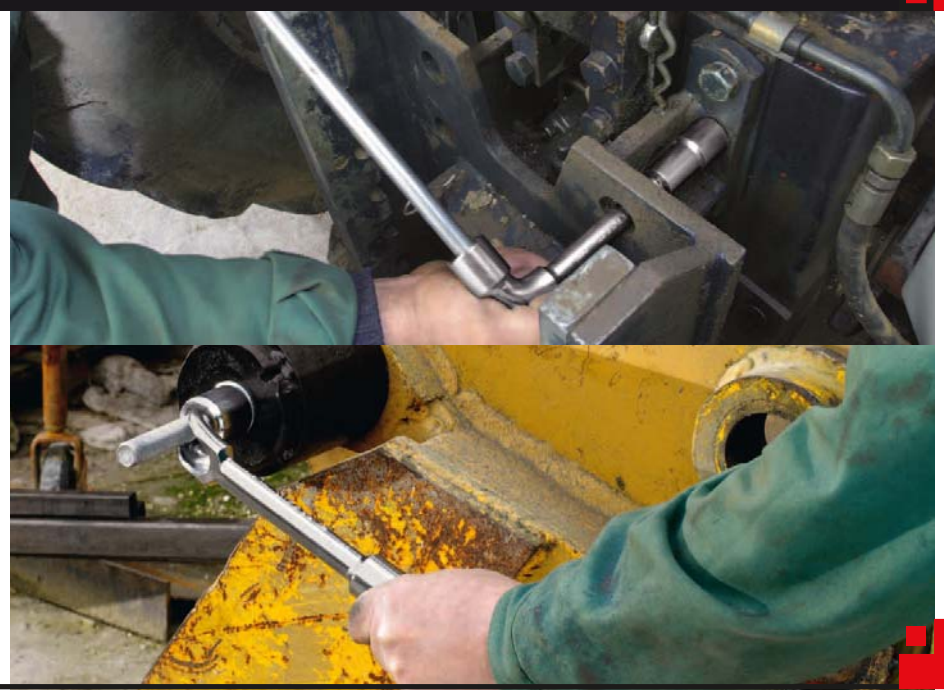


Standard series

ANGLED OPEN-SOCKET WRENCHES

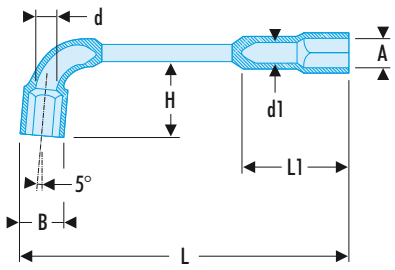
Specific through-hole and deep recess

- Specific angle and through-hole design: accommodates threaded rods or a bar for extra leverage without affecting wrench strength.
- Deep recess at one end: tightening possible even with protruding studs.
- Ring height allows for maximum strength on “tall” nuts.



75 - Forged metric 6 x 6 point angled open-socket wrenches







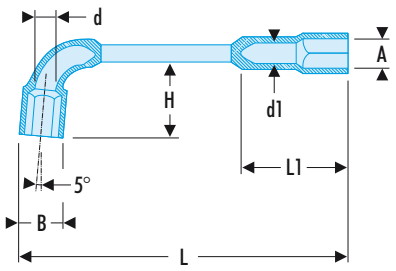
NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Angled socket wrenches: wrenches designed for powerful unlocking.
- Short head and long head: 6-point.
- Opening of the short head for passing threaded rods.
- Metric sizes: 6 to 38 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
75.6	6	10,0	4,5	4,5	15	102	21	30
75.7	7	11,0	4,5	4,5	17	106	22	35
75.8	8	12,5	7,0	6,0	19	114	25	60
75.9	9	13,5	7,0	6,0	20	122	26	65
75.10	10	15,0	8,0	7,0	24	129	28	95
75.11	11	16,5	8,0	7,0	25	136	30	115
75.12	12	18,0	9,0	8,0	28	144	36	155
75.13	13	19,5	9,0	8,0	30	152	38	175
75.14	14	21,0	10,5	9,0	32	160	40	205
75.15	15	22,5	10,5	10,0	34	169	42	230
75.16	16	24,0	13,0	12,0	37	178	46	285
75.17	17	25,5	13,0	12,0	39	187	48	315
75.18	18	26,5	13,0	12,0	40	195	50	365
75.19	19	28,5	15,0	12,0	41	204	51	430
75.20	20	29,5	15,0	13,0	43	212	53	440
75.21	21	30,5	15,0	14,0	46	221	55	490
75.22	22	32,0	15,0	14,0	48	230	57	535
75.23	23	33,5	18,0	15,0	51	240	64	625
75.24	24	34,5	18,0	16,0	54	250	67	660
75.25	25	36,0	20,0	17,0	56	260	69	785
75.26	26	37,0	20,0	17,0	57	270	70	795
75.27	27	38,0	22,0	19,0	58	280	73	950
75.28	28	39,5	22,0	19,0	60	290	75	950
75.29	29	41,0	22,0	19,0	62	300	76	1050
75.30	30	42,0	24,0	21,0	64	310	83	1300
75.31	31	43,5	24,0	22,6	70	320	86	1385
75.32	32	44,5	24,0	22,6	74	330	88	1400
75.33	33	46,0	27,0	24,0	79	340	92	1480
75.34	34	47,0	27,0	24,0	80	350	95	1550
75.35	35	48,5	27,0	24,0	81	360	96	1630
75.36	36	49,5	27,0	24,0	82	370	97	1700
75.38	38	52,0	28,0	25,0	85	390	99	2080

75 - Forged inch 6 x 6 point angled open-socket wrenches





- Angled socket wrenches: wrenches designed for powerful unlocking.
- Short head and long head: 6-point.
- Opening of the short head for passing threaded rods.
- Dimensions in inches: from 1/4" to 1".
- Presentation: satin chrome finish.

	A ["]	B [mm]	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⧋ [g]
75.1/4	1/4	10,0	4,5	4,5	15	102	21	30
75.5/16	5/16	12,5	7,0	6,0	19	114	25	60
75.3/8	3/8	15,0	8,0	7,0	24	129	28	95
75.7/16	7/16	16,5	8,0	7,0	25	136	30	115
75.1/2	1/2	19,5	9,0	8,0	30	152	38	175
75.9/16	9/16	22,5	10,5	10,0	34	169	42	230
75.5/8	5/8	24,0	13,0	12,0	37	178	46	285
75.11/16	11/16	26,5	13,0	12,0	40	195	50	365
75.3/4	3/4	28,5	15,0	12,0	41	204	51	430
75.13/16	13/16	30,5	15,0	14,0	46	221	55	490
75.7/8	7/8	33,5	18,0	15,0	51	240	64	625
75.15/16	15/16	34,5	18,0	16,0	54	250	67	660
75.1'	1"	37,0	20,0	17,0	57	270	70	795

75 - Metric and inch angled socket wrench sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Presentation: supplied as box or panel sets.

	A [mm]	A ["]	Contents	⧋ [kg]
75.JN8	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	-	Box	2,370
75.JN10	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	-	Box	2,160
75.J12	7 - 8 - 10 - 11 - 12 - 13 - 16 - 17 - 18 - 19 - 22 - 24	-	Box	3,390
75.JE16	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	-	Box	4,700
75.P22M	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32	-	Panel: PK.1	13,340
75.JU10	-	5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 11/16 - 3/4 - 13/16 - 7/8	Box	2,760

Metric angled socket wrench sets in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⧋ [kg]
MOD.75-1	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Tray: PL.625	2,500

Metric angled socket wrench sets in foam tray

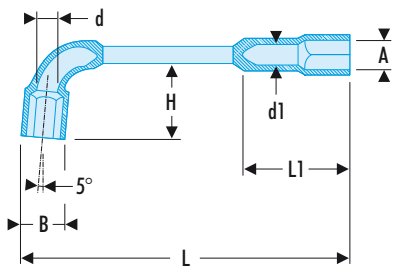


- Compatible with the FACOM modular storage system: compatible with CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [kg]
MODM.75	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19	Tray: PM.MOD75	2,690

76 - Forged metric 12 x 6 point angled open-socket wrenches





NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Angled socket wrenches: wrenches designed for powerful unlocking.
- 12-point short head for 30° increment and 6-point long head.
- Opening of the short head for passing threaded rods.
- Metric sizes: 6 to 38 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
76.6	6	10,0	4,5	4,5	16	102	21	30
76.7	7	11,0	4,5	4,5	17	106	22	35
76.8	8	12,5	7,0	6,0	19	114	25	60
76.9	9	13,5	7,0	6,0	20	122	26	65
76.10	10	15,0	8,0	7,0	24	129	28	95
76.11	11	16,5	8,0	7,0	25	136	30	115
76.12	12	18,0	9,0	8,0	28	144	36	155
76.13	13	19,5	9,0	8,0	30	152	38	175
76.14	14	21,0	10,5	9,0	32	160	40	205
76.15	15	22,5	10,5	10,0	34	169	42	230
76.16	16	24,0	13,0	12,0	37	178	46	285
76.17	17	25,5	13,0	12,0	39	187	48	315
76.18	18	26,5	13,0	12,0	40	195	50	365
76.19	19	28,5	15,0	12,0	41	204	51	430
76.20	20	29,5	15,0	13,0	43	212	53	440
76.21	21	30,5	15,0	14,0	46	221	55	490
76.22	22	32,0	15,0	14,0	48	230	57	535
76.23	23	33,5	18,0	15,0	51	240	64	625
76.24	24	34,5	18,0	16,0	54	250	67	660
76.25	25	36,0	20,0	17,0	56	260	69	785
76.26	26	37,0	20,0	17,0	57	270	70	795
76.27	27	38,0	22,0	19,0	58	280	73	950
76.28	28	39,5	22,0	19,0	60	290	75	950
76.29	29	41,0	22,0	19,0	62	300	76	1050
76.30	30	42,0	24,0	21,0	64	310	83	1300
76.31	31	43,5	24,0	22,6	70	320	86	1385
76.32	32	44,5	24,0	22,6	74	330	88	1400
76.33	33	46,0	27,0	24,0	79	340	92	1480
76.34	34	47,0	27,0	24,0	80	350	95	1550
76.35	35	48,5	27,0	24,0	81	360	96	1630
76.36	36	49,5	27,0	24,0	82	370	97	1700
76.38	38	52,0	28,0	25,0	85	390	99	2080

76 - Metric angled socket wrench sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

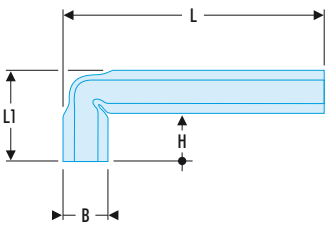
- Presentation: supplied as box or panel sets.

	A [mm]	Contents	⚖ [kg]
76.JN8	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Box	2,370
76.JN10	8 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Box	2,160
76.JE16	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Box	4,700
76.P22M	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 29 - 30 - 32	Panel: PK.1	13,340

Box series

92A - Metric angled box wrenches







NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Angled box wrenches: allows to work on long threaded rods.
- Passage hole allowing to use shanks: 160A.
- Shank to use: 160A.1 for the dimensions 4 to 23 mm; 160A.2 for the dimensions 24 to 32 mm.
- Metric sizes: 4 to 32 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	H [mm]	L [mm]	L1 [mm]	⧋ [g]
92A.4	4	8,5	16,5	95	23,5	20
92A.5	5	9,5	16,0	95	23,5	20
92A.5,5	5,5	10,0	17,5	95	25,0	25
92A.6	6	10,5	17,5	100	26,5	30
92A.7	7	11,5	19,5	100	28,5	30
92A.8	8	13,0	20,5	109	31,5	45
92A.9	9	14,5	22,0	109	33,0	50
92A.10	10	16,0	23,0	118	36,5	65
92A.11	11	17,0	23,0	118	36,5	70
92A.12	12	19,0	27,0	127	43,0	100
92A.13	13	20,5	27,0	127	43,0	110
92A.14	14	21,5	31,0	136	49,0	155
92A.15	15	22,5	31,0	136	49,0	160
92A.16	16	24,0	35,0	145	55,0	190
92A.17	17	26,0	35,0	145	55,0	200
92A.18	18	27,5	39,0	154	61,0	225
92A.19	19	28,5	39,0	154	61,0	230
92A.20	20	29,5	41,5	163	66,5	320
92A.21	21	31,0	42,5	163	67,5	325
92A.22	22	32,0	42,5	172	68,0	350
92A.23	23	33,0	46,5	165	72,5	390
92A.24	24	34,5	45,5	175	74,5	415
92A.27	27	38,5	49,0	184	81,0	520
92A.30	30	42,5	53,5	195	86,5	640
92A.32	32	45,0	57,0	200	93,0	785

92A - Metric angled box wrenches sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691

- Presentation: supplied as box or rack.

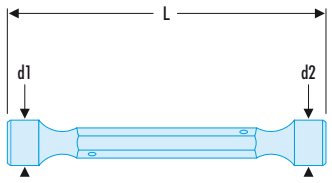
	A [mm]	Contents	⧋ [kg]
92A.JE8	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Box	1,490
92A.P8M	8 - 10 - 11 - 13 - 17 - 19 - 22 - 24	Rack: CKS.96	1,880
92A.P16M	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24	Rack: CKS.39A	4,050



Socket series

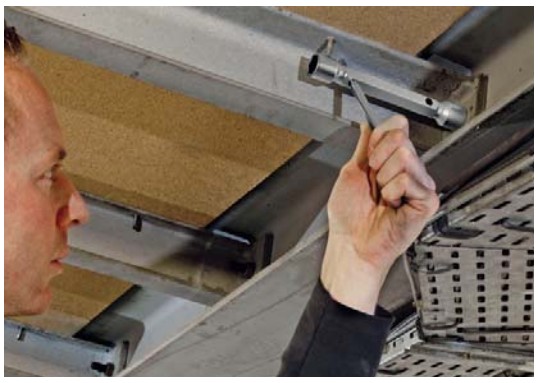
97 - Metric forged double socket wrenches





NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Double socket wrenches: full opening of the wrench allows passage of very long threaded rods.
- The forged hexagonal body allows tightening with a wrench.
- Passage hole allowing to use shanks: 160A.
- Shank to use: 160A.1 for the dimensions 6x7 à 21x23 mm; 160A.2 for the dimensions 24x26 to 30x32 mm.
- 6-point heads.
- 2 dimensions per wrench.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.



	A [mm]	d [mm]	d1 [mm]	d2 [mm]	d2 [mm]	L [mm]	⚖ [g]
97.6X7	6x7	4,0	9,5	10,7	10,7	110	35
97.8X9	8x9	4,0	12,5	14,0	14,0	120	50
97.10X11	10x11	6,0	15,0	16,0	16,0	130	65
97.12X13	12x13	6,0	17,5	19,0	19,0	140	110
97.14X15	14x15	6,5	20,0	21,5	21,5	150	140
97.16X17	16x17	8,2	22,7	24,0	24,0	160	190
97.18X19	18x19	8,2	25,2	26,5	26,5	170	240
97.20X22	20x22	10,2	27,7	30,2	30,2	180	260
97.21X23	21x23	10,2	29,0	31,2	31,2	185	295
97.24X26	24x26	12,5	33,0	35,5	35,5	190	415
97.25X28	25x28	12,5	34,5	38,0	38,0	195	440
97.27X29	27x29	12,5	37,0	39,5	39,5	200	505
97.30X32	30x32	12,5	40,5	43,0	43,0	200	630

Metric double-ended forged socket wrench sets



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Presentation: in box.

	A [mm]	Contents	⚖ [kg]
97.JE6	8x9 - 10x11 - 12x13 - 14x15 - 16x17 -18x19	Box	0,770

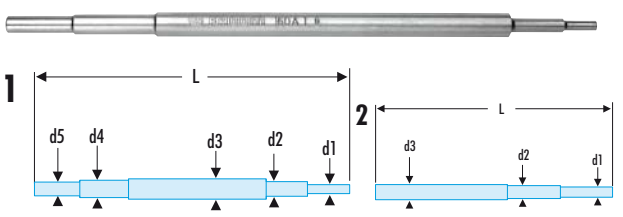
Metric angled socket wrench set in heat formed tray

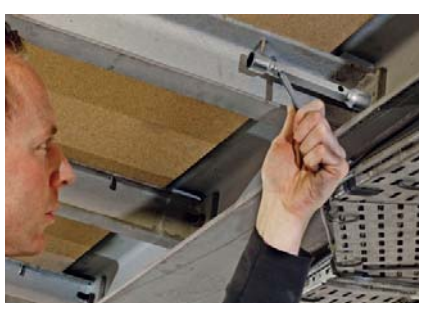


- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [g]
MOD.97	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	Tray: PL.359	900

160A - Bars for wrenches 91A, 92A and 97





- For 160A.1: Form 1.
- For 160A.2: Form 2.
- Presentation: satin chrome finish.

	d1 [mm]	d2 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	d5 [mm]	L [mm]	⚖ [g]
160A.1	3,80	5,25	5,25	9	7,4	6,25	220	80
160A.2	10,75	12,25	12,25	13	-	-	300	280

Tee handle series

SOCKET WRENCHES WITH SCREWDRIVER HANDLE

SOCKET WRENCHES WITH SCREWDRIVER HANDLE

- Forged body for maximum strength.
- Hollow body allows insertion over long threaded rods.

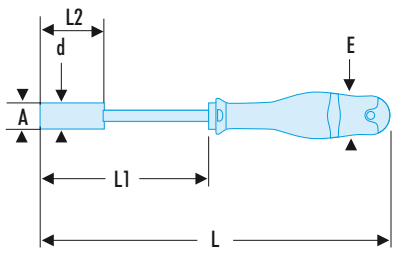
PROTWIST® handle

- Natural grip and excellent ergonomics.
- Fast and effective approach.
- Comfortable force tightening.
- High torque application with lesser effort.
- Resistance to loads, impacts, abrasion and chemicals.



74A - Forged socket wrenches with metric screwdriver handle





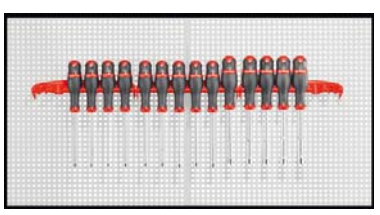
NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691

- Socket wrenches with screwdriver handle ideal for screws with limited access in height or precision mechanics.
- Protwist screwdriver handle for optimum comfort even for powerful unlocking.
- 6-point socket with deep opening for long threads.
- Forged body for maximum strength.
- Metric sizes: 3.2 to 14 mm.
- Presentation: satin chrome finish.

	A [mm]	d [mm]	E [mm]	L [mm]	L1 [mm]	L2 [mm] L3 [mm]	⚖ [g]
74A.3,2	3,2	6,0	36	245	125	20	110
74A.4	4,0	7,0	36	245	125	20	115
74A.4,5	4,5	7,5	36	245	125	25	120
74A.5	5,0	8,0	36	245	125	25	120
74A.5,5	5,5	8,0	36	245	125	30	120
74A.6	6,0	9,5	36	245	125	35	125
74A.7	7,0	9,5	36	245	125	35	130
74A.8	8,0	12,0	36	245	125	50	155
74A.9	9,0	12,0	36	245	125	50	160
74A.10	10,0	14,5	40	250	125	50	200
74A.11	11,0	16,0	40	250	125	50	210
74A.12	12,0	17,0	40	250	125	50	210
74A.13	13,0	18,5	40	250	125	55	250
74A.14	14,0	20,0	40	250	125	55	255

74A - Forged socket wrenches set with metric screwdriver handle



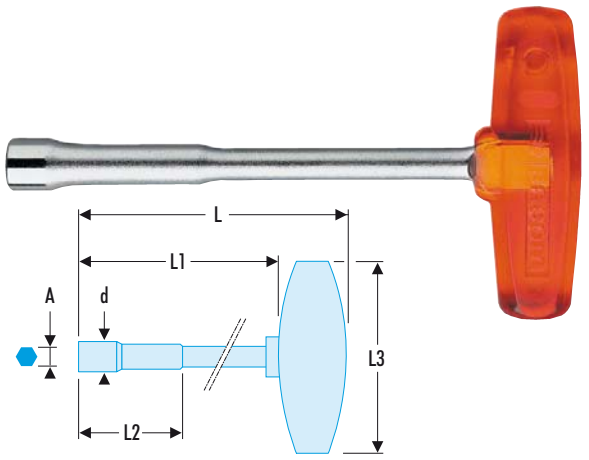


NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691

- Presentation: supplied as plastic rack or in roll.

	A [mm]	Contents	⚖ [kg]
74A.JL9	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10	Roll: N.38A-10D	1,000
74A.JL14	3,2 - 4 - 4,5 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14	Roll: N.38A-14A	1,690
74A.P14E	3,2 - 4 - 4,5 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14	Rack: 3 x CKS.08	1,810

74T - Forged socket wrenches with metric tee handle





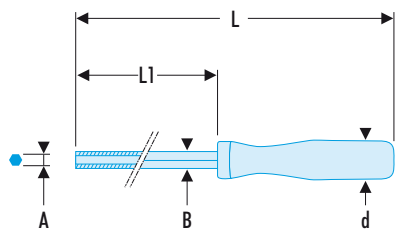
NF ISO 691, ISO 691, DIN ISO 691

- Socket wrenches with Tee handle: allows to apply more power upon unlocking.
- 6-point socket with deep opening for long threads.
- Forged body for maximum strength.
- Metric sizes: 5 to 14 mm.
- Presentation: satin chrome finish.

	A [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
74T.5	5	8	160	130	25	85	80
74T.5,5	5,5	9	160	130	30	85	85
74T.6	6	9	160	130	35	85	100
74T.7	7	11	160	130	35	85	115
74T.8	8	12	160	130	50	85	120
74T.9	9	13	160	130	50	85	120
74T.10	10	14	160	130	50	85	125
74T.11	11	16	160	130	50	85	130
74T.12	12	18	160	130	50	85	135
74T.13	13	19	160	130	55	85	135
74T.14	14	20	160	130	55	85	140

94A - Wrenches engaged in tube with metric screwdriver handle





- Wrenches engaged in tube with screwdriver handle: ideal for screws with limited access in height or precision mechanics.
- Tube body to allow unlocking on very long threaded rods.
- Metric sizes: 3.2 to 14 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
94A.3,2	3,2	7	25	225	125	70
94A.4	4	7	25	225	125	75
94A.5	5	7	25	225	125	80
94A.5,5	5,5	7	25	225	125	100
94A.6	6	9	28	235	125	110
94A.7	7	9	28	235	125	125
94A.8	8	11	28	235	125	150
94A.9	9	11	28	235	125	160
94A.10	10	13	32	245	125	165
94A.11	11	13	32	245	125	245
94A.12	12	16	39	260	125	260
94A.13	13	16	39	260	125	275
94A.14	14	18	39	260	125	280

94A - Sets of wrenches engaged on metric tube



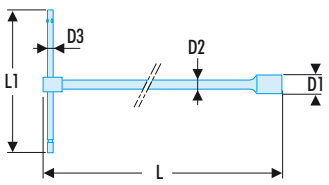
NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691

- Presentation: supplied in roll.

	A [mm]	Contents	⚖ [kg]
94A.JL9	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10	Roll: N-38A-10D	1,150
94A.JE13T	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14	Roll: N-38A-14D	2,050

98B - Tee socket wrenches with metric slide handle







NF ISO 2236, NF ISO 1711-1, NF ISO 691, ISO 2236, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

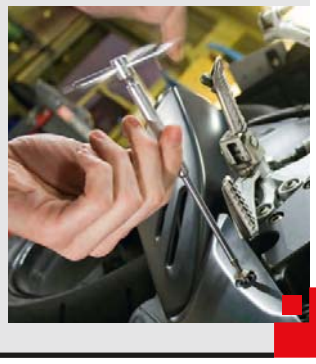
- Socket wrenches with sliding tee handle: ideal for unlocking requiring access or fast execution.
- Sliding control handle with groove:
- the middle position locking groove allows for rapid approach by rotation between the fingers: "rolling effect".
- the rod in the extreme position allows a "lever arm" use for powerful unlocking or for clearance in confined locations.
- Metric sizes: 6 - 8 - 10 - 12 - 13 - 14 - 17 mm.
- Presentation: satin chrome finish.

	A [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	L1 [mm]	⚖ [g]
98B.6	6	9,80	7	7	215	165	130
98B.8	8	12,50	7	7	235	165	160
98B.10	10	15,00	8	8	260	175	245
98B.12	12	17,60	9	9	260	180	305
98B.13	13	19,25	9	9	260	180	310
98B.14	14	20,50	10	10	260	200	380
98B.17	17	24,00	11	11	285	220	505

6-POINT “T” FAST KEYS

FOR 6-POINT FAST “T” KEYS, SEE P. 433

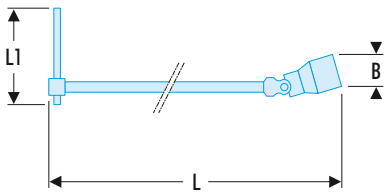




Universal joint series

99C - Universal joint tee socket wrenches with metric slide handle







NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Universal joint tee handle socket wrenches: the universal joint allows a working angle allowing better access.
- The socket is held in position tanks spring locking.
- Metric sizes: 6 to 19 mm.
- Presentation: satin chrome and polished chrome for the socket.

	A [mm]	B [mm]	L [mm]	L1 [mm]	⚖ [g]
99C.6	6	10,3	399	165	225
99C.7	7	10,3	399	165	225
99C.8	8	12,6	399	165	225
99C.9	9	13,8	399	175	225
99C.10	10	15,0	431	175	325
99C.11	11	16,5	431	175	325
99C.12	12	17,5	434	175	335
99C.13	13	19,0	466	175	415
99C.14	14	20,5	466	175	430
99C.15	15	21,7	498	180	545
99C.16	16	23,0	499	180	560
99C.17	17	24,0	499	180	560
99C.18	18	24,7	501	180	570
99C.19	19	26,0	523	220	860

99C - Universal joint tee socket wrenches set with metric slide handle



NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 896, DIN ISO 691

- Presentation: supplied as box or panel sets.

	A [mm]	Contents	⚖ [kg]
99C.JE8	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17	Box	2,840
99C.JE12	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Box	4,550
99C.P12E	7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 19	Panel: PK.1	6,850

Metric universal joint tee socket wrench set in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [kg]
MOD.99B	7 - 8 - 10 - 11 - 13 - 17 - 19	Tray: PL.304	4,010

Metric universal joint tee socket wrench set in foam tray



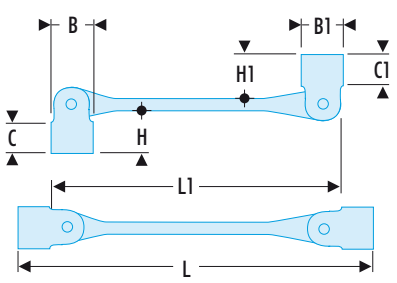
- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [kg]
MODM.99B	7 - 8 - 10 - 11 - 13 - 17 - 19	Tray: PM.MOD99B	3,500

Hinged series

66A - Metric hinged combination wrenches





NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Hinged socket wrenches: the socket can be turned by 180° for maximum access.
- The socket is held in position tanks spring locking.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	C x C1 [mm]	H x H1 [mm]	L [mm]	L1 [mm]	⚖ [g]
66A.6X7	6x7	10,3 x 11,5	15 x 15	23,0 x 23,0	188,5	156	95
66A.8X9	8x9	12,6 x 13,85	15 x 15	23,0 x 23,0	188,5	156	100
66A.10X11	10x11	15,0 x 16,5	18 x 18	26,0 x 26,0	194,5	156	105
66A.10X13	10x13	15,0 x 19,0	21 x 21	31,0 x 31,0	233,5	189,5	190
66A.12X13	12x13	17,5 x 19,0	21 x 21	31,0 x 31,0	233,5	189,5	195
66A.14X15	14x15	20,5 x 21,75	23 x 23	33,0 x 33,0	237,5	231	215
66A.16X17	16x17	23,0 x 24,0	23 x 23	35,0 x 35,0	280,0	231	325
66A.16X18	16x18	23,0 x 24,7	23 x 24	35,0 x 36,0	281,0	231	330
66A.18X19	18x19	24,7 x 26,0	24 x 28	36,0 x 40,0	286,0	231	345
66A.20X22	20x22	27,3 x 30,5	28 x 28	41,5 x 41,5	329,0	270	515
66A.21X23	21x23	28,6 x 31,5	28 x 30	41,5 x 43,5	331,0	270	535
66A.24X27	24x27	33,0 x 36,7	33 x 33	50,5 x 50,5	381,0	312	1020
66A.30X32	30x32	40,5 x 43,0	36 x 36	53,5 x 53,5	387,0	312	1100

66A - Inch hinged combination wrenches



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Hinged socket wrenches: the socket can be turned by 180° for maximum access.
- The socket is held in position tanks spring locking.
- OGV® profile with 12-point ring for powerful tightening while protecting the nut.
- Dimensions in inches: from 3/8" to 3/4".
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	C x C1 [mm]	H x H1 [mm]	L [mm]	L1 [mm]	⚖ [g]
66A.3/8X7/16	3/8x7/16	15,0 x 16,5	18 x 18	26 x 26	164,5	156	105
66A.1/2X9/16	1/2x9/16	19,0 x 20,5	21 x 23	31 x 33	235,5	189,5	215
66A.5/8X11/16	5/8x11/16	23,0 x 24,7	23 x 24	35 x 36	281,0	231	335
66A.5/8X3/4	5/8x3/4	23,0 x 26,0	23 x 28	35 x 40	285,0	231	340

66A - Metric and inch wrench sets



NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691

- Presentation: supplied as box or roll sets.

	A [mm]	A ["]	Contents	⚖ [kg]
66A.JE6	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	-	Box	1,300
66A.JE9	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23	-	Box	2,450
66A.JE9T	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23	-	Roll: N.38A-9B	2,550
66A.JE6T	8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19	-	Roll: N.38A-6B	1,150
66A.JU3	-	3/8x7/16 - 1/2x9/16 - 5/8x3/4	Box	0,670

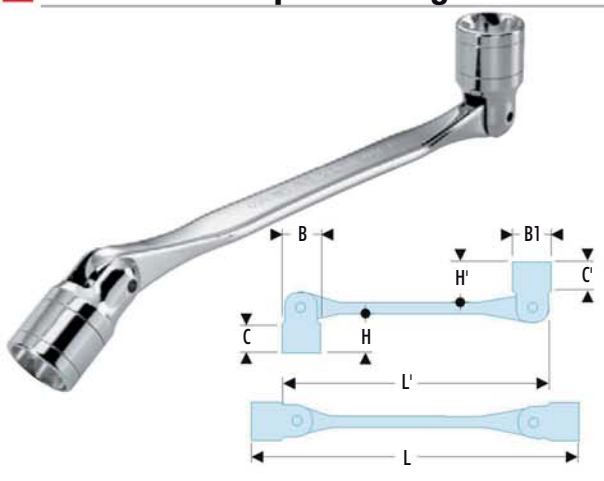
MOD.66A - Metric hinged ratchet socket wrench sets in heat formed tray



- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [g]
MOD.66A-1	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17	Tray: PL.319A	940
MOD.66A-2	18x19 - 20x22 - 21x23	Tray: PL.320	1600

66TX - TORX® profile hinged socket wrenches



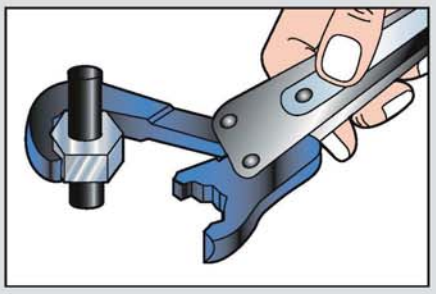
- Hinged socket wrenches: the socket can be turned by 180° for maximum access.
- The socket is held in position tanks spring locking.
- Torx dimensions: from E6 to E24.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	C x C1 [mm]	H x H1 [mm]	L [mm]	L1 [mm]	⚖ [g]
66TX.6X8	6x8	8,0 x 10,0	5,0 x 7,0	22 x 22	186	156	85
66TX.10X12	10x12	13,0 x 15,0	7,5 x 8,0	27 x 27	224,5	189,5	175
66TX.14X18	14x18	17,0 x 20,5	10,0 x 12,0	32 x 34	274	231	330
66TX.20X24	20x24	23,5 x 28,0	13,0 x 18,0	38 x 42	323	270	530

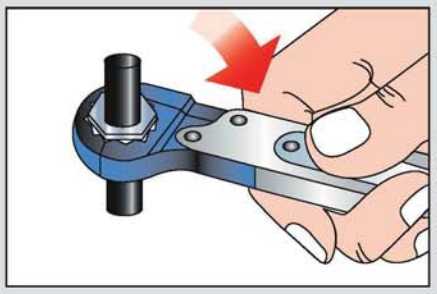
Ratchet series

RATCHET FLARE-NUT WRENCHES

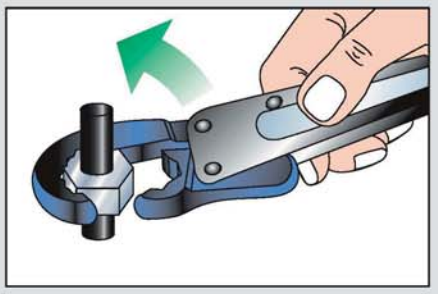
RATCHET EFFECT AND ACCESSIBILITY!



• Positioning is straight forward, even with little clearance around the pipe.



• Torque is applied over all six flats for optimum drive.



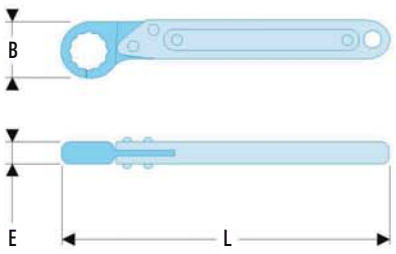
• Ratchet action without wrench removal: completes work five times faster than with a conventional tool.

• Fast tools for pipe unions in a variety of applications such as automotive, construction, air conditioning, refrigeration, aerospace and plumbing, etc.

70A - Straight flare-nut wrenches with metric web







- Flare nut ratchets: the wrench opens to pass around the pipe and closes down on the nut for optimum grip. The special shape of the wrench allows for a ratchet effect.
- Fast tightening on all piping in automotive, trucking, public works, compressors, refrigeration, aeronautics, sanitation.
- 6-point head: 7 to 10 mm - 12-point head: 11 to 32 mm.
- Hanging hole at end of handle: wrenches stored on panel or hung to avoid loss or fall.
- Metric sizes: 7 to 32 mm.
- Presentation: satin chrome handle / burnished head.

	A [mm]	B [mm]	E [mm]	L [mm]	[g]
70A.7	7	24,6	7,0	139,5	90
70A.8	8	24,6	7,0	139,5	90
70A.9	9	24,6	7,0	139,5	90
70A.10	10	24,6	7,0	139,5	90
70A.11	11	25,4	7,2	141,0	90
70A.12	12	27,5	7,2	141,0	85
70A.13	13	27,5	7,2	141,0	90
70A.14	14	35,7	10,0	191,0	180
70A.16	16	35,7	10,0	191,0	175
70A.17	17	35,7	10,0	191,0	175
70A.18	18	35,7	10,0	191,0	170
70A.19	19	37,0	10,0	191,0	160
70A.22	22	40,7	13,0	233,0	295
70A.24	24	43,2	13,0	235,0	300
70A.27	27	55,5	14,1	325,0	605
70A.30	30	56,4	15,9	325,0	615
70A.32	32	58,5	15,9	325,0	625

70A - Metric ratchet flare-nut wrenches sets



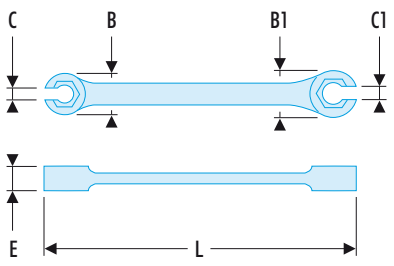
- Presentation: supplied as box or roll sets.

	A [mm]	Contents	⚖ [kg]
70A.JN6	8 - 10 - 11 - 13 - 17 - 19	Box	0,560
70A.JE7T	7 - 8 - 9 - 10 - 11 - 12 - 13	Roll: N.38A-7B	0,550
70A.JE5T	14 - 16 - 17 - 18 - 19	Roll: N.38A-5A	0,720

Standard series

43 - Straight flare-nut wrenches with metric web





- Flare nut wrenches with web: the head is reinforced by toile allowing for powerful unlocking. Examples: brake hoses, injector nut.
- The toile also holds the wrench on the nut.
- Short handle for better handling.
- Metric sizes: 7 to 19 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	L [mm]	⚖ [g]
43.7X9	7X9	15,6 x 18,3	10,0	124	40
43.8X10	8X10	16,6 x 19,1	10,0	124	40
43.10X11	10X11	19,1 x 20,0	10,0	124	45
43.11X13	11X13	20,0 x 22,9	11,5	143	65
43.12X14	12X14	22,3 x 24,6	11,5	143	70
43.17X19	17X19	28,3 x 31,4	13,0	162	100

Straight flare-nut wrenches set with metric web



- Presentation: supplied in roll.

	A [mm]	Contents	⚖ [kg]
43.JE5T	7x9 - 8x10 - 11x13 - 12x14 - 17x19	Contents	0,330

Straight flare nut set with metric web in heat formed tray

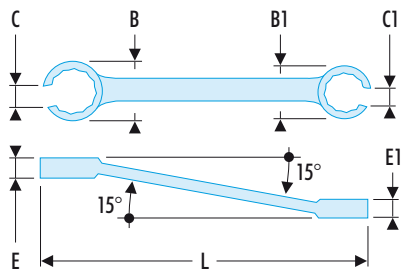


- Compatible with the FACOM modular storage system: compatible with CHRONO, JET, CHRONO XL, CHRONO+, JETXL and JET+ roller cabinets.

	A [mm]	Contents	⚖ [g]
M0D.43	7x9 - 8x10 - 11x13 - 12x14 - 17x19	Tray: PL.365	960

42 - Metric 15° hinged flare nut wrenches





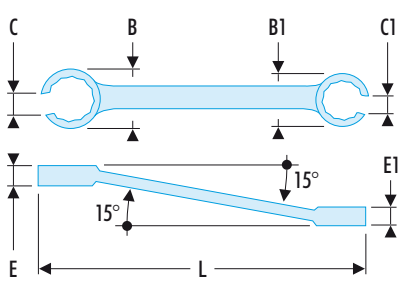
DIN 3118, ISO 691

- 15° hinged flare nut wrenches: facilitates access to the nuts.
- 6-point head: from 8x10 to 12x14 mm - 12-point head: from 14x17 to 36x41 mm.
- Metric sizes: 8 to 41 mm.
- Presentation: satin chrome finish.

	A [mm]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
42.8X10	8X10	17,9 x 19,4	6,5	7,5	140	55
42.10X11	10X11	19,4 x 21,4	8,0	8,5	154	65
42.10X12	10X12	19,4 x 21,4	8,0	8,5	154	65
42.11X13	11X13	21,4 x 25,4	8,5	10.5	175	110
42.12X14	12X14	21,4 x 25,4	11,0	12,5	175	120
42.14X17	14X17	27,4 x 31,4	11,0	12,5	197	135
42.17X19	17X19	31,4 x 33,4	12,0	13,0	215	175
42.19X22	19X22	33,4 x 38,4	13,0	14,0	230	210
42.22X24	22X24	38,4 x 41,9	15,0	16,0	245	270
42.24X27	24X27	42,4 x 46,4	16,0	17,0	260	290
42.30X32	30X32	50,4 x 52,4	19,5	21,0	300	480
42.36X41	36X41	61,0 x 68,0	25,0	27,0	320	1100

42 - Inch 15° hinged flare nut wrenches





ASME B107.100

- 15° hinged flare nut wrenches: facilitates access to the nuts.
- 6-point head: 5/16x3/8 and 7/16x1/2 - 12-point head: from 9/16x5/8 to 1"x1"1/8.
- Dimensions in inches: from 5/16" to 1"1/8.
- Presentation: satin chrome finish.

	A ["]	B x B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
42.5/16X3/8	5/16x3/8	17,9 x 19,4	6,5	7,5	140	55
42.7/16X1/2	7/16x1/2	21,4 x 25,4	8,5	10.5	175	110
42.9/16X5/8	9/16x5/8	27,4 x 31,4	11,0	12 ,5	197	135
42.11/16X3/4	11/16x3/4	31,4 x 33,4	12,0	13,0	215	175
42.3/4X7/8	3/4x7/8	33,4 x 38,4	13,0	14,0	230	210
42.1'X1'1/8	1'x1'1/8	50,4 x 52,4	19,5	21,0	300	290

Set of 5 metric flare-nut wrench angled at 15°



DIN 3118, ASME B107.100

- Presentation: supplied in roll.

	A [mm]	Contents	⚖ [kg]
42.JE5T	8x10 - 11x13 - 12x14 - 17x19 - 22x24	Roll: N.38A-5A	0,770

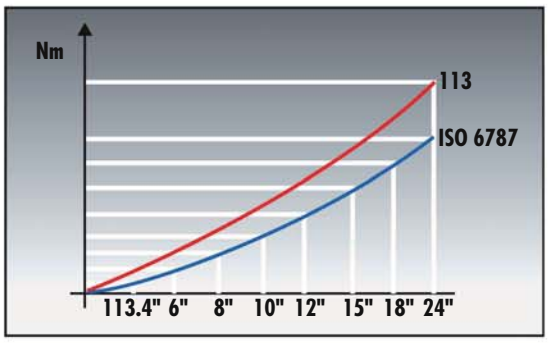
Adjustable series

ADJUSTABLE WRENCH

HIGH PERFORMANCE AND MANOEUVRABILITY!

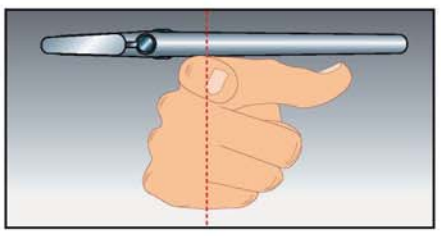
Powerful

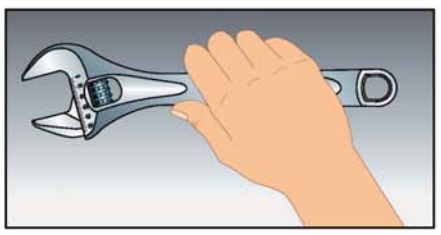
- Performance exceeds standard specifications.
- ISO 6787, DIN 3117 NF E 74-324.
- ASME B 107.8m-1996 (US. nat. std).



Ergonomic

- Optimised contact surfaces for maximum user comfort.
- Contoured handle for improved handling.
- Ergonomic worm screw:
  - Optimised finger contact area.
  - Improved worm screw access.





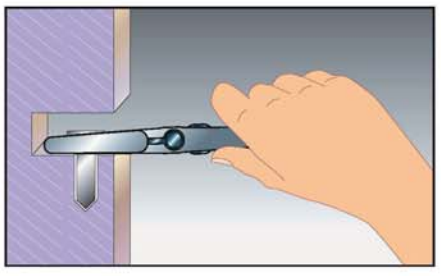
Versatile

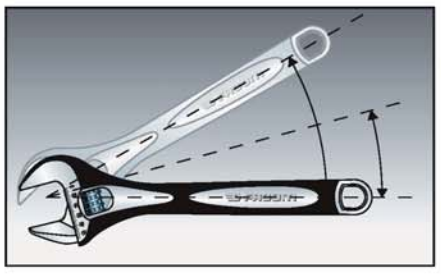
- Millimetre graduations:
- Reading measurements,
- Wrench presetting.
- Non-protruding moving jaw at maximum capacity.



For greater accessibility

- Head angled at 15° for easier repositioning.
- Tapered jaw tips for optimum access.

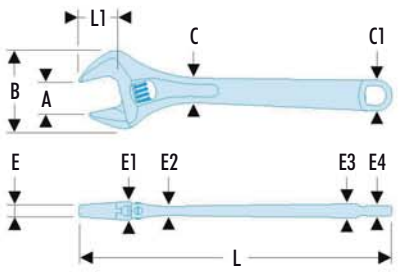






113A.C - Chromed adjustable wrenches





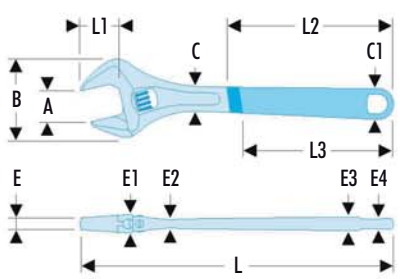
NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Right-hand button rotation.
- Range from 4" to 24".
- Presentation: chromed body and polished head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	⚖ [g]
113A.4C	13	34,0	11,0 x 14,0	4,5	9,5	5,0	6,5	5,0	114	13	65
113A.6C	20	45,0	14,8 x 18,5	5,0	11,8	6,0	8,3	5,8	155	19	125
113A.8C	27	61,5	18,5 x 24,0	6,5	13,5	9,0	11,0	8,5	206	24	275
113A.10C	30	69,5	21,5 x 28,5	9,0	15,5	9,5	12,7	10,0	255	29	480
113A.12C	34	80,0	25,0 x 31,0	10,0	18,0	10,2	13,0	10,0	306	34	700
113A.15C	44	97,0	28,0 x 35,0	13,5	20,0	12,0	14,8	11,5	380	44	1145
113A.18C	53	115,0	31,0 x 38,5	16,0	22,5	14,3	17,8	13,5	456	53	1790
113C.24C	62	132,0	42,0 x 38,0	17,0	31,0	17,0	15,0	15,0	612	61	3495

113A.CG - Chromed sheath adjustable wrenches





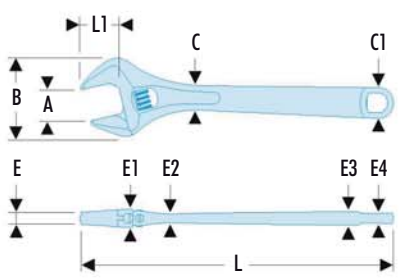
NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Right-hand button rotation.
- Range from 4" to 12".
- Presentation: sheathed chromed body and polished head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
113A.4CG	13	34,0	14,8 x 24,0	4,5	9,5	5,0	9,5	6,0	116	13	65,5	65,0	75
113A.6CG	20	45,0	14,8 x 24,0	5,0	11,8	6,0	12,0	8,0	159	19	90,5	80,0	140
113A.8CG	27	61,5	18,5 x 31,0	6,5	13,5	9,0	14,5	10,0	209	24	123,0	109,0	310
113A.10CG	30	69,5	21,5 x 36,5	9,0	15,5	9,5	17,5	12,5	259	29	157,5	140,0	510
113A.12CG	34	80,0	25,0 x 39,5	10,1	18,0	10,2	19,5	14,0	310	34	189,5	169,5	740

113A.T - Phosphated adjustable wrenches





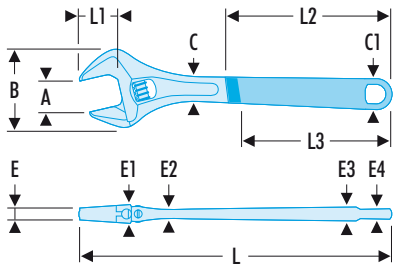
NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Left-hand button rotation.
- Range from 4" to 24".
- Presentation: phosphated body and "fine ground" head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	⚖ [g]
113A.4T	13	34	11,0 x 14,0	4,5	9,5	5,0	6,5	5,0	114	13	65
113A.6T	20	45	14,8 x 18,5	5,0	11,8	6,0	8,3	5,8	155	19	125
113A.8T	27	61,5	18,5 x 24	6,5	13,5	9,0	11,0	8,5	206	24	275
113A.10T	30	69,5	21,5 x 28,5	9,0	15,5	9,5	12,7	10,0	255	29	480
113A.12T	34	80	25,0 x 31,0	10,0	18,0	10,2	13,0	10,0	306	34	700
113A.15T	44	97	28,0 x 35,0	13,5	20,0	12,0	14,8	11,5	380	44	1145
113A.18T	53	115	31,0 x 38,5	16,0	22,5	14,3	17,8	13,5	456	53	1790
113.24T	62	132	42,0 x 38,0	17,0	31,0	17,0	15,0	15,0	612	61	3270

113A.TG - Sheathed phosphated adjustable wrenches







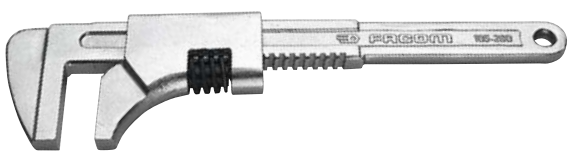
NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100

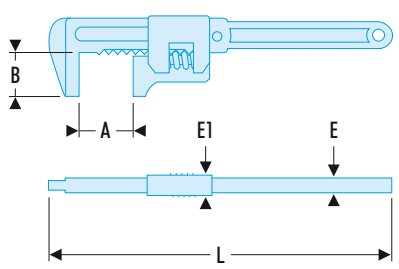
- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Left-hand button rotation.
- Range from 4" to 12".
- Presentation: phosphated body and "fine ground" head faces.

	A [mm]	B [mm]	C x C1 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	[g]
113A.4TG	13	34,0	11,0 x 18,5	4,5	9,5	5,0	9,5	6,0	116	13	65,5	65,0	75
113A.6TG	20	45,0	14,8 x 24,0	5,0	11,8	6,0	12,0	8,0	159	19	90,5	80,0	140
113A.8TG	27	61,5	18,5 x 31,0	6,5	13,5	9,0	14,5	10,0	209	24	123,0	109,0	310
113A.10TG	30	69,5	21,5 x 36,5	9,0	15,5	9,5	17,5	12,5	259	29	157,5	140,0	510
113A.12TG	34	80,0	25,0 x 39,5	10,1	18,0	10,2	19,5	14,0	310	34	189,5	169,5	740

Monkey series

105 - Monkey wrenches







- Large capacity robust wrenches for heavy duty work. Examples: building, farming, worksites.
- Set of 3 wrenches: maximum capacity 60 - 70 - 80 mm.
- Presentation: satin chrome finish.

	A [mm]	B [mm]	E [mm]	E1 [mm]	L [mm]	[g]
105.230	60	34	10	17	230	480
105.280	70	45	11	20	280	810
105.375	80	45	13	22	375	1440

Series for lateral notch nuts

HOOK AND PIN WRENCHES

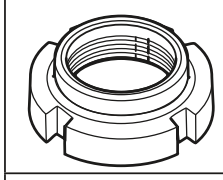
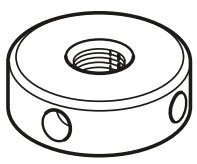
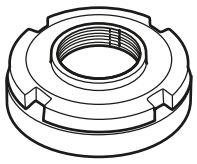
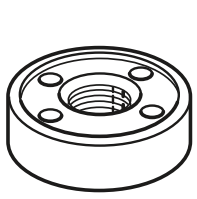
MORE VERSATILITY WITH FACOM HOOK AND PIN WRENCHES

Adjustable models = multiple opening (Hinged or with rack)

- One hinged wrench instead of several fixed wrenches.

More choice

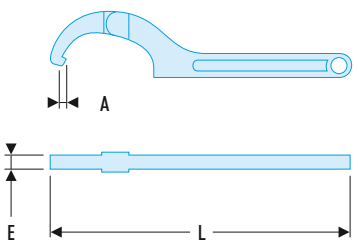
- Hook and pin wrenches: side-hole nuts / transmission of tightening or removal sleeves, mandrels.
- Double hook and pin wrenches: ball joint bearing nuts,…

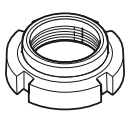
		Series	
	Pin type	Single pin	Double pin
For nuts with side holes	For nuts with side holes 	125A 	115A, 119 
	For nuts with side holes 	126A 	116 
For nuts with top holes	For nuts with top holes 		118.A 
	For nuts with top holes 		117.B 

125A - Hinged models



- The hinge is fitted with a spring washer guaranteeing smooth and reliable operation.
- These 5 dimensions replace more wrenches than classical fixed models.
- Capacity: 15 to 180 mm.
- Presentation: satin chrome finish.



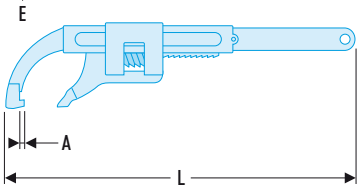


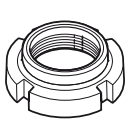
	A [mm]	d [mm]	E [mm]	L [mm]	⧋ [g]
125A.35	3,0	15 - 35	5	168	80
125A.50	4,0	35 - 50	6	202	170
125A.80	5,0	50 - 80	8	280	380
125A.120	5,5	80 - 120	9	345	700
125A.180	7,5	120 - 180	11	492	1480

115A - Monkey wrench



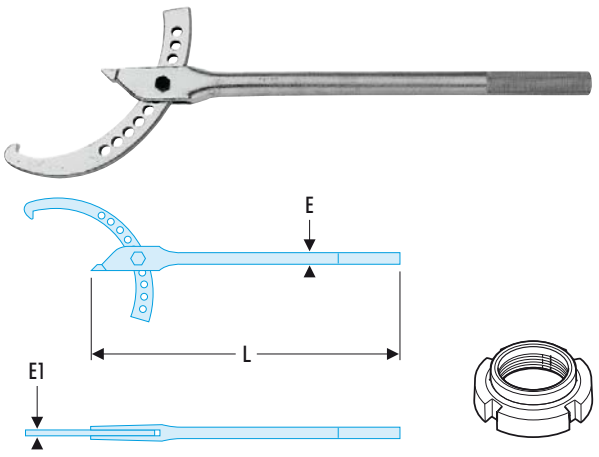
- Capacity: 10 to 200 mm.
- Presentation: satin chrome finish.





	A [mm]	d [mm]	E [mm]	L [mm]	⧋ [g]
115A.50	4	10 - 50	4	213	340
115A.100	5	20 - 100	5	347	800
115A.200	7	30 - 200	7	548	1860

119 - Heavy-duty hook and pin wrenches



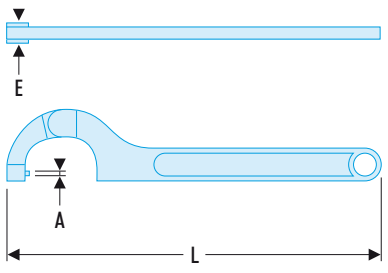
- Replaces many classical model wrenches thanks to its 11 adjustment points in opening.
- Hook: forged and treated for high hardness.
- Capacity: 120 to 324 mm.
- Presentation: satin chrome finish.

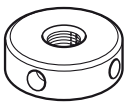
	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
119.3/8	120 - 224	26	9,5	610	3160
119.3/4	220 - 324	32	20	635	5900

Series for lateral pin nuts

126A - Hinged hook and pin wrenches





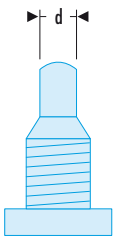


- For nuts with lateral holes.
- Removable hooks.
- Same design and benefits as the "125A" wrench, but fitted with removable hooks to turn holed nuts.
- The 5 dimensions replace more wrenches than all classical fixed models.
- Hooks treated for high hardness.
- Capacity: 15 to 180 mm.
- Presentation: satin chrome finish.

	A [mm]	d [mm]	E [mm]	L [mm]	⚖ [g]
126A.35	3	15 - 35	10	168	80
126A.50	4	35 - 50	12	202	170
126A.80	5	50 - 80	14	280	360
126A.120	6	80 - 120	18	345	700
126A.180	8	120 - 180	20	492	1440

126.E - Sets of 2 spare hooks for 136A wrenches

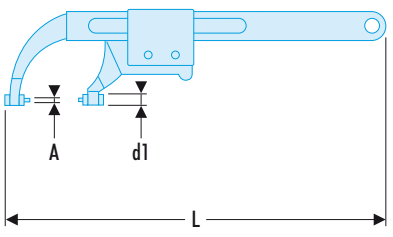


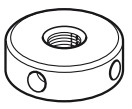


	d [mm]	Wrench	⚖ [g]
126.E35	3	126A.35	5
126.E50	4	126A.50	5
126.E80	5	126A.80	10
126.E120	6	126A.120	20
126.E180	8	126A.180	35

116 - Sliding-jaw hook and pin wrenches





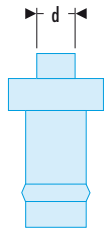


- For nuts with lateral holes.
- Removable hooks.
- Sliding the mobile jaw is ensured by simple sliding. Locking on nut is ensured by self-tightening.
- The wrenches are fitted with 2 sets of easily interchangeable hooks.
- Capacity: 0 to 200 mm.
- Presentation: satin chrome handle body; phosphated hooks.

	A [mm]	d [mm]	d1 [mm]	L [mm]	⚖ [g]
116.50	2,5 - 4	0 - 50	8	213	380
116.100	4 - 6	0 - 100	12	345	820
116.200	6 - 8	35 - 200	16	546	1960

116E - Sets of 2 spare hooks for 116 wrenches





	d [mm]	Wrench	⚖ [g]
116.50E1	2,5	116.50	5
116.50E2	4	116.50	5
116.100E1	4	116.100	15
116.100E2	6	116.100	15
116.200E1	6	116.200	35
116.200E2	8	116.200	30

Series for nuts with top recesses

117.B Wrench for nuts with holes bored on the face

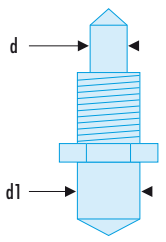




- For nuts with holes bored on the face.
- The wrench is adjusted as a compass, by turning the centre screw.
- Double round removable hooks.
- Each wrench is supplied with 4 sets of 2 hooks.
- Capacity: 20 to 100 mm.
- Length: 245 mm.
- Presentation: satin chrome finish.
- Weight: 0.530 kg.

117.E - Sets of 2 spare hooks for 117.B wrench



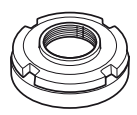


- Double-ended round pins for nuts with face holes.

	d [mm]	d1 [mm]	⚖ [g]
117.E1	2,5	4	15
117.E2	6	8	25
117.E3	3	5	20
117.E4	7	9	30

118A Wrench for nuts with slot on the face

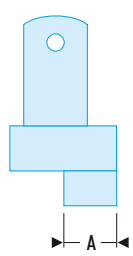




- For nuts with slot on the face.
- The wrench is adjusted as a compass, by turning the centre screw.
- Double square removable hooks.
- Each wrench is supplied with 4 sets of 2 hooks.
- Capacity: 20 to 100 mm.
- Length: 245 mm.
- Presentation: satin chrome finish.
- Weight: 0.530 kg.

118.EC - Sets of 2 spare hooks for 118A wrenches





- Double-ended square pins for slotted nuts on face.

	A [mm]	⚖ [g]
118.EC4	4	10
118.EC5	5	15
118.EC6	6	15
118.EC8	8	20



1/4" "RADIO" RANGE



1/4" socket sets **237**
1/4" ratchets **245**
1/4" accessories **247**
1/4" sockets **252**
1/4" long reach sockets **254**
1/4" Torx® sockets **255**
1/4" screwdriver sockets **255**

1/2" "STANDARD" RANGE



1/2" socket sets **276**
1/2" ratchets **289**
1/2" accessories **292**
1/2" sockets **297**
1/2" Torx® sockets **300**
1/2" screwdriver sockets **300**

3/8" "JUNIOR" RANGE



3/8" socket sets **257**
3/8" ratchets **264**
3/8" accessories **266**
3/8" sockets **271**
3/8" Torx® sockets **274**
3/8" screwdriver sockets **274**

3/4" "TRUCK" RANGE



3/4" socket sets **303**
3/4" ratchets **309**
3/4" accessories **311**
3/4" sockets **314**



1" "MAMMOUTH" RANGE

316









1" socket sets 316
1" ratchets and accessories 317
1" sockets 318

"IMPACT" RANGE

319



3/8" impact sockets and accessories..... 321
1/2" impact sockets and accessories..... 323
3/4" impact sockets and accessories..... 331
1" impact sockets and accessories..... 334
1" 1/2" impact sockets and accessories..... 337

DYNAPACT MANUAL IMPACT WRENCHES

339



Impact screwdrivers
➲ See section 7 in page 464



CHOOSING YOUR SOCKETS

RANGE, PERFORMANCE AND SAFETY BY FACOM

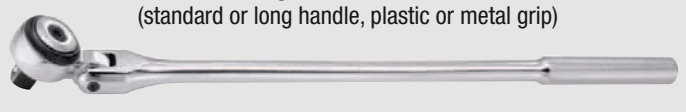
RANGE
• The FACOM range includes over 1500 different ratchets, sockets, accessories and sets to meet your every need, from light engineering to power-assisted work or live working applications.

PERFORMANCE
• The performance of Facom's ratchets, sockets and accessories greatly exceeds current standard specifications.

SAFETY
• For your safety always observe colour codes as well as safety instructions
- Chrome finish: manual use only.
- Black: use with impact or power tools.
- Orange: live, manual use
- Bronze/Copper: use in explosive atmosphere.

COLOUR OF THE SOCKET OR ACCESSORY	USE	DIMENSIONS	SQUARE DRIVE	
Chromed 	Light engineering Electronics Electromechanical Cycles	3.2 to 14 mm 3/16" to 9/16"	Radio range 1/4"	p. 250
Chromed 	Mechanical engineering Automotive engineering	7 to 24 mm 1/4" to 1"	Junior range 3/8"	p. 258
	Motorcycles	8 to 34 mm 1/4" to 1"	Standard range 1/2"	p. 276
Chromed 	Mechanical engineering Heavy goods vehicles Civil engineering plant	19 to 55 mm 3/4" to 2"1/4	Truck range 3/4"	p. 393
	Farming equipment Offshore	41 to 100 mm 1"13/16 to 3"3/8	Mammouth range 1"	p. 316
Black 	For all your power-assisted torquing applications	6 to 120 mm 3/8" to 2"1/8	Impact range 3/8", 1/2", 3/4", 1", 1"1/2	p. 320
			Manual impact wrenches	p. 678
			Power-assisted impact machines	p. 712
			Power-assisted bolters	p. 691
Orange 	For all live working applications	Sockets 6 to 12 mm	Radio 1/4"	p. 803
		Sockets 9 to 19 mm	Junior 3/8"	p. 804
		Sockets 8 to 22 mm	Standard 1/2"	p. 806
Copper-Beryllium 	For all work in explosive atmosphere	See = ADF range		p. 738

CHOOSE YOUR RATCHET

USE	OFFER	OTHER BENEFITS	
Standard	**Pear head ratchets** Ideal: these ratchets are ideal for use in difficult working conditions. 	Very compact Precise palm control	Square: 1/4"-3/8"-1/2" **RL.161** **JL.161** **SL.161**
	Palm control ratchets FACOM tradition. Ring reversing. The palm-control system allows the operator to push down on the head of the ratchet while avoiding accidental reversal. 	Precise	Square: 1/4"-3/8"-1/2" **R.161** **J.161** **S.161**
	Standard ratchets Classical cap reversing line. 		Square: 1/4"-3/8"-1/2"-3/4"-1" **R.151 - J.151 - S.151** **K.152 - K.149 - K.154B** **M.151**
Speed & productivity	**Fast ratchets** Work faster in confined areas. 	Socket locking Palm control	Square: 1/4" - 3/8" - 1/2": **R.360** **J.360** **S.360**
Powerful / Reduced efforts	**Long ratchets** Less fatigue during applications requiring high torque. 		Square: 3/8"-1/2"-3/4"- 1" **J.174 - S.154** **K.154B** **K.151B + K.126A** **M.151 + M.126**
	Long hinged ratchets Combine joint for access & long handle to reduce efforts and fatigue during applications requiring high torque (handle with plastic or metal grip). 	Palm control	Square: 3/8"-1/2" **J.153A** **S.153A** **J.158A** **S.158A**
Locking of sockets and accessories	Sockets and accessories secured to avoid any risk falling particularly in confined spaces. 	Palm control	Square: 1/4" - 3/8" - 1/2" **R.360 - J.360** **S.360 - J.171** **J.174 - S.171**
Access	**Hinged head ratchets** (standard or long handle, plastic or metal grip) 	Palm control	Square: 1/4" - 3/8" - 1/2" **S.143A - S.153A** **S.158A - J.153A** **J.158A - R.158A**
	Ultra-compact bit ratchet Design halving size compared with a standard ratchet. 	Allows also to use sockets with ECR adapter	**R.PE** Square: 1/4": R.PE **65.PE**
	 **Ratchet without handle** For manual access with/without extension in confined spaces		Square: 1/4" **R.150A**
Others	 **Intermediate ratchets** To use with tee or hinged handle. 		Square: 3/8" - 1/2" **J.156** **S.156**

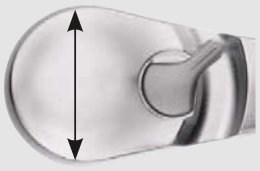
PEAR HEAD RATCHETS
RL-JL-SL.161

SEALED AND ROBUST

ULTRA-RESISTANT AND SEALED HEAD FOR LONGER LIFETIME
- Double sealing gasket: mechanism sealed to industrial dust.
- Maintenance free.
- Tested in aggressive conditions.



ULTRA-COMPACT HEAD



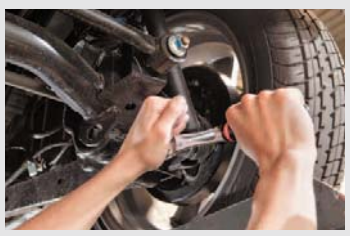
38 mm in 1/2" version



37 mm in 1/2" version

HIGH PRECISION
- 72 teeth for 5° increments.

REDUCED FATIGUE:
- Lighter 1/2" ratchet (-15% for S.161, -25% for 1/2" traditional lever ratchets.)
- Center of gravity moved towards the head for easier increment movements.



PALM CONTROL SYSTEM
- For more powerful loosening.

RECESSED REVERSE LEVER
Avoids accidental reversal and is easier to operate with gloved hands.



COMFORTABLE:
No discontinuity between the plastic and metal sections.

HOOKING EYE



	Square drive
RL.161	1/4"
JL.161	3/8"
SL.161	1/2"

THE FAST RATCHET WITH ROTATING HANDLE

WORK TWICE AS FAST WITH THE ROTATING HANDLE

- The rotating handle allows fast access to improve productivity.
- Gain time, especially in confined work spaces.



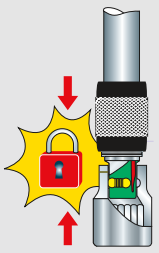


MAXIMUM COMFORT

- No need to hold the socket in the access phase = just place the socket on the screen and turn the handle.
- More comfort and access, especially in confined work spaces.

SOCKET LOCKING

- No need to secure the socket by hand when tightening threads or nuts with little or no locking.



PALM CONTROL

- Ratchet head can be pressed for more powerful (un)tightening.



	Square drive
R.360	1/4"
J.360	3/8"
S.360	1/2"

- Also available in NANO and DETECTION BOXES.







RATCHETS AND ACCESSORIES WITH SAFETY LOCK

The Facom range of 1/4" and 1/2" ratchets and accessories prevents any accidental loss of sockets in your work space.

Locking mechanism

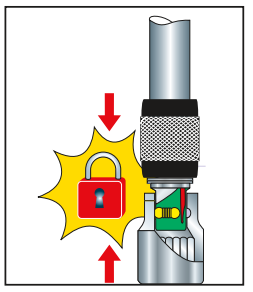
Resistant to more than 60 kg traction before socket tearing.

Instant release thanks to

- The knurled ring of the extensions,
- Releasing the ratchet for instant ejection of the socket by simple pressure, even with slippery hands.

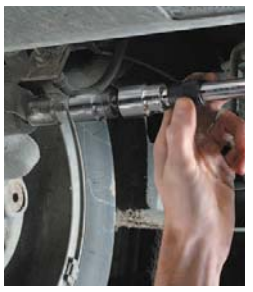
Ratchets	Extensions	Square drive
R.360	R.210RC	1/4"
	R.215RC	
	R.217RC	
J.360	J.210RC	3/8"
J.171	J.215RC	
J.174	J.217RC	
S.360	S.210RC	1/2"
S.171	S.215RC	
	S.217RC	

For your safety, only use ratchets and accessories with sockets with an internal ball notch.

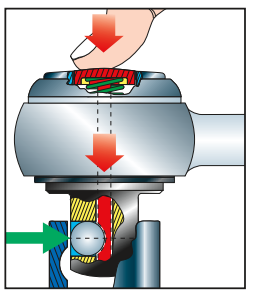




Locking mechanism



Instant release



Sockets with ball notch

S.171

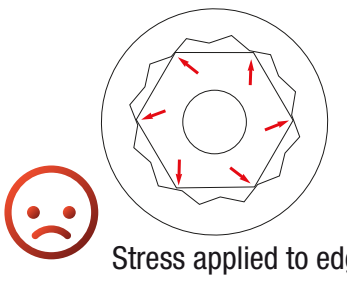


FACOM OGV® PROFILE

FACOM OGV® PROFILE

- More powerful tightening.
- Safer by strongly reducing the risk of slippage, particularly on rounded nuts.

Standard profile



Stress applied to edges

OGV®



Bears against the side faces

THE ULTRA-COMPACT BIT RATCHET

THE FACOM R.PE RATCHET WAS DEVELOPED TO DELIVER MAXIMUM POWER AND COMPACTNESS WHEN USING BITS.

MAXIMUM COMPACTNESS

The design of the R.PE allows insertion of the bit in the mechanism while halving the height compared with a standard ratchet.
Therefore, it is the most compact in the market at this level of performance.

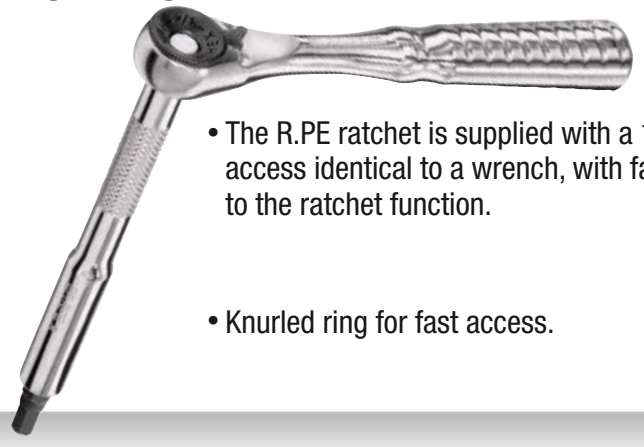


COMPATIBLE WITH 1/4" SOCKETS

With the ECR adapter,



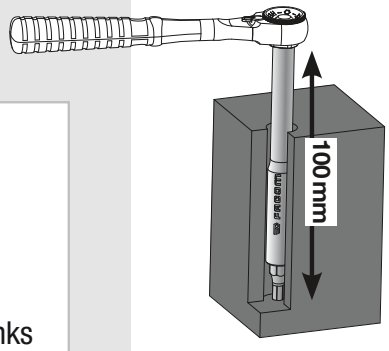
WORK FASTER



- The R.PE ratchet is supplied with a 100 mm extension: access identical to a wrench, with faster operation thanks to the ratchet function.
- Knurled ring for fast access.











THE ULTRA COMPACT R.PE RATCHET AND BIT TOOL SET

COMPLETE SET

Torx® bits: T6 to T40.
- Hexagonal bits: 1.5 mm to 8 mm.
- Bits PH no.1 - 2 - 3 / PE no.1 - 2 - 3 / Slotted head 4 - 5.5 mm.
- Adaptor for sockets.
- Extension 100 mm.

ULTRA-COMPACT

- 124 mm x 34 mm x 64 mm.

PRACTICAL

- Fast tool selection.
- Anti slip tool grip.



STORING YOUR SOCKETS

SOCKET STORAGE SYSTEMS ARE ADAPTED TO YOUR NEEDS ON THE MOVE OR WHEN WORKING IN THE WORKSHOP AND TO YOUR WORK CONSTRAINTS.

ON-SITE APPLICATIONS

COMPACT

WORKSHOP WORK

NANO Box concept
• Square: 1/4".



DETECTION Box Concept
• Square drive: 1/2"-3/8".



FOD compatible.

Polypropylene boxes or metal boxes
• Square: 1/4"-3/8"-1/2"-3/4"-1".



Modules with thermoformed trays
• Square drive: 1/4"-3/8"-1/2"-3/4".



MOD.J1

Modules with foam trays
• Square drive: 1/4"-3/8"-1/2".



MODM.R1A

FOD compatible.

SAFETY AND EFFICIENCY

THE RNANO CONCEPT



ULTRA-COMPLETE: 100% BOLTING-TIGHTENING

• Up to 38 tools, 1/4" drive square, in metric or inch dimensions, 6-or 12- point sockets, with standard / pear head / fast ratchet.

ULTRA-COMPACT

• 50% more compact than 1/4" sets in regular box.



PRACTICAL: SAVE TIME

• Easy set and tool selection thanks to tool pattern tag,
• Thanks to 3-sided set identification sticker.



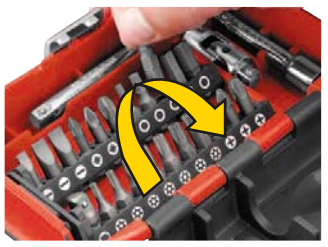


Easy tool picking

• Bit strips rise automatically when opening the set.

• Socket picking by tilting.

• Auto-closing clasp: closes instantly.









Sockets, bits, and accessories held in case of tipping

STRENGTH AND COMFORT BY FACOM

• Sturdy closing system: metal clasp and hinge rod
• Bi-material body: - Box frame in PC/B > Rigid and unbreakable.
- Skin in TPU = soft anti-slip> Good grip
> Does not slip on work surface
> Does not scratch the intervention zone (bodywork…)
• Plastic resistant to workshop solvents.

DETECTION BOX CONCEPT

REINFORCED SAFETY

- The “Detection BOX” concept ensures instant availability check even when the box is closed.







EASY TO STORE

- Easy storage in all roller cabinet drawers (including 60 mm high).
- Adapts to 1/3 width of a roller cabinet module.
- Holds vertically.
- Does not slide, even on a smooth surface.

EASY TO CARRY

- With the extension used as a handle.



PRACTICAL

- Sockets locked securely in their slots and stay in place even when set is tipped over.

HIGH STRENGTH

- Thanks to their bi-material shell, metal clasps and metal hinge pins.

1/4" NANO SETS
METRIC DIMENSIONS

			RL.NANO1	RL.NANO112	R.360NANO	R2NANO
			RL.161	RL.161	R.360	R.161
			6	12	6	6
		1/4" 6,35 mm	1/4"	1/4"	1/4"	1/4"
	mm	5,5	•	•	•	•
		6	•	•	•	•
		7	•	•	•	•
		8	•	•	•	•
		9	•	•	•	•
		10	•	•	•	•
		11	•	•	•	•
		12	•	•	•	•
		13	•	•	•	•
		14	•	•	•	•
	EP	1	•		•	•
		2	•		•	•
		3	•		•	•
	EH	3	•	•	•	•
		4	•	•	•	•
		5	•	•	•	•
	mm	6	•	•	•	•
		7	•	•	•	•
	ED	1	•		•	•
		2	•		•	•
		3	•		•	•
	ES	4,5	•	•	•	•
		6,5	•	•	•	•
		8	•	•	•	•
	EXR	10	•		•	•
		15	•		•	•
		20	•		•	•
		25	•		•	•
		27	•		•	•
		30	•		•	•
		40	•		•	•
		R.209	•	•	•	•
		R.210	•	•	•	•
		R.240A	•	•	•	•
		R.235	•	•	•	•
		R.236A	•	•	•	•
		ECR	•	•	•	•
			BV.NANO1			
			152 x 48 x 92 mm			
			0,81 Kg	0,745 Kg	0,85 Kg	0,85 Kg

RL.NANO1



RL.NANO112

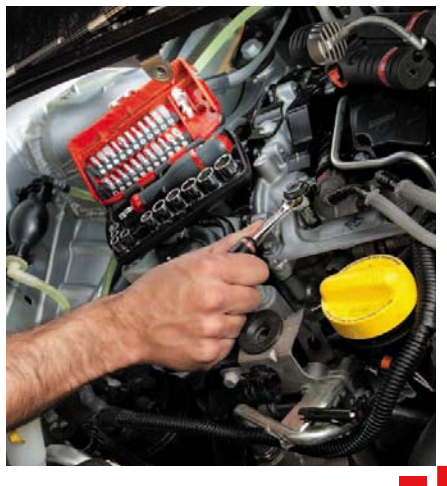


R.360NANO



R2NANO





1/4" NANO SETS
INCH DIMENSIONS

			RL.NANO-U1	RL.NANO-U112	RL.NANO-U2	R.360NANO-U1	R.360NANO-U112
			RL.161	RL.161	RL.161	R.360	R.360
			6	12	12	6	12
1/4" 6,35 mm			1/4"	1/4"	1/4"	1/4"	1/4"
	"	7/32	•	•	•	•	•
		1/4	•	•	•	•	•
		9/32	•	•	•	•	•
		5/16	•	•	•	•	•
		11/32	•	•	•	•	•
		3/8	•	•	•	•	•
		13/32	•	•	•	•	•
		7/16	•	•	•	•	•
		1/2	•	•	•	•	•
		9/16	•	•	•	•	•
	EP	1	•		•	•	
		2	•		•	•	
		3	•		•	•	
	EH	1/4	•	•	•	•	•
		1/8	•	•	•	•	•
		3/16	•	•	•	•	•
	mm	5/32	•	•	•	•	•
		7/32	•	•	•	•	•
	ED	1	•	•	•	•	•
		2	•	•	•	•	•
		3	•	•	•	•	•
	ES	4,5	•	•	•	•	•
		6,5	•	•	•	•	•
		8	•	•		•	•
	TORX®	8			•		
	EXR	10	•		•	•	
		15	•		•	•	
		20	•		•	•	
		25	•		•	•	
		27	•		•	•	
		30	•		•	•	
		40	•		•	•	
		R.209	•	•	•	•	•
		R.210	•	•	•	•	•
		R.240A	•	•	•	•	•
		R.235	•	•	•	•	•
		R.236C	•	•	•	•	•
		ECR	•		•	•	
			BV.RNANO-U				
			152 x 48 x 92 mm				
			0,81 Kg	0,745 Kg	0,81 Kg	0,90 Kg	0,85 Kg

RL.NANO-U1



RL.NANO-U112



RL.NANO-U2



R.360NANO-U1



R.360NANO-U112



1/4" CLASSICAL SETS
METRIC DIMENSIONS

			R.3A	R.410AE	R.410D	R.420P	R.425AP	R.426AP	R.425A
			R.161	R.151	R.151	R.161	R.161	R.161	R.151
			6	6	6	6	6	12	6
1/4" 6,35 mm			1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	mm	3,2				•			
		4		•		•			
		5		•		•			
		5,5	•	•	•	•	•	•	•
		6	•	•	•	•	•	•	•
		7	•	•	•	•	•	•	•
		8	•	•	•	•	•	•	•
		9	•	•	•	•	•	•	•
		10	•	•	•	•	•	•	•
		11	•	•	•	•	•	•	•
		12	•	•	•	•	•	•	•
		13	•	•	•	•	•	•	•
		14			•	•	•	•	•
	EP	1					•	•	•
		2					•	•	•
		3							
	EH	3					•	•	•
		4					•	•	•
		5					•	•	•
	mm	6					•	•	•
		7							
		8							
	ED	1	•						
		2	•						
		3	•						
	ES	4					•	•	•
		4,5							
		5,5							
		6,5					•	•	•
		8					•	•	•
	EXR	10							
		15	•						
		20	•						
		25	•						
		27							
		30	•						
		40	•						
		R.209				•	•	•	•
		R.210	•	•		•	•	•	•
		R.215			•	•			
		R.240A			•	•	•	•	•
		R.235	•				•	•	•
		R.236A	•	•	•	•	•	•	•
		R.120A			•	•	•	•	•
		R.222							
		R.142							
			PL.366A	PL.390A	PL.244A	PL.442	PL.441		
			BP.102						
			204 x 122 x 52 mm						
			0,60 Kg	0,55 Kg	0,66 Kg	0,82 Kg	0,83 Kg		

R.3A ▼



R.410AE ▼



R.410D ▼



R.420P ▼



R.425AP ▼
R.426AP ▼
R.425A ▼



1/4" CLASSICAL-COMBINED SETS
METRIC/INCH DIMENSIONS

			R.411MU	R.420MU
			R.151	RL.161
			6	6
		1/4" 6,35 mm	1/4"	1/4"
mm		3,2		•
		4	•	•
		5	•	•
		5,5	•	•
		6	•	•
		7	•	•
		8	•	•
		9	•	•
		10	•	•
		11	•	•
		12	•	•
		13	•	•
		14		
"		3/16		•
		7/32	•	•
		1/4	•	•
		9/32	•	•
		5/16	•	•
		11/32	•	•
		3/8	•	•
		13/32	•	•
		7/16	•	•
		1/2	•	•
		9/16	•	•
EH	mm	3		
		4		
		5		
		6		
		7		
		8		
ED		1		
		2		
		3		
ES		4		
		4,5		
		5,5		
		6,5		
		8		
EXR		10		
		15		
		20		
		25		
		27		
		30		
		40		
		R.209	•	•
		R.210		
		R.215	•	•
		R.240A	•	•
		R.235		
		R.236A		•
		R.120A		•
		R.222	•	
		R.142	•	
			PL.125A	PL.453
			BP.115	BP.102
			332 x 143 x 67 mm	204 x 122 x 52 mm
			1,56 Kg	0,72 Kg

R.411MU



R.420MU







1/4" CLASSICAL-COMBINED SETS
METRIC/INCH/WRENCH DIMENSIONS

				R.440UP	R.418AU	R.450AP		R.440EP		R.447EP	R.430AP
1/4" 6,35 mm				R.161	R.151	R.161		R.161		R.161	R.161
				mm+wrenches	mm	std+long		mm+wrenches		mm+wrenches	mm
mm		3,2	3/16"	•	•	•	•	•			•
		4	7/32"	•	•	•	•	•		•	•
		5	1/4"	•	•	•	•	•		•	•
		5,5	9/32"	•	•	•	•	•		•	•
		6	5/16"	•	•	•	•	•		•	•
		7	11/32"	•	•	•	•	•		•	•
		8	3/8"	•	•	•	•	•		•	•
		9	13/32"	•	•	•	•	•		•	•
		10	7/16"	•	•	•	•	•		•	•
		11	1/2"	•	•	•	•	•		•	•
		12	9/16"	•	•	•	•	•		•	•
		13	-			•	•	•		•	•
		14	-			•	•	•			
34 heads angled at 15°and 75°		3/2	3/16	•				•			
		4	7/32	•				•			
		5	1/4	•				•			
		5,5	9/32	•				•			
		6	5/16	•				•			
		7	11/32	•				•			
		8	3/8	•				•			
		9	13/32	•				•			
		10	7/16	•				•			
		11	1/2	•				•			
		12	9/16	•				•			
		13						•			
		14						•			
ED			1			•				•	
			2			•				•	
			3							•	
			4							•	
EH mm			2							•	
			2,5							•	
			3							•	
			4							•	
			5							•	
			6							•	
			7							•	
			8							•	
ES			3			•					
			4			•				•	
			5,5			•				•	
			6,5			•				•	
			8			•				•	
RT			3			•					
			4			•					
			5			•					
			7			•					
22			3,2 x 5,5								•
			4 x 5								•
			6 x 7								•
			8 x 9								•
			10 x 11								•
			12 x 13								•
			R.209	•		•		•		•	•
			R.210S		•						
			R.215	•		•		•		•	•
			R.240A	•		•		•		•	•
			R.235							•	
			R.245			•					
			R.236A	•	•	•		•		•	•
			R.120A	•		•		•		•	•
			R.110			•					
			R.140A	•		•		•			•
			R.216	•		•		•			•
			R.227			•					
			181.18G	•				•			
			AN 2,5 x 75								•
			AN 3,5 x 75	•				•			
				PL.37A	PL.391B	PL.703		PL.36A		PL.128A	PL.414
				BP.109	BP.102	BP.109					
				478x234x72 mm	204x122x52 mm	478x234x72 mm					389x164x72 mm
				2,56 Kg	0,55 Kg	3,26 Kg		2,70 Kg		2,50 Kg	1,92 Kg

R.440UP



R.418AU



R.450AP



R.440EP



R.447EP



R.430AP



1/4" SOCKETS SETS
SET OR RACK

		R.40E	RL.40E	RL.41E	R.40U	REL.40U	RTX.40
12 6 TORX®		6	6	6	6	6	TORX®
1/4" 6,35 mm		Standard	Long	Long	Standard	Long	TORX®
mm	3,2	•	•				
	4	•	•				
	5	•	•				
	5,5	•	•				
	6	•	•				
	7	•	•				
	8	•	•				
	9	•	•				
	10	•		•			
	11	•		•			
	12	•		•			
	13	•		•			
	14	•		•			
"	3/16				•	•	
	7/32				•	•	
	1/4				•	•	
	9/32				•	•	
	5/16				•	•	
	11/32				•	•	
	3/8				•	•	
	13/32				•	•	
	7/16				•	•	
	1/2				•	•	
	9/16				•	•	
TORX®	E4						•
	E5						•
	E6						•
	E7						•
	E8						•
	E10						•
		CKS.93	CKS.89	CKS.89	CKS.93	CKS.93	CKS.89
		0,255 Kg	0,220 Kg	0,310 Kg	0,235 Kg	0,345 Kg	0,090 Kg

R.40E
RL.40E



RL.41E



R.40U



REL.40U



RTX.40



1/4" MODULES IN THERMOFORMED TRAYS
METRIC/INCH

				MOD.RL1	MOD.R1	MOD.R5	MOD.R3
				RL.161	R.161	R.161	R.161
				6	6	6	6
1/4" 6,35 mm				mm	mm	mm	"
	mm	3,2	3/16"				•
		4	7/32"				•
		5	1/4"				•
		5,5	9/32"	•	•	•	•
		6	5/16"	•	•	•	•
		7	11/32"	•	•	•	•
		8	3/8"	•	•	•	•
		9	13/32"	•	•	•	•
		10	7/16"	•	•	•	•
		11	1/2"	•	•	•	•
		12	-	•	•	•	
		13	-	•	•	•	
		14	-	•	•	•	
	EP	1				•	
		2				•	
		3				•	
	EH	1/8					•
		3/16					•
		5/32					•
	"	7/32					•
	EH	3		•	•	•	
	mm	4		•	•	•	
		5		•	•	•	
		6		•	•	•	
		7				•	
	ED	ED.101T		•	•		
		ED.102T		•	•		
	ES	4,5		•	•		
		6,5		•	•		
		8		•	•		
	EXR	10				•	
		15				•	
		20				•	
		25				•	
		30				•	
		40				•	
	82H	2	5/64"	•	•		•
		2,5	3/32"	•	•		•
		3	1/8"	•	•		•
		4	9/64"	•	•		•
		5	5/32"	•	•		•
		6	3/16"	•	•		•
		7	7/32"	•	•		•
		8	1/4"	•	•		•
		9	5/16"	•	•		•
		10	3/8"	•	•		•
	83SH	1,5				•	
		2				•	
		2,5				•	
		3				•	
		4				•	
		5				•	
		6				•	
		8				•	
		10				•	
	89S	10				•	
		15				•	
		20				•	
		25				•	
		27				•	
		30				•	
		40				•	
		45				•	
		R.209		•	•	•	•
		R.215		•	•	•	•
		R.240A		•	•	•	•
		R.235		•	•	•	•
		R.236A		•	•	•	•
		R.120A		•	•	•	•
				PL.321	PL.321	PL.658	PL.603
				435 x 198 x 55 mm	420 x 180 x 55 mm	420 x 190 x 55 mm	420 x 180 x 55 mm
				1,1 Kg		1,41 Kg	0,95 Kg

MOD.RL1



MOD.R1



MOD.R5



MOD.R3



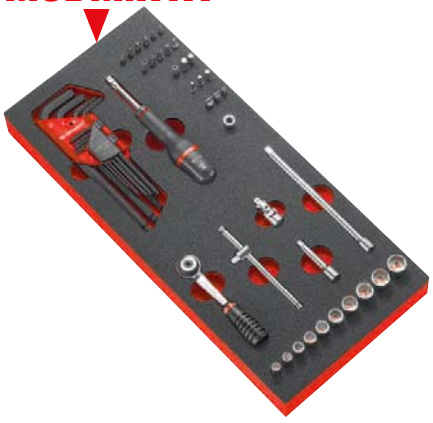
1/4" MODULES IN FOAM TRAYS
BI-COLOURED-METRIC

			MODM.RL1	MODM.R1A
			RL.161	R.161
			6	6
		1/4" 6,35 mm	1/4"	1/4"
	mm	5,5	•	•
		6	•	•
		7	•	•
		8	•	•
		9	•	•
		10	•	•
		11	•	•
		12	•	•
		13	•	•
		14	•	•
	EP	EP.101T	•	•
		EP.102T	•	•
		EP.103T	•	•
	EH	EH.103	•	•
		EH.104	•	•
		EH.105	•	•
	mm	EH.106	•	•
		EH.107	•	•
	ED	ED.101T	•	•
		ED.102T	•	•
		ED.103T	•	•
	ES	ES.134,5T	•	•
		ES.136,5T	•	•
		ES.148T	•	•
	EXR	EXR.115	•	•
		EXR.120	•	•
		EXR.125	•	•
		EXR.127	•	•
		EXR.130	•	•
		EXR.140	•	•
	83SH	1,5	•	•
		2	•	•
		2,5	•	•
		3	•	•
		4	•	•
		5	•	•
		6	•	•
		8	•	•
		10	•	•
		R.209	•	•
		R.215	•	•
		R.240A	•	•
		R.235	•	•
		R.236A	•	•
		R.120A	•	•
			PM.MODR1A	PM.MODR1A
			416 x 190 x 50 mm	420 x 190 x 55 mm
			1,095 Kg	

MODM.RL1



MODM.R1A

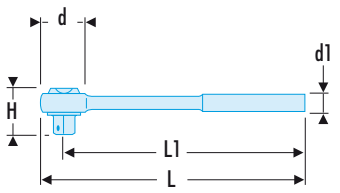


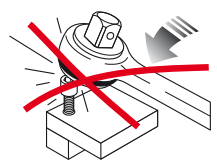


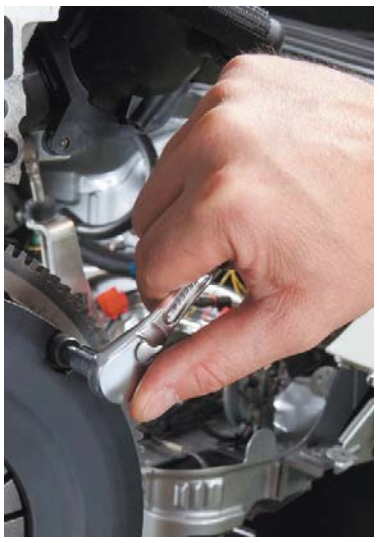
Ratchets 1/4"

1/4" maintenance free pear head ratchet









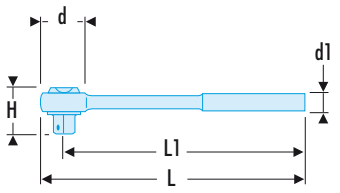
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

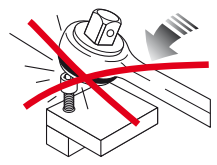
- Dust proof, maintenance free mechanism.
- 72 teeth mechanism for 5° increments.
- Drive direction switch allows easy reversal even with gloved or greasy hands.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ultra-compact head.
- Hook for hanging when working at height.
- Ergonomic comfort grip handle design resistant to workshop chemicals and solvents.

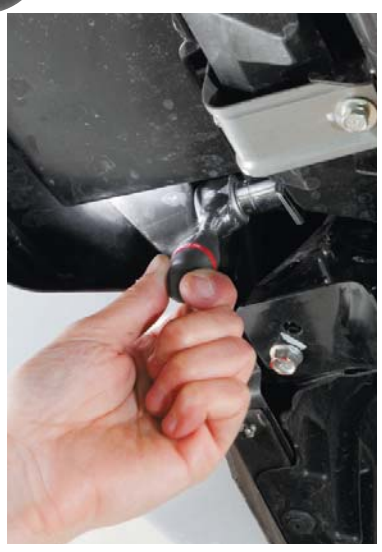
	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
RL.161	22	20	25	120	110	78

1/4" fast action twist handle ratchet









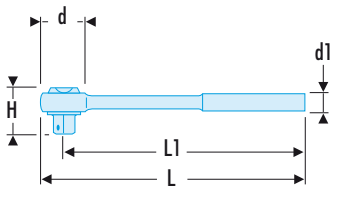
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

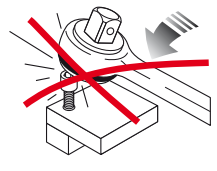
- Rotating handle jack: work twice as fast in confined spaces.
- 6° increments for final tightening.
- Socket safety locking: no more lost sockets.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
R.360	27	21	29	120	120	144

1/4" palm control ratchet









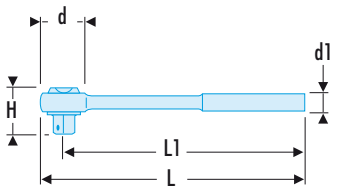
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

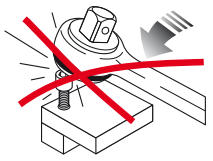
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
R.161	25	19	25	120	108	120

1/4" standard ratchet







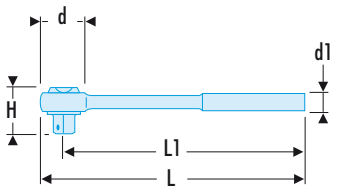
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

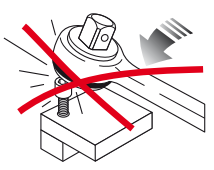
- 72 teeth mechanism for 5° increments.
- Reverse by rotating cap.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
R.151	25	21	25	120	108	100

Ultra compact 1/4" bit ratchet









- Exceptionally compact design when using end bits.
- Mechanism: 60 teeth.
- Use sockets with the ECR adapter.
- Supplied with magnetic extension.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
R.PE	17	16	26,5	158	126	96

65.PE Bit-holder ratchet wrench 1/4" - 5/16"



- Takes the following bits:

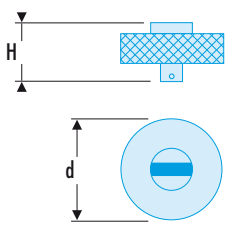
- Series 1: hexagon 1/4".
- Series 2: hexagon 5/16".

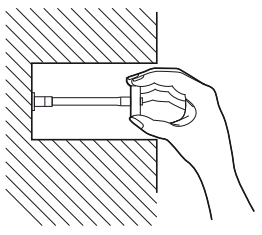
- Used for installing 1/4" and 5/16" aircraft fasteners.
- Increment: 5°.
- Heads angled at 15°.
- Bits held by a spring clip.
- Knurled head for fast pre-tightening.
- Length 150 mm.
- Satin chrome finish.

Weight: 74 g.

1/4" finger control ratchet







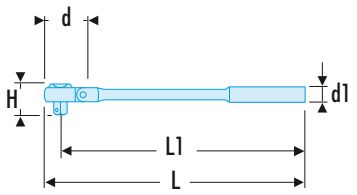
- 72 teeth mechanism for 5° increments.
- Ideal for confined deep recess spaces.

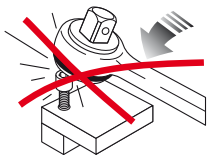
Weight: 120 g.

	d [mm]	H [mm]	⚖ [g]
R.150A	38,5	26,5	95

1/4" long hinged metal grip ratchet







- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Stiffened joint to maintain the position even with an extension and the socket engaged.
- Knurled metal grip.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⧋ [g]
R.158A	25	11	26,5	158	126	135

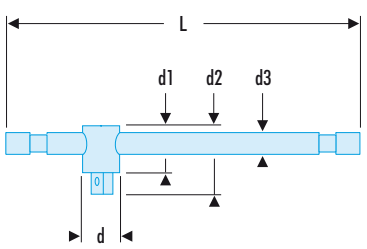
MAINTENANCE OF 1/4" RATCHETS

	R.161	R.151	R.155A	R.157A	R.158A	R.150A
Caps						
 R.161C	•		•	•	•	
J.161C						•
R.151C		•				
Spare part kit						
 R.161RN	•		•	•	•	•
R.151RN		•				
Rotors						
 R.151R	•	•	•	•	•	•

Accessories 1/4"

1/4" drive sliding tee





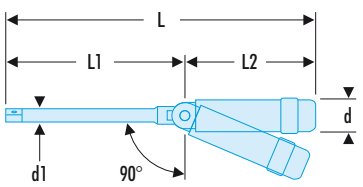
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Friction bar allows the bar to form a T or L-handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	⧋ [g]
R.120A	12	14	22	7	115	49

1/4" hinged handle



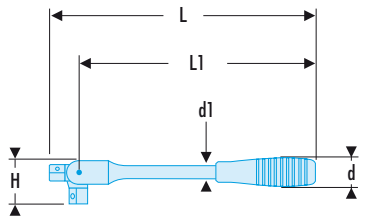


- Driver or L-handle for fast approach or powerful locking.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [g]
R.142	14	8,1	182	105	77	125

Hinged bar 1/4" with handle





NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Spring steadies hinge in any position, allowing access behind obstacles.
- Non-slip handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
R.140A	19	8	25,5	150	131,5	83

R.236C 1/4" drive short spinner



NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Ergonomic bi-material grip.
- Ideal for confined spaces.

Weight: 76 g.

R.236A 1/4" drive medium spinner



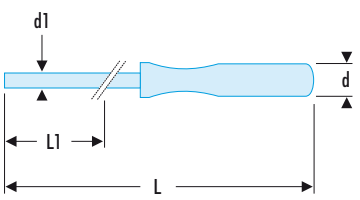
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Ergonomic bi-material grip.
- Ideal for confined spaces.

Weight: 79 g.

1/4" drive standard spinner





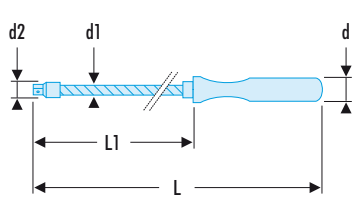
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Ergonomic bi-material grip.
- Ideal for confined spaces.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
R.227A	23,5	8	260	160	125

1/4" drive flexible spinner



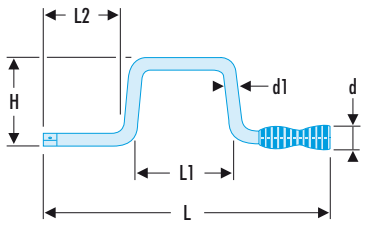


- Ergonomic bi-material grip.
- For fasteners where access is difficult.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
R.222A	20	8	12	265	160	117

1/4" drive speed brace





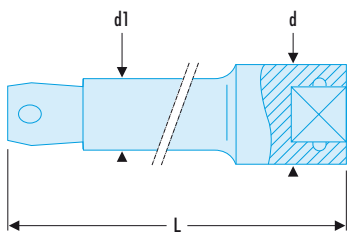
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- For fast rotation.
- PVC rotating handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⏃ [g]
R.110	21	8	110	360	130	120	220

1/4" drive extension







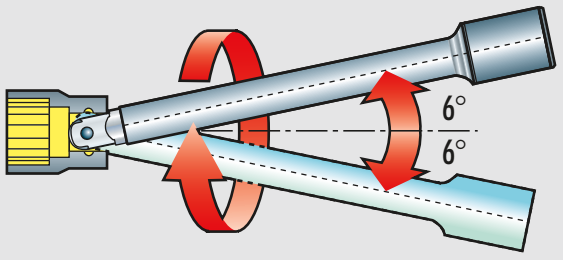
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

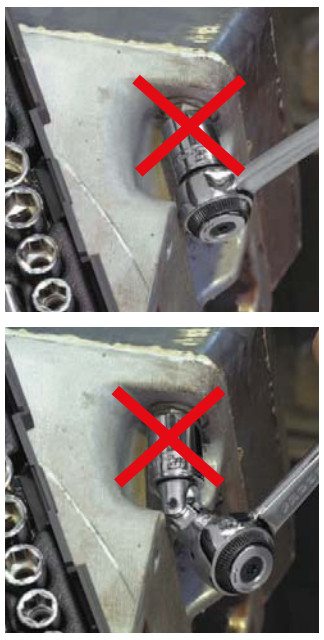
- Finish: chromed.

	d [mm]	d1 [mm]	L [mm]	⏃ [g]
R.209	12	8,2	55	30
R.210	12	8,2	100	45
R.215	12	8,2	150	65
R.217	12	8,2	250	105

WOBBLE EXTENSION

Hard to access with a socket or universal joint? USE A WOBBLE EXTENSION !

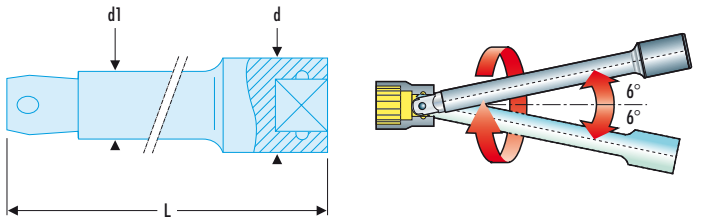






1/4" wobble extension



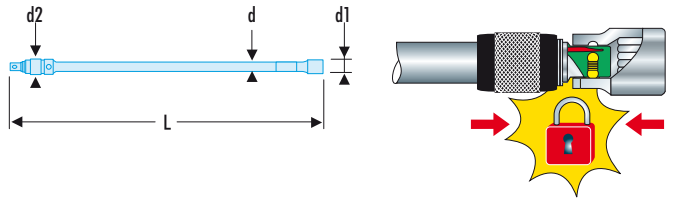


- Square drive profile gives 6° working angle.
- Hard to access with a socket or universal joint? Use a wobble extension !
- Finish: bright chrome.

	d [mm]	d1 [mm]	L [mm]	⚖ [g]
R.209S	12	8,2	55	30
R.210S	12	8,2	100	45

1/4" drive locking extensions





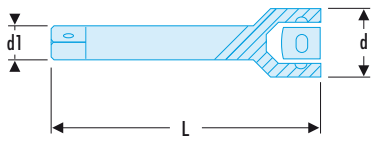
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Locking mechanism.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	⚖ [g]
R.210RC	8,2	12	13	100	45
R.215RC	8,2	12	13	150	60
R.217RC	8,2	12	13	250	100

1/4" wobble extension



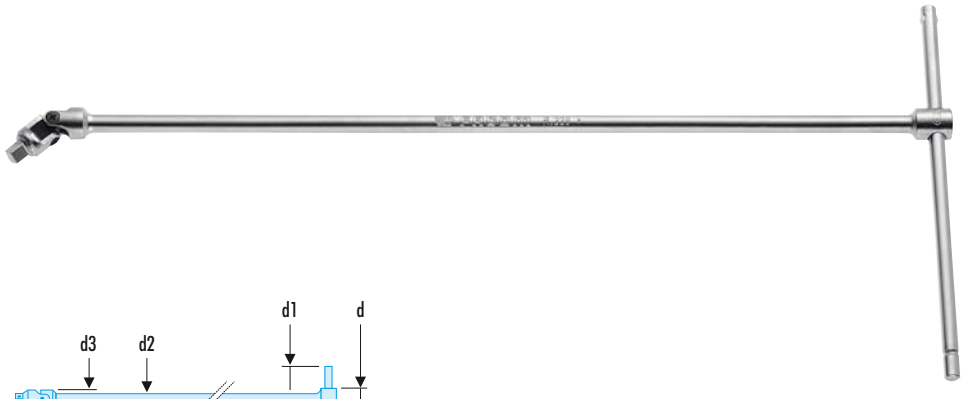


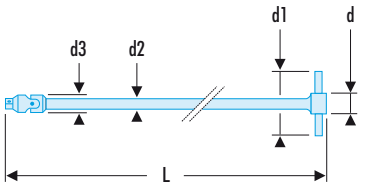
ASME B107.10

- Reaches fasteners out of direct access line.
- Unsuitable for high torques: max. 2.8 N.m.

	d [mm]	d1 [mm]	L [mm]	⚖ [g]
R.216	12	8	150	66

1/4" drive tee with universal joint



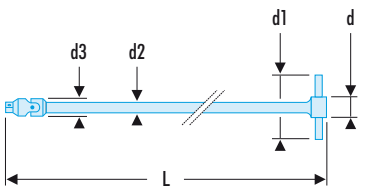


- Universal joint withstands high torques and is spring-steadied in position.
- Long reach and working angle up to 65° allows access to recessed fasteners.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	⚖ [g]
R.229A	13	135	9	13	385	215

1/4" drive tee with universal joint



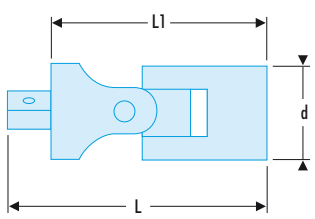


- Extended reach of tee-handle for particularly deep recesses.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	ΔΔ [g]
R.228	13	135	9	13	470	250

1/4" universal joint







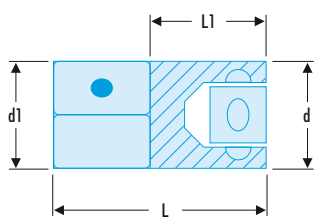
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Spring-stiffened joints. Stays in position when reaching for fasteners.
- Finish: bright chrome.

	d [mm]	L [mm]	L1 [mm]	ΔΔ [g]
R.240A	13	33	25	20

1/4" to 3/8" coupler





NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- 1/4" female to 3/8" male square drive.
- For adapting 3/8" drive sockets.

Finish: bright chrome.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	ΔΔ [g]
R.232	12	12	24,5	13,5	16

D.169 Set of 3 couplers



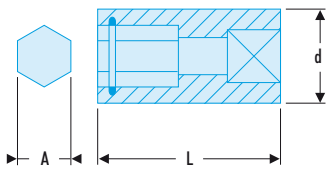


- Allows use of square drivers smaller than socket drive sizes:
  - 1/4" square drive + D.169RJ --> 3/8" socket.
  - 3/8" square drive + D.169JS --> 1/2" socket.
  - 1/2" square drive --> 3/4" socket.
- Compactness means that fewer tools are needed for in situ maintenance operations.
- Magnetic retainer and locking system (JS and SK).
- Knurl allows hand tightening where access is difficult.

Weight: 96 g.

1/4" drive standard spring-clip bit holder





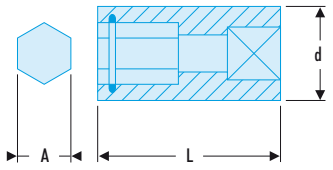
NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

- Spring clip for frequent bit changes.
- Finish: bright chrome.

	A ["]	Square ["]	d [mm]	L [mm]	⚖ [g]
R.235	1/4	1/4	11,3	22	10

1/4" drive secure spring-clip bit holder





NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

- Stiffer, more secure, spring clip for infrequent bit changes.
- Square drive has side-hole for ball or plunger lock.
- Finish: bright chrome.

	A ["]	Square ["]	d [mm]	L [mm]	⚖ [g]
R.245	1/4	1/4	11,3	22	10

1/4" drive lock-ring bit holder



NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

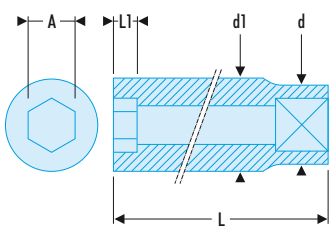
- Bit lock.
- Square drive has side-hole for ball or plunger lock.

	A ["]	Square ["]	L [mm]	⚖ [g]
EF.R	1/4	1/4	30	26

Sockets 1/4"

R 1/4" drive metric 6-point sockets





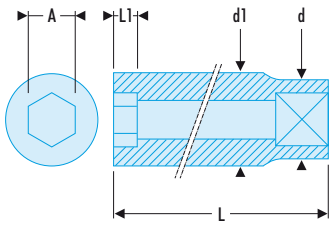
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.
- Available as sets on metal rack (Ref R.40E).

	A [mm]	⬢ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
R.3,2	3,2	6	11,2	5,9	22	2,4	7,30
R.4	4,0	6	11,2	6,9	22	2,6	7,70
R.5	5,0	6	11,2	8,2	22	4,8	8,10
R.5,5	5,5	6	11,2	8,8	22	4,8	8,40
R.6	6,0	6	11,2	9,4	22	5,6	8,60
R.7	7,0	6	11,0	11,0	22	6,0	9,20
R.8	8,0	6	12,0	12,0	22	6,5	11,50
R.9	9,0	6	13,2	13,2	22	6,5	14,30
R.10	10,0	6	14,7	14,7	22	7,8	17,70
R.11	11,0	6	15,8	15,8	22	9,0	19,40
R.12	12,0	6	17,0	17,0	22	9,50	23,20
R.13	13,0	6	17,7	17,7	22	10,00	23,70
R.14	14,0	6	18,7	18,7	22	10,00	26,10

R 1/4" drive inch 6-point sockets





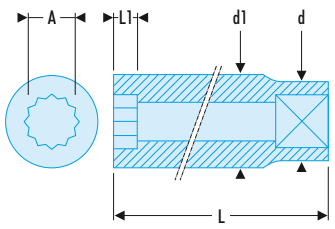
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.
- Available as rack set (Ref R.40U).

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
R.3/16	3/16	6	11,2	8,0	22	4,75	8,20
R.7/32	7/32	6	11,2	9,0	22	5,50	8,30
R.1/4	1/4	6	11,2	10,1	22	6,00	9,30
R.9/32	9/32	6	11,0	11,0	22	6,00	8,90
R.5/16	5/16	6	12,0	12,0	22	6,50	11,50
R.11/32	11/32	6	13,2	13,2	22	6,50	14,50
R.3/8	3/8	6	14,7	14,7	22	7,80	17,80
R.13/32	13/32	6	14,7	14,7	22	7,80	17,00
R.7/16	7/16	6	15,8	15,8	22	9,00	19,50
R.1/2	1/2	6	17,7	17,7	22	10,00	24,50
R.9/16	9/16	6	18,7	18,7	22	10,00	25,20

R.E 1/4" drive metric 12-point sockets





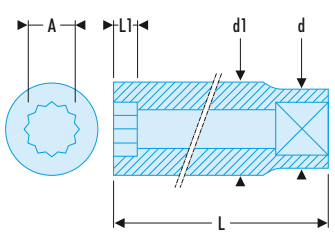
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
R.5,5E	5,5	12	11,2	8,8	22	4,80	8,40
R.6E	6,0	12	11,2	9,4	22	5,60	8,60
R.7E	7,0	12	11,0	11,0	22	6,00	9,20
R.8E	8,0	12	12,0	12,0	22	6,50	11,50
R.9E	9,0	12	13,2	13,2	22	6,50	14,30
R.10E	10,0	12	14,7	14,7	22	7,80	17,70
R.11E	11,0	12	15,8	15,8	22	9,00	19,40
R.12E	12,0	12	17,0	17,0	22	9,50	23,20
R.13E	13,0	12	17,7	17,7	22	10,00	23,70
R.14E	14,0	12	18,7	18,7	22	10,00	26,10

R.E 1/4" drive inch 12-point sockets





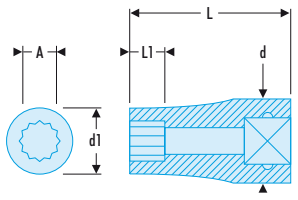
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
R.3/16E	3/16	12	11,2	8,0	22	4,75	8,20
R.7/32E	7/32	12	11,2	9,0	22	5,50	8,30
R.1/4E	1/4	12	11,2	10,1	22	6,00	9,30
R.9/32E	9/32	12	11,2	10,6	22	6,00	8,90
R.5/16E	5/16	12	12,0	12,0	22	6,50	11,50
R.11/32E	11/32	12	13,0	13,0	22	6,50	14,50
R.3/8E	3/8	12	14,7	14,7	22	7,80	17,80
R.13/32E	13/32	12	14,7	14,7	22	7,80	17,00
R.7/16E	7/16	12	15,8	15,8	22	9,00	19,5
R.1/2E	1/2	12	17,7	17,7	22	10,00	24,5
R.9/16E	9/16	12	18,7	18,7	22	10,00	25,20

RB 1/4" drive inch 12-point thin wall sockets





ASME B107-1

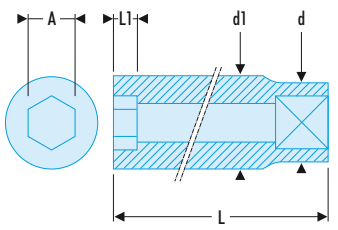
- OGV® profile: more powerful tightening, preserves fasteners.
- Thin-wall for better access, conform with aeronautical standards.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
RB.3/16	3/16	12	11,2	7,6	22	4,8	7,00
RB.7/32	7/32	12	11,2	8,7	22	5,5	8,00
RB.1/4	1/4	12	11,2	9,7	22	6,0	8,00
RB.9/32	9/32	12	11,2	10,6	22	6,0	10,50
RB.5/16	5/16	12	11,9	11,9	22	6,5	10,00
RB.11/32	11/32	12	12,9	12,9	22	6,5	11,50
RB.3/8	3/8	12	13,7	13,7	22	7,8	14,00
RB.7/16	7/16	12	14,8	15,8	22	9,0	17,00
RB.1/2	1/2	12	16,0	16,9	22	10,0	18,50
RB.9/16	9/16	12	17,5	18,7	22	10,0	22,00

Long reach sockets 1/4"

R.LA 1/4" long-reach metric 6-point sockets





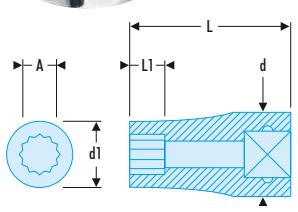
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Available as rack set Ref RL.40E (3.2 --> 9 mm) and Ref RL.41E (10 --> 14 mm).
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
R.3,2LA	3,2	6	12,0	5,80	50,5	1,8	18
R.4LA	4,0	6	12,0	6,80	50,5	2,0	18
R.5LA	5,0	6	12,0	8,10	50,5	2,3	18
R.5,5LA	5,5	6	12,0	8,10	50,5	3,0	18
R.6LA	6,0	6	12,0	9,40	50,5	5,6	18
R.7LA	7,0	6	12,0	10,90	50,5	7,1	27
R.8LA	8,0	6	12,0	12,00	50,5	7,9	27
R.9LA	9,0	6	12,8	12,80	50,5	7,9	32
R.10LA	10,0	6	14,3	14,30	50,5	7,9	41
R.11LA	11,0	6	16,0	16,00	50,5	7,9	54
R.12LA	12,0	6	16,8	16,80	50,5	8,4	50
R.13LA	13,0	6	18,2	18,20	50,5	8,4	59
R.14LA	14,0	6	19,2	19,20	50,5	10,2	68

R.EL 1/4" long-reach metric 12-point sockets





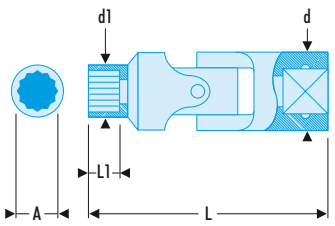
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- High performance, suitable for aircraft fasteners to AS954E.
- Thinner socket walls for better accessibility.
- Available as rack set (Ref REL.40U).
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
R.3/16EL	3/16	12	10,9	7,7	50	6,0	14
R.7/32EL	7/32	12	10,9	8,5	50	7,4	15
R.1/4EL	1/4	12	10,9	9,4	50	7,4	17
R.9/32EL	9/32	12	10,9	10,2	50	8,5	17
R.5/16EL	5/16	12	11,8	11,4	50	9,0	23
R.11/32EL	11/32	12	12,0	12,5	50	9,7	25
R.3/8EL	3/8	12	12,8	13,7	50	11,2	32
R.7/16EL	7/16	12	14,3	15,6	50	11,9	40
R.1/2EL	1/2	12	16,2	17,3	50	13,8	45
R.9/16EL	9/16	12	17,1	18,8	50	16,2	49

R.F - 1/4" drive hinged 12-point sockets





ASME B107.1

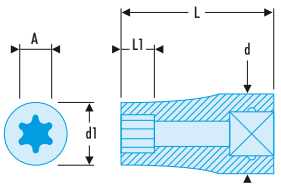
- OGV® profile: more powerful tightening, preserves fasteners.
- Compact solution used instead of universal joint.
- Finish: bright chrome.

	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⧋ [g]
R.3/16F	12	13	8,0	31,6	5,3	13
R.7/32F	12	13	8,5	32,4	6,1	13
R.1/4F	12	13	9,8	32,8	6,5	13
R.9/32F	12	13	10,5	32,8	6,5	13
R.5/16F	12	13	12,0	33,3	7,0	14
R.11/32F	12	13	13,3	33,3	7,0	16
R.3/8F	12	13	13,7	34,6	8,3	21
R.7/16F	12	13	15,5	35,8	9,5	27
R.1/2F	12	13	18,0	36,8	10,5	34
R.9/16F	12	13	19,2	36,8	10,5	35

Torx® sockets 1/4"

RTX - 1/4" Torx® sockets





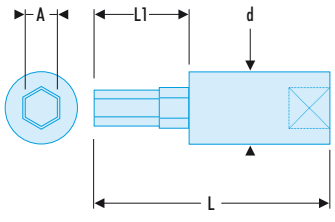
- For Torx® fasteners.
- Finish: bright chrome.
- Available as rack set (Ref RTX.40).

	A [mm]	Torx [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⧋ [g]
RTX.4	3,70	E4	11,2	5,4	22	3,2	8
RTX.5	4,58	E5	11,2	6,7	22	3,0	8
RTX.6	5,54	E6	11,2	7,7	22	3,6	8
RTX.7	6,22	E7	11,2	8,3	22	3,6	8
RTX.8	7,29	E8	11,2	9,6	22	4,3	9
RTX.10	9,19	E10	12,0	11,3	22	5,6	11

1/4" drive sockets with removable bits

RT 1/4" drive metric 6-point sockets



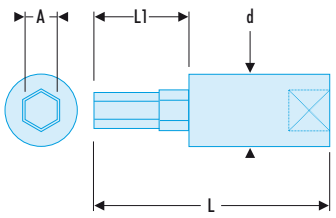


- Removable hard tip for more durability.
- R.245 socket.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	d [mm]	Bits	L [mm]	L1 [mm]	⧋ [g]
RT.2	2,0	11,3	EH.102	37	15	18
RT.2,5	2,5	11,3	EH.102,5	37	15	18
RT.3	3,0	11,3	EH.103	37	15	18
RT.4	4,0	11,3	EH.104	37	15	18
RT.5	5,0	11,3	EH.105	37	15	19
RT.6	6,0	11,3	EH.106	37	15	20
RT.7	7,0	11,3	EH.107	37	15	21
RT.8	8,0	11,3	EH.108	37	15	22
RT.10	10,0	11,3	EH.110	37	15	24

RT 1/4" drive metric 6-point sockets



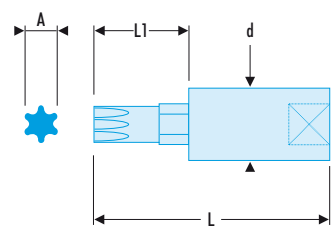


- Removable hard tip for more durability.
- R.245 socket.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	d [mm]	Bits	L [mm]	L1 [mm]	⚖ [g]
RT.1/8	3,17	11,3	EH.101/8	37	15	18
RT.5/32	3,96	11,3	EH.105/32	37	15	18
RT.3/16	4,76	11,3	EH.103/16	37	15	18
RT.7/32	5,56	11,3	EH.107/32	37	15	19
RT.1/4	6,35	11,3	EH.101/4	37	15	20

RX 1/4" drive Torx® bit sockets





- Removable hard tip for more durability.
- R.245 socket.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	Torx [No]	d [mm]	Bits	L [mm]	L1 [mm]	⚖ [g]
RX.6	1,65	T6	11,3	EX.106	38	16	17
RX.7	1,97	T7	11,3	EX.107	38	16	17
RX.8	2,30	T8	11,3	EX.108	38	16	17
RX.9	2,48	T9	11,3	EX.109	38	16	17
RX.10	2,72	T10	11,3	EX.110	38	16	17
RX.15	3,26	T15	11,3	EX.115	38	16	17
RX.20	3,84	T20	11,3	EX.120	38	16	18
RX.25	4,40	T25	11,3	EX.125	38	16	18
RX.27	4,96	T27	11,3	EX.127	38	16	18
RX.30	5,49	T30	11,3	EX.130	38	16	18
RX.40	6,60	T40	11,3	EX.140	38	16	18

CREATE YOUR OWN BIT SOCKETS

Screw bits



- Series 1 ⬡ 1/4"
- Series 2 ⬡ 5/16"

See Section 7 p. 450



Bit holder ⊠ 1/4"



R.235
⬡ 1/4" 6.35 mm standard retaining pin



R.245
⬡ 1/4" 6.35 mm heavy duty retaining pin

See p. 458

3/8" "DETECTION BOX" SETS
METRIC DIMENSIONS

		JL.DBOX1	JL.DBOX112	J.360DBOX1	J.360DBOX112	J.DBOX500	J.DBOX501
		JL.161	JL.161	J.360	J.360	J.171	J.171
12 6		6	12	6	12	6	12
	J.8	•	•	•	•	•	•
	J.9	•	•	•	•	•	•
	J.10	•	•	•	•	•	•
	J.11	•	•	•	•	•	•
	J.12	•	•	•	•	•	•
	J.13	•	•	•	•	•	•
	J.14	•	•	•	•	•	•
	J.15	•	•	•	•	•	•
	J.16	•	•	•	•	•	•
	J.17	•	•	•	•	•	•
	J.18	•	•	•	•	•	•
	J.19	•	•	•	•	•	•
	J.21	•	•	•	•	•	•
	J.22	•	•	•	•	•	•
	J.210	•	•	•	•		
	J.210RC					•	•
	J.215	•	•	•	•		
	J.210RC					•	•
	J.240A	•	•	•	•	•	•
		BV.J1NANO					
		50 x 124 x 280 mm					
		1,920 Kg	1,920 Kg	2,050 Kg	2,050 Kg	2,010 Kg	2,010 Kg



JL.DBOX1



JL.DBOX112



J.360DBOX1



J.360DBOX112



J.DBOX500



J.DBOX501



STANDARD 3/8" SETS
METRIC DIMENSIONS

			J.420E	J.430AP	J.431AP	J.431ASP	J.430ASP
			J.151A	J.161	J.161	J.161	J.161
			12 6	12	12	6	6	12
	mm	7	•				
		8	•	•	•	•	•
		9	•	•	•	•	•
		10	•	•	•	•	•
		11	•	•	•	•	•
		12	•	•	•	•	•
		13	•	•	•	•	•
		14	•	•	•	•	•
		15	•	•	•	•	•
		16	•	•	•	•	•
		17	•	•	•	•	•
		18	•	•	•	•	•
		19	•	•	•	•	•
		20	•				
		21	•	•	•	•	•
		22	•	•	•	•	•
		23	•				
		24	•				
	ED	1				•	•
		2				•	•
		3				•	•
	EH	4					
		5				•	•
		6				•	•
	mm	8				•	•
		10				•	•
	ES	6,5				•	•
		8				•	•
		10				•	•
		J.210		•	•	•	•
		J.215		•	•	•	•
		J.120A		•	•	•	•
		J.240A		•	•	•	•
		J.210RC					
		J.215RC					
		J.210S	•				
		J.235				•	•
		J.236C				•	•
			PL.19A	PL.412A		PL.411	
			BP.115	BP.112		BP.112	
			322 x 143 x 67 mm	389 x 164 x 66 mm		389 x 164 x 66 mm	
			1,50 Kg	1,96 Kg		2,75 Kg	

J.420E ▼



J.430AP ▼



J.431AP ▼



J.430ASP ▼
J.431ASP ▼



STANDARD 3/8" SETS
METRIC DIMENSIONS

			J.451EP		J.426M	J.447E		JT.415E	JX.415EP
			J.161+J.156		-	J.151		J.151A	J.161
			6	12	6	12	wrench	6	TORX®
			Std	Long	Fittings	Std	39	Screwdriver socket	Screwdriver socket
	mm	7	•	•		•	•		
		8	•	•		•	•		
		9	•	•		•	•		
		10	•	•		•	•		
		11	•	•		•	•		
		12	•	•		•	•		
		13	•	•		•	•		
		14	•	•		•	•		
		15	•	•		•	•		
		16	•	•		•	•		
		17	•	•		•	•		
		18	•	•					
		19	•	•					
		21	•	•					
		22	•	•					
		24	•	•					
	JT mm	3		•				•	
		4		•				•	
		5		•				•	
		6		•				•	
		7		•				•	
		8		•				•	
		10		•				•	
	EP	1			•				
		2			•				
		3			•				
		4			•				
	ED	1		•	•				
		2		•	•				
		3		•	•				
		4		•	•				
	ES	4			•				
		5,5		•	•				
		6,5		•	•				
		8		•	•				
		10		•	•				
TORX®	Screwdriver sockets TORX®	10			•				•
		15			•				•
		20			•				•
		25			•				•
		27			•				•
		30			•				•
		40			•				•
		45			•				•
		50			•				•
		55			•				•
	EH mm	3			•				
		4			•				
		5			•				
		6			•				
		7			•				
		8			•				
		10			•				
		J.210	•		•	•			
		J.120A	•						•
		J.240A	•			•			
		J.215R	•			•			•
		J.210S						•	•
		J.110	•						
		J.235	•		•				•
		J.236	•		•				•
		J.216	•						
		BJ.21A1				•			
		BJ.16A1				•			
		J.140A	•		•				
		J.222			•				
			PL.77A		PL.20A	PL.27B		PL.20A	PL.118
			BT.105		BP.112	BP.109		BP.115	BT.109G
			540 x 280 x 58 mm		389 x 164 x 66 mm	478 x 234 x 72 mm		322 x 143 x 66 mm	470 x 195 x 53 mm
			7,70 Kg		2,53 Kg	3,55 Kg		1,27 Kg	1,75 Kg

J.451EP



J.426M



J.447E



JT.415E



JX.415EP



3/8" SETS IN A PLASTIC CASE
INCH DIMENSIONS

			J.430MU	JL.430MU	J.430UP	J.450U		J.420AU
			J.161	JL.161	J.161	J.151A+J.156		J.161
			12 6	12	12	12	12	12
			Standard	Standard	Standard	Std	Long	Standard
	mm	7	•	•				
		8	•	•				
		9	•	•				
		10	•	•				
		11	•	•				
		12	•	•				
		13	•	•				
		14	•	•				
		15	•	•				
		16	•	•				
		17	•	•				
		18	•	•				
		19	•	•				
		20	•	•				
		21	•	•				
		22	•	•				
		24	•	•				
	"	1/4	•	•	•	•	•	•
		5/16	•	•	•	•	•	•
		3/8	•	•	•	•	•	•
		7/16	•	•	•	•	•	•
		1/2	•	•	•	•	•	•
		9/16	•	•	•	•	•	•
		5/8	•	•	•	•	•	•
		11/16	•	•	•	•	•	•
		3/4	•	•	•	•	•	•
		13/16	•	•	•	•	•	•
		7/8	•	•	•	•	•	•
		15/16	•	•	•	•	•	•
		1	•	•	•	•	•	•
	JT	1/8				•		
		5/32				•		
		3/16				•		
	mm	7/32				•		
		1/4				•		
		5/16				•		
		3/8				•		
	ED	1				•		
		2				•		
		3				•		
		4				•		
	ES	5,5				•		
		6,5				•		
		8				•		
		10				•		
		J.210	•	•	•	•		•
		J.215	•	•	•	•		•
		J.120A	•	•	•	•		
		J.240A	•	•	•	•		
		J.110			•	•		
		J.235				•		
		J.236				•		
		J.216				•		
		J.140A				•		
			PL.59A	PL.59A	PL.12A	PL.78A		PL.69A
			BP.109	BP.109	BP.109	BT.105		BP.115
			478 x 234 x 72 mm	478 x 234 x 72 mm	478 x 234 x 72 mm	540 x 80 x 58 mm		332 x 143 x 67 mm
			4,18 Kg	4,110 Kg	3,73 Kg	7,38 Kg		2,70 Kg

J.430MU



JL.430MU



J.430UP



J.450U



J.420AU



3/8" SOCKET SETS
RACK OR SET

			J.40E	JL.40E	JL.41E	J.40U	JL.40U	JTX.40	JT.40
			12 6	12	12	12	12	TORX	TORX SCREWDRIVER SOCKETS
			Standard	Long	Long	Standard	Long	Standard	Standard
	mm	7	•	•					
		8	•	•					
		9	•	•					
		10	•	•					
		11	•	•					
		12	•	•					
		13	•	•					
		14	•	•					
		15	•	•					
		16	•		•				
		17			•				
		18			•				
		19			•				
		21			•				
		22			•				
		24			•				
	”	1/4				•	•		
		5/16				•	•		
		3/8				•	•		
		7/16				•	•		
		1/2				•	•		
		9/16				•	•		
		5/8				•	•		
		11/16				•	•		
		3/4					•		
		13/16					•		
Sockets	TORX®	E4						•	
		E5						•	
		E6						•	
		E7						•	
		E8						•	
		E10						•	
	JT	8							•
		10							•
		12							•
	mm	14							•
		16							•
			CKS.94					CKS.91	
			0,380 Kg	0,590 Kg	0,870 Kg	0,340 Kg	0,840 Kg	0,090 Kg	0,280 Kg















3/8" MODULES IN THERMOFORMED TRAYS

METRIC/ INCH

			MOD.JL1	MOD.J1	MOD.J5	MOD.J7	MOD.J2
			JL.161	J.161	J.171	J.161+J.174	J.161
			6	6	6	6	12
	mm	7	•				
		8	•	•	•	•	
		9	•	•	•	•	
		10	•	•	•	•	
		11	•	•	•	•	
		12	•	•	•	•	
		13	•	•	•	•	
		14	•	•	•	•	
		15	•	•	•	•	
		16	•	•	•	•	
		17	•	•	•	•	
		18	•	•	•	•	
		19	•	•	•	•	
		20					
		21	•	•	•	•	
		22	•	•	•	•	
		23				•	
		24				•	
	"	1/4					
		5/16					•
		3/8					•
		7/16					•
		1/2					•
		9/16					•
		5/8					•
		11/16					•
		3/4					•
		13/16					•
		7/8					•
		15/16					
		1					
	JT	1/8					
		5/32					
		3/16					
		7/32					
		1/4					
		5/16					
		3/8					
	EP	1					
		2					
		3					
		4					
	ES	5,5					
		6,5					
		8					
		10					
		J.210	•	•			•
		J.215	•	•			•
		J.120A	•	•	•	•	•
		J.240A	•	•	•	•	•
		J.210RC			•	•	
		J.215RC			•	•	
		J.210S					
		J.110					
		J.235	•				
		J.232	•				
		J.216					
		J.140A					
			PL.686	PL.322A	PL.322A	PL.665	PL.601
			435 x 198 x 55 mm		420 x 180 x 55 mm		
			2,25 Kg	1,80 Kg	1,75 Kg	2,20 Kg	1,52 Kg

MOD.JL1



MOD.J1



MOD.J5



MOD.J7



MOD.J2

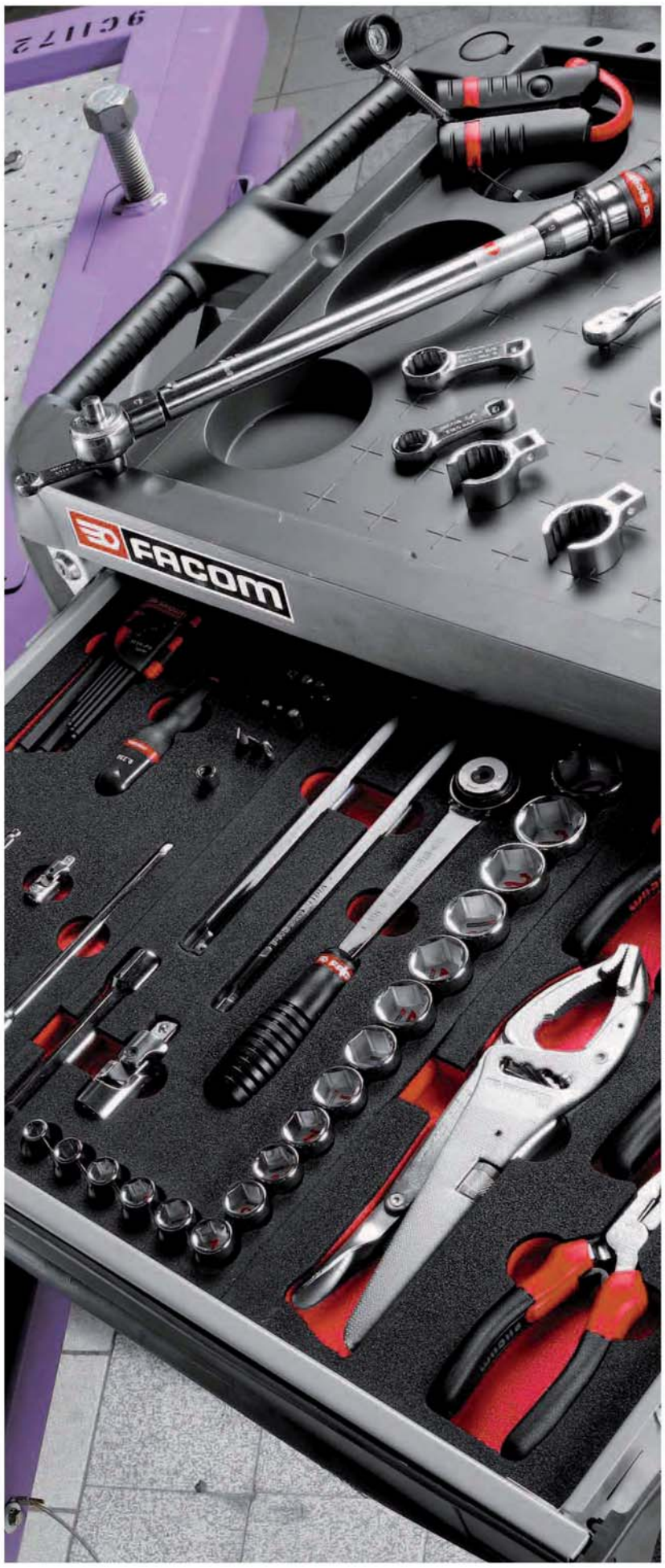


3/8" MODULES IN FOAM TRAYS BI-COLOURED-METRIC

		MODM.JL1
		JL.161
		12 6 / 6
	J.8H	•
	J.9H	•
	J.10H	•
	J.11H	•
	J.12H	•
	J.13H	•
	J.14H	•
	J.15H	•
	J.16H	•
	J.17H	•
	J.18H	•
	J.19H	•
	J.21H	•
	J.22H	•
	J.210	•
	J.215	•
	J.120A	•
	J.240A	•
	J.210RC	
	J.215RC	
	J.210S	
	J.110	
	J.235	•
	J.232	•
	J.216	
	J.140A	
		PM.MODJL1
		416 x 190 x 50 mm
		1,88 Kg

MODM.JL1

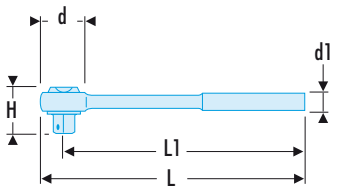


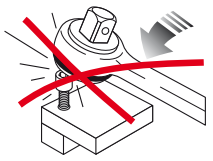


Ratchets 3/8"

3/8" maintenance free pear head ratchet







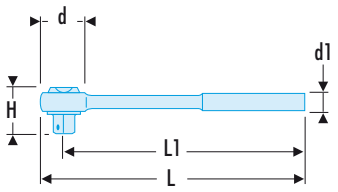
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

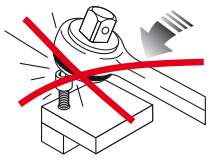
- Dust proof, maintenance free mechanism.
- 72 teeth mechanism for 5° increments.
- Drive direction switch allows easy reversal even with gloved or greasy hands.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse
- Ultra-compact head.
- Hook for hanging when working at height.
- Ergonomic comfort grip handle design resistant to workshop chemicals and solvents.

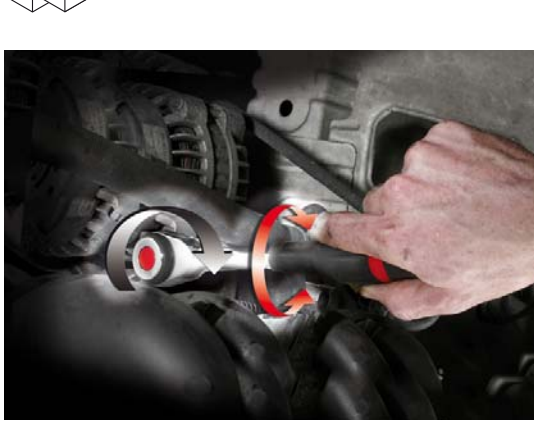
	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
JL.161	29	27	29	210	195	200

3/8" fast action twist handle ratchet









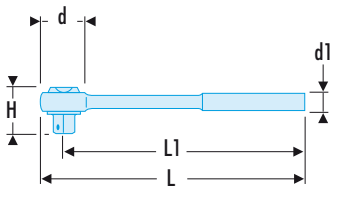
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

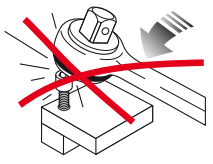
- 3/8" fast ratchet with rotating handle:
- Rotating handle jack: work twice as fast in confined spaces.
- 6° increments for final tightening.
- Socket safety locking = no sockets lost in your machines.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
J.360	37	37	39	233	233	442

3/8" palm control ratchet









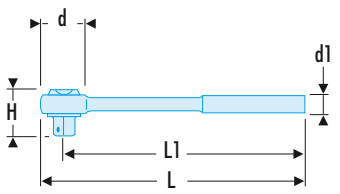
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

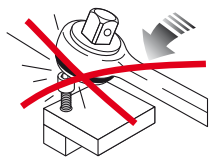
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
J.161	30	25	32	175	164	210

Standard 3/8" ratchet







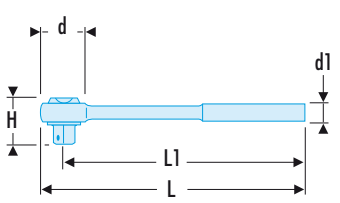
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

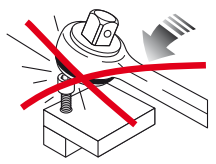
- 72 teeth mechanism for 5° increments.
- Reversing by rotating cap.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
J.151A	30	21	29	179	179	200

3/8" locking ratchet







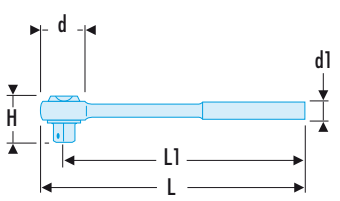
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

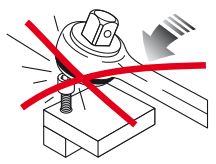
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Socket safety locking = no sockets lost in your machines.
- Long handle to reduce fatigue.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
J.171	32,5	28	36	210	195	260

3/8" long-reach locking ratchet







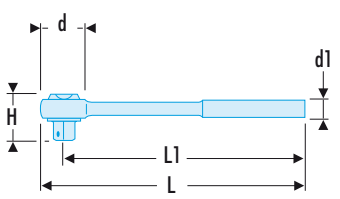
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

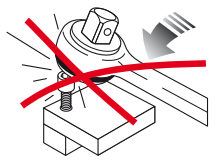
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Socket safety locking = no sockets lost in your machines.
- Long handle to reduce fatigue.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
J.174	32,5	28	36	250	234	320

3/8" long-reach hinged ratchet







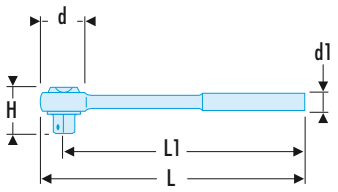
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

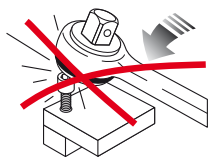
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Extra-long handle to apply more torque without effort.
- Stiffened joint to maintain the position even with an extension and the socket engaged.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
J.153A	30	25	32	278	263	315

3/8" hinged head ratchet with metal handle







NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Stiffened joint to maintain the position even with an extension and the socket engaged.
- Full metal handle with knurled grip.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⧋ [g]
J.158A	30	16	32	273	258	350

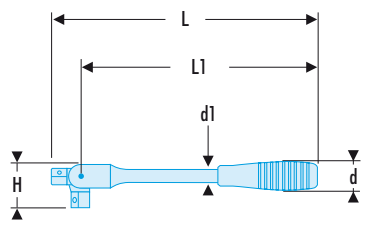
MAINTENANCE OF 3/8" RATCHETS

	J.171	J.161	J.151A	J.174	J.153A	J.161E	J.155A	J.157A	J.158A	J.159A	J.156
Caps											
J.161C		•			•	•	•	•	•	•	
S.156C											•
J.151AC			•								
Spare part kit											
J.161RN		•			•	•	•	•	•	•	
S.151RN											•
J.151RN			•								
Rotors											
J.151AR		•	•		•	•	•	•	•	•	
J.151R											•

Accessories 3/8"

3/8" hinged bar





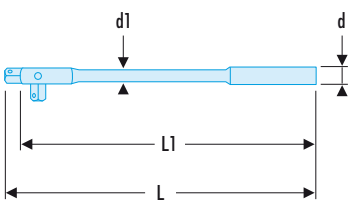
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Stiffened joint.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⧋ [g]
J.140A	25	10	33,5	260	235,5	230

3/8" drive metal-grip hinged handle





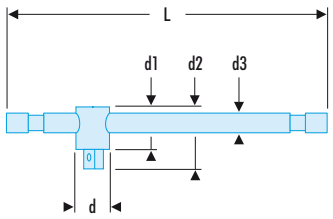
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Stiffened joint.
- Finish: bright chrome.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⧋ [g]
J.145	17	11	255	245	290

3/8" drive sliding tee





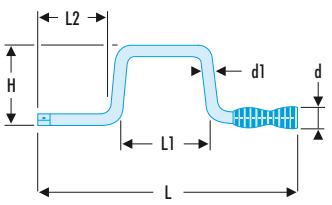
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Friction-head allows bar to form a T or L-handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	⏢ [g]
J.120A	20	23	34	12	200	215

3/8" drive speed brace





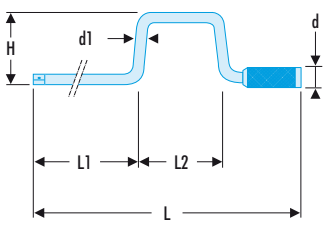
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- For fast rotation.
- PVC rotating handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⏢ [g]
J.110A	29	12	115	382	130	110	395

3/8" drive metal-grip speed brace





NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- For fast rotation.
- Metal rotating handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⏢ [g]
J.115	29	9,5	75	420	195	125	425

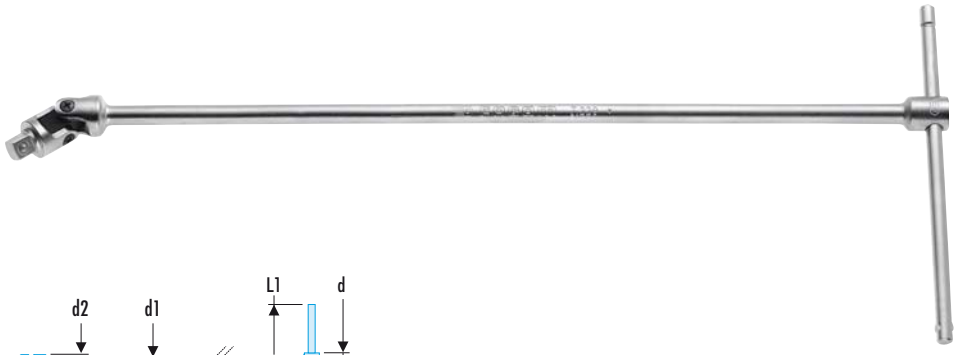
J.222A 3/8" drive flexible spinner

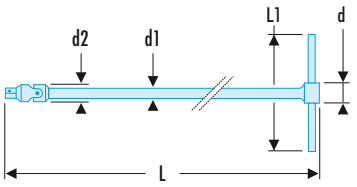


- Ergonomic bi-material grip.
- For fasteners where access is difficult.
- Length 295 mm.
- Finish: bright chrome.

Weight: 230 g.

3/8" drive tee with universal joint

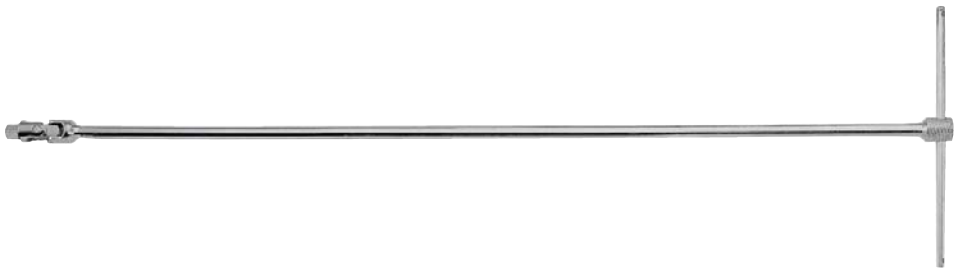


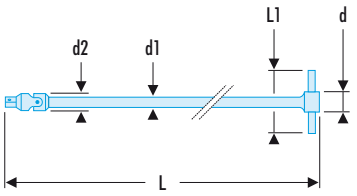


- Universal joint withstands high torques and is spring-steadied in position.
- Long reach and working angle up to 65° allows access to recessed fasteners.
- Sliding tee handle for a T or L position for more power.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	⚖ [g]
J.229A	17	10	19	460	175	410

3/8" long-reach drive tee with universal joint



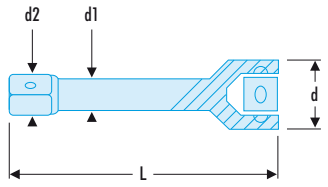


- Universal joint withstands high torques and is spring-steadied in position.
- Long reach and working angle up to 65° allows access to recessed fasteners.
- Sliding tee handle for a T or L position for more power.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	⚖ [g]
J.228	18	12	19	700	190	660

J - 3/8" drive extensions





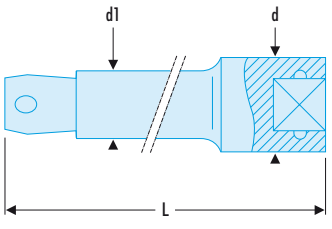
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

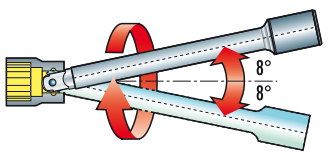
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	⚖ [g]
J.208	18	10	12,6	50	62
J.209	18	10	12,6	75	86
J.210	18	10	12,6	125	127
J.215	18	10	12,6	250	230
J.217	18	10	12,6	500	445

J.S - 3/8" drive wobble extensions





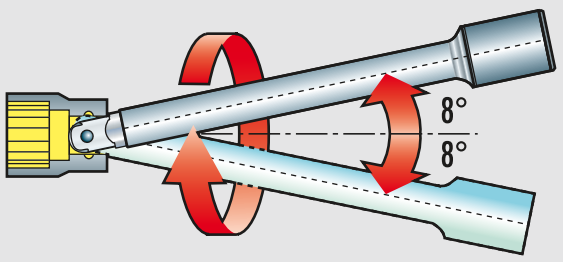


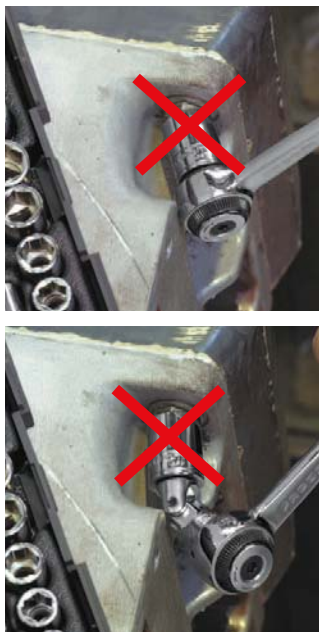
- Square drive profile gives 8° working angle.
- Useful where access is limited.
- Finish: bright chrome.

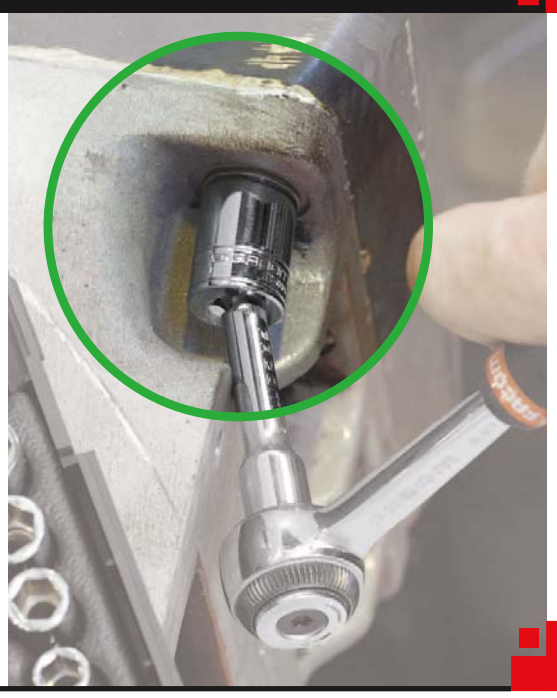
	d [mm]	d1 [mm]	L [mm]	⚖ [g]
J.209S	18	12,5	75	80
J.210S	18	12,5	125	130

WOBBLE EXTENSION

Hard to access with a socket or universal joint? USE A WOBBLE EXTENSION !

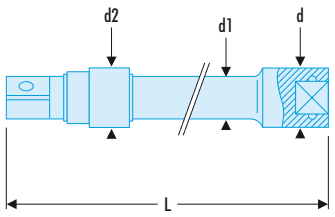


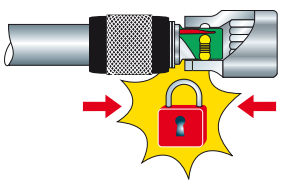




J.RC - 3/8" drive locking extensions







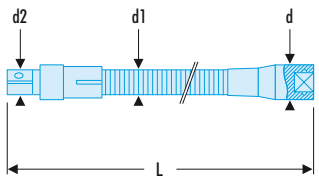
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Total safety as lock system prevents socket loss.
- Finish: bright chrome with phosphate-hardened ring.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
J.210RC	18	12,5	18	125	135
J.215RC	18	12,5	18	250	240
J.217RC	18	12,5	18	500	490

3/8" wobble extension





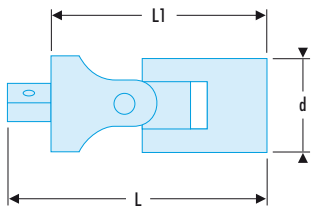
ASME B107.10

- Maximum access.
- Unsuitable for high torques.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [g]
J.216	18	12,6	15	200	145

3/8" universal joint





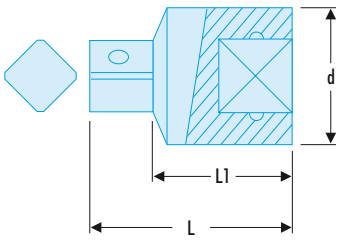
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Spring-stiffened joints.
- Finish: bright chrome.

	d [mm]	L [mm]	L1 [mm]	ΔΔ [g]
J.240A	18	51,5	36,5	60

3/8" to 1/4" coupler





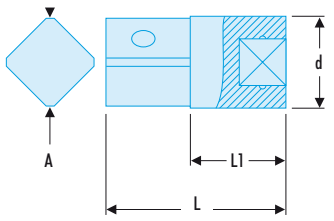
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- For adapting 1/4" drive sockets.
- Max. torque 62 N.m.
- Finish: bright chrome.

	d [mm]	L [mm]	L1 [mm]	⧋ [g]
J.230	17,5	24,5	17	25

3/8" to 1/2" coupler





NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- For adapting 1/2" drive sockets.
- Finish: bright chrome.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⧋ [g]
J.232	16,5	18	34,5	19	45

D.169 Set of 3 couplers



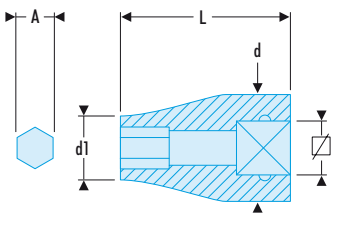


- Allows use of square drivers smaller than socket drive sizes:
  - 1/4" square drive + D.169RJ --> 3/8" socket.
  - 3/8" square drive + D.169JS --> 1/2" socket.
  - 1/2" square drive --> 3/4" socket.
- Compactness means that fewer tools are needed for in situ maintenance operations.
- Magnetic retainer and locking system (JS and SK).
- Knurl allows hand tightening where access is difficult.

Weight: 96 g.

J - 3/8" bit holder sockets with retaining clip





NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

- Spring clip for frequent bit changes.
- For frequent removals.
- Finish: bright chrome.
- J.235: 1/4 bits.
- J.236: 5/16 bits.

	A ["]	Square ["]	d [mm]	d1 [mm]	L [mm]	⧋ [g]
J.235	1/4	3/8	18,0	11,3	30	26
J.236	5/16	3/8	18,0	14	30	30

3/8" bit holder socket with locking ring



NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

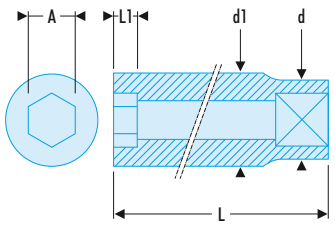
- Bit lock.
- Square drive has side-hole for ball or plunger lock.

	A ["]	Square ["]	L [mm]	⚖ [g]
EF.J	1/4	3/8	43	48

Sockets 3/8"

J.H - 3/8" metric 6-point sockets





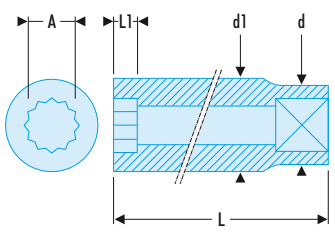
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Available as rack sets (Ref J.40U).
- Finish: bright chrome.

	A [mm]	⬢ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
J.7H	7	6	17,6	11,0	27	6,0	24
J.8H	8	6	17,6	12,2	27	6,5	25
J.9H	9	6	17,6	13,5	27	6,7	25
J.10H	10	6	17,6	14,7	27	7,8	26
J.11H	11	6	17,6	16,0	27	9,0	27
J.12H	12	6	17,6	17,2	27	9,5	26
J.13H	13	6	17,4	18,3	30	10,4	36
J.14H	14	6	17,6	19,5	30	10,5	34
J.15H	15	6	18,9	20,8	30	12,0	38
J.16H	16	6	19,9	22,0	30	12,0	45
J.17H	17	6	21,7	23,4	30	13,0	52
J.18H	18	6	21,7	24,7	33	13,0	69
J.19H	19	6	22,7	26,0	33	14,0	62
J.20H	20	6	22,2	27,2	33	15,0	70
J.21H	21	6	23,5	28,5	33	16,0	75
J.22H	22	6	24,7	29,7	33	16,5	80
J.23H	23	6	26,0	31,0	33	16,5	90
J.24H	24	6	26,3	31,3	33	16,5	86

J - 3/8" metric 12-point sockets





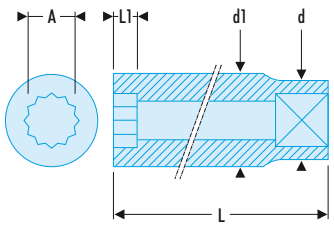
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

	A [mm]	⬢ [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
J.7	7	12	17,6	11,0	27	6,0	24
J.8	8	12	17,6	12,2	27	6,5	25
J.9	9	12	17,6	13,5	27	6,7	25
J.10	10	12	17,6	14,7	27	7,8	26
J.11	11	12	17,6	16,0	27	9,0	27
J.12	12	12	17,6	17,2	27	9,5	26
J.13	13	12	17,5	18,3	30	10,4	36
J.14	14	12	17,7	19,5	30	10,5	34
J.15	15	12	19,0	20,8	30	12,0	38
J.16	16	12	20,0	22,0	30	12,0	45
J.17	17	12	21,7	23,4	30	13,0	52
J.18	18	12	21,7	24,7	33	13,0	69
J.19	19	12	22,7	26,0	33	14,0	62
J.20	20	12	22,2	27,2	33	15,0	70
J.21	21	12	23,5	28,5	33	16,0	75
J.22	22	12	24,7	29,7	33	16,5	80
J.23	23	12	26,0	31,0	33	16,5	90
J.24	24	12	26,3	31,3	33	16,5	86

J - 3/8" inch 12-point sockets





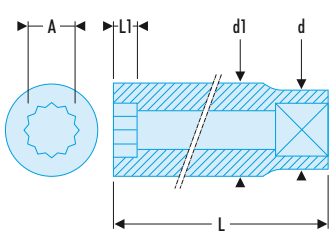
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Available as rack sets (Ref J.40U).
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
J.1/4	1/4	12	17,5	10,0	27	6,0	24
J.5/16	5/16	12	17,5	11,9	27	6,5	25
J.3/8	3/8	12	17,6	14,1	27	7,5	26
J.7/16	7/16	12	17,5	16,0	27	9,0	27
J.1/2	1/2	12	17,5	18,1	30	10,4	36
J.9/16	9/16	12	17,7	19,5	30	10,5	34
J.5/8	5/8	12	20,0	22,0	30	12,0	46
J.11/16	11/16	12	21,0	24,0	33	13,0	74
J.3/4	3/4	12	22,7	26,0	33	14,0	76
J.13/16	13/16	12	23,0	28,0	33	16,0	79
J.7/8	7/8	12	24,7	29,7	33	16,5	104
J.15/16	15/16	12	26,3	31,3	33	16,5	136
J.1'	1	12	28,3	33,3	33	16,5	156

JB - 3/8" inch 12-point sockets





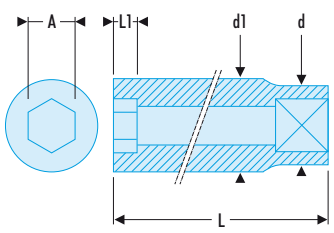
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Built to aeronautical specifications.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
JB.1/4	1/4	12	16,7	9,7	27	6,0	20
JB.5/16	5/16	12	16,7	11,7	27	6,8	21
JB.11/32	11/32	12	16,7	12,7	27	6,8	22
JB.3/8	3/8	12	16,7	13,7	27	7,5	23
JB.7/16	7/16	12	16,7	15,6	27	9,0	24
JB.1/2	1/2	12	16,7	17,6	30	10,4	27
JB.9/16	9/16	12	18,5	19,6	30	10,5	33
JB.5/8	5/8	12	20,0	21,6	30	12,0	42
JB.11/16	11/16	12	22,0	23,6	32	13,0	50
JB.3/4	3/4	12	22,8	25,4	32	15,0	55
JB.13/16	13/16	12	24,0	27,4	32	16,0	68
JB.7/8	7/8	12	24,0	29,4	32	16,0	68

J.HLA - 3/8" long-reach metric 6-point sockets





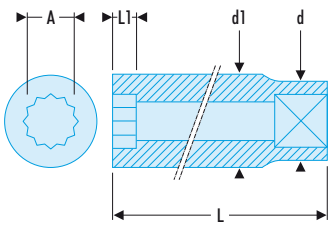
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Available as rack set Ref JL.40E (7 --> 15 mm) and Ref RL.41E (16 --> 24 mm).
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
J.7HLA	7	6	17,3	10,6	55	6,0	44
J.8HLA	8	6	17,3	12,0	55	7,5	46
J.9HLA	9	6	17,3	13,0	55	7,5	47
J.10HLA	10	6	17,3	14,5	55	9,0	50
J.11HLA	11	6	17,3	16,0	55	10,5	53
J.12HLA	12	6	17,2	16,8	55	12,0	53
J.13HLA	13	6	17,0	18,0	55	12,0	54
J.14HLA	14	6	18,0	20,0	55	15,0	60
J.15HLA	15	6	20,0	21,0	60	15,0	75
J.16HLA	16	6	20,0	22,0	60	15,0	85
J.17HLA	17	6	22,0	23,5	60	15,0	102
J.18HLA	18	6	23,0	24,5	60	18,0	109
J.19HLA	19	6	24,0	25,0	60	18,0	110
J.21HLA	21	6	26,0	27,0	60	18,0	123
J.22HLA	22	6	28,0	29,0	60	21,0	150
J.24HLA	24	6	30,0	31,0	60	24,0	176

J.LA - 3/8" long-reach metric 12-point sockets





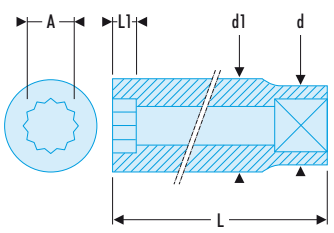
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Available as rack sets (Ref JL.40U).
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
J.7LA	7	12	17,3	10,6	55	6,0	44
J.8LA	8	12	17,3	12,0	55	7,5	46
J.9LA	9	12	17,3	13,0	55	7,5	47
J.10LA	10	12	17,3	14,5	55	9,0	50
J.11LA	11	12	17,3	16,0	55	10,5	53
J.12LA	12	12	17,3	16,8	55	12,0	53
J.13LA	13	12	17,2	18,0	55	12,0	54
J.14LA	14	12	17	20,0	55	15,0	60
J.15LA	15	12	18	21,0	55	15,0	75
J.16LA	16	12	20	22,0	60	15,0	85
J.17LA	17	12	20	23,5	60	15,0	102
J.18LA	18	12	22	24,5	60	18,0	109
J.19LA	19	12	23	25,0	60	18,0	110
J.21LA	21	12	24	27,0	60	18,0	123
J.22LA	22	12	26	29,0	60	21,0	150
J.24LA	24	12	30	31,0	60	21,0	176

J.LA - 3/8" inch 12-point sockets





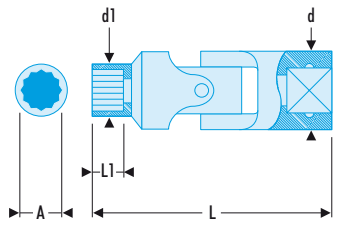
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
J.1/4LA	1/4	12	17,5	10,6	44,7	4,0	36
J.5/16LA	5/16	12	17,5	12,4	44,7	4,3	36
J.3/8LA	3/8	12	17,5	14,3	44,7	4,7	41
J.7/16LA	7/16	12	17,5	16,2	44,7	6,2	45
J.1/2LA	1/2	12	18,2	18,2	44,7	7,4	50
J.9/16LA	9/16	12	20,5	20,5	48,0	9,0	72
J.5/8LA	5/8	12	22,3	22,3	63,8	10,2	104
J.11/16LA	11/16	12	23,8	23,8	63,8	10,2	113
J.3/4LA	3/4	12	25,3	25,3	63,8	11,8	127
J.13/16LA	13/16	12	27,0	27,0	63,8	12,3	140
J.7/8LA	7/8	12	30,2	30,2	63,8	12,7	181
J.15/16LA	15/16	12	31,8	31,8	63,8	12,7	185
J.1'LA	1	12	33,4	33,4	63,8	12,7	185

J.F - 3/8" drive hinged inch 12-point sockets





ASME B107.1

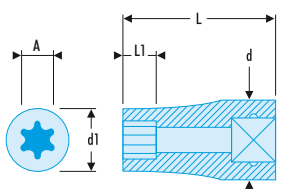
- OGV® profile: more powerful tightening, preserves fasteners.
- Compact solution used instead of universal joint.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
J.3/8F	3/8	12	19	14,0	47,5	8,3	55
J.7/16F	7/16	12	19	15,8	49,0	9,8	55
J.1/2F	1/2	12	19	18,3	50,5	11,3	60
J.9/16F	9/16	12	19	19,5	50,5	11,3	60
J.5/8F	5/8	12	19	22,00	53,5	12,8	70
J.11/16F	11/16	12	19	24,00	54,5	13,8	72
J.3/4F	3/4	12	19	25,8	56,5	15,8	80

Torx® sockets 3/8"

JTX - 3/8" Torx® sockets





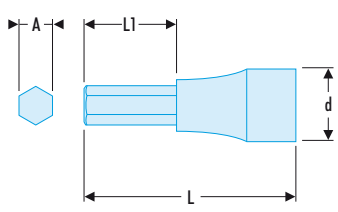
- For Torx® fasteners.
- Available as metal rack set (Ref JTX.40).
- Finish: bright chrome.

	A [mm]	Torx [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
JTX.8	7,29	E8	17,3	9,9	26	5,6	40
JTX.10	9,19	E10	17,3	11,8	26	6,4	40
JTX.12	10,95	E12	17,3	14,5	26	8,0	40
JTX.14	12,67	E14	17,3	15,7	26	8,8	50
JTX.16	14,70	E16	17,3	18,0	26	9,6	100

Screwdriver sockets 3/8"

JT - 3/8" drive metric bit sockets



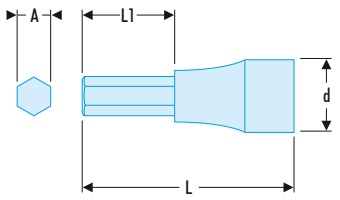


- Removable bits.
- J.235 socket.
- Finish: bright chrome with phosphate-hardened tip.
- Available as rack set Ref JT.40.

	A [mm]	d [mm]	Bits	L [mm]	L1 [mm]	[g]
JT.3	3	18	EH.103	45,0	15,0	31
JT.4	4	18	EH.104	45,0	15,0	31
JT.5	5	18	EH.105	45,0	15,0	32
JT.6	6	18	EH.106	45,0	15,0	33
JT.7	7	18	EH.107	45,0	15,0	34
JT.8	8	18	EH.208	47,5	17,5	43
JT.10	10	18	EH.210	47,5	17,5	50

JT - 3/8" drive inch bit sockets



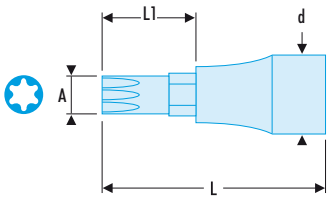


- Removable bits.
- J.235 sockets.
- Finish: bright chrome with phosphate-hardened tip.
- Available as metal rack set (Ref JT.40).

	A ["]	d [mm]	Bits	L [mm]	L1 [mm]	ΔΔ [g]
JT.1/8	3,17	18	EH.101/8	45	15,0	31
JT.5/32	3,96	18	EH.105/32	45	15,0	31
JT.3/16	4,76	18	EH.103/16	45	15,0	31
JT.7/32	5,56	18	EH.107/32	45	15,0	32
JT.1/4	6,35	18	EH.101/4	45	15,0	33
JT.5/16	7,94	18	EH.205/16	47,5	17,5	43
JT.3/8	9,53	18	EH.203/8	47,5	17,5	50

JX - 3/8" Torx® drive sockets



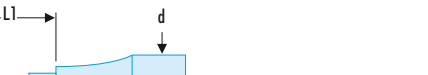


- Removable bits.
- J.236 socket.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	Torx [No]	Bits	L [mm]	L1 [mm]	ΔΔ [g]
JX.10	2,72	T10	EX.110	46,0	16,0	33,50
JX.15	3,26	T15	EX.115	46,0	16,0	33,50
JX.20	3,84	T20	EX.120	46,0	16,0	33,50
JX.25	4,40	T25	EX.125	46,0	16,0	33,50
JX.27	4,96	T27	EX.127	46,0	16,0	33,50
JX.30	5,49	T30	EX.130	46,0	16,0	33,50
JX.40	6,60	T40	EX.140	52,5	22,5	45,00
JX.45	7,77	T45	EX.145	52,5	22,5	45,00
JX.50	8,79	T50	EX.150	52,5	22,5	47,50
JX.55	11,17	T55	EX.155	52,5	22,5	61,00

CREATE YOUR OWN BIT SOCKETS

Screw bits





- Series 1 ⬡ 1/4"
- Series 2 ⬡ 5/16"

See Section 7

Bit holder ⊠ 3/8"



J.235
⬡ 1/4"
6.35 mm



J.236
⬡ 5/16"
7.94 mm

See p. 270



1/2" "DETECTION BOX" SETS
METRIC DIMENSIONS

		SL.DBOX1	SL.DBOX112	SL.DBOX4	SL.DBOX412
		SL.161	SL.161	SL.161	SL.161
		6	12	6	6
Socket type		Standard	Standard	Standard	Standard
mm	8	•	•	•	•
	9			•	•
	10	•	•	•	•
	11	•	•	•	•
	12	•	•	•	•
	13	•	•	•	•
	14	•	•	•	•
	15	•	•	•	•
	16	•	•	•	•
	17	•	•	•	•
	18	•	•	•	•
	19	•	•	•	•
	21	•	•	•	•
	22	•	•	•	•
	23			•	•
	24	•	•	•	•
	27	•	•	•	•
	30	•	•	•	•
	32	•	•	•	•
	S.210S			•	•
	S.120A			•	•
	S.240A	•	•		
	S.215	•	•		
	S.210	•	•		
		BV.S1NANO		BV.S2NANO	
		340 x 180 x 58 mm			
		3,680 Kg		3,750 Kg	

SL.DBOX1



SL.DBOX112



SL.DBOX4



SL.DBOX412





1/2" "DETECTION BOX" SETS
METRIC DIMENSIONS

		S.360DBOX1	S.360DBOX112	S.360DBOX4	S.360DBOX412	S.DBOX500	S.DBOX501
		S.360	S.360	S.360	S.360	S.171	S.171
		6	12	6	12	6	12
Socket type		Standard	Standard	Standard	Standard	Standard	Standard
mm	8	•	•	•	•	•	•
	9			•	•		
	10	•	•	•	•	•	•
	11	•	•	•	•	•	•
	12	•	•	•	•	•	•
	13	•	•	•	•	•	•
	14	•	•	•	•	•	•
	15	•	•	•	•	•	•
	16	•	•	•	•	•	•
	17	•	•	•	•	•	•
	18	•	•	•	•	•	•
	19	•	•	•	•	•	•
	21	•	•	•	•	•	•
	22	•	•	•	•	•	•
	23			•	•		
	24	•	•	•	•	•	•
	27	•	•	•	•	•	•
	30	•	•	•	•	•	•
	32	•	•	•	•	•	•
	S.210S			•	•		
	S.120A			•	•		
	S.240A	•	•			•	•
	S.215A	•	•				
	S.215RC					•	•
	S.210	•	•				
	S.210RC					•	•
		BV.S1NANO		BV.S2NANO		BV.S1NANO	
		340 x 480 x 58 mm				340 x 480 x 58 mm	
		3,890 Kg				3,740 Kg	

S.360DBOX1



S.360DBOX112



S.360DBOX4



S.360DBOX412



S.DBOX500



S.DBOX501



1/2" "STANDARD" SETS
METRIC DIMENSIONS

		S.420B	S.423AP	S.422AP	S.200DP	S.600
		S.151	S.161	S.161	S.161	S.161
		12	6	12	6	6
Socket type		Standard	Standard	Standard	Standard	Standard
mm	8		•	•		•
	9		•	•		
	10	•	•	•	•	•
	11	•	•	•	•	•
	12	•	•	•	•	•
	13	•	•	•	•	•
	14	•	•	•	•	•
	15	•	•	•	•	
	16	•	•	•	•	•
	17	•	•	•	•	•
	18	•	•	•	•	•
	19	•	•	•	•	•
	20					
	21	•	•	•	•	•
	22	•	•	•	•	•
	23		•	•	•	•
	24	•	•	•	•	•
	26					
	27				•	•
	28					
	29					
	30				•	•
	32				•	•
	34					
	S.210		•	•	•	
	S.215	•	•	•	•	•
	S.240A		•	•	•	•
	S.120A					
	S.110					
	S.210RC					
	S.215RC					
		PL.423	PL.422	PL.422	PL.618	PL.619
		BP.112				
		389 x 164 x 66 mm				
		2,33 Kg	2,92 Kg		3,45 Kg	

S.420B



S.423AP
S.422AP



S.200DP



S.600



1/2" "STANDARD" SETS
METRIC DIMENSIONS

Socket type		S.429EP	S.428EP	S.431ADP	S.430ADP	S.441AP	S.440AP
		S.161	S.161	S.161	S.161	S.161	S.161
		6 Standard	12 Standard	6 Standard	12 Standard	6 Standard	6 Standard
mm	8					•	•
	9					•	•
	10	•	•	•	•	•	•
	11	•	•	•	•	•	•
	12	•	•	•	•	•	•
	13	•	•	•	•	•	•
	14	•	•	•	•	•	•
	15	•	•	•	•	•	•
	16			•	•	•	•
	17	•	•	•	•	•	•
	18			•	•	•	•
	19	•	•	•	•	•	•
	20			•			
	21		•	•	•	•	•
	22	•	•	•	•	•	•
	23			•	•	•	•
	24	•	•	•	•	•	•
	26			•		•	•
	27	•	•	•	•	•	•
	28			•		•	•
	29			•		•	•
	30	•	•	•	•	•	•
	32	•	•	•	•	•	•
	34					•	•
S.210		•	•	•	•	•	•
S.215		•	•	•	•	•	•
S.240A		•	•	•	•	•	•
S.120A		•	•	•	•	•	•
S.110						•	•
		PL.10A		PL.701		PL.619	
		BP.109					
		478 x 234 x 72 mm					
		4,03 Kg		4,88 Kg		5,95 Kg	

S.429EP
S.428EP ▼



S.431ADP
S.430ADP ▼



S.441AP
S.440AP ▼



1/2" "STANDARD" SETS
METRIC DIMENSIONS

			S.441E	S.440E	S.800	S.900	S.447DP	S.446DP
			S.151	S.151	S.161	S.161	S.161	S.161
			6	12	6	6	6	12
		Socket type	Standard	Standard	Standard	Standard	Standard	Standard
	mm	8	•	•	•	•		
		9	•	•				
		10	•	•	•	•	•	•
		11	•	•	•	•	•	•
		12	•	•	•	•	•	•
		13	•	•	•	•	•	•
		14	•	•	•	•	•	•
		15	•	•	•	•	•	•
		16	•	•	•	•	•	•
		17	•	•	•	•	•	•
		18	•	•	•	•	•	•
		19	•	•	•	•	•	•
		20			•	•	•	•
		21	•	•	•	•	•	•
		22	•	•	•	•	•	•
		23	•	•	•	•	•	•
		24	•	•	•	•	•	•
		26	•	•			•	•
		27	•	•	•	•	•	•
		28	•	•			•	•
		29	•	•				
		30	•	•	•	•	•	•
		32	•	•	•	•	•	•
		34	•	•	•			
	EP	1			•	•		
		2			•	•		
		3			•	•		
	EH	3						
		4			•	•		
		5			•	•		
	mm	6			•	•	•	•
		7						
		8			•	•	•	•
		10			•	•	•	•
	ED	1			•			
		2			•			
		3			•			
	ES	4,5						
		6,5			•	•		
		8			•	•		
		10			•	•		
	EHL	4			•	•		
		5			•	•		
		6			•	•		
		7			•	•		
		8			•	•		
		10			•	•		
	EX	20			•	•		
		25			•	•		
		27			•	•		
		30			•	•		
		40			•	•		
		45			•	•		
		50				•		
	EXL	30				•		
		40				•		
		45				•		
		50				•		
	ENH	12					•	•
		24					•	•
		S.206			•			
		S.208				•		
		S.210	•	•		•	•	•
		S.210S						
		S.215	•	•	•		•	•
		S.240A	•	•	•	•	•	•
		S.120A	•	•			•	•
		S.110	•	•				
		S.236			•	•	•	•
		S.237					•	•
			PL.708		PL.706	PL.705	PL.291A	
			BP.109					
			478 x 234 x 72 mm					
			5,95 Kg		4,70 Kg	7,30 Kg	5,00 Kg	

S.441E
S.440E



S.800



S.900



S.447DP
S.446DP



1/2" "STANDARD" SETS
METRIC DIMENSIONS

		S.442EP	SM.440EP	SM.441EP	S.450EP	
		S.161	SL.161	SL.161	S.161	
Socket type		12 6 Standard	12 Standard	6 Standard	12 Standard	12 long
mm	7					
	8	•	•	•	•	
	9	•	•	•	•	
	10	•	•	•	•	
	11	•	•	•	•	
	12	•	•	•	•	•
	13	•	•	•	•	•
	14	•	•	•	•	•
	15	•	•	•	•	•
	16	•	•	•	•	•
	17	•	•	•	•	•
	18	•	•	•	•	•
	19	•	•	•	•	•
	21	•	•	•	•	•
	22	•	•	•	•	•
	23	•	•	•	•	•
	24	•	•	•	•	•
	26	•	•	•	•	•
	27	•	•	•	•	•
	28	•	•	•	•	•
	29	•	•	•	•	•
	30	•	•	•	•	•
	32	•	•	•	•	•
	34	•	•	•		
EP	3				•	
	4				•	
ENS	314				•	
	316				•	
	S.210	•	•	•	•	
	S.215	•	•	•	•	
	S.240A	•	•	•	•	
	S.120A	•	•	•	•	
	S.110	•	•	•	•	
	S.236				•	
	S.237				•	
	S.234				•	
	S.141A				•	
		P.21	PL.708		PLT.11, PL.23, PL.24A	
		BT.6A	BP.109		BP.108	
		468 x 190 x 160 mm	478 x 234 x 72 mm		452 x 284 x 111 mm	
		7,68 Kg	6,05 Kg		14,86 Kg	

S.442EP



SM.440EP
SM.441EP



S.450EP



1/2" "STANDARD" SETS
INCH DIMENSIONS

		S.420AU	S.441AUP	S.440AUP	SL.441AUP	SL.440AUP	S.450UP	
		S.151	S.161	S.161	SL.161	SL.161	S.161+S.156	
	Socket type	Standard	Standard	Standard	Standard	Standard	Standard	long
"	3/8	•	•	•	•		•	
	7/16	•	•	•	•	•	•	
	1/2	•	•	•	•	•	•	•
	9/16	•	•	•	•	•	•	•
	19/32		•	•	•	•	•	
	5/8	•	•	•	•	•	•	•
	21/32		•	•	•	•	•	
	11/16	•	•	•	•	•	•	•
	3/4	•	•	•	•	•	•	•
	25/32		•	•	•	•	•	
	13/16	•	•	•	•	•	•	•
	7/8	•	•	•	•	•	•	•
	15/16		•	•	•	•	•	•
	31/32		•	•	•	•	•	
	1'		•	•	•	•	•	•
	1'1/16		•	•	•	•	•	•
	1'1/8		•	•	•	•	•	•
	1'1/4		•	•	•	•	•	•
EP	3						•	
	4						•	
ENS	314						•	
	316						•	
	S.210		•	•	•	•	•	
	S.215	•	•	•	•	•	•	
	S.240A		•	•	•	•	•	
	S.120A	•	•	•	•	•	•	
	S.110		•	•	•	•	•	
	S.236						•	
	S.237						•	
	S.234						•	
	S.141A						•	
		PL.415	PL.702		PL.702		PLT.11, PL.23, PL.24A	
		BP.112	BP.109		BP.109		BT.108	
		389x164x66 mm	478x234x72 mm		478x234x72 mm		452x284x111 mm	
		2,43 Kg	5,18 Kg		5,13 Kg		13,03 Kg	

S.420AU



S.441AUP
S.440AUP



SL.441AUP
SL.440AUP



S.450UP



1/2" SOCKETS SETS
STANDARD SETS

		S.401A	S.400A	S.405E	S.404E	STM.J9	AMEX.3
12 6 TORX®		6	12	6	12	-	-
Socket type		Standard	Standard	Long	Long	Hexagonal screwdriver socket	TORX®
	8	•	•				
	9	•	•				
	10	•	•				
	11	•	•				
	12	•	•	•	•		
	13	•	•	•	•		
	14	•	•	•	•		
	15	•	•	•	•		
	16	•	•	•	•		
	17	•	•	•	•		
	18	•	•	•	•		
	19	•	•	•	•		
	21	•	•	•	•		
	22	•	•	•	•		
	23	•	•	•	•		
	24	•	•	•	•		
	26	•	•	•	•		
	27	•	•	•	•		
	28	•	•				
	29	•	•				
	30	•	•	•	•		
	32	•	•	•	•		
STM	STM.5					•	
	STM.6					•	
	STM.7					•	
	STM.8					•	
	STM.10					•	
	STM12					•	
	STM.14					•	
	STM.17					•	
	STM.19					•	
SXM	SXM.20						•
1/2"	SXM.25						•
	SXM.27						•
	SXM.30						•
	SXM.40						•
	SXM.45						•
	SXM.50						•
	SXM.55						•
	SXM.60						•
		PL.413		PL.52B		PL.458	PL.455
		BP.112		BP.109		BP.102	
		389 x 164 x 66 mm		478 x 234 x 72 mm		204 x 122 x 52 mm	
		2,69 Kg		4,65 Kg		0,865 Kg	

S.401A
S.400A



S.405E
S.404E



STM.J9



AMEX.3



1/2" SOCKETS SETS
IN METALLIC RACK

		S.40E	S.41E	S.40U	S.41U	STX.40	RSX.J6
Socket type		Standard	Standard	Standard	Standard	Standard	Standard 1/4" + 1/2"
mm	7						
	8	•					
	9	•					
	10	•					
	11	•					
	12	•					
	13	•					
	14	•					
	15	•					
	16	•					
	17		•				
	18		•				
	19		•				
	21		•				
	22		•				
	23		•				
	24		•				
"	3/8			•			
	7/16			•			
	1/2			•			
	9/16			•			
	19/32			•			
	5/8			•			
	21/32			•			
	11/16				•		
	3/4				•		
	13/16				•		
	7/8				•		
	15/16				•		
	1"				•		
TORX®	E.6						•
	E.8						•
	E.10						•
	E.12					•	•
	E.14					•	•
	E.16					•	•
	E.18					•	
	E.20					•	
		CKS.95	CKS.95	CKS.97	CKS.95	CKS.90	CKS.98
		0,570 Kg	0,69 Kg	0,465 Kg	0,350 Kg	0,320 Kg	0,205 Kg

S.40E
S.41E
S.40U
S.41U



STX.40



RSX.J6



1/2" SOCKETS SETS
IN METALLIC RACK

		ST.40	ST.41	SX.41	SV.40A	SV.41A	SV.J8A	SV.LJ6A
Screwdriver socket								
STM	STM.6	•						
	STM.8	•						
	STM.10	•						
	STM.12	•						
	STM.14	•						
	STM.17	•						
	STM.19	•						
SXM	SXM.20			•				
	SXM.25			•				
	SXM.27			•				
	SXM.30			•				
	SXM.40			•				
	SXM.45			•				
	SXM.50			•				
	SXM.55			•				
SHPLA: long screwdriver socket for countersunk hex head screws	SHPLA.6		•					
	SHPLA.7		•					
	SHPLA.8		•					
	SHPLA.10		•					
	SHPLA.12		•					
SVLB: long screwdriver socket with multiple XZN teeth	SV.6LB						•	•
	SV.8LB					•	•	•
	SV.10LB					•	•	•
	SV.12LB					•	•	•
SVB: long screwdriver socket with multiple XZN teeth	SV.6B				•		•	
	SV.8B				•		•	
	SV.10B				•		•	
	SV.12B				•		•	
Extra-long screwdriver socket with multiple XCN teeth	SV.10ELB							•
	SV.12ELB							•
		CKS.97	CKS.90	CKS.95	CKS.90		PL.247	PL.258
							220x136x28 mm	170x170x34 mm
		0,830 Kg	0,61 Kg	0,64 Kg	0,34 Kg	0,44 Kg	0,805 Kg	0,80 Kg

ST.40



ST.41



SX.41



SV.40A
SV.41A



SV.J8A



SV.LJ6A



1/2" MODULES IN THERMOFORMED TRAYS
METRIC-INCH

		MOD.SL1	MOD.S1	MOD.S2	MOD.HLA	
1/4" 6.35 mm		SL.161	S.161	S.161		
		6	6	12	6	
		Standard	Standard	Standard	Long	Long
"	3/8			•		
	7/16			•		
	1/2			•		
	9/16			•		
	19/32			•		
	5/8			•		
	21/32			•		
	11/16			•		
	3/4			•		
	25/32					
	13/16			•		
	7/8			•		
	15/16					
	31/32					
	1					
	1"1/16					
	1"1/8					
	1"1/4					
mm	7					•
	8					•
	9					•
	S.10H	•	•			•
	S.11H	•	•		1/2	•
	S.12H	•	•		•	3/8
	S.13H	•	•		•	
	S.14H	•	•		•	
	S.15H	•	•		•	
	S.16H	•	•		•	
	S.17H	•	•		•	
	S.18H	•	•		•	
	S.19H	•	•		•	
	S.21H	•	•			
	S.22H	•	•			
	S.23H	•	•			
	S.24H	•	•			
	S.27H	•	•			
	S.30H	•	•			
	S.32H	•	•			
	S.210	•	•	•		
	S.215	•	•	•		
	S.240A	•	•	•		
	S.120A					
	S.236					
	S.232B	•				
	S.230	•				
		PL.687	PL.323	PL.604	PL.609	
		435x198x55 mm	420x180x55 mm	420x180x55 mm	420x180x55 mm	
		3,36 Kg	3,32 Kg	2,95 Kg	1,62 Kg	

MOD.SL1



MOD.S1



MOD.S2



MOD.HLA



1/2" MODULES IN THERMOFORMED TRAYS

			MOD.TX1		MOD.CH	MOD.SHP
12 6 other			TORX® JTX	TORX® STX	TORX® + XZN screwdriver socket	TORX® + XZN screwdriver socket
			Standard	Standard	Standard + Long	Long
		D.34B7L			•	
		D.34B9L			•	
		D.34B10L			•	
		D.34B12L			•	
		D.34B14L			•	
		D.34B16L			•	
	JTX 3/8"	JTX.8	•		•	
		JTX.10	•		•	
		JTX.12	•			
		JTX.14	•			
		JTX.16	•			
SHP: countersunk hex long screwdriver		SHP.5LA				•
		SHP.6LA			•	•
		SHP.7LA				•
		SHP.8LA			•	•
		SHP.10LA			•	
		SHP.12LA			•	
	STX	STX.12			•	
		STX.14			•	
		STX.16			•	
		STX.18	•		•	
		STX.20	•		•	
SVB: long screwdriver socketwith multiple teeth		SV.6LB			•	•
		SV.8LB			•	•
		SV.10ELB			•	•
		SV.12ELB			•	•
		SV.14ELB			•	•
SX: screwdriver socket for TORX®		SX.40LA				•
		SX.45LA				•
		SX.55LA			•	•
		SX.70LA			•	•
	EXR	10	•			
		15	•			
		20	•			
		25	•			
		30	•			
		40	•			
	EX	40	•			
		45	•			
		50	•			
		55	•			
59TX : TORX®		6x8	•			
		10x12	•			
		14x18	•			
		20x27	•			
		R.235	•			
		S.236	•			
		J.235	•			
			PL.360		PL.663	PL.336
			420 x 180 x 55 mm			
			0,99 Kg			

MOD.TX1



MOD.CH



MOD.SHP



1/2" MODULES IN BI-COLOUR FOAM TRAYS

		MODM.SL1	MODM.S1A	MODM.HLA
		SL.161	S.161	-
		6	6	6
Type		Std	Std	Long
mm	8	•	•	3/8"+1/2"
	9			
	10	•	•	
	11	•	•	
	12	•	•	
	13	•	•	
	14	•	•	
	15	•	•	
	16	•	•	
	17	•	•	
	18	•	•	
	19	•	•	
	20			
	21	•	•	
	22	•	•	
	23	•	•	
	24	•	•	
	27	•	•	
	28			
	29			
	30	•	•	
	32	•	•	
	34			
Long-reach sockets 1/2"	S.12HLA			•
	S.13HLA			•
	S.14HLA			•
	S.15HLA			•
	S.16HLA			•
	S.17HLA			•
	S.18HLA			•
	S.19HLA			•
Long-reach sockets 3/8"	J.7HLA			•
	J.8HLA			•
	J.9HLA			•
	J.10HLA			•
	J.11HLA			•
	S.210	•	•	
	S.215	•	•	
	S.240A	•	•	
	S.120A	•	•	
		PM.S1A	PM.S1A	PM.MODHLA
		420 x 190 x 55 mm		
		3,40 Kg	3,45 Kg	

MODM.SL1



MODM.S1A



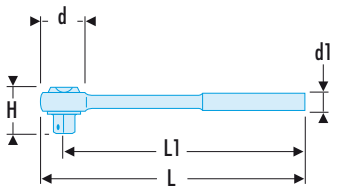
MODM.HLA

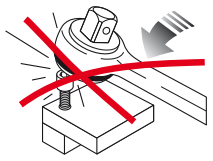


Ratchets 1/2"

1/2" maintenance free pear head ratchet









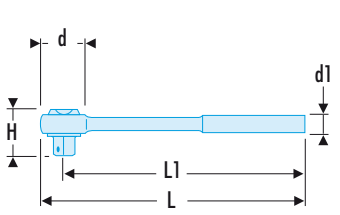
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

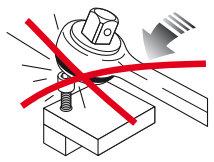
- Dust proof, maintenance free mechanism.
- 72 teeth mechanism for 5° increments.
- Drive direction switch allows easy reversal even with gloved or greasy hands.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse
- Ultra-compact head.
- Hook for hanging when working at height.
- Ergonomic comfort grip handle design resistant to workshop chemicals and solvents.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⍙ [g]
SL.161	37	32	37	262	245	446

1/2" fast action twist handle ratchet







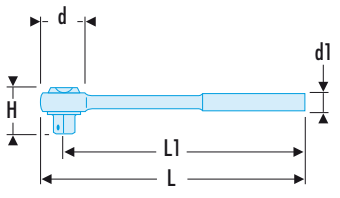
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

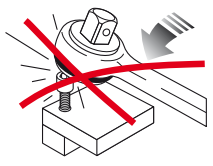
- Rotating handle jack: work twice as fast in confined spaces.
- 6° increments for final tightening.
- Socket safety locking = no sockets lost in your machines.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.

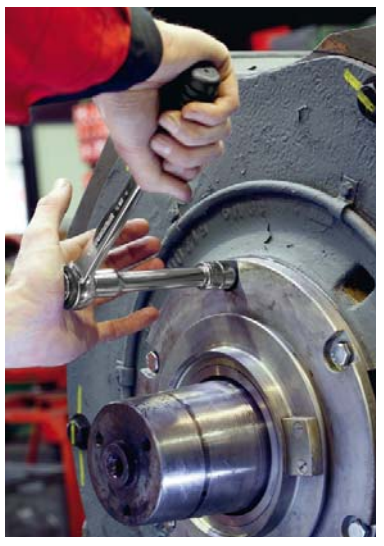
	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⍙ [g]
S.360	45	37	41	251	251	570

1/2" palm control ratchet









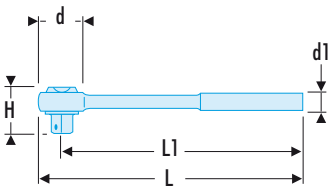
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

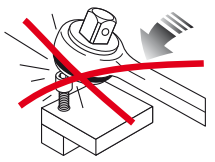
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⍙ [g]
S.161	39	31	43	250	234	500

Standard 1/2" ratchet







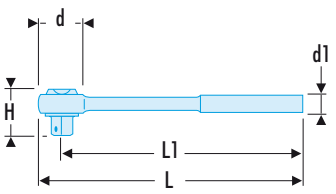
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

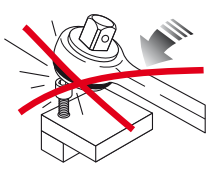
- 72 teeth mechanism for 5° increments.
- Reversing by rotating cap.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
S.151	39	30	40	250	255	480

1/2" locking ratchet









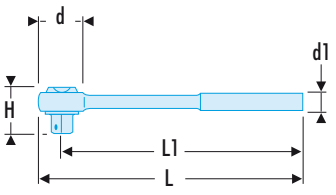
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

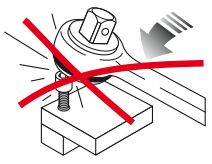
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Socket safety locking = no sockets lost in your machines.

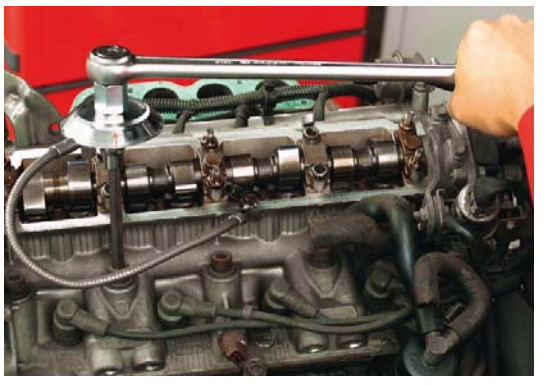
	d [mm]	d1 [mm]	H [mm]	L1 [mm]	L2 [mm]	⚖ [g]
S.171	39	31	44	250	234	510

Long-reach 1/2" ratchet







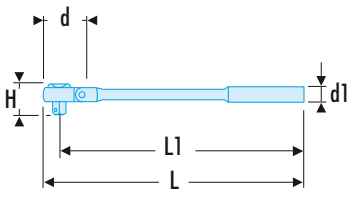


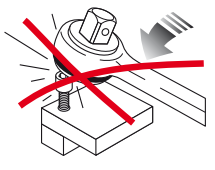
- 72 teeth mechanism for 5° increments.
- Reversing by rotating cap.
- Length: 400 mm (applies more torque and reduces effort).

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
S.154	40	30	40	404	38	780

Hinged 1/2" ratchet





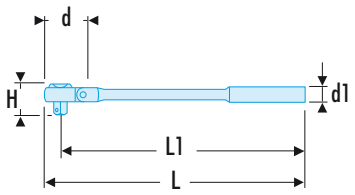


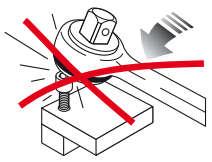
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Stiffened joint to maintain the position even with an extension and the socket engaged.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
S.143A	38	31	42	265	247	598

Long-reach 1/2" hinged ratchet





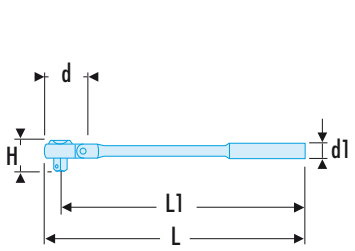


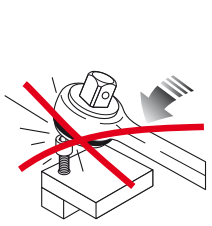
- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Extra-long handle to apply more torque without effort.
- Stiffened joint to maintain the position even with an extension and the socket engaged.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
S.153A	38	31	43	400	381	755

Long hinged metal grip 1/2" ratchet





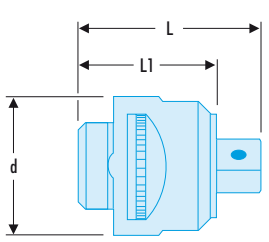


- 72 teeth mechanism for 5° increments.
- Palm control system - allows the operator to press down on the head avoiding risk of accidental reverse.
- Ring reversing.
- Extra-long handle to apply more torque without effort.
- Stiffened joint to maintain the position even with an extension and the socket engaged.
- Full metal grip.

	d [mm]	d1 [mm]	H1 [mm]	L [mm]	⚖ [g]
S.158A	42	20		435	940

1/2" offset ratchet





- Female square drive bit 1/2".
- Male square drive bit 1/2".
- Increment: 5°.
- Finish: bright chrome with phosphate-hardened square drive.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
S.156	39	59	39	230

MAINTENANCE OF 1/2" RATCHETS

	S.171	S.161	S.151	S.154	S.143A	S.153A	S.158A	S.156
Caps								
 S.161C		•			•	•	•	
S.151C			•	•				
S.156C								•
Spare part kit								
 S.161RN		•			•	•	•	
S.151RN			•	•				•
Rotors								
 S.151R		•	•	•	•	•	•	•

Accessories 1/2"

1/2" drive sliding tee

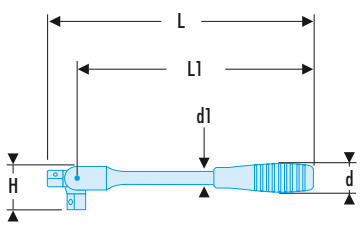


NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10
- Friction-head allows bar to form a T or L-handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	⚖ [g]
S.120A	24	29	45	14	275	408

1/2" drive hinged handle



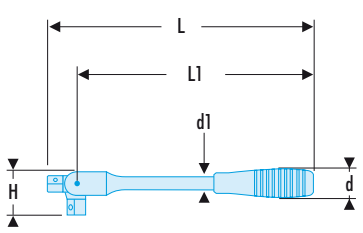


NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10
- Stiffened joint.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
S.140A	31	14	44	246	214,5	425

1/2" long drive hinged handle



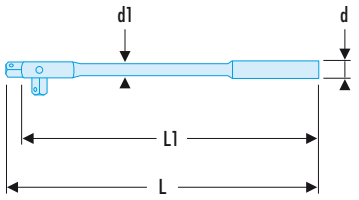


NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10
- Stiffened joint.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
S.141A	31	14	41	381	349,5	595

1/2" drive metal-grip hinged handle





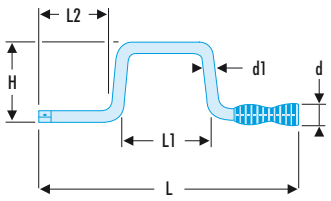
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Stiffened joint.
- Metal handle with knurled handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
S.145	20	15	410	392	740

1/2" drive speed brace





NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Significant time-savings whenever space allows.
- PVC rotating handle.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
S.110	29	12	115	402	130	130	510

1/2" drive tee with universal joint

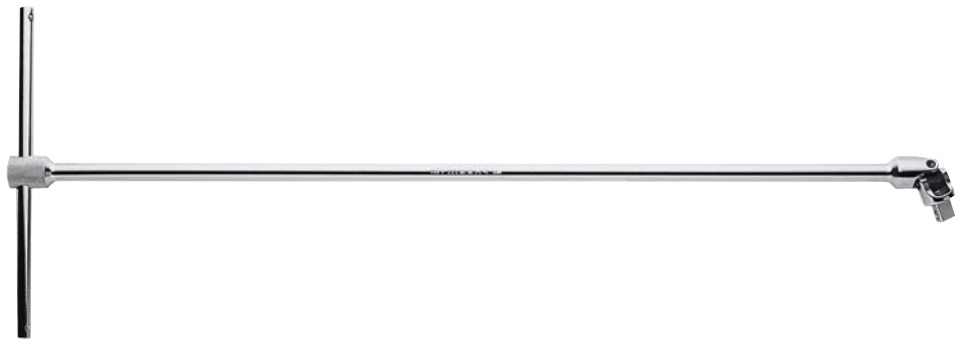


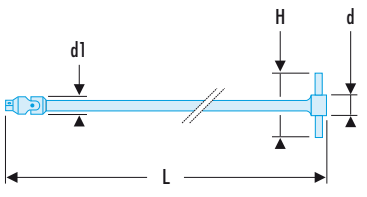


- Universal joint for high torques.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	⚖ [g]
S.229A	18	24	180	495	550

1/2" extra-long drive tee with universal joint

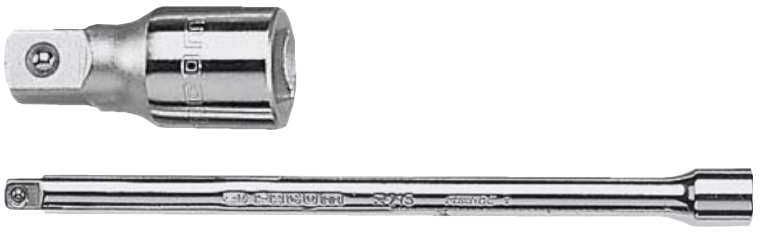


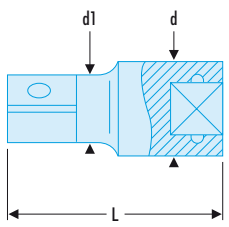


- Extended reach of tee-handle is ideal for particularly deep recesses.
- Finish: bright chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	⚖ [kg]
S.228	24	25	240	700	1,20

S - 1/2" drive extensions





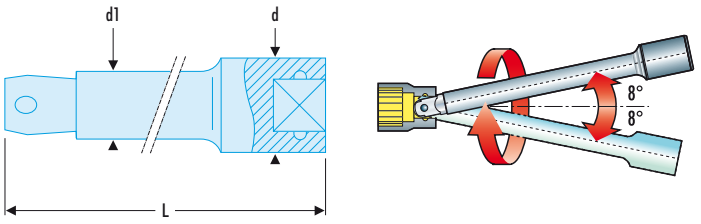
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Finish: bright chrome.

	Square ["]	d [mm]	d1 [mm]	L [mm]	ΔΔ [g]
S.206	1/2	23	16,5	52,5	90
S.208	1/2	23	16,5	75	130
S.210	1/2	23	16,5	130	225
S.215	1/2	23	16,5	250	420
S.217	1/2	23	16,5	500	840

S.S - 1/2" wobble drive extensions



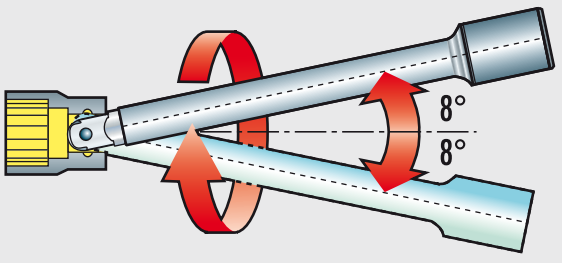


- Square drive rounded profile gives 8° working angle.
- Useful where access is limited.
- Finish: bright chrome.

	Square ["]	d [mm]	d1 [mm]	L [mm]	ΔΔ [g]
S.208S	1/2	23	16,5	75	130
S.210S	1/2	23	16,5	130	225
S.215S	1/2	23	16,5	250	420

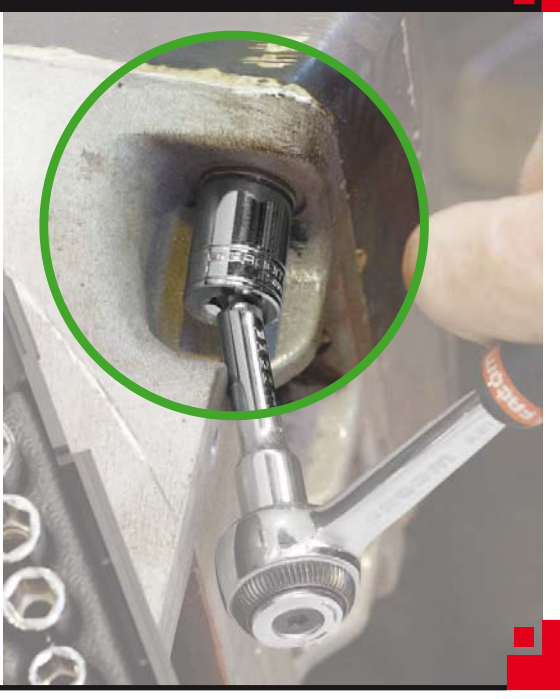
WOBBLE EXTENSION

Hard to access with a socket or universal joint? USE A WOBBLE EXTENSION !



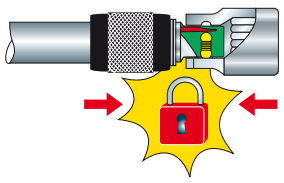


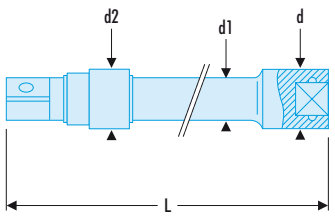




S.RC - 1/2" drive locking extensions









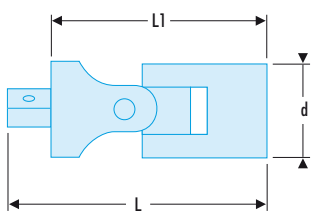
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Total safety as lock system prevents socket loss.
- Safety and instant release, by retracting knurled ring, for total user confidence.
- Positive locking for use with sockets with internal ball notch.
- Finish: bright chrome with phosphate-hardened ring.

	Square ["]	d [mm]	d1 [mm]	d2 [mm]	E [mm]	L [mm]	⚖ [g]
S.210RC	1/2	23	16,5	23	16,5	130	250
S.215RC	1/2	23	16,5	23	16,5	250	450
S.217RC	1/2	23	16,5	23	16,5	500	860

1/2" universal joint





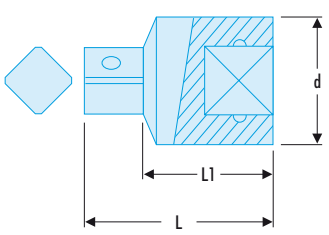
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Spring-stiffened joint.
- Stays in position when reaching for fasteners.
- Significant time savings.
- Finish: bright chrome.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
S.240A	23	66	51	150

1/2" to 3/8" coupler





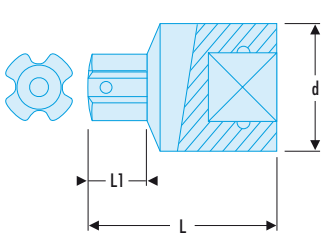
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Double 3/8" coupler
- Max torque: 212 N.m.
- Finish: bright chrome.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
S.230	23	33,5	23	55

1/2" to CDX® coupler





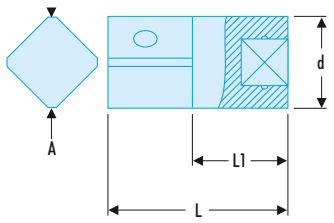
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- 1/2" female to CDX® male square drive.
- Double "CDX®" coupler.
- Finish: bright chrome.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
S.231	22	37	12	65

1/2" to 3/4" coupler





NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- 1/2" female to 3/4" male square drive with plunger.
- For adapting sockets and accessories 3/4".
- Male square drive with plunger for positive locking of sockets and accessories.
- Finish: satin chrome.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
S.232B	25	49	26	135

D.169 Set of 3 couplers



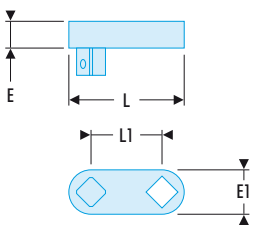


- Allows use of square drivers smaller than socket drive sizes:
- 1/4" square drive + D.169RJ --> 3/8" socket.
- 3/8" square drive + D.169JS --> 1/2" socket.
- 1/2" square drive --> 3/4" socket.
- Compactness means that fewer tools are needed for in situ maintenance operations.
- Magnetic retainer and locking system (JS and SK).
- Knurl allows hand tightening where access is difficult.

Weight: 96 g.

1/2" drive offset adaptor



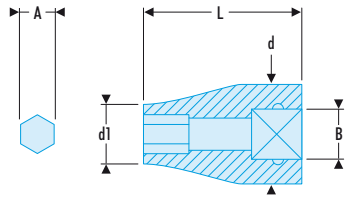


- 1/2" female to 1/2" male square drive.
- Offset centrelines for enhanced accessibility.
- Finish: bright chrome.
- S.236: for 5/16 bits.
- S.237: for 1/2 bits.

	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
S.234	15	25	65	40	165

S - 1/2" drive spring-clip bit holders





NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124,

- S.236: for 5/16 bits.
- S.237: for 1/2 bits.
- Finish: bright chrome.

	A ["]	Vierkant ["]	d [mm]	d1 [mm]	L [mm]	⚖ [g]
S.236	5/16	1/2	23,0	14	36	54
S.237	1/2	1/2	23	20,5	44	70

1/2" drive lock-ring bit holder



NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124,

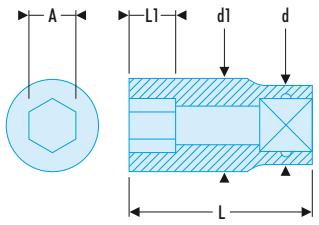
- Bit lock.
- Square drive has side-hole for ball or plunger lock.

	A ["]	Square ["]	L [mm]	⚖ [g]
EF.S	1/4	1/2	50	88

Sockets 1/2"

S.H - 1/2" metric 6-point sockets





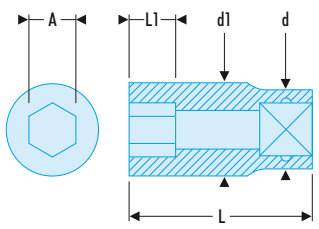
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.8H	8	6	22,8	13,1	36	6,5	48
S.9H	9	6	22,8	13,8	36	6,5	48
S.10H	10	6	22,8	15,3	36	7,8	48
S.11H	11	6	22,8	16,5	36	9,0	51
S.12H	12	6	22,8	17,8	36	9,5	52
S.13H	13	6	22,8	18,9	36	10,4	55
S.14H	14	6	22,8	20,2	36	10,5	57
S.15H	15	6	22,8	21,4	36	12,0	60
S.16H	16	6	21,6	22,6	36	12,0	57
S.17H	17	6	23,1	24,1	36	13,0	61
S.18H	18	6	23,4	25,5	36	13,0	68
S.19H	19	6	24,6	26,6	36	14,0	69
S.20H	20	6	25,4	27,4	36	14,0	71
S.21H	21	6	25,1	29,1	38	16,0	93
S.22H	22	6	26,4	30,4	38	16,5	101
S.23H	23	6	27,6	31,6	38	16,5	122
S.24H	24	6	28,7	32,7	38	16,5	130
S.25H	25	6	27,7	34,1	38	16,5	139
S.26H	26	6	29,0	35,4	38	16,5	149
S.27H	27	6	29,2	36,6	44	19,0	164
S.28H	28	6	30,5	37,9	44	20,0	175
S.29H	29	6	31,3	38,7	44	20,0	179
S.30H	30	6	33,0	40,4	44	20,0	201
S.31H	31	6	34,2	41,6	44	20,0	205
S.32H	32	6	35,1	42,6	44	20,0	215
S.34H	34	6	37,5	44,9	44	20,0	240

S.H - 1/2" inch 6-point sockets





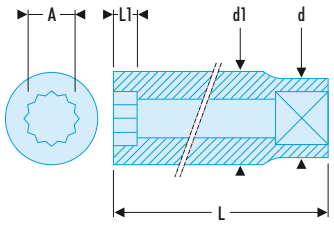
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.3/8H	3/8	6	22,8	14,7	36	7,8	48
S.7/16H	7/16	6	22,8	16,5	36	9,0	51
S.1/2H	1/2	6	22,8	18,9	36	10,4	55
S.9/16H	9/16	6	22,8	20,2	36	10,5	58
S.19/32H	19/32	6	22,8	21,4	36	12,0	60
S.5/8H	5/8	6	21,6	22,6	36	12,0	65
S.21/32H	21/32	6	23,1	24,1	36	13,0	65
S.11/16H	11/16	6	22,6	24,6	36	13,0	71
S.3/4H	3/4	6	25,0	27,0	36	14,0	68
S.25/32H	25/32	6	25,9	27,9	36	14,0	72
S.13/16H	13/16	6	24,6	28,6	38	16,0	96
S.7/8H	7/8	6	26,4	30,4	38	16,5	99
S.15/16H	15/16	6	28,7	32,7	38	16,5	132
S.31/32H	31/32	6	27,7	34,1	38	16,5	142
S.1'H	1	6	28,3	34,7	38	16,5	152
S.1'1/16H	1 1/16	6	29,2	36,6	44	19,0	164
S.1'1/8H	1 1/8	6	31,3	38,7	44	20,0	182
S.1'3/16H	1 3/16	6	33,0	40,4	44	20,0	201
S.1'1/4H	1 1/4	6	35,1	42,5	44	20,0	229

S - 1/2" metric 12-point sockets





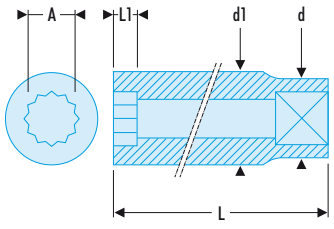
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.
- Supplied on metal rack. Ref S.40E (8 --> 16 mm) and Ref S.41E (17 --> 24 mm).

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.8	8	12	22,8	13,1	36	6,5	48
S.9	9	12	22,8	13,8	36	6,5	48
S.10	10	12	22,8	15,3	36	7,8	48
S.11	11	12	22,8	16,5	36	9,0	51
S.12	12	12	22,8	17,8	36	9,5	52
S.13	13	12	22,8	18,9	36	10,4	55
S.14	14	12	22,8	20,2	36	10,5	57
S.15	15	12	22,8	21,4	36	12,0	60
S.16	16	12	21,6	22,6	36	12,0	57
S.17	17	12	23,1	24,1	36	13,0	61
S.18	18	12	23,4	25,4	36	13,0	68
S.19	19	12	24,6	26,6	36	14,0	69
S.20	20	12	25,4	27,4	36	14,0	71
S.21	21	12	25,1	29,1	38	16,0	93
S.22	22	12	26,4	30,4	38	16,5	101
S.23	23	12	27,6	31,6	38	16,5	122
S.24	24	12	28,7	32,7	38	16,5	130
S.25	25	12	27,7	34,1	38	16,5	128
S.26	26	12	29,0	35,4	38	16,5	138
S.27	27	12	29,2	36,6	44	19,0	142
S.28	28	12	30,5	37,9	44	20,0	163
S.29	29	12	31,3	38,7	44	20,0	167
S.30	30	12	33,0	40,4	44	20,0	185
S.31	31	12	34,2	41,6	44	20,0	189
S.32	32	12	35,1	42,5	44	20,0	198
S.34	34	12	37,5	44,9	44	20,0	223

S - 1/2" inch 12-point sockets





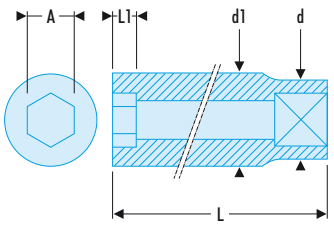
ASME B107.1

- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.
- Available as rack set Ref S.40U (3/8" --> 21/32") and Ref S.41U (11/16" --> 1").

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.3/8	3/8	12	22,8	14,7	36	7,8	48
S.7/16	7/16	12	22,8	16,5	36	9,0	51
S.1/2	1/2	12	22,8	18,9	36	10,4	55
S.9/16	9/16	12	22,8	20,2	36	10,5	58
S.19/32	19/32	12	22,8	21,4	36	12,0	60
S.5/8	5/8	12	21,6	22,6	36	12,0	65
S.21/32	21/32	12	23,1	24,1	36	13,0	65
S.11/16	11/16	12	22,6	24,6	36	13,0	71
S.3/4	3/4	12	25,0	27,0	36	14,0	68
S.25/32	25/32	12	25,9	27,9	36	14,0	72
S.13/16	13/16	12	24,6	28,6	38	16,0	96
S.7/8	7/8	12	26,4	30,4	38	16,5	99
S.15/16	15/16	12	28,7	32,7	38	16,5	132
S.31/32	31/32	12	27,7	34,1	38	16,5	131
S.1'	1	12	28,3	34,7	38	16,5	141
S.1'1/16	1 1/16	12	29,2	36,6	44	19,0	147
S.1'1/8	1 1/8	12	31,3	38,7	44	20,0	170
S.1'3/16	1 3/16	12	33,0	40,4	44	20,0	185
S.1'1/4	1 1/4	12	35,1	42,5	44	20,0	201

S.HLA - 1/2" long-reach metric 6-point sockets





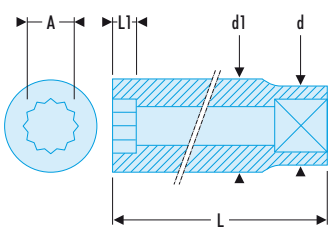
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.12HLA	12	6	21	17,8	77	12	105
S.13HLA	13	6	21,8	19,0	77	12	115
S.14HLA	14	6	21,8	20,3	77	15	120
S.15HLA	15	6	21,8	21,5	77	15	125
S.16HLA	16	6	22,0	22,8	77	15	128
S.17HLA	17	6	23,0	24,0	77	15	140
S.18HLA	18	6	24,0	25,0	77	18	160
S.19HLA	19	6	25,0	26,5	77	18	160
S.21HLA	21	6	27,0	29,0	77	18	200
S.22HLA	22	6	28,0	30,0	77	21	215
S.23HLA	23	6	29,0	31,5	77	21	232
S.24HLA	24	6	30,0	32,8	77	24	255
S.26HLA	26	6	32,0	35,0	77	24	280
S.27HLA	27	6	33,0	36,5	77	27	310
S.28HLA	28	6	34,0	37,8	77	27	330
S.29HLA	29	6	35,0	39,0	77	27	355
S.30HLA	30	6	36,0	40,0	77	30	355
S.32HLA	32	6	38,0	42,8	77	33	408

S.LA - 1/2" long-reach metric 12-point sockets





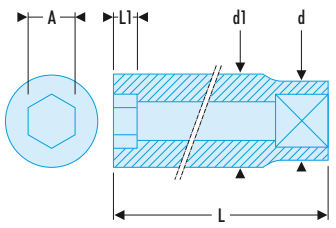
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Finish: bright chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.12LA	12	12	21,0	17,8	77	12	105
S.13LA	13	12	21,8	19,0	77	12	115
S.14LA	14	12	21,8	20,3	77	15	125
S.15LA	15	12	21,8	21,5	77	15	125
S.16LA	16	12	22,0	22,8	77	15	135
S.17LA	17	12	23,0	24,0	77	15	145
S.18LA	18	12	24,0	25,0	77	18	160
S.19LA	19	12	25,0	26,5	77	18	180
S.21LA	21	12	27,0	29,0	77	18	210
S.22LA	22	12	28,0	30,0	77	21	215
S.23LA	23	12	29,0	31,5	77	21	240
S.24LA	24	12	30,0	32,8	77	24	255
S.26LA	26	12	32,0	35,0	77	24	280
S.27LA	27	12	33,0	36,5	77	27	315
S.28LA	28	12	34,0	37,8	77	27	340
S.29LA	29	12	35,0	39,0	77	27	365
S.30LA	30	12	36,0	40,0	77	30	365
S.32LA	32	12	36,0	42,8	77	33	415

S.LA - 1/2" inch 12-point sockets





ASME B107.1

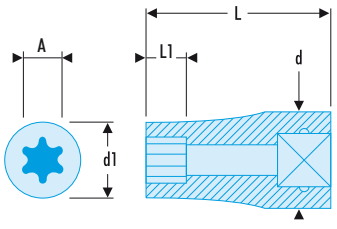
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Finish: bright chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
S.1/2LA	1/2	12	22,3	19,0	82,2	8,1	135
S.9/16LA	9/16	12	22,3	20,6	82,2	9,6	138
S.5/8LA	5/8	12	22,3	22,3	82,2	10,9	150
S.11/16LA	11/16	12	24,4	24,4	82,2	10,9	160
S.3/4LA	3/4	12	26,9	26,9	82,2	12,4	165
S.13/16LA	13/16	12	28,7	28,7	82,2	12,9	175
S.7/8LA	7/8	12	30,2	30,2	82,2	14,0	200
S.15/16LA	15/16	12	31,7	31,7	82,2	15,0	225
S.1'LA	1	12	33,3	33,3	82,2	15,2	255
S.1'1/16LA	1 1/16	12	36,5	36,5	82,2	16,0	320
S.1'1/8LA	1 1/8	12	38,1	38,1	82,2	16,7	350
S.1'1/4LA	1 1/4	12	42,9	42,9	82,2	16,7	430

Torx® sockets 1/2"

STX - 1/2" Torx® sockets





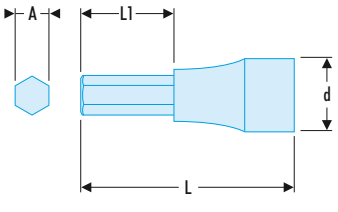
- For Torx® fasteners.
- Finish: bright chrome.
- Available as rack set Ref STX.40 (E12 --> E20) and Ref RSX.J6 (E6 --> E16).

	A [mm]	Torx [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
STX.12	10,95	E12	21	15,0	37	8,0	47
STX.14	12,67	E14	21	16,3	37	8,8	47
STX.16	14,70	E16	22	18,8	37	9,6	57
STX.18	16,38	E18	22	20,4	37	11,1	57
STX.20	18,16	E20	22	22,9	37	12,7	63
STX.24	21,84	E24	22	26,5	37	16,1	97

Screwdriver sockets 1/2"

STM - 1/2" drive metric hexagon bit sockets



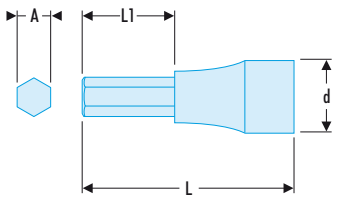


- Standard length series.
- For hexagon socket heads.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.
- Available in case set (Ref STM.J9).

	A [mm]	d [mm]	L [mm]	L1 [mm]	[g]
STM.4	4	22,8	60	24	59
STM.5	5	22,8	60	24	60
STM.6	6	22,8	60	24	62
STM.7	7	22,8	60	24	64
STM.8	8	22,8	60	24	65
STM.9	9	22,8	60	24	70
STM.10	10	22,8	60	24	80
STM.12	12	23,1	60	24	102
STM.14	14	23,1	60	24	127
STM.17	17	23,4	60	24	152
STM.19	19	23,4	60	24	162

ST - 1/2" drive inch hexagon bit sockets



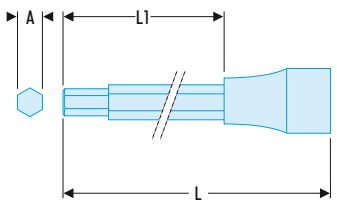


- Standard length series.
- For hexagon socket heads.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.

	A ["]	d [mm]	Bits	L [mm]	L1 [mm]	⧋ [g]
ST.1/4	1/4	23	EH.201/4	54	17	67
ST.5/16	5/16	23	EH.205/16	54	17	67
ST.3/8	3/8	23	EH.203/8	54	17	74
ST.7/16	7/16	23	ENH.307/16	70	31	110
ST.1/2	1/2	23	ENH.301/2	70	31	117
ST.9/16	9/16	23	ENH.309/16	70	31	125
ST.5/8	5/8	23	ENH.305/8	70	31	143
ST.3/4	3/4	23	ENH.303/4	70	31	165

SHP.LA - 1/2" drive long and extra-long reach metric hexagon bit sockets



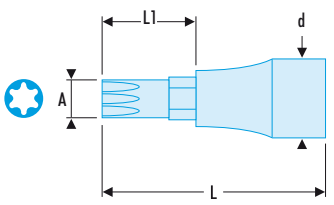


- Long and extra long reach series
- For hexagon socket heads.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	L [mm]	L1 [mm]	⧋ [g]
SHP.6LA	6	100	64	77
SHP.7LA	7	100	64	78
SHP.8LA	8	100	64	79
SHP.10LA	10	140	104	132
SHP.12LA	12	100	64	144
SHP.5ELA	5	180	144	112
SHP.6EL1A	6	140	104	93
SHP.6EL2A	6	220	184	127

SXM - 1/2" drive Torx® bit sockets



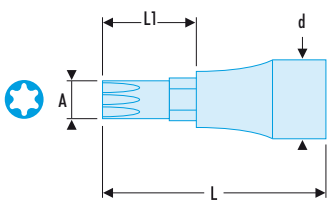


- Standard length series.
- For Torx® female drive fasteners.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.
- Also available in case set (Ref AMEX.3).

	A [mm]	Torx [No]	d [mm]	L [mm]	L1 [mm]	⧋ [g]
SXM.20	3,84	T20	22,8	60	24	58
SXM.25	4,40	T25	22,8	60	24	58
SXM.27	4,96	T27	22,8	60	24	59
SXM.30	5,49	T30	22,8	60	24	59
SXM.40	6,60	T40	22,8	60	24	62
SXM.45	7,77	T45	22,8	60	24	63
SXM.50	8,79	T50	22,8	60	24	74
SXM.55	11,17	T55	22,8	60	24	96
SXM.60	13,17	T60	23,1	60	24	117

SX.LA - 1/2" drive long-reach Torx® bit sockets



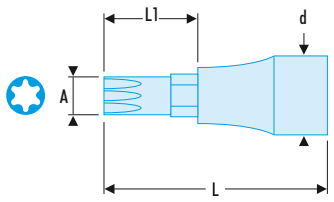


- Long-reach series.
- For Torx® female drive fasteners.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	Torx [No]	d [mm]	L [mm]	L1 [mm]	⧋ [g]
SX.40LA	6,60	T40	22,8	120	84	95
SX.45LA	7,77	T45	22,8	120	84	95
SX.55LA	11,17	T55	22,8	140	104	220
SX.70LA	15,49	T70	23,1	140	104	280

D.B - Long-reach spline driver sockets



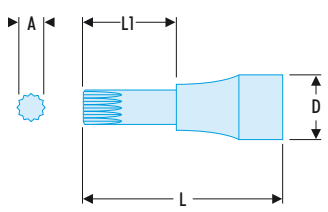


- Standard length series.
- For Torx® female drive fasteners.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	d [mm]	L1 [mm]	⚖ [g]
D.34B7	7	7	15	60
D.34B7L	7	7	63	100
D.34B9L	9	9	63	100
D.34B10	10	10	15	60
D.34B12L	12	12	63	100
D.34B14L	14	14	63	100
D.34B16L	16	16	63	100

SV.B - 1/2" drive XZN® spline bit sockets



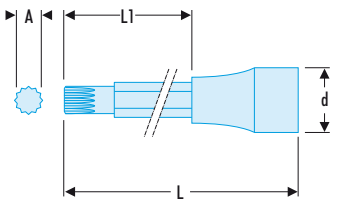


- Standard length series.
- For XZN® female drive fasteners.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
SV.6B	M6	22,8	60	24	60
SV.8B	M8	22,8	60	24	60
SV.10B	M10	22,8	60	24	70
SV.12B	M12	22,8	60	24	80
SV.14B	M14	22,8	60	24	100
SV.16B	M16	23,1	60	24	110

SV.LB - 1/2" drive long-reach XZN® spline bit sockets





- Long and extra long reach series
- For XZN® female drive fasteners.
- Non-removable bit.
- Finish: bright chrome with phosphate-hardened tip.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
SV.6LB	M6	22,8	100	64	80
SV.8LB	M8	22,8	100	64	80
SV.10LB	M10	22,8	100	64	90
SV.10ELB	M10	22,8	120	120	110
SV.12LB	M12	22,8	100	64	120
SV.12ELB	M12	22,8	140	104	150
SV.14LB	M14	22,8	100	64	150

CREATE YOUR OWN BIT SOCKETS



Screw bits





- Series 2 ⬡ 5/16"
- Series 3 ⬡ 1/2"

See Section 7

Impact bit holder ⧄ 1/2"



S.236
⬡ 5/16"
7.94 mm



S.237
⬡ 1/2"
12.70 mm

See p. 296

MULTI-DRIVE SETS
1/4" + 1/2"

1/4" & 1/2" SOCKET SETS IN PLASTIC CASES

		RS.100	RSL.100	RS.360
		R.161 + S.161	RL.161 + SL.161	R.360 + SL.161
		6	6	6
6 12 1/4" + 1/2"		STANDARD	STANDARD	STANDARD
1/4"	R.5,5	•	•	•
	R.6	•	•	•
	R.7	•	•	•
	R.8	•	•	•
	R.9	•	•	•
	R.10	•	•	•
	R.11	•	•	•
	R.12	•	•	•
	R.13	•	•	•
1/2"	S.10	•	•	•
	S.11	•	•	•
	S.12	•	•	•
	S.13	•	•	•
	S.14	•	•	•
	S.15	•	•	•
	S.17	•	•	•
	S.19	•	•	•
	S.21	•	•	•
	S.24	•	•	•
	S.27	•	•	•
	R.210	•	•	•
	R.240A	•	•	•
	R.120A	•	•	•
	S.210	•	•	•
	S.240A	•	•	•
		BP.112		
		PL.404		
		389 x 164 x 66 mm		
		2,630 kg	2,590 kg	2,640 kg

RS.100 ▼



RSL.100 ▼



RS.360 ▼



1/4" & 1/2" SOCKET SETS IN METAL RACKS

		RSX.J6
		✪
1/2" + 1/4"		STANDARD
Sockets ✪	E.6	1/4"
	E.8	1/4"
	E.10	1/4"
	E.12	1/2"
	E.14	1/2"
	E.16	1/2"
Rack		CKS.98
		0,205 kg

RSX.J6 ▼



MULTI-DRIVE SETS
1/4" + 1/2"

Socket type			RS.440E R.161 + S.161 6 Standard 1/4" + 1/2"	RS.430E R.151 + S.151 6 Standard 1/4" + 1/2"	RSX.427P R.161 + S.161 Standard 1/4" + 1/2"	RSX.19A - Standard 1/4" + 1/2"
1/4"		R.5		•		
		R.5,5	•	•		
		R.6	•	•		
		R.7	•	•		
		R.8	•	•		
		R.9	•	•		
		R.10	•	•		
		R.11	•	•		
		R.12	•	•		
		R.13	•	•		
		R.14	•			
1/2"		SH.10	•	•		
		SH.11	•	•		
		SH.12	•	•		
		SH.13	•	•		
		SH.14	•	•		
		SH.15		•		
		SH.16	•	•		
		SH.17	•	•		
		SH.18	•	•		
		SH.19	•	•		
		SH.21	•	•		
		SH.22	•	•		
		SH.24	•	•		
		SH.27	•			
		SH.30	•			
		SH.32	•			
EP		1	•			
		2	•			
		3	•			
ED		1	•			
		2	•			
		3	•			
ES		4,5				
		6,5				
		8				
		10				
EH		3	•			
		4	•			
		5	•			
		6	•			
		7	•			
		8	•			
EXR		10	•			•
		15	•			•
		20	•			•
		25	•			•
		27	•			•
		30	•			•
		40	•			•
STX: 1/2" Torx®		STX.12			•	•
		STX.14			•	•
		STX.16			•	•
		STX.18			•	•
		STX.20			•	•
SXM: 1/2" Screwdriver for Torx® screws		27			•	
		30			•	
		40			•	
		45			•	
		50			•	
RTX: 1/4" Torx®		RTX.4			•	
		RTX.5			•	
		RTX.6			•	•
		RTX.7			•	•
		RTX.8			•	•
		RTX.10			•	•
Torx® bits		8			•	
		10			•	
		15			•	
		20			•	
		25			•	
		27			•	
		40				
		45				•
		50				•
		55				•
		R.209	•			
		R.210	•	•		
		R.240A	•			
		R.120A				
		R.235	•		•	•
		R.236A	•	•		
		S.210S	•			
		S.210		•		
		S.215		•		
		S.240A		•		
		S.236				•
		AMZ.H			•	
			PL.714 BP.109	PL.112A BP.109	PL.220B BP.112	PL.393A BP.102
			478 x 234 x 72 mm		389 x 164 x 66 mm	204 x 122 x 52 mm
			3,92 kg		2,20 kg	0,62 kg

RS.440E



RS.430E



RSX.427P



RSX.19A



MULTI-DRIVE SETS
1/2" + 3/4"

			SK.453N	SK.452N	SK.452U
			K.151B + S.151	K.151B + S.151	K.151B + S.152
			6	12	12
1/2" + 3/4"			STANDARD	STANDARD	STANDARD
	3/4"	K.22HB		•	
		K.24HB	•	•	
		K.27HB	•	•	
		K.30HB	•	•	
		K.32HB	•	•	
		K.34HB	•	•	
		K.36HB	•	•	
		K.41HB	•	•	
		K.46HB	•	•	
		K.50HB	•	•	
	1/2"	SH.8	•	•	
		SH.9	•	•	
		SH.10	•	•	
		SH.11	•	•	
		SH.12	•	•	
		SH.13	•	•	
		SH.14	•	•	
		SH.15	•	•	
		SH.16	•	•	
		SH.17	•	•	
		SH.18	•	•	
		SH.19	•	•	
		SH.21	•	•	
		SH.22	•	•	
		SH.23	•	•	
		SH.24	•	•	
		SH.26	•	•	
		SH.27	•	•	
		SH.28	•	•	
		SH.29	•	•	
		SH.30	•	•	
		SH.32	•	•	
	3/4"	K.1"1/16			•
		K.1"1/2			•
		K.1"1/4			•
		K.1"1/8			•
		K.1"13/16			•
		K.1"3/5			•
		K.1"5/8			•
		K.1"7/16			•
		K.2"			•
	1/2"	S.1"			•
		S.1/2			•
		S.11/16			•
		S.1"1/16			•
		S.1"1/4			•
		S.1"1/8			•
		S.13/16			•
		S.1"3/16			•
		S.15/16			•
		S.19/32			•
		S.21/32			•
		S.25/32			•
		S.3/4			•
		S.3/8			•
		S.31/32			•
		S.5/8			•
		S.7/16			•
		S.7/8			•
		S.9/16			•
		K.120B	•	•	•
		K.210B	•	•	•
		K.215B	•	•	•
		S.210S			
		S.210	•	•	•
		S.215	•	•	•
		S.240A	•	•	•
		S.236			
		S.110	•	•	•
		S.120A	•	•	•
			PL.21 BT.6A		PL.22 BT.6A
			468 x 190 x 160 mm		
			17,20 kg		16,2 kg

SK.453N



SK.452N



SK.452U



3/4" SOCKET SETS
METRIC DIMENSIONS

FACOM, BY YOUR SIDE IN HEAVY MAINTENANCE WORK !

		K.411	K.441A	K.442E	K.437E	K.436E	SK.453N		SK.452N	
		K.152	K.151B	K.151B	K.151B	K.151B	K.151B + S.151		K.151B + S.151	
	3/4" 19,05mm	6 K.HB	6 K.HB	12 K.B	6 K.HB	12 K.B	6 K.HB	6 S.H	6 K.B	12 S.
mm	8							•		•
	9							•		•
	10							•		•
	11							•		•
	12							•		•
	13							•		•
	14							•		•
	15							•		•
	16							•		•
	17							•		•
	18							•		•
	19	•	•	•	•	•		•		•
	21	•	•	•	•	•	3/4"	•	K.3/4"	•
	22	•	•	•	•	•	•	•	•	•
	23		•	•	•	•		•		•
	24	•	•	•	•	•	•	•	•	•
	26							•		•
	27	•	•	•	•	•	•	•	•	•
	28							•		•
	29							•		•
	30	•	•	•	•	•	•	•	•	•
	32	•	•	•	•	•	•	•	•	•
	34	•	•	•	•	•	•	1/2"	•	1/2"
	36	•	•	•	•	•	•		•	
	38		•	•						
	41	•	•	•	•	•	•		•	
	42									
	46	•	•	•	•	•	•		•	
	50	•	•	•	•	•	•		•	
	54									
	55	•	•	•	•	•				
	K.210B	•	•	•	•	•	•		•	
	K.215B	•	•	•	•	•	•		•	
	K.120B	•	•	•	•	•	•		•	
	K.240A		•	•						
	K.140A		•	•						
	K.125A		•	•						
	S.210							•		•
	S.215							•		•
	S.120A							•		•
	S.240A							•		•
	S.110							•		•
		PL.438	C.K422CA + 2 x C.K422EA		PL.87A		P.21			
		BT.103G	BT.6A		BT.103G		BT.6A			
		643 x 230 x 111 mm	468 x 190 x 160 mm		643 x 230 x 111 mm		468 x 190 x 160 mm			
		15,20 kg	17,00 kg		15,50 kg		17,20 kg			

K.411



K.437E
K.436E



K.441A
K.442E



SK.453N
SK.452N



3/4" SOCKETS SETS
METRIC DIMENSIONS



FARMING EQUIPMENT
MAINTENANCE



INDUSTRIAL MAINTENANCE



HGV MAINTENANCE

K.420N / K.421N



K.432E / K.433E



MOD.K2



		K.421N	K.420N	K.433E	K.432E	MOD.K2	MOD.K1	K.415E	K.405E
		K.151B	K.151B	K.151B	K.151B	K.152	K.151B	K.151B	-
		6	12	6	12	6	6	6	6
3/4" 19,05mm		K.HB	K.B	K.HB	K.B	K.HB	K.HB	K.LA	K.LA
mm	22	•	•					•	•
	23							•	•
	24	•	•					•	•
	26							•	•
	27	•	•					•	•
	29							•	•
	30	•	•	•	•			•	•
	32	•	•	•	•			•	•
	33			•	•				
	34	•	•	•	•	•	•	•	•
	36	•	•	•	•	•	•	•	•
	38			•	•			•	•
	41	•	•	•	•	•	•	•	•
	42			•	•			•	•
	46	•	•	•	•	•	•		
	50	•	•	•	•	•	•		
	54			•	•				
	55			•	•	•	•		
	K.210B	•	•	•	•	•	•	•	
	K.215B	•	•	•	•			•	
	K.120B	•	•	•	•		•	•	
	K.240A					•			
	K.140A								
	K.125A								
	K.230B						•		
		PL.42 BT.103G		PL.40 BT.103G		PL.43	PL.60A	PL.43 BT.103G	PL.60A BT.111
		643 x 230 x 111 mm		643 x 230 x 111 mm				643 x 230 x 111 mm	396 x 224 x 82 mm
		12,90 kg	12,90 kg	16,30 kg	16,30 kg	7,46 kg	8,29 kg	16,27 kg	9,30 kg

3/4" SOCKET SETS
INCH DIMENSIONS

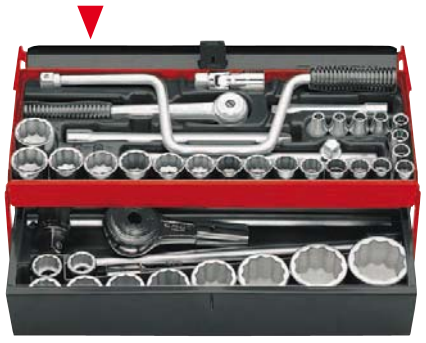
		K.442U	SK.452U	
		K.151B	K.151B + S.151	
12 6 3/4" 19,05mm		12 K.B	12 K.B	12 S.
mm	3/8			•
	7/16			•
	1/2			•
	9/16			•
	19/32			•
	5/8			•
	21/32			•
	11/16			•
	3/4			•
	25/32			•
	13/16			•
	3/4	•		
	7/8	•		•
	15/16	•		•
	31/32			•
	1	•	3/4"	•
	1"1/16	•	•	•
	1"1/8	•	•	•
	1"1/4	•	•	•
	1"5/16	•		1/2"
	1"3/8	•	•	
	1"7/16	•	•	
	1"1/2	•	•	
	1"5/8	•	•	
	1"11/16	•		
	1"3/4	•		
	1"13/16	•	•	
	1"7/8	•		
	2"	•	•	
	2"1/8	•		
	2"3/16	•		
	2"1/4	•		
	K.210B	•	•	
	K.215B	•	•	
	K.120B	•	•	
	K.240A	•		
	K.140A	•		
	K.125A	•		
	S.210			•
	S.215			•
	S.120A			•
	S.240A			•
	S.110			•
		-	PL.22	
		BT.6A	BT.6A	
		468 x 190 x 160 mm	468 x 190 x 160 mm	
		22,1 kg	16,2 kg	



K.442U



SK.452U



Ratchets 3/4"

K.152 | COMPACT AND PRECISE RATCHET ⧄ 3/4"

25% MORE COMPACT FOR CONFINED SPACES !







ERGONOMIC

- Ergonomic handle providing 2-handed grip for high torques.

PERFORMANCE

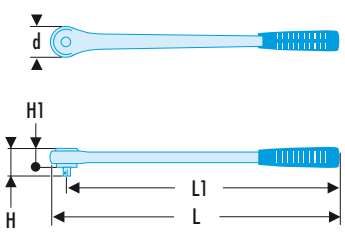
- Precise: 72 tooth mechanism, 5° manoeuvrable.
- Powerful and strong: 17 teeth in mesh during torquing.
- Monobloc ratchet: lighter and more manoeuvrable.
- Confined spaces: head 25% more compact than traditional ratchets.

SAFETY FIRST

- **Plunger locks ratchet/sockets/accessories.**

Compact and precise ratchet 3/4"





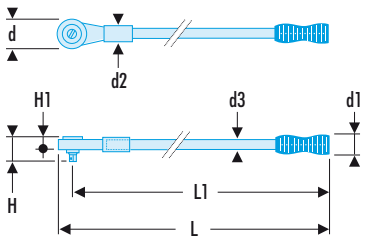
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Monobloc ratchet: lighter and more manoeuvrable.
- Compact head.
- Ergonomic handle providing 2-handed grip for high torques.
- Precise increment: 5°.
- 72-tooth mechanism.
- Plunger lock.
- Finish: satin chrome.

	d [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	⚖ [kg]
K.152	62	56,5	32	505	474	1,67

3/4" drive ratchet with removable handle







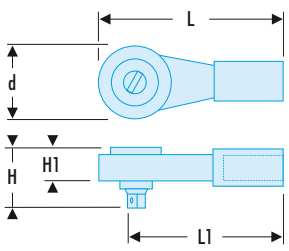
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Precise increment: 5°.
- 72-tooth mechanism.
- Plunger lock.
- Finish: satin chrome.

	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	⧋ [kg]
K.154B	69	40	30	20	61	37	548	514	2,40

3/4" drive ratchet without handle





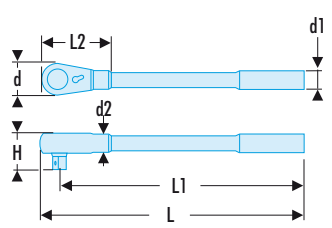
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Precise increment: 5°.
- 72-tooth mechanism.
- For use with bars K.125 or K.126 and handle K.154AM.
- Plunger lock.
- Finish: chromed.
- Plastic grip ratchet handle K.151B.

	d [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	⧋ [kg]
K.151B	68	60,8	36,6	170	136	1,20

3/4" drive "heavy duty" ratchet







NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Suitable for outdoor working:
  - Sturdy mechanism protected against dirt.
  - Recessed reversing switch.
  - 9° increments.
  - 40 tooth mechanism.
  - Removable handle.
- Plunger lock.
- Finish: mat chrome.

	d [mm]	d1 [mm]	d2 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
K.149	65,5	25	32	62	510	475	151	2,85

MAINTENANCE OF 3/4" RATCHETS

- Ratchet maintenance is straightforward: for continued serviceability, simply clean and replace worn parts periodically.

		K.150	K.150A	K.151	K.151A	K.151B	K.152	K.154A	K.154B	K.149
Caps										
	K.152C						•			
	M.151C			•						
	K.151BC				•	•		•	•	
Spare part kit										
	K.151RN			•	•	•		•	•	
	K.152RN						•			
	K.150RN	•	•							
Rotors										
	K.152R						•			
	K.150R	•								
	K.150AR		•							
	K.151AR				•	•		•	•	
Repair kit										
	K.149RN									•

Accessories 3/4"

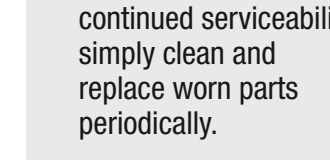
K.154AM 3/4" drive sliding tee



- Handle for 3/4" ratchets K.154B and K.151B.
- Plastic handle for enhanced comfort.

K.A - Bar for 3/4" ratchet



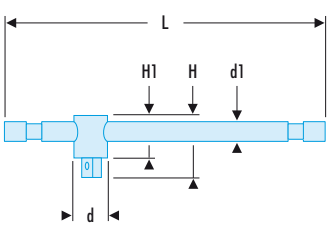


- For use as extension handles on ratchet K.151B, as well as on handles K.140A and K.200E.
- Finish: satin chrome.

	d [mm]	L [mm]	⚖ [kg]
K.125A	20	425	1,04
K.126A	20	500	1,22

3/4" drive sliding tee





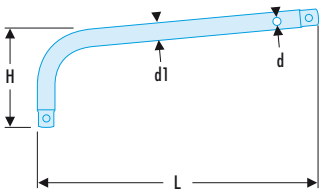
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Ball-steadied head.
- T or L-handle.
- Finish: satin chrome.

	d [mm]	d1 [mm]	H [mm]	H1 [mm]	L [mm]	⚖ [kg]
K.120B	36	20	62	37	425	1,30

3/4" drive angle bar





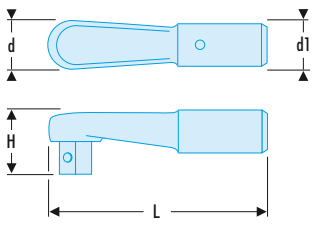
NF ISO 3315, ISO 3315, DIN 3122

- Takes 3/4" socket on either end:
- Short end for high torques.
- Long end for pre-tightening or in recess.
- Finish: satin chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	ΔΔ [kg]
K.130A	8	25	85	540	2,30

3/4" drive fixed adaptor



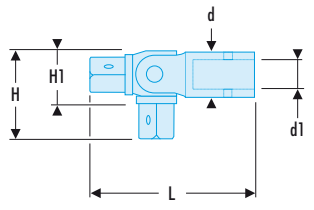


- For use with bars K.125 or K.126.
- For power loosening without damaging the ratchet.
- Finish: satin chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	ΔΔ [g]
K.200E	35	30	40	152	630

3/4" drive hinged adaptor





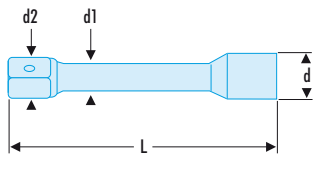
NF ISO 3315, ISO 3315, DIN 3122

- For use with bars K.125 or K.126.
- Fastener rotation from any angle over 180°.
- Joint 180°.
- Spring-steadied in any position.
- Finish: satin chrome.

	d [mm]	d1 [mm]	H [mm]	H1 [mm]	L [mm]	ΔΔ [g]
K.140A	40	20	70	46	125	760

K.B - 3/4" drive extensions





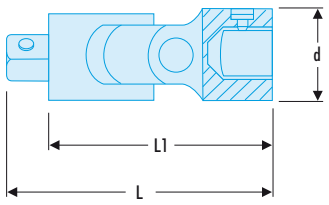
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Finish: satin chrome.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	ΔΔ [kg]
K.208B	36	25	25	100	0,410
K.210B	36	20	25	200	0,620
K.215B	36	20	25	400	1,130

3/4" universal joint





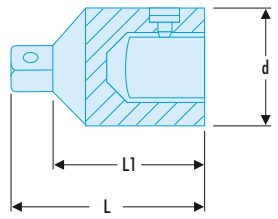
NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- Spring-stiffened joints.
- Significant time savings.
- Finish: satin chrome.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
K.240A	40	105	82	550

3/4" to 1/2" coupler





NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

- For adapting sockets and accessories 1/2".
- Interchangeable 1/2" male square ref. K.230B1.
- Max. torque 512 N.m.
- Finish: satin chrome, phosphate square.

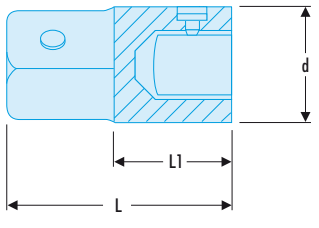
	d [mm]	L [mm]	L1 [mm]	⚖ [g]
K.230B	36	58,5	43	250

K.230B1 Interchangeable 1/2" male drive

- Interchangeable 1/2" male drive for 3/4" to 1/2" coupler reference K.230B.
- Finish: satin chrome.

3/4" to 1" coupler





NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10

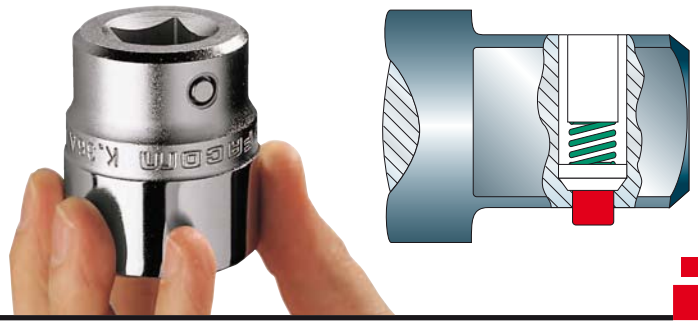
- For adapting sockets and accessories 1".
- Finish: satin chrome.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
K.232A	36	67	39	340

LOCKING SOCKETS AND ACCESSORIES ⍁ 3/4" – 1"

SAFETY AND COMFORT !

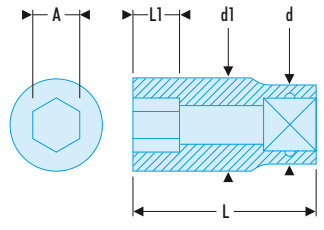
- Lock system prevents accidental socket loss during use.
- Quick release simply by pressing the plunger.
- Compatible with the standard ball-lock tools.



Sockets 3/4"

K.HB 3/4" drive metric 6-point sockets





NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

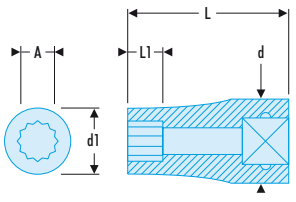
- OGV® profile: more powerful tightening, preserves fasteners.
- Secure attachment of plunger lock accessories
- Quick release button.
- Finish: satin chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.19HB	19	6	36	30,1	51,0	14	207
K.21HB	21	6	36	32,0	51,0	14	208
K.22HB	22	6	36	33,4	51,0	14	221
K.23HB	23	6	36	36,0	52,5	14	244
K.24HB	24	6	36	36,0	52,5	16	237
K.26HB	26	6	36	38,9	52,5	16	231
K.27HB	27	6	36	39,7	52,5	18	232
K.28HB	28	6	36	41,0	52,5	18	239
K.29HB	29	6	36	42,0	52,5	18	245
K.30HB	30	6	36	43,2	59,0	20	282
K.32HB	32	6	36	45,9	59,0	22	301
K.33HB	33	6	36	48,1	59,0	22	330
K.34HB	34	6	36	48,4	59,0	24	322

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.35HB	35	6	36	50,1	59,0	24	344
K.36HB	36	6	36	51,0	59,0	24	347
K.38HB	38	6	40	54,3	66,9	27	478
K.40HB	40	6	40	56,0	66,9	27	493
K.41HB	41	6	40	57,3	66,9	27	504
K.42HB	42	6	40	59,5	66,9	27	552
K.43HB	43	6	40	60,7	66,9	27	560
K.44HB	44	6	40	61,9	66,9	28	587
K.46HB	46	6	40	63,5	75,0	30	641
K.50HB	50	6	40	68,5	75,0	33	725
K.54HB	54	6	45	74,0	75,0	36	880
K.55HB	55	6	45	74,7	75,0	36	875

K.B 3/4" drive metric 12-point sockets





NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

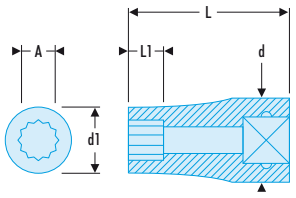
- OGV® profile: more powerful tightening, preserves fasteners.
- Secure attachment of plunger lock accessories
- Quick release button.
- Finish: satin chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.19B	19	12	36	30,1	51,0	14	207
K.21B	21	12	36	32,0	51,0	14	208
K.22B	22	12	36	33,4	51,0	14	221
K.23B	23	12	36	36,0	52,5	14	244
K.24B	24	12	36	36,0	52,5	16	237
K.26B	26	12	36	38,9	52,5	16	231
K.27B	27	12	36	39,7	52,5	18	232
K.28B	28	12	36	41,0	52,5	18	239
K.29B	29	12	36	42,0	52,5	18	245
K.30B	30	12	36	43,2	59,0	20	282
K.32B	32	12	36	45,9	59,0	22	301
K.33B	33	12	36	48,1	59,0	22	330
K.34B	34	12	36	48,4	59,0	24	322
K.35B	35	12	36	50,1	59,0	24	344

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.36B	36	12	36	51,0	59,0	24	347
K.38B	38	12	40	54,3	66,9	27	478
K.40B	40	12	40	56,0	66,9	27	493
K.41B	41	12	40	57,3	66,9	27	504
K.42B	42	12	40	59,5	66,9	27	552
K.43B	43	21	40	60,7	66,9	28	301
K.44B	44	12	40	61,9	66,9	28	587
K.46B	46	12	40	63,5	75,0	30	641
K.50B	50	12	40	68,5	75,0	33	725
K.54B	54	12	45	74,0	75,0	36	880
K.55B	55	12	45	74,7	75,0	36	875

K.B 3/4" drive inch 12-point sockets





ASME B107.1

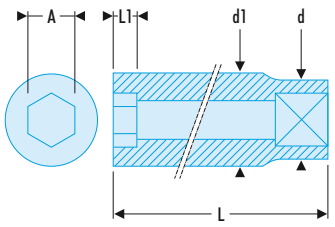
- OGV® profile: more powerful tightening, preserves fasteners.
- Secure attachment of plunger lock accessories
- Quick release button.
- Finish: satin chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.3/4B	3/4	12	36	30,1	51,0	14	207
K.7/8B	3/4	12	36	33,6	51,0	14	220
K.15/16B	15/16	12	36	35,7	52,5	14	233
K.1'B	1"	12	36	38,0	52,5	14	250
K.1'1/16B	1 1/16"	12	36	39,7	52,5	18	232
K.1'1/8B	1 1/8"	12	36	41,6	52,5	18	241
K.1'3/16B	1 3/16"	12	36	43,2	59,0	20	280
K.1'1/4B	1 1/4"	12	36	45,9	59,0	22	304
K.1'5/16B	1 5/16"	12	36	48,1	59,0	22	326
K.1'3/8B	1 3/8"	12	36	50,1	59,0	24	343
K.1'7/16B	1 7/16"	12	36	51,0	59,0	24	339
K.1'1/2B	1 1/2"	12	40	54,3	66,9	27	478

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.1'9/16B	1 9/16"	12	40	56,0	66,9	27	498
K.1'5/8B	1 5/8"	12	40	57,3	66,9	27	498
K.1'11/16B	1 11/16"	12	40	60,7	66,9	27	564
K.1'3/4B	1 3/4"	12	40	62,2	66,9	28	586
K.1'13/16B	1 13/16"	12	40	63,5	75,0	30	641
K.1'7/8B	1 7/8"	12	40	66,2	75,0	33	699
K.2'B	2"	12	40	68,5	75,0	33	698
K.2'1/8B	2 1/8"	12	45	74,0	75,0	36	880
K.2'3/16B	2 3/16"	12	45	74,7	75,0	36	855
K.2'1/4B	2 1/4"	12	45	77,1	75,0	36	913

K.LA 3/4" long-reach metric 6-point sockets





NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

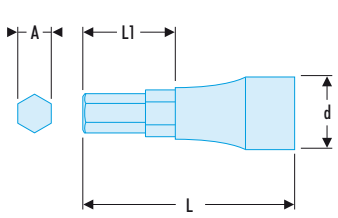
- OGV® profile: more powerful tightening, preserves fasteners.
- Secure attachment of plunger lock accessories
- Quick release button.
- Finish: satin chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.19LA	19	6	36	30,1	90	18	339
K.21LA	21	6	36	32,0	90	18	367
K.22LA	22	6	36	33,4	90	21	391
K.23LA	23	6	38	36,0	90	21	461
K.24LA	24	6	38	36,0	90	24	400
K.26LA	26	6	36	38,9	90	24	474
K.27LA	27	6	38	39,7	90	27	480
K.29LA	29	6	40	42,0	90	27	505
K.30LA	30	6	40	43,2	90	30	530

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
K.32LA	32	6	40	45,9	90	33	540
K.33LA	33	6	45	48,1	90	33	600
K.34LA	34	6	45	48,4	90	33	656
K.35LA	35	6	45	50,1	90	33	707
K.36LA	36	6	45	51,0	90	36	672
K.38LA	38	6	45	54,3	90	36	772
K.41LA	41	6	45	57,3	90	40	778
K.42LA	42	6	45	59,5	90	40	863

KT.A 3/4" drive metric bits for hexagon socket heads





- Interchangeable bits with plunger lock.
- Finish: chrome with phosphate bit.

	A [mm]	d [mm]	Bits	L [mm]	L1 [mm]	[g]
KT.14A	14	36	ET.1914	74,5	25	297
KT.17A	17	36	ET.1917	74,5	25	307
KT.19A	19	36	ET.1919	74,5	25	314
KT.22A	22	36	ET.1919	74,5	25	314

1" metric socket sets

M.431E Set of 1" drive 6-point sockets 42 to 82 mm



• Including:
- Ratchet: M.151.
- Sockets: M.50HA - M.54HA - M.55HA - M.58HA - M.60HA - M.63HA - M.65HA - M.67HA - M.70HA - M.71HA - M.75HA - M.77HA - M.80HA - M.82HA - M46HA.
- Accessories: M.120A - M.210A - M.215A.
- Metal case BT.101, dim. (L. x D. x H.): 768 x 344 x 158 mm.
- Tray PL.57.

Weight: 46 kg.

M.441E Set of 1" drive 6-point sockets 58 to 100 mm



• Including:
- Ratchet: M.151.
- Sockets: M.58HA - M.60HA - M.63HA - M.65HA - M.67HA - M.70HA - M.71HA - M.75HA - M.77HA - M.80HA - M.82HA - M.85HA - M.90HA - M.95HA - M.100HA.
- Accessories: M.120A - M.210A - M.215A.
- Metal case BT.101, dim. (L. x D. x H.): 768 x 344 x 158 mm.
- Tray PL.54.

Weight: 64.20 kg.

M.423E Set of 1" drive 6-point sockets 41 to 80 mm



• Including:
- Ratchet: M.151.
- Sockets: M.58HA - M.60HA - M.63HA - M.65HA - M.67HA - M.70HA - M.71HA - M.75HA - M.77HA - M.80HA - M.82HA - M.85HA - M.90HA - M.95HA - M.100HA.
- Accessories: M.120A - M.210A - M.215A.
- Metal case BT.104, dim. (L. x D. x H.): 568 x 344 x 123 mm.
- Tray PL.85.

Weight: 29.70 kg.

1" inch socket sets

M.431U Set of 1" drive sockets 17/8" to 33/8"

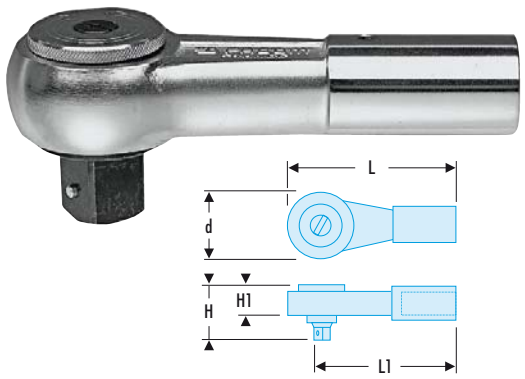


• Including:
- Ratchet: M.151.
- Sockets: M.1'7/8HA - M.2'1/2HA - M.2'1/4HA - M.2'3/16HA - M.2'3/4HA - M.2'3/8HA - M.2'5/8HA - M.2'HA - M.3'1/8HA - M.3'3/8HA - M.3'HA - M.2'1/8HA.
- Accessories: M.120A - M.210A - M.215A.
- Metal case BT.101, dim. (L. x D. x H.): 768 x 344 x 158 mm.
- Tray PL.58.

Weight: 29.70 kg.

Ratchets and accessories 1"

1" drive ratchet without handle



NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- 5° increment.
- 72-tooth mechanism.
- For use with bars M.125 or M.126 and handle M.120.
- Finish: satin chrome.

	d [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	⚖ [kg]
M.151	73	77	45	197	161	2,10

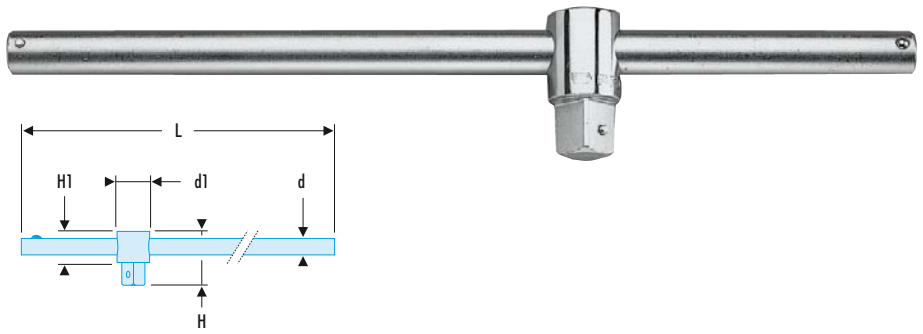
M.A - Bars for 1" ratchet M.151



- Used as extension handles on ratchet M.151.
- Finish: satin chrome.

	d [mm]	L [mm]	⚖ [kg]
M.125A	25	500	1,90
M.126A	25	700	2,70

1" drive sliding tee



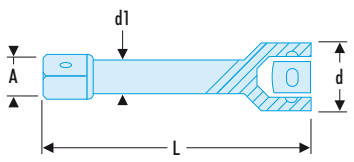
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Friction-head allows bar to form a T or L-handle.
- Fitted with a lock by plunger.
- Finish: satin chrome.

	d [mm]	d1 [mm]	H [mm]	H1 [mm]	L [mm]	⚖ [kg]
M.120A	25	42	79	49,5	500	2,40

M.A - 1" drive extensions





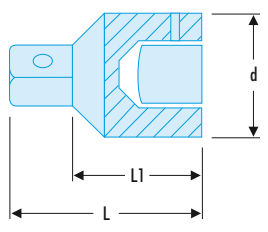
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Safety plunger lock.
- Finish: satin chrome.

	A [mm]	d [mm]	d1 [mm]	L [mm]	⚖ [kg]
M.210A	33	48	25	200	1,10
M.215A	33	48	25	415	2,00

M.230C 1" to 3/4" coupler





NF ISO 3316, ISO 3316, DIN 3123

- For adapting 3/4" drive sockets.
- Interchangeable 3/4" male square ref. M.230C1.
- Finish: satin chrome, with burnished square.

Weight: 415 g.

M.230C1 Interchangeable 3/4" male drive



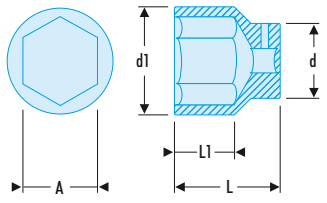
- Maximum torque 1412 N.m.
- Interchangeable 1/3" male square attaches to 1" to 3/4" coupler reference M.230C.
- Finish: burnished.

Weight: 111 g.

1" sockets

M.HA - 1" drive metric 6-point sockets





NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124

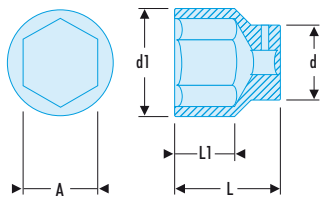
- Thinner, lighter body.
- Secure attachment of plunger lock accessories.
- Push-button release.
- Finish: satin chrome.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[kg]
M.41HA	41	6	51,3	56,9	74	25	0,685
M.46HA	46	6	51,3	64,4	76	30	0,852
M.50HA	50	6	51,3	69,4	80	33	0,968
M.54HA	54	6	56,3	74,4	84	31	1,262
M.55HA	55	6	56,3	75,4	84	36	1,262
M.58HA	58	6	56,3	79,6	85	35	1,354
M.60HA	60	6	56,3	82,4	87	39	1,432
M.63HA	63	6	58,3	85,4	92	35	1,545
M.65HA	65	6	58,3	88,4	92	42	1,652
M.67HA	67	6	58,3	90,4	92	39	1,687

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[kg]
M.70HA	70	6	56,3	95,0	96	45	1,921
M.71HA	71	6	56,3	96,0	96	45	1,904
M.75HA	75	6	63,3	101,0	100	48	2,261
M.77HA	77	6	63,3	108,0	100	51	2,751
M.80HA	80	6	63,3	108,0	106	52	2,800
M.82HA	82	6	63,3	110,8	110	52	2,880
M.85HA	85	6	71,3	114,0	110	52	3,225
M.90HA	90	6	71,3	121,0	110	56	3,555
M.95HA	95	6	71,3	127,0	110	56	3,800
M.100HA	100	6	71,3	133,0	115	56	4,225

M.HA - 1" drive inch 6-point sockets





ASME B107.1

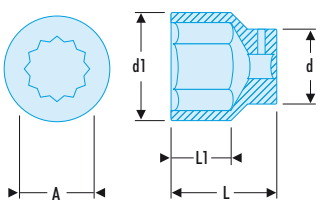
- Thinner, lighter body.
- Secure attachment of plunger lock accessories.
- Push-button release.
- Finish: satin chrome.

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[kg]
M.1'13/16HA	1"13/16	6	51,3	64,4	76	30	0,852
M.1'7/8HA	1"7/8	6	51,3	66,4	80	29	0,929
M.2'HA	2"	6	51,3	70,4	80	31	1,000
M.2'1/8HA	2"1/8	6	56,3	74,4	84	31	1,262
M.2'3/16HA	2"3/16	6	56,3	75,4	84	35	1,253
M.2'1/4HA	2"1/4	6	56,3	78,5	84	35	1,368
M.2'3/8HA	2"3/8	6	56,3	82,4	87	39	1,439

	A ["]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[kg]
M.2'1/2HA	2"1/2	6	58,3	86,4	92	35	1,570
M.2'5/8HA	2"5/8	6	58,3	90,4	92	39	1,704
M.2'3/4HA	2"3/4	6	94,4	58,3	96	45	1,904
M.3'HA	3"	6	65,3	103,4	100	51	2,347
M.3'1/8HA	3"1/8	6	65,3	107,4	106	51	2,770
M.3'3/8HA	3"3/8	6	73,3	113,4	110	56	3,225

1" drive 12-point sockets





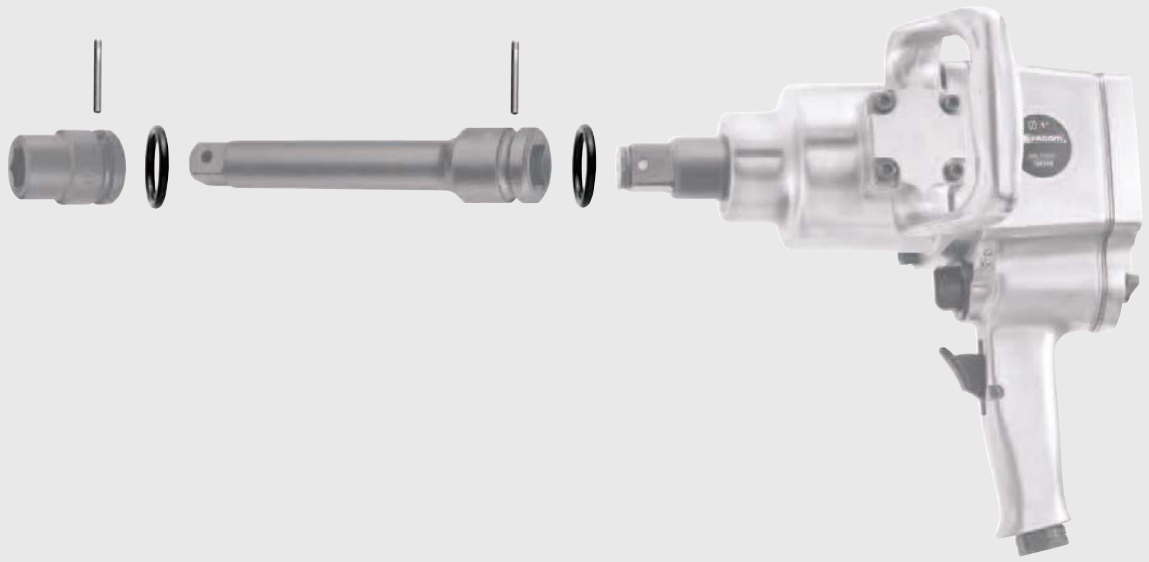
ASME B107.1

- Thinner, lighter body.
- Secure attachment of plunger lock accessories.
- Push-button release.
- Finish: chromed.

	A [mm]	[mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[kg]
M.65B	65	12	58,3	85,4	92	42	1,652

IMPACT SOCKETS AND ACCESSORIES

DEVELOPED FOR YOUR POWER TOOLS



PERFORMANCE

- Specially designed to resist the stresses from impact (section 14), or "Dynapact" tools (section 5). Their special steel and heat treatment ensure a very high yield strength and wear resistance.



SAFETY

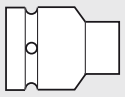
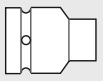
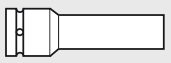
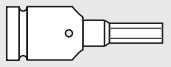
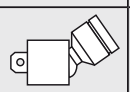
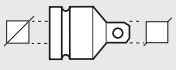
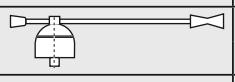
- All sockets and accessories feature a groove and side-hole to UNI ISO 2725. Locking is ensured by a through-pin and retaining ring (to be ordered separately). Never fit chrome-finished manual sockets Impact tools.

pins	Ø x L (mm)
GA.15A	2,5 x 15,0
GA.18A	2,5 x 18,0
GA.20A	3,0 x 20,0
GA.24A	3,0 x 24,0
GA.37A	4,0 x 37,0
GA.43A	5,0 x 43,0
GA.75A	6,0 x 75,0
GA.84A	6,0 x 84,0

rings	Ø tore x Ø in. (mm)
BA.16A	2,4 x 16,0
BA.19A	2,4 x 19,0
BA.21A	2,4 x 21,0
BA.20A	3,5 x 20,2
BA.24A	3,5 x 24,0
BA.25A	3,5 x 25,0
BA.38A	3,5 x 38,0
BA.46A	3,5 x 46,0
BA.75A	5,7 x 75,0
BA.85A	5,7 x 85,0

IMPACT SOCKETS AND ACCESSORIES

CHOOSING IMPACT TOOLS

TYPE OF TOOL	DRIVE	SIZES	
Socket 	◪ 3/8" ◪ 1/2" ◪ 3/4" ◪ 1" ◪ 1"1/2	6 6 > 19 mm 8 > 32 mm ; 3/8" > 1"1/16 17 > 46 mm ; 3/4" > 1"5/8 21 > 77 mm 55 > 120 mm 12 16 > 22 mm	
TORX® 	◪ 1/2"	E10 > E24	
Long-reach socket 	◪ 1/2" ◪ 3/4" ◪ 1"	8 > 32 mm 17 > 46 mm 22 > 70 mm	8 > 32 mm 21 > 36 mm 24 > 50 mm
Extra-long-reach socket 	◪ 1"	30, 32, 33 mm	
Monobloc bit 	◪ 1/2" ◪ 3/4"	5 > 19 mm 17 > 24 mm T30 > T60	
Extension 	◪ 3/8" ◪ 1/2" ◪ 3/4" ◪ 1" ◪ 1"1/2	L : 76 - 150 mm L : 50 - 252 mm L : 100 - 330 mm L : 125 - 330 mm L : 250 - 330 mm	
Universal joint 	◪ 3/8" ◪ 1/2"	1 model per drive	
Coupler 	◪ 3/8" ◪ 1/2" ◪ 3/4" ◪ 1" ◪ 1"1/2	◪ 3/8" > ◪ 1/2" ◪ 1/2" > ◪ 3/4" ◪ 3/4" > ◪ 1" ◪ 1" > ◪ 1"1/2 ◪ 1"1/2 > ◪ 2"1/2	◪ 3/8" > ◪ 1/4" ◪ 1/2" > ◪ 3/8" ◪ 3/4" > ◪ 1" ◪ 1" > ◪ 3/4" ◪ 1"1/2 > ◪ 1"
Dynapact wrench 	◪ 3/4" ◪ 1"	1000 Nm 2000 Nm	
Impact screwdrivers 	◪ 3/8" ◪ 1/2"	200 Nm 400 Nm	

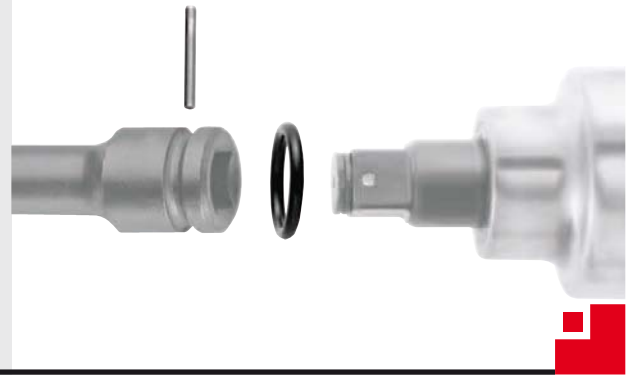


Impact sockets 3/8"

IMPACT SOCKETS AND ACCESSORIES ⊿ 3/8"

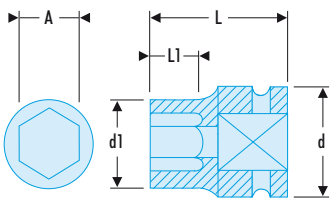
SAFETY FIRST

- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Never fit chrome-finished manual sockets or accessories to impact tools.



NJ.A - 3/8" drive metric 6-point impact sockets







NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	⬡ [mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	⚖ [g]
NJ.6A	6	6	19	11,5	GA.15A	BA.16A	30	6,0	38
NJ.7A	7	6	19	12,5	GA.15A	BA.16A	30	8,0	41
NJ.8A	8	6	19	14,0	GA.15A	BA.16A	30	8,0	41
NJ.9A	9	6	19	15,0	GA.15A	BA.16A	30	8,0	42
NJ.10A	10	6	19	16,5	GA.15A	BA.16A	30	8,0	41
NJ.11A	11	6	19	17,5	GA.15A	BA.16A	32	9,0	47
NJ.12A	12	6	19	19,0	GA.15A	BA.16A	30	9,0	49
NJ.13A	13	6	22	20,0	GA.18A	BA.19A	30	10,0	49
NJ.14A	14	6	22	21,5	GA.18A	BA.19A	30	11,5	63
NJ.15A	15	6	22	22,0	GA.18A	BA.19A	30	11,0	67
NJ.16A	16	6	22	24,0	GA.18A	BA.19A	30	12,5	72
NJ.17A	17	6	22	25,0	GA.18A	BA.19A	30	12,5	70
NJ.18A	18	6	22	26,5	GA.18A	BA.19A	30	12,5	73
NJ.19A	19	6	22	27,5	GA.18A	BA.19A	30	14,0	77

CREATE YOUR OWN BIT SOCKETS

Screw bits





- Series 2 ⬡ 5/16"
- Series 3 ⬡ 1/2"

See Section 7

Impact bit holder ⊿ 3/8"



NJ.236A
⬡ 5/16"
7.94 mm



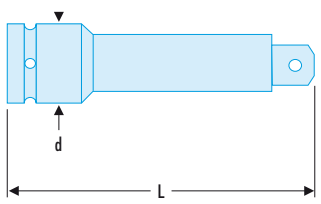
NJ.237A
⬡ 1/2"
12.70 mm

See p. 322



NJ.A - 3/8" drive impact extensions



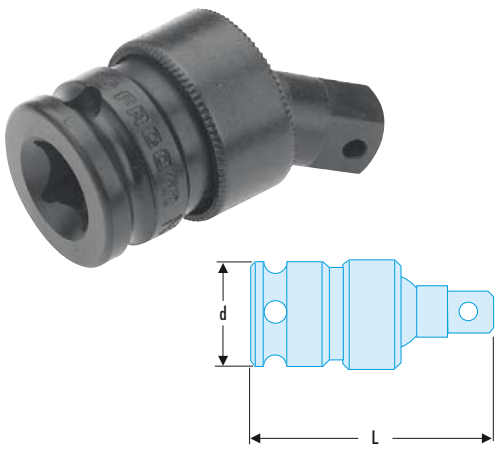


ASME B107.2

- For your safety, use impact extensions and accessories with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	⚖ [g]
NJ.210A	19	GA.15A	BA.16A	75	95
NJ.211A	19	GA.15A	BA.16A	150	170

3/8" drive impact universal joint



ASME B107.2

- For your safety, use impact universal joints with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	ΔΔ [g]
NJ.240A	23.85	GA.18A	BA.20A	51	85

NJ.A - 3/8" drive impact couplers



ASME B107.2

- For your safety, use impact couplers with the appropriate rings and pins.
- NJ.230A: 1/4" socket coupler.
- NJ.232A: 1/2" socket coupler.

	Square ["]	d [mm]	GA	BA	L [mm]	ΔΔ [g]
NJ.230A	F = 3/8" - M = 1/4"	22	GA.18A	BA.19A	32	40
NJ.232A	F = 3/8" - M = 1/2"	22	GA.18A	BA.19A	36	95

FACOM HAS A WIDE RANGE OF AIR AND PORTABLE ELECTRIC TOOLS,

Including impact wrenches, ratchets, screwdrivers, drills, grinders, sanders, power chisels, etc.

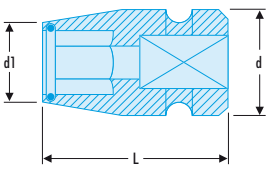
See section 14 p.676



Impact accessories 3/8"

NJ.A - 3/8" bit holder impact sockets





NF ISO 1711-2, ISO 1711-2, DIN 3121,

- NJ.236A: for 5/16 bits.
- NJ.237A: for 1/2 bits.

	A ["]	Vierkant ["]	d [mm]	d1 [mm]	GA	BA	L [mm]	ΔΔ [g]
NJ.236A	5/16	3/8	19	14,0	GA.15A	BA.16A	37	35
NJ.237A	1/2	3/8	19	19	GA.15A	BA.16A	37	40

Impact sockets 3/8" and bits

JHX.14 Case with 14 impact 3/8" bits



- Including:
- 2 bit holder sockets: 3/8", diam. 1/2" and 5/16" (Ref NJ.236A and NJ.237A).
- 6 hex impact bits: 6 - 7 - 8 - 10 - 12 - 14 mm (Ref ENH.306 - ENH.307 - ENH.308 - ENH.310 - ENH.312 - ENH.314).
- 5 Torx® impact bits: T30 - T40 - T45 - T50 - T55 (Ref NEX.30A - NEX.40A - NEX.45A - NEX.50A - NEX.55A).
- 3 Phillips impact bits: PH2 - PH3 - PH4 (Réf ENP.202 - ENP.203 - ENP.204).
- Plastic case BP.102, dim. (L. x D. x H.): 204 x 122 x 52 mm.
- Thermoformed module PL402A.

Weight: 780 g.

Impact sockets 1/2" and accessories set

NS.550A Set of 1/2" short and long-reach impact sockets 10 to 32 mm





- Suitable for all automotive works: short sockets, long sockets, aluminium wheel sockets (17 - 19 - 21 mm).
- For your safety, use impact sockets and accessories with the appropriate rings and pins (supplied in the case).
- Comprising:
- Standard sockets: 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 - 27 - 30 - 32 mm.
- Long-reach sockets: 10 - 13 - 16 - 18 mm.
- Sockets for alloy wheel nuts: 17 - 19 - 21 mm.
- Extension: NS.215A.
- Rings and associated pins.
- Plastic case BP.109, dim. (L. x D. x H.): 478 x 234 x 72 mm.
- Tray PL.716.

Weight: 5.10 kg.

NS.500A Set of 1/2" impact sockets 8 to 27 mm



- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Comprising:
- Sockets: 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 - 27 mm.
- Universal joint: NS.240A.
- Extension: NS.215A.
- Rings and associated pins.
- Plastic case BP.112, dim. (L. x D. x H.): 389 x 164 x 66 mm.
- Tray PL.416.

Weight: 3.70 kg.

NS.500AU Set of 1/2" impact sockets from 3/8" to 1"1/16





- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Comprising:

- NS.A sockets: 3/8" --> 1"1/16.
- Universal joint: NS.240A.
- Extension: NS.215A.
- Rings and associated pins.
- Plastic case BP.112, dim. (L. x D. x H.): 389 x 164 x 66 mm.
- Tray PL.417.

Weight: 3.10 kg.

NS.405A Set of 1/2" long-reach impact sockets 10 to 24 mm



- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Comprising:

- 1/2" long-reach sockets: 10 - 11 - 12 - 13 - 14 - 16 - 17 - 19 - 21 - 22 - 23 - 24 mm.
- Plastic case BP.112, dim. (L. x D. x H.): 389 x 164 x 66 mm.
- Tray PL.418.

Weight: 4 kg.

NS.J9 9-piece rack set of 1/2" drive metric 6-point impact sockets



- A selection of the most popular sizes for automotive applications: NS.13A - NS.14A - NS.16A - NS.17A - NS.18 - NS.19A - NS.21A - NS.22A - NS.24A.
- Essential accessory for any 1/2" drive.
- Supplied on rack CKS.95.

Weight: 1.20 kg.

NSB.3 3-piece set of 1/2" long-reach thin-wall impact sockets for wheel nuts



- Includes long-reach sockets NSB.17 - NSB.19 - NSB.21.
- Special series for wheel nuts.

Weight: 740 g.

NSTX.J7 7-piece Torx® 1/2" impact socket rack set



- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Set of 7 Torx® impact sockets drive 1/2".
- Comprising:

- NSTX: E10 - E12 - E14 - E16 - E18 - E20 - E24.

- Supplied on rack CKS.97.

Weight: 770 g.

NSHM.J8 8-piece rack set of 1/2" drive metric bits for hexagon socket heads



- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Set of 8 bits 1/2" drive for hexagon socket heads.
- Includes sizes: NSHM.5 - 6 - 8 - 10 - 12 - 14 - 17 - 19.
- Supplied on a rack CKS.95.

Weight: 1.20 kg.

NHX.14A 14-piece 1/2" drive impact bit set



- Comprising:

- 2 bit holders 1/2" square drive, diam. 1/2" and 5/16".
- 6 hex: 6 - 7 - 8 - 10 - 12 and 14 mm.
- Torx®: 30 - 40 - 45 - 50 - 55.
- Phillips®: 2 - 3 - 4.
- Plastic case BP.102.
- Tray PL.402A.

Weight: 800 g.

MOD.NS1 1/2" drive impact socket module NS1



- Comprising:

- 1/2" drive impact sockets: NSA 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 23 - 24 mm.
- 1/2" extension: NS215A 125 mm.
- Tray PL610.

Weight: 2 kg.

MOD.NS2 1/2" drive metric 6-point impact socket module



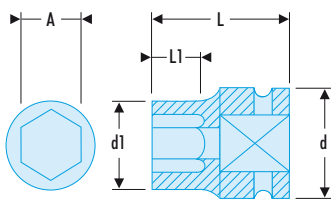
• Comprising:
- Impact short sockets 1/2": NS.A 13 - 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 - 27 - 30 - 32 mm
- Impact sockets 1/2" bit holders: NS.236A and NS.237A
- Impact bits: ENH.3 6 - 7 - 8 - 10 - 12 - 14; ENP.2 2 - 3 - 4; NEX.A 30 - 40 - 45 - 50 - 55.
- Tray PL.623.

Weight: 985 g.

Impact sockets 1/2" and accessories

NS.A - 1/2" drive metric 6-point impact sockets









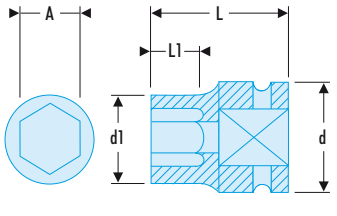
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

• For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NS.8A	8	6	25	15,0	GA.20A	BA.20A	38	9	70
NS.9A	9	6	25	16,0	GA.20A	BA.20A	38	12	70
NS.10A	10	6	25	17,5	GA.20A	BA.20A	38	12	75
NS.11A	11	6	25	18,7	GA.20A	BA.20A	38	12	76
NS.12A	12	6	25	20,0	GA.20A	BA.20A	38	12	75
NS.13A	13	6	25	21,0	GA.20A	BA.20A	38	12	76
NS.14A	14	6	25	22,5	GA.20A	BA.20A	38	12	83
NS.15A	15	6	30	23,7	GA.24A	BA.25A	38	12	112
NS.16A	16	6	30	25,0	GA.24A	BA.25A	38	12	105
NS.17A	17	6	30	26,5	GA.24A	BA.25A	38	13	112
NS.18A	18	6	30	27,5	GA.24A	BA.25A	38	13	110
NS.19A	19	6	30	29,0	GA.24A	BA.25A	38	14	112
NS.20A	20	6	30	30,0	GA.24A	BA.25A	38	15	116
NS.21A	21	6	30	31,0	GA.24A	BA.25A	38	15	156
NS.22A	22	6	30	32,5	GA.24A	BA.25A	38	16	156
NS.23A	23	6	30	33,5	GA.24A	BA.25A	38	16	156
NS.24A	24	6	30	35,0	GA.24A	BA.25A	45	20	169
NS.26A	26	6	30	38,0	GA.24A	BA.25A	50	24	192
NS.27A	27	6	30	39,0	GA.24A	BA.25A	50	24	220
NS.28A	28	6	30	40,0	GA.24A	BA.25A	50	24	273
NS.29A	29	6	30	41,0	GA.24A	BA.25A	50	24	276
NS.30A	30	6	30	43,0	GA.24A	BA.25A	50	24	285
NS.32A	32	6	30	45,0	GA.24A	BA.25A	50	24	278

NS.A - 1/2" drive inch 6-point impact sockets





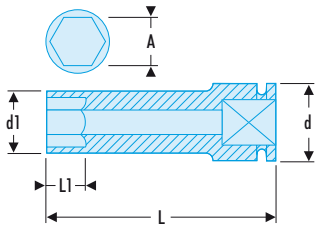
ASME B107.2

• For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A ["]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NS.3/8A	3/8	6	25	17,5	GA.20A	BA.20A	38	12	75
NS.7/16A	7/16	6	25	18,7	GA.20A	BA.20A	38	12	76
NS.1/2A	1/2	6	25	21,0	GA.20A	BA.20A	38	12	76
NS.9/16A	9/16	6	25	22,5	GA.20A	BA.20A	38	12	83
NS.5/8A	5/8	6	30	25,0	GA.24A	BA.25A	38	12	105
NS.11/16A	11/16	6	30	26,5	GA.24A	BA.25A	38	13	112
NS.3/4A	3/4	6	30	29,0	GA.24A	BA.25A	38	14	112
NS.13/16A	13/16	6	30	31,0	GA.24A	BA.25A	38	15	156
NS.7/8A	7/8	6	30	33,5	GA.24A	BA.25A	38	16	162
NS.15/16A	15/16	6	30	33,5	GA.24A	BA.25A	38	16	162
NS.1'A	1'	6	30	38,0	GA.24A	BA.25A	50	24	192
NS.1'1/16A	1' 1/16	6	30	39,0	GA.24A	BA.25A	50	24	220

NS.LA - 1/2" drive long-reach metric 6-point impact sockets





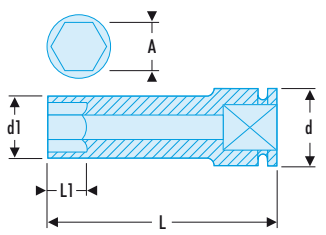
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NS.8LA	8	6	25	15,0	GA.20A	BA.20A	78	13	130
NS.10LA	10	6	25	17,5	GA.20A	BA.20A	78	14	154
NS.11LA	11	6	25	18,7	GA.20A	BA.20A	78	14	163
NS.12LA	12	6	25	20,0	GA.20A	BA.20A	78	14	169
NS.13LA	13	6	25	21,0	GA.20A	BA.20A	78	14	185
NS.14LA	14	6	25	22,5	GA.20A	BA.20A	78	17	201
NS.16LA	16	6	30	25,0	GA.24A	BA.25A	78	17	224
NS.17LA	17	6	30	26,0	GA.24A	BA.25A	78	17	252
NS.18LA	18	6	30	27,5	GA.24A	BA.25A	78	17	283
NS.19LA	19	6	30	29,0	GA.24A	BA.25A	78	19	268
NS.21LA	21	6	30	31,0	GA.24A	BA.25A	78	24	310
NS.22LA	22	6	30	32,5	GA.24A	BA.25A	78	24	302
NS.23LA	23	6	30	33,5	GA.24A	BA.25A	78	24	298
NS.24LA	24	6	30	35,0	GA.24A	BA.25A	78	24	309
NS.26LA	26	6	30	38,0	GA.24A	BA.25A	78	24	311
NS.27LA	27	6	30	39,0	GA.24A	BA.25A	78	24	325
NS.28LA	28	6	30	40,0	GA.24A	BA.25A	78	24	323
NS.29LA	29	6	30	41,0	GA.24A	BA.25A	78	24	357
NS.30LA	30	6	30	43,0	GA.24A	BA.25A	78	24	352
NS.32LA	32	6	30	45,0	GA.24A	BA.25A	78	24	317

NSB - 1/2" drive long-reach metric thin-wall 6-point impact sockets





NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Thin wall for better access.
- 6-point convex pattern for increased resilience.

	A [mm]	[mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NSB.8	8	6	13,0	GA.20A	BA.20A	80	8	165
NSB.10	10	6	15,0	GA.20A	BA.20A	80	10	170
NSB.13	13	6	19,0	GA.20A	BA.20A	80	13	210
NSB.15	15	6	22,0	GA.24A	BA.25A	80	15	220
NSB.16	16	6	23,0	GA.24A	BA.25A	80	16	230
NSB.17	17	6	24,0	GA.24A	BA.25A	80	17	245
NSB.18	18	6	25,5	GA.24A	BA.25A	80	18	245
NSB.19	19	6	27,0	GA.24A	BA.25A	80	19	240
NSB.21	21	6	30,0	GA.24A	BA.25A	80	22	245
NSB.22	22	6	31,0	GA.24A	BA.25A	85	23	250
NSB.24	24	6	32,0	GA.24A	BA.25A	85	24	280
NSB.27	27	6	36,0	GA.24A	BA.25A	85	27	325
NSB.30	30	6	39,0	GA.24A	BA.25A	85	30	330
NSB.32	32	6	41,0	GA.24A	BA.25A	85	32	335

SOCKETS FOR ALLOY WHEELS

- NSAL.3 = set of 3 deep impact sockets with protective plastic sleeves to prevent damage to polished chrome or alloy wheels.

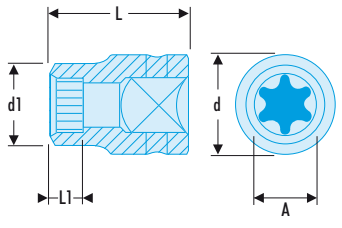
See Section 19 p. 954





NSTX Torx® 1/2" impact sockets



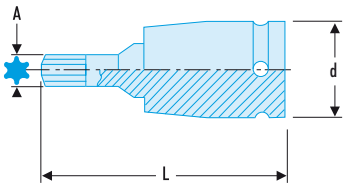


- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- For Torx® male drive fasteners.

	A [mm]	Torx [No]	d [mm]	d1 [mm]	GA	BA	L [mm]	⚖ [g]
NSTX.10	9,19	E10	25	14,2	GA.20A	BA.20A	38	86
NSTX.12	10,95	E12	25	15,2	GA.20A	BA.20A	38	85
NSTX.14	12,67	E14	25	18,2	GA.20A	BA.20A	38	88
NSTX.16	14,70	E16	25	19,2	GA.20A	BA.20A	38	88
NSTX.18	16,38	E18	25	22,2	GA.20A	BA.20A	38	89
NSTX.20	18,16	E20	30	24,2	GA.24A	BA.24A	38	134
NSTX.24	21,84	E24	30	28,2	GA.24A	BA.24A	40	138

NSX 1/2" drive impact bits for Torx® heads



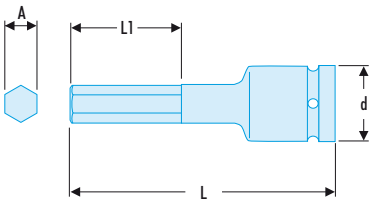


- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- For Torx® male drive fasteners.

	A [mm]	Torx [No]	d [mm]	Bits	L [mm]	⚖ [g]
NSX.30A	5,49	T30	25	NEX.30A	70	90
NSX.40A	6,60	T40	25	NEX.40A	70	95
NSX.45A	7,77	T45	25	NEX.45A	70	95
NSX.50A	8,79	T50	25	NEX.50A	70	100
NSX.55A	11,17	T55	25	NEX.55A	70	105
NSX.60A	13,20	T60	25	NEX.60A	70	110

NSHM 1/2" drive metric impact bits for hexagon socket heads



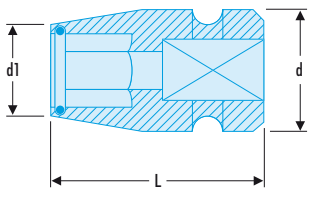


- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Monobloc driver socket.

	A [mm]	⬢ [mm]	d [mm]	GA	BA	L [mm]	L1 [mm]	⚖ [g]
NSHM.5	5	6	25	GA.20A	BA.20A	75	20	60
NSHM.6	6	6	25	GA.20A	BA.20A	75	20	60
NSHM.8	8	6	25	GA.20A	BA.20A	75	25	80
NSHM.10	10	6	25	GA.20A	BA.20A	75	25	100
NSHM.12	12	6	25	GA.20A	BA.20A	75	25	120
NSHM.14	14	6	25	GA.20A	BA.20A	75	25	120
NSHM.17	17	6	25	GA.20A	BA.20A	75	25	160
NSHM.19	19	6	25	GA.20A	BA.20A	75	25	180

NS.A - 1/2" impact bit holder sockets





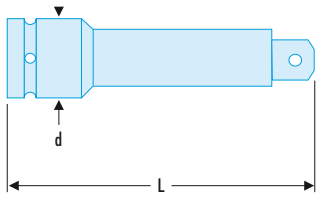
NF ISO 1711-2, ISO 1711-2, DIN 3121

- For 1/2" bits.
- NS.236: for 5/16" bits.
- NS.237: for 1/2" bits.

	A ["]	Square ["]	d [mm]	d1 [mm]	GA	BA	L [mm]	⚖ [g]
NS.236A	5/16	1/2	25	15,5	GA.20A	BA.20A	40	65
NS.237A	1/2	1/2	25	20	GA.20A	BA.20A	40	40

NS.A - 1/2" drive impact extensions





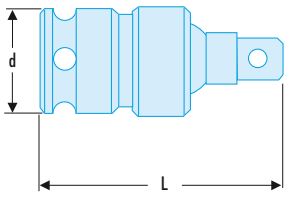
ASME B107.2

- For your safety, use impact extensions and accessories with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	⧋ [g]
NS.210A	25	GA.20A	BA.20A	50	105
NS.215A	25	GA.20A	BA.20A	125	235
NS.218A	25	GA.20A	BA.20A	175	370
NS.219A	25	GA.20A	BA.20A	250	520

1/2" drive impact universal joint





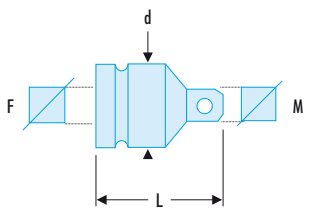
ASME B107.2

- For your safety, use impact universal joints with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	⧋ [g]
NS.240A	27,9	GA.24A	BA.24A	60	205

1/2" to 3/4" impact coupler





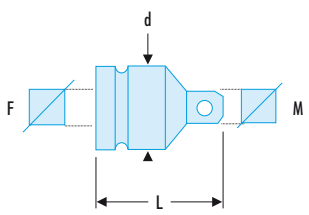
ASME B107.2

- For your safety, use impact couplers with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⧋ [g]
NS.232B	F = 1/2" - M = 3/4"	31	GA.24A	BA.25A	50	185

1/2" to 3/8" impact coupler





ASME B107.2

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⧋ [g]
NS.230A	F = 1/2" - M = 3/8"	25	GA.20A	BA.20A	41	90

NK.500E Set of 3/4" impact sockets 19 to 42 mm



- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Comprising:

- Sockets: NK.19A - NK.21A - NK.22A - NK.23A - NK.24A - NK.26A - NK.27A - NK.28A - NK.29A - NK.30A - NK.32A - NK.34A - NK.36A - NK.38A - NK.41A - NK.42A.
- Rings: BA.38A.
- Pins: GA.37A.
- Accessories: NK.210A and NS.240A.
- Metal case BT.111, dim. (L. x D. x H.): 396 x 224 x 82 mm.
- Tray PL.79A.

Weight: 12.40 kg.

NK.500U Set of 3/4" impact sockets size 3/4" to 1"5/8



- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Comprising:

- Sockets: NK.1'1/16A - NK.1'1/2A - NK.1'1/4A - NK.1'1/8A - NK.13/16A - NK.15/16A - NK.1'5/16A - NK.1'5/8A - NK.1'7/16A - NK.1'A - NK.3/4A - NK.7/8A.
- Pin: GA.37A.
- Ring: BA.38A.
- Accessories: NK.210A and NK.240A.
- Metal case BT.111, dim.(L. x D. x H.): 396 x 224 x 82 mm.
- Tray PL.80A.

Weight: 10.30 kg.

FACOM POWER TOOLS

FACOM HAS A WIDE RANGE OF AIR AND PORTABLE ELECTRIC TOOLS,

Including impact wrenches, ratchets, screwdrivers, drills, grinders, sanders, power chisels, etc.

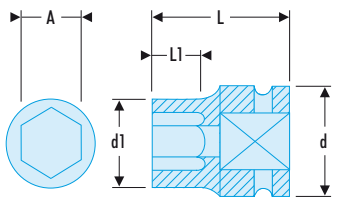
See section 14 p.676



Impact sockets 3/4" and accessories

NK.A - 3/4" drive metric 6-point impact sockets







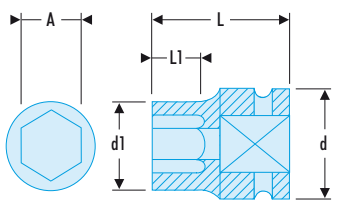
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NK.17A	17	6	44	30	GA.37A	BA.38A	52	12	300
NK.18A	18	6	44	32	GA.37A	BA.38A	50	13	310
NK.19A	19	6	44	33	GA.37A	BA.38A	50	14	315
NK.21A	21	6	44	35	GA.37A	BA.38A	50	15	330
NK.22A	22	6	44	37	GA.37A	BA.38A	50	16	345
NK.23A	23	6	44	38	GA.37A	BA.38A	50	16	350
NK.24A	24	6	44	39	GA.37A	BA.38A	50	17	350
NK.26A	26	6	44	42	GA.37A	BA.38A	50	18	480
NK.27A	27	6	44	43	GA.37A	BA.38A	54	23	480
NK.28A	28	6	44	44	GA.37A	BA.38A	54	23	520
NK.29A	29	6	44	45	GA.37A	BA.38A	54	23	520
NK.30A	30	6	44	47	GA.37A	BA.38A	54	23	545
NK.32A	32	6	44	49	GA.37A	BA.38A	56	23	620
NK.33A	33	6	44	51	GA.37A	BA.38A	56	23	650
NK.34A	34	6	44	52	GA.37A	BA.38A	56	23	680
NK.35A	35	6	44	53	GA.37A	BA.38A	56	23	680
NK.36A	36	6	44	54	GA.37A	BA.38A	56	25	705
NK.38A	38	6	44	57	GA.37A	BA.38A	58	26	890
NK.41A	41	6	44	60	GA.37A	BA.38A	58	28	890
NK.42A	42	6	44	62	GA.37A	BA.38A	58	29	925
NK.46A	46	6	44	67	GA.37A	BA.38A	63	32	1055

NK.A - 3/4" drive inch 6-point impact sockets





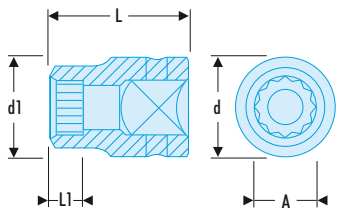
ASME B107.2

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A ["]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NK.3/4A	3/4	6	44	33	GA.37A	BA.38A	50	14	315
NK.13/16A	13/16	6	44	35	GA.37A	BA.38A	50	15	330
NK.7/8A	7/8	6	44	37	GA.37A	BA.38A	50	16	345
NK.15/16A	15/16	6	44	39	GA.37A	BA.38A	50	17	350
NK.1'A	1"	6	44	41	GA.37A	BA.38A	50	18	480
NK.1'1/16A	1' 1/16	6	44	43	GA.37A	BA.38A	54	23	480
NK.1'1/8A	1' 1/8	6	44	44	GA.37A	BA.38A	54	23	520
NK.1'1/4A	1' 1/4	6	44	49	GA.37A	BA.38A	56	23	620
NK.1'5/16A	1 '5/16	6	44	53	GA.37A	BA.38A	56	23	680
NK.1'7/16A	1 '7/16"	6	44	55	GA.37A	BA.38A	56	24	515
NK.1'1/2A	1' 1/2	6	44	57	GA.37A	BA.38A	58	26	890
NK.1'5/8A	1'5/8	6	44	60	GA.37A	BA.38A	58	28	890

NKD - 3/4" drive metric 12-point impact sockets





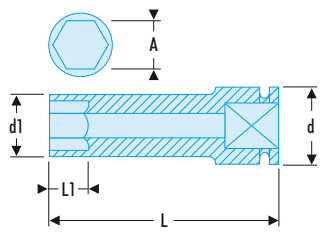
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NKD.16A	16	12	44	29,0	GA.37A	BA.38A	52	12	300
NKD.17A	17	12	44	30,0	GA.37A	BA.38A	52	12	305
NKD.18A	18	12	44	31,5	GA.37A	BA.38A	52	14	310
NKD.19A	19	12	44	32,5	GA.37A	BA.38A	52	14	315
NKD.22A	22	12	44	36,5	GA.37A	BA.38A	52	16	340

NK.LA - 3/4" drive metric long-reach metric 6-point impact sockets





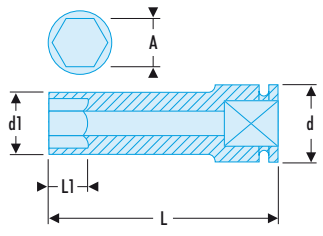
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NK.17LA	17	6	44	31	GA.37A	BA.38A	95	17	550
NK.19LA	19	6	44	33	GA.37A	BA.38A	95	17	620
NK.21LA	21	6	44	35	GA.37A	BA.38A	95	24	600
NK.22LA	22	6	44	37	GA.37A	BA.38A	95	24	780
NK.23LA	23	6	44	38	GA.37A	BA.38A	95	24	780
NK.24LA	24	6	44	39	GA.37A	BA.38A	95	24	820
NK.26LA	26	6	44	42	GA.37A	BA.38A	95	24	800
NK.27LA	27	6	44	43	GA.37A	BA.38A	95	24	810
NK.29LA	29	6	44	45	GA.37A	BA.38A	95	24	890
NK.30LA	30	6	44	47	GA.37A	BA.38A	95	24	900
NK.32LA	32	6	44	49	GA.37A	BA.38A	95	24	930
NK.33LA	33	6	44	51	GA.37A	BA.38A	95	24	980
NK.34LA	34	6	44	52	GA.37A	BA.38A	95	24	1100
NK.35LA	35	6	44	53	GA.37A	BA.38A	95	24	1240
NK.36LA	36	6	44	54	GA.37A	BA.38A	95	25	1240
NK.38LA	38	6	44	57	GA.37A	BA.38A	95	60	1220
NK.41LA	41	6	44	60	GA.37A	BA.38A	95	60	1470
NK.42LA	42	6	44	62	GA.37A	BA.38A	95	60	1450
NK.46LA	46	6	44	67	GA.37A	BA.38A	95	60	1480

NKB - 3/4" drive long-reach metric thin-wall 6-point impact sockets





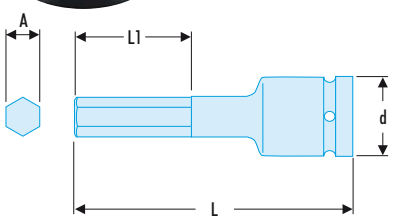
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Thin wall for better access.
- 6-point convex pattern for increased resilience.

	A [mm]	[mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NKB.21	21	6	33	GA.37A	BA.38A	102	21	600
NKB.22	22	6	34	GA.37A	BA.38A	102	22	600
NKB.24	24	6	36	GA.37A	BA.38A	102	24	640
NKB.27	27	6	40	GA.37A	BA.38A	102	27	670
NKB.30	30	6	43	GA.37A	BA.38A	102	30	700
NKB.32	32	6	46	GA.37A	BA.38A	102	32	706
NKB.33	33	6	48	GA.37A	BA.38A	102	33	750
NKB.36	36	6	50	GA.37A	BA.38A	102	36	765

NKHM - 3/4" drive metric impact bits for hexagon socket head



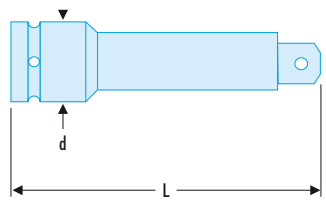


- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- Non-removable bits.

	A [mm]	[mm]	d [mm]	GA	BA	L [mm]	L1 [mm]	[g]
NKHM.17	17	6	44	GA.37A	BA.38A	100	20	600
NKHM.19	19	6	44	GA.37A	BA.38A	100	20	600
NKHM.22	22	6	44	GA.37A	BA.38A	100	20	600
NKHM.24	24	6	44	GA.37A	BA.38A	100	20	600

NK.A - 3/4" drive impact extensions





ASME B107.2

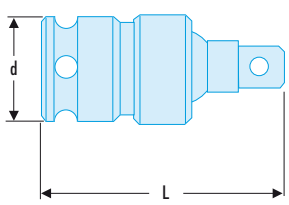
- For your safety, use impact extensions and accessories with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	[g]
NK.209A	44	GA.37A	BA.38A	100	600
NK.210A	44	GA.37A	BA.38A	175	105
NK.215A	44	GA.37A	BA.38A	252	117
NK.218A	44	GA.37A	BA.38A	330	151



3/4" drive impact universal joint





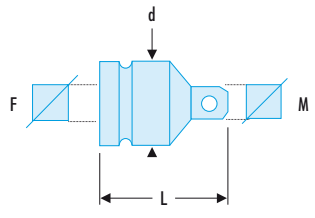
ASME B107.2

- For your safety, use impact universal joints with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	[g]
NK.240A	44	GA.37A	BA.38A	90	720

3/4" to 1/2" impact coupler





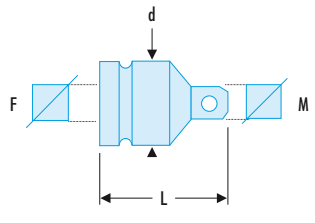
ASME B107.2

- For your safety, use impact couplers with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⚖ [g]
NK.230A	F = 3/4" - M = 1"	54	GA.37A	BA.38A	75	210

3/4" to 1" impact coupler





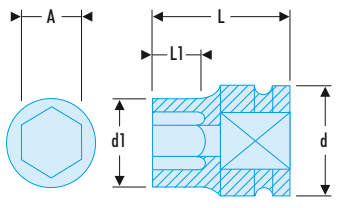
ASME B107.2

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⚖ [g]
NK.232A	F = 3/4" - M = 1"	43	GA.37A	BA.38A	71	525

NM.A - 1" drive metric 6-point impact sockets





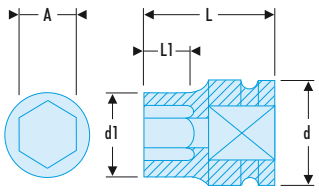
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	⬢ [mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	⚖ [kg]
NM.21A	21	6	54	38	GA.43A	BA.46A	58	17	0,520
NM.22A	22	6	54	40	GA.43A	BA.46A	58	17	0,500
NM.23A	23	6	54	41	GA.43A	BA.46A	58	17	0,500
NM.24A	24	6	54	42	GA.43A	BA.46A	58	17	0,500
NM.26A	26	6	54	44	GA.43A	BA.46A	58	18	0,520
NM.27A	27	6	54	46	GA.43A	BA.46A	58	19	0,520
NM.28A	28	6	54	47	GA.43A	BA.46A	58	20	0,520
NM.29A	29	6	54	48	GA.43A	BA.46A	60	20	0,520
NM.30A	30	6	54	50	GA.43A	BA.46A	60	20	0,750
NM.32A	32	6	54	52	GA.43A	BA.46A	60	22	0,760
NM.33A	33	6	54	53	GA.43A	BA.46A	60	22	0,750
NM.34A	34	6	54	55	GA.43A	BA.46A	62	23	0,750
NM.35A	35	6	54	56	GA.43A	BA.46A	62	26	0,800
NM.36A	36	6	54	57	GA.43A	BA.46A	65	26	0,840
NM.38A	38	6	54	60	GA.43A	BA.46A	65	30	0,840
NM.41A	41	6	54	63	GA.43A	BA.46A	67	30	1,040
NM.42A	42	6	54	65	GA.43A	BA.46A	74	35	1,040
NM.46A	46	6	54	70	GA.43A	BA.46A	74	35	1,500
NM.50A	50	6	54	75	GA.43A	BA.46A	80	40	1,650
NM.52A	52	6	54	77	GA.43A	BA.46A	84	42	1,750
NM.54A	54	6	54	80	GA.43A	BA.46A	84	42	1,790
NM.55A	55	6	54	81	GA.43A	BA.46A	84	42	1,840
NM.56A	56	6	54	82	GA.43A	BA.46A	84	42	2,060
NM.58A	58	6	54	85	GA.43A	BA.46A	87	44	2,190
NM.60A	60	6	54	87	GA.43A	BA.46A	87	44	2,370
NM.65A	65	6	54	93	GA.43A	BA.46A	90	46	2,730
NM.70A	70	6	54	100	GA.43A	BA.46A	96	50	2,980
NM.75A	75	6	86	106	GA.75A	BA.75A	98	50	3,300
NM.77A	77	6	86	109	GA.75A	BA.75A	100	50	3,500

NM.A - 1" drive inch 6-point impact sockets





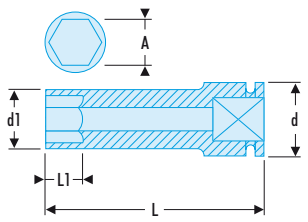
ASME B107.2

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A ["]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[kg]
NM.1'A	1''	6	54	44	GA.43A	BA.46A	58	18	0,520
NM.1'1/8A	1 1/8"	6	54	48	GA.43A	BA.46A	60	20	0,520
NM.1'1/4A	1'1/4	6	54	52	GA.43A	BA.46A	60	22	0,760
NM.1'5/16A	1'5/16	6	54	54	GA.43A	BA.46A	62	22	0,750
NM.1'1/2A	1'1/2	6	54	60	GA.43A	BA.46A	65	30	1,620
NM.1'5/8A	1'5/8"	6	54	63	GA.43A	BA.46A	67	30	1,040
NM.1'13/16A	1' 13/16	6	54	70	GA.43A	BA.46A	74	35	1,500
NM.1'7/8A	1'7/8	6	54	72	GA.43A	BA.46A	74	35	1,620
NM.2'A	2'	6	54	77	GA.43A	BA.46A	84	42	1,750
NM.2'1/8A	2'1/8	6	54	80	GA.43A	BA.46A	84	42	1,790

NM.LA - 1" drive long-reach metric 6-point impact sockets







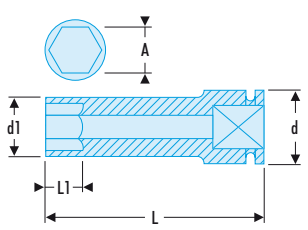
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[kg]
NM.22LA	22	6	54	40,0	GA.43A	BA.46A	100	21	1,000
NM.23LA	23	6	54	41,0	GA.43A	BA.46A	100	21	1,050
NM.24LA	24	6	54	42,0	GA.43A	BA.46A	100	21	1,050
NM.26LA	26	6	54	44,5	GA.43A	BA.46A	100	24	1,080
NM.27LA	27	6	54	46,0	GA.43A	BA.46A	100	24	1,120
NM.29LA	29	6	54	48,0	GA.43A	BA.46A	100	24	1,200
NM.30LA	30	6	54	50,0	GA.43A	BA.46A	100	24	1,200
NM.32LA	32	6	54	52,0	GA.43A	BA.46A	100	24	1,250
NM.33LA	33	6	54	53,0	GA.43A	BA.46A	100	24	1,320
NM.34LA	34	6	54	55,0	GA.43A	BA.46A	100	40	1,320
NM.35LA	35	6	54	56,0	GA.43A	BA.46A	100	60	1,340
NM.36LA	36	6	54	57,0	GA.43A	BA.46A	100	65	1,500
NM.38LA	38	6	54	60,0	GA.43A	BA.46A	100	65	1,500
NM.41LA	41	6	54	63,0	GA.43A	BA.46A	100	64	1,650
NM.42LA	42	6	54	65,0	GA.43A	BA.46A	100	64	1,650
NM.46LA	46	6	54	70,0	GA.43A	BA.46A	100	63	1,560
NM.50LA	50	6	54	75,0	GA.43A	BA.46A	100	62	1,870
NM.54LA	54	6	54	80,0	GA.43A	BA.46A	100	61	1,780
NM.55LA	55	6	54	81,0	GA.43A	BA.46A	100	60	1,930
NM.58LA	58	6	54	85,0	GA.43A	BA.46A	105	65	2,120
NM.60LA	60	6	54	87,0	GA.43A	BA.46A	120	78	2,180
NM.65LA	65	6	54	93,0	GA.43A	BA.46A	125	80	2,250
NM.70LA	70	6	54	100,0	GA.43A	BA.46A	125	80	2,230

NMB - Long-reach 6-point thin-wall sockets





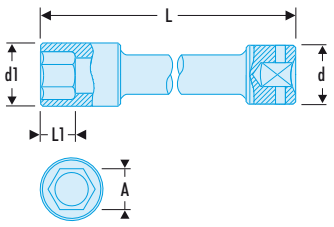
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- Thin wall for better access.
- For your safety, use impact sockets and accessories with the appropriate rings and pins.
- 6-point convex pattern for increased resilience.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[kg]
NMB.24	24	6	54	38	GA.43A	BA.46A	108	24	0,940
NMB.27	27	6	54	42	GA.43A	BA.46A	108	27	1,000
NMB.30	30	6	54	46	GA.43A	BA.46A	108	30	1,040
NMB.32	32	6	54	48	GA.43A	BA.46A	108	32	1,040
NMB.33	33	6	54	49	GA.43A	BA.46A	108	33	1,050
NMB.36	36	6	54	53	GA.43A	BA.46A	108	36	1,080
NMB.46	46	6	54	66	GA.43A	BA.46A	108	38	1,480
NMB.50	50	6	54	74	GA.43A	BA.46A	108	66	1,480

NM.ELA - 1" drive extra-long reach metric 6-point impact sockets



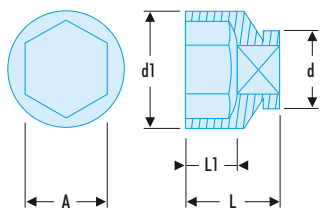


- For your safety, use impact extensions and accessories with the appropriate rings and pins.

	A [mm]	[mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	[kg]
NM.30ELA	30	6	54	50	GA.43A	BA.46A	270	30	2,50
NM.32ELA	32	6	54	52	GA.43A	BA.46A	270	32	2,56
NM.33ELA	33	6	54	53	GA.43A	BA.46A	270	32	2,56

Special "Trailer" 1" drive metric impact sockets



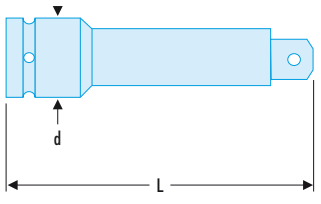


- For your safety, use impact extensions and accessories with the appropriate rings and pins.
- For 77 mm 6-point trailer hub nut.

	A [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[kg]
M.77TR	77	54	106	81	35	1,96

NM.A - 1" drive impact extensions







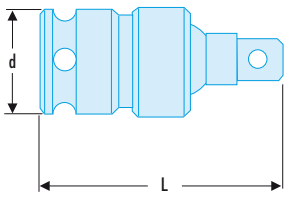
ASME B107.2

- For your safety, use impact couplers with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	[kg]
NM.209A	54	GA.43A	BA.46A	125	1,20
NM.210A	54	GA.43A	BA.46A	200	1,60
NM.215A	54	GA.43A	BA.46A	330	2,50

1" drive impact universal joint





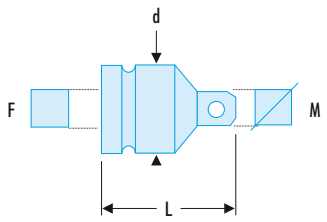
ASME B107.2

- For your safety, use impact couplers with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	⚖ [kg]
NM.240A	54	GA.43A	BA.46A	110	2,00

NM.A - 1" to 3/4" impact couplers





ASME B107.2

- For your safety, use impact couplers with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⚖ [kg]
NM.230A	F = 1" - M = 3/4"	54	GA.38	BA.36	75	0,540
NM.231A	F = 1" - M = 1/2"	51	GA.38	BA.36	154	1,040

1" to 1/2" impact coupler



ASME B107.2

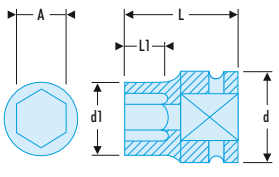
- For your safety, use impact couplers with the appropriate rings and pins.

	GA	BA	⚖ [kg]
NM.232A	GA.43A	BA.46A	1,50

Impact sockets 1" 1/2 and accessories

NG.A - 1 1/2" drive metric 6-point impact sockets





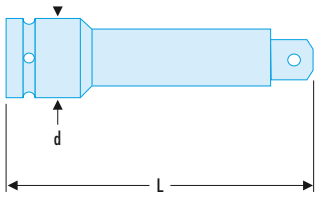
NF ISO 2725-2, NF ISO 1711-2, ISO 2725-2, ISO 1711-2, DIN 3129, ASME B107.33

- For your safety, use impact sockets and accessories with the appropriate rings and pins.

	A [mm]	⬢ [mm]	d [mm]	d1 [mm]	GA	BA	L [mm]	L1 [mm]	⚖ [kg]
NG.55A	55	6	86	87	GA.75A	BA.75A	90	38	2,520
NG.60A	60	6	86	94	GA.75A	BA.75A	92	38	2,870
NG.65A	65	6	86	100	GA.75A	BA.75A	95	40	3,180
NG.70A	70	6	86	106	GA.75A	BA.75A	100	43	3,750
NG.75A	75	6	86	112	GA.75A	BA.75A	103	45	3,930
NG.80A	80	6	86	119	GA.75A	BA.75A	110	51	4,610
NG.85A	85	6	86	125	GA.75A	BA.75A	118	52	5,380
NG.90A	90	6	86	131	GA.75A	BA.75A	118	52	5,650
NG.95A	95	6	95	137	GA.84A	BA.85A	118	52	6,590
NG.100A	100	6	95	144	GA.84A	BA.85A	125	59	7,420
NG.105A	105	6	95	150	GA.84A	BA.85A	125	59	7,830
NG.110A	110	6	95	156	GA.84A	BA.85A	125	59	8,600
NG.115A	115	6	95	162	GA.84A	BA.85A	135	67	9,730
NG.120A	120	6	95	169	GA.84A	BA.85A	135	67	9,480

NG.A - 1 1/2" drive impact extensions





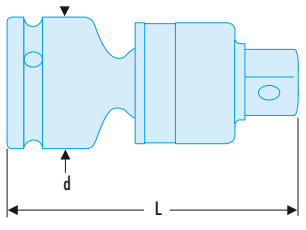
ASME B107.2

- For your safety, use impact extensions and accessories with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	⧋ [kg]
NG.210A	86	GA.75A	BA.75A	250	5,60
NG.215A	86	GA.75A	BA.75A	330	6,80

1 1/2" impact universal joint





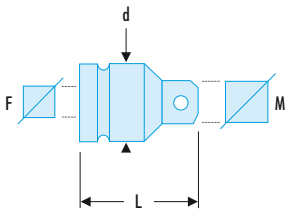
ASME B107.2

- For your safety, use impact universal joints with the appropriate rings and pins.

	d [mm]	GA	BA	L [mm]	⧋ [kg]
NG.240A	86	GA.75A	BA.75A	181	4,20

1 1/2" to 2 1/2" impact coupler





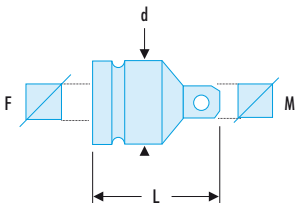
ASME B107.2

- For your safety, use impact universal joints with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⧋ [kg]
NG.232A	F =1" 1/2 - M = 2"1/2	86	GA.75A	BA.75A	120	3,90

1 1/2" to 1" impact coupler





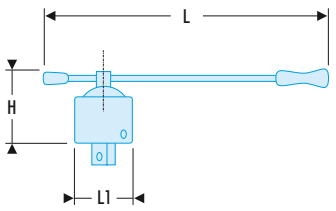
ASME B107.2

- For your safety, use impact universal joints with the appropriate rings and pins.

	Square ["]	d [mm]	GA	BA	L [mm]	⧋ [kg]
NG.230A	F =1" 1/2 - M = 1"	80	GA.75A	BA.75A	98	2,166

3/4" drive Dynapact manual impact wrench





- Stored energy frees or secures very tight fasteners.
- Handle rotation through 60° (approx.) releases torque.
- 10 impacts on 21 mm A/F equate to 1000 N.m.

- Dynapact handle: NK.300M.

	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
NK.300	105	470	96	4,00

NK.301AE 3/4" drive Dynapact manual impact wrench set

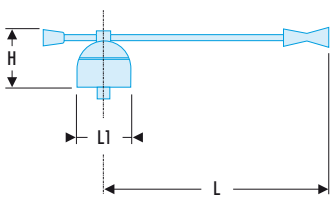


- Comprising:
- Wrench NK.300 and 16 tools with locking rings and pins.
- Sockets: NK.19A - NK.21A - NK.22A - NK.23 A - NK.24A - NK.26A - NK.27A - NK.29A - NK.30A - NK.32A -NK.34A - NK.36A - NK.38A - NK.41A - NK.42A.
- Extension: NK.210A.
- Metal case BT.103G, dim. (L. x D. x H.): 643 x 224 x 111 mm.
- Tray PL.84A.

Weight: 16.70 kg.

1" drive Dynapact manual impact wrench





- Stored energy frees or secures very tight fasteners.
- Handle rotation through 60° (approx.) releases torque.
- 10 impacts on 21 mm A/F equate to 2000 N.m.

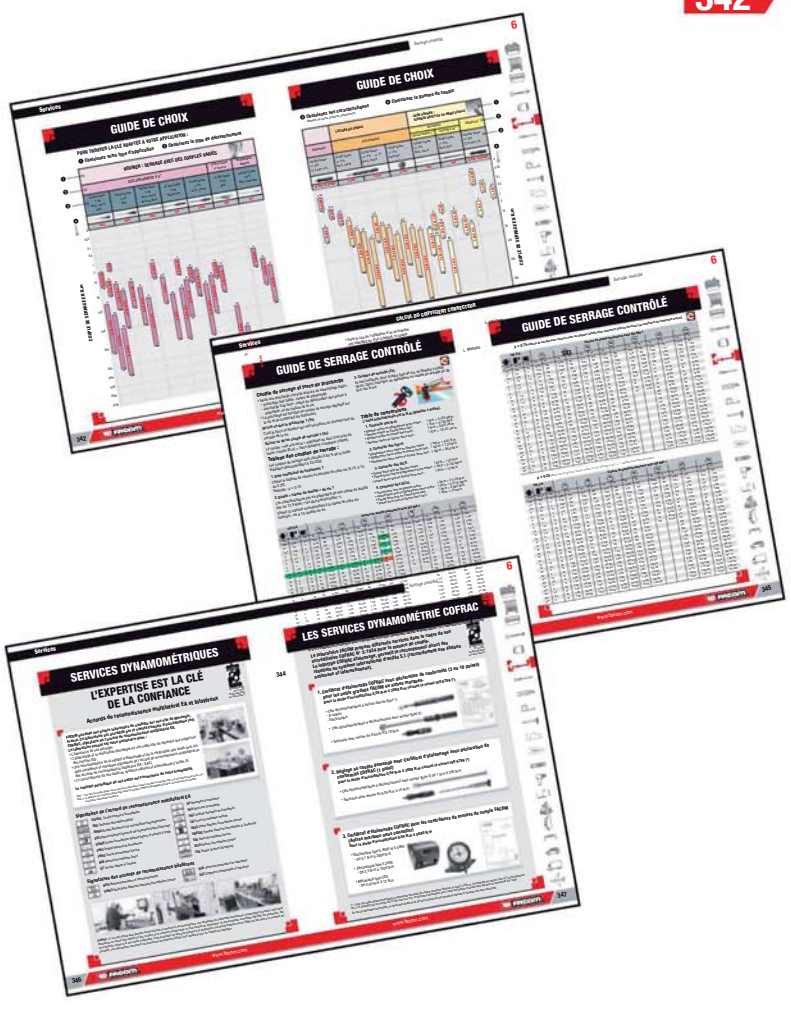
- Dynapact handle: NM.300M.

	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
NM.300	140	595	125	10,80



FACOM SERVICES

342



Selection guide **342**
Tightening torque **344**
Controlled torquing services **346**
Cofrac - Facom services **347**

TORQUE WRENCHES

350



"High performance" click wrenches **350**
"Multi-purpose" click wrenches **355**
Manual reset wrenches **357**
High-torque wrenches **358**
Torque multipliers **360**
Disengaging wrenches **362**
"Non vernier" adjustable wrenches **363**



ELECTRONIC TORQUE WRENCHES 365



Electronic torque wrenches 367
Electronic torque adapters 369

ACCESSORIES 374



Accessories 9 x 12 mm 375
Accessories 14 x 18 mm 377
Accessories 20 x 7 mm 378
Special accessories 379

DISENGAGING TORQUE DRIVER 370



Disengaging torque driver 371
"Non vernier" disengaging torque driver 373

TORQUE CONTROLLERS 381



Torque controllers 381

SELECTION GUIDE

TO FIND THE RIGHT WRENCH FOR YOUR APPLICATION:

❶ Choose the type of application **❷ Choose the torque-setting method**

❶	VERNIER: VARIABLE TORQUE ADJUSTMENT						
❷	5° RELEASE ANGLE					AUDIBLE AND VISUAL INDICATION	MANUAL RESET
❸	50,000 Cycles ± 4% 9x12, 14x18, Ø30	50,000 Cycles ± 4% 20x7	50,000 Cycles ± 4% 9x12, 14x18lbf.in or lbf.ft	25,000 Cycles ± 4% Fixed ratchet	25,000 Cycles ± 4% 9x12, 14x18	15,000 Cycles ± 4% Ø30	100,000 Cycles ± 6% 20x7, Fixed drive
❹	306D	306R	306U	208	208D	200	203

TIGHTENING TORQUE IN Nm

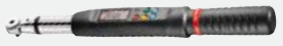
0 0.05 0.1 0.5 1 5 10 50 100 200 300 500 1000 1500 2000 2500

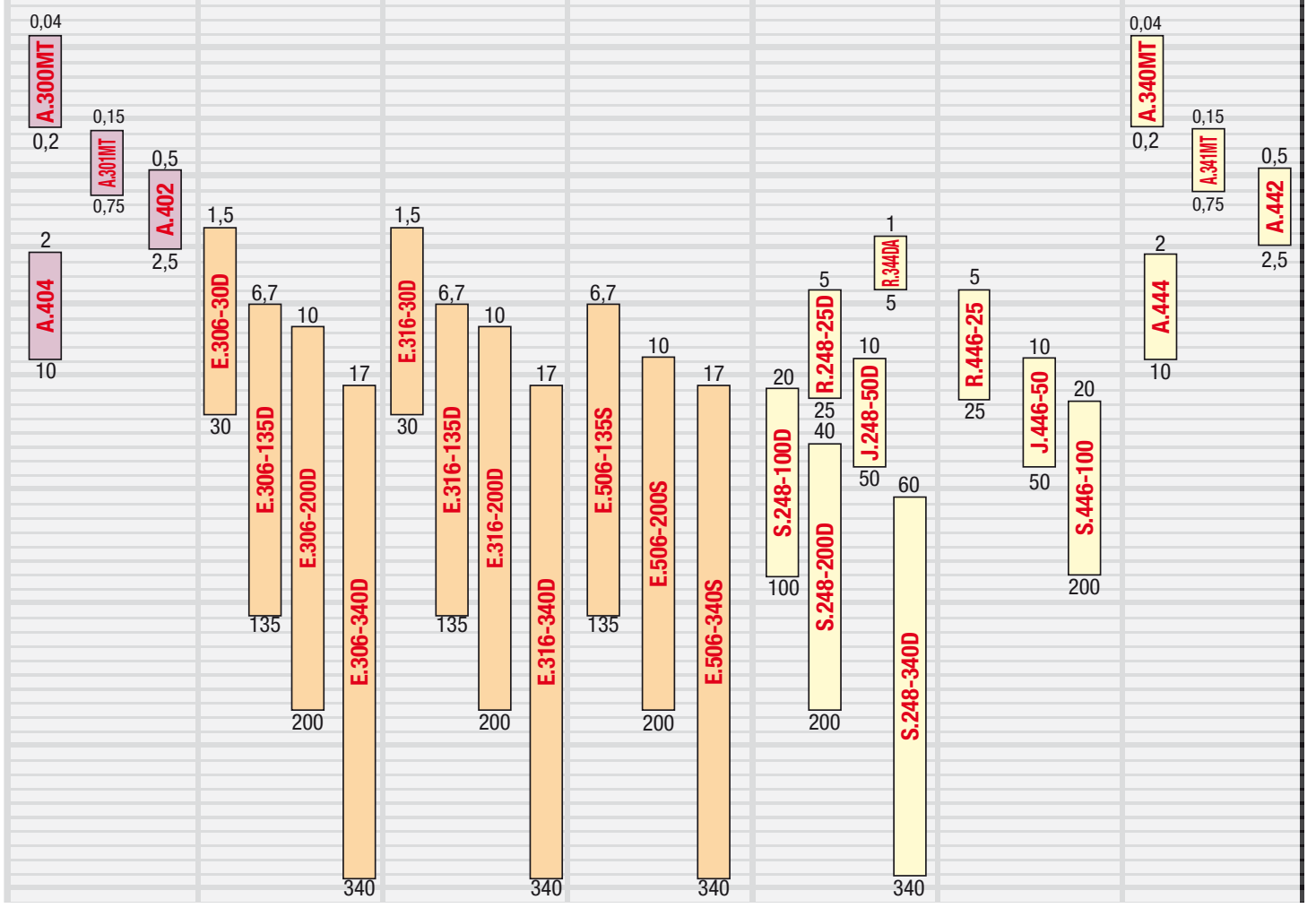
R.304DA 1–5
R.306-25D 5–25
J.306-50D 10–50
S.306-100D 20–100
S.306-200D 40–200
S.306-350D 70–350
S.306.100R 20–100
S.306-200R 40–200
S.306-350R 70–350
R.306U 4,52–22,6
J.306U 22,6–113
S.306U 68–339
R.208-25 5–25
S.208-340 60–340
S.208-200 40–200
J.208-50 10–50
S.208-100 20–100
S.208-340D 60–340
S.208-200D 40–200
J.208-50D 10–50
S.208-100D 20–100
K.200DB 180–900
K.202DB 300–1500
M.200DB 500–2500
R.203DA 6–36
J.203DA 20–100
S.203DA 40–200

SELECTION GUIDE

❸ Choose its characteristics
(Number of cycles, accuracy, end fitting)

❹ Choose the torque range

	TORQUE READING			NON VERNIER: REPETITIVE TIGHTENING TO THE SAME TORQUE		
				MECHANICAL		
RELEASE	DIAL	ELECTRONIC		5° "CLICK"	20° "BREAK"	RELEASE
100 000 Cycles +/- 6% ⎔ 4 mm, 1/4"	20 000 Cycles +/- 4% Fixed drive	25 000 Cycles +/- 2% 9x12, 14x18	10 000 Cycles +/- 3% Fixed drive	100 000 Cycles +/- 4% 9x12, 14x18	50 000 Cycles +/- 8% 9x12, 20x7	100 000 Cycles +/- 6% ⎔ 4 mm, 1/4"
						
A.400 / A.300MT	E.306	E.316	E.506	248	446	A.440 / A.340MT

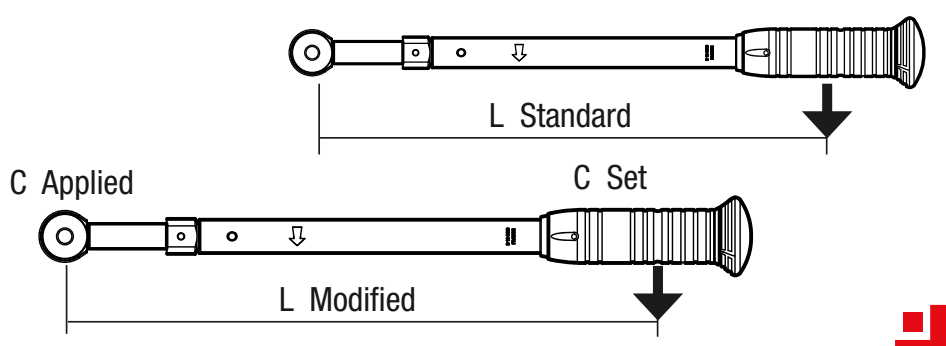


CALCULATION OF THE CORRECTION RATIO

- When using a non-standard accessory or crowfoot, torque applied does not match torque set.

Torque applied =

Torque set to x $\frac{\text{L Modified}}{\text{L Standard}}$



TORQUE CONTROL GUIDE

Tightening torque and tensile load

- Application of the correct force (tensile load) is essential for a reliable assembly:
  - under-tightened fasteners: can work loose
  - over-tight fasteners: may distort components to be connected, or shear the fastener.
- Tensile load depends on tightening torque applied to the fastener and the friction coefficient.

Tensile load (Fo)

The force in Newtons (N) which maintains pressure contact between assembled components.

Tightening torque (Cs)

The product of a force and the leverage length at which it is applied: Torque (N.m) = Force (in Newtons) x length (in metres).

Tightening torque table:

Torque values are given for 85% fastener yield strength (documentation E 25-030).

1. Friction coefficient

Choose the appropriate table according to type of fasteners used (0.10, 0.15, or 0.20). Example: μ = 0.10

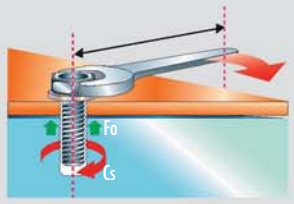
2. Fastener -grade

The grade of a fastener denotes its quality (best is 12.9). Check the appropriate column for the fasteners used. Example: fastener dia. 10, fastener grade

3. Tightening torque (Cs).

Torque values are listed in Newton-meters (Nm) for each type of fastener. In the example given, the fastener would be tightened to a torque of 36 Nm.





CONVERSION TABLE

The internationally accepted unit is the Newton-metre (Nm).

1. To convert Nm

- Newton-metres to Kilogramme-force metres: 1 N.m = 0.102 kgf.m
- Newton-metres to Pound-force feet: 1 Nm = 0.738 lbf.ft
- Newton-metres to Pound-force inches: 1 Nm = 8.851 lbf.in
- Newton-metres to Ounce-force inches: 1 Nm = 141.61 ozf.in

2. To convert kgf.m

- Kilogramme-force metres to Newton-metres: 1 kgf.m = 9.81 N.m
- Kilogramme-force metres to Pound-force feet: 1 kgf.m = 7.23 lbf.ft
- Kilogramme-force metres to Pound-force inches: 1 kgf.m = 86.8 lbf.in

3. To convert lbf.ft

- Pound-force feet en Newton-metres: 1 lbf.ft = 1.35 N.m
- Pound-force feet to Kilogramme-force metres: 1 lbf.ft = 0.138 kgf.m
- Pound-force feet to Pound-force inches: 1 lbf.ft = 12 lbf.in

4. To convert lbf.in

- Pound-force inches to Newton-metres: 1 lbf.in = 0.1129 N.m
- Pound-force inches to Kilogramme-force metres: 1 lbf.in = 0.0115 kgf.m
- Pound-force inches to Pound-force feet: 1 lbf.in = 0.083 lbf.ft
- Pound-force inches to Ounce-force inches: 1 lbf.in = 16 ozf.in

ISO 272			Steel fastener grades to ISO 898-1													
			5,6		5,8		6,8		8,8*		9,8**		10,9		12,9	
d mm	ISO mm	mm	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo
1,6**	0,35	3,2	0,06	260	0,084	364	0,096	416	0,128	555	0,144	624	0,189	815	0,221	954
2**	0,4	4	0,126	432	0,177	604	0,202	690	0,27	921	0,303	1 036	0,396	1 352	0,463	1 582
2,5**	0,45	5	0,261	718	0,365	1 006	0,417	1 150	0,556	1 533	0,626	1 724	0,82	2 251	0,96	2 634
3	0,5	5,5	0,44	1 077	0,62	1 508	0,71	1 724	0,95	2 298	1,09	2 586	1,4	3 376	1,64	3 951
4	0,7	7	1,03	1 868	1,44	2 615	1,65	2 988	2,2	3 985	2,49	4 484	3,23	5 853	3,78	6 849
5	0,8	8	2,03	3 053	2,85	4 275	3,25	4 885	4,34	6 514	4,92	7 335	6,3	9 568	7,4	11 196
6	1	10	3,53	4 310	4,95	6 034	5,6	6 896	7,5	9 195	8,53	10 336	11	13 506	12,9	15 805
8	1,25	13	8,5	7 904	11,9	11 066	13,6	12 647	18,2	16 863	20,63	18 968	26	24 768	31	28 984
10	1,5	16	16,8	12 580	23	17 612	27	20 128	36	26 838	41	30 197	52	39 418	61	46 128
12	1,75	18	29	18 337	40	25 672	46	29 339	62	39 119	70	44 022	91	57 457	106	67 236
14	2	21	46	25 175	65	35 245	74	40 280	99	53 707	111	60 251	145	78 882	170	92 309
16	2	24	71	34 597	100	48 436	115	55 356	153	73 808	173	83 165	225	108 406	263	126 858
18	2,5	27	99	42 094	139	58 932	159	67 351	220	92 440			313	131 897	366	154 348
20	2,5	30	140	54 059	196	75 682	225	86 494	311	119 003			440	169 385	515	198 216
22	2,5	34	192	67 511	269	94 515	307	108 017	424	148 374			602	211 534	704	247 540
24	3	36	241	77 845	338	108 983	387	124 552	534	171 437			758	243 914	887	285 432
27	3	41	355	102 393	498	143 350	569	163 829	784	225 110			1 114	320 832	1 304	375 442
30	3,5	46	483	124 491	677	174 287	773	199 185	1 067	274 030			1 515	390 072	1 773	456 467
33	3,5	50	653	155 083	915	217 116	1 046	248 132	1 442	341 347			2 048	485 926	2 397	568 637
36	4	55	841	182 032	1 177	254 845	1 346	291 252	1 855	400 571			2 636	570 369	3 085	667 453
39	4	60	1 088	218 667	1 523	306 135	1 741	349 868	2 399	481 158			3 410	685 159	3 990	801 782
42**	4,5	65	1 348	250 311	1 887	350 435	2 156	400 497	2 965	550 683			4 223	784 306	4 941	917 805
45**	4,5	70	1 681	292 970	2 353	410 158	2 690	468 752	3 698	644 534			5 267	917 973	6 164	1 074 223
48**	5	75	2 032	329 254	2 845	460 956	3 251	526 807	4 470	724 359			6 367	1 031 663	7 450	1 207 265
52**	5	80	2 608	395 006	3 651	553 008	4 172	632 009	5 737	869 013			8 171	1 237 685	9 562	1 448 354
56**	5,5	85	3 255	456 159	4 557	638 622	5 208	729 854	7 161	1 003 549			10 199	1 429 298	11 935	1 672 582
60**	5,5	90	4 032	532 893	5 645	746 050	6 451	852 629	8 871	1 172 365			12 634	1 669 732	14 785	1 953 941
64**	6	95	4 856	602 793	6 798	843 911	7 769	964 470	10 683	1 326 146			15 215	1 888 753	17 805	2 210 243

μ = 0.10 tightening torques for phosphated or galvanised fasteners with full lubrication (μ = average friction coefficient)

TORQUE CONTROL GUIDE

μ = 0.15 tightening torques for coated or bright fasteners fitted dry (μ = average friction coefficient)

ISO 272			Steel fastener grades to ISO 898-1													
			5,6		5,8		6,8		8,8*		9,8**		10,9		12,9	
d mm	ISO mm	mm	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo
1,6**	0,35	3,2	0,075	234	0,105	327	0,12	374	0,16	499	0,18	561	0,235	732	0,275	857
2**	0,4	4	0,159	388	0,222	544	0,254	621	0,339	829	0,381	932	0,498	1 217	0,582	1 424
2,5**	0,45	5	0,33	648	0,463	907	0,529	1 036	0,705	1 382	0,793	1 555	1,04	2 030	1,21	2 375
3	0,5	5,5	0,57	972	0,8	1 362	0,91	1 556	1,21	2 075	1,38	2 335	1,79	3 048	2,09	3 567
4	0,7	7	1,3	1 685	1,83	2 359	2,09	2 696	2,78	3 594	3,16	4 044	4,09	5 279	4,79	6 178
5	0,8	8	2,59	2 759	3,62	3 862	4,14	4 414	5,5	5 886	6,27	6 626	8,1	8 645	9,5	10 116
6	1	10	4,49	3 891	6,2	5 448	7,1	6 226	9,5	8 302	10,84	9 334	14	12 194	16,4	14 269
8	1,25	13	10,9	7 145	15,2	10 003	17,4	11 432	23	15 242	26,34	17 146	34	22 388	40	26 198
10	1,5	16	21	11 379	30	15 930	34	18 206	46	24 275	52	27 313	67	35 655	79	41 724
12	1,75	18	37	16 594	52	23 231	59	26 550	79	35 401	90	39 835	116	51 995	136	60 845
14	2	21	59	22 789	83	31 905	95	36 463	127	48 618	143	54 570	187	71408	219	83 563
16	2	24	93	31 385	130	43 939	148	50 216	198	66 955	224	75 422	291	98 340	341	115 079
18	2,5	27	128	38 123	179	53 373	205	60 998	283	83 746			402	119 454	471	139 787
20	2,5	30	182	49 039	254	68 655	291	78 463	402	107 941			570	153 657	667	179 811
22	2,5	34	250	61 326	350	85 857	400	98 123	552	134 806			783	192 157	917	224 865
24	3	36	313	70 616	438	98 863	500	112 986	691	155 489			981	221 266	1 148	258 928
27	3	41	463	93 042	649	130 259	741	148 868	1 022	204 577			1 452	291 534	1 700	341 157
30	3,5	46	628	113 045	880	158 263	1 005	180 872	1 387	248 811			1 969	354 209	2 305	414 500
33	3,5	50	854	141 009	1 195	197 412	1 366	225 614	1 884	310 343			2 676	441 828	3 132	517 033
36	4	55	1 096	165 409	1 534	231 573	1 754	264 655	2 418	363 974			3 435	518 282	4 020	606 501
39	4	60	1 424	198 910	1 994	278 474	2 279	318 257	3 139	437 669			4 463	623 253	5 223	729 339
42**	4,5	65	1 760	227 588	2 464	318 624	2 816	364 141	3 872	500 694			5 515	713 110	6 453	834 491
45**	4,5	70	2 203	266 613	3 085	373 258	3 525	426 580	4 847	586 548			6 903	835 386	8 079	977 579
48**	5	75	2 659	299 530	3 722	419 342	4 254	479 248	5 849	658 966			8 330	938 528	9 748	1 098 277
52**	5	80	3 425	359 684	4 795	503 558	5 480	575 495	7 335	791 306			10 731	1 127 011	12 558	1 318 843
56**	5,5	85	4 270	415 172	5 978	581 240	6 832	664 275	9 394	913 378			13 379	1 300 871	15 656	1 522 296
60**	5,5	90	5 306	485 416	7 428	679 583	8 490	776 666	11 673	1 067 916			16 625	1 520 971	19 455	1 779 860
64**	6	95	6 382	548 969	8 935	768 556	10 212	878 350	14 041	1 207 731			19 998	1 720 102	23 402	2 012 885

μ = 0.20 tightening torques for coated or bright fasteners. (μ = average friction coefficient)

ISO 272			Steel fastener grades to ISO 898-1													
			5,6		5,8		6,8		8,8*		9,8**		10,9		12,9	
d mm	ISO mm	mm	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo	Cs	Fo
1,6**	0,35	3,2	0,086	210	0,12	294	0,137	335	0,183	447	0,206	503	0,269	657	0,315	769
2**	0,4	4	0,183	349	0,256	488	0,293	558	0,39	744	0,439	837	0,573	1 093	0,671	1 279
2,5**	0,45	5	0,383	582	0,536	815	0,612	931	0,816	1 242	0,918	1 397	1,2	1 824	1,4	2 134
3	0,5	5,5	0,66	874	0,92	1 224	1,06	1 399	1,41	1 866	1,6	2 099	2,07	2 740	2,43	3 207
4	0,7	7	1,51	1 514	2,11	2 120	2,42	2 422	3,22	3 230	3,66	3 635	4,74	4 744	5,5	5 552
5	0,8	8	3	2 481	4,2	3 473	4,81	3 970	6,4	5 293	7,27	5 958	9,4	7 774	11	9 098
6	1	10	5,2	3 498	7,2	4 893	8,3	5 598	11,1	7 464	12,57	8 392	16,3	10 962	19,1	12 828
8	1,25	13	12,6	6 426	17,7	8 997	20	10 283	27	13 710	30,62	15 423	39	20 137	46	23 565
10	1,5	16	25	10 238	35	14 334	40	16 382	53	21 843	61	24 575	78	32 082	92	37 542
12	1,75	18	43	14 934	60	20 908	69	23 895	92	31 860	105	35 849	136	46 795	159	54 760
14	2	21	69	20 514	97	28 719	111	32 822	148	43 763	167	49 142	218	64 277	255	75 218
16	2	24	108	28 280	152	39 592	174	45 248	232	60 331	262	67 944	341	88 611	399	103 694
18	2,5	27	149	34 324	209	48 054	239	54 919	330	75 421			469	107 549	549	125 856
20	2,5	30	213	44 188	298	61 863	341	70 700	471	97 253			667	138 456	781	162 023
22	2,5	34	293	55 298	411	77 418	470	88 478	648	121 574			920	173 269	1 077	202 762
24	3	36	366	63 630	513	89 083	586	101 809	809	140 084			1 148	199 376	1 343	233 313
27	3	41	544	83 910	762	117 474	871	134 257	1 201	184 517			1 706	262 920	1 997	307 672
30	3,5	46	737	101 914	1 032	142 679	1 180	163 062	1 628	224 292			2 311	319 331	2 704	373 685
33	3,5	50	1 004	127 210	1 406	178 094	1 607	203 536	2 216	279 953			3 148	398 593	3 684	466 438
36	4	55	1 288	149 174	1 803	208 844	2 060	238 679	2 840	328 236			4 036	467 413	4 723	546 973
39	4	60	1 677	179 487	2 348	251 282	2 683	287 179	3 697	394 919			5 255	562 393	6 150	658 119
42**	4,5	65	2 070	205 323	2 898	287 452	3 312	328 516	4 554	451 710			6 486	643 344	7 590	752 849
45**	4,5	70	2 596	240 641	3 635	336 897	4 154	385 025	5 712	529 410			8 136	754 008	9 520	882 350
48**	5	75	3 130	270 321	4 383	378 449	5 009	432 514	6 887	594 706			9 809	847 006	11 478	991 177
52**	5	80	4 041	324 763	5 657	454 668	6 465	519 620	8 889	714 478			12 661	1 017 590	14 816	1 190 797
56**	5,5	85	5 034	374 739	7 048	524 635	8 054	599 582	11 075	824 426			15 773	1 174 182	18 458	1 374 043
60**	5,5	90	6 266	438 337	8 772	613 672	10 026	701 340	13 785	964 342			19 634	1 373 457	22 976	1 607 237
64**	6	95	7 533	495 676	10 546	693 947	12 052	793 082	16 572	1 090 488			23 603	1 553 119	27 620	1 817 480

TORQUE SERVICES

EXPERTISE IS THE KEY OF TRUST

cofrac ETALONNAGE
ACCREDITATIONN° 2-1934.Range available on www.cofrac.fr

EA and bilateral recognition agreements

FACOM has its own control laboratory in its site of Morangis, France. This laboratory is accredited by COFRAC, signatory of the EA multilateral recognition agreement.

Facom's laboratory is your partner:

- For accurate torquing.
- For calibrating and regularly checking your tools in accordance with ISO requirements.
- For mutually recognised validity of tool calibration and inspection with European and other countries based on multilateral or bilateral recognition agreements (EA ; ILAC).
- For relating your tools back to the national and international (SI) system of units.

Periodical checking of your tools ensures peace of mind.

Note 1: For more details on the services offered by the laboratory, refer to the after-sales catalogue or the web site www.facom.com
Note 2: A calibration certificate issued with the COFRAC-ETALONNAGE logotype guarantees the results are relatedto the IS international unit system.





Signatories of the EA multilateral recognition agreement

- **COFRAC**, Comité Français d'Accréditation
- **DKD** Deutscher AkkreditierungsRat
- **BMWA** Bundes Ministerium für wirtchaftliche Angelegenheiten
- **BKO** Belgische Kalibratie Organisatie obe Organisation Belge d'Etalonnage
- **DANAK** Danish Accreditation National Agency of Industry & Trade
- **ENAC** Entidad Nacional de Acreditacion
- **FINAS** Finnish Accreditation Service
- **NAB** National Accreditation Board
- **ACCREDIA** Ente Italiano di Accreditamento
- **NA** Norwegian Accreditation
- **RVA** Raad voor Accreditatie
- **IPAC** Instituto Português de Acréditação
- **CAI** Czech Accreditation Institute
- **UKAS** United Kingdom Accreditation Servioe
- **SWEDAC** Swedish Board for Accreditation & Conformity
- **SAS** Swiss Accreditation Service
- **ESYD** Hellenic Accreditation System
- **PCA** Polskie Centrum Akredytacji

Signatories to bilateral recognition agreements

- **NATA** National Association of Testing Authorities
- **SANAS** South Africa National Laboratory Accreditation Service
- **A2AL** American Association for Laboratory
- **SAC** Singapore Confederation of Industries







REMINDER: When a tool sent under guarantee is functional and complies with our prescriptions, a manufacturer compliance certificate is supplied with the product, however this certificate cannot be used in lieu and place of a calibration certificate, nor control report. When a COFRAC accredited service is requested, it is invoiced, even when the wrench cannot be repaired. This service will not be invoiced when a new machine package (FMN) following this check has been accepted. Information on COFRAC accredited services is valid on the day the catalogue is printed.

COFRAC TORQUE SERVICES

The FACOM laboratory offers different services within its COFRAC N° 2-1934 accreditation for measuring torque.
The COFRAC calibration logotype guarantees direct relation of the results with the I.S. international unit system (linked with national and international calibres).

cofrac ETALONNAGE
ACCREDITATION N° 2-1934.Range available on www.cofrac.fr

1. COFRAC calibration certificate with declaration of conformity (3 or 10 points) for graduated tools by FACOM or other brands.

In the 0.04 N.m to 3000 N.m accreditation range as per the ISO 6789 standard (*)

- Direct reading torque wrenches (type 1)- Dial- Electronic
- Vernier torque wrenches (type 2).
- Vernier torque drivers 0.04 Nm to 10 Nm.





2. Adjustment to the torque requested with Calibration certificate with COFRAC declaration of conformity (1 point). In the 0.04 N.m to 3000 N.m accreditation range as per the ISO 6789 standard (*)

- Non-vernier click torque wrenches (type 2) 1 Nm to 350 Nm
- Vernier torque drivers 0.04 Nm to 10 Nm.



3. COFRAC calibration certificate for FACOM torque testers (please consult us for other makes).

Within the 0.04 Nm to 5000 Nm accreditation range

- Electronic type E.4000 and E.5000- 0.1 Nm to 3,000 Nm
- Electronic type E.2000- 2.5 N.m to 1000 N.m
- Mechanical type CDS- 0.05 Nm to 12 Nm





(*): For manual control torque tools with a maximum torque below or equal to 10 N.m, the means uncertainty (see p.7) can exceed ±1% specified in the ISO 6789 standard. In this case, the tolerance acceptable for the tool is reduced accordingly to guarantee conformity of the tool.

In case of partial request, an offer will be issued and the wrench kept for six weeks maximum. Then it will be returned.

COFRAC ACCREDITED SERVICES

Caution! The name of the user company must be specified when ordering a COFRAC calibration certificate.

FACOM MAKE OR OTHER MAKE

cofrac ETALONNAGE
ACCREDITATION N° 2-1934.Range available on www.cofrac.fr

TORQUE WRENCHES AND SCREWDRIVERS



Description	Uncertainty Method and means	Measuring range	
COFRAC 3-point calibration certificate with declaration of conformity for graduated tools	see table on next page	0.04 N.m to 360 N.m	CVC.RJS
		360 N.m to 3000 N.m	CVC.KM
COFRAC 10-point calibration certificate with declaration of conformity for graduated tools	see table on next page	0.04 N.m to 3000 N.m	CEC10.RJS
		360 N.m to 3000 N.m	CEC10.KM
Presetting with COFRAC1-point calibration certificate with declaration of conformity	see table on next page	0.04 N.m to 3000 N.m	PRER.CO

TORQUE CONTROLLERS



Description	Uncertainty Method and means	Measuring range	
COFRAC calibration certificate torque meter 1 direction	see table on next page	0.04 N.m to 1000 N.m	CEC11
COFRAC calibration certificate torque meter 2 direction	see table on next page	0.04 N.m to 1000 N.m	CEC12
Facom E.5000 torque meter, 1 directions	see table on next page	10 N.m to 1000 N.m	CEC31
Facom E.5000 torque meter, 2 directions	see table on next page	10 N.m to 1000 N.m	CEC32

After analysis, any tool outside the packaged framework may be give rise to writing an offer.

1 - Within the guarantee, this package includes:

- The check as per procedures, NF EN ISO 6789 (except § 5.1.6: overload test and § 5.1.7: endurance test which are not applied) or specific procedures, validated by COFRAC.
- Overhauling the tool if necessary.
- A document with the values before and after intervention.
- COFRAC calibration certificate with declaration of conformity for graduated tools or COFRAC calibration certificate in the case of torquemeters.
- Carriage to the distributor.

2 - For FACOM tools outside the framework of the guarantee and out of tolerance, overhauling will be subject to an offer.

- If it is accepted: the cost of the service will correspond to the price of the repair package + price of the COFRAC calibration certificate with declaration of conformity for graduated tools or COFRAC calibration certificate in the case of torquemeters.
- If it is refused: the cost of the service will correspond, if the tool is functional, to the price of the COFRAC calibration certificate with declaration of conformity for graduated tools or COFRAC calibration certificate in the case of torquemeters.

TABLES OF UNCERTAINTIES AND COFRAC ACCREDITED METHODS





cofrac
ETALONNAGE
ACCREDITATIONN° 2-1934.Range available on www.cofrac.fr

1. CALIBRATION OF MANUAL CONTROL TORQUE TOOLS

Measuring range	Uncertainty of the means	Methods and means used
0.04 N.m to 1 N.m	± (1.2.10-3 N.m + 4.10-3.C)	Comparison with the CALS 010 sensor no. 0108
0.5 N.m to 5 N.m	± (6.10-3 N.m + 4.10-3.C)	Comparison with the CCS05 sensor no. 5191
1 N.m to 10 N.m	± (6.10-3 N.m + 4.10-3.C)	Comparison with the CS1 sensor no. 1248
5 N.m to 50 N.m	± 1.10-2.C	Comparison with the CS50 sensor no. 166
10 N.m to 100 N.m	± 1.10-2.C	Comparison with the CS 100 sensor no. 135
15 N.m to 150 N.m	± 1.10-2.C	Comparison with the CS 150 sensor no. 74
40 N.m to 400 N.m	± 1.10-2.C	Comparison with the CS 400 sensor no. 134
100 N.m to 1000 N.m	± 1.10-2.C	Comparison with the CS 1000 sensor no. 142
150 N.m to 1500 N.m	± 1.10-2.C	Comparison with the CS 1500 sensor no.150-8
400 N.m to 3000 N.m	± 1.10-2.C	Comparison with the CS 3000 sensor no.300-11

2. CALIBRATION OF TORQUEMETERS (TORQUE MEASUREMENT DEVICES)

Measuring range	Uncertainty of the means	Methods and means used
5 cN.m to 35 cN.m	± (0.1 cN.m + 2.10-3.C))	Right-hand torque calibration bench with bar no. BW-B-1-059 and weight no. BW-W-1-053
10 cN.m to 70 cN.m	± (0.1 cN.m + 2.10-3.C))	Right-hand torque calibration bench with bar no. BW-B-2-048 and weight no. BW-W-2-048
0.5 N.m to 4 N.m	± (10-3 N.m + 2.10-3.C)	Right-hand torque calibration bench with bar no. BW-B-3-065 and weight no. BW-W-3-057
1 N.m to 12 N.m	± (5.10-3 N.m + 2.10-3.C	Right-hand torque calibration bench with bar no. BW-B-4-065 and weight no. BW-W-4-062
0.04 N.m to 1 N.m	± (10-3 N.m + 2.10-3.C	Suspended weight and disc system disc no.21400
0.5 N.m to 50 N.m	± (5.10-3 N.m + 2.10-3.C	Suspended weight and arm system no.21420
10 N.m to 150 N.m	± (0.02 N.m + 2.10-3.C)	Suspended weight and arm system no.21421
20 N.m to 1000 N.m	± (0.06 N.m + 2.10-3.C)	Suspended weight and arm system no.21428
150 N.m to 5000 N.m	± (0.20 N.m + 2.10-3.C)	Suspended weight and arm system no.21515
10 N.m to 100 N.m	± (0.05 N.m + 5.10-3.C)	Comparison with a torquemeter reference HBM TB1A/100 no. 061730083 associated with the measurement bridge HBM MGC plus no. 019783
100 N.m to 1000 N.m	± (0.05 N.m + 5.10-3.C)	Comparison with a torquemeter reference HBM TB1A/1000 no. 052830025 associated with the measurement bridge HBM MGC plus no. 019783

C = torque applied.
These 2 tables give indications on the measurement range of the means, the absolute uncertainty of the means, the method and means used to perform a task. Example: Torque wrench reference S.306-200D capacity 40 N.m to 200 N.m. Service requested (product designation): COFRAC calibration certificate FACOM graduated wrench.

- Service reference: CEC10.RJS Mark no.1 corresponds for the link with the tables.

Mark no.1 is located in table 1 containing the following indications:

- Means measurement range: 40 N.m to 400 N.m,
- Absolute uncertainty of the means: ± 1.10-2.C
- Method and means used: Comparison with the CS 400 sensor no. 134

CAUTION ! In case of partial request, an offer will be issued and the wrench kept for six weeks maximum. Then it will be returned.

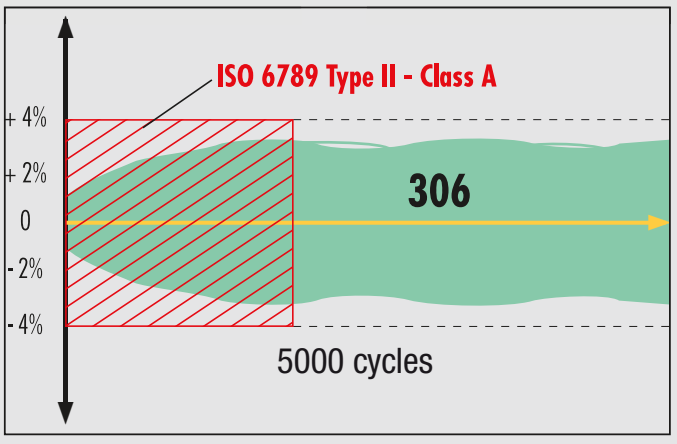
"High performance" click wrenches

SERIES 306 | CLICK WRENCHES
"HIGH PERFORMANCE"

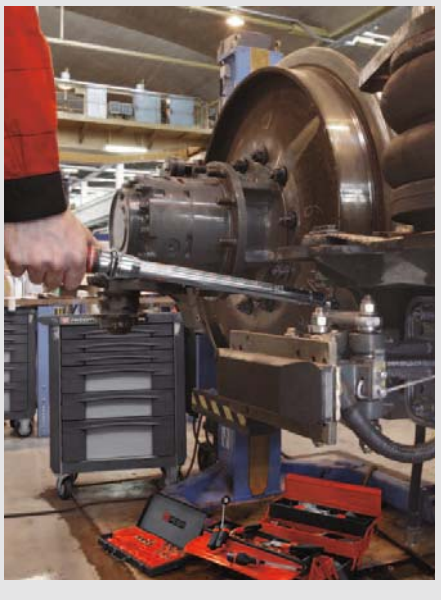
ISO 6789 TYPE II - CLASS A PRECISION ITSELF IN HEAVY DUTY!

HIGH PERFORMANCE
- Intensive use: reliability of mechanism tested to 50,000 cycles.
- Durable accuracy: remains within ISO 6789 tolerances after more than 5,000 cycles.
- Accuracy set at ± 2 % ex works.

SAFE
- Accurate, tamper-proof vernier. Easy to read and set for error-free adjustment.
- Automatically locking torque adjustment, no risk of accidental release.



ERGONOMIC
- Ergonomic handle.
- Increased length for improved torque transfer and accuracy.
- Hanging ring for storage.







306A - Click wrenches with removable ratchet





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy: ± 2% except:
- R.306-25D - K306-600D - K306-1000D (± 4%).
- R.304DA (± 6%).
- Reliability of mechanism: 50 000 cycles (wrenches up to 200 N.m).
- Use possible with accessories:
- End fitting: 9 x 12 or 14 x 18 mm.
- Diameter: 30 mm.
- One-way wrenches usable for unscrewing by reversing the bits.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Supplied in a plastic box with ratchet and hinged handle (except Ref R.306A25 - R.301A - K.306A600 - K.306A1000).

	Capacity [N.m]	Attachment	Graduation [N.m]	L [mm]	Wrench	Ratchet	Knob	Box	ΔΔ [kg]
R.301A	1 - 5	9 x 12	0,05	185	R.304DA	R.372		BP.102	0,290
R.306A25	5 - 25	9 x 12	0,10	271	R.306-25D	R.372		BP.D1	0,450
J.306A50	10 - 50	9 x 12	1,00	357	J.306-50D	J.372	S.305P	BP.D2	0,930
J.306A100	20 - 100	9 x 12	1,00	437	S.306-100D	J.372	S.305P	BP.D2	1,050
S.306A100	20 - 100	9 x 12	1,00	437	S.306-100D	S.372	S.305P	BP.D2	1,050
S.306A200	40 - 200	14 x 18	1,00	515	S.306-200D	S.382	S.305P	BP.D3	1,260
S.306A350	70 - 350	14 x 18	2,00	725	S.306-350D	S.382	S.305P	BP.D3	1,790
K.306A600	120 - 600	14 x18	2,00	990	K.306-600D	K.382		BP.D600	5,160
K.306A1000	200 - 1000	Ø 30 mm	4,00	1280	K.306-1000D	K.151A		BP.D1000	5,900

306D - Click wrenches without accessories



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy: ± 2% except:
- R.306-25D - K.306A600 - K.306A1000 (± 4%).
- R.304DA (± 6%).
- Reliability of mechanism: 50 000 cycles (wrenches up to 200 N.m).
- Use possible with accessories:
- End fitting: 9 x 12 or 14 x 18 mm.
- Diameter: 30 mm.
- One-way wrenches usable for unscrewing by reversing the bits.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Supplied in plastic box.

	Capacity [N.m]	Attachment	Graduation [N.m]	L [mm]	Box	ΔΔ [kg]
R.304DA	1 - 5	9 x 12	0,05	185	BP.102	0,290
R.306-25D	5 - 25	9 x 12	0,10	271	BP.D1	0,450
J.306-50D	10 - 50	9 x 12	1,00	357	BP.D2	0,930
S.306-100D	20 - 100	9 x 12	1,00	437	BP.D2	1,050
S.306-200D	40 - 200	14 x 18	1,00	515	BP.D3	1,260
S.306-350D	70 - 350	14 x 18	2,00	725	BP.D3	1,790
K.306-600D	120 - 600	14 x 18	2,00	945	BP.D600	4,600
K.306-1000D	200 - 1000	Ø 30 mm	4,00	1280	BP.D1000	5,900

"Low torque" click wrench with fixed ratchet





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy: ± 6%.
- Reliability of mechanism: 50,000 cycles.
- Compact wrench for confined access.
- Ratchet with 72 teeth (5°) for use with sockets.
- One-way wrench.
- Numbered wrench supplied with ISO 6789 calibration certificate.
- Supplied in a box, dim. (L. x W.): 205 x 120 mm.

	Capacity [N.m]	Graduation [N.m]	Square ["]	L [mm]	Box	[g]
R.306-5	1 - 5	0,05	1/4	197	BP.102	300

S.306R - Click wrenches with attachment 20 x 7 mm



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy: ± 2%.
- Reliability of mechanism: 50,000 cycles (wrenches --> 200 N.m).
- Use possible with accessories attachment 20 x 7 mm.
- One-way wrenches usable for unscrewing by reversing the bits.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Wrenches supplied in plastic protection tube.

	Capacity [N.m]	Attachment	Graduation [N.m]	L [mm]	⚖ [kg]
S.306-100R	20 - 100	20 x 7	1	420	1,040
S.306-200R	40 - 200	20 x 7	1	510	1,300
S.306-350R	70 - 350	20 x 7	2	698	1,890

R-J-S.306U - Click wrenches with dual lbf.in or lbf.ft and N.m graduation.



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy: ± 2% .
- Reliability of mechanism: 50,000 cycles.
- Click wrenches with dual lbf.in or lbf.ft and N.m graduation.
- Reversible model.
- Full metal wrenches with knurled handle.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Supplied in plastic box with ratchet.

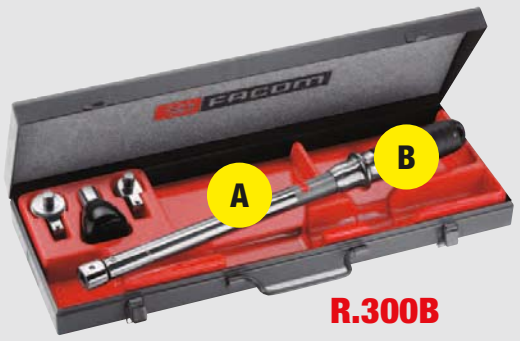
	Capacity [lbf.in]	Capacity [lbf.ft]	Attachment	Graduation [lbf.in]	Capacity [lbf.ft]	Square ["]	L [mm]	Box	⚖ [kg]
R.306U	40 - 200	-	9 x 12	1	-	1/4	285	BP.D1	0,460
J.306U	200 - 1000	-	9 x 12	5	-	3/8	379	BP.D2	1,050
S.306U	-	30 - 250	14 x 18	-	30 - 250	1/2	600	BP.D3	1,630

306 SERIES WRENCH SETS

EACH MODULAR SET COMES IN A STEEL CASE WITH ONE OR TWO EMPTY COMPARTMENTS THAT CAN EACH HOLD AN ADDITIONAL MODULE OF SOCKETS OR OTHER ACCESSORIES.



- Building a set:
  1. Check which size modules ("module" column) the set will take; e.g. S.300B takes 2 modules size C (C+C).
  2. Choose modules of the correct size. For the S.300B, with 9 x 12 end fittings, one can choose e.g. S.300-2 and J.300-3 (both size C modules). See below.



R.300B



J.300B - J.310B - S.300B

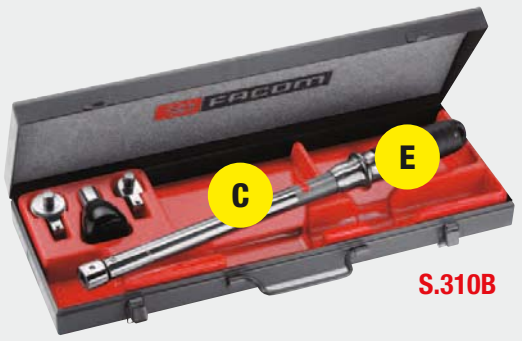
MODULES / mm	A 9 x 5 mm	B 14 x 5 mm	C 15 x 10 mm	
	**R.300-1** ☑ 1/4" Sockets 7-8-10-11-13 mm R.209 150 g		**J.300-1** ☑ 3/8" Sockets 10-11-13-15-16-17-18-19 J.210 ⚖ 540 g **J.300-11** ☑3/8" Sockets 10-11-13-15-16-17-18-19 J.210 ⚖ 680 g	**S.300-1** ☑ 1/2" Sockets 11-13-15-16 17-18-19-21-22 S.210 ⚖ 850 g **S.300-11** ☑ 1/2" Sockets 16-17-18-19-21-22-24-27 S.210 ⚖ 980 g
		**R.300-2** Open ends no.10: 8-10-11-12-13 mm ⚖ 200 g	**J.300-2** Open ends no. 10: 11-13-15-16-17-18-19 mm ⚖ 380 g	**S.300-2** Open ends no.10: 11-13-15-16-17-18-19 mm ⚖ 350 g
		**R.300-3** Ring ends no.12: 8-10-11-12-13 mm ⚖ 200 g	**J.300-3** Ring ends no.12: 10-11-13-15-16-17-18-19 mm ⚖ 380 g	**S.300-3** Ring ends no.12: 11-13-15-16-17-18-19 mm ⚖ 350 g
		**R.300-4** ☑ 1/4" Hex bits RT: 3-4-5-6 mm ⚖ 100 g	**J.300-4** ☑ 3/8" Hex bits JT: 5-6-8-10 mm ⚖190 g	**S.300-4** 1/2" Hex bits ST: 6-8-10-12 mm ⚖ 330 g

300B SERIES | MODULAR SETS

Contents of 300B series modular sets:

- 1 306D series wrench.
- 1 ratchet,1 square drive,1 pivot knob S.305P (except R.300B), 1 steel case with storage tray, (2 free compartments for modules).

	Capacity N.m	End fitting	Wrench	Content Ratchet	Square	Box set	Storage module	Kit	☐ "	Module	⚖ kg
R.300B	5-25	9 x 12	R.306-25D	R.372	R.373	BP.115	PL.141A	322 x 128 x 50	1/4	A+B	1,5
J.300B	10-50	9 x 12	J.306-50D	J.372	J.373	BT.118	PL.140	470 x 175 x 55	3/8	C+C	3,1
J.310B	20-100	9 x 12	S.306-100D	J.372	J.373	BT.118	PL.137	470 x 175 x 55	3/8	C+C	3,3
S.300B	20-100	9 x 12	S.306-100D	S.372	S.373	BT.118	PL.137	470 x 175 x 55	1/2	C+C	3,3
S.310B	40-200	14 x 18	S.306-200D	S.382	S.383	BT.119	PL.138	625 x 175 x 55	1/2	C+E	4,4
S.320B	70-350	14 x 18	S.306-350D	S.382	S.383	BT.120	PL.139	770 x 175 x 55	1/2	D+F	5,3



S.310B



S320B

MODULES / mm	E 28 x 10 mm	D 24 x 10 mm	F 39 x 10 mm
		**S.300-21** ☐ 1/2" Sockets 17-18-19-21-22-24-27-30-32 mm S.210 ⚖1300 g	
	**S.300-12** Open ends 11: 16-17 18-19-21-22-24-27 mm ⚖ 1280 g	**K.300-2** Open ends 11: 22-24-27 -30-32 mm ⚖ 1020 g	**S.300-22** Open ends 11: 17-18-19-21-22-24-27-30-32 mm ⚖ 1580 g
	**S.300-13** Ring ends 13: 16-17 - 18-19-21-22-24-27 mm ⚖ 1140 g		**S.300-23** Open ends 13: 17-18-19-21-22-24-27-30-32 mm ⚖ 1,440 g **K.300-3** Ring ends 13: 22-24-27-30-32-34-36 mm ⚖ 1320 g
	**S.300-14** ☐ 1/2" Hex. bits ST: 8-10-12 -14 mm ⚖ 400 g		**S.300-24** ☐ 1/2" Hex. Bits ST: 8-10-12-14-17 mm ⚖ 540 g

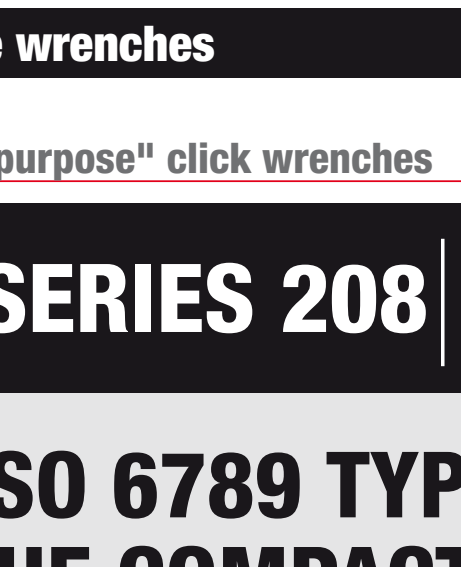
"Multi-purpose" click wrenches

SERIES 208 | CLICK WRENCH
"MULTI-PURPOSE"

ISO 6789 TYPE II - CLASS A
THE COMPACT WRENCH FOR ALL APPLICATIONS

HEAVY-DUTY
- Reliability of mechanism tested to 25000 cycles.
- Resistant to all hydrocarbons for use in garages or industrial environments.

Reliable
- Accurate to within ± 4 % in accordance with ISO 6789.
- Long-lasting accuracy.
- Double (coarse and fine) vernier adjustment.





Compact
- Shorter and lighter for working in congested spaces.
- Fixed ratchet version with a smaller head.

2 SERIES:



- With fixed ratchet.



- With removable ratchet.





R-J-S.208 - Click wrenches with fixed ratchet



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4%.
- Reliability of mechanism 25 000 cycles.
- Ratchet with 72 teeth (5° increment) for use with sockets.
- One-way wrenches.
- Sensitive and sound click when reaching torque.
- Automatic reset.
- Supplied with ISO 6789 calibration certificate.
- Supplied in plastic protection tube.

	Capacity [N.m]	Graduation [N.m]	Square ["]	L [mm]	⚖ [kg]
R.208-25	5 - 25	0,1	1/4	300	0,500
J.208-50	10 - 50	0,5	1/2	357	0,900
S.208-100	20 - 100	1,0	1/2	416	1,040
S.208-200	40 - 200	2,0	1/2	479	1,220
S.208-340	60 - 340	2,0	1/2	632	1,540

J-S.208D - Click wrenches without accessories



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4%.
- Reliability of mechanism 25 000 cycles.
- End fitting: 9 x 12 or 14 x 18 mm for accessories (ratchets, polygon and open end bits).
- One-way wrenches usable for unscrewing by reversing the bits.
- Sensitive and sound click when reaching torque.
- Automatic reset.
- Supplied with ISO 6789 calibration certificate.
- Supplied in plastic protection tube.

	Capacity [N.m]	Attachment	Graduation [N.m]	L [mm]	⚖ [kg]
J.208-50D	10 - 50	9 x 12	0,5	337	0,780
S.208-100D	20 - 100	9 x 12	1,0	396	0,920
S.208-200D	40 - 200	14 x 18	2,0	466	1,110
S.208-340D	60 - 340	14 x 18	2,0	618	1,430

J-S.208A - Click wrenches with removable ratchet



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4%.
- Reliability of mechanism 25 000 cycles.
- End fitting: 9 x 12 or 14 x 18 mm for accessories (ratchets, polygon and open end bits).
- One-way wrenches usable for unscrewing by reversing the bits.
- Sensitive and sound click when reaching torque.
- Automatic reset.
- Supplied with ISO 6789 calibration certificate.
- Supplied in plastic protection tube with ratchet.

	Capacity [N.m]	Attachment	Graduation [N.m]	Square ["]	L [mm]	Wrench	Ratchet	⚖ [kg]
J.208A50	10 - 50	9 x 12	0,5	3/8	337	J.208-50D	J.372V	0,780
S.208A100	20 - 100	9 x 12	1,0	1/2	396	S.208-100D	S.372V	0,920
S.208A200	40 - 200	14 x 18	2,0	1/2	466	S.208-200D	S.382V	1,110
S.208A340	60 - 340	14 x 18	2,0	1/2	618	S.208-340D	S.382V	1,430

Manual reset wrenches

MANUAL RESET WRENCH

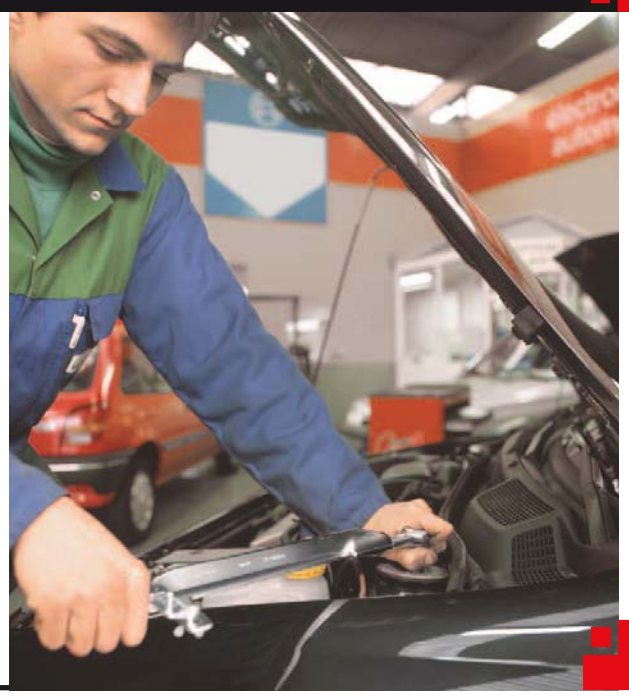
THE SIMPLE, HEAVY-DUTY WRENCH

Simple and reliable

- Strong, dependable wrenches.
- Accuracy to within ± 6 % of the reading in accordance with ISO 6789.
- Numbered and supplied with a calibration certificate.

Triple signal

- Release of the rocker when preset torque is reached produces a triple visual, sensory and audible signal.
- Clear graduated scale ensures precise torque settings.
- Scale pointer movement helps to monitor torque increase.



R-J-S.203DA - Manual reset wrenches





- Accuracy: ± 6 %.
- R.203A wrench, graduated in N.m. with fixed square.
- J.203A - S.203A wrenches, graduated in daN.m.
- Supplied in plastic storage case with ISO 6789 calibration certificate.

	Capacity [daN.m]	Graduation	Square ["]	L [mm]	Box	ΔΔ[g]
R.203DA	0,6 - 3,6	2,0 N.m	1/4	320	BP.D5	300
J.203DA	2,0 - 10,0	0,5 daN.m	3/8	440	BP.D5	800
S.203DA	4,0 - 20,0	1,0 daN.m	1/2	460	BP.D5	900

R-J-S.203A - Manual reset wrenches with removable square drive







NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 6% value displayed.
- R.203A wrench, graduated in N.m.
- J.203A - S.203A wrenches, graduated in daN.m.
- Supplied in plastic storage case with ISO 6789 calibration certificate.

	Capacity [daN.m]	Graduation	Square ["]	Square	L [mm]	Wrench	Knob	Box	ΔΔ [kg]
R.203A	0,6 - 3,6	2,0 N.m	1/4	-	320	R.203DA	R.200P	BP.D5	0,400
J.203A	2,0 - 10,0	0,5 daN.m	3/8	J.203E	440	J.203DA	S.200P	BP.D5	0,950
S.203A	4,0 - 20,0	1,0 daN.m	1/2	S.203E	460	S.203DA	S.200P	BP.D5	1,000

J-S.202A - Manual click wrenches with removable ratchet



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 6% value displayed.
- 1/4" square wrench: see product ref R.203A.
- Supplied in plastic storage case with ISO 6789 calibration certificate.

	Capacity [daN.m]	Graduation	Square ["]	L [mm]	Wrench	Ratchet	Box	ΔΔ [kg]
J.202A	2-10	0,5 daN.m	3/8	460	J.203DA	J.152	BP.D5	1,000
S.202A	4-20	1,0 daN.m	1/2	470	S.203DA	S.152	BP.D5	1,120

SJ-K214 - Extension for 203 series wrench



- Can double or triple the capacity of wrenches ref J.203DA - S.203DA.
- Use with:

- 152 ratchets.
- Bits series 20: SJ.214.
- Sockets 3/4": K.214A.

	Capacity [daN.m]	L [mm]	⚖ [kg]
SJ.214	x2	400	0,680
K.214A	x3	860	3,000

R-J-S.205E - Modular sets with sockets



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Each of these sets has a free slot for an additional bit module.
- Choice of module and size (refer to the table).
- Supplied with a handle:

- R.200P (R.205E).
- S.200P (J.205E - S.205E).
- Supplied with extension SJ.214 (except R.205E).
- Supplied in a grey metal box.

	Capacity [daN.m]	Square ["]	Wrench	Socket	Box	Tray	⚖ [kg]
R.205E	0,6 - 3,6	1/4	R.203DA	R.300.1	BT.112G	PL.142	1,350
J.205E	2 - 10	3/8	J.203DA	J.300.11	BT.118	PL.136	4,260
S.205E	4 - 20	1/2	S.203DA	S.300.11	BT.119	PL.135	4,700

High-torque wrenches

SERIES 200 | HIGH-TORQUE WRENCH

HIGH-TORQUE WRENCH

Comfort of use

- Large dial.
- Separate N.m and lbf.ft scales.
- Accurate to within ± 4 % of the reading in accordance with ISO 6789.
- Light signal on reaching preset torque.

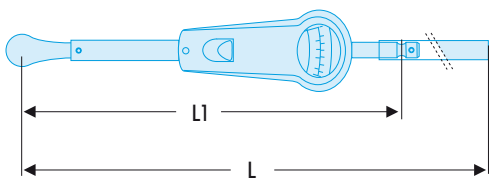
Sturdy

- Large round end fitting Ø 30 mm.
- Optional use with jack or lifting gear.



KM.B - High-torque wrenches with ratchet and drive square



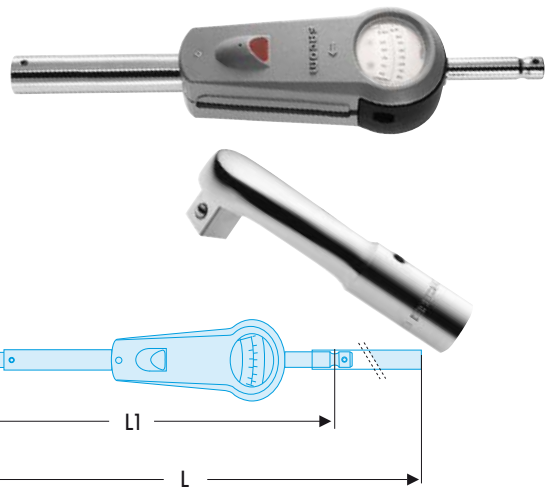


NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4 % value displayed.
- Two reading scales: N.m and lbf.ft.
- Large size dial.
- Light alarm when reaching torque.
- Cylindrical attachment diameter 30 mm.
- Numbered wrenches supplied with calibration certificate.
- Wrenches supplied in metal case with storage module), dim. (L. x W. x H.): 760 x 220 x 140 mm.

	Capacity [N.m]	Capacity [lbf.in]	Square ["]	Square	L [mm]	L1 [mm]	Wrench	Ratchet	Handle	Box	Tray	[kg]
K.201B	180 - 900	150 - 650	3/4	M.200E	1019	595	K.200DB	K.151A	K.200MA	BT.102	PL.549	7,900
K.203B	300 - 1500	250 - 1100	3/4	K.200E	1019	595	K.200DB	K.151A	K.202MA	BT.102	PL.549	8,000
M.201B	500 - 2500	300 - 1800	1	M.200EA	-	724	M.200DB	M.151	-	BT.102	PL.549	18,000

KM.B - High-torque wrenches with drive square





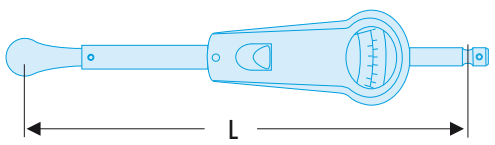
NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4 % value displayed.
- Two reading scales: N.m and lbf.ft.
- Large size dial.
- Light alarm when reaching torque.
- Cylindrical attachment diameter 30 mm.
- Numbered wrenches supplied with calibration certificate.
- Wrenches supplied in metal case with storage module, dim. (L. x W. x H.): 760 x 220 x 140 mm.

	Capacity [N.m]	Capacity [lbf.ft]	Capacity [lbf.ft]	Square ["]	Square	L [mm]	L1 [mm]	Wrench	Handle	Box	Tray	[kg]
K.200B	180 - 900	150 - 650	150 - 650	3/4	M.200E	1019	595	K.200DB	K.200MA	BT.102	PL.549	6,20
K.202B	300 - 1500	250 - 1100	250 - 1100	3/4	K.200E	1019	595	K.200DB	K.202MA	BT.102	PL.549	6,30
M.200B	500 - 2500	300 - 1800	300 - 1800	1	M.200EA		724	M.200DB	-	BT.102	PL.549	13,00

KM.DB - High-torque wrenches without accessories





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4 % value displayed.
- Two reading scales: N.m and lbf.ft.
- Large size dial.
- Light alarm when reaching torque.
- Cylindrical attachment diameter 30 mm.
- Numbered wrenches supplied with calibration certificate.

	Capacity [N.m]	Capacity [lbf.ft]	Graduation [N.m]	Capacity [lbf.ft]	L [mm]	[kg]
K.200DB	180 - 900	150 - 650	25	150 - 650	595	3,60
K.202DB	300 - 1500	250 - 1100	50	250 - 1100	595	4,65
M.200DB	500 - 2500	300 - 1800	100	300 - 1800	724	5,70

M.200M Handle for wrench M.200DB

- Telescopic handle gives up to 3m leverage including length of wrench.
- Complete with fasteners.

Weight: 8.144 kg.

Torque multiplier

TORQUE MULTIPLIERS

FOR HIGH TIGHTENING AND LOOSENING TORQUES WITHOUT AN EXTERNAL POWER SOURCE

MORE ACCURATE, SAFER AND MORE COMPACT

- Slow, gentle torque application ensures improved accuracy.
- Reduced lever arm compared to a high-torque wrench ensures operator safety.
- Reduced size allows multipliers to be used where high torque wrenches cannot reach.



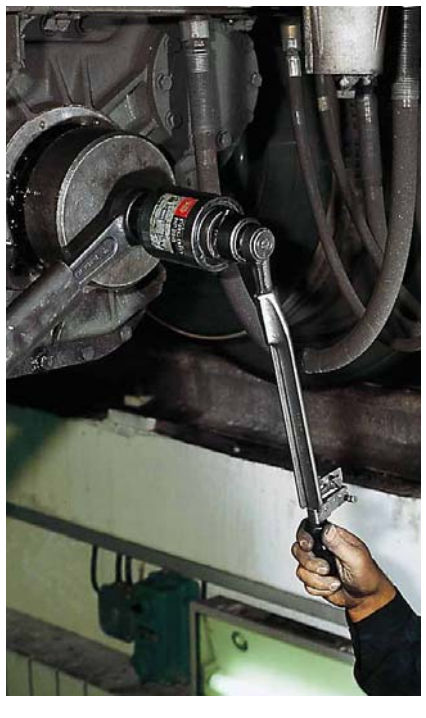




TYPE MC

- Compact and lightweight for awkward spaces.
- With stop lever.





TYPE NP

- Input torque limiter to protect the mechanism.
- Non-return system for increased safety.
- Lifetime-lubricated mechanism for ease of maintenance.
- Supplied with two reaction arms, one straight and one offset.



TORQUE MULTIPLIER SELECTION GUIDE

Required input torque: input torque= output torque x multiplying factor

Example: Specified tightening torque: 2000 Nm
Model NP.300B
–> Input torque = 2000 / 25 = 80 Nm.

	Input drive	Output drive	Accuracy	Multiplying factor	Max. input torque	Max. output torque
MC.130B	1/2"	3/4"	+/-4%	5	260	1300
MC.270B	3/4"	1"	+/-4%	5	540	2700
NP.100B	1/2"	3/4"	+/-4%	25	40	1000
NP.200B	1/2"	1"	+/-4%	25	80	2000
NP.300B	1/2"	1"	+/-4%	25	120	3000
NP.600B	1/2"	1"1/2	+/-4%	25	240	6000

WARNING

- **For your safety, use only impact grade sockets and accessories. Always lock sockets with the appropriate pin and ring.**
- **Never use manual or pneumatic impact wrenches with this type of tool.**

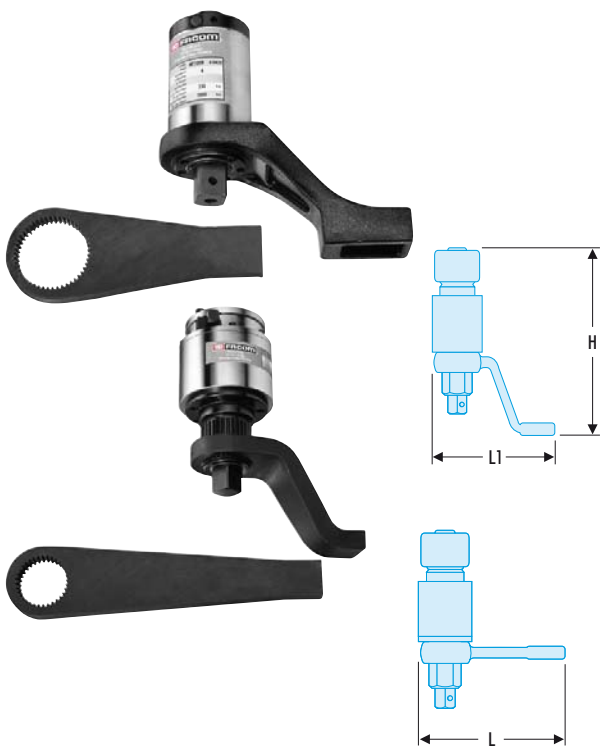
MC.B Torque Multiplier



- Compact and lightweight models suited to maintenance work on vans, trucks.
- Multiplication ratio: 5:1.
- Supplied with 2 reaction arms (straight and angled) and one spare drive square.

	A [mm]	B [mm]	C [mm]	d [mm]	L [mm]	⚖ [kg]
MC.130B	126	263	180	106	396	3,80
MC.270B	128	263	186	106	396	3,80

NP.B - Sets with torque multiplier



- Powerful tightening and untightening without external energy source.
- Constant multiplication ratio: 25:1.
- Safety: input torquer limiter.
- Non-return system.
- Rate = 25:1.
- Supplied with 2 reaction arms (straight and angled) and one spare drive square, with a compliance certificate.

	A [mm]	B [mm]	C [mm]	d [mm]	⚖ [kg]
NP.100B	174	165	218	72	3,00
NP.200B	174	165	218	72	3,00
NP.300B	224	141	285	108	7,00
NP.600B	271	154	351	119	10,60

Release wrenches

SERIES 648 | **RELEASE WRENCHES**

FULL TORQUE CONTROL



STURDY AND DURABLE

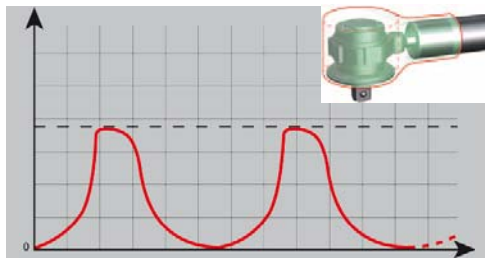
- Sturdy wrench for production environments.
- For intensive and repetitive use, tested to over 100,000 cycles.
- Accuracy: +/-4% in accordance with ISO6789.

SAFE AND RELIABLE

- Release technology: prevents exceeding the torque set on the key.
- For all application points: torque repeatable over time.
- Preset non graduated wrenches: no operator setting errors.

RELEASE TECHNOLOGY

Torque set cannot be exceeded, as the mechanism releases once the torque set is reached.
Accuracy and repeatability guaranteed, tightening accuracy no longer lies on the operator's hand, but in a reliable mechanism.
Wrench intended for production or assembly workshops,as it guarantees reliable tightening even in highly repetitive and busy working conditions.





Removable knob: for a firm grip directly on the body of the wrench.

648 - Release wrenches



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4% (except R.648.10 at ± 6%).
- Proven reliability: 100,000 cycles.
- Torque adjustment using a control bench, with a key:
- 82H.6 for products R.648-10 - R.648-25 - J.648-50.
- 82H.10 for product S.648-110.
- Hydrocarbon-resistant removable handle.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Supplied in plastic tube.

	Capacity [N.m]	Square ["]	L [mm]	⚖ [kg]
R.648-10	2 - 10	1/4"	178	0,300
R.648-25	5 - 25	1/4"	238	0,450
J.648-50	10 - 50	3/8"	328	0,900
S.648-110	25 - 110	1/2"	446	1,600

"Non vernier" adjustable wrenches

248 AND 446 SERIES | ADJUSTABLE WRENCHES "NON GRADUATED"

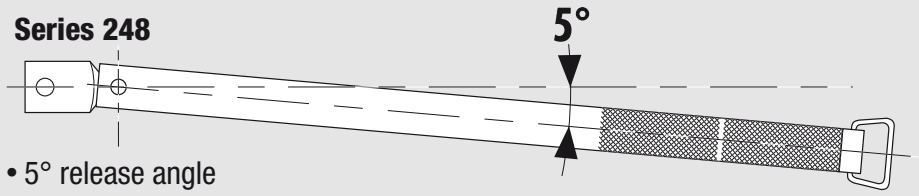
COMPACT, DURABLE PRODUCTION WRENCHES

Durable
- For intensive and repetitive use, tested to over 100,000 cycles.

Compact and lightweight
- Shorter and more compact for working in confined spaces.
- Reduced weight for increased comfort when performing intensive tasks.

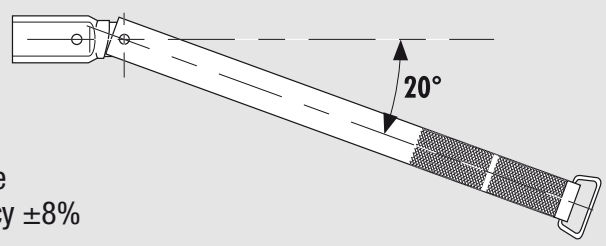
Safe
- Non-graduated preset torque wrenches for production applications.
- Preset with a hex key and a torque meter, no risk of accidentally altering settings.
- Touch and sound signals on release: can be used in noisy and poor visibility conditions.

Series 248



- 5° release angle
- 9x12 and 14x18 end fittings
- Accuracy ±4%

Series 446



- Wide (20°) release angle
- 20x7 end fitting accuracy ±8%





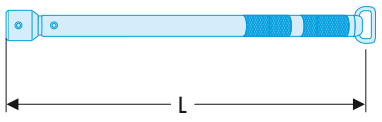
SERIES 248



SERIES 446

"Non vernier" adjustable click wrenches





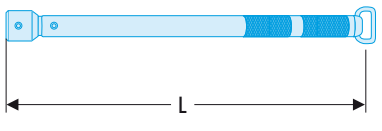
NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 4 %.
- Proven reliability: 100,000 cycles.
- End fitting: 9 x 12 or 14 x 18 mm.
- Wrenches which can be preset and used in tightening and untightening.
- Torque adjustment with a key using a control bench, see range of torque controllers.
- Knurled metal handle.
- Numbered wrenches supplied in plastic protection tube.

	Capacity [N.m]	Capacity [lbf.in]	Capacity [lbf.ft]	Attachment	Capacity [lbf.ft]	L [mm]	⚖ [kg]
R.344DA	1 - 5	10 - 50	-	9 x 12	-	200	0,240
R.248-25D	5 - 25	45 - 220	-	9 x 12	-	250	0,280
J.248-50D	10 - 50	90 - 440	-	9 x 12	-	331	0,740
S.248-100D	20 - 100	-	15 - 74	9 x 12	15 - 74	399	0,880
S.248-200D	40 - 200	-	30 - 148	14 x 18	30 - 148	464	1,080
S.248-340D	60 - 340	-	44 - 250	14 X 18	44 - 250	618	1,400

R-J-S.446 - "Non vernier" wide angle adjustable wrenches





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 8%.
- Proven reliability: 50,000 cycles.
- End fitting: 9 x 12 or 20 x 7 mm.
- Wrenches adjustable with a torquemeter, see range of torque controllers.
- Wrenches supplied with ISO 6789 calibration certificate.
- Wrenches supplied in plastic protection tube.

	Capacity [N.m]	Attachment	Square ["]	L [mm]	⚖ [g]
R.446-25	5 - 25	9 x 12	1/4	214	380
J.446-50	10 - 50	20 x 7	3/8	279	490
S.446-100	20 - 100	20 x 7	1/2	407	840

RANGE ELECTRONIC | WRENCHES AND ADAPTERS

FACOM offer an electronic range, for high productivity and accuracy. Torque range from 1.5 to 340 Nm.

E.306 SERIES
for electronic precision in torque tightening.



E.506 SERIES
for occasional torque & angle tightening.



E.316 SERIES
a single tool for torque & angle tightening for high productivity.



E.406 SERIES
for basic angular tightening.



In confined spaces, our wrenches and adapters provide torque or angle increments.





- The electronic display prevents reading errors.
- Tightening is indicated by the LEDs and buzzer (in all 4 series).
- Easy to use through the same user interface on all models.

WHY USE TORQUE/ANGLE TIGHTENING ?

Angle tightening eliminates friction issues related with torque tightening. The movement, and hence fastener tension, is defined by the screw pitch and tightening angle.

Torque/angle tightening is performed in 2 steps:
- Pre-torquing to approach the parts and eliminate interface faults.
- Then tightening at a specific angle. Proper assembly tension prevents the fastener from loosening or breaking.









RANGE ELECTRONIC | WRENCHES AND ADAPTERS

E.306 AND E.316 SERIES

- 9 torque and/or angle values can be preset.
- 250 results can be saved, downloaded via USB.



SERIES E.506

- 9 torque and/or angle values can be preset.
- 50-result memory.



SERIES E.406

- 9 preset angle values.
- 50-result memory.



Electronic torque wrenches and adapters

E.306D - Electronic torque wrenches



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 2% between 20% and 100% wrench capacity.
- Measuring mode: peak or follower.
- Measuring unit: N.m, lbf.ft, lbf.in and kg.cm.
- Bits: 9 x 12 and 14 x 18 mm.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied in plastic case with foam interior.

	Capacity [N.m]	L [mm]	⚖ [kg]
E.306-30D	1,5 - 30,0	360	1,520
E.306-135D	6,7 - 135,0	375	1,520
E.306-200D	10 - 200	474	2,400
E.306-340D	17 - 340	594	2,560

E.306A - Electronic torque wrenches with ratchet





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy: ± 2% between 20% and 100% wrench capacity.
- Measuring mode: peak or follower.
- Measuring unit: N.m, lbf.ft, lbf.in and kg.cm.
- Bits: 9 x 12 and 14 x 18 mm.
- Numbered wrenches supplied with ISO 6789 calibration certificate.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied in plastic case with foam interior.

	Capacity [N.m]	Square ["]	L [mm]	Ratchet	⚖ [kg]
E.306A30R	1,5 - 30,0	1/4	390	R.372	1,604
E.306A135J	6,7 - 135,0	3/8	415	J.372V	1,697
E.306A135S	6,7 - 135,0	3/8	415	S.372V	1,709
E.306A200S	10 - 200	1/2	530	S.382V	2,699
E.306A340S	17 - 340	1/2	650	S.382V	2,859

E.316D - Electronic torque / angle wrenches







NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:
- Torque: ± 2% between 20% and 100% wrench capacity.
- Angle: ± 2°.
- End fitting: 9 x 12 and 14 x 18 mm.
- Measuring mode: peak or follower.
- Locking keypad (the operator has access only to program choices and result memorising).
- Measuring unit: N.m, lbf.ft, lbf.in, kg.cm and deg.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied with calibration certificate.
- Supplied in plastic case and foam module.

	Capacity [N.m]	L [mm]	⚖ [kg]
E.316-30D	1,5 - 30,0	360	1,520
E.316-135D	6,7 - 135,0	375	1,520
E.316-200D	10 - 200	474	2,400
E.316-340D	17 - 340	594	2,560

E.316A - Electronic torque / angle wrenches with ratchet







NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:
- Torque: ± 2% between 20% and 100% wrench capacity.
- Angle: ± 2°.
- End fitting: 9 x 12 and 14 x 18 mm.
- Measuring mode: peak or follower.
- Locking keypad (the operator has access only to program choices and result memorising).
- Measuring unit: N.m, lbf.ft, lbf.in, kg.cm and deg.
- Presetting possible of 9 torque and/or angle values.
- Memory 250 values with PC USB link.
- Supplied with calibration certificate.
- Supplied in plastic case and foam module.

	Capacity [N.m]	Square ["]	L [mm]	Ratchet	⚖ [kg]
E.316A30R	1,5 - 30,0	1/4	390	R.372	1,604
E.316A135J	6,7 - 135,0	3/8	415	J.372V	1,697
E.316A135S	6,7 - 135,0	1/2	415	S.372V	1,709
E.316A200S	10 - 200	1/2	530	S.382V	2,699
E.316A340S	17 - 340	1/2	650	S.382V	2,859

E.406 E.406 - Electronic angle adapter







- Accuracy: ± 2°.
- Angular range: 1 – 360°.
- Measuring unit: degree.
- Accuracy: 0,1°.
- Presetting possible of 9 angle values.
- Memory 50 values.
- Supplied in plastic case with calibration certificate.

E.506 - Electronic torque / angle adapter





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:
- Torque: ± 3% between 20% and 100% wrench capacity.
- Angle: ± 2°.
- Measuring mode: peak or follower.
- Cycle counter.
- Locking keypad (the operator has access only to program choices and result memorising).
- Measuring unit: N.m, lbf.ft, lbf.in, kg.cm and deg.
- Presetting possible of 9 torque and/or angle values.
- Memory 50 values.
- Supplied in plastic case with calibration certificate.

	Resolution	Capacity [N.m]
E.506-135S	0,1	6,7 - 135,0
E.506-200S	0,1	10 - 200
E.506-340S	0,1	17 - 340

Release type torque driver

RELEASE TYPE TORQUE DRIVERS

AN ACCURATE, DURABLE LOW-TORQUE TOOL

RELIABLE, HIGH PERFORMANCE

- Reliability of mechanism tested over more than 50,000 operations.
- Accuracy exceeds ISO 6789 specified performance of ± 6 %.
- Automatic reset every 120°.

SAFE

- Automatically releases upon reaching the specified torque, impossible to exceed the set value.
- Protected adjustment system: no risk of accidentally altering settings.
- Flattened profile prevents tool rolling on thework-top.

ERGONOMIC

- Clear, easy to read vernier.
- Ergonomic handle providing an excellent grip.
- Lightweight.







ISO 6789 TYPE II - CLASS D - CLASS F

SERIES A.300MT

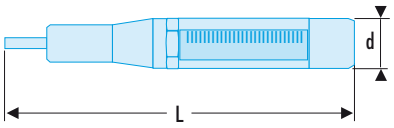


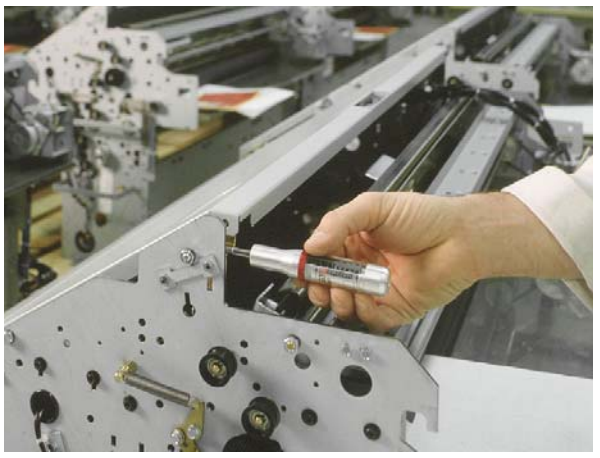
SERIES A.400



A.MT - Micro-Tech® "low torque" screwdriver







NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Lightweight and compact screwdriver for low torque load.
- Right-hand torquing.
- Female hex output for use with bits series 0 - 4 mm (1/4" output with ECR.0 drive optionally).
- 82H.4: Adjustement key 4 mm.
- Supplied with calibration certificate and adjustment key.

	Capacity [cN.m]	Graduation	d [mm]	L [mm]	Bits	⚖ [g]
A.300MT	4 - 20	0,05	21	96,5	0	75
A.301MT	15 - 75	0,50	23	130,0	1	130

A.400 - Screwdriver with vernier adjustment



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Class II type D (A.400 maintenance).
- One-direction screwdriver, right-hand torquing.
- Female hex output for use with 1/4" bit.
- ECR drive 1/4" - 1/4" for sockets and accessories optional.
- 1/4" drive on the handle for use with a ratchet handle type A.300PA.
- 82H.4: Adjustment key.
- Supplied with calibration certificate, adjustment key and individual identification number.

	Graduation [N.m]	L [mm]	Torque N.m	⚖ [g]
A.402	0,1	147	0,5 - 2,5	280
A.404	0,5	147	2 - 10	400

ECR.0 Drive socket adapter



- Bit to use 1/4" sockets with the torque screwdrivers A.300MT - A.340MT.
- 6-point drive 4 mm.
- Length: 22 mm.

Weight: 7 g.

ECR Socket adapter - 1/4"



NF ISO 1173, ISO 1173

- Bit to use 1/4" sockets with the torque screwdrivers A.400 - A.440 - A.301MT - A.341MT.
- Length: 25 mm.

Weight: 15 g.

A.300PA Ratchet handle for torque screwdrivers





- Adapting ratchet handle: increased tightening power for repeating or high torque tightening.
- For torque screwdrivers capacity 0.50 --> 10 N.m.
- Max torque: 30 N.m.

Weight: 85 g.

A.MTJ1 - Micro-Tech® torque screwdriver sets



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Lightweight and compact screwdriver for low torque load.
- Right-hand torquing.
- Female hex output for use with bits series 0 - 4 mm (1/4" output with ECR.0 drive optionally).
- Bits series 0 drive 4 mm.
- Adjustment key 4 mm.
- Supplied in case with calibration certificate.

	Capacity [N.m]	Screwdriver	Bits	[g]
A.300MTJ1	4-20	A.300MT	Slotted head : 1,8 - 2,5, PH 0,9 - 1,3 - 1,5 - 2 mm, PZ 0 - 1 - 2 mm	300
A.301MTJ1	15-75	A.301MT	Slotted head : 4 - 4,5 - 5,5, PH 1,5 - 2,5 - 3 mm, PZ 0 - 1 mm	370

A.J2 - Torque screwdriver sets



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Class II type D (A.400 maintenance).
- One-direction screwdriver, right-hand torquing.
- Female hex output for use with bits series 1 - 1/4".
- 1/4" drive on the handle for use with a ratchet handle type A.300PA.
- Ratchet handle (A.300PA).
- Adjustment key 4 mm.
- Supplied in case with calibration certificate and individual identification number.

	Wrench	Knob	Screwdriver	Bits	Bit holder	Box	Tray	[g]
A.402J2	A.402-20	A.300PA	A.402	Slotted head : 4,5 - 6,5 - 8, Hexagon: 3 - 4 - 5 mm, PZ 1 - 2 - 3 mm	EF.1P4	BP.102	PL.436	700
A.404J2	A.404-20	A.300PA	A.404	Slotted head : 4,5 - 6,5 - 8, Hexagon: 3 - 4 - 5 mm, PZ 1 - 2 - 3 mm	EF.1PA	BP.102	PL.436	830

A.J1 - Torque screwdriver sets - 1/4" sockets



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Class II type D (A.400 maintenance).
- One-direction screwdriver, right-hand torquing.
- Female hex output for use with 1/4" bit.
- 1/4" drive on the handle for use with a ratchet handle type A.300PA.
- Ratchet handle A.300PA.
- ECR drive 1/4" - 1/4" for sockets and accessories.
- Extensions 1/4" (R.210 and R.215).
- Adjustment key 4 mm.
- Supplied in case with calibration certificate and individual identification number.

	Wrench	Knob	Socket	Screwdriver	Box	Tray	[kg]
A.402J1	A402 - 20	A.300PA	R.3,2 - 4,0 - 5,0 - 5,5 - 6,0 - 7,0 - 8,0 - 9,0 - 10,0 mm	A.402	BP.115	PL.434	1,10
A.404J1	A404 - 20	A.300PA	R.3,2 - 4,0 - 5,0 - 5,5 - 6,0 - 7,0 - 8,0 - 9,0 - 10,0 mm	A.404	BP.115	PL.434	1,20

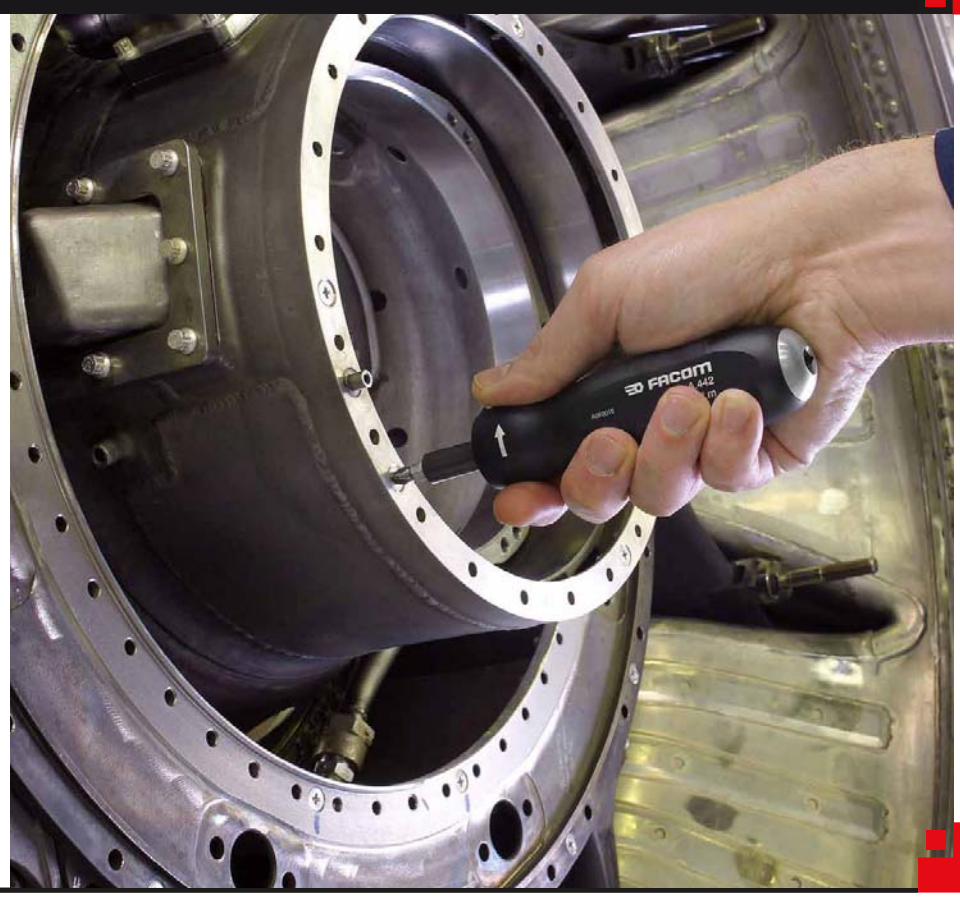
A.440 AND A.340MT SERIES NON-VERNIER DRIVERS

DRIVERS DESIGNED FOR PRODUCTION APPLICATIONS

Same characteristics as A.400 and A.300MT

- No vernier adjustment, torque set with a torque-meter.
- Performance exceeds ISO 6789 requirements (±6 % of the preset value).
- Handle release when required torque is reached, prevents inadvertent overtorquing.
- Automatic reset every 120°.

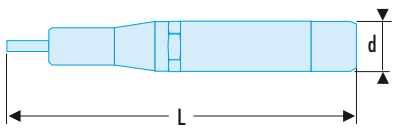
ISO 6789 Type II - Class D - Class F



"Non vernier" release type torque driver

A.MT - Micro-Tech® "Production" torque screwdriver





- Screwdriver without vernier: this non graduated screwdriver is adjusted on a control bench.
- Lightweight and compact screwdriver designed specifically for low torque loads.
- One-direction screwdriver, right-hand torquing.
- Female hex output for use with 4 mm bits (1/4" output with ECR.0 drive optionally).
- Supplied with adjustment key 4 mm.
- Supplied with calibration certificate and individual identification number.

	Capacity [cN.m]	Capacity [lbf.in]	d [mm]	L [mm]	⚖ [g]
A.340MT	4 - 20	0,35 - 1,70	21	96,5	75
A.341MT	15 - 75	1,30 - 6,50	23	130,0	130

A.440 - Micro-Tech® "Production" torque screwdriver





NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Class II type F (A.440 production).
- Screwdriver without vernier: this non graduated screwdriver is adjusted on a control bench.
- One-direction screwdriver, right-hand torquing.
- Female hex output for use with bits series 1 - 1/4".
- 1/4" drive on the handle for use with a ratchet handle type A.300PA.
- Supplied with adjustment key 4 mm.
- Supplied with calibration certificate and individual identification number.

	L [mm]	Torque N.m	⚖ [g]
A.442	147	0,5 - 2,5	300
A.444	168	2 - 10	400

TORQUE ACCESSORIES

7 TYPES OF ACCESSORY

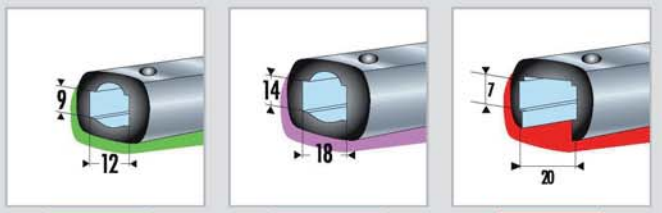


Pivot knob | Standard ratchet | Compact ratchet | Square drive | Open end | Ring end | Crowfoot end

• Wrench fitted with a ratchet J.372, a knob S.305P and a socket.



3 types of end fitting:



9x12 | 14x18 | 20x7

1. CHOOSE YOUR WRENCH OR DRIVER

306	208	200	203
R.304DA R.306-25D J.306-50D S.306-100D R.306U J.306U	J.208-50D S.208-100D		
S.306-200D S.306-350D S.306U K.306-600D	J.208-200D S.208-340D		
K.306-1000D		K.200DB K.202DB M.200DB	
S.306-100R S.306-200R S.306-350R			R.203DA J.203DA S.203A

E.306	E.316	248	446
E.306-30D E.306-130D	E.316-30D E.316-130D	R.344DA R.248-25D J.248-50D S.248-100D	R.446-25
E.306-200D E.306-340D	E.316-200D E.316-340D	S.248-200D S.248-340D	
			J.446-50 S.446-100

A.400 A.300MT	A.440 A.340MT
A.402 A.404	A.442 A.444
A.300MT A.301MT	A.340MT A.341MT

2. CHOOSE THE TYPE OF ACCESSORY

9x12	J.372 S.372	R.372 J.372V S.372V	R.373 J.373 S.373	Series 10	Series 12
14x18	S.382	S.382V K.382A	S.383 K.383	Series 11	Series 13
Ø 30		K.200DB K.202DB M.200DB	K.151A M.151		
20x7		J.152 S.152	J.203E S.203E	Series 20	

9x12	J.372 S.372	R.372 J.372V S.372V	R.373 J.373 S.373	Series 10	Series 12
14x18	S.382	S.382V K.382A	S.383 K.383	Series 11	Series 13
20 x 7		J.152 S.152	J.203E S.203E	Series 20	

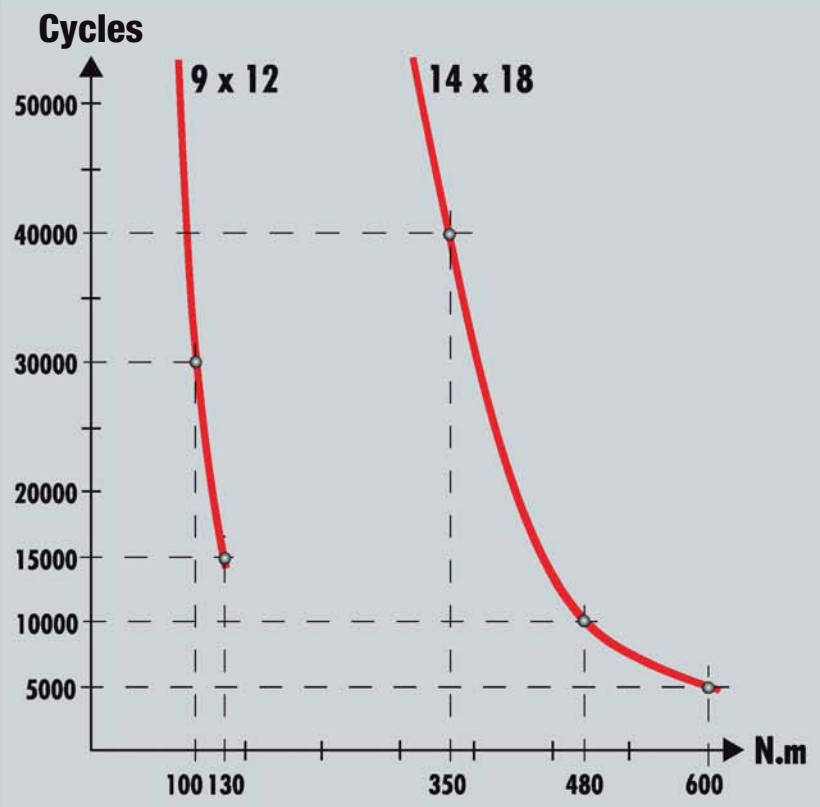
∅ 1/4	ECR	
∅ 4		ECR0

See the torque wrench and driver selection guide on p. 342

SAFETY OF END FITTINGS

When the wrench releases, the torque accessories are subjected to severe shocks that can cause them to fail after a certain number of cycles.

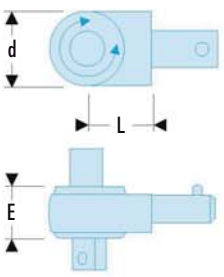
- The diagram below shows the number of cycles not to be exceeded according to the applied torque. The accessory must be replaced before reaching the maximum number of cycles.



Accessories 9 x 12 mm

Ratchets - drive 9 x 12 mm



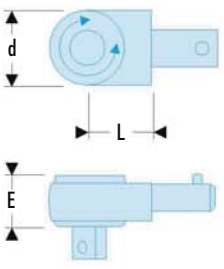


- For use with pivot handle S.305P.

	Square ["]	d [mm]	E [mm]	L [mm]	⚖ [g]
J.372	3/8	37	26	15	155
S.372	1/2	37	26	15	165

Compact ratchets - drive 9 x 12 mm

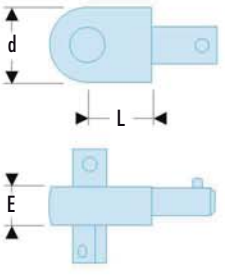




	Square ["]	d [mm]	E [mm]	L [mm]	⚖ [g]
R.372	1/4	27	19	15	70
J.372V	3/8	37	26	15	140
S.372V	1/2	37	26	15	150

Square drive - drive 9 x 12 mm



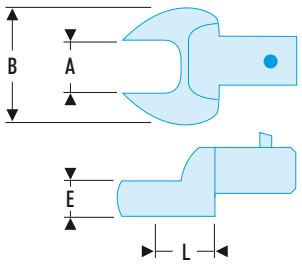


- For use with pivot handle S.305P, except the R.373 model.

	Square ["]	d [mm]	E [mm]	L [mm]	⚖ [g]
R.373	1/4	23	14	15	55
J.373	3/8	26	17	15	85
S.373	1/2	26	17	15	100

Metric open end bits - drive 9 x 12 mm

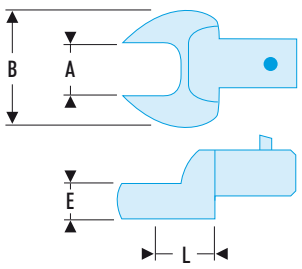




	A [mm]	B [mm]	E [mm]	L [mm]	⧋ [g]
10.7	7	21,0	5	17,5	33
10.8	8	22,0	5	17,5	32
10.9	9	23,5	6	17,5	38
10.10	10	24,5	6	17,5	37
10.11	11	26,0	6	17,5	36
10.12	12	27,5	7	17,5	44
10.13	13	29,0	7	17,5	45
10.14	14	31,5	7	20,0	42
10.15	15	33,0	9	20,0	61
10.16	16	35,5	9	20,0	60
10.17	17	37,5	9	20,0	62
10.18	18	39,0	9	20,0	69
10.19	19	41,5	9	20,0	67

Inch open end bits - drive 9 x 12 mm

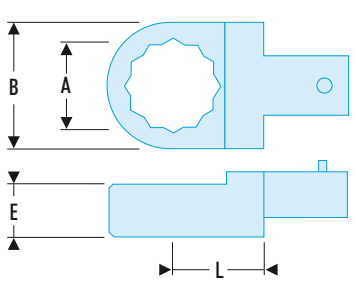




	A ["]	B [mm]	E [mm]	L [mm]	⧋ [g]
10.1/4	1/4	19	5	17,5	33
10.5/16	5/16	19	5	17,5	26
10.3/8	3/8	25	6	17,5	38
10.7/16	7/16	25	6	17,5	36
10.1/2	1/2	31	7	17,5	43
10.9/16	9/16	31	7	20,0	41
10.5/8	5/8	37	9	20,0	60
10.11/16	11/16	37	9	20,0	59
10.3/4	3/4	40	9	20,0	69

Polygon drives - drive 9 x 12 mm



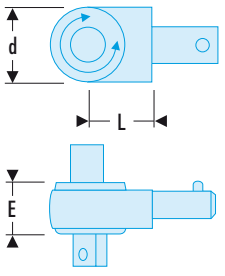


	A [mm]	B [mm]	E [mm]	L [mm]	⧋ [g]
12.7	7	20	7,9	17,5	33
12.8	8	20	7,9	17,5	33
12.9	9	20	7,9	17,5	32
12.10	10	20	7,9	17,5	36
12.11	11	20	7,9	17,5	34
12.12	12	20	12,1	17,5	41
12.13	13	20	12,1	17,5	40
12.14	14	23,5	12,1	17,5	49
12.15	15	24,5	12,1	17,5	46
12.16	16	26,5	12,9	17,5	54
12.17	17	27,5	13,1	17,5	50
12.18	18	30	13,1	17,5	57
12.19	19	31	13,1	17,5	67

Accessories 14 x 18 mm

S.382 Ratchet - drive 14 x 18 mm

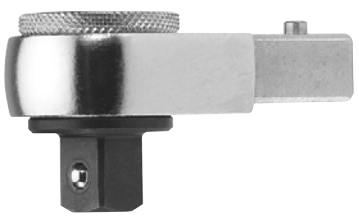


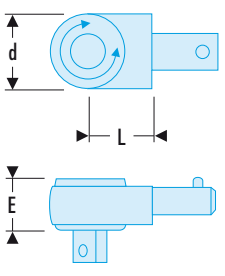


- For use with swivel handle S.305P.
- Square: 1/2".

Weight: 300 g.

Compact ratchets - drive 14 x 18 mm

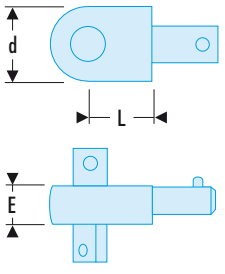




	Square ["]	d [mm]	E [mm]	L [mm]	⚖ [g]
S.382V	1/2	41	26	27	285
K.382A	3/4	69	35	27	870

Square drive - drive 14 x 18 mm

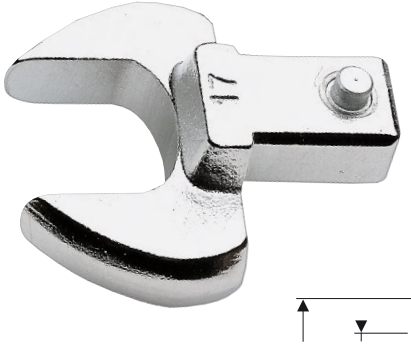


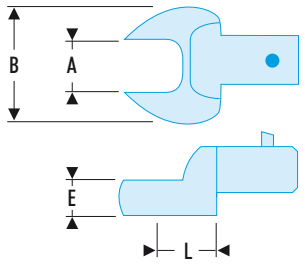


- For use with pivot handle S.305P, except the K.383 model.

	Square ["]	d [mm]	E [mm]	L [mm]	⚖ [g]
S.383	1/2	32	22	27	160
K.383	3/4	38	22	27	340

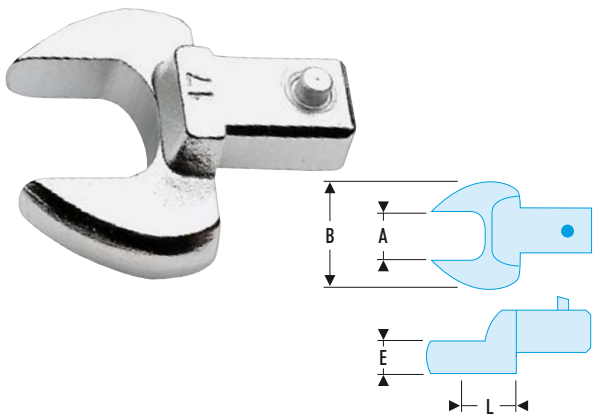
Metric open end bits - drive 14 x 18 mm





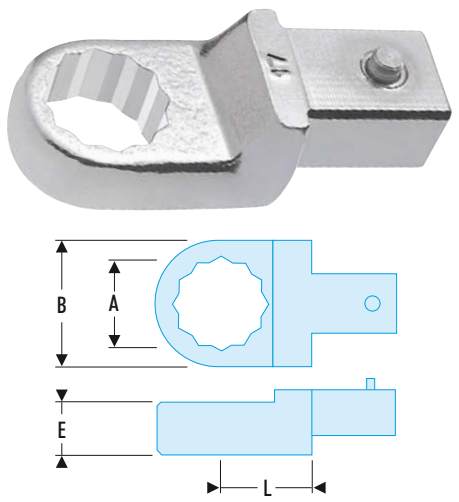
	A [mm]	B [mm]	E [mm]	L [mm]	⚖ [g]
11.13	13	34	8	25,0	114
11.14	14	34	8	25,0	113
11.15	15	34	8	25,0	111
11.16	16	39	10	25,0	140
11.17	17	39	12	25,0	134
11.18	18	39	12	25,0	136
11.19	19	45	12	25,0	140
11.21	21	45	12	25,0	157
11.22	22	52	14	25,0	161
11.23	23	52	14	25,0	172
11.24	24	52	14	25,0	165
11.27	27	59	16	32,5	222
11.30	30	64	18	32,5	277
11.32	32	64	18	32,5	269

Inch open end bits - drive 14 x 18 mm



	A ["]	B [mm]	L [mm]	⚖ [g]
11.1/2	1/2	34	25,0	114
11.9/16	9/16	34	25,0	111
11.5/8	5/8	39	25,0	140
11.11/16	11/16	39	25,0	137
11.3/4	3/4	45	25,0	156
11.13/16	13/16	45	25,0	152
11.7/8	7/8	52	25,0	172
11.15/16	15/16	52	25,0	167
11.1'1/4	1'1/4	59	32,5	266
11.1'1/16	1'1/16	64	32,5	221

Polygon drives - drive 14 x 18 mm



	A [mm]	d [mm]	E [mm]	L [mm]	⚖ [g]
13.13	13	30,0	11	25	113
13.14	14	30,0	11	25	109
13.15	15	30,0	11	25	107
13.16	16	30,0	11	25	127
13.17	17	30,0	12	25	123
13.18	18	30,0	12	25	118
13.19	19	31,0	12	25	141
13.21	21	33,0	12	25	133
13.22	22	35,0	14	25	153
13.23	23	38,0	14	25	157
13.24	24	38,0	14	25	143
13.27	27	41,5	16	31	183
13.30	30	45,0	18	31	223
13.32	32	47,5	18	31	209
13.34	34	51,0	11	31	212
13.36	36	53,0	19	31	193

Accessories 20 x 7 mm

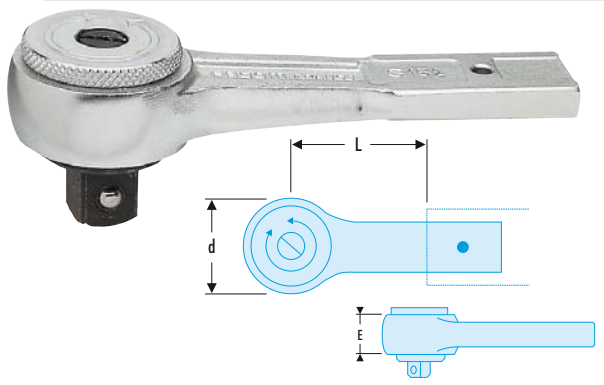
Swivel handles - drive 20 x 7 mm



- Allows to maintain the wrench parallel with the tightening plane and contribute to tightening accuracy.
- Used with square bits Ref J.203E - S.203E and torque wrench ref. R.203 DA.

	d [mm]	L [mm]	Wrench	⚖ [g]
R.200P	22	45	R.203DA	20
S.200P	36	55	J.203E - S.203E	55

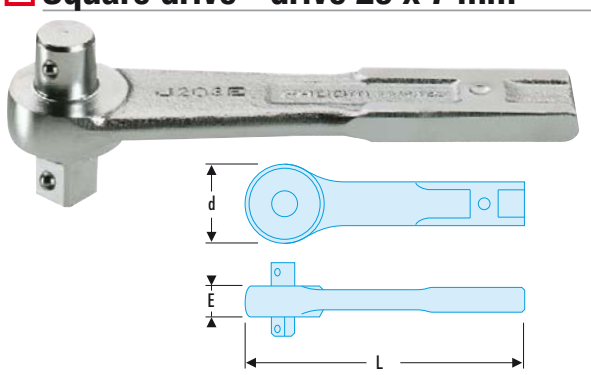
Ratchets - drive 20 x 7 mm



- 5° increment.
- For use on torque wrenches ref. J.203DA - S.203DA - S.306-100R - S.306-200R - S.306-350R.

	Square ["]	d [mm]	E [mm]	L [mm]	Wrench	⚖ [g]
J.152	3/8	38	25	55	J.203DA	274
S.152	1/2	38	25	55	S.203DA - S.306-100R - S.306-350R - S.306-200R	275

Square drive - drive 20 x 7 mm



- For use on torque wrenches ref. J.203DA - S.203DA - S.306-100R - S.306-200R - S.306-350R.

	Square ["]	d [mm]	E [mm]	L [mm]	⚖ [g]
J.203E	3/8	25	11	56	140
S.203E	1/2	25	11	56	150

Adapters - drive 20 x 7 mm

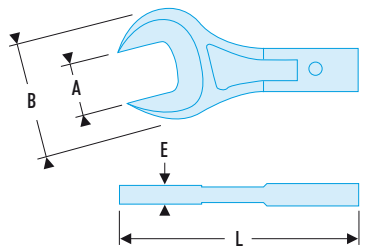


- For use with:
- bits 9 x 12 mm on wrenches max capacity 100 N.m.
- bits 14 x 18 mm on wrenches max capacity 600 N.m.

	Attachment	ΔΔ [g]
J.274	9 x 12	135
S.284	14 x 18	145

Open end bits - drive 20 x 7 mm





- For use on torque wrenches series 203, 306R and 446.

	A [mm]	B [mm]	E [mm]	L [mm]	ΔΔ [g]
20.10	10	24	6,0	105	60
20.11	11	24	6,0	105	60
20.12	12	29	6,0	106	60
20.13	13	29	6,0	106	60
20.14	14	29	6,0	106	65
20.15	15	40	7,5	109	105
20.16	16	40	7,5	109	105
20.17	17	40	7,5	109	105
20.18	18	40	7,5	109	100
20.19	19	40	7,5	109	100
20.21	21	53	8,0	112	145
20.22	22	53	8,0	112	145
20.23	23	53	8,0	112	145
20.24	24	53	8,0	112	140
20.26	26	53	8,0	112	130
20.27	27	66	9,0	115	185
20.28	28	66	9,0	115	185
20.29	29	66	9,0	115	185
20.30	30	66	9,0	115	185
20.32	32	66	9,0	115	180
20.35	35	74	10,0	118	220
20.36	36	74	10,0	118	220

Special accessories

S.305P Swivel handle

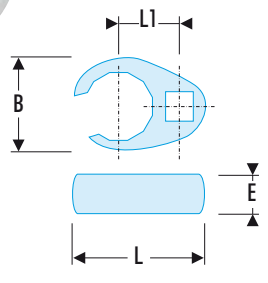


- Allows to maintain the wrench parallel with the tightening plane.
- Use with 3/8" and 1/2" ratchets and drive squares.
- Max diam. size: 45 mm.
- Length: 66 mm.

Weight: 110 g.

3/8" 12-point Crowfoot flare bit





- Thin wall 12-point high head.
- Built to aeronautical specifications.
- Drive square: 3/8".
- Dimensions: 5/8" --> 1'1/16.
- Finish: chromed.

	A ["]	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	ΔΔ [g]
4920FL	5/8	18,3	24,2	24,2	19,05	11,20	40
4922FL	11/16	18,3	26,3	26,3	20,20	12,50	44
4924FL	3/4	18,3	29,2	29,2	21,40	14,00	53
4926FL	13/16	18,9	31,1	31,1	22,60	15,40	56
4928FL	7/8	19,3	33,8	33,8	25,00	16,70	67
4930FL	15/16	19,0	35,9	35,9	24,20	17,30	68
4932FL	1	19,8	37,7	37,7	26,20	19,00	77
4934FL	1-1/16	20,0	39,5	39,5	27,00	18,10	84

PROTRACTOR ATTACHMENTS

DESIGNED FOR CYLINDER-HEADS

FACOM offers a complete range of specially designed tools

Maximum visibility

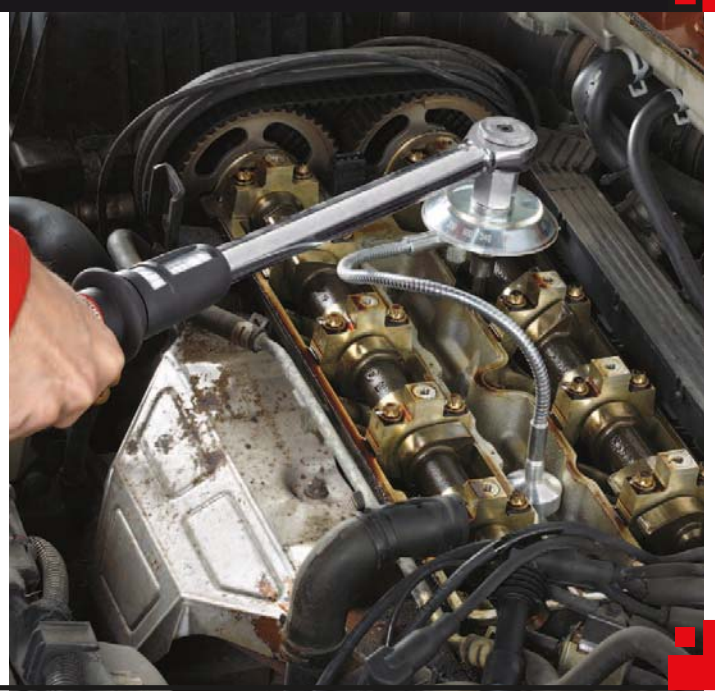
- Choice of tapered drum with reverse laser marking. (DMP.360, DM.360L, D.360L) or flat drum with normal marking. (DM.360, DM.370) Set the drum to the value recommended by the manufacturer and stop at zero.

Easier to attach

- Wide range of drum-locking accessories: Clamp, magnet, 3 limit stops (24, 45 and 65 mm).

Compliance with manufacturers' recommendations

- It is essential to apply the manufacturers' recommended cylinder head torques.
- Tightening to the correct torque with a suitable torque wrench.
- Correct torquing sequence and turn angle.



DM - Angular tightening wrenches



- Flat drum with top reading.
- Drum positioning on the value recommended by the manufacturer, then tightening to zero.
- Graduations: 2°.
- Male and female square drive.
- Fixed point by flexible with magnet.

	Square ["]	d [mm]	L [mm]	⚖ [g]
DM.360	1/2	63	410	350
DM.370	3/4	73	430	550

D.360L Lateral reading angular tightening wrench



- Lateral reading tapered drum for maximum legibility.
- Double presetting index (red line). For tightening, just align the marks.
- Accuracy: 2°.
- Square 1/2".
- Supplied with stops of 24 - 45 - 65 mm.

Weight: 414 g.

DM.360L Lateral reading angular tightening wrench with flexible arm and magnet





- Lateral reading tapered drum for maximum legibility.
- Double presetting index (red line). For tightening, just align the marks.
- Accuracy: 2°.
- Square 1/2".
- Supplied with 1 flexible and 1 magnet.

Weight: 500 g.

DMP.360L Angular tightening set



- Including:
- 1 lateral reading angular tightening wrench (D.360L).
- 3 stops, length 24 - 45 - 65 mm.
- 1 flexible.
- 1 pair of pliers.
- 1 magnet.
- Supplied in a plastic case, dim. (L. x W. x H.): 375 x 180 x 145 mm.

Weight: 550 g.

NEW

TORQUE CONTROLLER

EASY TORQUE CONTROL FOR ALL!

Simple and fast
- Easy to use device with minimum settings to avoid errors.
- For testing wrenches before use.

Wide torque range
- 3 devices covering a wide torque range from 2 to 1000 Nm.

Safe
- No risk of bad reading by the operator: limit value and tolerance can be preset, indication by orange, green, red LED.
- RS232 output for traceability.





E.2000



E.2000 - Torque controllers



- Accuracy: ± 1%, ± 1 digit.
- Measuring unit: N.m, lbf.ft, lbf.in.
- Measuring mode: monitor, edge and peak.
- Possible presetting of a limit value and tolerance with orange, green, red LED indicatror.
- RS232 PC link.
- Dimensions (L. x W. x H.): 150 x 150 x 90 mm.
- Supplied with a calibration certificate.

	Capacity [N.m]	Square ["]	Square	⚖ [kg]
E.2000-50	2 - 50	3/8"	-	2,60
E.2000-350	10 - 350	1/2"	-	2,60
E.2000-1000	100 - 1000	-	27	4,60



SCREWDRIVERS

384



PROTWIST® sets and modules 386
PROTWIST® screwdrivers 387
Stainless steel screwdrivers 397
SHOCK screwdrivers 400
Fluorescent screwdrivers 402
PROTWIST® 1,000V insulated screwdrivers 405
ISORYL screwdrivers 409
Wood handle screwdrivers 412
Miscellaneous screwdrivers 414

KEYS

420



Set of male wrenches 420
Offset keys 425
Stainless steel keys 428
Spinner keys - T spinner keys 430
Special profile keys 434

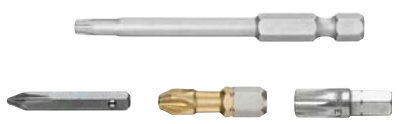
SCREWDRIVERS - KEYS - BITS



SCREW BITS

435













Bits series 0 ..... **436**
Bits series 1 ..... **437**
Bits series 2 ..... **450**
Bits series 6 ..... **453**
Bit holders and accessories **458**
Series 2 impact bits **460**
Series 3 impact bits **462**

IMPACT SCREWDRIVERS

464





3/8" drive series **464**
1/2" drive series **465**

Protwist®

SCREWDRIVERS
HIGH PERFORMANCE

EXCELLENT TORQUE TRANSMISSION AND FAST SCREWING SPEED

Natural grip, excellent comfort.
- Efficient pre-tightening.
- Comfortable high torque action.
- Easier torque transfer.



Strong, comfortable grip and long-lasting performance
- Soft polyurethane zone, polyamide core for high resistance to:
  - Impact and stress.
  - Abrasion and chemical agents.



Five handle sizes to suit the tip size
- Small sizes have a long, thin body for a faster screwing action.
- Larger sizes have a wider gripping surface for a firmer hold and maximum torque transfer.



Silicon carbon steel blades
- Very strong.
- Excellent resistance to bending.

Black tip: no risk of flaking and guaranteed accuracy
- Retains the dimensional accuracy of the machined tip.
- No chromium deposits in the environment.
- No weakening due to hydrogen release during chromium plating.



CARBON SILICIUM

SPECIFIC RANGES

- SHOCK range: for unmatched strength and outdoor use.



- INOX range: application for special fasteners.
- FLUO range: tool detection ensures enhanced safety.



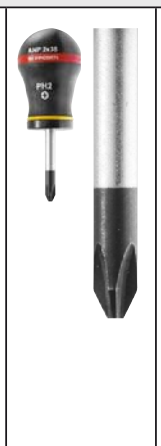
Protwist®

CHOOSING THE RIGHT
BLADE FOR YOUR NEEDS

THE PROTWIST® RANGE

- An ideal combination of blade types, tip patterns and materials to choose from
- Over 250 references to cover all your needs.



									
Short blade AN	Round blade, sand-blasted tip AS	Round blade, black tip AN	Hexagonal blade AW	Hexagonal blade with bolster AWH	1,000 V insulated blade A.VE	Hexagonal blade AWHH/AWSH	Stainless steel blade AXT	Impact blade	Fluo grip
Awkward spaces	Frequent use	Intensive use	High torque	Added torquing power with a wrench	Live working	Hexagon socket heads	Stainless fasteners/ corrosive environment	Locked fasteners	Tool detection
4 to 6.5 mm x 4	2.5 to 10 mm x 11	2 to 10 mm x 30	4 to 12 mm x 10	5.5 to 14 mm x 8	2 to 12 mm x 18		4 to 8 mm x 4	4 to 14 mm x 7	2.5to 10 mm x 11
1-2 x 3	0 to 3 x 4	0 to 4 x 10	1 to 4 x 4	1 to 4 x 4	0 to 4 x 5		1 to 2 x 2	1.2 to 3 x 3	0-1-2-3 x 4
1-2 x 3	0 to 3 x 4	0 to 4 x 9	1 to 4 x 4	1 to 4 x 4	0 to 3 x 4		1 to 2 x 2	1.2 to 3 x 3	
	10 to 30 x 5	6 to 40 x 12					10 to 40 x 6		
		10 to 40 x 7							
		5 to 40 x 12							
		10 to 40 x 7							
		1 to 3 x 3							
Borneo					1 to 2 x 4				
						2 to 8 mm x 14			3-4-5 x 3

Colour coding for immediate identification of all Protwist® screwdrivers.



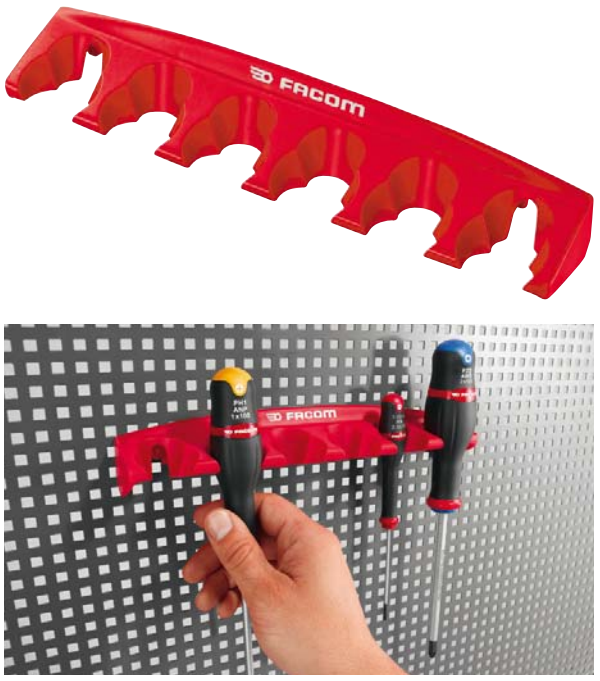
PROTWIST® screwdrivers sets and modules

Protwist® screwdrivers sets



	Content set	Quantity	⚖ [g]
AND.J5	AND0X75 - AND1X100 - AND2X125 - AND3X150 - AND4X200	5	750
ANP.J5	ANP0X75 - ANP1X100 - ANP2X125 - ANP3X150 - ANP4X200	5	750
ANX.J6	ANX10X75 - ANX15X75 - ANX20X100 - ANX25X100 - ANX30X125 - ANX40X150	6	680
ANXP.J6	ANXP10X75 - ANXP15X75 - ANXP20X100 - ANXP25X100 - ANXP30X125 - ANXP40X150	6	680
ANXR.J5	ANXR10X75 - ANXR15X75 - ANXR20X100 - ANXR25X100 - ANXR30X125	5	510
ANXRP.J5	ANXRP10X75 - ANXRP15X75 - ANXRP20X100 - ANXRP25X100 - ANXRP30X125	5	450
ANP.J6	AN3,5X75 - AN4X100 - AN5,5X150 - AN6,5X150 - ANP1X100 - ANP2X125	6	590
AND.J6	AN3,5X75 - AN4X100 - AN5,5X150 - AN6,5X150 - AND1X100 - AND2X125	6	600
AN.J10	AN3,5X75 - AN4X100 - AN5,5X150 - ANF6,5X150 - AW8X150 - AW10X200 - ANP1X100 - ANP2X125 - AND1X100 - AND2X125	10	1190
AWP.J6	AW4X100 - AW5,5X150 - AW6,5X150 - AW8X200 - AWP1X100 - AWP2X125	6	720
AWD.J6	AW4X100 - AW5,5X150 - AW6,5X150 - AW8X200 - AWD1X100 - AWD2X125	6	720
ANWH.J13	AN3,5X75 - AN4X100 - AN5,5X100 - AW6,5X150 - AWH8X150 - AWH10X200 - AN4X25 - AN6,5X35 - ANP1X100 - ANP2X125 - ANP2X35 - AND1X100 - AND2X125	13	1400

CKS.08 Screwdriver rack



- Easy use and save time.
- No specific place, screwdrivers can be stored in any slot.
- No damage to the tools, risk-free contact due to design of the polypropylene rack.
- Broad range coverage.
- Dimensions (L. x W. x D.): 238 x 38 x 50 mm.

Weight: 40 g

Thermo-formed Protwist® screwdriver module



- Tool storage organised in the drawers.
- Thermo-formed pressed polystyrene module.

	Tray	Content set	Quantity
MOD.A1	PL.325	AN3X75 - AN3,5X100 - AN4X100 - AN5,5X125 - AWH6,5X150 - AWH8X175 - ANP1X100 - ANP2X125	8
MOD.A2	PL.631	AN2X75 - AN2,5X75 - AWDH3X150 - ANP0X75 - AND0X75 - AND1X100 - AND2X125	8
MOD.A7	PL.325	AN3,5X75 - AN4X100 - AN5,5X150 - AN6,5X150 - AWH8X175 - AND1X100 - AND2X125	8
MOD.A3	PL.326	AN4X25 - AN5,5X35 - ANP0X75 - ANP1X25 - AND0X75 - AND1X100 - AND2X125 - AND2X35	8
MOD.A4	PL.676	ANX2,5X75 - AN3,5X75 - AN4X35 - AN4X100 - AN4X300 - AN5,5X35 - AN6,5X100 - AN8X175	9
MOD.A5	PL.677	AND1X100 - AND2X125 - AND2X35 - ANP0X75 - ANP1X25 - ANP1X100 - ANP2X35 - ANP2X125 - ANP2X250 - ANP3X150	10
MOD.A6	PL.678	AEX6X35 - AEX7X35 - AEX8X75 - ANXR10X75 - ANXR15X75 - ANXR30X125 - ANXR40X150 - ANXR20X100 - ANXR25X100 - ANXR27X100	10
MOD.ANX	PL.327	ANX10X75 - ANX15X75 - ANX20X100 - ANX25X100 - ANX27X100 - ANX30X125 - ANX40X150	7
MOD.ANXR	PL.327	ANXR10X75 - ANXR15X75 - ANXR20X100 - ANXR25X100 - ANXR27X100 - ANXR30X125 - ANXR40X150	7

Foam Protwist® screwdriver module



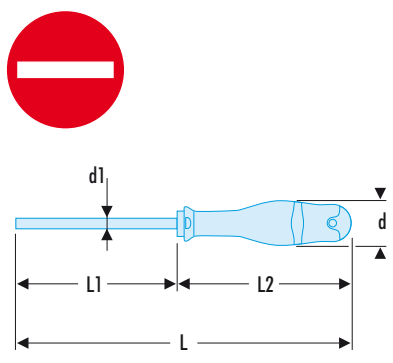
- Tool storage organised in the drawers = productivity, comfort and safety.
- Dual colour high density foam:
- Instant tool availability check.
- Resistant to crushing, hydrocarbons, hydraulic fluids and detergents.
- Easy grip thanks to finger holes.
- Optimised tool holding during transport.

	Tray	Content set	Quantity
MODM.A1	PM.MODA1	AN3,5X75 - AN3,5X100 - AN4X100 - AN5,5X100 - AWH6,5X150 - AWH8X175 - ANP1X100 - ANP2X125	8
MODM.A2	PM.MODA2	AN2X75 - AN2,5X75 - ANP0X75 - AWPH3X50 - AND1X100 - AND2X125 - AND3X150	8
MODM.A3	PM.MODA3	AN4X25 - AN5,5X35 - ANP0X75 - ANP1X25 - AND0X75 - AND1X100 - AND2X125 - AND2X35	9
MODM.A4	PM.MODA4	AN2,5X75 - AN3,5X75 - AN4X35 - AN4X100 - AN4X300 - AN5,5X35 - AN5,5X10 - AWH6,5X150 - AWH8X175	9
MODM.A5	PM.MODA5	ANP0X75 - ANP1X25 - ANP1X100 - ANP2X35 - ANP2X125 - ANP2X250 - ANP3X150 - AND1X100 - AND2X125 - AND2X35	10
MODM.A6	PM.MODA6	AEX6X35 - AEX7X35 - AEX8X75 - ANXR10X75 - ANXR15X75 - ANXR30X125 - ANXR40X150 - ANXR20X100 - ANXR25X100 - ANXR27X100	10
MODM. ANXR	PM.MODANXR	ANX10X75 - ANX15X75 - ANX20X100 - ANX25X100 - ANX27X100 - ANX30X125 - ANX40X150	7

PROTWIST® screwdrivers for slotted head screws

AN - PROTWIST® screwdrivers for slotted head screws - milled blades





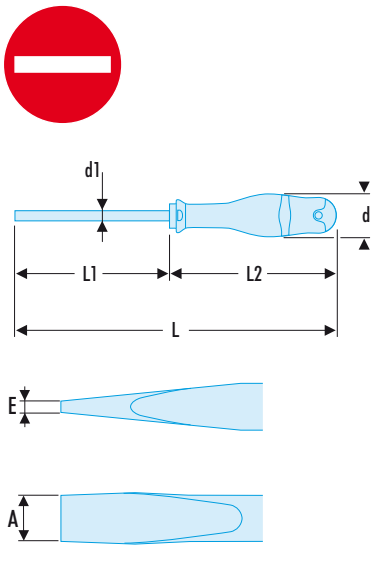
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Round shank for access in wells.
- Extra-long shank up to 300 mm for difficult and remote access.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AN2X75	2,0	0,4	19	2,0 x 75	169	94	18
AN2,5X50	2,5	0,4	19	2,5 x 50	144	94	20
AN2,5X75	2,5	0,4	19	2,5 x 75	169	94	21
AN3X75	3,0	0,5	25	3,0 x 75	178	103	32
AN3X100	3,0	0,5	25	3,0 x 100	203	103	33
AN3,5X75	3,5	0,6	25	3,5 x 75	178	103	41
AN3,5X100	3,5	0,6	25	3,5 x 100	203	103	43
AN3,5X250	3,5	0,6	25	3,5 x 250	353	103	55
AN4X100	4,0	0,8	30	4,0 x 100	209	109	47
AN4X150	4,0	0,8	30	4,0 x 150	259	109	52
AN4X200	4,0	0,8	30	4,0 x 200	309	109	57
AN4X300	4,0	0,8	30	4,0 x 300	409	109	120
AN5,5X100	5,5	1,0	30	5,5 x 100	209	109	82
AN5,5X125	5,5	1,0	30	5,5 x 125	234	109	87
AN5,5X150	5,5	1,0	30	5,5 x 150	259	109	91
AN5,5X200	5,5	1,0	30	5,5 x 200	309	109	105
AN5,5X300	5,5	1,0	30	5,5 x 300	409	109	130
AN6,5X125	6,5	1,2	36	6,5 x 125	245	120	132
AN6,5X150	6,5	1,2	36	6,5 x 150	270	120	140
AN6,5X200	6,5	1,2	36	6,5 x 200	320	120	153
AN6,5X300	6,5	1,2	36	6,5 x 300	420	120	180

ANF - PROTWIST® screwdrivers for slotted head screws - forged blades





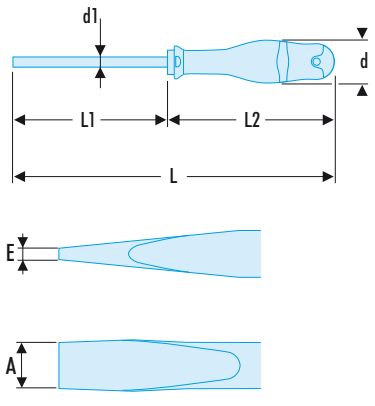
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Forged blade with excellent tip fibre for high torsion strength.
- Extra-long shank up to 250 mm for difficult and remote access.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ANF4X100	4,0	0,8	30	4,0 x 100	209	109	47
ANF5,5X100	5,5	1,0	30	5,5 x 100	209	109	76
ANF5,5X150	5,5	1,0	30	5,5 x 150	259	109	84
ANF6,5X100	6,5	1,2	36	6,0 x 100	220	120	120
ANF6,5X150	6,5	1,2	36	6,0 x 150	270	120	131
ANF8X150	8,0	1,2	40	7,0 x 150	275	125	149
ANF8X200	8,0	1,2	40	7,0 x 200	325	125	164
ANF10X200	10,0	1,6	40	9,0 x 200	325	125	214
ANF10X250	10,0	1,6	40	9,0 x 250	375	125	268

AW - PROTWIST® screwdrivers for slotted head screws - hexagonal blades





NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Hexagonal blade for optimum reliability and performance.
- Extra-long shank up to 250 mm for difficult and remote access.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

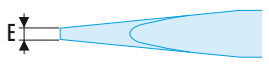
	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AW4X100	4,0	0,8	30	4 x 100	209	109	60
AW4X150	4,0	0,8	30	4 x 150	259	109	70
AW5,5X100	5,5	1,0	30	5 x 100	209	109	85
AW5,5X150	5,5	1,0	30	5 x 150	259	109	100
AW6,5X125	6,5	1,2	36	6 x 125	245	120	130
AW6,5X150	6,5	1,2	36	6 x 150	270	120	150
AW8X150	8,0	1,2	40	7 x 150	275	125	220
AW8X200	8,0	1,2	40	7 x 200	300	125	235
AW10X200	10,0	1,6	40	9 x 200	325	125	255
AW12X250	12,0	2,0	40	10 x 250	375	125	280

AWH - PROTWIST® screwdrivers for slotted head screws - power series











NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Hexagonal blade with shoulder to take a wrench.
- Extra-long shank up to 250 mm for difficult and remote access.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	E [mm]	d [mm]	d2 [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AWH5,5X125	5,5	1,0	30	8	5 x 125	234	109	90
AWH6,5X150	6,5	1,2	36	10	6 x 150	270	120	135
AWH8X175	8,0	1,2	40	11	7 x 175	300	125	160
AWH8EX175	8,0	1,6	40	12	8 x 175	300	125	220
AWH10X175	10,0	1,6	40	14	9 x 175	300	125	320
AWH12X200	12,0	2,0	40	14	10 x 200	325	125	350
AWH12X250	12,0	2,0	40	14	10 x 250	375	125	375
AWH14X250	14,0	2,5	40	16	12 x 250	375	125	450

AN - PROTWIST® screwdrivers for slotted head screws - short blades



NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Short round blade and ball handle for use in confined spaces.
- Finish: black tipped mat chromed blade.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AN4X25	4,0	0,8	36	4,0 x 25	81	56	35
AN4X35	4,0	0,8	36	4,0 x 35	91	56	36
AN5,5X35	5,5	1,0	36	5,5 x 35	91	56	41
AN6,5X35	6,5	1,2	36	6,5 x 35	91	56	46







CHOOSING THE RIGHT SCREWDRIVER FOR CROSS-HEADS

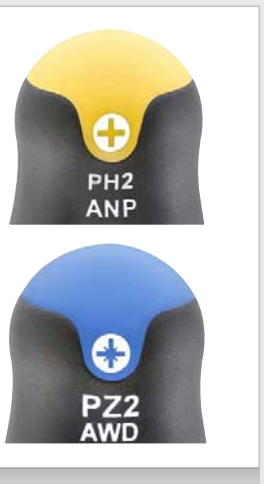
POWER - DURABILITY - QUALITY

The two main cross-head types have very different profiles. Choosing the right screwdriver is crucial for:

- Extending tool life.
- Protecting screw patterns.
- Transmitting maximum torque without wear, particularly with difficult fasteners.

Each tip pattern has a different colour code to help you choose the right screwdriver.

- Yellow for PHILLIPS® screwdrivers and blue for POZIDRIV® screwdrivers.
- A pictogram of the pattern is also shown on the colour coded end.









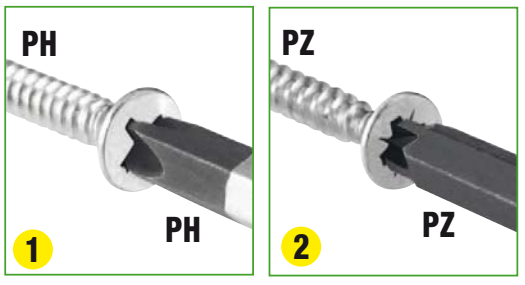
PHILLIPS® PH



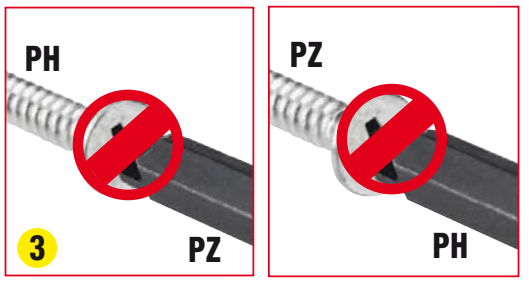
POZIDRIV® PZ

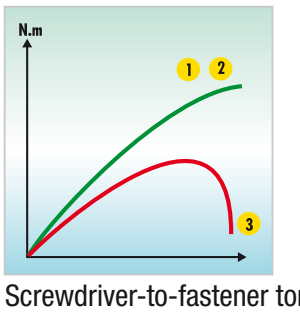
SMALL DIFFERENCES CAN HAVE A BIG EFFECT

Correct patterns and sizes.

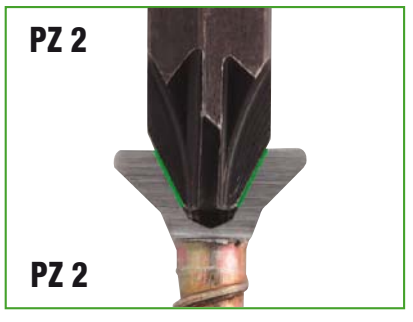


Incorrect patterns or sizes.

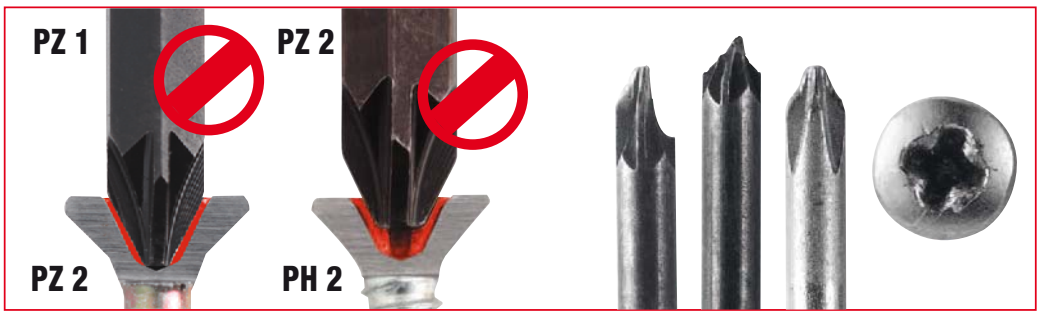




Screwdriver-to-fastener torque transmission.



Using the right screwdriver for the fastener optimises contact areas and transmits maximum torque.

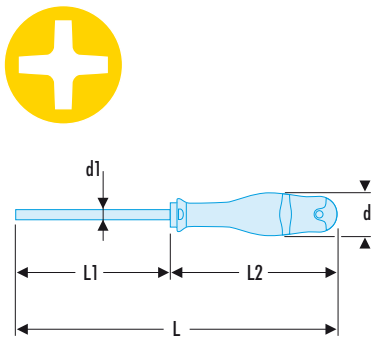


Using the wrong screwdriver reduces contact areas, increases risk of wear or breakage (worn tips, broken fins) which can damage fasteners and assemblies, and may even cause injury.

PROTWIST® screwdrivers for Phillips® screws

AN - PROTWIST® screwdrivers for Phillips® screws - round blades





NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

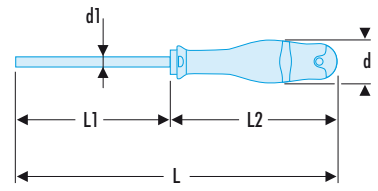
- Extra-long blade up to 400 mm for difficult and remote access.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
ANP0X75	PH0	25	3,0 x 75	178	103	45
ANP1X75	PH1	30	4,5 x 75	184	109	73
ANP1X100	PH1	30	4,5 x 100	209	109	76
ANP1X250	PH1	30	4,5 x 250	359	109	99
ANP2X100	PH2	36	6,0 x 100	220	120	120
ANP2X125	PH2	36	6,0 x 125	245	120	126
ANP2X250	PH2	36	6,0 x 250	370	120	153
ANP2X400	PH2	36	6,0 x 400	520	120	186
ANP3X150	PH3	40	8,0 x 150	275	125	194
ANP4X200	PH4	40	10,0 x 200	325	125	277

AWP - PROTWIST® screwdrivers for Phillips® screws - hexagonal blades







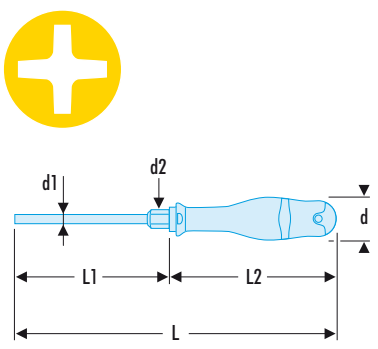
NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Hexagonal blade for optimum reliability and performance.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AWP1X100	PH1	30	5 x 100	209	109	80
AWP2X125	PH2	36	6 x 125	245	120	130
AWP3X150	PH3	40	8 x 150	275	125	200
AWP4X200	PH4	40	10 x 200	325	125	280

AWPH - PROTWIST® screwdrivers for Phillips® screws - power series



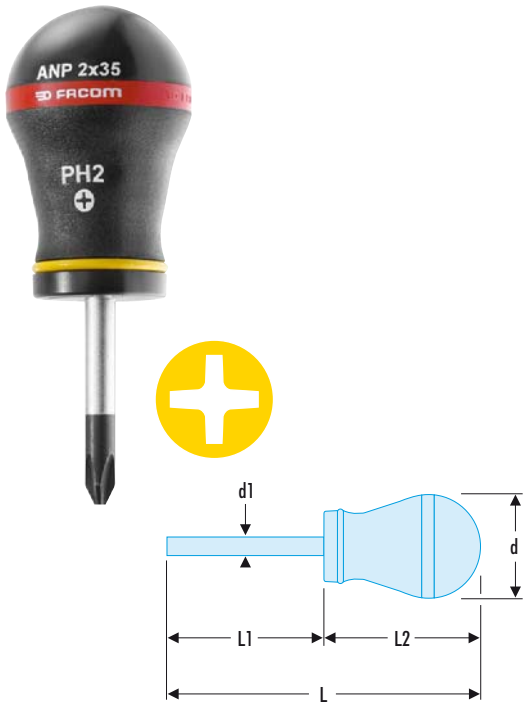


NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Hexagonal blade with shoulder to take a wrench.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	Phillips [No]	d [mm]	d2 [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AWPH1X100	PH1	30	8	5 x 100	209	109	70
AWPH2X125	PH2	36	10	6 x 125	245	120	130
AWPH3X150	PH3	40	12	8 x 150	275	125	200
AWPH4X200	PH4	40	14	10 x 200	325	125	280

ANP - PROTWIST® screwdrivers for Phillips® screws - short blades



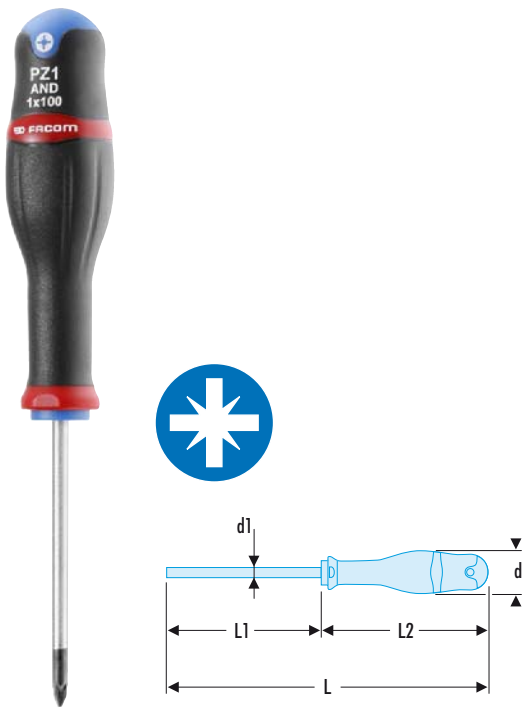
NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Short blade and ball handle for use in confined spaces.
- Finish: black tipped mat chromed blade.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ANP1X25	PH1	36	4,5 x 25	81	56	38
ANP1X35	PH1	36	4,5 x 35	91	56	39
ANP2X35	PH2	36	6,0 x 35	91	56	44

PROTWIST® screwdrivers for Pozidriv® screws

AND - PROTWIST® screwdrivers for Pozidriv® screws - round blades



NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

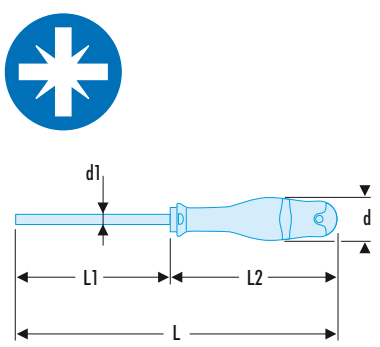
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed round blade.

	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AND0X75	PZ0	25	3,0 x 75	178	103	45
AND1X75	PZ1	30	4,5 x 75	184	109	73
AND1X100	PZ1	30	4,5 x 100	209	109	76
AND1X250	PZ1	30	4,5 x 250	359	109	99
AND2X100	PZ2	36	6,0 x 100	220	120	120
AND2X125	PZ2	36	6,0 x 125	245	120	126
AND2X250	PZ2	36	6,0 x 250	370	120	153
AND3X150	PZ3	40	8,0 x 150	275	125	194
AND4X200	PZ4	40	10,0 x 200	325	125	277

AWD - PROTWIST® screwdrivers for Pozidriv® screws - hexagonal blades







NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

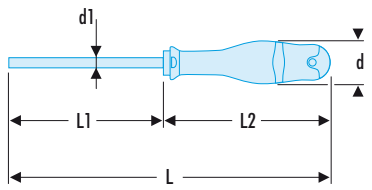
- Hexagonal blade for optimum reliability and performance.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AWD1X100	PZ1	30	5 x 100	209	109	80
AWD2X125	PZ2	36	6 x 125	245	120	130
AWD3X150	PZ3	40	8 x 150	275	125	200
AWD4X200	PZ4	40	10 x 200	325	125	280

AWDH - PROTWIST® screwdrivers for Pozidriv® screws - power series







NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

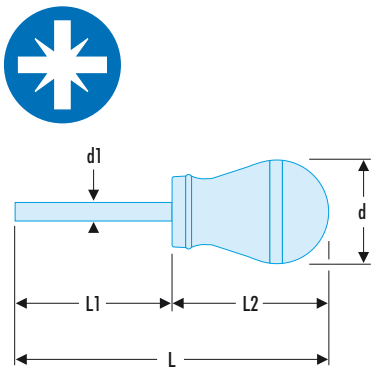
- Hexagonal blade with shoulder to take a wrench.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	Pozidriv [No]	d [mm]	d2 [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AWDH1X100	PZ1	30	8	5 x 100	209	109	209
AWDH2X125	PZ2	36	10	6 x 125	245	120	245
AWDH3X150	PZ3	40	12	8 x 150	275	125	275
AWDH4X200	PZ4	40	14	10 x 200	325	125	325

AND - PROTWIST® screwdrivers for Pozidriv® screws - short blades







NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Short round blade and ball handle for use in confined spaces.
- Finish: black tipped mat chromed blade.

	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AND1X25	PZ1	36	4,5 x 25	81	56	38
AND1X35	PZ1	36	4,5 x 35	91	56	40
AND2X35	PZ2	36	6,0 x 35	91	56	45

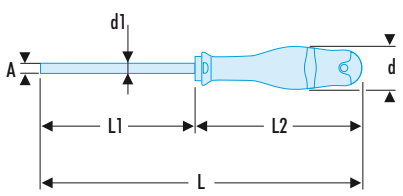
PROTWIST® screwdrivers for square head screws

ANSQ - PROTWIST® screwdrivers for ROBERTSON square head screws









- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

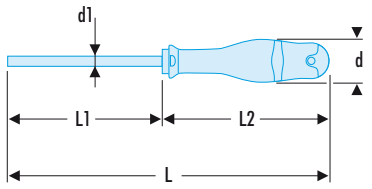
	A [mm]	Robertson [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
ANSQ1X75	4	SQ1	30	4 x 75	184	109	73
ANSQ2X100	5	SQ2	36	5 x 100	220	120	120
ANSQ3X125	6	SQ3	40	6 x 125	250	125	185

PROTWIST® screwdrivers for Torx® and Resistorx® screws

ANX - PROTWIST® screwdrivers for Torx® screws





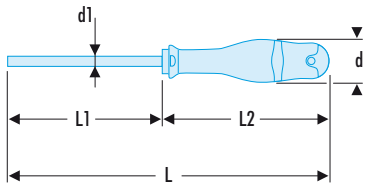


- Compliant with Torx® specifications.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	Torx [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
ANX6X50	1,65	T6	19	2,5 x 50	144	94	20
ANX7X50	1,97	T7	19	2,5 x 50	144	94	20
ANX8X50	2,30	T8	26	2,5 x 50	153	103	35
ANX9X75	2,48	T9	25	3,0 x 75	178	103	45
ANX10X75	2,74	T10	30	3,0 x 75	184	109	50
ANX15X75	3,26	T15	30	3,5 x 75	184	109	61
ANX20X100	3,84	T20	36	4,0 x 100	220	120	67
ANX20X150	3,84	T20	36	4,0 x 150	270	120	73
ANX25X100	4,40	T25	36	5,0 x 100	220	120	113
ANX27X100	4,96	T27	36	5,5 x 100	220	120	113
ANX30X125	5,49	T30	36	6,0 x 125	245	120	126
ANX40X150	6,60	T40	40	7,0 x 150	275	125	173

ANXP - PROTWIST® screwdrivers for Torx Plus® screws





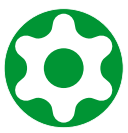
- Compliant with Torx Plus® specifications.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

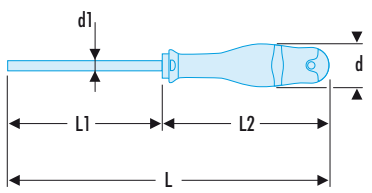
	A [mm]	Resistorx [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
ANXP5X50	1,42	IP5	19	2,5 x 50	144	95	20
ANXP6X50	1,65	IP6	19	2,5 x 50	144	95	20
ANXP7X50	1,97	IP7	19	2,5 x 50	144	95	20
ANXP8X50	2,30	IP8	25	2,5 x 50	153	103	35
ANXP9X75	2,48	IP9	25	3,0 x 75	178	103	45
ANXP10X75	2,74	IP10	30	3,0 x 75	184	109	50
ANXP15X75	3,26	IP15	30	3,5 x 75	184	110	61
ANXP20X100	3,84	IP20	36	4,0 x 100	220	120	67
ANXP25X100	4,40	IP25	36	5,0 x 100	220	120	113
ANXP27X100	4,96	IP27	36	5,5 x 100	220	120	113
ANXP30X125	5,49	IP30	36	6,0 x 125	245	120	126
ANXP40X150	6,60	IP40	40	7,0 x 150	275	125	173

ANXR - PROTWIST® screwdrivers for Resistorx® screws







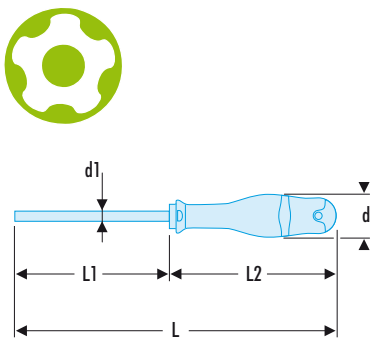


- Compliant with Resistorx® specifications.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	Resistorx [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
ANXR10X75	2,74	TT10	25	3,0 x 75	184	109	50
ANXR15X75	3,26	TT15	30	3,5 x 75	185	110	61
ANXR20X100	3,84	TT20	36	4,0 x 100	220	120	67
ANXR25X100	4,40	TT25	36	5,0 x 100	220	120	113
ANXR27X100	4,96	TT27	36	5,5 x 100	220	120	113
ANXR30X125	5,49	TT30	36	6,0 x 125	245	120	126
ANXR40X150	6,60	TT40	40	7,0 x 150	275	125	173

ANXRP - PROTWIST® screwdrivers for Torx Plus® screws





- Compliant with Torx Plus® specifications.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	Resistorx [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
ANXRP10X75	2,74	IPR10	30	3,0 x 75	184	109	50
ANXRP15X75	3,26	IPR15	30	3,5 x 75	185	110	61
ANXRP20X100	3,84	IPR20	36	4,0 x 100	220	120	67
ANXRP25X100	4,40	IPR25	36	5,0 x 100	220	120	113
ANXRP27X100	4,96	IPR27	36	5,5 x 100	220	120	113
ANXRP30X125	5,49	IPR30	36	6,0 x 125	245	120	126
ANXRP40X150	6,60	IPR40	40	7,0 x 150	275	125	173

Set of PROTWIST® screwdrivers with sand-blasted tip

Set of 6 PROTWIST® screwdrivers with sand-blasted tip for slotted-head and Phillips® screws

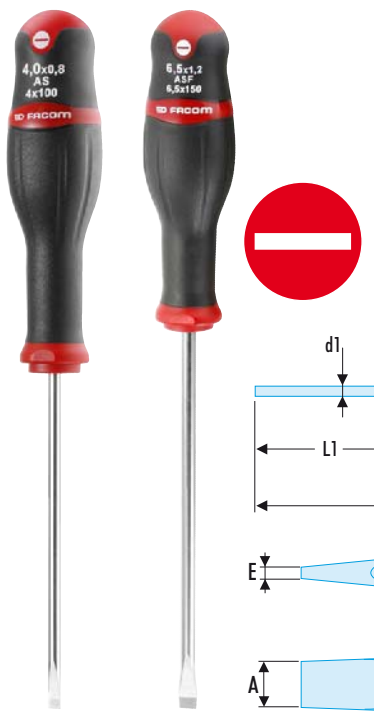


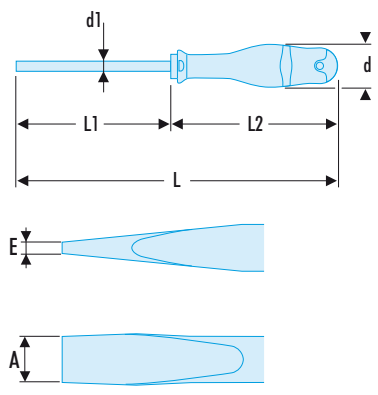
- Supplied in a box.

	Content set	Quantity
ASP.J6	AS3,5X75 - AS4X100 - AS5,5X100 - ASF6,5X150 - ASP1X100 - ASP2X125	6

PROTWIST® screwdrivers with sand-blasted tip

AS - ASF - PROTWIST® screwdrivers with sand-blasted tip for slotted head screws





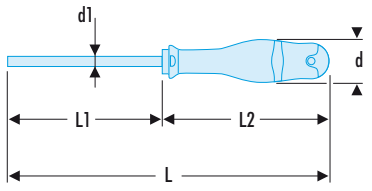
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- ASF: forged blade.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: sand-blasted tip gloss chromed blade.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AS2,5X75	2,5	0,4	19	2,5 x 75	170	95	21
AS3,5X75	3,5	0,6	25	3,5 x 75	179	104	41
AS3,5X100	3,5	0,6	25	3,5 x 100	204	104	43
AS4X100	4,0	0,8	30	4,0 x 100	209	109	47
AS5,5X100	5,5	1,0	30	5,5 x 100	210	110	82
AS5,5X150	5,5	1,0	30	5,5 x 150	260	110	91
AS6,5X150	6,5	1,2	36	6,5 x 150	270	120	140
ASF5,5X100	5,5	1,0	30	5,0 x 100	210	110	76
ASF6,5X150	6,5	1,2	36	6,0 x 150	270	120	120
ASF8X150	8,5	1,2	40	7,0 x 150	275	125	149
ASF10X200	10,0	1,6	40	9,0 x 200	325	125	214

ASP - PROTWIST® screwdrivers with sand-blasted tip for Phillips® screws





NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

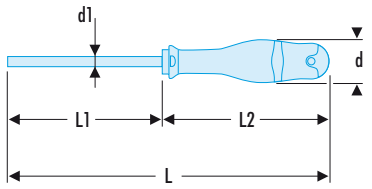
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: sand-blasted tip gloss chromed blade.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ASP0X75	PH0	25	3,0 x 75	179	104	45
ASP1X100	PH1	30	4,5 x 100	210	110	76
ASP2X125	PH2	36	6,0 x 125	245	120	126
ASP3X150	PH3	40	8,0 x 150	275	125	194

ASD - PROTWIST® screwdrivers with sand-blasted tip for Pozidriv® screws







NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

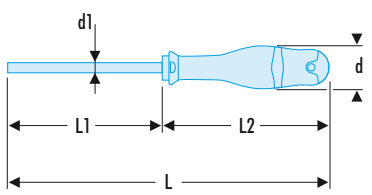
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: sand-blasted tip gloss chromed blade.

	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ASD0X75	PZ0	25	3,0 x 75	179	104	45
ASD1X100	PZ1	30	4,5 x 100	210	110	76
ASD2X125	PZ2	36	6,0 x 125	245	120	126
ASD3X150	PZ3	40	8,0 x 150	275	125	194

ASX - PROTWIST® screwdrivers with sand-blasted tip for Torx® screws







- Compliant with Torx® specifications.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: sand-blasted tip gloss chromed blade.

	Torx [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ASX10X75	T10	30	3,0 x 75	184	109	50
ASX15X75	T15	30	3,5 x 75	185	110	61
ASX20X100	T20	36	4,0 x 100	220	120	73
ASX25X100	T25	36	5,0 x 100	220	120	113
ASX30X125	T30	36	6,0 x 125	245	120	126

PROTWIST® stainless steel screwdrivers

PROTWIST® STAINLESS STEEL SCREWDRIVERS

APPLICATIONS FOR STAINLESS STEEL TOOLS

- Industries sensitive to contamination: agro-food, clean rooms, laboratories, medical facilities.
- Rust-prone outdoor environments: marine environments, buildings (door and window fasteners, terraces).



Only use stainless steel screwdrivers to preserve the antirust characteristics of a stainless steel screw

- Standard screwdrivers produce metal particles which rust and contaminate stainless steel fasteners.
- Using a stainless steel screwdriver is the only way to guarantee non-contamination of the fastener, and high resistance to corrosion.



Screwdrivers combining resistance to oxidation, strength and screwing comfort

- Protwist ergonomic grip overmoulded on stainless steel blade, chosen for its high range characteristics and submitted to a precise and controlled thermal treatment.

Stainless steel X46Cr13

- Also used for high range food grade cutlery, surgical tools, brake discs, etc.

Vacuum quenching

- Guarantees mechanical characteristics and resistance to corrosion.

Bacteriological tests passed after sterilisation in autoclave

- 20 min at 120°C, 1 bar over-pressure.



Set of 6 PROTWIST® stainless steel screwdrivers N°1



- High corrosion resistance of stainless steel tools ensures a longer lifetime in environments prone to rust.
- The stainless steel blade Ref X46Cr13 is used in top range food cutlery, surgical tools, brake discs.
- Vacuum quenching guarantees mechanical characteristics.

	Content set	Quantity	⚖ [g]
ADST.J6	4X100 - 5,5X100 - 6,5X150 - 8X175 - PZ1X100 - PZ2X125	6	620

Set of 6 PROTWIST® stainless steel screwdrivers N°2



- High corrosion resistance of stainless steel tools ensures a longer lifetime in environments prone to rust.
- The stainless steel blade Ref X46Cr13 is used in top range food cutlery, surgical tools, brake discs.
- Vacuum quenching guarantees mechanical characteristics.

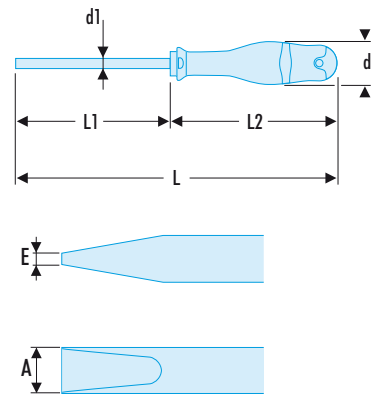
	Content set	Quantity	⚖ [g]
APST.J6	4X100 - 5,5X100 - 6,5X150 - 8X175 - PH1X100 - PH2X125	6	620

A.ST - AF.ST - PROTWIST® stainless steel screwdrivers for slotted head screws









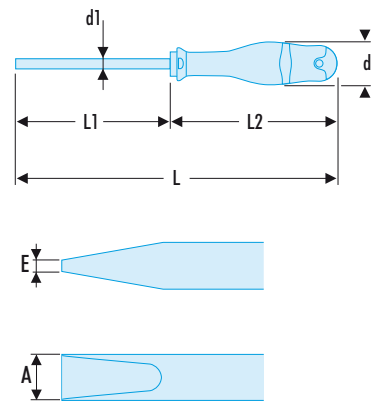
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- High corrosion resistance of stainless steel tools ensures a longer lifetime in environments prone to rust.
- The stainless steel blade Ref X46Cr13 is used in top range food cutlery, surgical tools, brake discs.
- Vacuum quenching guarantees mechanical characteristics.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
A4X100ST	4,0	0,8	30	4,0 x 100	209	109	47
A5,5X100ST	5,5	1,0	30	5,5 x 100	210	110	82
AF6,5X150ST	6,5	1,2	36	6,5 x 150	270	120	153
AF8X175ST	8,0	1,2	36	6,5 x 175	420	120	180

AP.ST - PROTWIST® stainless steel screwdrivers for Phillips® screws





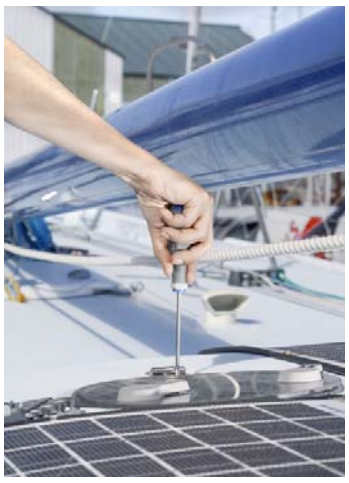
NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- High corrosion resistance of stainless steel tools ensures a longer lifetime in environments prone to rust.
- The stainless steel blade Ref X46Cr13 is used in top range food cutlery, surgical tools, brake discs.
- Vacuum quenching guarantees mechanical characteristics.
- Bi-material grip resists to impacts, abrasion, and chemicals.

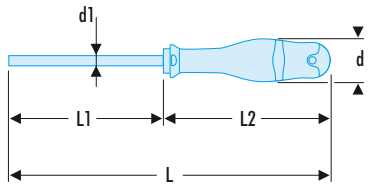
	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AP1X100ST	PH1	30	4,5 x 100	209	109	76
AP2X125ST	PH2	36	6,0 x 125	245	120	126

AD.ST - PROTWIST® stainless steel screwdrivers for Pozidriv® screws









NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- High corrosion resistance of stainless steel tools ensures a longer lifetime in environments prone to rust.
- The stainless steel blade Ref X46Cr13 is used in top range food cutlery, surgical tools, brake discs.
- Vacuum quenching guarantees mechanical characteristics.
- Bi-material grip resists to impacts, abrasion, and chemicals.

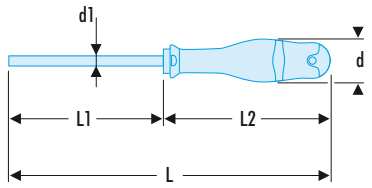
	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
AD1X100ST	PZ1	30	4,5 x 100	209	109	76
AD2X125ST	PZ2	36	6,0 x 125	245	120	126

AX.ST - PROTWIST® stainless steel for Torx® screws









- High corrosion resistance of stainless steel tools ensures a longer lifetime in environments prone to rust.
- The stainless steel blade Ref X46Cr13 is used in top range food cutlery, surgical tools, brake discs.
- Vacuum quenching guarantees mechanical characteristics.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Torx [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
AX10X75ST	T10	30	3,0 x 75	184	109	50
AX15X75ST	T15	30	3,5 x 75	184	109	61
AX20X100ST	T20	36	4,0 x 100	220	120	67
AX25X100ST	T25	36	5,0 x 100	220	120	113
AX30X125ST	T30	36	6,0 x 125	245	120	126
AX40X150ST	T40	40	7,0 x 150	275	125	173

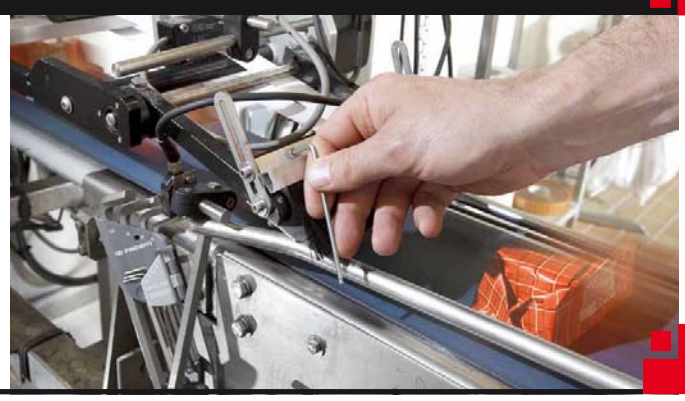
STAINLESS STEEL KEYS

STAINLESS STEEL KEYS: WHY ?

- Very high resistance to oxidation:
  - No rust on the tool.
  - No fastener contamination.
- Non-coated treated stainless steel key:
  - No risk of flaking.
  - No loss of material.

For details of our complete range of stainless steel keys see p. 428





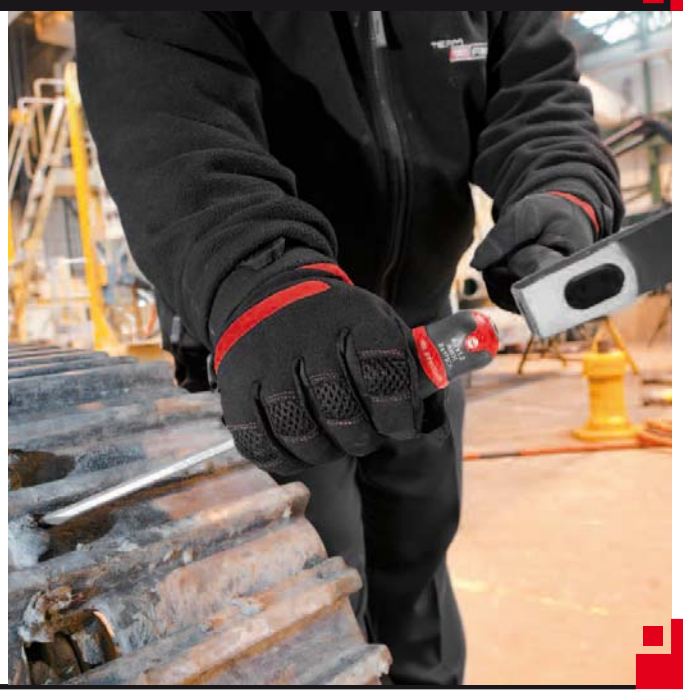
PROTWIST® SHOCK screwdrivers

IMPACT ZONE SCREWDRIVER

Exceptional unlocking power

- The shockwave unlocks rusted fasteners for easier unfastening.
- Metal insert added.
- Optimum impact power transmission from the insert to the blade: metal insert associated with the modified polyamide core of the Protwist.
- Major reduction of blow and vibrations in the hand upon impact: the blade and insert are not in direct contact, but separated by the polyamide.
- Positive grip: Protwist ergonomic handle and soft material for efficient and comfortable grip.
- High strength: hexagonal blade in high alloy steel and insert to protect the impact zone.





Set of 5 PROTWIST® SHOCK screwdrivers



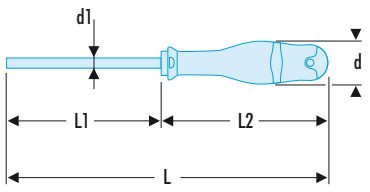
	Content set	Quantity
AWCK.J5	4X100 - 6,5x150 - 8X175 - PH1X100 - PH2X125	5

AWH.CK - PROTWIST® SHOCK screwdrivers for slotted head screws













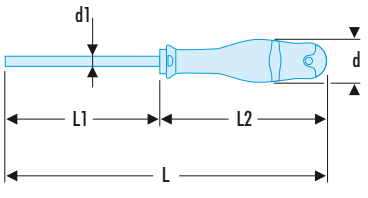
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Positive grip.
- PROTWIST® ergonomic handle and soft material for efficient and comfortable grip.
- High strength.
- Wide and domed metal insert to protect the impact zone, associated with a hexagonal blade in 73MO steel.
- Hexagonal blade with shoulder to take a wrench (except AW4X100Ck without shoulder).
- Extra-long blade for use in confined spaces.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	A [mm]	E [mm]	d [mm]	d2 [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
AW4X100CK	4,0	0,8	25	-	4,1 x 100	204	104	57
AWH5,5X125CK	5,5	1,0	25	8	4 x 100	204	104	57
AWH6,5X150CK	6,5	1,2	30	10	5 x 125	235	110	88
AWH8X175CK	8,0	1,2	36	11	6 x 150	270	120	147
AWH10X175CK	10,0	1,6	40	14	7 x 175	300	125	195
AWH12X200CK	12,0	2,0	40	14	10 x 200	325	125	292
AWH14X250CK	14,0	2,5	40	16	10 x 250	375	125	322

AWPH.CK - PROTWIST® SHOCK screwdrivers for Phillips® screws









NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Positive grip.
- PROTWIST® handle ergonomics and soft coating for efficient and comfortable grip.
- High strength.
- Wide domed metal insert protecting the zone of impact, associated with a 73MO hexagonal blade.
- Hexagonal blade with shoulder to take a wrench.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

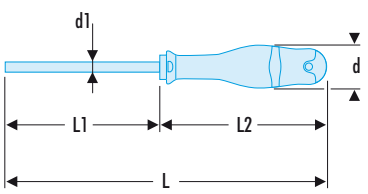
	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AWPH1X100CK	PH1	30	5 x 100	209	109	70
AWPH2X125CK	PH2	36	6 x 125	245	120	130
AWPH3X150CK	PH3	40	8 x 150	275	125	200

AWDH.CK - PROTWIST® SHOCK screwdriver for Pozidriv® screws













NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Positive grip.
- PROTWIST® handle ergonomics and soft coating for efficient and comfortable grip.
- High strength.
- Wide domed metal insert protecting the zone of impact, associated with a 73MO hexagonal steel blade.
- Hexagonal blade with shoulder to take a wrench.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

	Pozidriv [No]	d [mm]	d2 [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AWDH1X100CK	PZ1	30	8	5 x 100	210	110	86
AWDH2X125CK	PZ2	36	10	6 x 125	245	120	142
AWDH3X150CK	PZ3	40	12	8 x 150	275	125	211

PROTWIST® fluorescent screwdrivers

PROTWIST® FLUORESCENT SCREWDRIVER

YOUR SOLUTION FOR "DARK OR DIMLY LIT AREAS"

SAFETY FIRST

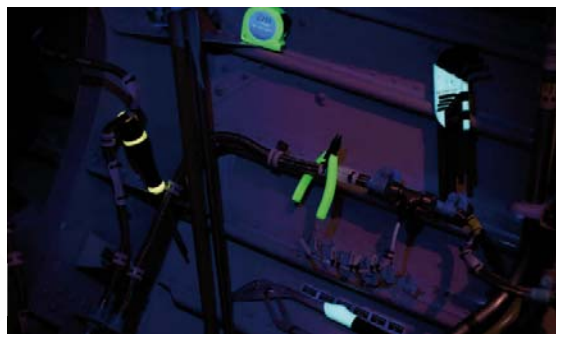
- No tools lost or forgotten.
- Tool visibility.

COST REDUCTION

- Less tools replaced due to loss.

Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.



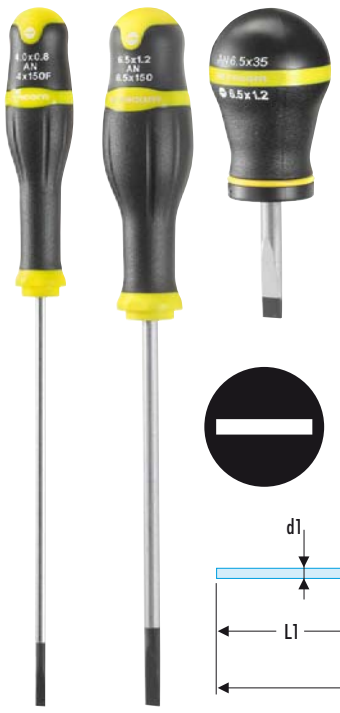


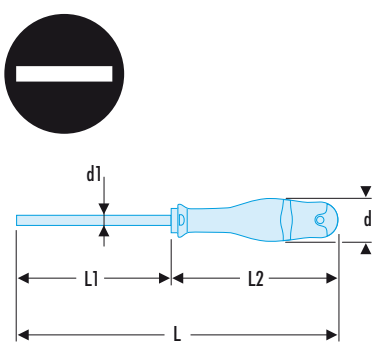


For the complete range of fluorescent tools, see Section 21 AERONAUTICS



AN.F - PROTWIST® fluorescent screwdrivers for slotted head screws - milled blade







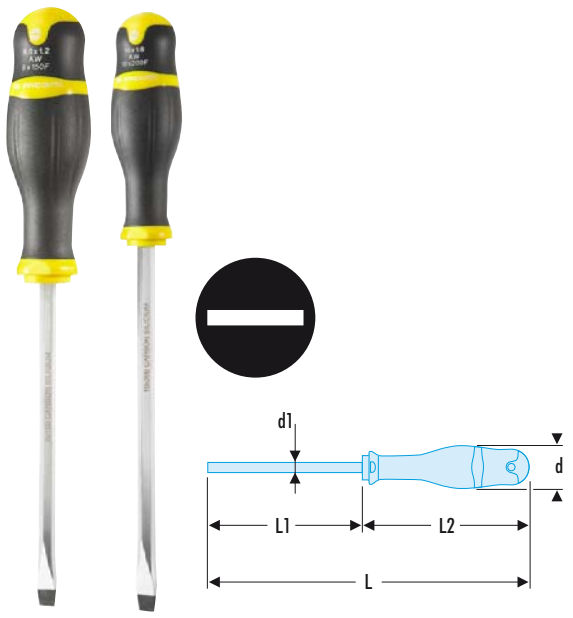


NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AN2,5X75F	2,5	0,4	19	2,5 x 75	169	94	21
AN3,5X100F	3,5	0,6	25	3,5 x 100	203	103	43
AN4X35F	4,0	0,8	36	4,0 x 35	91	56	36
AN4X100F	4,0	0,8	30	4,0 x 100	209	109	47
AN4X150F	4,0	0,8	30	4,0 x 150	259	109	52
AN5,5X150F	5,5	1,0	30	5,5 x 150	259	109	91
AN6,5X35F	6,5	1,2	36	6,5 x 35	91	56	46
AN6,5X150F	6,5	1,2	36	6,5 x 150	270	120	140

AW.F - PROTWIST® fluorescent screwdrivers for slotted head screws - hexagonal blade

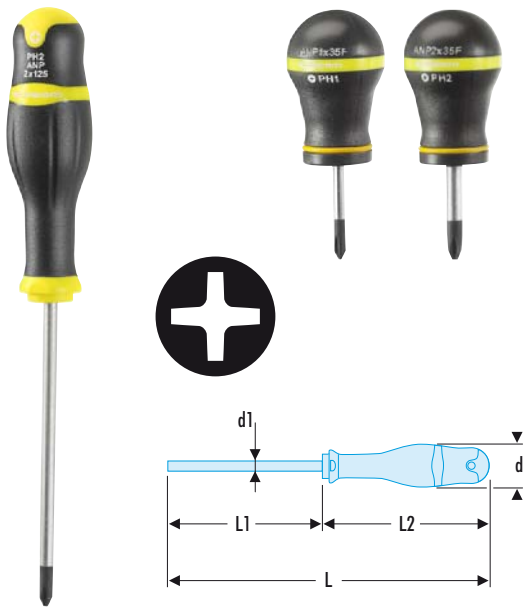


NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AW8X150F	40	7 x 150	275	125	220
AW10X200F	40	9 x 200	325	125	255

ANP.F - PROTWIST® fluorescent screwdrivers for Phillips® screws - milled blade

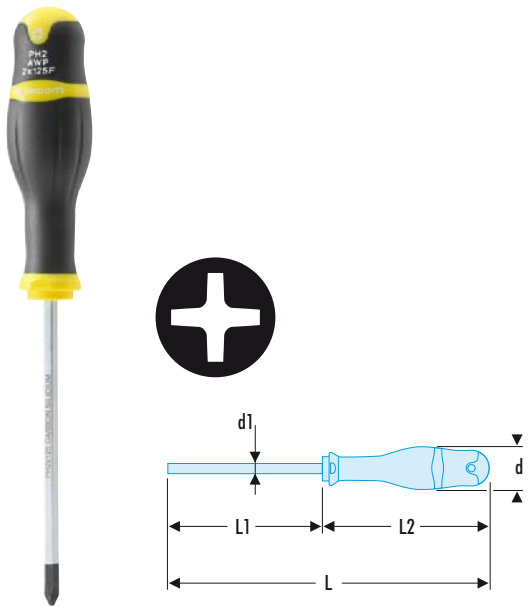


NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
ANP0X75F	PH0	25	3,0 x 75	178	103	45
ANP1X35F	PH1	36	4,5 x 35	91	56	39
ANP1X100F	PH1	30	4,5 x 100	209	109	76
ANP2X35F	PH2	36	6,0 x 35	91	56	44
ANP2X125F	PH2	36	6,0 x 125	245	120	126
ANP3X150F	PH3	40	8,0 x 150	275	125	194
ANP4X200F	PH4	30	4,0 x 200	309	109	57

AWP.F - PROTWIST® fluorescent screwdrivers for Phillips® screws - hexagonal blade



NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Hexagonal blade: optimum endurance and performance.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AWP2X125F	2	36	6 x 125	245	120	130

R.236AF PROTWIST® fluorescent handle screwdriver 1/4" - 158 mm

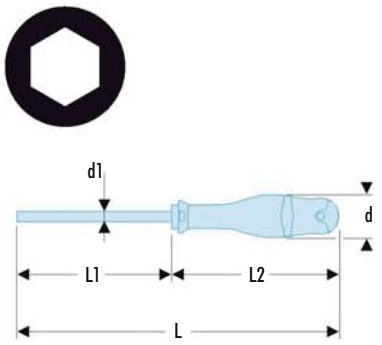


NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: chromed.

AWSH.F - PROTWIST® fluorescent handle hexagonal key - spherical head



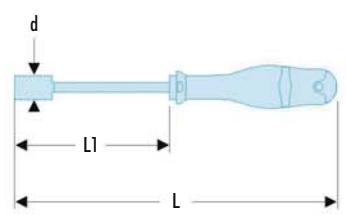


- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
AWSH3X75F	19	3	169	75	94	35
AWSH4X75F	25	4	178	75	103	45
AWSH5X100F	30	5	208	100	109	80

PROTWIST® fluorescent bit holder screwdriver





- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Long magnetic bit holders.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
AM.M2F	10	245	125	150

SAFETY FIRST | **WALLET SET OF FLUORESCENT KEYS**

WALLET SET OF FLUORESCENT KEYS AVAILABLE P. 1024



SAFETY FIRST **NON-SPARKING TOOLS**

RANGE OF NON-SPARKING TOOLS AVAILABLE P. 738



PROTWIST® 1,000 Volt insulated screwdrivers sets and modules

1,000 V INSULATED SCREWDRIVERS

FACOM VE-SERIES 1,000 V SCREWDRIVERS

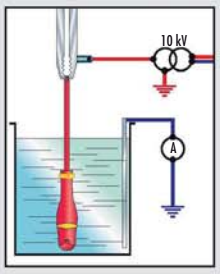
Protwist®

1000 VOLTS EN 60900

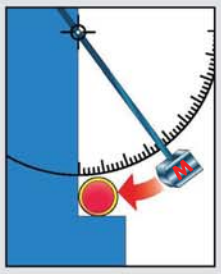
Tools built for electrical safety to European standard EN 60900 specifications, and designed for working on live components up to 1,000 V AC and 1,500 V DC

For your safety, every screwdriver is tested to 10,000 V for 10 seconds at the end of the manufacturing cycle.

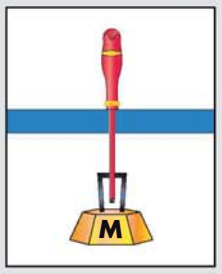
Tests performed in accordance with EN 60900.



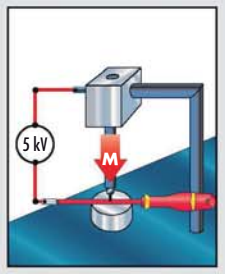
Electrical resistance



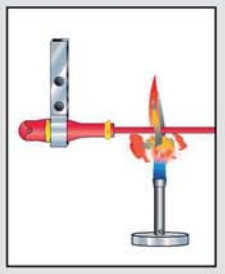
Impact resistance



Pull-off resistance



Penetration resistance

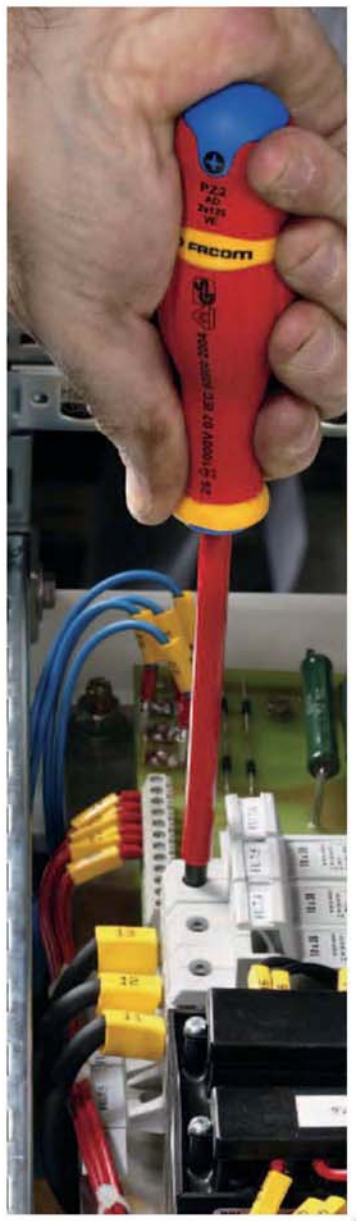


Combustion test

SAFETY FIRST

WORKING ON LIVE COMPONENTS IS HAZARDOUS.
For your safety it is important that you

- **Ensure that the insulation is not damaged by:**
  - **– heat (-20 to 70° working temperature)**
  - **– chemicals**
  - **– cuts or perforations.**
- **Visually check the insulation before use.**



A.VE - Sets of PROTWIST® 1,000 Volt insulated screwdrivers



- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Supplied in a box.

	Content set	Quantity	⚖ [g]
AD.J5VE	A3,5X100VE - A4X100VE - A5,5X125VE - AD1X100VE - AD2X125VE	5	430
AP.J5VE	A3,5X100VE - A4X100VE - A5,5X125VE - AP1X100VE - AP2X125VE	5	430
AD.J8VE	A2,5X75VE - A3X100VE - A3,5X100VE - A4X100VE - A5,5X125VE - A6,5X150VE - AD1X100VE - AD2X125VE	8	650

MOD.A1VE Module of 8 PROTWIST® 1,000 Volt insulated screwdrivers



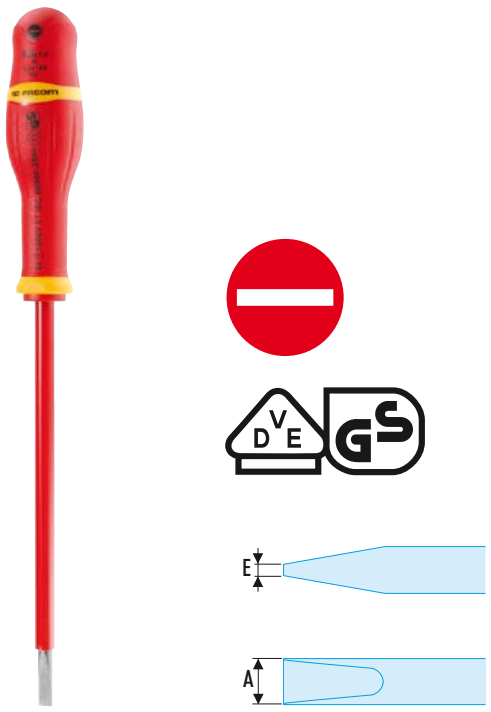
- For your safety, each screwdriver is tested individually at 10,000 Volts for 10 seconds, at the end of the manufacturing cycle.
- Including:

- AVE: 3.5 - 4 - 5.5 - 6.5 mm.
- AP1X100VE - AP2X125VE.
- AD1X100VE - AD2X125VE.
- Heat-formed tray PL325.

Weight: 907 g.

PROTWIST® 1,000 Volt insulated screwdrivers for slotted head screws

A.VE - PROTWIST® 1,000 Volt insulated screwdrivers for slotted-head screws



NF ISO 2380-1, NF ISO 2380-2, NF EN 60900, ISO 2380-1, ISO 2380-2, EN 60900, DIN ISO 2380-1, DIN ISO 2380-2, DIN EN 60900, ASME B107.600

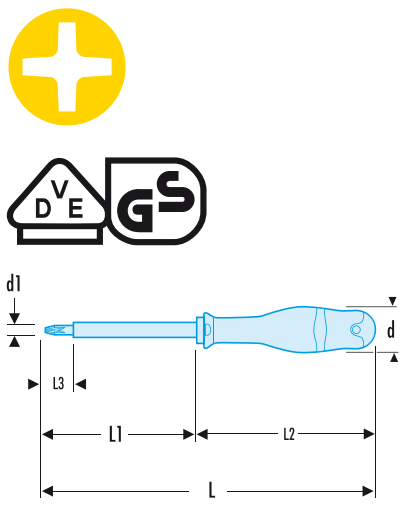
- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- 1,000 Volt sheathed round blade.
- Milled blade: --> 5.5 mm included.
- Fillet blade: 6.5 --> 12 mm.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	A [mm]	E [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
A2X75VE	2,0	0,4	19	170	40	95	18	23
A2,5X50VE	2,5	0,4	25	153	50	103	18	30
A2,5X75VE	2,5	0,4	25	178	75	103	18	32
A3X75VE	3,0	0,5	25	178	75	103	18	38
A3X100VE	3,0	0,5	25	202	100	103	18	39
A3,5X75VE	3,5	0,6	25	179	75	104	18	42
A3,5X100VE	3,5	0,6	25	204	100	104	18	44
A4X100VE	4,0	0,8	30	210	100	110	18	48
A4X150VE	4,0	0,8	30	260	150	110	18	53
A5,5X125VE	5,5	1,0	30	235	125	110	18	88
A5,5X150VE	5,5	1,0	30	260	150	110	18	92
A5,5X200VE	5,5	1,0	30	310	200	110	18	106
A6,5X150VE	6,5	1,2	36	270	150	120	18	120
A6,5X200VE	6,5	1,2	36	320	200	120	18	170
A8X150VE	8,0	1,2	40	275	150	125	18	160
A8X200VE	8,0	1,2	40	325	200	125	18	180
A10X200VE	10,0	1,6	40	325	200	125	18	240
A12X250VE	12,0	2,0	40	375	250	125	18	360

PROTWIST® 1,000 Volt insulated screwdrivers for Phillips® screws

AP.VE - PROTWIST® 1,000 Volt insulated screwdrivers for Phillips® head screws





NF ISO 8764-1, NF ISO 8764-2, NF EN 60900, ISO 8764-1, ISO 8764-2, EN 60900, DIN ISO 8764-1, DIN ISO 8764-2, DIN EN 60900, ASME B107.600

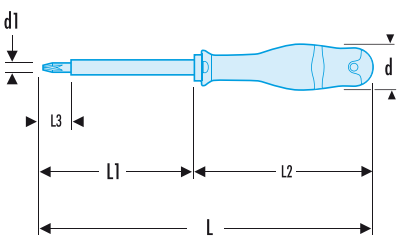
- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- 1,000 Volt sheathed round blade.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ΔΔ [g]
AP0X75VE	PH0	25	3,0	179	75	104	18	46
AP1X100VE	PH1	30	4,5	210	100	110	18	77
AP2X125VE	PH2	36	6,0	245	125	120	18	127
AP3X150VE	PH3	40	8,0	275	150	125	18	195
AP4X200VE	PH4	40	10,0	325	200	125	18	278

PROTWIST® 1,000 Volt insulated screwdrivers for Pozidriv® screws

AD.VE - PROTWIST® 1,000 Volt insulated screwdrivers for Pozidriv® head screws







NF ISO 8764-1, NF ISO 8764-2, NF EN 60900, ISO 8764-1, ISO 8764-2, EN 60900, DIN ISO 8764-1, DIN ISO 8764-2, DIN EN 60900, ASME B107.600

- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- 1,000 Volt sheathed round blade.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Pozidriv [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ΔΔ [g]
AD0X75VE	PZ0	25	3,0	179	75	104	18	46
AD1X100VE	PZ1	30	4,5	209	100	109	18	77
AD2X125VE	PZ2	36	6,0	245	125	120	18	127
AD3X150VE	PZ3	40	8,0	275	150	125	18	195

PROTWIST® BORNEO® screwdrivers sets for electrical terminals

1,000 V INSULATED SCREWDRIVERS

1000 VOLTS EN 60900 Borneo®

SPECIAL SCREWDRIVERS FOR COMBINATION PATTERN HEADS USED ON SWITCHGEAR.



Special pattern
- Specific driver pattern suitable for switches, relays, circuit-breakers, boxes, terminals, etc.

Powerful tightening
- Torque transmission considerably higher than with a conventional screwdriver.

Drive integrity
- More positive coupling preventing slippage, reduced wear of both fastener and screwdriver.
- More secure fit avoiding damage to enclosures and casings.



1,000 V SAFETY

- **Screwdrivers to European standard EN 60900.**
- **Most switchgear has combination Pozidriv®/slotted heads (Facom ADB series screwdrivers), but some uses Phillips®/slotted heads (Facom APB series screwdrivers). Clean results can only be achieved with correct screwdriver/ fastener contact.**

AB.VE - Sets of PROTWIST® BORNEO® screwdrivers for mixed heads



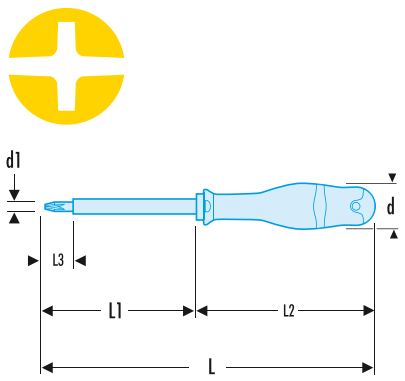
- Screwdrivers designed specifcally for mixed head screws found in electrical appliances.
- For your safety, each screwdriver is tested individually at 10,000 Volts for 10 seconds, at the end of the manufacturing cycle.
- Supplied in a box.

	Content set	Quantity
AB.J4VE	APB1X100VE - APB2X125VE - ADB1X100VE - ADB2X125VE	4
ADB.J7VE	ADB1X100VE - ADB2X125VE - A2,5X75VE - A3,5X100VE - A4X100VE - A5,5X125VE - A6,5X150VE	7
APB.J7VE	APB1X100VE - APB2X125VE - A2,5X75VE - A3,5X100VE - A4X100VE - A5,5X125VE - A6,5X150VE	7

PROTWIST® BORNEO® screwdrivers for electrical terminals

APB - PROTWIST® BORNEO® screwdrivers for mixed heads - Phillips®



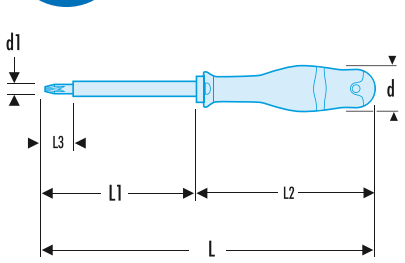


- Screwdrivers designed specifcally for mixed head screws found in electrical appliances.
- Tighter screwing = safety.
- Less slipping for better sensations and lesser wear.
- Longer screwdriver durability.
- For your safety, each screwdriver is tested individually at 10,000 Volts for 10 seconds, at the end of the manufacturing cycle.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
APB1X100VE	PH1	30	5	210	100	110	18	80
APB2X125VE	PH2	36	6	245	125	120	18	136

ADB.VE - PROTWIST® BORNEO® screwdrivers for mixed heads - Pozidriv®





- Screwdrivers designed specifcally for mixed head screws found in electrical appliances.
- Tighter screwing = safety.
- Less slipping for better sensations and lesser wear.
- Longer screwdriver durability.
- For your safety, each screwdriver is tested individually at 10,000 Volts for 10 seconds, at the end of the manufacturing cycle.
- Bi-material grip resists to impacts, abrasion, and chemicals.

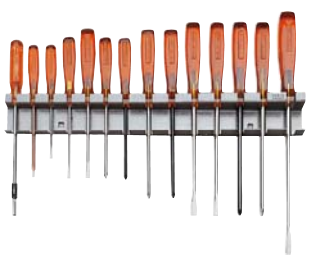
	Pozidriv [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
ADB1X100VE	PZ1	30	5	210	100	110	18	80
ADB2X125VE	PZ2	36	6	245	125	120	18	136

Sets of ISORYL screwdrivers

Sets of ISORYL screwdrivers



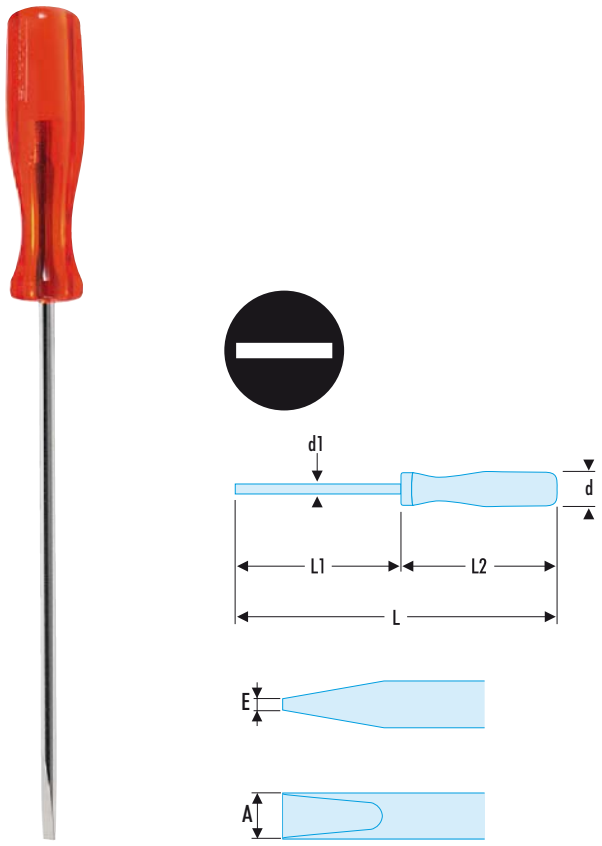




	Organiser for	Content set	Quantity	⚖ [g]
AR.J5	Box	AR.3X75 - AR.4X100 - AR.5,5X100 - AR.6,5X150 - AR.8X150	5	406
AS.4	Rack	AP.0X75 - AP.1X75 - AP.2X100 - AP.3X150 - AP.4X200	5	685
AT.J9	Wallet : N.38A-9B	AR.3X75 - AR.3,5X100 - AR.4X100 - AP.0X75 - AP.1X100 - AP.2X125 - AWHH2X75 - AWHH2,5X75 - AWHH3X75	9	300
AJ.3	Box	AR.3,5X100 - AR.4X100 - AR.5,5X100 - AR.6,5X150 - AR.8X150 - ATH.8EX175 - A.3,5X100VE - AP.1X75 - AP.2X100 - AP.3X150 - AD.1X75 - AD.2X100 - AD.3X150 - AF	14	1210
AS.15	Rack	AR.3,5X100 - AR.4X100 - AR.5,5X100 - AR.6,5X100 - AR.8X150 - ATH.8EX175 - A3,5X100VE - AP.1X75 - AP.2X100 - AP.3X150 - AD.1X75 - AD.2X100 - AD.3X150 - AF	14	1460

ISORYL screwdrivers for slotted head screws

AR - ISORYL screwdrivers for slotted-head screws - milled blade

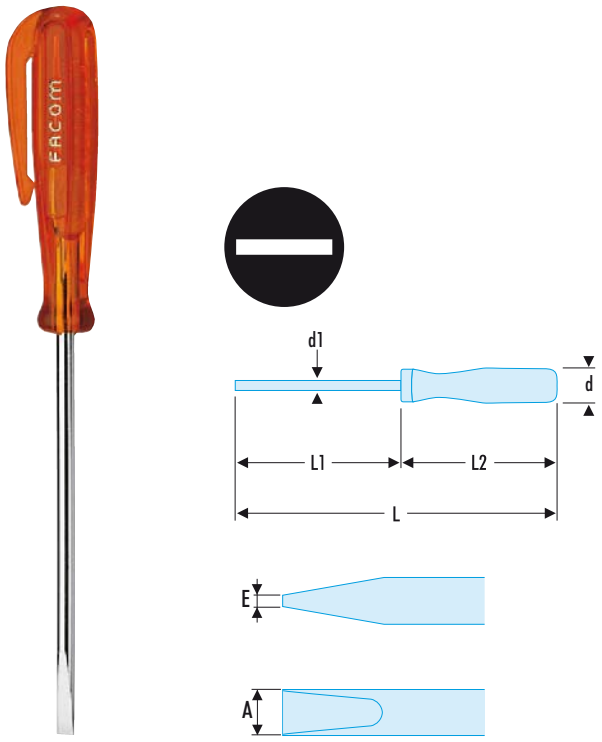


NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Round blade milled for access to the bottom of the well.
- Finish: polished chromed.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AR.2X40	2,0	0,4	16	2,0 x 40	110	70	13,50
AR.2,5X50	2,5	0,4	16	2,5 x 50	120	70	15,00
AR.2,5X75	2,5	0,4	16	2,5 x 75	145	70	16,00
AR.3X75	3,0	0,5	16	3,0 x 75	145	70	17,50
AR.3,5X75	3,5	0,6	20.5	3,5 x 75	155	80	31,00
AR.3,5X100	4,0	0,8	20.5	3,5 x 100	180	80	33,00
AR.4X100	4,0	0,8	24	4,0 x 100	190	90	45,00
AR.4X150	4,0	0,8	24	4,0 x 150	240	90	50,00
AR.5,5X100	5,5	1,0	28	5,5 x 100	200	100	71,00
AR.5,5X150	5,5	1,0	28	5,5 x 150	250	100	80,00
AR.5,5X200	5,5	1,0	28	5,5 x 200	300	100	89,00
AR.6,5X100	6,5	1,2	30	6,5 x 100	210	110	102,00
AR.6,5X150	6,5	1,2	30	6,5 x 150	260	110	114,00
AR.6,5X200	6,5	1,2	30	6,5 x 200	310	110	226,00
AR.8X150	8,0	1,2	30	8,0 x 150	260	110	141,00

ARA - ISORYL screwdrivers for slotted-head screws - handle with clasp

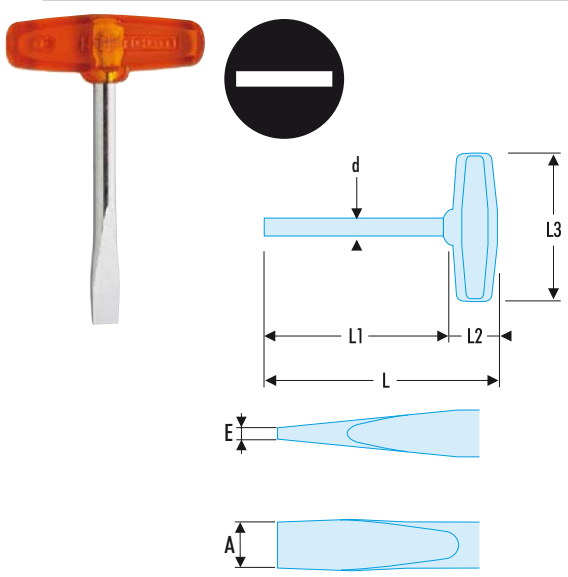


NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Finish: polished chromed.

	A [mm]	E [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ARA.2,5X50	2,5	0,4	13	2,5 x 50	110	60	10
ARA.2,5X75	2,5	0,4	13	2,5 x 75	135	60	11
ARA.3,5X50	3,5	0,6	13	3,5 x 50	110	60	12
ARA.3,5X75	3,5	0,6	13	3,5 x 75	135	60	14

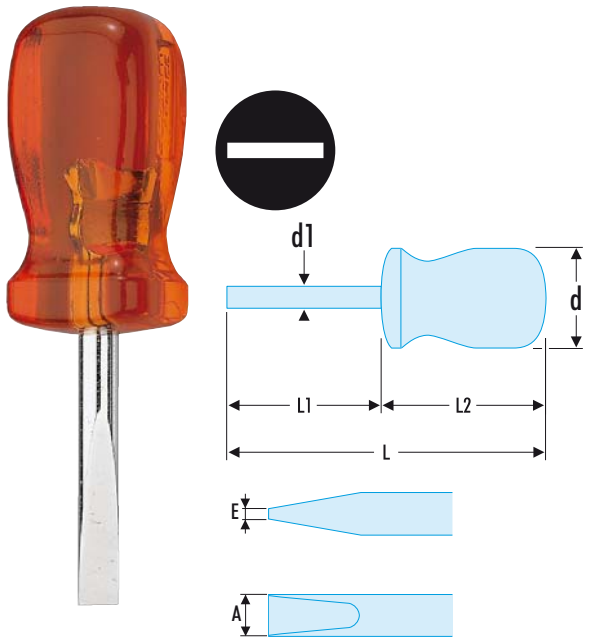
AGT - ISORYL screwdrivers for slotted-head screws - forged blade - T handle



- Transmits high torque.
- Finish: chromed.

	A [mm]	E [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	L3 [mm]	⚖ [g]
AGT.8X100	8	1,2	8 x 100	130	30	85	150
AGT.10X100	10	1,6	10 x 100	130	30	85	160

ARB - ISORYL screwdrivers for slotted-head screws - short blade



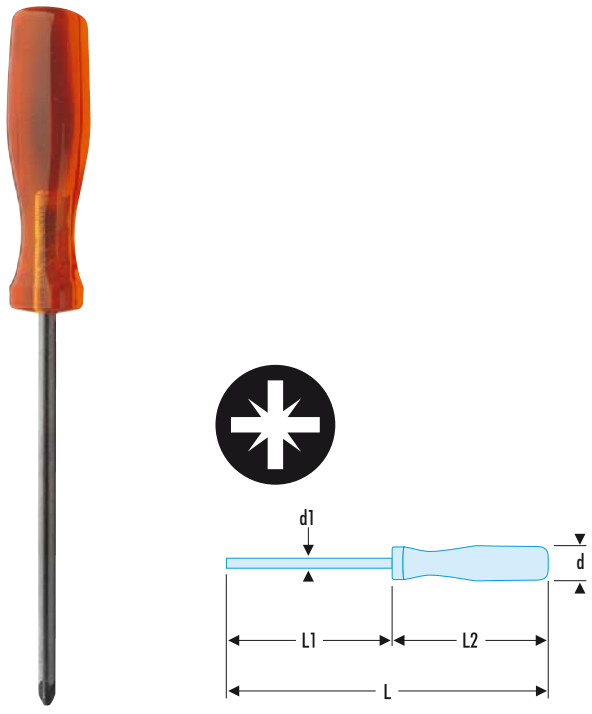
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- For use in confined space.
- Finish: polished chromed.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
ARB.4X40	4,0	0,8	29	4,0 x 40	90	50	38
ARB.5,5X40	5,5	1,0	29	5,5 x 40	90	50	39
ARB.6,5X40	6,5	1,2	29	6,5 x 40	90	50	42

ISORYL screwdrivers for Pozidriv® screws

AD - ISORYL screwdrivers for Pozidriv® screws

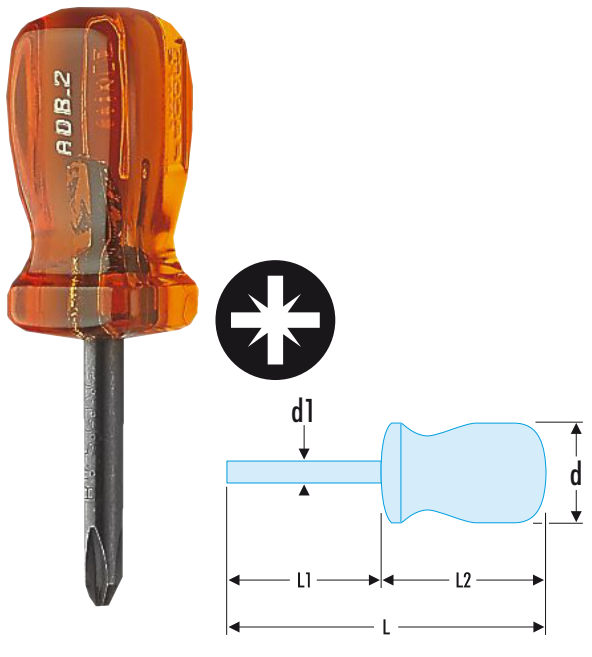


NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- High strength steel alloy blades.
- Finish: burnt.

	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
AD.0X50	PZ0	20,5	4 x 50	130	95	31
AD.1X75	PZ1	24,0	4 x 75	165	95	55
AD.2X100	PZ2	28,0	6 x 100	200	95	77
AD.2X125	PZ2	28,0	6 x 125	225	63	81
AD.3X150	PZ3	30,0	8 x 150	260	63	142

ADB - ISORYL screwdrivers for Pozidriv® screws - short blade



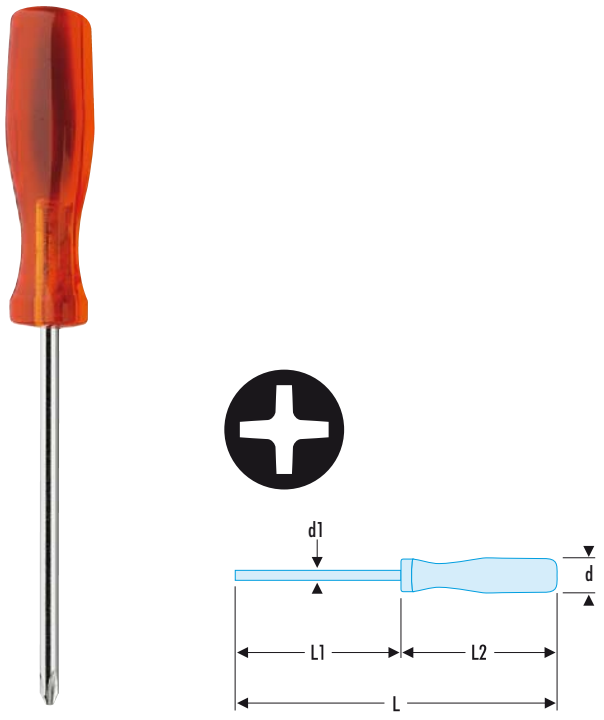
NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- For use in confined space.
- Finish: burnt.

	Pozidriv [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
ADB.1X40	PZ1	29	5 x 40	90	77	38
ADB.2X40	PZ2	29	6 x 40	90	77	44

ISORYL screwdrivers for Phillips® screws

AP - ISORYL screwdrivers for Phillips® screws

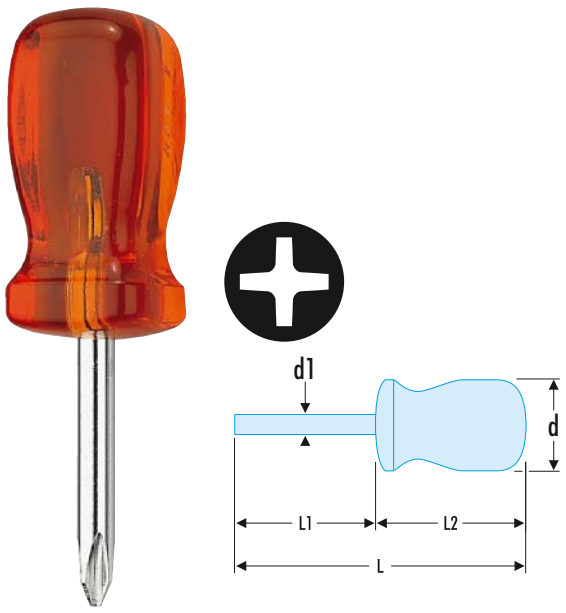


NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Finish: chromed.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AP.0X50	PH0	20,5	4 x 50	130	80	31
AP.0X75	PH0	20,5	4 x 75	155	80	33
AP.1X75	PH1	24,0	5 x 75	165	90	55
AP.1X100	PH1	24,0	5 x 100	190	90	59
AP.2X100	PH2	28,0	6 x 100	200	100	77
AP.2X125	PH2	28,0	6 x 125	225	100	81
AP.3X150	PH3	30,0	8 x 150	260	110	142
AP.4X200	PH4	34,0	10 x 200	320	120	246

APB - ISORYL screwdrivers for Phillips® screws - short blade



NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- For use in confined space.
- Finish: chromed.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
APB.0X40	PH0	29	4 x 40	90	50	33
APB.1X40	PH1	29	5 x 40	90	50	36
APB.2X40	PH2	29	6 x 40	90	50	40

Sets of wood handle screwdrivers

Sets of wood handle screwdrivers

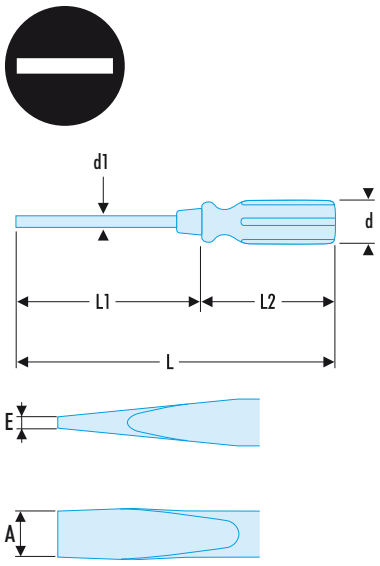


	Organiser for	Content set	Quantity	⚖ [g]
ATH.JS5	Rack	ATH.5,5X100 - 6,5X100 - 8X150 - 8X175 - 10X200	5	837
ATHH.JS5	Rack	ATHH.5,5X100 - 6,5X125 - 8X150 - 10X175 - 12X200	5	952
ATHH.PJ3	Box	ATHH.P1 - P2 - P3	3	372
ATHH.J7	Box	ATHH.4X90 - 5,5X100 - 6,5X125 - 8X150 - 10X17 - 12X200 - 14X250	7	1262
AJT.2	Box	ATHH.5,5X100 - ATHH.6,5X125 -ATHH. 8X150 - ATHH.10X175 - ATHH.P1 - ATHH.P2 - ATHH.D1 - ATHH.D2	8	908

Wood handle screwdrivers for slotted head screws

ATH - Wood handle screwdrivers for slotted head screws - forged blade





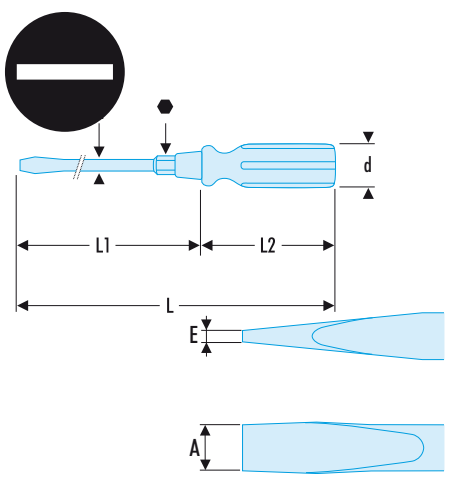
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Through blade allowing to "separate" locked screws by means of light impacts.
- Impact zone widened by metallic cap.
- Round blade forged and treated over its entire length.
- Handle-blade link by fins.
- Finish: burnt.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ATH.5,5X100	5,5	1,0	22	5 x 100	205	105	65
ATH.6,5X100	6,5	1,2	26	6 x 100	210	110	86
ATH.8X150	8,0	1,2	28	7 x 150	270	120	130
ATH.8EX175	8,0	1,6	32	7 x 175	305	130	177
ATH.10X200	10,0	1,6	32	9 x 200	330	130	222
ATH.12X250	12,0	2,0	32	10 x 250	380	130	335

ATHH - Wood handle screwdrivers for slotted head screws - hexagonal forged blade







NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

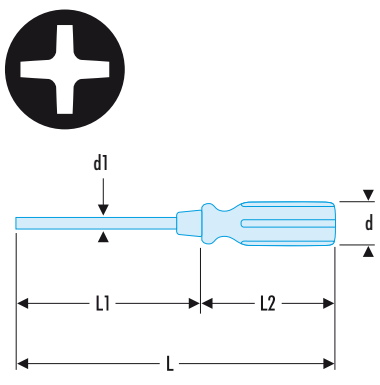
- Through blade allowing to "separate" locked screws by means of light impacts.
- Forged and treated hexagonal blade for locking or unlocking with a wrench.
- Handle-blade link by fins.
- On the blade side, the handle includes a crimped steel ferrule with dampener, at the opposite side, a copper ring protects wood from impacts.
- Finish: polished chromed.

	A [mm]	E [mm]	⬢ [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ATHH.4X90	4,0	0,8	6	25	4,5 x 90	195	95	49
ATHH.5,5X100	5,5	1,0	8	25	5,5 x 100	200	100	58
ATHH.6,5X125	6,5	1,2	10	26	6,5 x 125	240	115	99
ATHH.6,5X175	6,5	1,2	10	26	6,5 x 175	290	115	110
ATHH.8X150	8,0	1,2	13	28	8,0 x 150	270	120	160
ATHH.10X175	10,0	1,6	13	30	9,0 x 175	300	125	207
ATHH.12X200	12,0	2,0	17	32	10,0 x 200	330	130	278
ATHH.14X250	14,0	2,5	17	32	10,0 x 250	385	135	331

Wood handle screwdrivers for cross-headed screws

ATHH.P - Wood handle screwdrivers for Phillips® screws - hexagonal blade





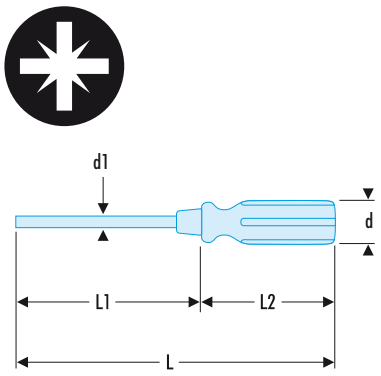
NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Through blade allowing to "separate" locked screws by means of light impacts.
- Forged and treated hexagonal blade for locking or unlocking with a wrench.
- Handle-blade link by fins.
- On the blade side, the handle includes a crimped steel ferrule with dampener, at the opposite side, a copper ring protects wood from impacts.
- Finish: polished chromed.

	Phillips [No]	⬢ [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ATHH.P1	PH1	8	25	5 x 100	200	100	60
ATHH.P2	PH2	10	26	6 x 125	235	110	92
ATHH.P3	PH3	13	28	8 x 150	270	120	160

ATHH.D - Wood handle screwdrivers for Pozidriv® screws - hexagonal blade





NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Through blade allowing to "separate" locked screws by means of light impacts.
- Forged and treated hexagonal blade for locking or unlocking with a wrench.
- Handle-blade link by fins.
- On the blade side, the handle includes a crimped steel ferrule with dampener, at the opposite side, a copper ring protects wood from impacts.
- Finish: polished chromed.

	Pozidriv [No]	[mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	[g]
ATHH.D1	PZ1	8	25	5 x 100	200	100	60
ATHH.D2	PZ2	10	26	6 x 125	240	115	92
ATHH.D3	PZ3	13	28	8 x 150	270	120	160

Multiblade screwdrivers

AM - PROTWIST® multi-blade screwdriver sets







- Several screwing patterns in a small footprint.
- Each blade has two useful tips.
- bi-material ergonomic handle for comfortable and reliable screwing.
- The handle drives the blades by the 6-point 1/4" drive.
- A spring holds the blades in the handle.
- Packaging:

- AM.1: plastic box BP.112.
- AM.2 - AM.3 - AM.4: compact bag.

	A fente [No]	Phillips [No]	Pozidriv [No]	Torx [No]	Resistorx [No]	Knob	Quantity	[g]
AM.1	AMZ.S3,5 - 4 - AMZ.S5,5 - 6,5	AMZ.P0-1 - AMZ.P2-3	AMZ.D0-1 - AMZ.D2-3	AMZ.X10-15 - AMZ.X20-25 - AMZ.X30-40	-	AM.D	16	775
AM.2	AMZ.S3,5 - 4 - AMZ.S5,5 - 6,5	AMZ.P1-2	AMZ.D1-2	-	-	AM.D	5	350
AM.3	AMZ.S3,5 - 4 - AMZ.S5,5 - 6,5	AMZ.P1-3	-	AMZ.X10-15 - AMZ.X20-25 - AMZ.X30-40	-	AM.D	7	450
AM.4	AMZ.S3,5 - 4 - AMZ.S5,5 - 6,5	-	-	-	AMZ.XRP10-15 - AMZ.XRP10-15 - AMZ.XRP27-30	AM.D	6	350

AMZ - Reversible blades



- 1/4" hexagonal reversible blade.
- Length: 175 mm.
- Handle out length: 125 mm.
- Finish: chromed.

	Content set	[g]
AMZ.S3,5-4	Slotted-head: 0,6 x 3,5 - 0,8 x 4	40
AMZ.S5,5-6,5	Slotted-head: 1,0 x 5,5 - 1,2 x 6,5	40
AMZ.P0-1	PH0 - PH1	40
AMZ.P2-3	PH2 - PH3	40
AMZ.P1-2	PH1 - PH2	40
AMZ.D0-1	PZ0 - PZ1	40
AMZ.D2-3	PZ2 - PZ3	40
AMZ.D1-2	PZ1 - PZ2	40
AMZ.H2,5	6-point : 2,5	40
AMZ.H3	6-point : 3,0	40
AMZ.H4	6-point : 4,0	40
AMZ.H5	6-point : 5,0	40
AMZ.H6	6-point : 6,0	40
AMZ.X8-9	T8 - T9	40
AMZ.X10-15	T10 - T15	40
AMZ.X20-25	T20 - T25	40
AMZ.X30-40	T30 - T40	40
AMZ.XRP10-15	IPR TT+ 10-15	40
AMZ.XRP20-25	IPR TT+ 20-25	40
AMZ.XRP27-30	IPR TT+ 27-30	40
AMZ.E	Bit holder 6-point 1/4"	40

ACL.2 PROTWIST® ratchet blade holder handle



- High quality 45-teeth ratchet = fast screwing, accuracy, strength and longevity.
- 3-position bush: screwing, unscrewing and locking.
- Storage handle to store the additional eight bits (not supplied).
- Cap can be used as mini bit holder for use in confined spaces.
- Partially hollow handle to store more bits or screws.
- Bi-material ergonomic handle for comfortable and reliable screwing.
- Very low blade return torque.
- Hexagonal - 1/4" drive.

AM.D PROTWIST® reversible blade holder handle



- Bi-material ergonomic handle for comfortable and reliable screwing.
- Hexagonal - 1/4" drive.
- Length: 133 mm.
- Diameter: 35 mm.

Weight: 100 g.

AMR "Radio" model multiblade screwdrivers



- Length with blade: 105 mm.
- Supplied with 3 blades for slotted-head screws, diam. 1.5 - 2 - 2.5 mm, stored in the handle.
- Finish: polished chromed.

Weight: 14 g.

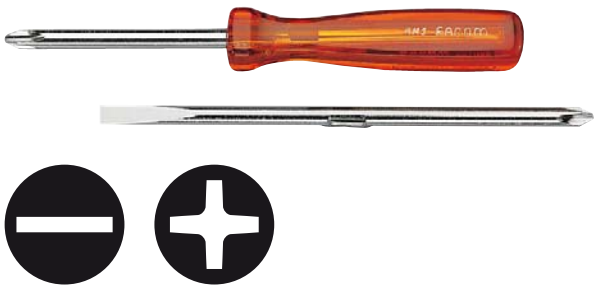
AMJ "Junior" model multiblade screwdrivers



- Length with blade: 150 mm.
- Supplied with 3 blades for slotted-head screws, diam. 3.5 - 4 - 5.5 mm, stored in the handle.
- Finish: polished chromed.

Weight: 57 g.

AMS "Standard" model multiblade screwdrivers



- Length with blade: 165 mm.
- Supplied in roll, with 2 reversible blades:
- Slotted head screws, diam. 5.5 mm and Phillips® no.1.
- Slotted head screws, diam. 6.5 mm and Phillips® no.2.
- Finish: polished chromed.

Weight: 101 g.

Bit-holding screwdrivers

RATCHET BIT DRIVERS

Ergonomic bi-material Protwist® grip
- Comfort of use.

Storage compartment
- Partly hollow handle for storing additional bits or screws.

High quality
- 45 tooth mechanism, 3 positions, low return torque.

Chrome finished blade 100 mm
- Resistance to corrosion and access.
- Knurled zone for fast blade screwing.

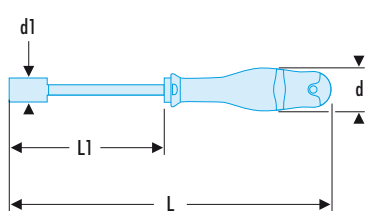
Powerful magnetic adaptor
- Holds the bit and screw.



PROTWIST® ratchet blade holder screwdriver + 15 bits





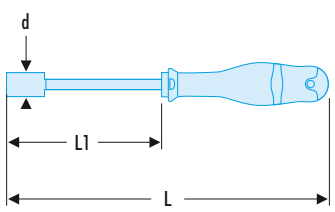


- High quality 45-teeth ratchet = fast screwing, accuracy, strength and longevity.
- 3-position bush: screwing, unscrewing and locking (hand selection).
- Storage cap for charger.
- Cap can be used as mini bit holder for use in confined spaces.
- Partially hollow handle to store more bits or screws.
- bi-material ergonomic handle for comfortable and reliable screwing.
- Very low blade return torque.
- Powerful magnetic adapter allowing the magnet to hold the bit and screw.
- Magnetised central storage of chargers serves as additional mini bit holder.
- Including 2 chargers:
- 1 charger containing 7 screw bits + 1 separate: for slotted head screw 4 - 6.5; Phillips® screws PH.1 - PH.2; Pozidriv® screws PZ.1 - PZ.2; hollow hex screws 4 - 6).
- 1 transparent charger containing 7 Resistorx bits EXR.110 - EXR.115 - EXR.120 - EXR.125 - EXR.127 - EXR.130 - EXR.140.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]
ACL.1A	34	10	225	120

AM - PROTWIST® bit holder screwdriver





- Bi-material ergonomic handle for comfortable and reliable screwing.
- AM.H: Snap-ring model.
- AM.M1: Short magnetic model.
- AM.M2: Long magnetic model.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
AM.H	11	180	75	80
AM.M1	10	180	63	120
AM.M2	10	245	125	150

AAM.PE Automatic screwdriver with hex 1/4" bit holder



- For long thread screws, reduces screwing and unscrewing times by one third.
- Fast chuck for screwing bits series 1: 1/4" (6.35 mm).
- Ratchet with 3 positions: screwing, unscrewing, locking.
- Bush locking the helical shaft in the retracted position.
- Length: open, 305 mm; closed, 230 mm.
- Finish: polished chromed.

Weight: 345 g.

Voltage-tester screwdrivers

AV.BT - Very low voltage detector screwdrivers



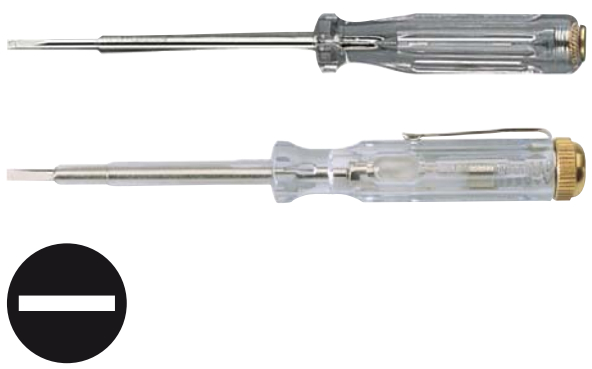
- For very low voltage.
- 2 models:

- AV.BT1: Standard model.
- AV.BT2: Model with clasp.

- Supplied with 50 cm wire with plug and aligator clip.

	d [mm]	L [mm]	Blade Length [mm]	Voltage\Volt	⚖ [g]
AV.BT1	4	196	104	6 - 24	53
AV.BT2	3	138	53	6 - 24	27

AV.HT - Low voltage detector screwdrivers



- AV.HT1B: Standard model.
- AV.HT2B: Model with clasp.

	d [mm]	L [mm]	Blade Length [mm]	Voltage\Volt	⚖ [g]
AV.HT1B	3,5	190	100	90 - 480	45
AV.HT2B	3,0	140	62	110 - 250	20

Magnetiser - Demagnetiser

837 Magnetiser - Demagnetiser

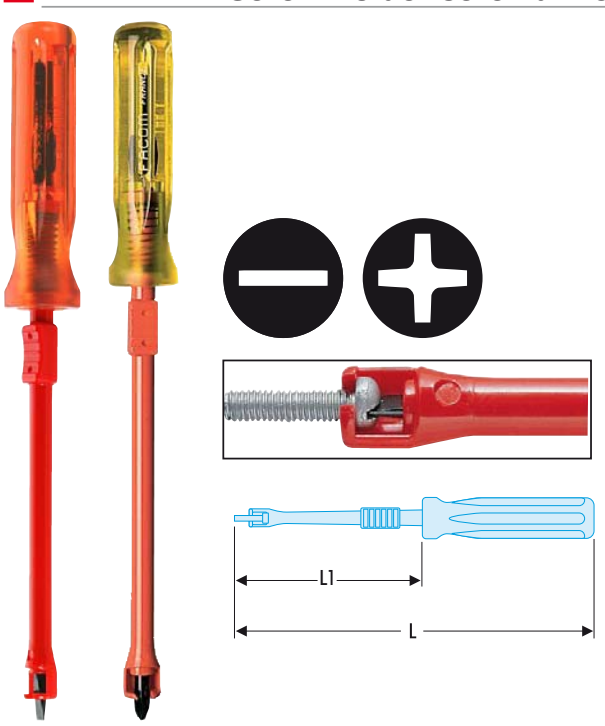


- Magnetiser the screwdriver to hold the screw in place.
- Demagnetises the screwdriver after use.

Weight: 73 g.

Screw holder

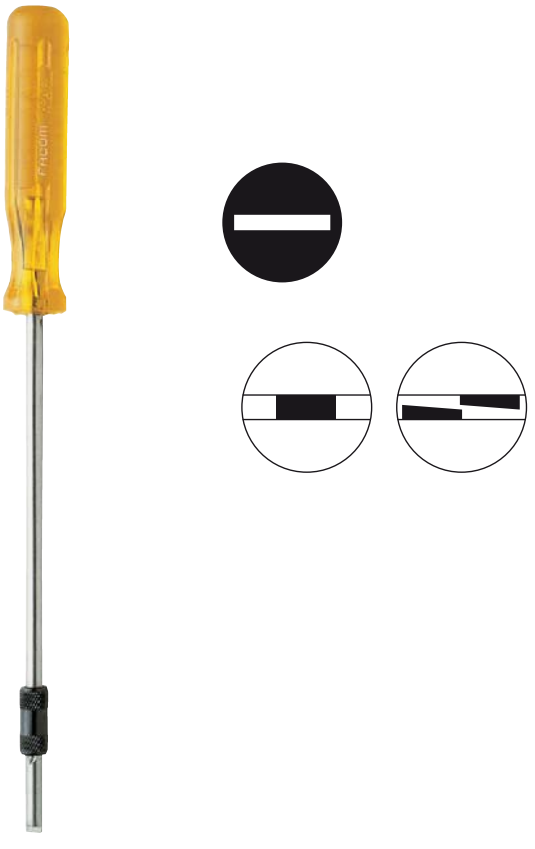
AFR - AFP - Screw holder screwdrivers



- For slotted and Phillips® head.
- Screw holder and screwing with the same tool.
- The guide is moved with the thumb, the spring holds the screw on the blade.

	A [mm]	E [mm]	Phillips [No]	L [mm]	L1 [mm]	⚖ [g]
AFR.3X100	3	0,5	-	190	100	37
AFR.4X125	4	0,6	-	225	125	64
AFR.5X150	5	0,7	-	260	150	95
AFP.1	-	-	PH1	260	150	96
AFP.2	-	-	PH2	285	175	118

AF Screw holder screwdrivers for slotted-head screws



- For slotted head screws 0.5 --> 1.5 mm.
- Sliding bush to lock the two angle half-blades in the screw slotted head.
- Screwdriver required for susequent tightening or loosening.
- Blade length: 150 mm.
- Total length: 240 mm.

Weight: 56 g.

AFU - Screw holder for slotted-head screws







- Bush rotation secures the blade in the screw slotted head.
- Finely knurled steel handle.
- AFU.2 is fitted with a magnet at the end of the handle.

	A [mm]	E [mm]	L [mm]	⚖ [g]
AFU.0	3,8	0,5	135	18
AFU.1	7,0	0,8	130	18
AFU.2	7,0	0,8	300	31

AFUX - Screw holder for Phillips® screws







- Bush rotation secures the blade in the screw head.
- Finely knurled steel handle.
- AFUX.2 is fitted with a magnet at the end of the handle.

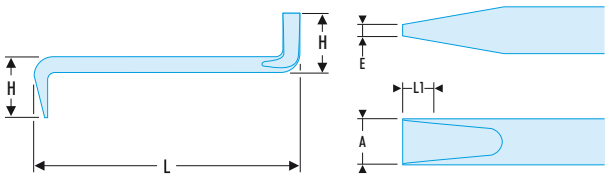
	Phillips [No]	L [mm]	⚖ [g]
AFUX.1	PH1	130	23
AFUX.2	PH2	235	39

Angled screwdrivers

ARZ - AKZ - Angled screwdrivers - for slotted-head screws







DIN 5000

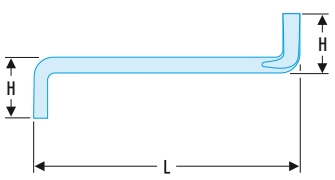
- ARZ round blade.
- AKZ square blade.
- Two ends in two planes at 90°.
- Operating by quarter turn flip.
- Finish: burnt.

	A [mm]	E [mm]	L [mm]	L1 [mm]	H [mm]	⚖ [g]
ARZ.4	4,0	0,8	86	0,5	13,0	10
ARZ.5,5	5,5	1,0	95	0,6	14,0	19
ARZ.6,5	6,5	1,2	110	0,7	16,0	31
AKZ.6	8,0	1,2	123	0,7	17,5	38
AKZ.8	10,0	1,6	175	1,0	20,0	92

APZ - Angled screwdrivers - for Phillips® screws







DIN 5008

- A different head at each end.
- For use in confined space.
- Finish: chromed.

	Phillips [No]	L [mm]	H [mm]	⚖ [g]
APZ.A	PH0 - PH1	86	18	17
APZ.B	PH1 - PH2	142	20	40
APZ.C	PH3 - PH4	205	22	138

Wallet of keys

FACOM KEYS

Strong and durable:
- Silicon alloy, for strength and wear resistance.

Guaranteed safe:
- Precise, constant heat treatment controls the hardness of the key, to ensure that, if overloaded, it will fail by twisting before breaking cleanly and without splintering.

Perfect fit in the screw:
- Keys cut, not sheared, to give a clean, regular face.

A comprehensive range
- Hexagon keys available in three lengths, with standard and spherical heads (series 82 and 83).
- Torx® and Resistorx® keys (series 89).
- Special pattern keys: XZN®, groove sockets and Bristol (series 80, 81 and 85).
- Hexagonal tee-handle keys (series 84 TC).
- Hexagonal and Torx® tee-handled nut spinners (series 84TZ and 89TX).
- Protwist® hexagonal and spherical head nut spinners (series AWHH and AWSH).

… and tool holders to suit every need.
- JP sleeve sets of hexagonal and Torx® keys.
- Multi-blade hexagonal and Torx® drivers.
- Ring, wallet or module sets.





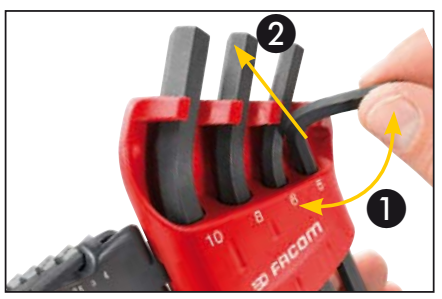
"EASY LOCK SYSTEM" sleeve

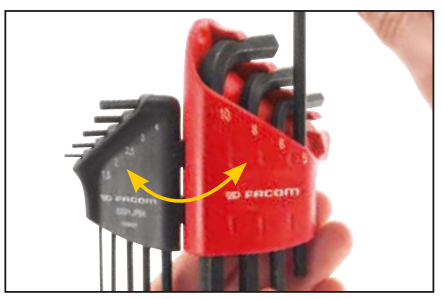
Full access to each key
- Access to each key regardless of the position of the others.
- Easy tool storage and selection.
- Flat sleeve-case, hinged flap.

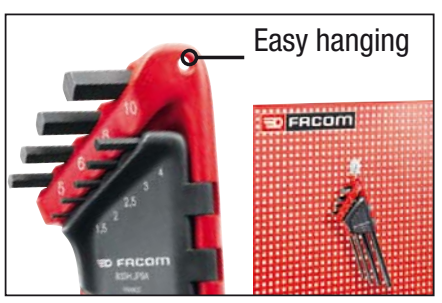
Constant key holding over time
- Positive key locking even when sleeve worn.
- No risk of losing keys.

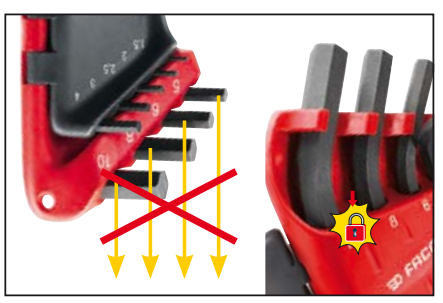
Convenient hanging hole
- Offset position of the fastening hole.

Strong and durable
- Elastomer chosen for its wear resistance,good durability and its resistance to chemicals and weather variations.









JP - Set of hexagon keys in wallet



- Keys are packaged in a compact wallet for easy selection of the dimension required.
- Sets available in 4 types of keys:

- 82H: Short keys.
- 83H: Long keys.
- 83SH: Spherical head long keys.
- 83S.L: Spherical head extra-long keys.

JP = metric key sets
JPU = inch key sets.

	6-point [mm]	Wrench	[g]
82H.JP9A	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0	82H	260
82H.JP8AU	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	82H	235
83H.JP9A	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0	83H	350
83SH.JP7	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6	83SH	290
83SH.JP9A	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10	83SH	380
83SH.JPA	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0	83SH	270
83SH.JPAA	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0	83SH	270
83SH.JP6U	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4	83SH	300
83SH.JP8AU	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	83SH	365
83S.JP9AL	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0	83S.L	350

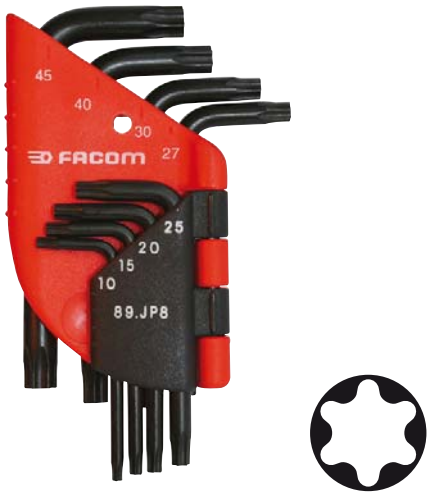
83R.JP6 Set of 6 keys for 6-point safety screws



- Keys are packaged in a compact wallet for easy selection of the dimension required.
- The wallet contains the dimensions: 2 - 2.5 - 3 - 4 - 5 - 6 mm.

Weight: 350 g.

89.JP - Set of Torx® keys in wallet



- Compliant with Torx® and Resistorx® specifications.
- Keys are packaged in a compact wallet for easy selection of the dimension required.
- Sets available in 4 types of keys:

- 89: Torx® keys.
- 89L: Long Torx® keys.
- 89R: Resistorx® keys.
- 89S: Long - sphérical heads.

	Torx [No]	Wrench	[g]
89.JP6	T10 - T15 - T20 - T25 - T30 - T40	89	230
89.JP8A	T10 - T15 - T20 -T25 - T27 - T30 - T40 - T45	89	330
89.JP8AL	T10 - T15 - T20 -T25 - T27 - T30 - T40 - T45	89L	360
89R.JP6	T10 - T15 - T20 - T25 - T30 -T40	89R	220
89S.JP8A	T10 - T15 - T20 -T25 - T27 - T30 - T40 - T45	89S	260

Sleeve-sets of keys

MULTI-BLADE HANDLE

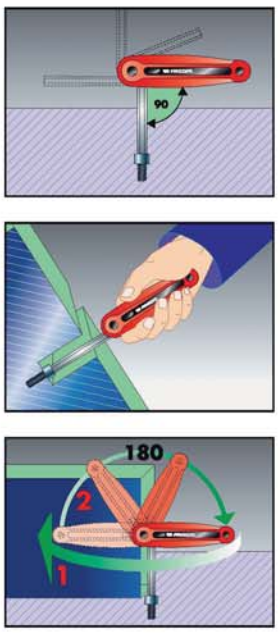
POWERFUL AND ERGONOMIC

90° stop
Provides positive leverage for safe and powerful rotation.

Blade at 180°.
For fast pre-tightening in "screwdriver" position.

Holder swings 180°.
For fast re-positioning without removing the blade from the fastener.

Composite construction
- Metal frame for 30 % more strength.
- Resin side pieces for comfortable handling.
- For hexagon and Torx® keys.





86H - Hexagon keys on sleeve



- Very compact sleeve.
- Positive grip.
- Keys on 90° end stop for tightening.
- Keys in silicon steel issued from series 82H.
- Finish: phosphate-coated.

	[mm]	["]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	[g]
86H.JE7A	2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0	-	30	24	138	32	405
86H.JE7B	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0	-	22	18	118	28	147
86H.JU6	-	-	30	24	138	32	420
86H.JU7	-	-	22	18	118	28	142

89.JM - Hexagon Torx® keys on sleeve



- Compliant with Torx® and Resistorx® specifications.
- Highly compact sleeve, positive grip.
- 89A.JM8: Torx® (T).
- 89R.JM8: Resistorx® (TT).

	Torx [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	H [mm]	[g]
89A.JM8	T8 - 10 - 15 - 20 - 25 - 27 - 30 - 40	30	24	138	32	34 x 83,5	170
89R.JM8	TT8 - 10 - 15 - 20 - 25 - 27 - 30 - 40	30	24	138	32	37 x 88,5	160

Key ringsets

87H - Long hexagon key ringsets





NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Keys from series 83H.
- Silicon steel.
- Finish: phosphate-coated.

	[mm]	[g]
87HL.JE8	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0	150
87HL.JU8	5/64 - 3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16	175

87H - Short hexagon key ringsets





NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Keys from series 82H.
- Silicon steel.
- Finish: phosphate-coated.

	[mm]	["]	[g]
87H.JE8	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0	-	150
87H.JU8	-	5/64 - 3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16	175

89.JA8 Torx® key ringsets





- Compliant with Torx® specifications.
- Includes the 8 Torx® keys no.: T8 - T10 - T15 - T20 - T25 - T27 - T30 - T40.

Weight: 107 g.

Key sets in bag

JL - JU - Set of hexagon keys in roll





- 82H: Short keys.
- 83H: Long keys.
- 83SH: Spherical head long keys.

JL = metric key sets.
JU = inch key sets.

	[mm]	["]	Wrench	[g]
82H.JE10	0,9 - 1,5 - 2,0 - 2,5 - 3,0 - 3,5 - 4,0 - 4,5 - 5,0 - 6,0	-	82H	122,000
82H.JL10	2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 7,0 - 8,0 - 9,0 - 10,0	-	82H	433,000
82H.JL12	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 7,0 - ,8,0 - 9,0 - 10,0 - 12,0	-	82H	600,000
82H.JL13	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 17 - 19	-	82H	2220,000
82H.JU7	-	0,028 - 0,035 - 0,050 - 3/64 - 1/16 - 5/64 - 3/32	82H	0,151
82H.JU10	-	1/16 - 5/64 - 3/32 - 1/8 - 3/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	82H	433,000
82H.JU13	-	3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8 - 7/16 - 1/2 - 9/16 - 5/8 - 3/4	82H	2080,000
83H.JL10	2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 7,0 - 8,0 - 9,0 - 10,0	-	83H	585,000
83H.JL12	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 12	-	83H	810,000
83H.JL13	3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 17 - 19	-	83H	3040,000
83H.JU10		1/16 - 5/64 - 3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	83H	440,000
83SH.JL10	2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 7,0 - 8,0 - 9,0 - 10,0		83SH	585,000
83SH.JL12	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 7,0 - 8,0 - 9,0 - 10,0 - 12,0		83SH	810,000
83SH.JU8		3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8	83SH	435,000

89.JL - Set of Torx® keys in roll

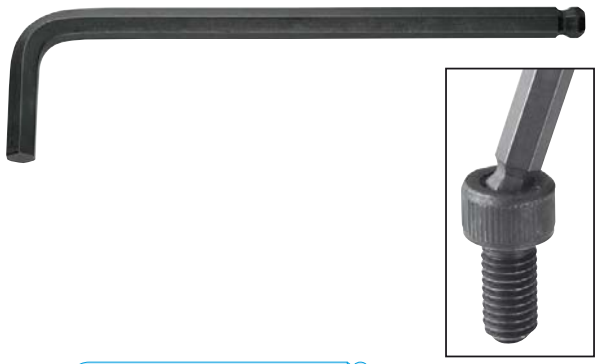


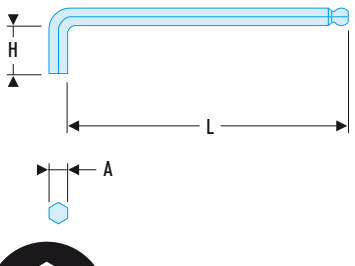
- Compliant with Torx® specifications.

	Torx [No]	Wrench	[g]
89.JL8	8 - 10 - 15 - 20 - 25 - 27 - 30 - 40	89	110
89.JL12	7 - 8 - 9 - 10 - 15 - 20 - 25 - 27 - 30 - 40 - 45 - 50	89	271

Hexagon keys

83SH - Long metric keys - spherical head







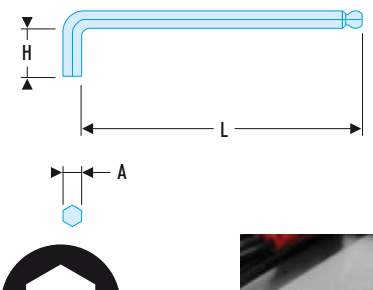
NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Manufactured in silicon steel.
- The spherical head allows to handle screws with a tilt angle up to 30°.
- Finish: phosphate-coated.

	A [mm]	L [mm]	H [mm]	⚖ [g]
83SH.1,5	1,5	62	14	1
83SH.2	2,0	75	16	2
83SH.2,5	2,5	85	18	4
83SH.3	3,0	90	20	7
83SH.4	4,0	100	25	15
83SH.5	5,0	115	28	24
83SH.6	6,0	135	32	42
83SH.7	7,0	140	34	57
83SH.8	8,0	150	36	80
83SH.9	9,0	160	38	110
83SH.10	10,0	170	40	140
83SH.12	12,0	190	45	225

83SH - Long inch keys - spherical head









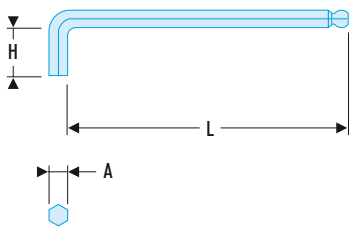
ASME B18.3

- Manufactured in silicon steel.
- The spherical head allows to handle screws with a tilt angle up to 30°.
- Finish: phosphate-coated.

	A ["]	L [mm]	H [mm]	⚖ [g]
83SH.3/32	3/32	85	17	4
83SH.1/8	1/8	90	20	7
83SH.5/32	5/32	100	25	13
83SH.3/16	3/16	115	28	22
83SH.7/32	7/32	135	32	34
83SH.5/16	5/16	150	36	80
83SH.3/8	3/8	170	38	128

83S.L - Extra long keys - spherical head









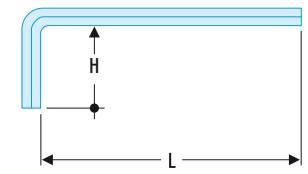
NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Higher lengths: more lever, higher power, improved line access.
- Finish: phosphate-coated.

	A [mm]	L [mm]	H [mm]	⚖ [g]
83S.2L	2,0	100	16	4
83S.2,5L	2,5	111	18	6
83S.3L	3,0	124	20	10
83S.4L	4,0	138	25	20
83S.5L	5,0	159	28	36
83S.6L	6,0	179	32	58
83S.8L	8,0	198	36	115
83S.10L	10,0	221	40	200

83H - Long metric keys







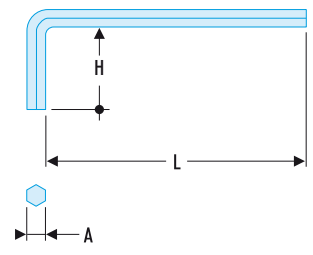
NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Manufactured in silicon steel.
- Finish: phosphate-coated.

	A [mm]	L [mm]	H [mm]	⚖ [g]
83H.1,5	1,5	62	14	1
83H.2	2,0	75	16	2
83H.2,5	2,5	85	18	4
83H.3	3,0	90	20	7
83H.3,5	3,5	95	25	10
83H.4	4,0	100	25	15
83H.4,5	4,5	110	26	18
83H.5	5,0	115	28	24
83H.6	6,0	135	32	42
83H.7	7,0	140	34	57
83H.8	8,0	150	36	80
83H.9	9,0	160	38	110
83H.10	10,0	170	40	140
83H.11	11,0	180	42	180
83H.12	12,0	190	45	225
83H.13	13,0	200	50	286
83H.14	14,0	215	56	361
83H.15	15,0	225	58	435
83H.16	16,0	235	60	515
83H.17	17,0	245	63	602
83H.18	18,0	255	66	713
83H.19	19,0	265	70	830
83H.22	22,0	275	80	1010
83H.23	23,0	285	85	1160
83H.24	24,0	299	90	1310
83H.27	27,0	315	100	1380
83H.32	32,0	64	125	1470

83H - Long inch keys





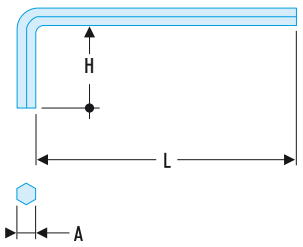


- Manufactured in silicon steel.
- Finish: phosphate-coated.

	A ["]	L [mm]	H [mm]	⚖ [g]
83H.050	0,50	62	14	0,80
83H.3/64	3/64	58	14	1,00
83H.1/16	1/16	62	13	2,00
83H.5/64	5/64	75	16	3,00
83H.3/32	3/32	85	17	4,00
83H.7/64	7/64	90	18	5,00
83H.1/8	1/8	90	20	7,00
83H.9/64	9/64	95	22	10,00
83H.5/32	5/32	100	25	13,00
83H.3/16	3/16	115	28	22,00
83H.7/32	7/32	135	32	34,00
83H.1/4	1/4	140	32	46,00
83H.5/16	5/16	150	36	80,00
83H.3/8	3/8	170	38	128,00
83H.7/16	7/16	180	42	186,00
83H.1/2	1/2	190	45	263,00
83H.9/16	9/16	215	56	376,00

82H - Short metric keys







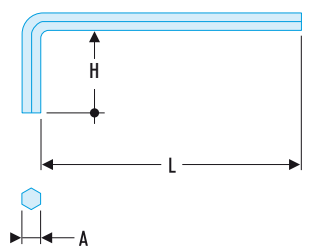
NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Manufactured in silicon steel.
- Finish: phosphate-coated.

	A [mm]	L [mm]	H [mm]	⚖ [g]
82H.0,9	0,9	38	12	0,30
82H.1,3	1,3	45	13	0,70
82H.1,5	1,5	45	13	0,90
82H.2	2,0	50	16	2,00
82H.2,5	2,5	62	17	3,00
82H.3	3,0	65	20	5,00
82H.3,5	3,5	66	22	8,00
82H.4	4,0	70	25	10,00
82H.4,5	4,5	75	26	15,00
82H.5	5,0	80	28	20,00
82H.6	6,0	90	32	30,00
82H.7	7,0	95	34	45,00
82H.8	8,0	100	36	60,00
82H.9	9,0	105	38	80,00
82H.10	10,0	112	40	100,00
82H.11	11,0	118	42	130,00
82H.12	12,0	125	45	165,00
82H.13	13,0	135	50	205,00
82H.14	14,0	140	55	260,00
82H.15	15,0	150	58	310,00
82H.16	16,0	154	60	370,00
82H.17	17,0	160	63	440,00
82H.18	18,0	170	66	540,00
82H.19	19,0	180	70	640,00
82H.22	22,0	200	80	950,00
82H.23	23,0	210	85	1100,00
82H.24	24,0	224	90	1250,00
82H.27	27,0	250	100	1300,00
82H.32	32,0	315	125	1420,00

82H - Short inch keys







- Manufactured in silicon steel.
- Finish: phosphate-coated.

	A ["]	L [mm]	H [mm]	⚖ [g]
82H.028	0,28	33	10	0,30
82H.050	0,50	38	12	0,40
82H.3/64	3/64	38	12	0,50
82H.1/16	1/16	45	13	0,70
82H.5/64	5/64	50	16	2,00
82H.3/32	3/32	62	17	3,00
82H.7/64	7/64	60	18	4,00
82H.1/8	1/8	65	20	6,00
82H.9/64	9/64	66	22	8,00
82H.5/32	5/32	70	25	10,00
82H.3/16	3/16	80	28	16,00
82H.7/32	7/31	90	32	24,00
82H.1/4	1/4	90	32	33,00
82H.5/16	5/16	100	36	59,00
82H.3/8	3/8	112	40	90,00
82H.7/16	7/16	118	42	135,00
82H.1/2	1/2	125	45	202,00
82H.9/16	9/16	140	55	273,00
82H.5/8	5/8	160	60	383,00
82H.11/16	11/16	170	63	540,00
82H.3/4	3/4	175	70	623,00
82H.7/8	7/8	200	80	955,00
82H.1'	1'	235	90	1450,00

Stainless steel hexagon keys

STAINLESS STEEL KEYS



Stainless steel X46Cr13

- Also used for high range food grade cutlery, surgical tools, brake discs, etc.

Vacuum quenching

- Guarantees mechanical characteristics and resistance to corrosion.

Bacteriological tests passed after sterilisation in autoclave

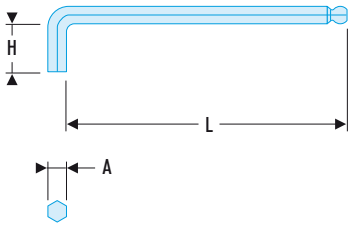
- 20 min at 120°C, 1 bar over-pressure.



83SH.ST - Stainless steel keys - hexagonal









NF ISO 2936, ISO 2936, DIN ISO 2936, ASME B18.3.2M

- Stainless steel Ref X46Cr13. Also used for high range food grade cutlery, surgical tools, brake discs, etc.
- Vacuum quenching guarantees mechanical characteristics and resistance to corrosion.
- Bacteriological tests conclusive after autoclave sterilisation(20 min at 120°C, overpressure 1 bar).

	A [mm]	L [mm]	H [mm]	⚖ [g]
83SH.1,5ST	1,5	62	14	1
83SH.2,5ST	1,5	85	18	4
83SH.3ST	3,0	90	20	7
83SH.5ST	5,0	115	28	24
83SH.6ST	6,0	135	32	42
83SH.8ST	8,0	150	36	80
83SH.10ST	10,0	170	40	140

Set of 9 hexagonal stainless steel keys





- Stainless steel Ref X46Cr13. Also used for high range food grade cutlery, surgical tools, brake discs, etc.
- Vacuum quenching guarantees mechanical characteristics and resistance to corrosion.
- Bacteriological tests conclusive after autoclave sterilisation(20 min at 120°C, overpressure 1 bar).

	[mm]	Wrench	[g]
83SHST.JP9	1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0	9	365

STAINLESS STEEL SCREWDRIVERS

STAINLESS STEEL SCREWDRIVER RANGE AVAILABLE P. 397

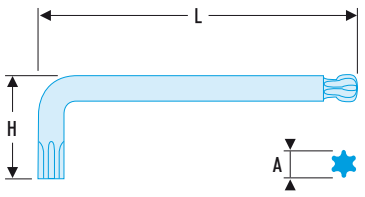


Torx® hexagon keys

89S - Long Torx® keys - spherical head









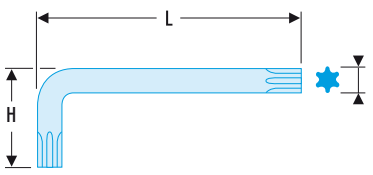
- Compliant with Torx® specifications.
- The spherical head allows for a deflection up to 20° for use in confined spaces.
- Finish: burnt.

	A [mm]	Torx [No]	L [mm]	H [mm]	[g]
89S.15	3,26	T15	121	48	8
89S.20	3,84	T20	54	20	10
89S.25	4,40	T25	57	21	18
89S.27	4,96	T27	61	24	23
89S.30	5,49	T30	65	25	30
89S.40	6,60	T40	76	30	45
89S.45	7,70	T45	83	33	63

89 - Short Torx® keys



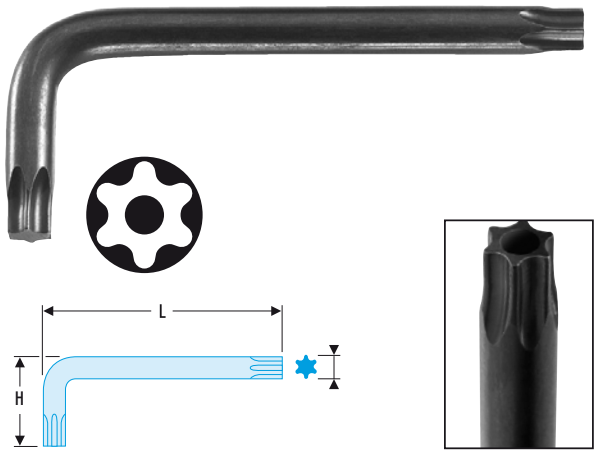




- Compliant with Torx® specifications.
- Finish: burnt.

	A [mm]	Torx [No]	L [mm]	H [mm]	[g]
89.6	1,65	T6	51,0	18,0	3
89.7	1,97	T7	51,5	18,0	3
89.8	2,30	T8	51,5	18,0	3
89.9	2,48	T9	51,5	19,5	4
89.10	2,72	T10	53,0	19,5	4
89.15	3,26	T15	57,0	21,5	6
89.20	3,84	T20	61,0	24,0	8
89.25	4,40	T25	63,5	25,5	11
89.27	4,96	T27	67,5	27,0	16
89.30	5,49	T30	76,0	30,0	20
89.40	6,60	T40	83,5	34,0	31
89.45	7,70	T45	88,5	37,0	43
89.50	8,79	T50	106,0	41,0	62
89.55	11,17	T55	121,0	48,0	70

89R - Short Resistorx® keys



- Compliant with Resistorx® specifications.
- For security screws.
- Finish: burnt.

	A [mm]	Torx [No]	L [mm]	H [mm]	[g]
89R.10	2,72	T10	54	20	4
89R.15	3,26	T15	57	21	6
89R.20	3,84	T20	61	24	8
89R.25	4,40	T25	65	25	11
89R.30	5,49	T30	76	30	20
89R.40	6,60	T40	83	33	31

Spinner keys - T spinner keys

NUT SPINNERS

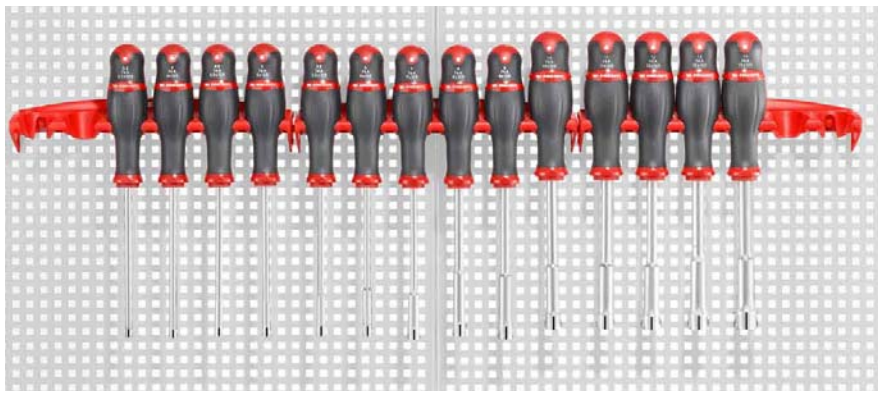
Natural grip
- Excellent torque transmission.
- Ergonomic handle grip.Easier pre-tightening.

Long-lasting performance
- Soft polyurethane zone, resistance to abrasion and corrosive liquids.
- Impact-resistant polyamide core.



For the complete range, see WRENCHES section p. 211





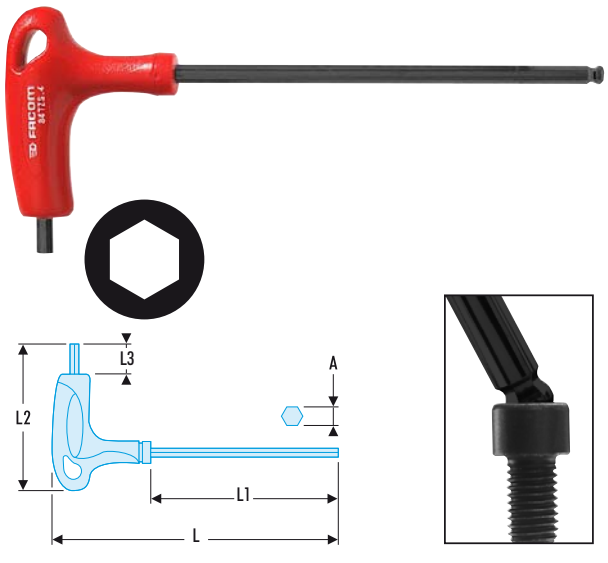
MOD.84TZS Set of 7 "T" spherical head hexagon keys



- 84TZ.3 mm.
- 84TZS.4 - 5 - 6 - 7 - 8 - 10 mm.
- Thermoformed module PL329.

Weight: 996 g.

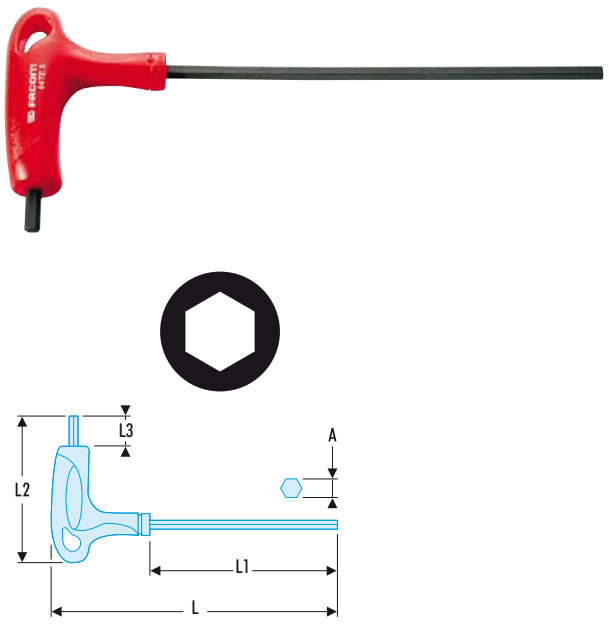
84TZS - Spherical head metric hexagon keys



- Ergonomic T handle for efficient use of the two ends of the key.
- The spherical head allows for screwing with a tilt angle up to 30°. Use the short hexagon key for tightening.
- Silicon steel.
- Finish: polished, phosphate-coated.

	A [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	[g]
84TZS.4	4	183	130	77	12	58
84TZS.5	5	183	130	77	12	70
84TZS.6	6	240	175	95	15	112
84TZS.7	7	240	175	95	15	120
84TZS.8	8	240	175	95	15	125
84TZS.10	10	240	175	95	15	192

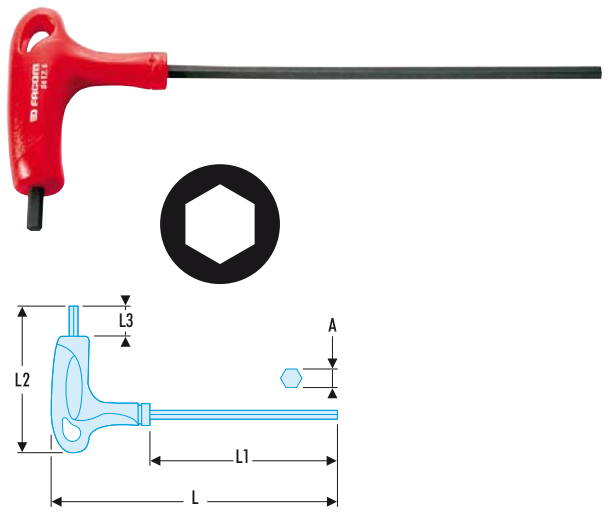
84TZ - Metric hexagon keys



- Ergonomic T handle for efficient use of the two ends of the key.
- Silicon steel.
- Finish: polished, phosphate-coated.

	A [mm]	A ["]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⧋ [g]
84TZ.2,5	2,5	-	133	90	63	11	9
84TZ.3	3,0	-	133	90	63	11	12
84TZ.4	4,0	-	183	130	77	12	58
84TZ.5	5,0	-	183	130	77	12	70
84TZ.6	6,0	-	240	175	95	15	112
84TZ.8	8,0	-	240	175	95	15	125
84TZ.10	10,0	-	240	175	95	15	192

84TZ - Inch hexagon keys



- Ergonomic T handle for efficient use of the two ends of the key.
- The spherical head allows for screwing with a tilt angle up to 30°. Use the short hexagon key for tightening.
- Silicon steel.
- Finish: polished, phosphate-coated.

	A [mm]	A ["]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⧋ [g]
84TZ.5/32	-	5/32	183	130	77	12	58
84TZ.3/16	-	3/16	183	130	77	12	65
84TZ.7/32	-	7/32	240	175	95	15	80
84TZ.1/4	-	1/4	240	175	95	15	115
84TZ.5/16	-	5/16	240	175	95	15	125
84TZ.3/8	-	3/8	240	175	95	15	180

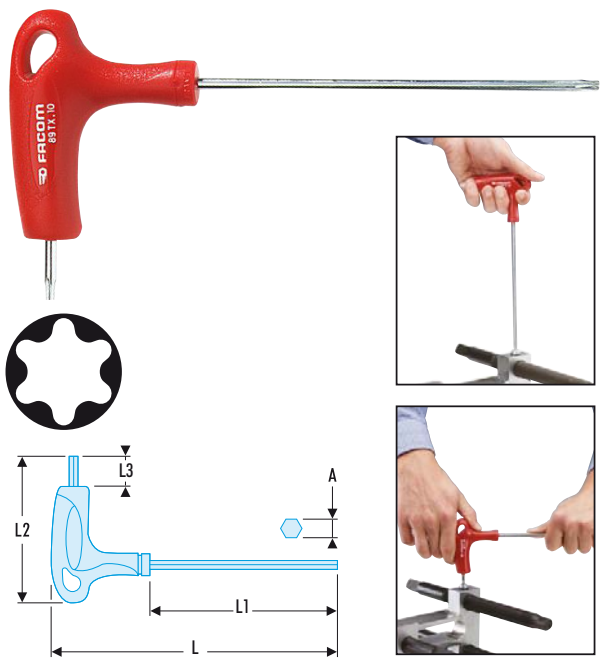
MOD.89TX Set of 7 "T" spherical head TORX® hexagon keys



Including:
- 89TX.10 - 15 - 20 - 25 - 27 - 30 - 40.
- Thermoformed module PL328.

Weight: 648 g.

89TX - Torx® spinners



- Ergonomic handle for efficient use of the two ends of the key.
- Finish: chromed shot-blasted.

	A [mm]	Torx [No]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⧋ [g]
89TX.6	1,65	T6	133	90	63	11	7
89TX.7	1,97	T7	133	90	63	11	8
89TX.8	2,30	T8	133	90	63	11	9
89TX.9	2,48	T9	133	90	63	11	10
89TX.10	2,72	T10	133	90	63	12	12
89TX.15	3,26	T15	133	130	77	12	15
89TX.20	3,84	T20	183	130	77	12	40
89TX.25	4,40	T25	183	130	77	15	55
89TX.27	4,96	T27	183	175	95	15	60
89TX.30	5,49	T30	240	175	95	15	90
89TX.40	6,60	T40	240	175	95	15	105
89TX.45	7,77	T45	240	175	95	15	125
89TX.50	8,79	T50	240	175	95	15	170

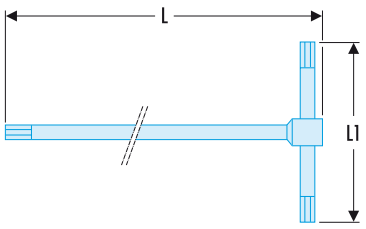
84TC.JE5 Set of 5 "T" spinner hexagon keys



• Including the wrenches 84TC.3 - 4 - 5 - 6 - 8 mm.
Weight: 519 g.

84TC - Metric hexagon keys







• Hexagon profile at the 3 ends.
• Finish: chromed, burnt ends.

	[mm]	L [mm]	L1 [mm]	[g]
84TC.2	2,0	125	62,5	22
84TC.2,5	2,5	125	62,5	22
84TC.3	3,0	150	75,0	26
84TC.4	4,0	180	90,0	63
84TC.5	5,0	210	105,0	100
84TC.6	6,0	210	105,0	145
84TC.8	8,0	250	125,0	220
84TC.10	10,0	300	150,0	440
84TC.12	12,0	320	160,0	645
84TC.14	14,0	340	170,0	680

"T" SOCKET WRENCH WITH SLIDE BAR

**6-point fast "T" keys.
Approach twice faster
than a standard wrench!
=
incredible work ergonomics.**

Usage:
• Hold the tube.
• Launch the wrench.
• The wrench is guided properly and turns much faster than when holding it between the fingers: "rolling effect".

Access:
• The long-reaching body provides better access than with a traditional 6-point wrench.
• Easy access to screws requiring depth.

Powerful tightening/loosening:
• 6-point key at the 3 ends: for a "lever arm" effect.







84TCS.J4 Set of 4 fast "T" spinner hexagon keys



- Set of 4 keys: 84TCS.3 - 4 - 5 - 6 mm.
- Hexagon male profile at the 3 ends.
- Tube fastened by snap ring for fast approach.
- Finish: chromed body, knurled tube (for good grip and limits slipping), burnt ends (maintains accurate machining).

Weight: 497g.

84TCS - Fast hexagon spinners



- Hexagon male profile at the 3 ends.
- Tube fastened by snap ring for fast approach.
- Finish: chromed body, knurled tube (for good grip and limits slipping), burnt ends (maintains accurate machining).

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ΔΔ [g]
84TCS.3	4,0	4,0	7	150	75	75	65	36
84TCS.4	5,6	5,6	9	180	90	90	70	76
84TCS.5	7,0	7,0	11	210	105	105	70	129
84TCS.6	8,0	8,0	11	210	105	105	70	154

AWSH.JT6 Set of spherical head spinner hexagon keys

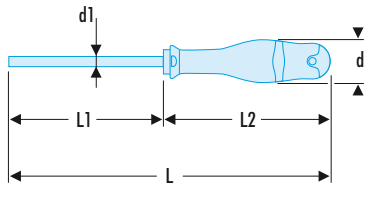


- Set of 6 spherical head hexagon keys: AWSH 2X75 - 2.5X75 - 3X75 - 4X75 - 5X100 - 6X100 mm.
- bi-material ergonomic PROTWIST® handle for comfortable and reliable screwing.
- Supplied in roll.

Weight: 375 g.

AWHS - Spherical head spinner hexagon keys





- Bi-material ergonomic PROTWIST® handle for comfortable and reliable screwing.

	[mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	ΔΔ [g]
AWSH2X75	2,0	19	2,0 x 75	169	94	31
AWSH2,5X75	2,5	19	2,5 x 75	169	94	33
AWSH3X75	3,0	19	3,0 x 75	169	94	35
AWSH4X75	4,0	25	4,0 x 75	178	103	45
AWSH5X100	5,0	30	5,0 x 100	208	109	80
AWSH6X100	6,0	36	6,0 x 100	220	120	120
AWSH8X100	8,0	36	8,0 x 100	220	120	180

AWHH.JT6 Set of hexagon spinner keys





- Set of 6 hexagon keys: AWHH 2X75 - 2.5X75 - 3X75 - 4X75 - 5X100 - 6X100 mm.
- Bi-material ergonomic PROTWIST® handle for comfortable and reliable screwing.
- Supplied in roll.

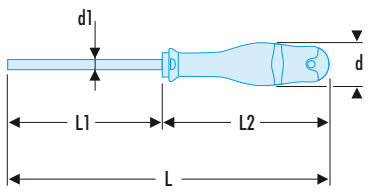
Weight: 375 g.

AWHH - Spinner hexagon keys









- Bi-material ergonomic PROTWIST® handle for comfortable and reliable screwing.

	[mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	[g]
AWHH2X75	2,0	19	2,0 x 75	169	94	31
AWHH2,5X75	2,5	19	2,5 x 75	169	94	33
AWHH3X75	3,0	19	3,0 x 75	169	94	35
AWHH4X75	4,0	25	4,0 x 75	178	103	45
AWHH5X100	5,0	30	5,0 x 100	209	109	80
AWHH6X100	6,0	36	6,0 x 100	220	120	120
AWHH8X100	8,0	36	8,0 x 100	220	120	180

Special profile keys

80.JL7 Set of angled keys for multiple XZN teeth





- Set of 7 80 keys: M5 - M6 - M8 - M10 - M12 - M14 - M16.
- Supplied in roll.

Weight: 918 g.

85.JU10 Set of 10 keys for BRISTOL heads





- Set of 10 85 keys: 033 - 048 - 060 - 072 - 096 - 111 - 133 - 145 - 168 - 183.
- Supplied in roll.

Weight: 37 g.

RANGE OF FACOM SCREWING BITS

QUALITY - DURABILITY ECONOMY

Choosing the right bit for your needs:

• 1-According to the type of screw-driving method used:




Standard intense


High Perf' intense


High Perf' intense


TITANIUM High Perf' intense


Impact

• 2-According to the hexagon drive:



0-series - 4 mm drive



1-series - Drive 1/4" - 6.35 mm.


Standard


Titanium


High perf



2-series - Drive 5/16" - 7.94 mm.


Standard


Impact



3-series - Drive 1/2" - 12.7 mm.


Impact



6-series - Drive 1/4" - 6.35 mm.


Standard intense


Titanium


High Perf' intense

To choose your screwing bits, Facom offers different types of packaging:

- PER unit.
- Packaged by 3.
- 3 bits of the same type.
- 3 different bits.







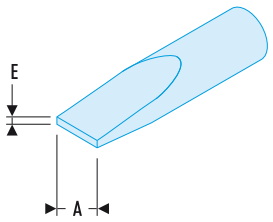
Bits series 0

Standard bits series 0 - drive 4 mm

ES.0 - Screw bits for slotted head screws







- For manual high precision screwing.
- Drive 4 mm.
- For use with the Micro-Tech® bit holder screwdriver AEM.M.
- For use with the Micro-Tech® torque screwdrivers series A.300MT and A.340MT.

	E [mm]	A fente [No]	L [mm]	⚖ [g]
ES.001,8	0,3	1,8	28	3,00
ES.002	0,4	2,0	28	3,00
ES.002,5	0,4	2,5	28	3,10
ES.003	0,5	3,0	28	3,10
ES.004	0,5	4,0	28	3,20
ES.004,5	0,6	4,5	28	3,20

EP.0 - Screw bits for Phillips® screws





- For manual high precision screwing.
- Drive 4 mm.
- For use with the Micro-Tech® bit holder screwdriver AEM.M.
- For use with the Micro-Tech® torque screwdrivers series A.300MT and A.340MT.

	Phillips [No]	L [mm]	⚖ [g]
EP.0X2	PH00	28	3,20
EP.000	PH0	28	3,20

ED.0 - Screw bits for Pozidriv® screws





- For manual high precision screwing.
- Drive 4 mm.
- For use with the Micro-Tech® bit holder screwdriver AEM.M.
- For use with the Micro-Tech® torque screwdrivers series A.300MT and A.340MT.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.0X2	PZ00	28	3,20
ED.000	PZ0	28	3,20
ED.001	PZ1	28	3,20

EH.0 - Screw bits for countersunk hex head screws

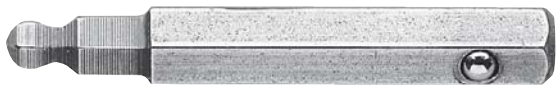




- For manual high precision screwing.
- Drive 4 mm.
- For use with the Micro-Tech® bit holder screwdriver AEM.M.
- For use with the Micro-Tech® torque screwdrivers series A.300MT and A.340MT.

	⬢ [mm]	L [mm]	⚖ [g]
EH.000,9	0,9	28	3,00
EH.001,3	1,3	28	3,10
EH.001,5	1,5	28	3,10
EH.002	2,0	28	3,20
EH.002,5	2,5	28	3,20

ETS.0 - Screw bits for countersunk hex spherical head screws





- For manual high precision screwing.
- Drive 4 mm.
- For use with the Micro-Tech® bit holder screwdriver AEM.M.

	[mm]	L [mm]	[g]
ETS.001,5	1,5	28	3,10
ETS.002	2,0	28	3,20
ETS.002,5	2,5	28	3,20

EX.0 - Screw bits for Torx® screws





- For manual high precision screwing.
- Drive 4 mm.
- For use with the Micro-Tech® bit holder screwdriver AEM.M.
- For use with the Micro-Tech® torque screwdrivers series A.300MT and A.340MT.

	Torx [No]	L [mm]	[g]
EX.006	T6	28	1,80
EX.007	T7	28	1,80
EX.008	T8	28	1,80
EX.010	T10	28	1,90

ECR.0 Socket holder bit 4mm - 1/4"



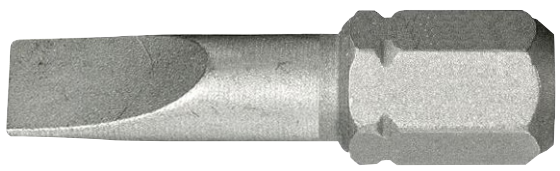
- Bit to use 1/4" "radio" series sockets with the Micro-Tech® torque screwdrivers A.300MT and A.340MT.
- Drive 4 mm (hex).
- Length: 22 mm.

Weight: 7 g.

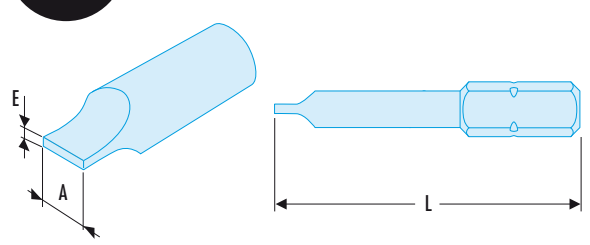
Bits series 1

Standard bits series 1 - 1/4" - 6.35 mm drive

ES.1 - Standard bits series 1 for slotted head screws





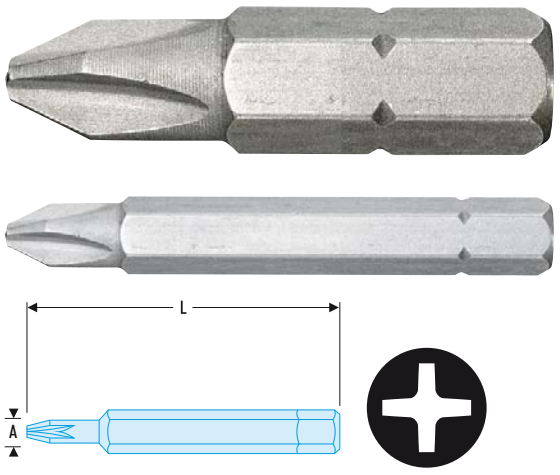


NF ISO 2351-1, NF ISO 1173, ISO 2351-1, ISO 1173, DIN ISO 2351-1

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	A [mm]	E [mm]	L [mm]	[g]
ES.133	3	0,5	25	5

EP.1 - Standard bits series 1 for Phillips® screws

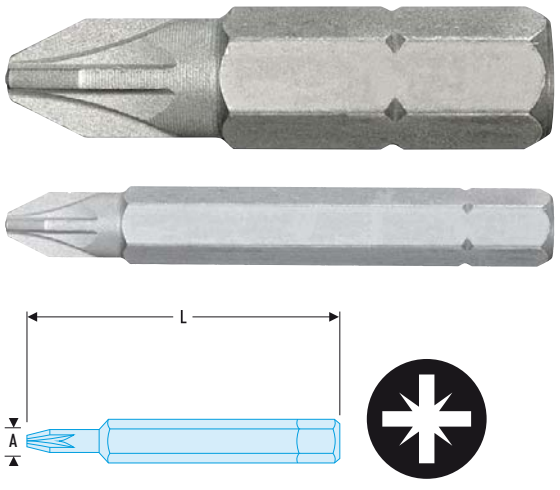


NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Phillips [No]	L [mm]	⚖ [g]
EP.100	PH0	25	7,20
EP.111	PH1	50	14,40
EP.122	PH2	50	14,40

ED.1 - Standard bits series 1 for Pozidriv® screws

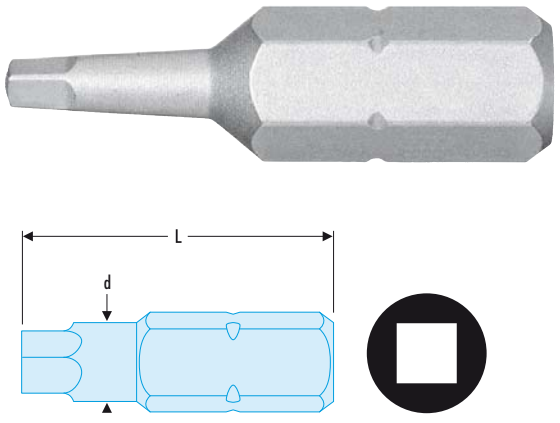


NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.100	PZ0	25	6
ED.111	PZ1	50	11
ED.112	PZ2	50	12

ECAR.1 - Standard bits series 1 for ROBERTSON square head screws

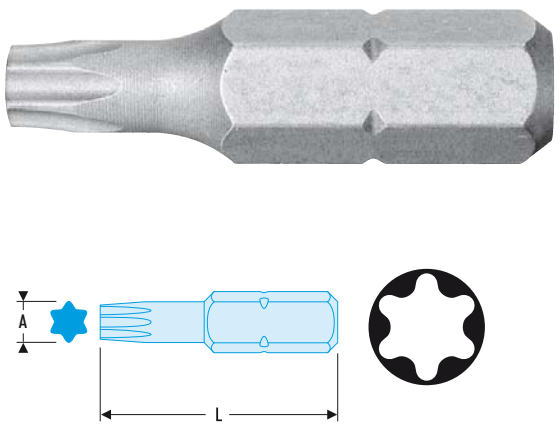


NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	d [mm]	L [mm]	Square ["]	⚖ [g]
ECAR.101	3,5	25	1	8
ECAR.102	6,0	25	2	10
ECAR.103	6,0	25	3	12

EX.1 - Standard bits series 1 for Torx® screws



NF ISO 1173, ISO 1173

- Compliant with Torx® specifications.
- For manual screwing.
- Drive 1/4" - 6.35 mm.

	A [mm]	Torx [No]	L [mm]	⚖ [g]
EX.106	1,65	T6	25	5
EX.107	1,97	T7	25	5
EX.108	2,30	T8	25	5
EX.109	2,48	T9	25	5
EX.110	2,72	T10	25	5
EX.115	3,26	T15	25	5
EX.120	3,84	T20	25	6
EX.125	4,40	T25	25	6
EX.127	4,96	T27	25	6
EX.130	5,49	T30	25	6
EX.140	6,60	T40	25	6

EX1 - Set of 3 series 1 Torx® bits





- For Torx® screws.
- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Torx [No]	L [mm]	Content set
EX108.J3	T8	25	EX.108 (x3)
EX110.J3	T10	25	EX.110 (x3)
EX115.J3	T15	25	EX.115 (x3)
EX120.J3	T20	25	EX.120 (x3)
EX125.J3	T25	25	EX.125 (x3)
EX127.J3	T27	25	EX.127 (x3)
EX130.J3	T30	25	EX.130 (x3)
EX140.J3	T40	25	EX.140 (x3)

EX11.J3 Set of 3 series 1 Torx® bits T8-10-15





- Drive 1/4" - 6.35 mm.
- For manual screwing.
- For Torx® screws.
- Including 3 bits:

- EX.108 (T8).
- EX.110 (T10).
- EX.115 (T15).

- Length: 25mm.

EX12.J3 Set of 3 series 1 Torx® bits T20-25-30





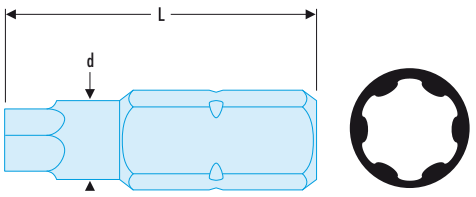
- Drive 1/4" - 6.35 mm.
- For manual screwing.
- For Torx® screws.
- Including 3 bits:

- EX.120 (T20).
- EX.125 (T25).
- EX.130 (T30).

- Length: 25 mm.

EXP.1 - Standard bits series 1 for Torx Plus® screws





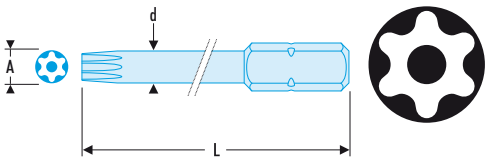
NF ISO 1173, ISO 1173

- Compliant with Torx Plus® specifications.
- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Resistorx [No]	L [mm]	⚖ [g]
EXP.106	IP6	25	5
EXP.107	IP7	25	5
EXP.108	IP8	25	5
EXP.109	IP9	25	5
EXP.110	IP10	25	5
EXP.115	IP15	25	5
EXP.120	IP20	25	6
EXP.125	IP25	25	6
EXP.127	IP27	25	6
EXP.130	IP30	25	6
EXP.140	IP40	25	6

EXR.1 - Standard bits series 1 for Resistorx® screws





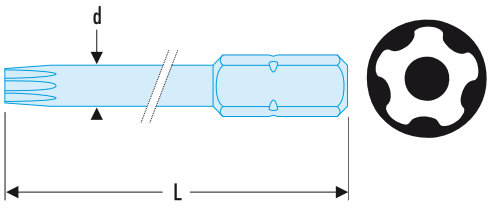
NF ISO 1173, ISO 1173

- Compliant with Resistorx® specifications.
- For manual screwing.
- Drive 1/4" - 6.35 mm.
- Long bits 70 mm are low cut for access to screws inserted in the wells.

	A [mm]	Resistorx [No]	d [mm]	L [mm]	⚖ [g]
EXR.110	2,72	TT10	-	25	5
EXR.115	3,26	TT15	-	25	6
EXR.120	3,84	TT20	-	25	6
EXR.125	4,40	TT25	-	25	6
EXR.127	4,96	TT27	-	25	6
EXR.130	5,59	TT30	-	25	6
EXR.140	6,60	TT40	-	25	6
EXR.110L	2,72	TT10	5,2	70	8
EXR.115L	3,26	TT15	5,2	70	8
EXR.120L	3,84	TT20	5,6	70	9
EXR.125L	4,40	TT25	5,6	70	11
EXR.130L	5,59	TT30	6,0	70	14
EXR.140L	6,60	TT40	7,1	70	17

EXP.1 - Standard bits series 1 for Tamper Resistant Torx Plus® screws





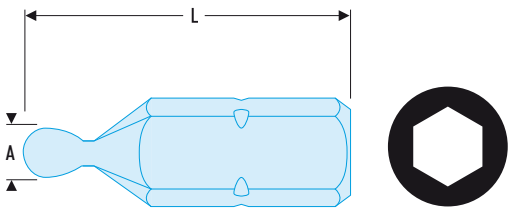
NF ISO 1173, ISO 1173

- Compliant with Tamper Resistant Torx Plus® specifications.
- For manual screwing.
- Drive 1/4" - 6.35 mm.

	Tamper	L [mm]	⚖ [g]
EXRP.108	IPR8	25	5
EXRP.110	IPR10	25	5
EXRP.115	IPR15	25	6
EXRP.120	IPR20	25	6
EXRP.125	IPR25	25	6
EXRP.127	IPR27	25	6
EXRP.130	IPR30	25	6
EXRP.140	IPR40	25	6

ETS.1 - Standard bits series 1 with spherical head for countersunk hex screws





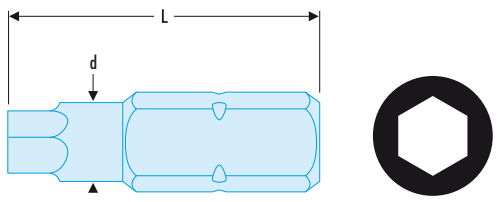
NF ISO 1173, ISO 1173

- The spherical head allows for screwing with a tilt angle up to 30°.
- For manual screwing.
- Drive 1/4" - 6.35 mm.

	[mm]	L [mm]	[g]
ETS.102,5	2,5	25	5
ETS.103	3,0	25	5
ETS.104	4,0	25	5
ETS.105	5,0	25	6
ETS.106	6,0	25	6

EH.1 - Screw bits series 1 for metric countersunk hex head screws





NF ISO 2351-3, NF ISO 1173, ISO 2351-3, ISO 1173, DIN ISO 2351-3

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	[mm]	L [mm]	[g]
EH.101,5	1,5	25	5
EH.102	2,0	25	5
EH.102,5	2,5	25	5
EH.103	3,0	25	5
EH.104	4,0	25	5
EH.105	5,0	25	6
EH.106	6,0	25	7
EH.107	7,0	25	8
EH.108	8,0	25	9
EH.110	10,0	25	11

EH.10 - Set of 3 screw bits series 1 for metric countersunk hex head screws



- For manual screwing.
- Drive 1/4" - 6.35 mm.

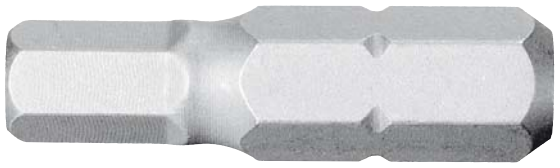
	[mm]	L [mm]	Content set
EH102.J3	2,0	25	EH.102 (x3)
EH102,5.J3	2,5	25	EH.102,5 (x3)
EH103.J3	3,0	25	EH.103 (x3)
EH104.J3	4,0	25	EH.104 (x3)
EH105.J3	5,0	25	EH.105 (x3)
EH106.J3	6,0	25	EH.106 (x3)
EH108.J3	8,0	25	EH.108 (x3)

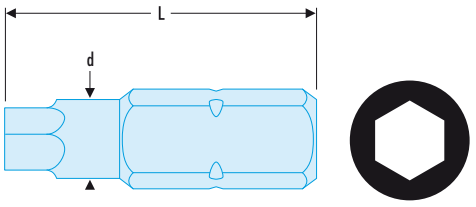
EH1.J3 Set of 3 screw bits series 1 for metric countersunk hex head screws



- For manual screwing.
- Drive 1/4" - 6.35 mm.
- Including 3 bits:
- EH.104 (4 mm).
- EH.105 (5 mm).
- EH.106 (6 mm).
- Length: 25 mm.

EH.1 - Screw bits series 1 for inch countersunk hex head screws





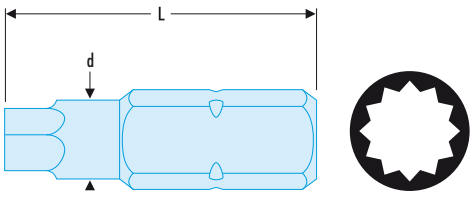
NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	A ["]	L [mm]	⚖ [g]
EH.101/8	1/8	25	5
EH.105/32	5/32	25	5
EH.103/16	3/16	25	5
EH.107/32	7/32	25	6
EH.101/4	1/4	25	7

EV.1 - Standard bits series 1 for XZN multiple teeth head screws





NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	XZN [No]	L [mm]	⚖ [g]
EV.104	M4	25	5
EV.105	M5	25	5
EV.106	M6	25	6
EV.108	M8	25	7
EV.110	M10	25	8

ETRI.1 - Standard bits series 1 for Tri-wing head screws





NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	L [mm]	Screw Size[mm]	⚖ [g]
ETRI.101	25	1	5,50
ETRI.102	25	2	5,50
ETRI.103	25	3	5,50
ETRI.104	25	4	5,50
ETRI.105	25	5	5,50

EBNA.1 - Standard bits series 1 for BNAE head screws



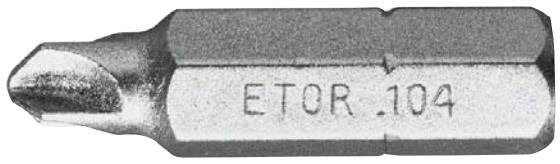


NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	L [mm]	Bit BNAE [No]	⚖ [g]
EBNA.104	25	4	5
EBNA.105	25	5	5
EBNA.106	25	6	6

ETOR - Standard bits series 1 for Torq Set® head screws





NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 1/4" - 6.35 mm.

	L [mm]	Screw Size[mm]	⚖ [g]
ETOR.100	25	0	5,50
ETOR.101	25	1	5,50
ETORM.102	25	2	6,00
ETORM.103	25	3	6,00
ETORM.104	25	4	6,00
ETORM.105	25	5	6,00
ETORM.106	25	6	6,00
ETORM.108	25	8	6,00
ETORM.110	25	10	6,00
ETORM.101/4	32	1/4	13,00

Sets of standard series 1 bits - 1/4" - 6.35 mm drive

AME.B - Sets of 9 High Perf' bits + bit holder



- For intense manual screwing.
- AME.B3: Slotted head, Phillips®, Pozidriv®.
- AME.B4: Slotted head, Pozidriv®, hex.
- AME.B5: Slotted head, Phillips®, Torx®.
- AME.B6: Torx®, Resistorx®.
- Supplied with clasp bit holder (Ref EF.6P1).
- Compact box, dim.

	A fente [No]	Phillips [No]	Pozidriv [No]	Torx [No]	Resistorx [No]	⬢ [mm]	⚖ [g]
AME.B3	0,6 x 4,5 - 1,0 x 5,5 - 1,2 x 6,5	1 - 2 - 3	1 - 2 - 3	-	-	-	100
AME.B4	0,6 x 4,5 - 1,0 x 5,5	-	1 - 2	-	-	2,5 - 3,0 - 4,0 - 5,0 - 6,0	100
AME.B5	0,6 x 4,5 - 1,0 x 5,5	1 - 2	-	T10 - T15 - T20 - T25 - T30	-	-	103
AME.B6	-	-	-	8 - 9	TT10 - TT15 - TT20 - TT25 - TT27 - TT30 - TT40	-	125

"Pocket" bit holder handle



- Equivalent to 6 screwdrivers in 1.
- Built-in bit storage = 3 slotted head bits and 3 Pozidriv® for manual screwing.
- Magnetic 1/4" bit holder blade.
- Compact volume in closed position.

	A fente [No]	Pozidriv [No]	⚖ [g]
EFPZ	4,5 - 6,5 - 8,0	1 - 2 - 3	200

65.PEJ13 Bit set - bit holder ratchet



- Including:
- 65.PE: 1/4" - 5/16" bit holder ratchet.
- Bits for Resistorx® screws: EXR.110 - EXR.115 - EXR.120 - EXR.125 - EXR.130 - EXR.140.
- Hexagon countersunk bits: EH.103 - EH.104 - EH.105 - EH.106.
- Bits for Pozidriv® screws: ED.101T - ED.102T -

Sets of standard series 1 bits + bit holder in bag - 1/4" - 6.35 mm drive

SCREW BITS BOX

EXCLUSIVE DESIGN:
COMPACT AND EASY TO USE

Polyamide case (PA66)

- High impact resistance.
- Bits held effectively and durably.
- Good resistance to chemicals.

❶ **Easy wallet type opening/closing.**

❷ **Effective and easy bit push-out system on the rear face.**

❸ **Easy selection: bits visible on the front face + pattern symbols.**



E.110 Combined set of 10 bits 1/4" - 25 mm + bit holder - No.1





- Including:
- Bits for manual screwing.
- Slotted head bits: ES.134,5T - ES.135,5T - ES.136,5T - ES.148T.
- Phillips® bits: EP.101T - EP.102T - EP.103T.
- Pozidriv® bits: ED.101T - ED.102T - ED.103T.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.111 Combined set of 10 bits 1/4" - 25 mm + bit holder - No.2





- Including:
- Bits for manual screwing.
- Slotted head bits: ES.134,5T - ES.136,5T - ES.148T.
- Pozidriv® bits: ED.101T - ED.102T - ED.103T.
- 6-point bits: EH.103 - EH.104 - EH.105 - EH.106.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.112 Combined set of 10 Torx® bits 1/4" - 25 mm + bit holder





- Including:
- Bits for manual screwing.
- Bits: EX.108 - EX.109 - EX.110 - EX.115 - EX.120 (x2) - EX.125 - EX.127 - EX.130 - EX.140.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.113 Combined set of 10 Resistorx® bits 1/4" - 25 mm + bit holder





- Including:
- Bits for manual screwing.
- Bits: EXR.110 - EXR.115 - EXR.120 (X2) - EXR.125 (X2) - EXR.127 - EXR.130 (X2) - EXR.140.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.114 Combined set of 10 Tamper Proof Torx Plus® bits 1/4" - 25 mm + bit holder





- Including:
- Bits for manual screwing.
- Bits: EXRP.108 - EXRP.110 - EXRP.120 (X2) - EXRP.125 - EXRP.127 - EXRP.130 (X2) - EXRP.140.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.116 Combined set of 10 Torx Plus® bits 1/4" - 25 mm + bit holder

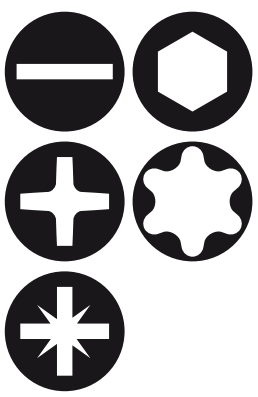




- Including:
- Bits for manual screwing.
- Bits: EXP.108 - EXP.109 - EXP.110 - EXP.115 - EXP.120 - EXP.125 - EX.127 - EX.130 (x2) - EXP.140.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.120 Combined set of 28 High Perf' series 1 bits + bit holder

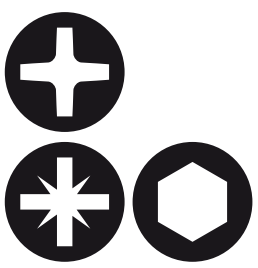




- For intense manual screwing.
- Drive 1/4" - 6.35 mm.
- Including:
- 3 bits for slotted heads: ES.134,5T - ES.136,5T - ES.148T.
- 3 bits for Phillips® screws: EP.101T - ES.102T - ES.103T.
- 3 bits for Pozidriv® screws: ED.101T - ED.102T - ED.103T.
- 4 6-point bits: EH.103 - EH.104 - EH.105 - EH.106.
- 6 Torx® bits: EX.110 - EX.115 - EX.120 - EX.125 - EX.130 - EX.140.
- Bit holder: EF.6P1.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.611 Set of 10 bits 1/4" - 50 mm





- Drive 1/4" - 6.35 mm.
- Including:
- 3 bits for Phillips® screws: EP.601T - EP.602T (x2).
- 3 bits for Pozidriv®: ED.601T - ED.602T (x2).
- 4 6-point bits: EH.603 - EH.604 - EH.605 - EH.606.
- Supplied in compact high strength and chemical resistant polyamide roll.

E.612 Set of 10 bits 50 mm long with groove





- Drive 1/4" - 6.35 mm.
- Including:
- 3 bits for Phillips® screws: EP.601T - EP.602T (x2).
- 3 bits for Pozidriv®: ED.601T - ED.602T (x2).
- 4 Torx® bits: T10 - T20 - T25 - T30.
- Supplied in compact high strength and chemical resistant polyamide roll.

Modules of standard series 1 bits - 1/4" - 6.35 mm drive

Module with 20 screw bits



	Organiser for	Content set
MOD.E20L	PL.624	EH.204L - 205L - 206L - 207L - 208L - 210L - EV.205L - 206L - 208L - 210L - EX.230L - 240L - 245L - 250L - EXR.110L - 115L - 120L - 125L - 130L - 140L - Porte-embouts SJ.236 - Douille R.235-N - S.236-N

Module with 41 screw bits

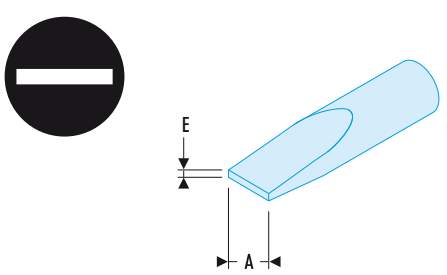


	Organiser for	Content set
MOD.E41	PL.621	ED.101T-102T-103T - EH.104-105-106-107 - EH.204L-205L-206L-207L-208L-210L - EH.208-210 - EV.205L-206L-208L-210L - EV.206-208-210 - EX.230L-240L-245L-250L - EX.245-250-255

High power bits series 1 - 1/4" - 6.35 mm drive

ES.1T - High Perf' bits series 1 for slotted head screws



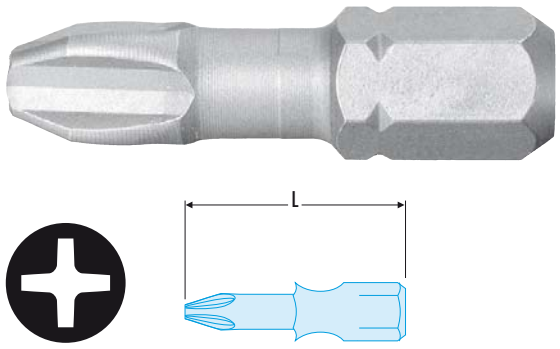


NF ISO 2351-1, NF ISO 1173, ISO 2351-1, ISO 1173, DIN ISO 2351-1

- For intense manual screwing.
- Drive 1/4" - 6.35 mm.

	A [mm]	E [mm]	L [mm]	⚖ [g]
ES.134T	4,0	0,5	25	2
ES.134,5T	4,5	0,6	25	3
ES.135,5T	5,5	0,8	25	3
ES.145,5T	5,5	1,0	25	4
ES.136,5T	6,5	1,2	25	4
ES.148T	8,0	1,6	25	8

EP.1T - High Perf' bits series 1 for Phillips® screws

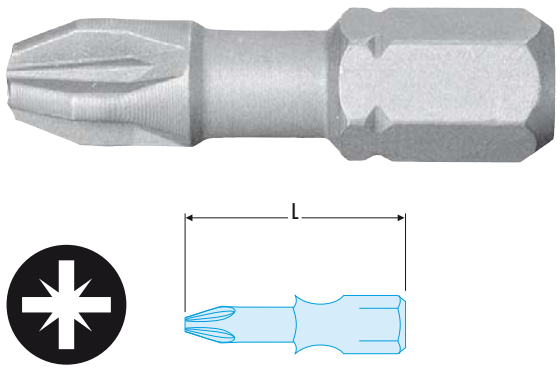


NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For intense manual screwing.
- Drive 1/4" - 6.35 mm.

	Phillips [No]	L [mm]	⚖ [g]
EP.101T	PH1	25	3,50
EP.102T	PH2	25	4,00
EP.103T	PH3	25	4,20

ED.1T - High Perf' bits series 1 for Pozidriv® screws



NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For intense manual screwing.
- Drive 1/4" - 6.35 mm.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.101T	PZ1	25	3,50
ED.102T	PZ2	25	4,00
ED.103T	PZ3	25	4,20

Sets of high power series 1 bits - 1/4" - 6.35 mm drive

ES13T - ES14T - Set of 3 High Perf' bits series 1 for slotted head screws



- For intense manual screwing.
- Drive 1/4" - 6.35 mm.

	E [mm]	L [mm]	Content set
ES134T.J3	0,5	25	ES.134T (x3)
ES134,5T.J3	0,6	25	ES.134.5T (x3)
ES135,5T.J3	0,8	25	ES.135,5T (x3)
ES136,5T.J3	1,2	25	ES.136,5T (x3)
ES148T.J3	1,5	25	ES.148T (x3)

EP10T - Sets of 3 High Perf' bits series 1 - 25 mm



- For intense manual screwing.
- Drive 1/4" - 6.35 mm.

	Phillips [No]	L [mm]	Content set
EP101T.J3	PH1	25	EP.101T (x3)
EP102T.J3	PH2	25	EP.102T (x3)
EP103T.J3	PH3	25	EP.103T (x3)

ED10T - Sets of 3 High Perf' bits series 1 for Pozidriv® screws



- For intense manual screwing.
- Drive 1/4" - 6.35 mm.

	Pozidriv [No]	L [mm]	Content set
ED101T.J3	PZ1	25	ED.101T (x3)
ED102T.J3	PZ2	25	ED.102T (x3)
ED103T.J3	PZ3	25	ED.103T (x3)

ES1.J3 Set of 3 High Perf' bits for slotted head screws



- For intense manual screwing.
- Drive 1/4" - 6.35 mm.
- Length: 25 mm.
- Including 3 bits:

- ES.134.5 (4.5 mm).
- ES.136.5 (6.5 mm).
- ES.138 (8 mm).

EP1.J3 Set of 3 High Perf' bits for Phillips® screws



NF ISO 1173, ISO 1173

- For intense manual screwing.
- Drive 1/4" - 6.35 mm.
- Length: 25 mm.
- Including 3 bits:

- EP.101 (PH1).
- EP.102 (PH2).
- EP.103 (PH3).

ED1.J3 Set of 3 High Perf' bits for Pozidriv® screws

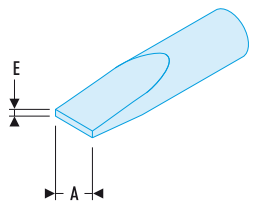


- For intense manual screwing.
- Drive 1/4" - 6.35 mm.
- Length: 25 mm.
- Including 3 bits:
- ED.101 (PZ1).
- ED.102 (PZ2).
- ED.103 (PZ3).

High power Titanium bits series 1 - 1/4" - 6.35 mm drive

ES.12T - High Perf' Titanium bits series 1 for slotted head screws





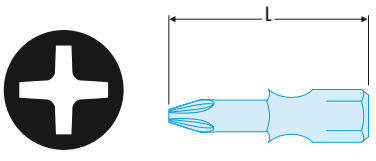
NF ISO 2351-1, NF ISO 1173, ISO 2351-1, ISO 1173, DIN ISO 2351-1

- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm.

	A [mm]	E [mm]	L [mm]	⚖ [g]
ES.124,5T	4,5	0,6	25	3
ES.125,5T	5,5	0,8	25	3
ES.175,5T	5,5	1,0	25	4
ES.126,5T	6,5	1,2	25	4
ES.128T	8,0	1,6	25	8

EP.13T - High Perf' Titanium bits series 1 for Phillips® screws



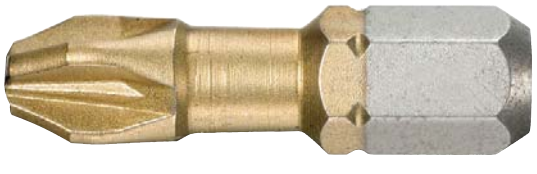


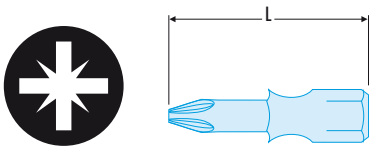
NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm.

	Phillips [No]	L [mm]	⚖ [g]
EP.131T	PH1	25	3,50
EP.132T	PH2	25	4,00
EP.133T	PH3	25	4,20

ED.13T - High Perf' Titanium bits series 1 for Pozidriv® screws





NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.131T	PZ1	25	3,50
ED.132T	PZ2	25	4,10
ED.133T	PZ3	25	4,20

Sets of high power Titanium series 1 bits - 1/4" - 6.35 mm drive

EP13T - Sets of 3 High Perf' Titanium bits series 1 - 25 mm



- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm.

	Phillips [No]	L [mm]	Content set
EP131T.J3	PH1	25	EP.131T (x3)
EP132T.J3	PH2	25	EP.132T (x3)
EP133T.J3	PH3	25	EP.133T (x3)

ED13T - Sets of 3 High Perf' Titanium bits series 1 - 25 mm - Titanium



- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm.

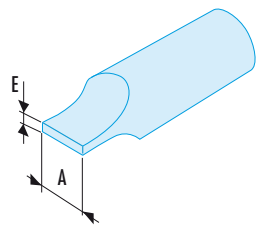
	Pozidriv [No]	L [mm]	Content set
ED131T.J3	PZ1	25	ED.131T (x3)
ED132T.J3	PZ2	25	ED.132T (x3)
ED133T.J3	PZ3	25	ED.133T (x3)

Bits series 2

Standard bits series 2 - 5/16" - 7.94 mm drive

ES.2 - Standard bits series 2 for slotted head screws





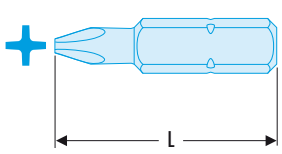
NF ISO 2351-1, NF ISO 1173, ISO 2351-1, ISO 1173, DIN ISO 2351-1

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	A [mm]	E [mm]	L [mm]	⚖ [g]
ES.206,5	6,5	1,2	41	11
ES.208	8,0	1,2	41	13
ES.210	10,0	1,6	41	19
ES.212	12,0	2,0	41	23

EP.2 - Standard bits series 2 for Phillips® screws





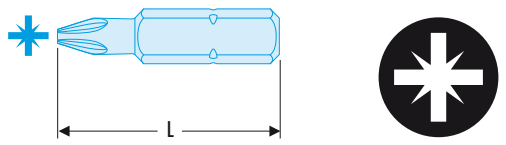
NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	Phillips [No]	L [mm]	⚖ [g]
EP.201	PH1	32	10
EP.202	PH2	32	11
EP.203	PH3	32	11
EP.204	PH4	32	14

ED.2 - Standard bits series 2 for Pozidriv® screws





NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

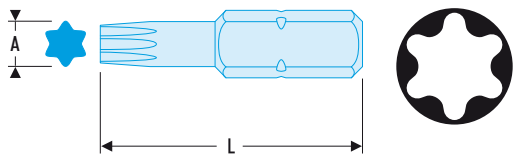
- For manual screwing.
- Drive 5/16" - 7.94 mm.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.201	PZ1	32	10
ED.202	PZ2	32	11
ED.203	PZ3	32	11
ED.204	PZ4	32	12

EX.2 - Standard bits series 2 for Torx® screws





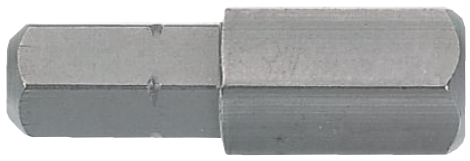


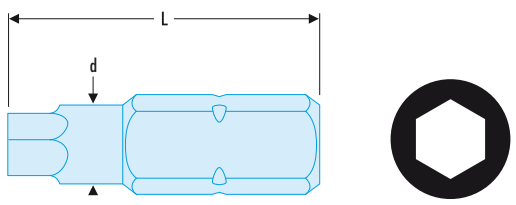
NF ISO 1173, ISO 1173

- Compliant with Torx® specifications.
- For manual screwing.
- Drive 5/16" - 7.94 mm.

	Torx [No]	d [mm]	L [mm]	⚖ [g]
EX.220	T20	-	35	13
EX.225	T25	-	35	13
EX.227	T27	-	35	13
EX.230	T30	-	35	15
EX.240	T40	-	35	15
EX.245	T45	-	35	15
EX.250	T50	-	35	18
EX.255	T55	-	35	31
EX.220L	T20	5,6	70	25
EX.225L	T25	5,6	70	25
EX.230L	T30	6,0	70	30
EX.240L	T40	7,0	70	30
EX.245L	T45	Hex.7,94	70	40
EX.250L	T50	Hex.7,94	70	55

EH.2 - Standard bits series 2 for countersunk hex screws





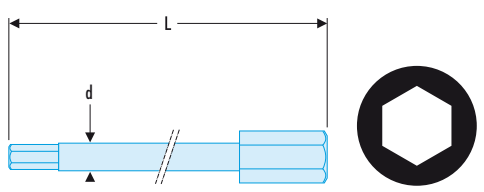
NF ISO 2351-3, NF ISO 1173, ISO 2351-3, ISO 1173, DIN ISO 2351-3

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	⬢ [mm]	L [mm]	⚖ [g]
EH.204	4	30	8
EH.205	5	30	9
EH.206	6	30	11
EH.208	8	30	13
EH.210	10	30	17
EH.201/4	1/4	30	12
EH.205/16	5/16	30	15
EH.203/8	3/8	30	19

EH.2L - Standard long bits series 2 for countersunk hex screws





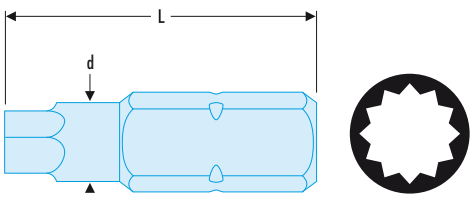
NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	⬢ [mm]	d [mm]	L [mm]	⚖ [g]
EH.204L	4	4,8	70	15
EH.205L	5	6,0	70	19
EH.206L	6	7,0	70	23
EH.207L	7	8,9	70	28
EH.208L	8	8,9	70	29
EH.210L	10	11,3	70	42

EV.2 - Standard bits series 2 for XZN multiple teeth head screws





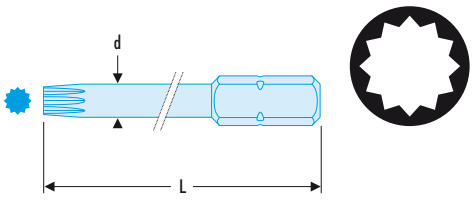
NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	XZN [No]	L [mm]	⚖ [g]
EV.206	M6	28	9
EV.208	M8	28	10
EV.210	M10	32	15
EV.212	M12	36	21

EV.L - Standard long bits series 2 for XZN multiple teeth head screws





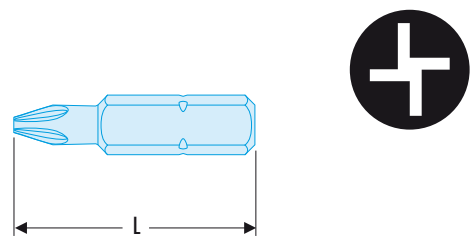
NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	XZN [No]	d [mm]	L [mm]	⚖ [g]
EV.205L	M5	6,0	70	26
EV.206L	M6	7,0	70	27
EV.208L	M8	7,5	70	28
EV.210L	M10	10,0	70	39

ETORM.2 - Standard bits series 2 for Torq Set® head screw





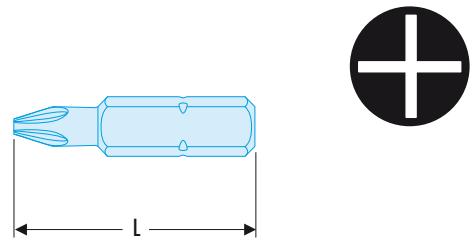
NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 5/16" - 7.94 mm.

	L [mm]	Screw Size[mm]	⚖ [g]
ETORM.208	32	8	14
ETORM.210	32	10	14
ETORM.201/4	32	1/4	14
ETORM.205/16	32	5/16	14
ETORM.203/8	32	3/8	14

EBNA.2 - Standard bits series 2 for BNAE head screws





NF ISO 1173, ISO 1173

- For manual screwing.
- Drive 5/16" - 7.94 mm.

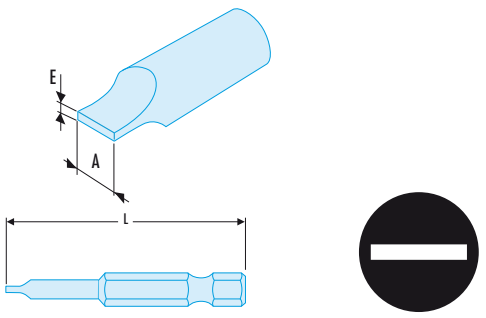
	L [mm]	Bit BNAE [No]	⚖ [g]
EBNA.204	35	4	9
EBNA.205	35	5	9
EBNA.206	35	6	10
EBNA.208	35	8	10

Bits series 6

Standard bits series 6 - 1/4" - 6.35 mm grooved drive

ES.6 - Standard bits series 6 for slotted head screws





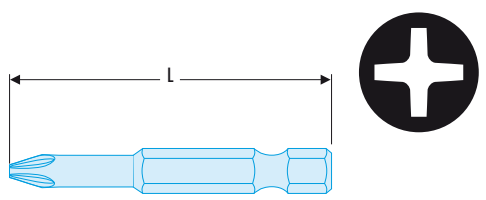
NF ISO 2351-1, NF ISO 1173, ISO 2351-1, ISO 1173, DIN ISO 2351-1

- Drive 1/4" - 6.35 mm with groove.

	A [mm]	E [mm]	L [mm]	⚖ [g]
ES.603	3,0	0,5	50	7,70
ES.603,5	3,5	0,6	50	7,90
ES.604	4,0	0,5	50	8,60
ES.604,5	4,5	0,6	50	9,00
ES.605,5	5,5	0,8	50	10,00
ES.606,5	6,5	1,2	50	11,50
ES.608	8,0	1,2	70	13,70
ES.623	3,0	0,5	70	8,80
ES.623,5	3,5	0,6	70	9,40
ES.624	4,0	0,8	70	10,60
ES.625,5	5,5	1,0	70	13,70

EP.6 - Standard bits series 6 for Phillips® screws





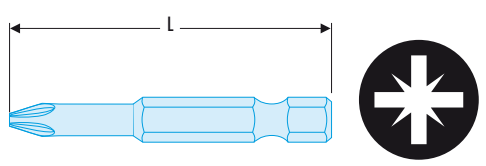
NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- Drive 1/4" - 6.35 mm with groove.

	Phillips [No]	L [mm]	⚖ [g]
EP.661	PH1	70	12,40
EP.662	PH2	70	14,40
EP.663	PH3	70	15,20
EP.691	PH1	90	16,10
EP.692	PH2	90	17,90

ED.6 - Standard bits series 6 for Pozidriv® screws





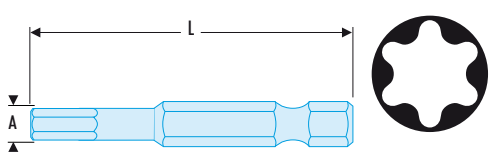
NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- Drive 1/4" - 6.35 mm with groove.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.661	PZ1	70	12,40
ED.662	PZ2	70	14,40
ED.663	PZ3	70	15,20
ED.691	PZ1	90	16,10
ED.692	PZ2	90	17,90
ED.693	PZ3	90	18,90

EX.6 - Standard bits series 6 for Torx® screws





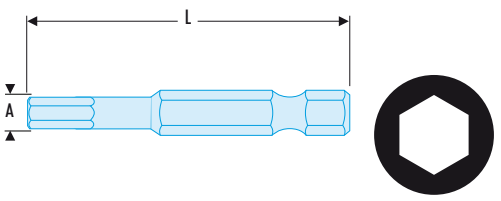
NF ISO 1173, ISO 1173

- Compliant with Torx® specifications.
- Drive 1/4" - 6.35 mm with groove.

	A [mm]	Torx [No]	d [mm]	L [mm]	⚖ [g]
EX.610	2,72	T10	5,2	70	8,40
EX.615	3,26	T15	5,2	70	8,60
EX.620	3,84	T20	5,6	70	9,80
EX.625	4,40	T25	5,6	70	11,50
EX.627	4,96	T27	5,8	70	12,90
EX.630	5,59	T30	6,0	70	14,50
EX.640	6,60	T40	7,1	70	17,60

EH.6 - Standard bits series 6 for countersunk hex screws





NF ISO 2351-3, NF ISO 1173, ISO 2351-3, ISO 1173, DIN ISO 2351-3

- Drive 1/4" - 6.35 mm with groove.

	[mm]	L [mm]	[g]
EH.603	3	50	14,40
EH.604	4	50	14,40
EH.605	5	50	15,00
EH.606	6	50	15,50
EH.608	8	50	18,00

EH60 - Sets of 3 standard bits series 6

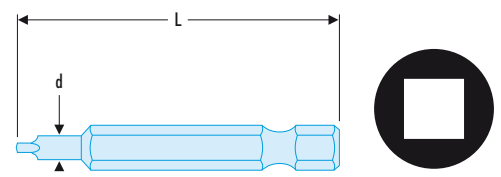


- For hex screws.
- Drive 1/4" - 6.35 mm.

	[mm]	L [mm]	Content set
EH603.J3	3	50	EH.603 (x3)
EH604.J3	4	50	EH.604 (x3)
EH605.J3	5	50	EH.605 (x3)
EH606.J3	6	50	EH.606 (x3)

ECAR.6 - Standard bits series 6 for ROBERTSON square head screws





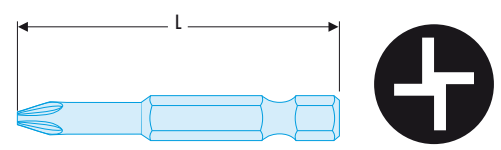
NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm with groove.

	L [mm]	Square ["]	[g]
ECAR.601	50	1	10
ECAR.602	50	2	12
ECAR.603	50	3	15

ETORM.6 - Standard bits series 6 for Torq set® head screws





NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm with groove.

	Torq-set [No]	L [mm]	[g]
ETORM.602	2	50	12
ETORM.603	3	50	12
ETORM.604	4	50	12
ETORM.605	5	50	12
ETORM.606	6	50	12
ETORM.608	8	50	12
ETORM.610	10	50	12
ETORM.601/4	1/4	50	12

EF.6DM - Magnetic sockets for hex screws





NF ISO 1173, ISO 1173

- Holds the screw with a magnet.
- Drive 1/4" - 6.35 mm with groove.

	A [mm]	L [mm]	⧋ [g]
EF.6DM5,5L	5,5	70	31
EF.6DM7L	7,0	70	36
EF.6DM8L	8,0	70	42
EF.6DM10L	10,0	70	49
EF.6DM13L	13,0	70	63

EF.6D - Sockets for hex screws





NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm with groove

	A [mm]	L [mm]	⧋ [g]
EF.6D5,5L	5,5	70	26
EF.6D7L	7,0	70	32
EF.6D8L	8,0	70	37
EF.6D10L	10,0	70	44
EF.6D13L	13,0	70	58

Sets of standard series 6 bits - 1/4" - 6.35 mm grooved drive

ES60 - Sets of 3 bits for slotted head screws - High Perf'





- Drive 1/4" - 6.35 mm.

	E [mm]	L [mm]	Content set
ES603.J3	0,5	50	ES.603 (x3)
ES604.J3	0,5	50	ES.604 (x3)
ES604,5.J3	0,6	50	ES.604,5 (x3)
ES605,5.J3	0,8	50	ES.605,5 (x3)
ES606,5.J3	1,2	50	ES.606,5 (x3)
ES608.J3	1,2	50	ES.608 (x3)

EX6 - Sets of 3 bits for Torx® screws

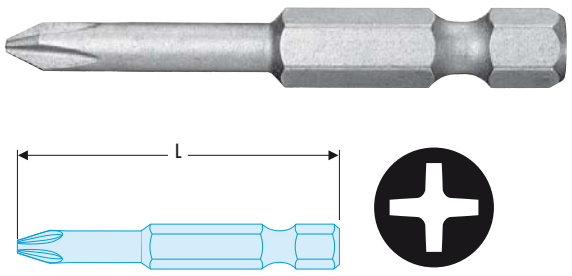


- Drive 1/4" - 6.35 mm.

	Torx [No]	L [mm]	Content set
EX610.J3	T10	50	EX.610 (x3)
EX615.J3	T15	50	EX.615 (x3)
EX620.J3	T20	50	EX.620 (x3)
EX625.J3	T25	50	EX.625 (x3)
EX630.J3	T30	50	EX.630 (x3)
EX640.J3	T40	50	EX.640 (x3)

High power bits series 6 - 1/4" - 6.35 mm grooved drive

EP.60T - For Phillips® screws

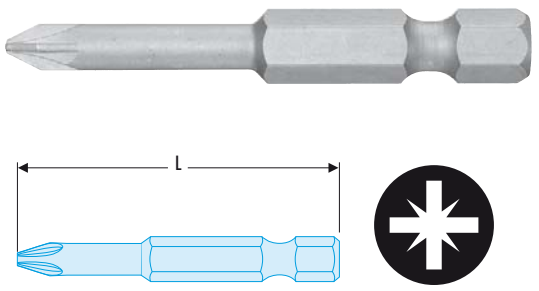


NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- Drive 1/4" - 6.35 mm with groove.

	Phillips [No]	L [mm]	⚖ [g]
EP.601T	PH1	50	8,70
EP.602T	PH2	50	10,00
EP.603T	PH3	50	11,50

ED.60T - For Pozidriv® screws



NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- Drive 1/4" - 6.35 mm with groove.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.601T	PZ1	50	8,70
ED.602T	PZ2	50	10,00
ED.603T	PZ3	50	11,50

Sets of high power series 6 bits - 1/4" - 6.35 mm grooved drive

EP60T - Sets of 3 bits for Phillips® screws - High Perf'



- Drive 1/4" - 6.35 mm with groove.

	Phillips [No]	L [mm]	Content set
EP601T.J3	PH1	50	EP.601T (x3)
EP602T.J3	PH2	50	EP.602T (x3)
EP603T.J3	PH3	50	EP.603T (x3)

ED60T - Sets of 3 bits for Pozidriv® screws - High Perf'



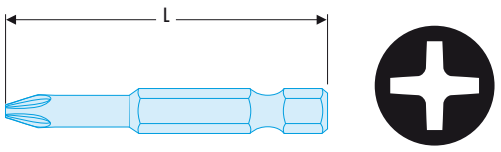
- Drive 1/4" - 6.35 mm.

	Pozidriv [No]	L [mm]	Content set
ED601T.J3	PZ1	50	ED.601T (x3)
ED602T.J3	PZ2	50	ED.602T (x3)
ED603T.J3	PZ3	50	ED.603T (x3)

High power titanium bits series 6 - 1/4" - 6.35 mm grooved drive

EP.6T - High Perf' titanium bits series 6 for Phillips® screws





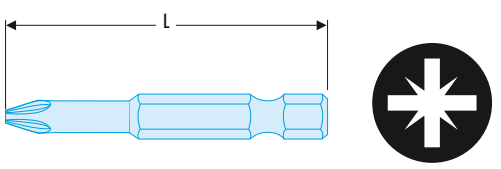
NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm with groove.

	Phillips [No]	L [mm]	⚖ [g]
EP.631T	PH1	50	8,70
EP.632T	PH2	50	10,00
EP.633T	PH3	50	11,50

ED.6T - High Perf' titanium bits series 6 for Pozidriv® screws





NF ISO 2351-2, NF ISO 1173, ISO 2351-2, ISO 1173, DIN ISO 2351-2

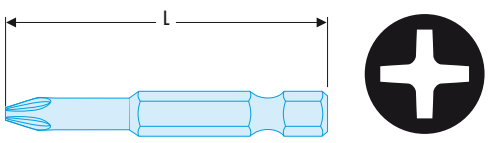
- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm with groove.

	Pozidriv [No]	L [mm]	⚖ [g]
ED.631T	PZ1	50	8,70
ED.632T	PZ2	50	10,00
ED.633T	PZ3	50	11,50

Sets of high power titanium series 6 bits - 1/4" - 6.35 mm grooved drive

EP63T - Sets of 3 High Perf' titanium grooved bits series 6 - 50 mm



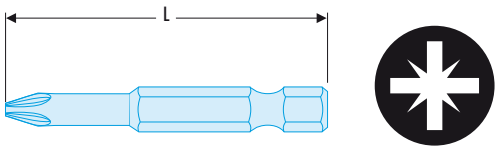


- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm.

	Phillips [No]	L [mm]	Content set
EP631T.J3	PH1	50	EP.631T (x3)
EP632T.J3	PH2	50	EP.632T (x3)
EP633T.J3	PH3	50	EP.633T (x3)

ED63T - Sets of 3 High Perf' titanium bits series 6 for Pozidriv® screws



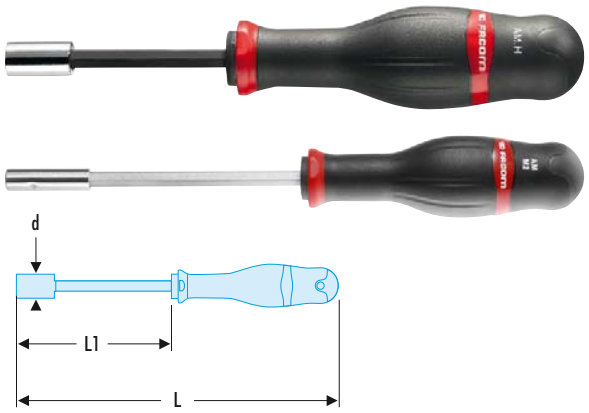


- For use on power or pneumatic nutrunners (except impact wrenches).
- Drive 1/4" - 6.35 mm with groove.

	Pozidriv [No]	L [mm]	Content set
ED631T.J3	PZ1	50	ED.631T (x3)
ED632T.J3	PZ2	50	ED.632T (x3)
ED633T.J3	PZ3	50	ED.633T (x3)

Bit holders and accessories for manual screwing

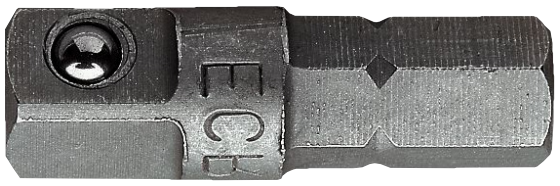
AM - PROTWIST® bit holder screwdrivers



- Hexagonal - 1/4" - 6.35 mm drive.
- AM.H Snap-ring model.
- AM.M1 Sgort magnetic model.
- AM.M2 Long magnetic model.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
AM.H	11	180	75	80
AM.M1	10	180	63	120
AM.M2	10	245	125	150

ECR Socket holder bit - square 1/4"



NF ISO 1173, ISO 1173

- Bit to use 1/4" sockets with the torque screwdrivers series A.400 - A.440 - A.301MT - A.341MT.
- Hexagonal - 1/4" - 6.35 mm drive.
- Length: 25 mm.

Weight: 15 g.

Snap ring bit holder sockets



NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

- For bits series 1 - 1/4" - 6.35 mm drive.
- The sockets Ref R.235 - J.235 - SJ.235 include a standard clip for frequent removal.
- The socket Ref R.245 includes a retaining clip ensuring the bits are held firmly. For rare removal, the drive is fitted with a hole for ball or plunger locking.

	A ["]	d [mm]	L [mm]	Square ["]	⚖ [g]
R.235	1/4	11,3	22	1/4	10
R.245	1/4	11,3	22	1/4	10
J.235	1/4	18,0	30	3/8	26
SJ.235	1/4	18,6	30	CDX	28

J-SJ-S - Snap ring bit for bits series 2



NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

- For bits series 2 - 5/16" - 7.94 mm drive.
- Manual use.

	A ["]	d [mm]	d1 [mm]	L [mm]	Square ["]	⚖ [g]
J.236	5/16	18,0	14	30	3/8	30
SJ.236	5/16	18,6	14	30	CDX	32
S.236	5/16	23,0	14	36	1/2	54

Bit holders and accessories for non impact powered screwing

EF - Snap ring bit holder sockets



NF ISO 2725-1, NF ISO 1173, ISO 2725-1, ISO 1173, DIN 3124

- For bits series 1 - 1/4" - 6.35 mm drive.

	A ["]	L [mm]	Square ["]	⚖ [g]
EF.R	1/4	30	1/4	26
EF.J	1/4	43	3/8	48
EF.S	1/4	50	1/2	88

EF.6P6 Magnetic ring bit holder



NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm.
- Fast bit change.
- Holds the screw on the bit with a magnet.
- Length: 77 mm.

Weight: 41 g.

EF.6P5 Locking ring bit holder



NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm.
- Fast bit change.
- Length: 51 mm.

Weight: 31 g.

EF.6P1 Short snap ring bit holder



NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm.
- Length: 57 mm.

Weight: 30 g.

EF.6P3 - EF.6P4 Magnetic snap ring bit holder



NF ISO 1173, ISO 1173

EF.6P3
- Berilium.
- Length: 74 mm.

Weight: 39 g.

EF.6P4
- Drive 1/4" - 6.35 mm.
- Length: 75 mm.

Weight: 36 g.

EF.6R Socket holder - 1/4" square drive



NF ISO 1173, ISO 1173

- Drive 1/4" - 6.35 mm.
- Locking by plunger.
- Length: 50 mm.

Weight: 16 g.

EF.6RL Long socket holder - 1/4" square drive



NF ISO 1173, ISO 1173
- Drive 1/4" - 6.35 mm.
- Locking by plunger.
- Length: 100 mm.

Weight: 38 g.

EF.6J Socket holder - 3/8" square drive



NF ISO 1173, ISO 1173
- 3/8" drive.
- Locking by plunger.
- Length: 50 mm.

Weight: 25 g.

EF.6JL Long socket holder - 3/8" square drive



NF ISO 1173, ISO 1173
- 3/8" drive.
- Locking by plunger.
- Length: 100 mm.

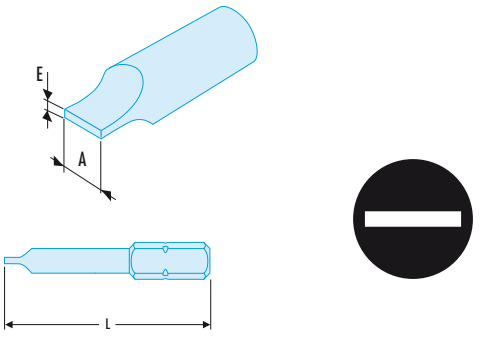
Weight: 80 g.

Series 2 impact bits

Series 2 impact bits - 5/16" - 7.94 mm drive

ENS.2 - Impact bits series 2 for slotted head screws



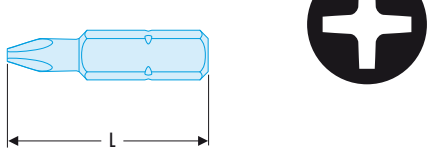


NF ISO 1173, ISO 1173
- Use with impact screwdrivers.
- Drive 5/16" - 7.94 mm.
- Finish: burnt.

	A [mm]	E [mm]	L [mm]	⚖ [g]
ENS.205,5	5,5	0,8	41	10
ENS.206,5	6,5	1,2	41	12
ENS.208	8,0	1,2	41	14
ENS.210	10,0	1,6	41	19
ENS.212	12,0	2,0	41	22
ENS.214	14,0	2,5	41	28

ENP.2 - Impact bits series 2 for Phillips® screws



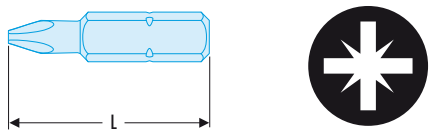


NF ISO 1173, ISO 1173
- Use with impact screwdrivers.
- Drive 5/16" - 7.94 mm.
- Finish: burnt.

	Phillips [No]	L [mm]	⚖ [g]
ENP.201	PH1	32	14
ENP.202	PH2	32	14
ENP.203	PH3	32	14
ENP.204	PH4	32	14

END.2 - Impact bits series 2 for Pozidriv® screws



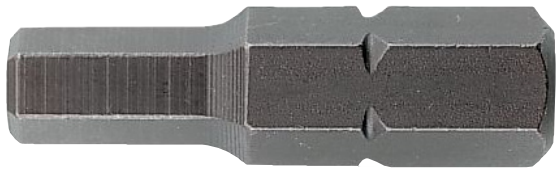


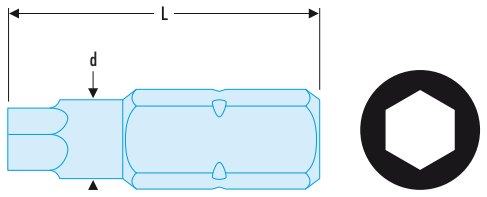
NF ISO 1173, ISO 1173

- Use with impact screwdrivers.
- Drive 5/16" - 7.94 mm.
- Finish: burnt.

	Pozidriv [No]	L [mm]	⚖ [g]
END.201	PZ1	32	10
END.202	PZ2	32	10
END.203	PZ3	32	11
END.204	PZ4	32	12

ENH.2 - Impact bits series 2 for hex countersunk screws





NF ISO 1173, ISO 1173

- Use with impact screwdrivers.
- Drive 5/16" - 7.94 mm.
- Finish: burnt.

	⬢ [mm]	L [mm]	⚖ [g]
ENH.204	4	30	9
ENH.205	5	30	10
ENH.206	6	30	11
ENH.208	8	30	13
ENH.210	10	30	17

ENX.2 - Impact bits series 2 for Torx® screws



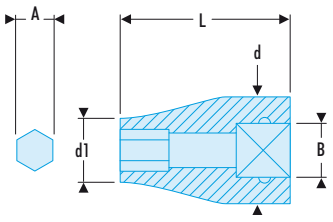
NF ISO 1173, ISO 1173

- Compliant with Torx® specifications.
- Use with impact screwdrivers.
- Finish: burnt.

	A [mm]	Torx [No]	L [mm]	⚖ [g]
ENX.220	3,84	T20	35	13
ENX.225	4,40	T25	35	13
ENX.227	4,96	T27	35	13
ENX.230	5,49	T30	35	15
ENX.240	6,60	T40	35	15
ENX.245	7,77	T45	35	15
ENX.250	8,79	T50	35	18
ENX.255	11,77	T55	35	31

NJ-NS.236A - Bit holder impact sockets





NF ISO 1711-2, ISO 1711-2, DIN 3121,

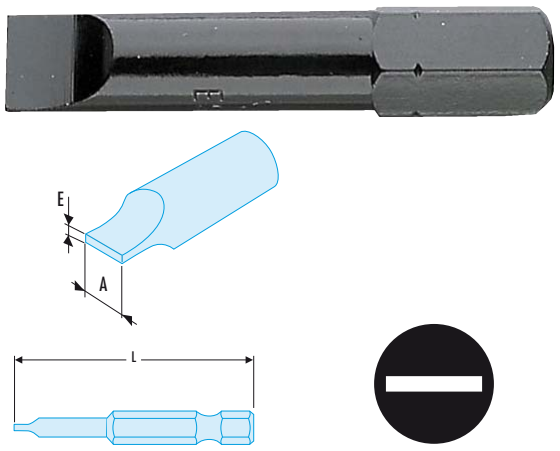
- For your safety, use the locking rings and pins.
- Finish: burnt.

	A ["]	d [mm]	d1 [mm]	L [mm]	Square ["]	BA	GA	⚖ [g]
NJ.236A	5/16	19	14,0	37	3/8	BA.16A	GA.15A	35
NS.236A	5/16	25	15,5	40	1/2	BA.20A	GA.20A	65

Series 3 impact bits

Series 3 impact bits - 1/2" - 12.7 mm drive

ENS.3 - Impact bits series 3 for slotted head screws

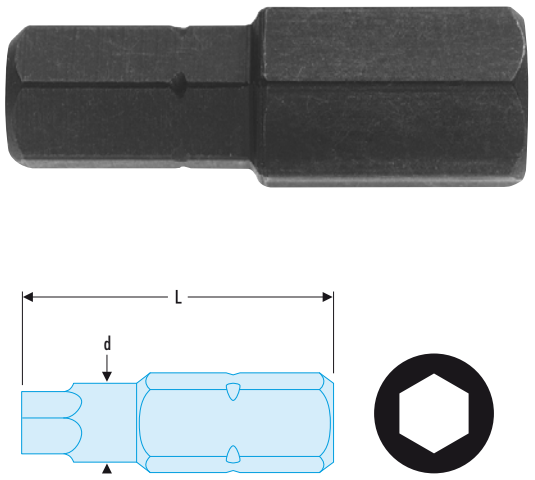


NF ISO 1173, ISO 1173

- Use with impact wrenches.
- Finish: burnt.
- Drive 1/2" - 12.7 mm.

	E [mm]	L [mm]	⚖ [g]
ENS.312	2,0	50	40
ENS.314	2,5	50	46
ENS.316	2,5	50	59

ENH.3 - Impact bits series 3 for metric hex countersunk screws

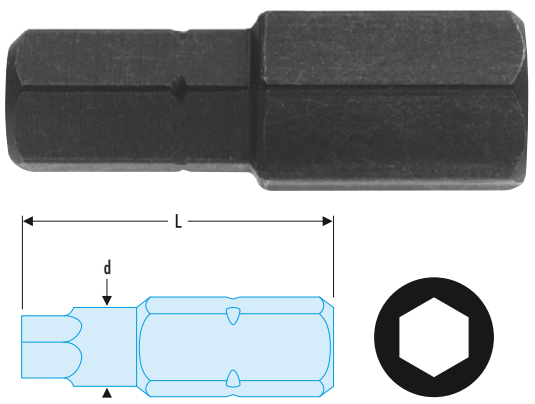


NF ISO 1173, ISO 1173

- Use with impact wrenches.
- Drive 1/2" - 12.7 mm.
- Finish: burnt.

	A [mm]	L [mm]	⚖ [g]
ENH.303	3	50	20
ENH.304	4	50	22
ENH.305	5	50	22
ENH.306	6	50	24
ENH.307	7	50	24
ENH.308	8	50	24
ENH.310	10	50	30
ENH.311	11	50	40
ENH.312	12	50	45
ENH.314	14	50	55
ENH.317	17	50	73
ENH.319	19	50	86

ENH.3 - Impact bits series 3 for inch hex countersunk screws

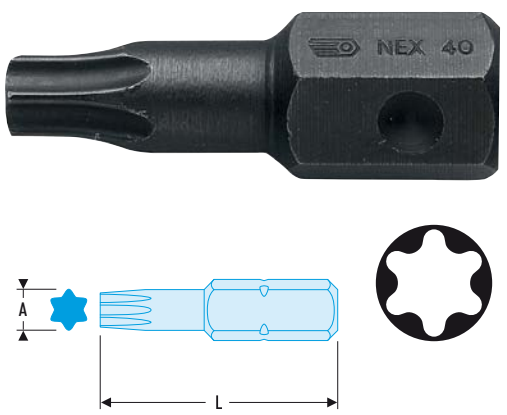


NF ISO 1173, ISO 1173

- Use with impact wrenches.
- Drive 1/2" - 12.7 mm.
- Finish: burnt.

	A ["]	L [mm]	⚖ [g]
ENH.301/2	1/2	50	48
ENH.309/16	9/16	50	57
ENH.305/8	5/8	50	65
ENH.303/4	3/4	50	86
ENH.307/16	7/16	50	40

NEX - Impact bits series 3 for Torx® screws



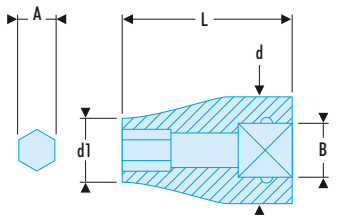
NF ISO 1173, ISO 1173

- Compliant with Torx® specifications.
- Use with impact wrenches.
- Drive 1/2" - 12.7 mm

	A [mm]	Torx [No]	L [mm]	⚖ [g]
NEX.25A	4,40	T25	50	18
NEX.27A	4,96	T27	50	18
NEX.30A	5,49	T30	50	20
NEX.40A	6,60	T40	50	25
NEX.45A	7,77	T45	50	25
NEX.50A	8,79	T50	50	30
NEX.55A	11,17	T55	50	38
NEX.60A	13,20	60	50	45
NEX.70A	15,49	T70	50	55

NJ-NS.237A - Bit holder impact sockets





NF ISO 1711-2, ISO 1711-2, DIN 3121,

- Use with impact wrenches.
- For your safety, use the locking rings and pins.
- Finish: burnt.

	A ["]	d [mm]	d1 [mm]	L [mm]	Square ["]	BA	GA	⚖ [g]
NJ.237A	1/2	19	19	37	3/8	BA.16A	GA.15A	40
NS.237A	1/2	25	20	40	1/2	BA.20A	GA.20A	40

Impact bits sets

JHX.14 Case with 14 impact 3/8" bits



- Including:

- 2 bit holder sockets 3/8" drive, 1/2" and 5/16" hex (NJ.236A - NJ.237A).
- 6 hex impact bits: 6 - 7 - 8 - 10 - 12 - 14 mm (ref. ENH.306 - ENH.307 - ENH.308 - ENH.310 - ENH.312 - ENH.314).
- 5 Torx® impact bits: T30 - T40 - T45 - T50 - T55 (Ref. NEX.30A - NEX.40A - NEX.45A - NEX.50A - NEX.55A).
- 3 Phillips impact bits: PH2 - PH3 - PH4 (Ref. ENP.202 - ENP.203 - ENP.204).
- Plastic case BP.102, dim. (L. x W. x H.): 204 x 122 x 52 mm.
- Heat-formed tray PL402A.

Weight: 780 g.

NHX.14A Case with 14 impact 1/2" bits



- Including:

- 2 bit holder sockets 1/2", 1/2" and 5/16" hex drive.
- 6 hex: 6 - 7 - 8 - 10 - 12 - 14 mm.
- Torx® no. 30 - 40 - 45 - 50 - 55.
- Phillips® no. 2 - 3 - 4.
- Plastic case BP.102, dim. (L. x W. x H.): 204 x 122 x 52 mm.
- Heat-formed tray PL402A.

Weight: 800 g.

3/8" drive series

IMPACT SCREWDRIVERS

For loosening seized, rusted or stuck fasteners quickly and in complete safety

- Choose the correct bit for the screw head pattern and hit the driver with a mallet.
- Hitting the handle of the driver compresses a spring that fires the bit into rotation to loosen the screw. As there is no hard, repeated impact as is the case with impact wrenches, there is less risk of damage to the screw pattern.
- Also suitable for tightening.

SAFETY FIRST

- **Do not use anything other than a dead-blow hammer to avoid damaging the driver (see section 10).**
- **Wear eye protection (See section 15).**





NJ.260 Impact screwdriver 3/8" drive



- 3/8" drive = 9.53 mm.
- Torque: 200 N.m.
- Diameter: 32 mm.
- Length: 160 mm.
- Finish: chromed.

Weight: 795 g.

NJ.261M Set of 12 impact screwdrivers



- Including:

- END no. 2 - 3: Pozidrv® bits.
- ENP no. 2 - 3: Phillips® bits.
- ENS: 6.5 - 8 - 10 mm: Slotted head screw bits.
- ENH: 5 - 6 - 8 mm: Hex bits.
- NJ.236A.
- NJ.260.
- Plastic case BP.115.
- Heat-formed tray PL.72A.

Weight: 1.72 kg.

NJ.262 Set of 16 impact screwdrivers



- Including:

- END no. 2 - 3 - 4: Pozidrv® bits.
- ENP no. 2 - 3 - 4: Phillips® bits.
- ENS: 6.5 - 8 - 10 mm: Slotted head screw bits.
- ENX no. 20 -25 -27 -30 -40: Torx® impact bits.
- NJ.236A.
- NJ.260.
- Plastic case BP.115.
- Heat-formed tray PL.73A.

Weight: 1.78 kg.

1/2" drive series

NS.260A Impact screwdriver 1/2" drive



- 3/8" drive = 9.53 mm.
- Torque: 200 N.m.
- Diameter: 32 mm.
- Length: 160 mm.
- Finish: chromed.

Weight: 795 g.

NS.263M Set of 13 impact screwdrivers



- Including:

- END no. 2 - 3 - 4: Pozidrv® bits.
- ENS: 8 - 10 - 12 - 14 mm: Slotted head screw bits.
- ENH: 5 - 6 - 8 - 10 mm: Hex bits.
- NS.236A.
- NS.260A.
- Plastic case BP.115.
- Thermoformed module PL.49A.

Weight: 1.78 kg.

MOD.NS260 Impact screwdriver module



- Including:

- NS.260A: Impact screwdriver 1/2" drive.
- NS.236A: Bit holder socket with 1/2" to 5/16" drive bit.
- 15 impact bits: ENH.5 - ENH.6 - ENH.8 - ENH.10 - END.2-2 - END.2-3 - ENP.2-2 - ENP.2-3 - ENP.2-4 - ENX.2-20 - ENX.2-25 - ENX.2-30 - ENX.2-40 - ENX.2-45 - ENX.2-55.
- Heat-formed tray PL380.

Weight: 1.25 kg.

NS.265M Set of 21 impact screwdrivers



- 1/2" drive = 12.7 mm.
- Torque: 400 N.m.
- Including:

- END no. 2 - 3 - 4: Pozidrv® bits.
- ENP no. 2 - 3 - 4: Phillips® bits.
- ENS no. 8 - 10 - 12 - 14 mm: Slotted head screw bits.
- ENH no. 5 - 6 - 8 - 10 mm: Hex bits.
- ENX no. 20 - 30 - 40 - 45 - 50: Torx® impact bits.
- NS.236A: Bit holder impact socket.
- NS.260A: Impact screwdrivers.
- Plastic case BP.115.
- Heat-formed tray PL50A.

Weight: 1.92 kg.



ENGINEERS MULTIGRIP PLIERS



Locking multigrip pliers 468
Automatic multigrip pliers 471
Standard multigrip pliers 472
Notch-joint multigrip pliers 472

ELECTRICAL ENGINEERS PLIERS



Cutters 473
Flat nose pliers 474
Half-round nose pliers 474
Wire stripper 474

CPE SERIES PLIERS



Diagonal cutters 476
End cutters 476
Half-round nose pliers 477
Combination pliers 479
Flat nose pliers 479
Round nose pliers 479
Standard wire strippers 479

TE SERIES PLIERS



Diagonal cutters 481
Half-round nose pliers 482
Combination pliers 482
Flat nose pliers 483
Standard wire strippers 483

G SERIES PLIERS



Diagonal cutters 484
End cutters 485
Half-round nose pliers 485
Combination pliers 486
Flat nose pliers 486

VE SERIES 1000 VOLT PLIERS



Diagonal cutters 487
End cutters 488
Half-round nose pliers 489
Combination pliers 489
Flat nose pliers 490
Round nose pliers 490
Standard wire strippers 490



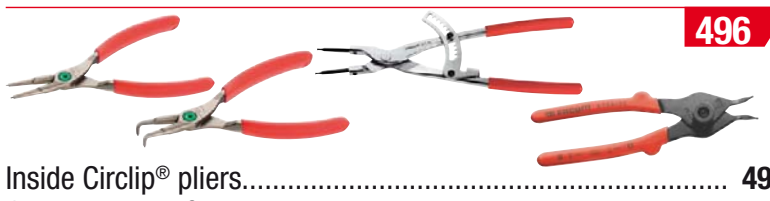
FLUORESCENT SHEATH PLIERS



491

Fluorescent sheath pliers 491

CIRCLIP®



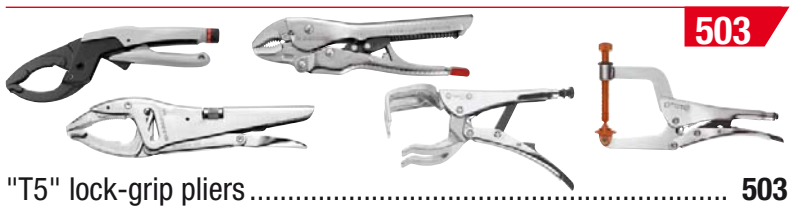
496
Inside Circlip® pliers 496
Outside circlips® pliers 497
High-performance pliers 499
Reversible pliers 500
Removable tip pliers 500
Snap-ring pliers 501

LOCKING-WIRE PLIERS



502
Special pliers 502

LOCK-GRIP PLIERS



503
"T5" lock-grip pliers 503
Large-capacity lock-grip pliers 505
Compact lock-grip pliers 508
Single-setting lock-grip pliers 509
"Metalworking" lock-grip pliers 510
Bar clamp lock-grip pliers 511

END NIPPERS



512
Heavy-duty end nippers 512
End nippers 512

SPECIAL PLIERS



513
Plastics cutters 513
Motorists pliers 514
Extra-long reach half-round nose pliers 514
Low-effort cutters 515
"Connector" pliers 515

PLIER SETS AND MODULES



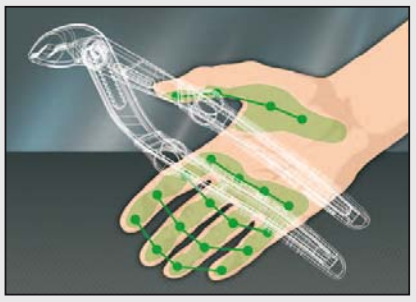
516
Plier sets and modules 516

Locking multigrip pliers

MULTIGRIP PLIERS

POWER AND PRECISION

POWERFUL
- The closed position of the egonomic comfort grip handles increases the tightening power.



STURDY
- Accurate and strong thanks to its rack and offset pin.



SLIM-LINE NOSE
- With self-gripping teeth.





2 FINISHES AVAILABLE



- **CPE version:**- Chrome-finished.- Bi-material ergonomic grips.



- **G version:**- Varnished.- Ergonomic grips.

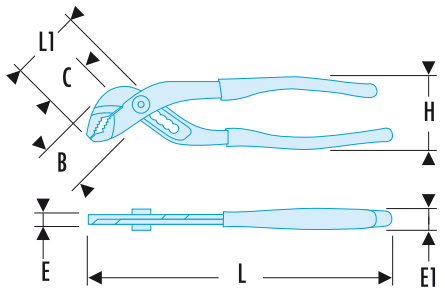




181EF version: long nose

181A - Locking twin slip-joint multigrip pliers





NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

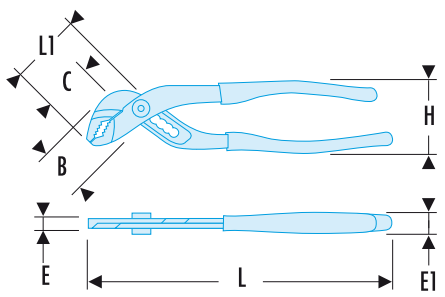
- Fast, precise push-button adjustment with safety lock.
- 12-position notches.
- The closed position of the ergonomic comfort grip handles increases the tightening power.
- High torsional strength.
- Slim-profile self-gripping nose.
- 62 HRc high-frequency treated jaws.
- Finish:

- Chromed, bi-material ergonomic grips: 181A.CPE.
- Varnish finish, PVC grips: 181A.G.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	Capacity Nuts [mm]	Capacity Maxi Tube [mm]	⚖ [g]
181A.18CPE	22	24	7,5	20,0	185	48	36	36	230
181A.25CPE	28	28	7,5	22,5	245	54	41	42	360
181A.18G	22	24	7,5	20,0	185	48	36	36	225
181A.25G	28	28	7,5	19,0	245	54	41	42	350
181A.30G	35	33	9,0	22,5	300	73	46	49	680

181EF- Locking twin slip-joint multigrip pliers





NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Long slim nose for improved reach in confined spaces.
- Fast, precise push-button adjustment with safety lock.
- 12-position notches.
- The closed position of the ergonomic comfort grip handles increases the tightening power.
- High torsional strength.
- Slim-profile self-gripping nose.
- 62 HRc high-frequency treated jaws.
- Packaging:

- Chromed, bi-material ergonomic grips: 181EF.CPE .
- Varnish finish, PVC grips: 181EF.G .

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	Capacity Nuts [mm]	Capacity Maxi Tube [mm]	⚖ [g]
181EF.25CPE	25	37,5	7,5	22,5	256	63	41	42	350
181EF.25G	25	37,5	7,5	19,0	256	63	41	42	340

180 | SLIP-JOINT MULTIGRIP PLIERS - RIVETED PIVOT PIN

IDEAL FOR CONFINED SPACES!

❶ Long slim nose for improved reach in confined spaces.
❷ 7 positions.
❸ Capacity (parallel jaws): 44 mm.



SAFE
- Finger clearance.
- Insulated VE model for working on or near live components up to 1,000V AC.
- To European standard EN60900.





180 - High-performance multigrip pliers



NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500
- Capacity: 44 mm.
- Ideal for confined spaces: long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- 3 options:
- 180.CPE: Chrome finish, ergonomic grips.
- 180: Chrome finish.
- 180.VE: Varnish finish, 1,000V insulated grips designed for electrical safety to EN 60 900 and qualified for working on or near live components.

	A [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	[g]
180	30	30	35	8	14	250	58	320
180.CPE	30	30	35	8	22	250	58	360
180.VE	30	30	35	8	22	250	58	360

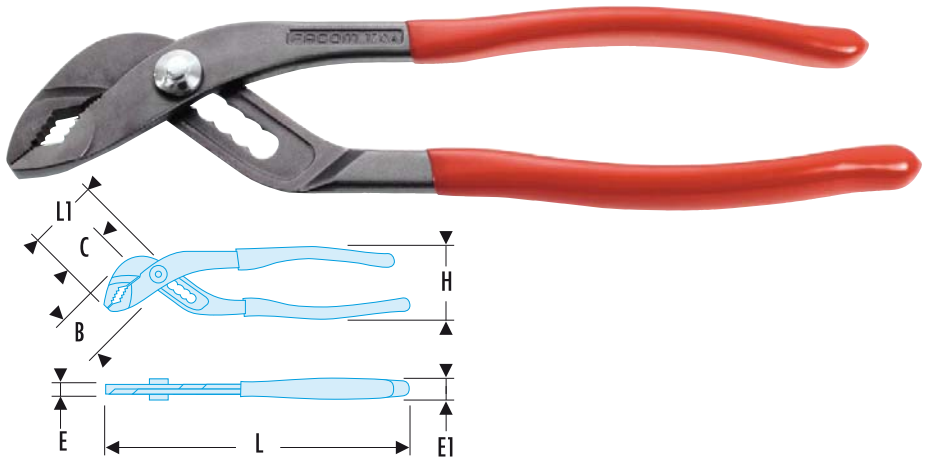
SLIP-JOINT MULTIGRIP PLIERS

SELF-TIGHTENING PLIERS

- Teeth self-gripping on pipes.
- Tightens and loosens nuts without damage.
- Capacity: 46 mm.
- Safe: finger protection.
- Riveted pivot.



Standard multigrip pliers

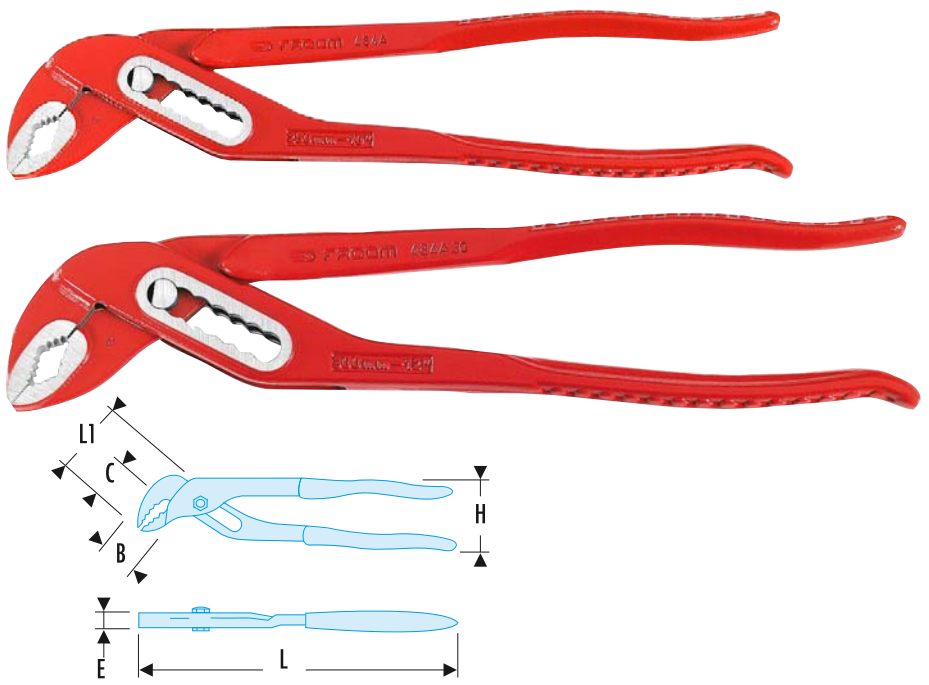


NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Wide jaws for comfortable use.
- Self-gripping teeth.
- Capacity: 46 mm.
- Finger clearance.
- PVC grips.

	B [mm]	C [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	L1 [mm]	⧍ [g]
170A	32,5	35	8	17	55	240	56	310

484 - Twin slip-joint multigrip pliers



NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Inter-slotted jaws distribute load either side of central pin.
- 2 heavy-gauge slots for optimum safety and durability.
- 7 positions.
- Capacity:
- 484A: 34 mm.
- 484A0.30: 43 mm.
- Finish: satin surface.

	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	⧍ [g]
484A	33	33	38	7,0	50	240	60	345
484A.30	38	38	40	9,5	52	300	66	560

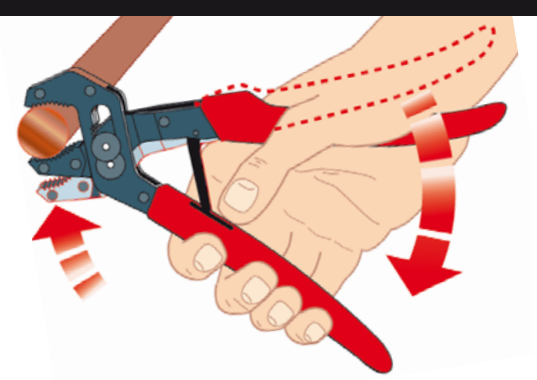
Automatic multigrip pliers

SELF-ADJUSTING MULTIGRIP PLIERS

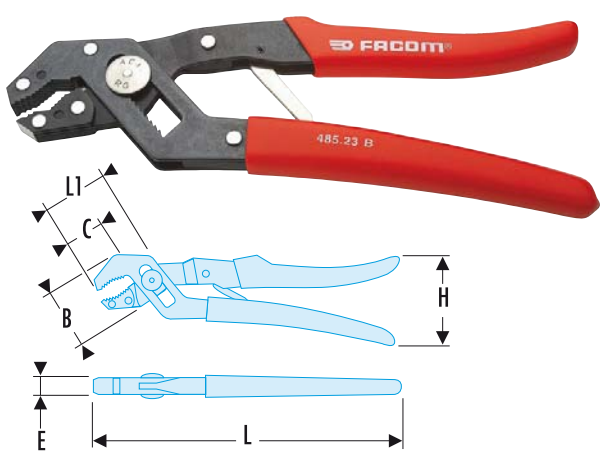
FAST ADJUSTMENT

- Instant automatic setting with one hand while clamping.





485 - Automatic multigrip pliers



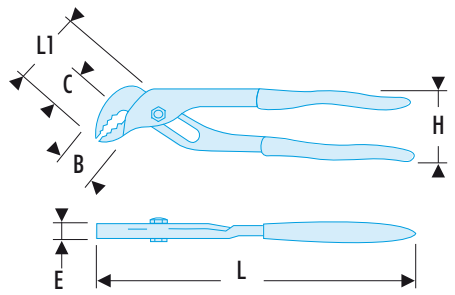
- Instant automatic setting with one hand while clamping.
- Capacity:
- 485.17: diameter 28 mm, 6-point 23 mm.
- 485.23: diameter 45 mm, 6-point 38 mm.
- Finish: burnished, PVC grip.

	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	⧍ [g]
485.17	28	28	23	7	42	170	42	150
485.23	40	40	30	10	70	230	57	380

Standard multigrip pliers

"Mammoth" multigrip pliers





NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

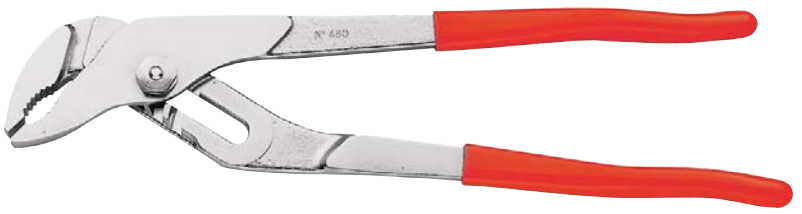
- Powerful, two-handed use ideal for heavy engineering and farm machinery.
- Forged and hardened to 48 HRc.
- Thick-gauge jaws withstand torsion.
- 7 positions.
- Capacity: 58 mm.
- Finish: chromed, polished tips.

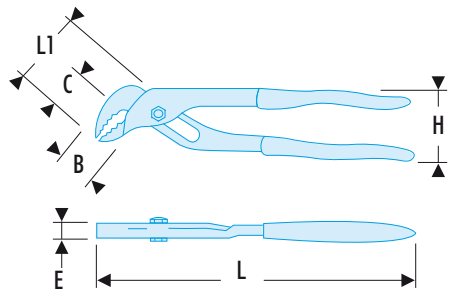
Spare pivot pin: 182.SE.

	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
182A.CP	55	50	10,5	62	362	85	810

Notch-joint multigrip pliers

Notch-joint multigrip pliers





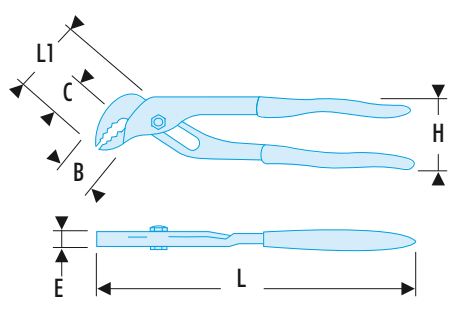
NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Undercut arcs:
- Positive engagement of notches provides high power.
- Pivot pin is not load bearing.
- Smooth adjustment.
- 5 positions.
- Capacity: 36 mm.
- Finish: chrome finish, red PVC grips.

	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
480.ECG	35	30	9,5	60	250	55	320

482 - Notch-joint multigrip pliers



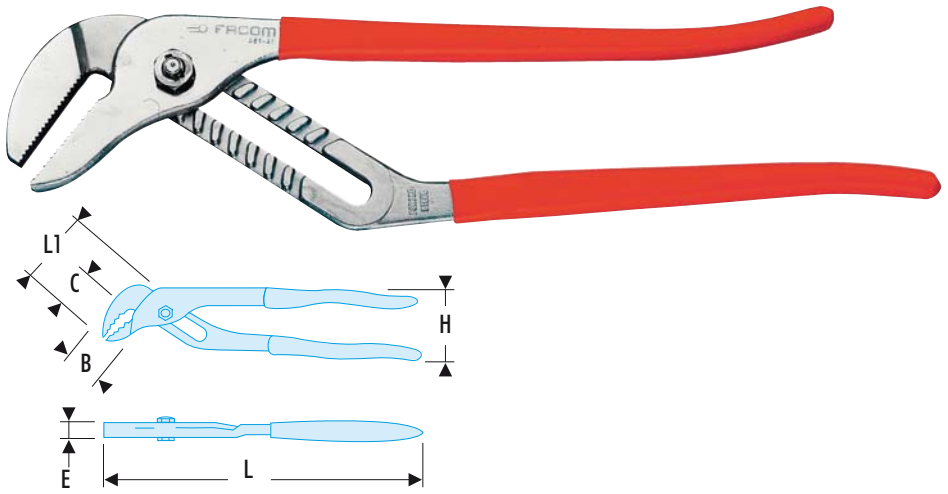


NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Self-gripping teeth.
- Undercut arcs:
- Positive engagement of notches provides high power.
- Pivot pin is not load bearing.
- 5 positions.
- Capacity: 36 mm.
- Packaging:
- CPE model: chrome finish, ergonomic grips.
- EG model: burnished finish, red PVC grips.

	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
482.CPE	35	35	30	9,5	60	255	55	365
482.EG	35	35	30	9,5	60	255	55	320

"Extra-wide capacity" straight-jaw pliers



NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Straight serrated jaw.
- Notch joint.
- 11 positions.
- Capacity: 105 mm.
- Finish: chrome finish, PVC grip.

	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	L1 [mm]	[kg]
481.40	56	50	14	102	412	90	1,10

Cutting pliers

PRECISION CUTTERS

3 TYPES OF CUT:

AXIAL
Hard cutting edges for all materials.



SEMI-FLUSH
Clean cut in semi-hard materials.

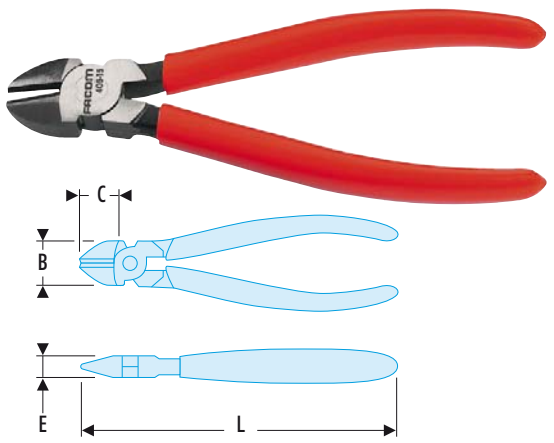


FLUSH
Smooth burr-free finish.



Micro-Tech® electronic pliers. See Electronic Section p.814.

"Compact" diagonal cutters

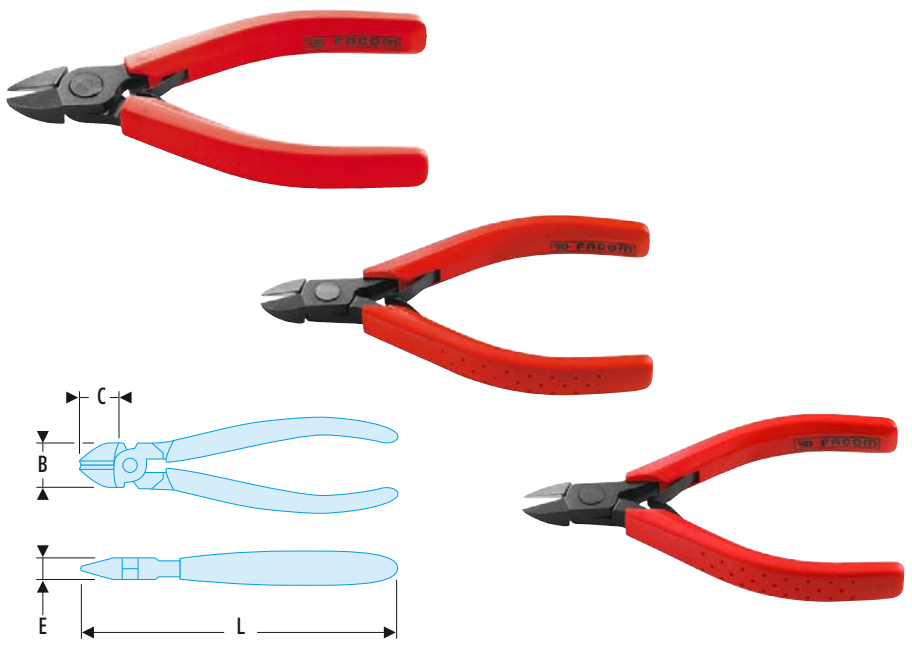


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Capacity:
- Hard wire 160 kg/mm²: diameter 1.6 mm.
- Semi-hard wire 100 kg/mm²: diameter 1.8 mm.
- Finish: varnished finish, red PVC grips.

	B [mm]	C [mm]	E [mm]	L [mm]	[g]
405.15	20	17	11	160	195

Diagonal cutters



NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- 405: Axial cut.
- 416 - 435: Semi-flush cut, slim nose.
- 425: Flush cut, nose extended 13 mm.
- Finish: Matt burnished finish, red grips - return spring.

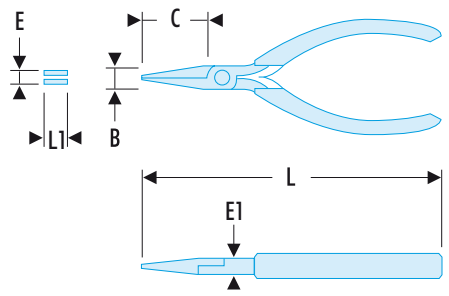
	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	[g]
405.12	16,0	16,0	16,0	120	8	95
405.10	11,5	10,5	10,5	110	7	60
435	13,0	10,5	10,5	110	7	60
416	11,5	10,5	10,5	110	7	60
425	13,0	10,5	10,5	110	7	60

Flat-nose pliers

401-421 - Flat nose pliers







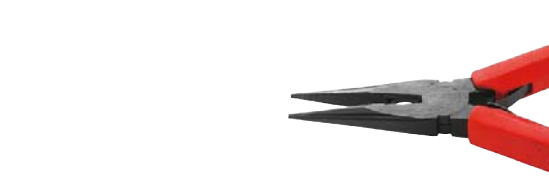
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Smooth jaws with contoured inside edges to protect components.
- Finish: Matt burnished finish, red grips.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
401	48	14	5	1	160	8	80
421	33	11	3	1	130	7	70

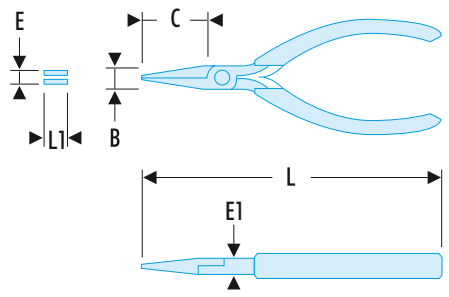
Half-round nose pliers

Half-round nose pliers









NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- 402: Short smooth jaws.
- 442: Short serrated jaws with side wire-cutter (2 mm dia. copper, 1 mm dia. steel 100 kg/mm²).
- 403: Smooth jaws, angled 40°.
- Finish: Matt burnished finish, red grips - return spring.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
402	48	14	14	1,5	160	8	76
442	42	14	14	3,8	150	8	88
403	45	14	14	1,2	155	8	75

Wire strippers

194.12 Fine wire strippers



- Max. AWG 14.
- For light-gauge wire.
- Narrow blades.
- Cutting depth presetting.
- Single and multi-core wire diameter: 1,5 mm.
- Cross-section: 1,8 mm².
- Length: 130 mm.
- Finish: burnished, PVC grip.

Weight: 70 g.

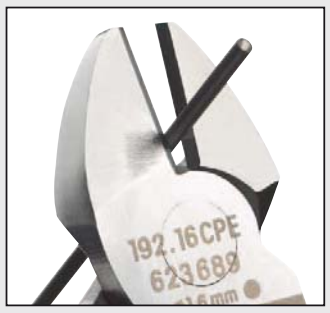
Diagonal cutters

FACOM CUTTING PLIERS
HIGH PERFORMANCE !

FACOM'S CUTTING PLIERS ARE DESIGNED TO MEET THE 3 MAIN REQUIREMENTS OF PROFESSIONAL USERS.

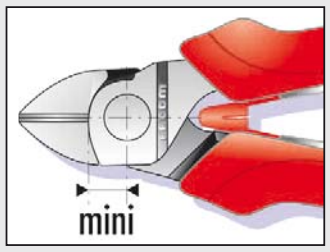
1- One tool for cutting all materials

- FACOM's universal cutters can cut cleanly through all types of materials:
- Copper wire, semi-hard wire, hard wire, piano wire, steel strip, nylon strip, binding wire,
- Bronze wire, Ertalon, etc.



2- A reduced cutting effort

- Facom cutting pliers reduce the cutting effort by 20% :
  – Optimised cutting-edge geometry.
  – Long lever arm.
  – Pivot pin offset as close as possible to the cutting edges.



For cutting: 4 mm screws

FACOM cutters require 10 kg less cutting effort on the part of the user.



For cutting:
Piano wire 200 kg/mm²

FACOM cutters require 14 kg less cutting effort on the part of the user.



3- Durable cutting power

- Very high resistance to wear when used to cut hard wire or subject to intensive use.
- FACOM cutters are made of high strength steel for maximum durability. The cutting edges are double heat treated.

❶ Very hard cutting edges: 61/63 HRc.
❷ CHROME-MOLYBDENUM-VANADIUM steel.



Cutting capacity

- (Max. diameter of wires in"mm" - Tensile strength in "Kg/mm²")

200 kg/mm² Piano wire		160 kg/mm² Hard wire		80 kg/mm² Semi-hard wire	
⇉	Ø max	⇉	Ø max	⇉	Ø max
192	: 2.0 mm	391	: 1.6 mm	405	: 1.0 mm
190	: 2.0 mm	193	: 1.6 mm	436	: 0.7 mm
187	: 2.0 mm	185	: 1.6 mm	416	: 0.5 mm
171	: 2.5 mm	195	: 1.6 mm		
191A	: 2.5 mm	183	: 1.6 mm		
405.12	: 0.8 mm	491	: 3.6 mm		

Copper

- (Electrical fitters cutters)

	Ø max		Ø max		Ø max
⇉		⇉		⇉	
391	: 3.5 mm	435	: 1.3 mm	405	: 1.0 mm
405	: 2.0 mm	416	: 1.0 mm	436	: 0.7 mm

Plastic

⇉	395	396

Four types of finish

❶ CPE series chromed
❷ TE series varnished
❸ VE-VSE series 1000 Volts insulated
❹ G series PVC grip

❶


❷

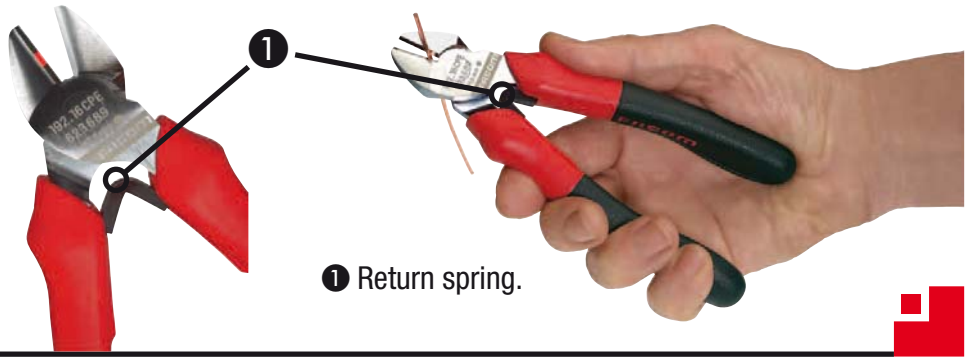

❸


❹


CPE SERIES CHROME-FINISHED PLIERS

STRENGTH

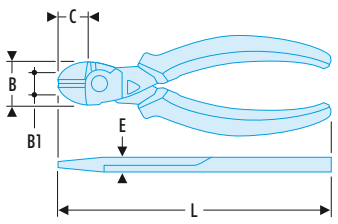
- High-performance materials chosen for their resistance to workshop chemicals (skydrol, chlorothene, acetone, petrol, etc…).



❶ Return spring.

192.CPE High-performance diagonal cutters







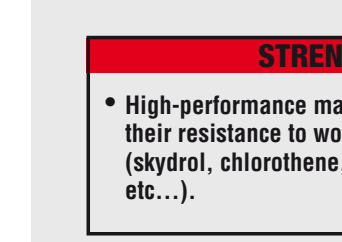
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, soft wires and modern materials 200 kg/mm²).
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	⚖ [g]
192.14CPE	21,5	15,5	1,4	9,5	145	160
192.16CPE	24,0	180	1,6	10,0	160	200
192.18CPE	26,0	20,0	1,8	11,0	180	260
192.20CPE	28,0	22,0	2,0	11,5	200	320

Electricians diagonal cutters







NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

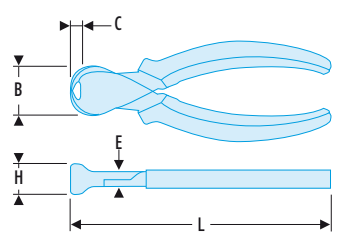
- Snipe nose for confined space (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire: hard wires (max. 160 kg/mm²), thin copper wires, modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
391.16CPE	19	21	9	165	9	190

End cutters

190.CPE - High-performance end cutters





NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, hard and soft wires (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	A [mm]	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	⚖ [g]
190.16CPE	6,5	28	6,5	1,6	11,5	160	200
190.20CPE	7,5	31	7,5	2,0	13,5	200	340

Half-round nose pliers

FACOM HALF-ROUND NOSE PLIERS
A COMPREHENSIVE RANGE TO SUIT EVERY NEED

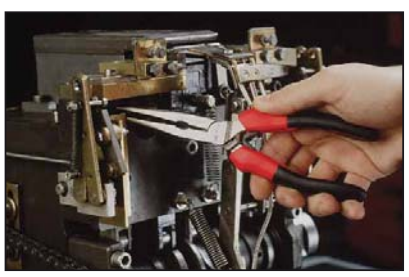
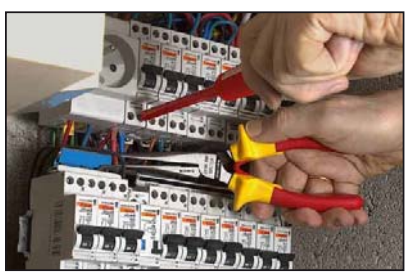
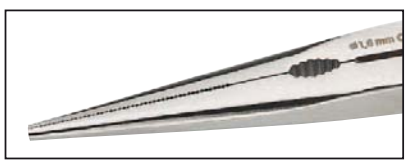
High-performance.
- Facom's half-round nose pliers are precision made, machined on numerically controlled robotic production machinery.
- For gripping and manipulating all types of components or wires, even in difficult-to-reach places.
- Perfectly finished, with no sharp edges, offers comfortable and safe contact to the user's second hand.

Straight and 40° angled short-nose pliers.
- Narrow, finely serrated tips (0.5mm pitch), with a side wire-cutter.

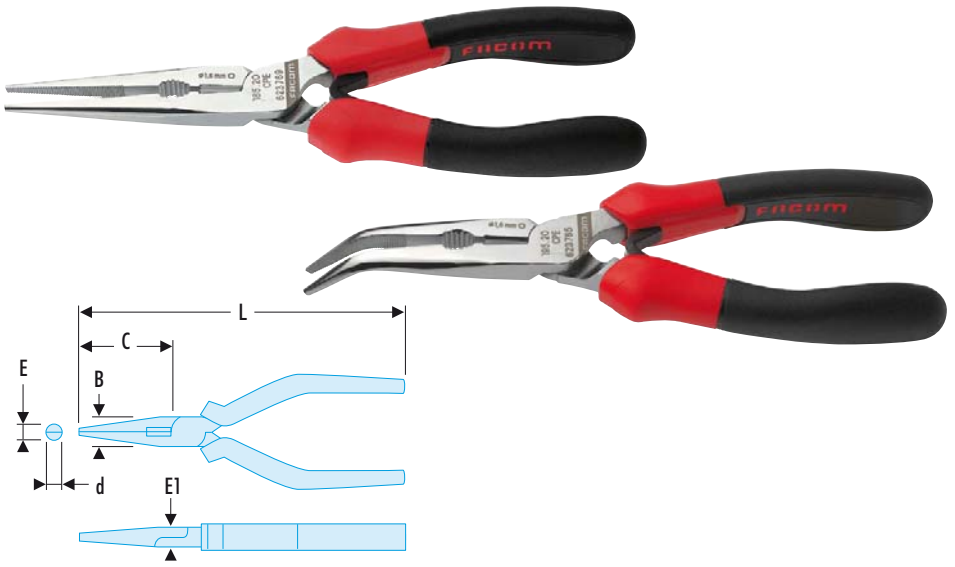
Straight and 40° angled long-nose pliers.
- Reinforced, serrated tips (0.8mm pitch), with a tube grip and side wire-cutter. For mechanics, industrial maintenance, automotive trades, etc. Finishes CPE and TE.
- Narrow, finely serrated tips (0.5mm pitch), with a side wire-cutter. For electricians, electrical fitters, delicate tasks. Finishes G and VE (1,000 V insulated – EN60900).

Guaranteed cutting accuracy and consistency.
- For cleanly cutting thin copper wire and modern materials, hard wires (max. 1.6mm diameter at 160 kg/mm²).



Industrial, automotive applications, etc...	Electrical, electromechanical applications, etc...
	
	
	
	

185-195.CPE - Long half-round nose pliers



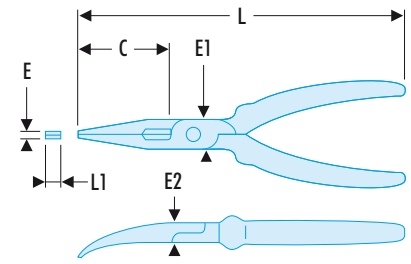
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- 185: straight nose.
- 195: 40° angled nose.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
185.20CPE	18	75	2,9	3,6	9	200	192
195.20CPE	18	69	2,9	3,6	9	200	192

Half-round long snipe-nose pliers







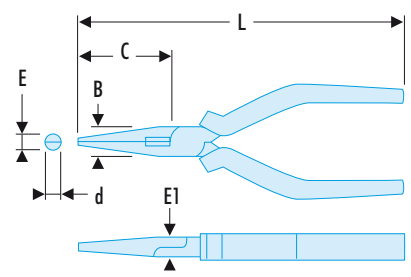
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	⚖ [g]
183.20CPE	69	3	18	9	200	2,5	185

Short half-round nose pliers





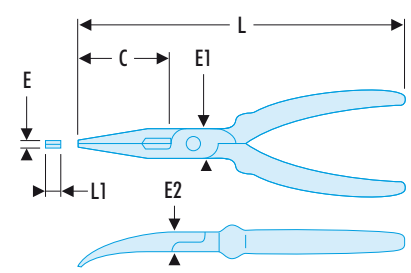
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
193.16CPE	17	50	2,5	3	9	160	177

Short half-round nose pliers





NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

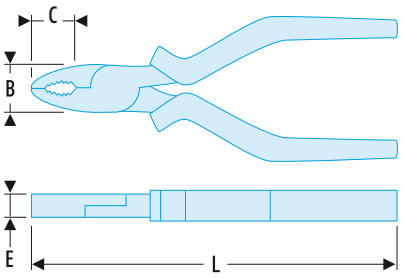
- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
195.16CPE	17	50	2,5	3	9	160	177

Combination pliers

187.CPE - Combination pliers







NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

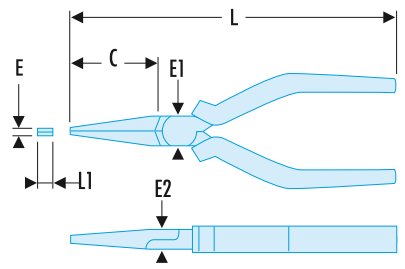
- Cutting edges designed to cut all types of wire: piano wire, soft wires and modern materials (Fe 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	E [mm]	L [mm]	[g]
187.16CPE	21	34	9,5	165	195
187.18CPE	23	36	10,0	185	225
187.20CPE	26	42	11,5	205	300

Flat-nose pliers

188 - Flat nose pliers





NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

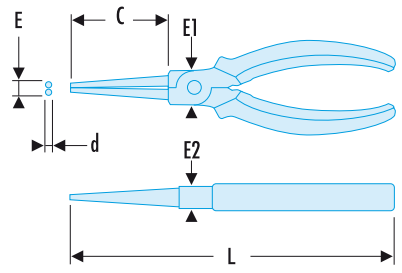
- Serrated nose for a firm grip.
- 188.E: snipe nose version for confined spaces.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	[g]
188.16CPE	46	4,0	18	9	168	6,5	140
188.20CPE	75	4,0	18	9	200	6,5	200
188E.16CPE	46	2,5	18	9	168	3,5	130

Round nose pliers

Round nose pliers





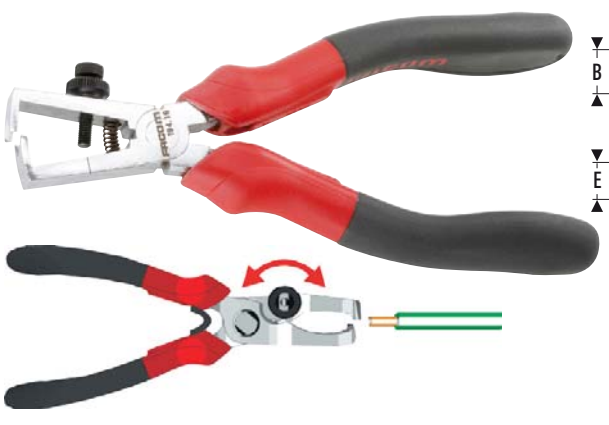
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

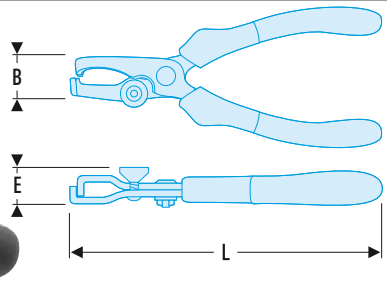
- For shaping loops, bends or rings.
- Finely serrated jaws for positive grip.
- Diameter of each nose at the end: 2 mm.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	d [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	[g]
189.17CPE	41	2	4	18	9	170	135

Standard wire strippers

Wire strippers





- For single and multi-core wires 0.5 to 6 mm².
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic grips resistant to chemical agents.
- Finish: chromed.

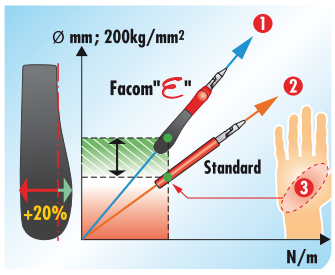
	B [mm]	d mini - maxi [mm]	E [mm]	L [mm]	[g]
194.17CPE	17	0,5 - 6,0	8,5	170	185

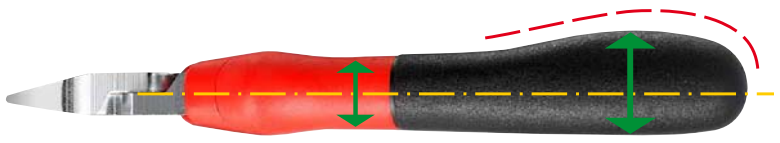
SERIES "E" PLIERS

ERGONOMIC

Non-slip spatula-shaped pressure area

- The ergonomic features of series "E" pliers represent the culmination of an intensive programme of testing and analysis of tools in service, with additional support from specialist ergonomics laboratories.
- Extended contact area and asymmetric profile fit naturally in the hand. Reduced risk of repetitive strain injury, inflammation and fatigue, especially in intensive use.







Guard

- Firm, comfortable grip for pushing or pulling pressure.



Return spring

Comfort and precision.

- The spring wedges the handles snugly between fingers and palm.

Three levels of finish



TE series varnished



CPE series chromed



VE series 1,000 V insulated

Highly resistant materials

- Materials used for the grips are chosen for their resistance to workshop chemicals (Skydrol, chlorothene, acetone, petrol, etc.).
- Spring tested to over one million cycles.

SAFE

- **Facom 1,000 V insulated safety pliers meet the requirements of EN 60900 European standard**

1000 VOLTS EN 60900





Diagonal cutters

TE SERIES | **VARNISHED, POLISHED PLIERS**

Ergonomic!

❶ Spatula-shaped pressure areas
- + 20% more slip-resistant.
- Maximum comfort. Reduced pressure on the hand.

❷ Return spring
Comfort and precision.
- The spring naturally wedges the handles snugly between fingers and palm.

❸ Guard
- Designed to provide a firm, comfortable grip for pushing or pulling pressure.

RESISTANT
- **High-performance materials chosen for their resistance to workshop chemicals (skydrol, chlorothene, acetone, petrol, etc...).**





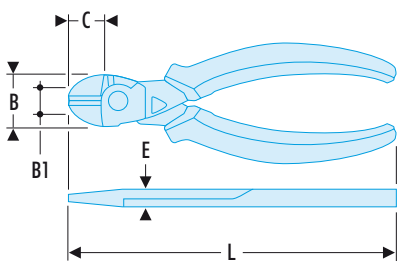






192.TE - High-performance diagonal cutters



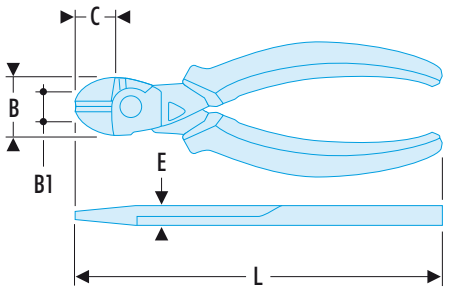


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500
- Cutting edges designed to cleanly cut all types of wire: piano wire, soft wires and modern materials 200 kg/mm²).
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	[g]
192.14TE	21,5	15,5	1,4	9,5	145	160
192.16TE	24,0	18,0	1,6	10,0	160	200
192.18TE	26,0	20,0	1,8	11,0	180	260
192.20TE	28,0	22,0	2,0	11,5	200	320

Electricians diagonal cutters





NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

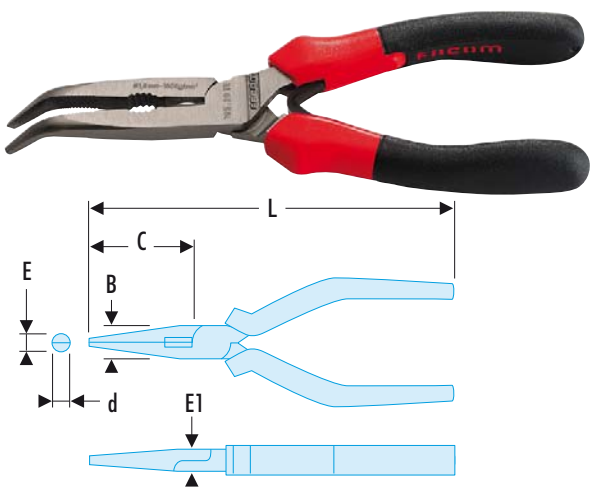
- Snipe nose for confined space (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire: hard wires (max. 160 kg/mm²), thin copper wires, modern materials.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
391.16TE	19	21	9	165	190

Half-round nose pliers

185-195.TE - Long half-round nose pliers





NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

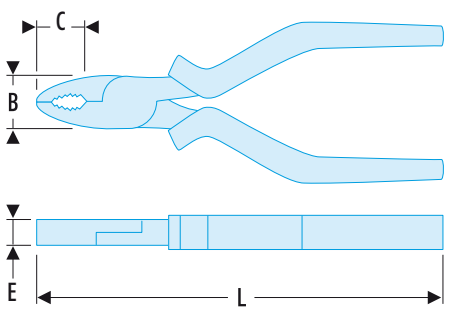
- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- 185.TE: straight nose.
- 195.TE: 40° angled nose.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

	B [mm]	C [mm]	d [mm]	E1 [mm]	L [mm]	⚖ [g]
185.20TE	18	75	2,9	9	200	192
195.20TE	18	69	2,9	9	200	192

Combination pliers

187.TE - Combination pliers





NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

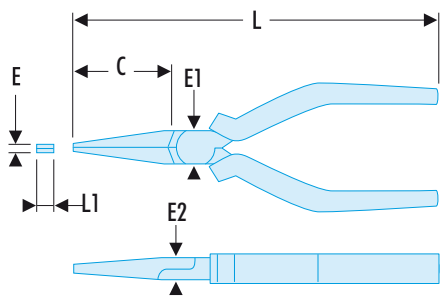
- Cutting edges designed to cut all types of wire: piano wire, soft wires and modern materials (Fe 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
187.18TE	23	36	10,0	185	225
187.20TE	26	42	11,5	205	300

Flat-nose pliers

Flat-nose pliers





NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

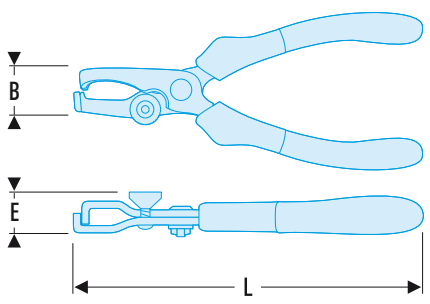
- Serrated jaws for a firm grip.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	[g]
188.16TE	46	4	18	9	168	6,5	140

Standard wire strippers

Wire strippers

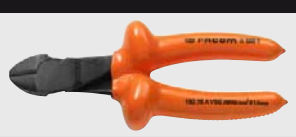




- For single and multi-core wires 0.5 to 6 mm².
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic grips resistant to chemical agents.
- Finish: polished, varnished.

	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	[g]
194.17TE	17	17	8,5	8,5	170	185

VSE INSULATED CRIMPING PLIERS, WIRE STRIPPERS, ETC.





Electricity section p. 758

Diagonal cutters

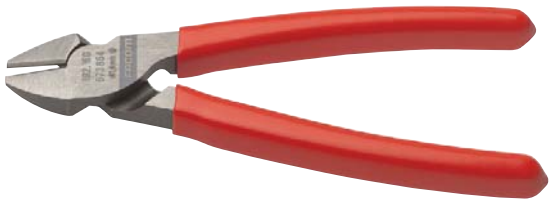
SERIES "G" | **VARNISHED, POLISHED PLIERS**

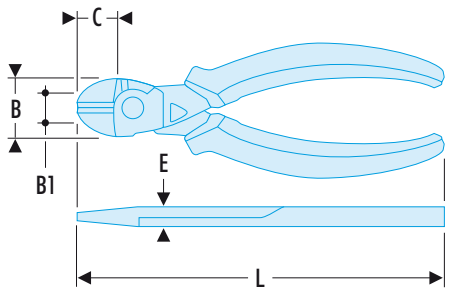
PVC GRIPS

- Identical characteristics and specifications to series CPE and TE.



192.G - High-performance diagonal cutters





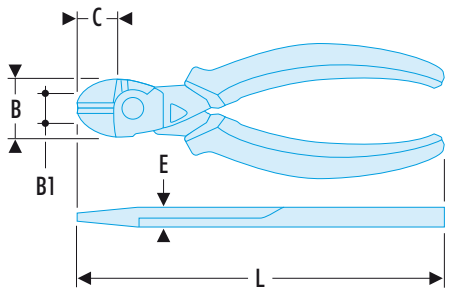
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, soft wires and modern materials (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	ΔΔ [g]
192.14G	21,5	15,5	1,4	9,5	145	130
192.16G	24,0	18,0	1,6	10,0	160	170
192.18G	26,0	20,0	1,8	11,0	180	230
192.20G	28,0	22,0	2,0	11,5	200	290

Electricians diagonal cutters





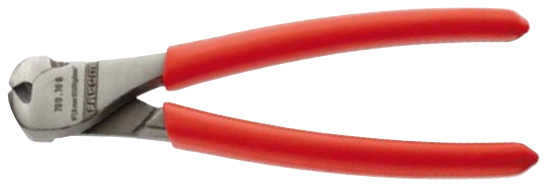
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

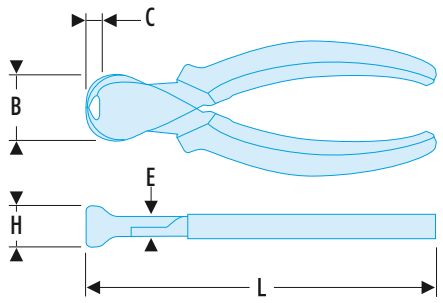
- Snipe nose for confined space (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire: hard wires (max. 160 kg/mm²), thin copper wires, modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	ΔΔ [g]
391.16G	19	21	9	165	160

End cutters

190.G - High-performance end cutters





NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, hard and soft wires (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	H [mm]	L [mm]	[g]
190.16G	28	6,5	1,6	11,5	23	160	170
190.20G	31	7,5	2,0	13,5	29	200	310

CUTTING PLIERS END "CUTTING" AND "NIPPER"

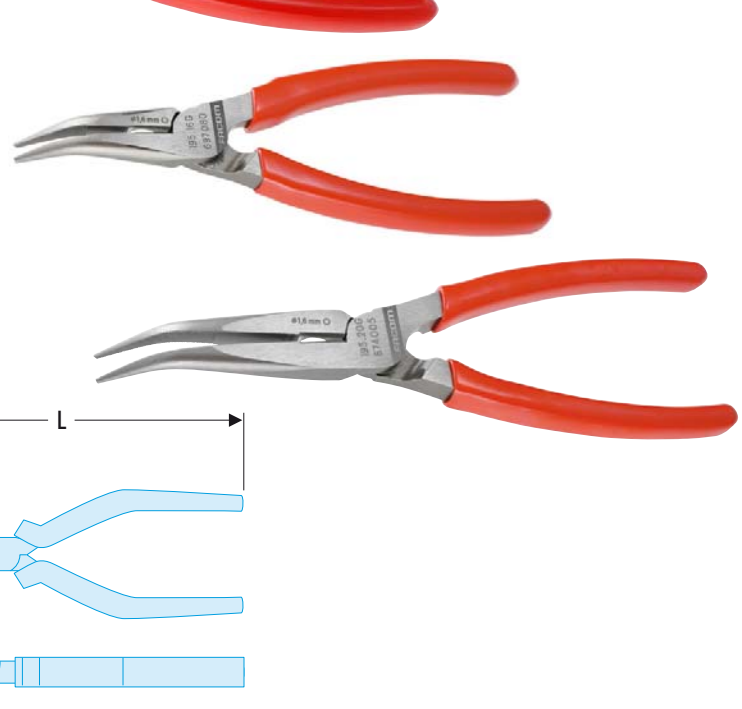


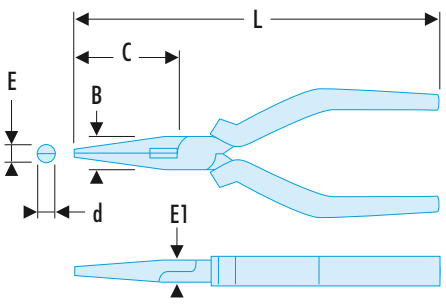
Find these products in p. 512

Half-round nose pliers

185-195.G - Long half-round nose pliers





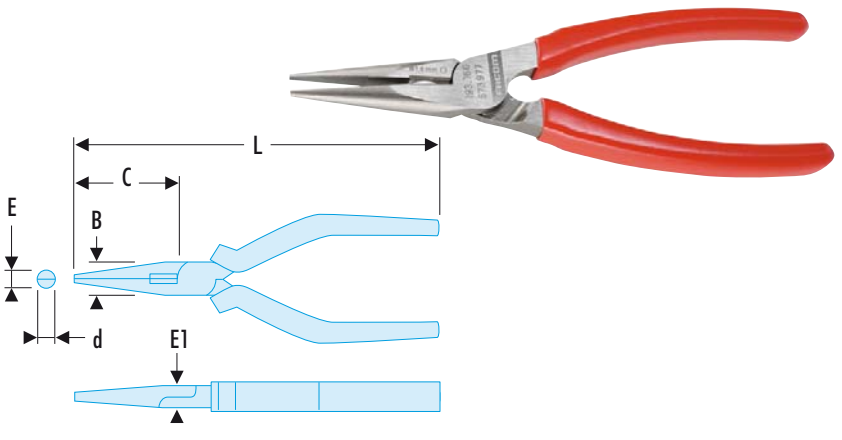


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- 185.G: straight nose.
- 195.G: 40° angled nose.
- PVC grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	[g]
185.20G	18	75	2,9	3,6	9	200	192
195.16G	17	50	2,5	3,0	9	160	177
195.20G	18	69	2,9	3,6	9	200	192

Short half-round nose pliers



NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

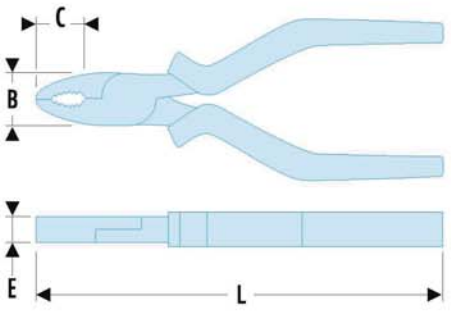
- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- PVC grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	[g]
193.16G	17	50	2,5	3	9	160	177

Combination pliers

187.G - Combination pliers





NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

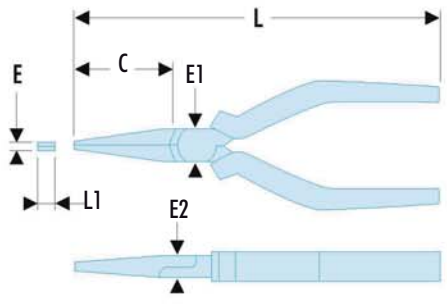
- Cutting edges designed to cut all types of wire: piano wire, soft wires and modern materials (Fe 200 kg/mm²)
- Long lever am, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
187.16G	21	34	21	9,5	165	195
187.18G	23	36	23	10,0	185	225
187.20G	26	42	26	11,5	205	300

Flat-nose pliers

188.G - Flat nose pliers





NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Serrated nose for a firm grip.
- PVC grips.
- Finish: polished, varnished.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	⚖ [g]
188.16G	46	4	18	9	168	6,5	140
188.20G	75	4	18	9	200	6,5	200

Diagonal cutters

VE SERIES | 1,000 V INSULATED PLIERS

1000 VOLTS EN 60900

20% MORE SLIP RESISTANT WITH SPATULA SHAPED PRESSURE AREAS

Guard

- Firm, comfortable grip for pushing or pulling pressure.

Return spring for added safety

- The elastomer spring closes off the metal parts of the tool and prevents the finger slipping towards the uninsulated area.

Insulation tests

(to European standard EN 60900)
❶ 10,000 V immersion test
❷ 5,000 V after penetration test
❸ Adhesion test after heating to 70°C
❹ Impact test after chilling to -25°C
❺ Flame propagation test

INFORMATION

- Compliance with European standard EN 60900
- For working on live components up to 1,000 volts AC.
- Each tool is individually electrically tested to 10,000 volts for 10 seconds.
- Our production site is accredited and certified to produce insulated tools.





Guard



Return spring for added safety

SAFETY

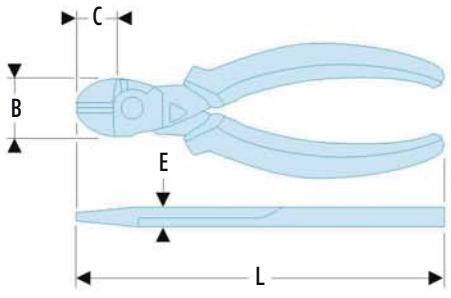
- Prevent damage to insulation from:
  – heat (-20 to +70° working temperature)
  – chemicals
  – cuts or perforations
- Visually check the insulation before use.
- Wear glasses and gloves.



❶ ❷ ❸ ❹ ❺

192.VE - 1,000 Volt insulated high-performance diagonal cutters





NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

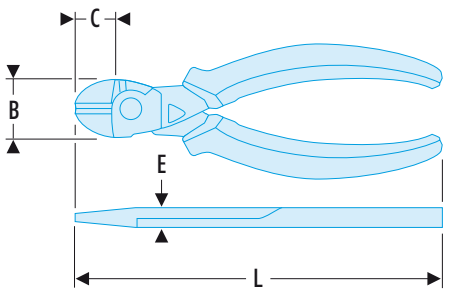
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, soft wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
192.14VE	21,5	15,5	9,5	145	160
192.16VE	24,0	18,0	10,0	160	200
192.18VE	26,0	20,0	11,0	180	260

1,000 Volt insulated electricians diagonal cutters







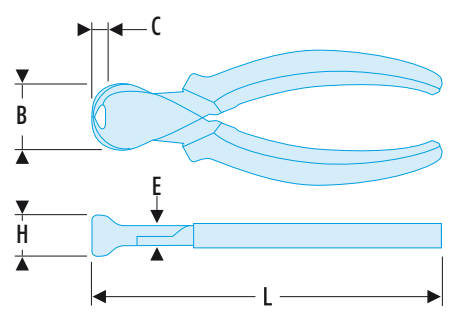
NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim head for confined access (electric cabinets, wiring works, etc.).
- Semi-flush cutting edges to cleanly cut through all types of wire: hard wire, thin copper wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
391.16VE	19	21	9	165	190

1,000 Volt insulated high-performance end cutters





NF ISO 5748, NF EN 60900, ISO 5748, EN 60900, DIN ISO 5748, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, hard and soft wires.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

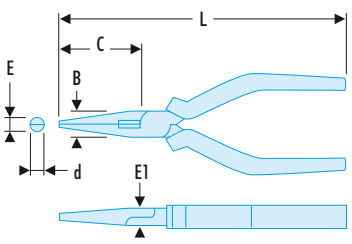
	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	⚖ [g]
190.16VE	28	6,5	11,5	23	160	200

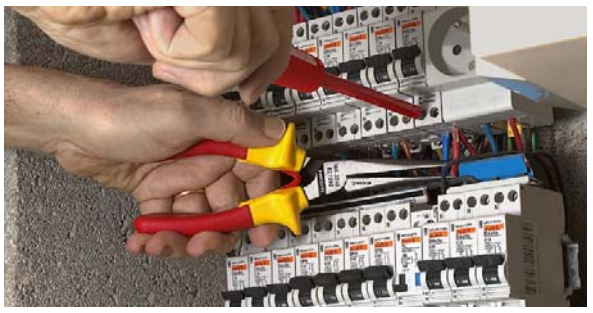
Half-round nose pliers

185-195.VE - 1,000 Volt insulated long half-round nose pliers









NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

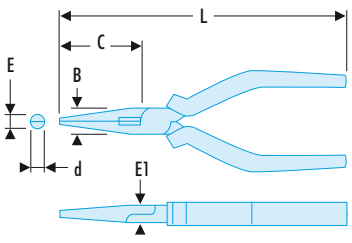
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim, fine serrated noses.
- Lateral wire cutter for copper and hard steel wire.
- 185.VE: straight nose. Checked by VDE.
- 195.VE: 40° angled nose.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	[g]
185.20VE	18	75	2,9	3,6	9	200	192
195.20VE	18	69	2,9	3,6	9	200	192

193-195.VE - 1,000 Volt insulated short half-round nose pliers









NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim, fine serrated noses.
- Lateral wire cutter for copper and hard steel wire.
- 193.VE: straight nose.
- 195.VE: 40° angled nose.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

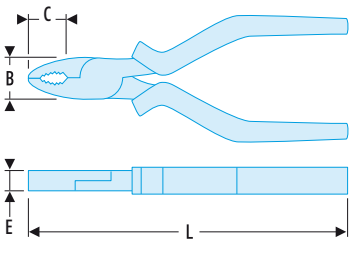
	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	[g]
193.16VE	17	50	2,5	3	9	160	177
195.16VE	17	50	2,5	3	9	160	177

Combination pliers

187.VE - 1,000 Volt insulated combination pliers







NF ISO 5746, NF EN 60900, ISO 5746, EN 60900, DIN ISO 5746, DIN EN 60900, ASME B107.500

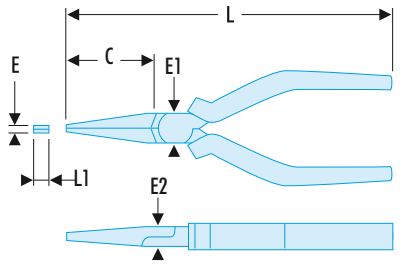
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cut through all types of wire: piano wire, soft wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	[g]
187.16VE	21	34	9,5	165	195
187.18VE	23	36	10,0	185	225

Flat-nose pliers

188.VE - 1,000 Volt insulated flat nose pliers





NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

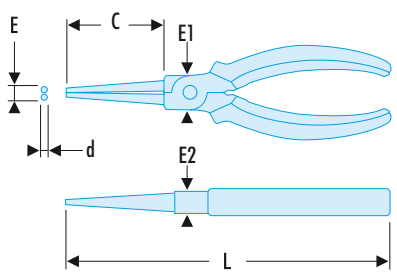
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Serrated nose for stronger grip.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	⚖ [g]
188.16VE	46	4	18	9	168	6,5	140
188.20VE	75	4	18	9	200	6,5	200

Round nose pliers

1,000 Volt insulated round nose pliers





NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

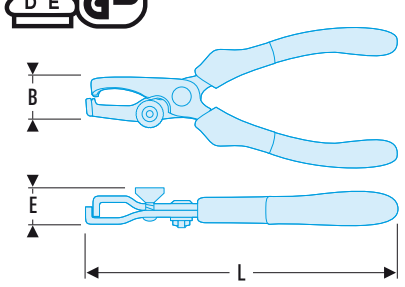
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- To make loops, angles or rings.
- Nose finely serrated inside for stronger grip.
- Diameter of each nose at the end: 2 mm.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	C [mm]	d [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	⚖ [g]
189.17VE	41	2	4	18	9	170	135

Standard wire strippers

1,000 Volt insulated strippers





NF EN 60900, EN 60900, DIN EN 60900

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- For multiple or single strand wires 0.5 --> 6 mm².
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	E [mm]	L [mm]	⚖ [g]
194.17VE	17	8,5	170	185

MULTIGRIP PLIERS 180.VE - RIVETED PIVOT

1000 VOLTS EN 60900



Find the 180.VE pliers p. 792

Slip-joint locking multigrip pliers with fluorescent grips



NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Fast, precise push-button adjustment with safety lock.
- Self-tightening.
- Double heat-treated noses; hardness 60/62 HRc.
- Finish: chromed.

	A [mm]	C [mm]	E [mm]	Capacity Nuts [mm]
181.25CPEF	33,8	55	28	41

Slip-joint multigrip pliers with fluorescent grips



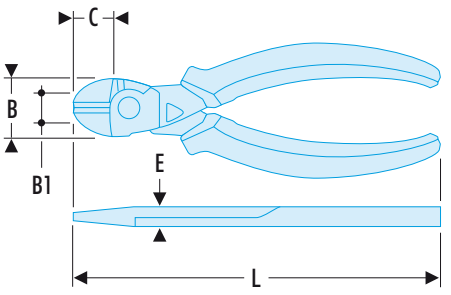
NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Capacity: 44 mm.
- Ideal for confined spaces: Long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- Finish: chromed, bi-material ergonomic grips.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]
180.CPEF	30	35	8	22	250	58

192.CPEF - Diagonal cutters with fluorescent grips





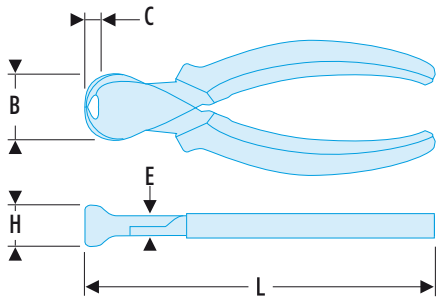
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, soft wires and modern materials (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	⚖ [g]
192.14CPEF	21,5	15,5	1,5	9,5	145	160
192.20CPEF	28,0	22,0	2,5	11,5	200	320

Front cutters with fluorescent grips





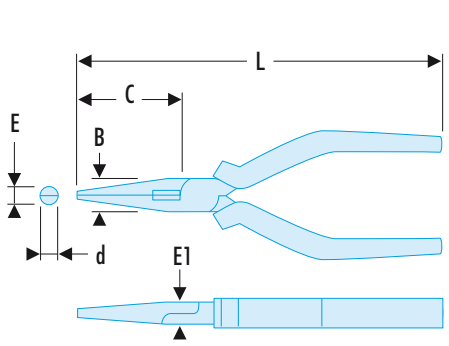
NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, hard and soft wires (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
190.20CPEF	7,5	31	7,5	13,5	200	340

Long-reach half-round nose pliers with fluorescent grips





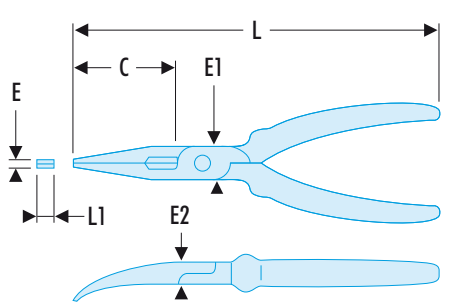
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
185.20CPEF	18	75	2,9	3,6	9	200	200

Long-reach slim half-round nose pliers with fluorescent grips





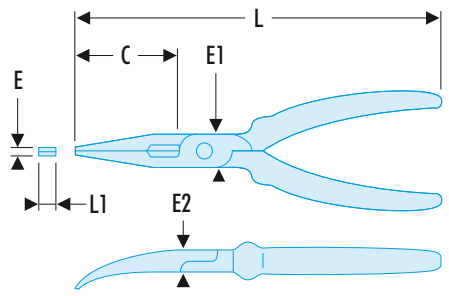
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	⚖ [g]
183.20CPEF	69	3	18	9	200	2,5	185

Short half-round nose pliers with fluorescent grips





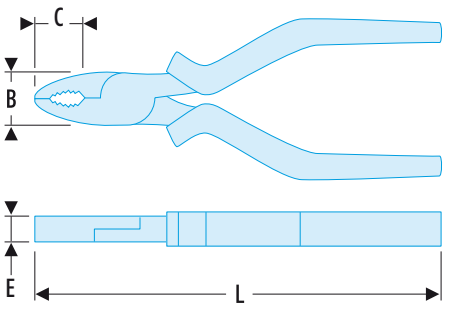
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips, 40° angled, with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
195.16CPEF	17	50	2,5	3	9	160	177

Combination pliers with fluorescent grips





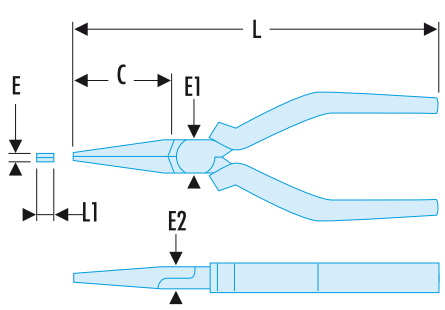
NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
187.16CPEF	21	34	9,5	165	195

Flat nose pliers with fluorescent grips





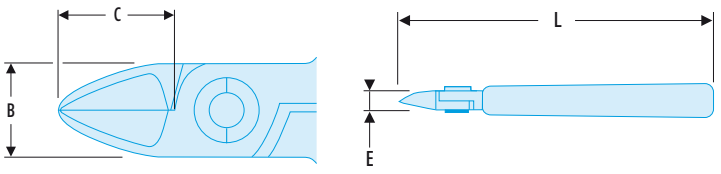
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Serrated nose for stronger grip.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	⚖ [g]
188.20CPEF	75	4	18	9	200	6,5	200

Micro-Tech® "heavy-duty" cutters with fluorescent grips





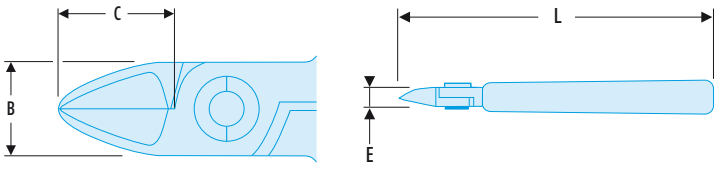
NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Pliers for clear cutting multiple materials: from copper wire to piano wire up to 0.5 mm.

	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]	Fe wire 30 HRc diameter [mm]	Cut	⧋ [g]
405.10MTF	10,5	11,5	7	110	0,3 - 1,4	0,8	⋀	60

Micro-Tech® long-reach cutters with fluorescent grips





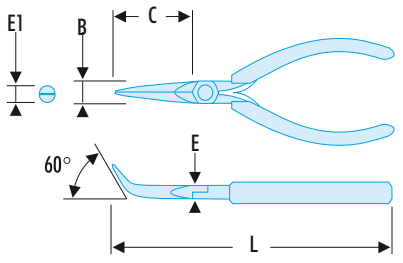
NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Long-reaching pliers up to 1.5 to 2 mm more than with standard pliers.
- The model with retention system prevents the wire from being ejected.

	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]	Cut	⧋ [g]
425F	10,5	13	7	110	0,1 - 1,3	⌐¬	60

Micro-Tech® gripping pliers with fluorescent grips





NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Rigid jaws, angled 60°.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	⧋ [g]
423.MTF	11	25	7	1,4	125	70

Inside Circlip® pliers with fluorescent grips - straight nose



NF E 73-130, DIN 5256, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⧋ [g]
179A.18F	1,8	19 - 60	185	215

Inside Circlip® pliers with fluorescent grips - 45° angled



NF E 73-130, DIN 5256, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⧋ [g]
199A.18F	1,8	19 - 60	170	215

Fluorescent sheath pliers

Outside Circlip® pliers with fluorescent grips - straight nose



NF E 73-130, DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
177A.18F	1,8	19 - 60	180	175

Outside Circlip® pliers with fluorescent grips - 90° angled

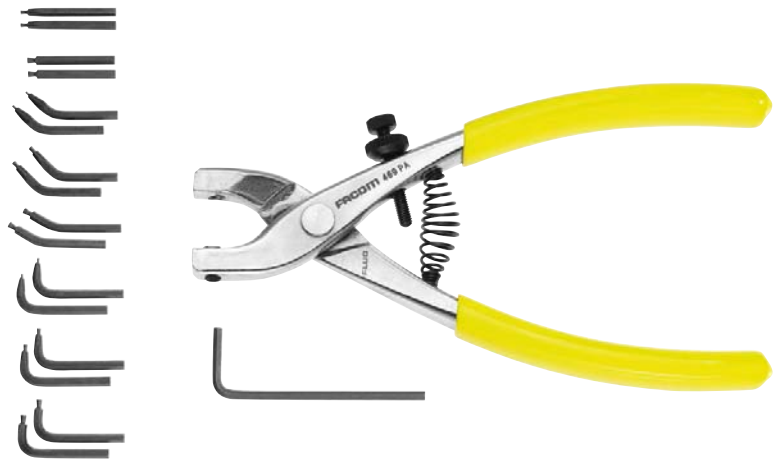


NF E 73-130, DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
197A.18F	1,8	19 - 60	170	175

469F Inside Circlip® pliers with fluorescent grips

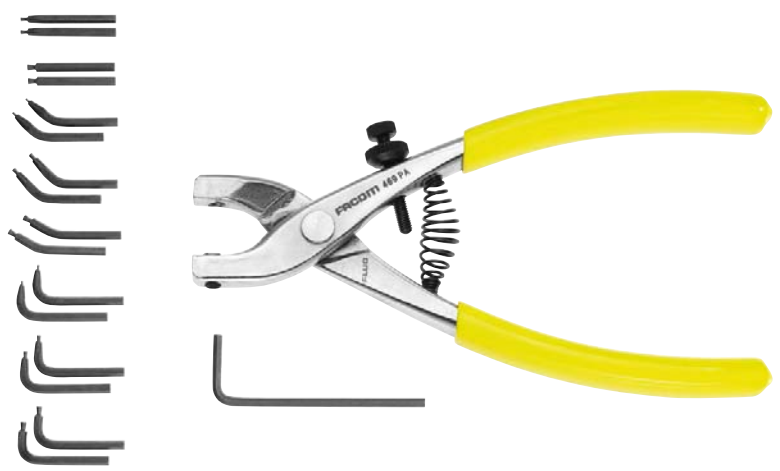


NF E 73-130DIN 5256, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Interchangeable tips for a capacity of diam. 8 --> 63 mm.
- Thumbscrew position setting.
- Opening return spring.
- Finish: chrome finish, PVC grip.
- Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.

Weight: 160 g.

467FLUO Outside Circlip® pliers with fluorescent grips



NF E 73-130DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Interchangeable tips for a capacity of diam. 8 --> 63 mm.
- Thumbscrew position setting.
- Opening return spring.
- Finish: chrome finish, PVC grip.
- Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.

Weight: 160 g.

Inside circlip® pliers

FACOM CIRCLIP® PLIERS

PACKED WITH FEATURES!

Performance and safety

- Piano wire tips:
  - Resistant to deformation.
  - Reinforced to limit risks of breakage.
- Integral spring: optimum flexibility of use:
  - Spring protection.
  - Limits risks of spring loss and/or ejection.
- Tips extended and angled at 10°:
  - Better circlip holding.
  - Reduces risks of circlips warping and falling.

Comfort and ergonomics

- Grips in anti-slip granite PVC.
- Reduces risks of slipping or falling during use.
- Improves ergonomics during intensive operations.
- Easy to clean.

Slim-line and accessibility

- Slim-line head and nose for easy access even in crowded spaces.



Productivity

- Colour code: opening / closing.
- Improved productivity thanks to faster identification of the pliers in the tool box.



Closing

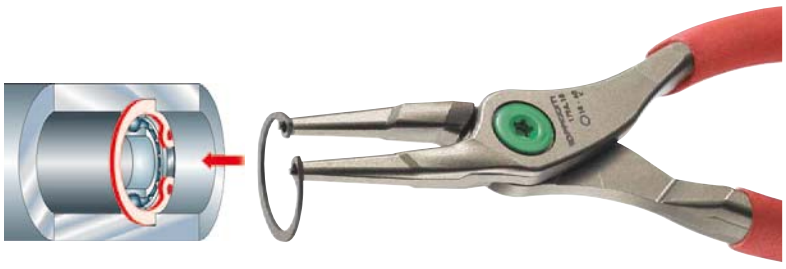


Opening

- Straight, 45° or 90° tip profiles.
- Chrome finish.

SAFETY

- **Eye protection is recommended.**



179A - Straight nose inside circlip® pliers



NF E 73-130, DIN 5256, ASME B107.500

- For Circlips® 8 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
179A.9	0,9	8 -13	140	115
179A.13	1,3	12 - 25	140	115
179A.18	1,8	19 - 60	185	215
179A.23	2,2	40 - 100	215	300
179A.32	3,2	85 - 200	310	565

169A - 45° angled nose inside circlip® pliers



NF E 73-130ASME B107.500

- For Circlips® 8 --> 100 mm
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
169A.9	0,9	8 -13	140	115
169A.13	1,3	12 - 25	140	115
169A.18	1,8	19 - 60	180	215
169A.23	2,2	40 - 100	215	115

199A - 90° angled nose inside circlip® pliers





NF E 73-130, DIN 5256, ASME B107.500

- For Circlips® 8 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
199A.9	0,9	8 -13	130	115
199A.13	1,3	12 - 25	130	115
199A.18	1,8	19 - 60	170	215
199A.23	2,2	40 - 100	205	215
199A.32	3,2	85 - 200	290	215

Outside circlip® pliers

OUTSIDE CIRCLIP® PLIERS

- Straight, 45° or 90° profiles.
- Chrome finish.

SAFETY

- **Eye protection is recommended.**



177A - Straight nose outside circlip® pliers





NF E 73-130, DIN 5254, ASME B107.500

- For Circlips® 3 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
177A.9	0,9	3 - 10	150	105
177A.13	1,3	10 - 25	150	105
177A.18	1,8	19 - 60	180	175
177A.23	2,2	40 - 100	215	280
177A.32	3,2	85 - 200	310	600

167A - 45° angled nose outside circlip® pliers





NF E 73-130ASME B107.500

- For Circlips® 3 --> 100 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
167A.9	0.9	3 - 10	145	105
167A.13	1.3	10 - 25	145	105
167A.18	1.8	19 - 60	175	175
167A.23	2.2	40 - 100	215	280

197A - 90° angled nose outside circlip® pliers





NF E 73-130, DIN 5254, ASME B107.500

- For Circlips® 3 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
197A.9	0,9	3 - 10	14 0	105
197A.13	1,3	10 - 25	140	105
197A.18	1,8	19 - 60	170	175
197A.23	2,2	40 - 100	200	280
197A.32	3,2	85 - 200	290	600

PCJ4 Set of 4 straight and 90° angled nose circlip® pliers - 18 to 60 mm



• Including:
- 177A.18: Straight nose outside Circlip® pliers for Circlips® 19 --> 60 mm.
- 197A.18: 90° angled nose outside Circlip® pliers for Circlips® 19 --> 60mm.
- 179A.18: Straight nose inside Circlip® pliers for Circlips® 19 --> 60 mm.
- 199A.18: 90° angled nose inside Circlip® pliers for Circlips® 19 --> 60 mm.

Weight: 860 g.

PCSNJ4 Set of 4 straight nose circlip® pliers - 10 to 60 mm



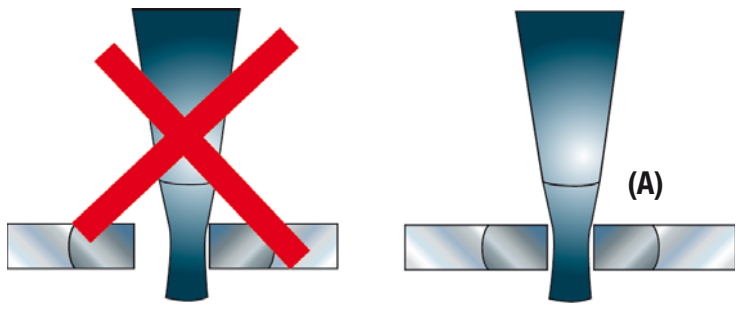
• Including:
- 177A.13: Straight nose outside Circlip® pliers for Circlips® 10 --> 25 mm.
- 177A.18: Straight nose outside Circlip® pliers for Circlips® 19 --> 60 mm.
- 179A.13: Straight nose inside Circlip® pliers for Circlips® 12 --> 25 mm.
- 179A.18: Straight nose inside Circlip® pliers for Circlips® 19 --> 60 mm.

Weight: 740 g.

High-performance pliers

CHOOSING THE RIGHT CIRCLIP® PLIERS

- Always select the nearest tip diameter to the size of Circlip® holes **(A)**
- Never attempt to reshape the tips of the pliers.
- Safety first: always wear eye protection when handling circlips®.



Rack-type "compression" pliers for inside circlips®



ASME B107.500

- Interchangeable tip.
- Rack holds circlips® compressed for easy fitting and removal (with release trigger).
- Finish: chrome finish, red PVC grips.

	Tips	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
499.32	45°	3,2	85 - 200	310	480
479.32	Straight	3,2	85 - 200	310	480

477-497 Rack-type "expansion" pliers for outside circlips® pliers



ASME B107.500

- Interchangeable tip.
- Rack holds circlips® compressed for easy fitting and removal (with release trigger).
- Finish: chrome finish, red PVC grips.

	Tips	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
477.32	45°	3,2	85 - 200	310	480
497.32	Straight	3,2	85 - 200	310	480

490.SE - Spare tips for pliers 477 to 499



- Each reference includes 2 tips and 2 screws.

	Tips	d [mm]	d mini - maxi [mm]
490.SE28-1	Straight	2,8	65 - 120
490.SE32-1	Straight	3,2	85 - 200
490.SE38-1	45°	3,8	120 - 200
490.SE28-2	45°	2,8	65 - 120
490.SE32-2	45°	3,2	85 - 200
490.SE38-2	45°	3,8	120 - 200

Reversible pliers

REVERSIBLE CIRCLIP® PLIERS

REVERSIBLE CIRCLIP® PLIERS 475A

- Single tool for both inside and outside circlips®.
- Quick thumbscrew position setting.



Position 1 for outside Circlips®.



Position 2 for inside Circlips®.

475A - Reversible inside and outside circlip® pliers



- Single tool for both inside and outside circlips®.
- Finish: burnished, PVC grip.

	d [mm]	d mini - maxi [mm]	L [mm]	ΔΔ[g]
475A.15	1,0	10 --> 30 - 10 --> 18	150	75
475A.20	1,8	20 --> 48 - 19 --> 45	200	155

475A.J1 Set of two reversible pliers



- Including:
- 475A.15: for inside circlips®, diam. 10 --> 30 mm and outside, diam. 10 --> 18 mm.
- 475A.20: for inside circlips®, diam. 20 --> 48 mm and outside, diam. 19 --> 45 mm.
- Supplied in a case, dim. (L. x W. x H.): 245 x 135 x 35 mm.

Weight: 430 g.

Removable tip pliers

470 Inside and outside circlip® pliers



- Interchangeable tips for:
- diam. 8 --> 63 mm, for inside circlips®.
- diam. 3 --> 63 mm, for outside circlips®.
- Including:
- 469.PA: Inside circlip® pliers.
- 467.PA: Outside circlip® pliers.
- 82H.2.5: Key.
- Set of 18 removable tips.
- Supplied in a plastic case.

Weight: 1.50 kg.

469 Inside circlip® pliers



NF E 73-130, DIN 5256, ASME B107.500

- Interchangeable tips for a capacity of diam. 8 --> 63 mm.
- Thumbscrew position setting.
- Opening return spring.
- Finish: chrome finish, red PVC grips.
- Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.

Weight: 160 g.

467 Outside circlip® pliers



NF E 73-130, DIN 5254, ASME B107.500

- Interchangeable tips for a capacity of diam. 3 --> 63 mm.
- Thumbscrew position setting.
- Opening return spring.
- Finish: chrome finish, red PVC grips.
- Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.

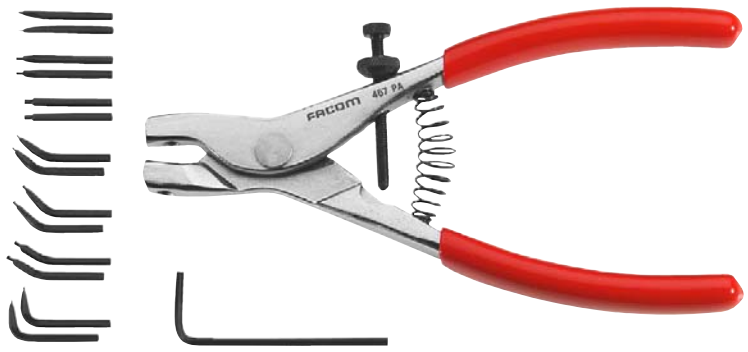
Weight: 160 g.

467.01AJ2 Spare tips



- For products Ref: 467 - 469 - 470.

470.E - Spare tips for circlip® pliers 467 and 469



- Available as straight, 45° and 90° tip.
- Each reference includes a set of 2 tips.

	Tips	d [mm]	d mini - maxi [mm]
470.E1	Straight	0,9	8 --> 12 - 3 --> 10
470.E2	45°	0,9	8 --> 12 - 3 --> 10
470.E3	90°	0,9	8 --> 12 - 3 --> 10
470.E5	Straight	1,3	12 --> 25 - 10 --> 25
470.E6	45°	1,3	12 --> 25 - 10 --> 25
470.E7	90°	1,3	12 --> 25 - 10 --> 25
470.E8	Straight	1,8	19 --> 63 - 19 --> 63
470.E9	45°	1,8	19 --> 63 - 19 --> 63
470.E10	90°	1,8	19 --> 63 - 19 --> 63

Snap-ring pliers

411A - Outside snap-ring pliers



ASME B107.500

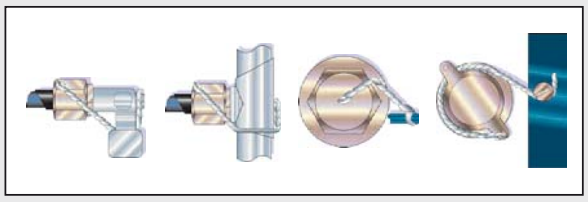
- Special tips for snap-rings and spring clips.
- Finish: chrome finish, PVC grip.

	d mini - maxi [mm]	L [mm]	[g]
411A.17	15 - 62	150	190
411A.20	60 - 160	190	275

FACOM LOCKING-WIRE PLIERS

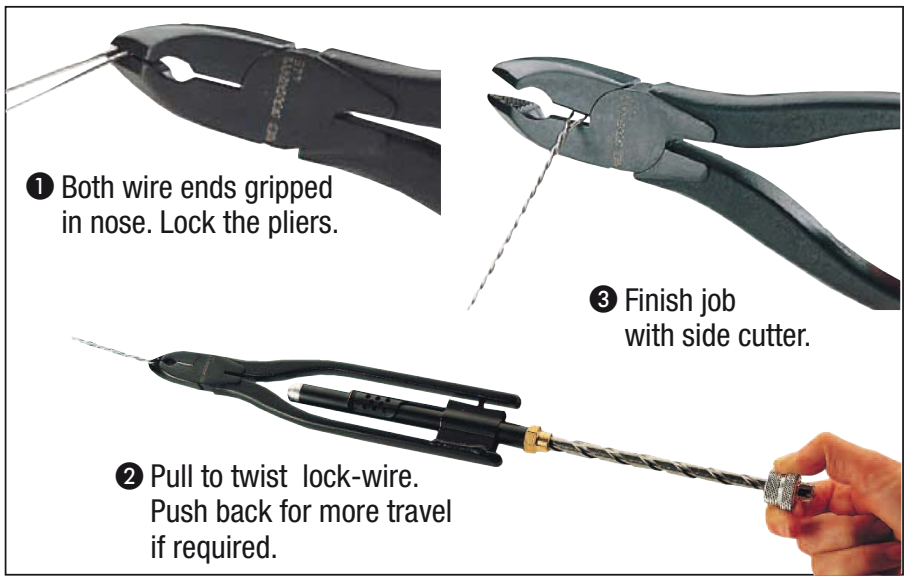
Fast twist in lock-wire securing assemblies subject to vibration.

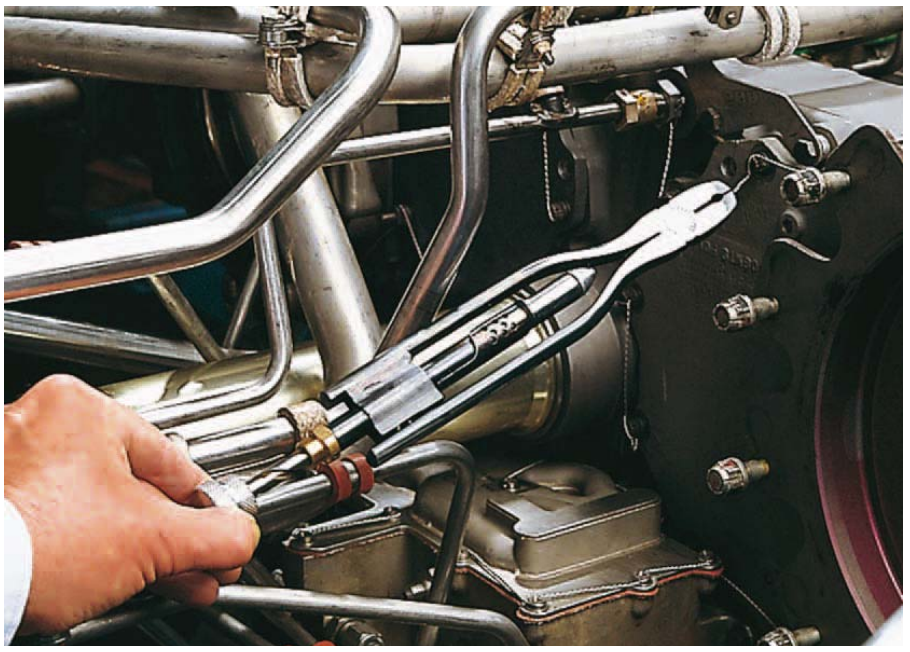
- For stainless and Inconel wire Ø 1 mm.
- Side wire cutter.
- Slim nose-tip for optimum manoeuvrability.
- 10" model: 3 turns, 125 mm travel.
- 8" model: 2.5 turns, 95 mm travel.



Automatic model

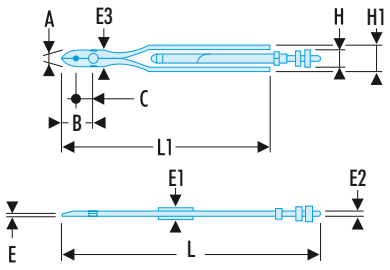
- Automatic-reset model for simplicity and time-saving.





Short locking-wire pliers 8"





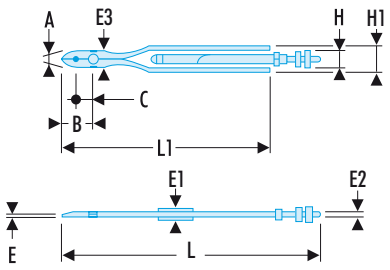
ASME B107.500

- "automatic" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 2.5 turns: 95 mm length.

	A [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	⚖ [g]
445.8R	3	20	7	2,5	15	10,5	15	22	37	215	170	245

Locking-wire pliers 10"





ASME B107.500

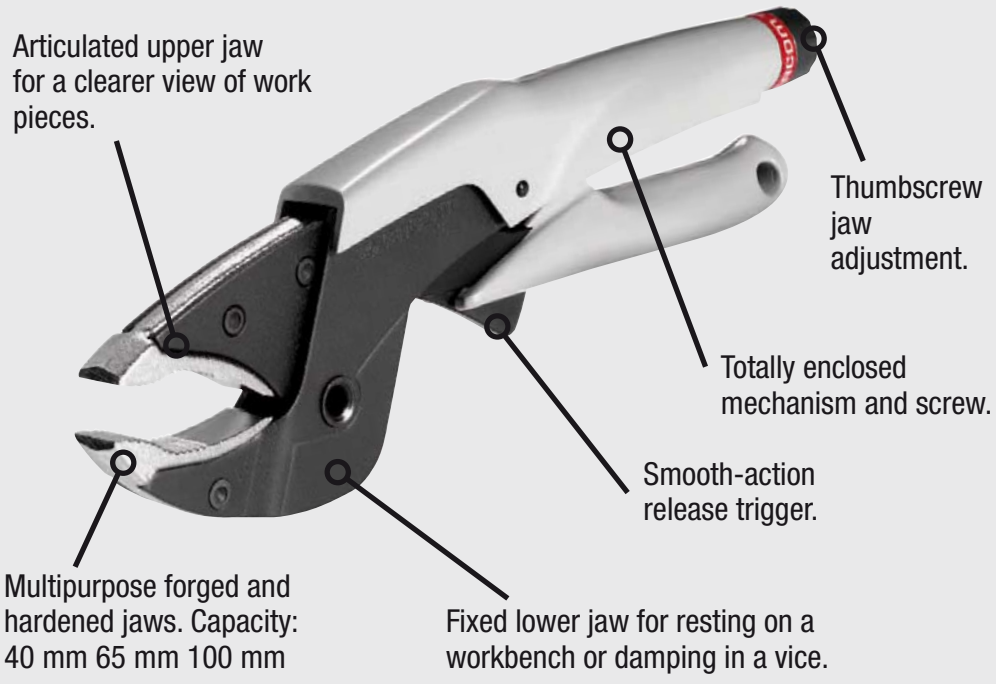
- "automatic" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 3 turns: 125 mm length.

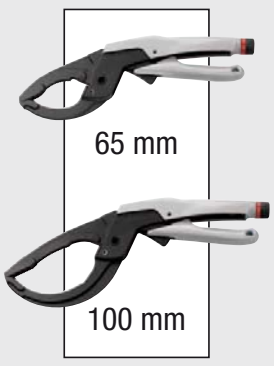
	A [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	⚖ [g]
445.10R	3	30	11	2,5	15,5	11,5	19	25	40	360	230	400

"T5" lock-grip pliers

T5 SERIES | LOCK-GRIP PLIERS
ERGONOMIC AND SAFE

SAFE, PRACTICAL AND ERGONOMIC





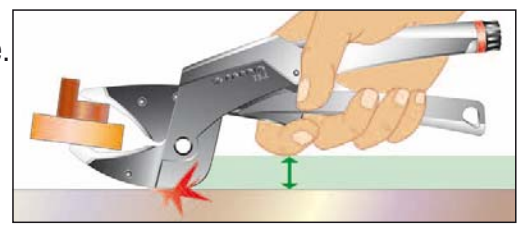
Smooth, controlled release.



One-hand operation



T5: INCREASED SAFETY
No shocks to the hand
- The trigger system eliminates shocks to the hand on release.



Hand protection
- Good finger clearance between lever and work surface.

T5: MORE PRACTICAL AND ERGONOMIC.
One-hand operation
- The pliers clamp and release with one hand even when very tight.
- Leaves the other hand free to hold components.

Controlled release
- The trigger system ensures progressive and controlled release.
- T5 pliers maintain pressure and components remain assembled between the jaws during unclamping.

Ergonomic
- Ergonomic sheathed handles and demultiplication reduce fatigue.

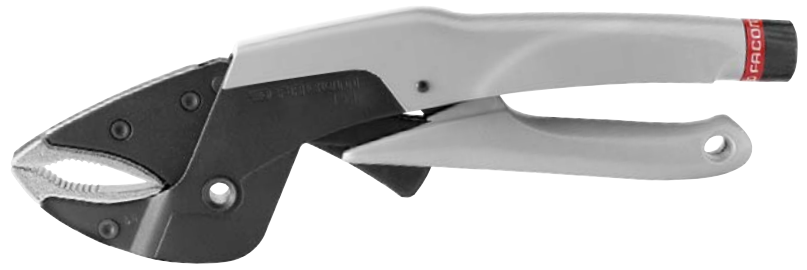




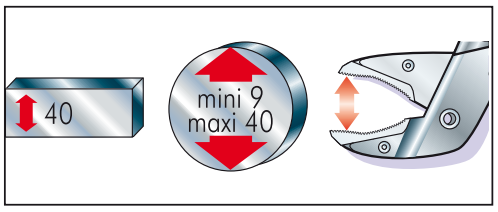




T5.L - Aluminium-sheathed trigger-release lock-grip pliers









- Ergonomic aluminium sheathing, protects against weld spatter.
- Controlled, progressive release.
- Practical and comfortable: one-handed operation, small grip opening at all jaw openings.
- Forged in Chrome Molybdenum steel with treated jaws for a longer working life.

	Open Position O maxi [mm]	Dimension [mm]/	[g]
T5.L	d. 40 mm	250 x 75 x 22	631
T5.L65	d. 65 mm	290 x 80 x 22	819

T5.1L Plastic-sheathed trigger-release lock-grip pliers



- Ideal for on-site maintenance.
- Controlled, progressive release.
- Practical and comfortable: one-handed operation, small grip opening.
- Forged in Chrome Molybdenum steel with treated jaws for a longer working life.
- Dimensions: 250 x 75 x 22 mm.

Weight: 565 g.

Large-capacity lock-grip pliers

SERIES 500 | LOCK-GRIP PLIERS
"ORIGINAL 500" LOCK-GRIP PLIERS

LARGE CAPACITY LOCKS ON TO ANY SHAPE

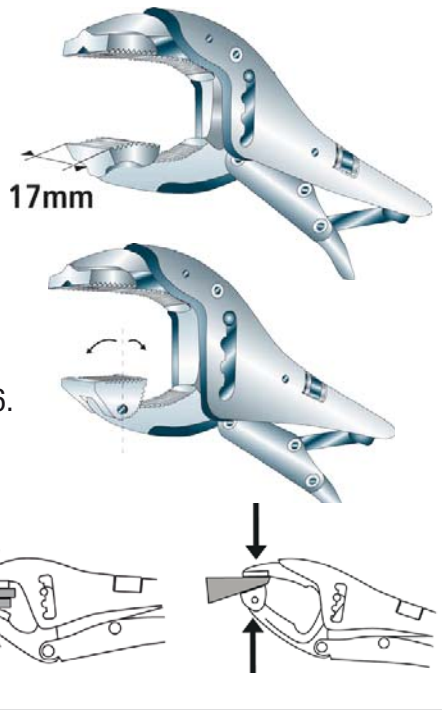


The range of "ORIGINAL 500" lock-grip pliers feature the efficient slip-joint developed by FACOM.
- Wide opening.
- Constantly parallel jaws
- Reach beyond edges up to 70 mm high.



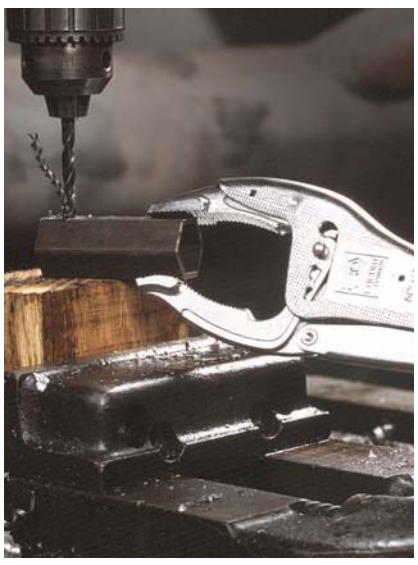
Jaws engineered for secure grip.
- 17 mm wide.
- Machined groove in upper jaw holds small round sections.
- Serrations along full jaw length.
- Chrome-molybdenum steel. For better wear resistance.

Hinged tip versions.
- To adapt to any grip configuration. Moving-tip options on model 506/516.





Round up to 135 mm



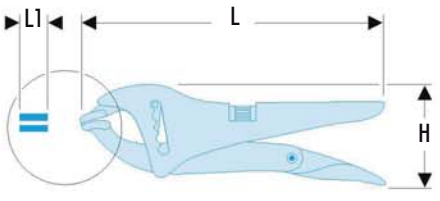
Hexagonal up to 125 mm

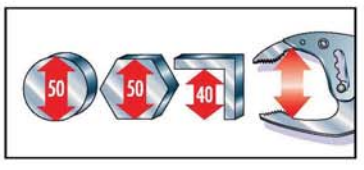


Angle section up to 70 mm

Short-nose lock-grip pliers







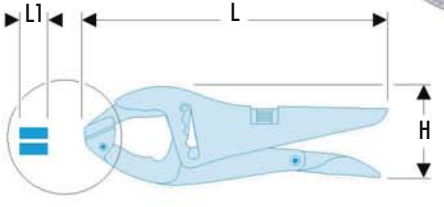
ASME B107.500

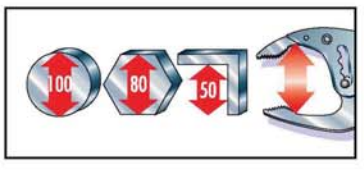
- 4-position slip joint system.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- Finish: chromed.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
500	58	225	17	540

501-506 - Long-nose lock-grip pliers







ASME B107.500

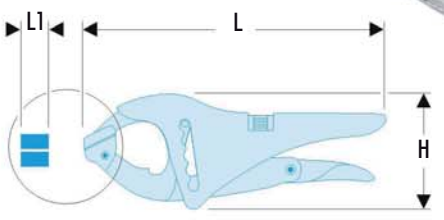
- 4-position slip joint system.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- 506 models: type 501 with hinged tip, adapts to all grip configurations.
- Finish: chromed.

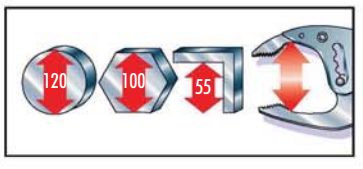
Weight: 620 g.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
501	63	250	17	620
506	63	250	17	640

511-516 5-position slip joint large-capacity pliers







ASME B107.500

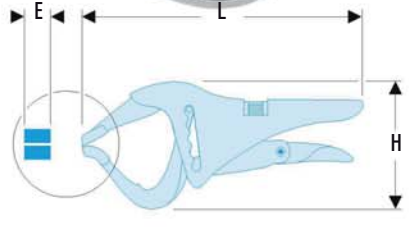
- 5-position slip joint for increased capacity.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- 516 models: type 511 with hinged tip, adapts to all grip configurations.
- Finish: chromed.

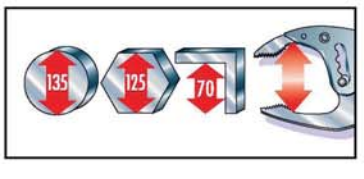
Weight: 680 g.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
511	79	250	17	680
516	79	250	17	695

5-position slip joint large-capacity pliers







ASME B107.500

- 5-position slip joint system, deep jaw.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- Finish: chromed.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
505	89	270	17	720

SERIES 580 — AUTOMATIC LOCK-GRIP PLIERS

IDEAL FOR SAVING TIME AND FOR PRODUCTION WORK

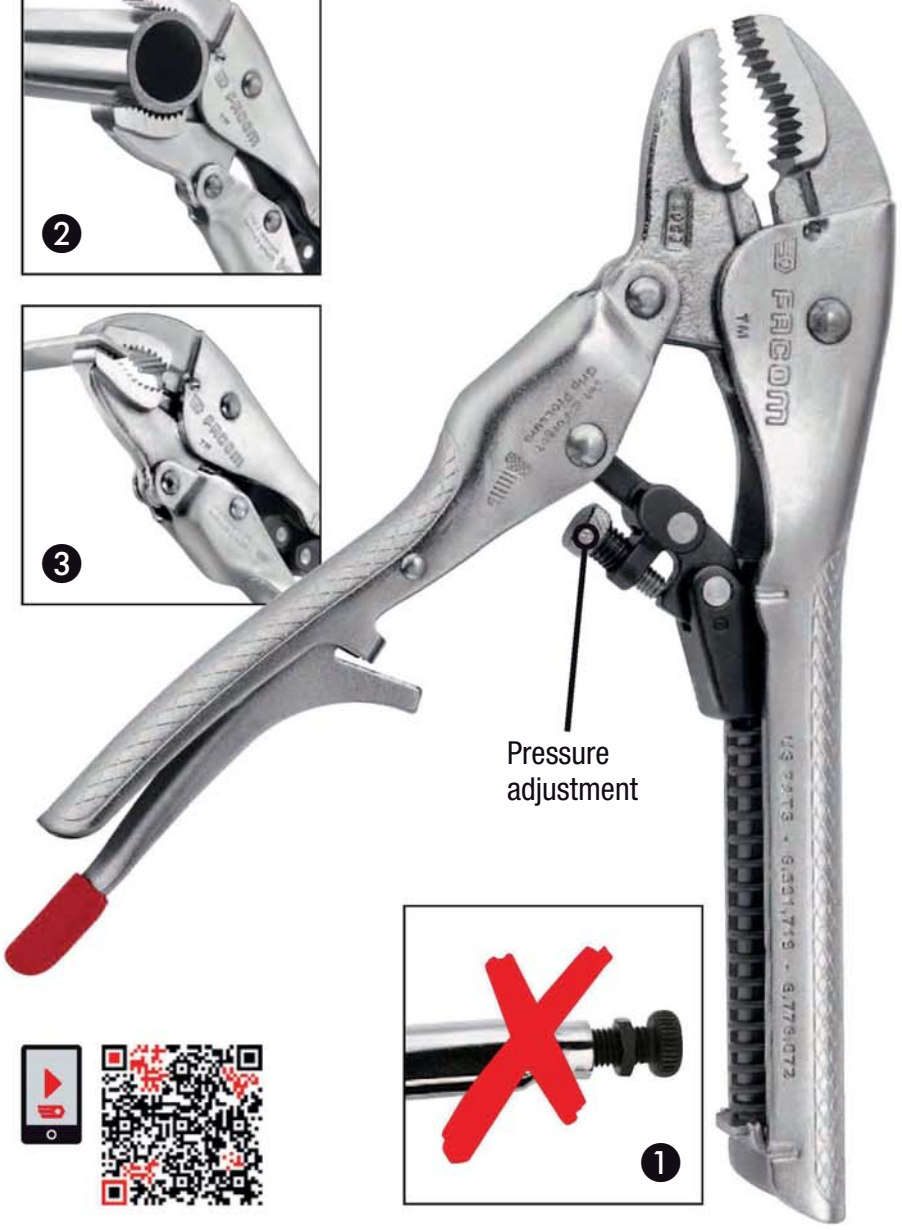
No adjustment!

❶ Just adjust the pressure no readjustment required.
❷ The tool automatically adjusts from thick parts to thin and from thin parts to thick.

Patented automatic closing mechanism.

❸ Automatically adjusts the jaws to the component, regardless of size and with the same pressure.

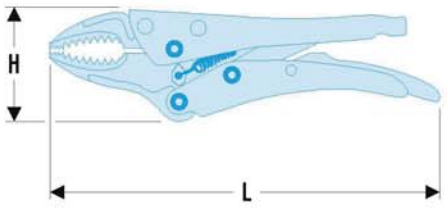




580 - Multi-purpose angle-nose lock-grip pliers







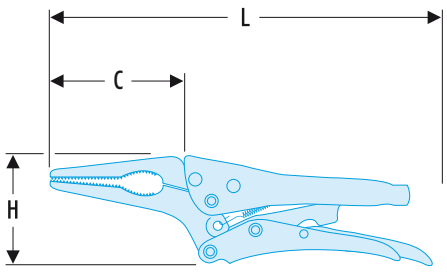
ASME B107.500

- Suitable for industrial and automotive production and maintenance applications.
- Automatically adjusts the jaws to the component, regardless of size and with the same pressure.
- Forged in Chrome Molybdenum steel: with treated jaws for longer working life.
- Non-slip chequered handle.
- One-hand unlocking by internal opening lever.
- Finish: chromed, burnished mechanism (patented).

	A [mm]	B [mm]	C [mm]	H [mm]	L [mm]	⚖ [g]
580.6	30	21	8	45	150	235
580.10	38	30	12	63	250	642

Long-nose automatic lock-grip pliers





ASME B107.500

- For holding, placing or removing components where access is difficult.
- Tips designed for holding flat or circular sections.
- Automatically adjusts the jaws to the component, regardless of size and with the same pressure.
- Forged in Chrome Molybdenum steel: with treated jaws for longer working life.
- Non-slip chequered handle.
- One-hand unlocking by internal opening lever.
- Finish: chromed, burnished mechanism (patented).

	A [mm]	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	[g]
582.7	45	61	5,5	61	45	175	270

Compact lock-grip pliers

SERIES 507 — 507 SERIES COMPACT LOCK-GRIP PLIERS

The “compact 507” range offers two major benefits

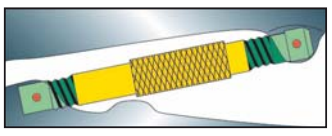
Versatility provided by the slip-joint system designed and developed by Facom that combines:

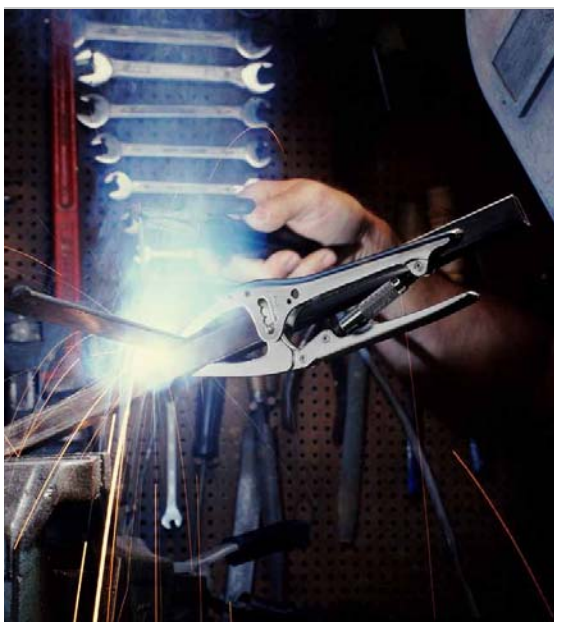
- Wide opening.
- Constantly parallel jaws.
- Reach beyond edges.

Slim profile and precision

- Compact tool with narrow nose.
- Fine adjustment with the unique Facom knurl system.







507A Short-nose compact lock-grip pliers



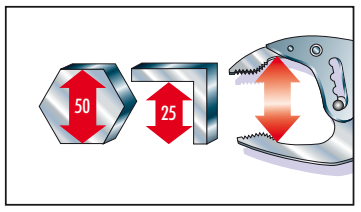
ASME B107.500

- 4-position slip joint system.
- Fine adjustment with the unique Facom knurl system.
- Forged jaws.
- Nose width 9.6 mm.
- Length: 200 mm.
- Height: 42 mm.
- Finish: chromed.

Weight: 330 g.

509 Long-nose compact lock-grip pliers





ASME B107.500

- 4-position slip joint system.
- Fine adjustment with the unique Facom knurl system.
- Forged jaws.
- Nose width 9.6 mm.
- Length: 215 mm.
- Finish: chromed.

Weight: 370 g.

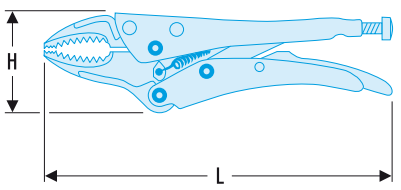
Single-setting lock-grip pliers

513 - Short-nose single setting lock-grip pliers









ASME B107.500

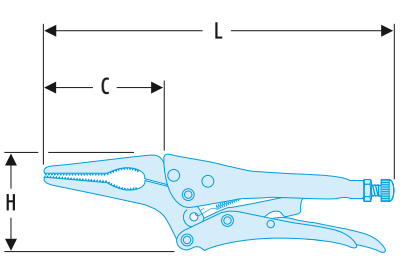
- Slim jaws.
- Hand-screw adjustment.
- Finish: black cataphoretic finish.

	A [mm]	B [mm]	C [mm]	H [mm]	L [mm]	⚖ [g]
513.5	25	18	6,4	49	140	180
513A.7	35	27	9,0	59	190	380
513.10	55	35	10,3	71	235	628

517 - Long-reach single setting lock-grip pliers







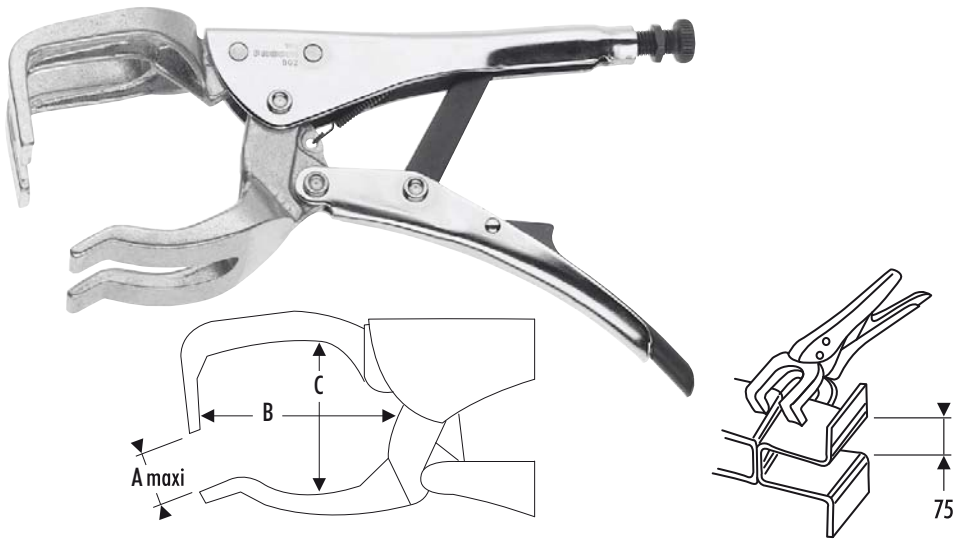
ASME B107.500

- For reaching and gripping components in confined spaces.
- Hand-screw adjustment.
- Finish: chromed.

	A maxi [mm]	C [mm]	H [mm]	L [mm]
517.6	55	50	48	165
517.10	70	80	60	235

"Metalworking" lock-grip pliers

Arc-welding lock-grip pliers

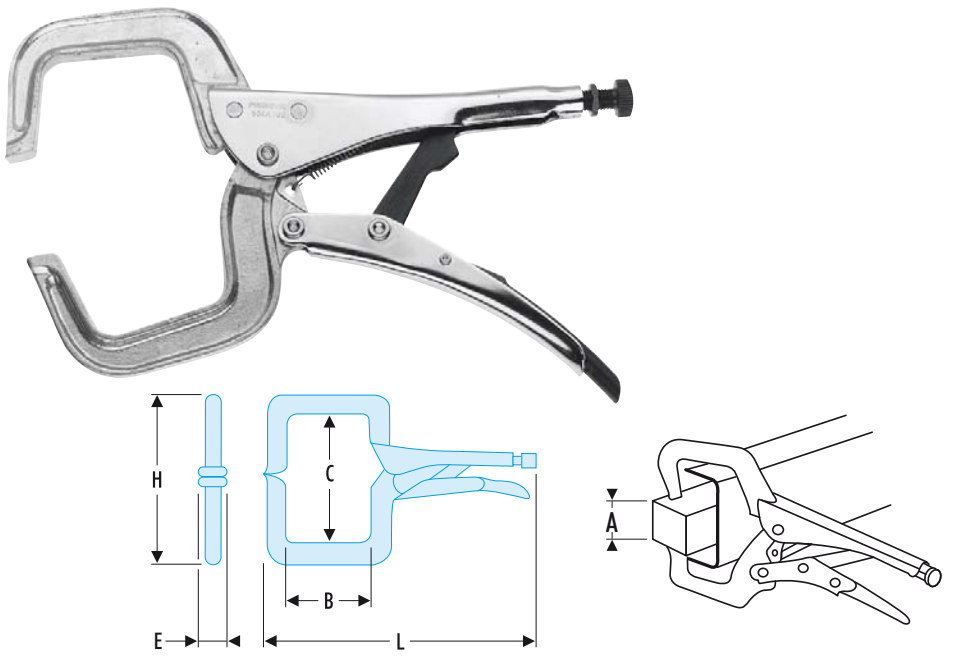


ASME B107.500

- Light alloy spatter-proof jaws.
- Steel body.
- Secure and precise alignment of work pieces.
- Ample clearance for the welding tool.
- Hand-screw adjustment.
- Dimensions: 280 x 82 x 70 mm.
- Finish: chromed.

	A maxi [mm]	B [mm]	C [mm]	[g]
502A	75	65	50	735

504A - "C-clamp" arc-welding lock-grip pliers

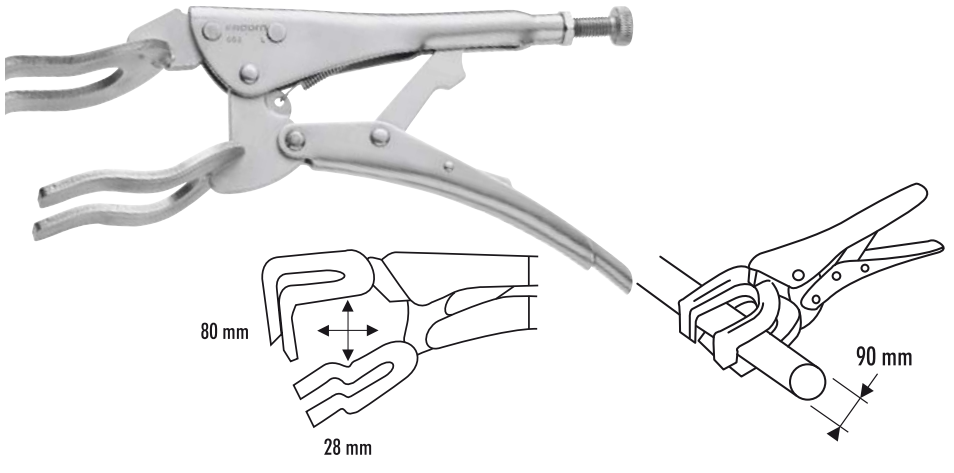


ASME B107.500

- Light alloy spatter-proof jaws.
- Steel body.
- Secure clamp for welding shaped or angled sections, and channels.
- Hand-screw adjustment.
- Finish: chromed.

	A maxi [mm]	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]
504A.100	80	65	100	12	147	280
504A.180	125	120	180	20	240	350

Lock-grip pliers for round sections

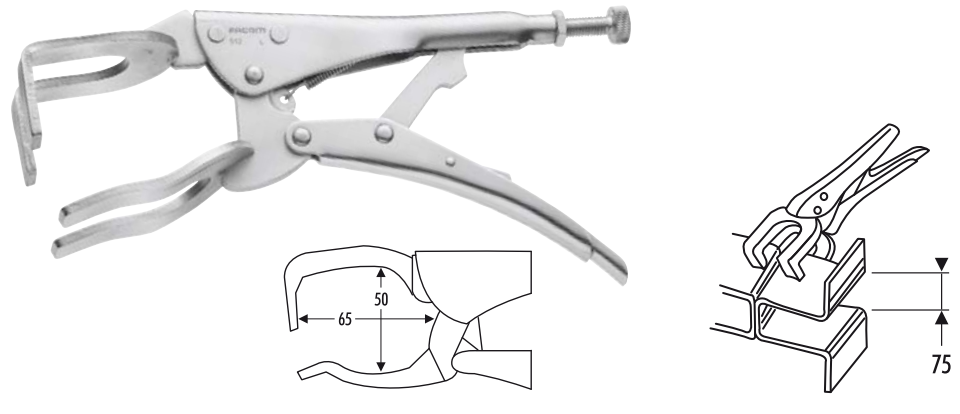


ASME B107.500

- Secure clamping of round sections.
- Pressed-steel jaws and body.
- Hand-screw adjustment.
- Dimensions: 280 x 85 x 68 mm.
- Finish: chromed.

	A maxi [mm]	B [mm]	C [mm]	[g]
503	90	80	28	945

Lock-grip pliers for angle sections

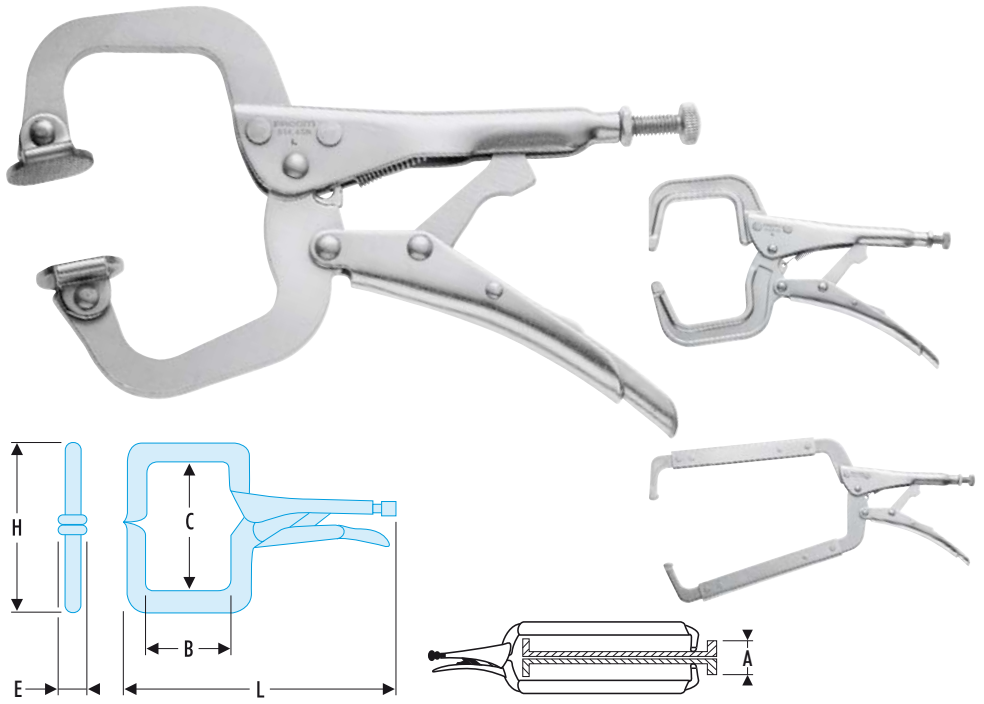


ASME B107.500

- Secure clamping of angle and channel sections.
- Pressed-steel jaws and body.
- Hand-screw adjustment.
- Dimensions: 280 x 85 x 70 mm.
- Finish: chromed.

	A maxi [mm]	B [mm]	C [mm]	[g]
512	75	65	50	953

514A-514A.R - Long-reach lock-grip pliers



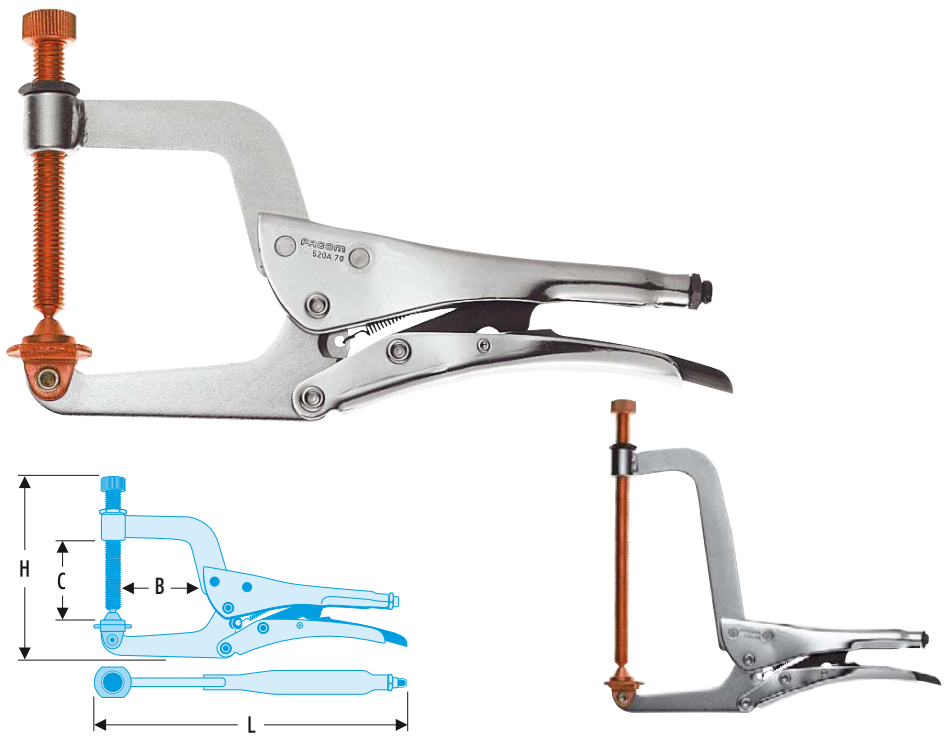
ASME B107.500

- Special forged-steel jaws for secure clamping of angle sections and deep channels
- Pressed-steel body.
- "R" models have hinged shoes at their tips.
- Hand-screw adjustment.
- Finish: chromed.

	A maxi [mm]	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	[kg]
514.45R	45	45	60	19	90	175	0,270
514A.65	70	65	100	12	150	300	0,905
514A.240	230	240	100	20	165	460	1,420
514A.240R	230	240	100	32	165	460	1,530
514A.400	370	400	100	20	165	630	1,705

Bar clamp lock-grip pliers

520A - Lock-grip G-clamps

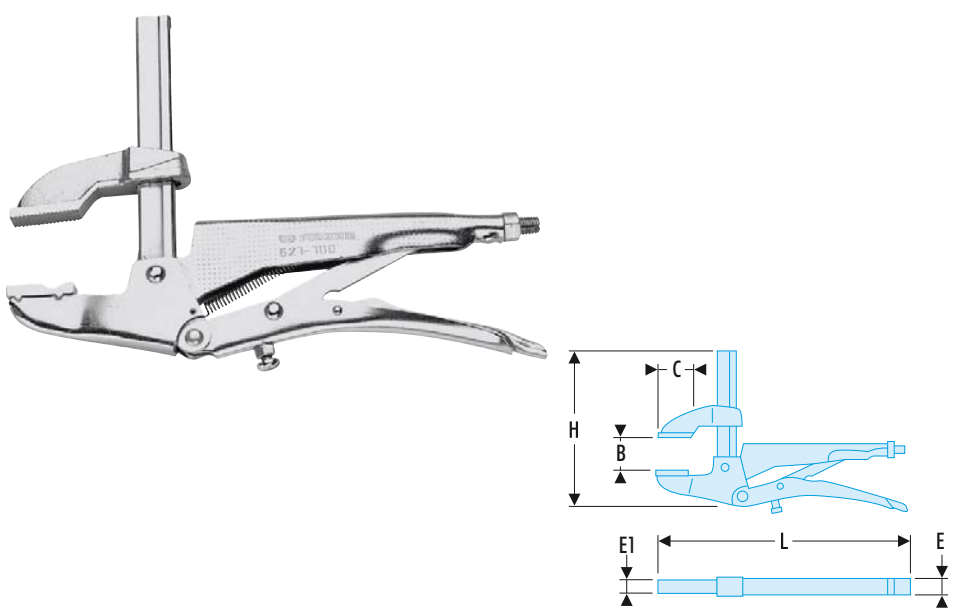


ASME B107.500

- Coppered screw with swivel shoe.
- Fine setting with locknut.
- Finish: chromed.

	B [mm]	C [mm]	H [mm]	L [mm]	[kg]
520A.70	70	70	165	280	1,020
520A.100	70	100	196	280	1,095
520A.170	70	170	270	280	1,250

521 - G-clamp pliers with sliding jaw



ASME B107.500

- Clamping force: 4000 N, adjustable.
- Zinc-plated, forged and hardened sliding jaw.
- Case-hardened and chromed teeth.
- Lower jaw angle screw-adjustable through 9°.
- Finish: chromed.

	B [mm]	C [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	[kg]
521.100	100	65	28	15	190	260	1,020
521.150	150	65	28	15	240	260	1,110
521.200	200	65	28	15	290	260	1,180

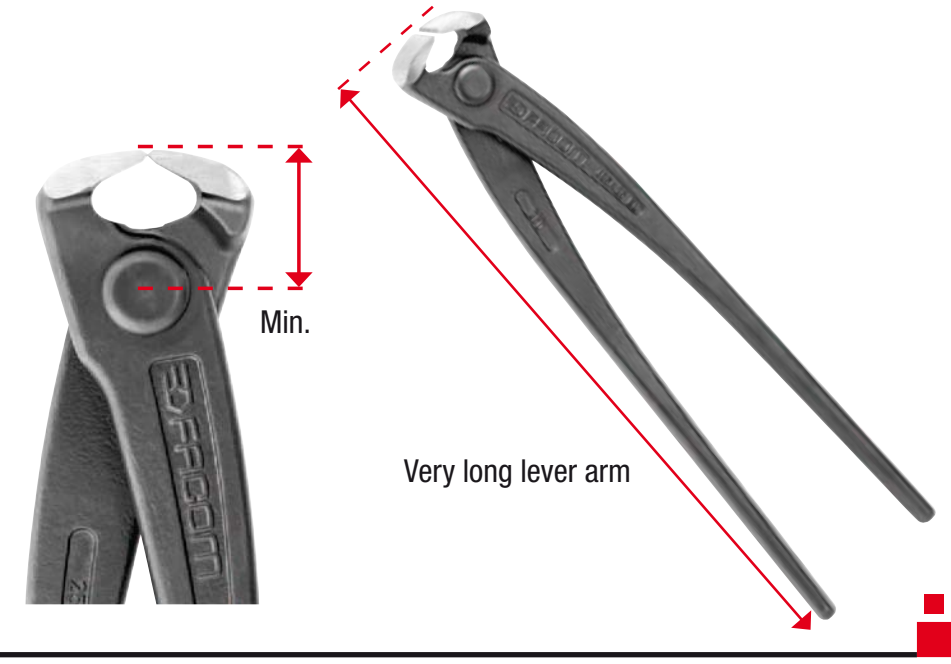
Heavy-duty end nippers

HIGH PERFORMANCE NIPPERS AND CUTTERS

CUTTING EFFORT REDUCED TO A MINIMUM

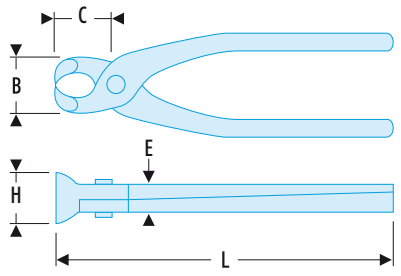
For tying and cutting in one operation
- Clean cut.
- Cutting edges sharpened after heat treatment for cleanly cutting lacing cord.

Maximum cutting power.
- Offset pivot.
- Maximum accessibility.
- Tapered shape.



495A - Heavy-duty end nippers





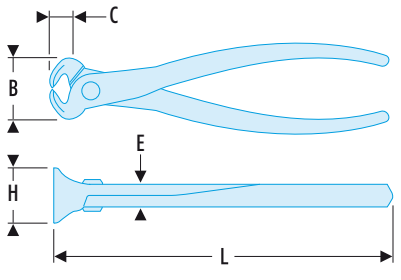
NF ISO 9242, ISO 9242, DIN ISO 9242
- Rounded, semi-rigid handles designed to turn quickly in the hand.
- 60/62 HRc high-frequency hardened cutting edges for long life.
- Cutting capacity:
- To diameter 4.5 mm on soft wire (300 mm model).
- Max. on hard wire 160 kg/mm².
- Finish: burnished, polished head.

	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	⚖ [g]
495A.20EL	28	10,0	12	20	200	240
495A.22EL	31	10,5	13	23	220	310
495A.25EL	35	12,0	14	25	250	390
495A.28EL	35	12,0	14	25	280	450
495A.30EL	35	12,0	14	25	300	510

Heavy-duty end nippers

491 - End nippers



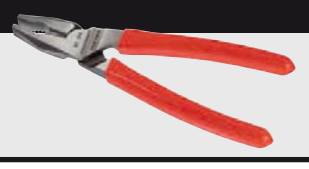


NF ISO 5748, ISO 5748, DIN ISO 5748
- Protruding cutting edges, for soft and hard wire (max. 160 kg/mm²).
- Offset pivot for maximum cutting power.
- 60/62 HRc high-frequency hardened cutting edges for long life.
- Finish: burnished, polished head, PVC grips.

	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	⚖ [g]
491.18G	39	11,5	14,6	32	180	300
491.20G	39	11,5	14,6	32	200	400
491.22G	43	12,7	14,6	34	220	450



For bolt croppers
see p. 612



For PVC grip pliers
see p. 484

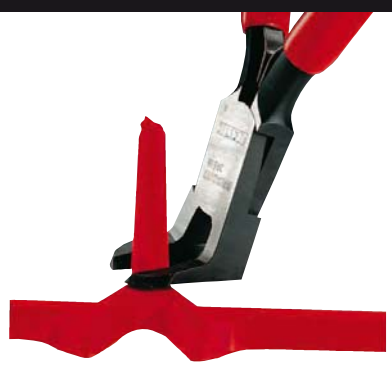
PLASTICS CUTTERS

SPECIAL CUTTERS TO REMOVE TAILS AND BURRS FROM INJECTION-MOULDED COMPONENTS.

• HF hardened cutting edges and flush cut for clean result.

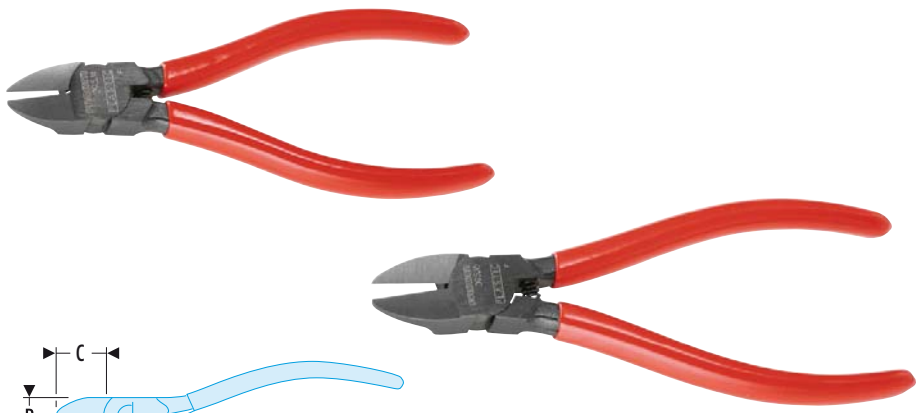


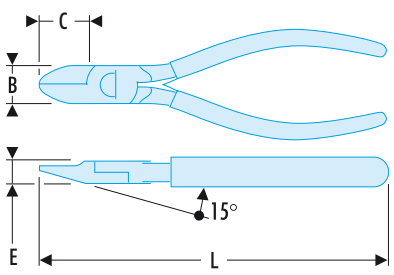
Flush cut



Plastics cutters

395 - Diagonal plastics cutters



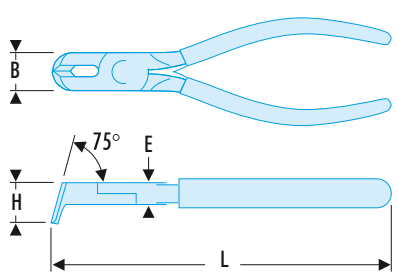


• Two joint and length sizes.
• Opening return spring.
• Finish: polished burnish, PVC grip.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	⚖ [g]
395.14	16	20	6	10	140	115
395.16	18	22	7	11	160	150

75° plastics cutters





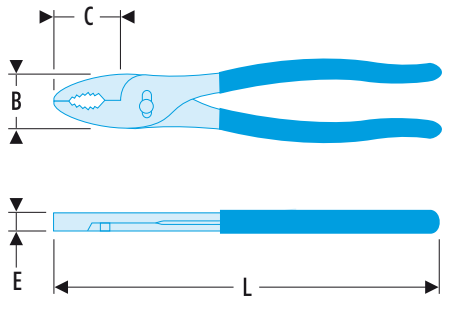
• 75° cutting edges.
• Opening return spring.
• Finish: polished burnish, red PVC grips.

	B [mm]	E [mm]	H [mm]	L [mm]	⚖ [g]
396	18	9	24,3	150	145

Motorists pliers

186 - Motorists pliers





NF ISO 9343, ISO 9343, DIN ISO 9343, ASME B107.500

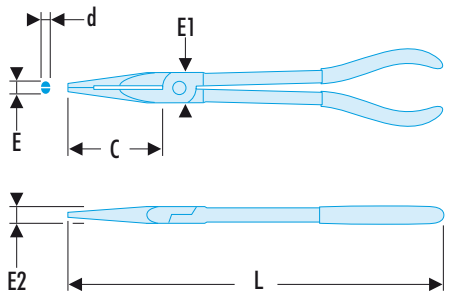
- 2-position adjustable slip-joint.
- Slim nose for accessibility.
- Finish: chrome finish, red PVC grips.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
186.7CPG	29	31	9,0	6,5	166
186.8CPG	31	35	10,5	7,5	204
186.10CPG	37	45	11,5	8,5	250

Extra-long reach half-round nose pliers

Extra-long reach half-round nose pliers



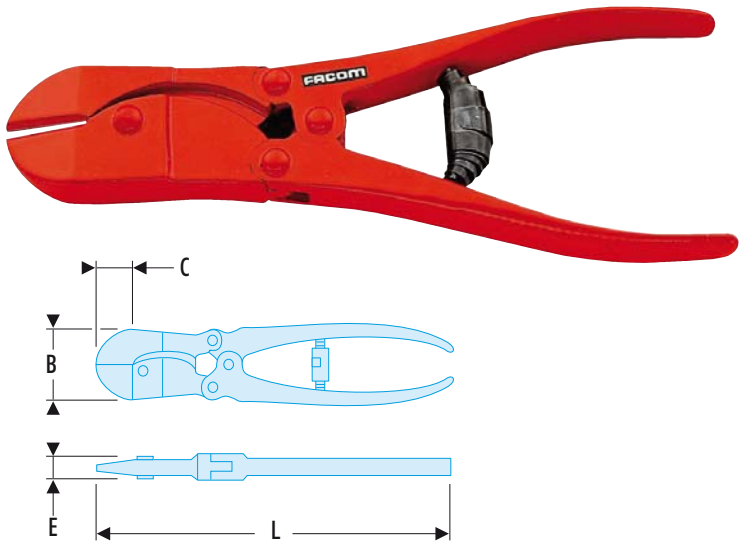


- For reaching components in confined spaces.
- Serrated jaws.
- Finish: polished, red PVC grips.

	C [mm]	d [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	[g]
185.28EG	73	3,5	5	17	10	295	304

Low-effort cutters

Diagonal cutters

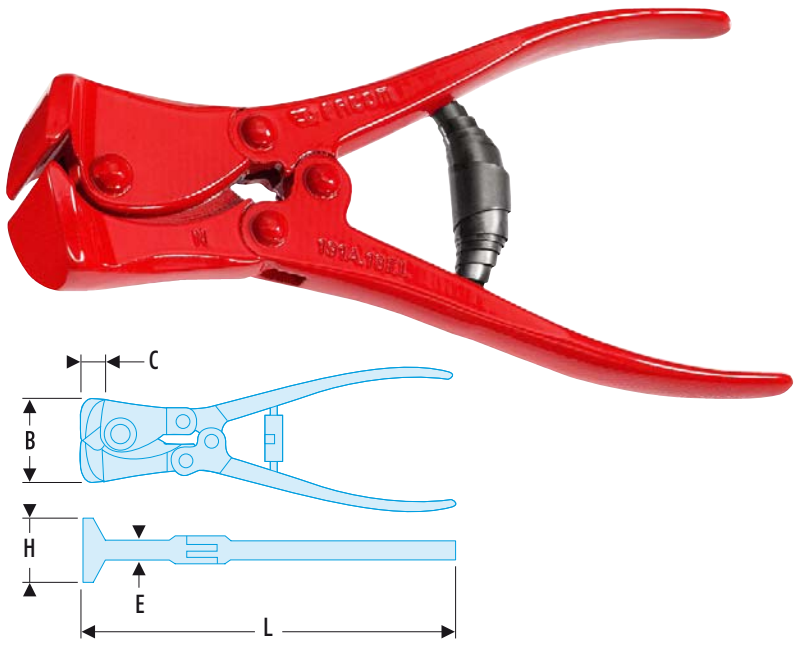


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Demultiplication system for increased capacity with minimum cutting effort. piano wire 200 kg/mm², diameter 2.5 mm.
- Finish: red paint finish.

	B [mm]	C [mm]	E [mm]	L [mm]	[g]
171.20EL	37	22	16	200	515

End-cutters



NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

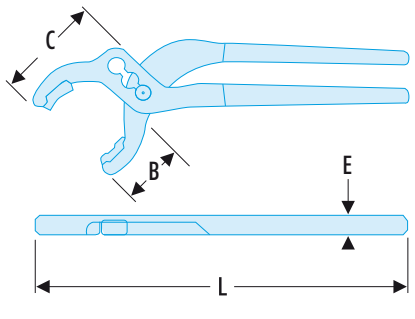
- Compound leverage for increased capacity with minimum cutting effort. piano wire 200 kg/mm², diameter 2.5 mm.
- Finish: red paint finish.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	H [mm]	L [mm]	[g]
191A.22EL	48	9	2,5	17	34	210	660

"Connector" pliers

410 - "Connector" pliers





ASME B107.500

- For handling fragile round components, e.g. screwed connector sleeves, tubes, lamps or wire looms, etc.
- Wide capacity from 3-position slip joint: max. diameter 55 mm.
- Replaceable plastic jaws available in 2 jaw hardness options:
- 410: hard jaws - 70 shore B.
- 410.S: soft jaws - 55 shore B.
- Finish: polished chrome, red PVC grips.

Spare jaws:
- 410.1: Set of 2 jaws with screws (hard).
- 410.S1: Set of 2 jaws with screws (soft).

	B [mm]	C [mm]	E [mm]	L [mm]	[g]
410	68	47	10	230	320
410.S	68	47	10	230	320

▣ 184.J2 "Mechanics" set



- Comprising 4 tools:
- Multigrip pliers 170A.
- Two-position slip-joint pliers 186.7CPG.
- Diagonal cutters 192.18G.
- Half-round nose pliers 193.16G.
- Supplied as a roll set N.38A-4B, dim. (L. x W. x H.): 260 x 100 x 50 mm.

Weight: 985 g.

▣ 184.J3CPE "Maintenance" set



- Comprising 12 tools:
- Locking multigrip pliers 181A.25CPE.
- Combination pliers 187.18CPE.
- Diagonal cutters 192.18CPE.
- End cutters 190.20CPE.
- 1 Flat-nose pliers 188.16CPE.
- Straight half-round nose pliers 185.20CPE.
- Angled half-round nose pliers 195.20CPE.
- Screwdriver for slotted heads AN4X100.
- Screwdriver for slotted heads AWH6.5X150.
- Screwdriver for slotted heads ANF6.5X150.
- Screwdriver for Phillips® heads ANP1X100.
- Screwdriver for Phillips® heads ANP2X125.
- Supplied as a roll set N.38A-12C.

Weight: 2.200 kg

▣ 184.J4CPE "Electrical fitters" set



- Comprising 10 tools:
- Combination pliers 187.18CPE.
- Diagonal cutters 391.16CPE.
- Wire strippers 194.17CPE.
- Round-nose pliers 189.17CPE.
- Half-round nose pliers 195.20CPE.
- Flat-nose pliers 188.16CPE.
- 3 screwdrivers for slotted heads, 1,000 V insulated A2.5X75VE - A3.5X100VE - A5.5X125VE.
- Adjustable wrench 113A.8C.
- Supplied as a roll set N.38A-10C.

Weight: 1.700 kg.

184.J5VE "Electricians" set



- 1,000V insulated tools to EN 60900900.
- Comprising 6 tools:

- Diagonal cutters 192.16VE.
- Combination pliers 187.18VE.
- Half-round nose pliers 185.20VE.
- 2 screwdrivers for slotted heads A.VE (4x100 - 5.5x125).
- 1 screwdriver for Pozidriv® heads AD1X100VE.

- Supplied as a roll set N.38A-6F.

Weight: 1.100 kg.

CPE.3 3-piece CPE plier set



- Including:

- Locking multigrip pliers 181A.25CPE.
- Diagonal cutters 192.16CPE.
- Half-round nose pliers 185.20CPE.

- Supplied in a cardboard box.

Weight: 790 g.

CPE.4 4-piece CPE plier set



- Including:

- Locking multigrip pliers 181A.25CPE.
- Diagonal cutters 192.16CPE.
- Half-round nose pliers 185.20CPE.
- Combination pliers 187.18CPE.

- Supplied in a cardboard box.

Weight: 1.020 kg.

VE.3 3-piece set of 1,000 Volt pliers



- 1,000V insulated tools to EN 60900900.
- Including:

- Multigrip pliers 180.VE.
- Diagonal cutters 391.16VE.
- Angled half-round nose pliers 195.20VE.

- Supplied in a cardboard box.

Weight: 790 g.

MODM.CPE1 Foam 4-piece plier set



• Including:
- Diagonal cutters 192.16CPE.
- Half-round nose pliers 185.20CPE.
- Locking twin slip-joint multigrip pliers 181A.25CPE.
- Large-capacity lock-grip pliers 501.
- PM.MODCPE1 foam tray.
Weight: 1.480 kg.

MOD.CPE 3-piece "mechanics" CPE plier module



• Including:
- Half-round nose pliers 185.20CPE.
- Combination pliers 187.18CPE.
- Diagonal cutters 192.16CPE.
- Tray PL.627.
Weight: 942 g.

MOD.TE 3-piece "mechanics" TE plier module



• Including:
- Half-round nose pliers 185.20TE.
- Combination pliers 187.18TE.
- Diagonal cutters 192.16TE, .
- Tray PL.627.
Weight: 942 g.

MOD.VE 3-piece EN 60900-compliant 1,000 Volt VE plier module



• 1,000V insulated tools to EN 60900900.
• Including:
- Slip-joint locking multigrip pliers 180.VE.
- Diagonal cutters 391.16VE.
- Standard wire strippers 194.17VE.
- Tray PL.622.
Weight: 950 g.

MOD.PR4 PR4 - 2-piece adjustable plier module



• Including:
- Multigrip pliers 180.CPE.
- Multigrip lock-grip pliers T5.L.
- Tray PL.330.
Weight: 1.158 kg.

MOD.PR5 PR5 - 2-piece adjustable plier module



• Including:
- Multigrip pliers 181EF.25CPE.
- Multigrip lock-grip pliers T5.L.
- Tray PL.330.
Weight: 1.158 kg.

MOD.PR7 PR7 - 2-piece adjustable plier module



• Including:
- Multigrip pliers 181EF.25CPE.
- Short-nose lock-grip pliers 500.
- Tray PL.330.

Weight: 1.094 kg.

MOD.PR8 PR8 - 2-piece adjustable plier module



• Including:
- Multigrip pliers 180.CPE.
- Short-nose lock-grip pliers 500.
- Tray PL.330.

Weight: 1.094 kg.

MOD.PR9 PR9 - 2-piece adjustable plier module



• Including:
- Locking multigrip pliers 181A.25CPE.
- Long-nose lock-grip pliers 501.
- Tray PL.330.

Weight: 1.094 kg.

MOD.PR11 PR11 - 2-piece adjustable plier module



• Including:
- Locking multigrip pliers 181A.25CPE.
- Multigrip lock-grip pliers T5.L.
- Tray PL.330.

Weight: 1.160 kg.

MOD.PR12 PR12 - 2-piece adjustable plier module



• Including:
- Locking multigrip pliers 181A.25CPE.
- Angled nose lock-grip pliers 580.10.
- Tray PL.330.

Weight: 1.160 kg.



DIGITAL METROLOGY



Calipers 522
Depth gauge 524
Micrometer 524
Dial gauge 524
Accessories 525

MECHANICAL METROLOGY



Mechanical calipers 525
Mechanical depth gauges 527
Mechanical micrometers 527
"Metrology" sets 529
Mechanical dial gauges 530
Magnetic bases for dial gauges 530
Surface gauges 531
Surface plates and V-blocks 531

RULES



Class I stainless steel rule with calibration certificate 533
Engineers rules 533
Class II rules 534
Various rules 536

SQUARES AND BEVEL PROTRACTORS



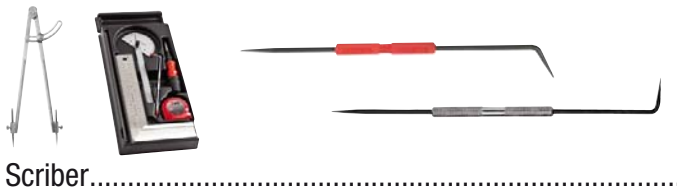
Precision squares 536
Other squares 538
Bevel protractors 539

FEELER GAUGES AND GAUGES



Feeler gauges 540
Radius gauges 541
Screw pitch gauges 541
Drill bit gauges 541

MARKING-OUT

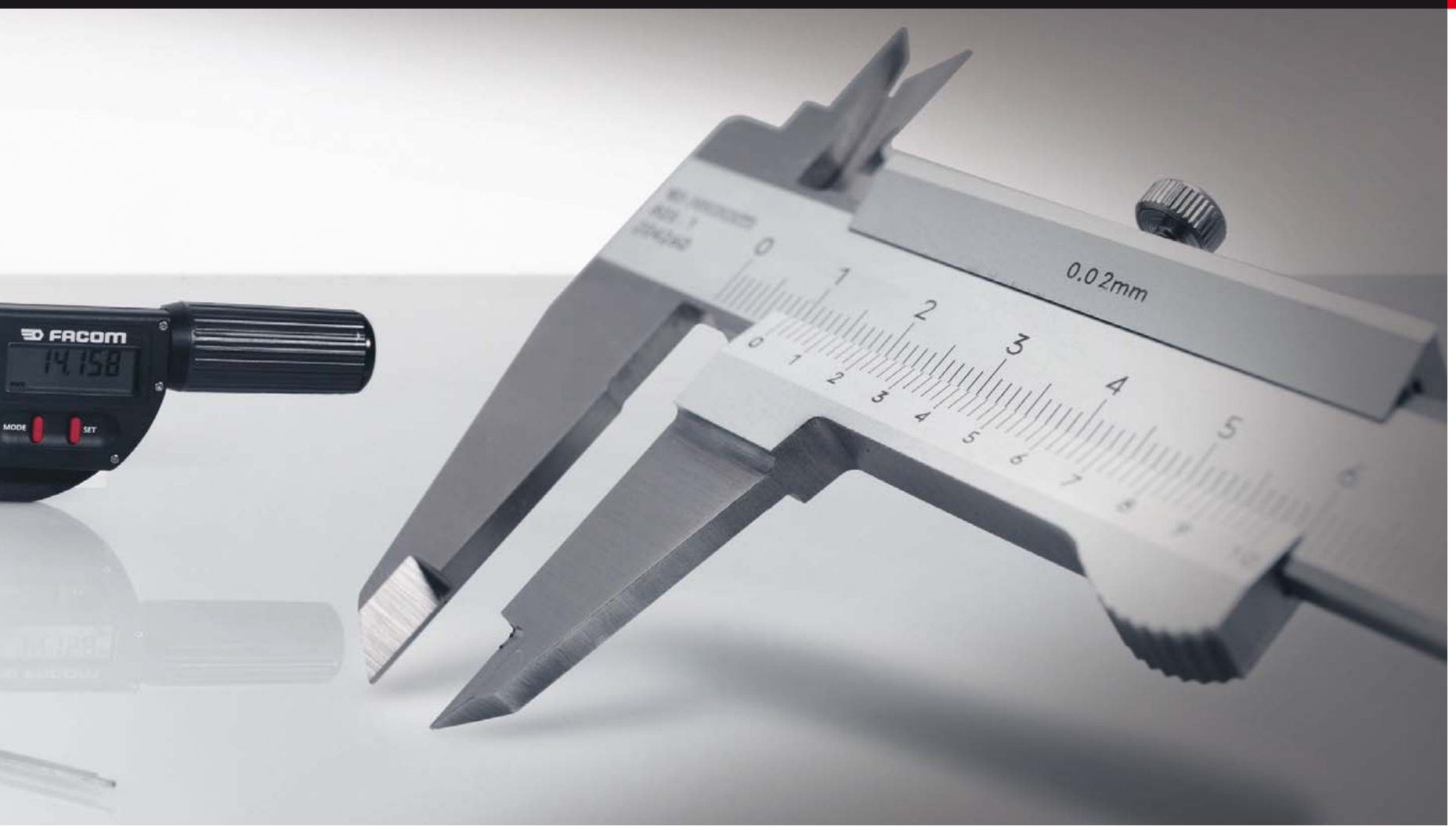


Scriber 542
Measuring marking out set 543
Steel scribers 543

MARKING-OUT



Letter and digit punches 544



"SHORT LENGTH" TAPE MEASURES

546



Stainless series 546
ABS series 547
Metal series 548
Export series mm and inch (not for sale in France) 548

"LONG" TAPE MEASURES

549



Tape treated anticorrosion Class I 549
Steel tape treated anticorrosion Class II 550
Plastiver tape Class III 551

LEVELS

552



Engineers levels 552
Trapezoid builders levels 553
Tubular builders levels 554

FOLDING RULES

555



Duralumin folding rules 555
Synthetic folding rule 555

BUILDERS SQUARES

556



Squares 556
Fliding bevels 556

BUILDERS MARKING-OUT

557



Plumb-bob 557
Chalk line reels 557
Chalk line powder 558
Chalk sticks 558

LIQUID CAPACITY GAUGE

558



Sounding leads 558
Spare parts for sounding leads 559
Sounding line gauges 559

Calipers

METROLOGY
INTRODUCTION TO THE STANDARDS

DIN 862 - Vernier and digital caliper measurements from 0 to 2,000 mm.

• Vernier or circular scale reading to 0.1 / 0.05 / 0.02 mm. Dimensional standard

Rule length (mm)	Height of lower jaw a1(mm)	Height of upper jaw a1 (mm)	Total thickness for inside measurement a1 (mm)	Extent of depth gauge a1 (mm)
160	40	8	5	100
200	60	8	10	100
250	75	10	10	100
300	90	10	10	100

• Accuracy

Rule length (mm)	Limit of error in µm			
	Accuracy			Digital reading
	0.1 / 1/10th	0.05 / 1/20th	0.02 / 1/50th	0.01 / 1/100th
50	50		20	20
100	50		20	20
200	50		30	30
300	50		30	30

• Hardness of measuring surfaces. +/- 53 HRc for stainless steel.
• Digital display measurements:
- Rate of displacement > standard (0.5m/s).
- Error notification in case of: - Excessive speed.
- Low power.

DIN 863 - Part 1 - Outside micrometers - Standard design
Mechanical and digital display micrometer.

• Dimensional standard: - Anvil diameter 6.5 - 7.5 or 8 mm.
- Tolerance of flatness of measuring surfaces 0.6 µm.
- The locking lever must not alter the reading by more than 2 µm.
- Thimble graduation.

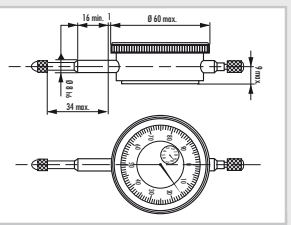
Measurement range (mm)	Bias error (µm)	Parallelism tolerance Applied force = 10N (µm)	Frame bending tolerance Applied force = 10N (µm)
0-25	4	2	2
25-50	4	2	2
50-75	5	3	3
75-100	5	3	3

Other specifications covered by the standard.

• Maximum force applied to the measured component between 5 and 10 N.
• The quality of the materials used and their elasticity under load.

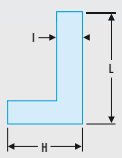
DIN 878 Dial gauges to 1/100 mm.

• Dimensional standard.
• Definition of accuracy.
• Measuring force - between 0.3 N and 1.5 N.



DIN 875 - Engineers square.

• Accuracy class.
• Perpendicularity tolerance of 2 surfaces.
• Flatness of edges.
• Legal markings.

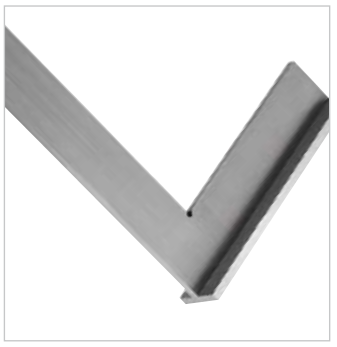


Perpendicularity tolerance (µm)			
Dim. (L) mm	Accuracy class		
	0	1	2
75	7	14	28
100	7	15	30
150	8	18	35
200	9	20	40
250	10	23	45
300	11	25	50
500	15	35	70

Dim. (L) mm	Height	
	Class 00/0/1	Class 2
75	50	50
100	70	70
150	100	100
200	130	130
250	165	165
300	200	175
500	330	250

Flatness tolerance (µm)			
L x H mm	Accuracy class		
	0	1	2
50	3	5	10
70	3	5	11
75	3	6	11
100	3	6	12
130	3	7	13
150	4	7	14
165	4	7	15
200	4	8	16
250	5	9	18
300	5	10	20
330	5	11	-
500	7	14	28













DIGITAL CALIPER

EASY, EFFICIENT AND RELIABLE!

Easy to use

- Clear, easy-to-read LCD screen.
- More intuitive use. Quick and easy to operate.
- Easier data transmission.

Reliable

- DIN 862.
- Ingress protection (IP) – IEC529.
  - Protection against dust and liquids.
  For perfect reliability under all operating conditions.
  - IP 6x = No dust penetration.
  - IP x5 = Protected against water jets from any direction for 3 minutes.
- Patented inductive measuring system.
- RS 232 connection. PC data transmission utility.

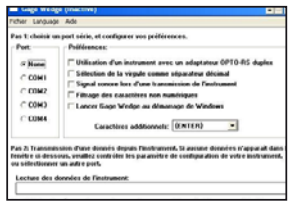






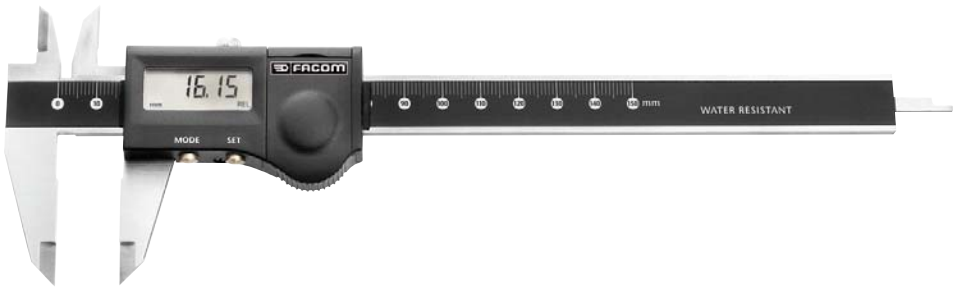
Efficient data transmission

- Gagewedge utility program developed for FACOM.
- Reliable data recording. Saves time, simple and easy to use.
- Compatible with the entire FACOM digital range.
- Easy RS232 cable connection between the measuring instrument and the PC.

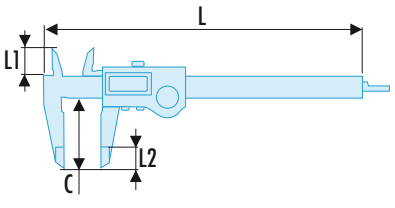


- Free download from www.facom.com

1300-1320 - Digital display calipers - 1/100th







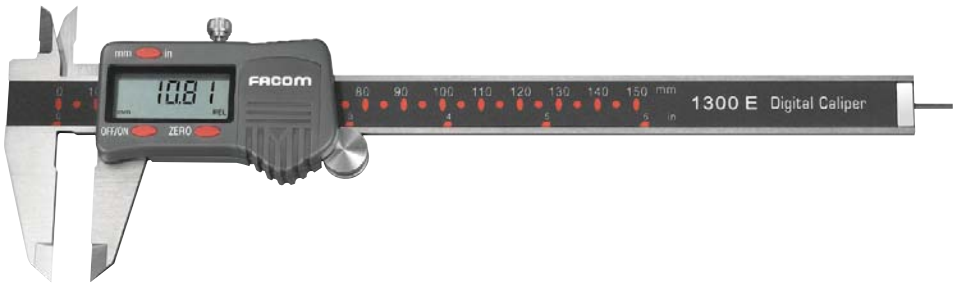


NF EN ISO 13385-1, ISO 13385-1, DIN 862

- Accuracy: 1/100th - 0.01 mm.
- Repeatability: 10 µm.
- Protection rating IP 65:
- IP 6: full dust protection.
- IP 5: fluid spray protection.
- Rectified stainless steel mechanical assembly.
- Reading rule with patented induction system.
- Flat depth gauge.
- LCD digital display 6 mm.
- Floating zero.
- Metric / imperial conversion.
- Automatic power off.
- Compatibility with Gagewedge software, RS232 output.
- Operating time: about 3500 hours.
- Supplied in case with compliance certificate.

	C [mm]	L [mm]	L1 [mm]	L2 [mm]	Capacity Cubic [mm]	Bias error [µm]	ΔΔ [g]
1300	40	233	16	10	150	20	465
1320	50	290	20	14	200	30	400

Workshop digital display caliper 150 mm - 1/100th





NF EN ISO 13385-1, ISO 13385-1, DIN 862

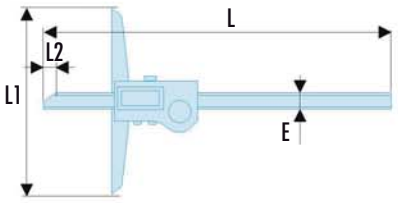
- Pocket-size caliper to be used in the workshop.
- Accuracy: 1/100th - 0.01 mm.
- Digital display for easy reading (resolution 0.01mm).
- Measurements: mm / inch. Inside / outside / depth measurement.
- Protection rating IP 20.
- Supplied with CR2032 battery.

	L [mm]	Capacity Cubic [mm]
1300E	235	150

Depth gauge

Digital display depth gauge 300 mm - 1/100th





NF EN ISO 13385-1, ISO 13385-1, DIN 862

- Accuracy: 1/100th - 0.01 mm.
- Repeatability: 10 µm.
- Protection rating IP 65:
- IP 6: full dust protection.
- IP 5: fluid spray protection.
- Rectified stainless steel mechanical assembly.
- Reading rule with patented induction system.
- LCD digital display 6 mm.
- Floating zero.
- Metric / imperial conversion.
- Compatible with Gagewedge software, RS232 output.
- Automatic power off.
- Operating time: about 3500 hours.
- Supplied in case with compliance certificate.

	E [mm]	L [mm]	L1 [mm]	L2 [mm]	Capacity Cubic [mm]	Bias error [µm]	ΔΔ [g]
1350	150	372	150	10	300	20	928

Micrometer

Digital display micrometer 25 mm





NF EN ISO 3611, ISO 3611, DIN 863

- Accuracy: 0.001 mm.
- Measurement range: 0 - 25 mm.
- Adjustable measuring force: 10 N (DIN 863).
- Protection rating IP 65:
- IP 6: full dust protection.
- IP 5: fluid spray protection.
- Automatic standby after 20 min.
- Stand by position without loss of origin.
- Fast forward: Drum forward 12 mm / turn.
- Compatibility with Gagewedge software, RS232 output.
- Operating time: 10 000 hours continuous.
- Supplied in case with compliance certificate.

	Capacity Cubic [mm]	ΔΔ [g]
1355A	0 - 25	270

Dial gauge

Digital display dial gauge





DIN 878

- Accuracy: 0.001 mm.
- Measurement range: 0 - 12.5 mm.
- Metric / imperial conversion.
- Protection rating IP 51.
- LCD display 6 mm.
- Fastening bush (Ø 8 mm).
- Interchangeable plunger tip (M2.5).
- Display pivots through 270°.
- Floating zero.
- Change of origin for any tip position.
- Measurement possible with two different references.
- Measurement save (frozen display).
- Compatibility with Gagewedge software, RS232 output.
- Supplied with FACOM compliance certificate.

	Capacity Cubic [mm]	ΔΔ [g]
1365	0 - 12,5	120

Accessories

1300.C2 Computer connection cable - RS232



- This cable is used to connect different metrology devices with a PC type computer.

Weight: 55 g.

Mechanical calipers

MECHANICAL METROLOGY

IMPROVED PERFORMANCE

Compliance with DIN 862

- Dimensional regulation.
- Hardness of measuring faces.
- Accuracy and limit of error in µm.
- Standard of quality and readability of graduations.

Technical specifications

- Ground stainless steel.
- Lock screw for reliable readings without risk of slippage.
- Vernier with guide. Natural hand position.
- Increased comfort.

Perfect reading quality

- Good contrast and anti-reflection.
- Excellent readability.
- Chemically formed graduation markings for perfect resistance to wear and chemical agents.



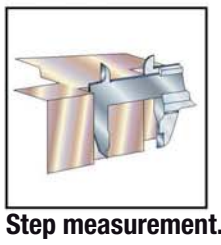
Outside measurement.



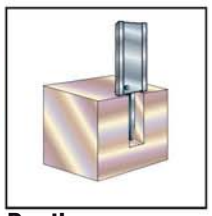
Inside measurement.



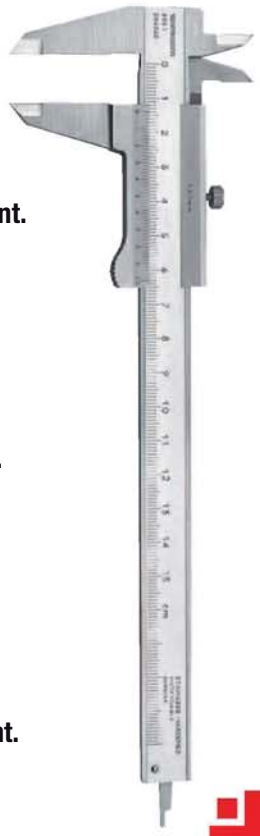
Throat measurement.



Step measurement.



Depth measurement.



Accuracy

- To 1/50 – 1/20 – 1/10 mm.

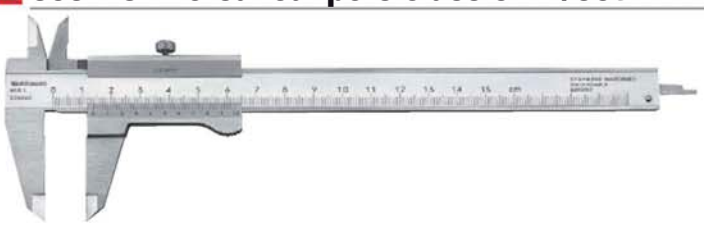
Traceability

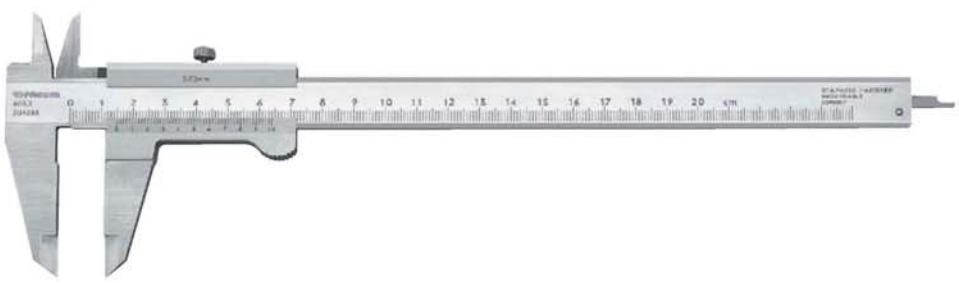
- Supplied with a numbered certificate of conformity.

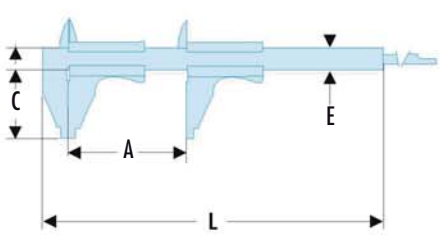
EXTRA SERVICE

Have your measuring instruments inspected each year by an accredited organisation to guarantee their accuracy.

805 - Universal calipers class 0 - 1/50th







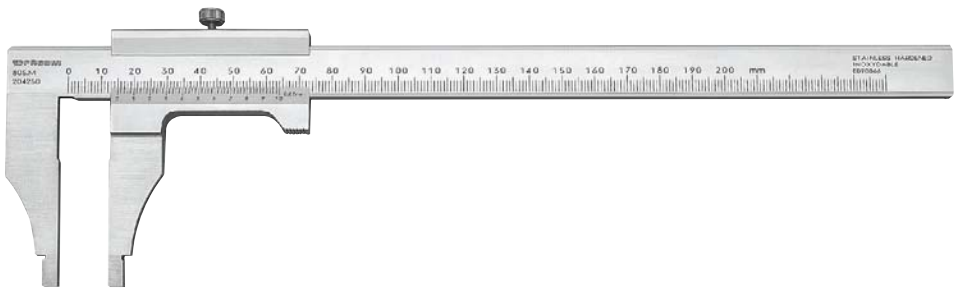


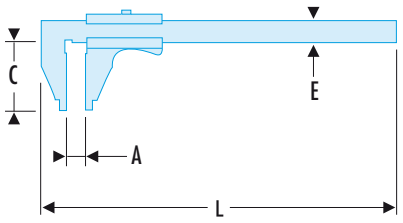
NF EN ISO 13385-1, ISO 13385-1, DIN 862

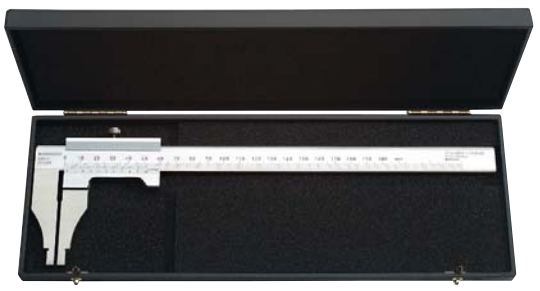
- Accuracy: 1/50th - 0.02 mm.
- Interior, exterior, depth measurement.
- Stainless steel rule - mat finish.
- Rule hardness: 40 HRc minimum.
- Flat depth gauge.
- Vernier with guide for better thumb position.
- Vernier endurance: 20 000 cycles minimum.
- Vernier screw locking.
- Supplied in case with compliance certificate.

	A [mm]	C [mm]	E [mm]	L [mm]	Bias error [µm]	Accuracy [mm]	⚖ [g]
805.1	150	40	16	228	20	0,02	290
805.2	200	50	17	290	30	0,02	419

Caliper class 0 - 1/50th





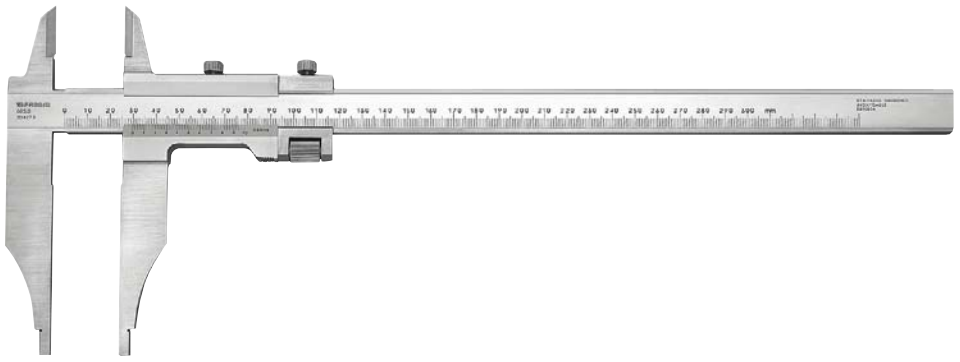


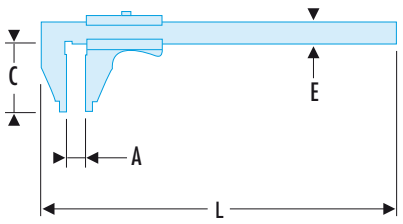
NF EN ISO 13385-1, ISO 13385-1, DIN 862

- Accuracy: 1/50th - 0.02 mm.
- Measurement capacity: 200 mm.
- Interior, exterior measurement (bore exceeding 10 mm).
- Stainless steel rule - mat finish.
- Rule hardness: 40 HRc minimum.
- Vernier with guide for better thumb position.
- Vernier endurance: 20 000 cycles minimum.
- Vernier screw locking.
- Graduations resistant to chemicals.
- Perfect contrast guaranteeing optimum reading quality.
- Supplied in case with compliance certificate.

	A [mm]	C [mm]	E [mm]	L [mm]	Bias error [µm]	Accuracy [mm]	⚖ [g]
805.M	200	60	17	290	30	0,02	423

Universal caliper - 300 mm - 1/50th





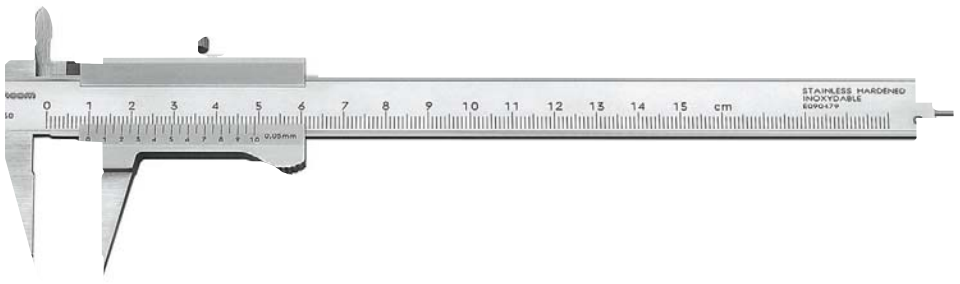


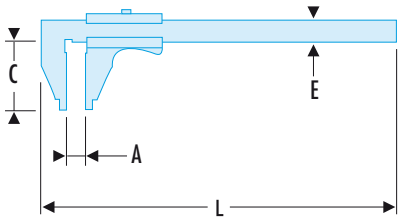
NF EN ISO 13385-1, ISO 13385-1, DIN 862

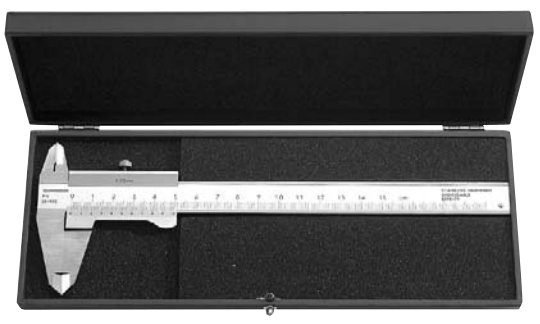
- Accuracy: 1/50th - 0.02 mm.
- Measurement capacity: 300 mm.
- Interior, exterior measurement (bore exceeding 10 mm).
- Stainless steel rule - mat finish.
- Rule hardness: 40 HRc minimum.
- Vernier with guide for better thumb position.
- Vernier endurance: 20 000 cycles minimum.
- Vernier screw locking.
- Precision adjustment screw.
- Supplied in case with compliance certificate.

	A [mm]	C [mm]	E [mm]	L [mm]	Bias error [µm]	Accuracy [mm]	⚖ [g]
805.S	300	100	20	418	30	0,02	941

Universal caliper - 150mm - 1/20th





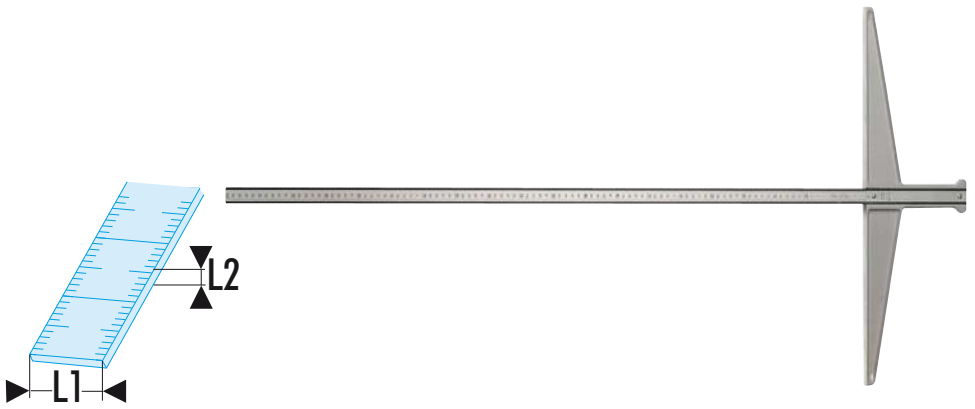


NF EN ISO 13385-1, ISO 13385-1, DIN 862

- Accuracy: 1/20th - 0.05 mm.
- Interior, exterior, depth measurement.
- Stainless steel rule - mat finish.
- Rule hardness: 40 HRc minimum.
- Flat depth gauge.
- Vernier with guide for better thumb position.
- Vernier endurance: 20 000 cycles minimum.
- Vernier screw locking.
- Supplied in case with compliance certificate.

	A [mm]	C [mm]	E [mm]	L [mm]	Bias error [µm]	Accuracy [mm]	⚖ [g]
816	150	40	16	228	50	0,05	288

DELA.5360 - Outage and inage hollow gauges - 0 at top

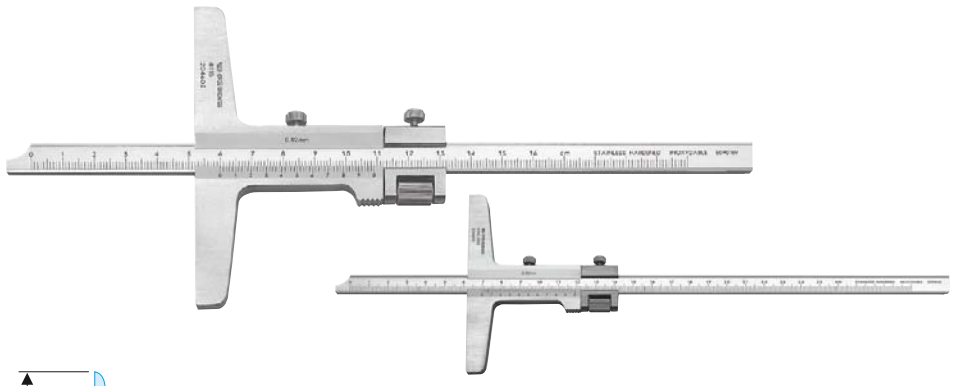


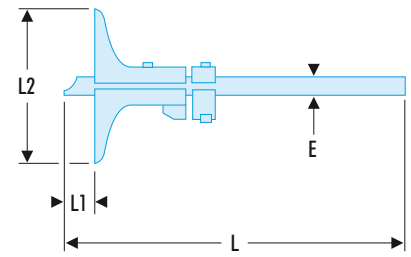
- Rule in AU4G.
- Graduation in mm.
- Bar width: 60 cm.

	L [mm]	L1 x L2 [mm]	⚖ [kg]
DELA.5360.01	500	21,5 x 1,2	1,000
DELA.5360.06	1000	21,5 x 1,2	1,200
DELA.5360.07	1500	21,5 x 1,2	1,240

Mechanical depth gauges

811 - Depth gauges class 0 - 1/50th







NF EN ISO 13385-2, ISO 13385-2, DIN 862

- Accuracy: 1/50th - 0.02 mm.
- Stainless steel rule - mat finish.
- Rule hardness: 40 HRc minimum.
- Measurement surface hardness: 53 HRc minimum.
- Vernier with guide for better thumb position.
- Vernier endurance: 20 000 cycles minimum.
- Vernier locking by precision adjustment screw.
- Supplied in case with compliance certificate.

	A [mm]	E [mm]	L [mm]	L1 [mm]	L2 [mm]	Bias error [µm]	Accuracy [mm]	⚖ [g]
811B	160	10	240	160	100	20	0,02	465
811C.250	250	10	330	250	100	30	0,02	491

Mechanical micrometers

806 - Micrometers 1/100th mm accuracy





NF EN ISO 3611, ISO 3611, DIN 863

- Accuracy: 1/100th - 0.01 mm.
- Accuracy: 0.01 mm.
- Carbide plunger tip: Ø 6.5 mm.
- Ratchet drum with torque limiter.
- Force applied on the part included strictly between 5 and 10 Nm.
- Drum: Ø 18 mm.
- Drum with 50 divisions (one drum turn: 0.5 mm).
- Isothermal pads.
- Supplied with:
- Pin and hook calibration wrench.
- Calibration shim wrench from model 806C.50.
- Calibration shims:
- 806.C50: 25 mm ± 1.5 µm.
- 806.C75: 50 mm ± 2 µm.
- 806.C100: 75 mm ± 2.5 µm.
- Supplied in plastic case.
- Supplied with compliance certificate.

	Measuring Range [mm]	Bias error [µm]	Flatness of measuring surfaces/Max.	Parallelism of measuring faces
806.C25	0 - 25	4	0,4	2
806C.50	25 - 50	4	0,4	2
806C.75	50 - 75	5	0,4	3
806C.100	75 - 100	5	0,4	3

807C Exterior micrometer with extension 1/100th mm accuracy



NF EN ISO 3611, ISO 3611, DIN 863

- Accuracy: 1/100th - 0.01 mm.
- Reading range 0 to 150 mm.
- Accuracy: 0.01 mm.
- Ratchet drum with torque limiter.
- Force applied on the part included strictly between 5 and 10 N.m.
- Drum: Ø 18 mm.
- Carbide plunger tip: Ø 6.5 mm.
- Interchangeable fixed plunger tip.
- Supplied with a set of 5 extensions.
- Supplied with the 5 calibration shims.
- Calibration shims:

- 807.CALE25: 25 mm ± 1.5 µm.
- 807.CALE50: 50 mm ± 2 µm.
- 807.CALE75: 75 mm ± 2.5 µm.
- 807.CALE100: 100 mm ± 3 µm.
- 807.CALE125: 125 mm ± 3.5 µm.

- Isothermal pads.
- Plunger tip lock.
- Supplied in wood case.
- Supplied with compliance certificate.

Exterior friction micrometer 1/100th mm accuracy



NF EN ISO 3611, ISO 3611, DIN 863

- Accuracy: 1/100th - 0.01 mm.
- Accuracy: 0.01 mm.
- Carbide plunger tip: Ø 6.5 mm.
- Ratchet drum with torque limiter.
- Force applied on the part included strictly between 5 and 10 N.m.
- Drum = Ø 18 mm.
- Plunger tip lock.
- Supplied in plastic case.
- Supplied with compliance certificate.

	Capacity Cubic [mm]	Bias error [µm]	Flatness of measuring surfaces/Max.	Parallelism of measuring faces
806.F	0 - 25	4	0,4	2

Metrology sets

MOD.MET Metrology module



- 805.1 mechanical caliper capacity 1/50 mm.
- 806.F: palmer 1/100 mm capacity 25 mm.
- 814.M: screw pitch gauge 23 blades, 25 to 300.
- 804: metric feeler gauges 4/100 to 1 mm.
- Thermoformed module PL634.

Weight: 0.930 kg.

809.J2 Metrology-control case 8 tools



Including:
- 805.M: caliper to 1/50 mm (capacity: 200 mm).
- 803.300M: stainless rule 300 mm.
- 811: depth gauge 1/50 mm (capacity: 160 mm), fine adjustment by return screw.
- 818B.15: simple square 150 mm (accuracy class: 1).
- 236: carbide scriber.
- 256.4: punch.
- 806.C25: micrometer 1/100 mm (capacity: 25 mm).
- 1901.05: straight scriber (capacity: 150 mm).
- Supplied in case (L. x D. x H.): 365 x 260 x 30 mm.

Weight: 2.100 kg.

809.J3 Metrology-control case 10 tools



Including:
- 805.M: caliper 1/50 mm (capacity 200 mm).
- 806.C25: micrometer 1/100 mm (capacity: 25 mm).
- 806C.50: micrometer 1/100 mm (capacity: 25 - 50 mm).
- 811: depth gauge 1/50 mm (capacity: 160 mm), fine adjustment by return screw.
- 818B.15: simple square 150 mm (accuracy class 1).
- 819B.15: flanged square 150 mm (accuracy class 1).
- 1901.05: straight scriber 150 mm.
- 236: carbide scriber.
- 803.300M: stainless rule 300 mm.
- 256.4: punch.
- Supplied in case (L. x D. x H.): 410 x 280 x 40 mm.

Weight: 3.560 kg.

Mechanical dial gauges

812B.AC Dial gauge 1/100th mm accuracy



- Accuracy: 1/100th - 0.01 mm.
- Travel 10 mm saved with totaller.
- Pivot dial: Ø 57 mm.
- Interchangeable plunger tip.

Weight: 345 g.

812B.1AC: Steel ball plunger for 812B.AC dial gauge

812A Dial gauge-magnetic base set



- Dial gauge 812B.AC supplied with the hinged magnetic holder 812.3.

Weight: 2.245 kg.

812B.P Lever dial gauge 1/100th mm accuracy



- Accuracy: 1/100th - 0.01 mm.
- Travel: 0.8 mm.
- Pivot dial: Ø 31 mm.
- Supplied with 2 fastening rods: Ø 4 and 8 mm.
- Plunger tip: Ø 2 mm.

Weight: 154 g.

Magnetic bases

812.3 Dial gauge-hinged magnetic base set

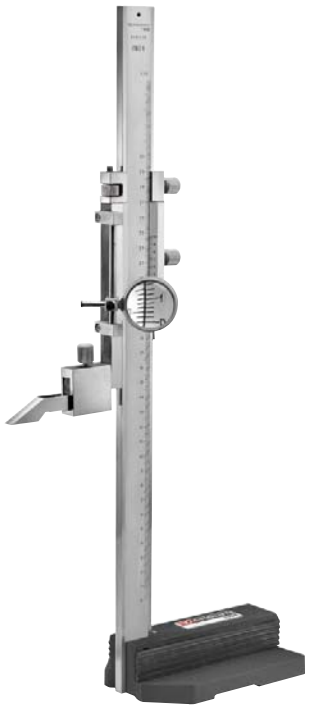


- Radius of action: 280 mm.
- Vertical tear strength: 600 N (60 kg).
- Threading Ø: M8.
- Base: 50 x 55 x 60 mm.

Weight: 1.900 kg.

Surface gauges

796B Precision surface gauge 300 mm - 1/50th



- Class 0.
- Precision 1/50th - 0.02 mm.
- Accuracy error: ± 28µm.
- Reliability error: ± 12µm.
- Stainless steel rule - mat anti-reflection finish:

- Width: 25 mm.
- Hardness 40 HRc minimum.

- Maximum measurement capacity: 300 mm.
- Steel alloy scriber:

- Hardness 53 HRc minimum.
- Better scribing quality.
- 796B.04: serial no. A02 0001 --> march 01.
- 796C.04: serial no. A02 0001 --> A04 0001.

- Fine adjustment by return screw.
- Repositionable magnifying glass.
- Dial gauge base supplied in standard: for dial gauge with Ø 8 mm rod (DIN 878 standard).
- Total dimensions: 455 mm x 90 mm.
- Supplied with compliance certificate.

Weight: 3.280 kg.

795A Engineers surface gauges



- Model without graduation.
- Fine adjustment by pivot strip using a push screw.
- Cast iron base.
- Vertical face with 90° V groove.
- Rod: Ø 10 mm.

Weight: 1.745 kg.

Surface plates and V-block

1200 - Cast iron surface plates

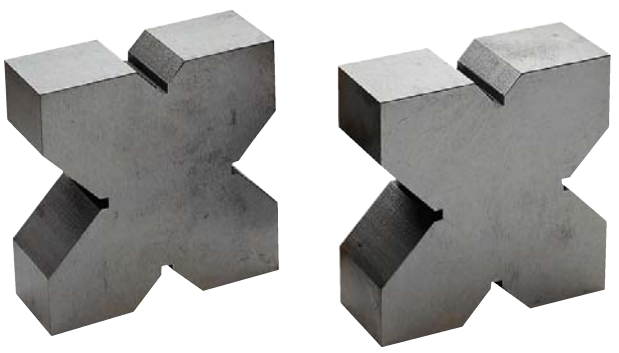


DIN 876

- Class II.

	Dimension [mm]	[kg]
1200.30	300 x 200	7
1200.40	400 x 250	16
1200.50	500 x 300	22
1200.60	600 x 400	35

1202.00 - Pair of steel V-blocks - 20 microns



ISO 8512-1, DIN 876

- Pair of vees with 4 90° notches.
- Paired vees, identification number punched on the upper face.

	Dimension [mm]	[kg]
1202	30 x 40 x 50 x 60	7,371
1202.00	20 x 30 x 40 x 50	2,808

RULES

A FACOM SPECIALTY, RIGOROUS EXPERTISE

TIGHT PRODUCTION CONTROL

- Our rules have been produced in our plants located in France since 1918.

CHEMICAL ENGRAVING

- Deep markings.
- Perfect contrast.
- Resistant to wear and chemical agents.

RIGOROUS SELECTION OF MATERIALS GUARANTEEING THE HIGHEST QUALITY

- Compromise between rigidity and flexibility.
- Mat surface for perfect readability.
- Smooth finish for fine, clean markings.

A RANGE OF OVER 50 REFERENCES

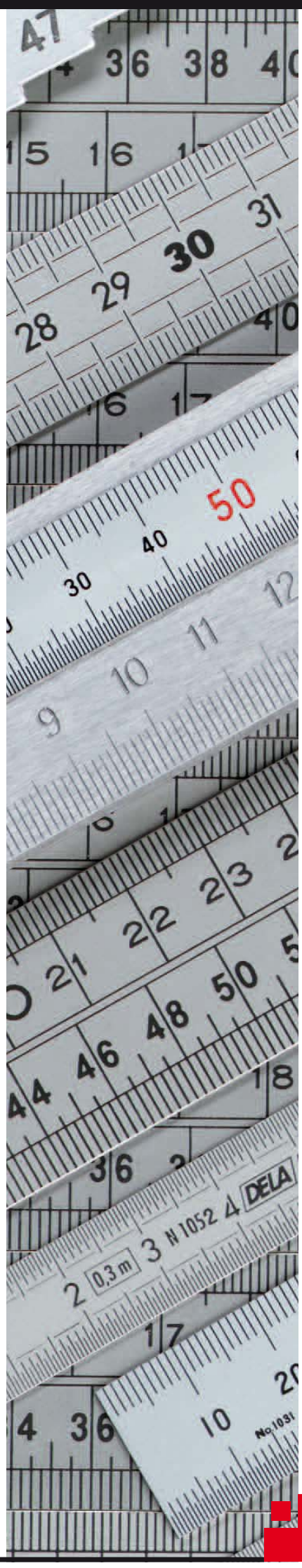
- Stainless steel or duralumin.
- Rigid, semi-rigid, flexible.
- Graduation mm – 1/2 mm.

INFORMATION

European directive 2004/22/EC, necessary harmonisation and change.

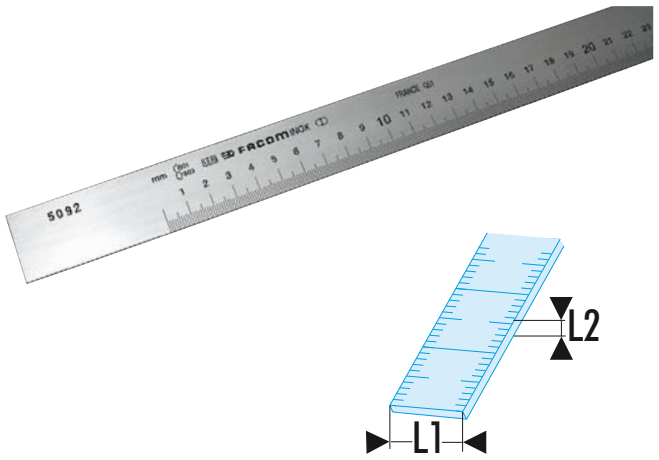
- Measuring Instrument Directive - Annex MI-008 – material measures.
- Harmonisation of the regulations for the 25 Member States.
- Entry into force in France on 30 October 2006.
- Gradule implementation as pattern approvals expire.
- NB: Only measurements > 500 mm are considered in legal metrology (OIML 35). No pattern and regulatory marking approvals are required for measurements< 500 mm.





Class I stainless steel rule with calibration certificate

Stainless steel rule class I - 1000 mm



- Engraved on one side.
- 1 edge in mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection treatment.
- Supplied with calibration certificate.

	L [mm]	L1 x L2 [mm]	⚖ [g]
DELA.61058.10C	1000	30 x 1	191

Engineers rules

Non graduated solid stainless steel rule



NF E 11-105, DIN 847

- Class I, flatness: 4 + L/60 µm (L being the length in mm).
- Stainless steel.
- Supplied in wood case.

	L [mm]	⚖ [kg]
809.IN500	500	2,900

Graduated solid stainless steel rule



NF E 11-105, DIN 874

- Class I, flatness: 4 + L/60 µm (L being the length in mm).
- With offset zero graduation.
- Supplied in wood case.

	L [mm]	⚖ [kg]
809.ING500	500	2,900

809 - Stainless steel filament rules



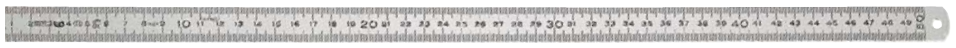
NF E 11-104, DIN 874

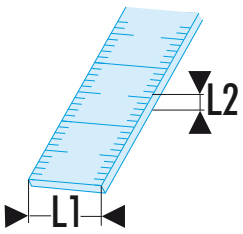
- To check a surface or an edge.
- Tempered stainless steel with insulating handle.
- Supplied in wallet.

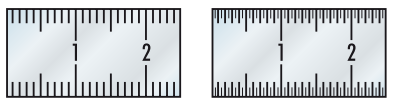
	L [mm]	Flatness of measuring surfaces/Max.	⚖ [g]
809.75	75	2	80
809.100	100	2	125
809.150	150	3	200
809.200	200	3	280

Class II rules

803 - Stainless steel rules - 2 sides



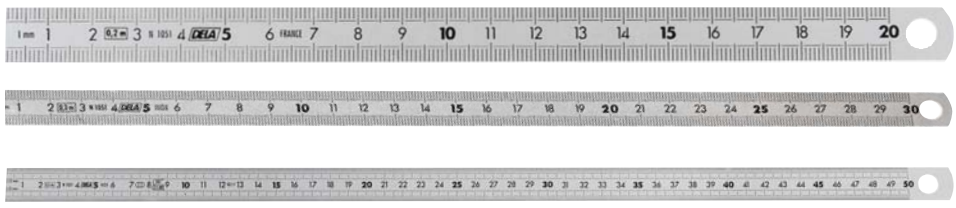


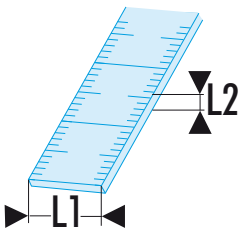


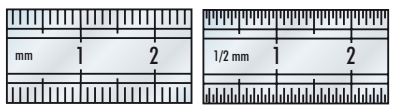
- Engraved on both sides, except 803.1000M (engraved on one side, upper edge in 1/2 mm, lower edge in mm).
- One side in mm - One side in 1/2 mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection mat satin surface.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]	[g]
803.200M	200	13 x 0,4	10
803.300M	300	13 x 0,5	16
803.500M	500	20 x 0,5	40
803.1000M	1000	25 x 0,5	100

DELA.1051 - Stainless steel rules - 2 sides





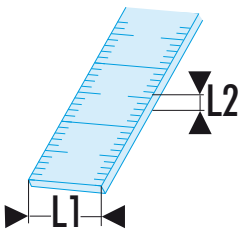


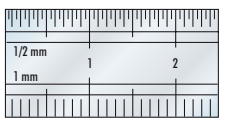
- Engraved on both sides.
- One edge in mm - One edge in 1/2 mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection treatment.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]	[g]
DELA.1051.02	150	13 x 0,5	8,5
DELA.1051.03	200	13 x 0,5	10,9
DELA.1051.04	250	13 x 0,5	13,5
DELA.1051.05	300	13 x 0,5	16,1
DELA.1051.06	500	20 x 0,5	40,4

DELA.1021 - Stainless steel rules - 1 side



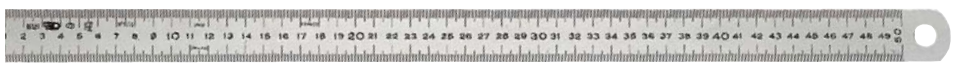


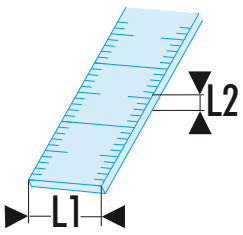


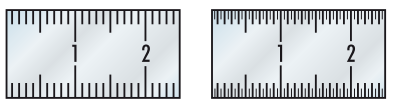
- Engraved on one side.
- One edge in mm - One edge in 1/2 mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection treatment.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]	[g]
DELA.1021.02	150	13 x 0,5	8,5
DELA.1021.03	200	13 x 0,5	10,9
DELA.1021.05	300	13 x 0,5	16,1
DELA.1021.06	500	20 x 0,5	40,4
DELA.1021.07	1000	25 x 0,5	100
DELA.1021.08	1500	25 x 0,5	152
DELA.1021.09	2000	25 x 0,5	200

803.SR - Stainless steel semi-rigid rules - 2 sides



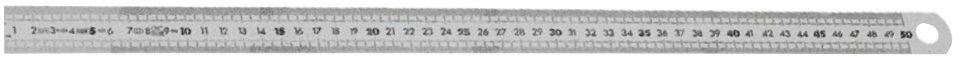


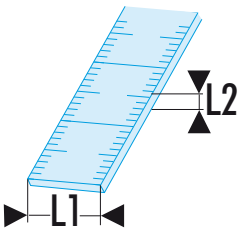


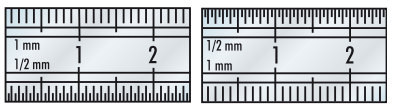
- Engraved on both sides except 803.SR1000 (one side).
- One edge in mm - One edge in 1/2 mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection mat satin surface.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]	[g]
803.SR300	300	30 x 1	62
803.SR500	500	30 x 1	100
803.SR1000	1000	30 x 1	200

DELA.1056 - Stainless steel semi-rigid short rules - 2 sides





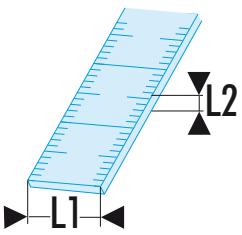


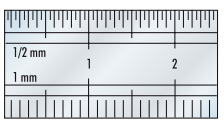
- Engraved on both sides.
- One edge in mm - One edge in 1/2 mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection treatment.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]	ΔΔ [g]
DELA.1056.01	300	30 x 0,8	60
DELA.1056.02	500	30 x 0,8	100

DELA.1056 - Stainless steel semi-rigid long rules - 1 side





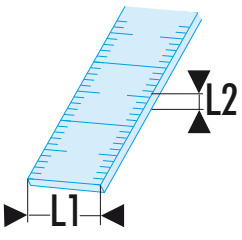


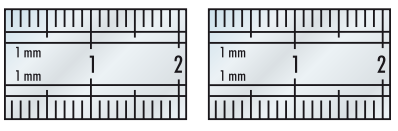
- Engraved on one side.
- One edge in mm - One edge in 1/2 mm.
- Graduation in mm on both sides for references: DELA.1056.06 - DELA.1056.07 - DELA.1056.08.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection treatment.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]
DELA.1056.03	1000	30 x 0,8
DELA.1056.04	1500	30 x 0,8
DELA.1056.05	2000	30 x 0,8
DELA.1056.06	3000	30 x 1,0
DELA.1056.07	4000	30 x 1,0
DELA.1056.08	5000	30 x 1,0

DELA.1061 - Dural semi-rigid short rules - 2 sides





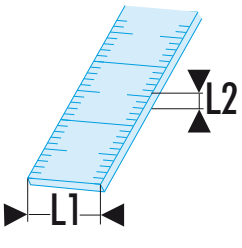


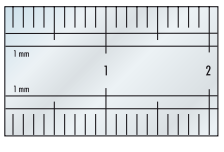
- Engraved on both sides.
- Two edges in mm.
- Anti-reflection treatment.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

	L [mm]	L1 x L2 [mm]	ΔΔ [g]
DELA.1061.01	300	30 x 1,2	33
DELA.1061.02	500	30 x 1,2	53

DELA.1061 - Dural semi-rigid long rules - 1 side







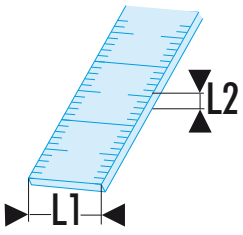
- Engraved on one side.
- Two edges in mm.
- Anti-reflection treatment.
- Class II as per regulations applies to rules with a length above or equal to 500 mm.

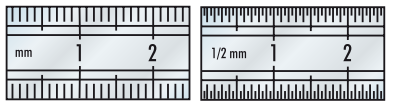
	L [mm]	L1 x L2 [mm]	ΔΔ [g]
DELA.1061.03	1000	30 x 1,2	110
DELA.1061.04	1500	30 x 1,2	150
DELA.1061.05	2000	30 x 1,2	200

Various rules

DELA.1052 - Stainless rules with heel







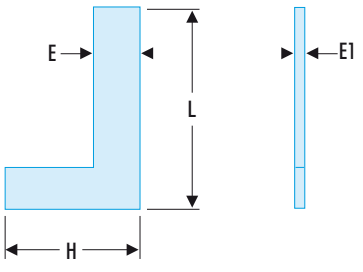
- Engraved on both sides.
- One side in mm - One side in 1/2 mm.
- Stainless steel 18 % Cr - 8 % Ni.
- Anti-reflection treatment.

	L [mm]	L1 x L2 [mm]	⚖ [g]
DELA.1052.02	200	13 x 0,5	12
DELA.1052.03	300	13 x 0,5	17
DELA.1052.04	500	20 x 0,8	44

Precision squares

818.CLO - Stainless steel basic precision squares - Class 0





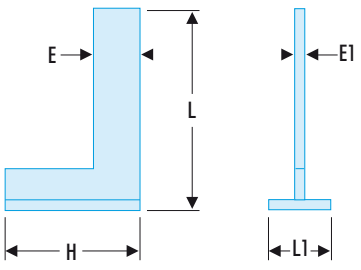
NF E 11-103, DIN 875

- Accuracy: ± 5 + h/50 µm (h being height in mm).
- Stainless steel.
- Ground exterior edges and flat surfaces.

	E x E1 [mm]	L x H [mm]	⚖ [kg]
818.75CLO	15 x 5	75 x 50	0,140
818.100CLO	20 x 5	100 x 70	0,220
818.150CLO	27 x 6	150 x 100	0,455
818.200CLO	31 x 7	200 x 130	0,760
818.300CLO	39 x 8	300 x 200	1,765

819.CLO - Stainless steel flanged precision squares - Class 0





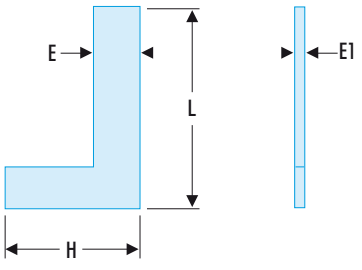
NF E 11-103, DIN 875

- Accuracy: ± 5 + h/50 µm (h being height in mm).
- Stainless steel.
- Ground exterior edges and flat surfaces.

	E x E1 [mm]	L1 [mm]	L x H [mm]	⚖ [kg]
819.75CLO	15 x 5	15	75 x 50	0,175
819.100CLO	20 x 5	20	100 x 70	0,280
819.150CLO	27 x 6	28	150 x 100	0,600
819.200CLO	31 x 7	32	200 x 130	1,095
819.300CLO	39 x 8	40	300 x 200	2,337

818B - Basic squares - Class I





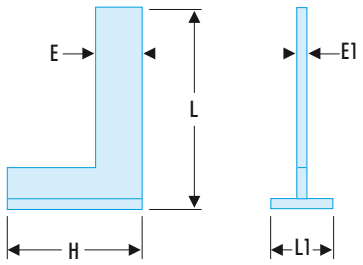
NF E 11-103, DIN 875

- Ground sides and chamfers.
- XC12 steel.

	E x E1 [mm]	L x H [mm]	⚖ [kg]
818B.10	19 x 5	100 x 70	0,130
818B.15	24 x 6	150 x 100	0,240
818B.20	30 x 7	200 x 130	0,410
818B.30	30 x 7	300 x 180	0,880

819B - Basic flanged squares - Class I





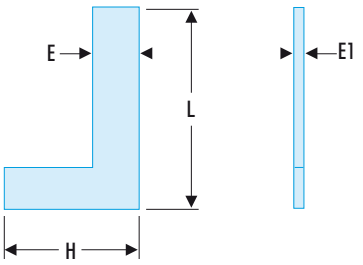
NF E 11-103, DIN 875

- Ground sides and chamfers.
- Screwed flange.
- XC12 steel.
- Supplied with compliance certificate.

	E x E1 [mm]	L1 [mm]	L x H [mm]	⚖ [kg]
819B.10	19 x 5	20	100 x 70	0,250
819B.15	24 x 6	25	150 x 100	0,470
819B.20	30 x 7	30	200 x 130	0,800
819B.25	30 x 7	30	250 x 160	0,980
819B.30	30 x 7	30	300 x 180	1,205

DELA.1256 - Basic squares - Class II





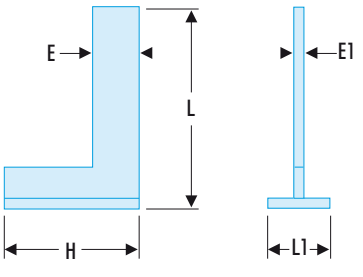
NF E 11-103, DIN 875

- Basic 90° squares.

	E x E1 [mm]	L x H [mm]	⚖ [kg]
DELA.1256.02	20 x 5	100 x 70	0,125
DELA.1256.04	20 x 5	150 x 100	0,290
DELA.1256.06	30 x 7	200 x 130	0,515
DELA.1256.07	30 x 7	250 x 165	0,580
DELA.1256.08	30 x 7	300 x 200	0,700
DELA.1256.10	40 x 7	500 x 330	1,800

DELA.1257 - Basic flanged squares - Class II





NF E 11-103, DIN 875

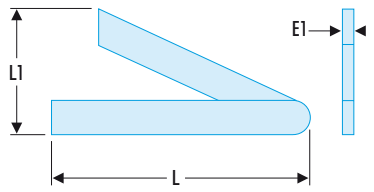
- Screwed flange.
- Perfect bearing of heel and side.

	E x E1 [mm]	L1 [mm]	L x H [mm]	⚖ [kg]
DELA.1257.02	20 x 5	20	100 x 70	0,200
DELA.1257.04	20 x 5	20	150 x 100	0,390
DELA.1257.06	30 x 7	30	200 x 130	0,715
DELA.1257.07	30 x 7	30	250 x 165	0,850
DELA.1257.08	40 x 8	40	300 x 200	1,020
DELA.1257.10	40 x 7	40	500 x 330	2,600

Other squares

817 - Dummy squares



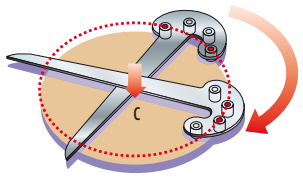


- Surface and edges in ground steel.

	E1 [mm]	L [mm]	L1 [mm]	[g]
817.15	15	150	19 - 145	350
817.20	15	200	24 - 195	580
817.25	15	250	24 - 240	720
817.30	15	300	24 - 285	810

DELA.1290.00 Centering square





- Steel square with 4 symmetrical studs.
- Allows to determine the center of an arc of circle in two operations.

Weight: 100 g.

DELA.1272 - Flanged double tab squares



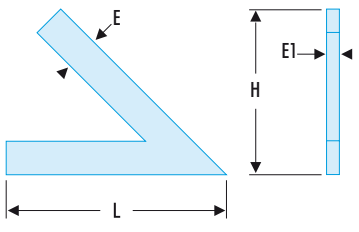
NF E 11-103, DIN 875

- Angles 30°, 45°, 60°, 90°.

	L [mm]	L1 [mm]	[g]
DELA.1272.01	100	78	270
DELA.1272.03	150	105	600
DELA.1272.04	200	142	720

Flanged square 45°





	E x E1 [mm]	L x H [mm]	[g]
DELA.1292.00	26 x 7	150 x 150	324

Bevel protractors

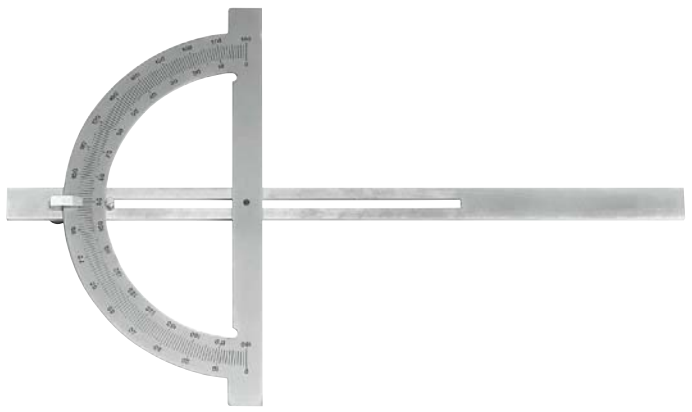
1885.00 Bevel protractor



- Ground stainless steel.
- Base of the sector divided in mm.
- Double division reversed from 0 to 180°.
- Sector Ø: 85 mm.
- Rule length: 170 mm.
- Easy reading by an index inside a port.

Weight: 150 g.

DELA.1880.00 High capacity bevel protractor



- Tempered steel.
- Graduations in degrees.
- Empty sector for measuring angles from 10 to 170°.
- Sector Ø: 200 mm.
- Rule length: 400 mm.
- Slide rule, screw locking.

Weight: 420 g.

DELA.1897.02 Simplified bevel protractor



- Stainless steel model without square.
- Accuracy: 5 mn arc.
- Length: 300 mm.
- Supplied in case (L. x D. x H.): 370 x 145 x 35 mm.

Weight: 400 g.

813B.S High precision bevel protractor



- Tempered stainless steel bevel protractor.
- Anti-reflection mat chrome reading surface.
- Measurement range 0 - 360°.
- Minimum reading: 5° arc on vernier.
- Dial diameter: 70 mm.
- Dimensions (L. x D. x H.): 315 x 75 x 20 mm.
- Dial pivots with vernier and dial locking screw.
- 2 End rules cut at 45° and 60°, including:

- 1 short rule 200 mm x 16 mm.
- 1 long rule 300 mm x 16 mm.

- Rule offset by 85 mm x 16 mm.
- Slide rules locking screw.
- Magnifying glass.
- Cast iron base: 70 mm x 30 mm.
- Supplied in rigid case dimensions (L. x D. x H.): 325 x 125 x 47 mm.

Weight: 1.466 kg.

Feeler gauges

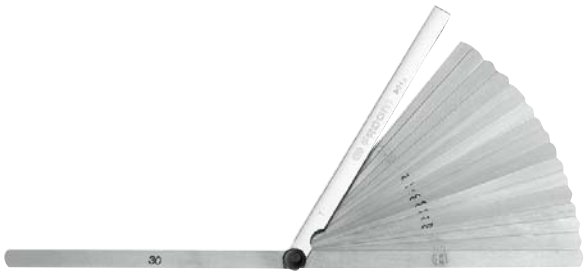
804 Round tip metric thickness gauges



- Set of 19 feeler gauges (round tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

Weight: 60 g.

804.L Long metric thickness gauges



- Set of 19 feeler gauges (round tip): 4/100 --> 25/100 mm.
- Blade length: 150 mm.

804.P Sharp tip metric thickness gauges



- Set of 19 feeler gauges (tapered tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

804.AM Anti-magnetic metric thickness gauges



- Set of 19 feeler gauges (tapered tip): 10/100 --> 100/100 mm.
- Blade length: 100 mm.
- Brass blades.

804.U Inch thickness gauges



- Set of 26 feeler gauges (tapered tip): 15/10000 --> 250/10000 inches.
- Blade length: 3"1/2 (88.9 mm).

Radius gauges

Radius gauges



- To check the radii of fillets and connections.
- Tempered steel blades.
- 3 models for concave and convex radii 1 to 25 mm.

	A [mm]	Number of Blades	Content set	⚖ [g]
DELA.1786.00	1,0 --> 7,0	34	1,00 - 1,25 - 1, 50 - 1,75 - 2,00 - 2,25 - 2,50 - 2,75 - 3,00 - 3,50 - 4,00 - 4,50 - 5,00 - 5,50 - 6,00 - 6,50 - 7,00	65
DELA.1787.00	7,5 --> 15,0	32	7,50 - 8,00 - 8,50 - 9,00 - 9,50 - 10,00 - 10,50 - 11,00 - 11,50 - 12,00 - 12,5 - 13,00 - 13,50 - 14,00 - 14,50 - 15,00	80
DELA.1790.00	15,5 --> 25,0	30	15,50 - 16,00 - 16,50 - 17,00 - 17,50 - 18,00 - 18,50 - 19,00 - 19,50 - 20,00 - 21,00 - 22,00 - 23,00 - 24,00 - 25,00	125

Screw pitch gauges

814 - Screw pitch gauges



	Number of Blades	Thread Forms	Content set	⚖ [g]
814.M	60° cutting gauge + 31 blades	Metric thread	25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 - 90 - 100 - 110 - 120 - 125 - 130 - 140 - 150 - 160 - 170 - 175 - 180 - 190 - 200 - 225 - 250 - 275 - 300	53
814.NI	60° cutting gauge + 25 blades	I.S.O thread	0,25 - 0,30 - 0,35 - 0,40 - 0,45 - 0,50 - 0,60 - 0,70 - 0,75 - 0,80 - 1,00 - 1,25 - 1,50 - 1,75 - 2,00 - 2,50 - 3,00 - 3,50 - 4,00 - 4,50 - 5,00 - 5,50 - 6,00 - 6,50 - 7,00	35
814.WH	55° cutting gauge + 29 blades	Whitworth thread	4 - 4,5 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 16 - 18 - 19 - 20 - 22 - 24 - 25 - 26 - 28 - 30 - 32 - 34 - 36 - 38 - 40 - 48 - 60	40
814.G	8 blades	Gas thread	Filets intérieurs : 11 - 14 - 19 - 28 Filets extérieurs : 11 - 14 - 19 - 28	20

Drill bit gauges

DELA.1952.00 Drill bit gauges

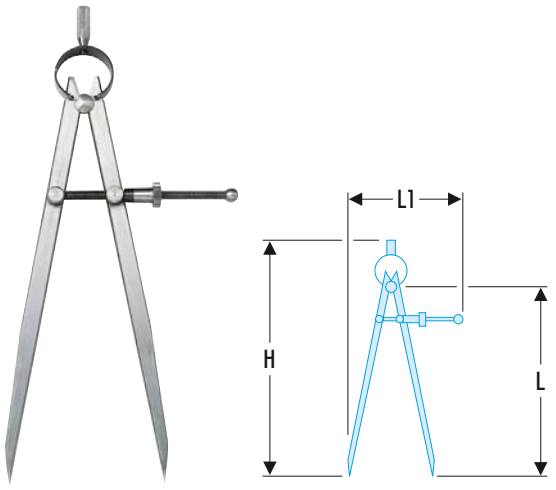


- For 120° drill bit sharpening angle.
- The drill bit edge dimension is divided into 1/2 mm from 0 to 20.
- Stainless steel.

Weight: 50 g.

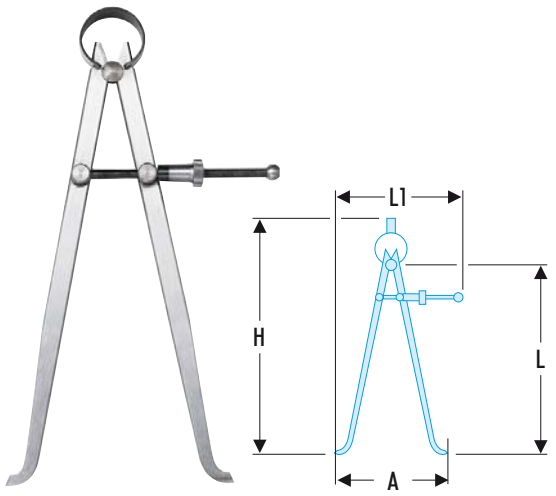
Scriber

DELA.1901 - Dry tip scriber



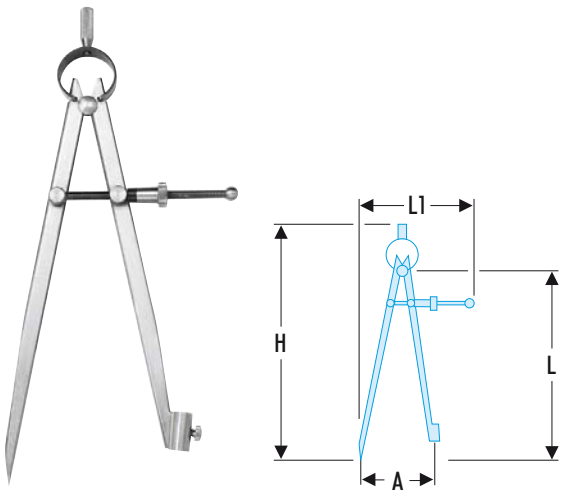
	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
DELA.1901.05	195	150	85	90
DELA.1901.07	245	200	100	160
DELA.1901.08	300	250	125	200
DELA.1901.09	350	300	140	240

DELA.1902 - Interior scriber



	A [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
DELA.1902.04	160	170	150	82	80
DELA.1902.06	210	225	200	100	165
DELA.1902.08	315	325	300	125	230

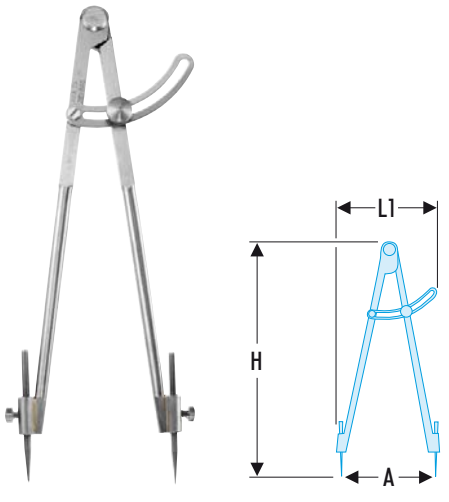
Pen holder scriber



- Pen: Ø 8 mm.

	A [mm]	H [mm]	L [mm]	L1 [mm]	ΔΔ [g]
DELA.1905.05	250	300	250	125	210

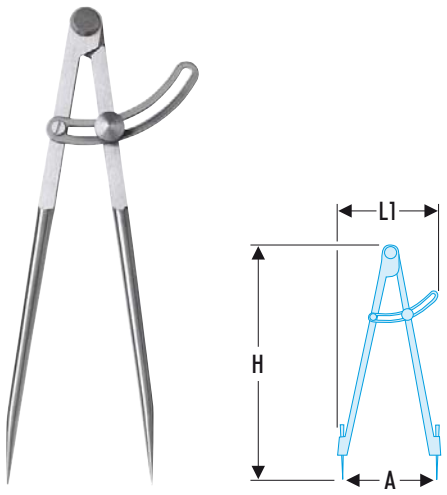
823 - 1/4" circle scriber



- Straight models with very rigid branches in polished steel, tempered tips, interchangeable.
- Tips only: 823.19SE1 - 823.25SE1.

	A [mm]	H [mm]	L1 [mm]	ΔΔ [g]
823.19	220	190	70	235
823.25	250	250	94	370

DELA.1908 - 1/4" tip circle scriber



	A [mm]	H [mm]	L1 [mm]	[g]
DELA.1908.03	220	190	68	180
DELA.1908.04	250	250	68	190

Measuring marking out set

MOD.234 Measuring marking out set



- 257G: automatic centre punch.
- 234: scriber.
- 893.316: tape measure 3 m.
- DELA.1051.05: rule 300 mm.
- 1885.00: bevel protractor.
- DELA.1223.02: straight square and tab 300 mm.
- Thermoformed module PL633.

Weight: 1.050 kg.

Steel scribers

234 Steel scriber



- Tip treated in chrome vanadium steel.
- Tip: Ø 4 mm.
- Length: 190 mm.

Weight: 20 g.

234.S Interchangeable steel tip scriber



- Tip treated in fast steel.
- Tips: Ø 4 mm.
- Body: Ø 8 mm.
- Length: 260 mm.

Weight: 58 g.

Set of 2 spare tips: 234.SP2.

DELA.1586.00 Steel scriber - plastic body



- Tip treated in chrome vanadium steel.
- Tip: Ø 4 mm.
- Body: Ø 8 mm.
- Length: 210 mm.

Weight: 20 g.

DELA.1589.00 Pen type carbide scriber



- Steel hexagonal body with a staple.
- Resharpenable tip:
- Length: 12 mm.
- Ø: 2.5 mm.
- Length: 150 mm.

Weight: 35 g.

233A Retractible carbide scriber



- Body with a staple.
- Double sharpened tip in tungsten carbide.
- Tip: Ø 2 mm.
- Body: Ø 8 mm.
- Length: 145 mm.

Weight: 16 g.

Set of 5 spare tips: 233.P5.

236 One-piece carbide scriber



- Rungsten carbide offset tip for scribing on tempered parts: Ø 2 mm.
- Octogon-shape body: Ø 12 mm.
- Length: 180 mm.

Weight: 30 g.

Square tips



- Square blade treated steel tip.
- Protwist ergonomic handle.
- For tapping hole, chamferring, deburring, etc.

	L [mm]	Blade	Handle	⚖ [g]
AP6X80	190	6 x 80	30 x 110	80
AP8X125	245	8 x 125	36 x 125	120

Letter and digit punches

292A - Set of 26 letter punches and punch



- Letter heights: 3 to 8 mm.
- Carbon steel 60 HRc.
- Supplied in plastic box.

	A [mm]	L [mm]	Cross-section [mm]	Dimension [mm]
292A.3	3	70	8 x 8	110 x 40 x 80
292A.4	4	70	8 x 8	110 x 40 x 80
292A.5	5	75	10 x 10	110 x 40 x 80
292A.6	6	75	10 x 10	110 x 40 x 80
292A.8	8	83	13 x 13	145 x 55 x 90

293A - Set of 9 digit punches



- Digit heights: 2 to 8 mm.
- Carbon steel 60 HRc.
- Supplied in plastic box.

	A [mm]	L [mm]	Cross-section [mm]	Dimension [mm]
293A.3	2	70	8 x 8	40 x 40 x 80
293A.4	4	75	8 x 8	40 x 40 x 80
293A.5	5	75	10 x 10	40 x 40 x 80
293A.6	6	75	10 x 10	40 x 40 x 80
293A.8	8	83	13 x 13	55 x 55 x 90

SHORT TAPE MEASURES

Exceptional abrasion wear and corrosion resistance

Blade

- High protection nylon coating.
- Professional-quality blade for all uses, ideal for intensive use.
- Optimum readability. Mat anti-glare finish.

High rigidity

- Up to 2.90m vertically and 2.30 m horizontally without bending for the 25mm wide blade.

Hook

- Tensile strength exceeds 1,000 N (100 Kg).
- Wide, protective hook. Hardened steel.
- Equipped with a stainless steel reinforcing plate.
- Sliding hook for hooking or internal and external measuring.

Class	Length in m / Tolerance in mm					
of accuracy	1 m	2 m	3 m	5 m	8 m	10 m
II	±0,5	±0,7	±0,9	±1,3	±1,3	±2,3

All FACOM tapes comply with current European standards.
Allowable tolerances as the following table:

SELECTION GUIDE	Stainless steel case 897 nylon-coated blade	ABS case 893 nylon-coated blade	Stainless steel case 800 series varnish-coated blade	ABS case 893 nylon-coated blade. Direct reading
2 M				
3 M				
5 M				DIRECT READING: For directly measuring the distance between two faces. 893.316F
8 M				
10 M				

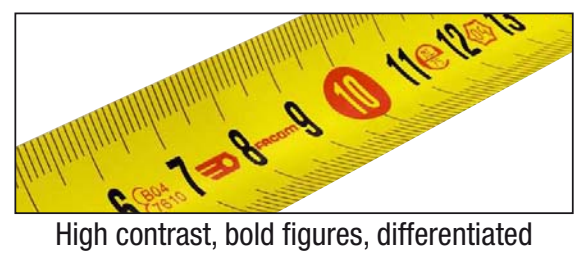




Hardened, concave, carbon steel.



Wide hook.



High contrast, bold figures, differentiated graduations, red "tens" markers.

Stainless series

SERIES 897

PROFESSIONAL QUALITY STAINLESS STEEL AND BI-MATERIAL TAPE MEASURES

Blade lock

- Ergonomic 2-position lock.
- Simple, effortless operation.

Soft coating

- Comfortable, non-slip grip.
- Prevents shocks when dropped.
- Stainless steel case.

Facom hook

- Corner protection to prevent accidental cutting.
- 3 rivets for increased pulling resistance.

Belt clip

- Stainless steel.

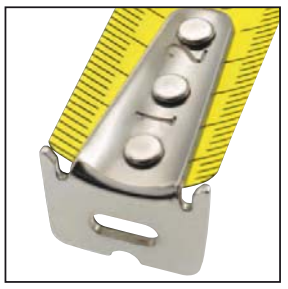
Facom blade

- High performance nylon coating.




Blade lock


Soft cating

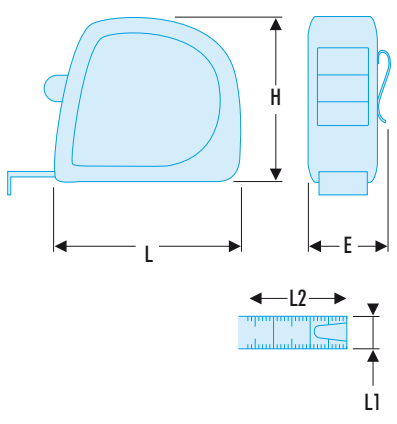

Facom hook


Belt clip


Facom blade

897 - Stainless body tape measure





- Body with stainless reinforcement plate.
- Soft coating withstanding impacts and intense conditions of use.
- Mat anti-reflection nylon tape.
- 3-rivet blade covering with stainless steel reinforcement plate.
- Horizontal and vertical tape rigidity see dimension table.
- Interior measurement by adding the L dimension (see table).
- Stainless belt clip.

	E [mm]	H [mm]	L [mm]	L1 [mm]	L2 [m]
897.216	32,0	64	70	16	2
897.319	32,0	64	70	19	3
897.525	41,0	72	78	25	5
897.825	40.5	82	85	25	8
897.1025	40.5	82	90	25	10

ABS series

SERIES 893

COMPACT, RESISTANT AND EASY TO MAINTAIN!

Easily accessible tape lock
- For keeping a measurement, making comparative measurements, marking-out, etc.

Stainless steel belt clip
- For easy carrying.

Wrist strap hole
- Avoids dropping the tape, frees the hand. Hole (except 893.316F).

Functional case
- Base and bearing face at 90°.
- Rounded additional length.





893 - ABS body tape measure



- Ergonomic, ABS material.
- Tape with mat anti-reflection nylon tape.
- High strength tape.
- High strength cover hook:
- 2 rivets with stainless reinforcement plate on the 2 and 3 m.
- 3 rivets with stainless reinforcement plate on the 5 and 8 m.
- Interior measurements by adding the L dimension (see table).

	E [mm]	H [mm]	L [mm]	L1 [mm]	L2 [m]	ΔΔ [g]
893.213	24,0	52,0	55	13	2	78
893.316	27,0	60,0	60	16	3	126
893.519	31,0	67,0	70	19	5	197
893.825	37,5	81,5	85	25	8	200

ABS body tape measure - 3 metres with panoramic window



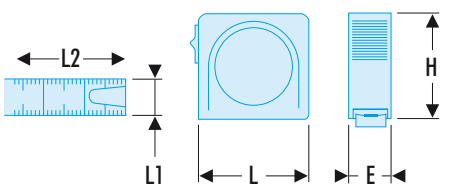
- Ergonomic, ABS material.
- Tape 3 m x 16 mm.
- Anti-reflection nylon tape.
- Tape printed recto and verso, for direct reading in the interior measurement window.
- Cover hook, 2 rivets.
- Stainless reinforcement plate.

	E [mm]	H [mm]	L [mm]	L1 [mm]	L2 [m]	ΔΔ [g]
893.316F	27	60	60	16	121	121

Metal series

800A-801A - Stainless body 2, 3 meter tape measures





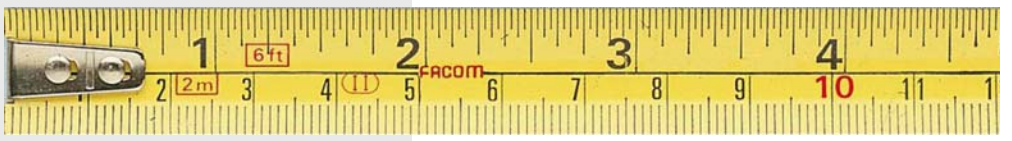
- Compact.
- Width: 16 mm.
- Tape with 2 rivets.
- Rigidity up to 1.10 m.

	A [mm]	E [mm]	H [mm]	L1 [mm]	L2 [m]	⚖ [g]
800A	50	21,4	50	16	2	90
801A	60	21,4	60	16	3	125

Export series mm and inch (not for sale in France)

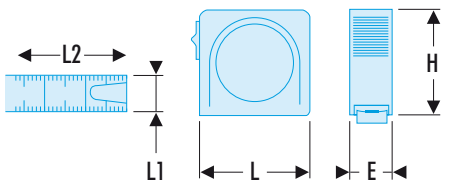
METRIC AND INCH EXPORT TAPE

- Hardened steel blade, concave for stiffness.
- Yellow background, protective coating.
- Identical casing to equivalent metric series.
- Double marking tapes are not for sale in the French territory.



800A-801A.EX - Stainless body tape measure - mm and inches



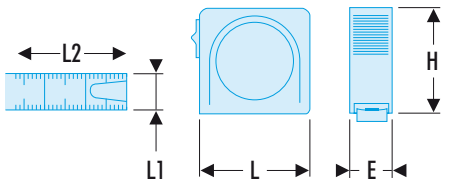


- Compact.
- Metric and imperial double graduation tape measure (not for sale in France).
- Width: 16 mm.
- Tape with 2 rivets.
- Rigidity up to 1.10 m.

	E [mm]	H [mm]	L [mm]	L1 [mm]	L2 ["]	L2 [m]	⚖ [g]
800A.EX	21,4	50	50	16	6	2	90
801A.EX	21,4	60	60	16	10	3	125

DELA.EX - ABS body tape measure - mm and inches





- Metric and imperial double graduation tape measure (not for sale in France).

	E [mm]	H [mm]	L1 [mm]	L2 ["]	L2 [m]	⚖ [g]
DELA.25.00EX	33	62	16	6	2	98
DELA.35.00EX	33	62	16	10	3	124
DELA.55.00EX	44	71	19	16	5	202

LONG TAPE MEASURES

Plastiver tapes are ideal for “outdoor” applications (e.g. building sites...).
Stringent inspection procedures ensure that our tapes conform to precision class I, II or III.

STEEL TAPE: Class I and II



PLASTIVER TAPE: Class III



32 glass-fibre strandscoated with PVC, centimeters marked in black and metres in red for excellent readability.



Tape treated anticorrosion Class I

CORROSION RESISTANT STEEL TAPE



Definition of class I

The particularly exacting tolerances of class I are limited to ± 1/10 millimeter per metre. Class I tapes are supplied complete with a COFRAC calibration certificate.
They have the “zero mark” approximately 10 cm after the beginning of the tape.

Calibration certificate

These tapes come with a COFRAC-approved calibration certificate.
This certificate is in line with ISO 9000 certification procedures.
- For 10m and 20m tapes, checks are made every metre.
- For 30m and 50m tapes, checks are at 5-metre intervals.

DELA.62881 - Cutout body tape measure

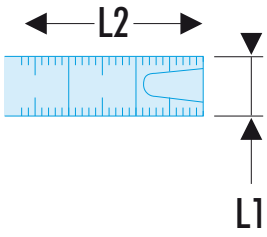


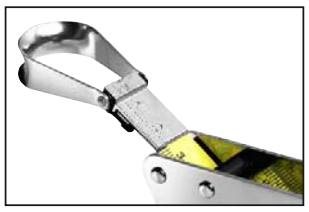
- Tape treated anticorrosion Class I.
- Lacquered steel body with folding crank.
- Tape guide rollers.
- Loop with folding hook.
- "Line" measurement, the zero starts 10 cm after the loop.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.62881.01C	13	10	369
DELA.62881.02C	13	20	604

DELA.62883 - Challenger tape measures







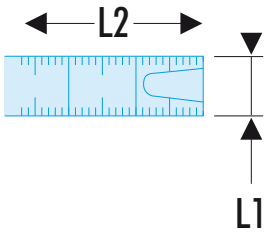
- Tape treated anticorrosion Class I.
- Revolver handle, ergonomic with folding crank.
- Loop with folding hook.
- "Line" measurement, the zero starts 10 cm after the loop.
- Supplied in case dimensions (L. x D. x H.): 325 x 275 x 56 mm.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.62883.03C	13	30	1270
DELA.62883.04C	13	50	1720

Tape treated anticorrosion Class II

DELA.2881 - Cutout body tape measures





- Tape treated anticorrosion Class II.
- Lacquered steel body with folding crank.
- Tape guide rollers.
- Loop with folding hook.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.2881.01	13	10	369
DELA.2881.02	13	20	604
DELA.2881.03	13	30	874

Challenger tape measure 50 m

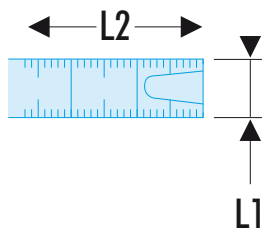


- Tape treated anticorrosion Class II.
- Revolver handle, ergonomic with folding crank.
- Loop with folding hook.
- Supplied in case dimensions (L. x D. x H.): 325 x 275 x 56 mm.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.2883.04	13	50	1720

DELA.2831 - Profile body tape measures





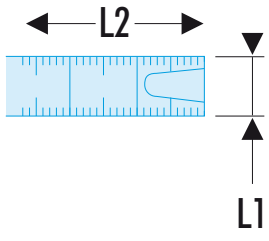
- ABS body with folding crank.
- Tape treated anticorrosion.
- Folding crank.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.2831.01	10	10	175
DELA.2831.03	10	20	339
DELA.2831.05	10	30	493

Plastiver tape Class III

DELA.8947 - Discover closed body tape measures



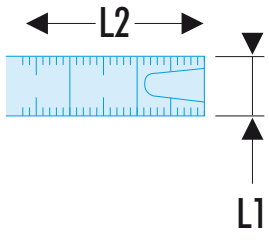


- Plastiver tape Class III.
- Synthetic closed body with folding crank.
- Recto verso graduation.
- Loop with hook.
- Fast winding.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.8947.02	15	10	161
DELA.8947.03	15	20	318

Cutout body tape measure 20 m





- Plastiver tape Class III.
- Steel cutout body with folding crank.
- Recto verso graduation.
- Loop with hook.
- Fast winding.

	L1 [mm]	L2 [m]	⚖ [g]
DELA.2882.20	15	20	480

Engineers levels

Two-vial level

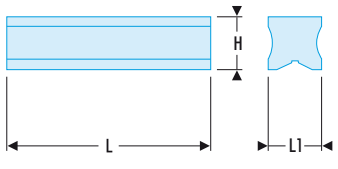


- Accuracy: 0.4 mm/m.
- Dressed steel with grooves for cylindrical surfaces.
- Adjustable and protected longitudinal vial.

	L [mm]	⚖ [g]
DELA.3151.01	200	400

3067 - High accuracy straight levels





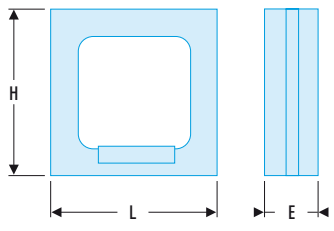
DIN 877

- Stabilised cast iron levels.
- Accuracy: 0.04 mm/m.
- Sides with anti-slip insulating pads.
- Vials protected by colourless plexiglas.
- Prismatique base with 140° Vee.
- Liquid: ether.
- supplied in wood case with compliance certificate.

	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
3067.200	42,5	200	40	1,620
3067.300	47,0	300	50	2,580

Cross-test level





DIN 877

- Stabilised cast iron level.
- Accuracy: 0.04 mm/m.
- Sides with anti-slip insulating pads.
- Vials protected by colourless plexiglas.
- Prismatique base with 140° Vee.
- Liquid: ether.
- Supplied in wood case with compliance certificate.

	E [mm]	H [mm]	L [mm]	⚖ [kg]
3071.200	42,5	200	200	4,300

DELA.3180 - Round laid levels



- Spherical vial levels.
- Checking horizontal surfaces along two axes.
- Nickel-plated brass.

	d [mm]	⚖ [g]
DELA.3180.02	25	12
DELA.3180.03	30	20
DELA.3180.05	50	80

Builders levels

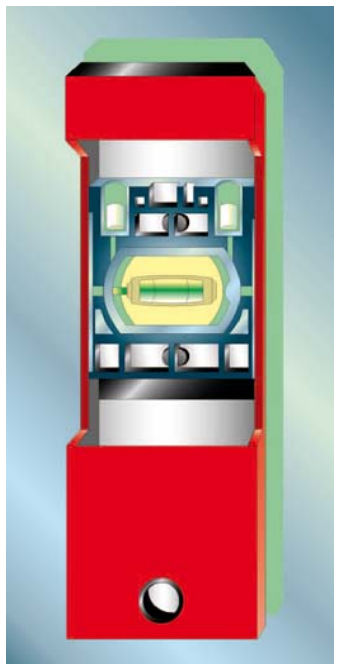
LEVELS

EASY-TO-USE, PROFESSIONAL GRADE TOOLS!

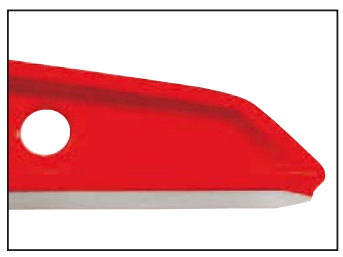
Accuracy
- The accuracy of a level is defined by 2 elements:
  - The quality of machining of the flat faces,
  - The quality and positioning of the vial.
- Vial integral with the body of the level.

Readability
- Vial machined from a solid acrylic block:
  - Anti-reflective.
  - Anti-parallax.
- Does not become clouded over time.
- High impact resistance.

Durability
- Unbreakable synthetic caps.
- Impact-protection system providing maximum protection to the face.
- Rigid.
- Leak proof and highly impact-resistant acrylic glass.





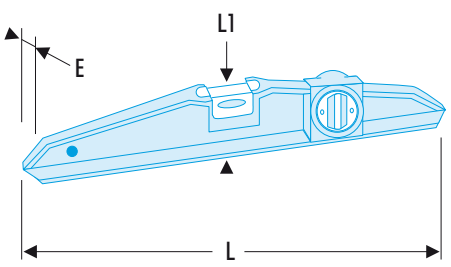




Trapezoidal levels

307BM - Magnetic trapezoidal levels





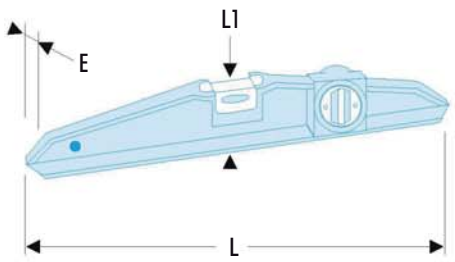


DIN 877
- In reverse position, accuracy 0.75 mm/m.
- Massive light alloy body, pressure moulded.
- Electrostatic powder protective coating.

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
307BM.25	22	250	45	200
307BM.40	23	400	50	420
307BM.60	23	600	50	680

307B - Standard trapezoidal levels





DIN 877

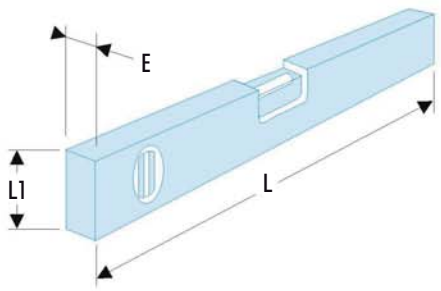
- In reverse position, accuracy 0.75 mm/m.
- Massive light alloy body, pressure moulded.
- Electrostatic powder protective coating.

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
307B.25	22	250	45	200
307B.40	23	400	50	420
307B.60	23	600	50	680

Tubular-section levels

320B - Standard levels, 1 machined sole plate





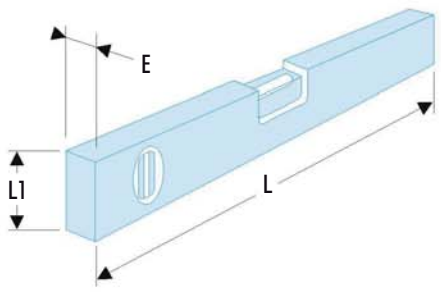
DIN 877

- In reverse position, accuracy 0.75 mm/m.
- Light alloy body, drawn.
- Electrostatic powder coating.
- Vertical vial and horizontal vial.

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
320B.40	21	400	50	300
320B.60	21	600	50	480

309BM - Magnetic levels







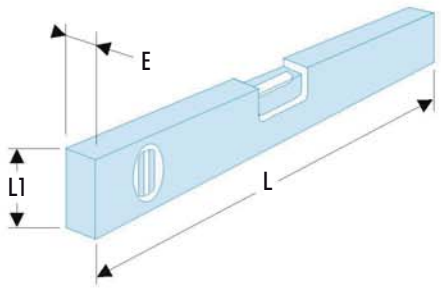
DIN 877

- In reverse position, accuracy 1 mm/m.
- Light alloy body, drawn.
- Smooth anodized surfaces (easy cleaning).
- Vertical vial and horizontal vial.

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
309BM.40	21	400	50	300
309BM.60	21	600	50	500

311B - Magnetic levels, 1 machined sole plate







DIN 877

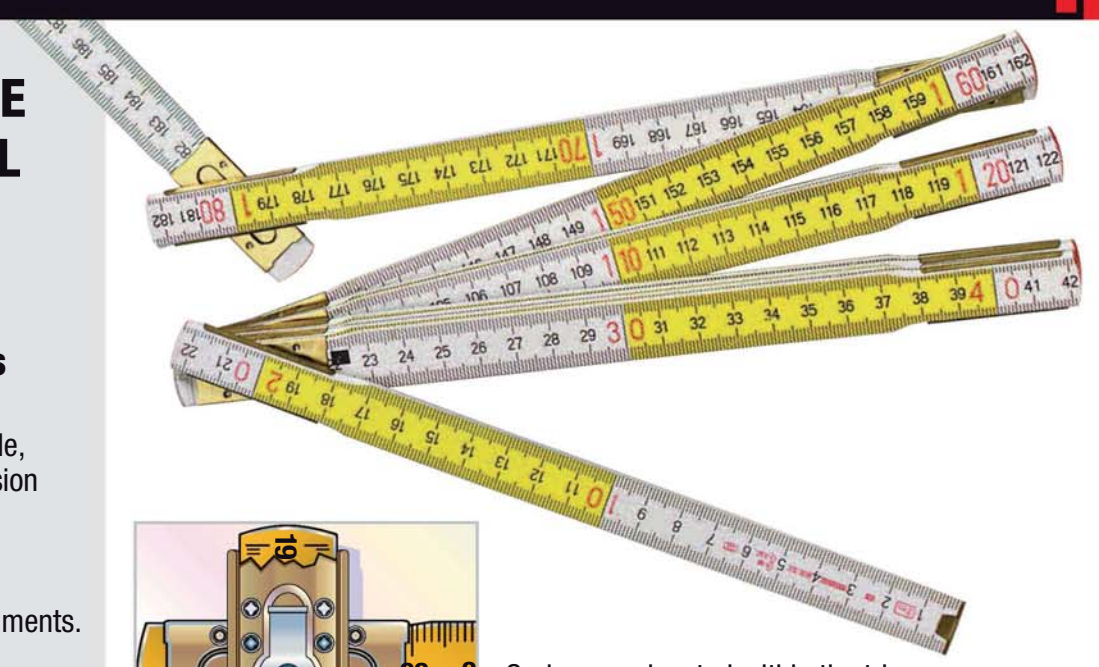
- In reverse position, accuracy 0.5 mm/m.
- Fitted with a vertical vial, horizontal vial, and a declivity vial.

	E [mm]	L [mm]	L1 [mm]
311B.60	25	600	54
311B.80	25	800	54

Duralumin folding rules

FOLDING RULES

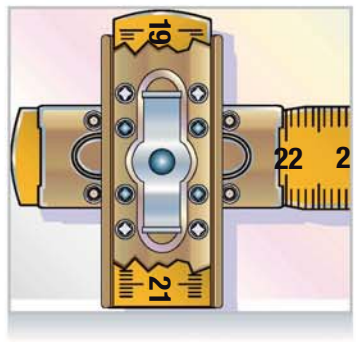
FOLDING RULES ARE THE BUILDER'S TRADITIONAL MEASURING TOOL!



The FACOM DELA range features 4 models:

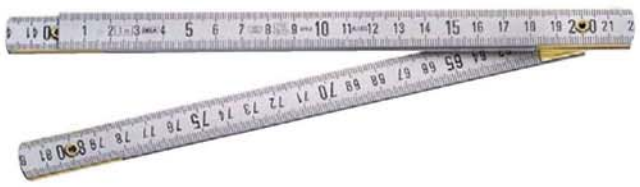
- 2 duralumin, 1 wooden and 1 synthetic rule, complying with the requirements of precision class III.
- The blades are locked into position either by brass springs or by embossed notches.
- Typical specifications for measuring instruments.

Precision tolerances		
Length	1 m	2 m
Class III	+/- 1.0 mm	+/- 1.4 mm



Springs are located within the trim inlaid in the wood, preventing expansion of the joints in damp conditions.

DELA.625.00 Duralumin blade rules Class III 1 meter - 5 branches



- Deep chemical engraving.
- Recto verso marking in mm.
- Brass springs.
- Satin surface.
- Width: 15 mm.

Weight: 92 g.

DELA.626.00 Duralumin blade rules Class III 2 meters - 10 branches

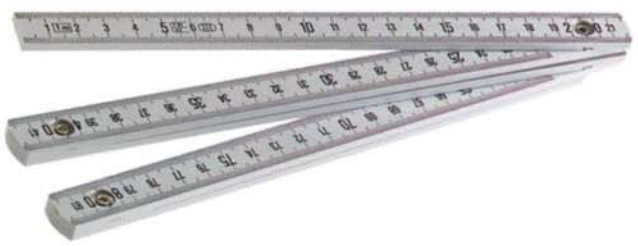


- Deep chemical engraving.
- Recto verso marking in mm.
- Brass springs.
- Satin surface.
- Width: 15 mm.

Weight: 162 g.

Synthetic folding rule

DELA.401.00 Synthetic blade rule Class III 2 meters - 10 branches

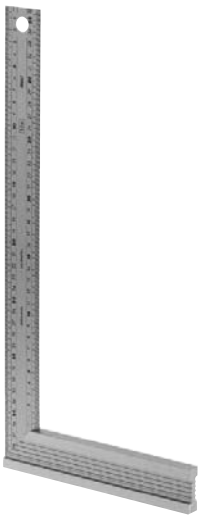


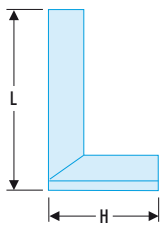
- Recto verso graduatrion on the 2 edges in mm.
- Clicked branches 90° or 180°.
- Washable.
- Width: 16 mm.

Weight: 105 g.

Squares

DELA.1223 - Stainless steel joiners squares





NF E 73-205

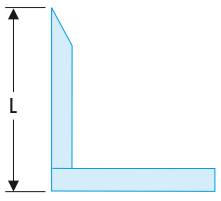
- Stainless steel blade divided in recto-verso protected by a sleeve.
- Anti-reflection.
- Deep engravings.
- Anodised aluminium heel.

	L x H [mm]	⚖ [g]
DELA.1223.01	200 x 120	160
DELA.1223.02	250 x 140	200
DELA.1223.03	300 x 170	240
DELA.1223.04	400 x 200	300

False squares

DELA.1207-1208 - Dummy squares and dummy sliding squares





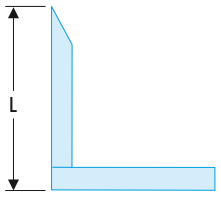
- Wood heel, steel blade, brass lining.

1207: dummy square
1208: sliding dummy square

	L [mm]	⚖ [g]
DELA.1207.02	250	150
DELA.1207.03	300	180
DELA.1208.02	250	120
DELA.1208.03	300	140

DELA.1276 - Metal dummy sliding squares





- Cast metal heel.
- Steel blade.
- Blade locking by heel tip screw.

	L [mm]	⚖ [g]
DELA.1276.02	250	260
DELA.1276.03	300	270

Plumb-bob

DELA.3224.00 Plumb-bob



- Engineers plumb-bob.
- Diameter: 16 mm.
- Supplied with 4 m Ø 2 mm line.

Weight: 125 g.

Chalk line reels

DELA.13299 - Profile chalk line reels



- Ergonomic alu body, anti-wear wire guide.
- Fast winding.
- Polycoton line Ø 1mm with hook.

Spare line 100 m: DELA.3226.01.CORD.

	L [m]	⚖ [g]
DELA.13299.15	15	250
DELA.13299.30	30	265

DELA.13298 - Chalk line reels, plum-bob



- Metal container with chalk line locking by folding the crank.
- Chalk line reel: Ø 1.5 mm.

	L [m]	⚖ [g]
DELA.3298.15	15	240
DELA.3298.30	30	250

DELA.3400.00 Grodel chalk line reel



- Builders carcass and public works.
- High strength synthetic body with folding crank.
- High capacity container.
- Chalk line reel: Ø 3 mm.
- Length: 30 m.

Weight: 500 g.

Chalk line powder

Blue talcum powder



	⚖ [g]
DELA.3402.00	100
DELA.3404.00	360

Chalk sticks

DELA.3310.00 Natural "Briançon" chalk sticks

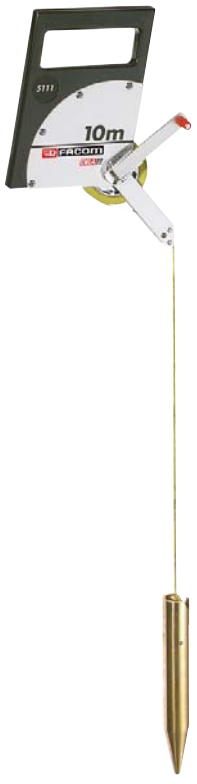


- Natural cut greasy chalk for marking on metal.
- Cross-section: 10 x 10 mm.
- Length: 100 mm.
- Colour: white.
- Box of 50 units.

Weight: 1.300 kg.

Sounding leads

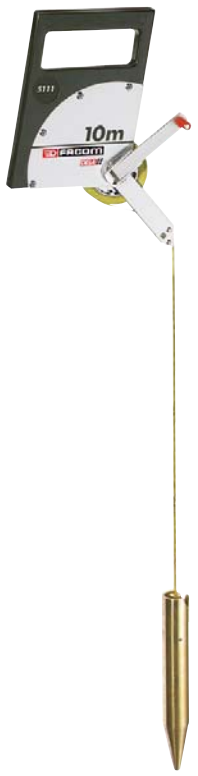
DELA.5111 - Sounding leads with yellow steel tape



- Anti-corrosion treated steel tape, yellow lacquered.
- Gauges with grounding.
- Suited specifically to explosive environments.
- Grounding prevents electric discharge.
- Weight of 900 g fastened by an anti-twist ball joint.
- Supplied in case dimensions (L. x D. x H.): 325 x 278 x 53 mm.

	l [mm]	L [m]	⚖ [kg]
DELA.5111.20	13	20	2,300
DELA.5111.30	13	30	2,500

5112 - Sounding leads with black steel tape



- Black engraved tape, gloss divisions and digits.
- Gauges with grounding.
- Designed specifically for corrosive and chemical environments.
- Anti-corrosion treatment.
- Weight of 900 g fastened by an anti-twist ball joint.
- Supplied in case dimensions (L. x D. x H.): 325 x 278 x 53 mm.

	L [mm]	l [mm]	[kg]
5112.20	20	13	2,400
5112.30	30	13	2,750

Spare parts for sounding leads

5116 - Yellow lacquered steel tapes fitted with weights



	L [mm]	l [mm]	[kg]
5116.20A	20	13	1,255
5116.30A	30	13	1,400

5117 - Black engraved steel tapes fitted with weights



	L [mm]	l [mm]	[kg]
5117.20A	20	13	1,255
5117.30A	30	13	1,400

Sounding line gauges

DELA.5300 - Full sounding line gauges - 0 down



- Rule in AU4G.
- Graduation in mm.
- Cross-section of the base: 15 x 25 x 15 mm.

	L [mm]	L1 x L2 [mm]	[kg]
DELA.5300.03	2000	21,5 x 1,2	0,750
DELA.5300.05	3000	21,5 x 1,2	1,000
DELA.5300.06	3500	21,5 x 1,2	1,160

Full sounding line gauges



- Rule AU4G.
- Cross-section of base 20 x 40 x 20 mm.
- Graduation in mm.
- Length 4 m.
- Cross-section 33.4 x 1.2 mm.

	L [mm]	L1 x L2 [mm]	[kg]
DELA.5301.03	4000	33,4 x 1,2	3,400



HAMMERS - MALLETS

562

SOFT FACE HAMMERS

571









Graphite handle hammer **562**
Hickory handle hammers **566**
Sledge hammers and mallets..... **570**

Dead-blow hammers **571**
Interchangeable-tip mallets **572**



IMPACT TOOLS

574



Drifts 574
Poly-impact sets 575
Sheathed series impact tools 576
Drift punches 576
Nail-sets 576
Nail-sets 576
Centre punches 577



Sets and modules 577
Flat chisels - Cape chisels 582

Graphite handle hammer

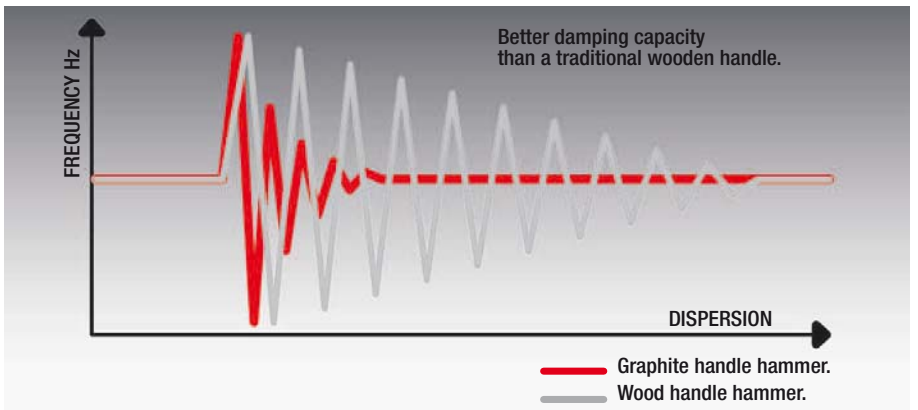
Profiber

HAMMER
WITH GRAPHITE HANDLE

THE SAFE HAMMER

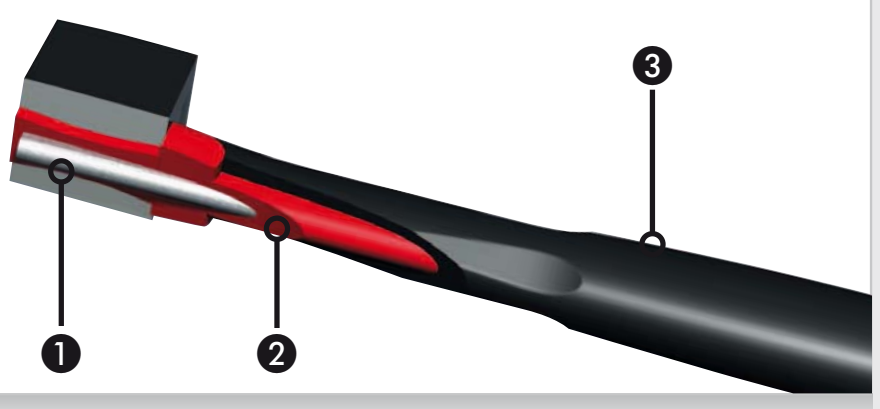
Maximum safety.
- Permanent epoxy resin head-to-handle connection.
- Unbreakable.

Total comfort
- Anti vibration : absorbent material and narrow upper handle profile to reduce vibration.



Positive grip
- Soft elastomer handle for a comfortable hold.
- Wide guard to prevent loss of grip.

A combination of 3 materials for a perfect result
1 - Graphite:
For strength. No risk of breakage.
2 - Polypropylene:
For reduced vibration.
3 - Elastomer:
For a perfect grip and excellent resistance to corrosive workshop liquids.



SAFETY FIRST

Wear eye protection.



200 C

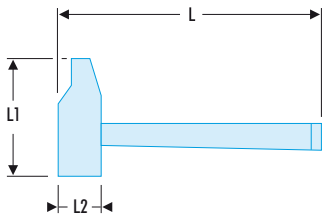
205 C



200C - Graphite handle riveting engineers hammer







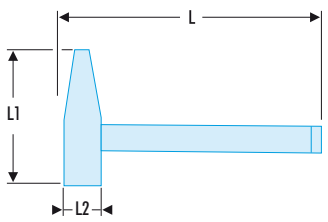
NF E 71-016, NF ISO 15601, ISO 15601

- Ergonomic safety handle with graphite core.

	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
200C.26	245	80	25	0,345
200C.28	270	88	28	0,380
200C.30	270	93	30	0,470
200C.32	300	100	32	0,585
200C.36	300	106	35	0,725
200C.40	330	108	40	1,025
200C.42	330	117	42	1,130
200C.50	360	138	50	1,910
200C.60	380	151	60	2,800

205C - Graphite handle DIN engineers hammer





NF ISO 15601, ISO 15601, DIN 1041

- Ergonomic safety handle with graphite core.

	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
205C.20	280	96	19	0,250
205C.30	300	106	23	0,380
205C.50	320	122	27	0,580
205C.80	350	132	33	0,960
205C.100	360	137	36	1,140

MOD.MI7 Impact tools module 205C





• Comprising:
- 205C.50: composite hammer 500 g.
- 208A.32CB: steel mallet 32 mm.
- 248. 4-5-6 mm: long drift punches.
- 263.18: chisel.
- 256.6: punch.
- Heat-formed tray PL.333.

Weight: 1.660 kg.

MODM.MI5 Impact tools 205C long sheathed drift punches foam module



• Comprising:
- 205C.50: DIN composite hammer 500 g.
- 208A.32CB: steel mallet 32 mm.
- 263.G19: sheathed chisel 190 mm.
- 256.6: punch accuracy 6 mm.
- 249.G 4 - 5 - 6 mm: 3 long-reach sheathed drift punches.
- Foam tray PM.MODMI5.

Weight: 1.750 kg.

MODM.MI6 Impact tools 200C foam module



• Comprising:
- 200C.40: composite riveting hammer 40 mm.
- 208A.32CBA: steel mallet 32 mm.
- 256.6: punch accuracy 6 mm.
- 263.G19: sheathed chisel 190 mm.
- 249.G 4 - 5 - 6 mm: sheathed drift punches.
- Foam tray PM.MODMI6.

Weight: 2.150 kg.

MODM.MI7 Impact tools 205C long drift punches foam module



• Comprising:
- 205C.50: DIN composite hammer 500 g.
- 208A.32CBA: steel mallet 32 mm.
- 256.6: punch accuracy 6 mm.
- 263.18: chisel.
- 248. 4 - 5 - 6 mm: long drift punches.
- Foam tray PM.MODMI7.

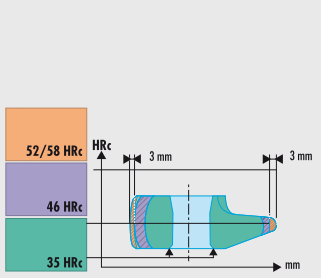
Weight: 1.700 kg.

WOOD HANDLE
HAMMER

SAFE, ERGONOMIC AND COMFORTABLE

Head.
"High security" triple wedge handle attachment:
- 2 steel + 1 wooden wedge for a better distribution of contact surfaces between the handle and the head.

Head very firmly secured on the handle:
- Precise heat treatment of the head.





Handle.
Hickory:
- Excellent mechanical strength.
- Unaffected by climatic differences.

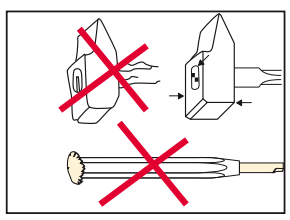
Octagonal handle profile:
- Exclusive to FACOM.
- Best compromise between mechanical strength and absorption of vibration.



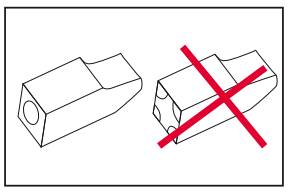
GROWTH RING
Our handles are made only from blocks with a strictly defined number of growth rings : as this determines the rate of growth of the tree. Fast growth, few rings, low density wood and thus low mechanical strength.



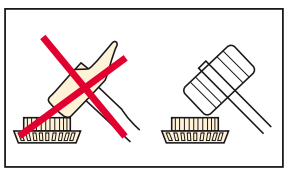
Always inspect a hammer before use. If damaged in any way, discard it. Watch out for:
- Excessively worn or mushroomed head.
- Suspect fit.
- Scored handle.

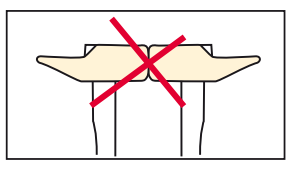


For safety, the hammer should hit dead square in the centre of the face.
Steady precise blows extend tool life.



Flying chips are dangerous. Never hammer materials harder than 46 HRc. Use a FACOM mallet instead.





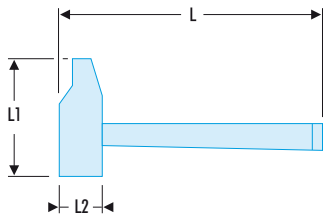
SAFETY FIRST
Wear eye protection.



Hickory handle hammers

200H - Riveting engineers hammers





NF E 71-016, NF ISO 15601, ISO 15601

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	L [mm]	L1 [mm]	L2 [mm]	Handle	⚖ [kg]
200H.26	245	80	25	210.MHB01	0,345
200H.28	270	88	28	210.MHB02	0,380
200H.30	270	93	30	210.MHB03	0,470
200H.32	300	100	32	210.MHB04	0,585
200H.36	300	106	35	210.MHB04	0,725
200H.40	330	108	40	210.MHB05	1,025
200H.42	330	117	42	210.MHB05	1,130
200H.50	360	138	50	210.MHB06	1,910
200H.60	380	151	60	210.MHB27	2,800

MOD.MI1 Impact tools module 200H



- Comprising:
- 200H.32: hickory riveting hammer 32 mm.
- 208A.32CBA: steel mallet 32 mm.
- 263.20: chisel.
- 256.6: punch.
- 248. 4 - 5 - 6 mm: long drift punches.
- Heat-formed tray PL.333.

Weight: 1.800 kg.

MODM.MI1 Impact tools 200H foam module

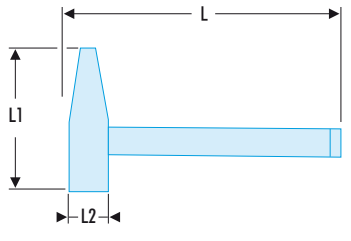


- Comprising:
- 200H.40: hickory riveting hammer 40 mm.
- 208A.32CBA: mallet.
- 263.20: chisel.
- 256.6: punch accuracy 6 mm.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Foam tray PM.MODMI1.

Weight: 1.800 kg.

205H - DIN engineers hammers







NF ISO 15601, ISO 15601, DIN 1041

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	L [mm]	L1 [mm]	L2 [mm]	Handle	⚖ [kg]
205H.20	280	96	19	210.MHB12	0,250
205H.30	300	106	23	210.MHB13	0,380
205H.50	320	122	27	210.MHB14	0,580
205H.80	350	132	33	210.MHB15	0,960
205H.100	360	137	36	210.MHB16	1,140

MOD.MI3 Impact tools module 205H



• Comprising:
- 205H.50: DIN 500 g hickory hammer.
- 208A.32CBA: steel mallet 32 mm.
- 263.18: chisel.
- 256.6: punch.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Heat-formed tray PL.333.

Weight: 1.710 kg

MODM.MI3 Impact tools 205H foam module





• Comprising:
- 205H.100: DIN 1 kg hickory hammer.
- 208A.32CBA: mallet.
- 263.20: chisel.
- 256.6: punch accuracy 6 mm.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Foam tray PM.MODMI3.

Weight: 1.800 kg.

WOOD HANDLE HAMMERS

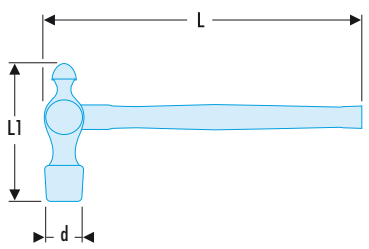
IMPACT TOOL SAFETY:

- Check the condition of the tool before use.
- Do not use tools with traces of wear, mushrooming, scaling or cracks.
- Wear eye protection and gloves.



202H - Ball head engineers hammers





NF ISO 15601, ISO 15601, ASME B107.400

• "High safety" hickory handle, steel wedge.

	d [mm]	L [mm]	L1 [mm]	Handle	⚖ [kg]
202H.1/4	20	275	65	210.MHB07	0,140
202H.1/2	26	297	84	210.MHB08	0,280
202H.1	31	322	104	210.MHB09	0,430
202H.1'1/2	37	363	123	210.MHB10	0,840
202H.2	40	394	128	210.MHB11	1,110

MOD.MI4 Impact tools module 202H



- Comprising:
- 202H.1/2: hickory American hammer.
- 208A.32CBA: steel mallet 32 mm.
- 263.18: chisel.
- 256.6: punch.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Heat-formed tray PL.333.

Weight: 1.450 kg.

MODM.MI4 Impact tools 202H foam module



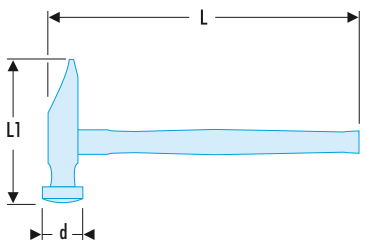
- Comprising:
- 202H.1: 1LB: hickory American hammer.
- 208A.32CB: steel mallet 32 mm.
- 263.20: chisel.
- 256.6: punch accuracy 6 mm.
- 248. 4 - 5 - 6 mm: 3 long drift punches.
- Foam tray PM.MODMI4.

Weight: 1.800 kg.

860H - Dinging hammers, round face







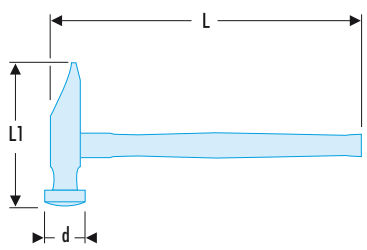
NF ISO 15601, ISO 15601

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	d [mm]	L [mm]	L1 [mm]	Handle	⚖ [kg]
860H.26	26	297	114	210.MHB26	0,340
860H.28	28	297	118	210.MHB26	0,370
860H.30	30	314	123	210.MHB28	0,440
860H.32	32	339	134	210.MHB29	0,570
860H.36	36	339	139	210.MHB29	0,700
860H.40	40	377	149	210.MHB31	0,920

Dinging hammer, square face





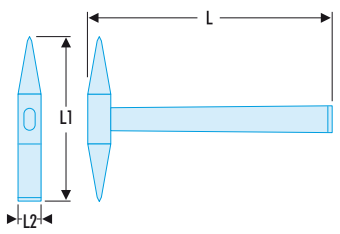
NF ISO 15601, ISO 15601

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	d [mm]	L [mm]	L1 [mm]	Handle	⚖ [kg]
859H.28	28	319	140	210.MHB34	0,560

213H - Welders chipping hammers





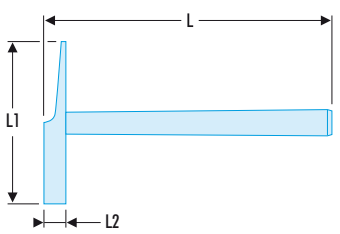
NF ISO 15601, ISO 15601, DIN 6465

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	L [mm]	L1 [mm]	L2 [mm]	Handle	⚖ [kg]
213H.30	270	170	21	210.MHB32	0,340
213H.40	270	180	21	210.MHB32	0,480

203H - Electricians hammer





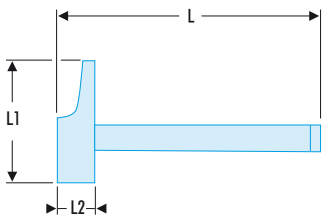
NF E 71-016, NF ISO 15601, ISO 15601

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
203H.16	237	141	16	0,160
203H.18	237	142	18	0,200

215H - Joiners hammers





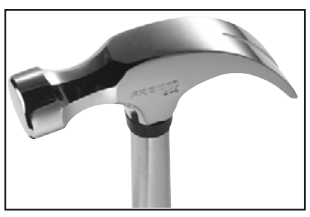
NF E 71-016, NF ISO 15601, ISO 15601

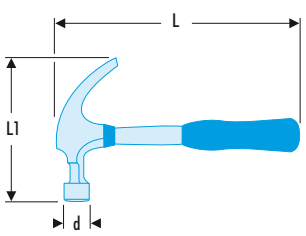
- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
215H.20	264	91	20	0,210
215H.22	283	99	22	0,270
215H.26	285	109	26	0,360

Carpenters hammer







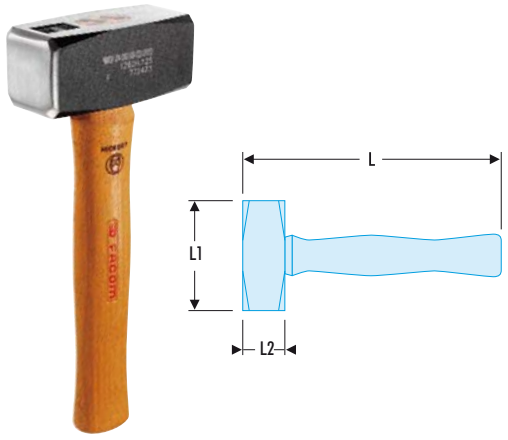
ASME B107.400

- Safety fit tubular handle, PVC grip.
- Head balanced with nail-puller peen.
- Presentation: polished finish.

	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
204	30	335	130	0,810

Sledge hammers and mallets

1262H - Beveled edge club hammers

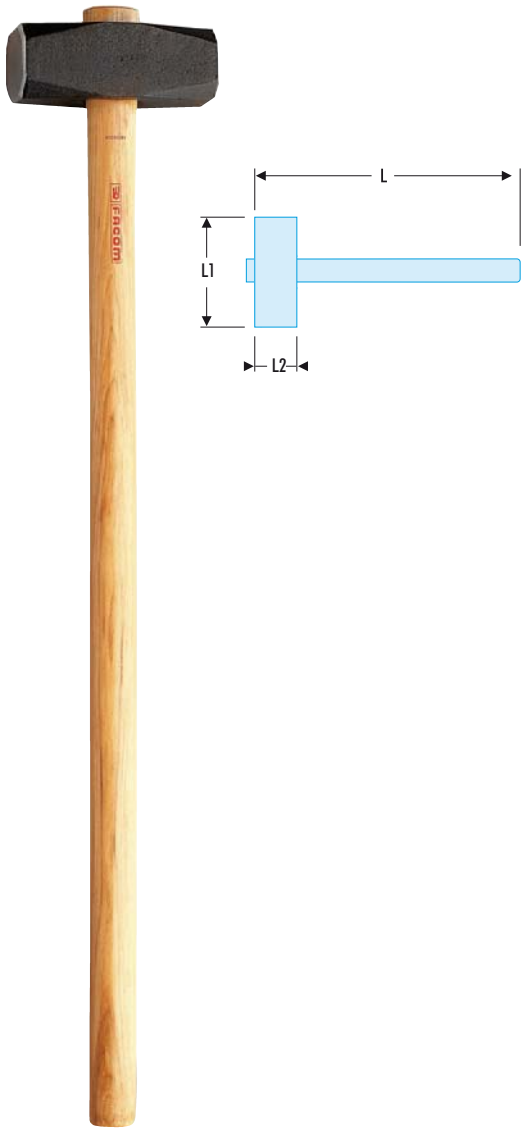


NF ISO 15601, ISO 15601, DIN 6475

- "High safety" hickory handle, triple fit: 2 steel wedges and 1 wood wedge.

	L [mm]	L1 [mm]	L2 [mm]	Handle	⚖ [kg]
1262H.100	245	100	40	210.MHB22	1,000
1262H.125	248	105	43	210.MHB23	1,250
1262H.150	254	115	45	210.MHB24	1,500

High load club hammer

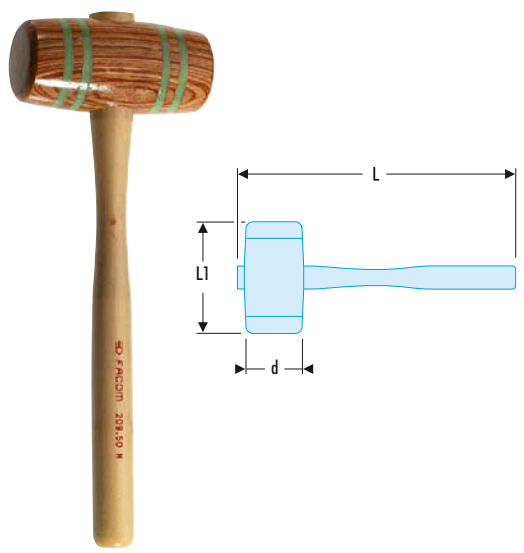


NF ISO 15601, ISO 15601, DIN 6475

- "High safety" hickory handle.

	L [mm]	L1 [mm]	L2 [mm]	Handle	H [mm]	⚖ [kg]
1263H.400	880	175	60	210.MHB35	60	4,800

209 - Wooden mallets



DIN 7462

- Model in compressed laminated wood.
- Shrunk-on rings embedded in glass fiber.
- Horn-beam handle.

	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
209.50	50	290	100	0,320
209.60	60	320	120	0,500

Dead-blow hammers

DEAD-BLOW HAMMERS

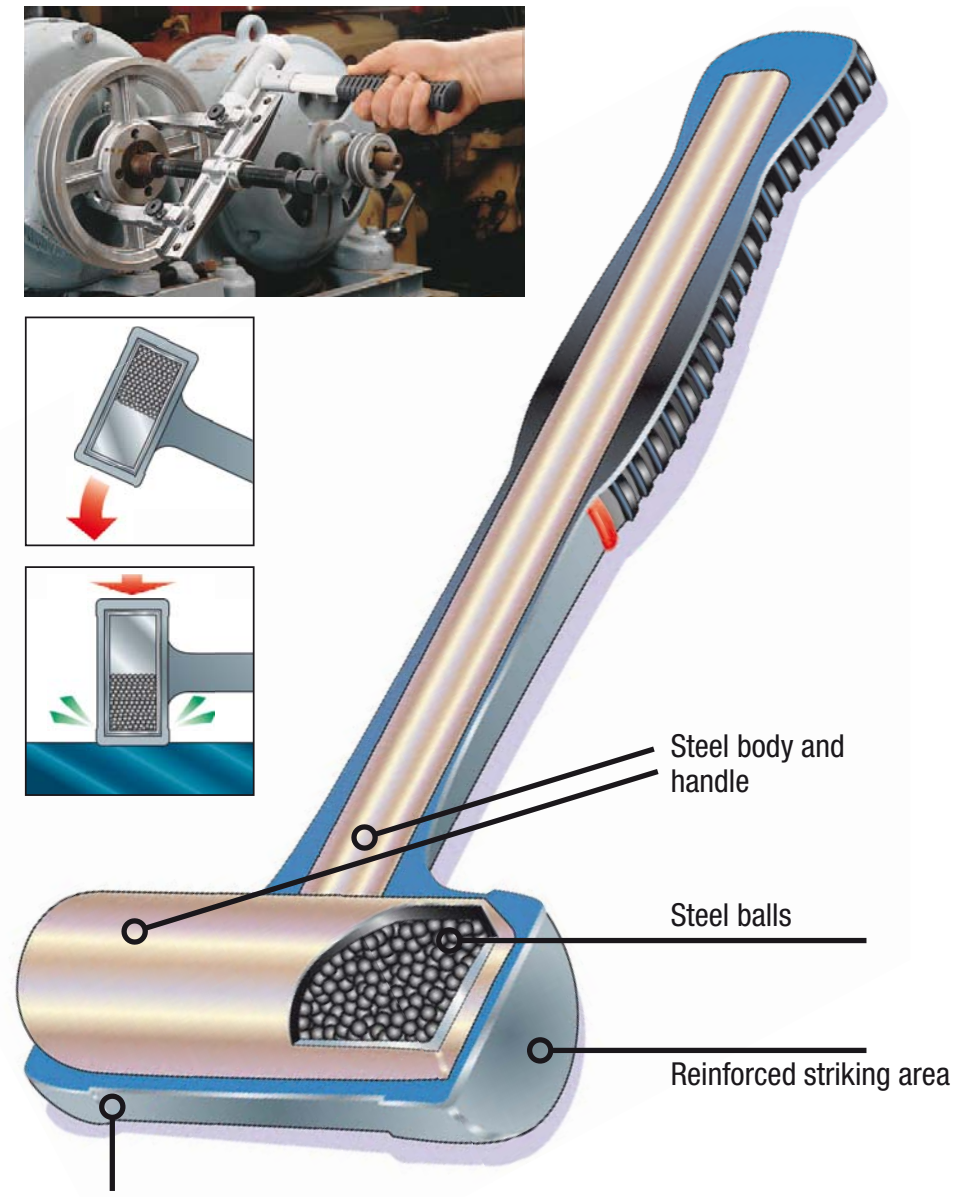
SAFE, ERGONOMIC AND COMFORTABLE

Deadening the blow

The head is half-fitted with steel balls, the mass of which has sufficient inertia to counteract any tendency to bounce back. After striking, the face of the hammer remains in position, without the damaging effects of rebound when hammering home an accurate fit. The nylon or polyurethane striking faces remove the risk of lying chips when hitting hard metal objects.

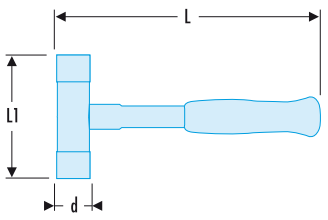
"Monobloc" hammer in polyurethane

- In addition to the dead-blow feature the soft-face hammer 216 is fully moulded in a polyurethane shell.
- This monobloc design protects the head from splitting and the balls escaping in the workshop.
- The chemical-resistant polyurethane moulding gives the tips a far longer service life than conventional soft-faced hammers.



216 - One-piece dead-blow hammers





- Dead-blow hammer with steel microballs.
- Body and handle in steel coated with polyurethane.
- D45 ± 5 shore hardness impact surface.
- Ergonomic PVC grip.

	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
216.40	40	298	110	0,657
216.50	50	308	115	0,888
216.60	60	316	120	1,316

212A - Dead-blow hammers, interchangeable tips





- Glass fiber handle.
- Steel body.
- Easily replaceable, special nylon tips shore hardness D74 ± 5.
- Ergonomic PVC grip.
- Presentation: black epoxy.

- Spare tip: 212.E35 to E60.

	d [mm]	L [mm]	L1 [mm]	Bits	[kg]
212A.35	35	305	112	212.E35	0,698
212A.40	40	310	117	212.E40	0,839
212A.50	50	320	120	212.E50	1,143
212A.60	60	330	145	212.E60	1,664

Adaptable-tip mallets

INTERCHANGEABLE-TIP MALLETS

IMPACT TOOL SAFETY:

- Check the condition of the tool before use.
- Do not use tools with traces of wear, mushrooming, scaling or cracks.
- Wear eye protection and gloves.



207A-208A - Adaptable-tip mallets



207A: Aluminum body "light" series hammers.
208A: Steel body "heavy" series hammers.

- Mallets are available with a limited number of tip combinations only, but you can customize your mallet by selecting a body and two tips of your choice.
- Tips available:

- EA series: neoprene.
- EB series: polyurethane.
- EC series: nylon.

	d [mm]	Finish	Bits	[kg]
207A.25CB	25	Aluminium	EC - EB	0,135
207A.32CB	32	Aluminium	EC - EB	0,210
207A.40CB	40	Aluminium	EC - EB	0,350
207A.50CB	50	Aluminium	EC - EB	0,560
207A.60CB	60	Aluminium	EC - EB	0,840
208A.25CBA	25	Mosi□dz	EC - EB	0,220
208A.32CBA	32	Mosi□dz	EC - EB	0,345
208A.32BBA	32	Mosi□dz	EB - EB	0,350
208A.40CBA	40	Mosi□dz	EC - EB	0,615
208A.40CCA	40	Mosi□dz	EC - EC	0,620
208A.50CBA	50	Mosi□dz	EC - EB	1,000
208A.60CBA	60	Mosi□dz	EC - EB	1,550

207A-208A - Mallet tips





207A: Lightweight aluminum body, hickory handle.
208A: Heavyweight steel body, hickory handle.

	d [mm]	L [mm]	Handle	Finish	[kg]
207A.25	25	280	210.MHB12	Aluminium	0,110
207A.32	32	300	210.MHB13	Aluminium	0,160
207A.40	40	323	210.MHB14	Aluminium	0,270
207A.50	50	350	210.MHB15	Aluminium	0,410
207A.60	60	363	210.MHB16	Aluminium	0,610
208A.25A	25	280	210.MHB12	Mosi⊠dz	0,200
208A.32A	32	300	210.MHB13	Mosi⊠dz	0,295
208A.40A	40	323	210.MHB14	Mosi⊠dz	0,510
208A.50A	50	350	210.MHB15	Mosi⊠dz	0,830
208A.60A	60	363	210.MHB16	Mosi⊠dz	1,300

Spare tips for mallets



EA



EB



EC

- Tips:

EA: neoprene tips, hardness shore A75.
Replaces rubber mallets.
EB: thermoplastic polyurethane tips (TPU), hardness shore D56.
Replaces wood and leather mallets.
EC: nylon tips, hardness shore D68.
Replaces soft metal mallets (copper, lead, brass, aluminum).

	d [mm]	Color	Bits
EA.25	25	Black	Neopren
EA.32	32	Black	Neopren
EA.40	40	Black	Neopren
EA.50	50	Black	Neopren
EA.60	60	Black	Neopren
EB.25	25	Red	TPU
EB.32	32	Red	TPU
EB.40	40	Red	TPU
EB.50	50	Red	TPU
EB.60	60	Red	TPU
EC.25	25	White	Nylon
EC.32	32	White	Nylon
EC.40	40	White	Nylon
EC.50	50	White	Nylon
EC.60	60	White	Nylon

Punches and nail sets

214 - Standard drifts





- Steel body.
- Replaceable nylon tips shore hardness D74.
- Use with a hammer or by hand to fit or extract small parts or bearings.
- Replaces bronze or brass drifts.

	d [mm]	L [mm]	Bits	[kg]
214.10	10	166	212.E10	0,100
214.15	15	175	212.E15	0,200

214.R - Dead-blow drifts



- Steel body with dead-blow design: the body is filled with steel balls preventing rebound after the shock.
- Replaceable nylon tips shore hardness D74.
- These large drifts can be used directly by hand to place parts delicately.

	d [mm]	L [mm]	Bits	[kg]
214.R20	20	150	212.E20	0,220
214.R25	25	153	212.E25	0,330
214.R30	30	157	212.E30	0,460
214.R35	35	157	212.E35	0,620

Multi-impact tool sets

MULTI-IMPACT SYSTEM

DRIFTS AND PUNCHES

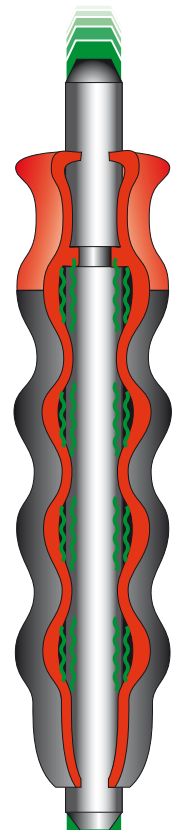
Parts protection
- Interchangeable tips of different hardness for parts that must not be marked.
- High quality, precision tools.

Multi-solution
- Tips of 3 different materials: brass, aluminium and polyamide.
- Extensive range of sizes.

Comfort and safety
- Exclusive sheathed, shock-absorbing handle.
- Slide-action for an increased shock-absorbency.
- Positive grip.







217.GJ1 Drifts set - 3 materials: Brass-Polyamide-Aluminum

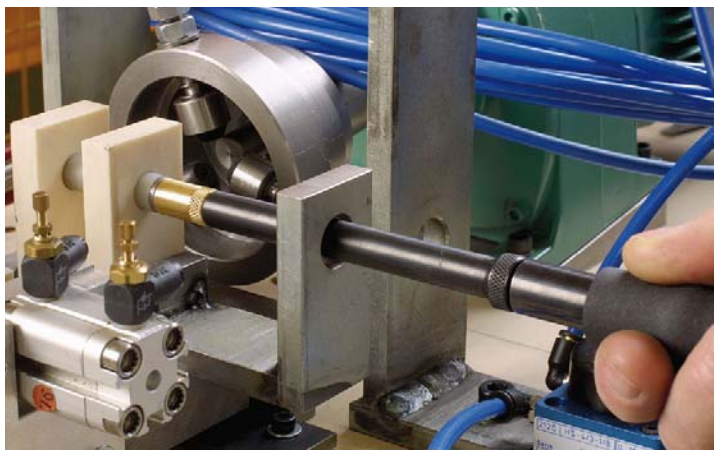


- Capacity Ø 10 to 20 mm.
- Sets of 19 pieces comprising:
- 1 anti-vibration sheathed grip 217.G16.
- 5 aluminum drift punch tips Ø 10, 12, 14, 16, 18 mm; useful length: 60 mm.
- 3 brass tips Ø 12, 16, 20 mm; useful length: 40 mm.
- 3 polyamide tips Ø 12, 16, 20 mm; useful length: 40 mm.
- one extension useful length 100 mm.
- 3 bits for extension: brass Ø 12, 16, 18 mm; useful length: 20 mm.
- 3 bits for extension: polyamide Ø 12, 16, 18 mm; useful length: 20 mm.
- Packaged in plastic case 265 x 230 x 50.

Weight: 1.350 kg.

Extension





- M8 threaded bit holder extension.

	d [mm]	L [mm]	⚖ [kg]
217.R12	12	125	0,105

Sheathed series

SHEATHED SERIES - A STEP FORWARD

NEW ULTRA-COMFORTABLE ANTI-ROLL SHEATH

Ergonomic

- Shock-absorbing.
- Elastic sheath. Partly free-sliding sheath.
- More stable, more positive grip.
- Protects the hand.

Safe

- Choice of best steels.
- Very precise heat treatment with different harnesses.
- DIN 7255.
- FACOM specifications.
- Better shock absorbance and elasticity to avoid the risk of breakage.

Precise and Powerful

- Comfortable grip ensures an accurately aimed blow.
- Stability of tool ensures a more powerful blow.

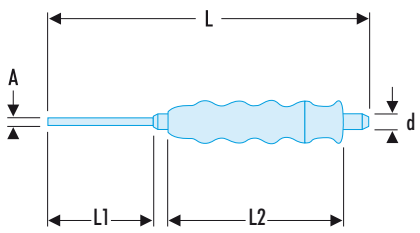




249G - Sheathed drift punches



- Long shank.
- Head hardened to 43 HRc.
- Shank hardened to 58 HRc.

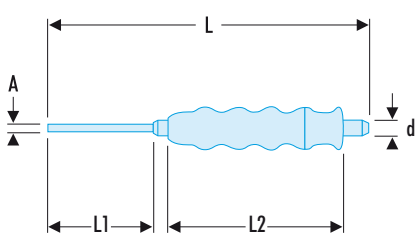


	A [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
249.G2	1,95	8	140	35	105	0,088
249.G3	2,95	8	150	45	105	0,090
249.G4	3,95	10	190	60	105	0,094
249.G5	4,95	10	200	70	105	0,098
249.G6	5,90	12	210	80	105	0,142
249.G8	7,90	12	216	86	105	0,158
249.G10	9,80	14	230	100	105	0,181
249.G12	11,80	16	280	130	105	0,380
249.G14	13,80	18	290	140	105	0,490
249.G16	15,70	18	310	160	105	0,580

247G - Sheathed nail sets



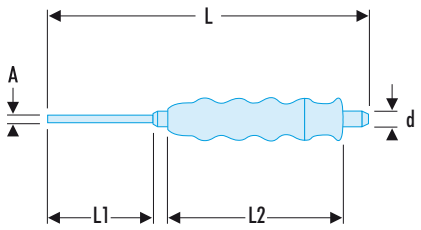
- Head hardened to 36 - 44 HRc.
- Tip hardened to 52 - 60 HRc.



	A [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
247.G2	1,9	10	185	55	105	0,102
247.G3	2,9	10	185	55	105	0,106
247.G4	3,9	10	185	55	105	0,109
247.G5	4,9	10	185	55	105	0,112
247.G6	5,9	10	185	55	105	0,115
247.G8	7,8	12	185	55	105	0,173

255G - Sheathed centre punches





- Head hardened to 36 - 44 HRc.
- Tip hardened to 57 - 60 HRc.

	A [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
255.G2,5	2,5	10	185	55	105	0,104
255.G4	4	10	185	55	105	0,110
255.G6	6	10	185	55	105	0,116
255.G8	8	12	185	55	105	0,174
255.G10	10	14	185	55	105	0,210

Sets of sheathed impact tools



- Sets of punches and nail sets.

	Content set
249.GJ5	249.G3 - G4 - G5 - G6 - G8
249.GJ7	249.G2 - G3 - G4 - G5 - G6 - G8 - G10
249.G247GJ12	249.G2 - G3 - G4 - G5 - G6 - G8 247.G2 - G3 - G4 - G5 - G6 - G8
249.GJ4	249.G10 - G12 - G14 - G16

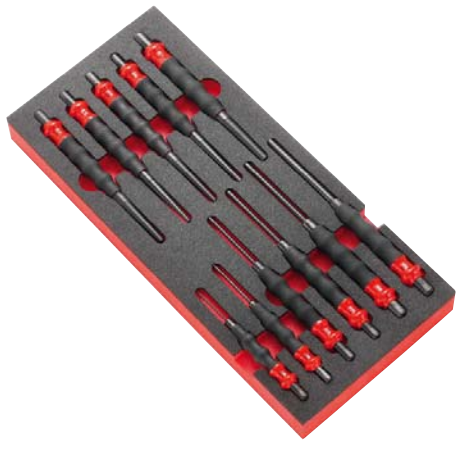
MOD.CG Sheathed drift punches module



- Comprising:
- 249.G 2 - 3 - 4 - 5 - 6 - 8 mm: 6 drift punches.
- 247.G. 4 - 5 - 6 - 8 mm: 4 nail sets.
- 255.G6: punch.
- Heat-formed tray PL.334.

Weight: 1.470 kg.

MODM.CG Sheathed drift punches foam module



- Comprising:
- 249.G 2 - 3 - 4 - 5 - 6 - 8 mm: 6 drift punches.
- 247.G 4 - 5 - 6 - 8 mm: 4 nail sets.
- 255.G6: punch accuracy 6 mm.
- Foam tray PM.MODCG.

Weight: 1.470 kg.

SHEATHED SERIES

IMPACT TOOL SAFETY:

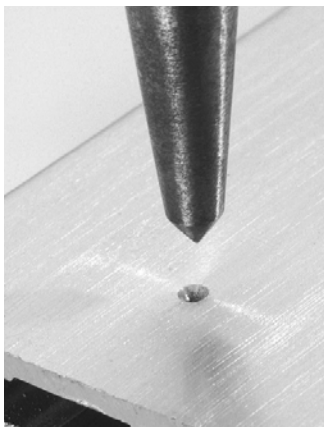
- Check the condition of the tool before use.
- Do not use tools with traces of wear, mushrooming, scaling or cracks.
- Wear eye protection and gloves.



257.G Sheathed automatic centre punch





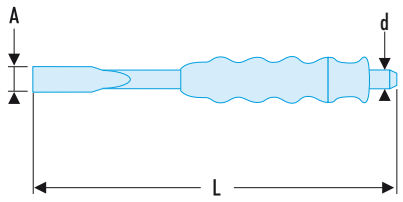


- Simply press the end to release spring impact.
- Impact adjustable from 15 to 25 kg.
- Ergonomic Facom handle.
- Tip hardened to 57 - 60 HRc.

Weight: 0.175 kg.

263.G - Sheathed chisels





- Engineers chisels.
- Hardness:

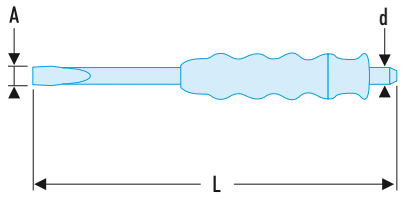
- Tip hardened to 57 - 60 HRc.
- Head hardened to 36 - 44 HRc.

- Cutting angle: 60°.

	A [mm]	d [mm]	L [mm]	⚖ [kg]
263.G19	15	12	190	0,165
263.G20	20	16	200	0,305
263.G22	25	18	220	0,415

Sheathed cape chisels





- Hardness:

- Edge: 57-60 HRc.
- Impact head: 36- 44 HRc.

	A [mm]	d [mm]	L [mm]	⚖ [kg]
265.G18	10	10	180	0,110

263.GJ4 Set of sheathed tools



- Comprising:
- 3 chisels: 263.G19 - 20 - 22.
- 1 cape chisel: 265.G18.
- Supplied on cardboard box.

Weight: 1.005 kg.

MOD.CG1 Drift punch - chisels - sheathed cape chisel module



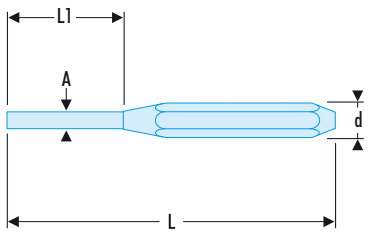
- Comprising:
- 249.G 12 - 14 - 16 mm: 3 sheathed drift punches.
- 263G. 19 - 20 - 22: 3 sheathed chisels.
- 265.G 18: 1 sheathed cape chisel.
- Heat-formed tray PL.611.

Weight: 3.000 kg.

Drifts

249 - Standard drift punches



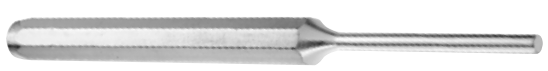


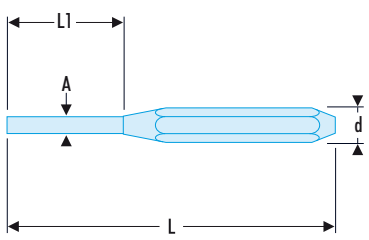
NF E 71-211, DIN 6450, ASME B107.410

- Hexagonal shank, high-strength steel tip, hardened to 53-58 HRc.
- Zinc-plated finish.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
249.2	1,9	8	115	30	0,030
249.3	2,9	8	125	40	0,035
249.4	3,9	10	150	50	0,065
249.5	4,9	10	165	50	0,075
249.6	5,9	12	180	50	0,120
249.8	7,9	12	200	50	0,160
249.10	9,9	16	200	50	0,220

248 - One-piece drift punches



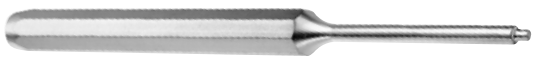


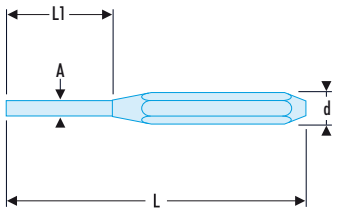
NF E 71-211

- Octagon-shaped, high-strength steel tip, hardened to 53-55 HRc.
- Zinc-plated finish.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
248.2	1,9	8	150	30	0,045
248.3	2,9	8	150	40	0,050
248.4	3,9	10	150	50	0,055
248.5	4,9	10	150	50	0,065
248.6	5,9	10	150	50	0,070
248.8	7,9	12	150	50	0,100
248.10	9,9	12	150	50	0,120

246 - Drift punches for spring pins

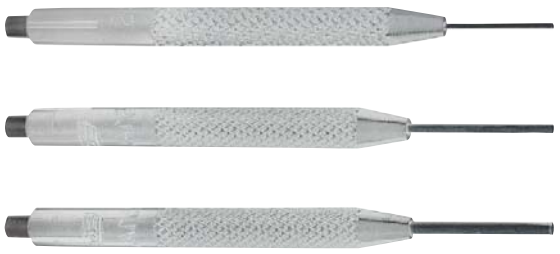


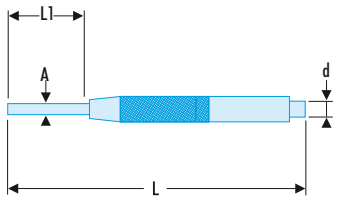


- Octagon-shaped body.
- Zinc-plated finish.
- Shouldered tip accurately centers into split pins.
- Hardened to 53 to 58 HRc guaranteeing perfect absorption of the shockwave.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
246.2	1,9	8	150	30	0,045
246.3	2,9	8	150	40	0,045
246.4	3,9	10	150	50	0,060
246.5	4,9	10	150	50	0,060
246.6	5,9	10	150	50	0,070
246.8	7,9	12	150	50	0,100

251A - Precision sleeved drift punches





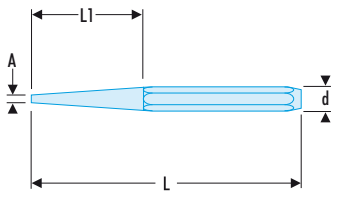
- The centre slides within a guide to prevent distortion, even in smaller sizes.
- Shank hardened to 52 to 57 HRc.
- Zinc-plated body, burnished body.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
251A.1	0,9	3	70	14	0,005
251A.1,5	1,4	3,5	83	21	0,010
251A.2	1,9	3,5	88	26	0,010
251A.2,5	2,4	4,5	93	22	0,018
251A.3	2,9	4,5	93	22	0,020
251A.3,5	3,4	5,5	96	25	0,025
251A.4	3,9	5,5	96	28	0,030
251A.5	4,9	7	107	33	0,045
251A.6	5,9	9	112	36	0,065

Nail sets

247 - Nail sets





NF E 71-211, DIN 6458, ASME B107.410

- Octagon-shaped body.
- Shank hardened to 54 - 58 HRc.
- Zinc-plated finish.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
247.2	2	10	120	40	0,060
247.3	3	10	120	40	0,060
247.4	4	10	120	40	0,060
247.5	5	10	120	40	0,065
247.6	6	10	120	40	0,070
247.8	8	12	120	40	0,100

DRIFT PUNCHES

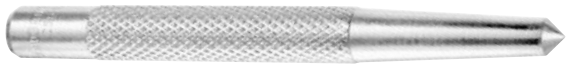
IMPACT TOOL SAFETY:

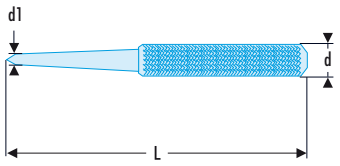
- Check the condition of the tool before use.
- Do not use tools with traces of wear, mushrooming, scaling or cracks.
- Wear eye protection and gloves.



Drift punches

256 - Precision centre punches







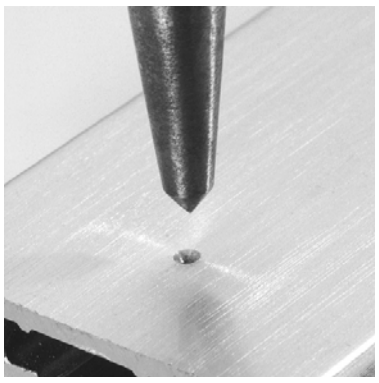
NF E 71-211, DIN 7250, ASME B107.410

- Chrome-vanadium steel forged, hardened to 52 to 58 HRc.
- Presentation: knurled body.
- Zinc-plated finish.

	A [mm]	d [mm]	L [mm]	[kg]
256.2,5	2,5	7	100	0,025
256.4	4	8	105	0,035
256.6	6	10	115	0,060
256.8	8	12	130	0,100
256.10	10	14	130	0,135

257A Automatic centre punch





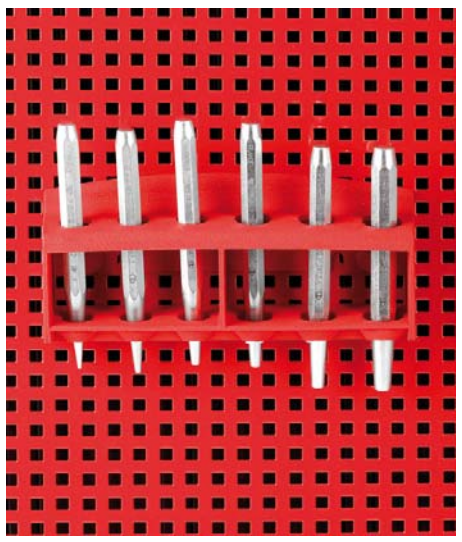
- Simply press the end to release spring impact.
- Impact adjustable by turning the knurled head.
- Acceptable load: 11 to 22 kg.
- Presentation: chrome body, greased tip.
- Length: 163 mm, body Ø 16 mm, shank Ø 7 mm.

Weight: 0.135 kg.

Interchangeable tip: 257.07.
Spare tip: 257.10A.

Sets

Impact tools set







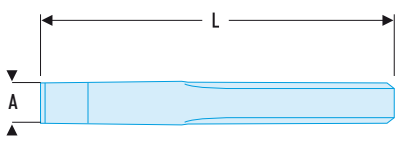
- JS Presentation on holder.
- JT Presentation as roll sets.
- For 249.JT7: roll set N.38A-7B.
- For 248.JT7: roll set N.38A-7B.
- For 251A.JT9: roll set N.38A-9C.
- For 247.265JT10: roll set N.38A-10B.

	Dimension [mm]	Content set	Organiser for	[kg]
249.JS7	120x195x45	249.2-3-4-5-6-8-10	CKS.103	0,868
249.JT7	230x120	249.2-3-4-5-6-8-10	N.38A-7B	0,755
248.JS6	120x190x45	248.2-3-4-5-6-8	CKS.103	0,588
248.JT7	265 x 120	248.2-3-4-5-6-8-10	N.38A-7B	0,695
246.JS6	120x190x45	246.2-3-4-5-6-8	CKS.103	0,593
246.JT6	200x165	246.2-3-4-5-6-8	N.38A-6C	0,545
251A.JS9	120x115x45	251A.1-1.5-2-2.5-3-3.5-4-5-6	CKS.103	0,354
251A.JT9	180 x 120	251A.1-1.5-2-2.5-3-3.5-4-5-6	N.38A-9C	0,260
247.249JS12	120x180x47	247.2-3-4-5-6-8 / 249.2-3-4-5-6-8	CKS.103	1,076
247.265JT10	180x120 / 240x60	247.3-4-5 / 256.4-6 / 249.3-4-5 / 263.20 / 265.18	N.38A-10B	1,155

Flat chisels - Cape chisels

263 - Slim chisels





- Constant-profile cape chisel
- Chrome vanadium forged steel; differentiated heat treatment - edge 54 - 58 HRc - impact head 38 - 46 HRc to prevent head effect.
- Edge resharpening with grinder.
- Presentation: lacquered.

	A [mm]	L [mm]	⚖ [kg]
263.15	21	150	0,200
263.18	21	180	0,250
263.20	24	200	0,350
263.22	24	220	0,380
263.25	27	250	0,500
263.30	27	300	0,610

263P - Chisels with guard



- Chisels with guard, diameter: 85 mm.
- Chrome vanadium forged steel; differentiated heat treatment: edge 54 - 58 HRc - impact head 38 - 46 HRc to prevent head effect.
- Edge resharpening with grinder.
- Presentation: lacquered.

	A [mm]	L [mm]	⚖ [kg]
263.P25	27	250	0,610
263.P30	27	300	0,710

265 - Cape chisels

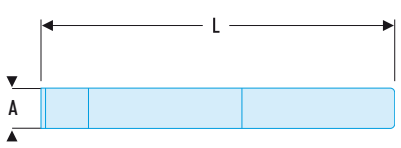


- Constant-profile cape chisels.
- Chrome vanadium forged steel; differentiated heat treatment: edge 54 - 58 HRc - impact head 38 - 46 HRc to prevent head effect.
- Edge resharpening with grinder.
- Presentation: lacquered.

	A [mm]	L [mm]	⚖ [kg]
265.18	8	180	0,240
265.20	10	200	0,310
265.22	10	220	0,370

259 Slim-profile chisels





- Slim profile chisel.
- Chrome vanadium forged steel, treated 57 HRc on edge and 40 HRc on impact head.
- Blade width: 26 mm.
- Length: 235 mm.
- Presentation: lacquered.

Weight: 240 g.

259.P Slim-profile chisel with guard



- Chisel with guard, diameter: 85 mm.
- Chrome vanadium forged steel, treated 57 HRc on edge and 40 HRc on impact head.
- Blade width: 26 mm.
- Length: 235 mm.
- Presentation: lacquered.

Weight: 400 g.

260.P Wide chisel with guard



- Chisel with guard, diameter: 85 mm.
- Chrome vanadium forged steel and hardened to 57 HRc on edge.
- Edge resharpening with grinder.
- Head hardened to prevent head effect.
- Blade width: 60 mm.
- Length: 250 mm.
- Presentation: lacquered.

Weight: 630 g.

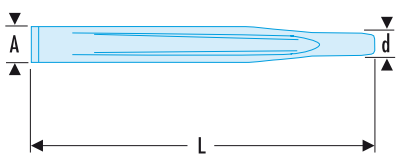
Set of chisels and cape chisels on holder



	Dimension [mm]	Content set	Organiser for	[kg]
263.265JS5	255 x 180 x 30	263.15-20-25 265.18-22	CKS.81A	1,850

262A - Ribbed chisels, round head





- Forged chisels with rounded edges for better handling.
- Cylinder-shaped head for safer impact.
- Cutting edge hardness: 57 to 59 HRc.
- Cutting edge angle: 60°.
- Presentation: zinc-plated finish.

	A [mm]	d [mm]	L [mm]	[kg]
262A.15	21	16	150	0,170
262A.18	24	18	180	0,250
262A.20	26	18	200	0,340
262A.25	29	21	260	0,500

Set of ribbed chisels on holder



	Dimension [mm]	Content set	Organiser for	[kg]
262A.JS4	180 x 30 x 250	262A.15-18-20-25	CKS.80B	1,440



SAWING

586



Hacksaw frame 586
Hacksaw blades 589

FILES

590



File sets 592
Engineers files 593
Wood rasps 598
Precision files 599

WORKSHOP DRILL BITS, TAPS AND DIES

600



Taps 600
Dies 601
Threading and tapping tool sets 602
Thread restoring tools 602
Tools for taps and dies 603
Workshop drill bits 604
Bits for impact machinery 606

HOLESAWS

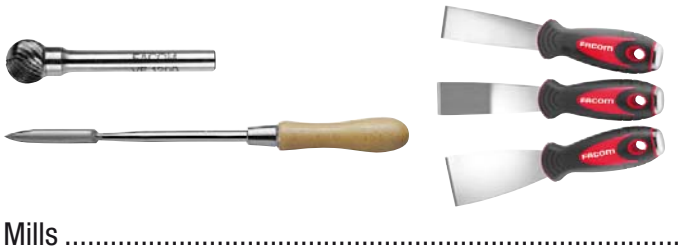
606



Variable pitch holesaws 606
Holesaw sets 607

MILLS, SCRAPERS

608



Mills 608
Scrapers 608



METAL SHEARS



Metal shears 610

BOLT CROPPERS



Forged arms bolt croppers 612
Tubular arms bolt croppers 613

CABLE CUTTERS



Copper and aluminium cable cutters 614
Steel cable cutters 615

UTILITY KNIVES

Utility knives 617
Utility knife blades 619
Multipurppose cutters 621

SCISSORS



Scissors 621

KNIVES



Knives 622

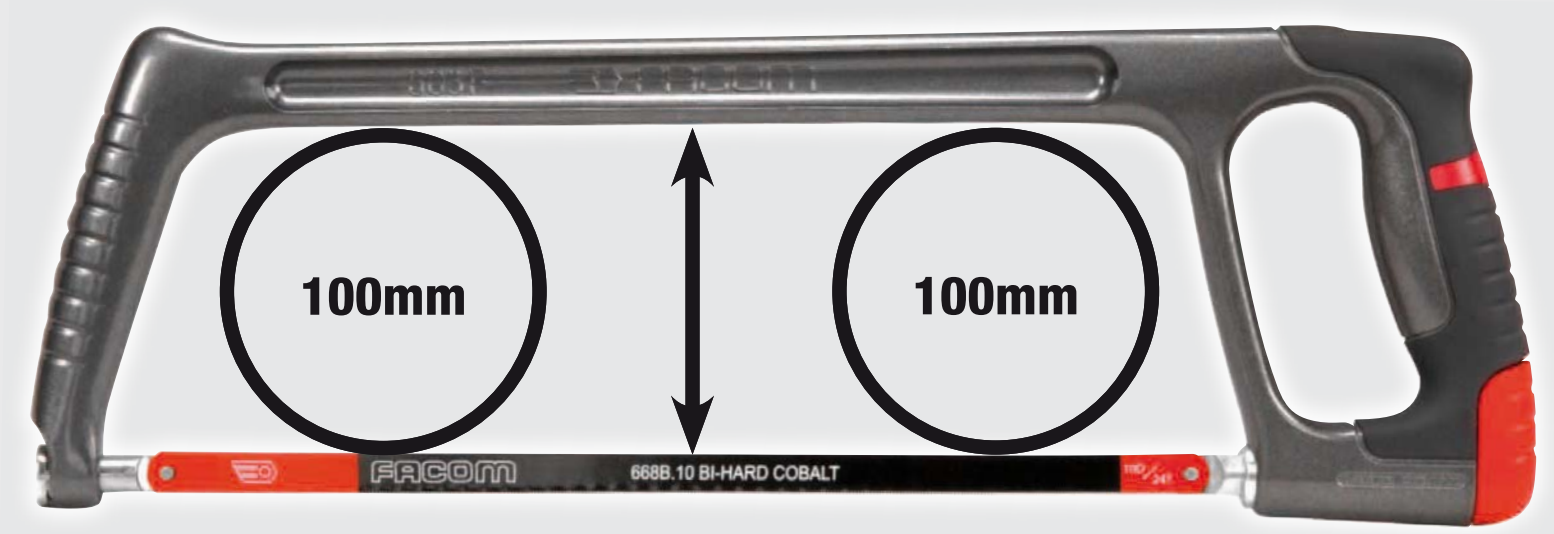
PUNCH KIT



Punch kit 624

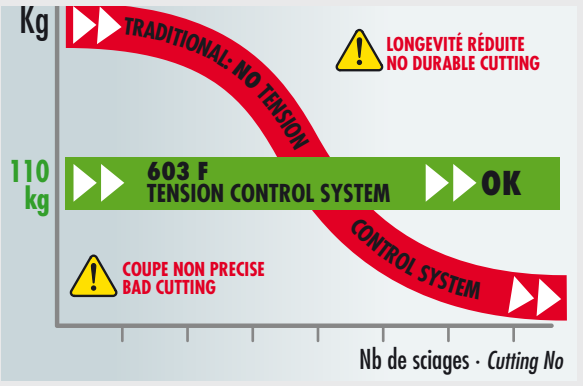
Hacksaw frame

HIGH PERFORMANCE HACKSAW FRAME 603F



OPTIMUM AND DURABLE CUT

- Constant blade tension: 110 kg controlled automatically.
- Rigid aluminium bow.
- Bi-material ergonomic handle to reduce vibrations.





Exact cutting

- For a perfect tension control (110 kg), turn the button till CLACK.

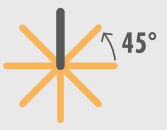
SAVE TIME

- Cutting capacity 100 mm over the full bow length.
- Ultra-fast blade changing.
- 8 cutting positions (every 45°).



360°

- 8 positions













603F «High performance» hacksaw frame



NF E 73-073, DIN 6473

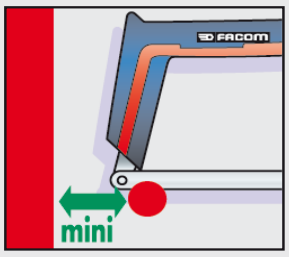
- Optimum and durable automatic blade tension control at 110 kg.
- Aluminium bow for maximum stiffness.
- Ergonomic handle for maximum cutting comfort.
- 8 blade positions.
- Ultra-fast blade changing.
- Takes 300 mm blade.
- Dimensions (L. x W.): 440 x 145 mm.
- Supplied with one blade.

Weight: 830 g.

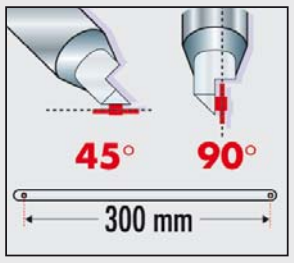
- Spare blades: 668B.

"TRAVELLING" HACKSAW FRAME 601

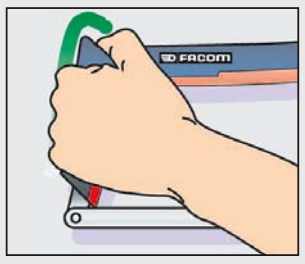
PRACTICAL AND COMPACT



Minimum clearance to start cutting.



2 blade positions on machined and shouldered pins.



Left-hand rest.



Compact: stored in a 5-compartment box and in roller-cabinet modules.



601 Compact hacksaw frame





NF E 73-073, DIN 6473

- Impact-resistant steel/resin construction compact and lightweight.
- Blade tension 80 kg.
- 2 blade positions: 45° and 90°.
- Takes 300 mm blade.
- Dimensions (L. x W.): 385 x 145 mm.
- Supplied with one blade.

Weight: 590 g.

- Spare blades: 668B.

MOD.601 Saw, tape measure and files module



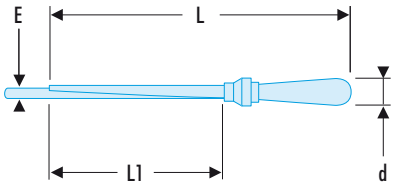
- Comprising:

- 601: Hacksaw frame.
- 666B.10 10: Saw blades (10 teeth per cm).
- 234.S: Scriber.
- 803.300M: Stainless steel 2-face rule 300 mm.
- 893.316: Tape measure 3m.
- 5 files with handle: PAM.B250EMA (flat bastard file) - DRD.MD250EMA (half-round, half-smooth) - CAR.MD200EMA (square file, half-smooth) - TRI.MD200EMA (triangular file, half-smooth) - RD.MD200EMA (round file, half-smooth).
- Tray PL.335.

Weight: 2.300 kg.

Straight frame with blade backing





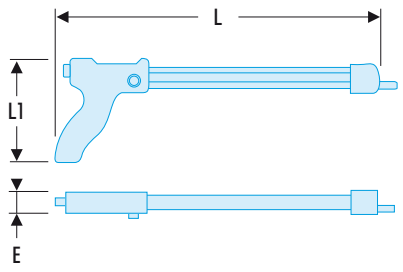
- Blade can be set to protrude beyond the backing to allow insertion into narrow gaps.
- Takes 300 mm blade.

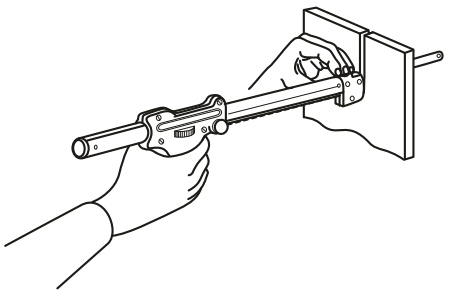
- Spare blades: 668B.

	d [mm]	E [mm]	L [mm]	L1 [mm]	[g]
606A	33	16	350	190	410

Revolver frame with sliding blade-guide







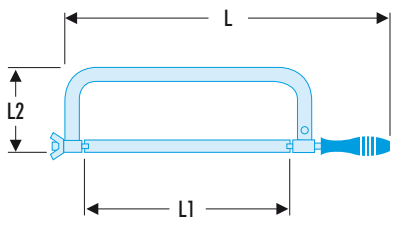
- Sliding guide steadies blade throughout cutting stroke.
- A thumbscrew can lock the guide to keep blade end clear.
- Takes 300 mm blade.

- Spare blades: 668B.

	E [mm]	L [mm]	L1 [mm]	[g]
605.B	30	370	130	780

Flat bow frame - adjuster fitting





NF E 73-073, DIN 6473,

- Wood handle.
- Takes 300 mm blade.

- Spare blades: 668B.

	L [mm]	L1 [mm]	L2 [mm]	[g]
599	520	300	130	600

Hacksaw blades

NEW HACKSAW BLADES 668B



Made from cobalt steel

- Higher heat resistance, reduced teeth wear.
- Equal performance throughout blade lifecycle.
- Enhanced flexibility and neater cut.
- Suited to all materials.
- Available in 8, 10 and 12 teeth.



668B - Cobalt steel bimetal saw blades



NF E 73-072, ISO 2336-1, DIN 6494

- Characteristics:
- 668B.8: for thick semi-hard steels - thickness recommended: 6 - 25 mm.
- 668B.10: for special or alloy steels - thickness recommended: 3 - 6 mm.
- 668B.12: for stainless steel, copper - thickness recommended: 1 - 3 mm.
- Blade in cobalt steel: higher heat resistance, reduced teeth wear.
- Equal performance throughout blade lifecycle.
- Enhanced flexibility and neater cut.
- Suited to all materials.
- Blade length 300 mm.

	Teeth [“]	Teeth [cm]	⚖ [g]
668B.8	18	8	160
668B.10	24	10	160
668B.12	32	12	160

FILE SELECTION GUIDE

Facom technical specifications

- Made from high carbon-content steels.
- Optimum heat treatment for each application.
  - 64 to 66 HRc for engineers files.
  - 53 to 56 HRc for rasps.
  - 65 to 67 HRc for sharpening files.

File selection guide

Four criteria apply :

1. Shape or cross-section.
2. Pattern according to material.
3. Grade according to operation.

- Standard files:
  - B: Bastard cut for rough filing.
  - MD: Second cut for general purpose.
- Precision files:
  - TOA: Bastard cut for rough filing.
  - T2A: for normal smooth filing.

4. File length.
   - Lengths quoted are always without tang.

Main shapes		
FLAT PAM	HALF-ROUND DRD	ROUND RD
THREE-SQUARE TRI	SQUARE CAR	





Pattern selection according to material		Steel	Cast Iron	Brass	Hard plastics, wood etc.	Aluminium and soft materials
Double cut for steel and metals.		●	●	●	●	
Single cut for good surface finish, sharpening saws, lathe filling and fitters' requirements.		●				
Dreadnaught, for soft materials, sheet metal, etc. Leaves a smooth finish.		●		●	●	●
Rasp for soft materials and wood. Produces a rough surface.					●	●

SELECTION GUIDE: WOOD HANDLES FOR FILES AND RASPS



Files	100 mm	125 mm	150 mm	200 mm	250 mm	300 mm
PAM: Flat hand	MAN.3	-	MAN.3	MAN.2	MAN.1	MAN.0
DRD: Half-round	MAN.3	-	MAN.3	MAN.2	MAN.1	MAN.0
TRI: Three-square	MAN.4	MAN.3	MAN.3	MAN.2	MAN.1	MAN.1
RD: Round	MAN.4	MAN.4	MAN.4	MAN.3	MAN.2	MAN.0
CAR: Square	MAN.4	MAN.4	MAN.4	MAN.3	MAN.2	MAN.1
CT: Knife	MAN.3	MAN.3	MAN.2	MAN.2	MAN.1	MAN.1
PIL: Pillar	MAN.3	-	MAN.2	MAN.2	MAN.1	-
PDE: Fat warding	MAN.3	MAN.3	MAN.2	MAN.2	MAN.1	MAN.1
BAR: Barette	MAN.3	-	MAN.2	MAN.2	MAN.1	-
FRC / FRO: Tapered	-	-	-	-	-	MAN.0
TRO: Round for chainsaws	-	-	MAN.4	MAN.4	-	-
Type of rasps	**100 mm**	**125 mm**	**150 mm**	**200 mm**	**250 mm**	**300 mm**
RAB.DRD: Half-round	-	-	-	-	MAN.1	MAN.0
RAB.P: Flat	-	-	-	-	MAN.1	MAN.0
RAB.RD: Round	-	-	-	-	MAN.1	MAN.0



MAN - Wood handles for files and rasps



- Varnished wood handles with nickel-plated steel ferrule.
- Supplied singly.

	d [mm]	L [mm]	[g]
MAN.0	34	132	55
MAN.1	32	124	45
MAN.2	28	110	40
MAN.3	25	102	30
MAN.4	22	98	25

SELECTION GUIDE: PLASTIC HANDLES FOR FILES AND RASPS



Files	100 mm	125 mm	150 mm	200 mm	250 mm	300 mm
PAM: Flat hand	**MP.4**	-	**MP.3**	**MP.2**	**MP.1**	**MP.0**
DRD: Half-round	**MP.4**	-	**MP.3**	**MP.2**	**MP.1**	**MP.0**
TRI: Three-square	-	-	**MP.3**	**MP.1**	**MP.0**	**MP.0**
RD: Round	**MP.4**	**MP.4**	**MP.4**	**MP.3**	**MP.1**	**MP.0**
CAR: Square	-	-	**MP.4**	**MP.3**	**MP.1**	**MP.0**
CT: Knife	**MP.4**	-	**MP.3**	**MP.2**	**MP.1**	-
PIL: Pillar	**MP.4**	-	**MP.3**	**MP.2**	**MP.1**	-
PDE: Fat warding	**MP.4**	-	**MP.3**	**MP.2**	**MP.1**	-
BAR: Barette	**MP.4**	-	**MP.3**	**MP.2**	**MP.1**	-
FRC / FRO: Tapered	-	-	-	-	-	**MP.0**
TRO: Round for chainsaws	-	-	**MP.4**	**MP.4**	-	-
Type of rasps	**100 mm**	**125 mm**	**150 mm**	**200 mm**	**250 mm**	**300 mm**
RAB.DRD: Half-round	-	-	-	-	**MP.1**	**MP.0**
RAB.P: Flat	-	-	-	-	**MP.1**	**MP.0**
RAB.RD: Round	-	-	-	-	**MP.1**	-



MP - Plastic handles for files and rasps



- Ergonomic handle in plastic resistant to workshop solvents.
- Supplied singly.

	d [mm]	L [mm]	[g]
MP.0	30	120	40
MP.1	30	120	45
MP.2	28	120	40
MP.3	28	105	35
MP.4	25	100	20

File sets

STG Set of 5 files



- Set of 5 files with varnished wood handles, for general engineering and automotive applications.
- Comprising:
- PAM.B250A: Flat bastard file.
- DRD.MD250A: Half-round second-cut file.
- CAR.MD200EMA: Square second-cut file.
- TRI.MD200EMA: Triangle second-cut file.
- RD.MD200A: Round second-cut file.
- Supplied in grey hammer-finish wall-rack CKS.35A.

Weight: 1.265 kg.

STU Set of 9 files



- Set of 9 files and rasps for engineering and industrial maintenance.
- Comprising:
- PAM.B250A: Flat bastard file.
- PAM.MD200A: Flat second-cut file.
- DRD.B250A: Half-round second cut bastard file.
- DRD.MD200A: Half-round second-cut file.
- RD.B250A: Round bastard file.
- RD.MD200A: Round second-cut file.
- CAR.MD200A: Square second-cut file.
- TRI.MD150A: Triangle second-cut file.
- RAB.DRDMD250A: Half-round second-cut rasp.
- Supplied in grey hammer-finish wall-rack CKS.34A.

Weight: 2.150 kg.

CLE.BAM100A Set of 6 locksmiths files - length 100 mm



NFE 75-001, NFE 75-002

- Geneva pattern with wooden handle.
- Available in 3 different cuts.
- CLE.BAM100A: Bastard cut files.
- CLE.MDAM100A: Second cut files.
- CLE.DAM100A: Smooth cut files.
- In plastic wallet dimensions (L. x D. x H.): 200 x 105 x 11 mm.

Weight: 205 g.

MOD.LIM Module of 5 files 200 mm long with handle



- Comprising:
- PAM.B200EMA: Flat bastard file.
- DRD.MD200EMA: Half-round second-cut file.
- CAR.MD200EMA: Square second-cut file.
- TRI.MD200EMA: Triangle second-cut file.
- RD.MD200EMA: Round second-cut file.
- Thermoformed module PL606.
- Finish: ergonomic handle in plastic resistant to workshop solvents.

Weight: 950 g.

LIM200EM.J5 Set of 5 second-cut files 200 mm long



NFE 75-001, NFE 75-002

- Comprising:
- PAM.MD200EMA: Flat second-cut file.
- DRD.MD200EMA: Half-round second-cut file.
- CAR.MD200EMA: Square second-cut file.
- RD.MD200EMA: Round second-cut file.
- TRI.MD200EMA: Triangle second-cut file.
- Finish: ergonomic handle in plastic resistant to workshop solvents.

Weight: 820 g.

LIM250EM.J5 Set of 5 second-cut files 250 mm long



NFE 75-001, NFE 75-002

- Comprising:
- PAM.MD250EMA: Flat second-cut file.
- DRD.MD250EMA: Half-round second-cut file.
- CAR.MD250EMA: Square second-cut file.
- RD.MD250EMA: Round second-cut file.
- TRI.MD250EMA: Triangle second-cut file.
- Finish: ergonomic handle in plastic resistant to workshop solvents.

Weight: 1.350 kg.

Engineers files

PAM.MDA - Half-round flat files





NFE 75-001, NFE 75-002

- Flat files with handle.
- 2 double cut squares.
- 1 single cut square.
- 1 smooth cut.
- Designed for steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	[g]
PAM.MD150A	4 x 15	150	75
PAM.MD200A	5 x 20	200	145
PAM.MD250A	6 x 25	250	270

PAM.MDEMA - Flat half-cut files with handle





NFE 75-001, NFE 75-002

- Flat files with handle.
- 2 double cut squares.
- 1 single cut square.
- 1 smooth cut.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	[g]
PAM.MD150EMA	4 x 15	150	140
PAM.MD200EMA	5 x 20	200	200
PAM.MD250EMA	6 x 25	250	340

PAM.BA - Flat bastard files





NFE 75-001, NFE 75-002

- Flat files with handle.
- 2 double cut squares.
- 1 single cut square.
- 1 smooth cut.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	⚖ [g]
PAM.B150A	4 x 15	150	60
PAM.B200A	5 x 20	200	145
PAM.B250A	6 x 25	250	270

PAM.BEMA - Flat bastard files with handle





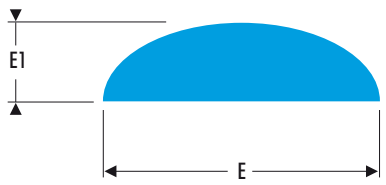
NFE 75-001, NFE 75-002

- Flat files with handle.
- 2 double cut squares.
- 1 single cut square.
- 1 smooth cut.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	⚖ [g]
PAM.B150EMA	4 x 15	150	140
PAM.B200EMA	5 x 20	200	200
PAM.B250EMA	6 x 25	250	340

DRD.MDA - Half-round second-cut files





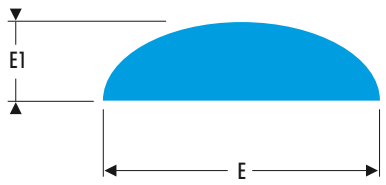
NFE 75-001, NFE 75-002

- Second-cut files with handle.
- Double second-cut squares.
- Double cut square.
- Designed for steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	⚖ [g]
DRD.MD150A	4,5 x 16,0	150	60
DRD.MD200A	6 x 21	200	115
DRD.MD250A	7 x 25	250	220

DRD.MDEMA - Half-round second-cut files with handle





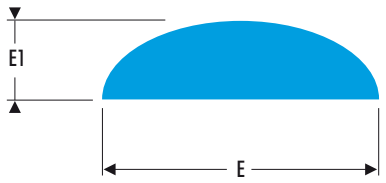
NFE 75-001, NFE 75-002

- Second-cut files with handle.
- Double second-cut squares.
- Double cut square.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	⚖ [g]
DRD.MD150EMA	4,5 x 16,0	150	100
DRD.MD200EMA	6 x 21	200	160
DRD.MD250EMA	7 x 25	250	280

DRD.BA - Half-round bastard files





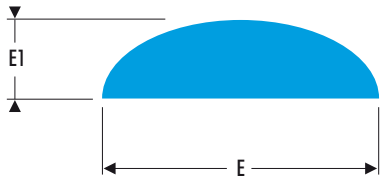
NFE 75-001, NFE 75-002

- Second-cut files with handle.
- Double second-cut squares.
- Double cut square.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	ΔΔ [g]
DRD.B150A	4,5 x 16,0	150	60
DRD.B200A	6 x 21	200	115
DRD.B250A	7 x 25	250	220

DRD.BEMA - Half-round bastard files with handle





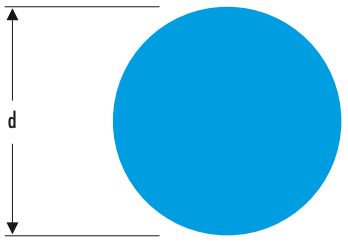
NFE 75-001, NFE 75-002

- Second-cut files with handle.
- Double second-cut squares.
- Double cut square.
- Ergonomic handle in plastic resistant to workshop solvents.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	ΔΔ [g]
DRD.B150EMA	4,5 x 16,0	150	100
DRD.B200EMA	6 x 21	200	160
DRD.B250EMA	7 x 25	250	280

RD.MDA - Second-cut round files





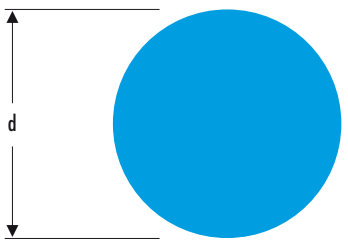
NFE 75-001, NFE 75-002

- Round files with handle.
- Double square.
- Designed for steel, cast iron, brass, and hard plastics.

	d [mm]	L [mm]	ΔΔ [g]
RD.MD150A	6	150	50
RD.MD200A	8	200	75
RD.MD250A	10	250	135

RD.MDEMA - Second-cut round files with handle





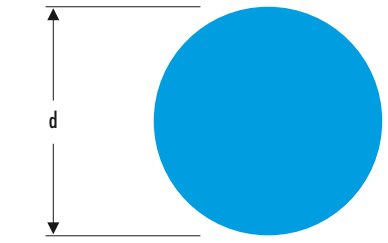
NFE 75-001, NFE 75-002

- Round files with handle.
- Double square.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for steel, cast iron, brass, and hard plastics.

	d [mm]	L [mm]	ΔΔ [g]
RD.MD150EMA	6	150	100
RD.MD200EMA	8	200	140
RD.MD250EMA	10	250	208

RD.BA - Round bastard files





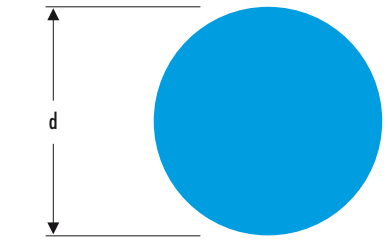
NFE 75-001, NFE 75-002

- Round files with handle.
- Double square.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	d [mm]	L [mm]	[g]
RD.B150A	6	150	50
RD.B200A	8	200	75
RD.B250A	10	250	135

RD.BEMA - Round bastard files with handle





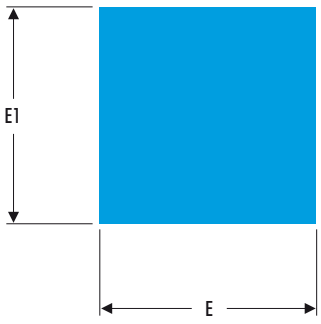
NFE 75-001, NFE 75-002

- Round files with handle.
- Double square.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	d [mm]	L [mm]	[g]
RD.B150EMA	6	150	100
RD.B200EMA	8	200	140
RD.B250EMA	10	250	200

CAR.MDA - Second-cut square files





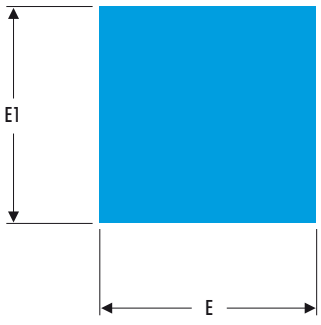
NFE 75-001, NFE 75-002

- Square files with handle.
- Double square on 4 cuts.
- Designed for steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	[g]
CAR.MD150A	6 x 6	150	60
CAR.MD200A	8 x 8	200	80
CAR.MD250A	10 x 10	250	140

CAR.MDEMA - Second-cut square files with handle





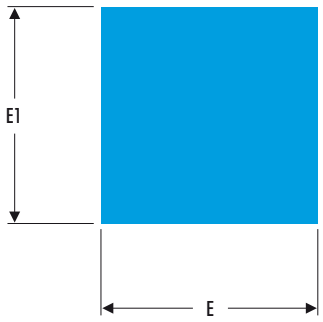
NFE 75-001, NFE 75-002

- Square files with handle.
- Double square on 4 cuts.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	[g]
CAR.MD150EMA	6 x 6	150	100
CAR.MD200EMA	8 x 8	200	120
CAR.MD250EMA	10 x 10	250	190

CAR.BEMA - Square bastard files with handle





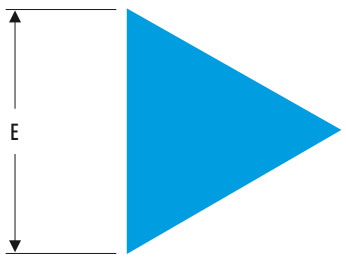
NFE 75-001, NFE 75-002

- Square files with handle.
- Double square on 4 cuts.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for roughing steel, cast iron, brass, and hard plastics.

	E x E1 [mm]	L [mm]	ΔΔ [g]
CAR.B150EMA	6 x 6	150	100
CAR.B200EMA	8 x 8	200	120
CAR.B250EMA	10 x 10	250	190

TRI.MDA - Second-cut triangle files





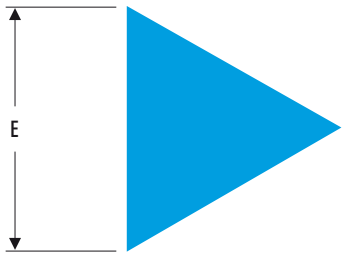
NFE 75-001, NFE 75-002

- Triangle files with handle.
- Double square on 3 cuts.
- Designed for steel, cast iron, brass, and hard plastics.

	E [mm]	L [mm]	ΔΔ [g]
TRI.MD150A	11	150	90
TRI.MD200A	15	200	170
TRI.MD250A	19	250	270

TRI.MDEMA - Second-cut triangle files with handle





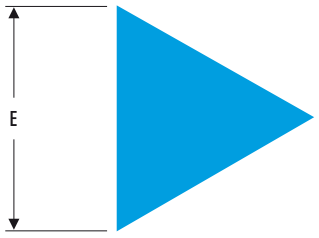
NFE 75-001, NFE 75-002

- Triangle files with handle.
- Double square on 3 cuts.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for steel, cast iron, brass, and hard plastics.

	E [mm]	L [mm]	ΔΔ [g]
TRI.MD150EMA	11	150	130
TRI.MD200EMA	15	200	210
TRI.MD250EMA	19	250	330

TRI.BEMA - Triangle bastard files with handle





NFE 75-001, NFE 75-002

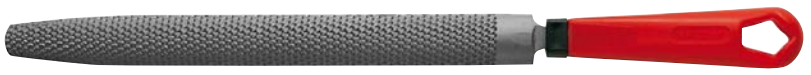
- Triangle files with handle.
- Double square on 3 cuts.
- Ergonomic handle in plastic resistant to workshop solvents.
- Designed for roughing steel, cast iron, brass, and hard plastics.

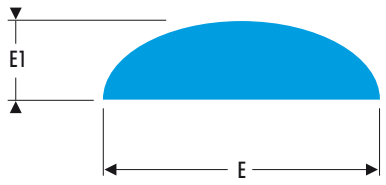
	E [mm]	L [mm]	⚖ [g]
TRI.B150EMA	11	150	130
TRI.B200EMA	15	200	210
TRI.B250EMA	19	250	330

Wood rasps

RAB.DRDMDA - Half-round second-cut rasps medium cut







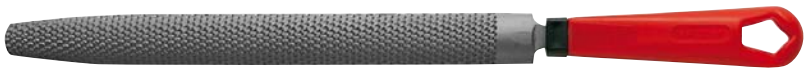
NFE 75-001, NFE 75-002

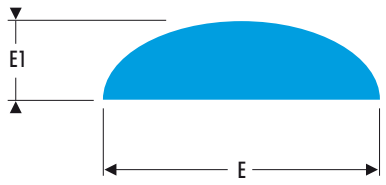
- Second-cut rasps with handle.
- RAB.DRDB250EMA - RAB.DRDMD300EMA: Rasp with handle.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for soft materials, aluminium, lead, plastic or wood.

	E x E1 [mm]	L [mm]	⚖ [g]
RAB.DRDMD250A	25 x 7	250	260
RAB.DRDMD300A	30,0 x 8,5	300	420
RAB.DRDMD250EMA	25 x 7	250	300
RAB.DRDMD300EMA	30,0 x 8,5	300	380

RAB.DRDBA - Half-round bastard rasps large cut





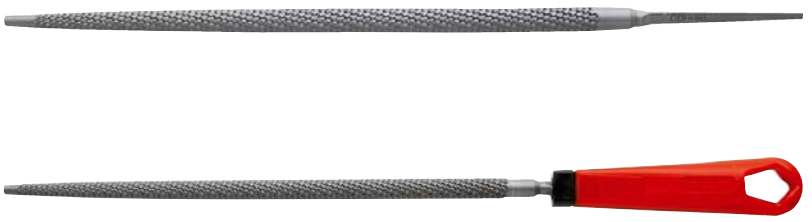


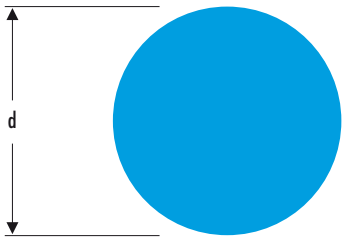
NFE 75-001, NFE 75-002

- Second-cut rasps with handle.
- RAB.DRDB300EMA: Rasp with handle.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for roughing work, soft materials, aluminium, lead, plastic or wood.

	E x E1 [mm]	L [mm]	⚖ [g]
RAB.DRDB250A	25 x 7	250	260
RAB.DRDB300EMA	30,0 x 8,5	300	480

RAB.RDA - Round second-cut rasps medium cut





NFE 75-001, NFE 75-002

- Round rasps with handle.
- RAB.RD250EMA: Rasp with handle.
- Finish: ergonomic handle in plastic resistant to workshop solvents.
- Designed for soft materials, aluminium, lead, plastic or wood.

	d [mm]	L [mm]	⚖ [g]
RAB.RD250A	10	250	140
RAB.RD250EMA	10	250	180

RAB.P - Flat rasps medium cut





NFE 75-001, NFE 75-002

- Flat rasps with handle.
- Bastard finish: recommended for roughing work.
- Second cut finish recommended for current work.
- Designed for current work, for soft materials, aluminium, lead, plastic or wood.

	E x E1 [mm]	L [mm]	Files	⚖ [g]
RAB.PB250A	25 x 6	250	Bastard	320
RAB.PMD250A	25 x 6	250	Second cut finish	320

Precision files

AS - Selections of 6 and 12 needle files





- AS.6L: Selection of 6 needle files: round (RD), half-round (DRD), flat entry (DPE), square (CAR), triangular (TRI), tile (PAM).
- AS.12L: Selection of 12 needle files: round (RD), half-round (DRD), flat entry (PDE), crossing file (FS), knife (CT), square (CAR), triangular (TRI), file (PAM), strip (BAR), BR tile (PAMBR), hook (CRO), oval (OV).
- T0 for rough filing.
- T2 for precise filing.

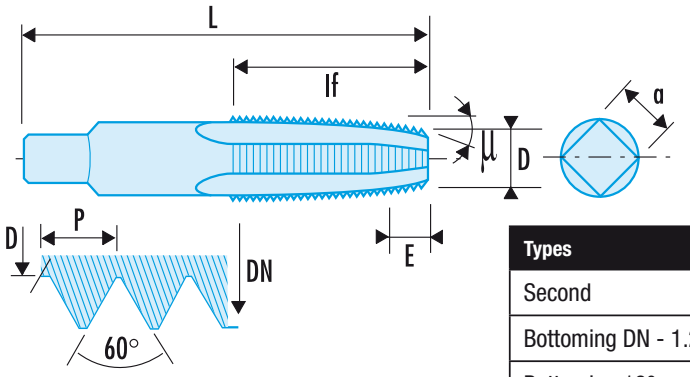
	L [mm]	Files	Contents	Content set	⚖ [g]
AS.6L140T0A	140	T0	Plastic wallet	6	115
AS.6L140T2A	140	T2	Plastic wallet	6	115
AS.6L160T0A	160	T0	Plastic wallet	6	140
AS.6L160T2A	160	T2	Plastic wallet	6	140
AS.12LBC100T0A	100	T0	Cardboard box	12	55
AS.12LBC100T2A	100	T2	Cardboard box	12	55
AS.12LBP140T0A	140	T0	Plastic box	12	115
AS.12LBP140T2A	140	T2	Plastic box	12	115
AS.12LBP160T0A	160	T0	Plastic box	12	140
AS.12LBP160T2A	160	T2	Plastic box	12	140
AS.12LTP180T0A	180	T0	Plastic wallet	12	175
AS.12LTP180T2A	180	T2	Plastic wallet	12	175

Taps

TAP SELECTION GUIDE

- Ground-thread backed-off taps.
- ISO metric RH thread.6H machining.
- Set of 2 (ref. T2) for soft metals: 1 taper tap, 1 bottoming tap.
- Set of 3 (ref. T3) for hard metals: 1 taper tap, 1 second tap, 1 bottoming tap.

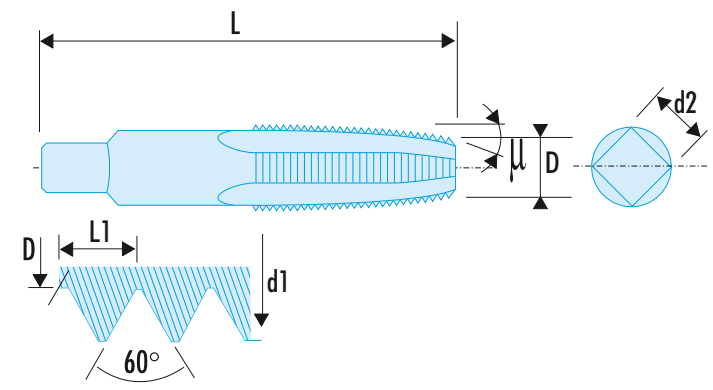
Max. hardness: 70 daN/mm²:
- for taps 227 and 80 daN/mm²
- for taps 227.S.



Types	D	E
Second	= 6 P	6°
Bottoming DN - 1.2p.	= 3.5 P	9°
Bottoming 18°	= 2 P	18°

227 - Standard taps





NF ISO 529, NFEN 22857, ISO 529, ISO 2857
- HSS steel.
- 227.T3: Set of 3 taps (taper, second and bottoming).
- 227.T2: Set of 2 taps (taper and bottoming).

	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	Content set	⚖ [g]
227.3X50T3	3	2,50	48	0,50	x 3	20
227.4X70T3	4	3,15	53	0,70	x 3	25
227.5X80T3	5	4,00	58	0,80	x 3	40
227.6X100T3	6	5,00	66	1,00	x 3	50
227.7X100T3	7	5,60	66	1,00	x 3	60
227.8X125T3	8	6,30	72	1,25	x 3	85
227.9X125T3	9	7,10	72	1,25	x 3	100
227.10X150T3	10	8,00	80	1,50	x 3	140
227.12X175T3	12	7,10	89	1,75	x 3	150
227.14X200T3	14	9,00	95	2,00	x 3	240
227.16X200T3	16	10,00	102	2,00	x 3	305
227.18X250T3	18	11,20	112	2,50	x 3	460
227.20X250T3	20	11,20	112	2,50	x 3	490
227.3X50T2	3	2,50	48	0,50	x 2	10
227.4X70T2	4	3,15	53	0,70	x 2	10
227.5X80T2	5	4,00	58	0,80	x 2	15
227.6X100T2	6	5,00	66	1,00	x 2	25
227.7X100T2	7	5,60	66	1,00	x 2	45
227.8X125T2	8	6,30	72	1,25	x 2	60
227.10X150T2	10	8,00	80	1,50	x 2	70
227.12X175T2	12	7,10	89	1,75	x 2	80

227.S - «High performance» cobalt taps



NF ISO 529, NFEN 22857, ISO 529, ISO 2857

- Molybdenum and cobalt steel.
- The hardness of cobalt increases torque resistance and wear compared with standard taps.
- 227.ST3: Set of 3 taps (taper, second and bottoming).
- 227.ST2: Set of 2 taps (taper and bottoming).

	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	Content set	⚖ [g]
227.S3X50T3	3	2,50	48	0,50	x 3	15
227.S4X70T3	4	3,15	53	0,70	x 3	25
227.S5X80T3	5	4,00	58	0,80	x 3	40
227.S6X100T3	6	5,00	66	1,00	x 3	50
227.S8X125T3	8	6,30	72	1,25	x 3	85
227.S10X150T3	10	7,10	80	1,50	x 3	140
227.S12X175T3	12	8,00	89	1,75	x 3	150
227.S3X50T2	3	2,50	48	0,50	x 2	5
227.S4X70T2	4	3,15	53	0,70	x 2	10
227.S5X80T2	5	4,00	58	0,80	x 2	15
227.S6X100T2	6	5,00	66	1,00	x 2	25
227.S7X100T2	7	5,60	66	1,00	x 2	45
227.S8X125T2	8	6,30	72	1,25	x 2	50
227.S9X125T2	9	7,10	72	1,25	x 2	50
227.S10X150T2	10	8,00	80	1,50	x 2	70
227.S12X175T2	12	7,10	89	1,75	x 2	80
227.S14X200T2	14	9,00	95	2,00	x 2	160
227.S16X200T2	16	10,00	102	2,00	x 2	200
227.S18X250T2	18	11,20	112	2,50	x 2	290

221 - Split dies



NF ISO 261, ISO 261, DIN ISO 261

- ISO metric RH thread.
- Chrome-vanadium HSS hardened to 62/64 HRc (234 daN/mm²).
- Tapered adjusting screw.

	d [mm]	d1 [mm]	d2 [mm]	E [mm]	E1 [mm]	⚖ [g]
221.3X50	25,4	3	0,50	8	3,5	25
221.4X70	25,4	4	0,70	8	3,5	25
221.5X80	25,4	5	0,80	8	3,5	30
221.6X100	25,4	6	1,00	9	3,5	30
221.7X100	25,4	7	1,00	9	3,5	30
221.8X125	25,4	8	1,25	9	3,5	30
221.9X125	25,4	9	1,25	9	3,5	30
221.10X150	38,1	10	1,50	13	6,0	80
221.12X175	38,1	12	1,75	13	6,0	90
221.14X200	38,1	14	2,00	13	6,0	80
221.16X200	38,1	16	2,00	13	6,0	75
221.18X250	38,1	18	2,50	15	8,0	75

Threading and tapping tool sets

221 - Tap and die sets



- Each selection includes sets of two taps per dimension: taper and bottoming.
- Selections Ref 227.SJ1 and 227.SJ2 include cobalt taps (Ref 227.S).
- Tray PL.47 and box BT.109G: for selection Ref 224.227J1 and 221.227SJ1.
- Tray PL.46 and box BT.105: for selection Ref 224.227J2 and 221.227SJ2.

	d [mm]	Dimension [mm]	Content set	⚖ [kg]
221.227J1	M3 - M4 - M5 - M6 - M7 - M8 - M9 - M10 - M12	470 x 195 x 53	18 taps - 9 threads - 4 dies	3,100
221.227SJ1	M3 - M4 - M5 - M6 - M7 - M8 - M9 - M10 - M12	470 x 195 x 53	18 taps - 9 threads - 4 dies	3,100
221.227J2	M3 - M4 - M5 - M6 - M7 - M8 - M9 - M10 - M12 - M14 - M16 - M18	540 x 284 x 58	24 taps - 12 threads - 5 dies	5,700
221.227SJ2	M3 - M4 - M5 - M6 - M7 - M8 - M9 - M10 - M12 - M14 - M16 - M18	540 x 284 x 58	24 taps - 12 threads - 5 dies	5,700

227.A - Tap and drill-bit sets



- Each selection includes sets of 3 taps per dimension: taper, second and bottoming.
- Selection Ref 227.SJ2A includes cobalt taps (Ref 227.S).
- Supplied in metal box BT.228J2.

	d [mm]	Drill Bits	Dimension [mm]	Content set	⚖ [kg]
227.J2A	M3 - M4 - M5 - M6 - M8 - M10 - M12	2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2 mm	172 x 105 x 57	21 taps - 7 drill bits	1,100
227.SJ2A	M3 - M4 - M5 - M6 - M8 - M10 - M12	2,5 - 3,3 - 4,2 - 5,0 - 6,8 - 8,5 - 10,2 mm	172 x 105 x 57	21 cobalt taps - 7 drill bits	1,100

227 - Tap set



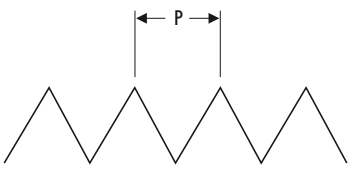
- Each selection includes sets of 3 taps per dimension: taper, second and bottoming.
- Selection Ref 227.SJ1 includes cobalt taps (Ref 227.S).
- Supplied in metal box BT.228J1.

	d [mm]	Dimension [mm]	Content set	⚖ [g]
227.J1	M3 - M4 - M5 - M6 - M8 - M10 - M12	118 x 118 x 31	21 taps	720
227.SJ1	M3 - M4 - M5 - M6 - M8 - M10 - M12	118 x 118 x 31	21 cobalt taps	720

Thread restoring tools

237 - Thread restoring tool



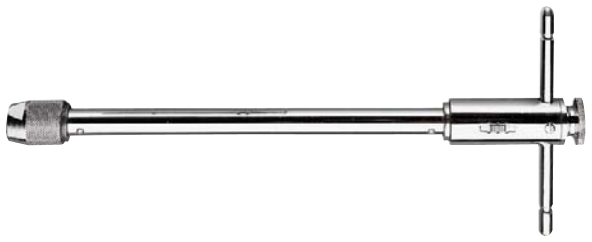


- To restore male and female screw threads.

	L [mm]	P [mm]	⚖ [g]
237.A	230	75 - 100 - 125 - 150 - 175 - 200 - 250 - 300	120
237.B	230	80 - 100 - 125 - 150 - 175 - 200 - 250 - 300	125
237.C	230	10F - 11F - 12F - 14F - 16F - 18F - 20F - 24F	125

Tools for taps and dies

830A.L - Long ratcheting tap wrenches



- Ideal for cutting threads in tight recesses.
- Two-way ratchet.
- Ratchet lock.
- Finish: polished chromed.

	d [mm]	L [mm]	Open Position O maxi [mm]	For Tapp	⧋ [g]
830A.5L	20,5	250	5	M6	230
830A.10L	25,5	300	8	M12	415

830A - Short ratcheting tap wrenches



- Two-way ratchet.
- Ratchet lock.
- Finish: polished chromed.

	d [mm]	L [mm]	Open Position O maxi [mm]	⧋ [g]
830A.5	20,5	85	5	165
830A.10	25,5	105	8	312

830A.RN - Repair kits



- Comprising chuck and spring.
- 830A.5RN, for 830A.5 and 830A.5L.
- 830A.10RN, for 830A.10 and 830A.10L.

Weight: 15 g.

831 - Adjustable tap wrenches



NF E 66-130

- Pressure-cast Zamak body. Machined and hardened clamp.
- Finish: grey hammered finish.

	L [mm]	Open Position O maxi [mm]	⧋ [g]
831.1	180	2-8	100
831.2	300	4-11	300
831.3	385	5-16	705

832 - Die stocks



- Pressure-cast Zamak body for accurate centring of the die.
- Finish: grey hammered finish.

	d [mm]	d [“]	L [mm]	Organiser for	⧋ [g]
832.1’	25,4	1	220	221.3x50 --> 221.9x125	115
832.1’1/2	38,1	1”-1/2	325	221.10x150 --> 221.18x250	410

Workshop drill bits

222A.T - Ground twist drills



- For steel up to 800 MPA, stainless steel, grey cast-iron and aluminium alloy.

	d [mm]	L [mm]	[g]
222A.T1	1,0	35	5
222A.T1,5	1,5	40	5
222A.T2	2,0	50	5
222A.T2,5	2,5	57	5
222A.T3	3,0	62	5
222A.T3,3	3,3	65	5
222A.T3,5	3,5	70	5
222A.T4	4,0	75	10
222A.T4,2	4,2	75	10
222A.T4,5	4,5	80	10
222A.T5	5,0	85	10
222A.T5,5	5,5	92	15
222A.T6	6,0	92	15
222A.T6,5	6,5	102	20
222A.T6,8	6,8	105	25
222A.T7	7,0	107	25
222A.T7,5	7,5	110	30
222A.T8	8,0	117	35
222A.T8,5	8,5	117	40
222A.T9	9,0	127	50
222A.T9,5	9,5	127	55
222A.T10	10,0	132	60
222A.T10,2	10,2	132	65
222A.T10,5	10,5	132	70
222A.T11	11,0	142	80
222A.T11,5	11,5	142	90
222A.T12	12,0	152	100
222A.T12,5	12,5	152	110
222A.T13	13,0	152	115

222A.TJ - Sets of ground twist drills







NF ISO 235, ISO 235, DIN 338

- For steel up to 800 MPA, stainless steel, grey cast-iron and aluminium alloy.
- Sets 222A.TJ19 and 222A.TJ25: Bits with 5/10 mm increments.
- Sets 222A.TJ50 and 222A.TJ81: Bits with 1/10 mm increments.

	d maxi [mm]	Dimension [mm]	Content set	[kg]
222A.TJ19	1 - 10	165 x 110 x 35	19	0,730
222A.TJ25	1 - 13	190 x 110 x 54	25	1,390
222A.TJ50	1 - 5,9	135 x 120 x 35	50	0,760
222A.TJ81	2 - 10	235 x 210 x 145	81	3,700

222A.TJ32 Set of 32 ground twist drills

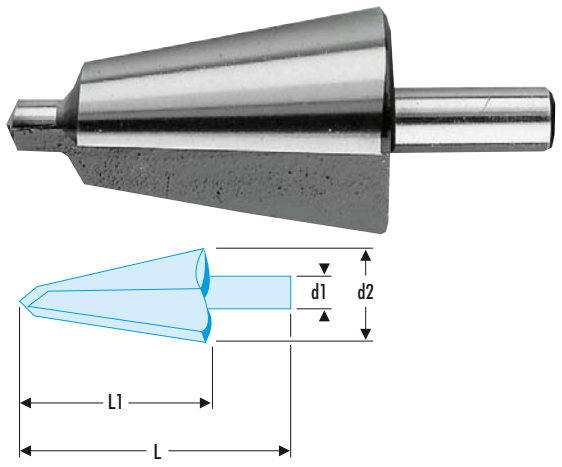


NF ISO 235, ISO 235, DIN 338

- For steel up to 800 MPA, stainless steel, grey cast-iron and aluminium alloy.
- 20 drill bits Ref 222A.T, diam.: 1 --> 10.5 mm (in 5/10 increments).
- 12 drill bits for riveting and tapping dimension diam.: 1.9 - 2.1 - 2.6 - 2.9 - 3.2 - 3.3 - 3.8 - 4.2 - 5.1 - 6.8 - 7.9 - 10.2 mm.
- Dimensions (L. x W. x H.): 170 x 110 x 50 mm.

Weight: 1.170 kg.

229A - Boring bits



- For drilling, deburring, boring thin materials: press sheet, non ferrous metals.
- HSS steel.
- Max. thickness recommended: 4 mm.
- Does not require a tapping hole.

	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	[g]
229A.1	6	3 - 14	59	37	25
229A.2	8	5 - 20	71	41	45
229A.3	9	16,0 - 30,5	76	48	130

229A.J3 Set of 3 tapered bits

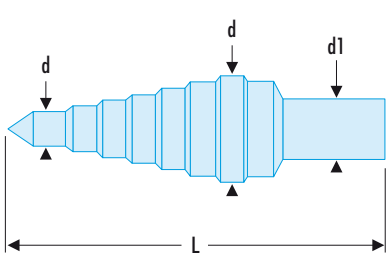


- Capacity: 3 to 30.5 mm.
- Supplied with a bottle of lubricant.
- Supplied in a pressed sheet box, dim. (L. x W. x H.): 120 x 100 x 38 mm.

Weight: 555 g.

Stepped bits





- For precision-drilling straight bores in all materials.
- No pilot hole required.
- Cross-sharpening: self-centering.
- More aggressive cut for easier drilling and no burs.
- Better shaving removal.
- Less vibration, quieter operation.
- Parallel shank with 3 flats for positive rotation.
- Laser-engraved diameter marking in a groove.
- 678006: Special ISO gland.
- 678014: PG size step drill.

	d mini - maxi [mm]	d1 [mm]	L [mm]	[g]
229A.ST0	4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	6	65	25
229A.ST1	4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20	8	75	65
229A.ST2	4 - 6 - 9 - 12 - 15 - 18 - 21 - 24 - 27 - 30 - 33 - 36 - 39	10	107	315
229A.ST3	6 - 9 - 13 - 16 - 19 - 21 - 23 - 26 - 29 - 32 - 35 - 38	10	100	320
678006	6,5 - 8,5 - 10,5 - 12,5 - 16,5 - 20,5 - 25,5 - 29,0 - 32,5 - 36,5 - 40,5	10	96	310
678014	6,0 - 9,0 - 12,5 - 15,2 - 18,6 - 20,4 - 22,5 - 26,0 - 28,3 - 30,5 - 34,0 - 37,0	10	100	300

Bits for impact machinery

223.SJ7 Set of 7 short drill bits for straight chucks



- Sharpened carbide tip inserts.
- Ground from stock with L-groove.
- Diameters: 4 - 5 - 6 - 7 - 8 - 10 - 12 mm.
- In a steel case, dim. (L. x W. x H.): 155 x 100 x 30 mm.

Weight: 355 g.

Variable pitch holesaws

BIMETAL HSS HOLESAW

FOR CUTTING HOLES THROUGH STANDARD MATERIALS AND METALS USED IN MECHANICAL ENGINEERING, SHEET-METALWORKING AND PLUMBING.

- High-speed steel teeth, hardness > 63 HRc.
- Holesaw back in thick sheet steel to minimise vibration.
- Side slots and holes for chip removal.



Quick assembly : chuck, pilot drill, spring, blade.

609A - Variable pitch holesaws



- Variable pitch holesaws 4 to 6 mm.
- Softer cut and reduced vibration.
- Cutting depth 34 mm.
- Chuck and drill for holesaws 19 to 29 mm 609A.M1.
- Chuck and drill for holesaws 35 to 68 mm 609A.M2.
- Set of 2 spare bits + chuck screws: 609.M-ACC.

	d [mm]	L [mm]	⚖ [g]
609A.19	19	51	30
609A.22	22	51	45
609A.25	25	51	65
609A.29	29	51	80
609A.35	35	51	100
609A.38	38	51	110
609A.40	40	45	140
609A.44	44	45	145
609A.51	51	45	150
609A.57	57	45	165
609A.64	64	45	185
609A.65	65	45	200
609A.67	67	45	230
609A.68	68	45	285

Holesaw sets

609A.J - Set of variable-pitch holesaws with chucks



- Comprising:
- 609A.M1: 1 chuck and drill for holesaws 19 to 29 mm.
- 609A.M2: 1 chuck for holesaws 35 to 64 mm.
- 609A.M-ACC: Set of 2 spare bits + chuck screws.
- Supplied in a plastic case, dim. (L. x W. x H.): 245 x 185 x 75 mm.

	d [mm]	⚖ [kg]
609A.J1	22 - 29 - 35 - 44 - 51 - 64	1,800
609A.J3	19 - 22 - 29 - 35 - 38 - 44 - 51 - 57 - 64	2,100

793898 Case set of 5 variable-pitch holesaws with «electrician» chuck



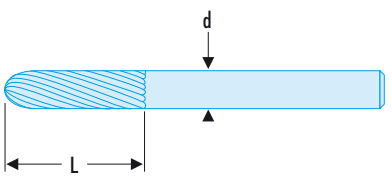
- Special electricians set: recess boxes.
- Comprising:
- 5 holesaws, diam.: 38 - 40 - 65 - 67 - 68 mm.
- 609A.M2: 1 chuck for holesaws 35 to 68 mm.
- 609A.M2: Set of 2 spare bits + chuck screws.
- Tray PL.643.
- Supplied in metal case, dim.(L. x D. x H.): 245 x 185 x 75 mm.

Weight: 1.680 kg.

Mills

VFA Cutters



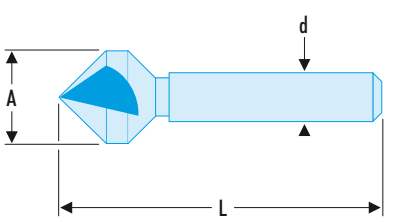


- Tungsten carbide.
- Right-hand spiral.
- Cutter shank diameter 6 mm.

	No.	d [mm]	L [mm]	tr/min	[g]
VFA.600	1	6	18	50000	25
VFA.602	2	6	18	50000	25
VFA.604	3	6	18	50000	25
VFA.606	4	6	18	50000	20
VFA.608	5	6	18	50000	20
VFA.610	6	6	15	50000	20
VFA.1200	1	12	25	20000	55
VFA.1202	2	12	25	20000	55
VFA.1204	3	12	25	20000	50
VFA.1206	4	12	25	20000	30
VFA.1208	5	12	25	20000	35
VFA.1210	6	12	20	20000	40

229.TT - 90° cone bits





- 3 HSS cutting edges for countersunk screw holes.
- Requires a pilot hole with a cylindrical bit ref 222A.T.

	A [mm]	d [mm]	L [mm]	[g]
229.TT2	10,4	6	50	10
229.TT3	16,5	10	60	30
229.TT4	20,5	10	63	50
229.TT5	25,0	10	67	70

229.TTJ4 90° cone bits



- Comprising:
- 4 bits: 229.TT2 --> 229.TT5 (and lubricant).
- In a steel case, dim. (L. x W. x H.): 120 x 100 x 38 mm.

Weight: 450 g.

Scrapers

231 Three-square scraper



- Finish: high quality steel blade, polished chrome finish and varnished wood handle.
- Shank length: 200 mm.

Weight: 180 g.

232 Half-round curved scraper



- Finish: high quality steel blade, polished chrome finish and varnished wood handle.
- Shank length: 200 mm.

Weight: 180 g.

329 Flat scraper



- Finish: high quality steel blade, polished chrome finish and varnished wood handle.
- Shank length: 200 mm.

Weight: 185 g.

235.J1 Set of 3 stainless steel scrapers



- Stainless steel blade, thickness: 0.8 mm.
- Reinforced striking zone.
- 3 shapes:
  - Straight, width: 32 mm.
  - Straight, width: 50 mm.
  - Angled, width: 32 mm.
- Length: 215 mm.

Weight: 430 g.

237.J1 Set of 3 flexible spatulas

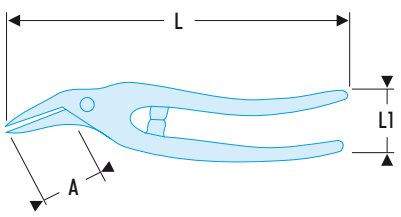


- Stainless steel blade, thickness: 0.5 mm.
- 3 shapes:
  - Straight, width: 32 mm.
  - Straight, width: 50 mm.
  - Angled, width: 32 mm.
- Width: 32 - 50 - 75 mm.
- Length: 215 mm.

Weight: 275 g.

883 - Scroll shears



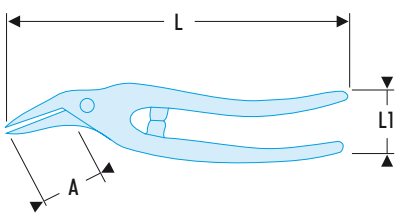


- Specially-shaped nose for accurately following detailed patterns.
- Steel end stops.
- Left-cut scroll shears: 883B.G.
- Right-cut scroll shears: 883B.
- Right cut large-capacity scroll shears: 883.32.
- Finish: Epoxy paint.

	A [mm]	L [mm]	L1 [mm]	Capacity Stainless [80 kg/mm²]	Capacity Semi-hard steel [mm]	⚖ [g]
883B.G	46	260	43 - 170	0,8	1,0	535
883B	50	260	43 - 170	0,8	1,0	530
883.32	73	320	47 - 170	0,9	1,2	765

884 Panel shears



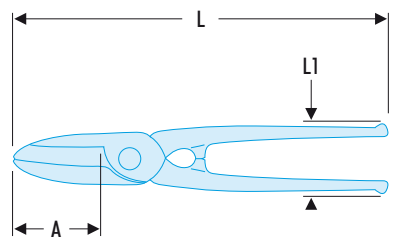


- The bottom-blade clearance makes these shears ideal for continuous straight cuts in large panels, leaving clean edges.
- Steel end stop.
- Right-hand panel shears: 884B.
- Right-hand high capacity panel shears: 884.30.
- Finish: Epoxy paint.

	A [mm]	L [mm]	L1 [mm]	Capacity Stainless [80 kg/mm²]	Capacity Semi-hard steel [mm]	⚖ [g]
884B	40	260	43 - 130	0,8	1,0	670
884.30	52	300	45 - 150	0,9	1,2	840

General-purpose shears

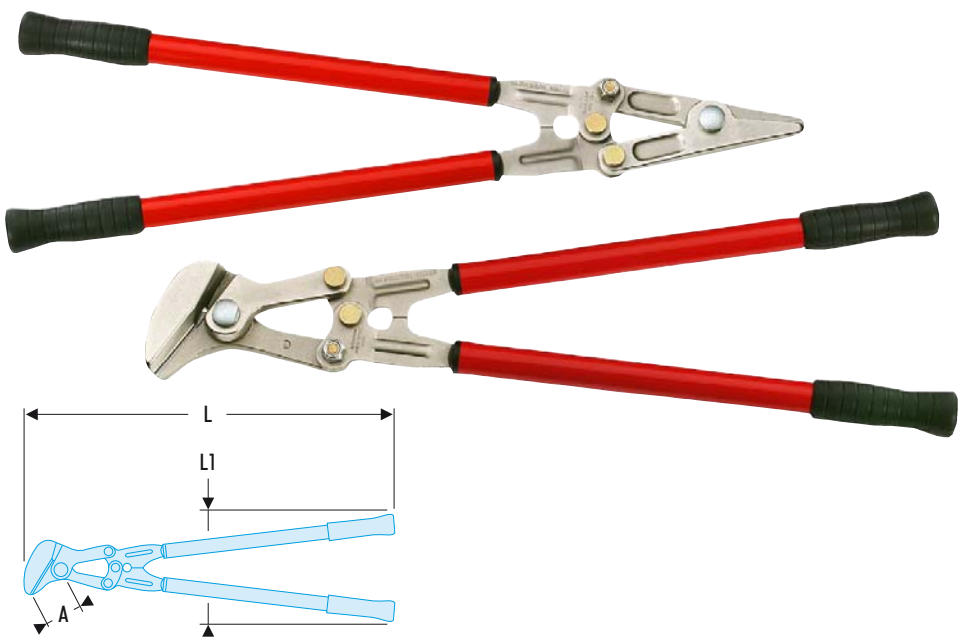




- 2 wide blades.
- Capacity:
- Stainless 80 kg/mm²: 0.5 mm.
- Semi-hard steel: 0.8 mm.
- Forged steel end stop.
- Finish: Epoxy paint.

	A [mm]	L [mm]	L1 [mm]	⚖ [g]
880	55	260	45 --> 130	520

882A-884A Two-hand shears

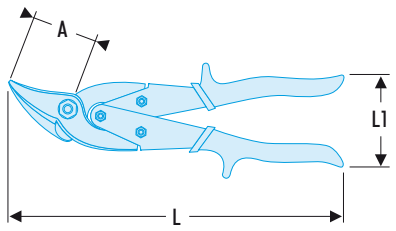


- Very high demultiplication.
- Forged steel end stop.
- Cutting capacity for blued sheet 120 kg/mm²: 2.0 mm (882A.65) and 2.5 mm (884A.65).
- Finish: Zinc-coated blades, tubular handles with neoprene grips.
- Spare blades:
- 882A.L65 for 882A.65.
- 884A.L65 for 884A.65.

	A [mm]	L [mm]	L1 [mm]	⚖ [kg]
882A.65	50	665	210 --> 820	2,130
884A.65	48	660	200 --> 790	2,400

Right-cut universal scroll shears





ASME B107.500

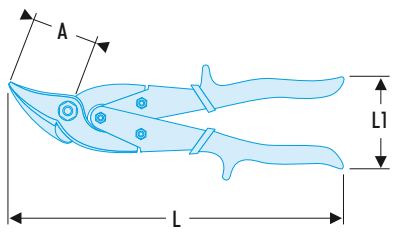
- Demultiplication reducing efforts.
- Forged, hardened and burnished blades.
- Red sheathed grips with guard.
- Inset opening spring.
- Lock-closed catch.
- Cutting capacity.

- Stainless 80 kg/mm²: 0.8 mm.
- Semi-hard steel: 0.8 mm.

	A [mm]	L [mm]	L1 [mm]	⚖ [g]
882A	32	250	45 - 130	475

982 - Compound scroll shears





ASME B107.500

- Panel-type shears with slightly serrated cutting edges to prevent workpiece slip.
- Good demultiplication and inset opening spring.
- Forged chrome molybdenum blades.
- Ergonomic non-slip bi-material grips.
- Colour-coded according to direction of cut.

- Red: left cut (Ref 982.G).
- Green: right cut (Ref 982).

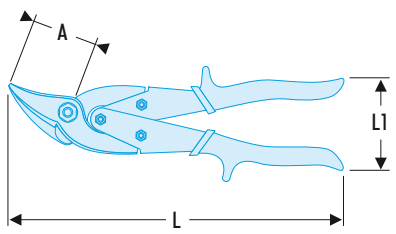
- Jaw lock catch.
- Cutting capacity.

- Stainless 80 kg/mm²: 0.8 mm.
- Semi-hard steel: 1.2 mm.

	A [mm]	L [mm]	L1 [mm]	⚖ [g]
982	45	245	65 - 190	380
982.G	45	245	65 - 190	380

985 - «Aircraft» shears





ASME B107.500

- High demultiplication allows long runs without effort.
- Good demultiplication and inset opening spring.
- Slightly serrated cutting edges prevent workpiece slip.
- Forged chrome molybdenum blades.
- Ergonomic non-slip bi-material grips.
- Colour-coded according to direction of cut.

- Red: left cut (Ref 985.LE).
- Green: right cut (Ref 985.RI).
- Yellow: straight cut (Ref 985.ST).

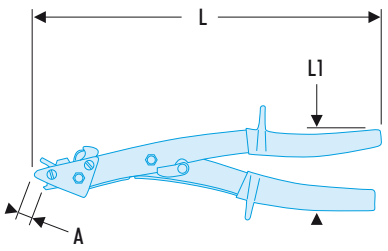
- Jaw lock catch.
- Cutting capacity:

- Stainless 80 kg/mm²: 0.8 mm.
- Semi-hard steel: 1.2 mm.

	A [mm]	L [mm]	L1 [mm]	⚖ [g]
985.LE	55	255	60 - 150	400
985.RI	55	255	60 - 150	400
985.ST	55	255	65 - 165	390

Nibblers





- Inset opening spring and high demultiplication allow effortless cutting along intricate patterns, removing a strip 2.8 mm wide.
- Die and blade system severs the strip at end of run.
- Top blades cut wire up to 2 mm in semi-hard steel and 2.5 mm in mild steel.
- Lock-closed catch.
- Cutting capacity.

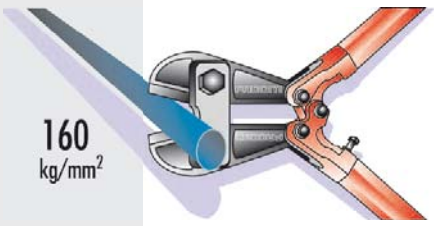
- Stainless 80 kg/mm²: 0,8 mm.
- Semi-hard steel: 1 mm.

- Spare blade: 887A.L1.

	A [mm]	L [mm]	L1 [mm]	⚖ [g]
887A	7	260	45 - 110	520

990.B BOLT CROPPERS

Powerful
- Increased steel-cutting capacity up to 160 kg/mm².
- Available with forged arms.



Durable
- Harder blades for a more durable cut.
- Body specially treated to reduce play to a minimum.
- High performance chrome blades.
- Eccentric screw adjustment of play between blades.



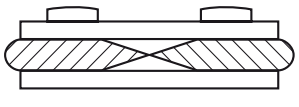
Efficient
- Minimum cutting effort.
- Handgrip with guard for greater comfort





990.BF - Axial cut bolt croppers



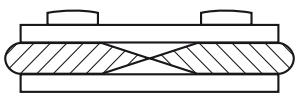


- Forged arms = less cutting flexion.
- High performance chrome blades.
- Harder blades for a more durable cut.
- Eccentric screw adjustment of play between blades.
- Hand grip with guard for greater comfort.

	L [“]	L [mm]	Ø [mm]: 60 - 140 - 160 kg/mm²	Blade	⚖ [kg]
990.BF0	18	450	7,0 - 6,0 - 5,5	990.LB0	1,700
990.BF1	24	600	10 - 8 - 7	990.LB1	2,800
990.BF2	30	750	13 - 9 - 8	990.LB2	4,200
990.BF3	35	900	16 - 10 - 9	990.LB3	6,400
990.BF4	41	1050	18 - 11 - 10	990.LB4	8,600

990.BF - Axial cut tubular arm bolt croppers





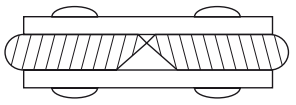


- High performance chrome steel blades.
- Harder blades for a more durable cut.
- Eccentric screw adjustment of play between blades.
- Hand grip with guard for greater comfort.

	L ["]	L [mm]	Ø [mm]: 60 - 140 - 160 kg/mm²	Blade	⚖ [kg]
990.B0	18	450	7,0 - 6,0 - 5,5	990.LB0	1,700
990.B1	24	600	10 - 8 - 7	990.LB1	2,800
990.B2	30	750	13 - 9 - 8	990.LB2	4,200
990.B3	35	900	16 - 10 - 9	990.LB3	6,400
990.B4	41	1050	18 - 11 - 10	990.LB4	8,600

990.RB0 - Flush-cut bolt croppers





- Specific blades for high performance chrome steel flush cutting.
- Harder blades for a more durable cut.
- Eccentric screw adjustment of play between blades.
- Hand grip with guard for greater comfort.
- 990.BRF0: Forged arms.
- 990.R00 - 990.R0: Tubular arms.

	L ["]	L [mm]	Ø [mm]: 60 - 140 - 160 kg/mm²	Blade	⚖ [kg]
990.RB00	12	350	6 - 5 - 5	990. LRB00	1,000
990.RB0	18	450	7,0 - 6,0 - 5,5	990.LRB0	1,700
990.BRF0	18	450	7,0 - 6,0 - 5,5	990.LRB0	1,700

990.LB Replacement blades for series 990.B (with screws)

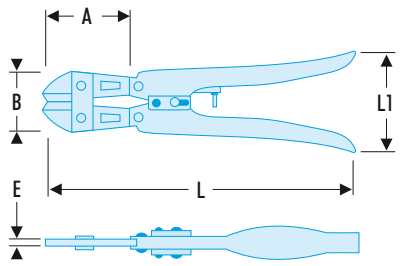


- Bolt-cropper blades are consumables and subject to normal wear. Facom guarantees their conformity to dimensional standards and suitability for recommended applications.
- Actual service life is dependent on conditions of use.
- Supplied with fasteners.

	For	⚖ [kg]
990.LB0	990.BF0 - 990.B0	0,650
990.LB1	990.BF1 - 990.B1	1,050
990.LB2	990.BF2 - 990.B2	1,650
990.LB3	990.BF3 - 990.B3	2,400
990.LB4	990.BF4 - 990.B4	3,400
990.LRB00	990.RB00	0,450
990.LRB0	990.BRF0 - 990.RB0	0,650

Mini croppers





- Compact, lightweight tool with demultiplication system designed to cut hard and semi-hard wire: piano wire, bolts, rivets, pins and nails, etc.
- Forged, hardened blades.
- Cutting capacity:
- Piano wire: max. diameter 2 mm to 200 kg/mm².
- Soft wire: max. diameter 4 mm to 60 kg/mm².
- Ergonomic hardened pressed-steel handles with adjustable, shock-absorbing end stop.
- Spring-assisted opening.
- Blades lock in closed position.
- Finish: bronzed blades, painted grips.

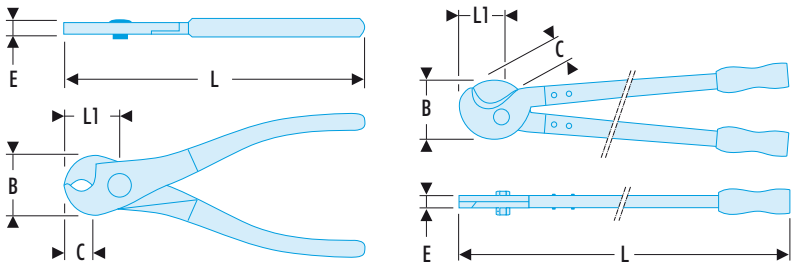
	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
997A.20	54,5	40	4,5	210	57	275

Copper and aluminium cable cutters

412 - Cable cutters





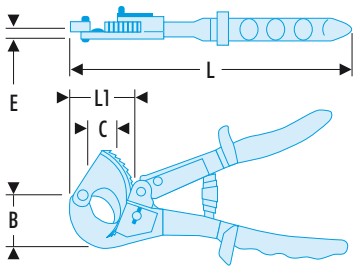


- 412B.10 “Compact” cable cutters:
- Capacity: diameter 10 mm.
- Integral opening spring.
- Lock closed catch.
- Cross proof design.
- 412.16 “Standard” cable cutters:
- Capacity: diameter 16 mm.
- Heavy-duty head, cross proof design.
- Safety stop.
- 412.30 - 412.42 “Heavy-duty” cable cutters:
- Capacity: 32 mm (Ref. 412.30) and 42 mm (Ref. 412.42).
- Powerful action, cuts without crushing electric cables..
- Safety stop.
- Set of blades for 412.30: 412.L30.
- Set of blades for 412.42: 412.L42.

	B [mm]	C [mm]	d mini - maxi [mm]	d [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [kg]
412B.10	28	21	53 - 190	10	10	170	40	0,225
412.16	54	28	80 - 370	16	14	290	45	0,670
412.30	70	40	155 - 1000	32	16	600	60	2,460
412.42	115	70	200 - 1300	42	16	800	90	3,695

Ratchet cable cutters





- Ratchet-blade system for easy cut through thick gauge cables.
- Particularly useful in confined spaces.
- Non-slip grips with guards.
- Capacities: 32 - 52 mm.
- Spare blade for 413A.32: 413A.L32.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
413A.32	58	34	32	7,8	255	65	385
413.52	80	53	52	8,0	275	75	800

985912 Manual 10 mm dia. copper/aluminium cable cutters



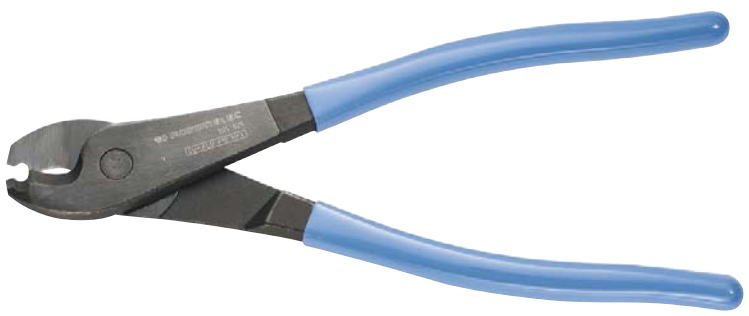
- Notched end for stripping wires.
- For single and multi-strand cables.
- Capacity:

- Multi-strand cable: diameter 10 mm.
- Single strand copper: diameter 8 mm.
- Almelec: diameter 6 mm.

- Length: 165 mm.

Weight: 225 g.

985925 Manual 18 mm dia. copper/aluminium cable cutters



- Notched end for stripping wires.
- For single and multi-strand cables.
- Capacity:

- Multi-strand cable: diameter 18 mm.
- Single strand copper: diameter 15 mm.
- Almelec: diameter 10 mm.

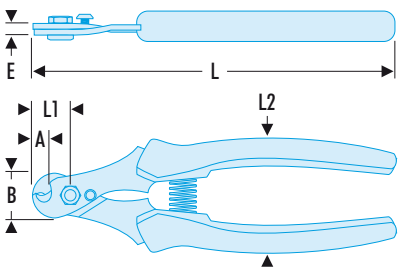
- Length: 231 mm.

Weight: 350 g.

Steel cable cutters

«Compact» steel cable cutters





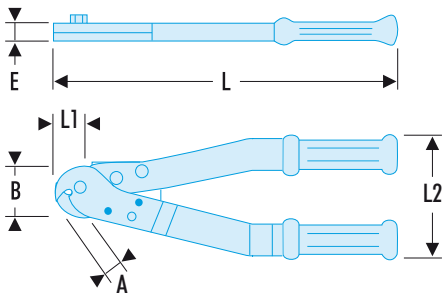
- Lightweight tool with blades and cutting angle designed for cutting solid materials and multi-strand cables.
- Push catch to lock closed, simply squeeze handles to release.
- Blades hardened to 60-62 HRc.
- Capacity:

- 5 mm for 60 - 100 kg/mm² soft steel cable.
- 4 mm for 130 - 160 kg/mm² hard steel cable.
- 3 mm for 60 kg/mm² round cable.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
996.5	7	21	8	165	12	50 - 125	165

«Standard» steel cable cutters





- Blade inserts in high-performance steel.
- Compact and powerful with ergonomic grips.
- Capacity:
- 8 mm for 60 - 100 kg/mm² soft steel cable.
- 7 mm for 130 - 160 kg/mm² hard steel cable.
- 6 mm for 60 kg/mm² round cable.
- Spare blades: 996.L8.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
996.8	12	42	16	340	21	115 - 470	890

Steel cable cutters

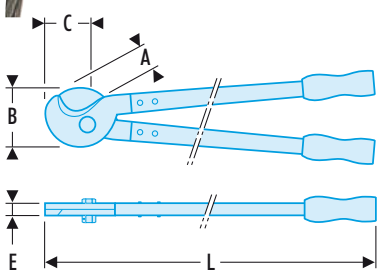


- Compact and powerful model.
- Blade inserts in high-performance steel.
- Cross proof design.
- Capacity:
- 12 mm for 60 - 100 kg/mm² soft steel cable.
- 10 mm for 120 - 150 kg/mm² hard steel cable.
- 8 mm for 60 - 80 kg/mm² round cable.
- Spare blades: 996.L12.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [kg]
996A.12	20	73	16	600	50	2,730

«Power» steel cable cutters





- Maximum power model.
- Forged blades in high-performance steel.
- Cross proof design.
- Ergonomic handles.
- Capacity:
- 16 mm for 60 - 100 kg/mm² soft steel cable.
- 13 mm for 120 - 150 kg/mm² hard steel cable.
- 10 mm for 60 - 80 kg/mm² round cable.
- Spare blades: 996.L16.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [kg]
996.16	28	115	16	800	55	4,950

THE NEW UTILITY KNIFE RANGE

CUTTING TOOLS DESIGNED FOR PROFESSIONALS

Uncompromising safety for professional applications.

- Recommended by the Health and Safety Committees (CHSCT).
- Avoids the risk of cuts as a result of handling the blade, or blade slippage.





- Automatic reload model.
- Blade lock feature.



Productivity and efficiency.

- In-handle blade storage allows easy blade changes.
- Time-saving and safe.

Especially designed for intensive and daily use.

- Stainless steel blade guide providing perfect torsion resistance.
- Ergonomic handle for a more comfortable grip.
- Soft finish to avoid slippage.



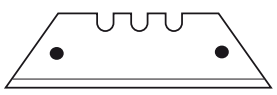
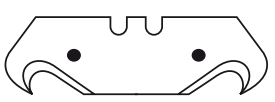
Rigorous quality.

- Dynamic endurance tested for mechanism lifetime.
- Load tested for blade-locking.
- Torsion tested to ensure blade retention.
- Tested for resistance to workshop chemicals.




Safety knife with retractable blade

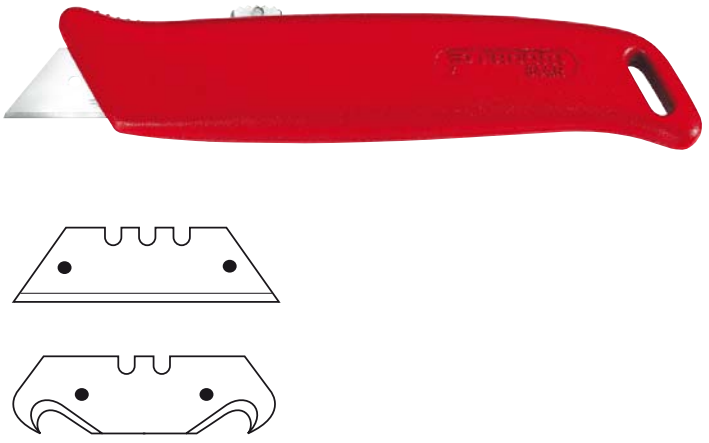


- Safety knife.
- Blade automatically retracts after use.
- Zamak body.
- ABS cursor, front or side thumb control.
- Supplied with 3 blades (1 factory-mounted and 2 in the body).

	E maxi [mm]	H mini - maxi [mm]	L [mm]	⚖ [g]
844.D	27	40,5 - 44,0	176	185

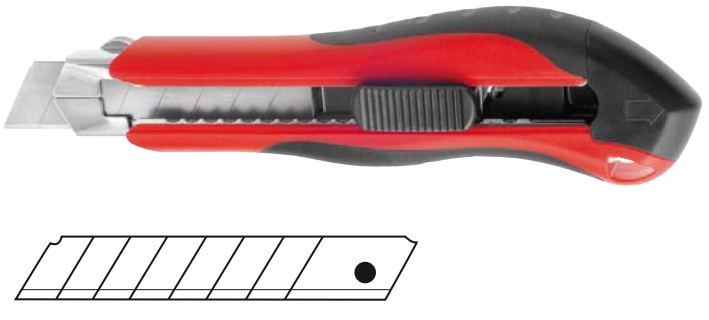
844.R Retractable utility knife with interchangeable blades



- Choice of 3 blade settings.
- Moulded handle housing 5 blades.
- Zamak body.
- Zinc alloy slide-button.

Weight: 190 g.

18 mm automatically reloading utility knife



- Productivity, accessibility, safety.
- Automatically reloading snap-off blades.
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Blade lock knob.
- 6-blade cartridge.
- Integral blade snapper.

	E maxi [mm]	H [mm]	L [mm]	⚖ [g]
844.S18	24	47	172	160

Cutter with 18 mm snap-off blades



- Cutter with snap-off blades.
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Automatic blade lock.
- 2-blade cartridge.
- Integral blade snapper.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.SE18	24	43	172	90

Cutter with 9 mm snap-off blades



- Cutter with snap-off blades.
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Automatic blade lock.
- 2-blade cartridge.
- Integral blade snapper.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.S9	17	30	149	47

BLADE SELECTION GUIDE

Our cutting tool experience at the service of professionals

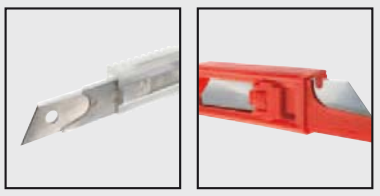
A perfectly cut blade guarantees your safety.

- A neat, clean cut.
- Does not damage the material to be cut.
- Effortless cutting without the risk of blade slippage or pull-out.
- Saves time.



A choice of packaging

- 10 blade dispenser always handy.

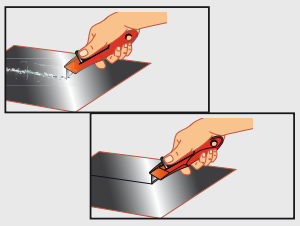


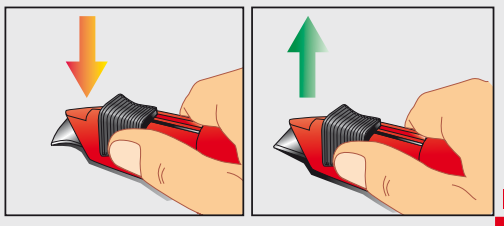
Choosing the right blade.

- What material is being cut ? Material, thickness.
- On what backing surface will cutting be performed ? (Does it need protecting ?)
- Is there a risk of slipping ? (uneven surface)
- What is the work environment ?
- What is the frequency of use ? What is the desired durability ?

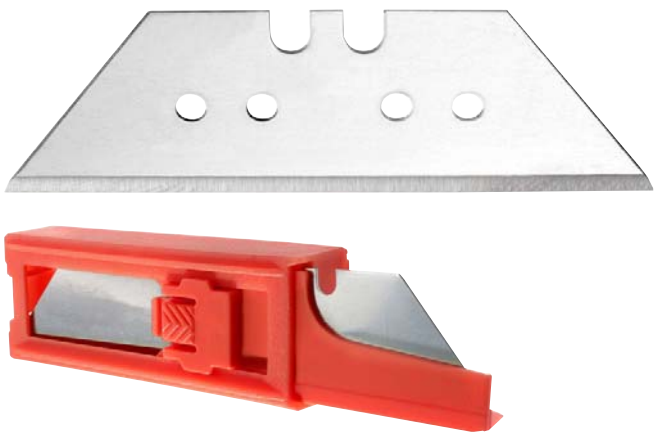
A blade is a compromise between :

- **Hardness :** For a strong cutting section and good stress resistance.
- **Flexibility :** For stress resistance as well as allowing the blade to twist without deforming for a neat cut.
- **Cutting angle :** to guarantee an optimum cut according to the material.





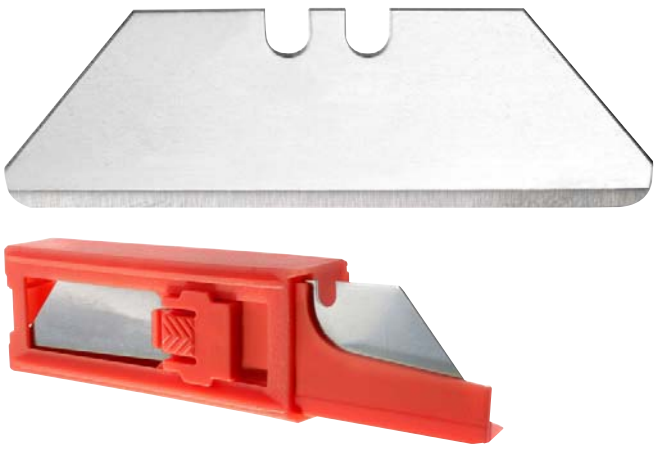
High strength perforated trapezoidal blade



- High strength trapezoidal blade.
- Designed to produce a perfect cut in intensive applications.
- Ideal for cutting:
- Thick cardboard.
- Hose.
- Plastic.
- Resilient foam.
- Heat-shrinkable tubing.
- Nylon strip.
- Plastic tubes.
- Seals.
- Supplied in a 10 blade dispenser.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.TTL10	0,65	19	60	50

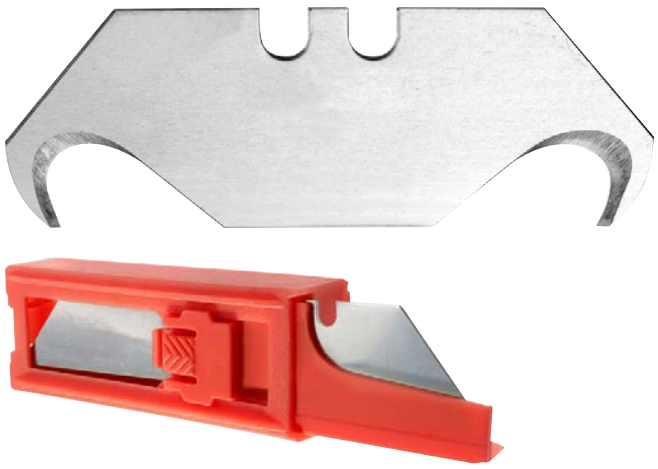
High performance safety trapezoidal blade



- High performance trapezoidal blade.
- Rounded corner to avoid risk of accidental cutting.
- Designed to produce a perfect cut in intensive applications.
- Ideal for cutting:
- Thick cardboard.
- Hoses.
- Plastic.
- Resilient foam.
- Heat-shrinkable tubing.
- Nylon strip.
- Plastic tubes.
- Seals.
- Supplied in a 10 blade dispenser.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.TRL10	0,65	19	60	50

High strength hook blade



- High strength hook blade.
- Specially designed to protect the backing during cutting.
- Ideal for cutting:
- Floor finishes, e.g. carpet, lino, PVC or other laid material.
- Straps and thick fabric.
- Supplied in a 10 blade dispenser.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.TCL10	0,65	19	50	50

18 mm snap-off blades



- 7-segment 18 mm snap-off blade:
- Ideal for all everyday cutting applications.
- Thick cardboard.
- Hose.
- Plastic.
- Resilient foam.
- Heat-shrinkable tubing.
- Nylon strip.
- Plastic tubes.
- Seals.
- Warning, snap-off blades are not designed to withstand excessive torsion forces.
- Supplied in a 10 blade dispenser.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.S18L10	0,53	18	110	90

9 mm snap-off blades



- 7-segment 18 mm snap-off blade:
- Ideal for all everyday cutting applications.
- Thick cardboard.
- Hose.
- Plastic.
- Resilient foam.
- Heat-shrinkable tubing.
- Nylon strip.
- Plastic tubes.
- Seals.
- Warning, snap-off blades are not designed to withstand excessive torsion forces.
- Supplied in a 10 blade dispenser.

	E [mm]	H [mm]	L [mm]	⚖ [g]
844.S9L10	0,43	9,5	84	30

"CUT ALL" GENERAL-PURPOSE SHEARS

AN EFFORTLESS CLEAN CUT EVERY TIME

Aluminium sheet (up to 1 mm thick), hard metal sheet (up to 0.5 mm), PVC, cardboard, rubber, floor coverings up to 5 mm thick. Hoses, plastic ties, small diameter pipes, electric cables (up to d 2.5 mm), insulating foam, wrapping paper... and many other applications.

1-Precise
serrated blades, no risk of slipping.
2-Smart
2 opening positions, adapts to your hand. (26 mm / 36 mm).
3-Safe
Locks in closed position.
4-Comfortable
Non-slip bi-material grips.

980 - Straight serrated shears

980C - Angled serrated shears

- Ideal for cutting long lengths.
- Keeps the hand away from the cutting operation.







Multi purpose shears



980



980C

- 980: straight blade version.
- 980C: angled blade version.
- Blade opening 29 to 36 mm.
- Handle opening 77 to 102 mm.
- Comfortable: non-slip bi-material grips.
- Safe: locks in closed position.
- Accurate: slightly serrated blade prevents any risk of slippage.
- Ideal for all everyday cutting applications:
- Cardboard, rubber, PVC, leather 5 mm thick.
- Thin sheet steel 0.5 mm thick, aluminium sheet up to 1 mm thick.
- Electric cables up to 2.5 mm diameter.
- Hoses, tubes, insulating foam, etc.

	B [mm]	C [mm]	L [mm]	ΔΔ [g]
980	67	49	205	200
980C	67	49	205	200

Sheathed electricians scissors



- Ergonomic plastic moulded sheathing, left/right hand.
- Long blades, with wire cutter.
- Finish: bi-material grips, burnished blades.

	L [mm]	Blade	ΔΔ [g]
841A.4	143	45 mm	80

Electricians scissors



- 100% metal handles, left/right hand.
- Short reinforced blades, with wire cutter.
- Finish: polished chromed.

	L [mm]	Blade	⚖ [g]
841	150	33	95

Heavy-duty scissors



- Industrial model, very strong and high capacity.
- Ideal to cut leather, rubber, carpet, fabric, etc.
- 100% metal right-handed handles.
- Finish: polished chromed.

	L [mm]	Blade	⚖ [g]
841.7	255	115 mm	490

Multi-purpose scissors



- Multiple use, highly versatile and maximum comfort.
- Exclusive FACOM ergonomic grip for right-handers for better comfort.
- Ideal for cutting thick cardboard, aluminium (thickness 0.2 mm), rubber (thickness 3mm), leather (thickness: 5 mm), rope, etc.
- Stainless steel blades: precision and better durability of the cutting edge.
- Finish: bi-material grips, burnished blades.

	L [mm]	Blade	⚖ [g]
841A.9	255	107 mm	210

840 THE 100% STAINLESS STEEL KNIFE

THE KNIFE DESIGNED AS A TOOL

Stainless steel
12C27 stainless steel blade.

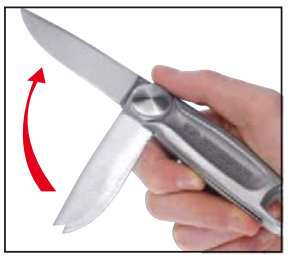
Comfortable Safe one-handed thumbwheel
blade opening (left or right hand).

Ergonomic
One-piece brushed stainless steel handle for a better grip.



Safe blade release
Blade is closed by releasing the "liner-lock" safety catch in two stages.

Universal hanging hook.

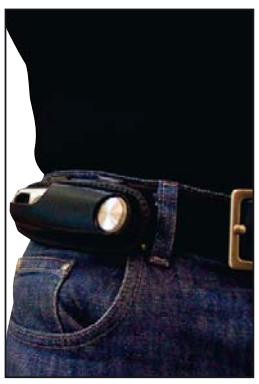




Comes with horizontal leather case
for complete freedom of movement and compliance with the safety regulations.

840LE Thumbwheel knife





- 12C27 stainless steel construction: very high corrosion resistance. Ideal in marine environments.
- Quick one-handed opening.
- Right/left hand.
- Safe: Liner lock safety catch and 2 stage release.
- Universal hanging hook.
- Blade length 73.5 mm; closed length: 115.5 mm.
- Total length: 189 mm.
- Comes with horizontal leather case.

Weight: 250 g.

840.4A Lock-back knife



- Polished stainless blade.
- Safe: lock-back.
- Rosewood handle and nickel silver bolster.
- Blade length 78 mm; closed length: 105 mm.
- Total length: 183 mm.

Weight: 160 g.

840.F Lock-back knife with bi-material handle





- Blade in polished stainless steel. Blade partially smooth for accurate cutting and another serrated for powerful cutting.
- Quick one-handed opening.
- Knife at the tip of the knife: window breaker function.
- Safe: lock-back.
- Universal hanging hook.
- Clip at the back of the knife for direct hanging to the belt.
- Blade length 77 mm; closed length: 115 mm.
- Total length: 186 mm.
- Supplied in vertical nylon case which fastens to the belt.

Weight: 170 g.

640180 Twin-blade electricians knife with plastic handle



- Electricians knife with blades suitable for cable work:
- 1 straight hollow ground general-purpose blade (length: 65 mm).
- 1 short curved blade, specially designed for cable work (length: 35 mm).
- Safe: lock-back for each blade.
- Length closed: 104 mm.
- Total length: 131/169 mm.

Weight: 100g.

840B Electricians knife with wire stripper



- Blade in polished stainless steel.
- Billhook blade.
- Wood handle.
- Blade length 60 mm; closed length: 100 mm.
- Total length: 160 mm.

Weight: 85 g.

843 Twin-blade electricians knife with wood handle



- Blades in polished stainless steel.
- Billhook blade, length 65 mm.
- Straight blade, length: 80 mm.
- Wood handle.
- Length closed: 100 mm.
- Total length: 165/180 mm.

Weight: 115 g.

840.1 Electricians knife with wire stripper with wood handle



- Blade in polished stainless steel.
- Blade with 2 notches:

- 1 half-moon notch for stripping.
- 1 vee for cutting.

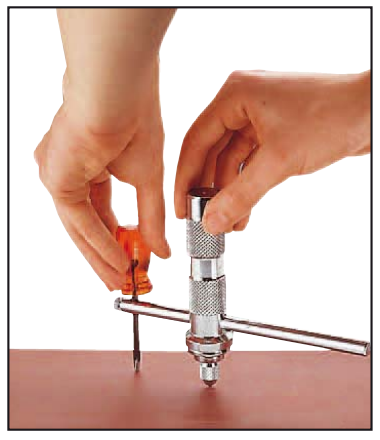
- Rosewood handle.
- Blade length 77 mm; closed length: 103 mm.
- Total length: 180 mm.

Weight: 75 g.

PUNCH KIT

THE SOLUTION TO EASILY PRODUCE ALL YOUR GASKETS

These kits are used to cut out clean and accurate circular gaskets in a variety of materials including cardboard, leather, rubber and fabric.
To cut holes Ø 3 to 50 mm, use a punch 245A.T with a shank 245A. M.
To cut holes Ø 44 to 420 mm, use calipers with centre-point and cutter.
All components are available either separately or in kits.





245.J1 «Standard» kit



- For making round gaskets.
- Cutting capacity.

- Punch diameter: 3 to 30 mm.
- Compass diameter: 56 to 330 mm.

- Supplied in a plastic case BP.115 with tray PL.100A.
- Dimensions (L. x W. x H.): 332 x 143 x 67 mm.

Weight: 1.800 kg.

245.J2 «Maintenance» kit



- For making round gaskets.
- Cutting capacity:
- Punch diameter: 3 to 50 mm.
- Compass diameter: 44 to 420 mm.
- Supplied in a plastic case BP.109 with tray PL.99A.
- Dimensions (L. x W. x H.): 478 x 234 x 72 mm.

Weight: 3.700 kg.

245A.C Scriber



- For making round gaskets.
- Cutting capacity: diam. 44 to 420 mm.
- Supplied in plastic case, dim.(L. x W. x H.): 260 x 90 x 40 mm.

Weight: 590 g.

245A.T - Punches



	Capacity Cubic Ø maxi [mm]	d [mm]	For	⚖ [g]
245A.T3	M13 x 100	3	245.J1 - 245.J2	10
245A.T4	M13 x 100	4	245.J1 - 245.J2	10
245A.T6	M13 x 100	6	245.J1 - 245.J2	15
245A.T8	M13 x 100	8	245.J1 - 245.J2	15
245A.T10	M13 x 100	10	245.J1 - 245.J2	15
245A.T12	21	12	245.J1 - 245.J2	20
245A.T14	28	14	245.J1 - 245.J2	20
245A.T16	21	16	245.J1 - 245.J2	20
245A.T18	21	18	245.J1 - 245.J2	25
245A.T20	21	20	245.J1 - 245.J2	25
245A.T22	31	22	245.J1 - 245.J2	40
245A.T24	31	24	245.J1 - 245.J2	40
245A.T26	31	26	245.J1 - 245.J2	45
245A.T28	31	28	245.J1 - 245.J2	50
245A.T30	31	30	245.J1 - 245.J2	60
245A.T32	41	32	245.J2	75
245A.T34	41	34	245.J2	80
245A.T36	41	36	245.J2	80
245A.T38	41	38	245.J2	75
245A.T40	41	40	245.J2	75
245A.T42	52	42	245.J2	100
245A.T44	52	44	245.J2	105
245A.T46	52	46	245.J2	105
245A.T48	52	48	245.J2	100
245A.T50	52	50	245.J2	100

Accessories for punches and calipers



	No.	For	⚖ [g]
245A.M1	1	245.J1	450
245A.M2	2	245.J1	530
245A.M3	3	245.J1	310
245A.M4	4	245.J1 - 245.J2	150
245A.P1	5	245.J1 - 245.J2 - 245.AC	40
245A.C1	6	245.J1 - 245.J2 - 245.AC	40
245A.B1	7	245.J1	130
245A.B2	8	245.J1 - 245.J2	160

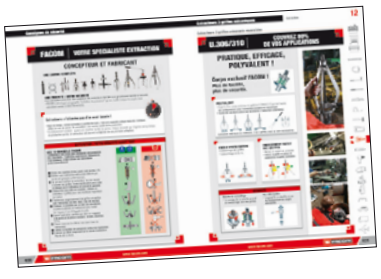


PULLER SELECTION GUIDE



Puller selection guide 628

SAFETY INSTRUCTIONS



Safety instructions 630

MECHANICAL 3-LEG PULLERS



Reversible universal 3-leg pullers 631
Slim 3-leg pullers 634
Heavy duty 3-leg pullers 635

HYDRAULIC 3-LEG PULLERS



Hydraulic pullers 638
Hydraulic jacks and pumps 641

MECHANICAL 2-LEG PULLERS



Reversible universal 2-leg pullers 643
Slim leg pullers 645
Wide 2-leg pullers 646
Caliper 2-leg pullers 648



SPECIAL GRIP BEARING PULLERS

649





Tip type pullers, cage grip 649
Tip type puller, inside grip 650
Clamp type puller, inside grip 652

SLIDE HAMMERS

654



Slide hammers 654

SEPARATORS AND BEAM PULLERS

655





Puller sets 655
Separators 656
Beams 656
Roller cabinet accessories 658

WORKSHOP PULLER KITS

659




Workshop boards 659
Case sets 660

STUD EXTRACTORS - NUT BREAKER

661






Stud extractors 661
Stud removers 663
Nut splitters 664

SPARE PARTS

665




Spare legs 665
Spare screw 667

SELECTION GUIDE

A CHOICE OF 90 PULLERS FOR ALL TYPES OF COMPONENTS UP TO 800 MM.

The right questions to ask when choosing a puller

- What type of component is to be removed ? = bearing, pulley, studs or nuts.
- What is the diameter of the component to be removed ? = choice of spread.
- How is the component to be gripped ? = choice of type of grip: outside grip, inside grip, special grip.
- How is the component to be pulled ? = choice of bearing point: on the central axis, on the outside of the component, no available bearing point (= need to use puller accessories).

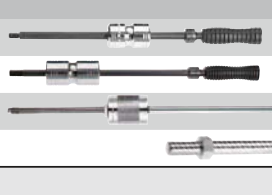
Bearings Pulleys Studs Outside grip Inside grip

	Spread (mm)	Reach (mm)	Force T	Force kN	Characteristics	Page
	Outside grip - adjustable 2 or 3 leg pullers					
U.306A140	7 – 140	147	3	30	 System U.306 - 2 or 3 legs - Inside or outside grip - Self gripping - self centring	632
U.306-180	10 – 180	200	4	40		632
U.306-260	20 – 260	250	4	40		632
U.310-170	15 – 170	170	10	100		633
U.310-250	15 – 250	250	10	100		633
	Outside grip - 3 leg pullers					
U.302	17 – 80	90	1,5	15	 Compact series slim legs	634
U.302-150	25 – 150	150	1,5	15		634
U.302-200	25 – 200	200	2,4	24		634
U.20	25 – 170	160	7	70	 Force	635
U.20B	25 – 260	220	7	70		635
U.27AS3	30 – 800	720	6	60		636
U.320	100 – 360	400	20	200	 Heavy duty	637
U.330	100 – 530	550	30	300		637
U.312H	45 – 270	260	10	100	 Heavy duty hydraulic	639
U.320H	100 – 360	265	20	200		640
U.330H	100 – 530	395	30	300		640
	Inside or outside grip - 2 leg pullers					
U.32T2-8	20 – 80 / 90 – 140	105	2	20		643
U.32T2-12	20 – 120 / 90 – 180	105	2	20		643
U.32T6-16	20 – 160 / 130 – 250	150	6	60		643
U.32T6-20	20 – 200 / 130 – 290	150	6	60	Lockable reversible 2-leg puller	643
U.32T15-25	25 – 250 / 180 – 380	170	15	150		643
U.32T15-35	25 – 350 / 180 – 480	270	15	150		643
U.32T15-50	25 – 470 / 180 – 530	270	15	150		643
U.232-65	30 – 60 / 65 – 90	65	1,5	15		645
U.232-90	60 – 81 / 86 – 95	100	3	30		645
U.232-130	60 – 122 / 86 – 136	100	3	30		645
U.232-160	86 – 153 / 127 – 171	145	4	40	Reversible 2-leg puller	645
U.232-210	86 – 203 / 127 – 222	145	4	40		645
U.232-270	100 – 255 / 148 – 276	190	5	50		645
U.232-340	100 – 325 / 148 – 346	190	5	50		645

SELECTION GUIDE

	Spread (mm)	Reach (mm)	Force T	Force kN	Characteristics	Page
	Outside grip - 2 leg pullers					
U.14A	10 – 35	40	-	-		645
U.14L	10 – 45	60	-	-		645
U.301	10 – 80	90	0,9	9	 Compact series slim legs	645
U.301-150	15 – 150	150	0,9	9		645
U.301-200	15 – 200	200	1,3	13		645
U.301P	15 – 50	70	0,9	10	 Compact series wide legs	647
U.301M	15 – 100	100	0,9	11		647
U.301L	15 – 110	130	1,3	17		647
U.35P	10 – 55	75	1	10	 wide legs	647
U.35	15 – 75	90	4	40		647
U.35L	15 – 75	130	3	30		647
U.34	40 – 180	245	7	70		647
U.42	10 – 85	120	1,5	15	 Slim legs with yoke	648
U.42B	10 – 85	180	1,5	15		648
U.52	10 – 150	160	6	60		648
	Pulley pulling					
DM.17A	40 – 65	30	-	-	 Special for grooved pulleys: pitch=3.56 mm	933
DM.50	45 – 175	15	-	-		933
	Inside grip - adaptable 2 or 3 leg pullers					
U.306A130N	23 – 130	140	3	30		632
U.306-170N	50 – 170	190	4	40	System U.306	632
U.310-230N	50 – 230	190	4	40		634
	Special inside grip					
U.51B	32 – 70	-	-	-		650
U.28	70 – 160	-	-	-		651
U.49P1 À U.49P9	6 – 60	-	-	-		652 652
U.23D5 À U.23D32	25 – 190	240	-	-		650 650
	Stud extractors					
285	3 – 50	-	-	-	 Flush broken studs, right-hand	661
885	6 – 14	-	-	-	 Flush broken studs, right and left-hand thread	662
286A	5 – 20	-	-	-	 Multi-diameter tool for removing/ refitting or pulling studs	663
286A.PL	15 – 27					
287B	6 – 16				 Singe-diameter tool for removing/ refitting or pulling studs	663
	Separators - Beams - Threaded adaptors					
U.53T	5 – 250	-	-	-	Separators	656
U.23K	25 – 95	150	-	-	Beams	657
U.53K	40 – 400	350	-	-		657
U.53E	Ø M4-M14	-	-	-	Threaded adaptors	658

Slide hammers

	Compatible pullers		Kg		Page
U.49L	U.49P1 →U.49P4	M8	0,2		654
U.49AM	U.49P5 →U.49P9	Tr1/2	1,0		654
U.306M	U.49P5 →U.49P9/U.35/U.35L/U.42/U.42L/U.32T2-8/U.32T2-12	M16	1,6		654
U.2	U.20/U.20B/U.310-170/U.310-250/U.310-230N/U.32T6-16/U.32T6-20	M22	5,2		654

INFORMATION

The quoted pulling powers are the actual powers obtained in the laboratory under normal working conditions.
All our pullers are designed to provide maximum safety and reliability.

SAFETY

As soon as access allows, use a 3-leg rather than 2-leg configuration. Check that the puller is properly aligned with the axis before applying the pulling force.

FACOM | YOUR PULLER SPECIALIST

DESIGNER AND MANUFACTURER.

A COMPREHENSIVE RANGE



YOUR SAFETY: OUR PRIORITY.

- The design, choice of materials and optimisation of Facom's pullers ensure guaranteed safety and reliability.
- Facom has developed a “force limiting” safety system consisting of a shear pin that fails when the maximum allowable torque is reached (series U.306/310 and U.20).



Pullers: it pays to be ready.

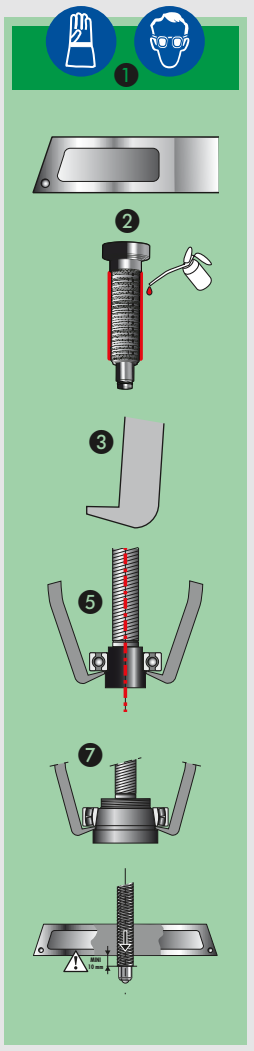
- Saves time: having the right puller readily to hand allows a speedy response in the event of a breakdown, and a quick resumption of production.
- A sound investment: when a machine breaks down, each second of lost production represents a great deal of money. A puller often pays for itself after just one use.

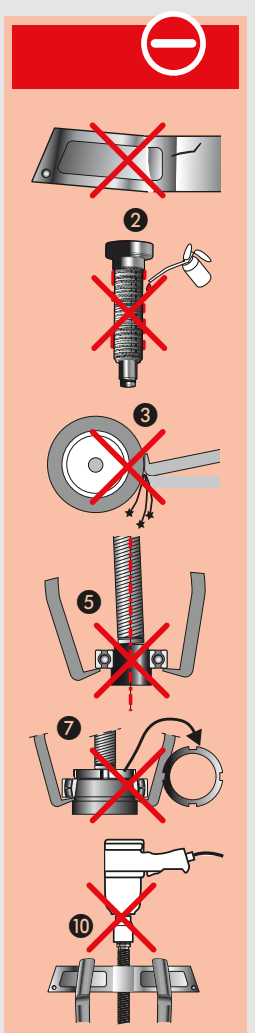
PULLERS: SAFETY FIRST

FACOM'S 10 TIPS

Pulling components can involve very high forces. The operation can therefore be very hazardous, which is why pullers require professional handling.

❶ Wear eye protection and gloves (see section 15).
❷ Always ensure that a puller is in good condition and that the screw is evenly lubricated.
❸ Never modify a puller. Do not grind or weld the legs. Modifications can be very dangerous for the user and invalidates the guarantee.
❹ Wherever possible, select a 3-leg puller for optimum load distribution.
❺ Position the legs carefully, making sure that the puller is straight in relation to the line of traction.
❻ Where possible, use a net (or sheet) to cover both the puller and the part being removed, in case the assembly springs apart sudently.
❼ Before applying pressure, check that the component is free to move, i.e. that all brackets, pins and nuts have been removed.
❽ Never stand behind a puller - stay to one side.
❾ Ask any bystanders to keep their distance.
❿ Apply pressure to the puller screw progressively. Do not use impact wrenches.





Universal reversible 3-leg pullers

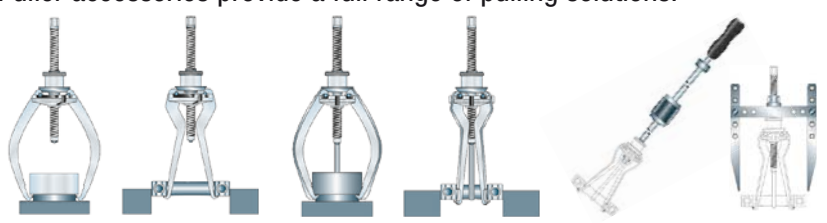
U.306/310 | COVERS 80% OF COMMON APPLICATIONS

PRACTICAL, EFFICIENT, VERSATILE

Exclusive Facom body.
Easier, safer.

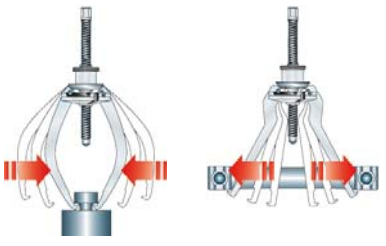


Versatile
- Based on a single body, the U.306/U.310 system can be configured to perform all routine mechanical engineering pulling operations.
- Puller accessories provide a full range of pulling solutions.

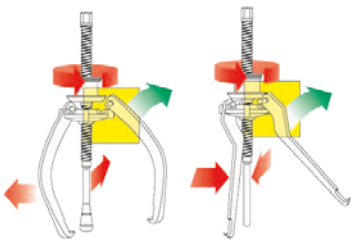


Inside or outside configuration for 2 or 3-leg pullers, with or without accessories.

Easy to use
- Self-gripping.
- Self-centering.

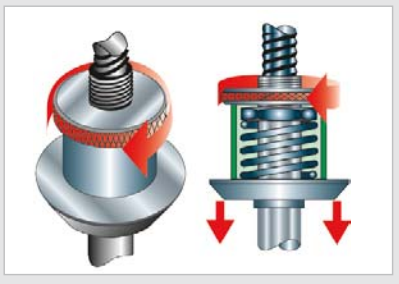


EASY LEG CHANGE
- Compress the spring.
- Remove the leg in place and place the new desired leg.



SAFETY

Locknut
- Tightening the locknut securely locks the legs in place.



Shear pin
- The pin shears if torque limit is exceeded.





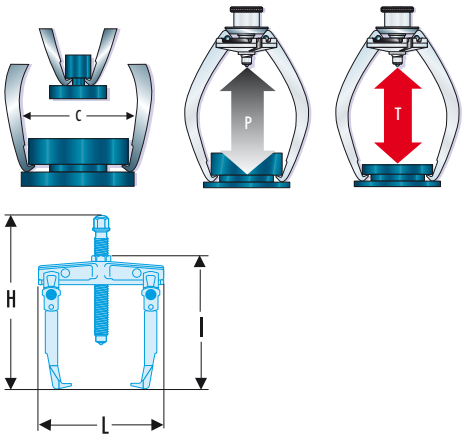






U.306 - Outside pullers



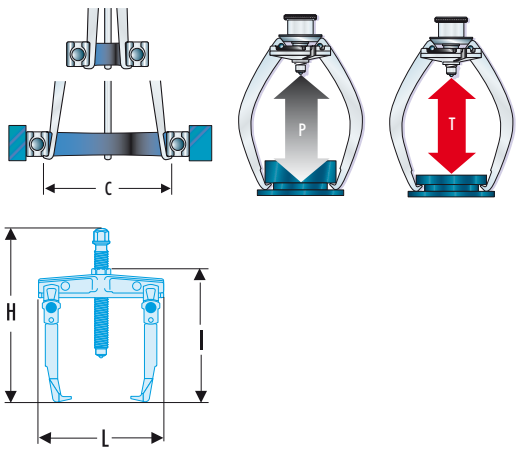


- Versatile: takes 2 or 3 legs. Converts into inside puller with the legs U.306G2 + screw U.306-4 or legs U.306G20 + screw U.306-2.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. Refer to spares table according to puller power.
- Adaptable puller accessories: slide hammer U.306M (direct attachment) and beam U.40 (attached using ring and nut U.306A1 to be ordered separately).
- The U.306-260 puller is supplied with the U.306-3 screw fitted with its extension.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.306A140	7 - 140	147	3	30	130 x 225 x 262	U.306G1	U.306-4	18	1,600
U.306-180	50 - 170	200	4	40	135 x 285 x 320	U.306G10	U.306-2	18	2,200
U.306-260	20 - 260	250	4	40	145 x 350 x 385	U.306G15	U.306-3	18	3,100

U.306N - Inside pullers





- Versatile: takes 2 or 3 legs. Converts into outside puller with the legs U.306G1 + screw U.306-4 or legs U.306G10 + screw U.306-2 or legs U.306G15 + screw U.306-3 (supplied fitted with its extension).
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. Refer to spares table according to puller power.
- Adaptable puller accessories: slide hammer U.306M (direct attachment) and beam U.40 (attached using ring and nut U.306A1 to be ordered separately).

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.306A130N	23 - 130	140	3	30	130 x 225 x 250	U.306G2	U.306-4	18	1,300
U.306-170N	50 - 170	190	4	40	135 x 285 x 320	U.306G20	U.306-2	18	1,800

U.306J1 Inside/outside puller kit



- Comprising:
- 1 puller U.306A140.
- 3 inside legs U.306G2.
- 2 puller accessories: slide hammer U.306M and beam U.40 (attached using ring and nut U.306A1, supplied with the kit).
- Spread:
- Outside: Ø 7 to Ø 140 mm.
- Inside: Ø 23 to Ø 130 mm.
- Reach: 140 mm.
- Supplied in a steel case BT.102 with tray PL.209.

Weight: 11.300 kg.

MOD.U306 Inside/outside puller kit

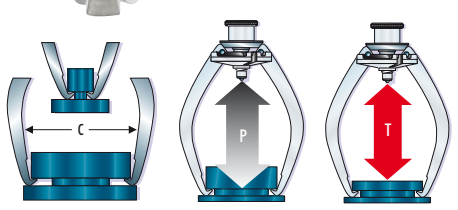


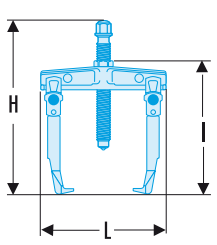
- Comprising:
- 1 puller U.306A140.
- 3 inside legs U.306G2.
- 3 long-reach outside legs U.306G10.
- Spread: outside Ø 7 to 140 mm or Ø 10 to 180 mm, inside 23 to 130 mm.
- 1 compact puller U.14L.
- Spread Ø 10 to 45 mm.
- Tray PL.354.

Weight: 4.400 kg.

U.310 - Outside pullers





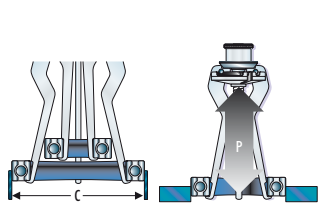


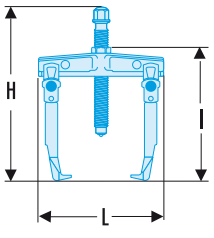
- Versatile: takes 2 or 3 legs. Converts into inside puller with the legs U.306G3 + screw U.20B1.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Adaptable puller accessories: hydraulic screw U.3 and slide hammer U.2.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.310-170	15 - 170	170	10	100	143 x 300 x 365	U.310G1	U.20B1	24	4,600
U.310-250	15 - 250	250	10	100	163 x 380 x 420	U.310G2	U.310-250-10	24	5,600

Inside puller







- Versatile: takes 2 or 3 legs. Converts into outside puller with the legs U.306G1 + screw U.20B1 or legs U.310G2 + screw U.310-250-10.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- Adaptable puller accessories: hydraulic screw U.3 and slide hammer U.2.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.310-230N	50 - 230	200	10	100	180 x 360 x 400	U.310G3	U.20B1	24	4,100

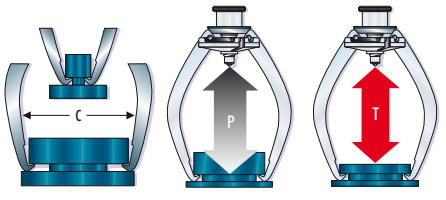
Slim-profile 3-leg pullers

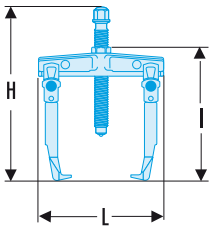
U.302 - Self-gripping outside pullers with slim legs











- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Adaptable puller accessories: slide hammer U.49AM.

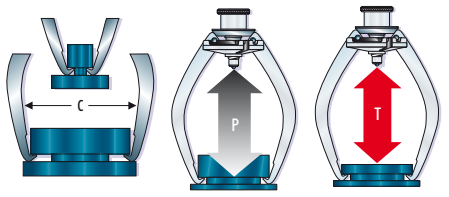
- Per tip U.301E1 (U.302 and U.302-150).
- Per tip U.301E2 (U.302-200).

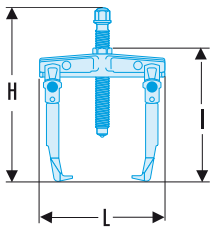
	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.302	17 - 80	90	1,5	15	77 x 130 x 153	U.301G	U.301-04	10	0,600
U.302-150	25 - 150	150	1,5	15	90 x 206 x 222	-	U.301-04-150	10	0,900
U.302-200	25 - 200	200	2,4	24	105 x 270 x 300	-	U.301-04-200	13	1,600

High capacity 3-leg pullers

Reversible universal 2-leg pullers







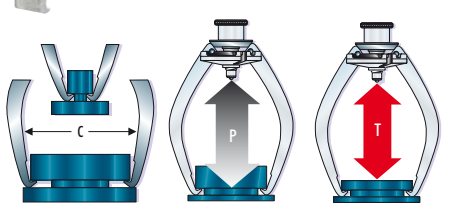


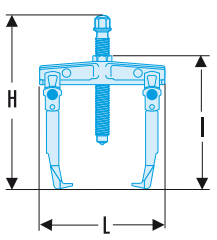
- Safety: legs locked in position on the bearing using the central nut. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. U.306-24J3.
- Fitted with the anti-rotation bush U.20-12. The button protects the screw when a bar is used to block puller rotation.
- Adaptable puller accessory: slide hammer U.2.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.20	25 - 170	160	7	70	120 x 265 x 305	U.20SE4	U.20-1S	24	3,500

Long-reach leg outside puller







- Safety: legs locked in position on the bearing using the central nut. No risk for the puller to escape from the bearing.
- Shear pin: the pin shears if torque limit is exceeded. Supplied with 2 spare pins.
- Set of 3 spare pins. U.306-24J3.
- Fitted with the anti-rotation bush U.20-12. The button protects the screw when a bar is used to block puller rotation.
- Adaptable puller accessory: slide hammer U.2.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.20B	25 - 260	220	7	70	125 x 325 x 370	U.20BSE4	U.20-B1S	24	4,300

U.27AS3 | ATTACHMENT OPTIONS

LONG LEGS AND LINKS FOR INCREASED VERSATILITY

U.27AS3
- Fitted with standard legs and links.
- Spread: 30 to 460 mm.
- Max. reach: 360 mm.





3 x U.27D: fitted with long legs
- Spread: 40 to 460 mm.
- Max reach: 480 mm.



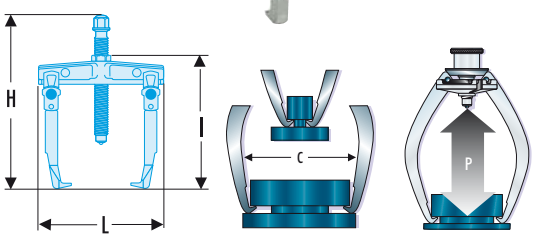
3 x U.27B: fitted with long links
- Spread: 50 to 800 mm.
- Max reach: 600 mm



3 x U.27D + 3 x U.27B: Fitted with long legs and links.
- Spread:50 to 800 mm.
- Max reach: 720 mm.

Wide spread grip puller - 2 or 3 leg pullers



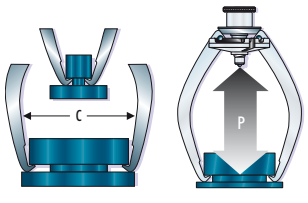


- Versatile: takes 2 or 3 legs.
- Can be fitted with long legs U.27D (order by sets of 3) and linkage system U.27B (order by sets of 3).

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	Spare Links	⚖ [kg]
U.27AS3	30 - 460	360	6	60	280 x 450 x 555	U.27S	U.27-6	35	U.27BS	16,500

1 long leg for U.27AS3



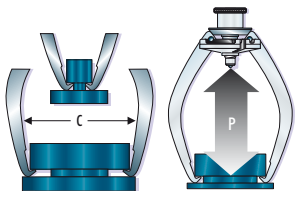


- Long links designed to increase spread of puller U.27AS3 from 360 to 480 mm (order by set of 3).
- Supplied without shaft.
- Set of pins to order separately: U.27SE2.

	C mini - maxi [mm]	P maxi [mm]	⚖ [kg]
U.27D	40 - 460	480	1,500

1 long leg for U.27AS3



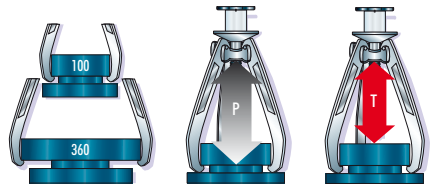


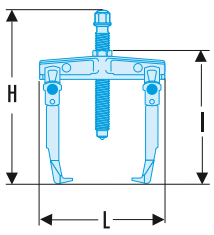
- Long links designed to increase spread of puller U.27AS3 from 460 to 800 mm (order by set of 3).
- Supplied without shaft.
- Set of pins to order separately: U.27SE2.

	C mini - maxi [mm]	P maxi [mm]	⚖ [kg]
U.27B	50 - 800	600	3,200

High-capacity 20T outside puller





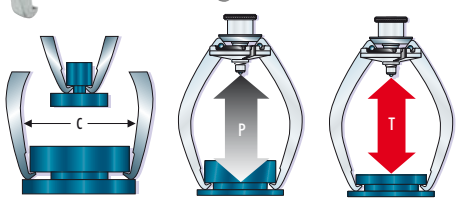


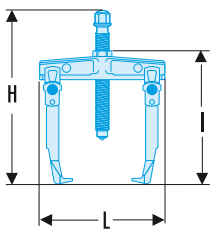
- Versatile: takes 2 or 3 legs.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- The screw is supplied with an extension: U.320-14.
- Adaptable puller accessory: hydraulic jack UWG.320. Using the jack requires the screw UWG.320-H01 and hydraulic pump UWP.10M. Mounting with 3 legs only with the hydraulic jack.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.320	100 - 360	400	20	200	250 x 700 x 740	U.320-13A	U.320-01	36	27,400

High-capacity 30T outside puller







- Versatile: takes 2 or 3 legs.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Safety: legs locked in position on the bearing using a knob. No risk for the puller to escape from the bearing.
- The screw is supplied with an extension: U.330-14.
- Adaptable puller accessory: hydraulic jack UWG.330. Using the jack requires the screw UWG.330-H01 and hydraulic pump UWP.10M. Mounting with 3 legs only with the hydraulic jack.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.330	100 - 530	550	30	300	300 x 900 x 950	U.330-08	U.330-02	41	32,400

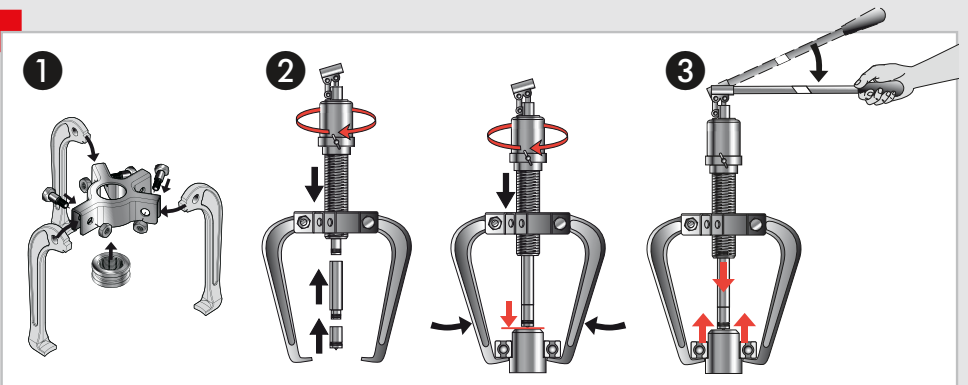
U.312H | MEDIUM-DUTY HYDRAULIC PULLER

10 TONNES OF EFFORTLESS PULLING FORCE READILY TO HAND



Versatile

- Based on a single body that can be fitted with 4 different sizes of legs for bearings Ø 45 to 270 mm.
- 2 or 3-leg configurations.
- For light to heavy engineering applications.



❶ Assemble the body and the correct legs for the bearing.
❷ Position the jack and the puller.
❸ Pump the jack. The bearing will be removed safely and effortlessly.

Practical

The carry case (field servicing) dismantles for easy storage in the drawers of your FACOM JET XL, JET+ roller cabinets (workshop servicing).





SAFETY FIRST

- **A safety valve hydraulically limits the jack to 10 tonnes.**
- **The other mechanical components can withstand much higher forces.**





U.312HJ3 Hydraulic puller 10 T for outside puller - 3 sets of legs



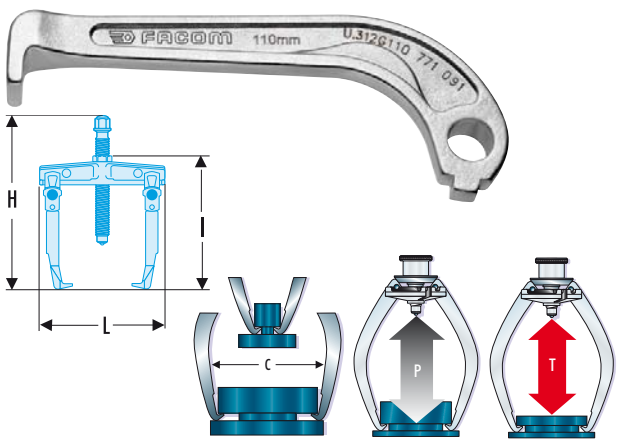
- Versatile: takes 2 or 3 legs.
- Safety: power is limited hydraulically to 10 tonnes. No risk of breakage.
- Comprising:

- A 10-tonne hydraulic jack (100 kN) U.312-01 + and guide tip U.312-02 + set of 2 extensions U.312-03.
- A body with 2 or 3 legs U.312-04 + centering screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
- 3 sets of legs: U.312G160, U.312G210 and U.312G260.

- Supplied in plastic case U.312VAL, dimensions (L. x W. x H.): 565 x 412 x 105 mm.

Weight: 13.200 kg.

U.312HJ3 - Mounting with legs



	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	ΔΔ [kg]
U.312G160	80 - 170	160	10	100	218 x 220 X 400	0,600
U.312G210	90 - 210	210	10	100	275 x 270 x 450	0,700
U.312G260	110 - 270	260	10	100	330 x 312 x 492	1,000

U.312HJ4 Hydraulic puller 10 T for outside puller - 4 sets of legs



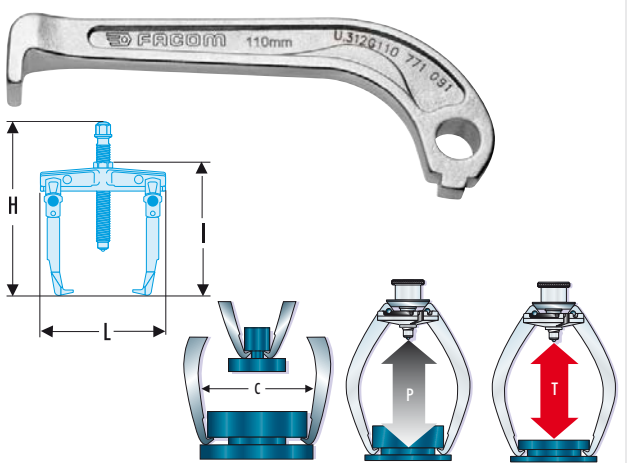
- Versatile: takes 2 or 3 legs.
- Safety: power is limited hydraulically to 10 tonnes. No risk of breakage.
- Comprising:

- A 10-tonne hydraulic jack (100 kN) U.312-01 + and guide tip U.312-02 + set of 2 extensions U.312-03.
- A body with 2 or 3 legs U.312-04 + centering screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
- 4 sets of legs: U.312G110, U.312G160, U.312G210 and U.312G260.

- Supplied in plastic case U.312VAL, dimensions (L. x W. x H.): 565 x 412 x 105 mm.

Weight: 14.400 kg.

U.312HJ4 - Mounting with legs



	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	ΔΔ [kg]
U.312G110	45 - 85	110	10	100	155 x 175 x 355	0,400
U.312G160	80 - 170	160	10	100	218 x 220 X 400	0,600
U.312G210	90 - 210	210	10	100	275 x 270 x 450	0,700
U.312G260	110 - 270	260	10	100	330 x 312 x 492	1,000

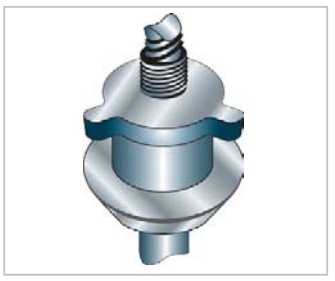
U.320H/U.330H | HIGH CAPACITY HYDRAULIC PULLERS

UP TO 30 TONNES IN COMPLETE SAFETY

- Hydraulic models incorporate a hydraulic jack fitted with a standard male coupling. The jack is designed for pressures up to 700 bar and is supplied from a manual or powered pump.
- Details of these accessories can be found under "Pumps and jacks".

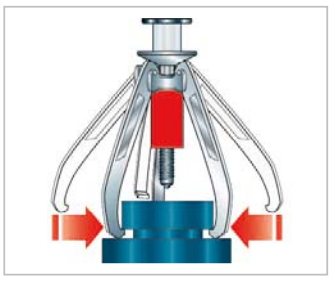
Powerful

- Fluid power ensures effortless and fast removal, while the puller remains steady even when applied to rotating components.
- Hydraulic models are used only with 3 legs.



Safe

- Legs are secured with a locknut.



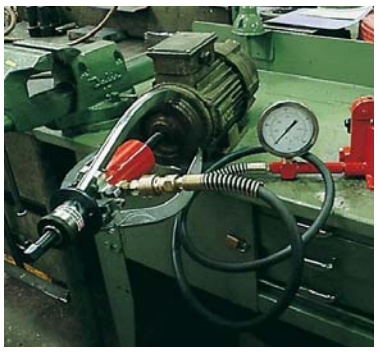
Automatic

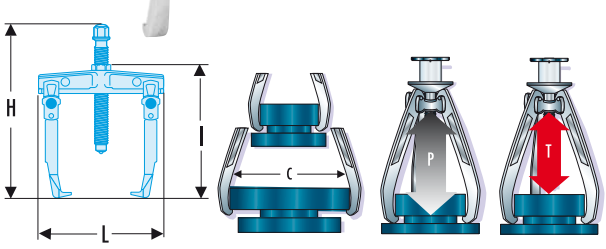
- Self-centring. Self-gripping.



20 T hydraulic outside puller





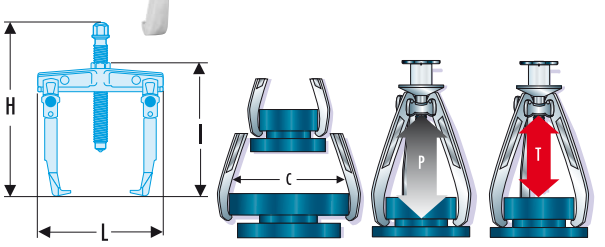


- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: power is limited hydraulically by the pump. No risk of breakage.
- 1 hollow jack UWG.320 fitted with the screw UWG.320H01.
- Use with 700-bar pump UWP.10M.
- Mounting with 3 legs only with the hydraulic jack.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	Jack	⧋ [kg]
U.320H	100 - 360	265	20	200	250 x 700 x 740	U.320-13A	UWG.320H01	21	UWG.320	48,500

30 T hydraulic outside puller





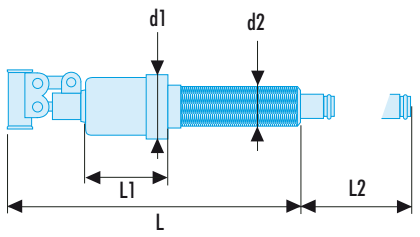
- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: power is limited hydraulically by the pump. No risk of breakage.
- 1 hollow jack UWG.320 fitted with the screw UWG.330H01.
- Use with 700-bar pump UWP.10M.
- Mounting with 3 legs only with the hydraulic jack.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	Jack	⧋ [kg]
U.330H	100 - 530	395	30	300	300 x 900 x 950	U.330-08A	UWG.330H01	24	UWG.330	55,600

Hydraulic jacks and pumps

10T hydraulic jack for U.312H



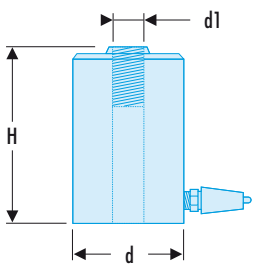


- Hydraulic jack: power 10 tonnes (100 kN).
- Beam travel: 80 mm.
- Use with hydraulic puller U.312H in kits U.312HJ3 and U.312HJ4.
- Supplied with guide bit U.312-02.

	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
U.312-01	61	42	325	83	80	2,300

UWG - 20T and 30T hollow jacks for U.320H, U.330H





- These jacks are intended for hydraulic pullers U.320H and U.330H in replacement or option on manual pullers U.320 and U.330 using special screws UWG.320H01 and UWG.330H01.
- They are fitted with through taps receiving a central screw to work in pushing or traction.
- Jacks activated with 700-bar pump UWP.10M.
- The use in jack function is possible.

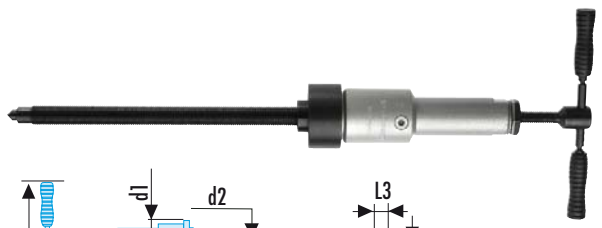
	Ton [t]	T [kN]	Screw Size	Screw Size[mm]	d [mm]	Oil Capacity [cm³]	d1 [mm]	H [mm]	⧋ [kg]
UWG.320	20	200	UWG.320H01	21	100	141,5	23,8	160	7,900
UWG.330	30	300	UWG.330H01	24	115	257,4	29,0	177	10,200

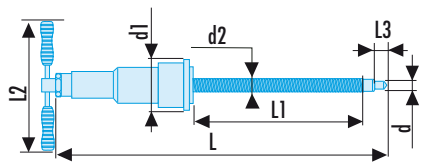
Screws for UWG jack



	Screw Size[mm]	Jack	d [mm]	L [mm]	⧋ [kg]
UWG.320H01	21	UWG.320	M27 x 3,0	590	2,300
UWG.330H01	24	UWG.330	M33 x 3,5	780	4,500

10 T hydraulic screw





- Power: 10 tonnes (100 kN).
- Length of the threaded screw: 300 mm.
- Travel of the pusher bit: 14 mm.
- M22 x 2.0 thread compatible with puller U.310.

	d [mm]	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⧋ [kg]
U.3	14	70	M22 x 2,0	555	300	230	7 --> 21	4,500

UWP.10M Hydraulic 2-speed hand pump





- Manual pump with pressure gauge and relief valve, giving 2 flow rates:
- 1st stage: high flow, max pressure: 50 bars = fast approach.
- 2nd stage: low flow, max pressure: 700 bar = maximum power.
- Use with pullers U.320H, U.330H and hollow jacks UWG.320, UWG.330.
- Oil capacity: 1500 to 2,500 cm³.
- Supplied with a hose of 1.80 m fitted with a female fast fitting.
- Dimensions (L x W x H): 450 x 170 x 160 mm.

Weight: 12.500 kg.

U.33A/U.66A | HYDRAULIC JACKS

HYDRAULICALLY-ASSISTED PULLING ACTION

Used in conjunction with mechanical pullers, hydraulic jacks help separate the fittings to be removed.

SAFETY FIRST

- **During screw tightening, a safety pin will shear if the maximum allowable torque is exceeded.**
- **When using both puller and jack, make sure generated forces are compatible.**
- **Never use pneumatic tools.**

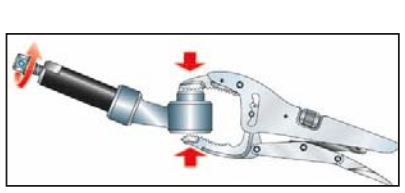


- Place the jack between the component and the puller's screw.
- Centre the loads.
- Apply pressure axially.



- Hold the puller while tightening the screw to allow the plunger to extend.
- The bearing is removed





Plunger retraction

- Back off screw to release pressure.
- Use pliers or clamp to push back plunger.

U.33A Mechanical screw 20-tonne jack



- Piston travel: 5 mm.
- Pin shearing at 110 N.m.
- Supplied with 3 spare pins, and 2 shims 25 and 50 mm high (Ø 40 mm).
- Set of 3 spare pins. U.33GJ3.
- Set of 2 spare blocks: U.33-EMB.
- Piston Ø: 33 mm.
- Length: 260 mm; head height: 35 mm.
- Power: 30 tonnes; 300 kN.
- 6-point screw size 19 mm.

Weight: 1.900 kg.

U.66A Mechanical screw 120-tonne jack



- Piston travel: 15 mm.
- Pin shearing at 550 N.m.
- Piston Ø: 80 mm; borehole Ø: 47 mm.
- Length: 500 mm; head height: 105 mm.
- Power: 120 tonnes; 1200 kN.
- 6-point screw size 36 mm.
- Supplied with 3 spare pins.
- Set of 3 spare pins: U.66A03J3.

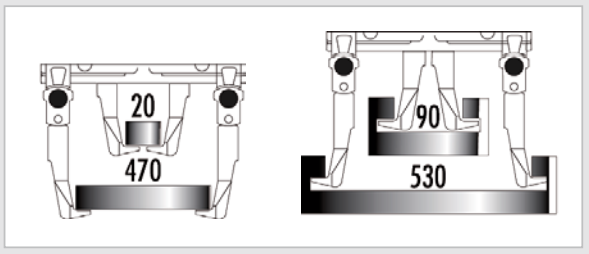
Weight: 8.800 kg.

Reversible universal 2-leg pullers

U.32T | LOCKABLE 2-LEG PULLER

HIGH PERFORMANCE PULLER

For inside and outside puller applications

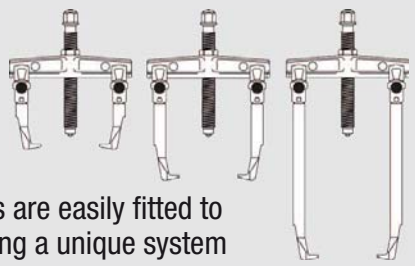


Inside and outside puller spread in millimeters.

Rotation prevention

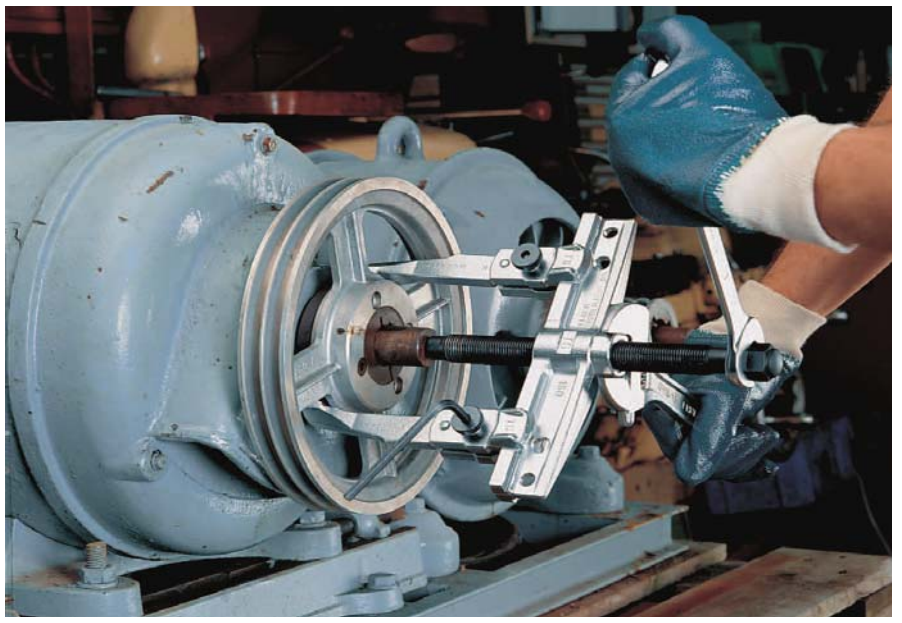


- Tightening the lock-nut with a wrench.
- Passing a rod through holes in the beam.



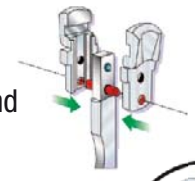
Reach

- Long-leg sets are easily fitted to the beam using a unique system of attachment. They increase the reach up to 470 mm.



SAFETY FIRST

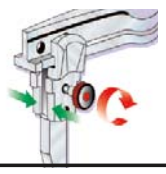
- **Pins**
Leg-mounting pins ensure easy and safe fixing to beam. Pins are treated to withstand pulling stresses.



- **Leg retainer**
Beam end-stop prevents legs sliding off.

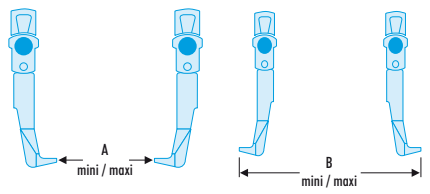


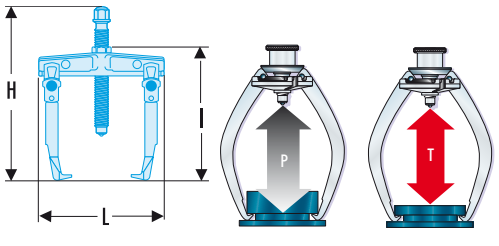
- **Knurled locknut**
Leg assembly locks in any position by hand-tightening the knurled locknut.



U.32T - Lockable 2-leg sliding-leg pullers







- Versatile: conversion possible in inside or outside grip with the same meg.
- Safety: knurled locking button.

	A mini - maxi [mm]	B mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Screw Size	Screw Size[mm]	Puller [mm]	⚖ [kg]
U.32T2-8	20 - 80	90 - 140	105	2	20	142 x 150 x 170	U.32T2-1	13	21	1,100
U.32T2-12	20 - 120	90 - 180	105	2	20	182 x 150 x 170	U.32T2-1	13	21	1,200
U.32T6-16	20 - 160	130 - 250	150	6	60	230 x 215 x 255	U.32T6-1	24	32	2,900
U.32T6-20	20 - 200	130 - 290	150	6	60	277 x 215 x 255	U.32T6-1	24	32	3,200
U.32T15-25	25 - 250	180 - 380	170	15	150	364 x 305 x 360	U.32T15-1	35	41	8,600
U.32T15-35	25 - 350	180 - 480	270	15	150	464 x 405 x 470	U.32T15-2	35	41	10,800
U.32T15-50	25 - 470	180 - 530	270	15	150	614 x 405 x 470	U.32T15-2	35	41	17,100

U.32TGA - Spare legs for U.32T

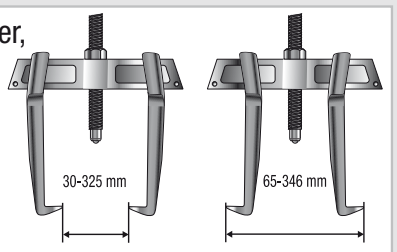


- For your safety, we recommend that all the legs are replaced in the event of a problem.
- Leg supplied per unit, without leg holder.
- Leg holder supplied per unit.

	Legs	E [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	Mounting Pins	⚖ [kg]
U.32T2GA10	U.32T2-8 - U.32T2-12	2,5	130	105	18	10	18,0	U.32T2DG	0,600
U.32T2GA20	Option	2,5	225	185	18	10	18,0	U.32T2DG	0,800
U.32T2GA25	Option	2,5	275	235	18	10	18,0	U.32T2DG	0,900
U.32T6GA15	U.32T6-16 -U.32T6-20	4,0	180	150	24	15	28,5	U.32T6DG	1,400
U.32T6GA30	Option	4,0	335	280	24	15	28,5	U.32T6DG	2,000
U.32T15GA20	U.32T15-25	5,0	250	170	34	20	36,0	U.32T15DG	3,400
U.32T15GA30	U.32T15-35 - U.32T15-50	5,0	315	270	34	20	36,0	U.32T15DG	4,200
U.32T15GA40	Option	5,0	445	370	34	20	36,0	U.32T15DG	5,000
U.32T15GA50	Option	5,0	545	470	34	20	36,0	U.31T15DG	5,800

STRENGTH AND SIMPLICITY!

- 2-leg puller, inside or outside grip



SAFETY FIRST

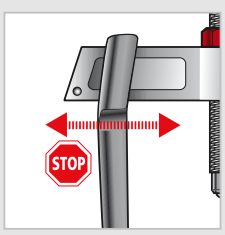
Leg retainer

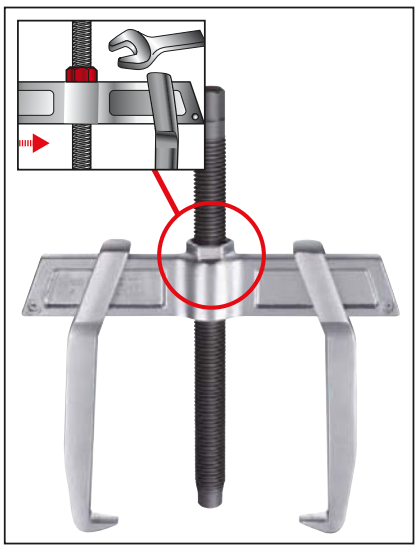
- **A spring-loaded pin at the end of the beam prevents the legs from sliding off.**



Leg locking

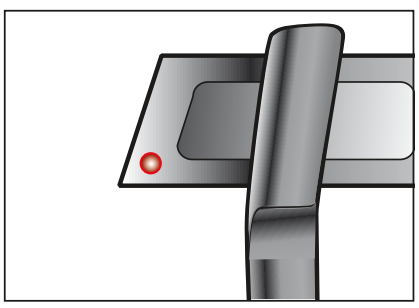
- **The legs are designed to cantilever during pulling, blocking them in place and preventing them from sliding along the beam.**





Anti-rotation system

- Tightening the lock-nut with a wrench.



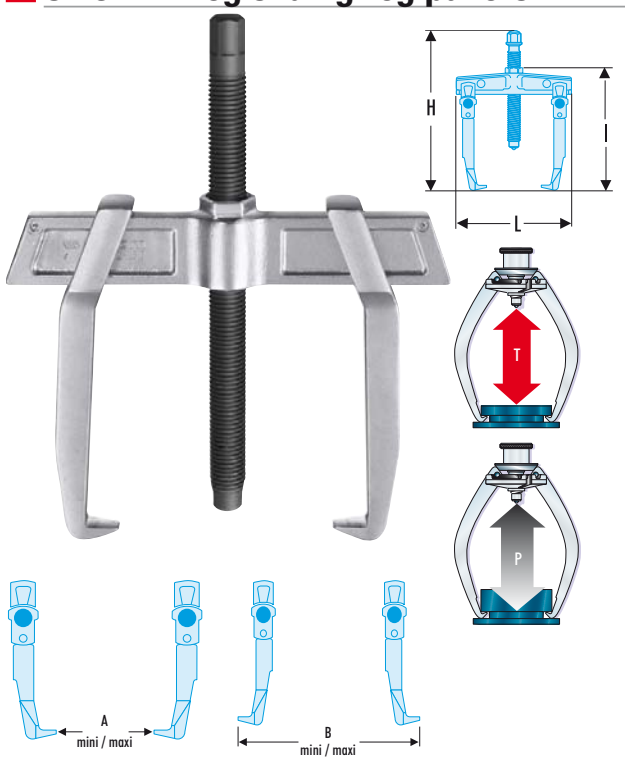
Leg reversal

- Legs changed from inside grip to outside grip configurations simply by pressing the pin. No need for tools.





U.232 - 2-leg sliding-leg pullers



- Versatile: conversion possible in inside or outside grip with the same leg.
- Safety:

- Stops to prevent legs from falling.
- Under pressure, the legs are set to overhang to avoid sliding.

	A mini - maxi [mm]	B mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	Puller [mm]	[kg]
U.232-65	30 - 60	65 - 90	65	1,5	15	115 x 105 x 133	U.232G1	U.35P01	13	16	0,400
U.232-90	60 - 81	86 - 95	100	3,0	30	146 x 155 x 182	U.232G2	U.35SE1	17	21	0,900
U.232-130	60 - 122	86 - 136	100	3,0	30	186 x 155 x 182	U.232G2	U.35SE1	17	21	1,000
U.232-160	86 - 153	127 - 171	145	4,0	40	247 x 233 x 283	U.232G3	U.53S2A07	17	27	2,800
U.232-210	86 - 203	127 - 222	145	4,0	40	297 x 233 x 283	U.232G3	U.53S2A07	17	27	3,000
U.232-270	100 - 255	148 - 276	190	5,0	50	379 x 303 x 345	U.232G4	U.53S3-07	32	36	7,500
U.232-340	100 - 325	148 - 346	190	5,0	50	449 x 303 x 345	U.232G4	U.53S3-07	32	36	8,200

Slim-profile 2-leg pullers

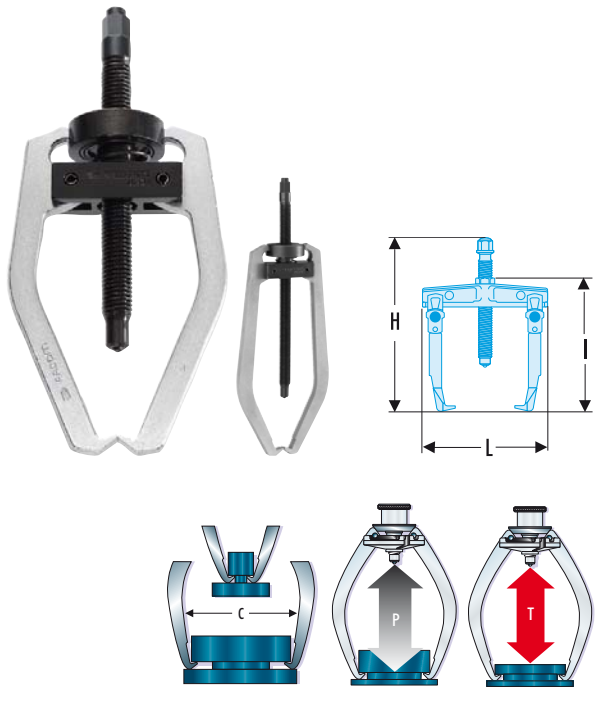
U.14 - Self-gripping outside pullers with slim legs



- Access: 2 slim leg puller.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Example of use = battery terminals.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Screw Size	Screw Size[mm]	[kg]
U.14A	10 - 35	40	0,5	5	60 x 75 x 125	U.14A04	Spindle	0,340
U.14L	10 - 45	60	0,5	5	85 x 120 x 150	U.14A04	Shaft	0,380

U.301 - Self-gripping outside pullers with slim legs



- Access: 2 slim leg puller.
- Comfort: self-gripping legs by return spring. The puller stays in rolling position even when not in tension.
- Adaptable puller accessory: slide hammer U.49AM.

- Per tip U.301E1 (U.301 and U.301-150).
- Per tip U.301E2 (U.301-200).

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	[kg]
U.301	10 - 80	90	0,9	9	83 x 130 x 153	U.301G	U.301-04	10	0,500
U.301-150	15 - 150	150	0,9	9	90 x 206 x 222	-	U.301-04-150	10	0,700
U.301-200	15 - 200	200	1,3	13	120 x 268 x 300	-	U.301-04-200	13	1,100

SLIM OR WIDE LEGS?

Slim leg pullers

Slim leg pullers are used for pulling bearings located in confined spaces.

or

Wide leg pullers

Wide leg pullers offer more limited access but their legs wrap around the bearing, offering maximum grip. The bearing is preserved and more power can be applied.









Wide 2-leg pullers

U.301 L/M/P | WIDE 2-LEG PULLER

A COMPACT PULLER WITH TWO "WRAP AROUND" LEGS FOR A BETTER GRIP!

Effective and easy to use

Self-gripping, self-centring "body and spring" system.

❶ Force-limiting safety rod.
❷ Ergonomic finger grips and one-hand installation option.
❸ Shear pin.
❹ "Wrap-around" legs to grip the part firmly without scratching.
❺ "Positive" leg angle for optimum grip even under maximum pulling force. Spread: 50, 100, 110 mm.

SAFETY FIRST

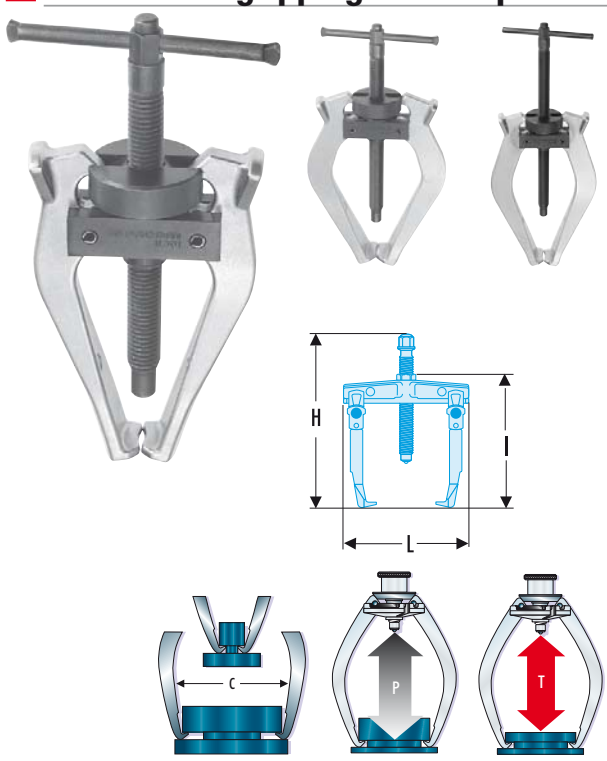
- **The rod (1) then the shear pin (3) fail in stages before the yield point of the legs is reached.**







U.301 - Self-gripping outside pullers with wide legs



- Comfort: self-gripping legs by return spring. The puller stays in position on the bearing even when not in tension.
- Safety: a power restrictor pin is pressed when the force applied is too strong.
- Adaptable puller accessory: slide hammer U.49AM.
- Per tip U.301E1 (U.301P and U.301M).
- Per tip U.301E2 (U.301L).

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Screw Size	⚖ [kg]
U.301P	15 - 50	70	0,9	9	75 x 120 x 147	U.301P04	0,500
U.301M	15 - 100	100	0,9	9	90 x 206 x 222	U.301M04	0,800
U.301L	15 - 110	130	1,3	13	120 x 268 x 300	U.301L04	0,900

U.35 - Pullers with outside wide legs



- Safety: use in “uncrossed legs” configuration doubles capacity, but the “cross-legged” configuration should be used preferably.
- Adaptable puller accessory: slide hammer U.306M for U.35 and U.35L.
- Set of 2 spare pins:
- U.42-5J2 for U.35P.
- U.35-5J2 for U.35 and U.35L.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.35P	10 - 55	75	1	10	65 x 110 x 140	U.35D (x 2)	U.35P01	13	0,400
U.35	15 - 75	90	4	40	68 x 160 x 183	U.35C (x 2)	U.35SE1	17	1,000
U.35L	15 - 75	130	3	30	90 x 188 x 225	U.35B (x 2)	U.35SE1 + U.35SE3	17	1,200

High-capacity wide leg outside puller



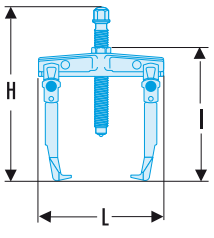
- Safety: use in “uncrossed legs” configuration doubles capacity, but the “cross-legged” configuration should be used preferably.
- Adaptable puller accessory: slide hammer U.2.

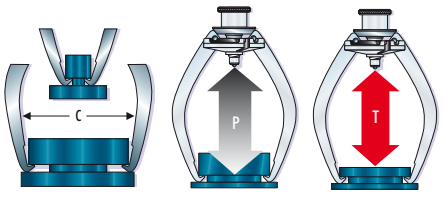
	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.34	40 - 180	245	7	70	215 x 315 x 370	U.34G (x2)	U.20B1	24	4,400

U-bolt 2-leg pullers

U.42 - Pullers with yoke





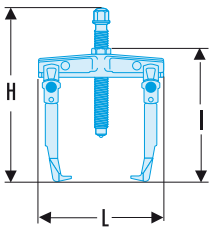


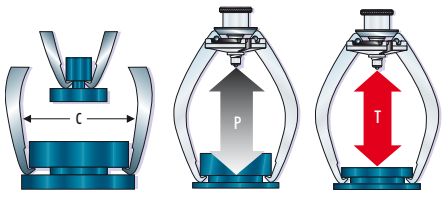
- The U.42 and U.42B models have legs designed specifically for gearbox bearings.
- Spare yoke for U.42 and U.42B: U.42SE2.
- Set of 2 spare pins for U.42 and U.42B: U.42-5J2.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.42	10 - 85	120	1,5	15	160 x 165 x 235	U.42-3	U.42-1	13	1,300
U.42B	10 - 85	180	1,5	15	160 x 225 x 240	U.42B3	U.42-1	13	1,600

U.52 - Pullers with yoke







- Spare yoke for U.52 = U.52SE2.
- Set of 2 spare pins for U.52: U.35-5J2.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	L x l x H [mm]	Legs	Screw Size	Screw Size[mm]	⚖ [kg]
U.52	10 - 150	160	6	60	220 x 200 x 250	U.52-3	U.52-1	17	1,700

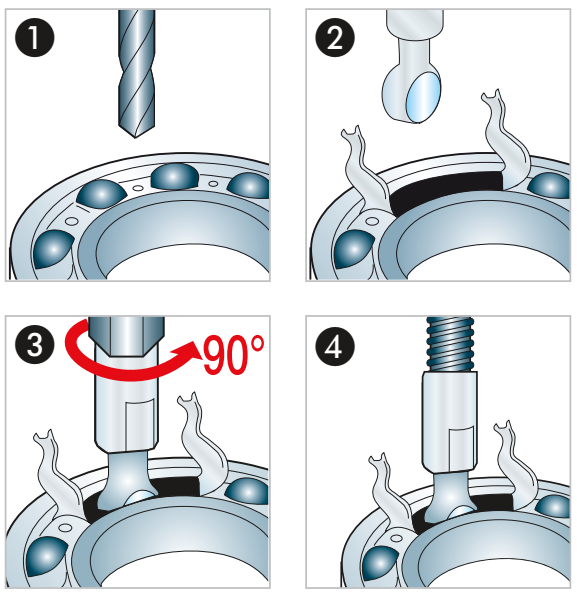
Tip-type pullers, cage grip

U.23 TIP TYPE PULLERS, CAGE GRIP

- The design of this puller is particularly suited to cage-type ball bearings.
- Pressure is distributed over the two races and the tool can be used for both shaft and housing fits.
- Depending on the ball diameter, different pairs of spherical tips should be selected from of three sets available.

Positioning tips in bearings

❶ Drill 2 diametrically opposed holes.
❷ Bend back cage ends.
❸ Insert appropriately sized tips into race. Turn through 90 degrees to lock.
❹ Screw beam rods into tips.





U.23J1A Micro-engineering puller kit



- Comprising:
- 3 pairs of tips: Ø 5.5 - 6 - 7.5 mm.
- Beam U.23K1A.
- Spread: Ø 25 to 95 mm.
- For ISO bearings: 6004 to 6010; 6200 to 6205; 6300 to 6302.
- Supplied in plastic case BP.102 with tray PL.392A.

Weight: 0.800 kg.

U.23J2 Light engineering puller kit



- Comprising:
- 3 pairs of tips: Ø 9 - 11 - 12.5 mm.
- Beam U.53K1.
- Spread: Ø 40 to 110 mm.
- For ISO bearings: 6206 to 6211; 6303 to 6307; 6403 to 6404.
- Supplied in plastic case BP.115 with tray PL.71A.

Weight: 1.800 kg.

U.23J3 General engineering puller kit



- Comprising:
- 6 pairs of tips: Ø 16 - 19 - 22 - 25 - 28 - 32 mm.
- Beam U.53K2.
- Spread: Ø 70 to 190 mm.
- For ISO bearings: 6212 to 6222; 6308 to 6319; 6405 to 6414.
- Supplied in plastic case BP.109 with tray PL.104A.

Weight: 7.300 kg.

U.23D - Set of 2 tips

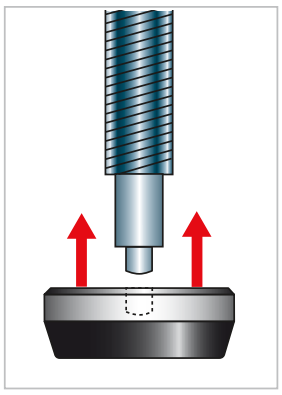


	d [mm]	Tapping	[kg]
U.23D5	5,5	M6	0,025
U.23D6	6,0	M6	0,027
U.23D8	7,5	M6	0,030
U.23D9	9,0	M10	0,040
U.23D11	11,0	M10	0,045
U.23D12	12,5	M10	0,045
U.23D16	16,0	M16	0,125
U.23D19	19,0	M16	0,275
U.23D22	22,0	M16	0,315
U.23D25	25,0	M16	0,490
U.23D28	28,0	M16	0,525
U.23D32	32,0	M16	0,670

Tip-type pullers, inside grip

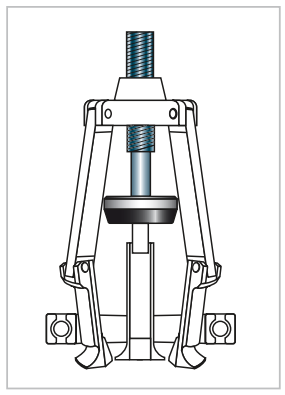
U.51B | TIP TYPE PULLER, INSIDE GRIP

1



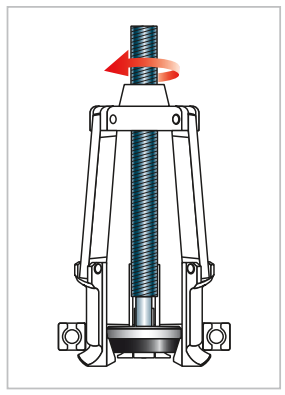
• Locate the spreader at end of screw.

2



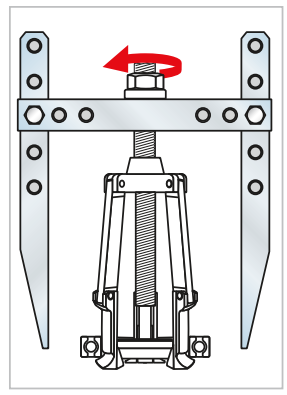
• Insert claw ends through bearing.

3



• Screw claws tight againt bearing.

4



• Fit beam and screw down nut to withdraw bearing.



U.51B Tip-type pullers, inside grip



- Capacity: Ø 32 to 70 mm.
- Adaptable puller accessories: beam U.40 or beam U.30.
- Supplied with 15 tips.
- Set of 15 spare tips: U.51BJ15.
- Spare nut + bush: U.51B-1.
- Supplied in plastic case BP.109 with tray PL.710.

Weight: 3.400 kg.

U.28 Tip-type pullers, large spread inside grip



- Capacity: Ø 70 to 160 mm.
- Allocation of “separator” tip discs:

- Tip disc no.1: capacity 70 - 100 mm.
- Tip disc no.2: capacity 100 - 136 mm.
- Tip disc no.3: capacity 130 - 160 mm.

- Adaptable puller accessory: beam U.30.

Weight: 3.300 kg.

- Set of 3 spare separator tips: U.28J3
- Spare nut + bush: U.28-1.

U.28J1 Separator and beam for inside grip set



- Comprising:

- 1 separator U.28.
- 1 beam U.30.

- Spread: Ø 70 to 160 mm.
- Supplied in a steel case BT.111 (396 x 224 x 82 mm) with tray PL.168.

Weight: 9.500 kg.

U.30 Beam for pullers U.28 and U.51B



- Use with pullers U.28 and U.51B.

Weight: 4.600 kg.

U.40 Beam for pullers U.51B and U.306



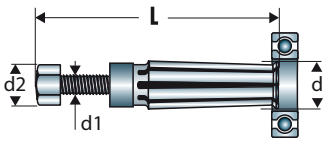
- Use with pullers U.51B and U.306. Using the beam U.40 with the separator U.306 requires using the bush and nut U.306A1 (to be ordered separately).

Weight: 1.800 kg.

Spreader-type pullers, inside grip

U.49P - Clamps for inside grip







- High impact and screwing / unscrewing resistance.
- Multiple flexible blades and hardly sensitive to distortion.
- Easy to use.

	d1 [mm]	d2 [mm]	d mini - maxi [mm]	L [mm]	⚖ [kg]
U.49P1	M8	12	6,5 - 8,0	76	0,025
U.49P2	M8	12	8,5 - 10,0	76	0,030
U.49P3	M8	12	10,5 - 13,0	88	0,045
U.49P4	M8	12	13,0 - 18,0	100	0,070
U.49P5	1/2"	17	18,0 - 22,5	112	0,140
U.49P6	1/2"	17	22,5 - 30,0	139	0,300
U.49P7	1/2"	22	30,0 - 38,0	158	0,545
U.49P8	1/2"	1-1/4"	38,0 - 50,0	190	1,215
U.49P9	1/2"	1-1/4"	50,0 - 60,0	190	1,425

U.49PJ1 Maintenance kit



- To pull bearings Ø 8.5 to 38 mm.
- Comprising:
- 6 pliers U.49P2 to U.49P7.
- 2 beams U.53KL0 and U.53KL2.
- Adapter bit U.49BR1.
- Supplied in plastic case BP.109 with tray PL.711.

Weight: 3.500 kg.

U.49PJ2 Light engineering puller kit



- To pull bearings Ø 18 to 50 mm.
- Comprising:
- 4 pliers U.49P5 to U.49P8.
- 1 slide hammer U.49AM.
- Supplied in plastic case BP.109 with tray PL.712.

Weight: 5,000 kg.

U.49PJ3 General engineering puller kit



- To pull bearings Ø 6.5 to 18 mm.
- Comprising:
- 4 pliers U.49P1 to U.49P4.
- 1 slide hammer U.49L.
- Supplied in plastic case BP.115 with tray PL.445.

Weight: 1.400 kg.

U.49PJ4 Heavy engineering puller kit

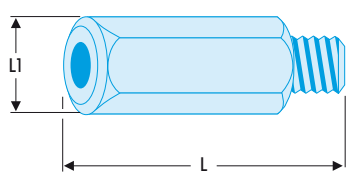


- To pull bearings Ø 30 to 60 mm.
- Comprising:
- 3 pliers U.49P7 to U.49P9.
- 1 beam U.53KL2.
- Tip U.49BR1.
- Supplied in plastic case BP.109 with tray PL.713.

Weight: 5.300 kg.

Adaptor tip for clamps U.49P5 to P9 on slide hammer or beam





- Female thread: M16 x 2.0.
- Male thread: 1/2" - 20UNF.
- Used to connect the slide hammer U.306M or beam U.53KL2 to the clamps U.49P5 to U.49P9.

	Screw Size	Screw Size[mm]	L [mm]	L1 [mm]	⚖ [kg]
U.49BR1	23	23	48	13	0,100

Adaptor tips for separators U.301 / U.302 on slide hammer U.49AM



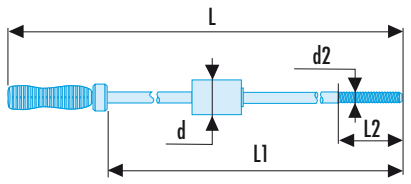
- U.301E1 tip for pullers U.301, U.302, U.301-150, U.302-150.
- Female thread: 1/2" - 20UNF.
- Male thread: M12 x 1.75.
- U.301E2 tip for pullers U.301-200 and U.302-200.
- Female thread: 1/2" - 20UNF.
- Male thread: M16 x 2.00.
- Locks the legs in Pullers position.

	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
U.301E1	25	62	22	0,200
U.301E2	25	62	22	0,300

Slide hammers

Slide hammer 0.2 kg



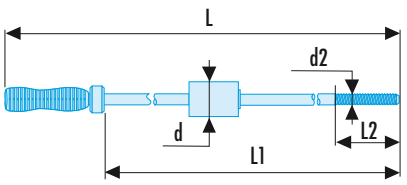


- For fitting on low spread clamps U.49P1 to U.49P4.
- Allows to extract bearings with an inner diameter Ø 6.5 to 18 mm.

	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
U.49L	30	M8x1,25	302	212	14	0,500

Slide hammer 1 kg

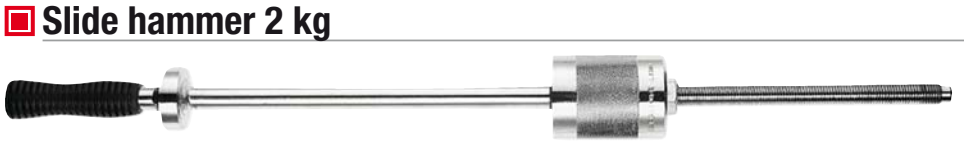




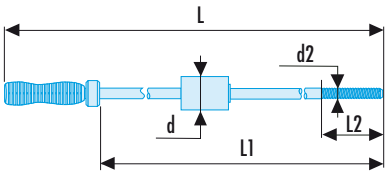
- For fitting on high spread clamps U.49P5 to U.49P9.
- Allows to extract bearings with an inner diameter Ø 18 to 60 mm.
- Use of threaded tips U.53E4 to U.53E14 with the adaptor tip U.53H3.

	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
U.49AM	45	1/2"-200NF	452	325	25	1,600

Slide hammer 2 kg





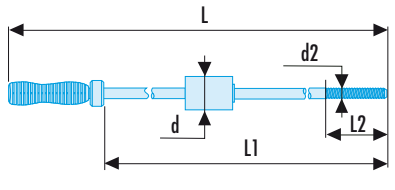


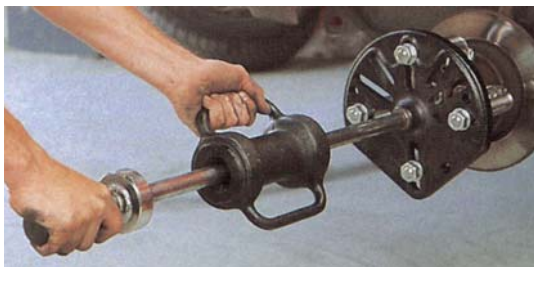
- Adapts to pullers U.306, U.42, U.42B, U.32T2-8, U.32T2-12, U.35, U.35L.
- Adaptable accessories:
- Clamps U.49P5 to U.49P9 with adaptor tip U.49BR1.
- Threaded tips U.53E4 to U.53E14 with the adaptor tip U.53H2.

	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
U.306M	60	M16x2,0	654	537	228	2,800

Slide hammer 7 kg







- Adapts to pullers U.20, U.20B, U.310, U.32T6-16, U.32T6-20 and tray U.9.

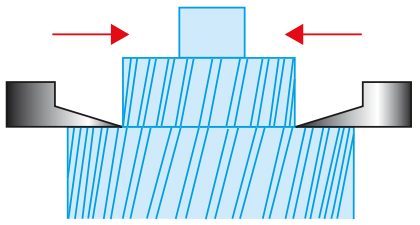
	d [mm]	d2 [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
U.2	92 / 171	M22x2,0	761	615	70	8,700

Puller kits

U.53 SEPARATORS, FLUSH GRIP

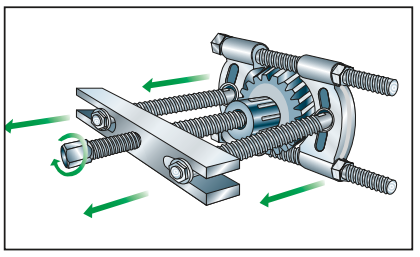
Bearing separators U.53T fit behind races where ordinary puller claws will not reach.

- The wedge-shaped jaws bear against the back of the fitting, pushing it out as they close.
- Separators can be used with beams for mechanical screws or with beams designed specifically for use with hand-operated hydraulically-assisted jacks.

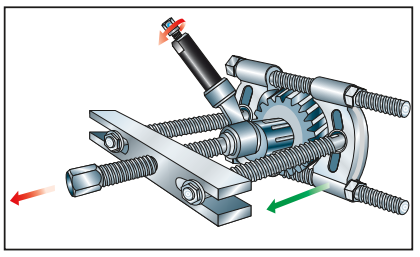


SAFETY FIRST

- **Only hand-operated hydraulic systems are to be used in conjunction with separator and beam combinations.**



Separator and beam with hand-operated hydraulic system.



Separator and beam with mechanical screw.

- Beam used with hydraulic press U.33A
- Only to be used with beams U.53K4 and U.53S4A.



U.53J1 60 mm separator and beam puller kit



- Comprising:
- 1 separator U.53T1 = spread: Ø 5 to 60 mm.
- 1 beam U.53K1 = spread: Ø 40 to 110 mm.
- Max reach: 180 mm.
- 4 pairs of U.53E threaded tips M4 - M5 - M6 - M8.
- 2 adaptors U.53H1.
- Supplied in plastic case BP.112 with tray PL.296A.

Weight: 3.400 kg.

U.53J2 110 mm separator and beam puller kit

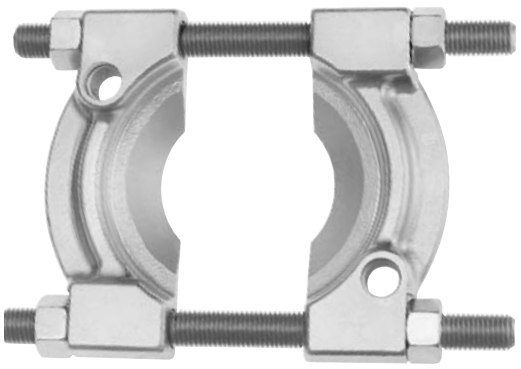


- Comprising:
- 1 separator U.53T2 = spread: Ø 15 to 110 mm.
- 1 beam U.53K2 = spread: Ø 70 to 200 mm.
- Max reach: 240 mm.
- 4 pairs of U.53E threaded tips M8 - M10 - M12 - M14.
- 2 adaptors U.53H2.
- Supplied in plastic case BP.109 with tray PL.297A.

Weight: 7.300 kg.

Separators

U.53T - Separators



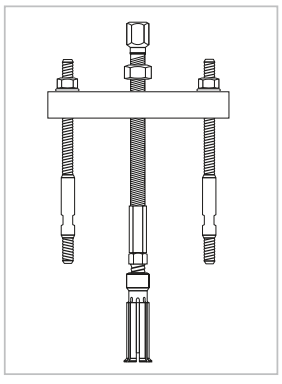
- Separators spread Ø 5 to 250 mm.
- Fit behind races where ordinary puller claws will not reach.
- They can be used with beams assisted by screws or jacks.

	Screw Size	d1 [mm]	d2 [mm]	d mini - maxi [mm]	H [mm]	L [mm]	For	⚖ [kg]
U.53T1	U.53T1-02	M10	M12	5 - 60	91	140	U.53K1	0,600
U.53T2	U.53T2-02	M16	M16	15 - 110	153	215	U.53K2 - U.53S2A	2,100
U.53T3	U.53T3-02	M20	M20	15 - 150	204	290	U.53K3	4,600
U.53T4	U.53T4-02	M22	M22	20 - 180	289	360	U.53K4 - U.53S4A	8,200
U.53T5	U.53T5-02	M22	M22	25 -250	316	430	U.53K4 - U.53S4A	11,200

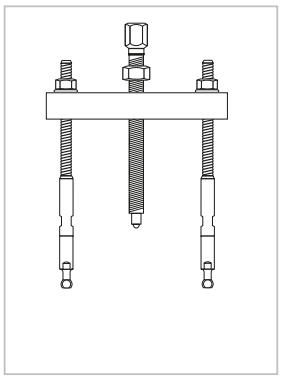
Beam pullers

U.23/U.53 | BEAM PULLERS

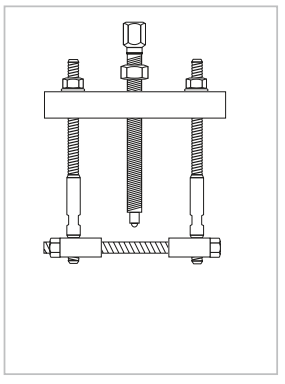
Beams can be used with different types of pullers:



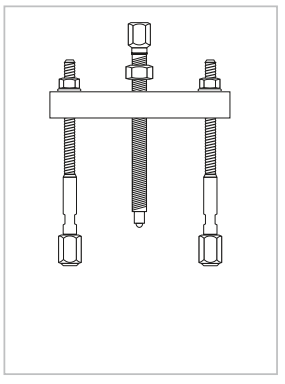
- Expansion bearing puller U.49P.



- Spherical or threaded tip pullers U.23.



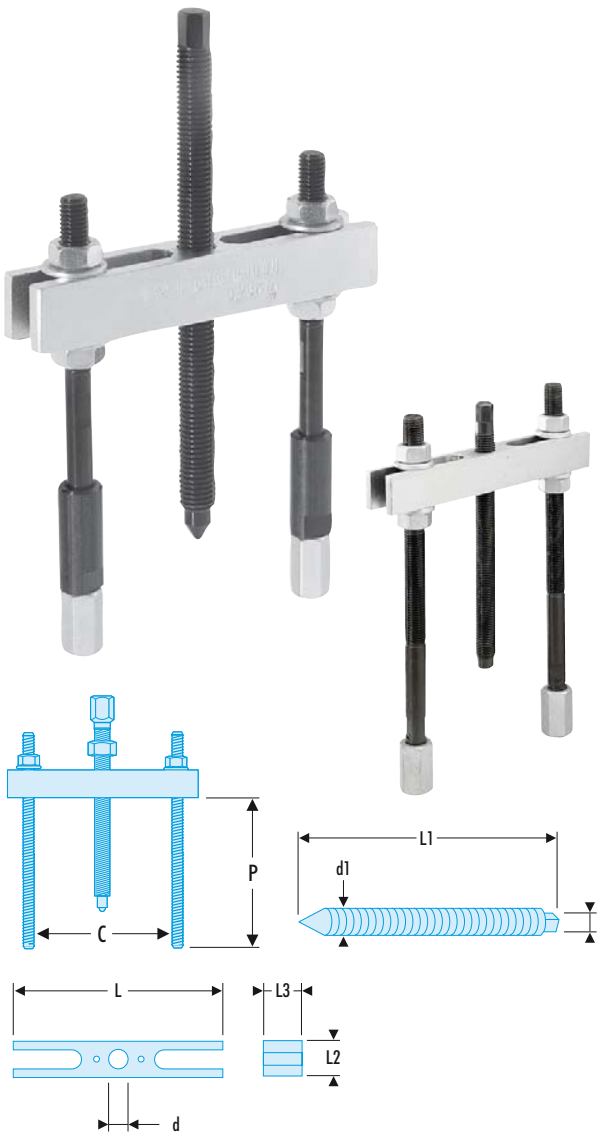
- Separator U.53.



- Extraction via beam alone.



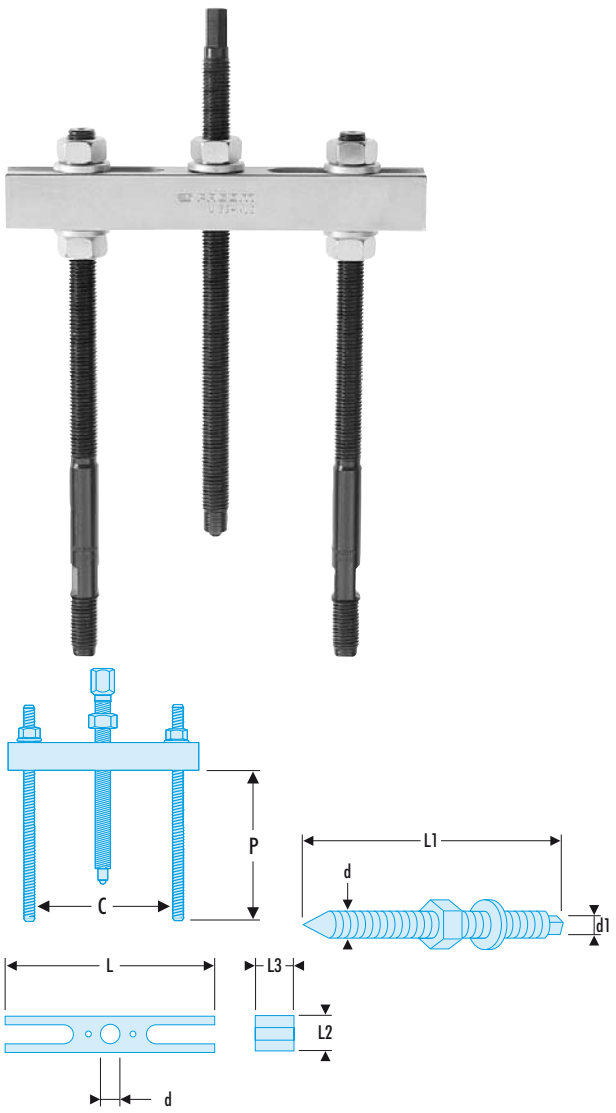
U.23K-U.53K - Tapped beams



- Tapped beams are used in mechanical pulling with separators, spherical or threaded tips.
- Spread: Ø 25 to 400 mm.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	Screw Size	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Tie-rods	⏃ [kg]
U.23K1A	25 - 95	100	1	10	U.23K1A-02	M10	8	110	155	20	20	U.23K1A-03	0,400
U.53K1	40 - 110	180	3	30	U.51K1-07	M16	11	135	215	25	25	U.53R1L	0,900
U.53K2	70 - 200	240	3	30	U.53K2-07	M16	11	220	280	30	30	U.53R2L	2,300
U.53K3	75 - 280	300	4	40	U.53S3-07	M27	21	320	340	45	35	U.53R3L	5,300
U.53K4	145 - 400	350	5	50	U.53S4-07	M33	25	450	420	50	50	U.53R4LA	10,700

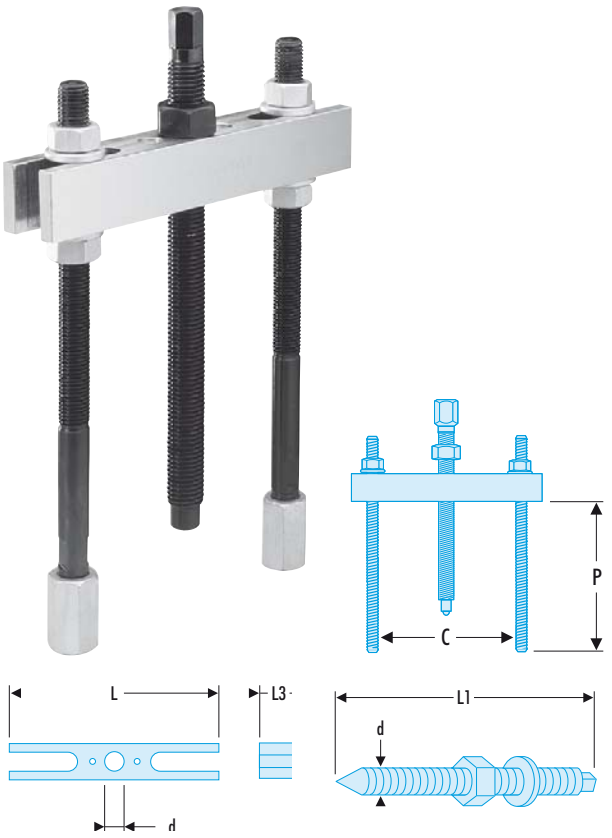
U.53KL - Non-tapped beams



- Non tapped beams allow to use clamps U.49P1 to U.49P9 to extract bearings by inside grip.
- U.53KL0: for clamps U.49P1 to U.49P4.
- U.53KL2: for clamps U.49P5 to U.49P9 with adaptor tip U.49BR1.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	Screw Size	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Tie-rods	⏃ [kg]
U.53KL0	25 - 100	125	1	10	U.53KL0-02	M8	6	110	155	20	20	U.53KL0-02	0,400
U.53KL2	70 - 200	240	3	30	U.53K2-07	M16	11	220	280	30	30	U.53R2L	2,400

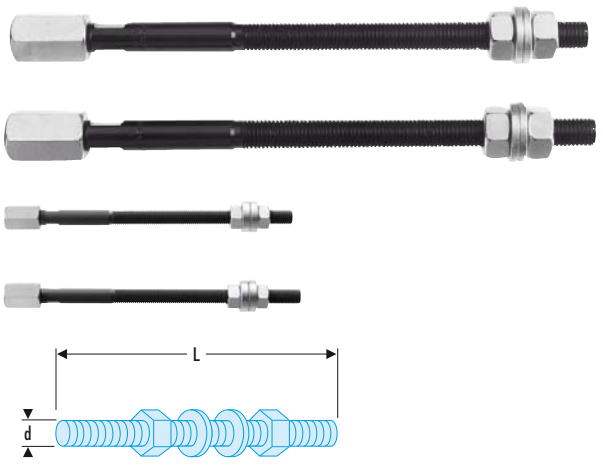
U.53S - Jack beams



- These 2 non tapped beams with mechanical specifications exceeding U.53K (dimensions, steel and thermal treatment) are designed to withstand the high loads generated by the power of jacks used.

	C mini - maxi [mm]	P maxi [mm]	Ton [t]	T [kN]	Screw Size	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Tie-rods	⚖ [kg]
U.53S2A	120 - 200	235	10	100	U.53S2A07	280	M20	220	280	35	35	U.53R2L	3,000
U.53S4A	170 - 400	340	30	300	U.53S4-07	420	M33	450	420	60	60	U.53R4LA	15,500

U.23K-U.53RL - Spare tie rods for beam

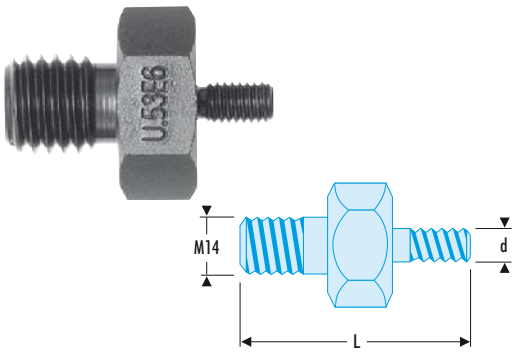


- Tie rods supplied by 2 with chrome-plated tips, nuts and washers.

	d [mm]	L [mm]	Beams	⚖ [kg]
U.23K1A-03	M8 x 1,25	95	U.23K1A	0,050
U.53KL0-02	M8 x 1,25	155	U.53KL0	0,050
U.53R1L	M10 x 1,50	205	U.53K1	0,200
U.53R2L	M16 x 2,00	275	U.53K2 - U.53KL2 -U.53S2A	0,500
U.53R3L	M20 x 2,50	350	U.53K3	1,200
U.53R4LA	M22 x 2,50	420	U.53K4 - U.53S4A	1,700

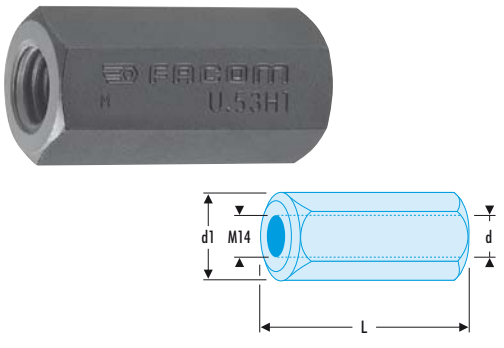
Accessories for beam pullers

U.53E - Threaded tips



	d [mm]	L [mm]	⚖ [kg]
U.53E4	4	33,5	0,050
U.53E5	5	33,5	0,050
U.53E6	6	36,5	0,050
U.53E8	8	39,5	0,050
U.53E10	10	42,5	0,055
U.53E12	12	46,6	0,060
U.53E14	14	48,5	0,070

U.53H - Adaptors for threaded tips

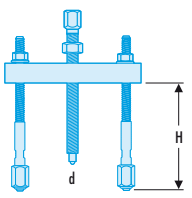


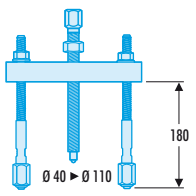
	d [mm]	d1 [mm]	L [mm]	⚖ [kg]
U.53H1	M10 x 1,5	23	50	0,130
U.53H2	M16 x 2,0	23	50	0,110
U.53H3	1/2" – 20 UNF	23	50	0,120

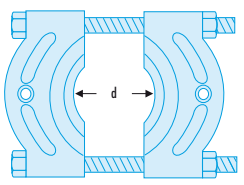
Workshop boards

U.JA1 Light engineering puller kit





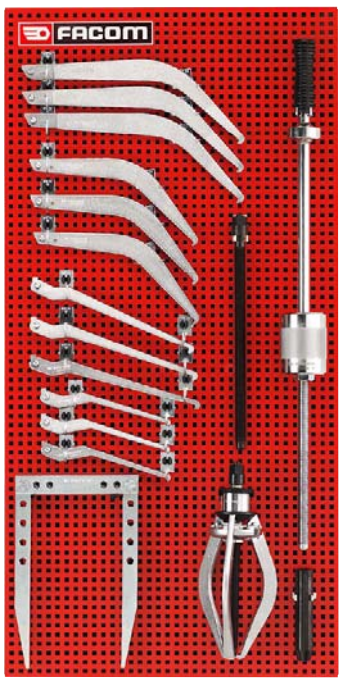


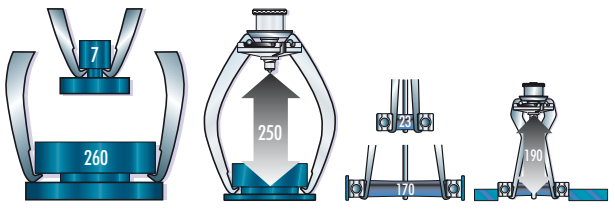


- Comprising:
- 2 slim leg pullers for outside grip = U.301 and U.302 (spread 10 to 80 mm).
- 4 clamps for inside grip = U.49P1 to U.49P4 (spread 6.5 to 18 mm).
- 1 slide hammer U.49L.
- 1 separator for difficult outside grip = U.53T1 (spread 5 to 60 mm) and its beam U.53K1.
- Presented on the PK.2 panel.
- Dimensions: 444 x 444 mm.

Weight: 4.300 kg.

U.J2 4-Tonne kit

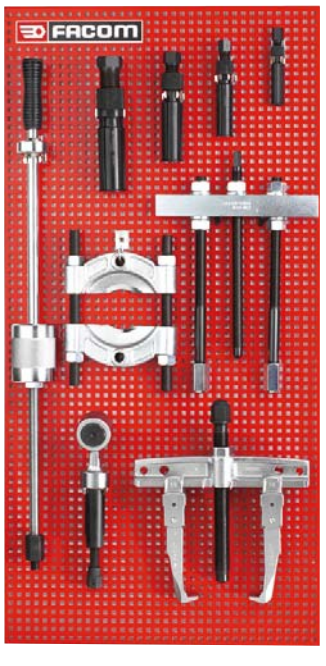


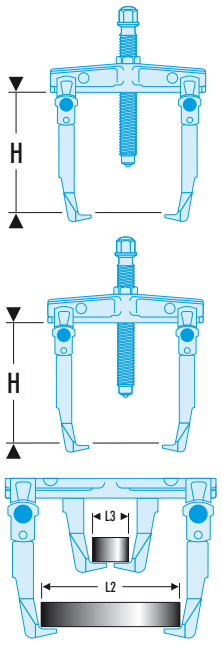


- Comprising:
- 1 clamp puller for outside grip = U.306A140 (spread 7 to 140 mm).
- 2 sets of 3 long legs for outside grip = U.306G10 (spread 10 to 180 mm) and U.306G15 (spread 20 to 260 mm).
- 2 sets of 3 legs for inside grip = U.306G2 (spread 23 to 130 mm) and U.306G20 (spread 60 to 170 mm).
- 1 long screw with tip U.306-3.
- 1 beam U.40 (attached using ring and nut U.306A1, supplied with the kit).
- 1 slide hammer U.306M.
- Presented on the PK.1 panel.
- Dimensions: 444 x 888 mm.

Weight: 12.400 kg.

U.JA3 General engineering puller kit





- Comprising:
- 1 sliding leg puller = U.32T6-20 outside grip (spread 20 to 200 mm) / inside grip (spread 130 to 290 mm).
- 1 separator U.53T2 (spread 15 to 110 mm) and the beam U.53K2.
- 4 clamps U.49P5 to U.49P8 (spread 18 to 50 mm).
- 1 slide hammer U.306M with adaptor tip U.49BR1.
- 1 jack U.33A (capacity 30 tonnes).
- Presented on the PK.1 panel.
- Dimensions: 444 x 888 mm.

Weight: 15.500 kg.

Case kits

U.301BJ1 Light engineering puller kit

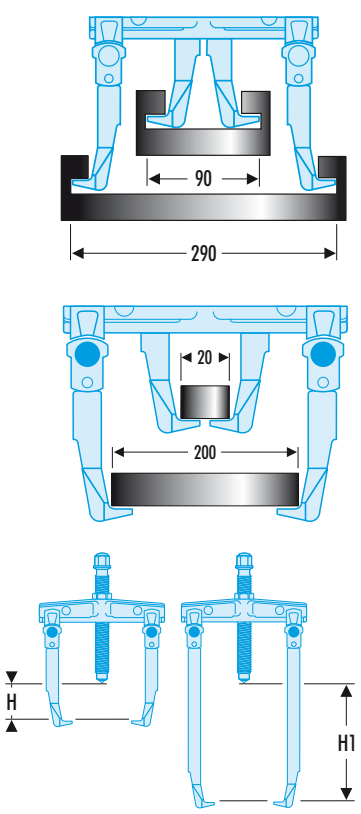


- Comprising:
- 1 leg puller U.301 for outside grip pulling (spread 10 to 80 mm).
- 4 clamps U.49P1 to U.49P4 (spread 6.5 to 18 mm).
- 1 beam U.53 KL0.
- Supplied in plastic case BP.112 with tray PL.182B.
- Dimensions: 389 x 164 x 66 mm.

Weight: 2.100 kg.

U.102T General engineering puller kit



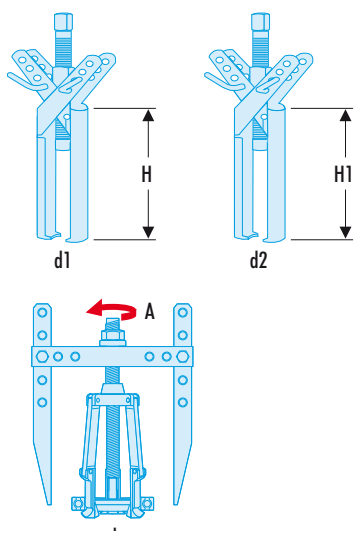


- Comprising:
- U.32T2-8: 2-tonne sliding-leg puller and set of long legs; reach P1: 105 mm, P2: 185 mm.
- U.32T6-20: 6-tonne sliding-leg puller and set of long legs; reach P1: 150 mm, P2: 280 mm.
- U.53T2: separator (spread 15 to 110 mm).
- U.33A: 30 tonne jack.
- Supplied in metal case. BT.108 with tray PL.287 (removable tray) and PL.288 (box bottom tray).
- Dimensions: 450 x 270 x 110 mm.

Weight: 14.500 kg.

U.103A Medium power engineering puller kit





- This complete set offering normal pulling power for all general engineering applications.
- Comprising:
- U.35L (spread 15 to 75 mm) and U.34 (spread 40 to 180 mm): wide leg pullers for outside grip pulling.
- U.51B: bearing inside puller (spread: 32 to 70 mm).
- U.40: beam.
- U.33A: 30 tonne jack.
- Supplied in a steel case BT.108 with tray PL.195A.
- Dimensions: 452 x 286 x 111 mm.

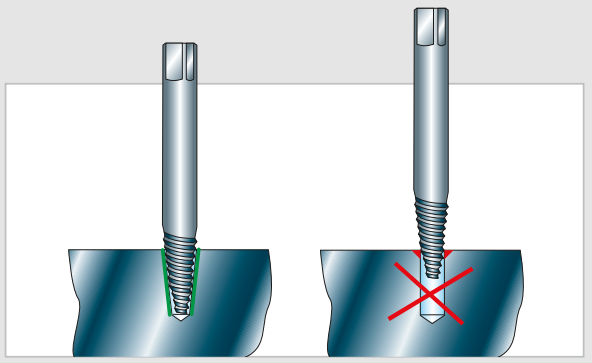
Weight: 13.300 kg.

Stud pullers

285 STUD EXTRACTORS

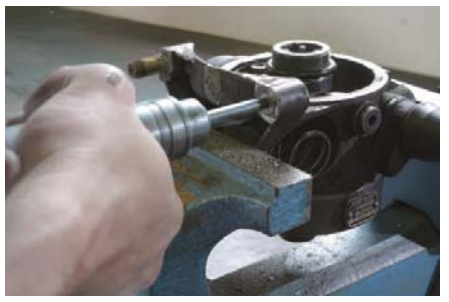
FOR REMOVING SHEARED RIGHT-HAND THREAD STUDS

- 285 stud extractors are designed exclusively for use on right-hand thread struts (99% of cases).
- The extractors' tapered shape requires the use of cone bits. Using traditional cylindrical bits reduces the contact surface between the extractor and the stud, greatly increasing the risk of extractor breaking in the stud.





- Choose the extractor and corresponding drill bit according to the diameter of the stud to be removed.



- Drill with a 285.F cone bit.



- Push in then unscrew using the corresponding stud extractor.



- The stud is removed

285.J - Set of stud pullers, right-hand pitch



285.J10



285.JS10 285.J5

- 285.J10: Set of 5 stud pullers + 5 appropriate tapered and tap wrench 831.1 (use with the 4 small pullers only).

Tray PL.464.

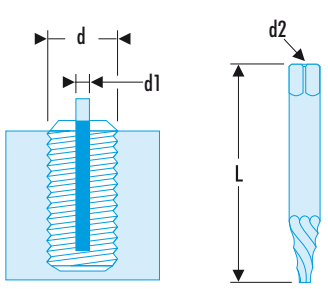
- 285.JS10: Set of 5 stud pullers and 5 adapted tapered drill-bits, supplied on stand.
- 285.JS5: Set of 5 stud pullers, supplied on stand.
- Supplied in plastic case BP.104
- Dimensions: 204 x 122 x 52 mm.

	L x l x H [mm]	d mini - maxi [mm]	Drill Bits	Conditioning	⚖ [kg]
285.J10	204 x 122 x 52	3 - 18	285.4-5-6-8-11 - 285.F1-F2-F3-F4-F5	BP.102 + PL.464	0,470
285.JS10	100 x 90 x 25	3 - 18	285.4-5-6-8-11 - 285.F1-F2-F3-F4-F5	CKS.25A x 2	0,290
285.JS5	100 x 90 x 25	3 - 18	285.4-5-6-8-11	CKS.25A	0,150

285 - Unit stud pullers, right-hand pitch



- These helical pullers allow pulling after drilling a pre-hole using specific tapered drill-bits 285.F.



	A mini - maxi [mm]	B mini - maxi [mm]	L [mm]	Drill Bits	Square	⚖ [kg]
285.4	3 - 6	2,2 - 3,4	55	285.F1	3,0	0,005
285.5	6 - 8	3,7 - 4,3	60	285.F2	4,0	0,010
285.6	8 - 11	4,5 - 5,3	65	285.F3	4,5	0,015
285.8	11 - 14	6,2 - 7,1	75	285.F4	6,0	0,025
285.11	14 - 18	8,6 - 9,8	85	285.F5	8,5	0,050
285.14	18 - 24	11,0 - 12,5	90	-	10,0	0,085
285.18	24 - 33	14,5 - 16,0	105	-	14,0	0,165
285.25	33 - 50	20,0 - 22,5	120	-	18,0	0,350

285.F - Single tapered drill bits for pullers 285



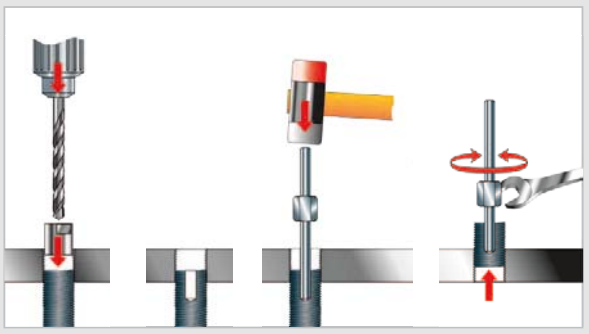
• These tapered drill-bits allow for drilling suited to tapered stud pullers 285.

	d [mm]	L [mm]	Puller [mm]	[kg]
285.F1	3,5	57	285.4	0,005
285.F2	4,0	63	285.5	0,010
285.F3	5,5	67	285.6	0,010
285.F4	7,5	80	285.8	0,025
285.F5	10,0	86	285.11	0,045

885 STUD EXTRACTORS

FOR REMOVING SHEARED RIGHT-HAND, OR LEFT-HAND THREAD STUDS

• 885 stud extractors are designed exclusively for use on right-hand thread.
• The splined rod has a cylindrical shape and can be drilled using standard (cylindrical) drill bits.





• Choose the extractor and corresponding drill bit according to the diameter of the stud to be removed.



• Drill with a standard 222A.T bit. Insert the splined bit using a mallet 216.40.



• Install the hexagonal shoulder. Loosen with a wrench.



• The stud is removed

885 Set of stud pullers, right or left-hand pitch



• Pulling by drilling and inserting a fluted rod driven by a 6-point.
• Spread: studs Ø 6 to 14 mm.
• Right or left-hand pitch.
• Supplied in case 165 x 130 x 25 mm.
Weight: 0.540 kg.

885 - Drill bits and pullers for stud pulling





885.F: Drill bits.
885.EH: Pullers.

	d [mm]	d [“]	L [mm]	[kg]
885.F1	3,2	1/8	65	0,005
885.F2	4,8	3/16	85	0,010
885.F3	6,3	1/4	100	0,020
885.F4	7,9	5/16	115	0,030
885.F5	8,7	11/32	120	0,040
885.EH1	6,3	1/4	-	0,015
885.EH2	7,9	5/16	-	0,020
885.EH3	9,5	3/8	-	0,035
885.EH4	11,1	7/16	-	0,045
885.EH5	12,7	1/2	-	0,060

Stud pullers

286A - Roller-type stud drivers - Multi-diameter



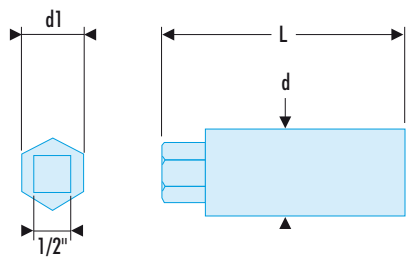


- Choose the hole suited to the stud diameter.
- Tighten or untighten: thanks to its eccentric shaft, the knob grips the stud, for tightening or untightening.

	C mini - maxi [mm]	Square ["]	Dimension [mm]	⚖ [kg]
286A	5 - 20	1/2	52 x 54	0,400
286A.PL	15 - 27	3/4	72 x 66	0,950

287B - Roller-type stud drivers - Single-diameter







- Capacity: Ø 6 to 16 mm.
- Turned by means of the hexagonal drive or a 1/2" - 12.7 mm ratchet. Except model 287B.16, which has a through-hole for a bar.
- Allows to tighten or untighten the studs.

	A maxi [mm]	d [mm]	d1 [mm]	L [mm]	⚖ [kg]
287B.6	6	25	22	65	0,165
287B.7	7	25	22	65	0,170
287B.8	8	25	22	65	0,170
287B.9	9	29	22	75	0,245
287B.10	10	29	22	75	0,240
287B.12	12	29	22	75	0,240
287B.14	14	34	27	75	0,310
287B.16	16	34	27	75	0,340

287B.JS5 Set of roller-type stud drivers



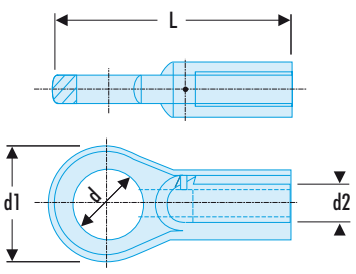
- Set of 5 stud drivers to screw and unscrew the M6, M7, M8, M9 and M10 studs (287B.6 to 287B.10).
- Presentation on stand (CKS.73A).
- Dimensions (L x W x H): 155 x 175 x 35 mm.

Weight: 1.100 kg.

Nut splitter

289 - Nut splitters







- For splitting a worn or jammed nut without damaging the screw thread.
- 289.V1: spare screws for puller 289.19 and 289.30.
- 289.V2: spare screw for 289.36.
- 289.V3: spare screw for 289.54.

	Screw Size[mm]	d [mm]	d1 [mm]	d2 [mm]	d mini - maxi [mm]	L [mm]	⚖ [kg]
289.19	4 - 13	19	31	14 x 150	M2 - M8	92	0,200
289.30	17 - 22	30	50	14 x 150	M10 - M16	104	0,300
289.36	24 - 30	36	62	20 x 150	M18 - M20	156	1,200
289.54	30 - 46	50	90	27 x 300	M20 - M30	198	2,000

289 Set of 2 nut-splitters for sizes M2 to M8 and M10 to M16



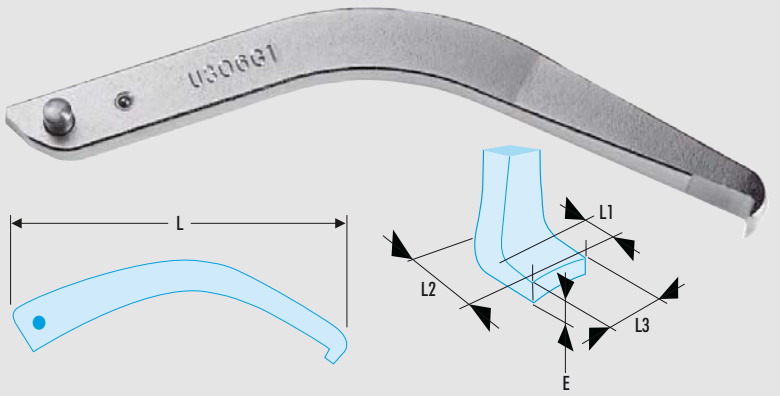
• Comprising:
- Body 289.19.
- Body 289.30.
- Screw 289.V1.

• Supplied on plastic tray PL.173 = 155 x 75 x 35 mm.

Weight: 0.900 kg.

SPARE LEGS
SPARE PARTS

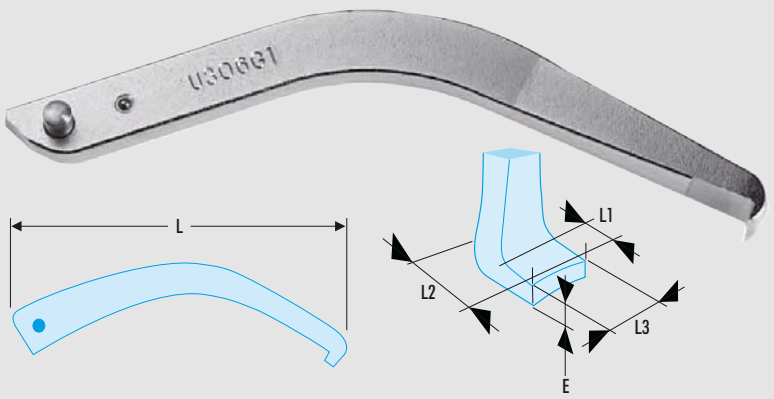




Puller	Leg reference (to be ordered by 2*)	Leg pin	L mm	E mm	L3 mm	L1 mm	L2 mm	kg	For the puller go to page
U.14A	-	-	74	2,5	8	7	16	0,040	645
U.14L	-	-	96	3,5	8	7	17	0,050	645
U.20	U.20SE4	U.20SE3 (set of 6 pins + 12 shear pins)	200	8,5	25	6	19	0,425	635
U.20B	U.20BSE4	U.20SE3 (set of 6 pins + 12 shear pins)	249	6,5	25	6	19	0,590	635
U.27AS3	U.27S (standard leg)	U.27SE2 (set of 12 pins + 12 shear pins)	220	12	26	8	29	0,850	636
U.27AS3	U.27D (long leg)	U.27SE2 (set of 12 pins + 12 shear pins)	330	10	30	7	16	1,520	636
U.27AS3	U.27BS (standard rod + counter-rod)	U.27SE2 (set of 12 pins + 12 shear pins)	275	-	-	-	-	1,800	636
U.27AS3	U.27B (long rod)	U.27SE2 (set of 12 pins + 12 shear pins)	520	-	-	-	-	3,300	636
U.32T2-8	U.32T2GA10	U.32T2DG (complete flasks + screws)	130	3	18	10	19	0,090	643
U.32T2-8	U.32T2GA20	U.32T2DG (complete flasks + screws)	225	3	18	10	19	0,180	643
U.32T2-8	U.32T2GA25	U.32T2DG (complete flasks + screws)	275	3	18	10	19	0,230	643
U.32T2-12	U.32T2GA10	U.32T2DG (complete flasks + screws)	130	3	18	10	19	0,090	643
U.32T2-12	U.32T2GA20	U.32T2DG (complete flasks + screws)	225	3	18	10	19	0,180	643
U.32T2-12	U.32T2GA25	U.32T2DG (complete flasks + screws)	275	3	18	10	19	0,230	643
U.32T6-16	U.32T6GA15	U.32T6DG (complete flasks + screws)	180	5	24,5	14	31	0,280	643
U.32T6-16	U.32T6GA30	U.32T6DG (complete flasks + screws)	335	5	24,5	14	31	0,600	643
U.32T6-20	U.32T6GA15	U.32T6DG (complete flasks + screws)	180	5	24,5	14	31	0,280	643
U.32T6-20	U.32T6GA30	U.32T6DG (complete flasks + screws)	335	5	24,5	14	31	0,600	643
U.32T15-25	U.32T15GA20	U.32T15DG (complete flasks + screws)	250	10	30	20	38	0,660	643
U.32T15-25	U.32T15GA30	U.32T15DG (complete flasks + screws)	345	10	32	20	43	0,990	643
U.32T15-25	U.32T15GA40	U.32T15DG (complete flasks + screws)	445	10	32	20	43	1,590	643
U.32T15-25	U.32T15GA50	U.32T15DG (complete flasks + screws)	545	10	32	20	43	1,800	643
U.32T15-35	U.32T15GA20	U.32T15DG (complete flasks + screws)	250	10	30	20	38	0,660	643
U.32T15-35	U.32T15GA30	U.32T15DG (complete flasks + screws)	345	10	32	20	43	0,990	643
U.32T15-35	U.32T15GA40	U.32T15DG (complete flasks + screws)	445	10	32	20	43	1,590	643
U.32T15-35	U.32T15GA50	U.32T15DG (complete flasks + screws)	545	10	32	20	43	1,800	643
U.32T15-50	U.32T15GA20	U.32T15DG (complete flasks + screws)	250	10	30	20	38	0,660	643
U.32T15-50	U.32T15GA30	U.32T15DG (complete flasks + screws)	345	10	32	20	43	0,990	643
U.32T15-50	U.32T15GA40	U.32T15DG (complete flasks + screws)	445	10	32	20	43	1,590	643
U.32T15-50	U.32T15GA50	U.32T15DG (complete flasks + screws)	545	10	32	20	43	1,800	643

SPARE LEGS
SPARE PARTS





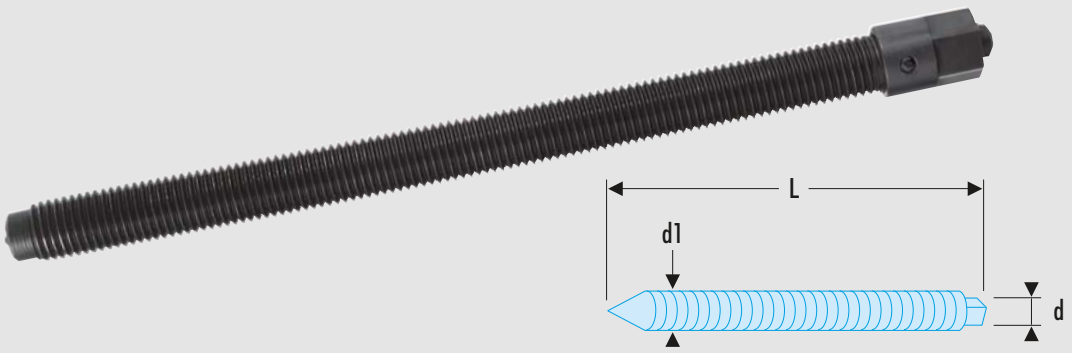
Puller	Leg reference (to be ordered by 2*)	Leg pin	Lmm	Tmm	L3mm	L1mm	L2mm	kg	For the puller go to page
U.34	**U.34G** (set of 2 legs)	M10 screw x 1.5 x 75 mm head H 17 mm, class 8.8	300	5,5	36	6	15,5	1,750	647
U.35	**U.35C** (set of 2 legs)	**U.35-5J2** (set of 2 shear pins)	155	4	22	3,5	14,5	0,545	647
U.35L	**U.35B** (set of 2 legs)	**U.35-5J2** (set of 2 shear pins)	188	4	22	3,5	14,5	0,705	647
U.35P	**U.35D** (set of 2 legs)	**U.42-5J2** (set of 2 shear pins)	110	2,5	15	3	8,5	0,200	647
U.42	**U.42-3**	**U.42-5J2** (set of 2 shear pins)	145	3	24	3	8	0,220	648
U.42B	**U.42B3**	**U.42-5J2** (set of 2 shear pins)	194	3	24	3	8	0,290	648
U.52	**U.52-3**	**U.35-5J2** (set of 2 shear pins)	198	4,5	25	4	21	0,380	648
U.232-65	**U.232G1**	-	100	4	8,5	10	16	0,080	645
U.232-90	**U.232G2**	-	155	5	10	15	24	0,190	645
U.232-130	**U.232G2**	-	155	5	10	15	24	0,190	645
U.232-160	**U.232G3**	-	225	8	15	22	33	0,580	645
U.232-210	**U.232G3**	-	225	8	15	22	33	0,580	645
U.232-270	**U.232G4**	-	303	11	17,5	25	43	1,550	645
U.232-340	**U.232G4**	-	303	11	17,5	25	43	1,550	645
U.301	**U.301G**	-	130	5	8	7	16	0,100	645
U.301-150	-	-	205	6	8	7	17	0,170	645
U.301-200	-	-	270	6	8	7	18	0,280	645
U.301L	-	-	180	4,5	21	7	18	0,220	647
U.301M	-	-	145	4	21	7	18,5	0,160	647
U.301P	-	-	120	4	17	5	12,5	0,120	647
U.302	**U.301G**	-	130	5	8	7	16	0,100	634
U.302-150	-	-	205	6	8	7	17	0,170	634
U.302-200	-	-	270	6	8	7	18	0,280	634
U.306-170N	**U.306G20**	-	230	6,5	8	4	12	0,190	632
U.306-180	**U.306G10**	-	250	5	14	4	13	0,320	632
U.306-260	**U.306G15**	-	310	6,5	14	4	13	0,450	632
U.306A130N	**U.306G2**	-	170	4,5	8	3,5	9,5	0,120	632
U.306A140	**U.306G1**	-	185	4,5	14	4	13	0,210	632
U.310-170	**U.310G1**	-	230	6	26	5	19	0,560	633
U.310-230N	**U.310G3**	-	260	10	15	5,5	15	0,360	634
U.310-250	**U.310G2**	-	310	7	26	5,5	19	0,760	633
U.312H	**U.312G110**	**U.312-04-02** (set of 3 screws + nuts)	150	7	25	15	33	0,400	639
U.312H	**U.312G160**	**U.312-04-02** (set of 3 screws + nuts)	190	7	25	15	36	0,540	639
U.312H	**U.312G210**	**U.312-04-02** (set of 3 screws + nuts)	240	7	25	12	36	0,720	639
U.312H	**U.312G260**	**U.312-04-02** (set of 3 screws + nuts)	285	7	25	12	38	0,980	639
U.320	**U.320-13A**	**U.320GP1** (set of 3 shear pins)	505	5	35,6	16	45	3,100	640
U.320H	**U.320-13A**	**U.320GP1** (set of 3 shear pins)	505	5	35,6	16	45	3,100	640
U.330	**U.330-08**	**U.320GP1** (set of 3 shear pins)	690	8,5	37,5	15,5	45	6,300	640
U.330H	**U.330-08**	**U.320GP1** (set of 3 shear pins)	690	8,5	37,5	15,5	45	6,300	640

* except U.35B, U.35C, U.35D and U.34: set containing the inside leg and outside leg.

- For your safety, we recommend that all the legs are replaced in the event of a problem.
- Do not modify nor grind the puller legs. Modifications can be very dangerous for the user and invalidates the guarantee.
- Wherever possible, select a 3-leg puller for optimum load distribution.

SPARE SCREWS
SPARE PARTS





Puller	Individual screw reference	Screw extension	L length screw mm	d1 mm	d mm	Shear pin	Shear pin strength	kg	For the puller go to page
U.14A	U.14A04	-	105	M10 x 1,5	Spindle	-	-	0,070	645
U.14L	U.14A04	-	105	M10 x 1,5	Spindle	-	-	0,070	645
U.20	U.20-1S	-	290	M22 x 2,5	24	U.306-24J3	7T	0,750	635
U.20B	U.20B1S	-	355	M22 x 2,5	24	U.306-24J3	7T	0,940	635
U.27AS3	U.27-6	-	525	M32 X 2,5	35	-	-	2,985	636
U.28	U.28-1*	*	300	M22 x 2,0	24	-	-	0,480	651
U.32T2-8	U.32T2-1	-	167	M16 x 2,0	13	-	-	0,190	643
U.32T2-12	U.32T2-1	-	167	M16 x 2,0	13	-	-	0,190	643
U.32T6-16	U.32T6-1	-	255	M22 x 2,0	24	-	-	0,650	643
U.32T6-20	U.32T6-1	-	255	M22 x 2,0	24	-	-	0,650	643
U.32T15-25	U.32T15-1	-	330	M32 X 2,5	35	-	-	1,850	643
U.32T15-35	U.32T15-2	-	430	M32 X 2,5	35	-	-	2,400	643
U.32T15-50	U.32T15-2	-	430	M32 X 2,5	35	-	-	2,400	643
U.34	U.20B1	-	360	M22 x 2,0	24	-	-	0,95	647
U.35	U.35SE1	-	183	M16 x 2,0	17	-	-	0,200	647
U.35L	U.35SE1	U.35SE3	183	M16 x 2,0	17	-	-	0,200	647
U.35P	U.35P01	-	135	M12 x 1,75	13	-	-	0,100	647
U.42	U.42-1	-	215	M16 x 2,0	13	-	-	0,250	648
U.42B	U.42-1	-	215	M16 x 2,0	13	-	-	0,250	648
U.51B	U.51B2**	**	290	M18 x 2,5	19	-	-	0,460	650
U.52	U.52-1	-	240	M18 x 2,5	17	-	-	0,390	648
U.232-65	U.35P01	-	132	M12 x 1,75	13	-	-	0,100	645
U.232-90	U.35SE1	-	183	M16 x 2,0	17	-	-	0,200	645
U.232-130	U.35SE1	-	183	M16 x 2,0	17	-	-	0,200	645
U.232-160	U.53S2A07	-	283	M20 x 2,5	17	-	-	0,470	645
U.232-210	U.53S2A07	-	283	M20 x 2,5	17	-	-	0,470	645
U.232-270	U.53S3-07	-	345	M27 x 3,0	21	-	-	1,280	645
U.232-340	U.53S3-07	-	345	M27 x 3,0	21	-	-	1,280	645
U.301	U.301-04	-	142	M12 x 1,75	10	-	-	0,090	645
U.301-150	U.301-04-150	-	212	M12 x 1,75	10	-	-	0,150	645
U.301-200	U.301-04-200	-	286	M16 x 2,0	13	-	-	0,350	645
U.301L	U.301L04	-	210	M12 x 1,75	10	-	-	0,170	647
U.301M	U.301M04	-	167	M12 x 1,75	10	-	-	0,130	647
U.301P	U.301P04	-	144	M12 x 1,75	10	-	-	0,120	647
U.302	U.301-04	-	142	M12 x 1,75	10	-	-	0,090	634
U.302-150	U.301-04-150	-	212	M12 x 1,75	10	-	-	0,150	634
U.302-200	U.301-04-200	-	286	M16 x 2,0	13	-	-	0,350	634
U.306-170N	U.306-2	-	310	M16 x 2,0	18	U.306-244J3 (set of 3 shear pins)	4T	0,310	632
U.306-180	U.306-2	-	310	M16 x 2,0	18	U.306-244J3 (set of 3 shear pins)	4T	0,310	632
U.306-260	U.306-3***	***	370	M16 x 2,0	18	U.306-24J3 (set of 3 shear pins)	7T	0,370	632
U.306A130N	U.306-4	-	250	M16 x 2,0	18	U.306-243J3 (set of 3 shear pins)	3T	0,250	632
U.306A140	U.306-4	-	250	M16 x 2,0	18	U.306-243J3 (set of 3 shear pins)	3T	0,250	632
U.310-170	U.20B1	-	360	M22 x 2,0	24	-	-	0,95	633
U.310-230N	U.20B1	-	360	M22 x 2,0	24	-	-	0,95	634
U.310-250	U.310-250-10	-	400	M22 x 2,0	24	-	-	0,950	633
U.320	U.320-01	U.320-14	500	M30 x 3,0	36	-	-	2,500	637
U.320H	UWG.320H01	-	590	M27 x 3,0	21	-	-	2,255	640
U.330	U.330-02	U.330-14	650	M36 x 3,0	41	-	-	4,700	637
U.330H	UWG.330H01	-	780	M33 x 3,5	24	-	-	4,400	640

* the U.28-1 screw is supplied with the ring and nut.
** the U.51B2 screw is supplied with the ring and nut.
*** the U.306-3 screw is supplied with its extension.



INSPECTION LAMPS





Workshop lamp **671**
Pocket inspection lamp **672**
Head lamp **673**
Pen lights **673**



INSPECTION LAMPS

674







Inspection lamps **674**

Inspection lamps with winder **675**

SELECTION GUIDE





LIGHTING: THE KEY TO SAFE AND ACCURATE WORK

Comfort and efficiency

- It is essential to use light suitable for the application to avoid tired eyes and accidents at work.
- Engineering or maintenance tasks require an illumination of 300 to 500 lux.
- Inspection, finishing and painting tasks require an illumination of 750 to 1,000 lux. The light source must be designed and arranged to avoid uncomfortable glare.

There are a number of lighting technologies to choose from:

TECHNOLOGY	ADVANTAGES	DISADVANTAGES	LIGHTINGPOWER	FACOM OFFER
Incandescent lamps	Low cost	Poor impact resistance. Very high temperature = risk of burns, fire and explosion	200 to 1,000 lux	
Fluorescent and compactfluorescent lamps	Diffuse lighting, low temperature, low consumption	Average impact resistance	300 to 400 lux	777 range
LEDs	Very good impact resistance, low temperature, very low consumption, long operating life.	Cost, concentrated light beam	300 to 1,000 lux	779 range

SAFETY

For your safety, the supply voltage of inspection lamps used for working inside the body of a vehicle must not exceed 50 V.



24 V IP 55 INSPECTION LAMP



INSPECTION LAMP IP 64

IP rating: What does it mean ?

(e.g. for a 4.5 V IP 64 inspection lamp)

1st figure (e.g. IP 64): Protection of live components against ingress of solid objects		2nd figure (e.g. IP 64): Protection of live components against ingress of liquid	
0	No protection	0	No protection
1	Solid objects greater than 50 mm diameter cannot penetrate	1	Vertically falling drops of water
2	Solid objects greater than 12 mm diameter cannot penetrate	2	Water dripping on the enclosure tilted at 15° from its normal position
3	A steel wire of 2.5 mm diameter cannot penetrate	3	Spraying water at an angle of up to 60° from the vertical
4	A steel wire of 1 mm diameter cannot penetrate	4	Splashing water against the enclosure from any direction
5	Invisible amount of talcum powder deposited when tested in a dust chamber	5	Water projected in jets (6.3 mm) against the enclosure from any direction
6	No talcum powder deposited when tested in a dust chamber	6	Water projected in jets (12.5 mm) against the enclosure from any direction
		7	Immersion to 1 m
		8	Submersible equipment according to manufacturer's specifications

779.CL2 CORDLESS LED INSPECTION LAMP

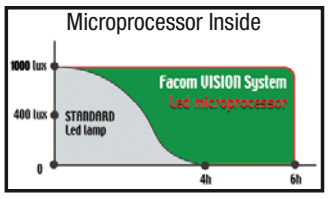
Sturdy
- High impact-resistant reinforced casing. Withstands crushing by vehicle (IK09) and fall.
- Sealed to water splashes (IP64).
- Resistant to workshop solvents and regular chemical agents.

Long service life
- 6 hours operation after 1h30 charging.
- Low battery indicated by flashing light.

Long-lasting power and constant brightness
- Smart brightness and charge management: constant 1000 LUX brightness even when batteries discharge; regulated charge for long service life of Ni-MH batteries.
- High-performance white LED technology for powerful and directive 1000 LUX brightness at 0.5 m (torch effect).

Practical and safe
- Supplied with charger and 2 m long lead.
- Click-stopped hook for hanging and angling the lamp.
- Does not heat up in operation, maximum 40° after 3 hours of use.







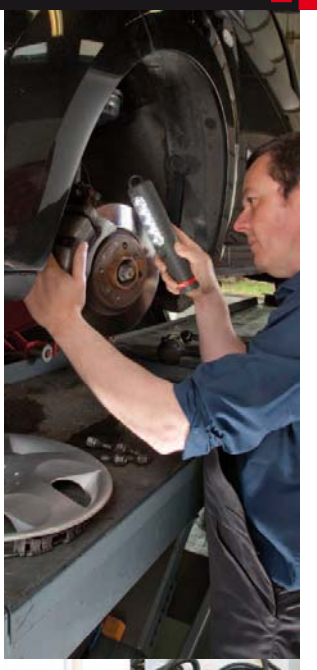
Heavy- duty



Long service life



Durable power





779.CL2 Cordless LED inspection lamp



- Brightness and charge managed by microchip:
- Guarantees constant brightness of 800 lux during 6 hours operation.
- Ensures proper longevity of NI MH batteries by means of regulated charging.
- 14 high performance white LEDs.
- Brightness: 1000 lux at 0.5m.
- Reinforced casing structure for high impact resistance.
- No temperature elevation during operation.
- End of autonomy indicated by flashing.
- Operator customization and identification device.
- Orientation and storage notched hook.
- Charger fastening: wall-mounted or on work station.
- Delivered with charger and 2 m cable.
- Sealing rating: IP 64.
- Strength rating: IK 09.
- Mains supply: 100-240 V.
- Charging time: 2h30 for 6h autonomy.
- Supply unit with 2-pole European plug.
- Lamp dimensions: 263 x 50 x 50 mm.

Weight: 480 g.

779.PC "POCKET" LED LIGHT

HANDS FREE LIGHTING

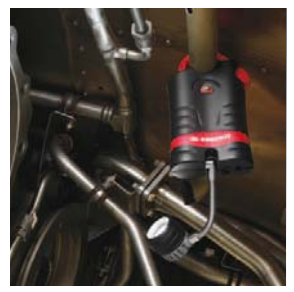


Quick and easy to attach

To illuminate a work area, one hand is often needed to hold the lamp. The FVS Pocket leaves both hands free as it incorporates a range of options for attachment and light direction.

- Innovating clamp hook.
- Removable magnet.
- Flexible to turn it in all planes.
- Compact shape for easy positioning.





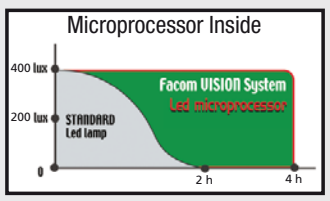


Long autonomous operation

FVS Pocket is a genuinely professional lamp, no need to change the batteries. Equipped with a rechargeable LI-ION battery, it provides 4 hours of continuous operation and recharges in only 2 1/2 hours.

Professional quality

Designed to the same specifications as the 779.CL2, it provides 4 hours of constant illumination and is very resistant to impact, workshop solvents and water (IP.55: see table on page 1055).



779.PC Facom Vision System FVS POCKET



- Wireless pocket lamp supplied by Lithium-ion rechargeable battery.
- Autonomy: 4h fast charge: 2h30.
- Microchip-controlled charging and lighting.
- Lighting level constant throughout the operating time.
- High power 1W LED.
- 2 levels of power:

- Economic mode 300 lux at 50 cm.
- "Booster" mode 400 lux at 50 cm.

- Impact-resistant casing.
- Sealing rating: IP.55.
- Supplied with: 230V charger, supply cable, user manual and wrist-strap.
- Dimensions: 130 x 65 x 30 mm.

Weight: 210 g.

779.FRT LED headlamp





- With 4 bright LEDs.
- Washable removable strap.
- 2 levels of lighting power to adapt power and operating time: normal and booster (50 and 100%).
- Orientable 180°.
- With fastening clip for hard hat or belt 20 x 3 mm.
- Autonomy: about 50 hours in normal position, 20 hours in booster position.
- Supplied on card with 3 AA alkaline batteries and interchangeable strap 779.FRT01.

Weight: 91 g.

779.PEN LED pen light







- Wide and powerful lighting inspection lamp with 6 LEDs.
- 36 lumens .
- 100 Lux at 1 meter.
- 8-hour continuous operating time.
- Splash-proof IP54.
- Clip to fasten the lamp to a pocket or other holder.
- Convenient magnetic bracket.
- Additional magnetic bracket strapped with Velcro.
- Runs on 3 AAA batteries supplied.
- Dimensions L = 156mm x W 16 mm.

Weight: 65g.

836 Pen light



- Body in aluminum tube.
- LED light.
- Length: 137 mm.
- Tube diameter: 14 mm.
- Runs on two AAA LR03 (1.5 volt) batteries not supplied.
- Supplied with wrist strap.

Weight: 29 g.

LED pen light

▣ 777B.24 24 Volt fluorescent inspection lamp





NF EN 60598-2-8, EN 60598-2-8, DIN EN 60598-2-8

- IP.55 Insulation Sealing level (dust, liquids).
- Low consumption: 11 Watt.
- Does not heat.
- Fluorescent tube 11 Watts: impact resistant.
- Durability, lighting power.
- Anti-glare cover.
- 300 Lux at 50 cm: lights without glare.
- Supplied with long cable and plug.
- Rubber cable H05 RN-F: resistant to hydrocarbons.
- No transformer.
- No cable winder.
- 24 volts.
- Cable length 10 m.

Weight: 1.2 kg.

- Spare fluorescent tube: 777A.230-24-02.
- Spare protective glass: 777A.03.

▣ 777B.230 230 Volt fluorescent inspection lamp





NF EN 60598-2-8, EN 60598-2-8, DIN EN 60598-2-8

- IP.55 Insulation Sealing level (dust, liquids).
- Low consumption: 11 Watt.
- Does not heat.
- Fluorescent tube 11 Watts: impact resistant.
- Durability, lighting power.
- Anti-glare cover.
- 300 Lux at 50 cm: lights without glare.
- Supplied with long cable and plug.
- Rubber cable H05 RN-F: resistant to hydrocarbons.
- No transformer.
- No cable winder.
- 230 volts.
- Cable length 10 m.

Weight: 1.2 kg.

- Spare fluorescent tube: 777A.230EN02.
- Spare protective glass: 777A.03.

777A.24EN Inspection lamp 24 Volts with winder



- IP.55 Insulation Sealing level (dust, liquids).
- Low consumption: 11 Watt.
- Does not heat.
- Fluorescent tube 11 Watts: impact resistant.
- Durability, lighting power.
- Anti-glare cover.
- 300 Lux at 50 cm: lights without glare.
- Supplied with long cable and plug.
- Rubber cable H05 RN-F: resistant to hydrocarbons.
- No transformer.
- 24 volts.
- Cable length 14.5 m.
- Winder: time gain for cable storage.
- Supplied with orientable wall fastener.

Weight: 4.3 kg.

- Spare fluorescent tube: 777A.230-24-02.
- Spare protective glass: 777A.03.

777A.230EN Inspection lamp 230 Volts with winder



- IP.55 Insulation Sealing level (dust, liquids).
- Low consumption: 11 Watt.
- Does not heat.
- Fluorescent tube 11 Watts: impact resistant.
- Durability, lighting power.
- Anti-glare cover.
- 300 Lux at 50 cm: lights without glare.
- Supplied with long cable and plug.
- Rubber cable H05 RN-F: resistant to hydrocarbons.
- No transformer.
- 230 volts.
- Cable length 10 m.
- Winder: time gain for cable storage.
- Supplied with orientable wall fastener.

Weight: 4.8 kg.

- Spare fluorescent tube: 777A.230EN02.
- Spare protective glass: 777A.03.



AIR TOOLS

678



Impact wrenches **682**
Rachets **688**
Screwdrivers **691**



Drills **692**
Sanders **693**
Belt sanders **696**
Grinders **698**
Angle grinders - cutters **700**
Polisher **701**





Chisel hammer 702
Saws 702
Other tools and accessories 703
Air line accessory 707

POWER TOOLS

711



Glue gun 711
Heat gun 711
Cordless impact wrench 712

IMPACT WRENCHES

A COMPREHENSIVE RANGE SUITED TO YOUR NEEDS





◪ 3/8"	◪ 1/2"	USE	◪ 3/4"	◪ 1"



NJ.3000F



NS.3000F

INTENSIVE USE

5



NK.3000F



NM.1000F2

4



NJ.2000F2



NS.1800F2
NS.1500F2



NK.2000F2

3



NJ.1300F2

2



NK.1000F2



NM.1010LF2



NJ.1400F



NS.1010F2

1

OCCASIONAL USE

IMPACT WRENCH

THE BEST UNFASTENING TOOL

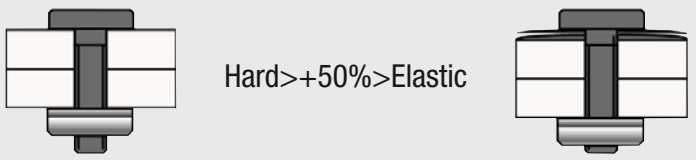
IMPACT WRENCHES ARE TOOLS DESIGNED TO UNSCREW WITH A HAMMERING SYSTEM

- Benefit: unfastens up to 3000 Nm without reaction torque.
- No existing standard defines the checking process for this type of tool, so we defined our own checking system, and applied it to the entire range.



POWER OF AN IMPACT WRENCH CHANGES ACCORDING TO:

- **Type of assembly:** power can drop up to 50% on a flexible assembly.



- **Air line:** pressure, air flow and diameter of the supply cable can lead to a 50% power drop.

Exhaust:
Tool power tool speed



- Air pressure: 6.2 Bar Min => Rotation speed
- Inner diameter of the connector (e.g. 6.5 mm for ½" tools)
- Air flow: Exceeds tool flow=> Tool power

- **Accessories:** extensions, universal joints and other accessories can lead to a power drop exceeding 50%.



IMPACT SYSTEMS

TWIN HAMMER:
- Powerful impact system.
- System 4 times more reliable than the pin clutch.



JUMBO:
- Powerful impact system.
- Vibration higher than pin clutch or double impact systems.
- Impact system twice as reliable as the pin clutch.



DOUBLE HAMMER:
- Powerful impact system. System 2.5 times more reliable than the pin clutch.



SYSTEMS NOT CHOSEN BY FACOM

SINGLE HAMMER:
- Powerful impact system, but torque delivered by the tool drops with tool wear.
- Vibration higher than pin clutch or double impact systems.
- Impact system 1.5 times more reliable than the pin clutch.



PIN CLUTCH:
- Powerful impact system, but torque delivered by the tool drops considerably with tool wear.
- Impact system used for occasional use.



USE

INTENSIVE USE



OCCASIONAL USE

TITANIUM IMPACT WRENCH

UP TO 30% MORE POWERFUL

1700 NM FOR THE NS.3000F WRENCH!
TWICE AS RELIABLE THAN OTHER IMPACT WRENCHES!

- New ergonomic soft grip.
- The most balanced tool in the market, tool weight centred in the handle axis.
- Titanium structure improving strength while reducing weight.
- 3 screwing power settings and always max torque in unscrewing.
- One-hand forward reverse.
- New trigger with progressive rotation speed.
- Rotating air fitting.
- Rubber bumper protecting the operator and wrench.



NEW MONOBLOC MOTOR

- More powerful.
- Less moving parts, less maintenance.
- 4 air injectors, 6 pallets for better efficiency.



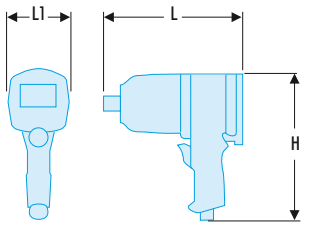
For our complete range of impact wrenches, see p. 678

Impact wrenches

3/8" titanium impact wrench





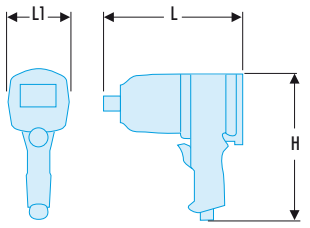


- Structure: titanium.
- Impact system: twin hammer.
- Max torque: 710 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NJ.3000F	152	66	180	1,300

3/8" composite impact wrench



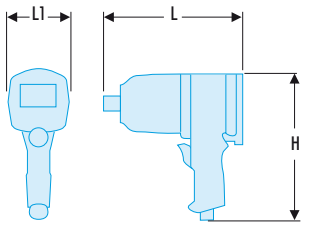


- Structure: composite.
- Impact system: twin hammer.
- Max torque: 290 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NJ.2000F2	157	58	165	1,300

3/8" aluminum impact wrench



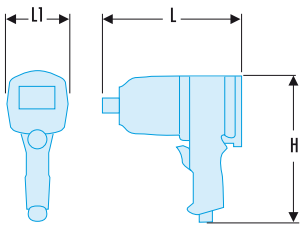


- Structure: aluminum.
- Impact system: single hammer.
- Max torque: 180 N.m.
- Progressive trigger.
- Power setting.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NJ.1300F2	137	49	167	1,200

3/8" impact wrench







- Structure: aluminum.
- Impact system: double hammer.
- Max torque: 67 N.m.
- Progressive trigger.
- Power regulator.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
NJ.1400F	140	40	47	470

3/8" impact wrenches

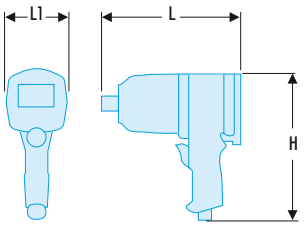
	NJ.3000F	NJ.2000F2	NJ.1300F2	NJ.1400F
Free speed (rpm)	10 500	9 600	11 200	12 000
Maximum torque (Nm)	710	290	180	67
Blows per minute	1 750	1 290	705	1 350
Weight (kg)	1,3	1,3	1,2	0,4
Power/Intensity of use rate*	5	3	2	2
Length (mm)	152	157	137	140
Average air consumption (l/min)	125	120	74	34
Structure	Titanium	Composite	Aluminium	Aluminium
Hose diameter	3/8"	3/8"	3/8"	3/8"
Air inlet	1/4"	1/4"	1/4"	1/4"
Vibration level (m/s²)	3,06	4,3	4	7,6
Noise level dB(A)	93,8	92,7	94,7	87,4

*This ratio is used to help you choose the tool most suited to your needs. The value 5 is used to indicate the tool is the most powerful in its category, and can be used on intensive work stations (such as tire change stations).

OCCASIONAL USE 1 2 3 4 5 INTENSIVE USE

1/2" titanium compact impact wrench





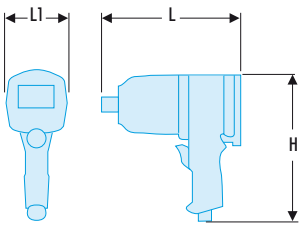


- Structure: titanium.
- Impact system: twin hammer.
- Max torque: 800 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NS.2000F	157	66	180	1,400

1/2" titanium impact wrench



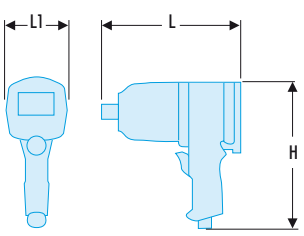


- Structure: titanium.
- Impact system: twin hammer.
- Max torque: 1,700 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NS.3000F	179	78	181	2,100

1/2" composite compact impact wrench



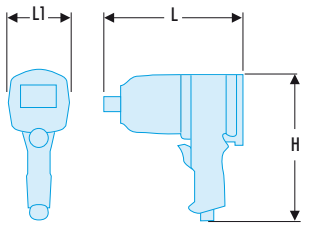


- Structure: composite.
- Impact system: twin hammer.
- Max torque: 505 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NS.1500F2	157	58	165	1,300

1/2" composite impact wrench



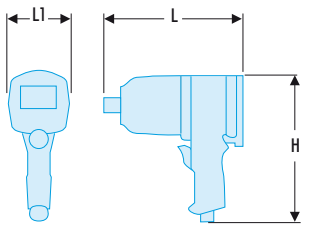


- Structure: composite.
- Impact system: double hammer.
- Maximum torque: 1080 Nm.
- Soft control trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NS.1800F2	180	69	183	2,200

1/2" aluminum impact wrench





- Structure: aluminum.
- Impact system: twin hammer.
- Max torque: 1,015 N.m.
- Progressive trigger.
- Power setting.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NS.1010F2	187	69	188	2,600

1/2" impact wrenches

	NS.3000F	NS.1800F2	NS.1010F2	Compact NS.2000F	Compact NS.1500F2
Free speed (rpm)	7 225	7 700	7 100	10 500	9 650
Maximum torque (Nm)	1700	1080	1015	800	505
Blows per minute	1 160	1 060	950	1 750	1 250
Weight (kg)	2,1	2,2	2,6	1,4	1,3
Power/Intensity of use rate*	5	3	2	4	3
Length (mm)	179	180	187	157	157
Average air consumption (l/min)	144	143	120	125	120
Structure	Titanium	Composite	Aluminium	Titanium	Composite
Hose diameter	3/8"	3/8"	3/8"	3/8"	3/8"
Air inlet	1/4"	1/4"	1/4"	1/4"	1/4"
Vibration level (m/s²)	4,91	10,2	8,4	3,06	8,2
Noise level dB(A)	94,2	96	93	93,8	92,9

*This ratio is used to help you choose the tool most suited to your needs. The value 5 is used to indicate the tool is the most powerful in its category, and can be used on intensive work stations (such as tire change stations).

OCCASIONAL USE 1 2 3 4 5 **INTENSIVE USE**

3/4" titanium impact wrench



- Structure: titanium.
- Impact system: twin hammer.
- Max torque: 2,115 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NK.3000F	227	97	227	3,800

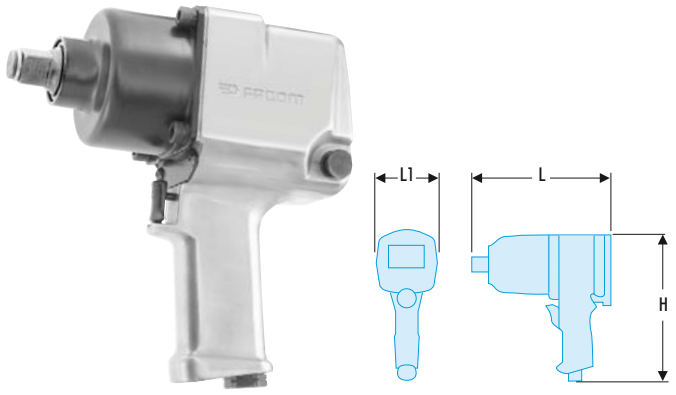
3/4" composite impact wrench



- Structure: composite.
- Impact system: twin hammer.
- Max torque: 1,700 N.m.
- Progressive trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NK.2000F2	221	86	213	3,900

3/4" aluminum impact wrench





- Structure: aluminum.
- Impact system: twin hammer.
- Max torque: 2,400 N.m.
- Progressive trigger.
- Power setting.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NK.1000F2	222	93	233	5,600

3/4" impact wrenches

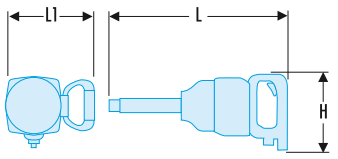
	NK.3000F	NK.2000F2	NK.1000F2
Free speed (rpm)	5 300	6 360	5 700
Maximum torque (Nm)	2 115	1 700	2 400
Number of pulses	950	850	790
Weight (kg)	3,8	3,9	5,6
Power/Intensity of use rate*	5	3	4
Length (mm)	227	221	222
Average air consumption (l/min)	200	204	193
Structure	Titanium	Composite	Aluminium
Hose diameter	1/2"	1/2"	1/2"
Air inlet	3/8"	3/8"	3/8"
Vibration level (m/s^2)	5,06	10,7	9,1
Noise level dB(A)	97,8	99,1	98,4

*This ratio is used to help you choose the tool most suited to your needs. The value 5 is used to indicate the tool is the most powerful in its category, and can be used on intensive work stations (such as tire change stations).

OCCASIONAL USE 1 2 3 4 5 **INTENSIVE USE**

Long-reach 1" impact wrench



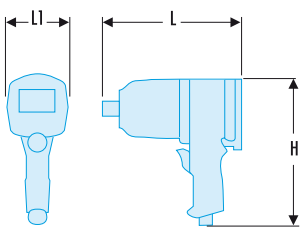


- Structure: aluminum.
- Impact system: twin hammer.
- Max torque: 4068 N.m.
- Progressive trigger.
- Power setting.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NM.1010LF2	523	202	172	11

1" impact wrench





- Structure: aluminum.
- Impact system: twin hammer.
- Max torque: 4068 N.m.
- Progressive trigger.
- Power setting.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NM.1000F2	300	205	290	10,300

1" impact wrenches

	NM.1010LF2	NM.1000F2
Free speed (rpm)	5 700	4 400
Maximum torque (Nm)	4 068	4 068
Blows per minute	720	720
Weight (kg)	11	10,3
Power/Intensity of use rate*	3	3
Length (mm)	523	300
Average air consumption (l/min)	243	243
Structure	Aluminium	Aluminium
Hose diameter	3/4"	3/4"
Tool fitting	1/2"	1/2"
Vibration level (m/s^2)	15,2	16,7
Noise level dB(A)	102	103,4

*This ratio is used to help you choose the tool most suited to your needs. The value 5 is used to indicate the tool is the most powerful in its category, and can be used on intensive work stations (such as tire change stations).

OCCASIONAL USE 1 2 3 4 5 INTENSIVE USE

RATCHET

The ultimate tool to increase your productivity !

- Upgrade with a torque range from 10 to 136 Nm and rotation speeds from 240 to 280 rpm, you can increase productivity and improve your working comfort.



- A range of sealed ratchets for a longer ratchet lifetime and protecting the operator from any risk of jamming the gloves in the mechanism.



◪ : 1/4" - 3/8" - 1/2"

- Select “palm control” versions for fastening in confined spaces and the mini or standard version when space allows. The shorter the tool, the higher the reaction torque.

- Reaction torque = force / distance
- 27 Nm = 2.74 Kg at 1 meter distance
- Reaction torque at 135 mm: 2.74 Kg/0.135 = 20.3 Kg
- Reaction torque at 205 mm: 2.74 Kg/0.205 = 13.4 Kg



Ratchets

◪ VR.R127 1/4" palm control ratchet



- Structure: composite.
- Ratchet: closed.
- Length: 135 mm.
- Max torque: 27 N.m.
- Speed: 240 rpm.
- Power setting.

Weight: 0.500 kg.

VR.R227 1/4" mini ratchet



- Structure: composite.
- Ratchet: closed.
- Length: 205 mm.
- Max torque: 27 N.m.
- Speed: 250 rpm.
- Power setting.

Weight: 0.660 kg.

VR.J154 3/8" palm control ratchet



- Structure: composite.
- Ratchet: closed.
- Length: 135 mm.
- Max torque: 54 N.m.
- Speed: 240 rpm.
- Power setting.

Weight: 0.500 kg.

VR.J254 3/8" mini ratchet



- Structure: composite.
- Ratchet: closed.
- Length: 205 mm.
- Max torque: 54 N.m.
- Speed: 270 rpm.
- Power setting.

Weight: 0.660 kg.

VR.J3108 Standard 3/8" ratchet



- Structure: composite.
- Ratchet: closed.
- Length: 260 mm.
- Max torque: 108 N.m.
- Speed: 280 rpm.
- Power setting.

Weight: 1.200 kg.

VR.S3136 Standard 1/2" ratchet



- Structure: composite.
- Ratchet: closed.
- Length: 260 mm.
- Max torque: 136 N.m.
- Speed: 280 rpm.
- Power setting.

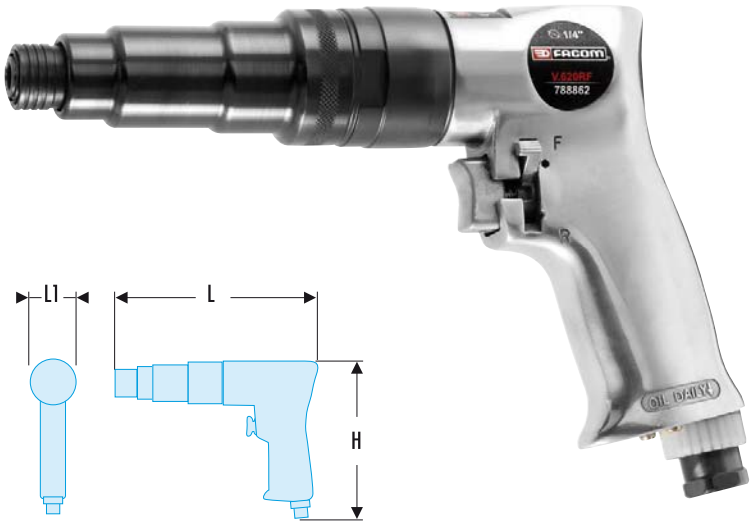
Weight: 1.200 kg.

RATCHETS

	1/4" palm	1/4" mini	3/8" palm	3/8" mini	3/8" std	1/2" HD
	VR.R127	VR.R227	VR.J154	VR.J254	VR.J3108	VR.S3136
Square (□)	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"
Head type	Sealed	Sealed	Sealed	Sealed	Sealed	Sealed
Max torque (Nm)	27	27	54	54	108	136
Free speed (Rpm)	240	250	240	270	280	280
Length	135	205	135	205	260	260
Weight (kg)	0,5	0,6	0,5	0,6	1,2	1,2
Head thickness	29,7	30	29,7	30	51,7	51,7
Air consumption (l/min)	110	80	110	80	115	115
Structure	Composite	Composite	Composite	Composite	Composite	Composite
Hose diameter	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Air inlet	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Vibration level (m/s^2)	3,8	1,8	3,9	3,5	4,6	9,1
Noise level dB(A)	92	91	92	92	99	99

Screwdrivers

Reversible pistol screwdriver

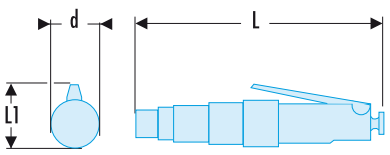


- Free speed: 1800 rpm.
- Maximum working torque: 13 N.m.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Screw size: M4.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.620RF	216	44	163	1,200

Reversible straight screwdriver







- Free speed: 1800 rpm.
- Tightening torque recommended: 13 N.m.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Screw size: M4.

	d [mm]	L [mm]	L1 [mm]	⚖ [kg]
V.610RF	44	270	70	1,100

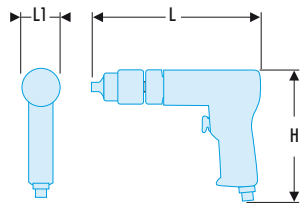
SCREWDRIVER SPECIFICATIONS

	V.620RF	V.610RF
Free speed (rpm)	1 800	1 800
Maximum working torque (N.m)	13	13
Weight (kg)	1,2	1,1
Length (mm)	216	270
Average air consumption (l/min)	110	110
Air inlet thread (")	1/4"	1/4"
Hose inner Ø (mm)	10	10
Working pressure (bar)	6,2	6,2

Drills

V.103MF Drill 10 mm with self-locking chuck



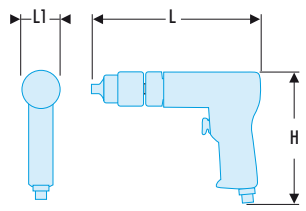


- 10 mm Quick chuck.
- Free speed: 2800 rpm.
- Average air consumption: 124 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Motor power: 0.45 kW.

- Spare chuck: V.103MFMA1.

Drill 13 mm with self-locking chuck





- 13 mm quick chuck.
- Free speed: 1300 rpm.
- Average air consumption: 124 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Motor power: 0.45 kW.
- Supplied with second handle.

- Spare chuck: V.97FMA1.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.97F	280	182	145	1,900

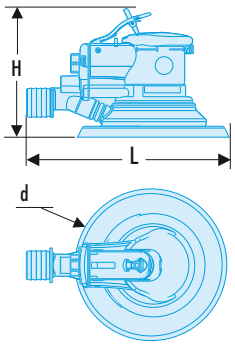
DRILL SPECIFICATIONS

	V.103MF	V.97F
Chuck capacity	10	13
Free speed (rpm)	2800	1300
Motor power (kW)	0,45	0,45
Weight (kg)	1,45	1,9
Length (mm)	234	280
Air consumption (l/min)	124	124
Air inlet thread (")	1/4"	1/4"
Hose inner Ø (mm)	10	10
Working pressure (bar)	6,2	6,2

Sanders

Orbital palm sander 152 mm - 5 mm orbit







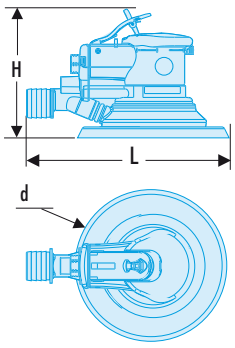
- Rotation speed control system.
- Can connect to a central exhaust unit.
- Speed of rotation: 10,000 rpm.
- Average air consumption: 105 l/mn.
- Air inlet thread: 1/4".
- Pressure: 6.2 bar.
- Orbit: 5 mm.
- Supplied with a 6-hole Velcro pad.

- Spare plate: V.252A1.

	d [mm]	L [mm]	H [mm]	⚖ [g]
V.252F	152	221	115	840

Orbital palm sander 152 m - 2.5 mm orbit





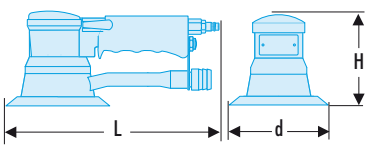
- Special finish sander.
- Plate diameter: 152 mm.
- Plate orbit: 2.5 mm.
- Can connect to a central exhaust unit.
- Rotation speed 10,000 rpm.
- Rotation speed control system.
- Average air consumption: 105 l/min.
- Air inlet thread: 1/4"
- Working pressure: 6.2 bar.
- Supplied with 6-hole velcro plate.

	d [mm]	L [mm]	H [mm]	⚖ [g]
V.256F	150	221	152	840

"Two-hand" orbital sander 152 mm - 10 mm orbit







- Plate diameter: 152 mm.
- Disc orbit: 10 mm.
- Can connect to a central exhaust unit.
- Variable speed.
- Rotating air exhaust.
- Free speed: 9000 rpm.
- Average air consumption: 115 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Supplied with 6-hole velcro plate.
- Spare pad V.258A1.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.258F	272	122	215	2,250

"Two-hand" orbital sander 152 mm - 5 mm orbit



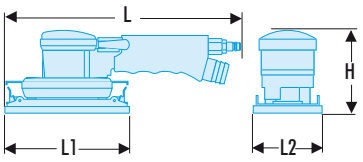


- Plate diameter: 152 mm.
- Disc orbit: 5 mm.
- Rotation speed control system.
- Can connect to a central exhaust unit.
- Rotation speed: 9000 rpm.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Average air consumption: 115 l/min.
- Supplied with 6-hole velcro plate.
- Spare pad V.254A1.

	d [mm]	L [mm]	H [mm]	⚖ [kg]
V.254F	152	275	110	1,300

Jitterbug sander - 95 x 170 mm - 8 holes





- Easy to handle, lightweight roughing sander.
- Clips for standard abrasives.
- Compatible with all diameters 29 mm dust exhaust.
- Variable speed control from 5000 to 8500 rpm.
- Air connection (female thread): 1/4".
- Recommended air hose (int. diam.): 8 mm.
- Recommended fitting: thread-internal diameter 1/4" - 6 mm.
- Pressure: 6.2 bar.
- Speed of rotation: 8500 rpm.
- Average air consumption: 115 l/min.
- Noise level: 74 dB(A).
- Vibration level: 5.4 m/s³.
- Eccentric offset: 5 mm.
- Finish: high-quality chrome-plated aluminium motor, comfortable thermally-insulated body.
- Supplied with pad and 8-hole abrasive perforator.

- 8 hole pad V.260A1.
- 95 x 170 mm pad V.260SAV50B.

	L [mm]	L1 [mm]	L2 [mm]	H [mm]	⚖ [kg]
V.260F	288	170	95	120	2,100

VIBRATING SANDER SPECIFICATIONS

	V.256F	V.252F	V.254F	V.258F	V.260F
Orbit (mm)	2,5	5	5	10	
Pad dimension (mm)	150	152	152	150	95 x 170
Free speed (rpm)	10000	10000	9000	9000	8500
Weight (kg)	0,84	0,84	1,3	2,25	2,1
Length (mm)	221	221	275	272	288
Average air consumption (l/min)	105	105	115	115	115
Air inlet thread (")	1/4"	1/4"	1/4"	1/4"	1/4"
Hose inner Ø (mm)	10	10	10	10	10
Working pressure (bar)	6,2	6,2	6,2	6,2	6,2

MATERIAL REMOVAL KIT

INCREDIBLY PRODUCTIVE, INSTANTLY REMOVES STICKERS, RUST, PAINT ETC

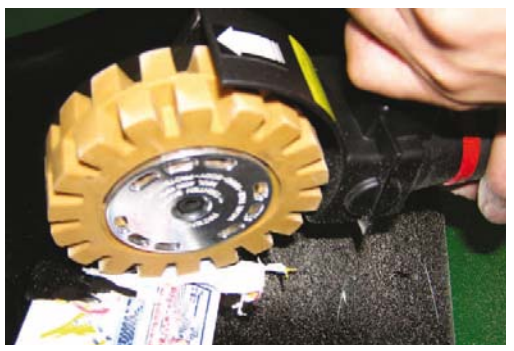
- Speed of rotation: 3500 rpm
- Weight: 1.2 Kg
- Noise level: 81 dB
- Supplied in a box with:
  - 1 fine brush 11 mm
  - 1 fine brush 22 mm
  - 1 hard brush 11 mm
  - 1 hard brush 22 mm
  - 1 fine composite brush
  - 1 hard composite brush
  - 2 adapters for fastening the brushes.

V.500F









V.500FWBF11



V.500FWBF22

V.500FWBC11



V.500FWBC22

V.500FA11



V.500FA22

V.500FRE



V.500FWBPRE

V.500F Multi-function brush



- Rotation speed: 3500 rpm.
- Sound level: 81 db.
- Supplied in a case with:

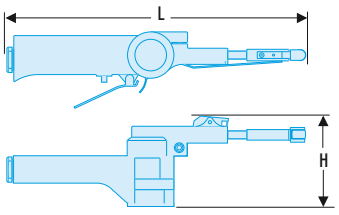
- V.500FWBF11: 1 thin brush 11 mm.
- V.500FWBF22: 1 thin brush 22 mm.
- V.500FWBC11: 1 Hard brush 11 mm.
- V.500FWBC22: 1 hard brush 22 mm.
- V.500FRE: 1 thin composite brush.
- V.500FWBPRE: 1 hard composite brush.
- V.500FA11 / V.500FA22: 2 adaptor for brush fastening.

Weight: 1.200 kg.

Belt sanders

Belt sander - 10 x 330 mm





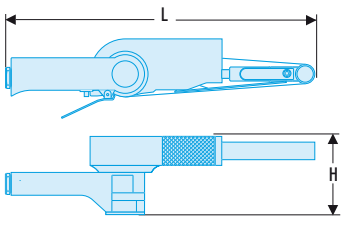
- Surface roughing and cleaning.
- Multi-position adjustable handle.
- Quick-change belt system.
- Belt size: 10 x 330 mm.
- Air connection (female thread): 1/4".
- Recommended air hose (int. diam.): 8 mm.
- Recommended fitting: thread-internal diameter 1/4" - 6 mm.
- Pressure: 6.2 bar.
- Speed of rotation: 16,000 rpm.
- Average air consumption: 110 l/min.
- Noise level: 86.1 dB(A).
- Vibration level: below 2.5 m/s³.
- Supplied with 3 belts (one ready-mounted): 2 x 120 grit, 1 x 80 grit.

- 80 grit belt 10 x 330 V.781A1 (minimum ordering quantity: 10).
- 120 grit belt 10 x 330 V.402A2 (minimum ordering quantity: 10).

	L [mm]	H [mm]	⚖ [g]
V.402F	283	83	800

High capacity belt sander - 20 x 520 mm





- Adjustable handle.
- Fast belt change system.
- Belt size 20 x 520 mm.
- Supplied with belts.
- Rotation speed: 16000 rpm.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.

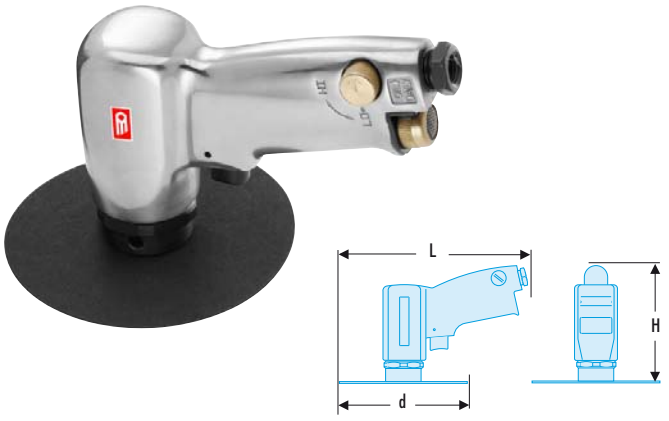
- Belt 20 x 500 mm 80 grit: V.403A1 (minimum ordering quantity: 10).
- Belt 20 x 500 mm 120 grit: V.403A2 (minimum ordering quantity: 10).

	L [mm]	H [mm]	⚖ [kg]
V.403F	350	93	1,150

BELT SANDER SPECIFICATIONS

	V.402F	V.403F
Free speed (rpm)	16000	16000
Weight (kg)	0,8	1,1
Length (mm)	283	350
Average air consumption (l/min)	110	110
Air inlet thread (")	1/4"	1/4"
Hose inner Ø (mm)	10	10
Working pressure (bar)	6,2	6,2

Pistol-grip 127 mm rotary disc sander



- Speed regulator.
- Rotation speed: 16,000 rpm.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Average air consumption: 120 l/min.

- Set of 2 pad 76 and 127 mm: V.401F1.

	d [mm]	L [mm]	H [mm]	⚖ [kg]
V.401F	112	198	126	1,200

Vertical rotary disc sander diam. 178 mm



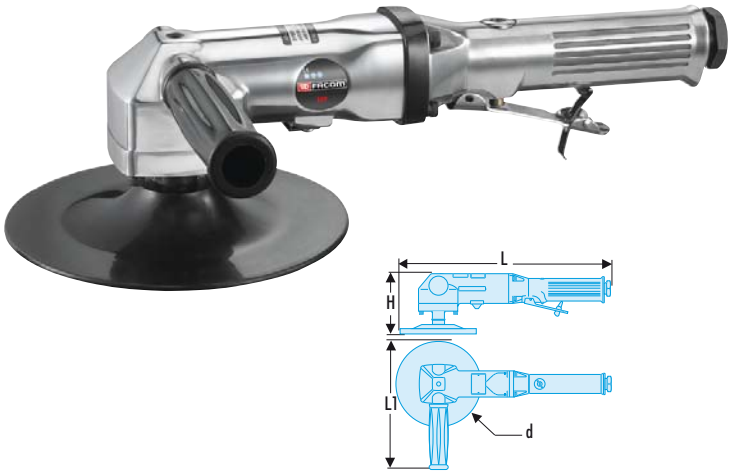


- Two-hand grip.
- Exhaust in the handle.
- Rotation speed: 4,200 rpm.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Average air consumption: 130 l/min.

- Pad 178 mm: V.410FA1.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.410F	260	250	190	2,600

Angle sander diameter 178 mm



- Speed of rotation: 4500 rpm.
- Speed control.
- Average air consumption: 110 l/min.
- Air connection (female thread): 1/4".
- Pressure: 6.2 bar.
- Supplied with handle and one 178 mm dia. fibre pad.

- Pad: 178 mm. V.411FA1.

	d [mm]	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.411F	178	373	229	101	2,250

CUTTER SPECIFICATIONS

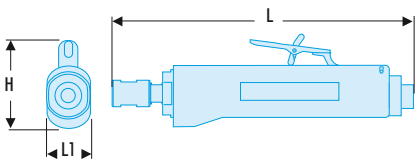
	V.401F	V.410F	V.411F
Pad dimension (mm)	127	178	175
Free speed (rpm)	16000	4200	4500
Weight (kg)	1,2	2,6	2,25
Length (mm)	198	260	373
Average air consumption (l/min)	120	130	110
Air inlet thread (")	1/4"	1/4"	1/4"
Hose inner Ø (mm)	10	10	10
Working pressure (bar)	6,2	6,2	6,2

Grinders

Straight die grinder - 6 mm collet front exhaust





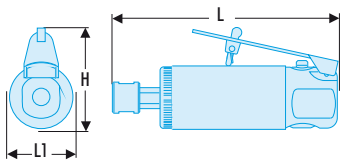


- Front exhaust.
- Inside hose 10 mm.
- Rotation speed: 20,000 rpm.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Average air consumption: 180 l/min.
- Power: 0.75 kW.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.445F	207	43	80	900

Straight die grinder - 6 mm collet





- Rotation speed: 20,000 rpm.
- Speed regulator.
- Front exhaust.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Average air consumption: 113 l/min.
- Power: 0.3 kW.

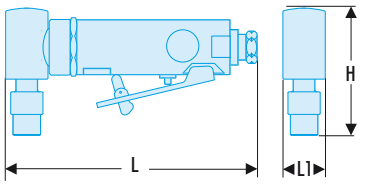
	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.345F	142	40	62	500

GRINDER SPECIFICATIONS

	V.445F	V.345F	V.347F
Free speed (rpm)	20000	20000	18000
Collet or shank diameter (mm)	6	6	6
Weight (kg)	0,9	0,6	0,7
Length (mm)	207	142	160
Average air consumption (l/min)	180	113	110
Air inlet thread (")	1/4"	1/4"	1/4"
Hose inner Ø (mm)	10	10	10
Working pressure (bar)	6,2	6,2	6,2

Angle die grinder - 6 mm collet





- Angle grinder for grinding wheel with shank.
- For cutting and cleaning.
- Compact motor with sturdy blades.
- Compact angled head for difficult-to-reach places.
- Exhaust air duct with integral air supply pipe.
- Air connection: female thread 1/4".
- Recommended air hose: int. diam. 8 mm.
- Recommended fitting: thread-internal diameter 1/4" - 6 mm.
- Pressure: 6.2 bar.
- Speed of rotation: 18,000 rpm.
- Average air consumption: 110 l/min.
- Noise level: 77.3 dB(A).
- Vibration level: below 2.5 m/s³.
- Power: 0.25 kW.
- Supplied with 6 mm pliers + 2 open end wrenches.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.347F	160	27	73	700

VM - Grinders on stand 6 mm



VM.600



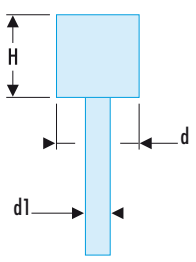
VM.604



VM.610



VM.612



- Definition and shapes as per ISO 293333.

	Model Size [in]	d [mm]	d1 [mm]	H [mm]	Maximum RPM [mm]
VM.600	A.4	30	6	32	17000
VM.604	A.11	28	6	45	18000
VM.606	A.12	20	6	30	30000
VM.610	A.25	-	6	25	25000
VM.612	A.26	-	6	17	54000
VM.624	W.206	32	6	21	30000

Angle grinders

Angle grinder - cutter diam. 100 mm



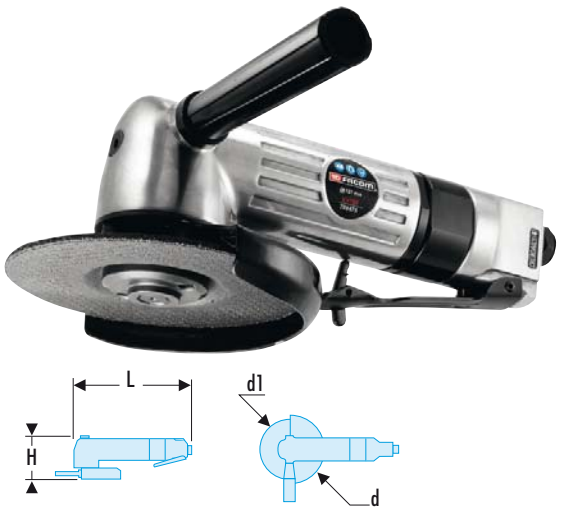


- Lateral handle.
- Rotation speed: 12,000 rpm.
- Working pressure: 6.2 bar.
- Average air consumption: 125 l/min.
- Air inlet thread: 1/4".
- Power: 0.8 Kw.
- Threading of the 3/8" shaft.

- Grinder diameter 100 mm: V.460A1.

	d [mm]	d1 [mm]	L [mm]	H [mm]	⚖ [kg]
V.462F	120	100	220	85	1,700

Angle grinder - cutter diam. 125 mm





- Lateral handle.
- Rotation speed: 12,000 rpm.
- Working pressure: 6.2 bar.
- Average air consumption: 120 l/min.
- Air inlet thread: 1/4".
- Power: 0.8 Kw.
- Threading of the 3/8" shaft.

- Fettling wheel 125 mm: V.471A1.
- Cutting grinder 125 mm: V.471A2.

	d [mm]	d1 [mm]	L [mm]	H [mm]	⚖ [kg]
V.472F	138	125	220	85	1,860

Angle grinder - cutter diam. 125 mm composite





- Motor 1 HP for heavy work.
- Rear exhaust in the handle.
- Free speed: 11,000 rpm.
- Clamp or shaft diameter: M14 x 2.
- Average air consumption: 113 l/min.
- Air inlet thread: 1/4".
- Hose inner diameter: 10 mm.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.582F	230	130	110	1,960

Vertical grinder - cutter diam. 180 mm

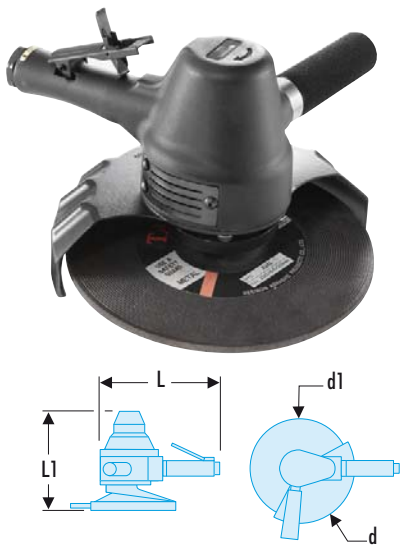


- Built-in protective guard.
- Speed/power regulator.
- Free speed: 6000 rpm.
- Motor power 0.9 kW.
- Grinder centre distance: 23 mm.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/2".
- Working pressure: 6.2 bar.

- Fettling wheel 180 mm: V.480A1.
- Cutting grinder 180 mm: V.480A2.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.482F	204	180	279	178	205	5,000

Vertical grinder - cutter diam. 230 mm



- Built-in protective guard.
- Speed/power regulator.
- Free speed: 6000 rpm.
- Motor power 0.9 kW.
- Grinder centre distance: 23 mm.
- Average air consumption: 120 l/min.
- Air inlet thread: 1/2".
- Working pressure: 6.2 bars.

- Fettling wheel 230 mm: V.490A1.
- Cutting grinder 230 mm: V.490A2.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [kg]
V.492F	254	230	304	178	5,400

GRINDER/CUTTER SPECIFICATIONS

	V.462F	V.472F	V.582F	V.482F	V.492F
Free speed (rpm)	12000	12000	11000	6000	6000
Diameter	100	125	125	180	230
Weight (kg)	1,7	1,9	2	5	5,4
Length (mm)	220	220	230	279	304
Average air consumption (l/min)	125	125	180	120	120
Air inlet thread (")	1/4"	1/4"	1/4"	1/2"	1/2"
Hose inner Ø (mm)	10	10	10	13	13
Working pressure (bar)	6,2	6,2	6,2	6,2	6,2

Angle polisher

Angle polisher diam. 178 mm



- Speed regulator.
- Supplied with 1 velcro plate, 1 foam buffing plate, 1 wool buffing plate.
- Free speed: 2500 rpm.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.

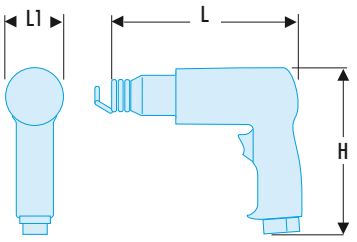
- Pad 178 mm: V.902FA1.
- Polishing cap 195 mm: V.902FA2.
- Foam plate 160 mm: V.902FA3.

	d [mm]	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.902F	178	373	101	229	2,300

Chisel hammer

Power chisel with hexagonal shank





- Built-in power regulator.
- Impact rate 3,000 min.
- Working pressure: 6.2 bars.
- Average air consumption: 90 l/min.
- Air inlet thread: 1/4".
- Power: 0.8 kW.
- Piston stroke: 67 mm.

- Straight chisel: V.320HA1.
- Punch (hexagonal shank): V.320HA2.
- Weld point cutter (hexagonal shank): V.320HA3.
- Sheet metal cutter (hexagonal shank): V.320HA4.
- Double-edge sheet-metal cutter (hexagonal shank): V.320HA5.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.320FH	171	50	160	1,580

V.321AH Chisel hammer set



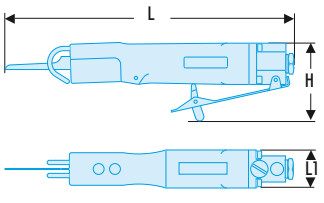
- Kit includes
- V.320FH: 1 power chisel.
- 1 sheet-metal cutter.
- 1 double edge sheet-metal cutter.
- 1 weld point cutter.
- 1 straight chisel.
- 1 punch.

Weight: 6.300 kg.

Saws

Sabre saw





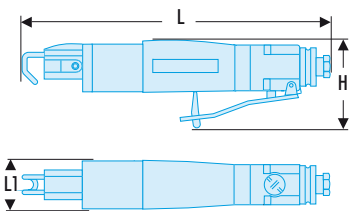
- Seamless straight and curved cutting.
- Suitable for flat and convex surfaces.
- Adjustable blade guide.
- Strokes per minute: 10,000.
- Average air consumption: 32 l/min.
- Air inlet thread: 1/4".
- Air hose int. diameter: 10 mm.
- Supplied with 3 x 10 teeth/cm blades and blades x 12 teeth/cm blades.

- Set of 6 12 teeth/cm blades: V.770F1.
- Set of 6 10 teeth/cm blades: V.770F2.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.770F	270	36	75	700

Production sabre saw





- Model suited to heavy use.
- Insulating and vibration dampening rubber cover.
- Rear exhaust in the handle.
- Supplied with 3 blades 10 teeth/cm, and 3 blades 12 teeth/cm.
- 5000 oscillations/min.
- Average air consumption: 32 l/min.
- Air inlet thread: 1/4".
- Hose inner diameter: 10 mm.

- Set of 6 blades 12 teeth/cm: V.770F1
- Set of 6 blades 10 teeth/cm: V.770F2

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.775F	880	40	70	960

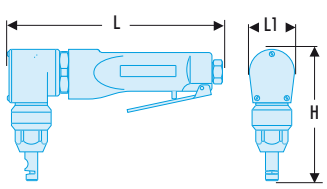
SAW SPECIFICATIONS

	V.770F	V.775F
Strokes/min	10000	5000
Weight (kg)	0,8	0,96
Length (mm)	270	880
Average air consumption (l/min)	32	32
Air inlet thread (")	1/4"	1/4"
Hose inner Ø (mm)	10	10
Working pressure (bar)	6,2	6,2

Other tools and accessories

Nibbler



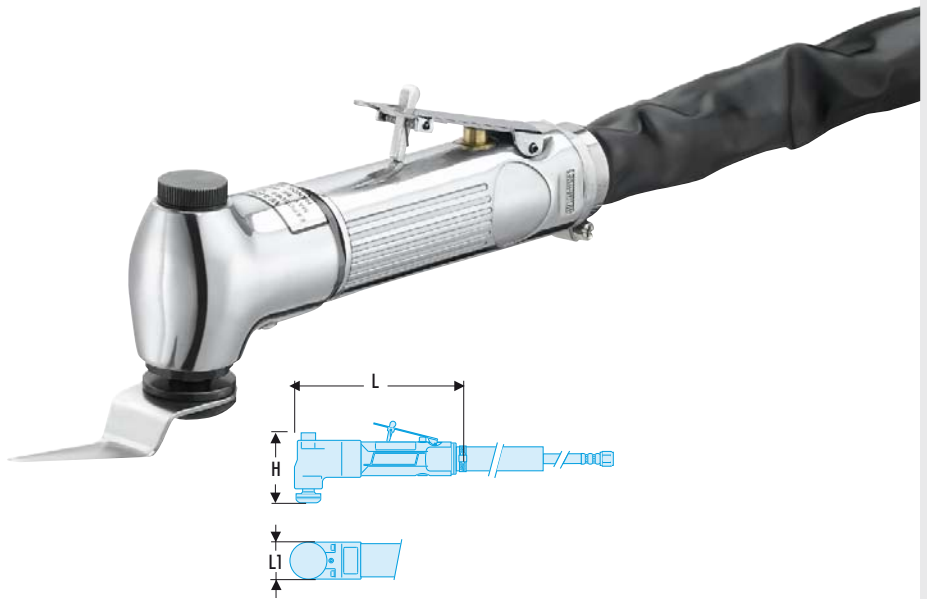


- Lever throttle for precise control and low-speed start.
- Can produce rounded edges up to 6.5 mm radius.
- Max. thickness: 1.2 mm - speed 1.8 m/min.
- Strokes per minute: 4300.
- Average air consumption: 120 l/min.
- Air inlet thread: 1/4".
- Air hose int. diameter: 10 mm.

- Punch set: V.850FKR2.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.850F	179	40,5	118	900

Windshield cutter



- Faster windscreen replacement.
- Safety trigger.
- Air exhaust in handle.
- Air inlet thread: 1/4".
- Pendular motion: 3°.
- Strokes per minute: 2000.
- Average air consumption: 120 l/min.
- Air inlet thread: 10 mm.
- Supplied with instructions, without blade.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
CAD.P300F	209	45	85	1,210

Windshield cutter blades CAD.P300F

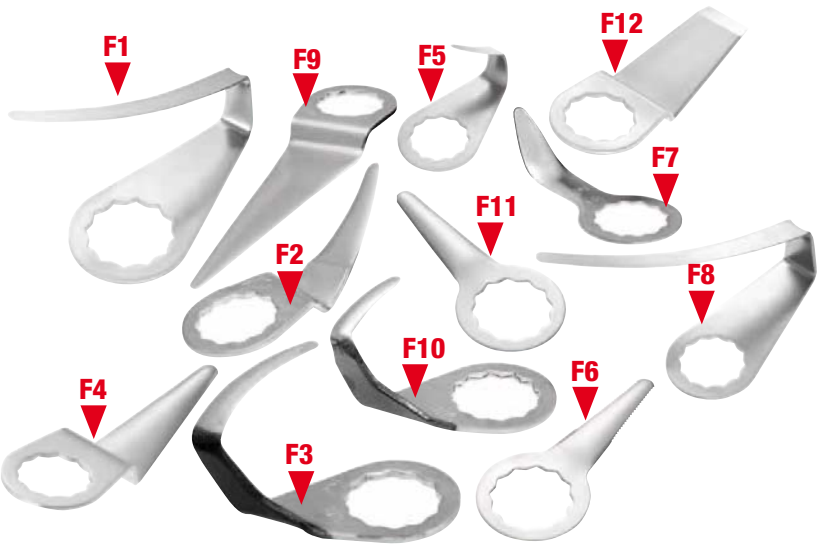


	L [mm]
CAD.P300F1	63
CAD.P300F2	30
CAD.P300F3	36
CAD.P300F4	57
CAD.P300F5	18
CAD.P300F6	35
CAD.P300F7	35
CAD.P300F8	90
CAD.P300F9	90
CAD.P300F10	25
CAD.P300F11	35
CAD.P300F12	45

WINDSCREEN CUTTER

	Description
CAD.P300F1	Hook blade 63 mm
CAD.P300F2	Curved blade 30 mm
CAD.P300F3	Hook blade 36 mm
CAD.P300F4	Long blade 57 mm
CAD.P300F5	Hook blade 18 mm
CAD.P300F6	Straight blade 35 mm
CAD.P300F7	Straight angled blade 35 mm
CAD.P300F8	Hook blade 90 mm
CAD.P300F9	Long flat blade 90 mm
CAD.P300F10	Hook blade 25 mm
CAD.P300F11	Thin straight blade 35 mm
CAD.P300F12	Scraper blade 45 mm

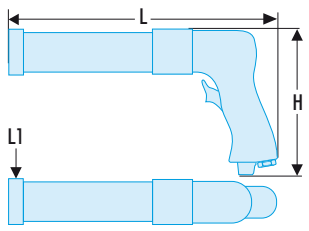
Characteristics	CAD.P300
Oscillations per minute	20000
Weight (kg)	1,21
Length (mm)	208
Air consumption (l/min)	120
Air inlet thread (")	1/4
Hose inner Ø (mm)	10
Working pressure (bar)	6,2





Caulking gun - 50 x 215 mm cartridge

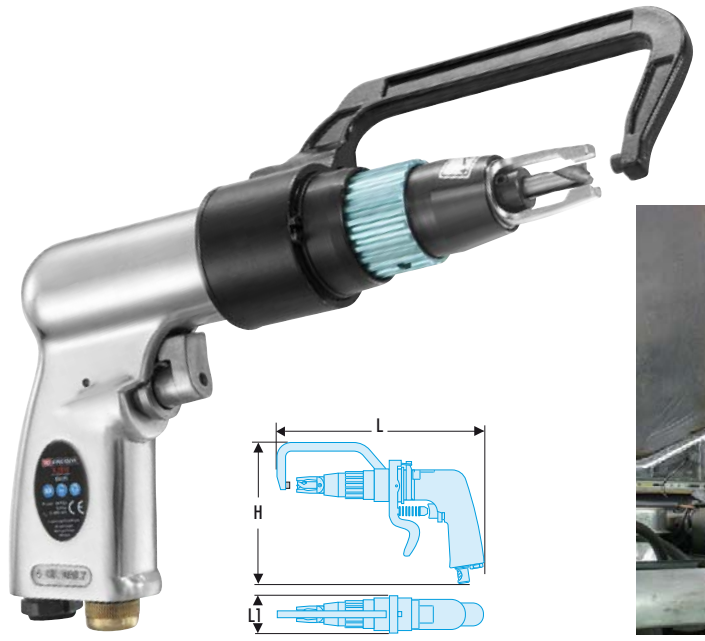




- For applying silicon, mastics, adhesives, etc.
- Variable flow.
- Automatic pressure release halting flow of mastic.
- Air connection: female thread 1/4".
- Recommended air hose: int. diameter 10 mm.
- Recommended fitting: thread-internal diameter 1/4" - 8 mm.
- Pressure: 6.2 bar.
- Noise level: 70 dB(A).
- Vibration level: below 2.5 m/s³.
- Standard cartridge: 50 x 215 mm.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.801F	305	62	168	1,300

Spot weld drill remover





- Fitted with a counterarm to hold the workpiece in position without slipping.
- Speed control.
- Free speed: 1800 rpm.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Milling cutter diameter 8 mm.

- Milling cutter diameter 8 mm: V.781A1 (minimum order quantity: 5).

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.781F	270	53	198	2,100

Pneumatic riveter



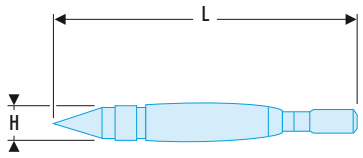


- Light and well balanced machine in aluminum alloy.
- For 3.2, 4 and 4.8 mm rivets.
- Traction strength 9.4 kN.
- Fast nose removal.
- Fast claw holder removal.
- Low activation force.
- 2-finger trigger.
- Orientable air exhaust.
- Tool travel: 18 mm.
- Working pressure: 6.2 bar.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
Y.135F	88	20,6	259	79	304	1,310

Scriber





- Tool used for engraving on hard materials (hardened steel, stone, glass, ceramics) with a tungsten carbide tip, at 600 impacts/second.
- Air control by rotating bush.
- Supplied with:
- Supply hose 1.5 m.
- 1/4" male threaded fitting.
- A standard tip.
- Number of cycles: 36,000 impacts/min.
- Idle air consumption: 30 l/min.
- Air inlet threading: 1/4".
- Working pressure: 5-7 bar.
- Sound level: 78.4 dBA.

- Standard tip: V.820A1.
- Fine tip: V.820A2.

	L [mm]	H [mm]	⚖ [g]
V.820F	160	17	220

Pneumatic needle scaler



- Tool used to clean, remove rust, etch metallic surfaces.
- Provides access to cracks, slots.
- Supplied with needles diameter 2 mm.
- Number of impacts: 4200/min.
- Average air consumption: 90 l/min.
- Air hose inner diameter: 13 mm.
- Air inlet bit threading: 3/8".
- Working pressure recommended: 5-7 bar.

- Set of needles diameter 2 mm: V.352FA1.
- Set of needles diameter 3 mm: V.352A1D3.
- Comb for needle diameter 3 mm: V.352-137D3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.352F	360	75	36	1,530

Blow gun



- Model with air screen to prevent dust return to the operator.
- Supplied with angled nozzle V.999A10.
- Power supply: threading 1/4".
- Hose diameter: 8 mm.
- Consumption: 0.53 m³/min.
- Jet pressure: 2 bar.

- Angled nozzle 100 mm: V.999A10.
- Angled nozzle 200 mm: V.999A20.
- Straight nozzle 300 mm: V.999A30.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.999A	150	40	44	170

N.709 Air hose reel



- Length 15 m.
- Withstands up to 15 bar.
- Suited to high air consumption tools.
- Internal diameter 10 mm.
- Metallic return spring.
- Polyurethane hose.
- 3/8" NPT outlet.

Weight: 7.800 kg.

Network connection

N.580 1/4" filter-regulator-lubricator BSP Gas



- 2-piece set.
- Lubricator regulator filter with wall fastener and pressure gauge.
- Diameter: 40 mm.
- Dimensions: H.172 x L.92 x D.86 mm.

Weight: 0.485 kg.

N.581 3/8" filter-regulator-lubricator BSP Gas



- 2-piece set.
- Lubricator regulator filter with wall fastener and pressure gauge.
- Diameter: 40 mm.
- Dimensions: H.218 x L.123 x D.102 mm.

Weight: 0.880 kg.

N.582 1/2" filter-regulator-lubricator BSP Gas



- 2-piece set.
- Lubricator regulator filter with wall fastener and pressure gauge.
- Diameter: 40 mm.
- Dimensions: H.275 x L.156 x D.118 mm.

Weight: 1.830 kg.

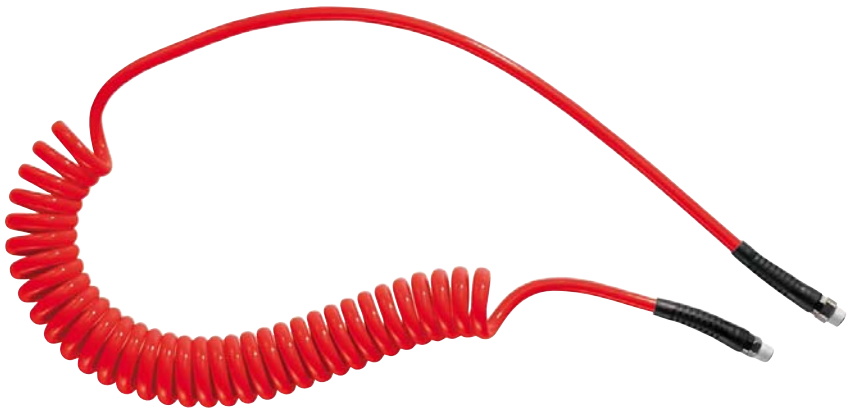
N.600 Set of 4 hose connections



- To connect elements with different pitches.
- Comprising:

- 1 part threading 1/4" x 3/8".
- 1 part threading 3/8" x 3/8".
- 1 part threading 3/8" x 1/2".
- 1 part threading 1/2" x 1/2".

N.644 Polyurethane spiral extension



- Max length: 8 m.
- Hose diameter: 8 x 12 mm.
- Rotary fitting tool side: 3/8" gas.
- Fixed fitting supply side: 3/8" gas.
- Female adapter bit 6 mm tapered 3/8" gas.

N.633 1/4" pre-tefloned tapered male threaded bit BSP Gas



- Passage diameter: 6 mm.
- Max outer diameter: 13 mm.
- Length: 39.5 mm.

Weight: 19 g.

N.650 3/8" pre-tefloned tapered male threaded bit BSP Gas



- Passage diameter: 8 mm.
- Max outer diameter: 17 mm.
- Length: 44,5 mm.

Weight: 37 g.

N.651 1/2" pre-tefloned tapered male threaded bit BSP Gas



- Passage diameter: 8 mm.
- Max outer diameter: 22 mm.
- Length: 55 mm.

Weight: 69 g.

N.631 Fitting for 8 mm hose



- Passage diameter: 6 mm.
- Length: 50 mm.

Weight: 19 g.

N.632 Fitting for 10 mm hose



- Passage diameter: 6 mm.
- Length: 50 mm.

Weight: 19 g.

N.630 Female tapped snap adapter 3/8" gas BSP.



- Passage diameter: 6 mm.
- Max outer diameter: 30 mm.
- Length: 71 mm.

Weight: 37 g.

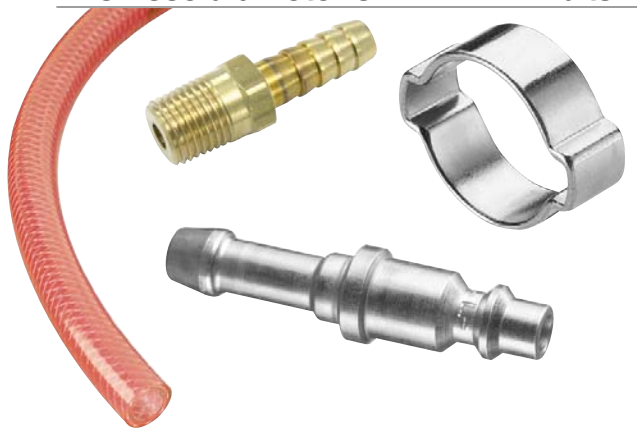
N.820 Female tapped snap adapter 1/2" gas BSP.



- Passage diameter: 8 mm.
- Max outer diameter: 35 mm.
- Length: 85 mm.

Weight: 69 g.

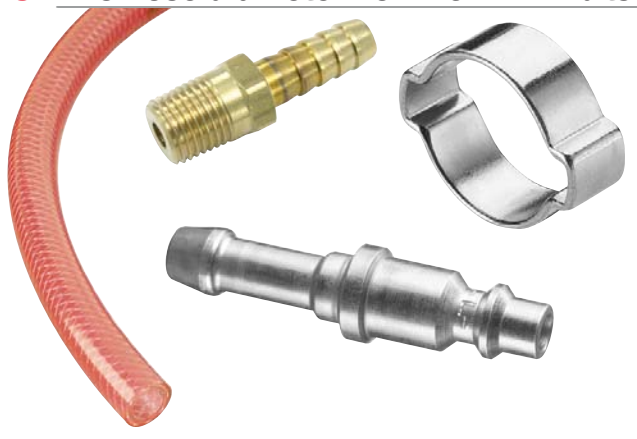
N.641 PVC hose diameter 8 x 14 mm + bits



- Length 12.5 m.
- Colour: red.
- Fitted with:

- 1 male bit passage diameter 6 mm for 8 mm diameter hose.
- 1 3/8" threaded union for 8 mm diameter hose.
- 2 ear ties diameter 13-15 mm.

N.643 PVC hose diameter 10 x 16 mm + bits



- Length 12.5 m.
- Colour: red.
- Fitted with:

- 1 male bit passage diameter 6 mm for 10 mm diameter hose.
- 1 3/8" threaded union for 10 mm diameter hose.
- 2 ear ties diameter 15-18 mm.

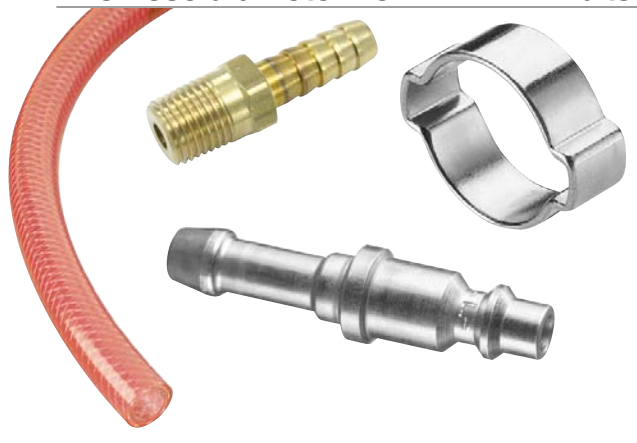
N.841 PVC Diflex hose diameter 10 x 16 mm + bits



- Length 12.5 m.
- Colour: red.
- Fitted with:

- 1 male bit passage diameter 8 mm for 10 mm diameter hose.
- 1 1/2" threaded union for 10 mm diameter hose.
- 2 ear ties diameter 15-18 mm.

N.842 PVC hose diameter 16 x 22 mm + bits



- Length 12.5 m.
- Colour: red.
- Fitted with:

- 1 male bit passage diameter 8 mm for 16 mm diameter hose.
- 1 1/2" threaded union for 16 mm diameter hose.
- 2 ear ties diameter 22-25 mm.

E.900A Glue gun



- To glue plastic, synthetic foam, fabric, wood and laminate in the fields of construction, furniture, in assembly workshops for electrical, electronic assemblies, in the garage.
- Voltage: 110-240 V (without automatic switch).
- Maximum power: 45 W.
- Fusion temperature: 206 °C.
- Preheating time: 7 to 10 min.
- Supplied in cardboard box with three versatile glue sticks.
- Dimensions: 260 x 210 x 60 mm.

Weight: 0.620 kg.

- Set of 50 sticks of "refractory" glue diameter 11.3 mm, length 90 mm: E.905J50.
- Set of 100 sticks of "versatile" glue diameter 11.3 mm, length 200 mm: E.906J100.

E.2005 Heat gun



- Electronic temperature control 60 to 600°C.
- Force: 2000 W.
- Power supply: 220 V/50 Hz.
- Air flow rate (2 speeds): 300 l/min and 500 l/min.
- VDE approved.
- Supplied with 2 nozzles: E.2002B1 - E.2002B3.
- Dimensions (L. x W. x H.): 330 x 80 x 72 mm.

Weight: 770 g.

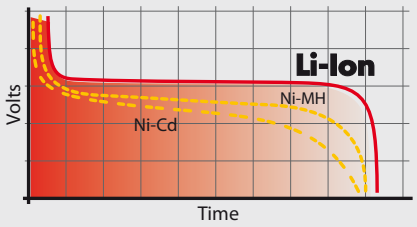
- Distribution nozzle, dim. (L. x h x d): 75 x 75 x 33.7 mm; weight 58 g: E.2002B1.
- Cross-flow nozzle, dim. (L. x h x d): 75 x 80 x 33.7 mm; weight 56 g: E.2002B2.
- Reflector nozzle, dim. (L. x h x d): 33 x 60 x 33.7 mm; weight 32 g: E.2002B3.
- Concentrator nozzle, dim. (L. x h x d): 20 x 52 x 33.7 mm; weight 30 g: E.2002B4.

CL2.C1913 | CORDLESS IMPACT WRENCH
LITHIUM-ION

PROFESSIONAL PERFORMANCE!
18 Volt - 3.3 AH battery



POWERFUL
- 510 Nm at unfastening.
- Untightening capacity 500 fasteners.
- Speed regulator to adjust power.



LIGHTWEIGHT
- Lithium-Ion technology: more power with reduced weight.
- Smart battery: charge auto-regulation, power constant and available until battery fully discharged.



DURABLE
- No memory effect : increased durability and battery life.
- Easily replaceable carbons.

PRACTICAL
- Patented battery locking system for faster changing and better locking.
- Charge indicator displaying remaining power. Integral lighting LED.











CL2.C1913 "heavy use - productivity" impact wrench pack







- Comprising:
- 1 Drill-driver CL2.C1913D.
- 2 Lithium-Ion batteries CL2.BA19.
- 1 charger CL2.CH1419.
- 1 plastic case CL2.VAL1.
- Drive dimension: square 12.7 mm (1/2'').
- Maximum dynamic torque: 510 N.m.
- Guaranteed static torque: 450 N.m.
- Impacts per minute: 2200.
- Motor no-load voltage: 18 Volts d.c.
- Idle speed: 1650 rpm.
- Speed control.

Weight: 6.370 kg.

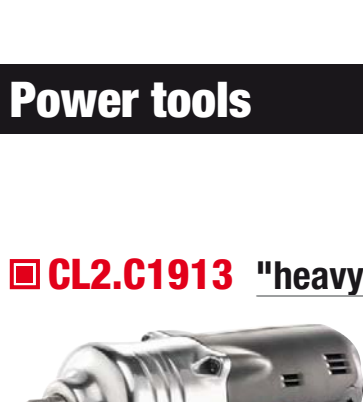
CL2.C19 "occasional use " impact wrench pack



Including:
- 1 impact wrench CL2.1913D.
- 1 Lithium-Ion battery CL2.BA19.
- 1 charger CL2.CH1419.
- 1 plastic case CL2.VAL1.
- Drive dimension: square 12.7 mm (1/2'').
- Maximum dynamic torque: 510 N.m.
- Guaranteed static torque: 450 N.m.
- Impacts per minute: 2200.
- Motor no-load voltage: 18 Volts d.c.
- Free speed: 1650 rpm.
- Speed control.

Weight: 4.850 kg.

CL2.C1913D Battery impact wrench



- Drive dimension: square 12.7 mm (1/2'').
- Maximum dynamic torque: 510 N.m.
- Guaranteed static torque: 450 N.m.
- Impacts per minute: 2200.
- Motor no-load voltage: 18 Volts d.c.
- Free speed: 1650 rpm.
- Speed control.
- Supplied without battery nor charger.

Weight without battery: 2 kg.

Spare carbon brushes: CL2.CBN2.

CL2.BA19 Lithium-Ion battery



- No memory effect: increased durability and battery life.
- Smart battery:
  - Provides a constant level of power until the battery is completely discharged.
  - Autoregulated load, no risk of battery being destroyed when leaving it on the charger.
- Environment-friendly: "clean" and recyclable battery (cadmium-free).
- Capacity: 2.9Ah.
- Voltage: 18 Volts d.c.

Weight: 0.725 kg.

CL2.CH1419 Battery charger





- Compatible with FACOM lithium-ion batteries.
- Capacity 100 to 240 volts.
- Fast charging: max. 1½ hour.
- Charge indicator.
- Can be mounted on a wall or workbench.
- Swappable cable.

Weight: 0.770 kg.



PERSONAL SAFETY EQUIPMENT

716



Personal safety equipment **716**

MISCELLANEOUS MAINTENANCE

718



Miscellaneous maintenance **718**

PIPEWORK TOOLS

720



Pipe wrenches **720**
Chain wrenches, strap wrenches **721**
Benders **722**
Iron-stainless steel pipe cutters **723**
Copper-pipe cutter **724**
Plastic-pipe cutter **724**
Deburring - chamferring **725**
Clamp tools **725**



RIVETING

727



Manual riveting pliers 727
Air riventing pliers..... 728
Sets and modules 729

LUBRICATION

730



Lubrication tools 730

VICES - PRESSES - CLAMPS

732



Vices 732
Assembly presses 734
Clamps 735

WHY WEAR GLOVES?

❶ To protect against mechanical hazards: abrasion, cut, tear and perforation resistant gloves: (leather gloves BC.109VSE and BC.110VSE).
❷ To protect against chemical hazards: (latex gloves BC.80VSE and BC.91VSE)
❸ To protect against electrical hazards: 500 to 1,000 volts (insulated gloves BC.VSE).



BC.VSE - Insulated gloves





NF EN 60903, EN 60903, DIN EN 60903

- Natural latex gloves, AZM classification:
- Resistance to acid: A.
- Resistance to ozone: Z.
- High mechanical strength: M.
- Length: 360 mm.
- Supplied in anti-UV opaque bag.

Weight: 150 g

	Class	Size [mm]	E [mm]	Voltage\Volt
BC.80VSE	00	9 (B)	0,5	500
BC.81VSE	00	10 (C)	0,5	500
BC.90VSE	0	9 (B)	1,0	1000
BC.91VSE	0	10 (C)	1,0	1000

BC.VSE - Safety overgloves





NF EN 60903, EN 60903, DIN EN 60903

- Silicon coated leather gloves protecting from mechanical risks.
- Used to protect latex insulated gloves.
- Physical and mechanical grade as per standard EN 388: 2, 1, 2, 1.
- Abrasion: 2.
- Cuts: 1.
- Tears: 2.
- Perforation: 1.

	Size [mm]	[g]
BC.109VSE	9 (B)	160
BC.110VSE	10 (C)	160

BC.VSE - Insulated mats



NF C 18-421

- Rubber mat for insulation by cladding grounds.
- Thickness: 3.2 mm.
- Hardness: 60 DIDC.
- Dimensions:

- BC.20VSE: 1 x 0,6 m.
- BC.21VSE: 1 x 1 m.

	⚖ [kg]
BC.20VSE	2,500
BC.21VSE	4,200

BC.1J20 Respiratory protection mask



NF EN 149, DIN EN 149,

- Set of 20 dust masks.
- Protection indispensable against fine dust (sanding, etc).

Weight: 226 g.

BC.5 Wrap-around protection glasses



NF EN 166, NF EN 168, DIN EN 166, DIN EN 168.

- Protection against projections of any nature.
- Indispensable for grinding, chiseling, etc.
- "Shell" shape able to contain glasses.

Weight: 82 g.

E.2005 Heat gun



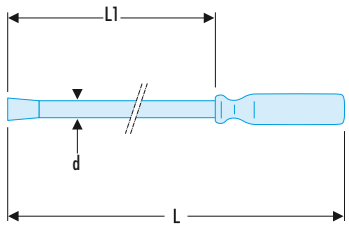
- Electronic temperature control 60 to 600°C.
- Force: 2000 W.
- Power supply: 220 V/50 Hz.
- Air flow rate (2 speeds): 300 l/min and 500 l/min.
- VDE approved.
- Supplied with 2 nozzles: E.2002B1 - E.2002B3.
- Dimensions (L. x W. x H.): 330 x 80 x 72 mm.

Weight: 770 g.

- Distribution nozzle, dim. (L. x h x d): 75 x 75 x 33.7 mm; weight 58 g: E.2002B1.
- Cross-flow nozzle, dim. (L. x h x d): 75 x 80 x 33.7 mm; weight 56 g: E.2002B2.
- Reflector nozzle, dim. (L. x h x d): 33 x 60 x 33.7 mm; weight 32 g: E.2002B3.
- Concentrator nozzle, dim. (L. x h x d): 20 x 52 x 33.7 mm; weight 30 g: E.2002B4.

D.3 - Pry bars







- Numerous uses: suspension, gear train, bodywork, etc.
- Sturdy blade minimising lever spring effect.

	d ["]	L [mm]	L1 [mm]	⚖ [kg]
D.3-7	3/8	292	165	0,275
D.3-12	3/8	422	305	0,345
D.3-18	1/2	635	460	0,810
D.3-24	1/2	787	610	1,030
D.3-30	5/8	915	740	1,710

D.3J3 Set of 3 pry bars

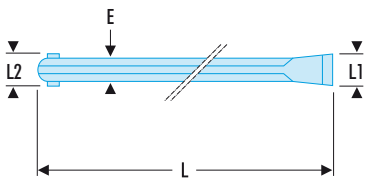


- Numerous uses: suspension, gear train, bodywork, etc.
- Sturdy blade minimising lever spring effect.
- Set comprising: D.3-7 - D.3-12 - D.3-18.
- Supplied in thermoformed tray.
- Dimensions (L. x W. x H.): 670 x 145 x 40 mm.

Weight: 1.648 kg.

1260 - Wrecking bars





- Forged, one flat end and one nail-claw, hardened to 45 HRc.
- Presentation: red lacquered, polished, varnished ends.

	E [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [kg]
1260.50	18	495	33	28	0,920
1260.70	23	710	39	35	1,140

268 - Round crowbars with crook beak





- Forged, one spindle end and one wide and slim pallet end, hardened to 45 HRc.
- Presentation: red lacquered, polished, varnished ends.

	E [mm]	L [mm]	L1 [mm]	⚖ [kg]
268.3	16	450	32	0,670
268.4	20	790	32	1,970
269	18	400	27	0,590

270A.MA Steel wire brush



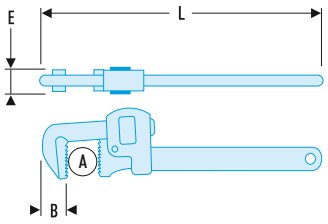
- Dimensions: 280 x 34 x 60 mm.

Weight: 150 g.

Pipework wrenches

131A - Steel Stillson models





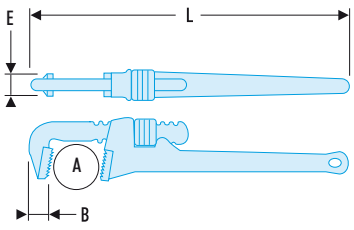


- Capacity: 0 to 102 mm; 0 to 3"1/2.
- Very robust wrench, head hardened to 55 HRc.
- Accurate approach thanks to fine machining of the threads and button, good grip.

	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	L ["]	⚖ [kg]
131A.8	27	3/4	19,5	12,5	200	8	0,280
131A.10	34	1	25,0	16,0	250	10	0,600
131A.14	49	1'1/2	29,5	21,0	350	14	1,060
131A.18	60	2	32,0	24,0	450	18	1,800
131A.24	76	2'	41,5	27,5	600	24	3,000
131A.36	102	3'1/2	49,5	30,5	900	36	6,000

134A - Cast-iron American model pipe wrenches



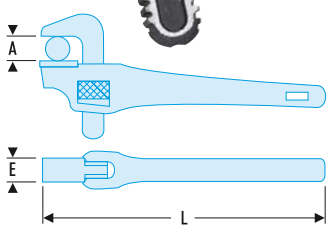


- Capacity: 0 to 140 mm; 0 to 5".
- Cast iron body.
- Interchangeable fixed jaw hardened to 55 HRc.
- Forged steel mobile jaw.

	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	L ["]	⚖ [kg]
134A.8	35	1	15	14,5	200	8	0,400
134A.10	54	1'1/2	20	17,5	250	10	0,780
134A.14	60	2	26	21,5	350	14	1,500
134A.18	76	2'1/2	29	26,0	450	18	2,400
134A.24	102	3'1/2	35	29,5	610	24	4,000
134A.36	140	5	35,5	43,0	920	36	9,000

135A - Light alloy 90° offset American model pipe wrenches



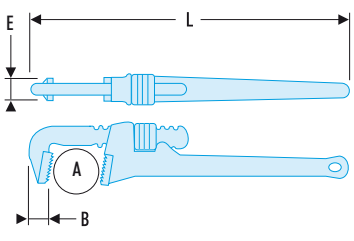


- Capacity: 0 to 76 mm; 0 to 2"1/2.
- Light alloy body.
- Jaws in steel hardened to 55 HRc.

	A maxi [mm]	A maxi ["]	E [mm]	L [mm]	L ["]	⚖ [kg]
135A.14	49	1'1/2	34	350	14	0,940
135A.18	60	2	39	450	39	1,480
135A.24	76	2'1/2	47	600	47	2,450

133A - Light alloy 90° offset American model pipe wrenches





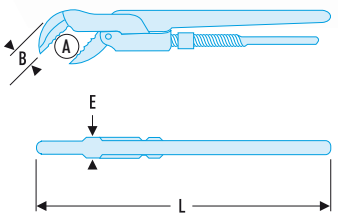


- Capacity: 0 to 140 mm; 0 to 5".
- Performance equivalent to model 134A.

	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	L ["]	⚖ [kg]
133A.14	60	2	26	21,5	350	14	1,000
133A.18	76	2'1/2	30	26,0	450	18	1,560
133A.24	90	3	34	29,5	600	24	2,460
133A.36	140	5	44	32,0	900	36	5,180

120A - "Swedish" model wrench - 45°





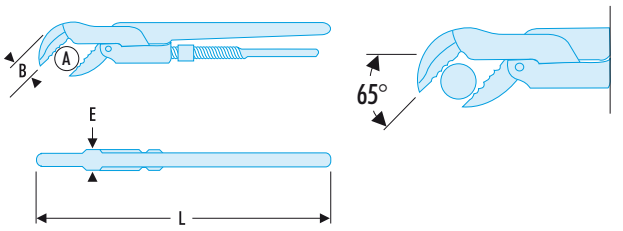
DIN 5234

- Capacity: 10 to 60 mm; 3/8" to 2".
- High-quality forged steel body.
- Special jaw design grips pipe at three points.

	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	⚖ [kg]
120A.1'	34	1	22	10	345	0,840
120A.1'1/2	49	1'1/2	26	13	450	1,450
120A.2'	60	2	39	17	600	2,400

121A - "Swedish" model wrench - "S" jaws - 45°







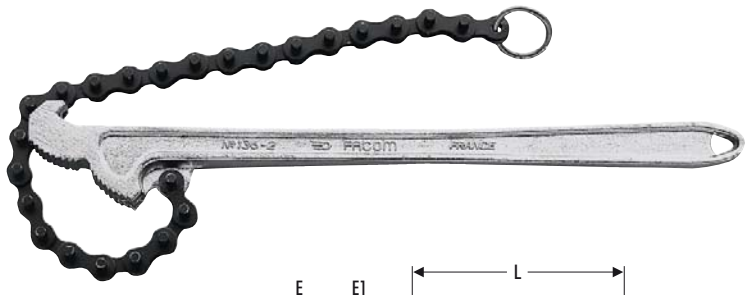
DIN 5234

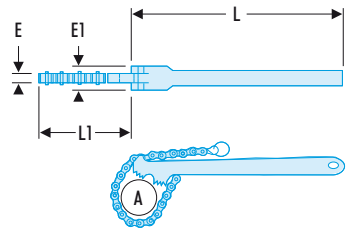
- Capacity: 10 to 60 mm; 3/8" to 2".
- High-quality forged steel body.
- Special jaw design grips pipe at three points.

	A maxi [mm]	A maxi ["]	B [mm]	E [mm]	L [mm]	⚖ [kg]
121A.1'	34	1	22	14	345	0,850
121A.1'1/2	49	1'1/2	26	19	450	1,550
121A.2'	60	2	39	21	600	2,300

Chain and strap wrenches

136A - Double effect chain wrench



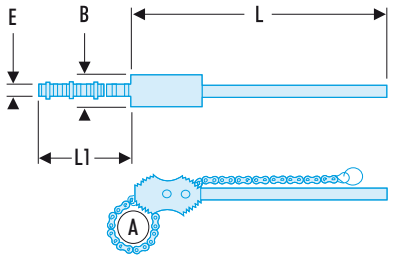


- Capacity: 60 to 140 mm.
- Hardened steel chain and body.
- Twin serrations allow rotation in either direction.
- 136.D2: spare chain for model 136A.2.
- 136A.C4: spare chain for model 136B.4 and 136A.4.

	A [mm]	A ["]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [kg]
136A.2	60 - 114	2 - 4'	20	7	360	460 - 18,5'	1,040
136B.4	90 - 140	3 - 5'	30	10	600	600 - 24'	3,100

137A - High power chain wrench

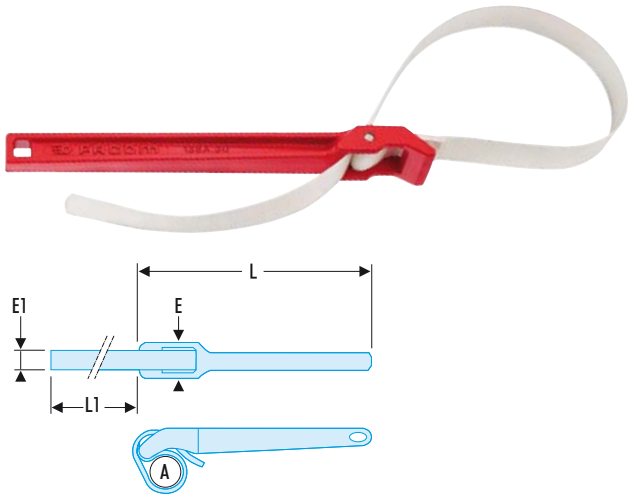




- Capacity: 50 to 180 mm.
- Forged steel handle.
- Serration hardened to 48 HRc.
- Jaws treated against corrosion.
- "Ratchet" system in both directions for easier trench work.
- 137A.C2'1/2: spare chain for model 137A.2'1/2.
- 137A.C4': spare chain for high power model 137A.4'.
- 137A.C6': spare chain for high power model 137A0.6'.

	A [mm]	A ["]	E [mm]	L [mm]	L1 [mm]	⚖ [kg]
137A.2'1/2	50 - 90	2 - 3'9/16	20	550	415 - 16"	4,500
137A.4'	60 - 130	2'3/8 - 5'1/8	20	910	560 - 24"	8,000
137A.6'	80 - 180	3'3/16 - 7'1/8	32	690	690 - 27"	10,500

138A - Nylon strap wrenches



- Capacity: 0 to 165 mm.
- Body in aluminum alloy.
- High strength nylon strap.

	A [mm]	A ["]	A maxi [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
138A.17	60	2	60	42	30	550	450	280
138A.30	125	4	125	42	30	910	750	290
138A.48	165	6	165	42	30	1065	1500	310

138.S17 Spare strap

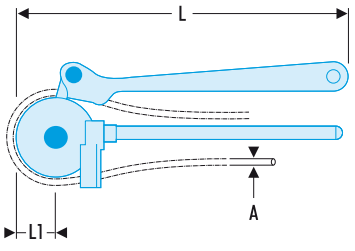


- To be used with the nylon strap wrench
- Length 1200 mm (48").
- 138.S17: spare strap for 138A.17.
- 138.S30: spare strap for 138A.30.
- 138.S48: spare strap for 138A.48.

Pipe benders

344A - Bending pliers





- Capacity: 8 to 18 mm.
- To shape pipes in cold drawn or annealed copper.
- Easy use on the work place without particular installation.
- Bending angle measurement (0° - 180°).
- Can be carried on a tool box.
- Made in forged and machined steel.

	A [mm]	A ["]	L [mm]	L1 [mm]	⚖ [kg]
344A.8	8	5/16	208	14	0,340
344A.10	10	-	245	23	0,700
344A.12	12	-	270	30	0,900
344A.14	14	-	352	42	1,800
344A.15	15	-	352	42	1,900
344A.16	16	5/8	380	54	2,640
344A.18	18	-	380	55	2,900

Iron-stainless steel pipe cutter

338B.1 Iron pipe cutter

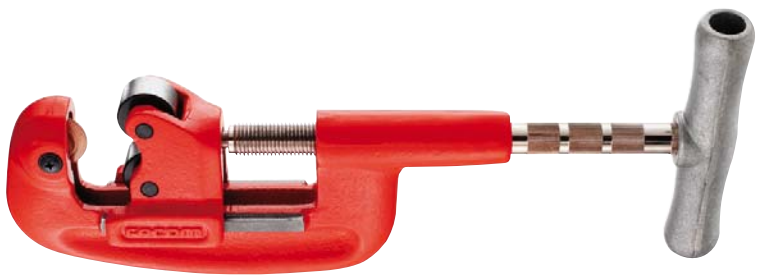


- Accurate guiding for right angle cutting.
- Dimensions: 130 x 34 mm.
- Min length 255 mm - max length 310 mm.
- Spread: 10 to 42 mm, 1/8 to 1" 1/8.

Weight: 1.480 kg.

- 38A.F5: Set of 5 spare rollers.

337A.2 Stainless steel pipe cutter



- Accurate guiding for right angle cutting.
- Fitted with a wheel cutting stainless steel pipes.
- Dimensions: 160 x 34 mm.
- Spread: 21 to 60 mm, 1/2 to 2".
- Min length 310 mm - max length 400 mm.

Weight: 2.700 kg.

- 337.F5: Set of 5 spare wheels.

334.35NX "High precision" stainless steel pipe cutter



- Fast adjustment button, covered in soft material for enhanced comfort.
- 4 rollers for perfect pipe guiding.
- Folding deburrer.
- Supplied with spare wheel.
- Very easy wheel changing without tool.
- Cuts stainless steel pipes from 3 to 35mm.

Weight: 0.440 kg.

- 334.M5: set of 5 spare wheels.

Copper pipe cutter

334B.35 "High precision" copper pipe cutter



- Comfortable fast advance knob.
- Optimum pipe guiding. Cut to 90°.
- Grooves for flush flange cutting.
- Folding rotary deburrer.
- Built-in spare wheel.
- Cutting diameter: 3 - 35 mm; 1/4 - 1" 1/4.

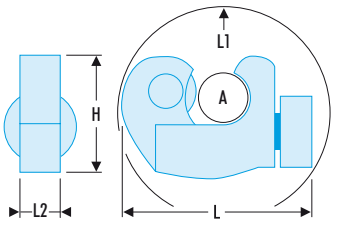
Weight: 0.450 kg.

- 238A.M5: Set of 5 spare wheels.

238 - Copper-pipe mini-cutter







- 238B.16, grey, 238.28, red.
- Very compact.
- Can be used in situ.
- Minimal working radius.
- Set of 5 spare wheels:

- 238B.16M5 for model 238B.16.
- 238A.M5 for model 238.28.
- 238.M5 for old model 238.16.

	A [mm]	A ["]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
238B.16	3 - 16	1/8 - 5/8	35	55	38	21	120
238.28	6 - 28	1/4 - 11/8	50	80	50	26	205

Plastic pipe cutter

Ratchet pipe cutter







- Pipe cutter for PVC pipes up to 25 mm diameter: 4 x 2.5 mm max; 4 x 3/32 s. inch.
- Fast and neat cutting.
- Automatic jaw opening.
- Ratchet advance with non-return mechanism.
- Fast advance for approach on small diameters.
- Chamfering tool built into the handle.

	A maxi [mm]	A maxi ["]	⚖ [g]
335.25	25	1	165

335B.40 Large diameter ratchet pipe cutter



- Ratchet pipe cutter for PVC pipes up to 40 mm diameter.
- Easy cutting with the ratchet system.
- Blade returns to the rest position by opening the branches.

Weight: 0.600 kg.

Plastic pipe cutter



- Ratchet pipe cutter for plastic pipes up to 63 mm diameter.
- Patented "V" profile blade for perfect cut, even on the smallest pipes.
- Stainless steel cutting blade: sturdy and long life cut.
- Can cut multiple strand flexible cables up to 5 x 2.5 mm2.

	A maxi [mm]	A maxi ["]	⚖ [kg]
335.63	63	2"1/2	1,100

Deburring - Chamferring

325 Deburring-chamfering case



- Selection of tools necessary for deburring and chamfering pipes in steel, aluminum, copper, brass, plastic.
- Blade holder working length: 110 mm.
- Case dimensions: 200 x 110 x 40 mm.

Weight: 0.425 kg.

- 325.01 One-piece blade deburrer for steel and aluminum.
- 325.02 Tool holder handle.
- 325.03 Blade holder extension: for blades diameter 2.6 and 3.2 mm.
- 325.05 Triangular scraper, sharpening at both ends.
- 325.L1J10 Set of 10 HSS steel blades for steel and aluminum; length 23 mm; diameter 2.6 mm.
- 325.L10J10 Set of 10 HSS steel blades for steel and aluminum; length 23 mm; diameter 3.5 mm.
- 325.L35J10 Set of 10 HSS "heavy duty" steel blades for steel and aluminum; length 47 mm; diameter 3.2 mm.

Collar tools

347 Set for S.A.E, DIN, S.A.E./DIN flanges





- Capacity: copper and steel pipe Ø 4.75 to 12 mm?; 3/16" to 1/2".
- Thickness: 0.7 to 1 mm.
- The press can be locked in a vice for more safety.
- Fast and effortless shaping.
- The set includes 11 punches and 10 dies.
- Operator instructions allow selection according to the type of flanges to produce.
- Metal sheet case: 396 x 224 x 82 mm.

Weight: 7.900 kg.

239 "Refrigeration" flanging tool, metric die 6 mm - 14 mm





- Capacity: pipes diam. 6 to 14 mm.
- Allows to produce flanges tapered at 45°, at the end of copper pipes without annealing the metal.
- BP.115 dimensions: 332 x 143 x 67 mm.

Weight: 1.520 kg.

- 239.MU: Inch dies: pipes diam. from 3/16" to 5/8".

240.M "Refrigeration" metric kit



- Caliper and die for pipes diameter: 6 - 8 - 10 - 12 - 14 mm.
- 334.32 pipe cutter.
- Supplied in plastic box.
- BP.115 dimensions: 332 x 143 x 67 mm.

Weight: 1.820 kg.

242 "Refrigeration" metric-inch kit



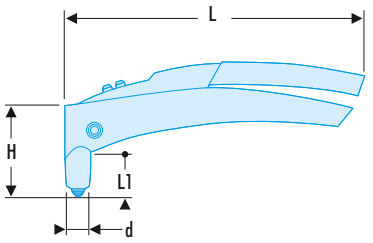
- Caliper.
- Die for pipes diameter: 6 - 8 - 10 - 12 - 14 mm.
- Die for pipes diameter: 3/16" - 1/4" - 5/16" - 3/8" - 7/16" - 1/2" - 5/8".
- 334.32 pipe cutter.
- Supplied in plastic box dimensions: 350 x 125 x 40 mm.

Weight: 2.400 kg.

Riveting pliers

Ergonomic riveting pliers



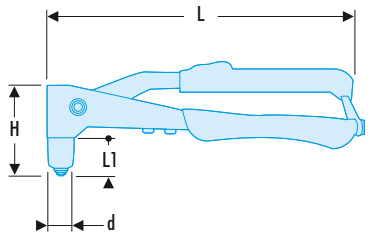


- Capacity:
- Diameter 5 mm alu rivets.
- Diameter 4 mm steel rivets.
- Grips shaped for optimum comfort.
- Return-spring to closed position prevents loss of rivet.
- Cushioning system when pin snaps.
- Supplied with 3 nosepieces for diameters 3 to 3.2 mm - 4 mm - 4.8 to 5 mm.
- Knurled nosepieces for hand-fitting.

	d [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
Y.105B	22	85	270	40	632

Riveting pliers





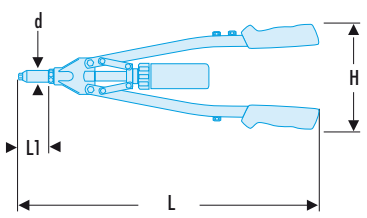


- capacity:
- Aluminum rivets diameter 3 - 3.2 - 4 - 4.8 - 5 mm.
- Steel rivets diameter 3 - 3.2 - 4 mm.
- Empty branches opening spring.
- 3 nosepieces with keys for diameters 3 to 3.2 mm - 4 mm - 4.8 to 5 mm.

	d [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
Y.103B	22	84	250	26	632

Two-hand riveter



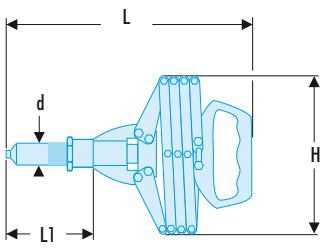


- Capacity:
- Diameter 6.4 mm alu rivets.
- Diameter 6 mm steel rivets.
- Absorbers cushion impact when pin snaps.
- Supplied with 4 nosepieces diameter 4 - 5 - 6 - 6.4 mm and spent-nail holder.

	d [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
Y.116B	22	164	526	66	1,900

"Expander" riveting pliers



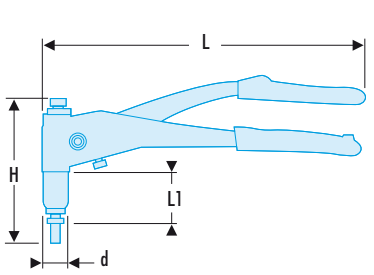


- Capacity:
- Diameter 6.4 mm alu rivets.
- Diameter 5 mm steel rivets.
- Model suited to heavy duty, particularly in worksites.
- Supplied with 5 nosepieces: diameters 3 to 3.2 mm - 4 mm - 4.8 to 5 mm - 6 mm - 6.4 mm.

	d [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
Y.113B	25	184	310	90	2,150

Blind-nut pliers





- Capacity: M6 steel; M5 stainless steel.
- Supplied with 3 steel nuts M4 - M5 - M6.
- Very comfortable pliers as can be used with both hands.

	d [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
Y.107	25	140	335	50	1,170

Pneumatic riveter





- Light and well balanced machine in aluminum alloy.
- For 3.2 - 4 and 4.8 mm rivets.
- Traction strength 9.4 kN.
- Fast nose removal.
- Fast claw holder removal.
- Low activation force.
- 2-finger trigger.
- Orientable air exhaust.
- Tool travel 18 mm.
- Working pressure: 6.2 bars.

	d [mm]	d1 [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
Y.135F	88	20,6	304	259	79	1,310

Cases and kits

Y.RIV1 Maintenance kit for multi-thickness aluminum rivets



• Comprising:
- Y.105B: riveter.
- Selection of rivets diameter 4 to 4.8 mm with standard head, 4.8 mm with wide head, in popular sizes for joint thickness 1.3 to 13 mm (approx. 450 rivets).
- Partitioned case with contents list.
- Case dimensions: 360 x 300 x 60 mm.

Weight: 2.700 kg.

Y.RIV3 Maintenance kit for aluminum rivets



• Comprising:
- Y.105B: riveter.
- Selection of aluminum rivets with standard head 4 x 8 - 4 x 10 - 4.8 x 8 - 4.8 x 10 mm and with wide head 4 x 8 et 4 x 10 mm (approx. 600 rivets).
- Case dimensions: 360 x 300 x 60 mm.

Weight: 2.350 kg.

Y.M46 Blind-nut kit



• Comprising:
- Y.107: blind-nut riveter.
- Selection of steel nuts M4 - M5 - M6, in popular sizes for joint thickness 0.3 to 3 mm (approx. 100 nuts).
- Partitioned case with contents list and instructions: 360 x 300 x 60 mm.

Weight: 2.500 kg.

MOD.Y105 Riveting module



• Y.105B: riveter.
• 600 alu rivets.
• Standard head: 4 x 8 - 4 x 10 - 4.8 x 8 - 4.8 x 10.
• Black lacquered standard head: 4 x 8 - 4 x 10.
• Heat-formed tray PL.377.

Weight: 1.984 kg.

376A Manual oil syringe



- Capacity: 500 cm³.
- galvanised steel body.
- Supplied with: 376A.1 straight angled tube.
- Length: 420 mm.

Weight: 0.830 kg.

378A Lever-operated grease gun



- Grease cartridge.
- Pressure: 400 bar. Air bleed facility.
- Use with cartridge or bulk grease.
- Capacity 500 cm³, i.e. 400 g grease.
- Hose compliant with DIN 1283 standard (static and burst pressure).
- Hose built in rubber approved by DIN 20024 standard.
- Hose diameter: 13.1 mm.
- Hose radius of curvature: 90 mm.
- Length: 370 mm excluding hose.

Weight: 1.356 kg.

378.2 Flexible nose for grease pump 378A



- Length 300 mm.

Weight: 0.100 kg.

377A Small grease pump

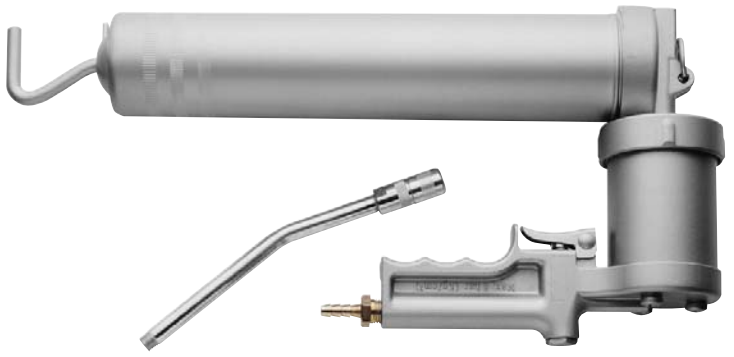


DIN 1282

- Nickel-plated body.
- Supplied with 1 lub type tip and 1 hydraulic type tip.
- Spread: 150 cm³ .
- Pressure: 200 bar.
- Length: 345 mm
- Diameter: 43 mm.

Weight: 0.410 kg.

379A Pneumatic grease gun



DIN 1284

- Capacity 500 cm³, i.e. 400 g grease; flow 1 cm³ per strike.
- Air pressure 2 to 8 bar (6 bar recommended).
- Supply fitting diameter 8 mm.
- Filling with cartridge or bulk grease.
- Length: 179 mm; height: 380 mm.
- Presentation: Aluminum body.
- Supplied with straight angled spout and tip.

Weight: 1.700 kg.

380 Set of greasing tips



- Selection of rigid spouts, flexible spouts and fasteners for all types of current greasers.
- Adaptable to models 378A and 379A.
- Case dimensions: 310 x 110 x 55 mm.

Weight: 0.425 kg.

373 - Simple-action oil cans



- Pumped delivery. Steel body.
- Spout length: 130 mm.
- 3 capacities: 250, 350 and 500 cm³.

	d [mm]	L [mm]	Oil Capacity [cm³]	[g]
373.25	73	130	250	210
373.35	84	130	350	236
373.50	84	130	500	277

374A.20 Double-action oil can

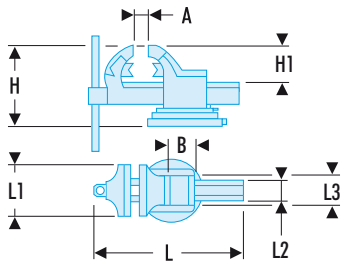


- Fitted with a double pump.
- Use in all positions, drop dosage.
- Volume: 200 ml.
- Presentation: Zinc body, impact resistant.
- Dimensions (H. x L. x D.): 271 x 117 x 61 mm.

Vices

1222 - Worksite-maintenance 360° swivel vices

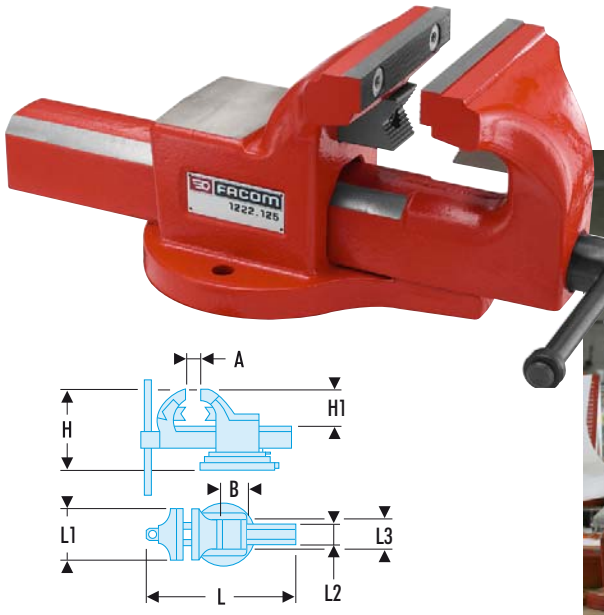




- Vices in spheroid graphite cast iron, tensile strength 700 N/mm² minimum.
- Wide bearing base of the prism guide/mobile jaw: lack of guide flexion, vice operation preserved even under heavy loads.
- Interchangeable parallel jaws. High wear resistance, hardness 48/53 HRc.
- Removable V-shaped jaws for tightening the pipes. Hardness 40/46 HRc.
- Adjustment system by 2 complex gap compensation screws.
- Burnished control bar.

	A maxi [mm]	B [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [kg]
1222.100	125	48	140	66	325	100	68	41,5	7,240
1222.125	150	60	172	82	402	125	84	51,5	13,800
1222.150	200	70	201	99	492	150	96	58,5	21,850
1222.175	235	80	237	118	551	175	110	67,5	33,350

1222.E - Worksite-maintenance fixed vices



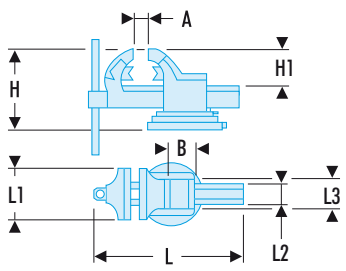


- Characteristics identical to model 1222, but non swiveling.

	H [mm]	⚖ [kg]
1222.100E	122	6,300
1222.125E	153	12,700
1222.150E	182	20,450
1222.175E	211	30,700

1223 - Swivel adjuster vices





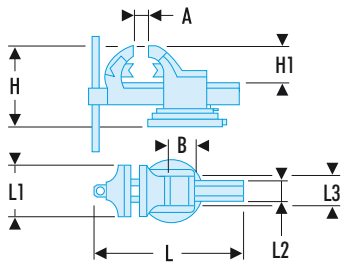


- Interchangeable jaws.
- Gap compensation.
- All steel.

	A maxi [mm]	B [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [kg]
1223.105	130	57	153	72	300	105	62	45	8,500
1223.125	150	70	180	90	350	125	70	50	12,700
1223.150	210	85	210	107	460	150	85	56	21,500

1223.E - Fixed adjuster vices

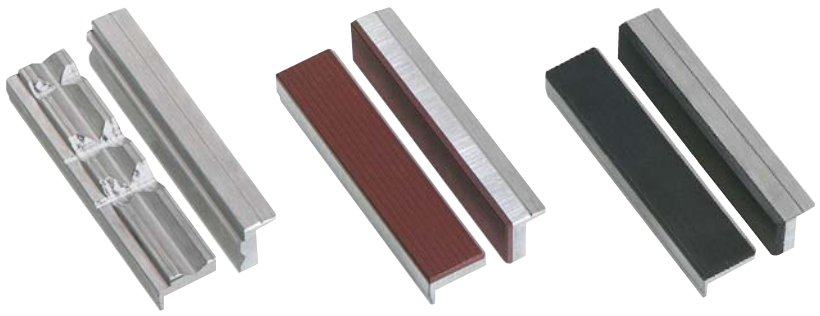




- Characteristics identical to model 1223, but non swiveling.

	H [mm]	⚖ [kg]
1223.105E	130	7,000
1223.125E	152	10,500
1223.150E	182	18,700

1223.M - Sets of jaws



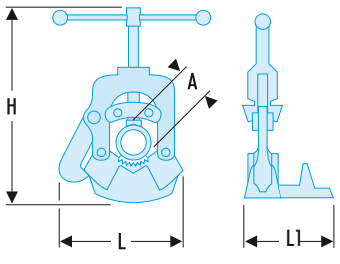
- Adaptable to vices 1222 and 1223.
- Magnetic fastening on the vice.
- Material:

- 1223.M1 - 1223.M2: Aluminum with prisms.
- 1223.M3 - 1223.M4: Fiber.
- 1223.M5 - 1223.M6: Rubber.

	L [mm]	⚖ [g]
1223.M1	125	200
1223.M2	150	240
1223.M3	125	200
1223.M4	150	240
1223.M5	125	200
1223.M6	150	240

283 - Pipe vices





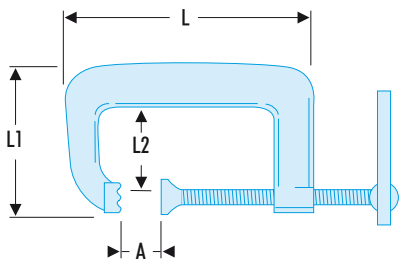
- Base, arcade, clamp and slider in soft cast iron.
- Screws in square thread semi-hard drawn steel.
- Hardened steel offset jaws.

	A [mm]	A ["]	H [mm]	L [mm]	L1 [mm]	⚖ [kg]
283.2	10 - 60	1/8 - 2	205	185	130	3,500
283.3	13 - 90	1/4 - 3	265	240	150	5,900

Flange presses

271A - Compact G-clamp



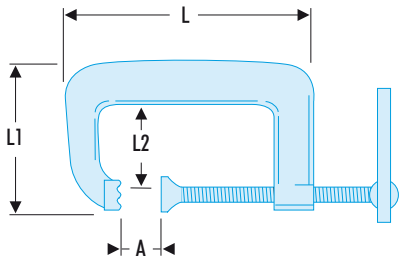


- Capacity: 0 to 250 mm and 0 to 9"7/8.
- Presentation: galvanised - burnished screw.

	A maxi [mm]	L [mm]	L1 [mm]	L2 [mm]	⍙ [kg]
271A.40	40	100	75	42	0,300
271A.60	60	130	98	57	0,510
271A.80	80	167	115	67	0,810
271A.100	100	192	131	77	1,170
271A.120	120	223	148	88	1,680
271A.150	150	262	162	98	1,980
271A.200	200	320	185	108	3,240
271A.250	250	380	202	118	3,950

271A.L - Deep-throat G-clamp

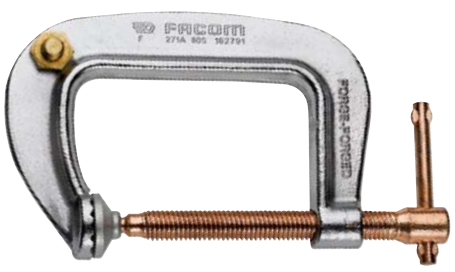


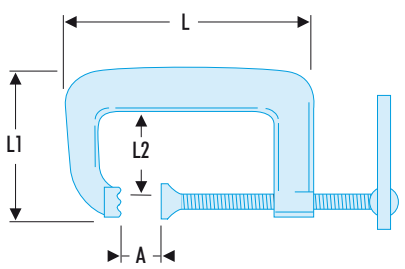


- Capacity: 0 to 150 mm and 0 to 5"7/8.
- Presentation: galvanised - burnished screw.

	A maxi [mm]	L [mm]	L1 [mm]	L2 [mm]	⍙ [kg]
271A.150L	133	288	213	133	3,320

Arc-welding G-clamp



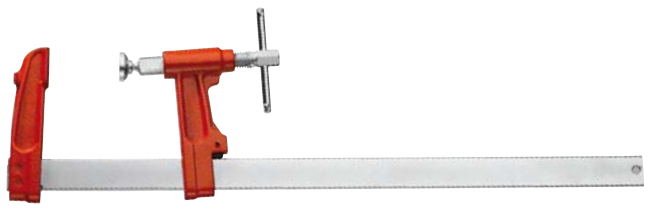


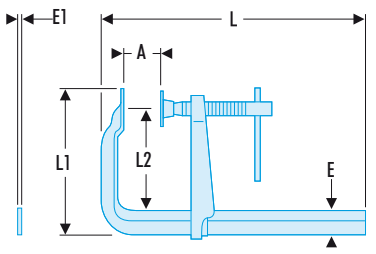
- Capacity: 0 to 80 mm and 0 to 3"1/8.
- Copper-plated screw and brass bolt for earth connection.
- Presentation: galvanised.

	A maxi [mm]	L [mm]	L1 [mm]	L2 [mm]	⍙ [g]
271A.80S	80	167	115	67	920

G-clamps

272A - Pump clamp

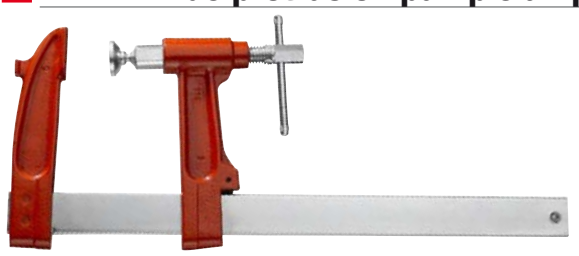


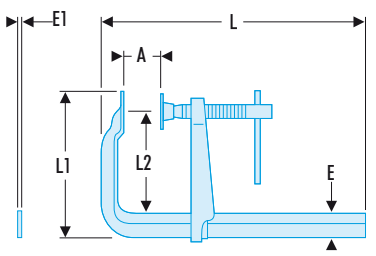


- Capacity: 0 to 1,500 mm.
- Accurate assembly by tightening the pump without rotation.
- Rail treated and notched on edges for clear locking, tilt ball joint.
- Presentation: lacquered, galvanised rail.

	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
272A.300	300	30 x 8	370	150	80	1,700
272A.400	400	30 x 8	470	150	80	1,900
272A.500	500	30 x 8	600	150	80	2,100
272A.600	600	35 x 9	680	180	100	2,900
272A.800	800	35 x 9	880	180	100	3,370
272A.1000	1000	35 x 9	1100	180	100	3,840
272A.1200	1200	35 x 9	1300	180	100	4,310
272A.1500	1500	35 x 9	1600	180	100	5,000

272L - Wide protrusion pump clamp

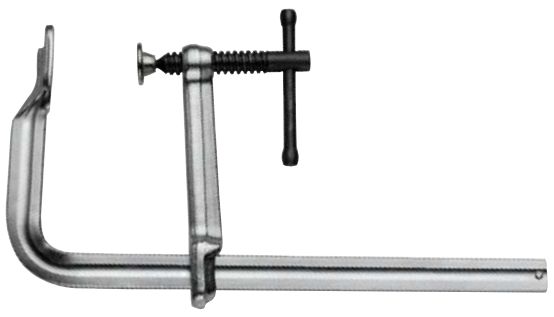


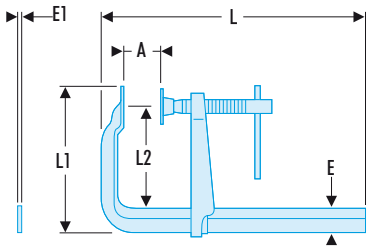


- Capacity: 0 to 1,000 mm.
- Protrusion: 150 mm.
- Same characteristics as model 272A with additional benefits of a deep slider and dog for gripping wide parts.

	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
272.300L	300	40 x 9	440	215	150	3,000
272.400L	400	40 x 9	540	215	150	3,300
272.600L	600	40 x 9	740	215	150	3,900
272.1000L	1000	40 x 9	1140	215	150	5,100

274 - G-clamp 6500 N

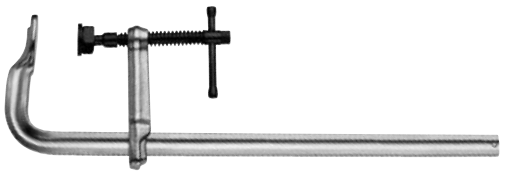


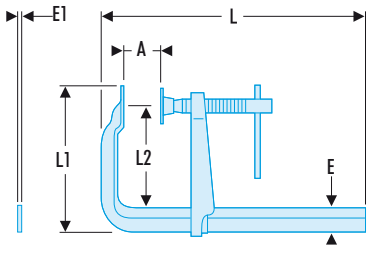


- Capacity: 0 to 500 mm.
- Tightening: 6500 N max.
- Hardened profile rail, forged dog and slider, square thread screw for tight fastening.
- Ball joint angle 30°.
- Presentation: galvanised.

	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
274.200	200	19,5 x 9,5	250	150	100	0,720
274.300	300	25 x 12	360	190	140	1,600
274.400	400	25 x 12	460	170	120	1,650
274.500	500	25 x 12	560	170	120	2,000

275 - Power G-clamp 12000 N





- Capacity: 0 to 1,000 mm.
- Tightening: 12000 N max.
- Large cross-section slider rail and screws for the most powerful tightening: up to 1.2 t between dog and slider.
- Ball joint angle 35°.
- Presentation: galvanised.

	A maxi [mm]	E x E1 [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
275.300	300	30 x 15	350	180	140	2,800
275.500	500	30 x 15	560	180	120	3,000
275.800	800	30 x 15	880	180	120	4,200
275.1000	1000	30 x 15	1100	180	120	4,800



NON SPARKING WRENCHES

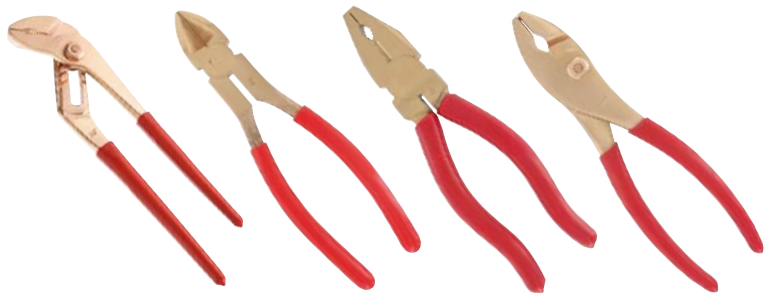
739



Combination wrenches 739
Adjustable wrenches 740
Impact wrenches 741
Angled socket wrenches 742

NON SPARKING PLIERS

743



Multigrip pliers 743
Cutters 743
Cutting pliers 743
Lineman's pliers 744

NON SPARKING RATCHETS, SOCKETS, ACCESSORIES

745



1/2" to 1" ratchets..... 745
1/2" sockets 745
3/4" sockets 746
1" sockets 747
Accessories 748

NON SPARKING SCREWDRIVERS, KEYS

749



Screwdrivers 749
Hexagon keys 750



NON SPARKING IMPACT TOOLS

751



Sledgehammers 751
Hammers 752
Wedges 752
Chisel 753
Drift punches 753

NON SPARKING CUTTING TOOLS

754



Files 754
Saws 755

NON SPARKING WRENCHES

756



Pipe wrenches 756
Valve wrenches 757



FACOM ADF
NON SPARKING TOOLS

ADF RANGE

NEW “FACOM ADF” NON SPARKING TOOLS PROGRAMME

- The FACOM ADF tool range has been designed for use in explosive or flammable atmospheres, where “traditional” steel tools may accidentally create sparks due to friction, impact, or by falling on a hard surface.
- The entire FACOM ADF range is made from a special Copper - Beryllium alloy having better mechanical properties than the other alloys proposed for use in non sparking tools.
- FACOM has determined the composition of the Cu-Be alloy as well as its specific treatment according to the use of each tool.
- In addition to its non sparking properties, the Cu-Be alloy is also anti-magnetic and highly corrosion resistant. Having a lower density, it also significantly reduces user fatigue.
- FACOM ADF tools have been designed in accordance with the most widely used dimensional standards (ISO, DIN, BSI, NF, etc.) or adapted to perform the tool’s main functions.

FACOM ADF tools can be used in a wide variety of fields, such as:

- Mining
- Oil and gas extraction (off-shore & on-shore)
- Refineries, petrochemicals Pipeline maintenance
- Energy production and transport (gas, electricity, etc.)
- Naval shipyards Aeronautical transport, airports
- Paint manufacture
- Manufacture of explosives & flammable products.
- Arsenals, munitions and explosive products storage.
- Applications requiring demagnetised tools (metal shavings, etc.).
- Farming - Grain silos …

The certificate TUV (n°TUV-F 09 ATEX 0005 X) have been found to comply with standard for a use in explosive atmospheres and with the Essential Health and Safety Requirements following EN 1127-1, EN 13463-1 (2007) and EN 13463-5 (2003).

SAFETY FIRST

- **Non sparking tools are not enough for protection from an explosion, other items adapted to the environment are necessary, such as: clothes, gloves, safety glasses and adapted materials.**
- **Tool’s surface temperature must not be more than present gases temperature.**
- **Cu-Be alloy tools must not be in contact with acetylene (risk of spark).**
- **All Cu-Be alloy tools, in the state of finished product, presents no risk for the user. On the other hand any modification of these tools presents a risk of Cu-Be alloy particles liberation, harmful for the health.**









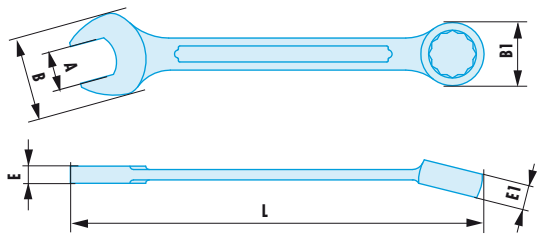




Non sparking combination wrenches

440.SR - Non sparking metric combination wrenches



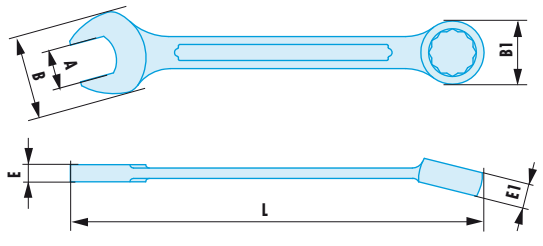


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
440.6SR	6	14,0	11,6	4,4	6	105	20
440.7SR	7	17,5	14,5	5,0	7	120	25
440.8SR	8	17,5	14,5	5,0	7	120	35
440.9SR	9	22,0	18,0	5,4	8	135	40
440.10SR	10	22,0	18,0	5,4	8	135	55
440.11SR	11	26,5	21,0	6,0	9	150	55
440.12SR	12	26,5	21,0	6,0	9	150	75
440.13SR	13	30,0	23,0	6,6	10	175	75
440.14SR	14	30,0	23,0	6,6	10	175	120
440.15SR	15	35,0	27,0	7,6	11	195	125
440.16SR	16	35,0	27,0	7,6	11,0	195	155
440.17SR	17	35,0	27,0	7,6	11,0	195	155
440.18SR	18	39,0	31,0	8,0	12,0	215	210
440.19SR	19	39,0	31,0	8,0	12,0	215	210
440.20SR	20	45,0	34,0	9,5	13,5	230	225
440.21SR	21	45,0	34,0	9,5	13,5	230	225
440.22SR	22	46,0	36,0	9,4	14,0	245	250
440.23SR	23	49,0	38,0	9,4	15,2	265	250
440.24SR	24	49,0	38,0	10,0	15,2	265	260
440.25SR	25	49,0	38,0	9,4	15,2	265	260
440.26SR	26	56,0	42,0	10,0	17,0	290	420
440.27SR	27	56,0	42,0	11,4	17,0	290	420
440.30SR	30	61,0	49,0	13,0	20,0	320	560
440.32SR	32	65,0	52,0	14,0	21,0	340	670
440.34SR	34	72,0	55,0	15,0	21,0	360	850
440.35SR	35	72,0	55,0	15,0	21,0	360	890
440.36SR	36	72,0	55,0	15,0	21,0	360	890
440.38SR	38	82,0	64,0	15,0	21,0	430	1440
440.41SR	41	82,0	64,0	15,0	21,0	430	1440
440.46SR	46	90,0	70,0	16,0	22,0	480	1890
440.50SR	50	98,0	77,0	17,0	23,0	520	2220
440.55SR	55	108,0	83,0	18,0	23,0	560	2780
440.60SR	60	115,0	89,0	20,0	25,0	595	3230
440.65SR	65	125,0	95,0	21,0	27,0	595	3680
440.70SR	70	142,0	112,0	24,0	29,0	630	4770

440.SR - Non sparking inch combination wrenches





- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A ["]	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
440.1/4SR	1/4”	14,0	11,6	4,4	6,0	105	20
440.5/16SR	5/16”	17,5	14,5	5,0	7,0	120	40
440.3/8SR	3/8”	22,0	18,0	5,4	8,0	135	55
440.7/16SR	7/16”	26,5	21,0	6,0	9,0	150	55
440.1/2SR	1/2”	30,0	23,0	6,6	10,0	175	75
440.9/16SR	9/16”	30,0	23,0	6,6	10,0	175	120
440.19/32SR	19/32”	35,0	27,0	7,6	11,0	195	125
440.5/8SR	5/8”	35,0	27,0	7,6	11,0	195	155
440.11/16SR	11/16”	35,0	27,0	7,6	11,0	195	155
440.3/4SR	3/4’	39,0	31,0	8,0	12,0	215	210
440.13/16SR	13/16’	45,0	34,0	9,5	13,5	230	225
440.7/8SR	7/8”	46,0	36,0	9,4	14,0	245	250
440.15/16SR	15/16"	49,0	38,0	10,0	15,2	265	260
440.1PSR	1”	56,0	42,0	11,4	17,0	290	260
440.1P1/16SR	1-1/16"	56,0	42,0	11,4	17,0	290	420
440.1P1/8SR	1-1/8”	61,0	49,0	13,0	20,0	320	560
440.1P3/16SR	1-3/16”	61,0	49,0	13,0	20,0	320	560
440.1P1/4SR	1-1/4”	65,0	52,0	14,0	21,0	340	670
440.1P5/16SR	1-5/16”	72,0	52,0	15,0	21,0	360	850
440.1P3/8SR	1-3/8”	72,0	55,0	15,0	21,0	360	890

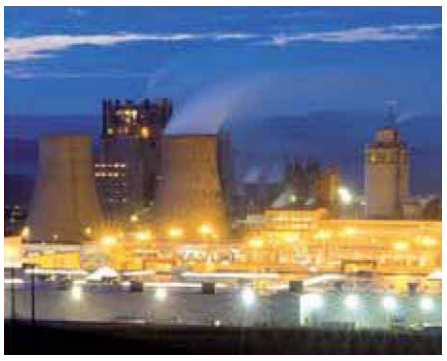
NON SPARKING TOOLS

FACOM HAS A VERY COMPREHENSIVE RANGE OF NON SPARKING TOOLS.

For any non sparking tools not featured in the catalogue please contact your Facom representative or local dealer.











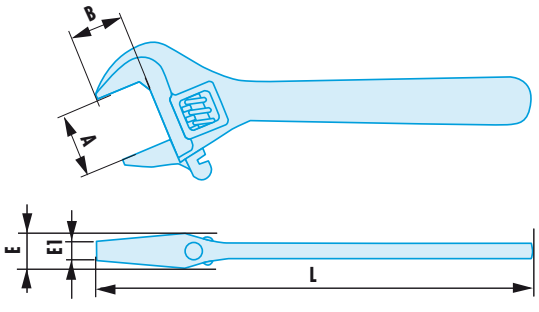




Non sparking adjustable wrenches

113A.SR - Non sparking adjustable wrenches





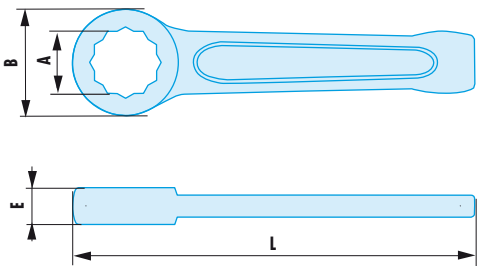
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	B [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
113A.6SR	18	18	10,8	8,0	150	135
113A.8SR	24	24	13,3	9,0	200	280
113A.10SR	30	28	15,7	10,6	250	440
113A.12SR	36	33	18,8	11,2	300	720
113A.15SR	46	42	23,4	13,7	375	1410
113A.18SR	55	51	26,7	15,0	450	2260

Non sparking impact wrenches

50.SR - Non sparking metric impact ring wrenches



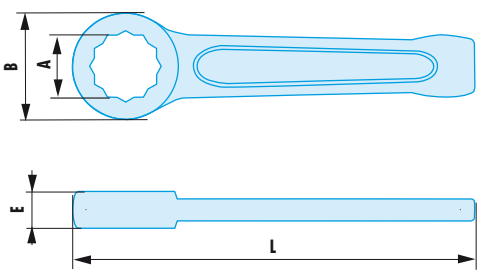


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	B [mm]	E [mm]	L [mm]	⚖ [g]
50.17SR	17	32	12,0	145	210
50.19SR	19	32	12,0	145	200
50.22SR	22	42	14,0	165	245
50.24SR	24	42	14,0	165	235
50.27SR	27	46	16,0	175	350
50.30SR	30	53	16,0	185	475
50.32SR	32	53	16,0	185	465
50.34SR	34	58	19,0	205	580
50.36SR	36	58	19,0	205	580
50.38SR	38	64	20,0	225	790
50.41SR	41	64	20,0	225	755
50.46SR	46	73	22,0	235	990
50.50SR	50	78	23,0	250	1145
50.55SR	55	86	23,5	265	1440
50.60SR	60	92	25,5	274	1620
50.65SR	65	102	28,0	298	1995
50.70SR	70	108	31,5	320	2435
50.75SR	75	113	33,0	326	3010
50.80SR	80	124	34,0	350	3600
50.85SR	85	130	36,0	355	4330
50.90SR	90	142	39,0	390	5500
50.95SR	95	142	39,0	390	5450
50.100SR	100	155	43,0	420	7080
50.105SR	105	155	43,0	420	7000
50.110SR	110	168	45,0	450	9130
50.120SR	120	182	50,0	480	11000
50.130SR	130	200	57,0	520	12610
50.140SR	140	200	57,0	520	13000
50.150SR	150	220	58,0	565	14500

50.SR - Non sparking inch impact ring wrenches



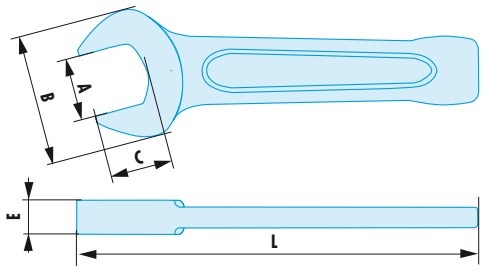


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A ["]	B [mm]	E [mm]	L [mm]	⚖ [g]
50.11/16SR	11/16"	32	12,0	145	210
50.3/4SR	3/4"	32	12,0	145	200
50.7/8SR	7/8"	42	14,0	165	245
50.1PSR	1"	46	16,0	175	350
50.1P1/16SR	1-1/16"	46	16,0	175	350
50.1P1/8SR	1-1/8"	53	16,0	185	455
50.1P3/16SR	1-3/16"	53	16,0	185	475
50.1P1/4SR	1-1/4"	53	16,0	185	470
50.1P3/8SR	1-3/8"	58	19,0	205	560
50.1P1/2SR	1-1/2"	64	28,0	225	790
50.1P5/8SR	1-5/8"	64	28,0	225	755
50.1P3/4SR	1-3/4"	73	22,0	235	1020
50.1P13/16SR	1-13/16"	73	22,0	235	990
50.2PSR	2"	78	23,0	250	1145
50.2P1/16SR	2-1/16"	86	23,5	265	1145
50.2P3/16SR	2-3/16"	86	23,5	265	1350
50.2P13/64SR	2-13/64"	86	23,5	265	1350
50.2P5/16SR	2-5/16"	92	25,5	274	1620
50.2P3/8SR	2-3/8"	92	25,5	274	1620
50.2P1/2SR	2-1/2"	102	30,0	298	1900
50.2P9/16SR	2-9/16"	102	30,0	298	1900
50.2P5/8SR	2-5/8"	102	30,0	298	1900
50.2P3/4SR	2-3/4"	108	31,5	320	2270
50.2P15/16SR	2-15/16"	113	33,0	326	2680
50.3PSR	3"	113	33,0	326	2680
50.3P1/16SR	3-1/16"	124	34,0	350	2820
50.3P1/8SR	3-1/8"	124	34,0	350	2820
50.3P3/8SR	3-3/8"	130	36,0	355	4000
50.3P9/16SR	3-9/16"	142	39,0	390	5300
50.3P3/4SR	3-3/4"	142	39,0	390	5300
50.3P15/16SR	3-15/16"	155	43,0	420	6730
50.4P1/8SR	4-1/8"	155	43,0	420	6730

49.SR - Non sparking metric impact open end wrenches





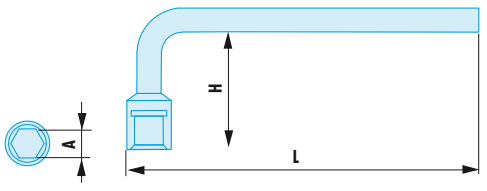
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	⚖ [g]
49.17SR	17	40,5	19	11,0	125	150
49.19SR	19	40,5	19	11,0	125	150
49.22SR	22	46,0	22	12,0	135	195
49.24SR	24	50,0	24	12,0	150	245
49.27SR	27	57,0	27	15,0	175	335
49.30SR	30	64,0	30	16,0	190	435
49.32SR	32	66,0	32	16,0	190	515
49.36SR	36	75,0	36	18,0	210	725
49.38SR	38	82,0	38	18,0	220	955
49.41SR	41	87,0	41	18,5	230	955
49.46SR	46	98,0	46	20,0	250	1225
49.50SR	50	108,0	50	20,5	275	1340
49.52SR	52	108,0	52	20,5	275	1500
49.55SR	55	117,0	55	23,0	305	1665
49.60SR	60	128,0	60	23,5	315	2190
49.65SR	65	141,0	65	27,5	335	2670
49.70SR	70	156,0	70	28,5	370	3250
49.75SR	75	162,0	75	29,0	375	3660
49.80SR	80	174,0	80	32,0	400	4500
49.85SR	85	174,0	85	32,0	400	5290
49.90SR	90	194,0	90	36,0	445	6640
49.95SR	95	194,0	95	36,0	445	6640
49.100SR	100	228,0	100	43,0	485	8850
49.110SR	110	238,0	110	45,0	513	11060
49.120SR	120	250,0	120	51,0	530	11060
49.130SR	130	265,0	130	53,0	560	14800
49.140SR	140	290,0	140	56,0	630	15850
49.150SR	150	290,0	150	56,0	630	15850

Non sparking box wrenches

75.SR - Non sparking metric angled socket wrenches





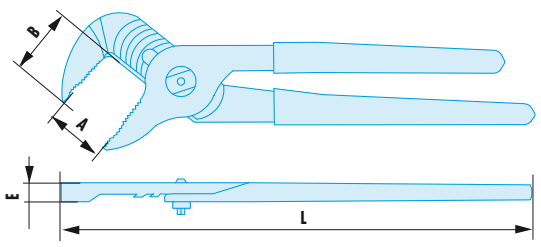
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	H [mm]	L [mm]	⚖ [g]
75.6SR	6	29	120	100
75.8SR	8	33	144	150
75.10SR	10	37	168	200
75.12SR	12	42	216	220
75.13SR	13	45	240	250
75.14SR	14	45	245	300
75.15SR	15	48	250	350
75.16SR	16	48	255	500
75.17SR	17	51	260	550
75.18SR	18	53	265	550
75.19SR	19	55	270	550
75.20SR	20	57	272	600
75.21SR	21	57	275	750
75.22SR	22	59	278	750
75.23SR	23	60	282	800
75.24SR	24	63	286	850
75.27SR	27	69	294	900
75.30SR	30	75	302	1000
75.32SR	32	81	310	1100
75.36SR	36	85	330	1300
75.41SR	41	90	350	1380

Non sparking multigrip pliers

482.SR - Non sparking multigrip pliers



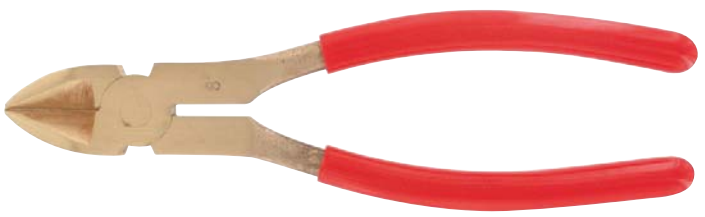


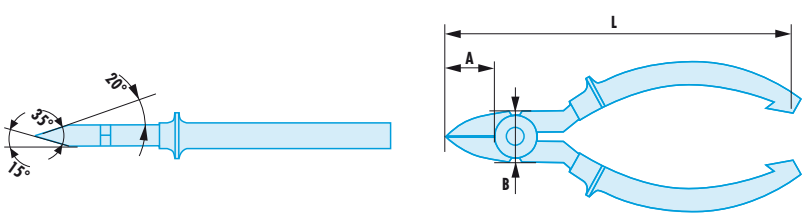
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.

	A [mm]	B [mm]	E [mm]	L [mm]	⚖ [g]
482.15SR	25	26	8	150	150
482.25SR	45	36	10	250	455
482.30SR	55	38	11	300	745
482.35SR	55	42	11	350	790

Non sparking cutting pliers

482.SR - Non sparking cutting pliers



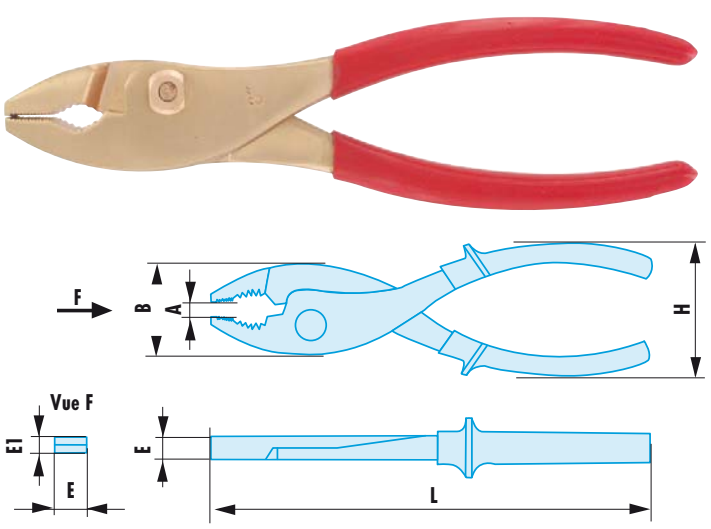


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.
- Cutting edges designed specifically for easy cutting and extended lifetime of the tool.

	A [mm]	B [mm]	L [mm]	⚖ [g]
192.16SR	22	22	155	205
192.20SR	30	28	198	310

Non sparking motorist pliers

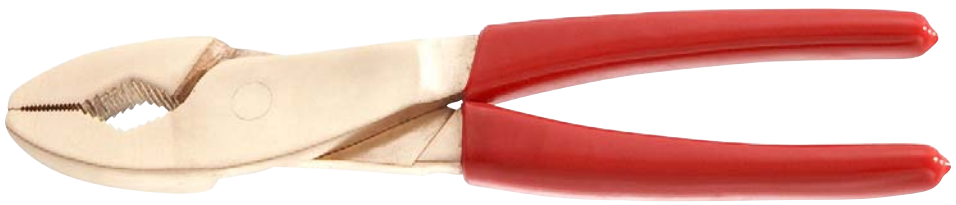
186.SR - Non sparking motorist pliers

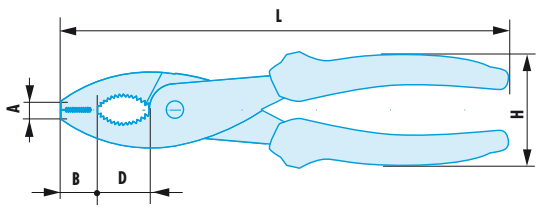


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.

	A [mm]	B [mm]	E [mm]	E1 [mm]	H [mm]	L [mm]	⚖ [g]
186.7SR	8	26	9	6	43	153	215
186.8SR	13	36	12	7	53	203	325

Non sparking gas plier

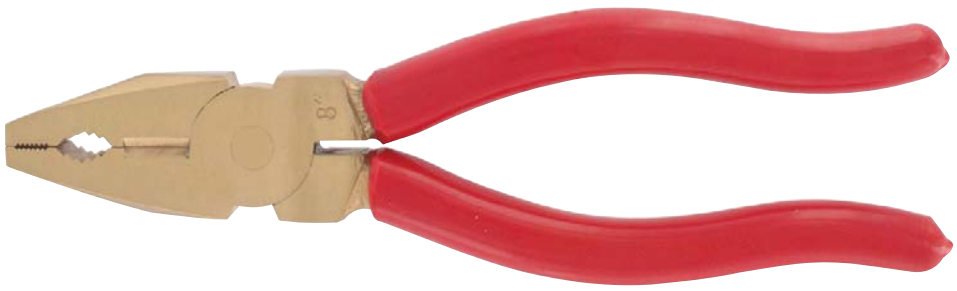


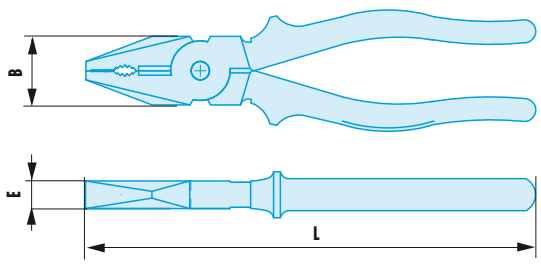


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.

	A [mm]	B [mm]	d [mm]	H [mm]	L [mm]	⚖ [g]
186.9SR	7	16	24	50	203	350

Non sparking Lineman's pliers





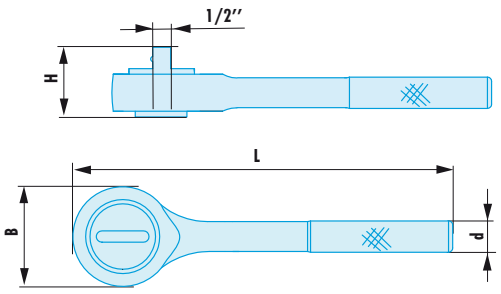
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.
- Cutting edges designed specifically for easy cutting and extended lifetime of the tool.

	B [mm]	E [mm]	L [mm]	⚖ [g]
187.16SR	24	10	150	180
187.18SR	26	11	175	306
187.20SR	28	12	200	405
187.22SR	32	13	250	502

1/2" to 1" Non sparking ratchets

Non sparking 1/2" - 3/4" - 1" ratchets





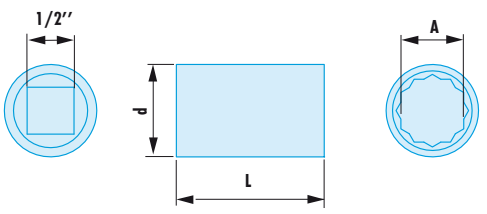
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- The entire ratchet mechanism is made in Copper-Beryllium.

	A [mm]	Square [']	d [mm]	H [mm]	L [mm]	⚖ [g]
S.155SR	48	1/2"	17	43,6	245	690
K.149SR	70	3/4"	21	58,0	320	1570
M.151SR	84	1"	26	70,0	550	3400

1/2" Non sparking sockets

Non sparking 1/2" metric 12-point sockets



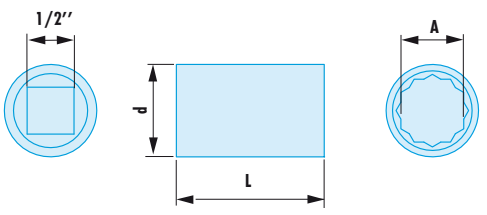


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	d maxi [mm]	L [mm]	⚖ [g]
S.6SR	6	24	40	75
S.7SR	7	24	40	80
S.8SR	8	24	40	80
S.9SR	9	24	40	80
S.10SR	10	24	40	80
S.11SR	11	24	40	80
S.12SR	12	24	40	80
S.13SR	13	24	40	80
S.14SR	14	24	40	80
S.15SR	15	25	40	85
S.16SR	16	25	40	85
S.17SR	17	25	40	90
S.18SR	18	26	42	90
S.19SR	19	28	42	110
S.20SR	20	29	42	120
S.21SR	21	30	43	140
S.22SR	22	31	43	145
S.23SR	23	33	43	160
S.24SR	24	34	43	185
S.25SR	25	36	43	200
S.26SR	26	37	43	210
S.27SR	27	38	46	235
S.28SR	28	39	46	245
S.29SR	29	41	46	250
S.30SR	30	42	46	285
S.32SR	32	44	46	320

S.SR - Non sparking 1/2" inch 12-point sockets





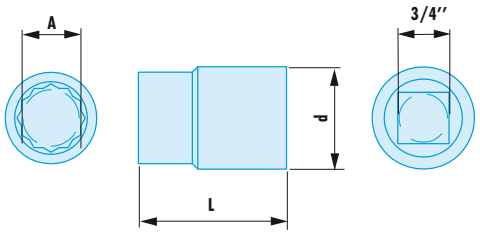
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	d maxi [mm]	L [mm]	⚖ [g]
S.5/16SR	24	40	78
S.3/8SR	24	40	78
S.7/16SR	24	40	79
S.1/2SR	24	40	79
S.9/16SR	24	40	80
S.5/8SR	25	40	90
S.11/16SR	26	40	95
S.3/4SR	28	42	100
S.13/16SR	30	43	120
S.7/8SR	32	43	140
S.15/16SR	34	43	150
S.1PSR	36	43	100
S.1P1/16SR	38	46	240
S.1P1/4SR	43	46	275
S.1P7/16SR	49	50	310

3/4" Non sparking sockets

K.SR - Non sparking 3/4" metric 12-point sockets



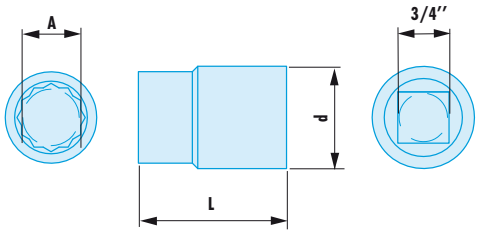


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	d maxi [mm]	L [mm]	⚖ [g]
K.17SR	17	38	50	246
K.19SR	19	38	50	246
K.21SR	21	38	55	268
K.22SR	22	38	55	268
K.23SR	23	40	55	306
K.24SR	24	40	55	307
K.26SR	26	40	55	307
K.27SR	27	40	55	312
K.28SR	28	41	55	339
K.29SR	29	42	55	350
K.30SR	30	43	60	410
K.32SR	32	45	60	465
K.34SR	34	48	60	480
K.36SR	36	50	60	510
K.38SR	38	53	60	555
K.41SR	41	57	65	660
K.46SR	46	63	65	830
K.50SR	50	68	70	945

K.SR - Non sparking 3/4" inch 12-point sockets





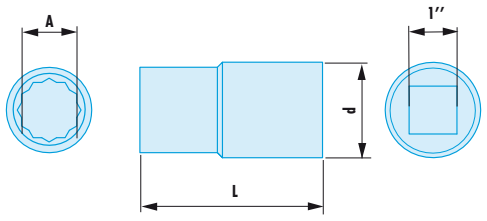
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	d maxi [mm]	L [mm]	⚖ [g]
K.3/4SR	38	50	240
K.13/16SR	38	55	262
K.7/8SR	38	55	267
K.15/16SR	40	55	305
K.1PSR	40	55	310
K.1P1/16SR	40	55	315
K.1P1/8SR	43	55	245
K.1P3/16SR	44	60	400
K.1P1/4SR	46	60	437
K.1P5/16SR	48	60	472
K.1P3/8SR	50	60	515
K.1P7/16SR	52	60	525
K.1P1/2SR	54	60	580
K.1P5/8SR	58	65	702
K.1P3/4SR	62	65	761
K.1P13/16SR	63	65	830
K.1P7/8SR	66	65	850
K.2PSR	69	70	930

1" Non sparking sockets

M.SR - Non sparking 1" metric 12-point sockets



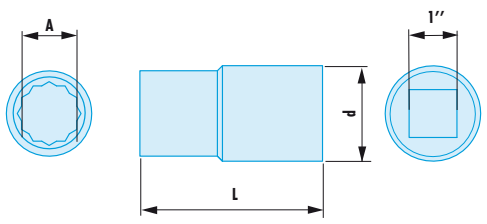


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	d maxi [mm]	L [mm]	⚖ [g]
M.22SR	22	48	55	360
M.24SR	24	48	55	370
M.26SR	26	48	55	380
M.27SR	27	48	55	395
M.28SR	28	48	55	400
M.29SR	29	48	55	400
M.30SR	30	48	60	445
M.31SR	31	48	60	450
M.32SR	32	48	60	480
M.34SR	34	50	60	500
M.36SR	36	52	65	505
M.38SR	38	55	65	570
M.41SR	41	58	70	630
M.46SR	46	64	75	785
M.50SR	50	68	75	890
M.55SR	55	74	80	1090
M.60SR	60	81	85	1220
M.65SR	65	88	90	1455
M.70SR	70	95	90	1550
M.75SR	75	103	95	2160
M.80SR	80	110	95	2405

M.SR - Non sparking 1" inch 12-point sockets





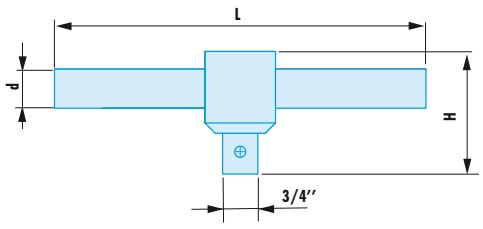
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	d maxi [mm]	L [mm]	⚖ [g]
M.1P1/16SR	48	55	395
M.1P1/8SR	48	55	400
M.1P3/16SR	48	60	445
M.1P1/4SR	48	60	470
M.1P5/16SR	48	60	485
M.1P3/8SR	50	60	490
M.1P7/16SR	52	65	520
M.1P1/2SR	55	65	500
M.1P5/8SR	58	70	635
M.1P7/8SR	66	75	780
M.2PSR	68	75	910
M.2P1/4SR	77	80	1190
M.2P1/2SR	85	90	1375
M.2P3/4SR	95	90	1505
M.3PSR	104	95	1670

Non sparking accessories

SKM.120SR - Non sparking 1/2" - 3/4" - 1" sliding tee



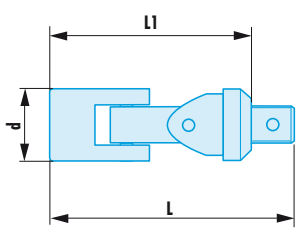


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	Square ["]	d [mm]	H [mm]	L [mm]	⚖ [g]
S.120SR	1/2"	13	45	250	330
K.120SR	3/4"	21	62	400	1335
M.120SR	1"	21	72	400	1620

SKM.240SR - Non sparking 1/2" - 3/4" - 1" universal joints



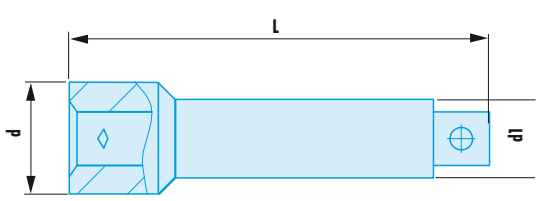


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	Square ["]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
S.240SR	1/2"	25	80	65	185
K.240SR	3/4"	38	110	90	500
M.240SR	1"	48	133	95	1000

SKM.SR - Non sparking 1/2" - 3/4" - 1" extensions





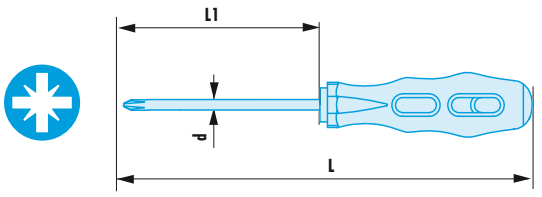
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	Square ["]	d [mm]	d1 [mm]	L [mm]	⚖ [g]
S.208SR	1/2"	24	16,5	100	245
S.210SR	1/2"	24	16,5	125	260
S.212SR	1/2"	24	16,5	200	485
S.215SR	1/2"	24	16,5	250	510
K.210SR	3/4"	35	25,0	200	960
M.210SR	1"	45	34,0	200	1580

Non sparking screwdrivers

AND.SR - non sparking screwdriver for Pozidriv® heads



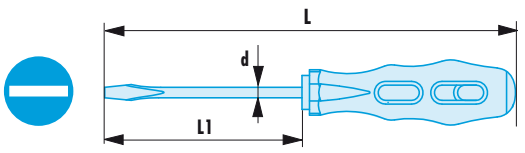


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wood handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	Pozidriv [No]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
AND0X75SR	PZ0	3,0	150	50	35
AND1X75SR	PZ1	4,5	175	75	45
AND2X100SR	PZ2	6,0	200	100	85
AND3X150SR	PZ3	8,0	250	150	145
AND4X200SR	PZ4	10,0	320	200	230

AN.SR - non sparking screwdriver for slotted heads



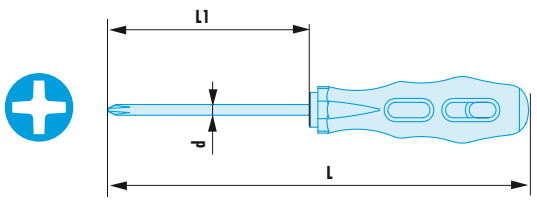


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	d [mm]	L [mm]	L1 [mm]	⚖ [g]
AN3X50SR	3,0	150	50	35
AN4.5X50SR	4,5	150	50	43
AN3X75SR	3,0	175	75	35
AN4X75SR	4,0	175	75	45
AN4X50SR	4,0	200	100	45
AN5X100SR	5,0	200	100	75
AN6X100SR	6,0	200	100	85
AN6X150SR	6,0	250	150	110
AN7X150SR	7,0	250	150	125
AN8X150SR	8,0	250	150	140
AN8X200SR	8,0	320	200	165
AN9X250SR	9,0	370	250	185
AN11X250SR	11,0	400	250	260
AN10X300SR	10,0	450	300	245
AN11X350SR	11,0	500	350	320
AN12X400SR	12,0	550	400	450
AN13X450SR	13,0	600	450	530

AND.SR - non sparking screwdriver for Phillips® heads





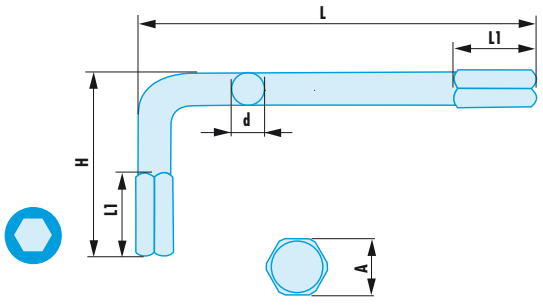
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	Phillips [No]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
ANP0X50SR	PH0	3	150	50	35
ANP1X75SR	PH1	5	175	75	70
ANP1X100SR	PH1	5	200	100	75
ANP2X100SR	PH2	6	200	100	100
ANP2X125SR	PH2	6	225	125	110
ANP3X150SR	PH3	8	250	150	165
ANP4X200SR	PH4	8	320	200	185
ANP4X300SR	PH4	9	450	300	245
ANP4X400SR	PH4	9	550	400	295

Non sparking hexagon keys

82H.SR - Non sparking metric keys



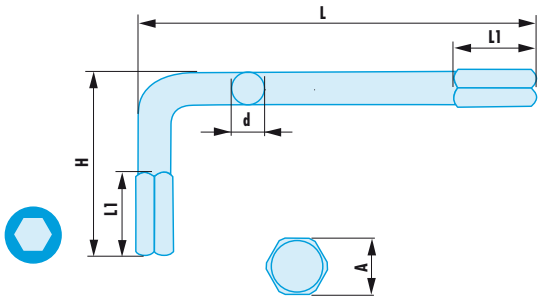


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	L1 [mm]	d [mm]	H [mm]	L [mm]	⧋ [g]
82H.1.5SR	1,5	5	3,0	13	38	5
82H.2SR	2,0	5	3,0	13	38	5
82H.3SR	3,0	7	3,7	25	59	10
82H.4SR	4,0	10	3,8	30	65	10
82H.5SR	5,0	10	4,5	32	79	15
82H.6SR	6,0	15	5,5	37	85	25
82H.7SR	7,0	20	6,0	43	88	35
82H.8SR	8,0	20	7,0	44	92	50
82H.9SR	9,0	20	8,0	44	97	60
82H.10SR	10,0	20	9,0	45	110	80
82H.11SR	11,0	20	10,0	48	119	100
82H.12SR	12,0	20	11,0	52	130	145
82H.13SR	13,0	20	11,5	54	140	180
82H.14SR	14,0	25	12,0	58	150	210
82H.16SR	16,0	25	14,0	63	162	300
82H.17SR	17,0	30	15,0	65	168	370
82H.18SR	18,0	30	16,0	69	173	450
82H.19SR	19,0	30	17,0	72	177	490
82H.22SR	22,0	35	20,0	77	186	675
82H.23SR	23,0	35	21,0	79	189	725
82H.24SR	24,0	35	22,0	82	192	825
82H.27SR	27,0	35	25,0	93	213	1220
82H.32SR	32,0	40	30,0	116	266	2065
82H.36SR	36,0	40	34,0	128	294	2905
82H.41SR	41,0	40	39,0	140	320	4120

82H.SR - Non sparking inch keys





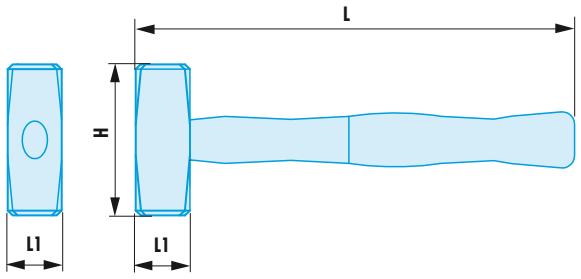
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A ["]	L1 [mm]	d [mm]	H [mm]	L [mm]	⧋ [g]
82H.1/16SR	1/16”	5	3,0	13	38	5
82H.5/64SR	5/64”	5	3,0	13	38	5
82H.3/32SR	3/32”	6	3,3	13	38	5
82H.7/64SR	7/64”	7	3,8	24	58	10
82H.1/8SR	1/8”	7	3,8	24	58	10
82H.9/64SR	9/64”	10	4,0	29	64	10
82H.5/32SR	5/32”	10	4,0	30	65	10
82H.3/16SR	3/16”	10	4,5	31	79	15
82H.7/32SR	7/32”	15	5,0	37	85	20
82H.1/4SR	1/4”	15	6,0	37	85	30
82H.9/32SR	9/32”	20	6,0	43	88	45
82H.5/16SR	5/16”	20	7,0	44	92	50
82H.11/32SR	11/32”	20	8,0	44	97	50
82H.3/8SR	3/8”	20	9,0	45	110	85
82H.7/16SR	7/16”	20	10,0	48	119	110
82H.1/2SR	1/2”	20	11,5	55	140	170
82H.9/16SR	9/16”	25	12,0	58	150	195
82H.5/8SR	5/8”	25	14,0	63	162	270
82H.11/16SR	11/16”	30	15,0	65	168	355
82H.3/4SR	3/4”	30	17,0	73	178	450
82H.13/16SR	13/16”	35	19,0	77	184	565
82H.7/8SR	7/8”	35	20,0	79	187	650
82H.15/16SR	15/16”	35	22,0	82	192	825
82H.1PSR	1”	35	23,0	85	200	925
82H.1P1/16SR	1-1/16”	35	25,0	93	213	1220
82H.1P1/8SR	1-1/8”	40	27,0	100	230	1350
82H.1P3/16SR	1-3/16”	40	28,0	105	240	1615
82H.1P1/4SR	1-1/4”	40	30,0	116	266	2065
82H.1P7/16SR	1-7/16”	40	34,0	128	294	2905
82H.1P5/8SR	1-5/8”	40	39,0	140	320	4120

Non sparking mallets

1262H.SR - Non sparking German style club hammer



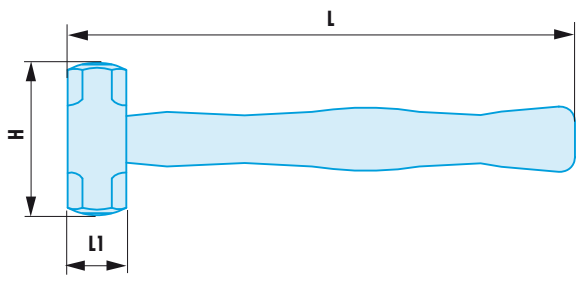


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.
- To avoid any risk of sparks, the design of the hammer heads is specific, without sharp edges.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
1262H.50SR	80,0	250	29,0	650
1262H.100SR	94,0	250	38,0	1300
1262H.150SR	115,0	250	42,0	1800
1262H.200SR	125,5	250	46,5	2300
1262H.400SR	165,0	800	58,0	4900
1262H.500SR	178,0	800	62,0	5900

1261H.SR - Non sparking sledgehammers





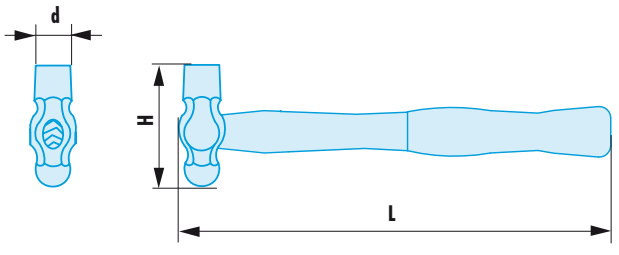
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.
- To avoid any risk of sparks, the design of the hammer heads is specific, without sharp edges.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
1261H.45SR	79	250	29,0	610
1261H.100SR	102	250	39,0	1300
1261H.140SR	116	250	42,0	1700
1261H.150SR	122	250	42,5	1800
1261H.180SR	122	250	46,5	2100
1261H.200SR	130	250	48,0	2300
1261H.220SR	134	250	49,0	2500
1261H.250SR	146	258	50,0	3410
1261H.270SR	151	258	51,0	3610
1261H.300SR	156	700	53,0	3910
1261H.400SR	168	800	59,0	4910
1261H.450SR	177	800	61,0	5410
1261H.500SR	184	800	63,0	5910
1261H.540SR	187	800	65,0	6310
1261H.640SR	197	800	69,0	7310
1261H.800SR	208	900	75,0	8910
1261H.820SR	208	900	76,0	9110
1261H.990SR	226	900	80,0	10810

Non sparking hammers

202H.SR - Non sparking ball pein hammers





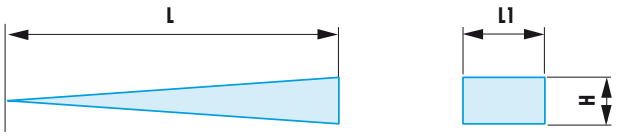
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.
- To avoid any risk of sparks, the design of the hammer heads is specific, without sharp edges.

	d [mm]	H [mm]	L [mm]	⚖ [g]
202H.1/4SR	24,2	80	300	400
202H.1/2SR	25,0	90	300	500
202H.1SR	27,0	101	325	680
202H.1P1/4SR	34,0	115	366	950
202H.1P1/2SR	36,0	126	366	1205
202H.2SR	39,0	137	397	1470

Non sparking wedges

WF.SR - Non sparking wedges





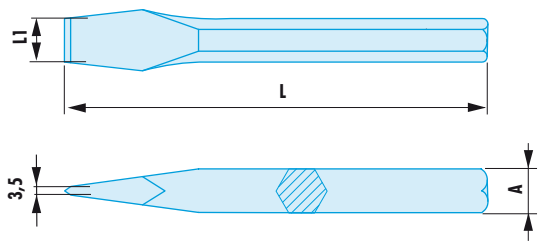
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
WF80.13SR	6	80	13	25
WF100.50SR	10	100	50	200
WF135.50SR	18	135	50	500
WF150.40SR	8	150	40	200
WF150.25SR	8	150	25	125
WF150.26SR	13	150	25	205
WF150.30SR	13	150	30	400
WF180.32SR	13	180	32	305
WF180.50SR	19	180	50	700
WF200.20SR	30	200	20	490
WF200.30SR	30	200	30	740
WF200.40SR	40	200	40	1315
WF200.50SR	12	200	50	500
WF230.40SR	20	230	40	750
WF250.40SR	30	250	40	1230
WF300.50SR	40	300	50	2460

Non sparking chisels

265.SR - Non sparking chisels





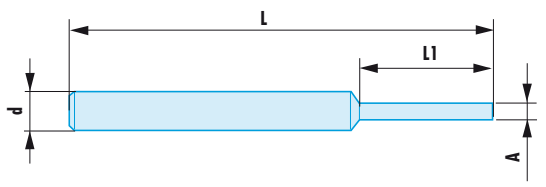
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	L [mm]	L1 [mm]	⚖ [g]
265.20SR	10	150	12	100
265.22SR	12	160	14	240
265.24SR	14	200	16	250
265.26SR	16	160	18	260
265.28SR	17	350	19	900
265.29SR	22	600	24	1800
263.30SR	25	300	28	1205
263.32SR	30	300	35	2860

Non sparking drift punches

249.SR - Non sparking drift punches





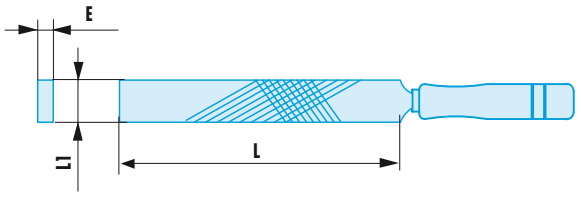
- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	d [mm]	L1 [mm]	L [mm]	⚖ [g]
249.3SR	3	9	20	110	20
249.4SR	4	10	35	110	60
249.6SR	6	12	35	115	105
249.8SR	8	14	40	120	130
249.10SR	10	16	45	145	200
249.12SR	12	18	50	160	280

Non sparking files

PAM.MDSR - Non sparking flat second-cut file



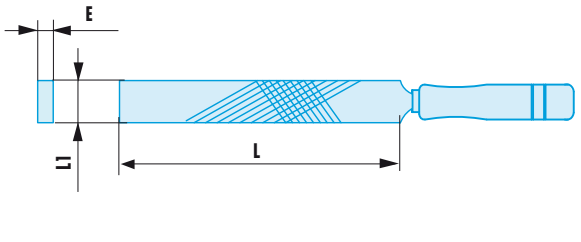


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
PAM.MD150SR	4,0	150	16	75
PAM.MD200SR	4,5	200	21	160
PAM.MD250SR	6,0	250	25	282
PAM.MD300SR	6,5	300	30	455

PAM.DSR - Non sparking smooth flat file



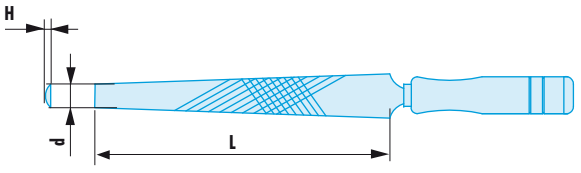


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
PAM.D350SR	8	350	32	675
PAM.D400SR	9.5	400	32	925

DRD.MDSR - Non sparking half-round second-cut file

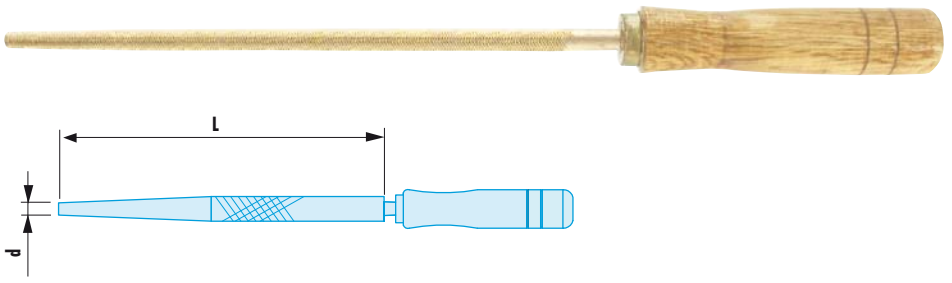




- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	d [mm]	H [mm]	L [mm]	⚖ [g]
DRD.MD200SR	15	4	150	105
DRD.MD220SR	17	4	200	190
DRD.MD250SR	17	5	250	255
DRD.MD300SR	17	5	300	375
DRD.MD350SR	17	6	350	565

RD.MDSR - Non sparking round second-cut file

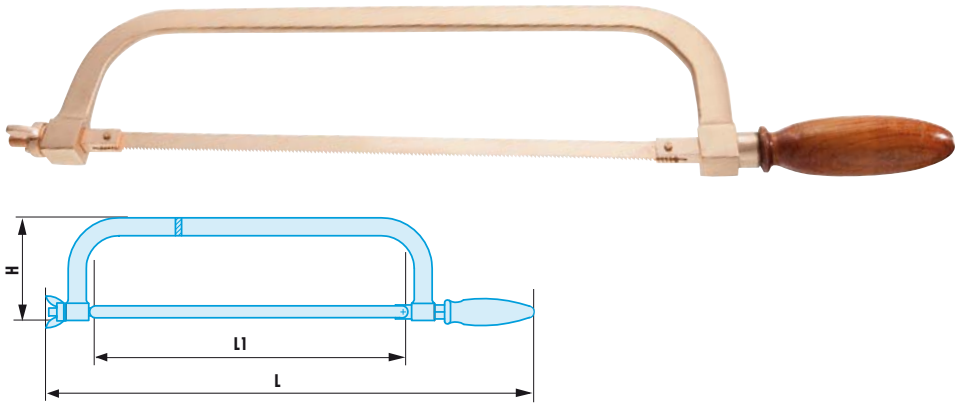


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	d [mm]	L [mm]	⚖ [g]
RD.MD150SR	5,5	150	45
RD.MD200SR	6,0	200	90
RD.MD250SR	6,5	250	120
RD.MD300SR	7,0	300	180
RD.MD350SR	7,5	350	250

Non sparking saws

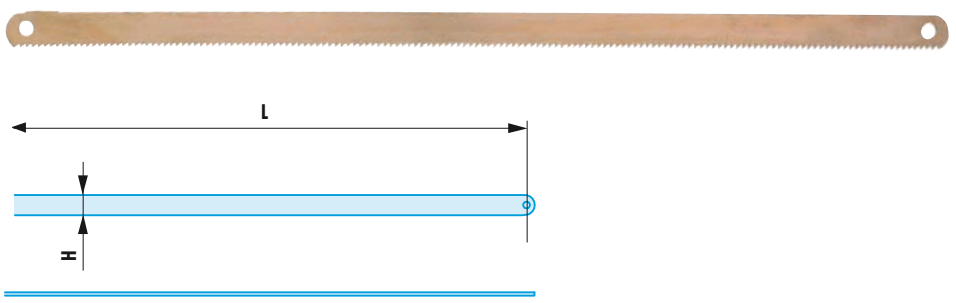
Non sparking hacksaw frame



- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses wooden handles to prevent any risk of sparks. This is not the case of certain bi-material plastic handles.

	H [mm]	L [mm]	L1 [mm]	⚖ [g]
599SR	103	500	300	645

Non sparking hacksaw blade



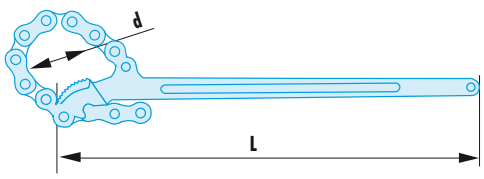
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- 10 teeth per centimeter for most current uses.

	H [mm]	L [mm]	⚖ [g]
660A.10SR	12	300	30

Non sparking pipework wrench

136A-137A.SR - Non sparking chain pipework wrenches





- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	d [mm]	L [mm]	⚖ [g]
136A.2SR	100	600	2105
137A.2P1/2SR	100	600	3955
137A.4PSR	150	600	4475
137A.6PSR	200	900	8705

134A.SR - Non sparking monkey wrenches

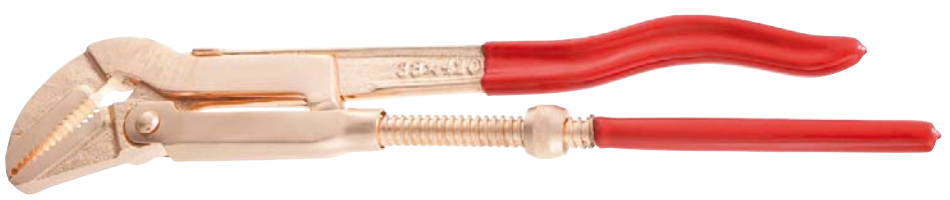


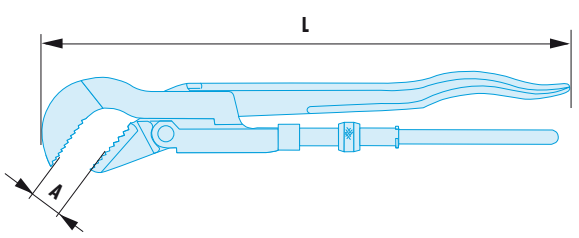


- Special non sparking and anti-magnetic Copper-Beryllium alloy.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
134A.8SR	45	35,5	12	240	26	510
134A.10SR	48	35,5	12	254	26	615
134A.12SR	58	43,0	15	305	28	1180
134A.14SR	65	49,5	18	350	32	1220

120A.SR - Non sparking Swedish model pipework wrenches

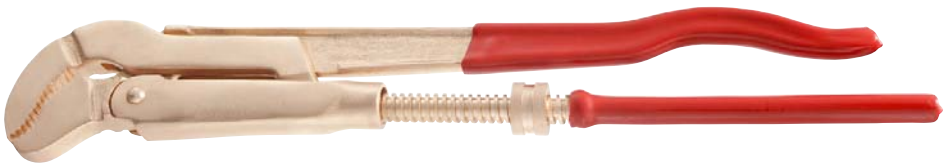


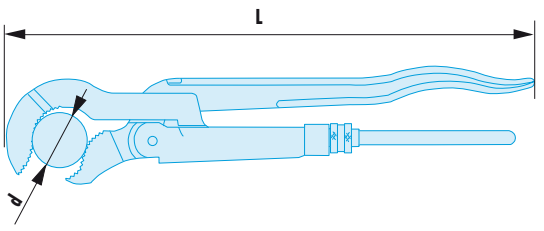


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.

	A [mm]	L [mm]	⚖ [g]
120A.1P1/2SR	38	434	1430
120A.2PSR	50	535	1755

121A.SR - Non sparking Swedish model pipework wrenches

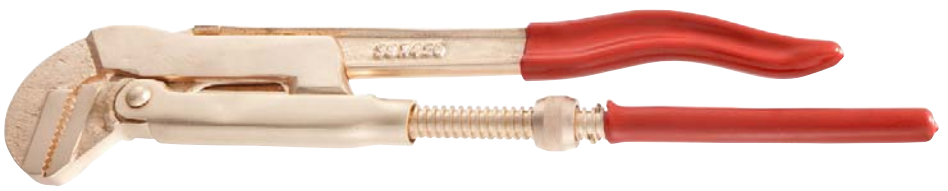


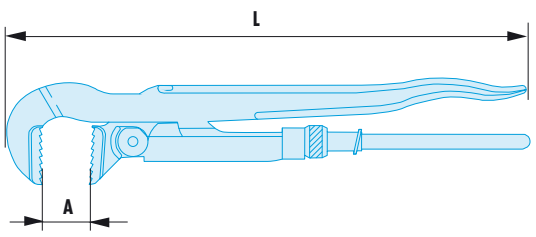


- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.

	d [mm]	L [mm]	⚖ [g]
121A.2PSR	50	535	2605

122A.SR - Non sparking Swedish model pipework wrenches





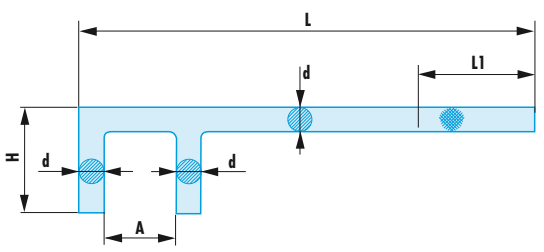
- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- For safety purposes, FACOM uses sheaths in overmoulded antistatic pvc to prevent any risk of sparks.

	A [mm]	L [mm]	⚖ [g]
122A.2PSR	38	434	1500

Non sparking valve wrench

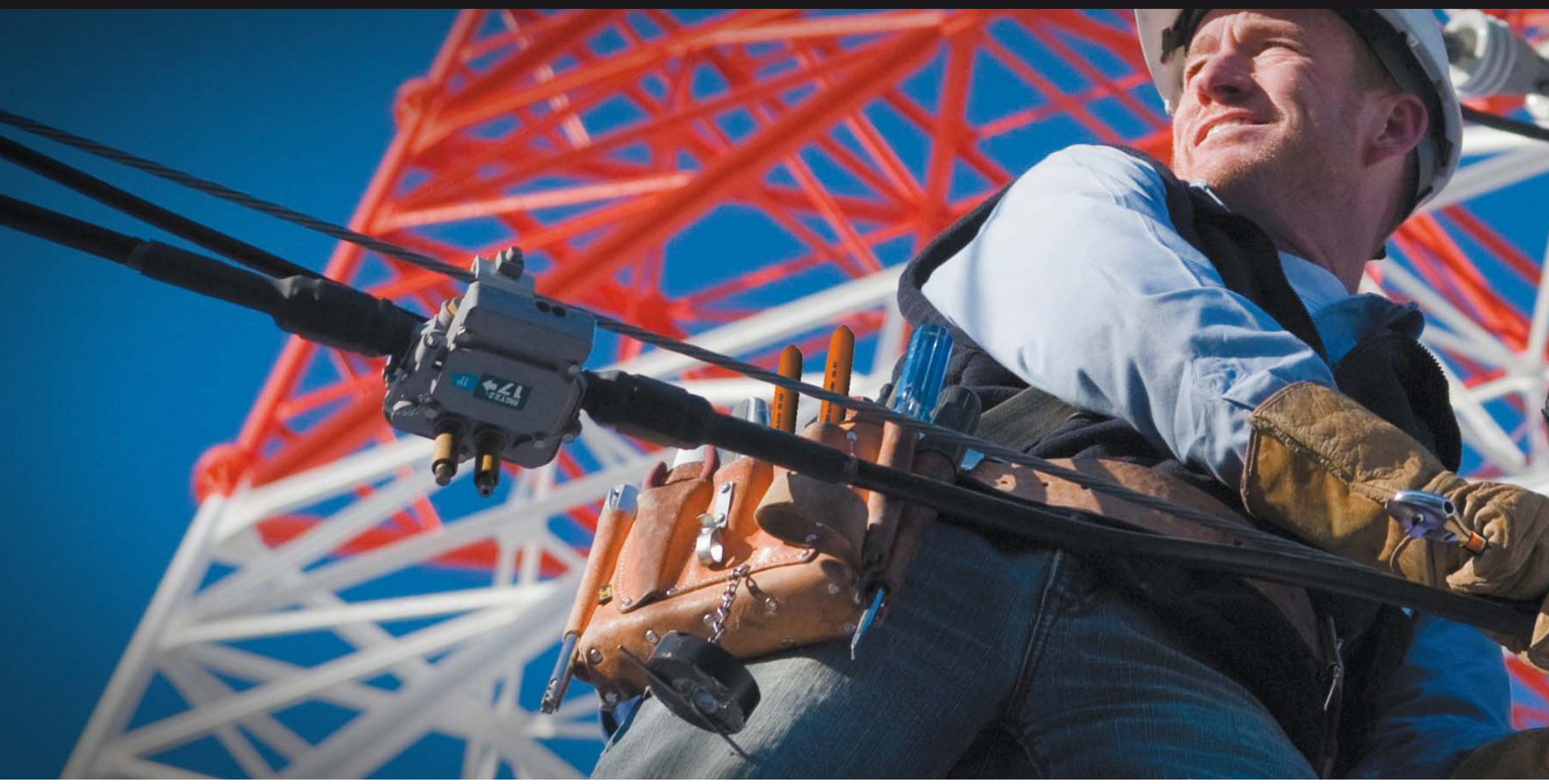
VH.SR - Non sparking valve wrenches





- Special non sparking and anti-magnetic Copper-Beryllium alloy.
- Metal-grip handle.

	A [mm]	d [mm]	H [mm]	L [mm]	L1 [mm]	⚖ [g]
VH30.200SR	30	13,0	44	200	100	280
VH32.300SR	32	15,0	50	300	120	540
VH35.250SR	35	13,0	47	250	110	365
VH40.300SR	40	14,0	50	300	120	470
VH45.350SR	45	15,0	58	350	130	610
VH48.375SR	48	15,0	62	375	140	660
VH50.400SR	50	15,5	67	400	150	705
VH55.450SR	55	16,5	73	450	160	960
VH60.500SR	60	17,5	79	500	170	1205
VH65.550SR	65	18,0	82	550	180	1370
VH70.600SR	70	18,0	85	600	190	1540
VH75.650SR	75	18,5	88	650	200	1705
VH80.700SR	80	19,0	91	700	210	1910
VH85.750SR	85	20,0	97	750	220	2250
VH90.800SR	90	20,0	103	800	230	2380



CABLE-SHEATH STRIPPERS

760



Cable-sheath strippers 760
Longitudinal/helicoidal cable-sheath stripper 761
Multifunction sheath strippers 762
Coax cable-sheath strippers 762

WIRE STRIPPERS

763



Automatic wire stripper 763
Automatic lateral wire strippers 764
Automatic cutting strippers 764
End wire strippers 765

CRIMPING PLIERS

766



For pre-insulated terminals 766
For tubular terminals and sleeves 769
Crimping dies 770
For open cylinder connectors 771
For wire tips 771
For transmission connectors 772
Terminal sets 773

WIRING TOOLS

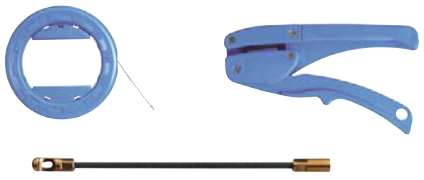
774



Sleeving pliers 774
Plastic cable-tie pliers 774
Glue gun 775
Wrenches for cabinet 775

WIRE PULLER AND ACCESSORIES

776



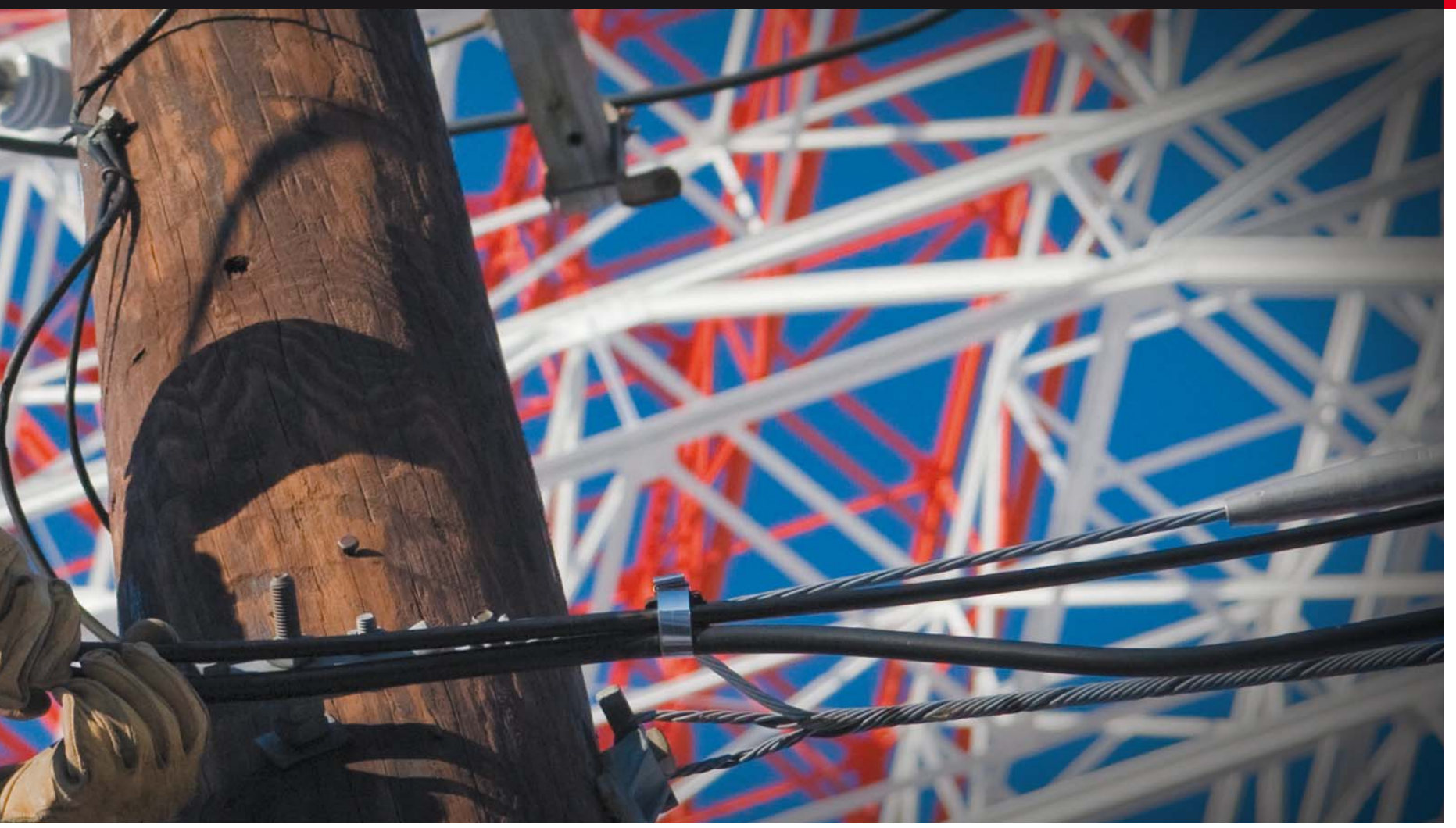
Nylon rods 776
Glass fibre rods 777
Accessories 777
Consumables for nylon and glass fibre rods 778
Accessories for nylon steel rods 779

PUNCHES

780



Standard hole punches with PG circular cutout 781
Standard hole punches with ISO circular cutout 782
Hydraulic devices for hole punches 784
Accessories 785
Hole punch sets 786



PHYSICAL MEASUREMENT

788



Testers..... 788
Thermometer..... 789

VE SERIES 1,000 VOLT INSULATED PLIERS

790



Diagonal cutters 790
End cutters 791
Half-round nose pliers 791
Standard multigrip pliers 792
Combination pliers 792
Flat nose pliers 793
Round nose pliers 793
Standard wire strippers 793

VE SERIES 1,000 VOLT INSULATED SCREWDRIVERS

794



Insulated screwdrivers for slotted head screws..... 794
Insulated screwdrivers for Phillips® screws..... 794
Insulated screwdrivers for Pozidriv® screws..... 795
Insulated screwdriver sets 795

VSE SERIES 1,000 VOLT INSULATED TOOLING

796



Multigrip pliers 797
Cutters 797
Combination pliers 798
Grip pliers 798
Wire stripper 799
Cable cutters 800
Hacksaw frame 800
Knife..... 801
Open-end wrenches 801
Ring wrenches..... 801
Adjustable wrenches 802
Offset keys 802
Box wrenches 802
1/4" sockets 803
1/4" ratchets and accessories 803
1/4" sockets and accessories sets..... 804
3/8" sockets 804
3/8" ratchets and accessories 805
3/8" sockets and accessories sets 806
1/2" sockets 806
1/2" ratchets and accessories 807
1/2" sockets sets..... 808
Insulated gloves 809
Safety overgloves 809
Insulated mats..... 810
Insulated pliers 810
Insulated tool sets 810

Cable-sheath strippers

MULTIFUNCTION SHEATH STRIPPER

Easy sheath stripping
trigger for 30% less effort



PVC cables
Ø 4>28 mm

Pivoting blade
for faster and easier sheath stripping



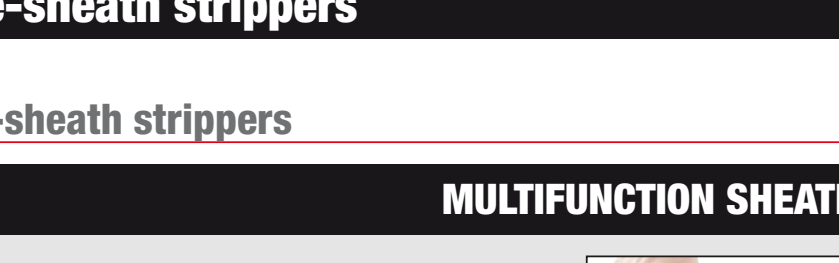
Easy blade change

• Easy blade change by pressing the release and locking point.

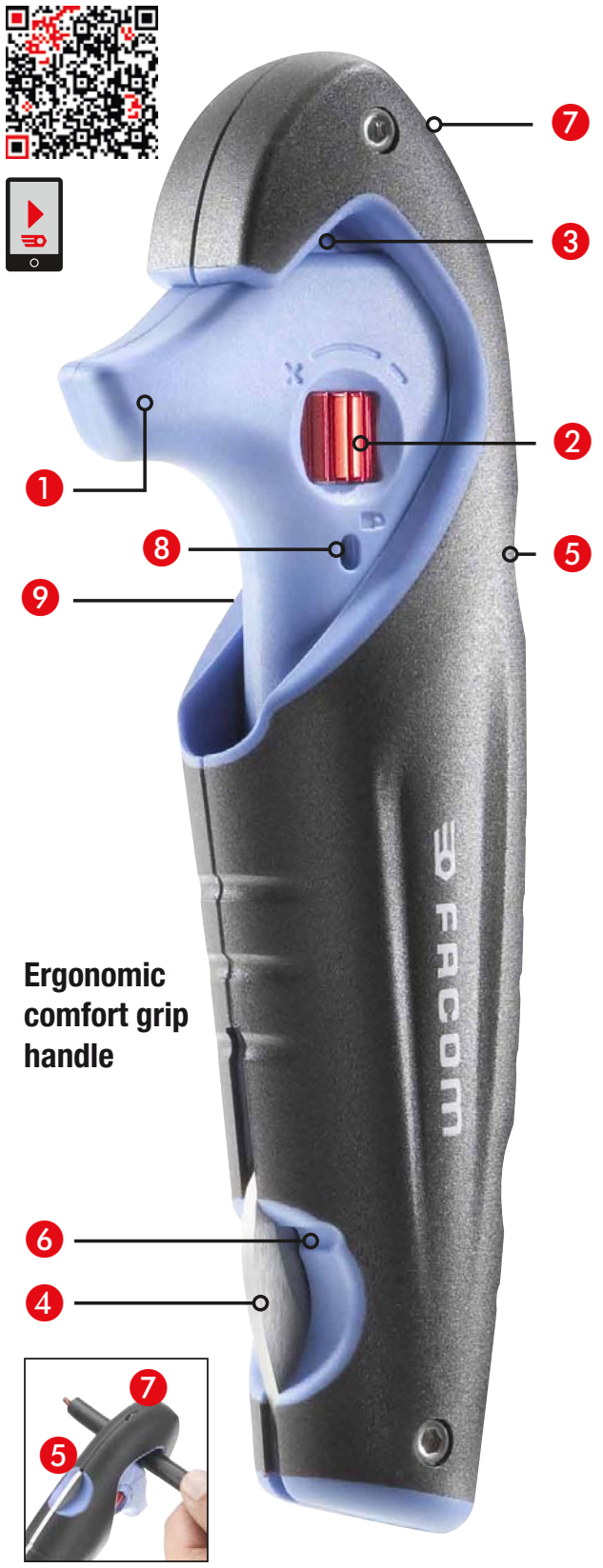


DOUBLE SAFETY

- **Cutting blade out => trigger locked.**
- **Stop blade.**



❶ Trigger system.
❷ Adjustment screw.
❸ Pivoting blade.
❹ + ❺ Double safety.
❹ Cutting blade out=> trigger locked.
❺ Stop blade.
❻ Stripping point.
❼ Spare pivot blade.
❽ Pivot blade locking.
❾ Pivot blade release.



Ergonomic comfort grip handle

▣ 872271 Multifunction trigger sheath-stripper



- Trigger system: 30% less effort.
- Self-swivelling blade: fast and easy sheath removal.
- Double safety:
- Cutting blade out = trigger locked.
- Lock back blade.
- Capacity: round PVC cable 4 to 28 mm diameter.
- Stripping zone.

Weight: 150 g.

872272: set of 6 spare blades (5 self-swivel blades and 1 knife blade).

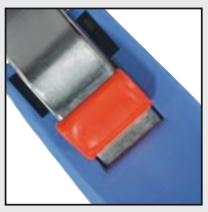
PIVOTING BLADE SHEATH STRIPPER



Extended hook for easy cable placing.



Easy, handy thumb wheel adjustment.



Ergonomic “low effort” push-button.



Rounded handle for a perfect grip.

Jivaro





Sheath strippers



985951



985955

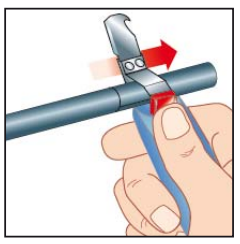


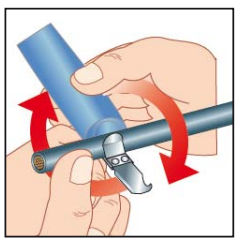
985956

- "Effort reducer" push button.
- Spare blade stored in the handle.
- Easily accessible adjustment knob.
- Self-swivel blade.
- 985955 straight blades.
- 985956 hooked blades.

986061: Set of 5 auto-swivel blades for sheath strippers
985951 - 985952 - 985953 - 985954 985955 - 985956.

	Capacity Cubic Ø maxi [mm]	[g]
985951	16	65
985952	28	65
985953	35	65
985954	50	65
985955	28	75
985956	28	75

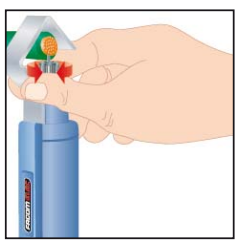


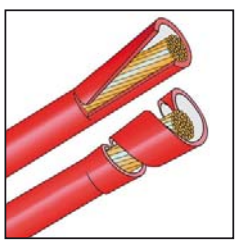


Longitudinal/helicoidal cable-sheath stripper

985957 Rotary sheath and insulation stripping tool







- Tool perfectly suited to stripping sheaths over long lengths.
- 2 possibilities of use:
- Longitudinal sheath stripping.
- Helicoidal sheath stripping by simple head rotation.
- Capacity: diameter 4.5 to 29 mm.
- Length: 137 mm.

Weight: 97 g.

Multifunction sheath strippers

985962 Multifunction sheath stripper









- Ideal for stripping sheaths on cables at the bottom of embedding boxes.
- Allows for stripping without prior adjustment.
- Also allows for stripping coax cables.
- Sheath stripping: diameter 4 to 13 mm.
- Stripping: section 0.5 to 16 mm².
- Coax cables: diameter 4 to 8 mm.

Weight: 90 g.

985936 Coax and multipair cable sheath stripper and stripper



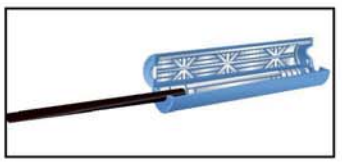
- Tool facilitating sheath stripping of coax and twisted multipair (UTP and STP) cables and optical fibers.
- Capacity: diameter 11 mm.

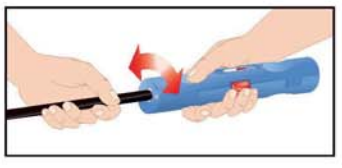
Weight: 35 g.

Coax cable-sheath strippers

985964 Sheath and insulation stripper for coaxial and twisted-pair cables





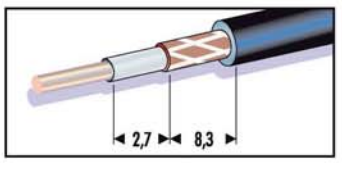


- 2 useful sides:
- Sheath stripping.
- Stripping.
- Capacity: diameter 4.8 to 7.5 mm.

Weight: 26 g.

838.CX58 Strippers for coax cables types RG.58, RG.59 and RG.62





- Stripper pre-adjusted to strip coax cables in a single operation.
- Stripping obtained allows direct fitting of BNC connectors used in computing, video, radio-telephony.
- Compact, non adjustable without tool.
- Reversible blade cassette doubling the time of use, supplied with calibration shim.

838.CX58L: Spare blade cassette.

Automatic wire strippers

AUTOMATIC WIRE STRIPPER

THE ALL-PURPOSE STRIPPER!

One tool for cutting and stripping wires from 0.02 to 10 mm².

- Adjustable stripping depth.
- Soft grips.
- Jaw force adjustment according to temperature conditions: indoors or outdoors working, hard or soft insulation.
- Mechanism designed for smooth, effortless wire stripping.
- Very easy blade change.



Tested to
150,000 cycles



793936 SWINGO® automatic stripper



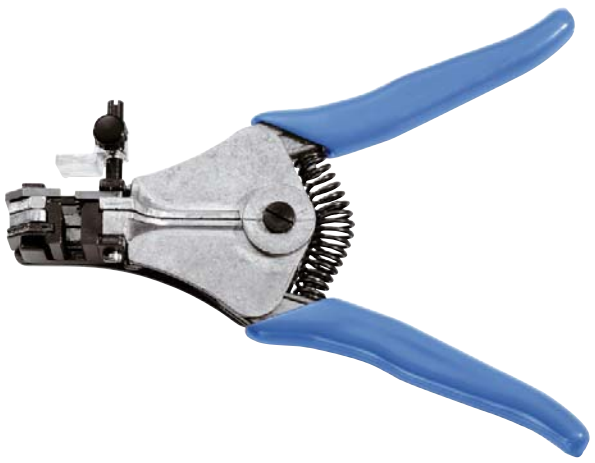
- 2 functions: cutting and stripping.
- Play take-up mechanism for smooth and easy stripping.
- Stripping capacity: 0.02 to 10 mm² (AWG: 32 - 8).
- Stripping length adjusted from 3 to 18 mm.
- Built-in cutting function:
- Cutting up to: 1.5 mm² single strand wire.
- Cutting up to: 10 mm² multi strand wire.
- Ergonomic body in glass charged nylon.

Weight: 136 g.

793207: Spare jaw.
793210: Set of 2 spare pads.

Automatic lateral wire strippers

Automatic lateral wire strippers

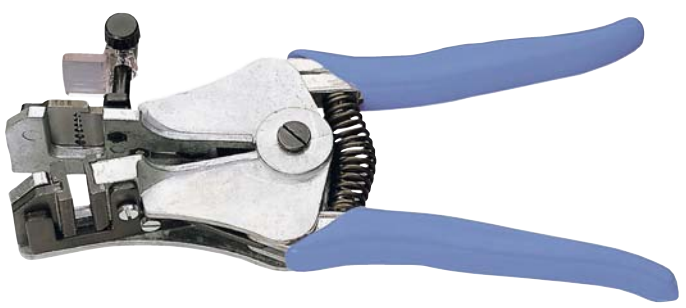


- These strippers offer high precision stripping with a diameter suited to each conductor.

175.E: Spare knife for 986058.
175.T: Spare knife for 986059.

	Pattern	⚖ [g]
986058	Ø : 0,6 - 0,8 - 1,0 - 1,2 - 1,6 - 2,0 - 2,5 mm²	370
986059	Ø : 2,0 - 2,4 - 3,1 - 4,0 mm²	370

165.1 High precision strippers for Teflon insulators



- High precision to cut the insulator circularly without damaging the conductor.
- Offset jaws designed to avoid marking insulators.
- AWG: 26 - 24 - 22 - 20 - 18 - 16.
- Die diameter: 0.55 - 0.65 - 082 - 1.05 - 1.30 - 1.55 mm.

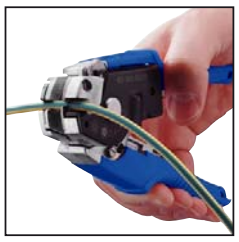
Weight: 370 g.

165.U: Spare knife.

Automatic wire cutters-strippers

985761 Automatic wire cutter-stripper







- For single or multiple strand with automatic adjustment to wire diameter.
- 1 tool only, 1 gesture for 2 operations:

- Cutting.
- Stripping.

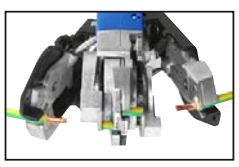
- Stripping capacity: 0.4 to 4 mm²
- Stripping length adjusted by button: 4 to 17 mm.
- Cutting diameter: 0.7 to 2.3 mm.
- AWG: 21 - 11.
- Length: 160 mm.

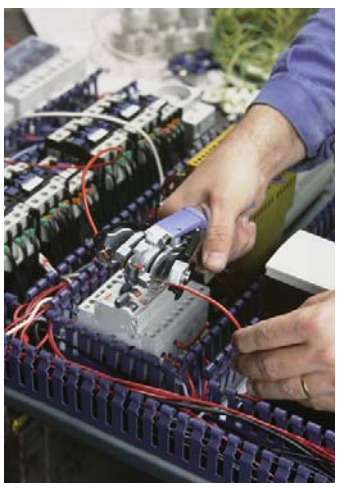
Weight: 340 g.

162-L1: Spare knives.

985762 Dual automatic wire cutter-stripper







- Allows to cut and strip the wire on both sides for fast wiring operations.
- The wire is pre-stripped automatically at the right length.
- Stripping capacity: 0.4 to 4 mm².
- Stripping length adjusted by button: 4 to 17 mm.
- Cutting diameter: 0.7 to 2.3 mm.
- AWG: 21 - 11.
- Length: 160 mm.

Weight: 430 g.

162-2L1: Spare knives.

163 Wire cutter and stripper



- For multistrand cutting and stripping:
- Diameter: 1.0 - 1.3 - 1.7 - 2.0 - 2.4 - 3.0 mm.
- Section: 0.8 - 1.3 - 2.3 - 3.0 - 4.5 - 7.0 mm².
- AWG: 20 - 18 - 16 - 14 - 12 - 10.
- 6 dies calibrated by grinding.
- End nipper.
- Return and lock spring.
- Length: 150 mm.

Weight: 115 g.

End wire strippers

194.12 Extra-slim wire strippers

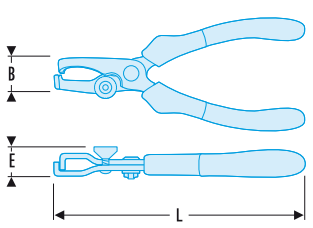


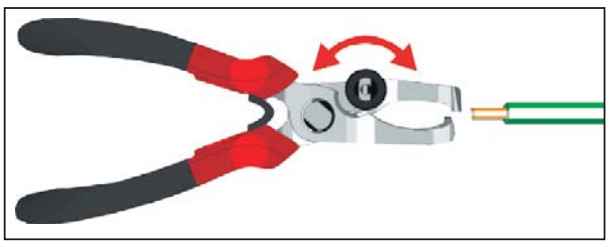
- For single and multistrand wires:
- Max diameter: 1.5 mm.
- Max section: 1.8 mm².
- Max AWG: 14.
- Narrow knives.
- Cutting depth adjusted by end stop.
- Length: 130 mm.
- Thickness: 4 mm.
- Finish: burnished, PVC grip.

Weight: 70 g.

Wire strippers







- For single or multiple strand wires 0.5 to 6 mm².
- Adjustment screw with lock nut.
- Metal return screw.
- Standard forged pliers.

	B [mm]	E [mm]	L [mm]	⚖ [g]
194.17CPE	17	8,5	170	185

173A Coated wire strippers



- Treated steel blades.
- Plastic stops avoiding hand fatigue.
- Finish: burnished blades.
- Dimensions: L.135 x W.10 mm.

Weight: 40 g.

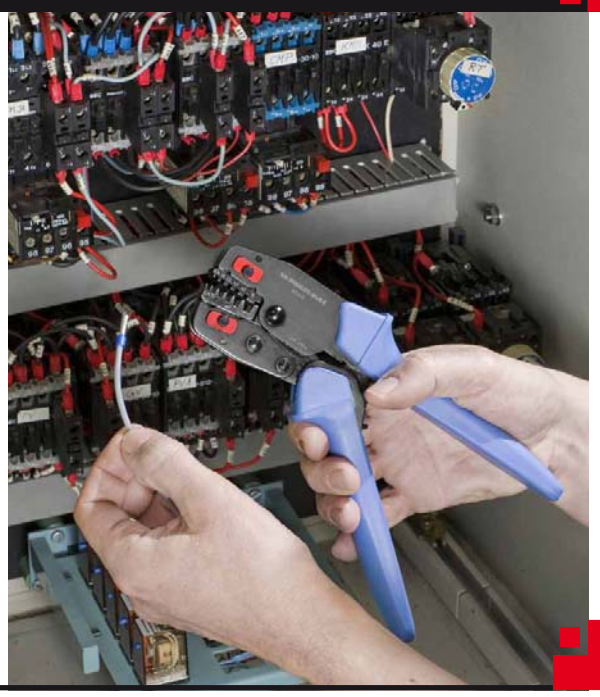
Pre-insulated terminal crimping pliers

PRE-INSULATED TERMINAL CRIMPING PLIERS

The 3-in-1 pliers to cut, strip and crimp

- New multi-function pliers: one tool to cut, strip and crimp wire ends, insulated terminals as well as open core terminals.





▣ 821415 Interchangeable multifunction crimping pliers



- The 3 in 1 pliers: cuts, strips, and crimps.
- Crimping system with ratchet for a perfect result, unlocking always possible.
- Ultra simple crimping die change.
- Once fitted, the dies are held by pins, no risk of escape.
- Crimps:

- Cable terminations from 0.14 to 10 mm².
- Pre-insulated terminals 0.5 to 6 mm².
- Open core terminals 0.5 to 6 mm².

- Cuts flexible wires up to 6 mm².
- Strips from 0.5 to 6 mm².
- Dimensions: L.250 x H.35 x W.75 mm.

Weight: 496 g.

▣ 821440 Cable termination die





DIN 46247

- 6 cavity die:

- 0.14 to 0.75 mm².
- 1.0 to 1.5 mm².
- 2.5 mm².
- 4.6 mm².
- 6.0 mm².
- 10.0 mm².

Weight: 52 g.

821431 Die for pre-insulated terminals





CEI 760

- 3 cavity die:
- Red cavity: 0.5 to 1 mm²; 20 - 16 AWG.
- Blue cavity: 1.5 to 2.5 mm²; 16 - 14 AWG.
- Yellow cavity: 4 to 6 mm²; 4 - 6 AWG.

Weight: 53 g.

821458 Open core terminal die





- Parallel crimping profile to crimp the contact and insulator in a single operation.

Weight: 46 g.

819809 Special electricity set



Complete set including:

- Crimping and stripping pliers 821415.
- Set of 3 crimping dies for:
- Cable terminations from 0.14 to 10 mm².
- Pre-insulated terminals 0.5 to 6 mm².
- Open core terminals 0.5 to 2.5 mm² and 4 to 6mm².
- Swingo® strippers 793936.
- Jivaro® sheath-strippers 985856.

Weight: 1,350 g.

819391 Standard crimping set



- Crimping and stripping pliers 821415.
- Set of three crimping dies.

Weight: 1,128 g.

CRIMPING PLIER INSPECTION SERVICE

ISO 9000 quality assurance systems require crimping equipment to be periodically checked for compliance with the standards and recommendations. That is why Facom's laboratory offers this service.









Pliers covered by the inspection service

- Pliers for insulated terminals to CEI 760- 985753, 985894, 673838.
- Pliers for cable terminals to NFC 20130- 985754, 985755, 985756,- 985896, 985897, 985895.

673838 CRIMPING PLIERS FOR INSULATED TERMINALS WITH LOCATOR

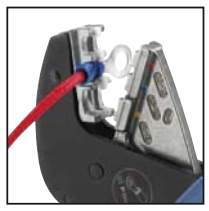
A THIRD HAND!

Complies with NFC 63-023

- Automatically positions the terminal to guarantee a secure attachment.
- Stainless steel dies ensuring good wear resistance.
- Reverse crimping for precision and visibility.
- Left/right-hand operation.
- Soft comfortable grips.

Serkan





Holds the terminal on the pliers.



Perfectly positions the wire in the terminal.



Holds the terminal and the wire after crimping.



673838 SERKAN® ratchet crimping pliers for insulated terminals with locator





NFC 63-023

- Lower fixed jaw: easy terminal fitting.
- Double crimping with die marking on the insulator.
- Stainless steel die with 3 cavities:

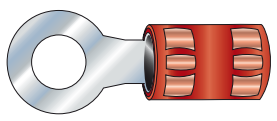
- Red cavity: 0.5 to 1.5 mm².
- Blue cavity: 1.5 to 2.5 mm².
- Yellow cavity: 4 to 6 mm².

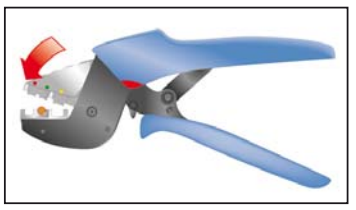
- Right/left handed pliers.

Weight: 490 g.

985894 Maintenance crimping pliers for pre-insulated terminals









CEI60352-2, CEI 60760

- Double crimping for pre-insulated terminals in compliance with the standard, with holding on the conductor core and the insulator.
- Unlocking accessible at all times.
- Reversed crimping: terminal positioned on the fixed part for more effectiveness and precision.
- Stainless steel die with 3 cavities:

- Red cavity: 0.5 --> 1.5 mm².
- Blue cavity: 1.5 --> 2.5 mm².
- Yellow cavity: 4 --> 6 mm².

- Shape allowing hand setting.
- Soft touch.
- Length: 230 mm.

Weight: 490 g.

985753 Production crimping pliers for insulated terminals



CEI 60760

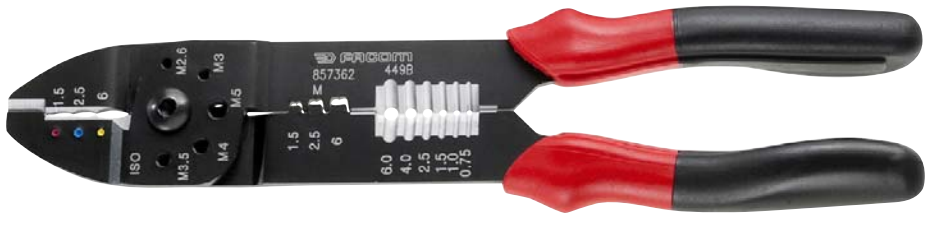
- Extended handle for 2-hand grip.
- Disengaging possible during crimping.
- Double crimping of the terminal.
- 3 cavity die:

- Red cavity: 0.5 to 1 mm².
- Blue cavity: 1.5 to 2.5 mm².
- Yellow cavity: 4 to 6 mm².

- Comfort grip.
- Length: 255 mm.

Weight: 540 g.

449B Standard crimping pliers for insulated terminals



- Crimping pre-insulated terminals: 1.5-2.5-6 mm².
- Crimping bare terminals: 1.5-2.5-6 mm².
- Stripping: 0.75 to 6 mm².
- Built-in wire cutting function.

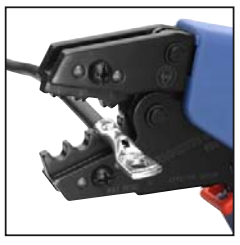
Weight: 260 g.

Tubular terminal and sleeve crimping pliers

985966 Crimping pliers for tubular terminals







NFC 20-130

- Ratchet pliers with possibility of unlocking in case of mishandling.
- Extended handle for 2-hand grip.
- Capacity 4 to 10 mm².
- Comfort grip.
- Length: 255 mm.

Weight: 500 g.

986095 Crimping pliers for tubular terminals with rotating dies



NFC 20-130

- Rotating dies indexable in 6 positions: 6 - 10 - 16 - 25 - 35 - 50 mm².
- The pliers can be disengaged during crimping.
- Capacity 6 to 50 mm².
- Length: 390 mm.

Weight: 1.185 g.

985913 Hydraulic trigger crimping pliers for tubular terminals and sleeves







NFC 20-130

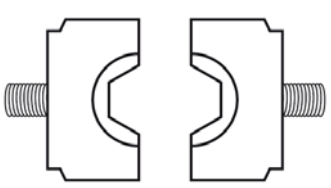
- 35 kN.
- Travel adjustable from 5 to 8 mm by rotation of the notched bush reducing the number of pump strokes for smaller sections.
- Rotating head 360°.
- Automatic trigger with audible "click" upon crimping.
- Piston return by discharge lever.
- Supplied in box.

Weight: 2.130 g.

Crimping dies

Hexagonal crimping dies





NFC 20-130

- For crimping pliers 985913.
- For tubular terminals and sleeves.

	Section [mm²]
985914	6
985915	10
985916	16
985917	25
985918	35
985919	50
985920	70
985921	95
985922	120
985923	150

Open core connector crimping pliers

985757 Open core connector crimping pliers



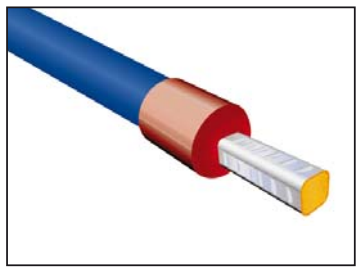
DIN 46249
- Die with 3 cavities for open core terminals with 1.5; 2.5 and 6 mm² section.
- Capacity 1.5 to 6 mm².
- Length: 195 mm.

Weight: 250 g.

Wire end crimping pliers

985895 Wire end crimping pliers



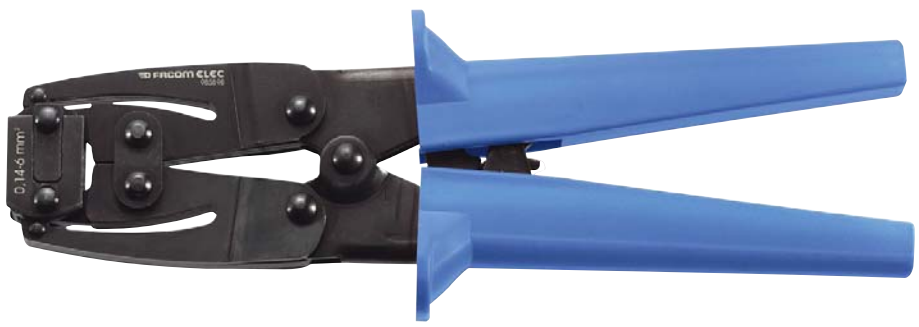




NFC 63-023
- Stainless steel 5-cavity dies:
- 0.5 to 0.75 mm².
- 1 to 1.5 mm².
- 2.5 mm².
- 4 mm².
- 6 mm².
- Unlocking accessible at all times.
- Reversed crimping: terminal positioned on the fixed part for more effectiveness and precision.
- Capacity 0.5 to 6 mm².
- Shape allowing hand setting.
- Soft touch.
- Length: 230 mm.

Weight: 490 g.

985898 Auto-adjustable wire end crimping pliers





NFC 63-023
- Allows to use the same cavity to crimp terminations from 0.14 to 6 mm² with or without insulation.
- With ratchet system guaranteeing proper crimping.
- Easy unlocking in case of mishandling.
- Comfort grip.
- Length: 210 mm.

Weight: 500 g.

985899 Standard wire end crimping pliers



- Capacity: 0.5 to 2.5 mm².
- End nipper.
- Length: 140 mm.

Weight: 115 g

Production wire end crimping pliers



- Easy unlocking in case of mishandling.
- Comfort grip.

	L [mm]	Capacity Cubic [mm]	Pattern	⚖ [g]
985755	195	0,5 -> 6,0 mm²	5	250
985756	195	4,0 -> 10,0 mm²	3	500
985896	255	10,0 -> 25,0 mm²	3	500
985897	255	35,0 -> 50,0 mm²	2	500

Transmission connectors crimping pliers

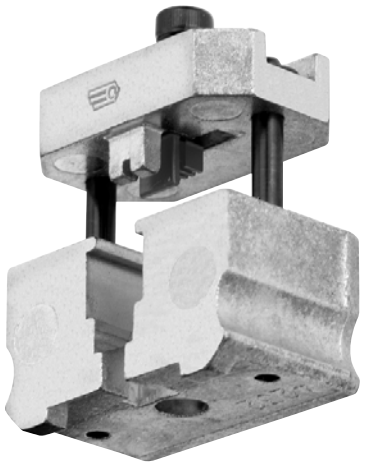
985902 Phone connector crimping pliers



- Pliers supplied in a case with the 986022 die for RJ45 connectors.
- Length: 205 mm.

Weight: 450 g

Crimping dies for phone connectors



- For crimping pliers 985902.

	d [mm]	⚖ [g]
986014	RJ11	50
986015	RJ9 - RJ22	50
986022	RJ45	50
986026	MMJ	50

985758 Coax connector crimping pliers





- For BNC connector RG58 - RG59 - RG62.
- Crimping die for coax connectors:
- 5.36 - 5.46 for RG58.
- 6.43 - 6.53 for RG59, RG 62.
- 1.64 - 1.74 for the core.
- Safety rack guaranteeing complete crimping.
- Length: 195 mm.

Weight: 250 g

Terminal sets

449.Z3A "general electricity" set



Including:
- Crimping pliers 449B.
- Selection of 20 models of pre-insulated terminals and accessories:
- Eyelets.
- Fork terminals.
- Sleeves.
- Male and female terminals.

Weight: 1.850 g

855367 "industrial electricity" set



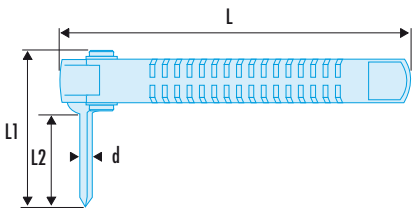
Including:
- Multifunction crimping pliers 821415.
- 2 dies for pre-insulated terminals 0.5 to 6 mm².
- 2 dies for open core terminals 0.5 to 6 mm².
- 2 dies for cable terminations from 0.25 to 10 mm².
- Selection of 20 models of pre-insulated terminals and accessories:
- Eyelets.
- Fork terminals.
- Sleeves.
- Male and female terminals.

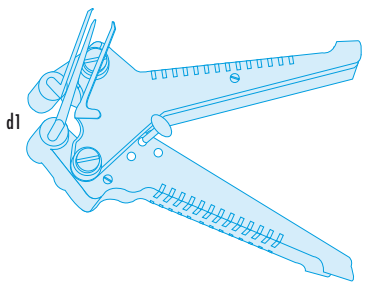
Weight: 1.950 g

Sleeving pliers

Sleeving pliers



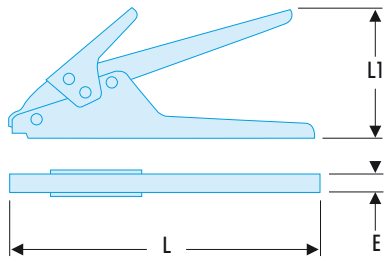


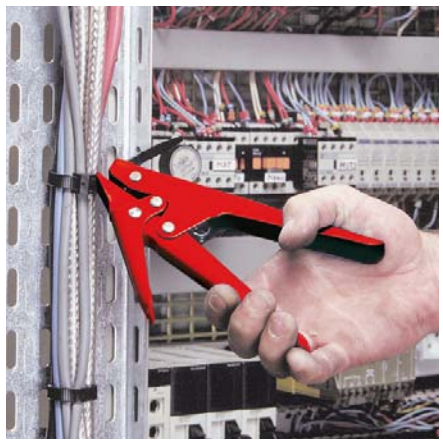


	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	Wire Ø [mm]	⚖ [g]
985763	3,5	12- 16 - 24	140	52	23	1,25 -> 4,50	165
985764	4,5	13 - 18 - 24	140	56	30	1,75 -> 9,00	165
985765	5,0	14 - 18 - 25	140	66	40	3 -> 15	165
640171	10,0	19,5 - 22,5 - 30,0	150	82	56	10 -> 28	149

Plastic cable-tie pliers

Plastic cable-tie pliers





- For all cable-ties 2.4 to 9 mm wide.
- Sturdy and easy to use, very good demultiplication.
- Long travel for a fast approach.
- Manual cable-tie tail cutting.

Weight: 310 g

	E [mm]	L [mm]	L1 [mm]	⚖ [g]
455B	17	190	100	310

986075 Automatic plastic cable-tie pliers



- For cable-ties 2.2 to 4.8 mm wide and 1.6 mm thick.
- Adjustable tightening strength.
- Automatic cable-tie tail cutting.

Weight: 290 g

Glue gun

E.900A Glue gun



- To glue plastic, synthetic foam, fabric, wood and stratified in the fields of construction, furniture, in assembly shops of electrical and electronic assemblies, in the garage.
- Voltage: 110-240 Volts (without automatic switch).
- Maximum power: 45 W.
- Fusion temperature: 206 °C.
- Preheating time: 7 to 10 min.
- Supplied in a box with three sticks of all-purpose glue.
- Dimensions: 260 x 210 x 60 mm.

Weight: 620 g

- E.905J50: "refractory" glue:

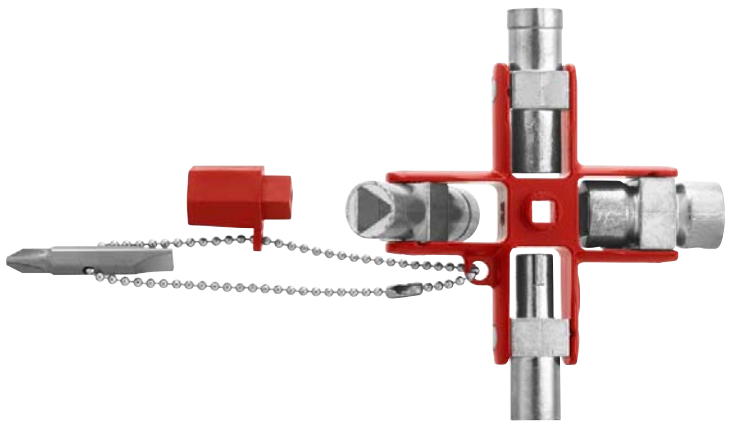
- Set of 50 sticks: diam. 11.3 mm, length 90 mm.

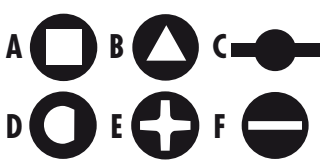
- E.906J100: "all-purpose" glue:

- Set of 100 sticks: diam. 11.3 mm, length 200 mm.

Cabinet keys

838305 Multi-cavity cross brace





- Good access, opens most doors and elements, whether in industry or in construction.
- 9 cavities in a light, compact and very handy tool.

- 4 square cavities: 5, 6, 7-8, 9-10 mm (A).

- 3 triangular cavities: 7, 8-9, 10-11 mm (B).

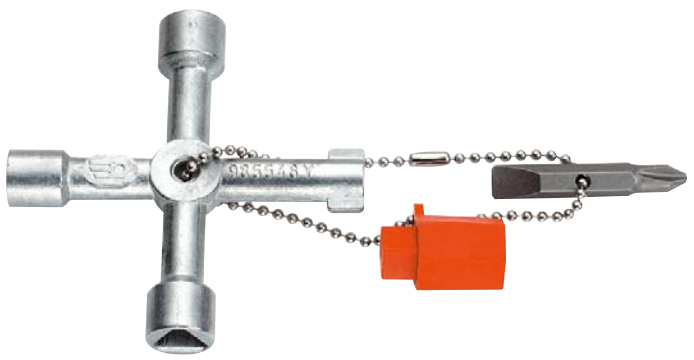
- 1 slotted cylindrical cavity: 3-5 mm (C).

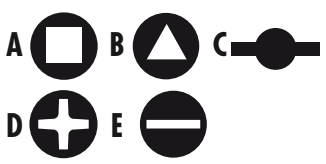
- 1 round cavity with flat: 6 mm (D).

- 1 bit with 2 screwing cavities Phillips® PH 2 (E) and slotted head 7 mm (F), linked with the wrench by a removable chain with bit adapter.

Weight: 210 g

985548 Four-way wrench for cabinets





- Toll supplied with 6-point adaptor for 1/4" - 6.35 mm drive bits.
- 4 cavities:

- 2 square cavities: 6, 8 mm (A).

- 1 triangular cavity: 9 mm (B).

- 1 slotted cylindrical cavity: 5-14 mm (C).

- 1 bit with 2 screwing cavities Phillips® PH 2 (D) and slotted head 7 mm (E).

Weight: 75 g

Nylon rods

FISH TAPES

3 TYPES OF WIRE PULLER



Nylon

- Relatively uncongested cable ducts with average bends, Distance < 20 m.
- Very high tensile strength.



Glass fibre

- Congested cable ducts with multiple bends, 20 m < distance < 40 m.
- Material has excellent dynamic.
- Maintains its efficiency after passing an obstacle.



Nylon-coated steel

- Long runs in highways 30 m < distance < 50 m.
- Excellent dynamic properties.
- Pushing force for tubes Ø 24 mm and over.



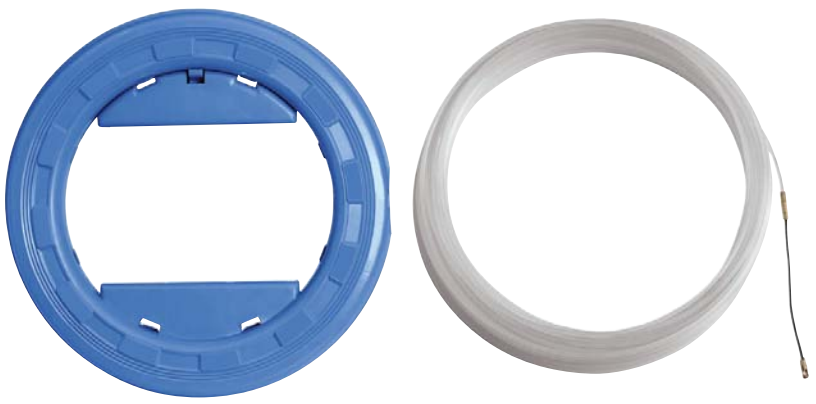
Nylon rods



- Supplied with:
- 1 flexible guiding head.
- 1 pulling eye.
- Breakage load: 120 kN.
- Diameter: 4 mm.

	L [m]	d [mm]
629731	10	4
629757	20	4

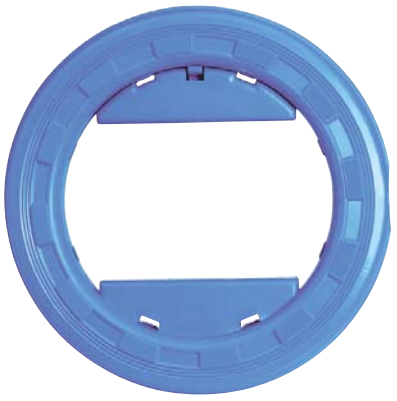
Nylon rod 20 m + needle holder casing



- Supplied with:
- 1 flexible guiding head.
- 1 pulling eye.
- Breakage load: 120 kN.
- For poorly clogged and medium curved ducts.
- For distance below 20 m.

	d [mm]	L [m]
669273	4	20

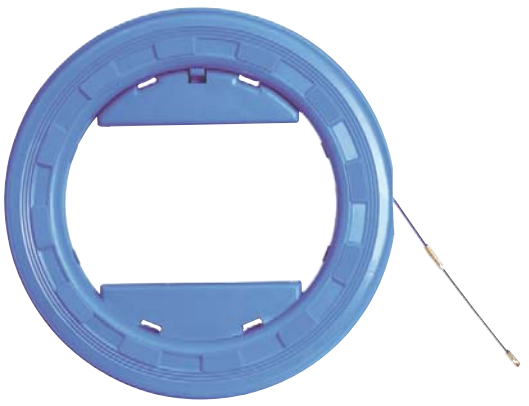
629765 Needle holder casing



- For a rod 10 to 40 m long.
- Housing for accessories and repair kit.

Glass fibre rods

Glass fibre rods



- Supplied in a needle holder casing with:
- 1 flexible guiding head.
- 1 pulling eye.
- 1 repair set.
- Breakage load: 120 kN.

	d [mm]	L [m]
629853	3	30
629861	3	40

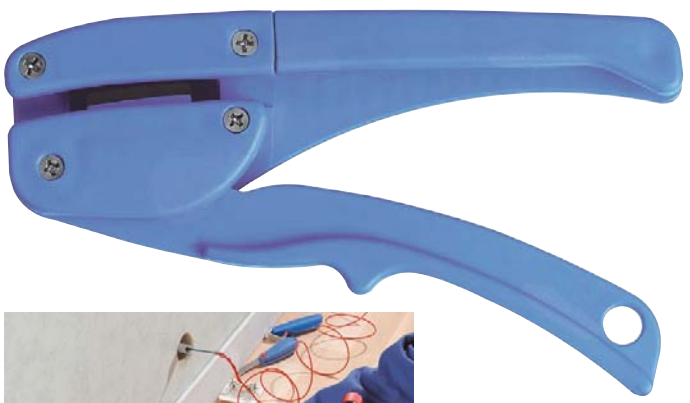
Accessories

629888 Glass fibre rod repair kit



Including:
- 2 bits.
- 1 seal.
- 1 specific glue.

629773 Fish tape pulling pliers





- Easy handling of rods without damaging them and avoiding hand injuries.
- Shock-proof material.

629984 Lubricant



- To be sprayed on the cable before pulling it.
- Facilitates pulling.
- Supplied in 1-litre bottle.

Weight: 1.100 kg

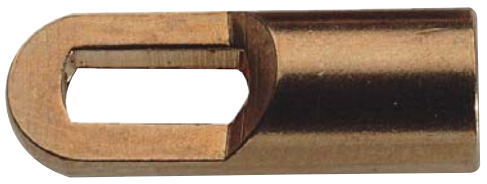
Consumables for nylon and glass fibre rods

629781 Flexible guiding head for nylon and glass fiber rods



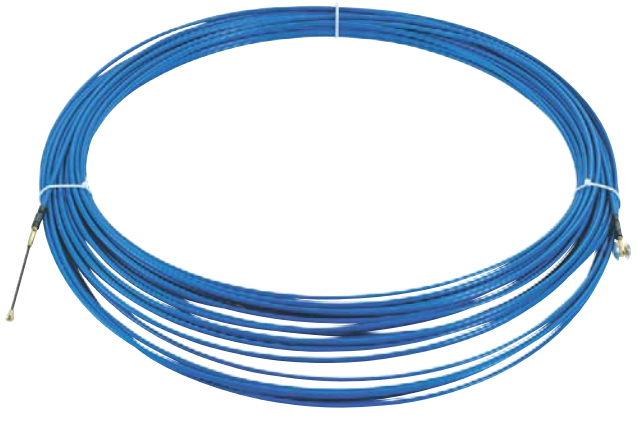
- Female part: M4 threading.

629790 Pulling eye



- Female threading.
- Breakage load: 120 kN.

629896 Nylon steel rod

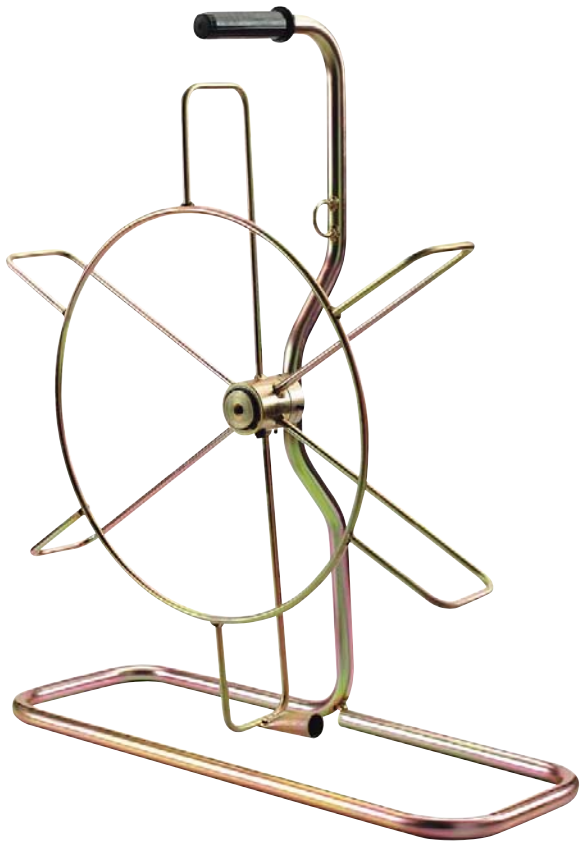


- Ideal for long ducts.
- High traction power.
- Breakage load: 200 kN.
- Rod length: 50 m.
- Diameter 6 mm.
- Supplied with:

- 1 flexible guiding head.
- 1 slide wheel with swage.
- 1 snap hook.

Accessories for nylon steel rods

629909 Tropic-proof steel reel



- Fast guiding and winding of the the rod.
- Ideal for long rods.
- Storage of nylon steel rods up to 150 m.
- Axis on ball bearing.
- Withstands heat and humidity.

Weight: 5.900 kg

629984 Lubricant



- To be sprayed on the cable before pulling it.
- Facilitates pulling.
- Supplied in 1-litre bottle.

Weight: 1.100 kg

629968 Snap hook



- Breakage load: 400 kN.

Hole punches for ISO sizes

HOLE PUNCHES FOR ISO HOLE SIZES

HOLE PUNCH FOR ISO HOLE SIZES
- 3 section ISO splitting punch.
- Spread: ISO 12 to ISO 63.
- Blanks split into three, thus preventing the actuating screw from jamming.
- Cutting-point geometry ensures longer life.
- Available with or without a thrust-bearing screw.

1 - For ordinary steel ST37
- Max. sheet thickness: 2 mm.
- Pilot hole: - Screw Ø + min 0.2 mm.



3-point punch

2 - For stainless steel
- Max stainless steel plate thickness:
  - 2 mm with screw Ø 11.1 mm.
  - 3 mm with screw Ø 19 mm.
- Pilot hole:
  - Screw Ø + min 0.2 mm.
- High alloy cutting edges for increased durability.



3-point punch

HOLE PUNCH FOR PG HOLE SIZES
- Spread: PG7 to PG48.

3 - For ordinary steel ST37
- 3-point punch.
- Circular blank automatically drops out after punching with a couple more turns of the wrench.
- Max. thickness:
  - 2 mm with screw Ø 9.5 mm.
  - 3 mm with screw Ø 19 mm.
- Pilot hole: - Screw Ø + min 0.2 mm.



4 - For stainless steel
- Max stainless steel plate thickness:
  - 2 mm with screw Ø 9.5 mm
  - 3 mm with screw Ø 19 mm
- Pilot hole: Screw Ø + min 0.2 mm.
- High alloy cutting edges for increased durability.



3-point punch

FACOM HOLE PUNCHES CAN BE OPERATED IN THE FOLLOWING WAYS:



With a wrench
For hole punches fitted with a thrust-bearing screw.



With a
hydraulic driver

DIMENSIONS (mm):

ISO12	ISO16	ISO20	ISO25	ISO32	ISO40	ISO50	ISO63
12.5	16.5	20.5	25.5	32.5	40.5	50.5	63.5

PG7	PG9	PG11	PG13	PG16	PG21	PG29	PG36	PG42	PG78
12.7	15.2	18.6	20.4	22.5	28.3	37	47	54	60

ISO EN 50262 REQUIREMENTS
- This international standard specifies the electrical functions and performance of cable entries.
- It stipulates that only ISO metric threads are to be used for cable glands since September '99.
- The use of PG threads will still be allowed for the maintenance of existing equipment despite no longer being covered by any national or international standard.

Remember to apply lubricant to the screw/pin for optimum operation of the punch.

CUSTOM SIZE KNOCKOUT PUNCH
Please consult us for your specific punch size or shape requirements.

Punches for PG size holes with actuating screw





- For circular cut out in metal sheet and plastic.
- Operated with a wrench or ratchet/socket set.
- Fast, clean and burr-free cut out.
- For all diameters PG 7 to PG 48.
- Parts greased for better use.
- TIP: the round cut falls much easier when applying 2 or 3 additional turns with the tightening wrench after cutting out.
- Supplied with punc, die, and ball stop screw.

Table caption:
- d = PG diameter/mm.
- d1 = drilling diameter/mm.
- Screw = dimension on flat (mm)/ operating screw.
- E = max/thickness steel/soft.

	d [mm]	d1 [mm]	E [mm]	PG	Screw Size [mm]
985968	12,7	11	2	7	17
985969	15,2	11	2	9	17
985972	18,6	11	2	11	17
985974	20,4	11	2	13	17
985978	22,5	11	2	16	17
985984	28,3	11	3	21	17
985995	37,0	11	3	29	27

Punches and dies for PG size holes without screw



- For circular cut out in metal sheet and plastic.
- Control with Hydraulic gun 643743 (one position) or 986108 (2 positions) or hydraulic pump.
- Fast, clean and burr-free cut out.
- For all diameters PG 7 to PG 48.
- Parts greased for better use.
- TIP: the round cut falls much easier when applying 2 or 3 additional pump strokes once cutting complete.
- Supplied with punch, die.

Table caption:
- d = PG diameter/mm.
- d1 = drilling diameter/mm.
- Screw = dimension on flat (mm)/ operating screw.
- E = max/thickness steel/soft.

	d [mm]	d1 [mm]	E [mm]	PG	Actuating Pin
985734	12,7	11	2	7	986064
985801	15,2	11	2	9	986064
985817	18,6	11	2	11	986064
985818	20,4	11	2	13	986064
985820	22,5	11	2	16	986064
985824	28,3	22	3	21	986065
985826	37,0	22	3	29	986065
985829	47,0	22	3	36	986065
985836	54,0	22	3	42	986065
985933	60,0	22	3	48	986065

Standard circular punches for ISO size holes

Punches for ISO size holes with actuating screw



- For circular cut out in metal sheet and plastic.
- Operated with a wrench or ratchet/socket set.
- Fast, clean and burr-free cut out.
- For all ISO diameters from M12 to M63.
- Parts greased for better use.
- PRODUCT PLUS: the round is slit into three parts and falls automatically at the end of the cutting operation.
- Supplied with punc, die, and ball stop screw.

Table caption:
- d = ISO diameter/mm.
- d1 = drilling diameter/mm.
- Screw = dimension on flat (mm)/ operating screw.
- E = max/thickness steel/soft.

	d [mm]	d1 [mm]	E [mm]	ISO	Screw Size [mm]
693716	12,5	11	2	M12	17
697590	16,2	11	2	M16	17
693695	20,4	11	2	M20	17
697602	25,4	11	2	M25	17
697611	32,5	22	2	M32	27
697645	40,5	22	2	M40	27
697637	50,5	22	2	M50	27
697653	63,5	22	2	M63	27

Punches for ISO size holes without actuating screw



- For circular cut out in metal sheet and plastic.
- Control with hydraulic gun 643743 (one position) or 986108 (2 positions) or hydraulic pump.
- Fast, clean and burr-free cut out.
- For all ISO diameters from M12 to M63.
- Parts greased for better use.
- PRODUCT PLUS: the round is slit into three parts and falls automatically at the end of the cutting operation.
- Supplied with punch, die.

Table caption:
- d = ISO diameter/mm.
- d1 = drilling diameter/mm.
- Screw = dimension on flat (mm)/ operating screw.
- E = max/thickness steel/soft.

	d [mm]	d1 [mm]	E [mm]	ISO	Actuating Pin
693708	12,5	11	2	M12	657539
664499	16,2	11	2	M16	986064
693687	20,4	11	2	M20	986064
664510	25,4	11	2	M25	986064
664536	32,5	22	2	M32	986064
664501	40,5	22	2	M40	986065
664528	50,5	22	2	M50	986065
664544	63,5	22	2	M63	986065

Punches - ISO Plus dies for stainless steel plate





- For circular cut out in metal sheet and plastic.
- Control with hydraulic gun 643743 (one position) or 986108 (2 positions) or hydraulic pump.
- Fast, clean and burr-free cut out.
- For all ISO diameters from M12 to M63.
- Parts greased for better use.
- PRODUCT PLUS: the round is slit into three parts and falls automatically at the end of the cutting operation.
- Supplied with punch, die.

Table caption:
- d = ISO diameter/mm.
- d1 = drilling diameter/mm.
- Screw = dimension on flat (mm)/ operating screw.
- E = max/thickness steel/soft.

	d [mm]	d1 [mm]	E [mm]	ISO PLUS	Actuating Pin
697469	16,2	11,5	2	M16	657547
697493	20,4	11,5	2	M20	657547
697506	25,4	11,5	2	M25	657547
697514	32,5	22	2	M32	986065
697522	40,5	22	2	M40	986065
697549	50,5	22	2	M50	986065
697531	63,5	22	2	M63	986065

Hydraulic hole punch equipment

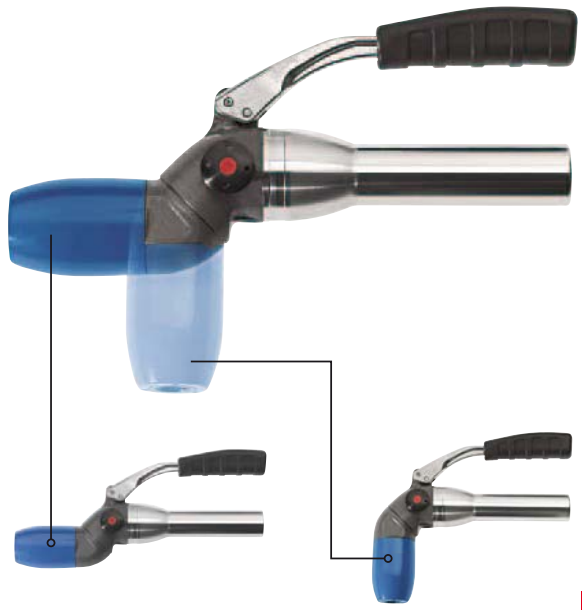
986108 | HYDRAULIC PUNCH DRIVER

ROTATING HEAD HYDRAULIC DRIVER!

- Two operating positions.
- Fast cutting, short piston stroke.
- Demultiplication of effort for fast, easy working.







986052 Dual-position hand-operated hydraulic driver and accessories



- Hydraulic tool to cut steel panel diameter 12.5 to 63 mm.
- The 180° swivel head allows for 2 work positions:
- Straight for direct work on the cabinet.
- Right angle to work on workbench.
- Jack power 7 kN.
- Pressure 700 bar.
- Piston travel 20 mm.
- Pressure limiter.
- Set supplied in a plastic box with:
- Manual 2-position hydraulic device (986108).
- Spacer bush no.1 (986110).
- Spacer bush no.2 (986111).
- Control axis 9.5 mm (986064).
- Control axis 19 mm (5986065).
- Control axis 6 mm (657539).
- Drill bit 11 mm (986051).

Weight: 2.450 kg

986108 Dual-position hand-operated hydraulic driver without accessories



- The 180° swivel head allows for 2 work positions:
- Straight for direct work on the cabinet.
- Right angle to work on workbench.
- Piston travel 20 mm.
- Jack power 7 kN.
- Pressure 700 bar.
- Pressure limiter.
- Device supplied without accessories:
- Packaging: cardboard box.

Weight: 2.300 kg

653255 Single-position hand-operated hydraulic driver and accessories



- Hydraulic tool to cut steel panel diameter 12.5 to 63 mm.
- Piston travel 20 mm.
- Jack power 7 kN.
- Set supplied in a plastic box with:

- Manual single position hydraulic device (643743).
- Spacer bush no.1 (986110).
- Spacer bush no.2 (986111).
- Drive axis 9.5 mm (986064).
- Drive axis 19 mm (986065).
- Drive axis 6 mm (657539).
- Drill bit 11 mm (986051).

Weight: 2.350 kg

643743 Single-position hand-operated hydraulic driver without accessories



- Piston travel 20 mm.
- Jack power 7 kN.
- Device supplied without accessories:
- Packaging: cardboard box.

Weight: 2.200 kg

Accessories

ISO staged drill bit



- For cylindrical high accuracy drilling in all diameters.
- Does not require a tapping hole.
- Cylindrical shank with 3 flats for proper drive, avoiding micro locking.
- Marking of different diameters.
- 678014: Special PG cable gland.
- Panel drilling capacity up to 4 mm thickness.
- Shank diameter 10 mm.
- Min - max diameter: 6.5 - 8.5 - 10.5 - 12.5 - 16.5 - 20.5 - 25.5 - 29 - 32.5 - 36.5 - 40.5 mm.
- Length 96 mm.

	d1 [mm]	L [mm]	⚖ [g]
678006	10	96	310

PG staged drill bit



- For cylindrical high accuracy drilling in all diameters.
- Does not require a tapping hole.
- Cylindrical shank with 3 flats for proper drive, avoiding micro locking.
- Marking of different diameters.
- 678014: Special PG cable gland.
- Panel drilling capacity up to 4 mm thickness.
- Shank diameter 10 mm.
- Min - max diameter: 6 - 9 - 12.5 - 15.2 - 18.6 - 20.4 - 22.5 - 26 - 28.3 - 30.5 - 34 - 37 mm.
- Length 100 mm.

	d1 [mm]	L [mm]	⚖ [g]
678014	10	100	300

986051 Drill bit diameter 11 mm



- Drill bit diameter 11 mm for tapping hole.

986107 Lubricating paste



- To lubricate the screws and drive axes.

Weight: 1.470 kg

Hole punch sets

985510 Single-position hydraulic driver and PG size hole punch set



- Set including:

- 1 manual single position hydraulic device.
- 2 drive axes 9.5 mm and 19 mm.
- 2 spacers no.1 and no.2.
- 1 drill bit diameter 11 mm.
- 1 series of 10 circular-shaped hole punches diameter 12.7 to 60 mm: PG 7, 9, 11, 13, 16, 21, 29, 36, 42, 48.
- 1 pot of lubricating paste.
- 1 storage case.

Weight: 7.100 kg

587110 Dual-position hydraulic driver and PG size hole punch set



• Set including:
- 1 manual 2-position hydraulic device.
- 2 drive axes 9.5 mm and 19 mm.
- 2 spacers no.1 and no.2.
- 1 drill bit diameter 11 mm.
- 1 series of 10 circular-shaped hole punches diameter 12.7 to 60 mm: PG 7, 9, 11, 13, 16, 21, 29, 36, 42, 48.
- 1 pot of lubricating paste.
- 1 storage case.

Weight: 7.460 kg

658689 Dual-position hydraulic driver and ISO size hole punch set



• Set including:
- 1 2-position hydraulic device.
- 3 drive axes 6 - 9.5 - 19 mm.
- 2 spacers no.1 and no.2.
- 1 drill bit diameter 11 mm.
- 1 series of 8 ISO hole punches from M12 to M50: M 12, 16, 20, 25, 32, 40, 50, 63.
- 1 pot of lubricating paste.
- 1 storage case.

Weight: 7.280 kg

661600 PG size hole punch set



• Hole punch set including:
- 1 drill bit diameter 11 mm.
- 1 series of 10 PG hole punches from diam. 12.7 mm to diam. 60 mm: PG 7, 9, 11, 13, 16, 21, 29, 36, 42, 48.
- 2 drive screws diameter 9.5 and 19 mm.
- 1 pot of lubricating paste.
- 1 storage case.

Weight: 4.900 kg

702571 ISO size hole punch set



• Hole punch set including:
- 1 drill bit diameter 11 mm.
- 1 series of 8 ISO hole punches from M12 to M63: M 12, 16, 20, 25, 32, 40, 50, 63.
- 3 drive screws diameter 6 - 9.5 and 19 mm.
- 1 pot of lubricating paste.
- 1 storage case.

Weight: 6.190 kg

Testers

THE RIGHT TESTER FOR YOUR NEEDS

Simple
- Automatic calibration: easy to use, no risk of error.
- Wide screen providing clear, detailed readings.

Safe
- Meets safety standard requirements.
- Contact-free measurement with the testing tips.

Operational
- Shock-proof coating: resistant to industrial environments.
- Cable storage: saves time.





711A Multimeter





- Maintenance muiltimeter.
- Ideal for repairing electronic or electromechanical assemblies and for teaching.
- DC / AC voltmeter: 0 to 600 V.
- DC / AC ammeter: 0 to 10 A.
- Ohmmeter: 0 to 40 MO.
- Capacimeter: 0 to 100 µF.
- Frequencymeter: 0 to 100 KHZ.
- Cyclic ratio: 5% to 99 %.
- Diode test.
- Continuity test with buzzer.
- RMS 600 V CAT III.

711A.P500 Clip-on ammeter



- Allows current measurements without contact.
- Compatible with most multimeters.
- Automatic zero point adjustment, perfectly suited to FACOM multimeters 711, 711A, 714 and 714A.
- AC / DC measurement: 0 to 600 A.
- Frequency response: 50 Hz - 60 Hz.
- RMS 600 V CAT III.

712A Clip-on multimeter





- Multimeter for mobile maintenance.
- Current measurement without contact, withstands difficult environments.
- DC / AC voltmeter: 0 to 600 V.
- DC / AC ammeter: 0 to 400 A.
- Ohmmeter: 0 to 40 MO.
- Continuity test with buzzer.
- Diode test.
- Temperature measurement with K thermocouple.
- RMS 600 V CAT III.

VAT DETECTOR: WORK SAFELY

- Check the absence of voltage before starting work around or on a component likely to be live.
- Directive C18-510 imposes the use of a VAT tester, such as the FACOM 701B VAT.
- The FACOM 701B is a must for professionals in construction, industrial maintenance and electricians, ensuring safe and fast work.



701B DAT VAT safety tester



NF EN 601010 - 600 V, IEC 612 43 - 3

- Indispensible for construction and repairing in industrial environments.
- The VAT test allows to check the lack of voltage on a circuit before starting the works.
- Auto test.
- Hazardous voltage detection.
- Phase detector.
- Continuity test with buzzer.
- Differential circuit breaker test: 30 mA.
- Phase rotation indicator.
- 600 V CAT III.

Thermometer

DX.T100 Combination electronic thermometer





- Infrared thermometer with laser aiming.
- Connector for measuring with "K" thermocouples.
- Adjustable emissivity.
- Infrared measurement range: -60°c to +600°c.
- D/S ratio: 11/1.
- Mode: differential, minimum, maximum, average, alarm.

DX.12 Temperature probes





	For
DX.12-06	Flexible probe
DX.12-08	Bracelet probe
DX.12-11	Standard needle probe
DX.12-15	Extension
DX.12-17	Surface contact probe
DX.12R	Air probe

VE series 1,000 Volt insulated diagonal cutting pliers

VE SERIES | **1,000 VOLT INSULATED PLIERS**

1000 VOLTS EN 60900

SPATULA-SHAPED PRESSURE AREA, + 20% MORE SLIP-RESISTANT

Guard

- Firm, comfortable grip for pushing or pulling pressure.

Return spring for added safety

- The elastomer spring closes off the metal parts of the tool and prevents the finger slipping towards the uninsulated area.

Insulation tests

Tools to EN 60900 specifications
❶ Dielectric test
❷ Penetration test
❸ Insulation adhesion test
❹ Impact test
❺ Non-flammability test

INFORMATION

- Compliance with European standard EN 60900.
- For working on live components up to 1,000 volt AC.
- Each and every tool is tested to 10,000 volt for 10 seconds at the end of the manufacturing cycle.
- Our production site is accredited and certified to produce insulated tools.





Guard



Return spring for added safety

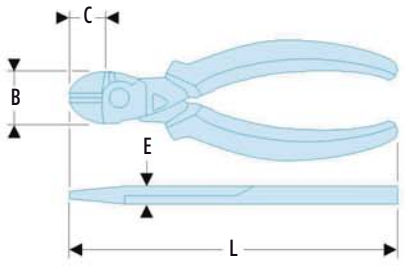
SAFETY

- Prevent damage to insulation from:
  – Heat (-20 to +70°C working temperature)
  – Chemicals
  – Cuts or perforations.
- Check insulation is sound before using a tool.
- Wear insulating gloves and eye protection.



192.VE - 1,000 Volt insulated high-performance diagonal cutters





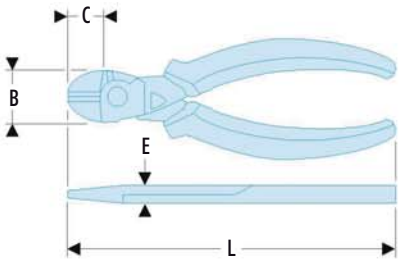
NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, soft wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	200 kg/mm² [Ø mm]	Cu - Ø max [mm]	⚖ [g]
192.14VE	21,5	15,5	9,5	145	1,5	0,7 - 3,0	160
192.16VE	24,0	18,0	10,0	160	2,0	0,7 - 4,0	200
192.18VE	26,0	20,0	11,0	180	2,2	0,7 - 4,5	260

1,000 Volt insulated electricians diagonal cutters







NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

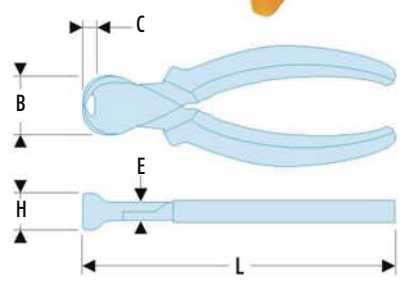
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim head for confined access (electric cabinets, wiring works, etc.).
- Semi-flush cutting edges to cleanly cut through all types of wire: hard wire, thin copper wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	160 kg/mm² [Ø mm]	Cu - Ø max [mm]	[g]
391.16VE	19	21	9	165	1,6	0,7 - 3,5	190

VE series 1,000 Volt insulated front cutting pliers

1,000 Volt insulated high-performance end cutters





NF ISO 5748, NF EN 60900, ISO 5748, EN 60900, DIN ISO 5748, DIN EN 60900, ASME B107.500

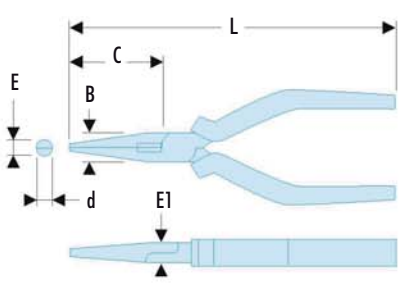
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, hard and soft wires.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

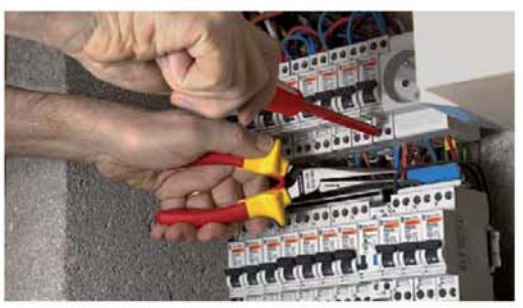
	B [mm]	C [mm]	E [mm]	L [mm]	200 kg/mm² [Ø mm]	[g]
190.16VE	28	6,5	11,5	160	1,6	200

VE series 1,000 Volt insulated 1/2 round nose pliers

185-195.VE - 1,000 Volt insulated long half-round nose pliers







NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

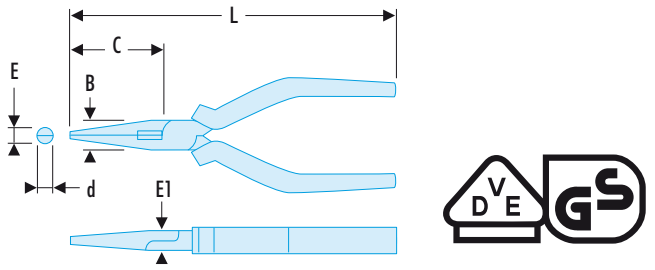
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim, fine serrated noses.
- Lateral wire cutter for copper and hard steel wire.
- 185.VE: straight nose. Checked by VDE.
- 195.VE: 40° angled nose.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	160 kg/mm² [Ø mm]	Cu - Ø max [mm]	[g]
185.20VE	18	75	2,9	3,6	9	200	1,6	0,7 - 3,5	192
195.20VE	18	69	2,9	3,6	9	200	1,6	0,7 - 3,5	192

VE series 1,000 Volt insulated pliers

193-195.VE - 1,000 Volt insulated short half-round nose pliers





NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

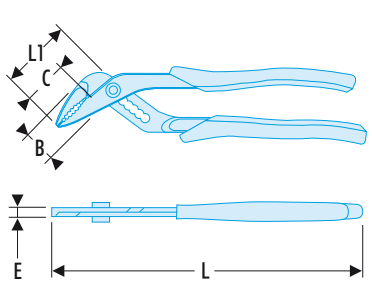
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim, fine serrated noses.
- Lateral wire cutter for copper and hard steel wire.
- 193.VE: straight nose.
- 195.VE: 40° angled nose.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	160 kg/mm² [Ø mm]	Cu - Ø max [mm]	⚖ [g]
193.16VE	17	50	2,5	3	9	160	1,6	0,7 - 3,0	177
195.16VE	17	50	2,5	3	9	160	1,6	0,7 - 3,0	177

VE series 1,000 Volt insulated standard multigrip pliers

High capacity 1,000 Volt insulated multigrip pliers





NF ISO 8976, NF EN 60900, ISO 8976, EN 60900, DIN ISO 8976, DIN EN 60900, ASME B107.500

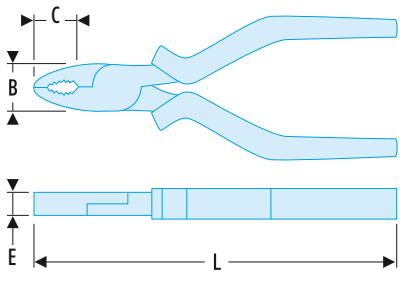
- For your safety, all pliers are tested individually at 10,000 Volt for 10s, at the end of the manufacturing cycle.

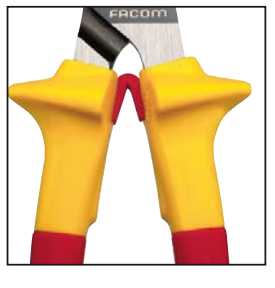
	A [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
180.VE	30	30	35	8	22	250	58	360

VE series 1,000 Volt insulated universal pliers

187.VE - 1,000 Volt insulated combination pliers







NF ISO 5746, NF EN 60900, ISO 5746, EN 60900, DIN ISO 5746, DIN EN 60900, ASME B107.500

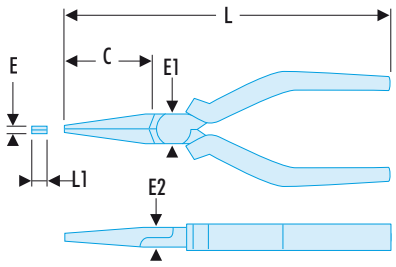
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cut through all types of wire: piano wire, soft wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRc).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	C [mm]	E [mm]	L [mm]	200 kg/mm² [Ø mm]	⚖ [g]
187.16VE	21	34	9,5	165	1,6	195
187.18VE	23	36	10,0	185	1,8	225

VE series 1,000 Volt insulated flat nose pliers

188.VE - 1,000 Volt insulated flat nose pliers





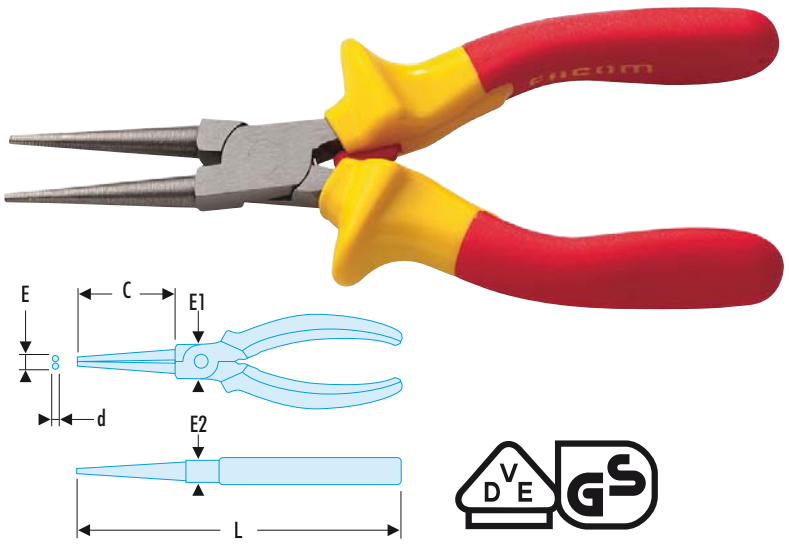
NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Serrated nose for stronger grip.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
188.16VE	46	4	18	168	6,5	140
188.20VE	75	4	18	200	6,5	200

VE series 1,000 Volt insulated round nose pliers

1,000 Volt insulated round nose pliers



NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

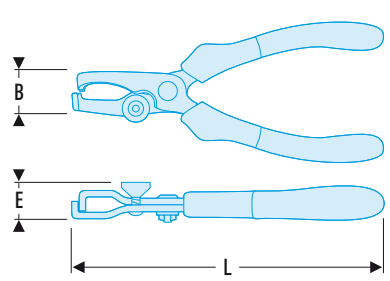
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- To make loops, angles or rings.
- Nose finely serrated inside for stronger grip.
- Diameter of each nose at the end: 2 mm.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	⚖ [g]
189.17VE	41	2	4	18	170	135

VE series 1,000 Volt insulated standard wire strippers

1,000 Volt insulated strippers





NF EN 60900, EN 60900, DIN EN 60900

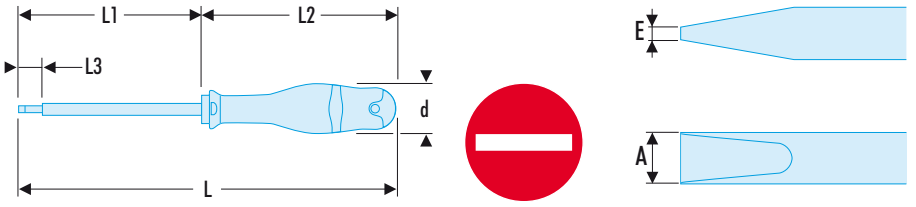
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- For multiple or single strand wires 0.5 --> 6 mm².
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

	B [mm]	E [mm]	L [mm]	⚖ [g]
194.17VE	17	8,5	170	185

Insulated screwdrivers for slotted head screws

A.VE - PROTWIST® 1,000 Volt insulated screwdrivers for slotted-head screws





NF ISO 2380-1, NF ISO 2380-2, NF EN 60900, ISO 2380-1, ISO 2380-2, EN 60900, DIN ISO 2380-1, DIN ISO 2380-2, DIN EN 60900, ASME B107.600

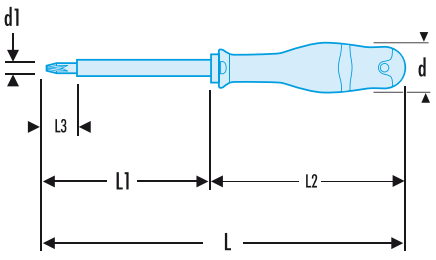
- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- 1,000 Volt sheathed round blade.
- Milled blade: --> 5.5 mm included.
- Fillet blade: 6.5 --> 12 mm.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	A [mm]	d [mm]	E [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
A2X75VE	2,0	19	0,4	170	40	95	18	23
A2,5X50VE	2,5	25	0,4	153	50	103	18	30
A2,5X75VE	2,5	25	0,4	178	75	103	18	32
A3X75VE	3,0	25	0,5	178	75	103	18	38
A3X100VE	3,0	25	0,5	202	100	103	18	39
A3,5X75VE	3,5	25	0,6	179	75	104	18	42
A3,5X100VE	3,5	25	0,6	204	100	104	18	44
A4X100VE	4,0	30	0,8	210	100	110	18	48
A4X150VE	4,0	30	0,8	260	150	110	18	53
A5,5X125VE	5,5	30	1,0	235	125	110	18	88
A5,5X150VE	5,5	30	1,0	260	150	110	18	92
A5,5X200VE	5,5	30	1,0	310	200	110	18	106
A6,5X150VE	6,5	36	1,2	270	150	120	18	120
A6,5X200VE	6,5	36	1,2	320	200	120	18	170
A8X150VE	8,0	40	1,2	275	150	125	18	160
A8X200VE	8,0	40	1,2	325	200	125	18	180
A10X200VE	10,0	40	1,6	325	200	125	18	240
A12X250VE	12,0	40	2,0	375	250	125	18	360

Insulated screwdrivers for Phillips® screws

AP.VE - PROTWIST® 1,000 Volt insulated screwdrivers for Phillips® head screws





NF ISO 8764-1, NF ISO 8764-2, NF EN 60900, ISO 8764-1, ISO 8764-2, EN 60900, DIN ISO 8764-1, DIN ISO 8764-2, DIN EN 60900, ASME B107.600

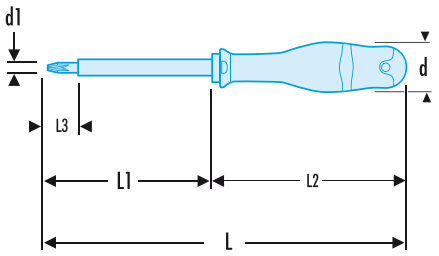
- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- 1,000 Volt sheathed round blade.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
AP0X75VE	PH0	25	3,0	179	75	104	18	46
AP1X100VE	PH1	30	4,5	210	100	110	18	77
AP2X125VE	PH2	36	6,0	245	125	120	18	127
AP3X150VE	PH3	40	8,0	275	150	125	18	195
AP4X200VE	PH4	40	10,0	325	200	125	18	278

Insulated screwdrivers for Pozidriv® screws

AD.VE - PROTWIST® 1,000 Volt insulated screwdrivers for Pozidriv® head screws





NF ISO 8764-1, NF ISO 8764-2, NF EN 60900, ISO 8764-1, ISO 8764-2, EN 60900, DIN ISO 8764-1, DIN ISO 8764-2, DIN EN 60900, ASME B107.600

- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- 1,000 Volt sheathed round blade.
- Bimaterial ergonomic handle, resistance to impact, abrasion and chemical agent.

	Pozidriv [No]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	⚖ [g]
AD0X75VE	PZ0	25	3,0	179	75	104	18	46
AD1X100VE	PZ1	30	4,5	209	100	109	18	77
AD2X125VE	PZ2	36	6,0	245	125	120	18	127
AD3X150VE	PZ3	40	8,0	275	150	125	18	195

Insulated screwdriver sets

A.VE - Sets of PROTWIST® 1,000 Volt insulated screwdrivers





- For your safety, each screwdriver is tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Supplied in a box.

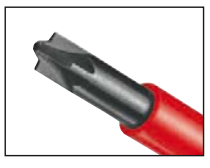
	⚖ [g]
AD.J5VE	430
AP.J5VE	430
AD.J8VE	650

BORNEO SCREWDRIVER

Borneo®

For our range of Borneo® screw drivers for electrical terminals. See p.408







1000 VOLTS EN 60900

PORTABLE FABRIC BAG

FOR PORTABLE FABRIC BAGS, SEE P. 144 AND 163 IN SECTION 3



FACOM VSE
A COMPREHENSIVE RANGE OF 1,000 VOLT INSULATED TOOLS

For use on live components!

"SAFETY" colour coding

ORANGE: 1,000 V protection.



YELLOW visible: **STOP** and change tool.





❶ **Basic tool:** Facom performance and safety.
❷ **Insulation:** Certified and accredited Facom production site. Tested and approved products.
❸ **2-colour warning insulation:** ORANGE = 1,000 V protection. YELLOW VISIBLE = STOP and change tool.
❹ **Ribbing on flexible insulation:** More secure grip.
❺ **Generously-sized guards:** Hand stays clear of the metal.
❻ **Hot markings:** Permanent safety data. Traceability.



"CERTIFIED" safety

CORRECT USE OF INSULATED TOOLS

ALWAYS wear insulating gloves and eye protection.
Check insulation is sound before using a tool.

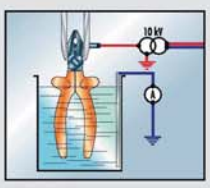
- **Never use a tool with cracked, cut or damaged insulation in any way.**
- **Discard tools if their insulation looks unsafe.**
- **Don't alter the insulation.**
- **Don't let other people use your insulated tools.**
- **Always use the correct tool.**
- **Check that the tool bears standard and approval markings.**
- **Read safety recommendations and keep the instructions.**

These products come with safety recommendations.
- **Beware of electrical hazards.**
- **Prevent damage to insulation from :**
  – Heat (-20 to 70°C working temperature),
  – Cuts or perforations.,
  – Chemicals.Visually check the insulation before use.
- **Wear insulating gloves and eye protection.**
  – 2-colour insulation :
  – Orange = safe.
  – Yellow = STOP.



TOOLS TO EN60900 SPECIFICATIONS

- **Individual production test:** Each and every tool is tested to 10,000V for 10 seconds at the end of the manufacturing cycle.



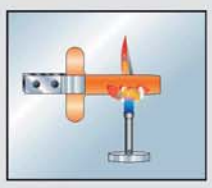
Dielectric test: After 24 hours immersion, the tool is wiped and tested to 10,000 V for 3 minutes between metal and sheath surface. Leakage current should not exceed specified limits.



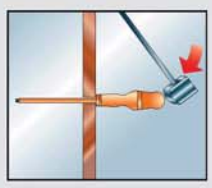
Penetration test: After a penetration test on the most vulnerable part of the tool, followed by heating and cooling, no breakdown or flashover should occur when 5,000 volts is applied for a period of 3 minutes.



Insulation adhesion test: A 50 kg tear test is carried out for 3 minutes at ambient temperature on a tool heated to 70°C for 168 hours. Sheath and guard should remain bonded to the metal.



Non-flammability test: After exposure to a flame for 10 seconds, flame spread over the tool should not exceed 120 mm high within the next 20 seconds.

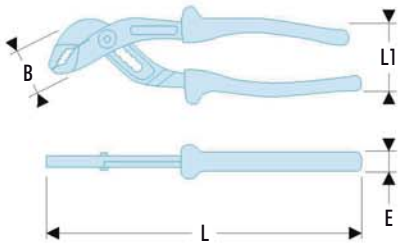


Impact test: A standard force is repeatedly applied to the handle end of a tool cooled to -25°C for 2 hours. The sheathing should not crack.

Multigrip pliers

VSE series 1,000 Volt insulated multigrip pliers





NF ISO 8976, NF EN 60900, ISO 8976, EN 60900, DIN ISO 8976, DIN EN 60900

- Insulation with "safety" colour coding.

	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
180.VSE	40	35	250	85	360

Cutting pliers

FACOM VSE 1,000 VOLTS®

1000 VOLTS EN 60900

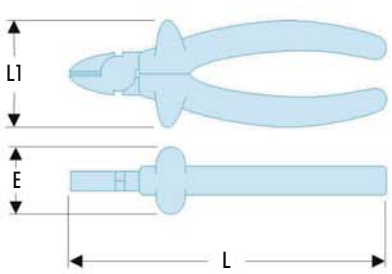
Tools built for electrical safety to European standard EN 60900. For working on live components up to 1,000 Volt AC and 1,500 Volt DC.

SAFETY COLOUR-CODING	**ORANGE:** 1,000 Volt protection
	YELLOW VISIBLE: STOP and change tool.



192.AVSE - VSE series 1,000 Volt insulated diagonal cutting pliers for hard wire



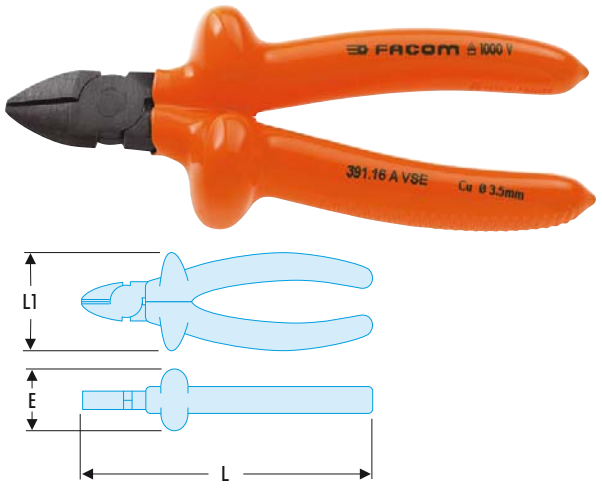


NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

- Tempered cutting edges for hardness above 60 HRc.
- 3 cutting diameters/200 kg/mm2: 1.4 - 1.6 - 1.8 mm.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	E [mm]	L [mm]	L1 [mm]	200 kg/mm² [Ø mm]	⚖ [g]
192.14AVSE	30	145	70	1,4	210
192.16AVSE	35	165	75	1,6	270
192.18AVSE	40	185	75	1,8	370

VSE series 1,000 Volt insulated diagonal cutting pliers for copper

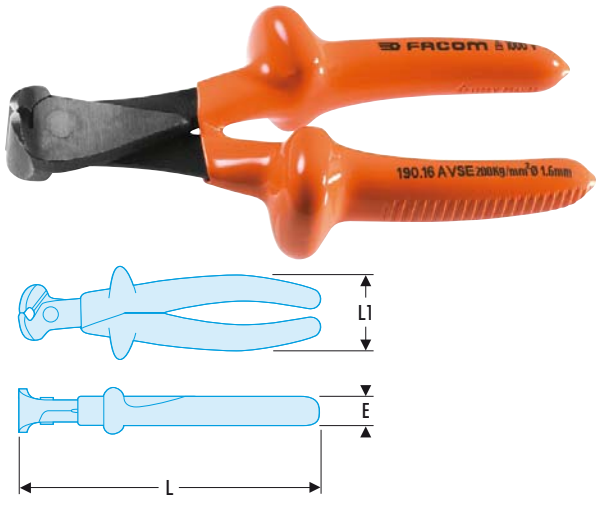


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Embedded meshing model.
- CU cutting diameter: 3.5 mm.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	E [mm]	L [mm]	L1 [mm]	Cu - Ø max [mm]	⚖ [g]
391.16AVSE	35	165	70	3,5	270

VSE series 1,000 Volt insulated end nippers for hard wire



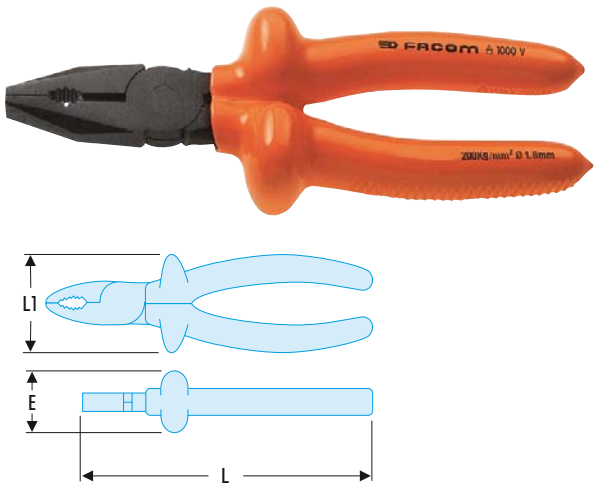
NF ISO 5748, NF EN 60900, ISO 5748, EN 60900, DIN ISO 5748, DIN EN 60900, ASME B107.500

- Tempered cutting edges for hardness above 60 HRc.
- Cutting diameter/200 kg/mm2: 1.6 mm.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	E [mm]	L [mm]	L1 [mm]	200 kg/mm² [Ø mm]	⚖ [g]
190.16AVSE	77	165	35	1,6	250

Combination pliers

187.AVSE - VSE series 1,000 Volt insulated combination pliers



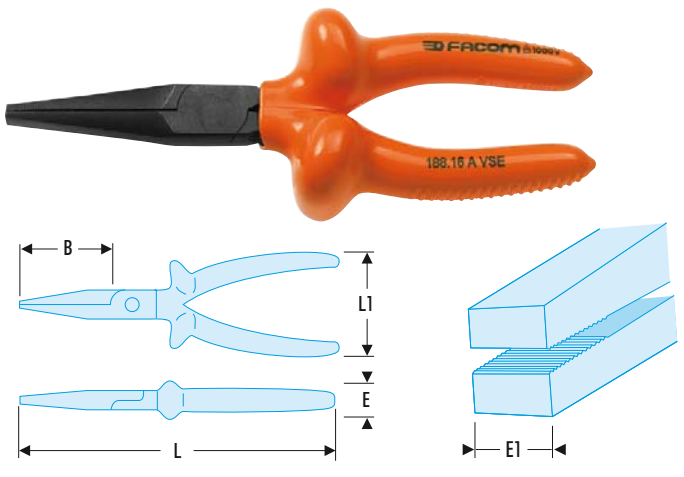
NF ISO 5746, NF EN 60900, ISO 5746, EN 60900, DIN ISO 5746, DIN EN 60900, ASME B107.500

- Tempered pliers for general strength.
- Second treatment on cutting edge for cutting edge hardness above 60 HRc.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	E [mm]	L [mm]	L1 [mm]	140 kg/mm² [Ø mm]	200 kg/mm² [Ø mm]	Cu - Ø max [mm]	⚖ [g]
187.16AVSE	35	165	65	2,0	1,6	3,3	265
187.18AVSE	35	185	70	1,8	1,8	3,7	320
187.20AVSE	40	205	70	2,0	2,0	4,0	410

Grip pliers

VSE series 1,000 Volt insulated flat nose pliers

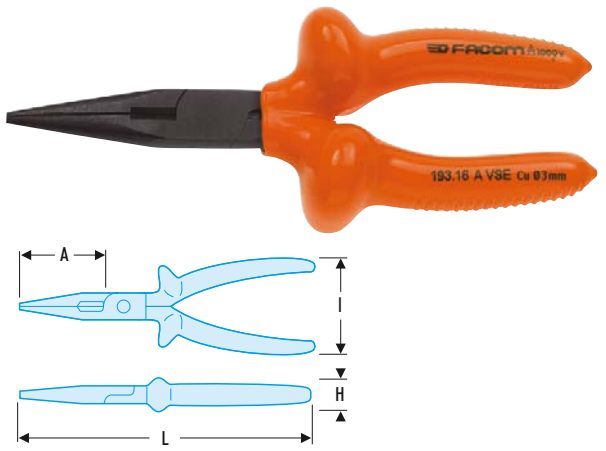


NF ISO 5746, NF EN 60900, ISO 5746, EN 60900, DIN ISO 5746, DIN EN 60900, ASME B107.500

- Serrated nose tips.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	B [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	⚖ [g]
188.16AVSE	50	37	7	165	60	170

VSE series 1,000 Volt insulated semi-round nose pliers

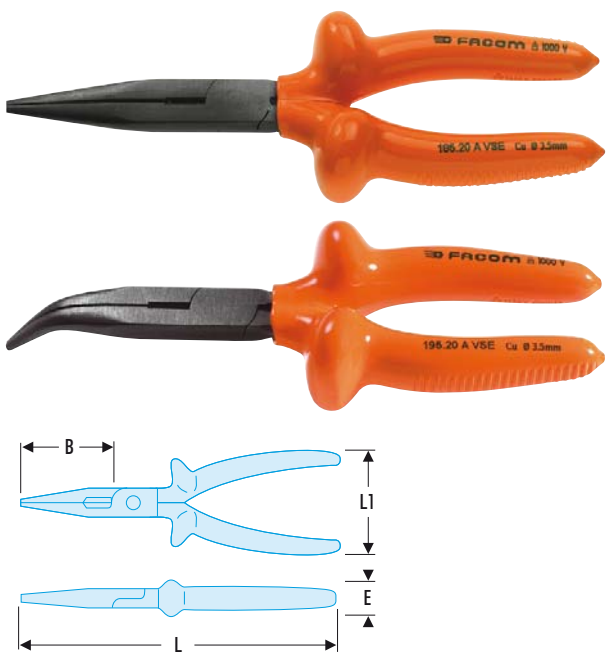


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Model with wire cutter.
- Serrated inner side of jaws facilitating grip.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	A [mm]	E [mm]	L [mm]	L1 [mm]	140 kg/mm² [Ø mm]	⚖ [g]
193.16AVSE	50	32	170	70	1,6	180

VSE series 1,000 Volt insulated long semi-round nose pliers



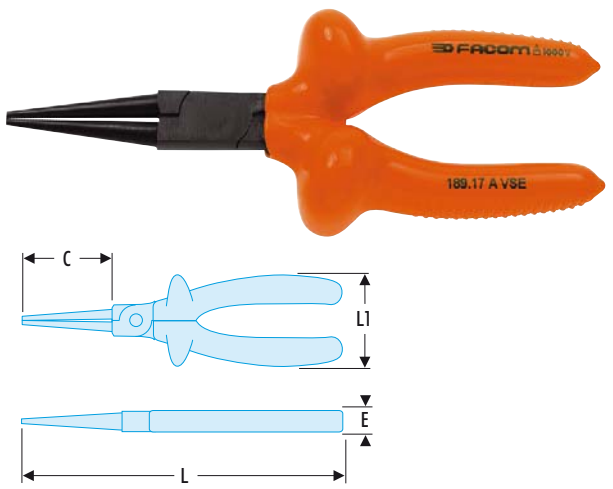
NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

- Models with wire cutter.
- Insulation with "safety" colour coding.
- Finish: burnished head.

185: straight nose.
195: angled nose.

	A [mm]	B [mm]	E1 [mm]	L [mm]	L1 [mm]	Cu - Ø max [mm]	⚖ [g]
185.20AVSE	69	69	3,0	200	65	3,5	250
195.20AVSE	64	64	3,5	200	63	3,5	250

VSE series 1,000 Volt insulated round nose pliers

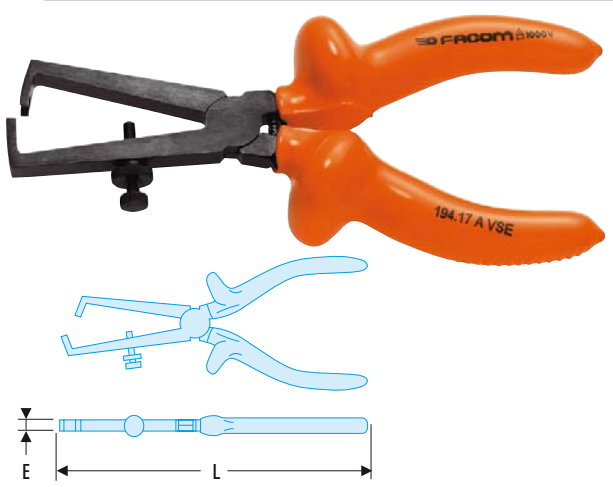


- Model with long, slim, serrated nose for making angles or terminals for all types of wires.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
189.17AVSE	45	45	33	170	60	175

Wire strippers

VSE series 1,000 Volt insulated strippers



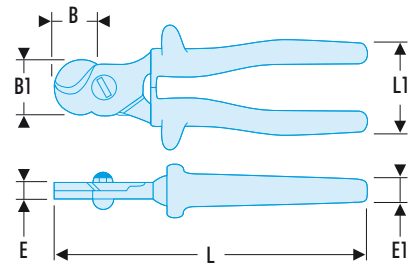
- Strips all current wires in electrical installations.
- Max diameter: 2.5 mm.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	E [mm]	E1 [mm]	L [mm]	⚖ [g]
194.17AVSE	8	8	170	200

Cable cutter

412.AVSE - VSE series 1,000 Volt insulated copper-alu cable cutter





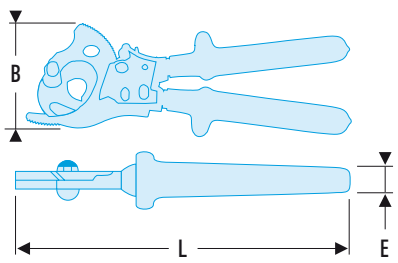
NF EN 60900, EN 60900, DIN EN 60900

- Particularly efficient for limited size.
- Forged safety stops.
- Insulation with "safety" colour coding.
- Finish: burnished head.

	B [mm]	B1 [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	Cu - Ø max [mm]	⚖ [g]
412.10AVSE	25	35	10	35	195	80	8	390
412.14AVSE	30	35	13	35	230	80	14	510
412.150AVSE	60	70	16	70	450	155	32	220

414.AVSE - VSE series 1,000 Volt insulated ratchet cable cutter





NF EN 60900, EN 60900, DIN EN 60900

- One-hand cutting.
- No distortion of the cable cut.
- Tempered forged steel blade.
- Insulation with "safety" colour coding.

414.45AVSE
- Cutting dimension: 45 mm.
- Max cutting cross-section copper 300 mm² and alu. 400 mm².
- Copper sector cable: 3x70.
- Alu sector cable: 4x70.

414.52AVSE
- Cutting dimension: 52 mm.
- Max cutting cross-section copper 400 mm².
- Max cutting cross-section HVA: 240 mm².
- LV sector cable: 3*150+70 or 3*240+95.

	B [mm]	E [mm]	L [mm]	⚖ [kg]
414.45AVSE	135	42	260	1,00
414.52AVSE	140	37	280	1,05

Hacksaw frame

602.AVSE SE series 1,000 Volt insulated hacksaw frame



NF E 73-073, NF EN 60900, EN 60900, DIN 6473, DIN EN 60900

- Hacksaw frame for 300 mm blade.
- 2 blade positions.
- Tension by wing nut.
- Supplied with one bimetal blade.
- Dimensions: 470 x 130 x 20 mm.

Weight: 590 g

Knife

1820.AVSE VSE series 1,000 Volt insulated knife



NF EN 60900, EN 60900, DIN EN 60900

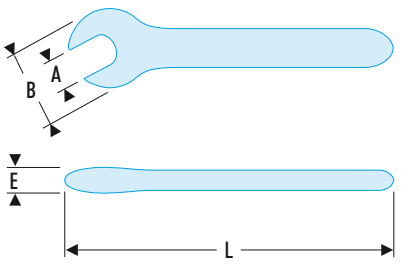
- Model with thick, angled, flat end blade.
- Soft bi-material handle.
- Storage case.
- Active blade length: 60 mm.
- Max dimensions: 185 x 52 x 25 mm.

Weight: 90 g

Open-end wrenches

46.AVSE - VSE series 1,000 Volt insulated open end wrenches





NF ISO 4229, NF EN 60900, ISO 4229, EN 60900, DIN 3114, DIN EN 60900

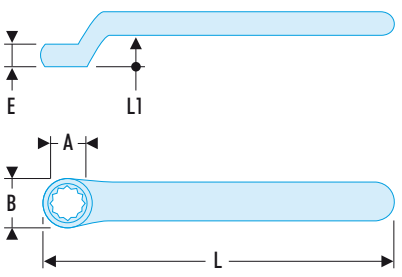
- Insulation with "safety" colour coding.

	A [mm]	B [mm]	E [mm]	L [mm]	⚖ [g]
46.8AVSE	8	22	8	105	30
46.9AVSE	9	24	9	105	35
46.10AVSE	10	25	9	105	40
46.11AVSE	11	29	10	115	50
46.12AVSE	12	30	10	125	60
46.13AVSE	13	32	11	135	70
46.14AVSE	14	34	11	145	80
46.15AVSE	15	36	11	145	90
46.16AVSE	16	38	12	155	105
46.17AVSE	17	41	12	155	120
46.18AVSE	18	42	12	160	135
46.19AVSE	19	45	12	165	150
46.21AVSE	21	50	14	185	180

Ring wrenches

55.AVSE - VSE series 1,000 Volt insulated offset ring wrenches





NF EN 60900, EN 60900, DIN EN 60900

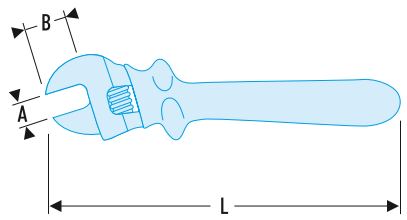
- OGV® profile ring.
- Insulation with "safety" colour coding.

	A [mm]	B [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
55.8AVSE	8	16	8	150	16	50
55.9AVSE	9	17	9	151	17	55
55.10AVSE	10	19	9	157	17	60
55.11AVSE	11	20	10	160	19	70
55.12AVSE	12	21	11	165	20	100
55.13AVSE	13	23	12	165	20	105
55.14AVSE	14	25	12	180	21	120
55.15AVSE	15	26	12	183	21	130
55.16AVSE	16	27	13	195	26	160
55.17AVSE	17	30	14	198	27	180
55.18AVSE	18	30	14	215	27	200
55.19AVSE	19	32	14	215	27	205
55.21AVSE	21	35	16	245	31	300

Adjustable wrenches

113.AVSE - VSE series 1,000 Volt insulated adjustable wrenches





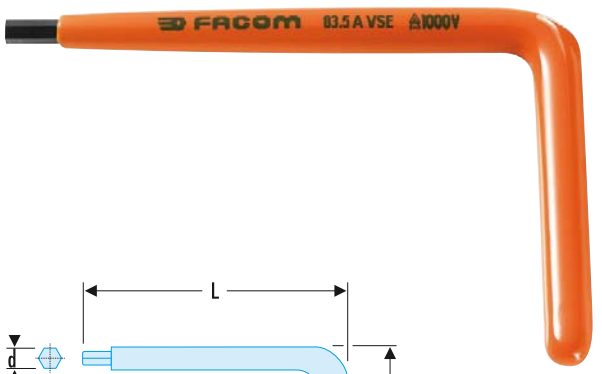
NF ISO 6787, NF EN 60900, ISO 6787, EN 60900, DIN EN 60900, ASME B107.100

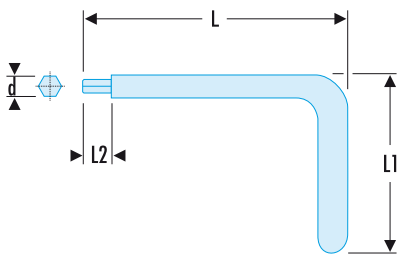
- Models with finger stop.
- Worm: left-hand rotation.
- Insulation with "safety" colour coding.
- Finish: burnished.

	A [mm]	B [mm]	L [mm]	⚖ [g]
113.8TAVSE	27	24	210	385
113.10TAVSE	30	29	260	655
113.12TAVSE	34	34	310	950
113.15TAVSE	44	44	385	1935

Offset keys

83.AVSE - VSE series 1,000 Volt insulated keys





NF ISO 2936, NF EN 60900, ISO 2936, EN 60900, DIN ISO 2936, DIN EN 60900

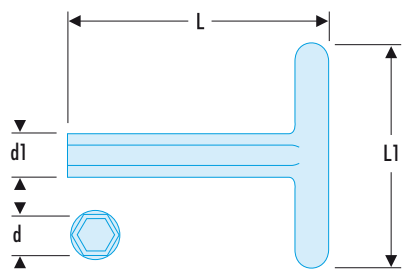
- Key made in allied steel treated for strength above specifications of standards.
- Insulation with "safety" colour coding.

	d [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
83.3AVSE	3	125	85	12	20
83.4AVSE	4	125	85	12	30
83.5AVSE	5	125	85	12	50
83.6AVSE	6	125	85	12	70
83.8AVSE	8	125	85	12	110
83.10AVSE	10	125	85	12	150
83.12AVSE	12	125	85	12	210

Box wrenches

94T-TL.AVSE - VSE series 1,000 Volt insulated box wrenches





NF EN 60900, EN 60900, DIN EN 60900

- 94T.AVSE: box wrenches length 135 mm.
- 94TL.AVSE: box wrenches length 300 mm.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
94T.6AVSE	6	13	135	115	150
94T.8AVSE	8	15	135	115	160
94T.10AVSE	10	19	135	115	185
94T.11AVSE	11	23	135	115	185
94T.12AVSE	12	24	135	115	210
94T.13AVSE	13	25	135	115	225
94T.14AVSE	14	26	135	115	240
94TL.10AVSE	10	21	300	205	420
94TL.13AVSE	13	25	300	205	520
94TL.16AVSE	16	30	300	205	800
94TL.17AVSE	17	30	300	205	840
94TL.19AVSE	19	33	300	205	910

FACOM VSE 1,000 VOLT INSULATED RATCHETS AND SOCKETS

A COMPREHENSIVE RANGE OF TOOLS FOR WORKING ON LIVE COMPONENTS

❶ Comprehensive range of accessories: extensions, Tee handles, etc.

❷ Variety of socket lengths.

❸ Square drives: 1/2", 3/8", 1/4" for overcoming accessibility problems.



1000 VOLTS EN 60900

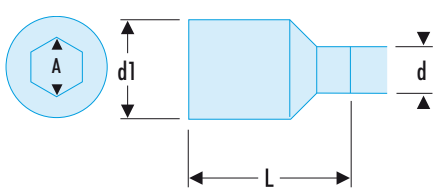


And complete box sets.

Sockets 1/4"

R.AVSE - VSE series 1,000 Volt insulated 6-point 1/4" sockets





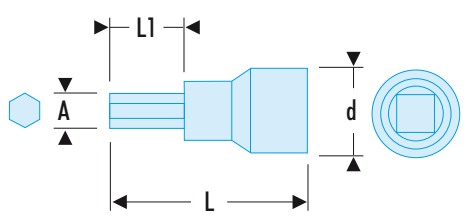
NF ISO 2725-1, NF ISO 1711-1, NF EN EN 60900, ISO 2725-1, ISO 1711-1, EN 60900, DIN 3124, DIN EN 60900, ASME B107.5

- Manual use sockets.
- Drive bit 1/4" - 6.35 mm.

	A [mm]	d [mm]	d1 [mm]	L [mm]	⚖ [g]
R.6AVSE	6	22	16	22	10
R.7AVSE	7	22	17	22	16
R.8AVSE	8	22	17	22	16
R.10AVSE	10	22	18	22	20
R.12AVSE	12	22	22	22	30

RT.AVSE - VSE series 1,000 Volt insulated 6-point 1/4" bit sockets





NF EN 60900, EN 60900, DIN EN 60900

- Manual use sockets.
- Drive bit 1/4" - 6.35 mm.

	A [mm]	d [mm]	L [mm]	L1 [mm]	⚖ [g]
RT.4AVSE	4	22	37	11	20
RT.5AVSE	5	22	37	13	20
RT.6AVSE	6	22	37	14	20

Ratchets and accessories 1/4"

R.151AVSE VSE series 1,000 Volt insulated 1/4" ratchet



NF ISO 3315, NF EN 60900, ISO 3315, EN 60900, DIN 3122, DIN EN 60900, ASME B107.10

- Drive bit 1/4" - 6.35 mm.
- Sockets and accessories held by spring ball (9 N).
- Insulation grip with "safety" colour coding.
- Dimensions: 125 x 45 x 35 mm.

Weight: 140 g

VSE series 1,000 Volt insulated 1/4" extension



NF ISO 3316, NF EN 60900, ISO 3316, EN 60900, DIN 3123, DIN EN 60900, ASME B107.10

- Drive bit 1/4" - 6.35 mm.

	d [mm]	L [mm]	⚖ [g]
R.210AVSE	16,6	116	65

Socket sets and accessories 1/4"

R.400AVSE Set of 10 VSE series 1,000 Volt insulated tools



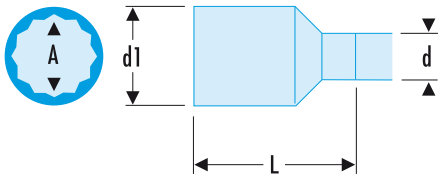
- Including:
- 5 sockets 6, 7, 8, 10, 12 mm.
- 3 6-point bit sockets 4, 5, 6 mm.
- 1 ratchet R.151AVSE.
- 1 extension R.210AVSE.
- Case dimensions: 322 x 136 x 53 mm.

Weight: 650 g.

Sockets 3/8"

J.AVSE - VSE series 1,000 Volt insulated 12-point 3/8" sockets





NF ISO 2725-1, NF ISO 1711-1, NF EN 60900, ISO 2725-1, ISO 1711-1, EN 60900, DIN 3124, DIN EN 60900, ASME B107.5

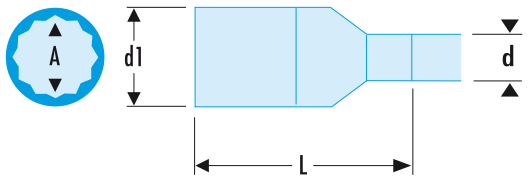
- Manual use sockets.
- Drive bit 3/8" - 9.53 mm.
- OGV® profile.

	A [mm]	d [mm]	d1 [mm]	L [mm]	⚖ [g]
J.8AVSE	8	18	17	43	30
J.10AVSE	10	18	18	43	34
J.11AVSE	11	18	20	43	35
J.12AVSE	12	18	21	46	35
J.13AVSE	13	18	22	46	45
J.14AVSE	14	18	23	46	45
J.15AVSE	15	18	25	46	45
J.16AVSE	16	18	25	46	45
J.17AVSE	17	18	27	46	48
J.18AVSE	18	18	27	46	66
J.19AVSE	19	18	29	50	68

Long reach sockets 3/8"

J.LAVSE - VSE series 1,000 Volt insulated long 12-point 3/8" sockets





NF ISO 2725-1, NF ISO 1711-1, NF EN 60900, ISO 2725-1, ISO 1711-1, EN 60900, DIN 3124, DIN EN 60900, ASME B107.5

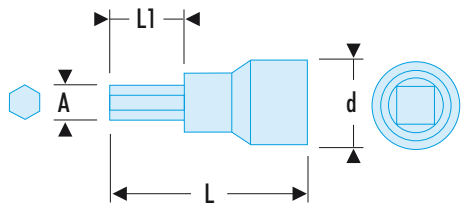
- Manual use sockets.
- Drive bit 3/8" - 9.53 mm.
- OGV® profile.

	A [mm]	d [mm]	d1 [mm]	L [mm]	ΔΔ [g]
J.8LAVSE	8	18	19	63	66
J.13LAVSE	13	18	23	63	75
J.14LAVSE	14	18	23	63	98
J.16LAVSE	16	18	25	69	147
J.17LAVSE	17	18	27	76	147
J.18LAVSE	18	18	28	76	157
J.19LAVSE	19	18	29	76	166

Bit sockets 3/8"

JT.AVSE - VSE series 1,000 Volt insulated male 6-point 3/8" bit sockets





NF EN 60900, EN 60900, DIN EN 60900

- Manual use sockets.
- Drive bit 3/8" - 9.53 mm.

	A [mm]	d [mm]	L [mm]	L1 [mm]	ΔΔ [g]
JT.4AVSE	4	18	66	10	43
JT.5AVSE	5	18	66	10	43
JT.6AVSE	6	18	66	10	44
JT.7AVSE	7	18	66	10	48
JT.8AVSE	8	18	66	10	56
JT.10AVSE	10	18	66	10	63

Ratchets and accessories 3/8"

J.151AVSE VSE series 1,000 Volt insulated 3/8" ratchet



NF ISO 3315, NF EN 60900, ISO 3315, EN 60900, DIN 3122, DIN EN 60900, ASME B107.10

- Drive bit 3/8" - 9.53 mm.
- Sockets and accessories held by spring ball set (16 N).
- Insulation grip with "safety" colour coding.
- Dimensions: 180 x 50 x 48 mm.

Weight: 250 g

J.121AVSE VSE series 1,000 Volt insulated 3/8" handle



NF EN 60900, EN 60900, DIN EN 60900, ASME B107.10

- Handle with drive bit 3/8" - 9.53 mm.
- Sockets and accessories held by spring ball set (16 N).
- Insulation grip with "safety" colour coding.
- Dimensions: 205 x 165 x 35 mm.

Weight: 380 g

J.AVSE - VSE series 1,000 Volt insulated 3/8" extensions



NF ISO 3316, NF EN 60900, ISO 3316, EN 60900, DIN 3123, DIN EN 60900, ASME B107.10

- Drive bit 3/8" - 9.53 mm.

	d [mm]	L [mm]	[g]
J.210AVSE	17	150	150
J.215AVSE	17	260	290

Socket sets and accessories 3/8"

J.400AVSE Set of 9 VSE series 1,000 Volt insulated tools



- Including:
- 6 12-point sockets 8, 10, 11, 12, 13, 14 mm.
- 1 ratchet J.151AVSE.
- 2 extensions J.210AVSE, J.215AVSE.
- Dimensions: 390 x 160 x 68 mm.

Weight: 1.740 kg

J.401AVSE Set of 17 VSE series 1,000 Volt insulated tools



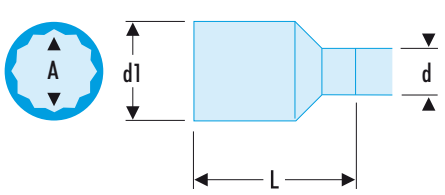
- Including:
- 9 12-point sockets 8, 10, 11, 12, 13, 14, 15, 17, 19 mm.
- 5 6-point bit sockets 4, 5, 6, 7, 8 mm.
- 1 ratchet J.151AVSE.
- 1 handle J.121AVSE.
- 1 extension J.210AVSE.
- Dimensions: 345 x 280 x 65 mm.

Weight: 2.250 kg

Sockets 1/2"

S.AVSE - VSE series 1,000 Volt insulated 12-point 1/2" sockets





NF ISO 2725-1, NF ISO 1711-1, NF EN EN 60900, ISO 2725-1, ISO 1711-1, EN 60900, DIN 3124, DIN EN 60900, ASME B107.5

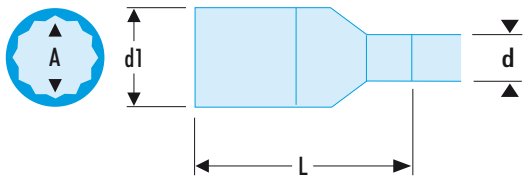
- Manual use sockets.
- Drive bit 1/2" - 12.7 mm.
- OGV® profile.

	A [mm]	d [mm]	d1 [mm]	L [mm]	[g]
S.8AVSE	8	22	17	52	70
S.9AVSE	9	22	18	52	70
S.10AVSE	10	22	19	52	75
S.11AVSE	11	22	20	52	75
S.12AVSE	12	22	22	52	75
S.13AVSE	13	22	23	52	75
S.14AVSE	14	22	24	52	80
S.17AVSE	17	22	28	52	90
S.19AVSE	19	22	32	52	95
S.21AVSE	21	22	33	52	130
S.22AVSE	22	22	34	52	145

Long reach sockets 1/2"

S.LAVSE - VSE series 1,000 Volt insulated long 12-point 1/2" sockets





NF ISO 2725-1, NF ISO 1711-1, NF EN EN 60900, ISO 2725-1, ISO 1711-1, EN 60900, DIN 3124, DIN EN 60900, ASME B107.5

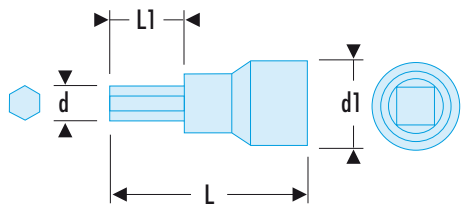
- Manual use sockets.
- Drive bit 1/2" - 12.7 mm.
- OGV® profile.

	A [mm]	d [mm]	d1 [mm]	L [mm]	⚖ [g]
S.12LAVSE	12	22	22	77	125
S.13LAVSE	13	22	23	77	135
S.14LAVSE	14	22	24	77	135
S.16LAVSE	16	22	27	77	150
S.17LAVSE	17	22	28	77	161
S.18LAVSE	18	22	29	77	167
S.19LAVSE	19	22	32	77	180

Bit sockets 1/2"

ST.AVSE - VSE series 1,000 Volt insulated male 6-point 1/2" bit sockets





NF EN 60900, EN 60900, DIN EN 60900

- Manual use sockets.
- Drive bit 1/2" - 12.7 mm.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
ST.8AVSE	8	22	70	10	90
ST.10AVSE	10	22	70	12	90
ST.12AVSE	12	22	92	12	145
ST.14AVSE	14	22	92	17	150
ST.17AVSE	17	22	92	19	175

Ratchets and accessories 1/2"

S.151AVSE VSE series 1,000 Volt insulated 1/2" ratchet



NF ISO 3315, NF EN 60900, ISO 3315, EN 60900, DIN 3122, DIN EN 60900, ASME B107.10

- Drive bit 1/2" - 12.7 mm.
- Sockets and accessories held by spring ball set (38 N).
- Insulation grip with "safety" colour coding.
- Dimensions: 265 x 55 x 70 mm.

Weight: 580 g

S.121AVSE VSE series 1,000 Volt insulated 1/2" handle



NF EN 60900, EN 60900, DIN EN 60900

- Handle with drive bit 1/2" - 12.7 mm.
- Sockets and accessories held by spring ball set (38 N).
- Insulation grip with "safety" colour coding.
- Dimensions: 210 x 165 x 25 mm.

Weight: 520 g

S.AVSE - VSE series 1,000 Volt insulated 1/2" extensions



NF ISO 3316, NF EN 60900, ISO 3316, EN 60900, DIN 3123, DIN EN 60900, ASME B107.10

• Drive bit 1/2" - 12.7 mm.

	d [mm]	L [mm]	ΔΔ [g]
S.210AVSE	22	145	250
S.215AVSE	22	145	470

Socket sets and accessories 1/2"

S.400AVSE Set of 12 VSE series 1,000 Volt insulated tools



NF EN 60900, EN 60900, DIN EN 60900

• Including:
- 9 12-point sockets 8, 9, 10, 11, 12, 13, 14, 17, 19 mm.
- 1 ratchet S.151AVSE.
- Extensions S.210AVSE and S.215AVSE .

• Dimensions: 390 x 160 x 68 mm.
Weight: 2.460 kg

S.401AVSE Set of 17 series 1,000 Volt insulated tools



NF EN 60900, EN 60900, DIN EN 60900

• Including:
- 9 12-point sockets 8, 9, 10, 11, 12, 13, 14, 17, 19 mm.
- 5 bit sockets 8, 10, 12, 14, 17 mm.
- 1 ratchet S.151AVSE.
- Handle S.121AVSE.
- S.210AVSE Extension.

• Dimensions: 345 x 280 x 65 mm.
Weight: 3.430 kg

Torque wrench

J.306-50VSE VSE series 1,000 Volt insulated torque wrench



NF EN ISO 6789, NF EN 60900, ISO 6789, EN 60900, DIN EN ISO 6789, DIN EN 60900

- Safe precision.
- Adjustment system locking ring.
- Wrench compliant with the ISO EN 6789 standard for torque control.
- Accuracy + or – 4 % for 5,000 cycles min.
- Automatic trigger and reset.
- Re-calibratable wrench: typical procedure for torque wrenches.
- Drive bit 3/8".
- Capacity 10 to 50 N.m.
- One-way wrench.
- Wrench compliant with the EN 60900 standard for insulated tools.
- Protection up to 1,000 Volt AC and 1500 Volt direct.
- Wrench checked at dielectric test per unit on the manufacturing line.
- Wrench supplied with inspection report.
- Length: 380 mm.

Weight: 1.274 kg

Insulated gloves

BC.VSE - Insulated gloves





NF EN 60903, EN 60903, DIN EN 60903

- Natural latex gloves, AZM classification:
- Resistance to acid: A.
- Resistance to ozone: Z.
- High mechanical strength: M.
- Length: 360 mm.
- Supplied in anti-UV opaque bag.

Weight: 150 g

	Size [mm]	E [mm]	Class	Voltage\Volt
BC.80VSE	9 (B)	0,5	00	500
BC.81VSE	10 (C)	0,5	00	500
BC.90VSE	9 (B)	1,0	0	1000
BC.91VSE	10 (C)	1,0	0	1000

Safety overgloves

BC.VSE - Safety overgloves





NF EN 60903, EN 60903, DIN EN 60903

- Silicon coated leather gloves protecting from mechanical risks.
- Used to protect latex insulated gloves.
- Physical and mechanical grade as per standard EN 388: 2, 1, 2, 1.
- Abrasion: 2.
- Cuts: 1.
- Tears: 2.
- Perforation: 1.

	Size [mm]	⚖ [g]
BC.109VSE	9 (B)	160
BC.110VSE	10 (C)	160

Insulated mats

BC.VSE - Insulated mats



NF C 18-421

- Rubber mat for insulation by cladding grounds.
- Thickness: 3.2 mm.
- Hardness: 60 DIDC.
- Dimensions:

- BC.20VSE: 1 x 0,6 m.
- BC.21VSE: 1 x 1 m.

	⚖ [kg]
BC.20VSE	2,500
BC.21VSE	4,200

Insulated pliers

BC.25VSE Set of 4 insulated pliers



- Powerful clamping resin pliers for assembly of insulating mats.
- Fitted with a suspension hook.
- Max opening: 40 mm.
- Length: 155 mm.

Weight: 70 g

Insulated tool sets

2180B.VSE 10-piece set of 1,000 Volt insulated tools



- Basic set for shop electrical maintenance.
- Supplied in leather bag BV.100.
- Dimensions: 350 x 120 x 120 mm.

Weight: 2.025 kg.

	Qtys	Set Description
BC.90VSE	1	Low temperature insulating gloves S9
189.17AVSE	1	1,000 Volt insulated round nose pliers
194.17AVSE	1	1,000 Volt insulated strippers
391.16AVSE	1	1,000 Volt insulated diagonal cutters for copper
187.18AVSE	1	1,000 Volt insulated combination pliers

	Qtys	Set Description
1820.AVSE	1	1,000 Volt insulated knife
A4X100VE	1	1,000 Volt insulated screwdriver for slotted heads 4x100 mm
A5,5X150VE	1	1,000 Volt slotted head screwdrivers 5.5x150 mm
AP1X100VE	1	1,000 Volt screwdrivers for Phillips® PH 1 head
BV.100	1	Compact leather bag

2185C.VSE 20-piece set of 1,000 Volt insulated tools



- In chest with modular storage.
- This general purpose selection includes 20 basic tools in a plastic box.
- Volume available for additional tools.
- Dimensions: 524 x 320 x 214 mm.

Weight: 9.300 kg.

	Qtys	Set Description
BC.90VSE	1	Low temperature insulating gloves S9
BC.109VSE	1	Safety overgloves S9
DELA.401.00	1	Plastic folding rule (2 m)
113.10TAVSE	1	1,000 Volt insulated adjustable wrench 30 mm
R.400AVSE	1	1/4" 1,000 Volt insulated tool set
188.16AVSE	1	1,000 Volt insulated flat nose pliers
192.16AVSE	1	1,000 Volt insulated cutters for hard wire
194.17AVSE	1	1,000 Volt insulated strippers
391.16AVSE	1	1,000 Volt insulated diagonal cutters for copper
412.14AVSE	1	1,000 Volt insulated copper/alu cable cutter 14 mm
1820.AVSE	1	1,000 Volt insulated knife
187.18AVSE	1	1,000 Volt insulated combination pliers
AV.HT1B	1	Voltage tester screwdriver 90 to 480 Volts

	Qtys	Set Description
A4X100VE	1	1,000 Volt insulated screwdriver for slotted heads 4x100 mm
A5,5X150VE	1	1,000 Volt slotted head screwdrivers 5.5x150 mm
A6,5X150VE	1	1,000 Volt slotted head screwdrivers 6.5x150 mm
A8X150VE	1	1,000 Volt insulated screwdriver for slotted heads 8x125 mm
AP1X100VE	1	1,000 Volt screwdrivers for Phillips® PH1 head
AP2X125VE	1	1,000 Volt screwdrivers for Phillips® PH2 head
BP.P26	1	Probox tool box

2187C.VSE 32-piece set of 1,000 Volt insulated tools



- For electrical equipment installers.
- Supplied in leather wallet BV.7A.
- Dimensions: 445 x 330 x 185 mm.

Weight: 8.500 kg.

	Qtys	Set Description
BC.90VSE	1	Low temperature insulating gloves S9
BC.109VSE	1	Safety overgloves S9
R.400AVSE	1	10-piece 1/4" insulated tool set
113.10TAVSE	1	1,000 Volt insulated adjustable wrench 30 mm
188.16AVSE	1	1,000 Volt insulated flat nose pliers
194.17AVSE	1	1,000 Volt insulated strippers
391.16AVSE	1	1,000 Volt insulated copper diagonal cutters
189.17AVSE	1	1,000 Volt insulated round nose pliers
187.18AVSE	1	1,000 Volt insulated combination pliers
412.14AVSE	1	1,000 Volt copper/alu cable cutter 14 mm
AV.HT1B	1	Voltage tester screwdriver 90 to 480 V
701B	1	Multifunction tester
46.8AVSE	1	1,000 Volt insulated open-end wrench 8 mm
46.10AVSE	1	1,000 Volt insulated open-end wrench 10 mm
46.11AVSE	1	1,000 Volt insulated open-end wrench 11 mm
46.12AVSE	1	1,000 Volt insulated open-end wrench 12 mm
46.13AVSE	1	1,000 Volt insulated open-end wrench 13 mm
46.14AVSE	1	1,000 Volt insulated open-end wrench 14 mm
46.17AVSE	1	1,000 Volt insulated open-end wrench 17 mm

	Qtys	Set Description
46.19AVSE	1	1,000 Volt insulated open-end wrench 19 mm
83.3AVSE	1	1,000 Volt insulated keys 3 mm
83.4AVSE	1	1,000 Volt insulated keys 4 mm
83.6AVSE	1	1,000 Volt insulated keys 6 mm
A3,5X100VE	1	1,000 Volt insulated slotted head screwdrivers 3.5x100 mm
A4X100VE	1	1,000 Volt insulated screwdriver for slotted heads 4x100 mm
A5,5X150VE	1	1,000 Volt slotted head screwdrivers 5.5x150 mm
A6,5X150VE	1	1,000 Volt slotted head screwdrivers 6.5x150 mm
A8X150VE	1	1,000 Volt insulated screwdriver for slotted heads 8x150 mm
AP0X75VE	1	1,000 Volt screwdrivers for Phillips® PH 0 head
AP1X100VE	1	1,000 Volt screwdrivers for Phillips® PH 1 head
AP2X125VE	1	1,000 Volt screwdrivers for Phillips® PH 2 head
BV.7A	1	Folding front panel leather case

2184C.VSE 41-piece set of 1,000 Volt insulated tools



- For electrical equipment shops, worksites.
- Supplied in leather case BV.5A.
- Dimensions: 425 x 215 x 320 mm.

Weight: 14.130 kg.

	Qtys	Set Description
BC.20VSE	1	Insulating mat 1 m x 0.6 m
BC.90VSE	1	Low temperature insulating gloves S9
180.VSE	1	1,000 Volt insulated multiple grip pliers
188.16AVSE	1	1,000 Volt insulated flat nose pliers
195.20AVSE	1	1,000 Volt insulated long half-round nose pliers
190.16AVSE	1	1,000 Volt insulated cutters for hard wire
192.16AVSE	1	1,000 Volt insulated cutters for hard wire
391.16AVSE	1	1,000 Volt insulated copper diagonal cutters 14 mm
189.17AVSE	1	1,000 Volt insulated round nose pliers
187.18AVSE	1	1,000 Volt insulated combination pliers
194.17AVSE	1	1,000 Volt insulated strippers
412.14AVSE	1	1,000 Volt insulated copper-alu cable cutter 14 mm
414.45AVSE	1	1,000 Volt insulated ratchet cable cutter 45 mm
46.8AVSE	1	1,000 Volt insulated open-end wrench 8 mm
46.10AVSE	1	1,000 Volt insulated open-end wrench 10 mm
46.12AVSE	1	1,000 Volt insulated open-end wrench 12 mm
46.13AVSE	1	1,000 Volt insulated open-end wrench 13 mm
46.14AVSE	1	1,000 Volt insulated open-end wrench 14 mm
46.17AVSE	1	1,000 Volt insulated open-end wrench 17 mm
46.19AVSE	1	1,000 Volt insulated open-end wrench 19 mm
46.21AVSE	1	1,000 Volt insulated open-end wrench 21 mm
701B	1	Multifunction tester
83.3AVSE	1	1,000 Volt insulated keys 3 mm
83.4AVSE	1	1,000 Volt insulated keys 4 mm

	Qtys	Set Description
83.6AVSE	1	1,000 Volt insulated keys 6 mm
94T.8AVSE	1	1,000 Volt insulated box wrench 8 mm
94T.10AVSE	1	1,000 Volt insulated box wrench 10 mm
94T.13AVSE	1	1,000 Volt insulated box wrench 13 mm
1820.AVSE	1	1,000 Volt insulated knife
DELA.401.00	1	Synthetic folding rule 2 m
A3,5X100VE	1	1,000 Volt insulated slotted head screwdrivers 3.5x100 mm
A4X100VE	1	1,000 Volt insulated screwdriver for slotted heads 4x100 mm
A5,5X150VE	1	1,000 Volt slotted head screwdrivers 5.5x150 mm
A6,5X150VE	1	1,000 Volt slotted head screwdrivers 6.5x150 mm
A8X150VE	1	1,000 Volt insulated screwdriver for slotted heads 8x150 mm
A10X200VE	1	1,000 Volt insulated screwdriver for slotted heads 10x200 mm
AP1X100VE	1	1,000 Volt screwdrivers for Phillips® PH 1 head
AP2X125VE	1	1,000 Volt screwdrivers for Phillips® PH 2 head
AD1X100VE	1	1,000 Volt screwdrivers for Pozidriv® PZ 1 heads
AD2X125VE	1	1,000 Volt screwdrivers for Pozidriv® PZ 2 heads
BV.5A	1	Leather case with drawers

ELECTRICIANS SELECTIONS

FOR THE ELECTRICIANS SELECTIONS, SEE P. 30 TO 34 IN SECTION 1.





ELECTRONIC PLIERS



Micro-Tech® series electronic pliers..... **816**

ANTISTATIC SERIES ELECTRONIC PLIERS



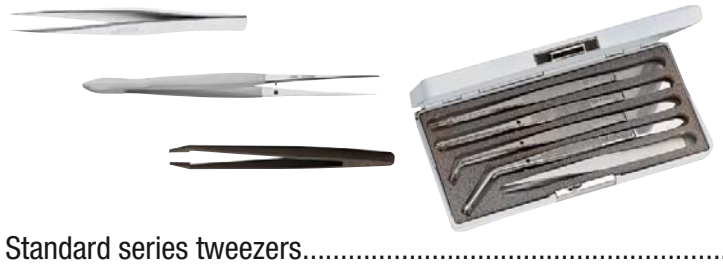
ESD antistatic series electronic pliers..... **827**

MICRO-TECH®

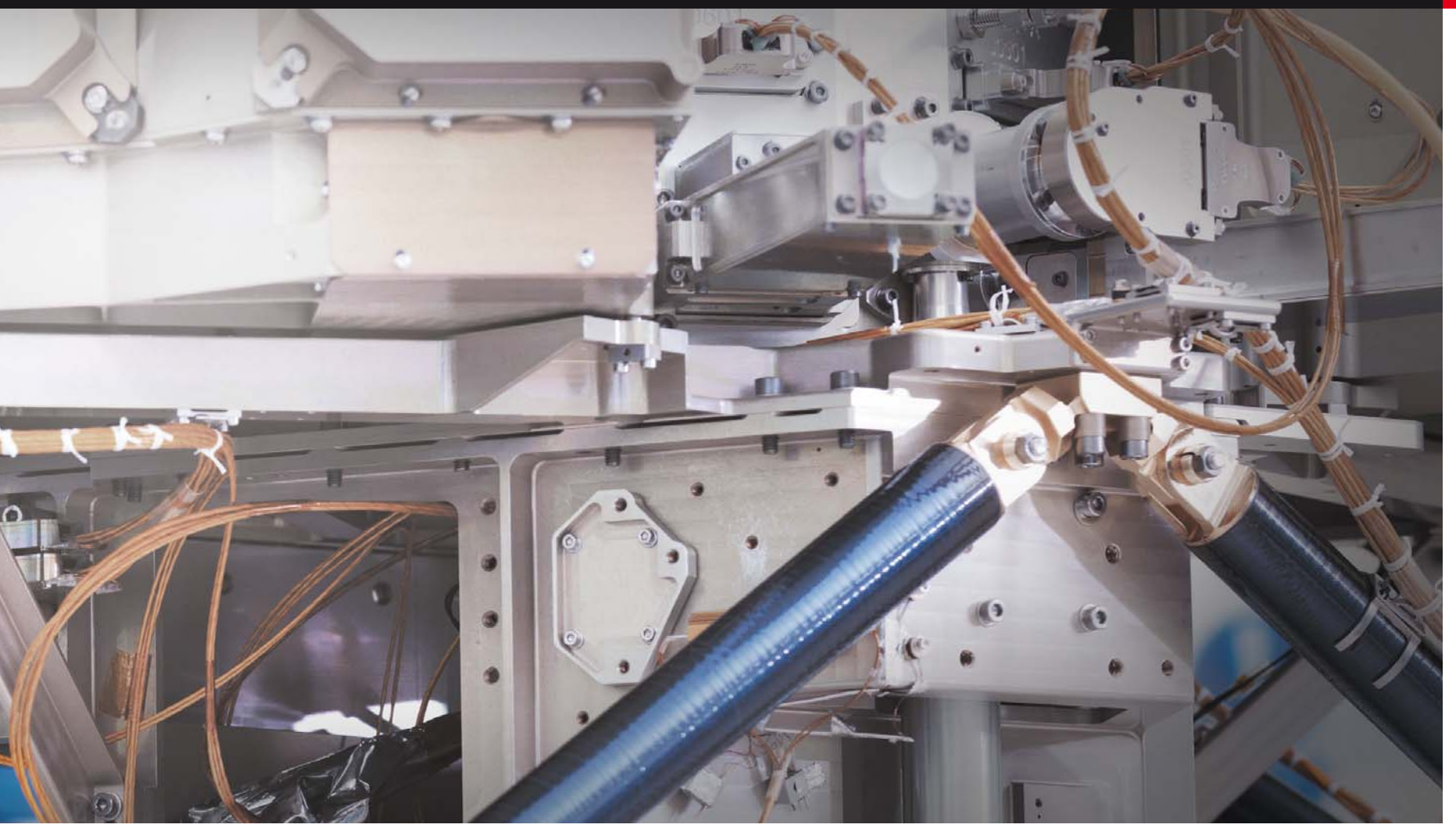


Micro-Tech® screwdrivers..... **833**
Bits series 0 - 4 mm drive..... **835**
Sets of Micro-Tech® screwdrivers..... **836**
Micro-Tech® set..... **838**
Clockwork screwdriver sets..... **840**

TWEEZERS



Standard series tweezers..... **841**
PVC sheath series tweezers..... **842**
High precision series tweezers..... **842**
Special tweezers..... **844**
Sets of tweezers..... **844**



SPECIAL MICRO-TECH®

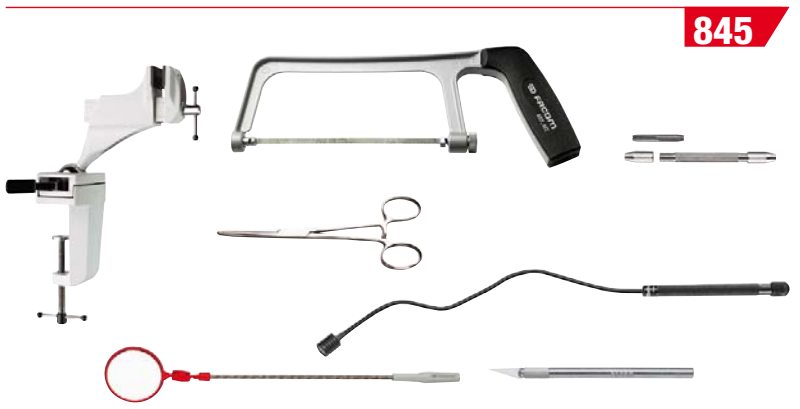
845



Circlip® pliers 845
Truarc® pliers 845

MISCELLANEOUS TOOLS

845



Scissors 845
Utility knife 846
Hacksaw frame 846
Miscellaneous tools 846

SOLDERING

852



Heat-regulated welders 852
Electronic soldering irons 853
"Instant" soldering irons 854
High power soldering irons 854
Gas soldering iron 855
Welding accessories 855

Micro-Tech® series electronic pliers

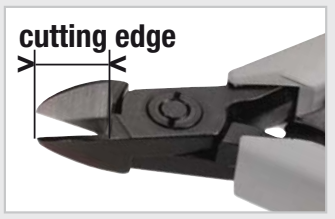
MICRO-TECH®
CHOOSING MICRO-PLIERS

❶ Materials to cut

TYPE OF MATERIALS	WIRES	Mechanical strength in N/mm²	HARDNESS (Hrc)
Copper, Nickel, Aluminium	Soft	220	-
Iron nail or wire, pin	Semi-soft	800	22
Iron spring, cable, hard steel wire or nail	Hard	1675	50
Steel spring	Piano wire	2200	59

❷ Dimension and type of wire or component to cut (diameter or thickness)

- Cross-section, thickness.
- Semi-soft: copper/Alu alloy.
- Hard wire: soft steel (30Hrc).
- Piano wire: steel spring (50Hrc).

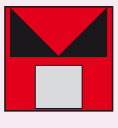


❸ Access:

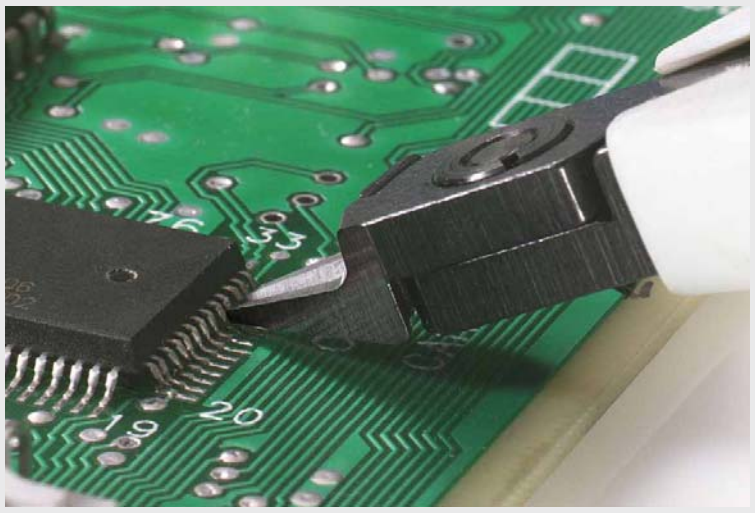
- Bullet, pointed, angled, end nose for components.

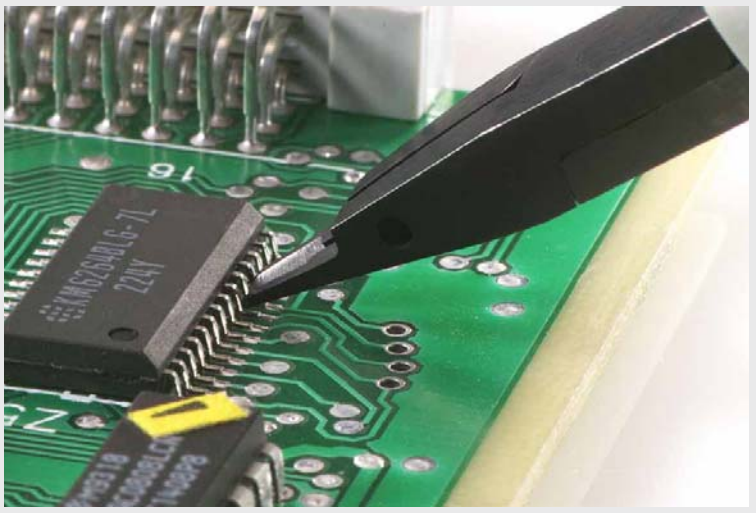
Flat half-round nose. ❹ Cutting edge design and type of cut

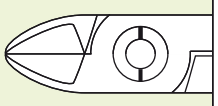
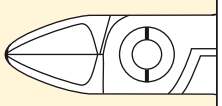
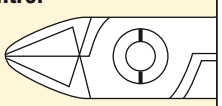
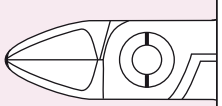
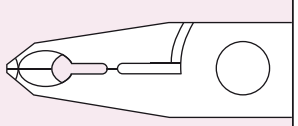
- **Axial cut:** cutting edges are treated to achieve maximum strength and precision cutting of a wide range of materials, from piano wire to copper.
- **Semi-flush cut:** suitable for semi-hard wire.
- **Flush cut:** the most precise shape in matters of cuts, but also the most fragile, designed to cut soft materials such as copper.

CUTTING EDGES	PATTERN	FEATURES	WIRE TYPE		OPERATION	APPLICATION
AXIAL CUT		Cutting edges are treated to achieve maximum strength and precision cutting of a wide range of materials, from piano wire to copper.	**Cu**	✓	– Production work – Day-to-day use – Maintenance – Hard materials	– Customer service (hi-fi) – Machine-tools – Automotive – Domestic appliances
			CuNi alloy	✓		
			Mild steel 30 HRC	✓		
			Hard steel 50 HRC Piano wire	✓		
SEMI-FLUSH CUT		Micro-chamfered cutting edges ensure high cutting capacity with clean finish. Precision is maintained throughout a long service life even in intensive use. Suitable for semi-hard wire.	**Cu**	✓	– Clean cut in intensive use – Wiring – Batch electronics – Semi-hard materials	– Computers – Telephone exchanges – Video and laser – Micro-Tech® (hi-fi, labs)
			CuNi alloy	✓		
			Mild steel 30 HRC	✓		
			Hard steel 50 HRC Piano wire	✗		
FLUSH CUT		This range is designed to give a through-cut without crushing the wire. Clean-cut ends allow reliable soldering, without damage to electronic components from arcing. Suitable for soft wire only.	**Cu**	✓	– High-frequency apparatus – High precision equipment – Cut-back before soldering – Electrostatically sensitive components	– Defence – Aerospace – Aviation – Laboratory
			CuNi alloy	✓		
			Mild steel 30 HRC	✗		
			Hard steel 50 HRC Piano wire	✗		

MICRO-TECH®
CHOOSING MICRO-PLIERS





NOSE DESIGN		Ø Cu WIRE (mm) 0 — 0.5 — 1 — 1.5 — 2	Ø MAX Fe WIRE 30 HRc	Ø MAX PIANO WIRE
Bullet nose: for strength 	405.8 MT-E 405.MT-E 405.10 MT-E 405.12MT-E 405-E 405.10 RMT-RE 405.12 RMT-RE*	0.2 —> 1.0 0.3 —> 1.3 0.3 —> 1.4 0.4 —> 2.0 0.3 —> 1.1 0.3 —> 1.2 0.4 —> 1.5	0.5 0.7 0.8 1.0 0.7 0.8 1.0	STOP 0.4 0.5 0.8 0.4 0.5 0.6
End nose for reach 	408.MT	0.4 —> 1.5	0.5	STOP
Bullet nose: for strength 	406.8-MT-E 406.MT-E 435.MT-E 436.MT-E 415.MT-E 406.RMT-RE* 435.RMT-RE* 415.RMT*-RE*	0.1 —> 1.0 0.1 —> 1.3 0.1 —> 1.3 0.1 —> 1.2 0.3 —> 2.0 0.1 —> 1.1 0.1 —> 1.1 0.3 —> 1.5	STOP 0.7 0.7 0.7 1.0 0.7 0.7 0.8	STOP
Pointed nose: for control 	416.MT-E 416.PMT-E 416.12 MT-E 416.RMT	0.1 —> 1.0 0.1 —> 0.8 0.3 —> 1.6 0.1 —> 0.9	0.5 0.4 0.7 0.5	
Bullet nose: for strength 	407.8 MT-E 407.MT-E 425.MT-E 426.MT-E	0.1 —> 0.8 0.1 —> 1.3 0.1 —> 1.3 0.1 —> 1.2	STOP	STOP
Pointed nose: for control	417.PMT-E	0.1 —> 0.8		
Angled nose for accuracy 	427.MT-E 429.MT-E 430.MT	0.2> 0.6 0.2 —> 1.0 0.2 —> 1.0		
End nose for reach	418.MT 428.MT	0.1 -> 0.6 0.1 —> 0.8		

Diagonal cutting pliers

BULLET NOSE PLIERS

- Are stronger than other profiles.
- Have a high cutting capacity and durability that are useful in a wide variety of applications.

AXIAL CUT
All applications, all materials.

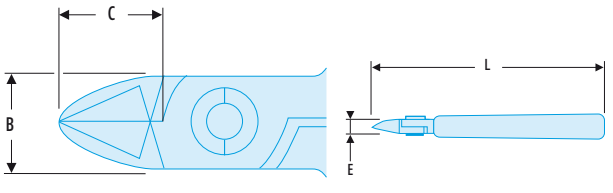
SEMI-FLUSH CUT
Clean, long-life cut in semi-hard materials.

FLUSH CUT
Smooth cut for sound soldered connections.



Micro-Tech® «small mesh» cutters: thin





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

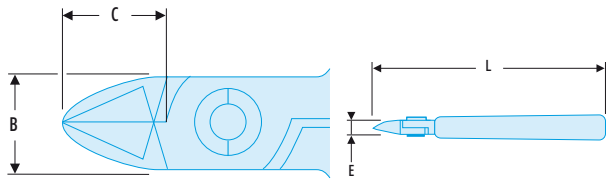
- These small mesh pliers are adapted to miniaturisation of electronic components.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]	Piano Diameter [mm]
405.8MT	8,5	9	6	110		0,5	0,2 - 1	-
406.8MT	8,5	9	6	110		-	0,1 - 1	-
407.8MT	8,5	9	6	110		-	0,1 - 1	-

Micro-Tech® «compact» cutters: handling





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

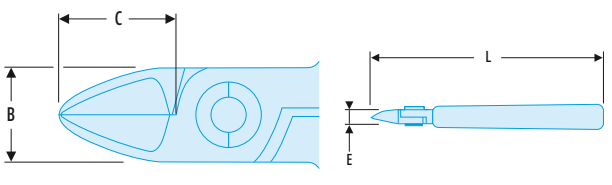
- These pliers combine cutting performance with handling thanks to their new slim diagonal shape.
- Fall prevention models avoid wire ejection. The 405.MT pliers allow to cut piano wire up to 0.4 mm.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Offcut retainer	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]	Piano Diameter [mm]
405.MT	10,5	9,5	7	110	-		0,7	0,3 - 1,3	0,4
406.MT	10,5	9,5	7	110	-		0,7	0,1 - 1,3	-
406.RMT	10,5	9,5	7	110	•		0,6	0,1 - 1,1	-
407.MT	10,5	9,5	7	110	-		-	0,1 - 1,3	-

Micro-Tech® «rugged» cutters: versatility





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

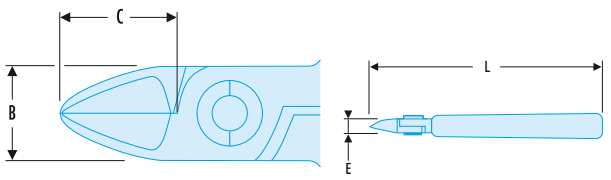
- These pliers allow neat cutting of multiple materials: from copper wire to piano wire up to 0.5 mm.
- Fall prevention models avoid wire ejection.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Offcut retainer	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]	Piano Diameter [mm]
405.10MT	10,5	11,5	7	110	-		0,8	0,3 - 1,4	0,5
405.10RMT	10,5	11,5	7	110	•		0,7	0,3 - 1,2	0,5

Micro-Tech® «long» cutters: access





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

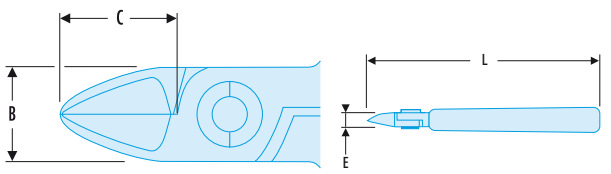
- These pliers allow to go further; up to + 1.5 to 2 mm compared with standard pliers.
- Fall prevention models avoid wire ejection.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
435.MT	10,5	13	7	110		0,7	0,1 - 1,3
425.MT	10,5	13	7	110		-	0,1 - 1,3

Micro-Tech® «long thin» cutters with clearance





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

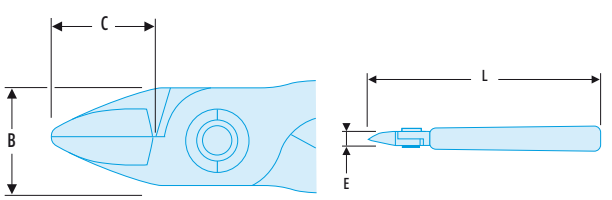
- These pliers allow to cut behind components and pass under obstacles (coils, resistors...).

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
426.MT	10,5	13	7	110	5,5		-	0,1 - 1,2

Micro-Tech® «high capacity» cutters: power





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- These pliers are suited to major efforts and repetitive work over a broad range of materials.
- Fall prevention models avoid wire ejection.

Weight: 95 g.

	B [mm]	C [mm]	E [mm]	L [m]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]	Piano Diameter [mm]
405.12MT	16	16	8	125		1,0	0,4 - 2,0	0,8
415.MT	16	16	8	125		0,9	0,3 - 2,0	-

Slim nose cutting pliers

POINTED-NOSE PLIERS

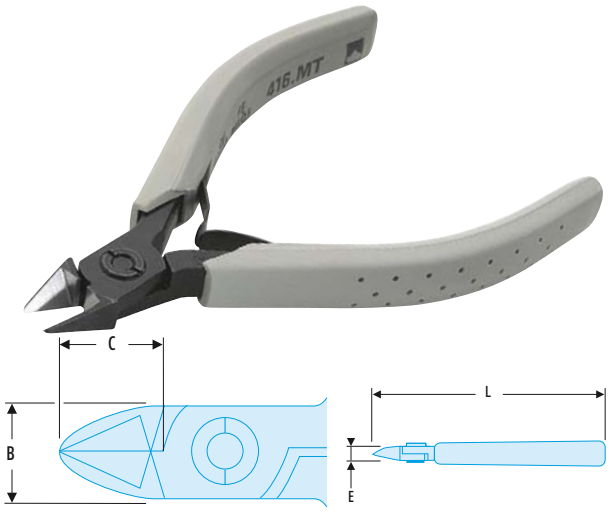
• Are ideal where clearance is restricted and allow better visibility of the wire being cut.

SEMI-FLUSH CUT
Clean, long-life cut in semi-hard materials.

FLUSH CUT
Smooth cut for sound soldered connections.



Micro-Tech® «machined» cutters

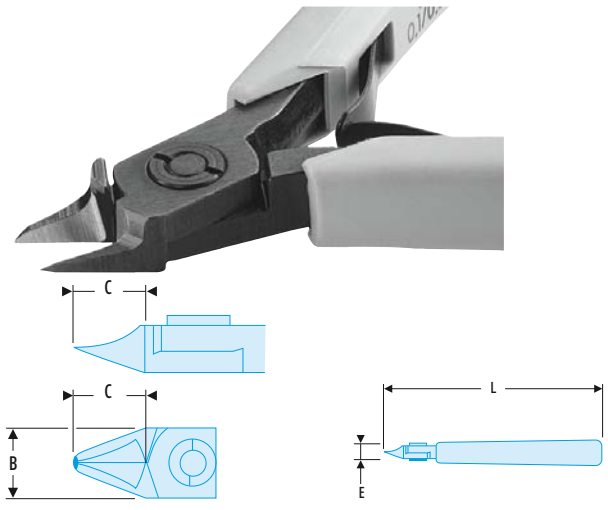


NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

• Compact noses for difficult access.
• Fall prevention models avoid wire ejection.
Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Offcut retainer	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
416.MT	10,5	10,5	7	110	-		0,5	0,1 - 1,0
416.RMT	10,5	10,5	7	110	•		0,5	0,1 - 0,9

Micro-Tech® «thin nose tip» cutters: handling

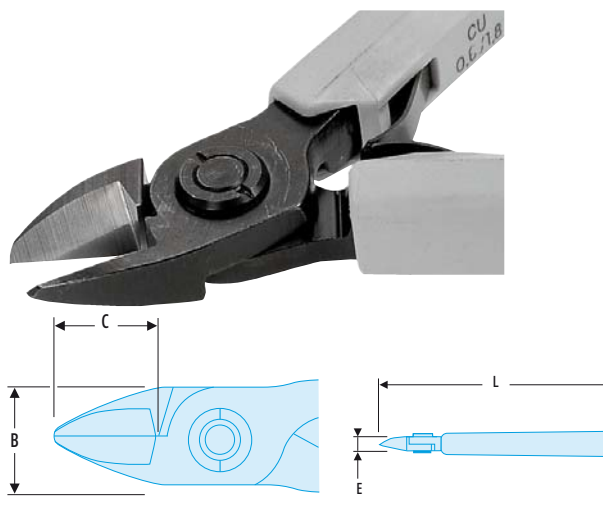


NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

• These pliers pass under all obstacles of the PCB and provide better visibility.
Weight: 60 g.

	B [mm]	C [mm]	C1 [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
416.PMT	10,5	10,5	9,5	7	110		0,4	0,1 - 0,8
417.PMT	10,5	10,5	9,5	7	110		-	0,1 - 0,8

Micro-Tech® «high capacity machined» cutters



NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

• Broadly dimensioned for large series works.
• Semi-flush cutting.
Weight: 95 g.

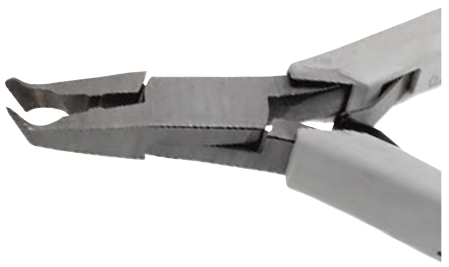
	B [mm]	C [mm]	E [mm]	L [mm]	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
416.12MT	16	16	8	125	0,7	0,3 -1,6

Angled nose cutting pliers

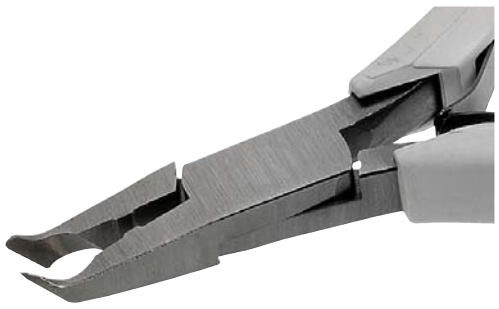
ANGLED-NOSE CUTTING PLIERS

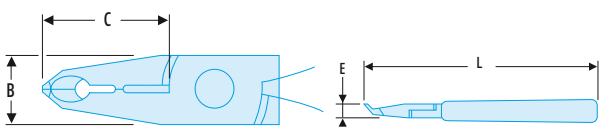
- Ideal for use on printed circuits, electronic modules and hybrid circuits.
- Designed for cutting right up against the board in the smallest of spaces.
- Flush cutting edges.

FLUSH CUT
Smooth cut for sound soldered connections.



Micro-Tech® 30° nose cutters





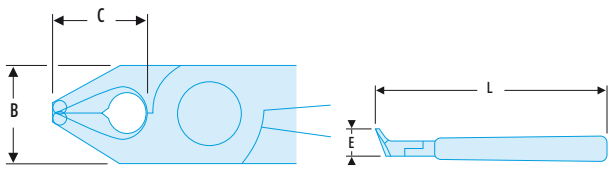
NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500
- Cutting edges angled at 30° with rear clearance.
- Cut: flush.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]
427.MT	11	23	7	120	0,2 - 0,6

Micro-Tech® 70° nose cutters





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500
- Model with wide cutting edges angled at 70° broadly cleared.
- Cut: flush.

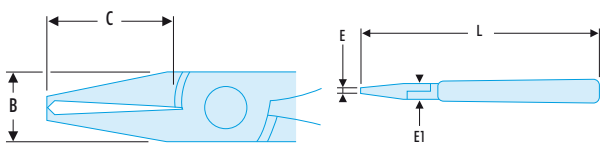
Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]
429.MT	11,5	12	7	110	0,2 - 1,0

«End-tip» cutting pliers

Micro-Tech® «tip» cutters





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500
- Long and narrow nose for vertical access cut.
- Cut: flush.

Weight: 75 g.

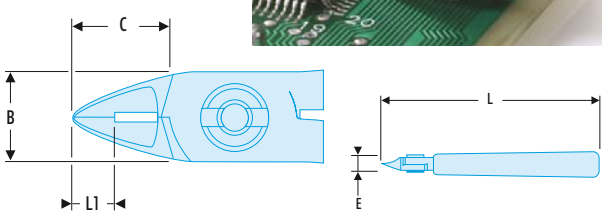
	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]
418.MT	10,5	21	2,7	120	0,1 - 0,6

Cutting pliers for DIP-CMS components

Micro-Tech® diagonal cutter for DIP - CMS components







NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- These pliers provide access between two legs of “DIP” components with a 0.65 mm gap. As they are extremely thin, these pliers can be used only for this function.
- Cut: flush.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [m]	L1 [mm]	Cu - Ni wire diameter [mm]
417.SPMT	10,5	10,5	7	110	6,5	0,1 - 0,6

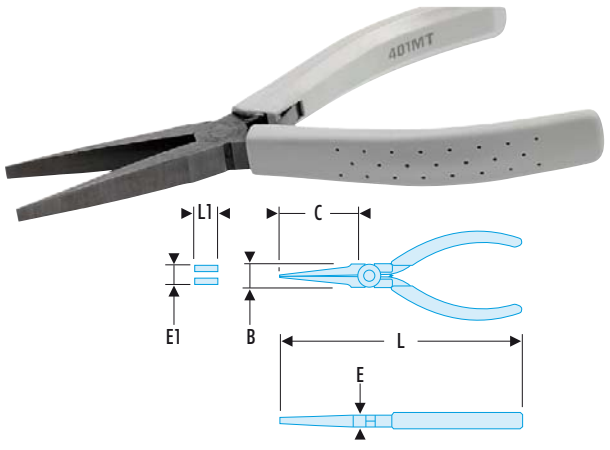
Flat nose gripping pliers

FLAT-NOSE PLIERS

- These pliers serve all professional needs in laboratory, production and maintenance applications.
- The rectangular-section jaws are smooth with contoured inside edges to avoid damage to components.
- Matt black non-reflective finish.
- Leaf spring.



Micro-Tech® extra-long nose gripper pliers



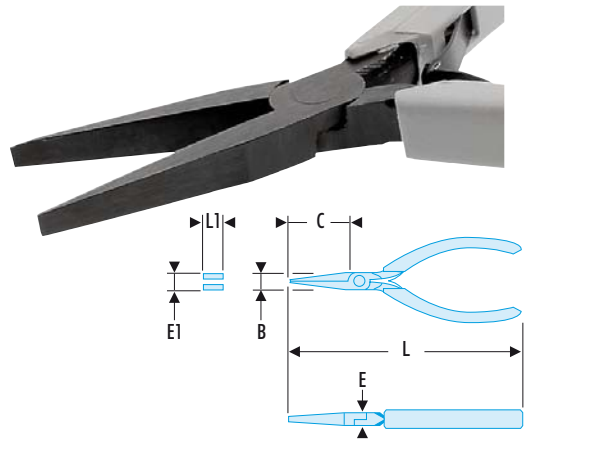
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- For powerful loads.

Weight: 80 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]
401.MT	14	48	8	1	160	5

Micro-Tech® long and rigid nose grippers

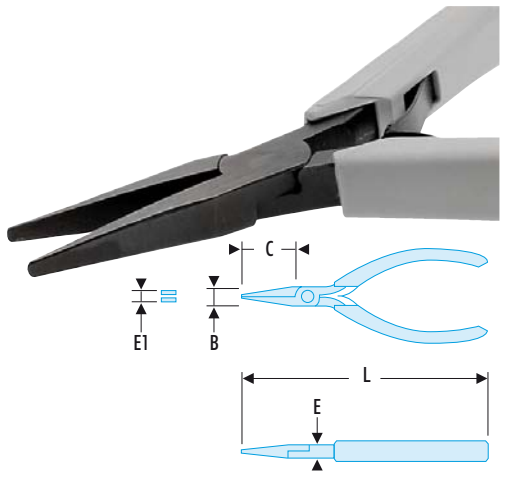


NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

Weight: 70 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]
421.MT	11	33	7	1	130	5

Micro-Tech® shaping gripper pliers



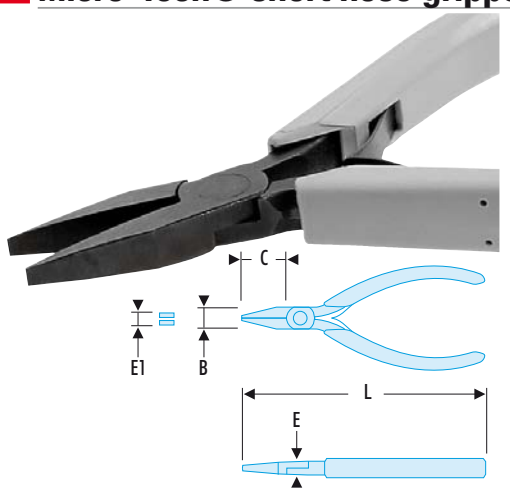
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Very thin nose.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
420.MT	9	21	7	1	125

Micro-Tech® short nose gripper pliers



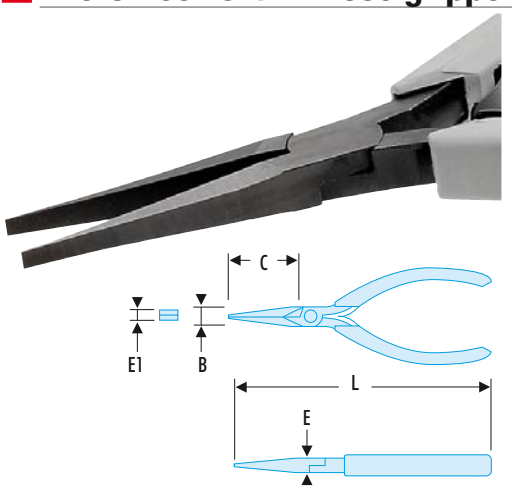
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Narrow mesh, for high precision works.

Weight: 55 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
431.MT	9	20	6	1	135

Micro-Tech® thin nose grippers



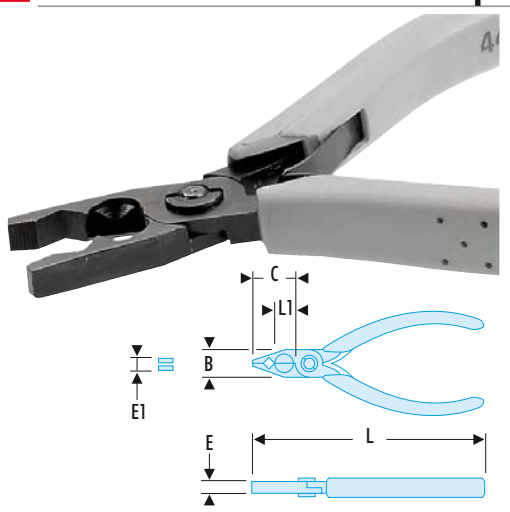
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Narrow mesh, for high precision works.

Weight: 80 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
431.LMT	9	35	6	1	135

Micro-Tech® versatile mini-pliers



- Side wire-cutter, max capacity: diameter 1.7 mm on Cu; diameter 1 mm on soft iron.
- Rugged, grooved nose with pipe clamp.
- Presentation: anti-reflection mat black.

Weight: 80 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]
443.12MT	12	19	5	1	115	8

Half-round nose gripping pliers

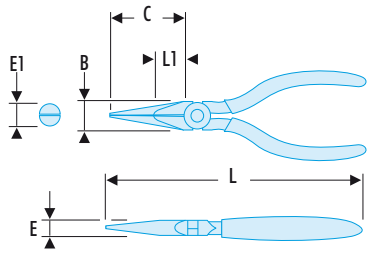
HALF-ROUND NOSE PLIERS

- These pliers serve all professional needs in laboratory, production and maintenance applications.
- The half-round jaws are smooth with contoured inside edges to avoid damage to components.
- Matt black non-reflective finish.
- Leaf spring.



Micro-Tech® gripper «telephone» type





NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

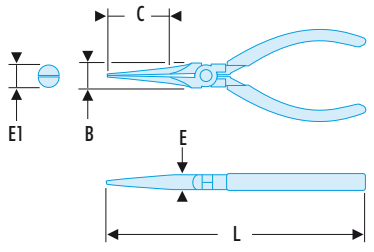
- Long, rugged, thin groove tip nose.
- Side wire-cutter.

Weight: 88 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]	Fe wire 30 HRc diameter [mm]
442.MT	14	42	8	3,8	150	10	1

Micro-Tech® extra-long nose gripper pliers





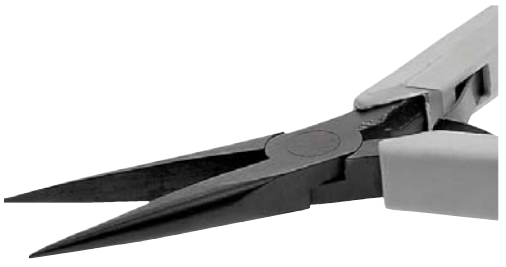
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

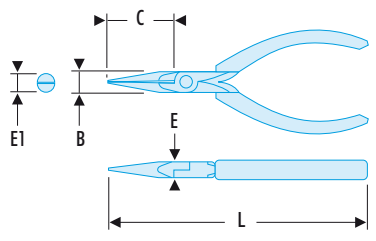
- For powerful loads.

Weight: 76 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
402.MT	14	48	8	1,5	160

Micro-Tech® long and rigid nose grippers



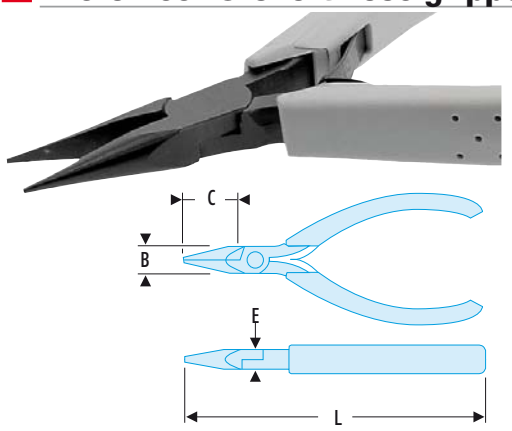


NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

Weight: 70 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
422.MT	11	33	7	0,5	130

Micro-Tech® short nose gripper pliers



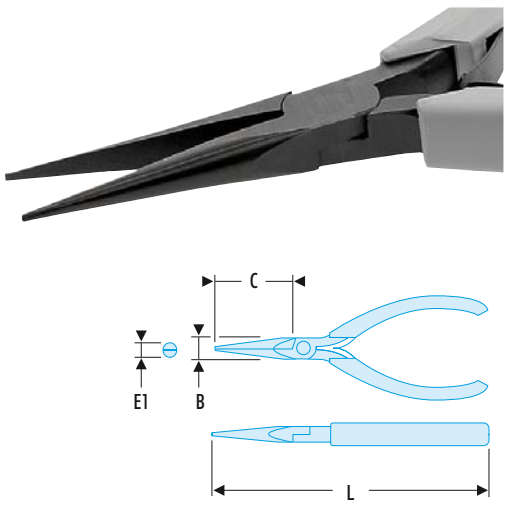
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Fine mesh.

Weight: 55 g.

	B [mm]	C [mm]	E [mm]	L [m]
432.MT	9	26	6	120

Micro-Tech® thin nose grippers



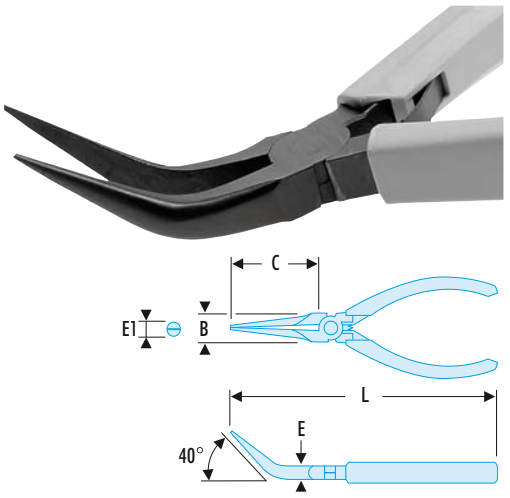
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Fine mesh, for high precision works.

Weight: 65 g.

	B [mm]	C [mm]	E1 [mm]	L [mm]
432.LMT	9	35	1,6	140

Micro-Tech® extra-long angled nose grippers



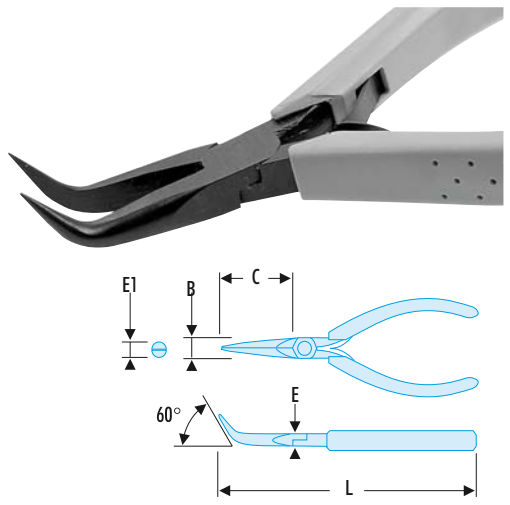
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- For powerful loads.

Weight: 75 g.

	B [mm]	C [mm]	L [mm]
403.MT	14	45	155

Micro-Tech® 60° angled rigid nose grippers



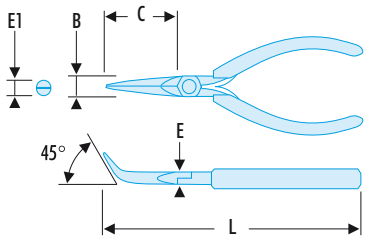
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

Weight: 70 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
423.MT	11	25	7	1,4	125

Micro-Tech® 45° angled thin nose grippers





NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Fine mesh, for high precision works.

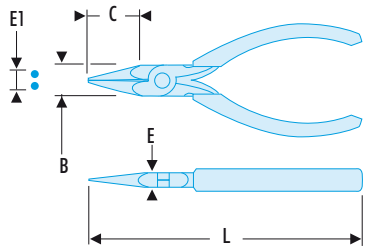
Weight: 75 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
433.LMT	9	35	6	1,6	135

Round nose pliers

Micro-Tech® short and rigid nose grippers





NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

Weight: 55 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
424.MT	11	22	7	2	120

Pliers set

MOD.MT1 Micro-Tech® 6-pliers set



Comprising:

- 405.MT - 405.12MT - 406.MT - 406.8MT - 402.MT - 433.LMT.
- Heat-formed tray PL.612.

Weight: 0.650 kg.

ANTI-STATIC SERIES ELECTRONIC PLIERS

A DANGER FOR ELECTRONIC COMPONENTS!

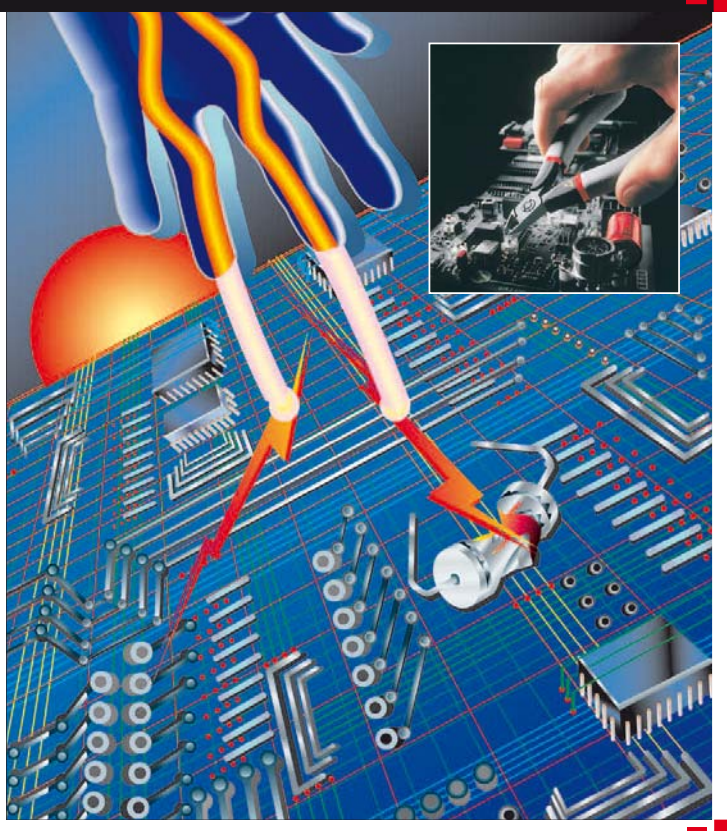
As they become smaller and more sophisticated, electronic circuits are increasingly at risk from static electricity - especially when the charge can build up to several thousand volts.

Controlling electrostatic build-up (ESD) makes economic sense.

While the cost of a faulty component at acceptance-test stage is relatively small, it starts to increase once the component has reached the board, and escalates markedly once a fault involves sending back a complete unit.
But the most important benefit in controlling static electricity is customer satisfaction. Facom solves the problem with an antistatic range to EN 61340-5-1 & 2. For safe work on printed circuits, all tools and equipment used should be interlinked and effectively connected to earth. Measurements and tests on antistatic screwdrivers and electronics pliers have been carried out in laboratories approved by the electrical industry.

SAFETY FIRST

Never use antistatic tools when working on live components.



Diagonal cutting pliers

ESD BULLET-NOSE CUTTING PLIERS

- Are stronger than other profiles.
- Have a high cutting capacity and durability that are useful in a wide variety of applications.

AXIAL CUT
All applications, all materials.

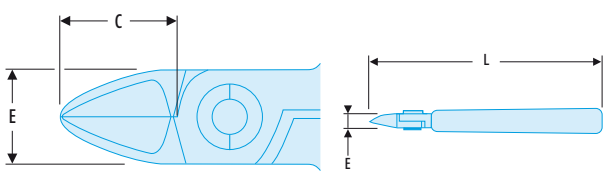
SEMI-FLUSH CUT
Clean, long-life cut in semi-hard materials.

FLUSH CUT
Smooth cut for sound soldered connections.



ESD «small mesh» cutters: thin





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

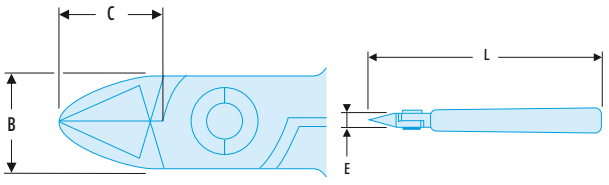
- Protection of electronic components from risks of electrostatic discharge (ESD).
- These small mesh pliers are adapted to miniaturisation of electronic components.
- The flush cutting model was extended to optimise access.

Weight: 55 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
405.8E	8,5	9	6	110		0,5	0,2 - 1
406.8E	8,5	9	6	110		-	0,1 - 1
407.8E	8,5	9	6	110		-	0,1 - 1

ESD «compact» cutters: handling





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

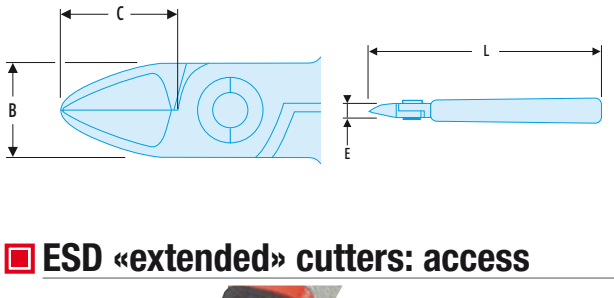
- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers combine cutting performance with handling thanks to their new slim diagonal shape.
- The 405.MT pliers allow to cut piano wire up to 0.4 mm.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]	Piano Diameter [mm]
405.E	10,5	9,5	7	110		0,7	0,3 - 1,3	0,4
406.E	10,5	9,5	7	110		0,7	0,1 - 1,3	-
407.E	10,5	9,5	7	110		-	0,1 - 1,3	-

ESD «rugged» cutters: versatility





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

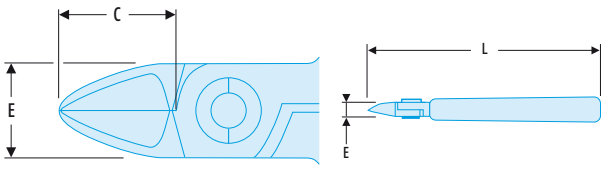
- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers allow neat cutting of multiple materials: from copper wire to piano wire up to 0.5 mm.
- Fall prevention models avoid wire ejection.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Offcut retainer	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]	Piano Diameter [mm]
405.10E	10,5	11,5	7	110	-		0,8	0,3 - 1,4	0,5
405.10RE	10,5	11,5	7	110	•		0,7	0,3 - 1,2	0,5

ESD «extended» cutters: access





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

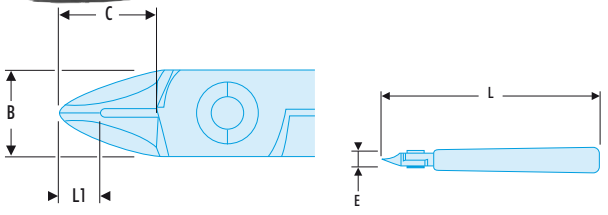
- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers allow to go further; up to + 1.5 to 2 mm compared with standard pliers.
- Fall prevention models avoid wire ejection.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Offcut retainer	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
425.E	10,5	13	7	110	-		-	0,1 - 1,3
435.E	10,5	13	7	110	-		0,7	0,1 - 1,3
435.RE	10,5	13	7	110	•		0,7	0,1 - 1,2

ESD «long thin» cutters with clearance





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

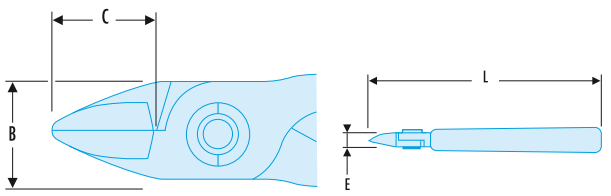
- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers allow to cut behind components and pass under obstacles (coils, resistors...).

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	L [m]	L1 [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
426.E	10,5	13	7	110	110	5,5		-	0,1 - 1,2

ESD «high capacity» cutters:





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers are suited to major efforts and repetitive work over a broad range of materials.
- Fall prevention models avoid wire ejection.

Weight: 105 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
405.12E	16	16	8	130		1,0	0,4 - 2,0
415.E	16	16	8	130		1,0	0,3 - 2,0

Slim nose cutting pliers

ESD POINTED-NOSE PLIERS

- Are ideal where clearance is restricted and allow better visibility of the wire being cut.

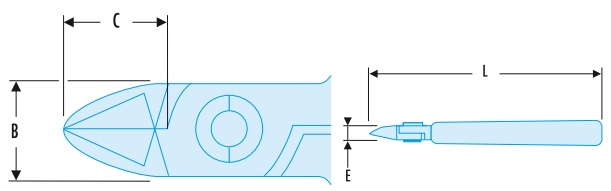
SEMI-FLUSH CUT
Clean, long-life cut in semi-hard materials.

FLUSH CUT
Smooth cut for sound soldered connections.



ESD «tip» cutters





NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

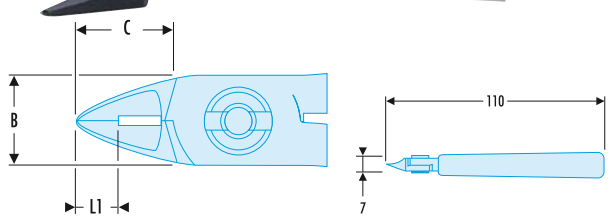
- Protection of electronic components from risks of electrostatic discharge (ESD).
- Compact noses for difficult access.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
416.E	10,5	10,5	7	110		0,5	0,1 - 1,0

ESD thin nose «machined» cutters: handling





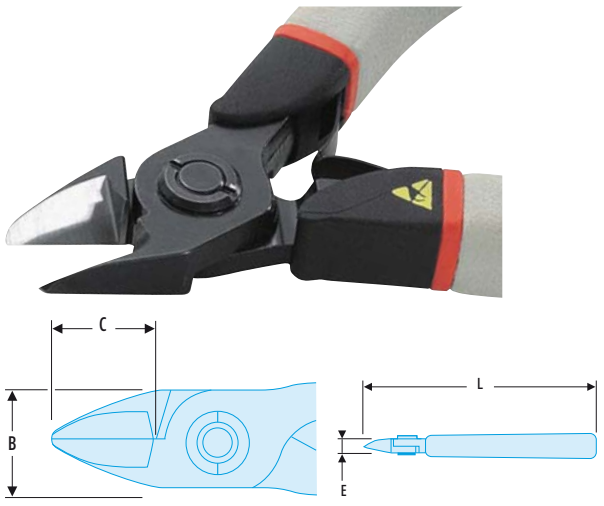
NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers pass under all obstacles of the PCB and provide better visibility.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
416.PE	10,5	10,5	7	110	6,5		0,4	0,1 - 0,8
417.PE	10,5	10,5	7	110	6,5		-	0,1 - 0,8

ESD «high capacity machined» cutters



NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Broadly dimensioned for large series works.

Weight: 105 g.

	B [mm]	C [mm]	E [mm]	L [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
416.12E	16	16	8	130		0,7	0,3 - 1,6

Angled nose cutting pliers

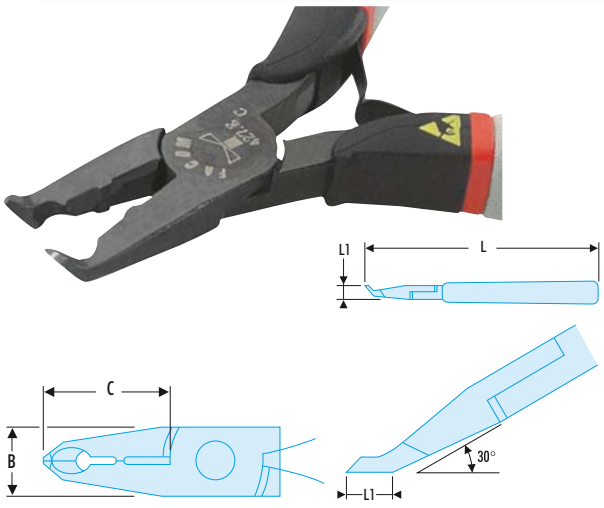
ESD ANGLED-NOSE PLIERS

- Ideal for use on printed circuits, electronic modules and hybrid circuits.
- Designed for cutting right up against the board in the minutest spaces.
- Flush cutting edges.

FLUSH CUT
Smooth cut for sound soldered connections.



ESD 30° angled cutters



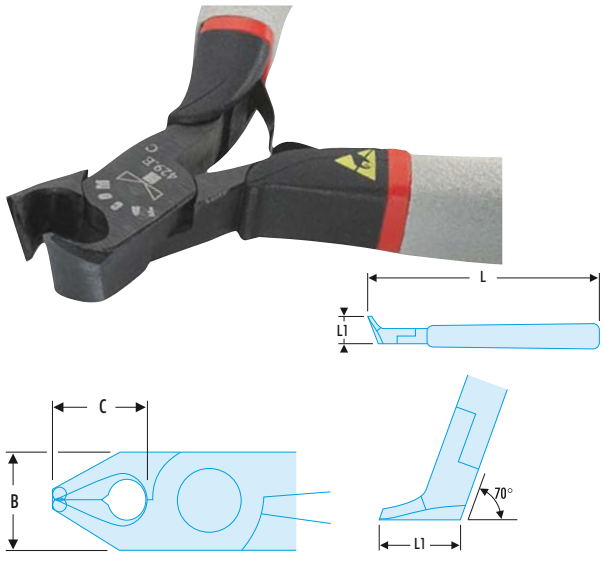
NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Cutting edges angled at 30° with rear clearance.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
427.E	11	23	7	120	6		-	0,2 - 0,6

ESD 70° «angled» cutters



NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

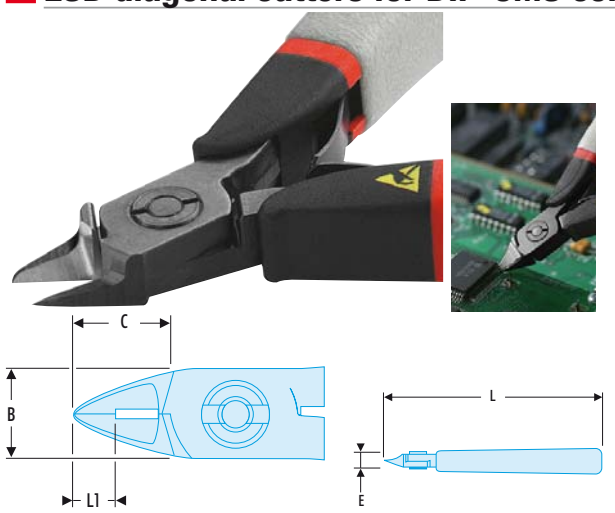
- Protection of electronic components from risks of electrostatic discharge (ESD).
- Cutting edges angled at 70° with rear clearance.

Weight: 66 g.

	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	Cut	Fe wire 30 HRc diameter [mm]	Cu - Ni wire diameter [mm]
429.E	11,5	12	7	110	12		-	0,2 - 1,0

Cutting pliers for DIP-CMS components

ESD diagonal cutters for DIP-CMS components



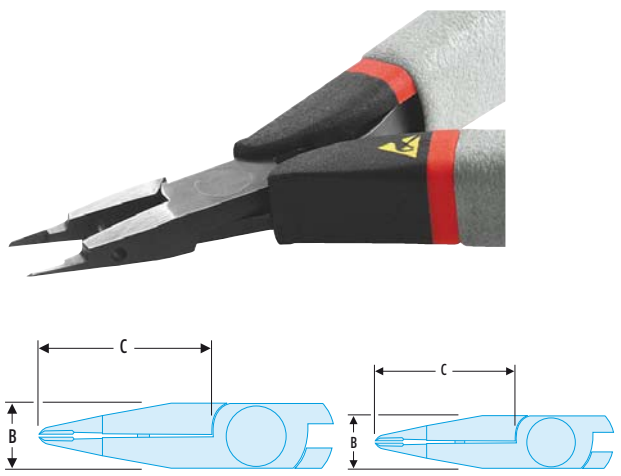
NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers provide access between two legs of “DIP” components with a 0.65 mm gap. Due to their shape, these pliers can be used only in this configuration.

Weight: 60 g.

	B [mm]	C [mm]	E [mm]	L [mm]	L1 [mm]	Cut	Cu - Ni wire diameter [mm]
417.SPE	10,5	10,5	7	110	6,5		0,1 - 0,7

ESD diagonal cutters for DIP components



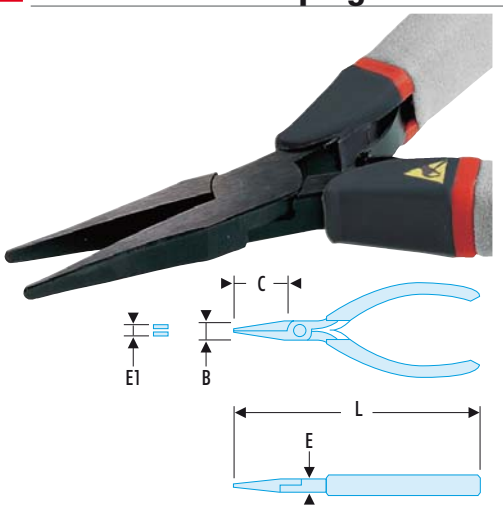
- Protection of electronic components from risks of electrostatic discharge (ESD).
- These pliers have a thin and pointy head to provide total access to DIP or CMS components in circuits.
- Cut: flush.

Weight: 40 g.

	B [mm]	C [mm]	L [mm]	Cu - Ni wire diameter [mm]
437.E	9	18	118	

Gripping pliers

ESD flat nose shaping cutters



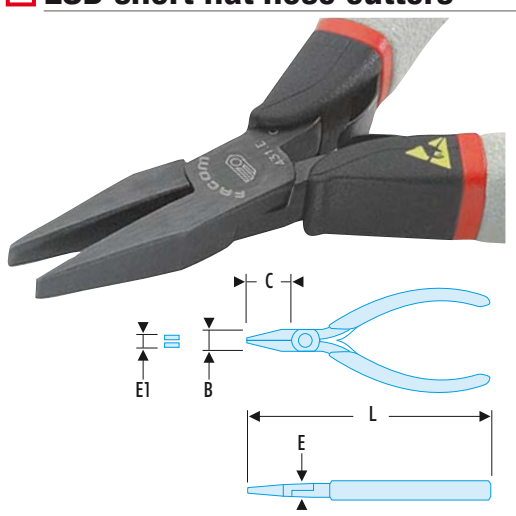
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Very thin nose.

Weight: 65 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
420.E	9	21	7	1	125

ESD short flat nose cutters



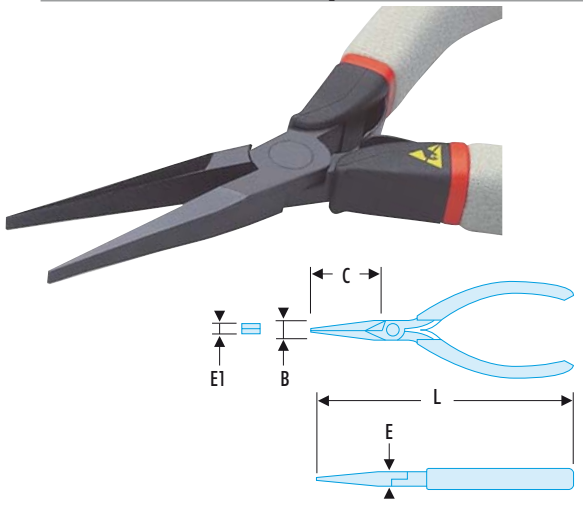
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Narrow mesh, for high precision works.

Weight: 75 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
431.E	9	20	6	1	135

ESD thin flat-nose pliers



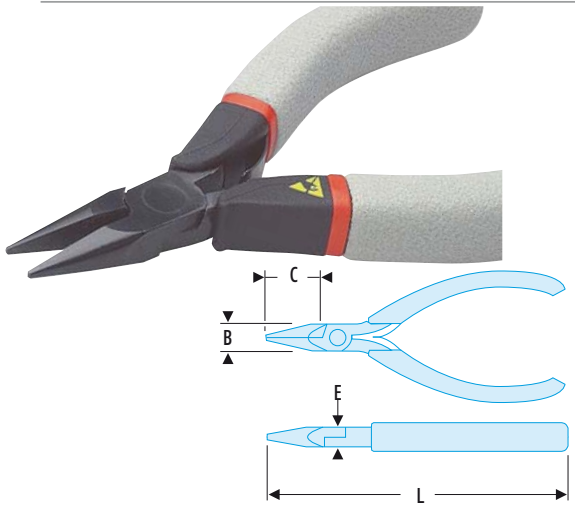
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Narrow mesh, for high precision works.

Weight: 75 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
431.LE	9	35	6	1	135

ESD half-round nose cutters



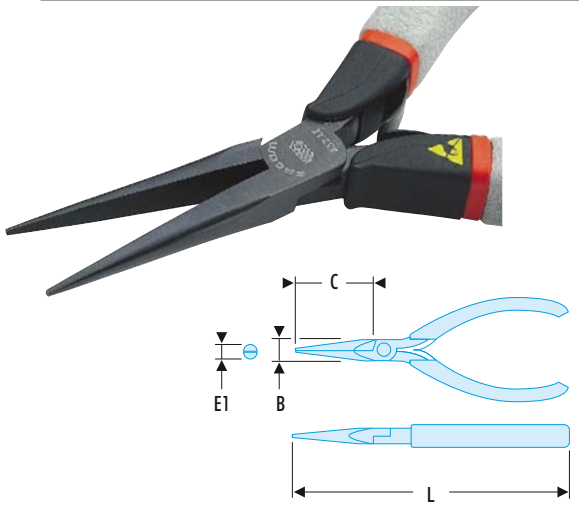
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Fine mesh.

Weight: 70 g.

	B [mm]	C [mm]	E [mm]	L [mm]
432.E	9	26	6	120

ESD half-round thin nose cutters



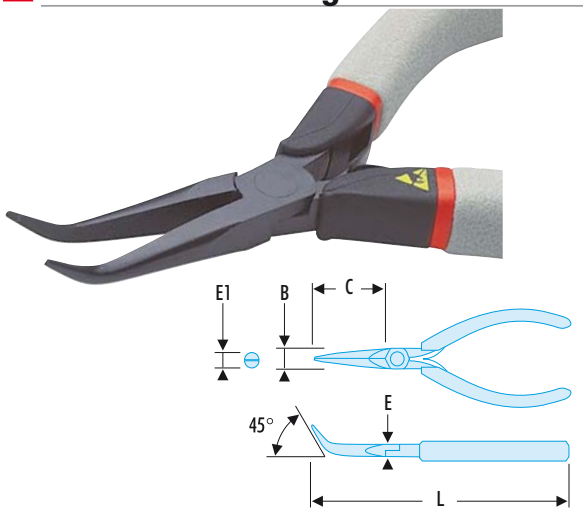
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- Narrow mesh, for high precision works.

Weight: 70 g.

	B [mm]	C [mm]	E1 [mm]	L [mm]
432.LE	9	35	1,6	140

ESD half-round angled nose cutters



NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Protection of electronic components from risks of electrostatic discharge (ESD).
- 45° angled nose.
- Narrow mesh, for high precision works.

Weight: 70 g.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]
433.LE	9	35	6	1,6	135

MICRO-TECH® SCREWDRIVERS

❶ Efficient

• The screwdriver end is designed to provide an effective pressure area in each of the three micro-engineering screwdriver positions. This end also rotates to optimise the turning motion.

❷ ❸ Powerful and accurate

• The body comprises a gripping surface designed for optimum torque transmission with handling accuracy. The handle is shaped so fingers can naturally grip the specially designed handle for total tool control.

❹ Quick and easy to use

• The ribbed cone provides maximum grip for fast pre-tightening. Blade clearance gives a clear view of the job in hand.

❺ A large choice of blades

• A selection of over 50 high-precision steel or ceramic fixed or replaceable blades.

❻ Easy identification

• Colour-coded by size for instant selection of the correct tool.



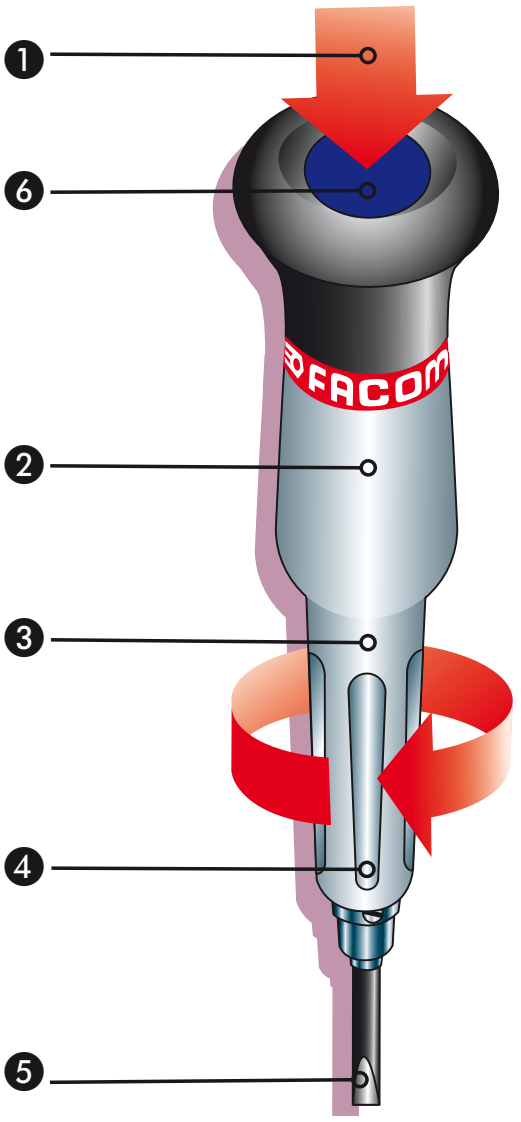
Finger-tip grip area



Watch makers grip area

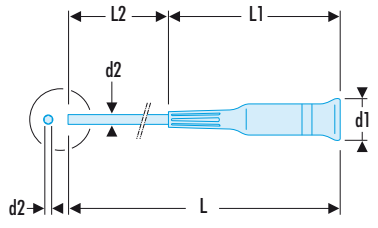


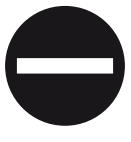
Full palm grip area



AEF -AEP - Micro-Tech® replaceable blade screwdriver





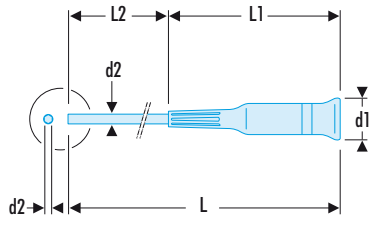


• Swivel head.
• Presentation: chromed blade, hardened tip.

		d1 x L1 [mm]	d2 x L2 [mm]	L [mm]	ΔΔ [g]
AEF.1X35	Red	17 x 82	1,0 x 35	117	11,5
AEF.1,2X35	Orange	17 x 82	1,2 x 35	117	11,5
AEP.00X35	Purple	17 x 82	2,5 x 35	117	11,5

AEF - Micro-Tech® screwdriver for slotted head screw





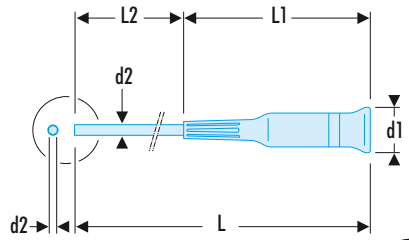


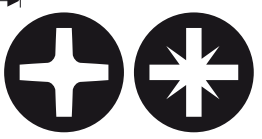
• Swivel head.
• Presentation: chromed blade, hardened tip.

		d1 x L1 [mm]	d2 x L2 [mm]	L [mm]	ΔΔ[g]
AEF.1,5X35	Yellow	17 x 82	1,5 x 35	117	12,1
AEF.1,8X35	Green	17 x 82	1,8 x 35	117	13,2
AEF.2X35	Indigo	17 x 82	2,0 x 35	117	13,5
AEF.2X75	Indigo	17 x 82	2,0 x 75	157	14,5
AEF.2,5X35	Blue	17 x 82	2,5 x 35	117	13,3
AEF.2,5X75	Blue	17 x 82	2,5 x 75	157	14,5
AEF.3X75	Pink	21 x 93	3,0 x 75	168	21,2
AEF.3,5X75	Purple	21 x 93	3,5 x 75	168	24,7
AEF.4X75	Plum	21 x 93	4,0 x 75	168	26,4

AEFP - AEFD Micro-Tech® screwdriver for Phillips® and Pozidriv® pattern





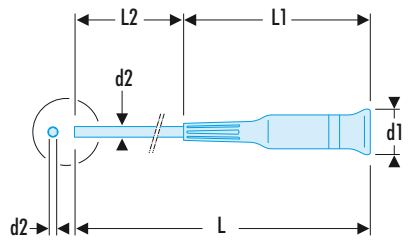


- AEFP presentation: chromed blade, hardened tip.
- AEFD presentation: hardened blade.

		Phillips [No]	Pozidriv [No]	d1 x L1 [mm]	d2 x L2 [mm]	L [mm]	ΔΔ [g]
AEFP.000X35	Pink	PH.000	-	17 x 82	2 x 35	117	11,5
AEFP.00X35	Purple	PH.00	-	17 x 82	2,5 x 35	117	12,5
AEFP.00X75	Purple	PH.00	-	17 x 82	2,5 x 75	157	14,9
AEFP.0X35	Plum	PH.0	-	17 x 82	3,0 x 35	117	13,5
AEFP.0X75	Plum	PH.0	-	21 x 93	3,0 x 75	168	32,2
AEFP.1X75	Brown	PH.1	-	21 x 93	4,0 x 75	168	37,5
AEFD.0X35	Orange	-	PZ.0	17 x 82	3,0 x 35	117	13,5
AEFD.0X75	Orange	-	PZ.0	21 x 93	3,0 x 75	168	32,2
AEFD.1X75	Brown	-	PZ.1	21 x 93	4,0 x 75	168	37,5

AEX - Micro-Tech® screwdriver for Torx® screw







- Presentation: chromed blade, hardened tip.

		Torx [No]	d1 x L1 [mm]	d2 x L2 [mm]	L [mm]	ΔΔ [g]
AEX.5X35	Green	T5	17 x 82	2,0 x 35	117	13,0
AEX.6X35	Indigo	T6	17 x 82	2,0 x 35	117	13,3
AEX.7X35	Blue	T7	17 x 82	2,5 x 35	117	13,3
AEX.8X75	Pink	T8	21 x 93	2,5 x 75	168	31,7
AEX.9X75	Purple	T9	21 x 93	3,0 x 75	168	32,6
AEX.10X75	Plum	T10	21 x 93	3,0 x 75	168	32,6
AEX.15X75	Brown	T15	21 x 93	3,5 x 75	168	35,0
AEX.20X75	Grey	T20	21 x 93	4,0 x 75	168	40,8

84E - Micro-Tech® screwdriver for male hex screws



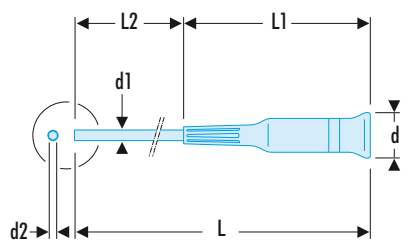


- Presentation: hardened blade.

		6-point [mm]	L [mm]	ΔΔ [g]
84E.0,9X35	Red	0,9	117	14,4
84E.1,3X35	Orange	1,3	117	15,0
84E.1,5X35	Yellow	1,5	117	15,0
84E.1,5X75	Yellow	1,5	157	15,0
84E.2X75	Green	2,0	168	30,0
84E.2,5X75	Indigo	2,5	168	32,0

Micro-Tech® bit holder screwdriver for hex screws 4 mm





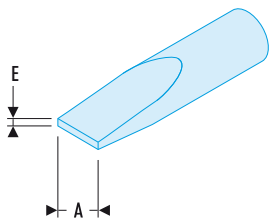
- For bits series 0 - 4 mm drive.
- Presentation: hardened blade.

	A [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	L2 [mm]	ΔΔ [g]
AEM.M	4	21	6	167	93	72	49,6

Bits series 0 - 4 mm drive

ES.0 - Screwing bits series 0-drive 4 mm for slotted head screw







	A fente [No]	E [mm]	L [mm]	⚖ [g]
ES.001,8	1,8	0,3	28	3,0
ES.002	2,0	0,4	28	3,0
ES.002,5	2,5	0,4	28	3,1
ES.003	3,0	0,5	28	3,1
ES.004	4,0	0,5	28	3,2
ES.004,5	4,5	0,6	28	3,2

EP.0 - Screwing bits series 0-drive 4 mm for Phillips® screws





	Phillips [No]	L [mm]	⚖ [g]
EP.0X2	PH00	28	3,2
EP.000	PH0	28	3,2

EP.0 - Screwing bits series 0-drive 4 mm for Pozidriv® screws







	Pozidriv [No]	L [mm]	⚖ [g]
ED.0X2	PZ00	28	3,2
ED.000	PZ0	28	3,2
ED.001	PZ1	28	3,2

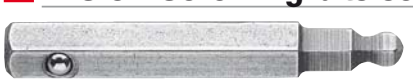
EH.0 - Screwing bits series 0-drive 4 mm for hollow hex screws





	6-point [mm]	L [mm]	⚖ [g]
EH.000,9	0,9	28	3,0
EH.001,3	1,3	28	3,1
EH.001,5	1,5	28	3,1
EH.002	2,0	28	3,2
EH.002,5	2,5	28	3,2

ETS.0 - Screwing bits series 0-drive 4 mm for hollow hex spherical head screws

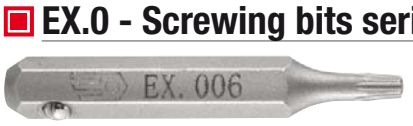




- The spherical head allows to screw with an angle up to 30°.

	6-point [mm]	L [mm]	⚖ [g]
ETS.001,5	1,5	28	3,1
ETS.002	2,0	28	3,2
ETS.002,5	2,5	28	3,2

EX.0 - Screwing bits series 0-drive 4 mm for Torx® screws





	Torx [No]	L [mm]	⚖ [g]
EX.006	T6	28	3,1
EX.007	T7	28	3,2
EX.008	T8	28	3,2
EX.010	T10	28	3,2

ECR.0 Socket holder drive



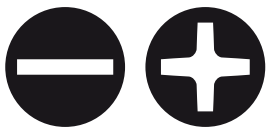
- Bit to use 1/4" "radio" series sockets with the screwdriver series A.300MT and A.340MT.
- Hex drive 4 mm.
- Length: 22 mm.

Weight: 7 g.

Micro-Tech® screwdriver kits

AEF.J1 Micro-Tech® 5-piece screwdriver set slotted head - Phillips®



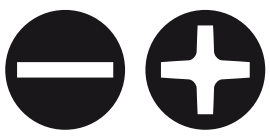


Comprising:
- 4 slotted head screwdriver: AEF.1.5x35 - AEF.1.8x35 - AEF.2x35 - AEF.2.5x35.
- 1 Phillips® screwdriver: AEFP.00x35.
- Case dimensions: L.178 x W.91 x H.25.

Weight: 170 g.

AEF.J3 Micro-Tech® 8-piece screwdriver set slotted head - Phillips®



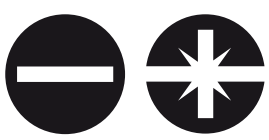


Comprising:
- 5 slotted head screwdriver: AEF.2x75 - AEF.2.5x75 - AEF.3x75 - AEF.3.5x75 - AEF.4x75.
- 3 Phillips® screwdriver: AEFP.00x75 - AEFP.0x75 - AEFP.1x75.
- Case dimensions: L.205 x W.130 x H.31 mm.

Weight: 384 g.

AEF.J5 Micro-Tech® 5-piece screwdriver set slotted head - Pozidriv®





Comprising:
- 3 slotted head screwdriver: AEF.2x75 - AEF.2.5x75 - AEF.3x75.
- 2 Pozidriv® screwdrivers: AEFD.0x75 - AEFD.1x75.
- Case dimensions: L.183 x W.109 x H.32 mm.

Weight: 230 g.

AEF.J6 Micro-Tech® 8-piece screwdriver set slotted head - Phillips® - Pozidriv®



Comprising:
- 5 slotted head screwdriver: AEF.2x75 - AEF.2.5x75 - AEF.3x75 - AEF.3.5x75 - AEF.4x75.
- 1 Phillips® screwdriver: AEFP.00x75.
- 2 Pozidriv® screwdrivers: AEFD.0x75 - AEFD.1x75.
- Case dimensions: L.215 x W.130 x H.31 mm.

Weight: 385 g.

AEFP.J1 Micro-Tech® 5-piece screwdriver set Phillips®



Comprising:
- 5 Phillips® screwdriver: AEFP.00x35 - AEFP.00x75 - AEFP.0x35 - AEFP.0x75 - AEFP.1x75.
- Case dimensions: L.183 x W.109 x H.32 mm.

Weight: 267 g.

AEF.J2 Micro-Tech® 5-piece screwdriver slotted head



Comprising:
- 5 slotted head screwdriver: AEF2x75 - AEF2.5x75 - AEF3x75 - AEF3.5x75 - AEF4x75.
- Case dimensions: L.183 x W.109 x H.32 mm.

Weight: 237 g.

AE.J1 Micro-Tech® 8-piece screwdriver set replaceable blade slotted head - Phillips®



Comprising:
- 6 slotted head screwdriver: AE.1x35 - AE.1.2x35 - AE.1.5x35 - AE.1.8x35 - AE.2x35 - AE.2.5x35.
- 2 Phillips® screwdriver: AEP.000x35 - AEP.00x35.
- Case dimensions: L.205x W.130 x H.31 mm.

Weight: 270 g.

AEX.J1 Micro-Tech® 5-piece screwdriver set Torx®



Comprising:
- 5 Torx® screwdrivers: AEX.6x35 - AEX.7x35 - AEX.8x75 - AEX.9x75 - AEX.10x75.
- Case dimensions: L.183x W.109 x H.32 mm.

Weight: 280 g.

AEX.J2 Micro-Tech® 8-piece screwdriver set Torx®



Comprising:
- 8 Torx® screwdrivers: AEX.5x35 - AEX.6x35 - AEX.7x35 - AEX.8x75 - AEX.9x75 - AEX.10x75 - AEX.15x75 - AEX.20x75.
- Case dimensions: L.205 x W.130 x H.31 mm.

Weight: 335 g.

84E.J1 5-piece set of hex screwdrivers



Comprising:
- 5 hex screwdrivers: 84E.0.9x35 - 84E.1.3x35 - 84E.1.5x35 - 84E.2x75 - 84E.2.5x75.
- Case dimensions: L.183 x W.109 x H.32 mm.

Weight: 250 g.

Micro-Tech® kit

10-piece Micro-Tech® set of short combination wrench



NF ISO 691, NF ISO 7738, NF ISO 3318, NF ISO 1711-1, E74-306, ISO 691, ISO 7738, ISO 3318, ISO 1711-1, DIN ISO 1711-1, DIN ISO 691, ASME B107.100

Comprising:
- 10 combination wrenches series 39: 3.2 - 4 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 mm.
- Case dimensions: L. 123 x W.95 x H.28 mm.

Weight: 240 g.

	A [mm]	⚖ [kg]
39.JE10	3,2 - 4 - 5 - 5,5 - 6 - 7 - 8 - 9 - 10 - 11	1,700

MT.J2 Micro-Tech® 8-tool set



Comprising:
- 1 mirror 834.R1.
- 1 spring-puller 835.A.
- 2 mechanical fingers 826.0 - 827.2.
- 1 screw fitter AFU.0.
- 1 pen light 836.
- 1 nut fitter 825.MT.
- 1 tool holder 1817.
- Case dimensions: L.285 x W.138 x H.26 mm.

Weight: 627 g.

MT.J3 Micro-Tech® 11-tool set



Comprising:
- 5 slotted head screwdrivers: AE.1.2 x 35 - AEF.1.5 x 35 - AEF.1.8 x 35 - AEF. 2 x 35 - AEF.2.5 x 35.
- 3 Phillips® screwdrivers: AEFP.000 x 35 - AEFP.00 x 35 - AEFP.0 x 35.
- 1 pair of tweezers: 140A.
- 2 pair of pliers: 405.10 MT - 432 LMT.
- Case dimensions: L.285 x W.138 x H.26 mm.

Weight: 726 g.

MT.J1 Micro-Tech® 16-tool set



Comprising:
- 6 slotted head screwdrivers: AE.1 x 35 - AE.1.2 x 35 - AEF.1.5 x 35 - AEF.1.8 x 35 - AEF.2 x 35 - AEF.2.5 x 35.
- 2 Phillips® screwdrivers: AEP.000 x 35 - AEFP.00 x 35.
- 3 hex screwdrivers: 84E.0.9 x 35 - 84E.1.3 x 35 - 84E.1.5 x 35 .
- 2 pairs of pliers 405.10MT- 432LMT.
- 1 pair of scissors 841.1.
- 1 cutter 845.1.
- 1 pair of tweezers 140AA.
- Case dimensions: L.366 x W.180 x H.66 mm.

Weight: 1075 g.

AEM.J1 Micro-Tech® 16-tool set - screwdriver + bits



Comprising:
- 1 bit holder screwdriver AEM.M.
- 5 bits series 0 for slotted head screw: ES.002 - ES.002.5 - ES.003 - ES.004 - ES.004.5.
- 2 bits series 0 for Phillips®: EP.0x2 - EP.000.
- 2 bits series 0 for Pozidriv®: ED.0x2 - ED.000.
- 3 bits series 0 hex: EH.001.5 - EH.002 - EH.002.5.
- 3 bits series 0 hex spherical head: ETS.001.5 - EH.002 - EH.002.5.
- Case dimensions: 183 x 109 x 32 mm.

Weight: 237 g.

AEM.J2 Micro-Tech® 26-tool set - socket holder + bits + sockets



Comprising:
- 1 bit holder screwdriver AEM.M.
- 5 bits series 0 for slotted head screw: ES.002 - ES.002.5 - ES.003 - ES.004 - ES.004.5.
- 2 bits series 0 for Phillips®: EP.0x2 - EP.000.
- 2 bits series 0 for Pozidriv®: ED.0x2 - ED.000.
- 3 bits series 0 hex: EH.001.5 - EH.002 - EH.002.5.
- 3 bits series 0 hex spherical head: ETS.001.5 - EH.002 - EH.002.5.
- 4 bits series 0 for Torx: EX.006 - EX.007 - EX. 008 - EX.010.
- 1 socket holder ECR.0.
- 5 1/4“ sockets: R.3.2 - 4 - 5 - 5.5 - 7 mm.
- Case dimensions: 205 x 130 x 31 mm.

Weight: 340 g.

Clockmakers screwdrivers set

HB.1B 5-piece watchmaker screwdriver set for slotted head screw



Comprising:
- 5 screwdrivers for slotted head screw: 0.8 x 13 - 1 x 16 - 1.2 x 17 - 1.6 x 19 - 2.5 x 21 mm.
- Presentation: chromed, hardened blade.
- In plastic case.

Weight: 130 g.

HB.2B 6-piece watchmaker screwdriver set for Phillips® - hex screw



Comprising:
- 3 hex screwdrivers: 1.5 - 2 - 2.5 mm.
- 3 Phillips® screwdrivers: PH N°00 - 0 - 1.
- Presentation: chromed, hardened blade.
- In plastic case.

Weight: 200 g.

HB.4 9-piece watchmaker screwdriver set for slotted head screw



Comprising:
- 9 slotted head screwdrivers: 0.6x11 - 0.8x11 - 1x12 - 1.2x12 - 1.4x12 - 1.6x15 - 2x15 - 2.5 x 15.5 - 3x15.5 mm.
- Replaceable blades.
- Supplied on carrousel with blade reserve.

Weight: 340 g.

Standard series

140 - Tweezers anti-magnetic or anti-reflection straight models



- Smooth pointed nose.
- 140.AA: satin polished presentation. Anti-magnetic stainless steel material.
- 140.AAW13: anti-reflection black presentation. Carbon steel material.

	L [mm]	⚖ [g]
140.AA	125	17
140.AAW13	130	16

148 Tweezers straight model - narrow nose



- Smooth narrow and pointed nose.
- Stainless steel.
- Presentation: fine polished.
- Length: 130 mm.

Weight: 15 g.

149 Tweezers straight model - fine grooved nose



- Long, thin, groove tip nose with guide.
- Stainless steel.
- Presentation: fine polished.
- Length: 155 mm.

Weight: 18 g.

150 Tweezers straight model - strong grooved nose



- Long, strong, groove tip nose with guide.
- Stainless steel.
- Presentation: fine polished.
- Length: 165 mm.

Weight: 22 g.

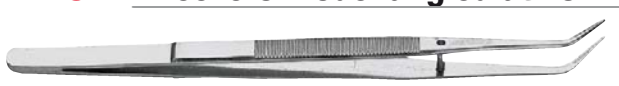
151 Tweezers model angled at 40°



- Long, strong, groove tip nose with guide.
- Stainless steel.
- Presentation: fine polished.
- Length: 155 mm.

Weight: 22 g.

152 Tweezers model angled at 45°



- Thin, grooved nose with guide.
- Stainless steel.
- Presentation: fine polished.
- Length: 150 mm.

Weight: 19 g.

153 Tweezers straight model - cross nose



- Grooved, crossed, self-locking nose.
- Stainless steel.
- Presentation: fine polished.
- Length: 150 mm.

Weight: 23 g.

154 Tweezers straight model - power nose



- Power, rigid, grooved nose for wiring.
- Stainless steel.
- Presentation: fine polished.
- Length: 155 mm.

Weight: 30 g.

PVC sheath series

149.Y PVC sheath tweezers straight model



- Length: 155 mm.

Weight: 25 g.

152.Y PVC sheath tweezers model angled at 45°



- Length: 150 mm.

Weight: 25 g.

146.1Y PVC sheath tweezers model for picking components - straight shank



- Diameter 2.5 to 4 mm, in the axis of the tweezers.
- Length: 140 mm.

Weight: 25 g.

High precision series

141.11 Tweezers «high precision» straight very pointy model



- Extra-flexible, smooth very pointed nose.
- Length: 110 mm.

Weight: 13 g.

141.12 «High precision» tweezers straight model



- Extra-flexible, smooth very pointed nose.
- Length: 130 mm.

Weight: 14 g.

146.2Y PVC sheath tweezers model for picking components - perpendicular shank



- Diameter 2.5 to 4 mm, perpendicular to the tweezers axis.
- Length: 140 mm.

Weight: 25 g.

142.1 «High precision» tweezers straight model - cleared nose



- Extra-flexible, smooth very pointed nose.
- Length: 112 mm.

Weight: 13 g.

142.2 «High precision» tweezers 15° angled model - cleared nose



- Extra-flexible, smooth very pointed nose.
- Length: 117 mm.

Weight: 15 g.

143 «High precision» tweezers curved straight model



- Extra-flexible, smooth very pointed nose.
- Length: 114 mm.

Weight: 14 g.

144 Tweezers «high precision» straight model - very slim nose



- Fine rounded, smooth nose.
- Length: 120 mm.

Weight: 17 g.

145 Tweezers «high precision» straight model - wide flat nose



- Smooth nose.
- Nose width: 7 mm.
- Length: 123 mm.

Weight: 14 g.

156 «High precision» tweezers straight power model



- Thin grooved nose.
- Length: 110 mm.

Weight: 15 g.

Special tweezers

150.P1 Plastic tweezers straight model - sterilizable



- Material: polypropylene, sterilizable 180 °C max.
- Length: 125 mm.

Weight: 6 g.

150.P - Plastic tweezers straight models - anti-static



- Material: glass fiber reinforced (20%) anti-static polyamide.
- Anti-magnetic.
- Resistant to acid.
- Resistant to temperatures up to 200 °C.
- Precision, smooth nose.

- 150.P10: wide straight nose.
- 150.P11: thin angled nose.

	L [mm]	⚖ [g]
150.P10	120	5
150.P11	120	5

139 Tweezers cutting model for extra-thin wires



- Carbon alloy steel for perfect cutting edges.
- Very high precision cut.
- Presentation: fine polished.
- Nose tip width: 10 mm.
- Length: 110 mm.

Weight: 27 g.

Sets of Tweezers

147 - Sets of tweezers



- The sets are presented in plastic case.

	Content set	Dimension [mm]	⚖ [g]
147.J5	Set of 5 standard tweezers: 149 - 150 - 151 - 152 - 140.AA	178 x 91 x 24	240
147.J6	Set of 8 standard and sheathed tweezers: 150 - 151 - 153 - 149.Y - 152.Y - 146.1Y - 146.2Y - 140.AA	205 x 130 x 31	410
147.J7	Set of 7 “high precision” tweezers: 140.AA - 141.14 - 142.1 - 142.2 - 143 - 144 - 145	205 x 130 x 31	335

Circlip® pliers

470.MT Set for inside and outside circlips®



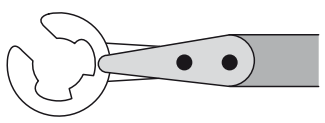
Comprising:
- 1 outside circlips pliers 467.PMT.
- 1 inside circlips pliers 469.PMT.
- These pliers include a spring-assisted opening and a screw-stop adjustment to avoid deforming the circlips and ensure precise fitting or removal.
- 6 sets of straight and angled tips.
- 1 key.
- Presentation: chrome polished. PVC sheathed branches.
- Supplied in plastic case: 285 x 142 x 46 mm.

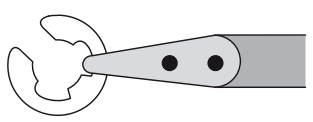
Weight: 600 g.

Truarc® pliers

1813 Tool for Truarc® rings







- It allows to fit and remove Truarc rings, maximum diameter 6 mm, in difficult access locations.
- Length: 170 mm.

Weight: 19 g.

Scissors

841.1 «Stubby» scissors



- For high precision cutting.
- Left/right hand model.
- Presentation: chrome polish, PVC sheathed branches.
- Length: 110 mm. Blade length: 24 mm.

Weight: 27 g.

841.2 Long pointed blade scissors



- Left/right hand multi-purpose model.
- Presentation: chrome polish, PVC sheathed branches.
- Length: 120 mm. Blade length: 42 mm.

Weight: 36 g.

Cutter

▣ 845.1 Interchangeable-blade safety knife



- For precise and neat cutting.
- Blades perfectly held.
- 2 types of blades.
- Length: 150 mm.
- Knife supplied with 10 L1-type blades.

Weight: 15 g.

- Spare blades:

- 845.L1: Set of 10 straight thin blades.
- 845.L2: Set of 10 offset blades.

Hacksaw frame

▣ 607.MT Micro-Tech® hacksaw frame



- Well in hand. Very light body in lacquered Zamak; for small work on plastic, wood, metal.
- Supplied with a 150 mm blade.
- Overall length: 262 mm.

Weight: 140 g.

▣ 608.L12 Saw blades

- Set of 5 blades 12 teeth/cm

Weight: 20g

Various tools

▣ 1817 Clamp tool-holder

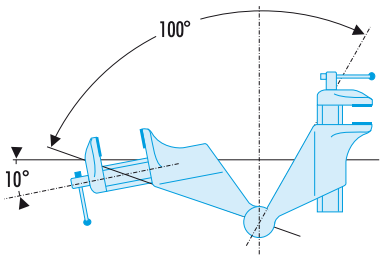


- Each end has a double clamp and a chuck.
- Can be fitted with any cylindrical tool diameter 0.5 to 3.5 mm.
- Length: 110 mm.

Weight: 35 g.

1150.MT Micro-Tech® swivel-base vice







- Designed for a comfortable work position ensuring high precision.
- Instant locking lever on swivel base.
- Fastener for firm fastening on a support of 80 mm thick max.
- Jaws in glued plastic, width: 50 mm.
- Max opening: 70 mm.
- Max depth: 38 mm.

Weight: 1400 g.

372 Pen oil can



- For precise greasing, drop by drop, by pressing the button.
- Level visible.
- Protection cap.
- Metal fastener for clipping in the pocket.
- Spread: 5 cm³.

Weight: 20 g.

825.MT Nut fitter



- Micro-Tech® screwdriver handle with swivel base.
- Allows to fit a hex nut 3 to 14 mm on flat.
- Blade length: 150 mm. Total length: 240 mm.
- Blade anti-corrosion treated.

Weight: 60 g.

835A Spring hook



- With pusher hook and traction hook.
- Presentation: chromed, sheathed.
- Length: 200 mm.

Weight: 13 g.

835.1 Separator



- With a fork and tip diameter 0.5 mm.
- Presentation: chromed, sheathed.
- Length: 210 mm.

Weight: 15 g.

836 Pen light



- Body in aluminum tube.
- Length: 137mm.
- Tube diameter: 14mm.
- Runs on two AAA LR03 (1.5 volt) batteries not supplied.
- Adjustable focus.
- Supplied with wrist strap.
- Spare lamp reference: 836.AMP.

Weight: 29 g.

1830 - Brushes



1830.1



1830.3



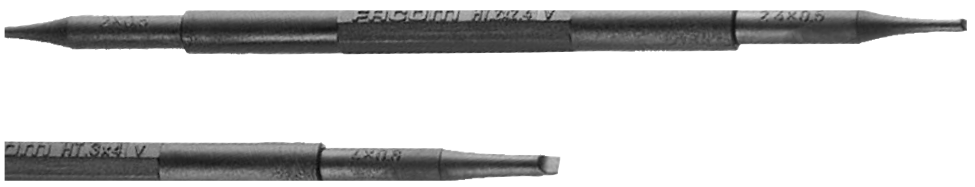
1830.4

- For cleaning, removing dust.

1830.1: Extra-soft silk brush.
1830.3: Etching brush: nylon outside, metallic wires at the centre.
1830.4: Soft nylon brush.

	L [mm]	L1 [mm]	[g]
1830.1	190	-	17
1830.3	190	50	35
1830.4	230	100	30

HT.3 Set of 2 tuning screwdrivers for slotted head screw



- Screwdriver dimensions:
  - HT.2x2.4: 2 and 2.4 mm.
  - HT.3x4: 3 and 4 mm.
- Screwdrivers available per unit.
- Supplied in roll.

Weight: 26 g.

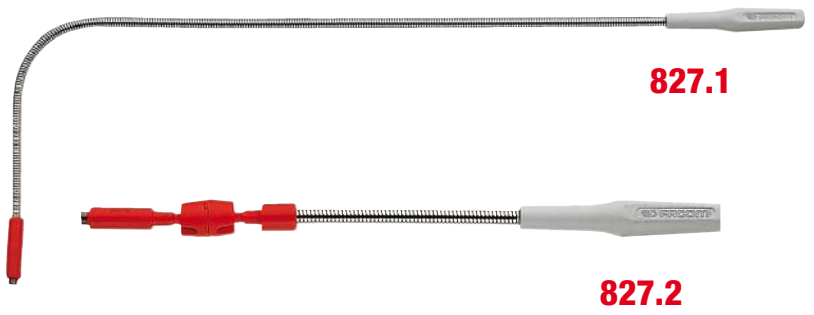
826.0 Mechanical retriever with 4 claws



- To recover small flat parts with max diameter 30 mm.
- Presentation: nickel-plated.

Weight: 20 g.

827 - Extra-thin flexible magnetic retrievers



- 827.1: flexible and long model head diameter 7 mm.
- 827.2: ball joint model head diameter 8 mm.
- Max lifted weight: 120 g.

	L [mm]	⚖ [g]
827.1	530	80
827.2	210	26

Flexible magnetic retriever



- Magnet diameter: 12 mm.
- Max lifted weight: 850 g.
- Length: 570 mm.

Weight: 220 g.

	⚖ [g]
827.M	80

Flexible magnetic retriever - high power

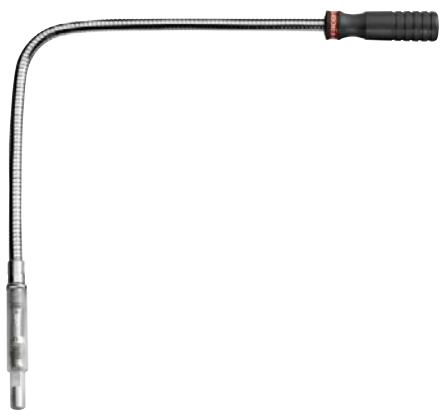


- Powerful magnet (3 kg).
- Magnetic flux conductor prevents sticking to sides.
- Length 560 mm, adjustable stiffness.
- Magnet diameter: 20 mm.

Weight: 130 g.

	⚖ [g]
827B	30

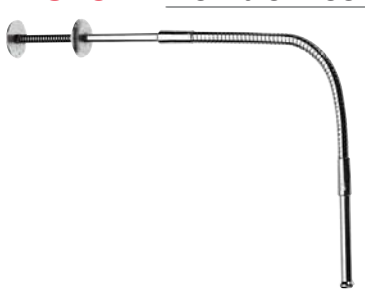
828 «Luminous» flexible magnetic retriever



- Magnet diameter: 15 mm.
- Max lifted weight: 1.2 kg.
- Supplied with LR1 battery.
- Length: 590 mm.

Weight: 220 g.

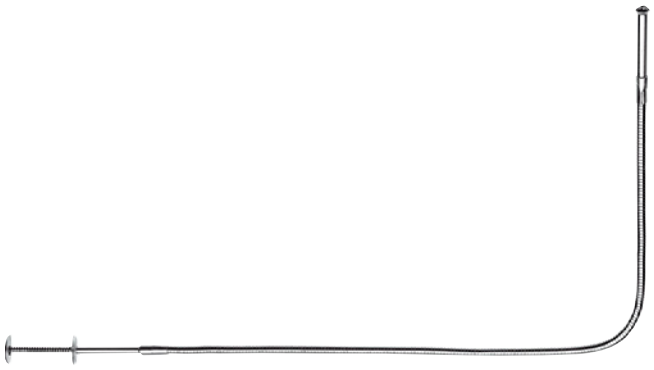
826.1 Flexible mechanical retriever 460 mm



- Max nose opening diameter: 29 mm.
- Length: 460 mm.

Weight: 200 g.

826.2 Flexible mechanical retriever 1000 mm



- Max nose opening diameter: 29 mm.
- Length: 1000 mm.

Weight: 400 g.

834 - Inspection mirrors



834



834.R1



834.R2

- Mirror crimped on plastic.
- 834: one-piece rigid.
- 834.R1: jointed and flexible.
- 834.R2: jointed and flexible.

	d [mm]	L [mm]	⚖ [g]
834	24	175	4
834.R1	36	210	13
834.R2	55	360	40

834B.RT Inspection mirror

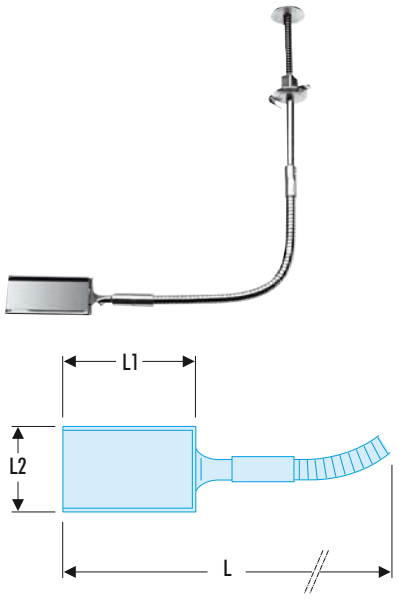


- Mirror in scratch resistant glass, available as spare parts.
- Metallic strapping around the glass for better protection.
- Join easily adjustable, or even locked, by screw.
- Solvent resistant plastic handle: Skydroll, gasoil…
- Max length 850 mm.
- Mirror diameter 55 mm.

Weight: 80 g.

- 834B.RT01: Spare mirror.

Flexible orientable mirror



- The mirror is turned by pressing the button on the handle.

Weight: 225 g.

	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
829	495	70	45	225

1802A.N Black mini wire-holder



- Insulated model with 2 claws, flexible tube diameter 3 mm.
- Length: 130 mm.

Weight: 10 g.

1802A.R Red mini wire-holder



- Insulated model with 2 claws, flexible tube diameter 3 mm.
- Length: 130 mm.

Weight: 10 g.

1803A.N Black contact tip



- Insulated model, brass tip and socket diameter 4 mm for 1804B chord.
- Supplied with protection cap.

Weight: 15 g.

1803A.R Red contact tip



- Insulated model, brass tip and socket diameter 4 mm for 1804B chord.
- Supplied with protection cap.

Weight: 15 g.

1804B.N Black connection cable



- Very flexible insulated model with retractable protection.
- 2 connectors diameter 4 mm for contact tip and mini-wire-holder.
- Length: 2.1 m.

Weight: 50 g.

1804B.R Red connection cable



- Very flexible insulated model with retractable protection.
- 2 connectors diameter 4 mm for contact tip and mini-wire-holder.
- Length: 2.1 m.

Weight: 50 g.

Thermoregulated Soldering Units

▣ 1003B.E Anti-static digital welder 68 watts



- Ultra fast heating time: 9 s.
- Automatic standby mode for less power consumption and automatic power off.
- Super compact station.
- Temperature calibration possible for higher accuracy. Reduction of temperature of the display and that of the soldering iron tip.
- Setpoint temperature: 360 °C / 680 °F.
- Temperature range: 150 to 450 °C, 300 to 842 °F.
- Stability: + or – 2°c.
- Power: 68 W.
- Supply voltage: 220 - 240 V ~ 50/60 Hz 110 - 120 V ~ 50/60 Hz.
- Dimensions (L x H x D): 145 mm x 80 mm x 103 mm.

Weight: 1050 g.

- Soldering iron 1003B.68E:

Dimensions: L x handle ø / 175 mm x 12 mm.
Cable length: 950mm.
Weight: 30 g (without cable).

- Holder:

Dimensions (L x H x D): 140 mm x 80 mm x 80 mm.
Weight: 200 g.

Spare iron tips 1003B.68E:
- 1003B.P1: thin pen tip (0.4mm).
- 1003B.P2: large pen tip (1.0mm).
- 1003B.P3: screwdriver tip (1.6mm).

▣ BV.21-10 Soldering iron stand





- Stores a soldering iron type Facom 1230 or equivalent immediately after welding works. It can be transported safely in a maintenance case. The insulating part does not contain any asbestos.
- 180 x diameter 35 mm.

Weight: 210 g.

1003B.68E Electronic soldering iron



- Power: 68 W.
- Supply voltage: 220 - 240 V ~ 50/60 Hz 110 - 120 V ~ 50/60 Hz.
- Dimensions: L x handle ø / 175 mm x 12 mm.

Cable length: 950mm.
Weight: 30 g.

Electronic irons

1230 - 203 volt electronic soldering irons



- Range from 15W to 40W.
- High efficiency irons thanks to inside heating of the tip.
- Supplied with iron stand.

Spare tips:
- For iron 1230.25: pointy tip 1230.25P2
- For irons 1230.30 and 1230.40: pointed tip 1230.30P2 - screwdriver tip 1230.30P3

	L [mm]	Heating time [mn]	Voltage\ Volt	Rating [W]	Peak temp ± 10%	⚖ [g]
1230.25	240	1	230	25	450	34
1230.30	240	2	230	30	420	80
1230.40	240	2	230	40	420	80

1116B.BW Bi-watt iron 20-40 for electronic

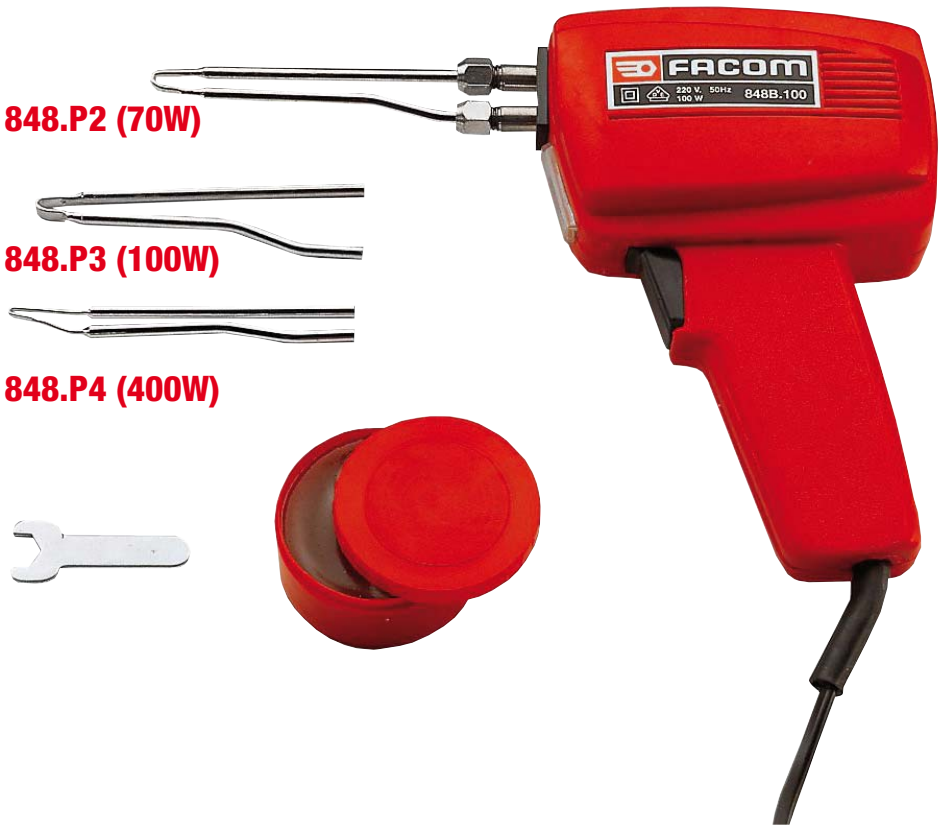


- Power supply: 230 V.
- Double insulation.
- Iron ideal for electric and electronic maintenance.
- In normal heating: 20 W for minor soldering.
- Additional power: 40 W by pressing the button.
- PVC 2-conductor cable (2 x 0.75). Length: 1.2 m.
- European connector 10 A.
- Supplied with tip 1112.30P1.

Weight: 145 g.

Instant soldering irons

848B.100 Instant-heat 100 W - 230 V soldering iron



848.P2 (70W)

848.P3 (100W)

848.P4 (400W)

- Double insulation.
- Ready to run (5 s) once the trigger pressed.
- When the trigger is released, the tip cools down instantly.
- Useful for punctual and intermittent works, handy in maintenance case.
- Lighting device effective and well protected.
- Supplied with 3 stainless steel tips for power 40, 70 and 100 W, a tightening key, a coil of tin and a 1 pot of etching paste in a polystyrene case.
- PVC 2-conductor cable (2 x 0.75 mm²). Length: 1.25 m.
- Connector with 2 poles.
- Length: 270 mm.

Weight: 1000 g.

- Spare tip: 848.100P2

High power soldering irons

947A - High power irons - 230 V



- Power range from 50 to 400 W.
- Supplied with an angled tip.
- Very high yield with excellent robustness.
- Shape designed for difficult access.
- Shiny copper tips.
- Stainless steel heating body tube.
- These irons meet the requirements of the EN 60335 - 2 - 45 standard.
- Tips:

- 947.50P1 diam. 6 mm.
- 947.80P1 diam. 8 mm.
- 947.100P1 diam. 10 mm.
- 947.2000P1 diam. 15 mm.
- 947.300P1 diam. 20 mm.

	L [mm]	Rating [W]	Peak	Peak temp ± 10%	⚠ [g]
947.50	266	50	947.50P1	390	290
947.80	295	80	947.80P1	400	330
947A.100	300	100	947.100P1	420	440
947A.200	315	200	947.200P1	450	675
947A.300	320	300	947.300P1	470	960
947A.400	320	400	947.300P1	500	960

Gas soldering iron

GAS SOLDERING IRON

ONE TOOL - FOUR FUNCTIONS

❶ **Soldering** (Electronics, etc.).
❷ **Hot fitting** (Heat-shrinkable tubing, etc.).
❸ **Blowtorch**
❹ **Hot-cutting** (Plastic, rubber, etc.).

- Rechargeable butane gas burner.
- Integral ignition system (Piezo-electric system).
- Adjustable power setting.
- Safe: The cap on the end of the nozzle keeps the gas control valve closed.












1075.G Self-sufficient soldering iron



- Power equivalent to 75 watts.
- Flow and power adjustable, operating time 45 mn at max power.
- Max temperature 1300°C.
- Lighting by piezo.
- Heating time: 40 sec.
- Rechargeable with butane gas (iron supplied empty).

- 1075.G1: spare tip.
- 1075.G2: hot air nozzle.
- 1075.G3: flame nozzle.
- 1075.G4: knife.

Weight: 275 g.

Soldering accessories

839 - Desoldering pumps

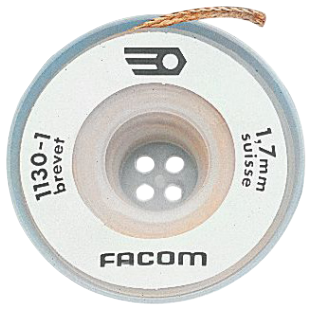


- Double gasket: one provides cleaning, allowing the other to guarantee perfect sealing.
- Sets of 5 spare tips:

- 839.E1J5: standard, white.
- 839.EJ5: thin, black, antistatic.

	Bits	L [mm]	⚖ [g]
839A	3,2	190	75
839A.0	2	165	36
839A.1	2	200	78
839A.7	2	195	78

1130.1 Desoldering braid



- This braid provides remarkable absorbing qualities. It avoids thermal shock for delicate components.
- Width: 1.6 mm.
- Length: 1.6 m.

Weight: 15 g.



WORKSHOP EQUIPMENT



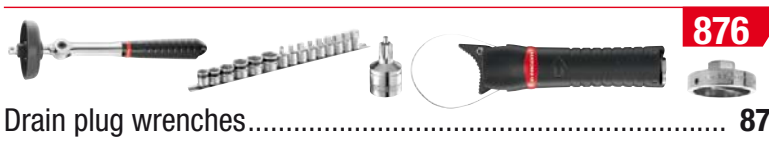
"Express" roller cabinets 858
Mobile lifting equipment 860
Hydraulic presses 867
Inspection creepers 870
Power levers 871

ELECTRIC AND HYBRID VEHICLES



Consigning kits 872
Safe 873
Sign posts and chains 874
Consigning roller cabinet 875

OIL CHANGE-FILTRATION



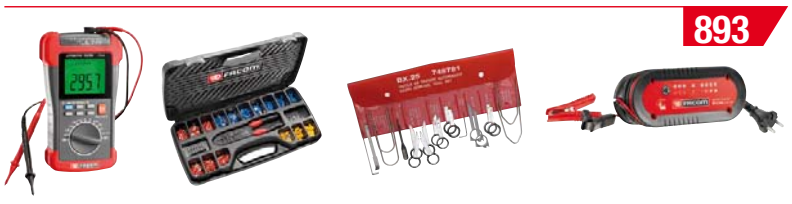
Drain plug wrenches 876
Magnetic drain plug bits and sockets 877
Gearbox and differential drain plug bits 879
Oil-filter wrenches 881
Cap wrenches and sockets 885

SPARK PLUGS



Petrol spark plug wrenches 887
Petrol and glow plug wrenches 890
Diesel glow plug wrenches 890

AUTO ELECTRICS

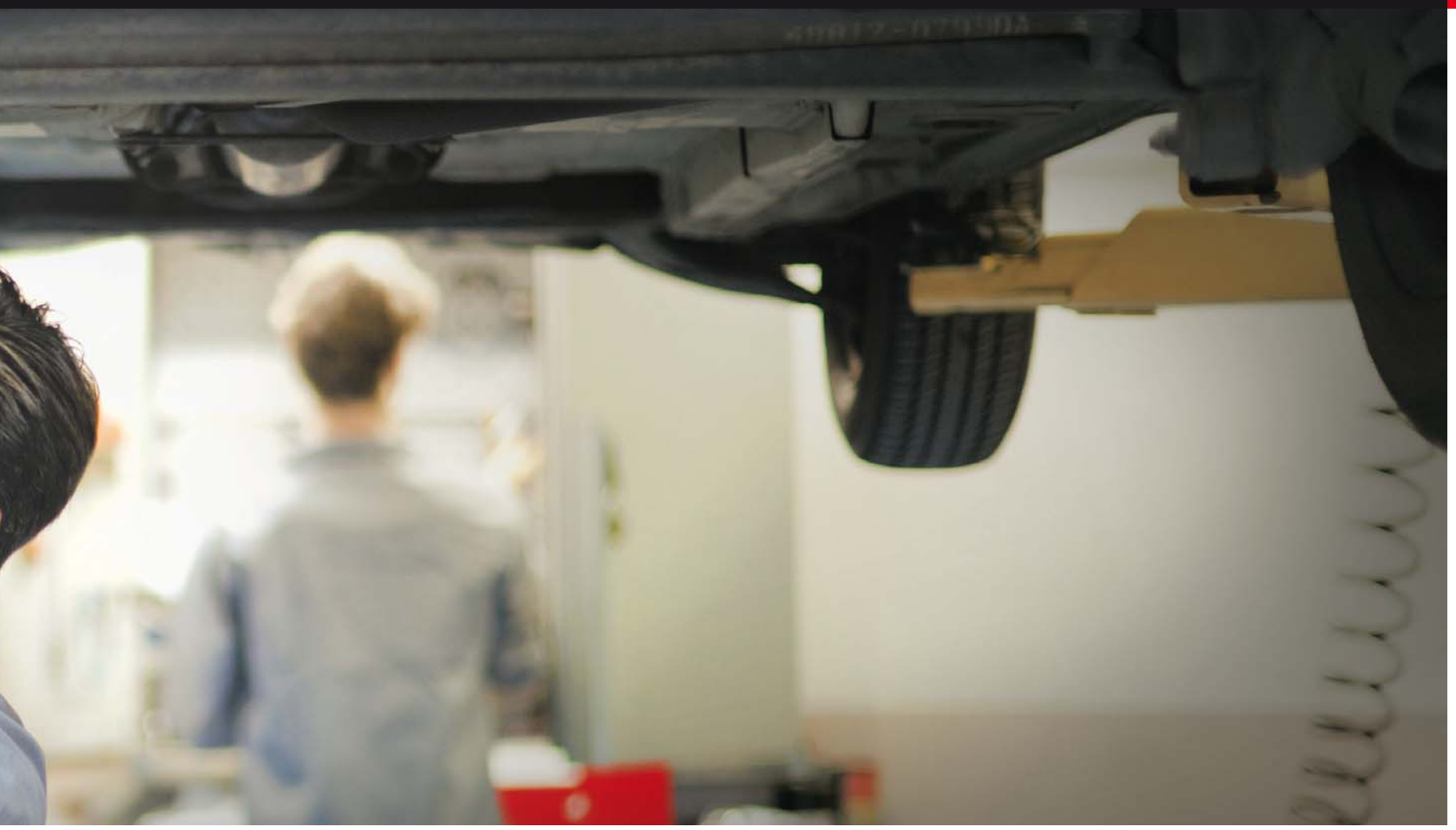


Testers and multimeters 893
Battery charger 895
Battery tools 897
Fuses and connectors 899
Car radio tools 900

POWER PLANT



Pressure testing 901
Common rail diesel injection 907
Fuel injection 910
Collars - hoses - gaskets 911
Cooling circuit 915
Cylinder head - valves 916
Angular range 921
Pistons - piston rings 923
Exhaust 924



TIMING - PULLEYS - BELTS

927



Diesel engine timing kit 928
Pulleys - sprockets - belts 932

TRANSMISSION

936



Gearbox and clutch 936

BRAKES

937



Check 937
Diagnostics and bleeding 939
Disc brakes 941
Drum brakes 942
Brake lines 944

SUSPENSION

946



Spring compressors 946
Workstation 950
Strut removal 951
Tools for shock absorbers 952

WHEEL - HUB - TRANSMISSION

953



Wheel removal and inspection 953

BODYWORK

958



Withstands 958
Stripping tools 962
Power tools 963
Cutting - drilling 964
Air tools 968
Forming 971
Paint preparation 981
Windshields 985
Hydraulic equipment 987

"Express" roller cabinets

“EXPRESS” ROLLER CABINET
DESIGNED FOR FAST SERVICING

SAVES TIME AND MONEY DURING FAST FIT & MAINTENANCE SERVICES



Save time by simplifying actions and movements
- Energised tooling available at all times.
- Easy moving and rotation.

Reduces fatigue and MSD (musculoskeletal disorders)
- Limits carrying, when removing the wheel, just swivel it to lay it on the appropriate holder at the same height.
- With its 5th wheel at the center, turn the roller cabinet with a finger for easy access to the drawers and limited wheel carrying when refitting.

Securing the tooling
- Tools stored in foam modules, in the roller cabinet drawers.

Available in 2 versions
- DLS.T1: 3 drawers.
- DLS.T2: 5 drawers.

❶ 2 wheel holders at height to limit carrying and effort.
❷ Paper roll and work order holder.
❸ Bottle container or large-size bin.
❹ 5th wheel for one-finger swivelling.
❺ Power tools available instantly.







DLS.T1 "Express" 3-drawer roller cabinet



- 3-drawers version:
- 2 drawers height: 60 mm.
- 1 drawer height: 120 mm.
- Air supply built into the roller cabinet.
- 2 hoses for air tooling.
- Cleaning spray storage tray.
- Cleanliness service: paper roll holder.
- Repair order holder.
- Ribbed aluminium tray for filling cans (5L cans).
- Supplied with 1 multifunction hook for impact wrench or inflater.
- Drawers can accommodate 2 XL modules.
- Dimensions (L. x D. x H.): 666 x 630 x 970 mm (box).
- Arm size:
- Folded: 190 mm.
- Open: 440 mm.

Weight: 83 kg.

DLS.T2 "Express" 5-drawer roller cabinet



- 5-drawer version:
- 3 drawers height: 60 mm.
- 1 drawer height: 120 mm.
- 1 Drawer, bin dim.: 295 mm.
- Air supply built into the roller cabinet.
- 2 hoses for air tooling.
- Cleaning spray storage tray.
- Cleanliness service: paper roll holder.
- Repair order holder.
- Ribbed aluminium tray for filling cans (5L cans).
- Supplied with 1 multifunction hook for impact wrench or inflater.
- Drawers can accommodate 2 XL modules.
- Dimensions (L. x D. x H.): 666 x 630 x 970 mm (box).
- Arm size:
- Folded: 190 mm.
- Open: 440 mm.

Weight: 85 kg.

Mobile lifting equipment

LIFTING EQUIPMENT RANGE

FOR FACOM, YOUR SAFETY IS PARAMOUNT



Conformity with the European directive on machinery and standards checked by an independent laboratory.



- Detailed manual.
- Exploded views.
- Spare parts list.
- Maintenance log.



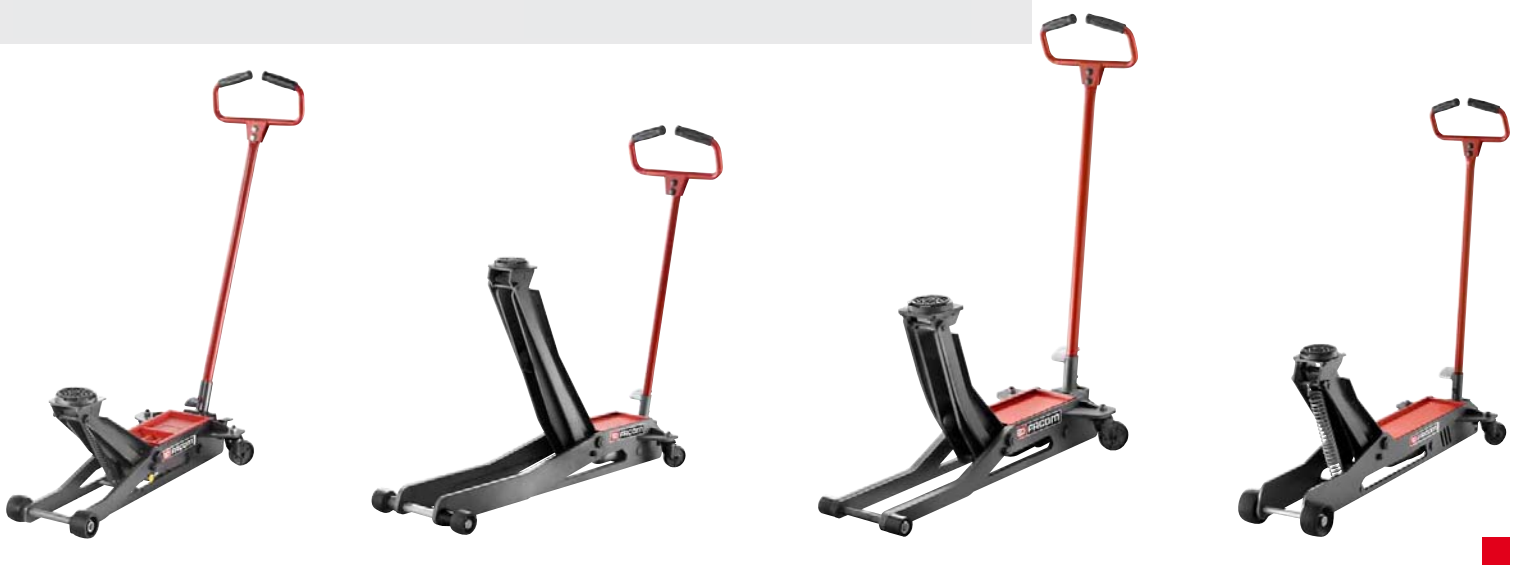
Permanent identification markings.



Comprehensive safety instructions.





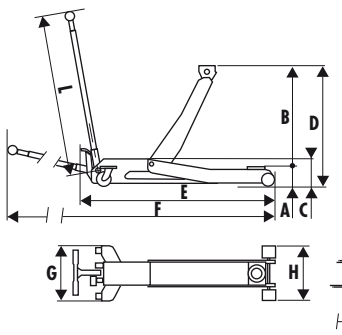


Heavy-duty trolley jacks

HEAVY-DUTY TROLLEY JACKS

CHARACTERISTICS COMMON TO HYDRAULIC JACKS OF THE "HEAVY-DUTY" RANGE

- Fast approach pedal.
- "Dead man" device.
- Load descent speed regulation.
- Comes with rubber bearing protection plate.
- Compliant with CE directive on machinery 2006 and EN 1494.





	F (t)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	Weight	Oil
DL.150HL	1,5	110	665	165	775	1250	2180	360	360	1030	60.5 kg	410 cm³
DL.200/DL.200SL	2	75	390	135	465	880	1810	360	260	1030	32 kg	215 cm³
DL.200CR	2	75	390	135	465	940	1870	360	330	1030	33 kg	250 cm³
DL.200LP	2	65	455	135	520	920	1850	360	260	1030	44.5 kg	270 cm³
DL.300	3	140	385	185	525	1150	2080	360	260	1030	46 kg	410 cm³
DL.PL6	6	170	410	220	580	1310	2215	414	336	950	81 kg	775 cm³
DL.PL10	10	170	435	270	605	1600	2530	414	386	950	123 kg	1,150 cm³

DL.200LP 2T gearbox & engine support trolley jack





NF EN 1494, EN 1494, DIN EN 1494

- Ideal for low ground clearance sports vehicles.
- Load capacity: 2 t.
- Maximum lifting height: 520 mm.
- Minimum height under body: 48 or 65 mm.
- Fast approach pedal.
- "Dead man" device.
- Load descent rate regulation.
- Supplied with rubber plate protection.
- Dimension (L. x W.): 920 x 260 mm.

Weight: 43 kg.

DL.200SL 2T "safety" trolley jack







NF EN 1494, EN 1494, DIN EN 1494

- Load capacity: 2 t.
- Maximum lifting height: 465 mm.
- Minimum height under body: 75 mm.
- Maximum chassis height: 135 mm.
- Fast approach pedal.
- "Dead man" device.
- Load descent rate regulation.
- Additional safety device: mechanical locking at 320 mm (with a 2nd release pedal).
- Supplied with rubber plate protection.
- Dimensions (L. x W.): 880 x 260 mm.

Weight: 32 kg.

DL.200CR 2T - 6 wheel "safety" trolley jack







NF EN 1494, EN 1494, DIN EN 1494

- Boggie wheels: for easy moving on rough floor, access to paint booths and better stability.
- Load capacity: 2 t.
- Maximum lifting height: 465 mm.
- Minimum height under body: 75 mm.
- Maximum chassis height: 135 mm.
- Fast approach pedal.
- "Dead man" device.
- Load descent rate regulation.
- Additional safety device: mechanical locking at 320 mm (with a 2nd release pedal).
- Supplied with rubber plate protection.
- Dimensions (L. x W.): 880 x 260 mm.

Weight: 33 kg.

DL.150HL 1.5T high lift "4x4" trolley jack







NF EN 1494, EN 1494, DIN EN 1494

- Load capacity: 1.5 t.
- Maximum lifting height: 775 mm.
- Minimum height under body: 110 mm.
- "Dead man" device.
- Fast approach pedal.
- Load descent rate regulation.
- Supplied with rubber plate protection.
- Dimensions (L. x W.): 1250 x 360 mm.

Weight: 60.500 kg.

DL.300 3T "L.U.V" trolley jack





NF EN 1494, EN 1494, DIN EN 1494

- Load capacity: 3 t.
- Maximum lifting height: 525 mm.
- Minimum height under body: 140 mm.
- "Dead man" device.
- Load descent rate regulation.

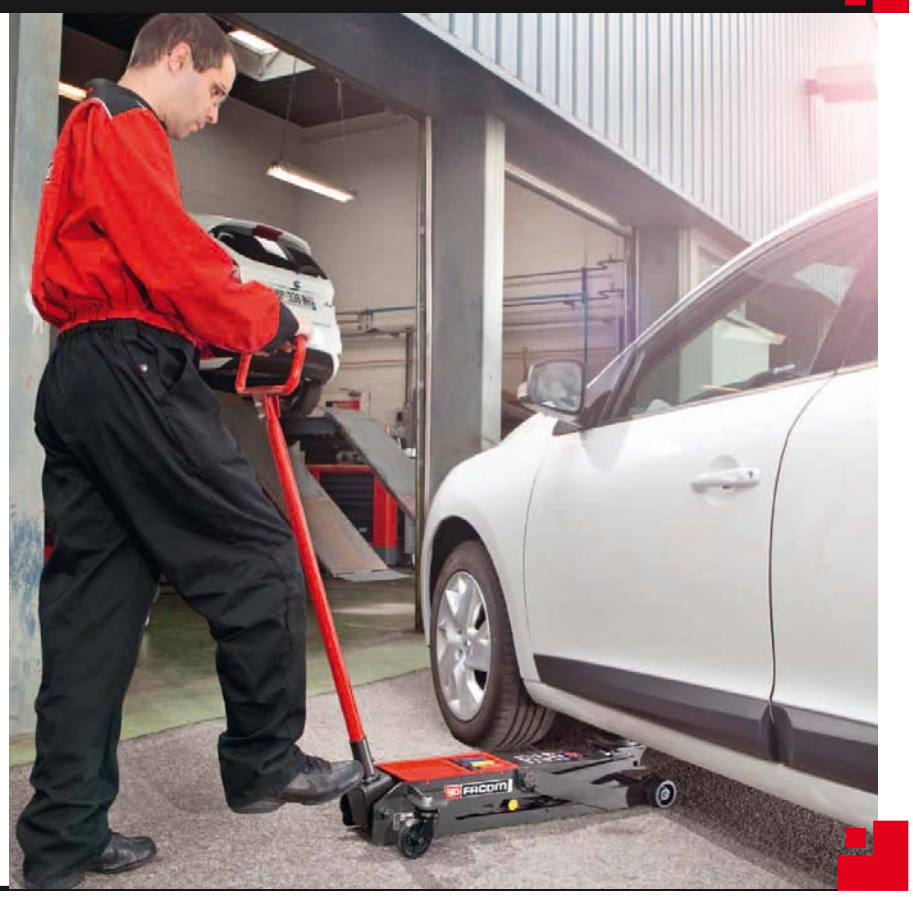
Weight: 50 kg.

HEAVY-DUTY TROLLEY JACKS

SAFETY FIRST

- In daily workshop operations, lifting a vehicle is a normal operation which, unfortunately, causes many accidents every year.
- A jack can be used only to lift or lower the vehicle, axle stands are always required to work on the vehicle.
- The new DL.200SL and DL.200CR jacks include a mechanical system locking them at 320 mm: always check that the jack is locked in the safety position before working under the vehicle.

Reminder: always work on flat ground and prevent any vehicle movement, using blocks if necessary.



Floor jacks "maintenance" range

DL.32 3.2T multi-purpose car and LCV's floor jack





NF EN 1494, EN 1494, DIN EN 1494

- Maximum lift 504 mm.
- Min. under-body clearance: 145 mm.
- Force 3.2 t.
- Quick-lift device brings jack: into contact in a single movement.
- Automatic air release device for constant cylinder efficiency.
- Removable polyurethane cover on the bearing head.
- Silent-running polyurethane-tyred wheels
- Overload valve, CE
- Dimensions (L. x D. x H.): 690 x 337 x 163 mm.

Weight: 38 kg.

DL.19 Lightweight servicing trolley jack 2T





NF EN 1494, EN 1494, DIN EN 1494

- Bi-material aluminium/steel jack.
- Force 2 t.
- Rear carry handle.
- Minimum jacking clearance: 100 mm.
- Wide polyurethane cover on the bearing head.
- Quick-lift device brings jack: into contact in a single movement.
- Universal joint mechanism for accurate control.
- Automatic air release device for constant cylinder efficiency.
- Silent-running polyurethane-tyred wheels.
- Overload valve, CE.
- Dimensions (L. x D. x H.) 705 x 310 x 160 mm.

Weight: 25 kg.

Axle stands

DL.3 Pair of 2.2 axle stands





- Load capacity: 2.2 t.
- Axle stands with locking pins.
- 6 height settings from 295 to 492 mm.
- Pin chained to the stand.
- Polyurethane contact surface protection.
- CE.
- Tested by the French national testing laboratory (LNE).
- Folded dimensions (L. x W. x H.): 295 x 210 x 210 mm.

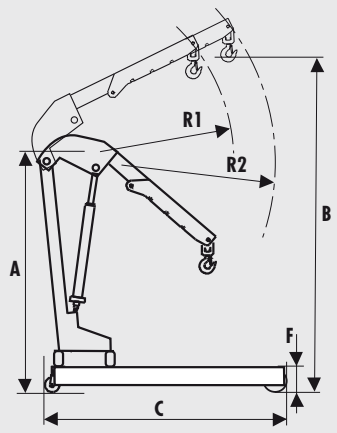
Weight: 5.500 kg (per pair).

Workshop cranes

WORKSHOP CRANES

Exclusive performance:

- Easy jib length adjustment without tool nor safety pin.
- Load lowering with one millimeter accuracy with the high-precision control.
- Rotating jack at 270°: controls jib rising and lowering by the back or side of the crane.







	A mm	B mm	C mm	D mm	E mm	F mm	G mm	R1 mm	R2 mm	Weight
DL.5	1400	2080	1500	820	450	80	465	1050	1250	97 kg
DL.10EU	1670	2440	1800	820	–	80	–	1260	1550	130 kg
DL.20EU	1690	2470	1870	820	–	200	–	1275	1570	180 kg

DL.5 500-kg workshop crane





- Folding crane.
- Tool-free jib extension.
- Rotating controller: 270°.
- Easy use, instant adjustment.
- Capacity: 500 kg.
- Effective load with boom deployed: 325 kg.
- Floor dimensions: 1500 x 820 mm.
- CE.

Weight: 97 kg.

DL.10EU 1T workshop crane





- Crane can be disassembled for European pallets.
- Tool-free jib extension.
- Rotating controller: 270°.
- Easy use, instant adjustment.
- Capacity: 1,000 kg.
- Effective load with boom deployed: 700 kg.
- Floor dimensions: 1800 x 820 mm.
- CE.

Weight: 130 kg.

DL.10F Drum lifter



- To handle metal drums with a crane.
- Max. load: 300 kg.

DL.101 Load balancer



- Allows to balance the load under the hoist according to the shape of the part or engine to lift.
- Easy adjustment by crank.
- Max. load: 600 kg.
- Center distance: 330 mm.
- Supplied with 4 fastening chains.

Load balancers

MOBILE LIFTING

Pit jacks

- Quick-lift device by pedal.
- "Dead man" device.
- Overload valve.
- Polyurethane wheels.
- Reversible bearing head.
- Can be fitted with foam block DL.20SUP (option).
- CE.





Pit jacks





- Max. load: 600 kg.
- "Dead man" safety lowering device.
- Safety overload valve.
- Polyurethane wheels.
- Reversible basket.
- Can support DL.20SUP (Option).
- CE.

	Dimension [mm]	ΔΔ [kg]
DL.30		31
DL.60		39

DL.1200 2-stage telescopic pit jack





- For 4WD, LUV and HV below 6 t.
- Max. load: 1200 kg.
- Adjustable height:

- Minimum: 900 mm.
- Maximum: 1.900 mm.

- Adjustable arms.
- Load holding chains.
- Foot control.
- "Dead man" device.
- Floor diameter: 650 mm.
- Can be fitted with two optional high density foam pads (Ref DL.20SUP).
- Supplied with swivel head.

Weight: 35.500 kg.

DL.20SUP Lifting plate



- This plate supports a block of high density foam that spreads the load over a large surface area and avoids damage to aluminium crank cases and under-bodies.
- For use on DL.200LP - DL.30 - DL.60 - DL.1200.
- Dimensions (L. x W. x H.): 300 x 150 x 60 mm.

Weight: 4 kg.

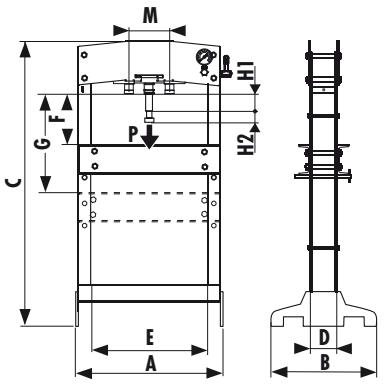
Hydraulic presses

WORKBENCH - SHOP PRESSES

- Supplied assembled with pair of Vees.
- Piston with automatic return spring.
- CE.

Shop presses

- Table raised by a single operator using the integral winch.
- Integral pusher support (set of pushers not supplied).
- Lateral moving jack.
- Openings in base for moving with a pallet jack, ground anchor device.





	P (t)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H1 mm	H2 mm	M	Weight	Oil
W.415HA	15	600	450	1050	120	500	150	450	95	75	–	74 kg	500 cm^3
W.430HA	30	880	650	1830	145	710	150	700	120	75	250	195 kg	900 cm^3
W.450HPA	50	880	650	1910	145	710	155	720	120	75	250	229 kg	900 cm^3

W.415HA 15T hydraulic bench press



- Integral jack and pump.
- Eye-level pressure gauge.
- Piston with automatic return spring.
- Piston travel: 95 mm.
- Screw extension: 75 mm.
- Supplied assembled with a pair of Vees.
- CE.
- Dimensions (L. x D. x H): 600 x 450 x 1050 mm.

Weight: 74 kg.

W.430HA 30T hydraulic workshop press







- Table raised by a single operator using the integral winch.
- Manual two-speed hydraulic jack, mobile laterally.
- Piston with automatic return spring.
- Piston travel: 150 mm.
- Screw extension: 75 mm.
- Floor anchoring possible.
- Integral pusher support (set of pushers not supplied).
- Supplied assembled with pair of Vees.
- CE.

Weight: 195 kg.

W.450HPA 50T hydropneumatic workshop press



- Hydropneumatic foot control.
- Table raised by a single operator using the integral winch.
- Integral pusher support (set of pushers not supplied).
- Lateral moving jack.
- Piston travel: 150 mm.
- Screw extension: 75 mm.
- Piston with automatic return spring.
- Floor anchoring possible.
- Supplied assembled with pair of Vees.
- CE.

Weight: 229 kg.

W.430-6 Set of 7 press pushers



- To be used with presses Ref. W.415HA - W.430HA - W.450HPA.
- Diameters: 12 - 16 - 18 - 20 - 22 - 25 - 30 mm.
- Length: 57 - 57 - 82 - 82 - 84 - 115 - 108 mm.
- Max loads: 3 - 8 - 12 - 14 - 18 - 18 - 20 t.

PRESS PROTECTION

WORKSHOP PRESS POLYCARBONATE PROTECTION WINDOWS

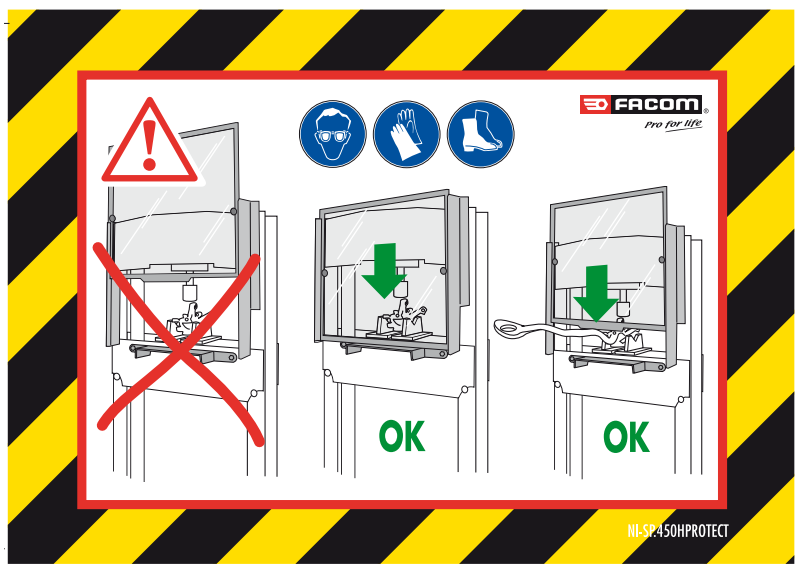
SAFE

- 2 impact-proof polycarbonate windows protect against risks of projection should a part break under the press.

FLEXIBLE

- Several height positions of the protection according to the part's size.
- Allows to position the protection flush with the part for large parts.
- Workshop 30 and 50T presses
- Available as special reference: ask your local dealer.





Inspection creepers

DTS.1B Inspection creeper





- High density foam padded vinyl headrest resistant to automotive fluid.
- Frame made of ovoid-shape tube: no protruding angle to improve comfort and better wheel fastening.
- Maximum height: 100 mm.
- Max. chassis load: 150 kg.
- 6 wheels.
- Dimensions (L. x W.): 1010 x 630 mm.

Weight: 8.200 kg.

DTS.2B Heavy-duty inspection creeper





- Adjustable headrest.
- Tool tray.
- High density foam padded vinyl headrest resistant to automotive fluid.
- Maximum height: 100 mm.
- Max. chassis load: 150 kg.
- 6 wheels.
- Dimensions: 101 x 63 cm.

Weight: 10 kg.

DTS.4 Mid-height work seat





- Ideal for working on wheels, brakes and bodywork.
- Thick heavy-duty PVC padding.
- Stability ensured by 4 wheels diameter 75 mm.
- Magnetic surface for fasteners and small components.
- Overall height: 590 mm.
- Seat height: 420 mm.
- Dimensions (L. x W.): 463 x 430 mm.

Weight: 10 kg.

CR.D2 Non-magnetic wing cover with suction fasteners





- Suction fastener system: non-scratch, quick-to-install.
- Each suction fastener can support 3 kg.
- Suitable for use with sheet metal, aluminium and composite materials.
- Adapts to all vehicle types.
- Cut-out provided for wheels.
- Easy maintenance.
- Impact and scratch resistant.
- High quality finish.

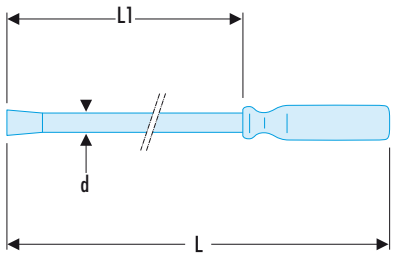
Weight: 480 g.

Pry bars

D.3 - Pry bars









- Numerous uses: suspension, gear train, bodywork, etc.
- Sturdy blade minimising lever spring effect.

	L [mm]	L1 [mm]	ΔΔ [kg]
D.3-7	292	165	0,275
D.3-12	422	305	0,345
D.3-18	635	460	0,810
D.3-24	787	610	1,030
D.3-30	915	740	1,710

D.3J3 Set of 3 pry bars



- Numerous uses: suspension, gear train, bodywork, etc.
- Sturdy blade minimising lever spring effect.
- Set comprising: D.3-7 - D.3-12 - D.3-18.
- Supplied in thermoformed tray.
- Dimensions (L. x W. x H.): 670 x 145 x 40 mm.

Weight: 1.648 kg.

Consigning kits

ELECTRIC VEHICLE: FACOM EXPERTISE

Facom, designer-manufacturer of 1,000 Volt tools

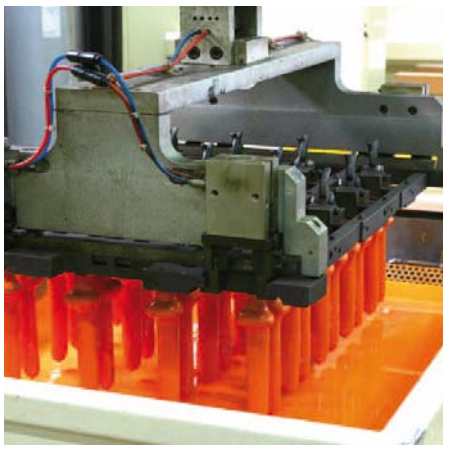
- Leveraging their expertise in designing and making professional tools, Facom offers a range of tools and equipment adapted to maintenance of electric-hybrid vehicles.

Facom's automotive know-how

- In France and globally, Facom is known for their in-depth knowledge of the specific requirements of automotive maintenance. Facom's know-how in 1,000 Volt tooling is the ideal partner for your “electric-hybrid” workshop.

Maintenance to be reinvented

- Design of vehicles, methods and requirements of maintenance of electric-hybrid vehicles clearly changes from habits taken in “combustion” engines. It is a whole new profession!



Safety and performance requirements.

- The particularities of electric-hybrid vehicles require specific tools and working in a 1,000 Volt environment requires observing particularly stringent safety measures.



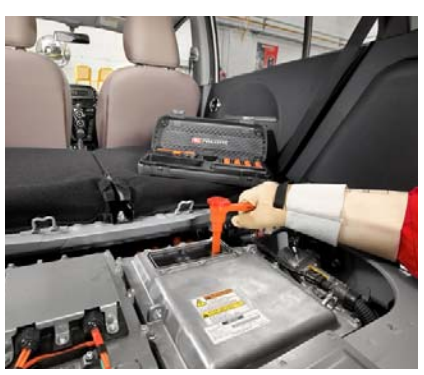
CM.HYELPB Toolkit for electric and hybrid vehicles



- A 3/8" 1,000 Volt insulated ratchet-socket case, comprising:
- 6 sockets: 8 - 10 - 11 - 12 - 13 - 14 mm.
- 1 3/8" insulated T handle.
- 2 insulated offset wrenches, dim. 10 - 12 mm.
- 1 1,000 Volt insulated screwdriver for 5.5 x 125 flat-head screws and one 1,000 Volt Phillips® 2 x 125 head screws.
- 1 pair of insulating gloves to EN 60903 and directive CE/89/686 category C, resistant to acid and ozone (size 10).
- 1 pair of protection overgloves conformant to directive CE/89/686 (size 10).
- 1 voltage absence tester conformant to NF EN 61010-600V cat 3 and IEC 61243-3 (VAT/DDT).
- 1 neutral phase marking, continuity test, 30 mA differential circuit breaker test. Phase rotation indication.
- Plastic case with padlock clasp (length: 650 mm).

CM.ELPSA Toolkit for PSA Ion and C-Zero vehicles





- Including:
- 1 1,000 Volt insulated 3/8" square drive socket.
- 4 1,000 Volt insulated sockets: 10 - 11 - 12 - 13 mm.
- 1 1,000 Volt insulated 3/8" extension.
- 1 1,000 Volt insulated open end wrench.
- 1 1,000 Volt insulated half-round pliers.
- Set suited to Peugeot iOn and Citroën C-zero vehicles.

Safe

CONTROLLED MAINTENANCE OF ELECTRIC-HYBRID VEHICLES

New technologies: precautions required

- Regulations define that a vehicle is considered as being electric when featuring an electric network of over 49 Vac and/or 120 Vdc, such as 100% electric and hybrid vehicles, and most vehicles featuring the “Stop and Start” system.

- The UTE C 18-550 standard governs the conditions of accreditation for intervention on electric-hybrid vehicles:
- Trained and accredited operators.
- Protection equipment.
- 1,000 Volt insulated tools to ensure safety.







BC.VSE - Insulated gloves





NF EN 60903, EN 60903, DIN EN 60903

- Natural latex gloves, AZM classification:
- Resistance to acid: A.
- Resistance to ozone: Z.
- High mechanical strength: M.
- Length: 360 mm.
- Supplied in anti-UV opaque bag.

Weight: 150 g

	Size [mm]	E [mm]	Class	Voltage\Volt
BC.80VSE	9 (B)	0,5	00	500
BC.81VSE	10 (C)	0,5	00	500
BC.90VSE	9 (B)	1,0	0	1000
BC.91VSE	10 (C)	1,0	0	1000

BC.VSE - Safety overgloves





NF EN 60903, EN 60903, DIN EN 60903

- Silicon coated leather gloves protecting from mechanical risks.
- Used to protect latex insulated gloves.
- Physical and mechanical grade as per standard EN 388: 2, 1, 2, 1.
- Abrasion: 2.
- Cuts: 1.
- Tears: 2.
- Perforation: 1.

	Size [mm]	⍙ [g]
BC.109VSE	9 (B)	160
BC.110VSE	10 (C)	160

Sign posts and chains

YOUR SAFETY: GLOVES AND OVERGLOVES

Insulated gloves must always be checked before use.
In case of any doubt, they should not be used.

Caution! always wear overgloves above insulated gloves.



EV.BAP Yellow and black marker posts



- Marker posts.
- Double hook for plastic chains.
- Height: 91 cm.

Weight: 4.400 kg.

EV.BAP-RN Red and white marker posts



- Marker posts.
- Double hook for plastic chains.
- Height: 91 cm.

Weight: 4.400 kg.

EV.CH Safety zone marker chain - black and yellow links



- Length: 25 m.
- Link diameter: 7.3 mm.

EV.CH-RN Safety zone marker chain - red and white links.



- Length: 25 m.
- Link diameter: 7.3 mm.

EV.PP Safety posters



- Warning post to be fitted to marker posts EV.BAP or EV.BAP-RN.
- Dimensions (L. x W.): 450 x 150 mm.

FUTURE EVOLUTIONS: CALL YOUR LOCAL DEALER

**Facom's offer for maintenance of electric and hybrid vehicles is evolving constantly.
Call your local Facom dealer for the latest developments.**

Consigning roller cabinet

EV.JET-KIT Roller cabinet kit for electric vehicle work





- 6-drawer roller cabinet: JET.6M3.
- Support for 6 marker posts.
- Length of yellow and black plastic chains: 25 m.
- 6 marker posts.
- 1 warning sign.

EV.JET-SUP Support for 6 posts



- Support for 6 post markers to be fastened onto the FACOM JET + roller cabinet.

Drain plug wrenches

D.48

OIL DRAINING
OIL DRAIN WRENCH AND MAGNETIC BITS

SIMPLE AND EFFECTIVE "CLEAN-HAND" OIL DRAIN

Hinged wrench
- Power position for easy unlocking.
- Driver position for pre-unlocking and fast removal.
- Spring-assisted joint for constant retaining load. No risk of slipping.



Saves time
- Magnetised drain plug bits avoid drain plugs from falling and being lost in oil collection tanks.
- The complete work support positionable on the arms of the oil collectors ensures all accessories are handy during oil change operations.



❶ **Drain plug unlocking** in power position.



❷ **Drain plug removal completed in driver position,** oil drops are stopped by the protection cup.



❸ **Drain plug dripping** above the oil collector.



❹ **Bit ejector:** easy bit changing even when covered in oil, just push the protection cup.

Handy
- Oil drain bits are removed easily with the 3/8" ejector drive.

Safer
- Cleaner
- Protection cup
- No contact of hands with hydrocarbons.
- Eliminates risks of burns.
- Reduces wiping paper consumption in the workshop.



Video demonstration on your smartphone

Drain kit
Including:
- Drain plug wrench D.48.
- 15 magnetic bits.
- General-purpose support tray.



General-purpose work support
- Support for storing all drain sockets and bits with the wrench.
- Easy fastening on oil collection containers or just laid on a worktop.



Fittings magnetic





Square bits:
8 and 10 mm.



6-point bits:
8, 10, 12, 13, 14 and 17 mm.



6-point sockets:
13, 14, 17, 18, 19 and 21 mm.



Torx®: T45

D.48-KIT Oil change kit



- Including:
- 1 drain wrench: D.48.
- Magnetic male square bits: 8 - 10 mm.
- Magnetic female 6-point bits: 8 - 10 - 12 - 13 - 14 - 17 mm.
- Magnetic female 6-point sockets: 13 - 14 - 17 - 18 - 19 - 21 mm.
- Magnetic Torx® 45 bits.
- Support for wrench D.48 and bits.

D.48 Hinged oil drain wrench



- Oil drain wrench.
- 3/8" drive.
- Length: 280 mm.

Weight: 440 g.

- Oil drip cup: D.48-RC.
- Magnetic oil drain support and bits: PL.IH.

Magnetic oil drain plug bits and sockets

MB-J15 Set of magnetic oil drain bits and sockets on rack

- Prevents drain plugs from falling in oil trays and collectors.
- Including:
- Magnetic drain plug bits: MB.S08 - MB.S10 - MB.H08 - MB.H10 - MB.H12 - MB.H13 - MB.H14 - MB.H17 - MB.T45.
- Magnetic drain plug sockets: MB.13 - MB.14 - MB.17 - MB.18 - MB.19 - MB.21.



MAGNETIC OIL-DRAIN PLUG APPLICATION LIST

															
	MB.13	MB.14	MB.17	MB.18	MB.19	MB.21	MB.T45	MB.S08	MB.S10	MB.MH08	MB.MH10	MB.MH12	MB.MH13	MB.MH14	MB.MH17
PSA	•	•			•	•		•		•					
Renault	•	•	•		•	•		•	•	•					
Dacia								•							
VAG	•		•	•	•						•	•	•		•
Mercedes	•	•					•	•		•					•
MCC	•														
BMW			•							•					
Opel	•	•	•		•		•	•				•		•	
Mini	•	•								•					
Jaguar	•				•			•							
Rover			•		•	•									
Austin															
Land Rover						•									
Fiat	•		•	•	•		•			•	•	•			
Alfa Roméo		•	•	•						•		•	•		
Lancia				•	•					•	•	•			
Toyota	•	•				•		•		•					
Lexus		•													
Nissan	•	•	•		•	•		•		•					
Honda	•		•	•		•									
Suzuki	•		•		•								•		
Mitsubishi	•		•					•							
Kia			•		•										
Daewoo			•		•										
Hyundai			•					•							
Daihatsu		•													
Mazda	•		•		•			•							
Subaru			•			•									•
Ford	•		•		•	•		•	•	•	•	•		•	
Chevrolet			•												
Jeep	•														
Chrysler	•		•		•					•					
Volvo	•		•		•	•		•		•					
Saab	•				•										
Lada			•									•			

3/8" 6-point magnetic oil-drain sockets



- Prevents drain plugs from falling in oil trays and collectors.
- 3/8" drive bit.
- 6-point socket.

	[mm]
MB.13	13
MB.14	14
MB.17	17
MB.18	18
MB.19	19
MB.21	21

MB.T45 3/8" Torx® magnetic oil-drain key



- Prevents drain plugs from falling in oil trays and collectors.
- 3/8" drive bit.
- Torx® 45.

3/8" magnetic oil-drain key



- Prevents drain plugs from falling in oil trays and collectors.
- 3/8" drive bit.

MB.S08
MB.S10

3/8" magnetic oil-drain male hex bits



- Prevents drain plugs from falling in oil trays and collectors.
- 3/8" drive bit.

MB.H08
MB.H10
MB.H12
MB.H13
MB.H14
MB.H17

Gearbox and differential drain plug bits

D.106-10 3/8" oil-drain female square bit 10 mm.



- 3/8" square drive bit.
- Square: 10 mm.

Weight: 40 g.

D.109-10 3/8" drain plug bit with male triangle



- 3/8" square drive bit.
- Square: 10 mm.

Weight: 40 g.

D.120-16 Drain plug bit with XZN pattern



- XZN pattern: diam. 16 mm.
- Drive 3/8".
- V.A.G. gearbox

Weight: 40 g.

D.13A Drain plug wrench for CITROËN, RENAULT, PEUGEOT engine



- Square bit: 8 x 10 mm.
- Length: 230 mm.
- Finish: chromed.

Weight: 230 g.

P.27B Drain plug wrench for CITROËN, PEUGEOT engine



- Male square: 10 mm.

Weight: 270 g.

F.63C Engine, gearbox and differential drain plug wrench



- For auto makers: ALFA ROMEO, FIAT, LANCIA.
- Male hex: 12 mm.

Weight: 280 g.

T.273 Gearbox and differential drain plug wrench



- For auto makers: RENAULT, VOLVO.
- Male square: 8 mm.
- Female square: 10 mm.
- Length: 260 mm.

Weight: 340 g.

Oil-filter wrenches

A SOLUTION FOR EACH TYPE OF FILTER

Cartridge filter:
- To remove cartridge filters, when space allows, strap wrenches are the easiest and fastest to use.
- When space is critical, use automatic or adjustable wrenches.



Removable filters with a composite bell - 6 point drive:
- To remove the bell, use a D.163-“size of 6-point” socket.
- With their specific design, sockets for composite oil filter bells allow to work in the most crowded environments, while preserving the composite bell from any damage.



Removable filters with a composite bell - other drives:
- To remove these oil filter bells, always use an adjustable wrench of the DE or DP series.
- Their specifications and rigidity eliminate any risks of breakage of the composite bell.
- Determine the reference of the adjustable wrench with the oil filter dimensions:
  - DE for notched filters, DP for pointed filters.
  - The first group of numbers is the filter diameter.
  - The second group of numbers is the number of points or notches.

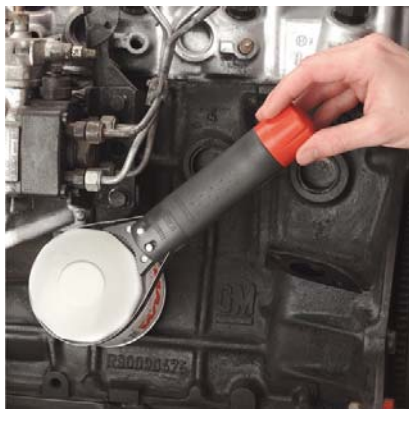
Example: DP.88-16 - adjustable wrench 88 mm, 16-point.

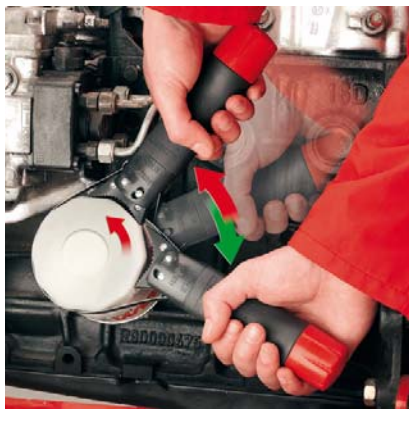




U.46ACL Fast oil-filter wrench







- Fast oil-filter wrench for cars.
- Max length: 290 mm (for filters diam.: 66 --> 106 mm).
- Ratchet effect increment: 5°.
- Spare strap U.46ACL06 for oil filter wrench.

Weight: 345 g.

U.48 | AUTOMATIC OIL-FILTER WRENCH

SAVES TIME: AUTOMATIC, RATCHET EFFECT

No adjustment.

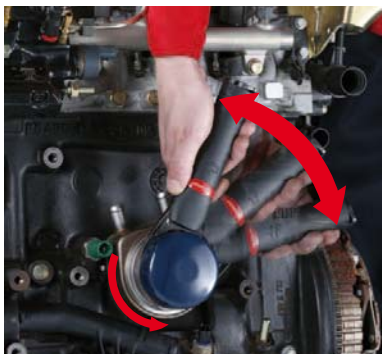
- Fits diameters 66 to 105 mm.
- Strap torque control for optimum ratchet effect.
- Universal torquing force regardless of the size of the filter.
- Available for HGV for 106 to 150 mm filters.



Set



Position and release



Ratchet effect ensures quick tightening and loosening



U.48 Automatic oil-filter wrench for cars



- For cars.
- For filters diam.: 66 --> 105 mm.
- Ratchet effect increment: 5°.
- Optimised automatic tightening.
- Spare strap U.48-2 for oil filter wrench.

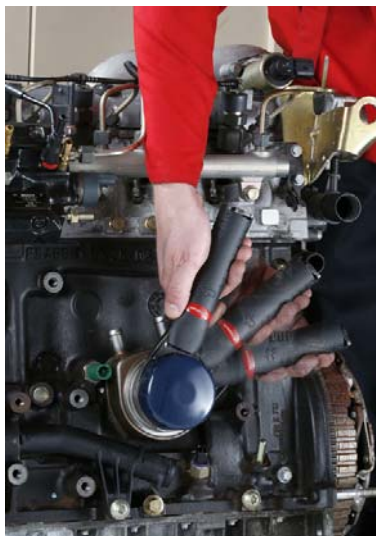
Weight: 285 g.

U.48PL Automatic oil-filter wrench for HGV's



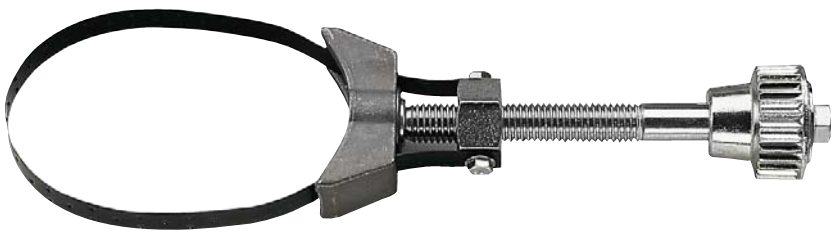
- For HGV's and farming vehicles.
- For filters diam.: 106 --> 145 mm.
- Ratchet effect increment: 5°.
- Optimised automatic tightening.
- Spare strap U.48-PL2 for oil filter wrench.

Weight: 290 g.





U.46 Adjustable oil-filter wrench for cars



- Automatic oil filter wrench for cars.
- Max length: 260 mm (for filters diam.: 65 --> 105 mm).
- Spare strap U.46-2A for oil filter wrench.

Weight: 310 g.

U.46PL Adjustable oil-filter wrench for HGV's



- Automatic oil filter wrench for HGV's and farming vehicles.
- For filters diam.: 105 --> 145 mm.
- Max length: 300 mm.
- Spare strap U.46APL2 for oil filter wrench.

Weight: 350 g.

D.149 Chain wrench



- To remove oil filters when access is not possible with an oil-filter wrench.
- 1/2" drive bit.
- For oil filters: 50 --> 110 mm.

Weight: 280 g.

D.151A Self-gripping oil-filter wrench for cars





- For cars.
- 3/8" drive bit.
- For oil filters: 65 --> 120 mm.

Weight: 580 g.

D.151PL Self-gripping oil-filter wrench for HGV's





- For HGV's and farming vehicles.
- 1/2" drive bit.
- For oil filters diam.: 95 --> 165 mm.

Weight: 1.345 kg.

D.163 Cap wrench





- For MANN and KNECHT filters.
- Hexagonal - 3/8" - 19 mm drive.

Weight: 110 g.

Cap wrenches and sockets

Cap wrenches with flats



- To be used when a strap wrench cannot be used.
- 3/8" square drive.

	Filter [mm]	⚖ [g]
D.139	14-point Ø 65.0	135
D.140	14-point Ø 74.0	160
D.141	15-point Ø 92.0	205
D.159	14-point Ø 66.5	140
D.160	15-point Ø 74.0	160
D.161	15-point Ø 79.0	175
D.162	15-point Ø 89.0	200
D.164	8-point Ø 74.0	150

Notched cap wrenches





- To be used when a strap wrench cannot be used.
- 3/8" square drive.

	Filter [mm]	Notches	⚖ [g]
D.154	Ø 66	6	200
D.155	Ø 76	12	225
D.156	Ø 86	18	268
D.157	Ø 96	18	295

D.163-J6 Set of 6 composite cap wrenches





- Including:
- Cap wrenches: D.163-24 - D.163-27 - D.163-30 - D.163-32 - D.163-36 - D.163-38.
- Module PL.472.
- Plastic case BP.102.

Composite cap wrench sockets





- Smaller shape and volume for better accessibility.
- 6-point profile for removal without damaging composite oil filter plugs.
- 3/8" drive.

	d [mm]
D.163-24	24
D.163-27	27
D.163-30	30
D.163-32	32
D.163-36	36
D.163-38	38

Composite cap wrenches with flats

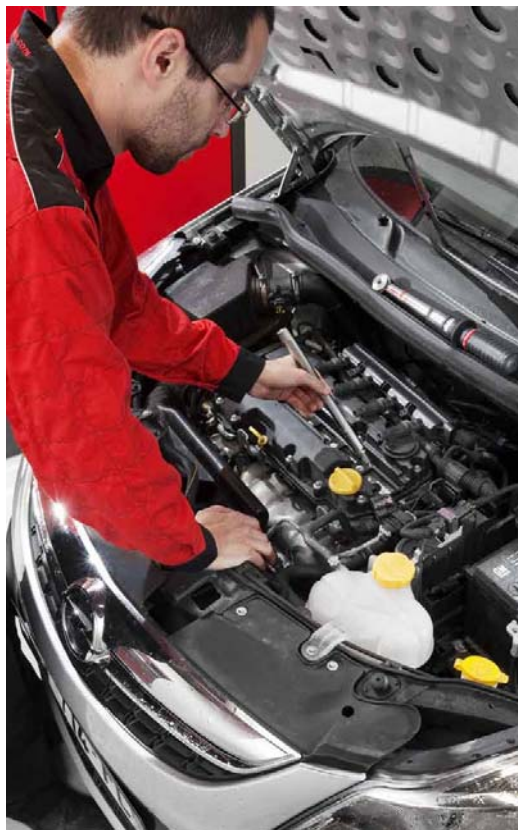


- Special cap wrench to fit and remove composite notched oil filter plugs without damaging them.

	Filter [mm]
DE.66-18	Ø 66
DE.96-18	Ø 99
DP.75-16	16-point Ø 75
DP.76-14	14-point Ø 76
DP.88-16	16-point Ø 88
DP.102-14	14-point Ø 102

SPARK PLUG WRENCH SELECTION GUIDE
AND RECOMMENDED TORQUES

FACOM SPARK PLUGS COMPLY WITH THE ISO 11168 STANDARD



This standard guarantees

- Sufficient play to enable the plug to engage in the cylinder head without risk of cross-threading.
- The spark plug's angle of freedom must also be limited to avoid damaging the insulation.

A range for each application.

- 3/8" socket: the most compact sockets. Most comprehensive range, 14 mm multi-point spark plug sockets are available only in this range.
- 1/2" sockets: most widely-used range, but not suited to modern multivalve engines.



- Hinged wrenches: ideal for congested spaces. Use for high productivity. To be used when engine layout prevents the use of a torque wrench.



- Box wrenches: compact and lightweight, particularly suited to tool bags.



TORQUE TIGHTENING OF SPARK PLUGS

- **Cylinder heads are made of aluminium alloy. The cylinder heads of modern engines are subjected to increasingly high stresses. Reduction of thread diameters. Therefore, spark plugs must always be torqued. The J.208-50 torque wrench is ideal for tightening spark plugs.**



	Flat seating (with seals)			Conical seating	
Thread diameter (mm)	18	14	12	18	14
Cast-iron cylinder head (Nm)	35-45	25-35	15-25	20-30	15-25
Aluminium cylinder head (Nm)	35-40	25-30	15-20	20-30	10-20

- **Values indicated for information only, always refer to manufacturer values.**

Petrol spark plug wrenches

3/8" square drive sockets

3/8" square drive sockets for 14 mm bi-hexagonal spark plugs







- Slim profile sockets (for spark plugs): 14 mm.
- Fitted with spark plug retainer.
- For new Renault and Peugeot engines.
- 3/8" drive.

	l [mm]	⚖ [g]
B.J14BH1	90	90
B.J14BH2	250	245

3/8" square drive sockets for 16, 18 and 21 mm spark plugs



NF ISO 11168, ISO 11168

- Sockets with spark plug retainer.

	d [mm]	l [mm]	⚖ [g]
B.J16A1	16,0	90	130
B.J16A2	16,0	250	350
B.J18A1	18,0	90	190
B.J21A1	20,8	90	200
B.J21A2	20,8	250	650

1/2" square drive sockets

1/2" square drive sockets for 16, 18 and 21 mm spark plugs





NF ISO 11168, ISO 11168

- Slim profile sockets (for spark plugs): 16 - 18 - 21 mm.
- Fitted with spark plug retainer.
- For new Renault and Peugeot engines.
- 3/8" drive.

	l [mm]	⚖ [g]
B.S16A1	90	130
B.S16A2	250	350
B.S18A1	90	190
B.S21A1	90	200
B.S21A2	250	650

Hinged wrenches

B.J - 3/8" square drive hinged sockets for 16, 18, 19 and 21 mm spark plugs



- Sockets with spark plug retainer.

	E [mm]	l [mm]	[g]
B.J16R1A	90	385	175
B.J16R2A	170	465	825
B.J18R1A	90	385	760
B.J19R1A	90	385	760
B.J21R1A	90	385	785
B.J21R2A	170	465	1000

Box wrenches for spark plugs

Box wrenches for 16 and 21 mm spark plugs



NF ISO 11168, ISO 11168

- Models L and M feature spark plug retainers.
- Removable tee-bar gives working angle at 90°.
- Tee-bar storage within wrench body.

	d [mm]	l [mm]	[g]
L.16AC	22,0	90	160
L.16AM	22,0	160	235
L.16AL	22,0	300	395
L.21C	26,0	90	180
L.21M	26,0	160	280
L.21L	27,5	300	460

Spark plug lead pliers

DM.28 Spark plug lead pliers



- For disconnecting spark plug without harming leads.
- No damage to connectors.
- Dimensions (L. x W. x H.): 198 x 30 x 55 mm.

Weight: 210 g.

Feeler gauges

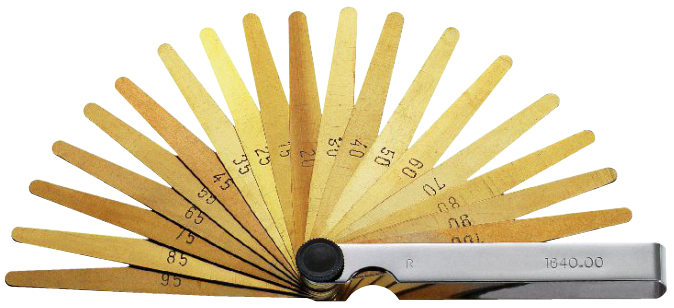
804 Round tip metric thickness gauges



- Set of 19 feeler gauges (round tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

Weight: 60 g.

804.AM Anti-magnetic metric thickness gauges



- Set of 19 feeler gauges (tapered tip): 10/100 --> 100/100 mm.
- Blade length: 100 mm.
- Brass blades.

804.P Sharp tip metric thickness gauges



- Set of 19 feeler gauges (tapered tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

804.U Inch thickness gauges



- Set of 26 feeler gauges (tapered tip): 15/10000 --> 250/10000 inches.
- Blade length: 3"1/2 (88.9 mm).

804.L Long metric thickness gauges



- Set of 19 feeler gauges (round tip): 4/100 --> 25/100 mm.
- Blade length: 150 mm.

Petrol and glow plug wrenches

Spark plug accessories

DM.20 Flexible spark-plug fitter



- Helps engaging a spark plug thread in any location.
- For all types of spark plug.
- Length: 316 mm.

Weight: 50 g.

Diesel glow plug wrenches

Glow plug accessories

D.110 Spark plug fitter



- Helps engage a spark plug thread in any location, regardless of the screw head.
- Square drive: 6 --> 11 mm.
- Length: 305 mm.

Weight: 55 g.

Diesel glow plug testing

Spark plug files

276 Contact file



- Thickness: 1 mm.
- Length: 130 mm.

Weight: 10 g.

Glow plug sets

MOD.BJ-GM Complete spark plug module



- Fitting and removal of spark plugs: 14 - 16 - 21 mm; and glow plugs: 8 - 9 - 10 - 12 mm.
- Comprising:

- B.J14BH 1 - 2 / B.J16A 1 - 2 / B.J21A1: Spark-plug sockets.
- B.10R8L - B.10R9L: Hinged glow plug wrenches.
- B.10R10A - B.10R12AL: Hinged glow plug wrenches.
- J.161: Ratchet.
- D.110: Fitter.
- Thermoformed module PL661A (value 2 modules).

Weight: 2.160 kg.

MOD.BJC Spark plug service module



- Including:

- B.J14BH1 - B.J14BH2 - B.J16A1 - B.J16A2 - B.J18A1 - B.J21A1: Spark-plug sockets.
- DM0.20: Flexible spark-plug fitter.
- Thermoformed module PL669A.

Weight: 1.485 kg.

MOD.BSB Spark plug service module



- Including:

- B.S16A1 - B.S16A2 - B.S18A1 - B.S21A1: 1/2" spark plug socket.
- DM0.20: Flexible spark-plug fitter.
- Thermoformed module PL668A.

Weight: 1.200 kg.

MOD.BRA Glow plug module



- Indispensable to intervene on glow plugs in modern diesel vehicles.
- Comprising:

- D.110: Fitter.
- B.10R8L - B.10R9L: Hinged glow plug wrenches.
- B.10R10A - B.10R12AL: Hinged glow plug wrenches.
- D.133A6: Flexible screwdriver 6 mm.
- Thermoformed module PL667.

Weight: 910 g.

Glow plug wrenches

3/8" square drive hinged wrenches for glow plugs



- Flexible spark plug fitter.
- Universal joint with friction springs for reaching socket angle required.
- Drive bit 3/8".
- Finish: polished chromed.

	d [mm]	l [mm]	⚖ [g]
B.10R8L	12,0	175	120
B.10R9L	13,0	177	125
B.10R10A	14,5	161	110
B.10R12B	17,0	155	125
B.10R12AL	17,0	178	150

3/8" square drive sockets for glow plugs



- Fitted with spark plug retainer.
- 3/8" square drive, diam. 17 mm (Ref B.12-1) and 15 mm (Ref B.10-1).

	l [mm]	⚖ [g]
B.10-1	70	70
B.12-1	70	80

Testers and multimeters

714 A | AUTOMOTIVE MULTIMETER

In automotive electricity, the multimeter is the indispensable complement to “diagnostic cases”.
In addition to typical measurement functions: Voltmeter, Ammeter, Ohmmeter, specialised functions have been added for checking vehicles:

Cyclic ratio:
- Test EGR valves, petrol injectors, turbocharger wastegates.

Measures internal resistance of batteries.
- Detect battery faults causing voltage fluctuations. In certain vehicles, these fluctuations cause malfunction in electronic equipment.

Large-size bargraph
- for Lambda probe test.

Tachometer and cam angle functions to tune older vehicles with non-electronic ignition systems.
The 714A is class III 600V, for work on voltages of hybrid and electric vehicles. (Within currently enforced procedures and regulations).





714A Automotive multimeter



- Measures internal resistance of batteries.
- Automatic calibre.
- Voltmeter: AC / DC 0 --> 600 V.
- Ammeter: AC / DC 0 --> 400 mA.
- Ohmmeter: 0 O --> 40 MO.
- Continuity and LED test.
- Temperature measurement.
- Cyclic ratio: 5% --> 99% .
- Cam angle.
- Tachometer.
- Frequency meter: 1 Hz --> 400 KHz.
- Compatible with clip-on ammeter Ref 711A.P500.

AUTOMOTIVE MULTIMETER

The entire multimeter program is shown in the Electricity section. See p. 788.

DX.T100 Infrared thermometer





- Provides non contact infrared temperature measurement with laser guide or by contact with K thermocouple (not supplied).
- Infrared: measurement -60°c --> +500°C.
- D/S ratio (distance/surface): 11/1.
- Emissivity: adjustable.
- Mode: Min Max Differential, instant.
- Thermocouple measurement performance change according to the K probe.

THERMOMETERS

Accessories for DX.T100 are shown in electricity section. p. 789

700 Continuity tester





- Checks earth and lead continuity when inspecting and testing electrical circuits.
- Features two indicator lights.
- Cable length: 300 mm.

Weight: 105 g.

705 Automotive voltage tester



- Filter diameter: 3 to 48 V.
- LED + or - polarity indicator.
- Complete with prodding probe, cable probe for testing insulated leads, and alligator clip.
- Dimensions (L. x W. x H.): 135 x 21 x 18 mm.

Weight: 55 g.

Battery charger

BATTERY CHARGERS

USE "NEW GENERATION" CHARGERS



BC128A

"Anti PeakTechnology"



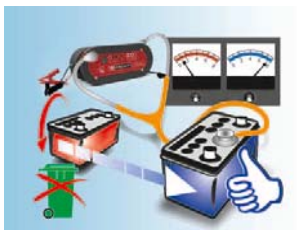
Standardisation of electronic equipment in vehicles requires the use of chargers which protect the battery and electronic equipment of vehicles. With a FACOM **charger compliant with DIN 40839,** work safely and recharge **batteries without disconnecting them from the vehicle**. No risk, even when reversing polarity.

"Automatic Adaptative Charge"



The charger adapts the charging strategy permanently to the battery. Smart charging offers the following benefits:
- Safe fast charging.
- Charging secured for the battery and vehicle electronics.
- Charges batteries at 100 % capacity.
- Recharges severely discharged batteries.

"Tester Inside"



Don't waste time: tester built into FACOM chargers = no more useless charging. If the battery is definitely out of service, the charger tells you when connecting to the battery.
An additional test cycle is run at the end of each charge. This test reduces **after-sales return**.
With **high frequency regeneration** before charging, battery plate sulphatation is reduced as the battery is in the best possible condition to be charged.

"Regeneration"



BOOST mode: if the battery is highly discharged or was not used for a long period, the BOOST mode can save "borderline" batteries.
Regeneration mode: at the start of each charge, a sulphate elimination cycle is applied to the battery elements to prepare it to receive the charge.

SAFETY

Due to potential overheating or even fire, standard chargers are not suited to GEL, VRA and AGM batteries fitted since approximatley 2002.





BC124A 12 Volt battery charger for motorbikes and cars



- Automatic.
- Compatible with all "lead acid" batteries: VLRA, GEL, AGM, CALCIUM, liquid.
- "Motorbike" mode for charging small batteries.
- "Cold" mode for charging AGM and UCRA batteries.
- Can be used as maintaining charger.
- For batteries 12 V, 3 Ah to 80 Ah.
- Power supply: 220 V, 50 - 60 Hz.
- Supplied with alligator clips, a cigar lighter connector and terminal connection kit.

BC128A 12 Volt battery charger for HGV's and utility vehicles



- Automatic.
- Compatible with all "lead acid" batteries: VLRA, GEL, AGM, CALCIUM, Liquid.
- "Power supply" mode to supply and save memory when changing a battery.
- "Cold" mode for charging AGM and UCRA batteries.
- Can be used as maintaining charger.
- "BOOST" mode to save limit batteries.
- For batteries 12 V, 20 Ah to 160 Ah.
- Power supply: 50 - 60 Hz.
- Supplied with alligator clips, a cigar lighter connector and terminal connection kit.

BC2430A 12 - 24 volt battery charger for HGV's, CGV's, LGV's, farm equipment



- Compatible with all "lead acid" batteries: VLRA, GEL, AGM, CALCIUM, Liquid.
- "Standard" mode for humid battery.
- "Power supply" mode to supply and save memory when changing a battery.
- "Dry" mode for charging AGM, GEL and VLRA batteries.
- Can be used as maintaining charger.
- "BOOST" mode to save limit batteries.
- Automatic charge compensation according to the temperature around the battery.
- Automatic 12 - 24 V switching.
- For batteries 12 V and 24 V, 90 Ah to 600 Ah batteries.
- Power supply: 200 V, 50 - 60 Hz.
- Supplied with alligator clips.

Battery tools

DX.11 Memory protector





- Saves configuration and stored data of vehicle accessories when battery is changed or power is temporarily interrupted.
- Diodes for checking correct battery connection.
- All makes.
- Power supplied: by 12 and 24 V external battery.

Weight: 180 g.

12V surge limiter



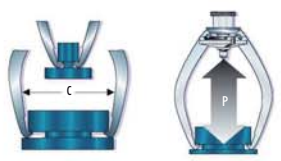


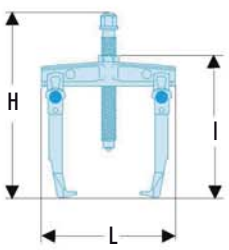
- For 12 V vehicles.
- Protects electronic components in the vehicle.
- Cable length: 300 mm.

	⚖ [g]
DX.8-12	140

Lug disconnecter









- Spring loaded, self-gripping 2-leg puller.

Example of use = battery lugs.
Weight: 400 g.

	C mini - maxi [mm]	L x l x H [mm]	Screw Size[mm]	Ton [t]	P maxi [mm]	Screw Size	T [kN]	⚖ [g]
U.14A	10 - 35	60 x 75 x 125	Spindle	0,5	40	U.14A04	5	340

781 Reamer



- For cleaning contact surfaces on battery lugs and terminals.
- Dimensions (L. x W. x H.): 26 x 92 x 130 mm.

Weight: 230 g.

785 Battery filler



- Acid, oil and solvent resistant plastic.
- Length: 260 mm.
- Diameter: 70 mm.

Weight: 85 g.

784B Acid hydrometer



- For checking specific gravity of battery fluid.
- Diameter: 42 --> 350 mm.

Weight: 100 g.

780A Refractometer







- Two quality control measuring cycles:
- Coolant: 0 to -50°C (graduations 5°C).
- Battery fluid density: 1.10 to 1.40 kg / l.
- Simple screw recalibration using distilled water.
- Supplied in a case with a sampling pipette and screwdriver.
- Dimensions (L. x W. x H.): 700 x 235 x 70 mm.

Weight: 550 g.

Fuses and connectors

449.Z1B Auto electricians kit



- For routine automotive electrical servicing and repair tasks: installation of accessories, car radios, trailer socket connections, fuse replacement etc.
- Contains:

- The 12 most commonly used terminals for automotive applications (210 terminals).
- 20x 5 dia. ring terminals for 0.5to 1.5 mm².
- 20x 4 dia. spade terminals for 0.5 to 1.5 mm².
- 20x 5 dia. ring terminals for 1.5 to 2.5 mm².
- 15x 6 dia. ring terminals for 1.5 to 2.5 mm².
- 20x 4 dia. spade terminals for 1.5 to 2.5 mm².
- 20x 6.3 mm dia. quick disconnects for 1.5 to 2.5 mm².
- 15x 6.3 mm dia. combined quick disconnects for 1.5 to 2.5 mm².
- 20x 6.3 mm dia. tab terminals for 1.5 to 2.5 mm².
- 15x 8 dia. ring terminals for 3 to 6 mm².
- 15 cable couplers for 0.5 to 1.5 mm².
- 15 cable couplers for 1.5 to 2.5 mm².
- 15 cable couplers for 3 to 6 mm².
- 1 set of 20 fuses with extractor (5A to 30 A).
- 1 fuse holder (for 5A to 30 A fuses).
- 5 quick splice terminals for 0.5 to 1.5 mm².
- 5 quick splice terminals for 1.5 to 3.5 mm².
- 1 power fuse remover DX.9 (for 40A to 80A fuses) Ref DX.9: for easy replacement or removal of power fuses (e.g. for removing the fuse when working on airbags).
- 1 pair of multi-purpose pliers 449l: for cutting wire from 0.5 to 6 mm² crimping colour-coded non-insulated terminals, cutting threaded rods from M 2.6 to M5, crimping non-insulated terminals, stripping.

- Supplied in a case.
- Dimensions (L. x W. x H.): 350 x 300 x 60 mm.

Weight: 1.350 kg.

985894 Maintenance crimping pliers for pre-insulated terminals







CEI60352-2, CEI 60760

- Double crimping for pre-insulated terminals in compliance with the standard, with holding on the conductor core and the insulator.
- Unlocking accessible at all times.
- Reversed crimping: terminal positioned on the fixed part for more effectiveness and precision.
- Stainless steel die with 3 cavities:

- Red cavity: 0.5 --> 1.5 mm².
- Blue cavity: 1.5 --> 2.5 mm².
- Yellow cavity: 4 --> 6 mm².

- Shape allowing hand setting.
- Soft touch.
- Length: 230 mm.

Weight: 490 g.

Car radio

DX.25 20-piece car radio removal tool set



- 20 special tools for the main makers of car radio (Alpine, Blaupunkt, Becker, Grundig, JVC, Pioneer, VDO).
- Multi-make: BMW, Fiat, Ford, Mercedes, Opel, PSA, Renault, VAG.
- Supplied in a plastic pouch showing applications.



Pressure testing

911 AND 912 | COMPRESSION GAUGES

Compression testing is a pre-requisite for good engine diagnosis.
Whatever the age of the vehicle, the engine cannot run at maximum efficiency if the compression is wrongly adjusted.
Electronic engine control and its self-diagnosis system will behave erratically if engine compressions are bad.
More than ever, compression testing is the pre-requisite for good engine diagnosis.



Test sheet:

- Compression readings are printed on a ticket allowing simple and immediate comparison of all engine cylinders.
  This ticket is also used for diagnostics or return under guarantee.

Range of adaptors:

- FACOM offer a range of dummy spark plugs and dummy injectors for precise coverage of most vehicles. All these adaptors are fitted with check valves close to the engine combustion chamber and guarantee accurate measurements.



912 Petrol engine compression tester





- Test cards up to 12 cylinders.
- Integral starter-motor control.
- Working range 3 to 18 bars.
- Including:

- 912-01-02: Hose for 911 and 912.
- 912TN: Bare compression tester.
- 912-12: Dummy petrol spark plugs 12 mm.
- 912-14: Dummy petrol spark plugs 14 mm.
- 912A.FC: Set of 100 test cards.
- 911B.016: Starter-motor control lead.

- Dimensions (L. x W. x H.): 430 x 340 x 85 mm.

Weight: 2 kg.

911 Diesel engine compression tester





- Test cards up to 12 cylinders.
- Integral starter-motor control.
- Suitable for all types of diesel engine: using dummy injectors and dummy heater plugs.
- Working range 5 to 60 bars.
- Including:

- 912-01-02: Hose for 911 and 912.
- 911TN: Bare diesel compression tester.
- 911-82 - 911-102 - 911-104 - 911-105 - 911-B2 - 911-B5 - 911-B8 - 911-V4 - 911-V5 - 911-V10: Diesel dummy glow plug.
- 911.C90: Angle adaptor.
- 911B.FC: Pack of 100 test cards.
- 911B.016: Starter-motor control lead.

- Dimensions (L. x W. x H.): 430 x 340 x 85 mm.

Weight: 2 kg.

912A.FC Set of 100 test cards for petrol engine

- Accessory for petrol engine compression tester.

912-12 Flexible dummy spark plug 12 mm



- Accessory for petrol engine compression tester.
- Flexible dummy spark plug 12 mm (spark plug size 14 mm).

912-14 Flexible dummy spark plug 14 mm



- Accessory for petrol engine compression tester.
- Flexible dummy spark plug 14 mm (spark plug size 16 mm).

912-18 Flexible dummy spark plug 18 mm



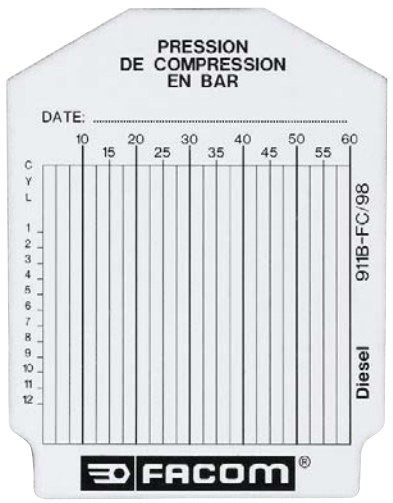
- Accessory for petrol engine compression tester.
- Flexible dummy spark plug 18 mm (spark plug size 18 and 21 mm).

911-C90 Angle adaptor



- Accessory for diesel engine compression tester.

911B.FC Set of 100 test cards for diesel engine



- Accessory for diesel engine compression tester.

912-01-02 Flexible fitting



- Accessory for petrol and diesel engine compression tester.
- Converts all older generations of 911 and 912 to make them compatible with the current "dummy spark plugs" and "dummy injectors" program.

911-VA Non-return valves



- Accessory for petrol and diesel engine compression tester.
- Compatible with all petrol and diesel dummy spark plugs and all dummy injectors.

911B.016 Starter cable

- Accessory for petrol and diesel engine compression tester.
- Drives the engine using the starter with ignition off.

911 | APPLICATIONS GUIDE
DUMMY SPARK PLUGS - DUMMY INJECTORS

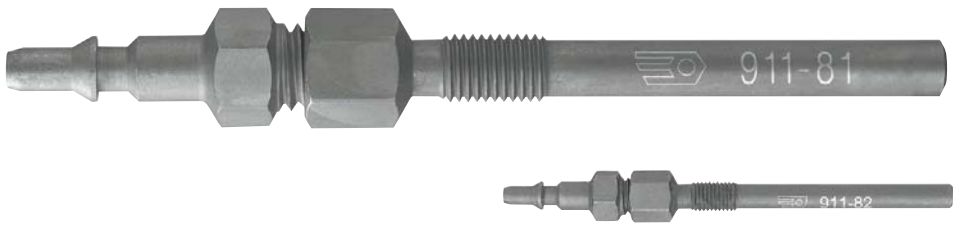




	911-XXX																
	PSA	RENAULT DACIA	VAG	FORD	FIAT	OPEL VAUXHALL	BMW MINI	MERCEDES	VOLVO	ROVER	NISSAN	TOYOTA	HONDA	MAZDA	MITSUBISHI	SUZUKI	CHRYSLER
1,3D			911-V4														
1,3CDTI/ JTD/ MULTIJET				911-81	911-81	911-81											
1,4D/TD			911-V4							911-V10							
1,4TDI/ TDCI/ HDI	911-82		911-102	911-182								911-82					
1,5D/TD/ DCI	911-102	911-102	911-V5			911-107		911-105			911-102					911-102	
1,6D/TD			911-V5				911-82										
1,6TDCI/ HDI/CDI	911-B8			911-B8													
1,7D/TD					911-V5	911-V5 / 911-V10 911-107								911-107			
1,7DTI/ CDTI						911-110											
1,8D/TD			911-V5	911-V5			911-105			911-V5 / 911-V10			911-V10	911-V5			
1,9D	911-V4	911-V10			911-V5											911-V5	
1,9D 64			911-V5														
1,9TD	911-V10	911-V10			911-V5 911-V10				911-V5						911-V10		
1,9TDI 75/SDI			911-V5														
1,9TDI/ DTI		911-B2	911-102	911-102													
1,9DCI/ TDCI/ CDTI/ JTD		911-B5		911-102	911-B3	911-B3											
2,0D/TD				911-106	911-V5						911-V5			911-V10			
2,0TDI 105/ DCI/DTI/ TDCI		911-106	911-102	911-B8		911-105											
2,0HDI	911-104 911-B5															911-104 911-B5	
2,0HDI 136/138/ JTD/CDI	911-B8				911-104			911-105									
2,1TD	911-V10				911-V10												
2,2DT		911-V10															
2,2HDI/ CDI/DTI/ TDCI/ DCI	911-104 / 911-B8	911-105		911-106		911-105		911-105									
2,3D/TD						911-V5 / 911-V10											
2,4D/TD			911-V5		911-V5												
2,4JTD/ D5					911-91				911-82								
2,5D				911-B5 / 911-B1					911-102								
2,5TD/ TDI			911-104	911-V10						911-102							911-102
2,7TD/ HDI/CDI	911-B8							911-105			911-107						
3,0D/ CDTI						911-110	911-102										
3,5D							911-102										

High-pressure dummy glow plugs

Diesel dummy glow plugs 8 mm



- For testing diesel engine compression.
- For use with FACOM 911 reader.
- Fitted with a non-return valve.

911-81
911-82

911-91 Diesel dummy glow plugs 9 mm



- For testing diesel engine compression.
- For use with FACOM 911 reader.
- Fitted with a non-return valve.

Diesel dummy glow plugs 10 mm



- For testing diesel engine compression.
- For use with FACOM 911 reader.
- Fitted with a non-return valve.

911-102
911-104
911-105
911-106
911-107
911-110

High-pressure dummy injectors

Dummy injectors



- For testing diesel engine compression.
- For use with FACOM 911 reader.
- Fitted with a non-return valve.

911-B2
911-B5
911-B8

Screw-on dummy injectors



- For testing diesel engine compression.
- For use with FACOM 911 reader.
- Fitted with a non-return valve.

911-V4
911-V5
911-V10

Inlet and turbo pressure

DA.160 Manual pressure/vacuum pump



- Manual pressure/vacuum pump.
- To test air actuators such as EGR valves, turbo wastegate valves, boost inlet pressure measurement, pressure sensors, etc.
- Allows to bleed small hydraulic circuits, prime fuel circuits.



Oil pressure

914 Oil pressure tester



- Quick coupler.
- Range: 0 to 8 bar.
- Supplied in case complete with adaptors, seals and fittings.
- Dimensions (L. x W. x H.): 360 x 340 x 125 mm.

Weight: 2.13 kg.

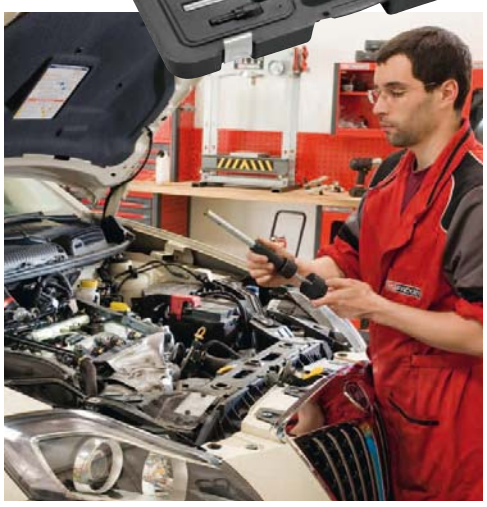
Common rail diesel injection

COMMON RAIL

Most modern diesel engines use the common rail technology. To meet issues related with injectors, FACOM offer a comprehensive range for testing and extraction.

Pressure constraints require perfect renovation of mating surfaces before refitting a new element, and changing gaskets at every removal. FACOM offer a range of tools to renovate mating surfaces and pull gaskets blocked at the bottom of injector wells.







Common rail injector tools

DCR.IT Common rail diesel injector return flow tester



- For 2 to 8 cylinder engines.
- 4 sets of 8 brass couplings for BOSCH and Siemens injectors.
- 1 set of 8 plastic couplings for DELPHI injectors.
- Supplied with universal connecting tubes.

DCR.IP Seized common rail injector slide hammer



- For more than 80% seized injectors.
- 4 Sockets for injector heads 25 - 27 - 29 - 30 mm.
- Tool for removing the inside mechanism for BOSCH injectors.
- Dual height slide hammer.
- Supplied with adaptors for BOSCH, SIEMENS, DELPHI injectors.

DCR.IPPSA Seized common rail injector screw puller on PSA engines



- PSA 2.0L HDI 16V and 2.2L HDI 16V engines.
- Designed for use on "minivan" and utility vehicles when access does not allow to use the puller DCR.IP.

DCR.IPREN Seized common rail injector screw puller on RENAULT engines



- RENAULT 2.2L DCI and 2.5L DCI engines.
- Designed for use on "minivan" and utility vehicles when access does not allow to use the puller DCR.IP.

DCR.IPM PSA and RENAULT common rail injectors puller set



- Comprises the elements and covers vehicles of the DCR. IP-PSA and DCR.IP-REN pullers.

DCR.SR Injector gaskets slide hammer





- To pull injector gaskets blocked at the bottom of the injector well.
- Avoids cylinder head removal.

DCR.IC Set of common rail injector well cleaning mills



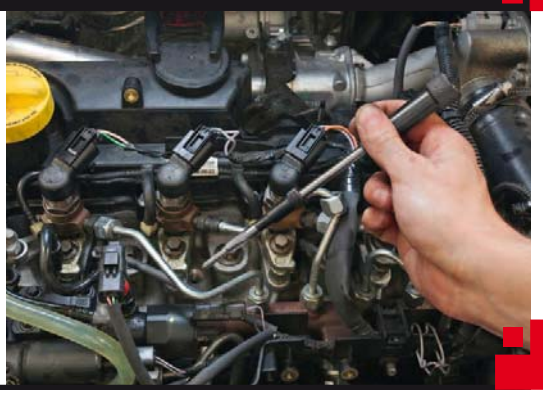
- Allows restoration of the injector well and its parting surface before refitting an injector.
- Avoids compression leaks and loss.
- Supplied with 3 mills and 1 extension.

TO PREVENT GLOW PLUGS FROM SEIZING

GLOW PLUG WELL CLEANING GRINDER.



- Built-up scale between the glow element and the cylinder head results in breaking glow plugs when removing them.
- Using a glow plug well cleaning grinder reduces the risk of breakage. On “sensitive” engines, glow plugs should be changed every 80 000 KM and the glow plug wells be cleaned.



Common rail glow plug tools

DCR.HC10 Cylinder head tool for 10 x 100 and 10 x 125 glow plugs





- Removes scale deposits between the cylinder head and the spark plug heating element.
- Prevents seizing and breakage of glow plugs in the cylinder heads.

DCR.HR-REN Toolkit for RENAULT engines: 1.5 DCI - 1.9DCI - 2.2DCI - 2.5DCI



- Allows extraction of glow plugs broken in the cylinder heads.
- For use with mounted engines.
- Drilling and tapping guide.

Fuel injection

Injectors

1/2" square drive diesel injectors sockets







- 1/2" square drive 12-point long reach sockets.
- D.27A.
- D.132B.
- Available for:

- CITROËN Saxo 1.5/Boxer TD.
- FORD Maverick.
- MAZDA Familia 1.7.
- MERCEDES 250C > 94.
- MITSUBISHI Pajero 2.
- NISSAN Serena 2.3.
- PEUGEOT 106/605/2.5.
- SEAT Terra 1.7.
- VOLKSWAGEN Polo D.

	d [mm]	l [mm]	[g]
D.27A	36	87	265
D.132B	29	98	160

D.142 1/2" square drive injector castle nut sockets



- For BOSCH injection on FIAT Croma 2.5 TD, also suitable on LV, LUV, HV diesel engine.
- Dimensions (L. x W.): 28.5 x 135 mm.

Weight: 320 g.

DM.19 3/8" square drive diesel injection wrench - 17 mm





- For RENAULT Laguna and specific diesel motorisations.
- 12-point 17 mm.
- Square drive bit 3/8".
- Dimensions (L. x W.): 27 x 95 mm.

Weight: 75 g.

DM.38 3/8" square drive diesel injection wrench - 14 mm

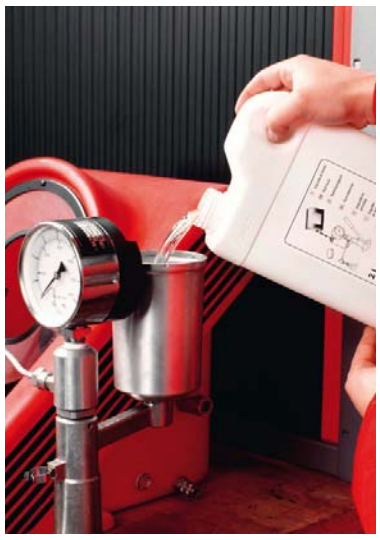


- For MERCEDES LV, UV and specific diesel motorisations.
- 12-point 14 mm.
- Square drive bit 3/8".
- Length: 95 mm.

Weight: 70 g.

916.600 Injector test pump

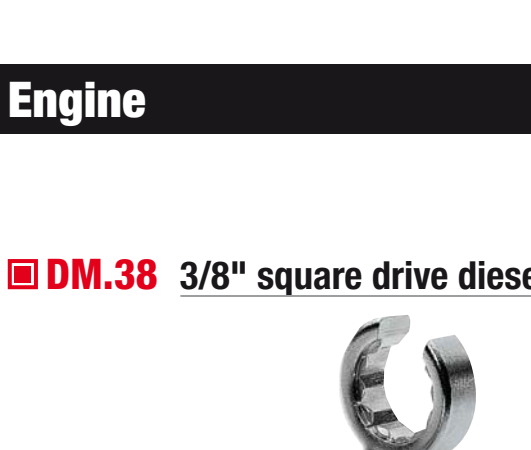




- For checking injector leak-back, injection pressure and fuel spray pattern.
- Dial gauge: 0-600 bar.
- Reservoir complete with filter.
- For use with fluid to NF ISO 4113 and vapour extractor Ref D.144.
- Dimensions (L. x W. x H.): 220 x 100 x 410 mm.

Weight: 4.400 kg.

D.144 Vapour extractor



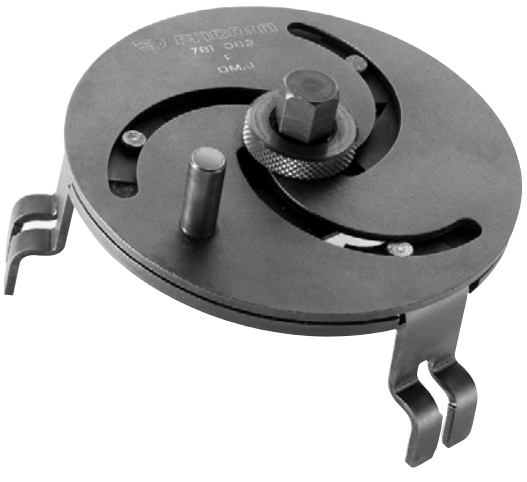
- Collects fumes and fluid checking or adjusting injectors.
- Air inlet hose fitted with shut-off valve.
- Inlet pressure: 6 bar.
- Dimensions (L. x W. x H.): 400 x 380 x 420 mm.

Weight: 5.200 kg.

Clips - hoses - gaskets

Fuel circuit tools

DM.J Fuel gauge wrench





- Used to dismount and refit fuel gauges bushes.
- Capacity: 88 --> 170 mm.
- Opening regulation through diaphragm.

DM.CC Automatic clamp pliers





- Pliers to open or close automatic clamps.
- Multi-direction gripping of clamps to work either vertically or horizontally (right or left).

DM.FR2 Diesel filter fitting and removal tool





- For multi-jet 1.3 and 1.9 diesel engines in Fiat and Opel.
- Filter holder support for lock grip.
- Filter holder wrench with 3/8" square bit.
- Allows retightening at the original torque value (value indicated on the plastic cap).

DM.F Fast fit fuel pliers







- For petrol and diesel vehicles.
- To disconnect fast fuel fittings.
- Length: 175 mm.

Fuel line pliers



- To disconnect fuel line unions.
- DM.15-8. for the RENAULT make: Twingo/Laguna/Scenic.
- DM.15-10. for the RENAULT make: Laguna Diesel/Espace all types/Mégane.
- Dimensions (L. x W. x H.): 115 x 65 x 20 mm.

	d [mm]	l [mm]	ΔΔ [g]
DM.15-8	8	110	70
DM.15-10	10	115	67

DM.MUB - SPRING CLAMP PLIERS

FOR AN EASIER REACH

Time-saving
- No need to remove components obstructing the hose clamp.
- Compact and lightweight for confined spaces.

Comfortable
- Non-slip grips.
- Ratchet lock system for reduced effort.

Capacity 18 to 54 mm.





Tools for self-tightening spring clips

DM.MUB Spring clamp pliers

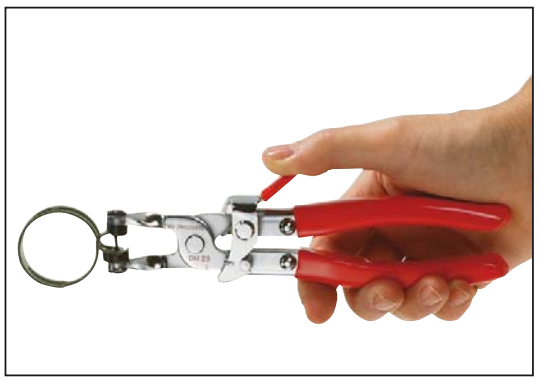


- Fits self-tightening spring clips diameter: 18 to 54 mm.
- Can be used one-handed.
- Non-slip bi-material handle for a better grip.
- Rack system for reduced effort.
- Sheath length: 560 mm.
- Total length: 780 mm.
- DM.MUB-RN1: Sleeve repair kit, cable + jaws (7373280).

Weight: 500 g.

Self-tightening clamp pliers





- For hose clamps on cooling, heating, fuel or screen-washer.
- DM.25: slip-joint model.
- DM0.27: long-reach model with lock and pivoting jaws.
- DM0.29: standard-reach model with lock and pivoting jaws.

	d [mm]	Dimension [mm]	⚖ [g]
DM.25	12..60	275 x 55 x 20	400
DM.27	15..56	275 x 60 x 25	395
DM.29	15..56	215 x 60 x 25	340

Flexible screwdriver

Flexible nut drivers (6 point)







- For loosening and tightening hose clamps.

	d [mm]
D.133A6	6
D.133A7	7
D.133A8	8
D.133A10	10

Cooling circuit

Cooling system tester

935A - COOLING SYSTEM FILLER

ESSENTIAL FOR THE LATEST ENGINES

Safe
- Some manufacturers are doing away with cooling system bleed screws and imposing vacuum filling systems instead.
- The 935A depressurises the cooling system, ensuring perfect bleeding.

Cost effective
- Fills and bleeds the air from cooling systems quickly and without wasting new coolant.





935A Vacuum cooling circuit fillers



- For total filling of cooling circuits also without bleed screw.
- Supplied in a plastic case (complete with 5 can adaptors).

Weight: 1.960 kg.

778A Anti-freeze hydrometer



- Measures antifreeze levels in engine coolant.
- Two scales for cold or warm engines.
- Dimensions (L. x W): 350 x 42 mm.

Weight: 90 g.

780A Refractometer







- Two measuring scales:
  - 0 to -50°C (5°C graduations)
  - Battery fluid density: 1,10 to 1,40 kg/l.
- Simple screw recalibration using distilled water.
- Supplied in case with sampling pipette and screwdriver.
- Dimensions (L. x W. x H.): 70 x 235 x 700 mm.

Weight: 550 g.

Hose clamps

Screw-type hose clamps



- Metal structure.
- Applications:
- Cooling circuit.
- Fuel circuit.
- Air circuit.

	d [mm]	l [mm]	⚖ [g]
DM.90	27	65	190
DM.91	45	85	240

Hose clamps





- Hoses are clamped shut instantly without damage.
- Plastic structure.

	d [mm]	l [mm]	⚖ [g]
DM.33	8...15	160	170
DM.34	15...28	180	190
DM.34GM	25...55	205	210

Cylinder head - valves

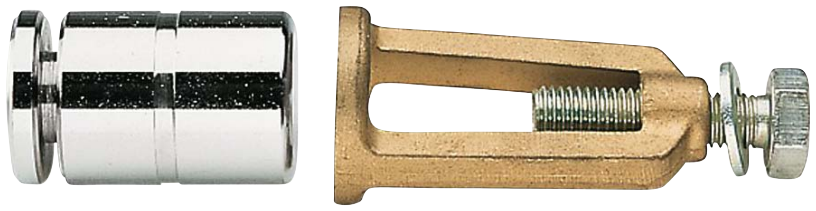
U.13L Valve lifter



- For removing valve springs.
- Complete with jaws ref U.13B.
- Dimensions (L. x W. x H.): 265 x 365 x 20 mm.

Weight: 1.14 kg.

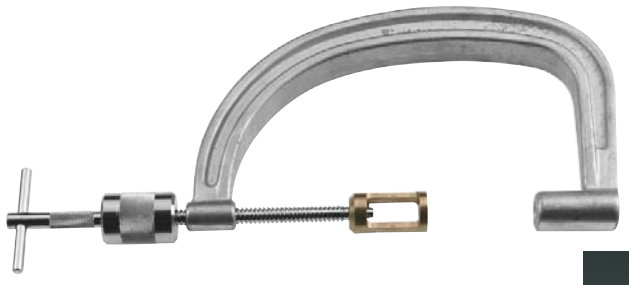
Collet clamp and cup



- To fit U.13L, the collet replacing the screw, with the cup inserted between the 2 jaws.
- U.13DB: For 16-valve engines.

	d [mm]	⚖ [g]
U.13DB	30	335
U.13DC	33	340

U.43LA Slide-hammer valve lifter





- For removing valve springs.
- The slide hammer is used to free split collets.
- Diameter: 34 mm.
- Dimensions (L. x W. x H.): 200 x 390 x 36 mm.

Weight: 1.385 kg.

U.43LA16A Collet clamp



- For 16-valve engines.
- Fits U.43LA.
- Length: 54 mm.
- Diameter: 29 mm.

Weight: 55 g.

U.43 Cylinder-head rest



- Adjustable distance between feet.
- Designed for easy use of valve lifters U.13L - U.43LA.
- Dimensions (L. x W. x H.): 215 x 500 x 165 mm.

Weight: 1.8 kg.

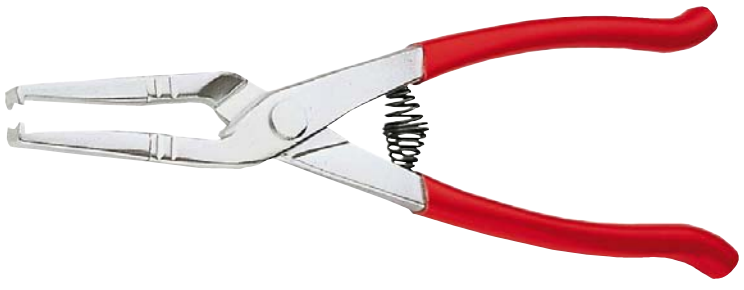
DM.7 Special pliers



- For removing valve guide seals.
- Length: 245 mm.
- Finish: Nickel, burnished jaws.

Weight: 350 g.

DM.10A Valve stem seal pliers



- For removing valve guide seals.
- Dimensions (L. x W. x H.): 235 x 80 x 15 mm.

Weight: 135 g.

U.54A Air-operated valve grinder



- Working pressure: 8 bar.
- Air consumption: 0.08 m³/min.
- Supplied with 2 suction cups (diam.: 22 and 33 mm).
- Dimensions (L. x W. x H.): 280 x 90 x 70 mm.

Weight: 800 g.

- Suction cup 22 mm: U.54AV1.
- Suction cup 33 mm: U.54AV2.
- Suction cup 30 mm: U.54AV3.
- Suction cup 45 mm: U.54AV4.

D.51 Valve grinder



- Suction pads: 19 - 22 mm.
- Dimensions (L. x W.): 235 x 22 mm.

Weight: 30 g.

D.1 Scraper



- For deburring and scraping off gasket debris.
- Triple-edge blade.
- Dimensions (L. x W. x H.): 200 x 25 x 20 mm.

Weight: 105 g.

D.34J7 7-piece set of 6-spline bits 1/2"

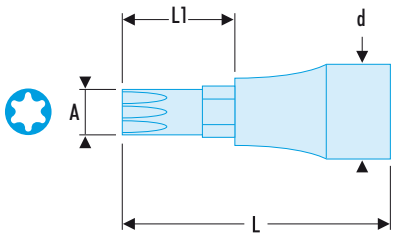


- Comprising: D.34B7 - D.34B7L - D.34B9L - D.34B10 - D.34B12L - D.34B14L - D.34B16L.
- Supplied on a rack.

Weight: 900 g.

D.34B - Long-reach 6-spline bits





	A [mm]	d [mm]	L1 [mm]	l [mm]	⚖ [g]
D.34B7	7	7	15	60	60
D.34B7L	7	7	63	100	100
D.34B9L	9	9	63	100	100
D.34B10	10	10	15	60	60
D.34B12L	12	12	63	100	100
D.34B14L	14	14	63	100	100
D.34B16L	16	16	63	100	100

MOD.SHP 12-piece set of 1/2" square-drive sockets with long-reach monoblock bits



- Sockets for light vehicle cylinder head screws.
- SX.LA 40 - 45 - 55 - 70.
- SHP.LA 5 - 6 - 7 - 8.
- SV.LB 6 - 8 - 10 - 12.
- Thermoformed module PL.336.

Weight: 1.630 kg.

MOD.TX1 Set of Torx® socket wrenches and bits



- J.235: Bit holder.
- R0.235: 1 bit holder socket 1/4".
- S.236: 1/2" bit holder socket.
- EX.2 40 - 45 - 50 - 55: 5/16 bits.
- EXR. 10 - 15 - 20 - 25 - 30 - 40: 1/4 bits.
- JTX. 8 - 10 - 12 - 14 - 16: 3/8" sockets.
- STX 18 - 20: 1/2" sockets.
- 59TX 6 x 8 - 10 x 12 - 14 x 18 - 20 x 24: Ring wrenches.
- Thermoformed module PL.360.

Weight: 995 g.

SV.J5 5-piece set of drive bits for spline socket head (XZN) bits 1/2"





- Comprising the bits: SV.14LB - SV.12LB - SV.10LB - SV.8LB - SV.6LB.
- Bit length: 64 mm.
- Supplied on a rack.

Weight: 670 g.

SE.1A 20-piece set of short-reach bits



- Including:

- 1 socket holder bit - square 1/2", diam.: 5/16".
- 5 6-point bits: 4 to 10 mm.
- 8 Torx® bits: n°20 to n°55.
- 4 XZN bits: 6 to 12 mm.
- 3 bits Pozidriv® bits: n°2 to n°4.

Weight: 475 g.

Angular range

TORQUE TIGHTENING | WRENCHES AND DRIVES

E.306 AND E.316 SERIES

- 9 torque and/or angle values can be preset.
- 250 results can be saved, downloaded via USB.



SERIES E.506

- 9 torque and/or angle values can be preset.
- 50-result memory.



SERIES E.406

- 9 preset angle values.
- 50-result memory.



Digital control tools

E.506-135S E.506 - Torque and angled adapter



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Drive bit 1/2".
- Accuracy:
- Torque: ± 3% between 20% and 100% wrench capacity.
- Angle: ± 2°.
- Measuring mode: peak or track follower.
- Cycle counter.
- Locking keypad (the operator has access only to program choices and memorise results).
- Measuring unit: N.m, ft.lb, In.lb, kg.cm, deg.
- Presetting possible of 9 torque and/or angle values.
- Memory 50 values.
- Length: 80 mm.
- Supplied in plastic case with calibration certificate.

Weight: 268 g.

E.406 E.406 - Angle adapter







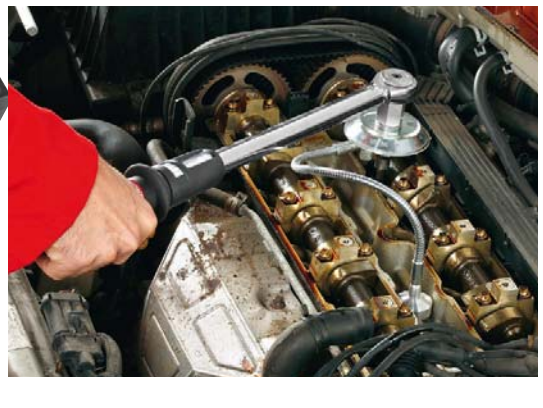
- Accuracy: ± 2°.
- Angular range: 1 - 360°.
- Measuring unit: degree.
- Presetting possible of 9 torque and/or angle values.
- Memory 50 values.
- Supplied in plastic case with calibration certificate.

Weight: 98 g.

Analog control tools

DMP.360L Angular torque gauge 1/2" drive





- Including:
- 3 bits (length: 24 - 45 - 65 mm).
- 1 flexible.
- 1 pair of pliers.
- 1 magnet.
- Dimensions (L. x W. x H.): 375 x 180 x 145 mm.

Weight: 550 g.

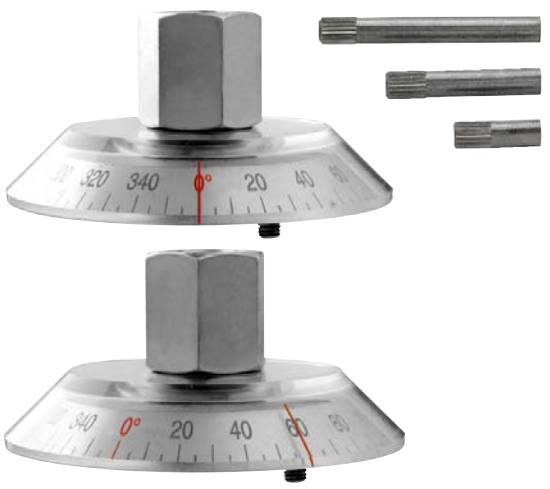
DM - Angular torque gauge



- 2° graduations.
- Male and female square drive.
- Fixed point by flexible with magnet.

	d [mm]	L [mm]	l [mm]	Square ["]	⚖ [g]
DM.360	63	410	410	1/2	350
DM.370	73	430	430	3/4	550

D.360L Side-graduated angular torque gauge 1/2" drive bit





- Lateral reading tapered drum for maximum legibility.
- Double index (red line) for presetting. To tighten, simply align the two markers. Ideal with low lighting.
- 2° resolution.
- Supplied with a limit stop (length: 24 - 45 - 65 mm).

Weight: 414 g.

DM.360L Side-graduated angular torque gauge with flexible arm and magnet 1/2"





- Supplied with a flexible arm and a magnet.

Weight: 500 g.

Pistons - piston rings

Piston ring compressors



- For easy insertion of piston into cylinder bore and even compression over full ring length.
- Ratchet mechanism.
- Complete with key (length: 6 mm).

	d [mm]	L [mm]	l [mm]	⚖ [g]
750.TB	55...110	80	80	260
750.KB	100...160	80	80	300

Piston ring pliers



- Even expansion over full ring length.
- Quick and easy to use.

	d [mm]	l [mm]	ΔΔ [g]
751.T	45...100	210	280
751.K	90...150	255	330

Removal

Lambda probe

Lambda probe wrench and sockets



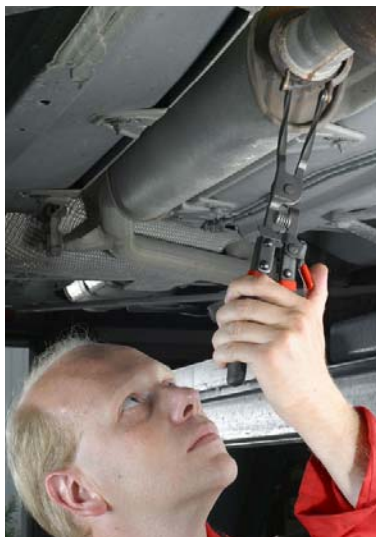
- For use on lambda probes.
- Featuring a slot for the connecting lead.
- Square drive bit 1/2".
- N.B. Lambda probes must be torqued to manufacturers specified values.

	d [mm]	ΔΔ [g]
D.145A	33 x 85	200
D.146A	33 x 85	230

Maintenance

DE.C PSA exhaust collar pliers





- Bi-material grip, for opening exhaust collars.

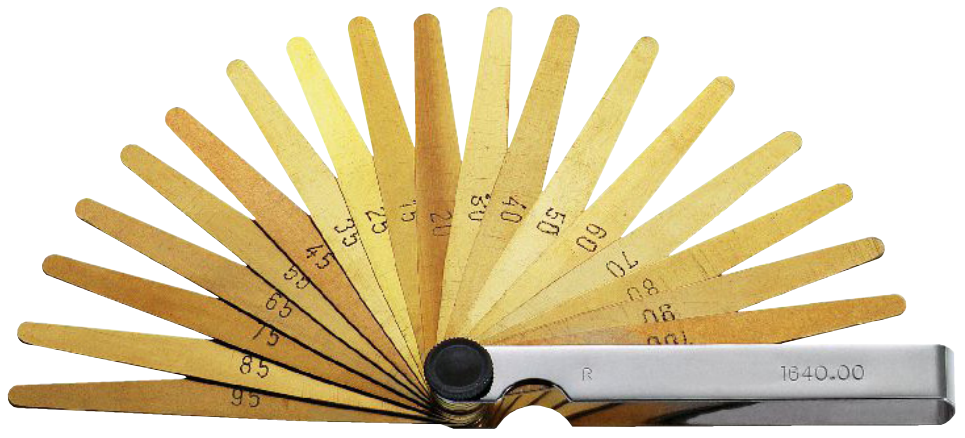
804 Round tip metric thickness gauges



- Set of 19 feeler gauges (round tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

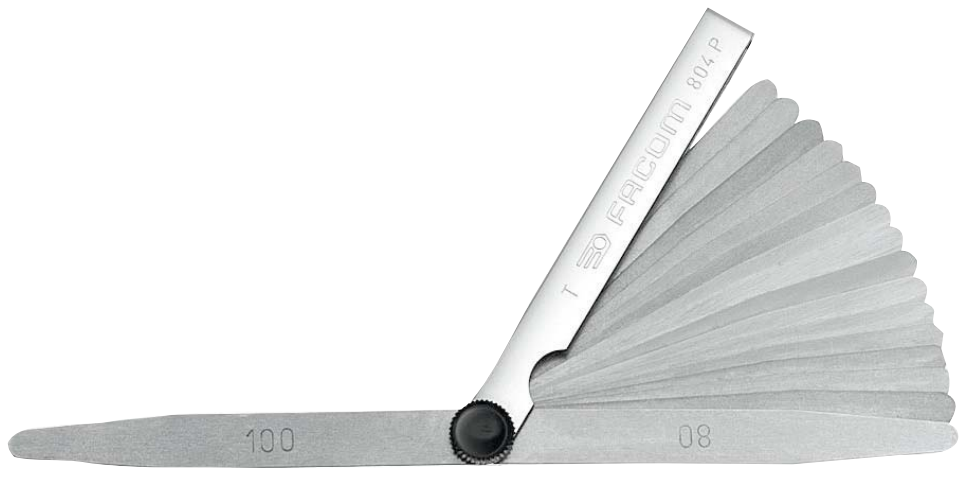
Weight: 60 g.

804.AM Anti-magnetic metric thickness gauges



- Set of 19 feeler gauges (tapered tip): 10/100 --> 100/100 mm.
- Blade length: 100 mm.
- Brass blades.

804.P Sharp tip metric thickness gauges



- Set of 19 feeler gauges (tapered tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

804.U Inch thickness gauges



- Set of 26 feeler gauges (tapered tip): 15/10000 --> 250/10000 inches.
- Blade length: 3"1/2 (88.9 mm).

804.L Long metric thickness gauges



- Set of 19 feeler gauges (round tip): 4/100 --> 25/100 mm.
- Blade length: 150 mm.

D.110 Spark plug fitter



- Helps engage a spark plug thread in any location, regardless of the screw head.
- Square drive: 6 --> 11 mm.
- Length: 305 mm.

Weight: 55 g.

DT SERIES
TIMING ADJUSTMENT

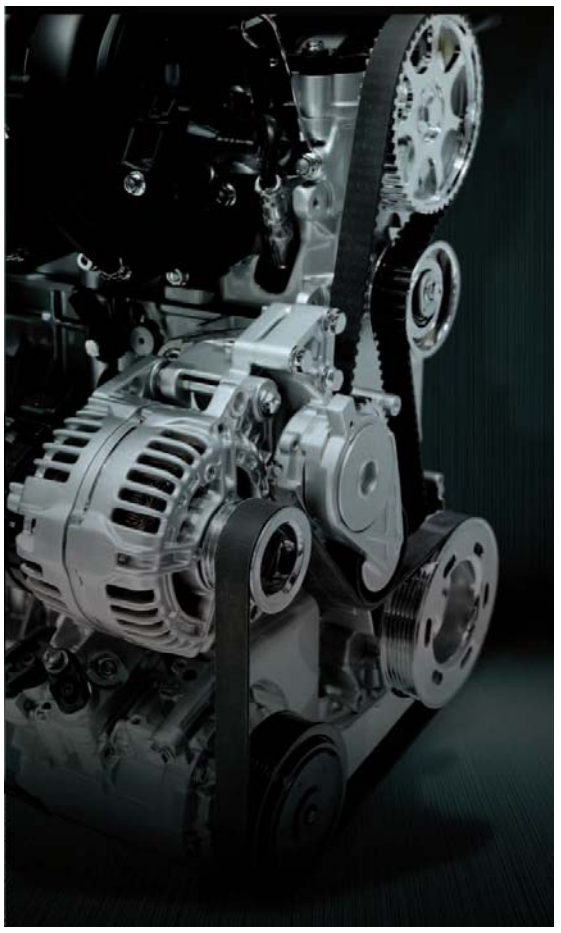
ACCURACY AND SPEED

FOR SAFE ACCURATE TIMING ADJUSTMENT.
The ignition timing of modern multi-valve petrol and high pressure diesel engines requires accurate adjustment

Inaccurate adjustment can lead to :
- over-consumption, engine breakage, malfunction, pollution, etc.

On many modern twin-cam engines, at least one of the two pulleys will turn when the timing belt is removed :
- the method of aligning timing marks is no longer appropriate.

Poor timing adjustment will at the very least cause engine malfunction, requiring the work to be restarted :
- the use of timing tools really does save time.



FOR ALL OF THESE REASONS, IT IS ESSENTIAL TO IMMOBILISE THE ENGINE WHEN READJUSTING TIMING OR CHANGING THE TIMING BELT.

THE RIGHT EQUIPMENT ENSURES PROFITABILITY
With a separate kit for each make or range of engines, you only buy the tools that you need.

The kits are defined according to the European vehicle fleet and timing belt sales statistics.



A CLEAR AND PRECISE METHOD.
Each kit comes with precise instructions that are sufficient for changing a timing belt or chain, or for adjusting the timing.

Regular updates : See www.facom.com for our latest products and applications.

Diesel engine timing kit

Timing kits

DT.FIAT-D1 FIAT timing kit - Diesel engines no.1



- Makes: FIAT, ALFA ROMEO, LANCIA, FORD, OPEL, SUZUKI.
- Timing chain diesel engine: 1.3 MULTIJET - 1.3 CDTi - 1.3 TDCi - 1.3 JTD/MULTIJET.
- Models:

- ALFA: Mito.
- FIAT: 500, Doblo, Doblo Cargo, Fiorino, Grande Punto, Idea,Linea, Panda, Punto, Punto Evo, Qubo, Strada Pick-up.
- LANCIA: Musa, Ypsilon.
- OPEL: Agila, Astra H, Combo C, Corsa C, Corsa D, Meriva, Tigra B.
- SUZUKI: Ignis, Swift, Wagon/Wagon R+.
- FORD: Ka.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.FIAT-D2 FIAT timing kit - Diesel engines no.2



- Makes: FIAT, LANCIA, ALFA ROMEO, OPEL.
- Timing belt diesel engine: 1.6 JTDM 16V - 1.6 MULTIJET - 1.9 MULTIJET - 1.9 CDTi (engine Z19) - 1.9 JTD - 1.9 JTD/ MULTIJET - 2 JTDM 16V - 2 MULTIJET - 2.4 JTD.
- Models:

- ALFA: 147, 156, 159, 166, Brera, Crosswagon, Giulietta, GT, Mito, Spider.
- LANCIA: Delta, Kappa, Lybra, Musa, Thesis.
- OPEL: Astra H, Signum, Vectra C, Zafira B.
- FIAT: Brava, Bravo, Croma, Doblo, Doblo Cargo, Grande Punto, Idea, Linea, Mareva, Marengo, Multipla, Palio Weekend, Punto, Punto Evo, Seidici, Stilo, Strada Pick-up.

- Dimensions (L. x W. x H.): 250 x 205 x 45 mm.
- Supplied in plastic case.

DT.FIAT-P1 FIAT timing kit - Petrol engines



- Makes: FIAT, ALFA ROMEO.
- Petrol engine: 0.9 TWINAIR - 1.4 MULTIAIR.
- Models:

- ALFA: Giulietta, Mito.
- FIAT: 500, Punto Evo.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.FORD-D1 FORD timing kit - Diesel engines



- Makes: FORD, MAZDA.
- Timing belt diesel engine: 1.4 TDCi - 1.6D -1.6 TDCi - 1.8 D - 1.8 D TURBO - 1.8 TDCi - 1.9 TDI PD - 2.0 TDCi - 2.2 TDCi -2.5 D - 2.5 TCi - 2.5 D TURBO.
- Models:

- FORD: C-Max, Courier, Escort, Fiesta, Fiesta Econetic, Focus, Focus C-MAX, Fusion, Galaxy, Mondeo, Orion, Tourneo Connect, Transit, Transit Connect.
- MAZDA: 2, 3, 5.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.FORD-P1 FORD timing kit - Petrol engines



- Make: FORD.
- Timing belt petrol engine: 1.25 - 1.4 - 1.6 - 1.6 Ti-VCT - 1.6 SCTi EcoBoost - 1.8 - 2.0.
- Models:

- FORD: C-Max, Cougar, Fiesta , Focus, Focus C-MAX, Fusion, Grand C-max, Mondeo, Puma, Tourneo Connect, Transit Connect.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.OPEL-D1 OPEL timing kit - Diesel engines



- Make: OPEL.
- Diesel engine: 1.5 D - 2.0 DTi (chain) - 2 D TURBO - 2.2DTi (chain) - 2.2D - 3.0 D TURBO - 3.1 D TURBO.
- Models:

- OPEL: Astra G, Cavalier, Frontera B, Midi, Monterey, Omega B, Signum, Sintra, Vectra B, Vectra C, Zafira A.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.OPEL-P1 OPEL timing kit - Petrol engines



- Make: OPEL.
- Petrol engine: 1.0/1.2/1.4 ("X" & "Z" chain engines) - 1.6 - 1.6 OPC/VXR - 1.8 - 2.0 TURBO.
- Models:

- OPEL: Agila, Ascona, Astra, AstraMax, Belmont, Cavalier, Combo, Corsa, Insigna, Kadett-E, Meriva, Nova, Signum, Tigra, Vectra, Zafira.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.PSA-D1 PSA timing kit - Diesel engines



- Makes: CITROEN, PEUGEOT.
- Timing belt diesel engine: 1.4 HDi - 1.5 D - 1.6 HDi - 1.9 D - 2.0 HDi - 2.0 DHDi 16V - 2.2 HDi - 2.5 D TURBO.
- Models:

- CITROEN: AX, Berlingo, Bipper, C1, C2, C3, C4, C5, Dispatch, Nemo, Jumper, Jumpy, Relay, Saxo, Xsara.
- PEUGEOT: 106, 107, 205, 206, 207, 306, 307, 308, 309, 405, 406, 407, 605, 607, 806, 807, 1007, 3008, 5008, Boxer, Expert, Partner.

- Dimensions (L. x W. x H.): 400 x 335 x 95 mm.
- Supplied in plastic case.

DT.PSA-P1 PSA timing kit - Petrol engines



- Makes: CITROEN, PEUGEOT.
- Timing belt petrol engine: 1.0 - 1.1 - 1.4 - 1.6 - 1.6 VTS - 1.8 16V - 2.0 - 2.0 16V - 2.2.
- Models:

- CITROEN: AX, Berlingo, BX, C2, C3, C3 Pluriel, C4, C5, C8, C15, Dispatch, Evasion, Jumper, Jumpy, Relay, Saxo, Synergie, Xantia, XM, Xsara, ZX.
- PEUGEOT: 106, 205, 206, 306, 307, 309, 405, 406, 407, 605, 607, 806, 807, 1007, Boxer, Expert, Partner/Ranch.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.REN-D1 RENAULT timing kit - Diesel engines



- Makes: RENAULT, NISSAN, OPEL.
- Timing belt diesel engine: 1.5 dCi - 1.9 dCi - 1.9 dTi - 1.9CDTi (F9Q engines) - 2.2 dCi - 2.2 DTI - 2.5 dCi - 2.5 CDTi.
- Models:

- NISSAN: Almera, Cube, Interstar, Juke, Kubistar, Micra, Note, NV200, Primastar, Primera, Qashqai, Tiida.
- OPEL: Movano-A, Vivaro.
- RENAULT: Clio, Espace, Kangoo, Laguna, Logan (LSO), Megane Scenic, Modus, Scenic, Scenic RX4, Traffic.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.REN-P1 RENAULT timing kit - Petrol engines



- Make: RENAULT.
- Timing belt petrol engine: 1.2 16V - 1.4 - 1.4 16V - 1.6 - 1.6 16V - 1.8 - 2.0 - 2.0 IDE - 2.0 16V.
- Models:

- RENAULT: Clio, Espace, Gran Scenic, Kangoo, Laguna, Logan, Megane, Megane Scenic, Modus, Twingo, Wind.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.VAG-D1 VAG timing kit - Diesel engines no.1



- Makes: AUDI, SEAT, WV, SKODA.
- Timing belt diesel engine: "TDI PD": 1.2 - 1.4 - 1.9 - 2.0 - "TDI CR": 1.6 - 2.0 - "SDI": 2.0.
- Models:

- AUDI: A2, A3, A4, A5, A6, Q5.
- SEAT: Altea, Arosa, Cordoba, Exeo, Ibiza, Leon, Toledo.
- SKODA: Fabia, Octavia, Praktik, Roomster, Superb, Yeti.
- VW: Beetle, Bora, Caddy, Eos, Fox, Golf, Golf Plus, Jetta, Lupo, Passat, Polo, Scirocco, Sharan, Tiguan, Touran, Transporter.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.VAG-D2 VAG timing kit - Diesel engines no.2



- Additional tooling kit for the timing case DT.VAG-A.
- Makes: Audi,WV, Seat, Skoda.
- Timing belt diesel engine: "TDI PD": 1.9 - 2.0 with oval crankshaft pulley.
- Models:

- AUDI: A3, A4, A6.
- SEAT: Altea, Cordoba, Ibiza, Leon, Toledo.
- SKODA: Fabia, Octavia, Roomster, Superb.
- VW: Beetle, Bora, Caddy, Eos, Golf, Jetta, Passat, Polo, Scirocco, Sharan, Touran, Transporter.

- Dimensions (L. x W. x H.): 147 x 77 x 42 mm.
- Supplied in blister.

DT.VAG-P1 VAG timing kit - Petrol engines no.1



- Makes: AUDI, SEAT, WV, SKODA.
- Chain petrol engine: 1.2 (6V & 12V 3-cylinder engine) - 1.4 FSI - 1.4 TSI - 1.6 FSI.
- Models:

- AUDI: A3.
- SEAT: Cordoba, Ibiza.
- SKODA: Fabia, Praktik, Roomster.
- VW: Eos, Fox, Golf, Jetta, Passat, Polo, Scirocco, Sharan, Tiguan, Touran.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

DT.VAG-PTD1 VAG timing kit - Petrol engines no.2



- Makes: AUDI, SEAT, WV, SKODA.
- Timing belt petrol engine: 1.4 16V - 1.4 FSI - 1.6 - 1.6 16V - 1.6 FSI - 1.8 - 1.8 TURBO - 2.0 - 2.0TFSI - 2.0 FSI.
- Timing belt diesel engine: 1.7 D - 1.7 SDI - 1.9 D - 1.9 TDI - 1.9 SDI - 1.9 D TURBO - 2.5 TDI (rotating pump 6-cylinder engine).
- Models:

- AUDI: A2, A3, A4, A6, A8, Allroad, S3, TT.
- SEAT: Alhambra, Altea, Arosa, Cordoba, Ibiza, Inca, Leon, Toledo.
- SKODA: Fabia, Felicia/Van/Pick Up, Octavia, Superb n.
- VW: Beetle, Bora, Caddy, Corrado, Fox, Golf, Jetta, Lupo, Passat, Polo, Scirocco, Sharan, Touran, Transporter Vento.

- Dimensions (L. x W. x H.): 325 x 265 x 77 mm.
- Supplied in plastic case.

D.86 Flywheel stay



- To lock the flywheel crown gear.
- Dimensions (L. x W. x H.): 30 x 46 x 25 mm.

Weight: 21 g.

Pulleys - sprockets - belts

Belt tension testing

DT.HERTZ - BELT TENSION TESTER

THE RIGHT TENSION GUARANTEED

Avoid breakage

The correct belt tension is essential :
- If insufficiently tight,
  - The auxiliary belts will slip and become worn.
  - Timing belts may jump (engine breakdown)
- If over-tightened,
  - The forces will damage the rollers and pumps.
  - Risk of premature belt failure.

Easy, accurate testing

Simply place the ultra-compact sensor against the belt and induce a vibration in the belt (like a guitar string). Compare the displayed reading with the recommended value in the guide.

Regular updates.

The DT.DOC guide is regularly updated. See www.facom.com for the reference number of the latest version.



DT.HERTZ Multi-make electronic belt tension-meter

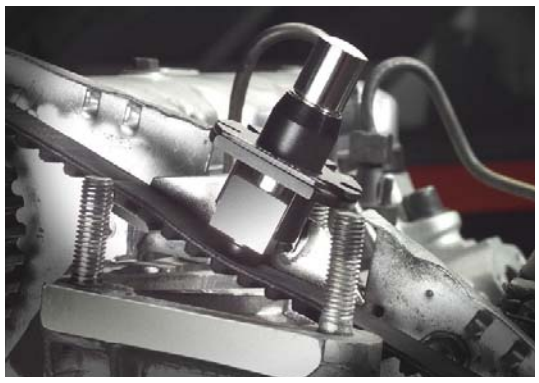


- Quickly and easily checks the tension of timing and auxiliary belts.
- Can be used for all belts on the market.
- Compact, manoeuvrable tool, can be operated one-handed.
- Cable length: 1,200 mm.
- Supplied in a plastic case, dim. (L. x W. x H.): 135 x 50 x 28 mm; with reference value guide.

Weight: 150 g.

DM.16 Multi-make electronic belt tension-meter





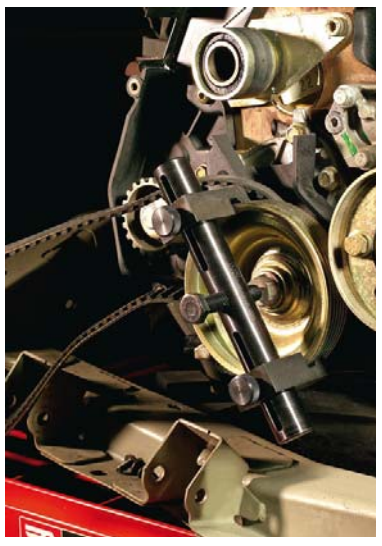
- For checking timing belt tension.
- Comes in a plastic case with 6 interchangeable ends, a belt thickness measuring gauge and a calibration checking gauge.
- Dimensions (L. x W. x H.): 170 x 120 x 50 mm.

Weight: 420 g.

Timing pulley and belt fitting and removal

DM.50 Multi-diameter damper pulley puller





- Removes crankshaft multi-groove pulleys without damage.
- Lockable, adjustable legs to fit the various pulley sizes.
- Compact design for working on engine in situ.
- Pulley capacity: 45 to 175 mm.
- No groove: 3.56 mm.

Weight: 1.120 kg.

DM.17A Multi-diameter timing and injection pump pulley puller





- Removes pulleys without damage.
- Adjustable legs adapt to differing pulley diameters.
- Compact design for working on engine in situ.
- Dimensions (L. x W.): 90 x 110 mm.

Weight: 925 g.

DT.TW - BELT TENSIONER WRENCHES

Handy
- One “arm”, 5 dimensions.
- Suited to most vehicles on the market.
- Angled wrenches for optimised access
- Mechanical wrench locking on the arm.











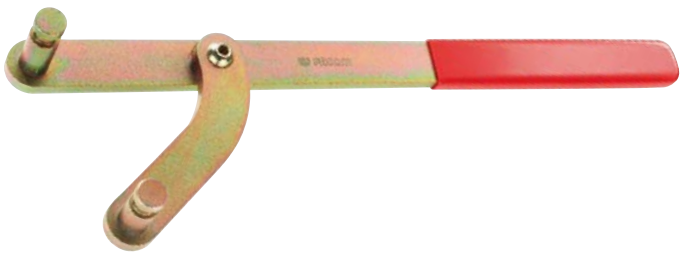
DT.TW 5-piece set of belt-tensioner nut wrenches



- To turn tensioner belts, timing pulley nuts and auxiliary elements even in confined positions.
- Wrench easy fastening / unfastening system integral to the handle.
- Comes with 445 mm handle and 5 ring wrenches 13 - 15 - 16 - 17 - 19 mm.

Weight: 1.350 kg.

DT.CLE Universal pulley wrench





- For blocking, cranking and holding camshaft and injection pump pulleys.
- Length: 410 mm.

Weight: 950 g.

DM.8 Pulley stay



- For blocking multi-groove pulleys.
- Capacity: 40 to 140 mm.
- Handle length: 350 mm.

Weight: 780 g.

DM.APR Alternator pulley kit



- For fitting and removing the alternator pulley.
- 13 tools.
- Comprising:

- 2 TORX bits T40 - T50.
- 2 XZN bits M8 - M10.
- 2 6-point bits 8 - 10mm.
- 1 TORX COMBI socket.
- 1 XZN COMBI socket.
- 2 special fitting / removal sockets.
- 1 double 6-point socket.
- 1 square / 6-point adapter.
- Supplied in a plastic case, dim. (L. x W. x H.): 330 x 140 x 65 mm.

Weight: 1.620 kg.

DT.SFB - FLEXIBLE BELT FITTING/REMOVING TOOL

Handy

- Tool suited to simple and double diameter pulleys.
- No adjustment required for fitting or removing.
- Suited to all types of elastic belts: A/C, alternators, belts.







DT.SFB Flexible belt kit



- For fitting / removing flexible service belts (A/C, power steering, alternator) without tensioner.
- Comprises two special tools for fitting and removing the belt.
- Special profile allowing use also on different diameter pulleys.
- Compact dimensions for access into the engine compartment.
- No regulations required for use on different pulleys.
- Supplied in a plastic case, dim. (L. x W. x H.): 210 x 120 x 55 mm.

Weight: 400 g.

Gearbox and clutch

U.25A Universal clutch aligner no.1



- Set of bushes and cones for centring clutch discs.
- Contains:
- 1 guide handle.
- 11 bushes, diam. 12 to 22 mm.
- 3 cones, diam. 25 - 30 - 40 mm.
- Pressed-steel case.
- Dimensions (L. x W. x H.): 322 x 136 x 53 mm.

Weight: 1.140 kg.

DM.30 Universal clutch aligner no.2



- The tool centres and holds the clutch disc and mechanism.
- Supplied complete with 3 expanding clamps:
- Clamp for diameter 18 to 21 mm.
- Clamp for diameter 22 to 25 mm.
- Clamp for diameter 14.5 to 18 mm.

470 Inside and outside circlip® pliers



- Interchangeable tips for:
- Diameter 8 to 63 mm for inside Circlips®.
- Diameter 3 to 63 mm for outside Circlips®.
- Contains:
- 469.PA: Inside circlip® pliers.
- 467.PA: Outside circlip® pliers.
- 82H.2.5: Key.
- Set of 18 removable tips.
- Plastic box.

Weight: 1.500 kg.

467.01AJ2 Set of spare screws



- For Ref.: 467 - 469 - 470.

DM.14 Transmission collar clamp



- To crimp collars on transmission bellows.
- For OETIKER collar.
- Dimensions (L. x W. x H.): 280 x 50 x 20 mm.

Weight: 475 g.

Inspection

DF.18-01 Disc brake vernier caliper





- Vernier caliper for checking the thickness of brake discs.
- Accurate, error-free reading.
- Measurements can be taken with wheel in place (if no protective bodywork).
- Can quickly demonstrate to customers the need for changing brakes.
- Capacity 0 to 50 mm, outer thickness measurement of the disc brakes of cars and LCV's.
- Nose length: 50 mm.
- 0.1 mm reading increments.
- Mechanical memory device.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.

Weight: 250 g.

DF.19-01 Drum brake vernier caliper





- Capacity and reading to suit requirements of car, LCV and HGV applications.
- Capacity: 40 to 300 mm, inner thickness measurement of brake drums on cars and LCVs.
- Nose length: 100 mm.
- 0.20 mm reading increments internal drum measurements for cars and LCVs.
- 0.10 mm increments for readings between tips.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.

Weight: 700 g.

DF.16 - BRAKE FLUID TESTER

QUICK BRAKE FLUID TESTER

A quick, cost-effective analysis.
For the safety of your customers.

- Water in the brake fluid can turn into vapour under severe or repeated braking, making the brake pedal ineffective.

The boiling point of brake fluids must exceed a specified minimum value :

DOT 3	140°C
DOT 4	155°C
DOT 5.1	180°C







DF.16 Brake fluid tester



- For testing brake fluids (DOT3 - DOT4 - DOT5.1).
- Measures brake fluid boiling point.
- Automatic test lasting up to 1 min.
- LCD display.
- °C / °F switch.
- Accuracy: 3%.
- Power supply: 12 V (vehicle battery).
- Plastic case.
- Dimensions (L. x W. x H.): 350 x 285 x 80 mm.

Diagnostics and bleeding

BRAKE BLEEDING : A SAFETY REQUIREMENT

FAST AND EFFICIENT

Brake bleeding is an operation that takes 10 to 15 minutes with a modern appliance such as the DF.20-100 or DF.21. A single operator is able to fill and bleed the brake system.

A profitable operation for the workshop. A brake bleeder is very quickly cost-effective, and its cost is absorbed in under 50 operations.

SAFETY

It is recommended to replace the brake fluid once every two years or after 40,000 km depending on the manufacturer.







DF.20-100 Brake and clutch system bleeder



- For bleeding car and LCV brakes and HGV clutches.
- ABS compatible.
- Portable, stand-alone appliance (12 V).
- Automatic pressure regulator (automatically keeps the working pressure below 2 bars for ABS systems).
- Reservoir with visible level and min. level indicator.
- Capacity: 5 l.
- Body: stainless/ABS.
- Length of hose and power cable: 4 m.
- Contains:

- 1 multi diameter plug for using the bleeder on vehicles with a bayonet plug (DF.20-12).
- 1 standard screw plug.
- 1 fluid collector with attaching chain.

Weight: 11 kg.

DF.21 Adjustable-pressure electronic brake bleeder



- For bleeding car and LCV brakes and HGV clutches.
- Pressure adjustment from 0.5 to 3 bar.
- Pressure adjustment keys: up and down.
- Electronic pressure control holds pressure steady at the selected value.
- ABS compatible.
- Portable, stand-alone appliance (12 V).
- Reservoir with visible level.
- Automatically stops below minimum level.
- Capacity: 5 L.
- Body: stainless/ABS.
- Length of hose and power cable: 4 m.
- Contains:

- 1 multi diameter plug for using the bleeder on vehicles with a bayonet plug (DF.20-12).
- 1 standard screw plug.
- 1 fluid collector with attaching chain.

Weight: 10.900 kg.

DF.20-12A Universal plug for bleeding brakes and clutches of LCV's and HGV's



- Can be used for bleeding the brakes and clutches of 90?% vehicles (incl. Asian makes, except Honda).
- Can also be used for bleeding HGV clutches.
- Claw system overcomes the many different bayonet shapes and different types and diameters of screw heads used by the various vehicle manufacturers.
- Working diameter: 35 to 83 mm.
- Minimum clearance required above the jar: 80 mm.
- Maximum working pressure of the bleeder: 3 bar.
- Connection by Rectus series 21 male coupling.
- 90° swivel connection.
- Dimensions (L. x W. x H.): 115 x 195x 85 mm.

Weight: 475 g.

DF.20-07 Aluminium brake bleeder plug



- Special thread fits diameter 44 and 45 mm.
- 90° swivel connection.
- Minimum clearance required above the jar: 40 mm.
- Used with DF.20 - DF.21 to automatically replenish the brake fluid jar.

Weight: 70 g.

SPECIFIC BRAKE BLEEDING ADAPTERS

Adapters specific to certain makes (Honda, Hyundai, Mazda, Toyota, etc.) are available upon request, contact your local dealer for more details.





Disc brakes

DF.17 | PNEUMATIC DISC BRAKE PISTON PUSHING/TURNING TOOLS

Essential for replacing brake pads.

Quick and easy to use
The pneumatic cylinder holds the flange against the head of the brake piston and the long handle allows the piston to be wound-back in a clockwise or anti-clockwise direction with minimum effort.

Saves time
The special Facom flange design covers the entire European vehicle fleet with only 9 flange types, minimising the number of flange changes and saving time.







DF.17-100 Brake disc caliper kit



- Comprising:
- 1 DF.17 air tool.
- 6 flanges DF.6-2 / DF.6-3 / DF.6-4 / DF.6-5 / DF.6-8 / DF.6-9.
- Covers the majority of the European fleet.
- Supplied in a plastic case with operating instructions and application guide.

Poids: 2,830 kg.

DF.17 Brake disc caliper tool



- Pneumatic cylinder for retracting and rotating the piston.
- Frequency of use: at each brake pad replacement.
- Compatible with flanges DF.6A.
- Can be used on clockwise and anti-clockwise pistons.
- Max pressure: 6.2 bars 1/4 NPT, Diameter 10 mm 3/8".
- Supplied in a plastic case with operating instructions and application guide.

MOD.DFD Brake disc module



- Including:
- 31.14X15 - 31.16X17: Extra-slim open end wrenches for removing the locknuts on the caliper yokes.
- 467F.12 - 467F.13 - 467F.14: Hinged combination wrench ratchets for removing the caliper yokes.
- NJ.260: Impact screwdriver + bit holder sockets.
- NJ.236A: 3/8" bit holder impact socket.
- 83SH.7: Spherical head male key 7 mm.
- 249.G4: Sheathed drift punch, diam. 4 mm.
- Bits: Torx® ENX.230 - ENX.240, Phillips® N° 2 and 6-point ENH.205 5 mm.
- Thermoformed module.

DF.3 Wire brush



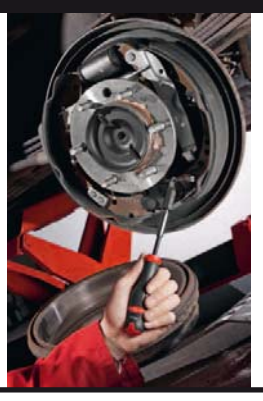
- For cleaning calipers.
- Dimensions (L. x W. x H.): 225 x 45 x 15 mm.

Weight: 65 g.

DF.2 “SPRING HOLDER” HOOKS

SAVE TIME

The DF.2 “spring holder” hooks allow to save precious time when refitting drum brake shoes by freeing one of your hands.





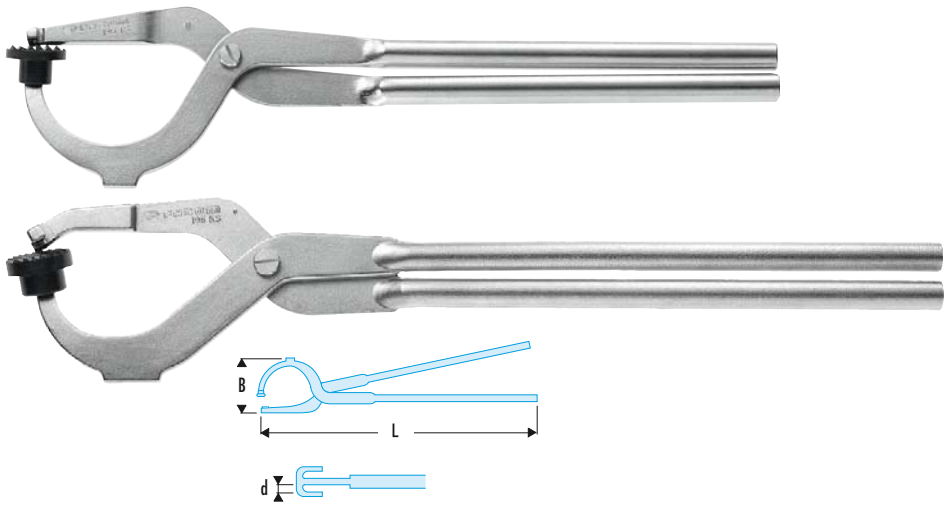
DF.2 Hand-brake pliers



- For holding the handbrake cable spring.
- For easy hook-up of hand-brake cable with both hands.
- Set of 2 "spring stop" ends, dim.(L. x W.): 70 x 10 mm.
- 1 magnetic bit holder ref AM.M1.

Weight: 40 g (per bit).

196 Brake-spring pliers



- For removing shoe springs.
- Suitable for right-handed and left-handed working.

	B [mm]	d [mm]	L [mm]	l [mm]	[kg]
196.TS	83	3	350	350	0,580
196.KS	100	5	485	485	1,230

D.79A Hand-brake pliers



- For easy hook-up of hand-brake cable.
- Length: 230 mm.

Weight: 180 g.

D.104B Steady-spring tool



- Fits steady-spring caps for compression against drum-brake shoes.
- Adapts to all makes.
- Length: 240 mm.
- Diameter: 34 mm.

Weight: 240 g.

MOD.DFT Drum brake servicing module



- Including:

- D.104A: Steady-spring tool.
- DF.2: Hand-brake cable screwdriver.
- D.79A: Hand-brake pliers.
- 43.8x10 - 43.11x13: Flare-nut wrenches.
- Tray PL684.

Weight: 855 g.

Brake lines

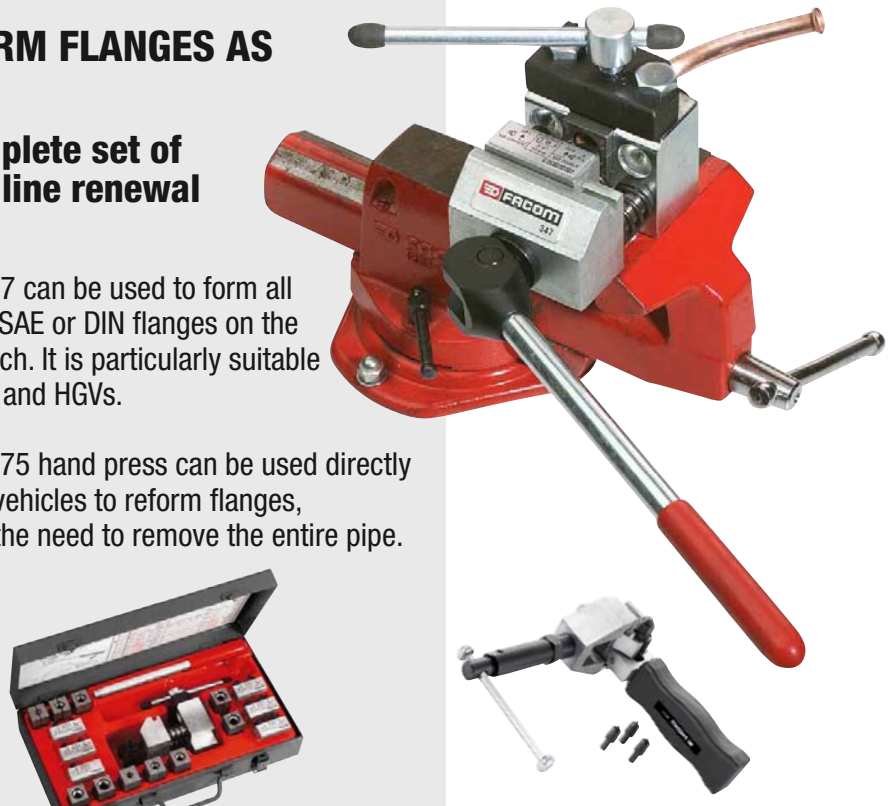
BRAKE LINE RENEWAL

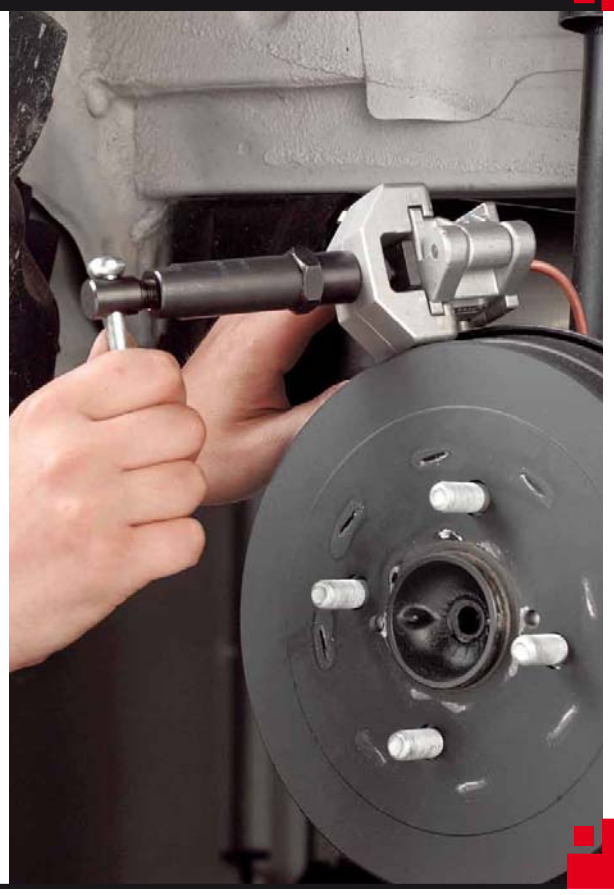
REFORM FLANGES AS NEW

A complete set of brake line renewal tools.

Press 347 can be used to form all types of SAE or DIN flanges on the workbench. It is particularly suitable for LCVs and HGVs.

The DF.475 hand press can be used directly on light vehicles to reform flanges, without the need to remove the entire pipe.







DF.475A Flange press



- Specifically designed for flanging (diam. 4.75 mm) automotive brake lines.
- SAE or DIN fittings are formed easily with the help of its 3 T hydraulic jack.
- Compact size allows working in situ on vehicles.
- Diameter: 4.75 mm.
- Dimensions (L. x W. x H.): 212 x 200 x 75 mm.

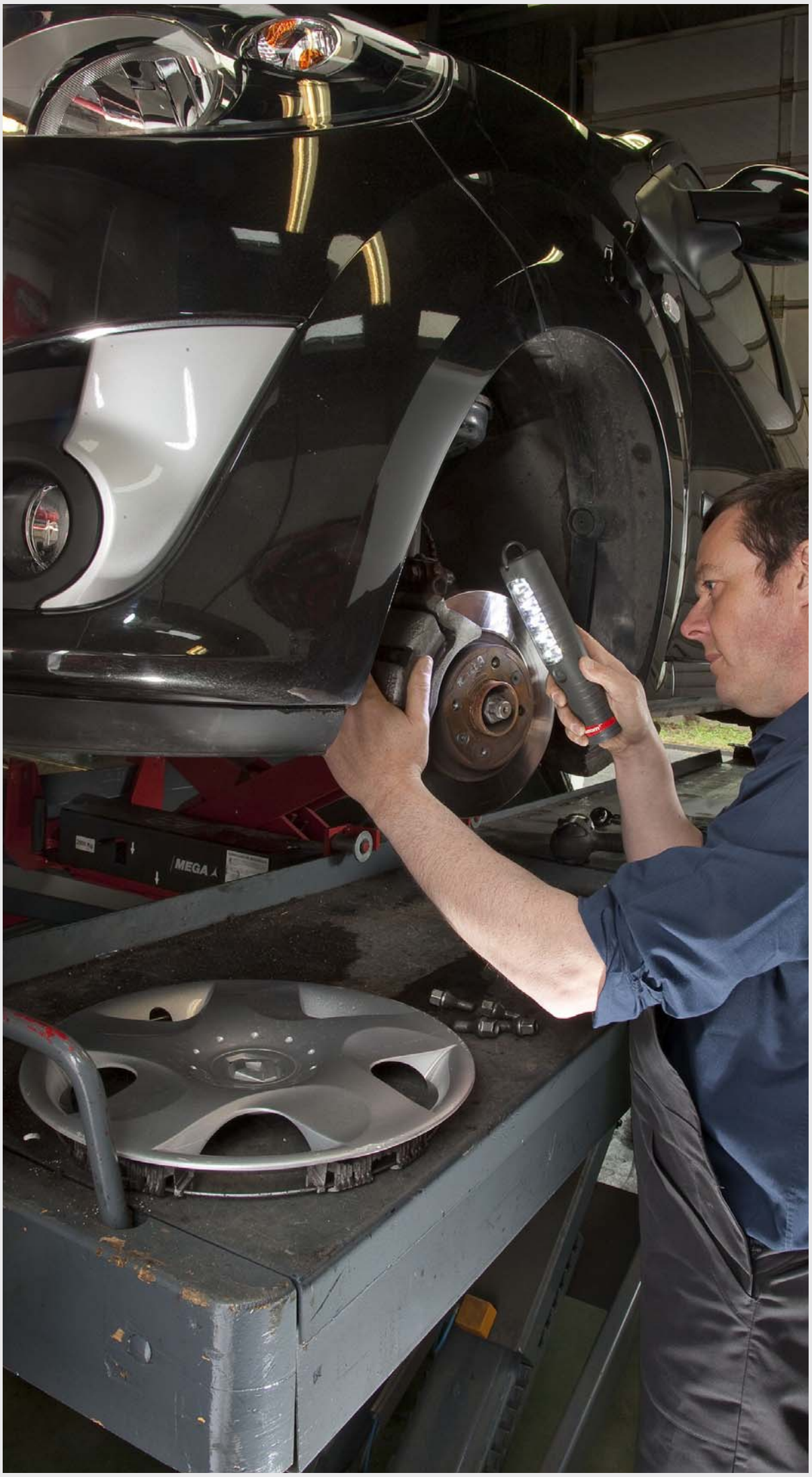
Weight: 1.100 kg.

347 Flange press set for S.A.E., DIN, S.A.E./DIN fittings



- Capacity: for copper and steel pipework diameter 4.75 to 12 mm; 3/16" to 1/2".
- Wall thickness: 0.7 to 1 mm.
- Press can be secured in a vice for increased stability.
- Fast and effortless forming.
- Kit includes 11 punches and 10 dies. Instructions explain selection according to flange type.
- Steel case.
- Dimensions (L. x W. x H.) 396 x 224 x 82 mm.

Weight: 7.900 kg.


MEGA

Spring compressors

DLS.500HP | SUSPENSION

SPRING COMPRESSORS

Safety and efficiency

DLS.500HP offers the highest productivity.
- Easy and fast changing of struts to adapt to the vehicle concerned.
- Effortless pneumatic compression.

- While guaranteeing optimum safety. By full application of the European Directive on Machinery 2006 42/CE.

SPRINGS = DANGER

Compression of springs, increasingly strong and complex-shaped remains a frequent source of occupational accidents in workshops.

4 safety benefits

- Strut strength tested at 1.5 times the max pressure of the machine.
- Protection barrier closing mandatory, checked by an air intake cut-off valve preventing use in open position.
- Compression speed regulated at less than 10 cm /second.
- Check valves preventing clamps from opening in case of accidental air supply cut.

DLS.500HP = MAXIMUM SAFETY







DLS.500HP Pneumatic spring compressor



- Pneumatic spring compressor for removing and fitting shock absorbers on Mac Pherson struts.
- Pressure: 1200 to 2200 kg according to air pressure (7 to 10 bars).
- Compression travel: 440 mm.
- Triple safety device:

- Protection barrier with automatic air stop device.
- Regulated compression speed.
- Protection valve preventing jaw opening in case of accidental air cut off.

- Supplied with 2 flanges (springs 78 to 220 mm).
- Dimensions: 590 x 590 x 1530 mm.

Weight: 66 kg.

DLS.500-04 Special forks for Asian vehicles



Weight: 970 g.

DLS.500-05 Special upper fork for Mercedes prior to 2010



Weight: 4.510 kg.

DLS.500-06 Vice for lower grip on Mc Pherson strut



- For long and regular springs.

Weight: 3.966 kg.

DLS.500-07 Lower fork for Renault - Nissan



- For Renault Koleos / Nissan Qashquai, reversed pitch springs.

Weight: 4.400 kg.

DLS.500-08 Lower fork diameter 105 to 182 mm



- Example of use: Citroen C3, Peugeot 206 / 207, Renault mégane III, Ford Fiesta, VW Golf VI.

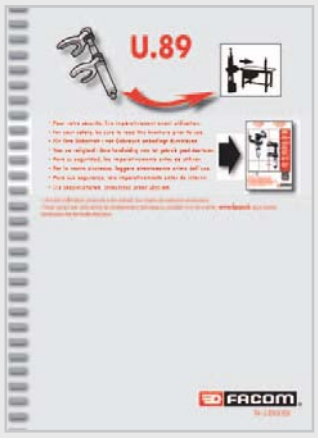
Weight: 4.430 kg.

U.89 SPRING COMPRESSOR - AN UPGRADEABLE INVESTMENT

The most universal system

Whether used on a workbench or workstation, this tool evolves according to your needs through its range of accessories available.

- Since it was set up in 1995, our database lists all vehicles U.89 adapts to.
- Each unit is supplied with a list of allocations and updates are available on www.facom.com.









U.89M20 Mini mechanical set



- Kit includes
- U.89M: Mechanical body.
- U.89J1: Set of forks.
- U.89J2: Set of forks.
- Supplied with operating instructions and vehicle application guide.

Weight: 14,700 kg.

U.89M30 Standard mechanical set



- Kit includes
- U.89M: Mechanical body.
- U.89J1: Set of forks.
- U.89J2: Set of forks.
- U.89J3: Set of forks.
- Supplied with operating instructions and vehicle application guide.

Weight: 19.100 kg.

U.89M Mechanical body



- Two-stage screw operated telescopic body.
- Hexagonal drive: 22 mm.
- Can be used with an electric or mechanical impact wrench.
- Tested to 100,000 N.
- Fitted with a safety pin.
- Can be used with all U.89 forks.
- Travel: 235 mm.
- Extended length: 540 mm.
- Compressed length: 305 mm.
- Diameter: 70 mm.

Weight: 5 kg.

U.89M2JM Mechanical compressor with multi-diameter fork set



- Kit includes
- U.89M2: Mechanical body with two-position spacer.
- U.89JMA: Pair of multi-diameter forks for spring diam. 100 to 215 mm.
- Supplied with operating instructions and vehicle application guide.

Weight: 11.600 kg.

U.89M230 Spring compressor - Universal system with interchangeable forks



- Two-stage screw operated telescopic body (hexagonal up to 22 mm).
- Mobile spacer for two possible working positions for the forks.
- Drive possible by 1/2 inch impact wrench.
- Body tested to 100,000 N.
- Travel: 235 mm.
- Compressed length: 305 mm.
- Extended length: 540 mm.
- Diameter: 70 mm.
- Supplied with 3 sets of plastic-coated forks J1 - J2 - J3.
- CE.

Weight: 14.700 kg.

U.89M2 Mechanical body



- Two-stage screw operated telescopic body.
- Hexagonal drive size 22 mm. Can be used with 1/2 inch electric or pneumatic impact wrench.
- Tested to 100,000 N.
- Spacer allowing to place the lower fork in two positions: allows for maximum travel on springs with few coils.
- Can be fitted with all U.89 forks.
- Travel: 235 mm.
- Compressed length: 305 mm.
- Extended length: 540 mm.
- Diameter: 70 mm.

Weight: 5.100 kg.

U.89JMA Multi-diameter fork set





- Offset forks: grip the spring at the end of the coil, this increasing the compressor's effective travel. This shape of fork is particularly effective for use on new-generation springs having a small number of coils.
- A hinged joint at the connection to the compressor allows the fork to be aligned with the slope of the coil.
- New design, fork fits directly onto the springs for quick installation.
- Suitable for 100 to 215 mm springs.
- Compatible with all U.89 bodies without modification.

Weight: 6.600 kg.

Workstation

SUSPENSION - WORKSTATION

Upgrade your U.89 spring compressor.







DLS.400 Spring compressor workstation (naked)



- Designed to receive FACOM compressor ref U.89M2 - U.89H2.
- Can accommodate up to 6 sets of forks.
- Impact wrench storage space.
- Space for set D.83C (new XL module).
- Space for application list.
- Hook for torque wrench.
- Small plan dimensions: 590 x 590 mm.
- Closed height 1.430 max height: 1.726 mm.
- Supplied with operating instructions and vehicle application guide.

Weight: 39.385 kg.

DLS.300-03 Compressor holder



- For attaching a compressor type U.89M or U.89H to workstation DLS.300.
- For bodies of max. diameter: 55 mm.

Weight: 700 g.

D.22B Special workbench vice



- For holding struts vertically on the workbench.
- Max diameter: 65 mm.
- Dimensions (L. x W.): 410 x 190 mm.
- Finish: zinc.

Weight: 3.535 kg.

Strut removal

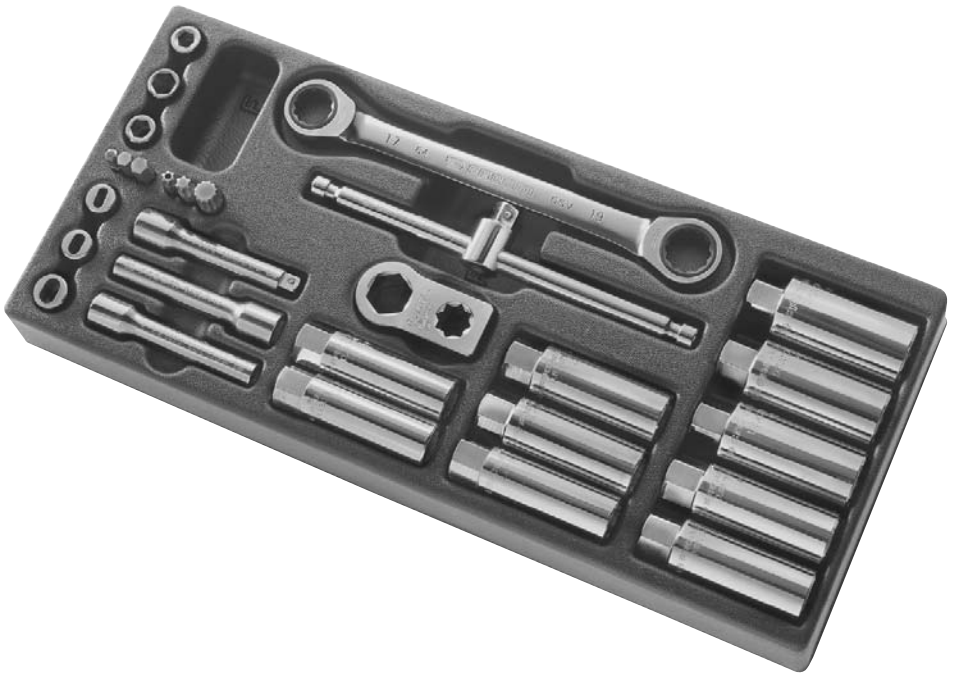
DS.J5 Mac Pherson clamp separator set

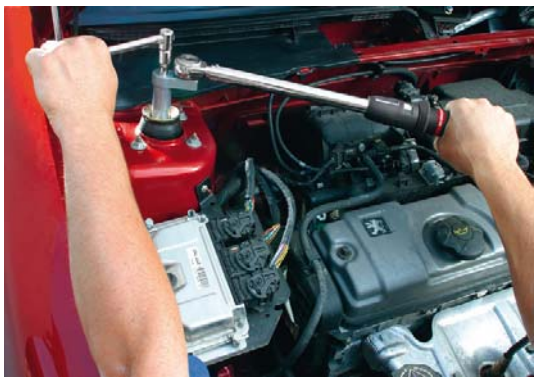


- Including:
- DS.10A: 7.5 x 9 mm.
- DS.11A: 5.2 x 6.9 mm.
- DS.12A: 6.6 x 7.9 mm.
- DS.13: 4.3 x 6.0 mm.
- DS.14: 12.7 x 16.7 mm.
- DS.P: 3/8" (9.53 mm) square drive operating handle.
- J.236: Bit holder socket.
- Helps open the clamp on vehicles fitted with Mac Pherson struts.
- Allows shock-absorbers to be stripped down at the work bench.
- Fast and efficient.
- All vehicles fitted with removable clamps (Citroen, Peugeot, Ford, VAG, Audi).
- A "junior" series ratchet can be used instead of the handle (space provided in the case).

Tools for shock absorbers

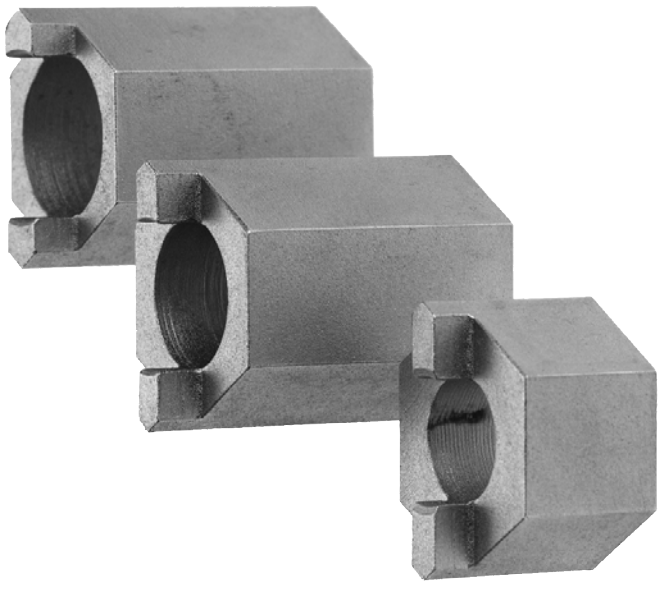
D.83C Set of 28 tools in modules for Mac Pherson strut rods





- Including:
- 10 long-reach sockets 14 - 15 - 16 - 17 - 18 - 19 - 21 - 22 - 24 mm.
- Slotted bits (3 No.) 5, 6 and 8 mm.
- 6-point sockets (3 No.) 8, 9 and 11 mm.
- 1 magnetic bit holder extension 7.94 mm.
- 1 bit-holder extension 6.35 mm.
- 1 extension with square drive 8 mm.
- EH bits: 6 - 7 - 8 mm .
- Bits: EXR.140 - EX.245 - XZN EV.212.
- 1 handle: J.120.
- 1 wrench 68: 17x19.
- 1 torque wrench adaptor.
- For holding the strut rod while tightening or loosening of the nut, for tightening with a torque wrench to a specified torque.
- Tool can be extended to include other bits (Torx, XZN, 6-point).
- XL module.
- Tray PL.647.
- Supplied in modules for placing in the drawer of a roller cabinet or workbench. Empty spaces for additional tools.

D.84 Set of lug adaptors for VAG struts



- For loosening and tightening notched nuts on strut rods.
- AUDI: 80 / 90.
- SEAT: Terra / Ibiza / Marbella / Toledo / Cordoba.
- VOLKSWAGEN: Polo / Golf / Jetta / Passat / Vento

Weight: 70 g.

Wheel removal and inspection

MOD.208 Wheel nut tightening module



- 77AT0D: Cross brace.
- S.208 - 200: Torque wrench 40 to 200 Nm.
- NSB.17 - 19 - 21: Long-reach impact sockets.
- SH.17 - 19 - 21: 6-point sockets.
- Tray PL.337.

Weight: 5.470 kg.

Cross braces

- Designed for removing wheel nuts on cars, light commercial and heavy goods vehicles.
- Replaceable bit on wrenches featuring a square drive.
- 77.P1: Spare male 3/4" square bit.
- 77.T1: Spare male 1/2" square bit.

	d [mm]	L [mm]	l [mm]	Square ["]	⚖ [kg]
77A.T0	17 - 19 - 23	400	400	1/2	1,750
77A.T02	17 - 19 - 23	400	400	1/2	1,750
77A.T0D	17 - 19 - 23	400	400	1/2	1,750
77A.PL1	24 - 27 - 30 - 32	700	700	-	4,650
77A.PL2	24 - 27 - 33	700	700	3/4	4,580
77A.PL2D	24 - 27 - 32	700	700	3/4	4,600

U.179A Air-line connector and gauge

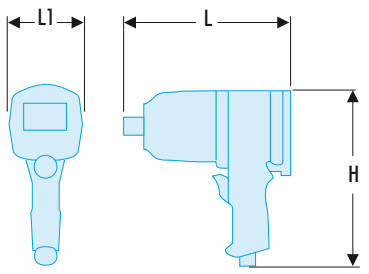


- Pressure range: 0 to 12 bar.
- Impact-resistant rubber casing.
- Dimensions (L. x W. x H.): 250 x 120 x 80 mm.

Weight: 850 g.

1/2" composite impact wrench





- Structure: composite.
- Impact system: double hammer.
- Maximum torque: 1080 Nm.
- Soft control trigger.
- Power setting: 3.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
NS.1800F2	180	69	183	2,200

NSAL.3 Set of long-reach thin wall sockets for alloy wheels



- Including:

- 3 impact sockets: 17 - 19 - 21 mm.

- Plastic coated to protect varnished alloys against impact damage.
- The 3 sizes are immediately identifiable.
- Supplied with a set of additional plastic protective sleeves (red, blue, yellow).

Weight: 775 g.

N.709 Air-hose reel



- Polyurethane hose, inner diam. 10 mm.
- Specifically designed for high air consuming tools (impact wrenches).
- Very high strength, return spring tested to 20,000 cycles minimum.
- Length: 15 m + 1.
- Hose stop every 50 cm.
- Pressure: 15 bar.

Weight: 6.800 kg.

D.93 Valve core remover





- The swivelling head and fluted body derived from the Facom Microtech screwdriver simplifies valve core removal and fitting.
- Length: 102 mm.

Weight: 15 g.

D.3 - Tyre-remover

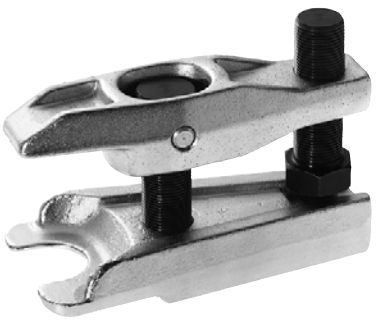


- Double tee section for added strength.
- Finish: zinc and chrome-plated.

	l [mm]	⚖ [g]
D.3-300	300	200
D.3-400	400	400
D.3-500	500	570
D.3-600	600	900

U.16 - Ball joint pullers







- Used to dismount steering and suspension ball joints.
- Supplied with a set of 2 spare safety pins.
- U.16-05J3: Set of 3 pins for U.16B and U.16A18.
- U.16-A45-05J3: Set of 3 shear pins for U.16B32 and U.16B45.

	A [mm]	d [mm]	l [mm]	⚖ [kg]
U.16A18	45	16	100	0,635
U.16B	45	22	100	0,665
U.16B32	80	32	158	2,452
U.16A45	80	45	158	2,543

D.138 Lower ball-joint socket



- Castle nut socket.
- 6-point drive: 32 mm.
- Tightening torque: 250 N.m.
- For models:

- CITROEN: BX / Xsara / XM / Xantia.
- PEUGEOT: 306 / 309 / 405 / 406.

- Dimensions (L. x W.): 52 x 48 mm.

Weight: 230 g.

U.7 - STEERING BALL JOINT REMOVAL AND FITTING TOOL

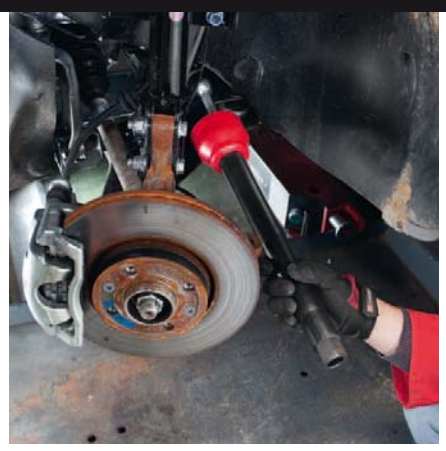
Easier maintenance

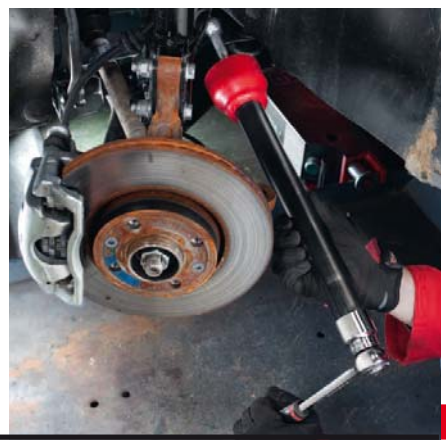
Saves time
To fit and remove steering ball joints without having to remove the rack. Access by the fender flange.

Powerful
6-point 30 mm drive square for powerful tightening or unlocking torque (e.g. 200 Nm on Golf VI).

Easy maintenance
Removable cage for easy cleaning and servicing of the tool.







U.7 Axial ball-joint unlocking tool



- Used to dismount steering ball joints from 35 to 45 mm.
- The head is made of a cage with three treated steel rollers. Rotating the tool locks the rollers between the body and the ball-joint to screw or unscrew.
- Treated steel rollers, nylon cage.
- 6-point drive: 30 mm for more power.
- Tube length: 420 mm.
- Head diameter: 82 mm.

Weight: 1.750 kg.

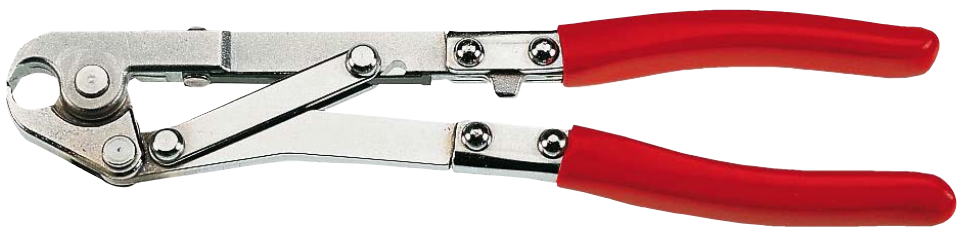
D.143B Socket for angular tightening of the hub nut



- Drive bit: 3/4".
- 6-point drive 36 mm.

Weight: 415 g.

DM.14 Transmission collar clamp



- To crimp collars on transmission bellows.
- For OETIKER collar.
- Dimensions (L. x W. x H.): 280 x 50 x 20 mm.

Weight: 475 g.

Supports

AUTOMOTIVE
BODYWORK

TIME-SAVING TOOLS AT EVERY STAGE







Stripping, cutting, forming, assembling, painting, windshields, pneumatics.

In order to improve your everyday working life, Facom offers customised solutions for :
- Saving time.
- Optimising storage.

Workstations




Supports










BODYWORK COMPONENT STORAGE STAND

Reduce operator movements, Optimise your storage.

For storing bonnets, tailgates, wheels, etc.

- Guarantees efficient organisation.
- Optimise workshop movements.
- Investment recovered in 3 months.





CR.S1 Bodywork component storage stand



- Maximum supported weight 150 kg.
- For storing bonnets, doors and exhaust systems.
- Incorporates anti-slide stops & gravity stabiliser.
- Dimensions: 90 x 60 x 190 cm.
- 4 castor wheels.
- Dimensions (L. x W. x H.): 90 x 60 x 190 cm.

Weight: 41 kg.

CR.S11 Mechanical component storage stand



- Storage of removed components on 4 levels for easy identification of the order of reassembly.
- 4 castor wheels for east manoeuvring around the vehicle.
- 2 fluid storage containers (water, oil) for a clean workshop.
- 2 plastic bins for fasteners.
- Dimensions (L. x W. x H.): 165 x 90 x 60.5 cm.

Weight: 40 kg.

CR.S5 - DOOR INSTALLATION AND REMOVAL

Saloons, light commercial vehicles and 4x4s

Versatile

- Suitable for positioning any type of door.
- Fully adjustable. Work with or without glazing.

Precise

- Progressive electric motor control providing millimeter precision.
- 4 castor wheels, 2 with brakes for total manoeuvrability.

Practical

- Motor fitted with a remote control, allowing the door to be guided while raising or lowering the support.
- Compact design for easy storage.
- Foam-covered supports to protect paintwork.

Safe

- Easy access to fuse for added safety.
- Supports 150 kg.



INFORMATION

Door installation and removal sometimes involves carrying heavy loads. The electric stand avoids this and allows you to comply with labour legislation that advocates the reduction of physical effort, especially that liable to cause back injury.
The electric stand will help improve working conditions in your workshop while enabling one person to work on the doors on their own.



1 operator
Reduced effort.
Maximum accuracy.

CR.S5 Electric door removal and installation stand



- Maximum supported weight 150 kg.
- Suitable for saloons and 4x4 (using CR.S5UTL).
- Works with or without glazing.
- Millimeter precision.
- Small footprint (52 x 90 cm).
- 4 castor wheels (2 with brake).
- Holders with rubber anti-scratch protections.
- 220 V mains powered electric motor with easy-to-reach fuse.
- Dimensions (L. x W. x H.): 52 x 90 x 120.5 cm.

Weight: 27 kg.

- Accessory for lateral slide door: CR.S5UTL.

CR.S6 Heavy-duty support stand for engines, gearboxes, etc.





- Maximum supported weight 450 kg.
- Modular support: many applications in bodywork and mechanical workshops.
- Raised stand (CR.S9) transforms the tool into a waist-height work table.
- Allows high pressure jetting before reassembly.
- Sliding, removable containers allow recovery of liquids.
- Dimensions (L. x W. x H.): 90 x 80 x 40 cm.

Weight: 27 kg.

CR.S9 Raised stand for CR.S6

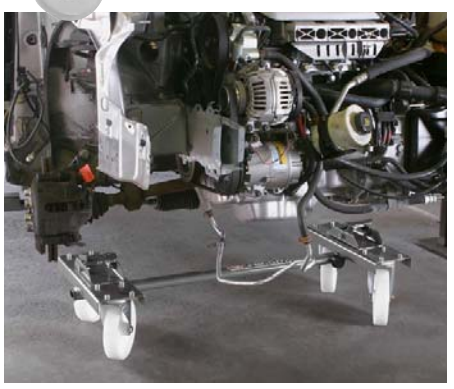


- Maximum supported weight 450 kg.
- Raised stand transforms support (CR.S6) into a waist-height work table.
- Allows high pressure jetting before reassembly.
- Transforms into a work table with raised stand CR.S9.
- Dimensions (L. x W. x H.): 90 x 80 x 80 cm.

Weight: 15.500 kg.

CR.S8 Support for moving vehicles with no steering gear





- Maximum supported weight by CR.S8: 450 kg.
- To support and move vehicles without front axle.
- Width adjustment (110 to 160) to suit vehicle.
- 4 castor wheels.
- Axle supported on a rubber-coated pivoting saddle.
- Dimensions (L. x W. x H.): (110 to 160) x 50 x 30 cm.

Weight: 21 kg.

CR.S12 Mobile support





- Maximum supported weight by CR.S8: 600 kg.
- For supporting 1/2 front or rear axles having suffered a locked wheel or a flat tyre.
- 4 castor wheels.
- Dimensions (L. x W. x H.): 58 x 37 x 17 cm.

Weight: 10 kg.

Stripping tools

CR.D1 Trim clip removal plier



- For quickly removing staples, clips, door panels, facia and trim supports, etc.
- Wide nose for undoing facings without risk of breaking or tearing panels.
- Finger guard to avoid injury.
- Designed for accessing difficult-to-reach places.
- Length: 240 mm.
- Finish: black head, chrome pliers.

Weight: 190 g.

D.115A Trim removal tool



- For removing interior door trimmings without damage.
- Dimensions (L. x W. x H.): 155 x 32 x 45 mm.

Weight: 106 g.

D.137A Fastener removal tool



- For removing plastic fasteners securing carpets, trim and panels.
- Capacity:

- Fitter diameter: 9 to 22 mm springs.
- Body diameter: 4 to 9 mm springs.

- Dimensions (L. x W. x H.): 200 x 28 x 40 mm.

Weight: 110 g.

RSX.19A Set of 1/4" and 1/2" drive sockets and Torx driver bits



- Tray PL.393A.
- Plastic case BP.102.
- Dimensions (L. x W. x H.): 204 x 122 x 52 mm.

Weight: 620 g.

CR.D5 Plastic component removal tool set



- For removing or unclipping plastic components (dashboard, door, external trim, snap rings, etc.).
- Set of 5 tools for different applications.
- Supplied in blister pack.

Weight: 275 g.

PLASTIC MULTIFUNCTION TOOLS

Practical

To remove plastic parts inside or outside the vehicle.

Safe

They protect plastic or varnished parts, trim, ceramics, etc.






CR.D4 4-piece set of plastic multi-use tools



- For removing adhesive weights from wheels in alloy, silicon, elastic sealing products, hub caps, etc.
- No damage to plastic or varnished parts, trim, ceramics, etc.
- 4 widths: 19 - 22 - 25 - 38 mm.
- For use with a hammer and resharpenable with a file.
- Supplied in blister pack.

Weight: 525 g.

Power tools

E.2005 Heat gun



- Electronic temperature control 60 to 600°C.
- Force: 2000 W.
- Power supply: 220 V/50 Hz.
- Air flow rate (2 speeds): 300 l/min and 500 l/min.
- VDE approved.
- Supplied with 2 nozzles: E.2002B1 - E.2002B3.
- Dimensions (L. x W. x H.): 330 x 80 x 72 mm.

Weight: 770 g.

- Distribution nozzle, dim. (L. x h x d): 75 x 75 x 33.7 mm; weight 58 g: E.2002B1.
- Cross-flow nozzle, dim. (L. x h x d): 75 x 80 x 33.7 mm; weight 56 g: E.2002B2.
- Reflector nozzle, dim. (L. x h x d): 33 x 60 x 33.7 mm; weight 32 g: E.2002B3.
- Concentrator nozzle, dim. (L. x h x d): 20 x 52 x 33.7 mm; weight 30 g: E.2002B4.

Cutting - drilling

Chisels

231 Three-square scraper

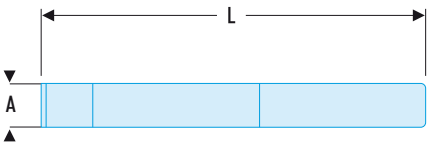


- Finish: high quality steel blade, polished chrome finish and varnished wood handle.
- Shank length: 200 mm.

Weight: 180 g.

259 Slim-profile chisels





- Slim profile chisel.
- Chrome vanadium forged steel, treated 57 HRc on edge and 40 HRc on impact head.
- Blade width: 26 mm.
- Length: 235 mm.
- Presentation: lacquered.

Weight: 240 g.

259.P Slim-profile chisel with guard



- Chisel with guard, diameter: 85 mm.
- Chrome vanadium forged steel, treated 57 HRc on edge and 40 HRc on impact head.
- Blade width: 26 mm.
- Length: 235 mm.
- Presentation: lacquered.

Weight: 400 g.

260.P Wide chisel with guard

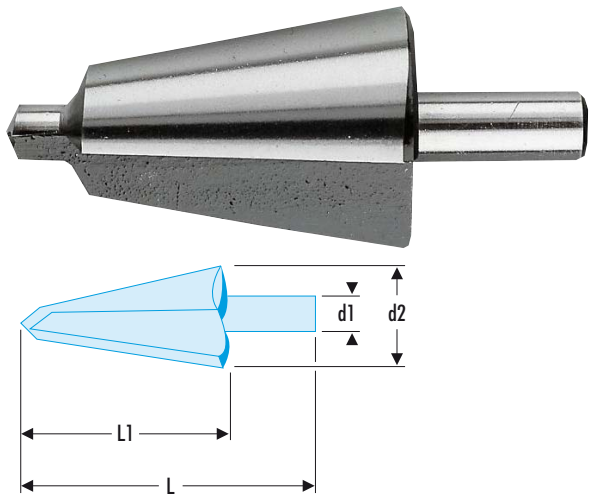


- Chisel with guard, diameter: 85 mm.
- Chrome vanadium forged steel and hardened to 57 HRc on edge.
- Edge resharpening with grinder.
- Head hardened to prevent head effect.
- Blade width: 60 mm.
- Length: 250 mm.
- Presentation: lacquered.

Weight: 630 g.

Drill bits

229A - Boring bits



- For drilling, deburring, boring thin materials: press sheet, non ferrous metals.
- HSS steel.
- Max. thickness recommended: 4 mm.
- Does not require a tapping hole.

	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	l [mm]	⚖ [g]
229A.1	6	3 - 14	59	37	59	25
229A.2	8	5 - 20	71	41	71	45
229A.3	9	16,0 - 30,5	76	48	76	130

229A.J3 Set of 3 tapered bits

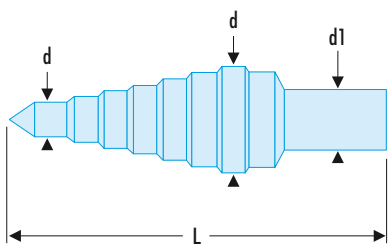


- Capacity: 3 to 30.5 mm.
- Supplied with a bottle of lubricant.
- Supplied in a pressed sheet box, dim. (L. x W. x H.): 120 x 100 x 38 mm.

Weight: 555 g.

229A - Stepped bits



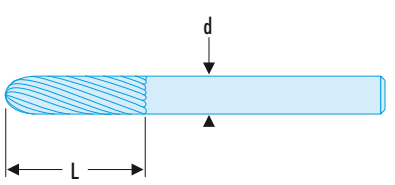


- For cylindrical high accuracy drilling in all materials.
- HSS steel.
- Cylindrical shank with 3 flats for proper drive, avoiding micro locking.
- Laser marking of different diameters in a groove.

	d1 [mm]	d mini - maxi [mm]	L [mm]	l [mm]	⚖ [g]
229A.ST0	6	4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	65	65	25
229A.ST1	8	4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20	75	75	65
229A.ST2	10	4 - 6 - 9 - 12 - 15 - 18 - 21 - 24 - 27 - 30 - 33 - 36 - 39	107	107	315
229A.ST3	10	6 - 9 - 13 - 16 - 19 - 21 - 23 - 26 - 29 - 32 - 35 - 38	100	100	320

VFA - Filing burrs





- Tungsten carbide mill.
- Right-hand cut.

	No.	d [mm]	L [mm]	tr/min	⚖ [g]
VFA.600	1	6	18	50000	25
VFA.602	2	6	18	50000	25
VFA.604	3	6	18	50000	25
VFA.606	4	6	18	50000	20
VFA.608	5	6	18	50000	20
VFA.610	6	6	15	50000	20
VFA.1200	1	12	25	20000	55
VFA.1202	2	12	25	20000	55
VFA.1204	3	12	25	20000	50
VFA.1206	4	12	25	20000	30
VFA.1208	5	12	25	20000	35
VFA.1210	6	12	20	20000	40

End mills



- Super fast HSS steel self-centring and resharpenable drill bits.
- Available in sets of 2 identical diameter bits (J2) or 3 different diameter bits (J3).

	d [mm]	l [mm]	[g]
225.6J2	6	66	36
225.8J2	8	77	50
225.10J2	10	88	90
225.J3	6 - 8 - 10	-	90

230 Welding spot mill



- This tool, fitted on a drill, separates two spot-welded metal sheets.
- Includes the mill holder assembly, reversible mill and centring tip.
- Not compatible with ref V.781B.
- Length: 70 mm.

Weight: 23 g.

- Set of 5 spare tips: 230.A1J5.

230.J1 Set of mills



- Set with a 230 module, 2 centring tips and 10 reversible mills.
- Dimensions (L. x W. x H.): 115 x 65 x 22 mm.

Weight: 90 g.

- Set of 5 spare tips: ref 230.A1J5.

Miscellaneous

270A.MA Steel wire brush



- Dimensions (L. x W. x H.): 280 x 34 x 60 mm.

Weight: 150 g.

245.J1 "Standard" kit







- For making round gaskets.
- Cutting capacity: diam. 3 to 30 mm using a punch and diam. 56 to 330 mm using calipers.
- Plastic case BP.115.
- Tray PL.100A.
- Dimensions (L. x W. x H.): 332 x 143 x 67 mm.

Weight: 1.800 kg.

235.J1 Set of 3 stainless steel scrapers



- Dimensions:
- Length: 215 mm.
- Width: 32 mm straight - 32 mm angled - 50 mm straight.

Weight: 427 g.

237.J1 Set of 3 flexible wide scrapers



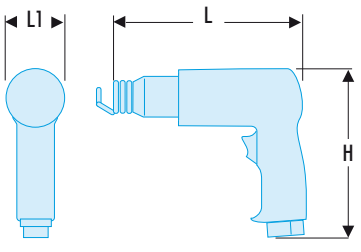
- Dimension:
- Length: 215 mm.
- Width: 32 mm - 50 mm - 75 mm.

Weight: 273 g.

Air hammer

Power chisel with hexagonal shank







- Built-in power regulator.
- Impact rate 3,000 min.
- Working pressure: 6.2 bars.
- Average air consumption: 90 l/min.
- Air inlet thread: 1/4".
- Power: 0.8 kW.
- Piston stroke: 67 mm.

- Straight chisel: V.320HA1.
- Punch (hexagonal shank): V.320HA2.
- Weld point cutter (hexagonal shank): V.320HA3.
- Sheet metal cutter (hexagonal shank): V.320HA4.
- Double-edge sheet-metal cutter (hexagonal shank): V.320HA5.

	L [mm]	L1 [mm]	H [mm]	⧋ [kg]
V.320FH	171	50	160	1,580

V.321AH Power chisel set



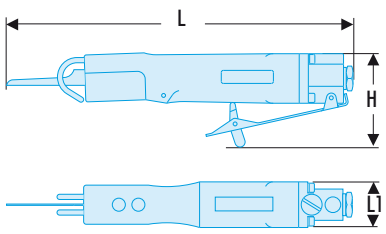
- Kit includes
- V.320FH: 1 power chisel.
- 1 sheet-metal cutter.
- 1 double edge sheet-metal cutter.
- 1 weld point cutter.
- 1 straight chisel.
- 1 punch.

Weight: 6.300 kg.

Air tools

Sabre saw





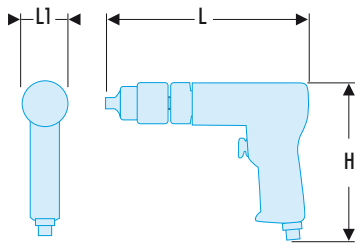
- Seamless straight and curved cutting.
- Suitable for flat and convex surfaces.
- Adjustable blade guide.
- Strokes per minute: 10,000.
- Average air consumption: 32 l/min.
- Air inlet thread: 1/4".
- Air hose int. diameter: 10 mm.
- Supplied with 3 x 10 teeth/cm blades and blades x 12 teeth/cm blades.

- Set of 6 12 teeth/cm blades: V.770F1.
- Set of 6 10 teeth/cm blades: V.770F2.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.770F	270	36	75	700

V.103MF Drill 10 mm with self-locking chuck

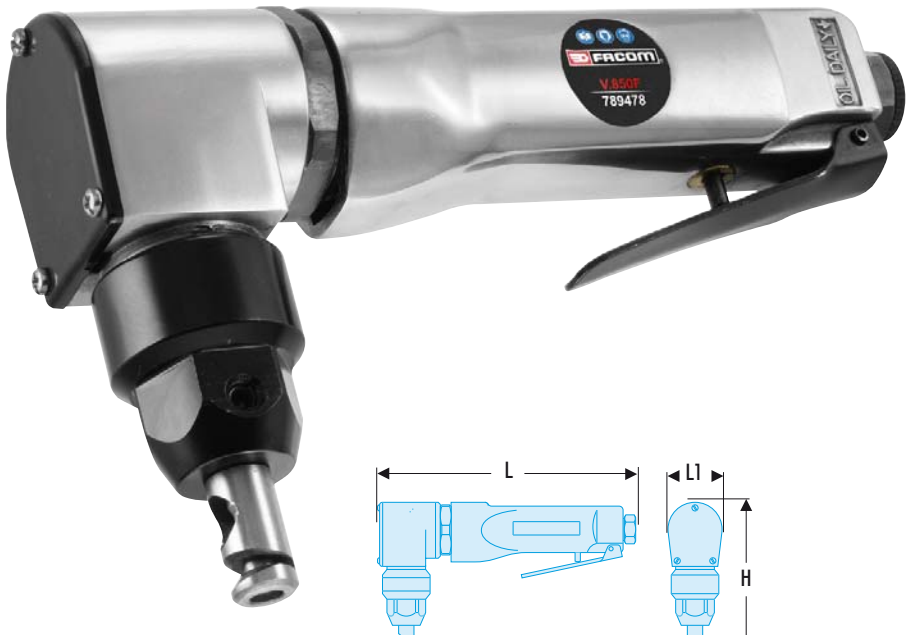


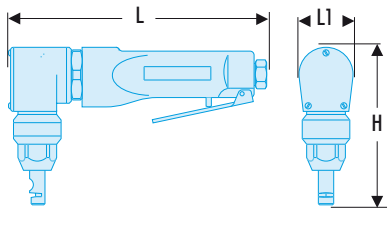


- 10 mm Quick chuck.
- Free speed: 2800 rpm.
- Average air consumption: 124 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Motor power: 0.45 kW.

- Spare chuck: V.103MFMA1.

Nibbler





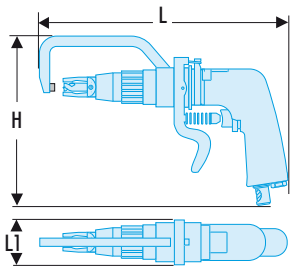
- Lever throttle for precise control and low-speed start.
- Can produce rounded edges up to 6.5 mm radius.
- Max. thickness: 1.2 mm - speed 1.8 m/min.
- Strokes per minute: 4300.
- Average air consumption: 120 l/min.
- Air inlet thread: 1/4".
- Air hose int. diameter: 10 mm.

- Punch set: V.850FKR2.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.850F	179	40,5	118	900

Spot weld remover with stop







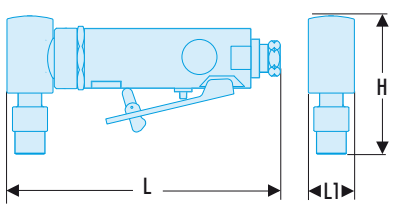
- Fitted with a counterarm to hold the workpiece in position without slipping.
- Speed control.
- Free speed: 1800 rpm.
- Average air consumption: 110 l/min.
- Air inlet thread: 1/4".
- Working pressure: 6.2 bar.
- Milling cutter diameter 8 mm.

- Milling cutter diameter 8 mm: V.781A1 (minimum order quantity: 5).

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.781F	270	53	198	2,100

Angle grinder - 6 mm collet





- Angle grinder for grinding wheel with shank.
- For cutting and cleaning.
- Compact motor with sturdy blades.
- Compact angled head for difficult-to-reach places.
- Exhaust air duct with integral air supply pipe.
- Air connection: female thread 1/4".
- Recommended air hose: int. diam. 8 mm.
- Recommended fitting: thread-internal diameter 1/4" - 6 mm.
- Pressure: 6.2 bar.
- Speed of rotation: 18,000 rpm.
- Average air consumption: 110 l/min.
- Noise level: 77.3 dB(A).
- Vibration level: below 2.5 m/s^3.
- Power: 0.25 kW.
- Supplied with 6 mm pliers + 2 open end wrenches.

	L [mm]	L1 [mm]	H [mm]	⚖ [g]
V.347F	160	27	73	700

AIR TOOLS







Power tools section p. 676

Forming

FORMING | BODYWORK REPAIR WORKSTATION

EFFICIENT, MORE COMFORTABLE STORAGE

Designed to keep everything close to hand, save time and avoid losing tools.



GALVANISED STEEL WORKTOP



- Easy to maintain.
- High strength.

SAFETY

- Central key locking.
- Drawer fronts fitted with a catch to prevent accidental opening.

CORNER BUMPERS

- To avoid damage to vehicles in case of accidental contact

MANOEUVRABILITY

- 4 large diameter wheels : 2 fixed and 2 castors, 1 with brake.

MAXIMUM STORAGE

- Panel with special system for securing hammers and dressers.
- Other tools can be freely hung using the CKS system.
- 2 pull-out trays giving access to a "bin" for storing heavy tools, much as dollies and spoons, etc. Trays and bin fitted with a non-slip mat
- 3 drawers: (2 x 60 mm + 1 x 130 mm) and bin for storing bulky items and pneumatic tools.
- Compatible with the FACOM modular storage system.

COMFORT

- Working height.
- Ergonomic handle. Lid fitted with gas springs.



Supplied without tools and consumables.

CR.T4XL Bodywork repair workstation







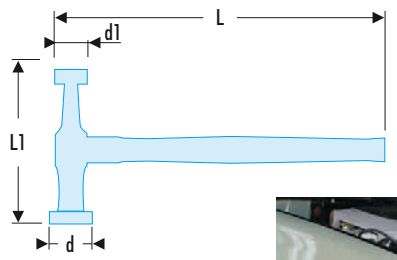
- A lid:
  - Containing a panel fitted with a system for securing dressers and hammers.
  - PK perforations for freely hanging other tools.
  - 2 gas springs for comfort of use.
- 2 trays that pull out sideways to reveal a large bin for storing heavier tools such as dollies and spoons. The bottom of the trays and the bin are fitted with non-slip mats.
- 3 drawers (2 x 60 + 1 x 130 mm) compatible with the Facom modular storage system and 1 bin drawer (270 mm high) for storing bulky items and pneumatic tools.
- Galvanised steel worktop: easy-to-maintain and high resistance.
- Safe: central key locking of lid and drawers.
- Corner bumpers to avoid damage to vehicles in case of accidental contact.
- Manoeuvrability ensured by 4 large diameter wheels, 2 fixed, 2 castors, one with a brake.
- Dimensions, handle excluded (L. x D. x H.): 825 x 546 x 1,035 mm.

Weight: 77 kg.

Panel beating hammers

861D - Bumping hammers





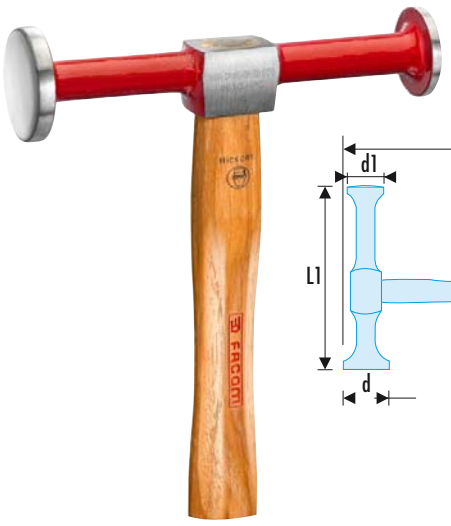


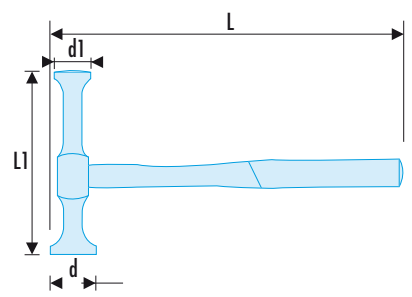
- Stretching and planishing hammer.
- Convex, round and square heads.
- Secure handle attachment.
- Finely polished planishing surfaces.
- Facetted hickory handle.

- Spare handle and wedge: 211.MH26.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
861D.26	25	30	310	100	300
861D.30	30	35	310	100	390

Round, flat, and convex head hammer



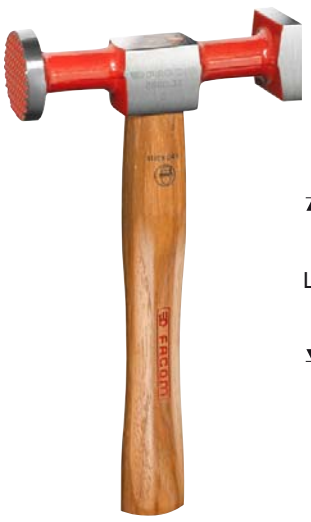


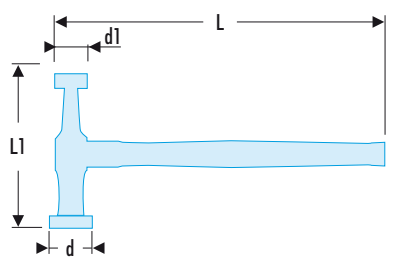
- Bumping and planishing hammer.
- Flat, round and convex heads.
- Secure handle attachment.
- Finely polished heads.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	d [mm]	d1 [mm]	E [mm]	L [mm]	L1 [mm]	⚖ [g]
861D.RPC	32	40	40	310	150	600

866D - Shrinking hammers



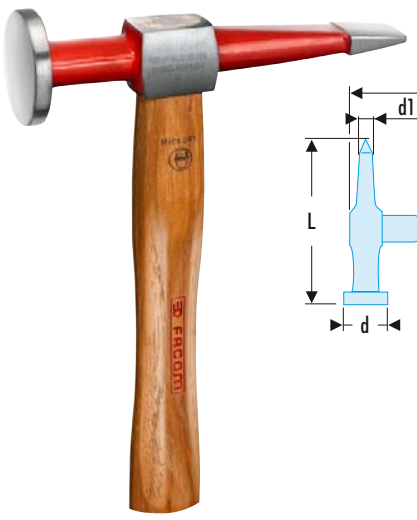


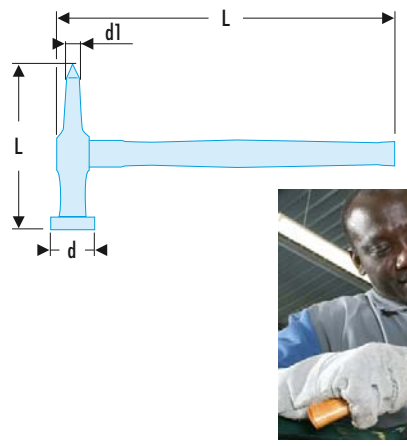
- Stretching and planishing hammer.
- 1 round ribbed face, one square smooth face.
- Secure handle attachment.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
866D.32	30	35	310	100	310
866D.41	35	40	310	100	380

Hammer with round flat face and straight pein





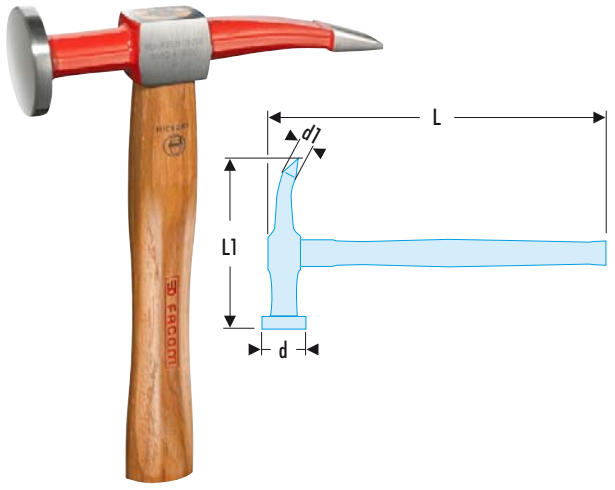


- Planishing hammer.
- 1 round flat face, 1 straight pein.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
868D.40PLD1	40	23	310	140	320

Hammer with round domed face and curved pein



- Planishing hammer.
- 1 round domed face, 1 curved pein.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

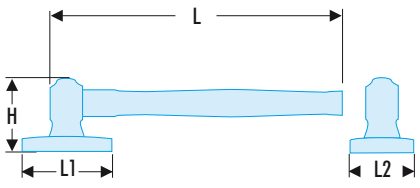
- Spare handle and wedge: 211.MH26.

	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⚖ [g]
868D.40BOC	40	23	310	23	430

Dressers

Flat dresser







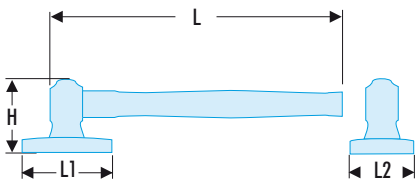
- Flat dresser.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
862D.60	70	295	50	30	320

Long-dome dresser





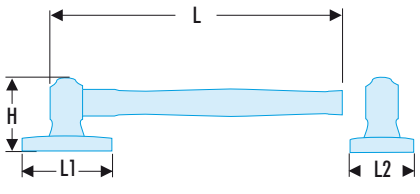
- Long-dome dresser.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
863D.60	70	295	50	30	320

Wide-dome dresser





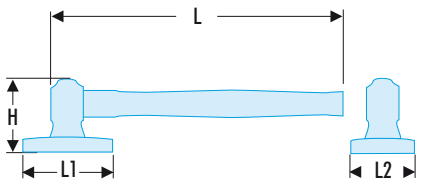
- Surface curved widthwise.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⚖ [g]
864D.60	70	295	50	30	320

Shrinking dresser no.1





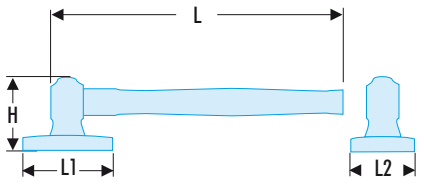
- Ribbed face.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	H [mm]	L [mm]	L1 [mm]	L2 [mm]	[g]
867D	70	295	50	30	310

Shrinking dresser no.2





- Ribbed face.
- Secure handle attachment.
- Finely polished head.
- Hickory handle.

- Spare handle and wedge: 211.MH26.

	H [mm]	L [mm]	L1 [mm]	L2 [mm]	[g]
867D.DS	70	295	50	30	310

Dollies

870A Regular dolly no.1



- Dimensions (L. x W. x H.): 88 x 60 x 35 mm.
- Finish: polished.

Weight: 1.115 kg.

870B Regular dolly no.2



- Combination of sharp and rounded edges.
- Dimensions (L. x W. x H.): 90 x 55 x 35 mm.
- Finish: polished.

Weight: 1.150 kg.

870B Flat regular dolly



- Comprising one flat face, one curved face and an angle.
- Dimensions (L. x W. x H.): 90 x 65 x 32 mm.

Weight: 1.050 kg.

909A Slim shaping dolly



- Dimensions (L. x W. x H.): 88 x 60 x 23 mm.
- Finish: polished.

Weight: 750 g.

871B.45 Slim wedge dolly



- Slim model with a domed face.
- Dimensions (L. x W. x H.): 125 x 55 x 37 mm.
- Finish: polished.

Weight: 900 g.

871B.55 Wedge dolly



- Model with a domed face.
- Dimensions (L. x W. x H.): 140 x 54 x 55 mm.
- Finish: polished.

Weight: 1.350 kg.

872A Curved head dolly



- Double-ended dolly, large model.
- Dimensions (L. x W. x H.): 90 x 70 x125 mm.
- Finish: polished.

Weight: 1.300 kg.

874A Dished dolly



- Curved on all sides.
- Dimensions (L. x W. x H.): 106 x 65 x 26 mm.
- Finish: polished.

Weight: 980 g.

902B Thin toe dolly



- One curved face and one flat face.
- Dimensions (L. x W. x H.): 115 x 56 x 25 mm.
- Finish: polished.

Weight: 860 g.

902C Toe dolly



- One curved face and one flat face.
- Dimensions (L. x W. x H.): 125 x 60 x 30 mm.
- Finish: polished.

Weight: 1.370 kg.

906A Pinch wedge dolly



- One curved face and one flat face.
- Dimensions (L. x W. x H.): 130 x 68 x 25 mm.
- Finish: polished.

Weight: 1.150 kg.

Spoons and blades

875.3 Long single spoon



- Bumping spoon.
- Length: 390 mm.
- Finish: polished.

Weight: 1.300 kg.

875.4 40° single spoon



- Bumping spoon.
- Length: 250 mm.
- Finish: polished.

Weight: 500 g.

876A Angled, flat short double spoon



- Double bumping spoon, very cranked at one end.
- Also available in a long version (ref: 877A, length: 510 mm).
- Length: 400 mm.
- Finish: polished.

Weight: 1.700 kg.

877A Angled and flat double spoon



- Double bumping spoon, very cranked at one end.
- Also available in a short version (ref: 876A, length: 400 mm).
- Length: 510 mm.
- Finish: polished.

Weight: 2.200 kg.

891A.PL Flat shrinking blade



- Ribbed face.
- Length: 350 mm.

Weight: 700 g.

895A Short single spoon

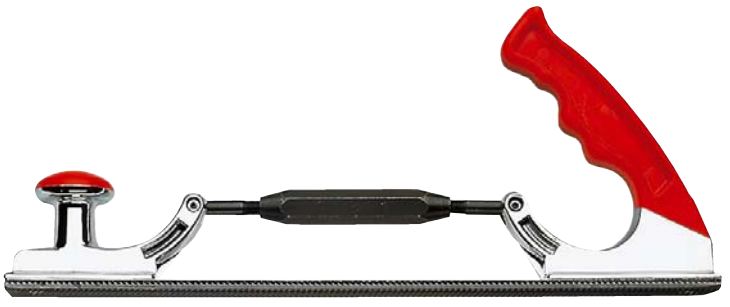


- Bumping spoon.
- Length: 285 mm.
- Finish: varnished and polished.

Weight: 820 g.

Files

851B Frame for milled files

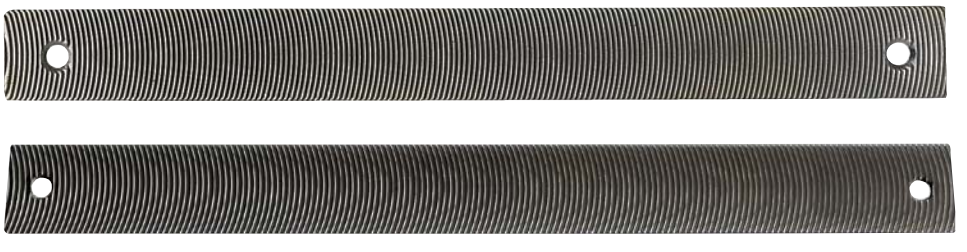




- Ergonomic handle with a choice of two working positions according to the task to be performed.
- Accurate setting of the file profile.
- Takes both 300 and 350 mm file lengths.
- Dimensions (L. x W. x H.): 360 x 33 x 140 mm.
- Supplied without file.

Weight: 630 g.

850 milled files



- Recommended for soft metal, cast iron, mild steel and soft plastics.
- For use with frame 851B.

	Size [mm]	L [mm]	l [mm]	Teeth [cm]	Blade profile	⚖ [g]
850.S300	Standard	300	30	31/2	Curved	190
850.S350	Standard	350	35	31/2	Curved	270
850.SD350	Standard	350	35	31/2	Straight	260
850.F350	Slim	350	35	41/2	Curved	270
850.EF350	Extra-slim	350	35	6	Curved	300

Forming tool sets

CR.CM92 135-piece bodywork tool set



- Set of forming tools.
- Supplied without content, detail below.

Weight: 20.340 kg.

	Qtys	Set Description
440.JP9	9	Combination wrenches 8 to 19 mm
R2NANO	38	1/4" sockets: 5.5 to 14 mm and accessories
SL.DBOX1	21	1/2" sockets: 8, 10 to 19, 21, 22, 24, 27, 30, 32 mm and accessories
AMZ.M1	1	Short bit holder
BP.102	1	Plastic case
ED.T	3	1/4" Pozidriv® tips 101-102-103
EH	4	1/4" 6-point tips 103 - 104 - 105 - 106
EP.T	3	1/4" Phillips® tips 101 - 102 - 103
ES.T	3	1/4" bits for slotted heads 134.5 - 136.5 - 148
EXR	6	1/4" Resistorx® tips 110 to 140
PL.400A	1	Plate for screwing bits
181A.25CPE	1	Lockable multigrip pliers
192.16CPE	1	Piano wire diagonal cutters
185.20CPE	1	Sheathed straight half-round nose pliers
501	1	Long-nose lock-grip pliers
893.316	1	Locking tape measure 3 m
234	1	Scriber
601	1	Hacksaw frame
668B.10	10	Saw blades
882A	1	Metal shears
RD.MD200EMA	1	Flat second-cut file 200 mm
DRD.MD200EMA	1	Half-round second-cut file 200 mm

	Qtys	Set Description
200H.50	1	Riveting hammer
208A.32CBA	1	Interchangeable-tip mallets
249	2	Drift punches 2 - 4 mm
256.6	1	Precision centre punch
259.P	1	Extra-flat chisel
861D.RPC	1	Round, flat, and convex head hammer
871B.45	1	Slim wedge dolly
861D.30	1	Bumping hammer
866D.32	1	Finishing hammer
868D.40BOC	1	Offset peening hammer
862D.60	1	Flat dresser
870B	1	Thin toe dolly
906A	1	Flat wedge dolly
875.3	1	Long single spoon
895A	1	Short single spoon
518.3	1	Lock-grip pliers
518.4	1	Lock-grip pliers
225.J3	3	End mills
851B	1	Frame for milled files
850.S350	1	Standard file
CR.D10	1	Windshield wiper arm remover
CR.D1	1	Trip removal tool

CR.858J5 Specialist 5-piece forming tool set: a must-have



- Supplied without content, detail below.

Weight: 3.880 kg.

	Qtys	Set Description
861D.30	1	Bumping hammer
862D.60	1	Flat dresser
870B	1	Thin toe dolly
906A	1	Flat wedge dolly
871B.45	1	Slim wedge dolly

CR.858J15 Specialist 15-piece forming tool set: basic for professionals



• Supplied without content, detail below.
Weight: 11.850 kg.

	Qtys	Set Description
868D.40B0C	1	Offset peening hammer
866D.32	1	Finishing hammer
861D.30	1	Bumping hammer
862D.60	1	Flat dresser
870B	1	Thin toe dolly
906A	1	Flat wedge dolly
871B.45	1	Slim wedge dolly
872A	1	Curved head dolly

	Qtys	Set Description
875.3	1	Long single spoon
876A	1	Offset flat spoon
895A	1	Short single spoon
891A.PL	1	Flat shrinking blade
851B	1	Frame for milled files
850.S350	1	Standard file
209.50	1	Wood mallet

CR.858J20 Specialist 20-piece forming tool set: a must-have for specialists



• Supplied without content, detail below.
Weight: 15.120 kg.

	Qtys	Set Description
868D.40B0C	1	Offset peening hammer
866D.32	1	Finishing hammer
861D.30	1	Bumping hammer
861D.RPC	1	Round, flat, and convex head hammer
862D.60	1	Flat dresser
870B	1	Thin toe dolly
906A	1	Flat wedge dolly
908A	1	Flat regular dolly
871B.45	1	Slim wedge dolly
874A	1	Dished dolly

	Qtys	Set Description
872A	1	Curved head dolly
875.3	1	Long single spoon
875.4	1	40° single spoon
876A	1	Offset flat spoon
895A	1	Short single spoon
891A.PL	1	Flat shrinking blade
851B	1	Frame for milled files
850.S350	1	Standard file
850.F350	1	Fine file
209.50	1	Wood mallet

Modules

MOD.CAR1A Bodywork module no.1



• Comprising:
- 861D.RPC: Hammer with round, flat and convex heads.
- 902B: Thin toe dolly.
- 909A: Slim shaping dolly.
- 906A: Pinch wedge dolly.
- Tray PL.396B.

• Spare handle and wedge: 211.MH26.

MOD.CAR2 Bodywork module no.2



- Comprising:
- 259: Slim-profile chisel 235 mm.
- 209.50: Wooden mallet 50 mm.
- 225.J3: Set of 3 end mills.
- 850.S350: Standard angled milled file.
- 851B: Frame for milled files.
- 860H.28: Round head hammer 28 mm.
- 861D.30: Bumping hammer.
- 862D.60: Flat dresser.
- 867D: Shrinking dresser.
- 870B: Thin toe dolly.
- 871B0.55: Wedge dolly.
- 874A: Dished dolly.
- 875.3: Long single spoon.
- 906A: Pinch wedge dolly.
- Thermoformed module PL.679 (value 3 modules).

MOD.CARA Bodywork module no.3



- Comprising:
- 225.J3: Set of 3 end mills.
- 259.P: Slim-profile chisel with guard.
- 501: Long nose self-tightening adjustable wrench.
- 850.S350: Standard milled file.
- 851B: Frame for milled files.
- 862D.60: Flat dresser.
- 875.3: Long single spoon.
- 875.4: Angled spoon.
- 884B: Panel shears.
- 874A: Dished dolly.
- Thermoformed module PL.379B (value 3 modules).

- Spare handle and wedge: 211.MH26.

Pliers

CAD.9 Hand punch



- Punch: 5 mm.
- Max. sheet thickness: 0.8 mm.
- Dimensions (L. x W. x H.): 290 x 130 x 30 mm.

Weight: 1.170 kg.

- Punch and die, 5 mm diameter: CAD.10RN1.

CAD.10 Hand crimper and punch



- Crimp width: 12 mm.
- Punch 5 mm.
- Swivel head.
- Max. sheet thickness: 0.8 mm.
- Dimensions (L. x W. x H.): 290 x 130 x 30 mm.

Weight: 1.200 kg.

- Punch and die, 5 mm diameter: CAD.10RN1.

Paint preparation

PAINTING PREPARATION | SURFACE PREPARATION WORKSTATION

EFFICIENT, MORE ORGANISED STORAGE

- Specially designed to enable the user to perform surface preparation tasks in a minimum of time with a maximum of organisation.
- A clever storage system for keeping all the tools and consumables required for each job close to hand.
- Every day, you will appreciate the comfort, safety and organisation provided by its various features.
- Particularly appreciated for ISO 9000 certifications.

EASY TO MAINTAIN

- Galvanised steel worktop, resistant to chemical agents, solvents, etc. Removable lip.

EVERYTHING CLOSE TO HAND

- Bottle-shelf, paper-roll holder, waste bin, shelf for abrasives, adhesive rolls, etc: keeps everything within easy reach, at all times !

CORNER BUMPERS

- To avoid damage to vehicles in case of accidental contact !

PADLOCK CLASP



Supplied without tools and consumables

Supports

CR.T3XL Surface preparation workstation





- Workstation comprising:
- 2 sloping upper shelves for storing consumables.
- 1 drawer 130 mm high with padlock for expensive items, safety items, etc.
- 1 2-way sloping shelf for ordinary tools.
- 1 storage area for bulky consumables.
- Perforated recessed side panels for attaching accessories: 2 bottle-shelves, 1 paper-roll holder, wire supports to hold paint guns, 1 waste bag holder.
- Dimensions, without handle (L. x D. x H.): 825 x 546 x 1645 mm.

Weight: 51 kg.

CR.S7 Multi-functional bodywork support cradle





- Maximum supported weight by CR.S8: 80 kg.
- Foam protections to prevent scratches.
- Ergonomic design, flexible fabric sling moulds to the shape of the panel supported.
- 4 castor wheels (2 castors with brake).
- Floor dimensions.
- Easy to store.
- Dimensions (L. x W. x H.): 90 x 82 x 93 cm.

Weight: 8 kg.

- Foam protection CR.S7PRO.
- Set of 2 slings CR.S7-05.

CR.P1 Painters support





- Maximum supported weight by CR.S8: 50 kg.
- Multi-adjustable support for bonnets, doors, etc.
- Modular: 16-point adjustment, adjustable height, 360° rotation, with locking supports.
- With 2 large-size wheels.
- Small floor dimensions
- Dimensions (L. x W. x H.): 130 x 120 x 70 cm.

Weight: 19 kg.

CR.P2 Bodywork component horizontal stand





- Maximum supported weight by CR.S8: 80 kg.
- 3-point support stand with anti-scratch protection.
- Work height: min. 800 mm and max. 1100 mm.
- Small floor dimensions, easy storage.

Weight: 8 kg.

- Foam protection CR.S7PRO.

CR.S2 Support for work in high locations



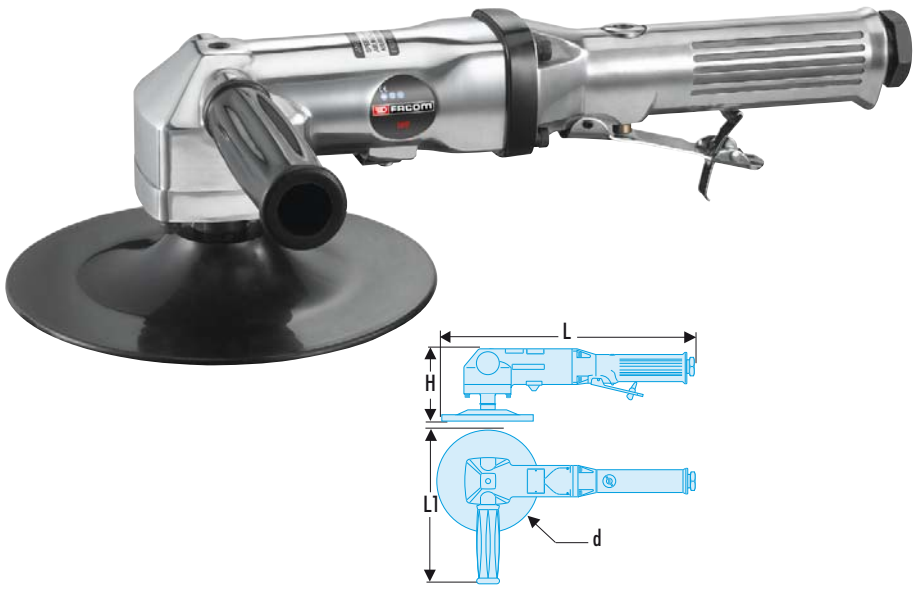


- Maximum supported weight by CR.S8: 140 kg.
- Stepped support for work in high locations on utility vehicles, minivans, 4x4, etc.
- Safe use (safety bow, base stability).
- Easy to fold and store.
- Rear wheels with 2 positions (in axis or turned by 90°).
- Suited to paint booth gratings.
- Dimensions (L. x W. x H.): 80 x 100 x 200 mm.

Weight: 37 kg.

Air tools

Angle sander diameter 178 mm



- Speed of rotation: 4500 rpm.
- Speed control.
- Average air consumption: 110 l/min.
- Air connection (female thread): 1/4".
- Pressure: 6.2 bar.
- Supplied with handle and one 178 mm dia. fibre pad.

- Pad: 178 mm. V.411FA1.

	d [mm]	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.411F	178	373	229	101	2,250

Orbital sander 152 mm - 5 mm orbit





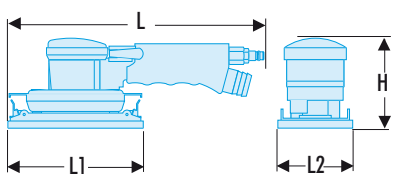
- Rotation speed control system.
- Can connect to a central exhaust unit.
- Speed of rotation: 10,000 rpm.
- Average air consumption: 105 l/mn.
- Air inlet thread: 1/4".
- Pressure: 6.2 bar.
- Orbit: 5 mm.
- Supplied with a 6-hole Velcro pad.

- Spare plate: V.252A1.

	d [mm]	L [mm]	H [mm]	⚖ [g]
V.252F	152	221	115	840

Vibrating sander - 95 x 170 mm - 8 holes





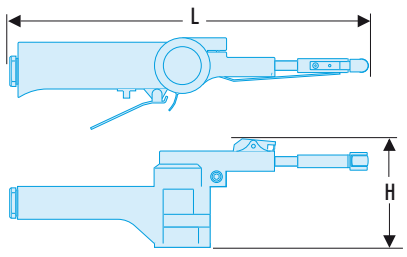
- Easy to handle, lightweight roughing sander.
- Clips for standard abrasives.
- Compatible with all diameters 29 mm dust exhaust.
- Variable speed control from 5000 to 8500 rpm.
- Air connection (female thread): 1/4".
- Recommended air hose (int. diam.): 8 mm.
- Recommended fitting: thread-internal diameter 1/4" - 6 mm.
- Pressure: 6.2 bar.
- Speed of rotation: 8500 rpm.
- Average air consumption: 115 l/min.
- Noise level: 74 dB(A).
- Vibration level: 5.4 m/s³.
- Eccentric offset: 5 mm.
- Finish: high-quality chrome-plated aluminium motor, comfortable thermally-insulated body.
- Supplied with pad and 8-hole abrasive perforator.

- 8 hole pad V.260A1.
- 95 x 170 mm pad V.260SAV50B.

	L [mm]	L1 [mm]	L2 [mm]	H [mm]	⚖ [kg]
V.260F	288	170	95	120	2,100

Belt sander - 10 x 330 mm





- Surface roughing and cleaning.
- Multi-position adjustable handle.
- Quick-change belt system.
- Belt size: 10 x 330 mm.
- Air connection (female thread): 1/4".
- Recommended air hose (int. diam.): 8 mm.
- Recommended fitting: thread-internal diameter 1/4" - 6 mm.
- Pressure: 6.2 bar.
- Speed of rotation: 16,000 rpm.
- Average air consumption: 110 l/min.
- Noise level: 86.1 dB(A).
- Vibration level: below 2.5 m/s³.
- Supplied with 3 belts (one ready-mounted): 2 x 120 grit, 1 x 80 grit.
- 80 grit belt 10 x 330 V.781A1 (minimum ordering quantity: 10).
- 120 grit belt 10 x 330 V.402A2 (minimum ordering quantity: 10).

	L [mm]	H [mm]	⚖ [g]
V.402F	283	83	800

AIR TOOLS







Power tools section p. 676

Windshields

Windshield tools

CR.D10 WINDSHIELD WIPER ARM REMOVER

COMPACT, LIGHTWEIGHT, EASY TO USE

- Covers more than 95% of European vehicles.
- Chrome beam and legs.
- Legs can be adjusted in the same way as bearing pullers.



Special spacer for washer jet





CR.D10 Windshield wiper arm remover



- Including spacer for wiper arms with integral washer jet.
- Each leg can be removed for a better fit on the arm.
- Capacity diam.: 44 mm.
- Supplied with instructions.

Weight: 220 g.

D.28B Windshield replacement kit





- Comprising:

- D.28A1: Suction cups (2x).
- D.28A2: Ratchet strap.
- D.28-3: Removal tool.
- D.28-4: Pull handle.
- D.28-5: Braided wire for windshields (18 m).

Weight: 3.300 kg.

D.80 Windshield tools



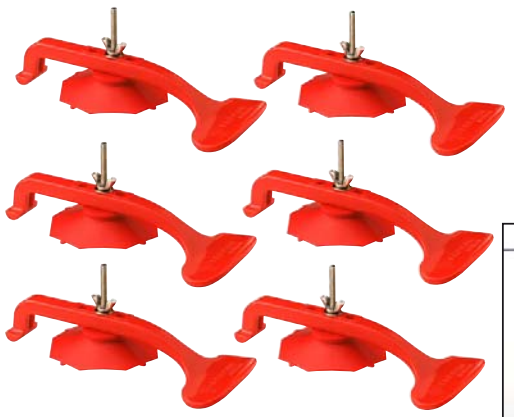
- Set of 3 tools.
- Comprising:

- D.80-01: Windshield fitting tool.
- D.80-02: Trim fitting tool.
- 82H.4: Hexagon key (4 mm).
- Supplied in a plastic case, dim. (L. x W. x H.): 325 x 135 x 50 mm.

Weight: 820 g.

- For narrow trim: D.80-02-04.
- For medium trim: D.80-02-05.
- For wide trim: D.80-02-06.

DCR.20J6 Set of 6 suction cups



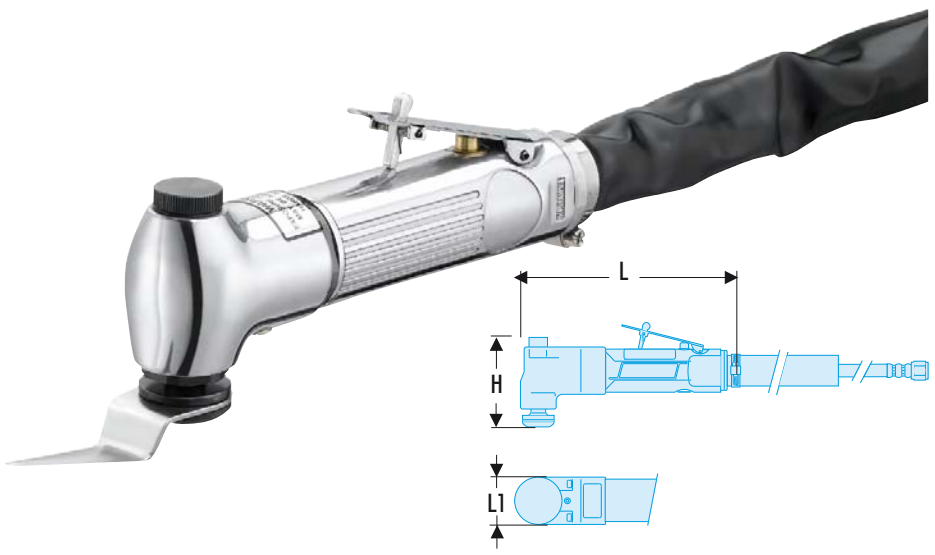


- Secures components while curing.
- Many bodywork applications:
- Windshield trims.
- Names and badges.
- Interior mirrors, etc.
- Excellent suction on painted panels and windows.

Weight: 470 g.

Air tools

Windshield cutter



- Faster windscreen replacement.
- Safety trigger.
- Air exhaust in handle.
- Air inlet thread: 1/4".
- Pendular motion: 3°.
- Strokes per minute: 2000.
- Average air consumption: 120 l/min.
- Air inlet thread: 10 mm.
- Supplied with instructions, without blade.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
CAD.P300F	209	45	85	1,210

Windshield cutter blades CAD.P300F

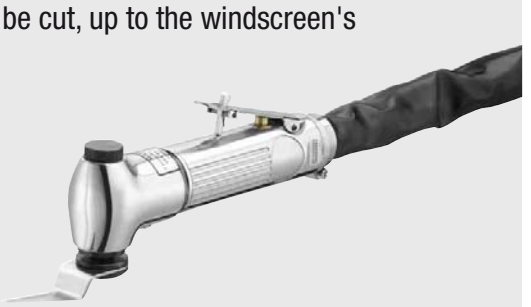


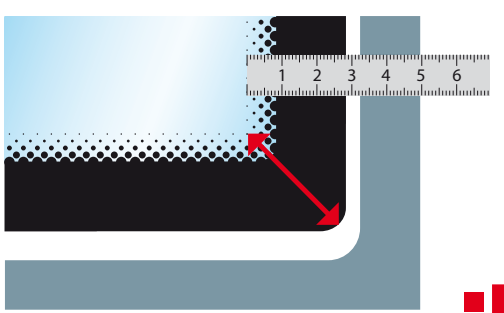
	L [mm]
CAD.P300F1	63
CAD.P300F2	30
CAD.P300F3	36
CAD.P300F4	57
CAD.P300F5	18
CAD.P300F6	35
CAD.P300F7	35
CAD.P300F8	90
CAD.P300F9	90
CAD.P300F10	25
CAD.P300F11	35
CAD.P300F12	45

WINDSCREEN CUTTERS

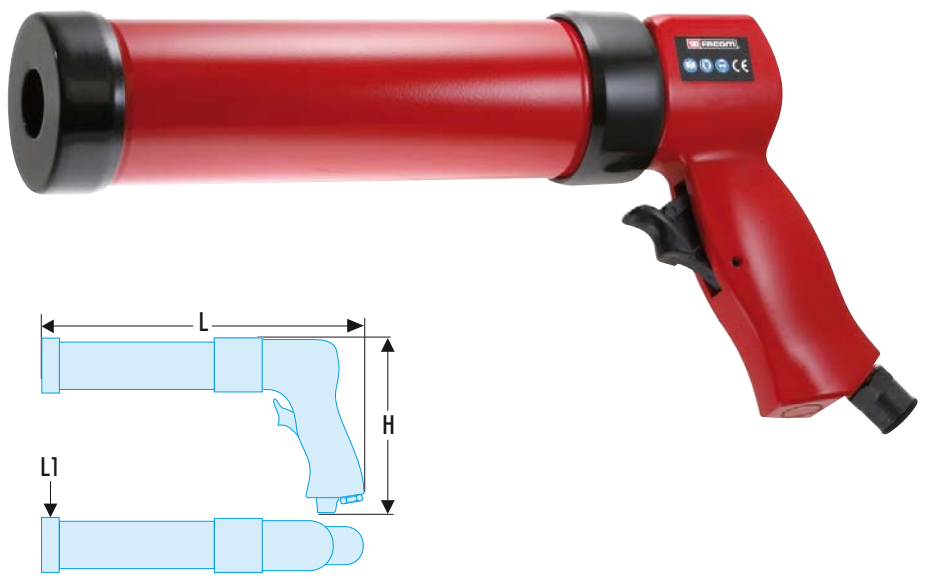
- Using a ruler, measure the depth of glue to be cut, up to the windscreen's printed markings.

⚠ Select the corresponding blade, taking account of the rounded corners.





Caulking gun - 50 x 215 mm cartridge



- For applying silicon, mastics, adhesives, etc.
- Variable flow.
- Automatic pressure release halting flow of mastic.
- Air connection: female thread 1/4".
- Recommended air hose: int. diameter 10 mm.
- Recommended fitting: thread-internal diameter 1/4" - 8 mm.
- Pressure: 6.2 bar.
- Noise level: 70 dB(A).
- Vibration level: below 2.5 m/s³.
- Standard cartridge: 50 x 215 mm.

	L [mm]	L1 [mm]	H [mm]	⚖ [kg]
V.801F	305	62	168	1,300

Hydraulic equipment

CR.4T 4 T hydraulic straightening kit



- Comprising:
- 1 hand pump (270 cm³).
- 1 push-jack (122 mm stroke).
- 1 plier-spreader jack.
- 5 extension pieces (115 to 534 mm).
- 7 accessories: flat base, spreading legs, heads (V, chequered, rubber).
- Quick couplers.
- Working pressure: 700 bar.
- Supplied in a storage case.
- CE.

Weight: 21.400 kg.

CR.10T 10 T hydraulic straightening kit



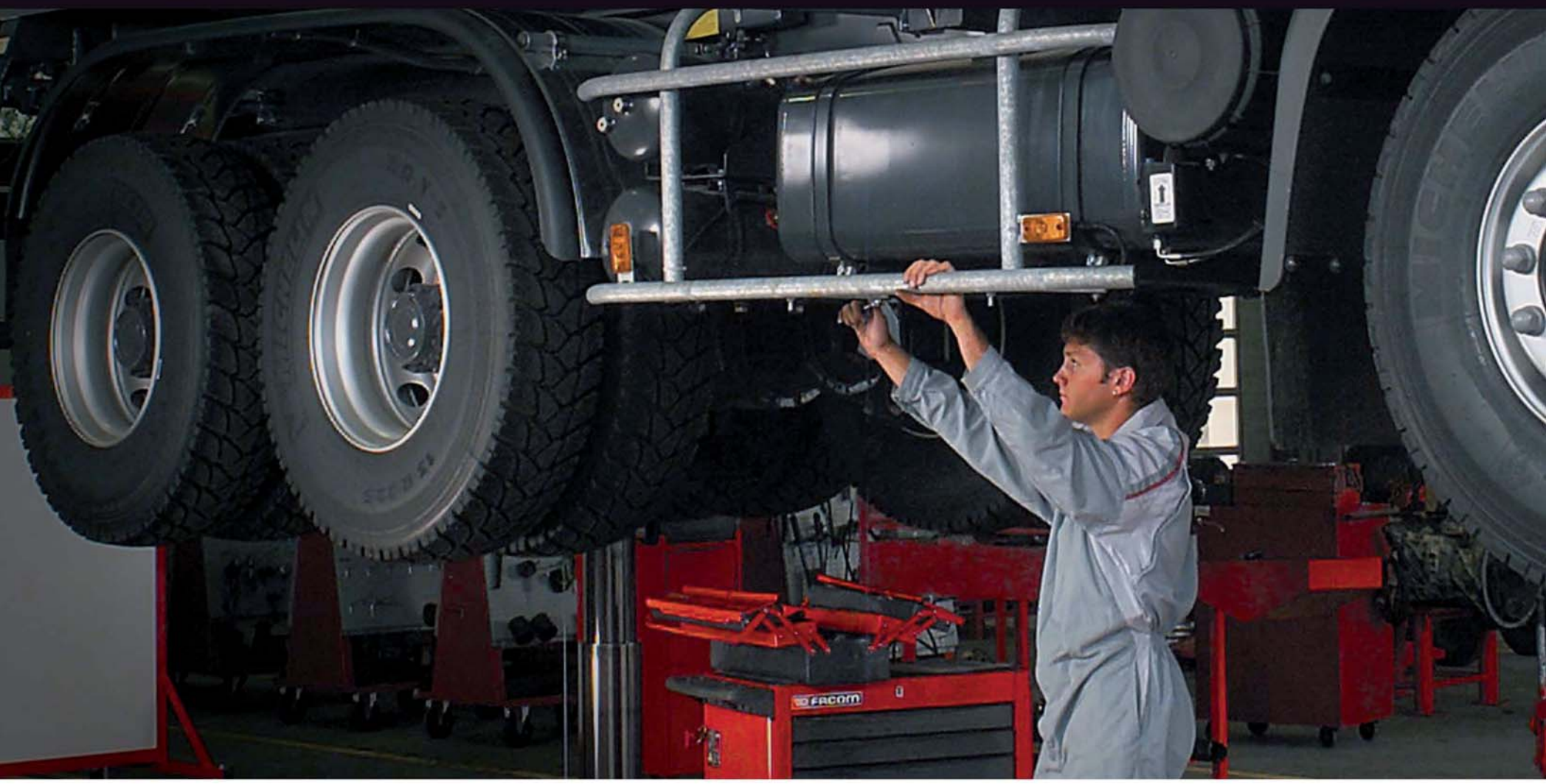
- Comprising:
- 1 hand pump (600 cm³).
- 1 push-jack (154 mm stroke).
- 1 plier-spreader jack.
- 4 extension pieces (127 to 711 mm).
- 7 accessories: flat base, spreading legs, heads (V, chequered, rubber).
- Quick couplers.
- Working pressure: 700 bar.
- Supplied in a wheeled storage case.
- CE.

Weight: 37.100 kg.

WA.21 Hydraulic oil - 2 litres



- 2 litre can.
- Suitable for hydraulic bodywork jacks, lifting jacks, cranes and pit jacks.



MOBILE LIFTING EQUIPMENT

990



Trolley jacks 991
Hydropneumatic jacks 992
Accessories for hydropneumatic jacks 993
Bottle jacks 994
Axle stands 995
Heavy load props 995
Hoists 996
Unit lifting jacks 997

HYDRAULIC PRESSES

998



Workshop 998

STORAGE

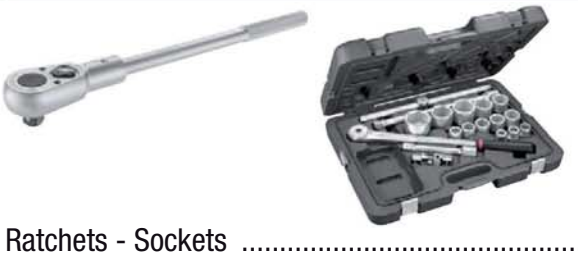
1000



Roller cabinet and mobile tables 1000
JET+ roller cabinets 1002
Truck selections 1003

RATCHETS - SOCKETS

1005



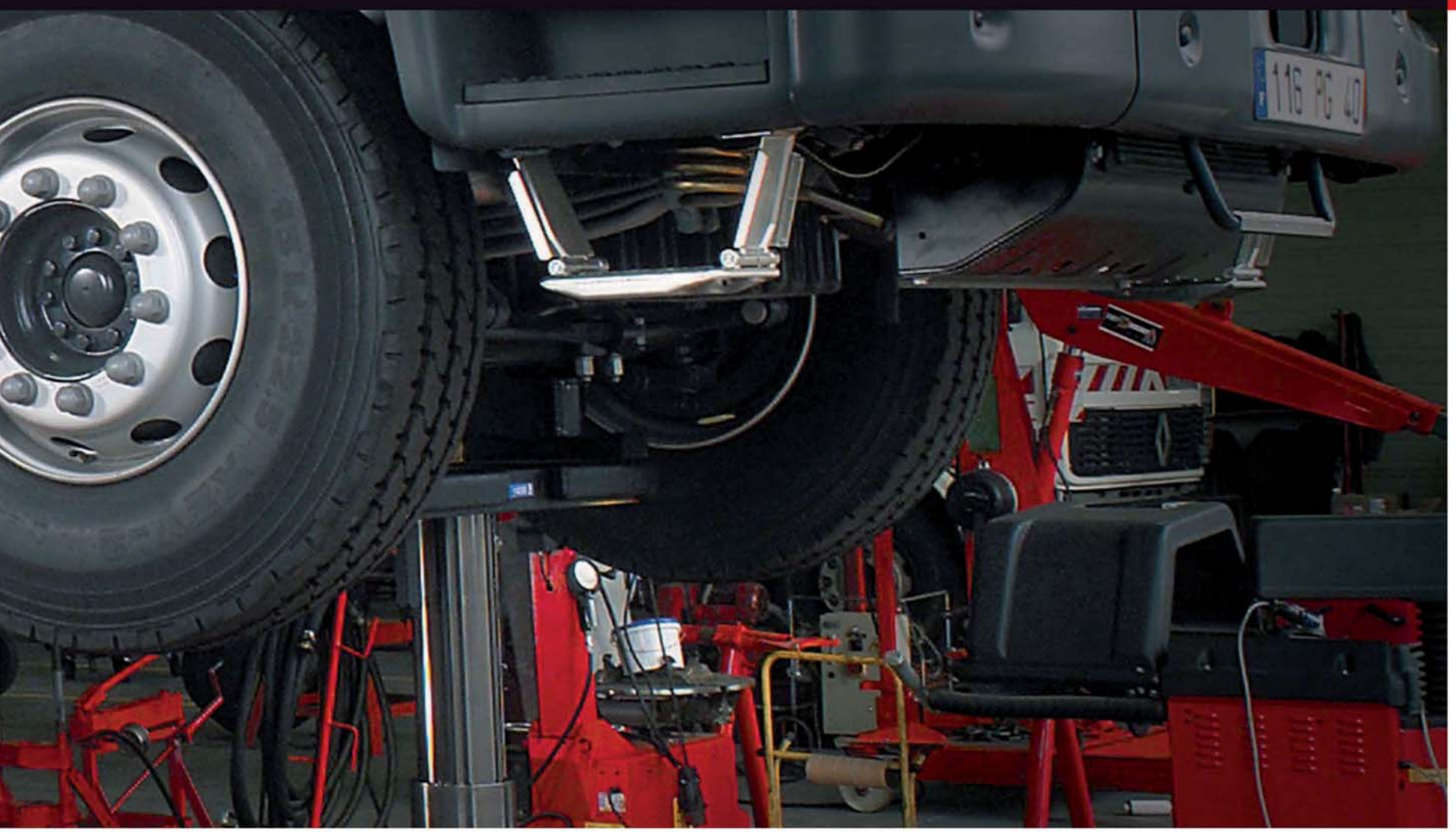
Ratchets - Sockets 1005

TORQUE CONTROL

1006



Controlled tightening 1006



AIR TOOLS



Air tools 1007

PULLERS



Pullers 1008

POWER PLANT



Cylinder head - pistons - valves 1009
Cooling 1009

OIL CHANGE-FILTRATION



Oil-filter wrenches - strap wrench 1010

BRAKES



Inspection 1011
Drums 1011
Draining 1012

HYDRAULIC CLUTCH



Hydraulic clutch 1013

WHEEL - STEERING - TRANSMISSION



Steering ball joints 1014
Wheels 1015

ELECTRICITY



Electricity 1016

SERVICE | TRUCKS INDUSTRIAL VEHICLES

DEMONSTRATIONS, TECHNICAL INFORMATION, ONLINE UPDATES AND AUTOMATED CHEST INVENTORIES

- You can also make an appointment with a FACOM distributor to produce an inventory of your tooling base (roller cabinets, chests, work benches...).

Advice, demonstration.
- For a presentation, demonstration, call our sales department or local dealer to speak to a FACOM adviser.



Internet.
- Access the entire up-to-date Facom product range in one click, download the whole catalogue, specific sections, and much, much more on www.facom.com.



Technical information.
- For information on a product, spare part, etc...



Inventory of boxes.
- Save time.
- Optimise your expenses.
- Control your tooling budget.
- Individual lists and box harmonisation help certifying your workshop to ISO.

1. During the first inventory, we define, for each worker (mechanical, bodywork, electricity, 24/24 service...), the computerised list of tools contained in his box.
2. Every year, we produce an annual inventory against the original list. This allows to manage the equipment stock precisely, keep the right equipment and empower all persons. You complete your workshop equipment effectively. (Service available only in mainland France).





Trolley jacks

"HEAVY DUTY" MOBILE LIFTING ROLLER JACKS

CHARACTERISTICS COMMON TO "HEAVY DUTY" HYDRAULIC JACKS

- Fast approach pedal.
- "Dead man" device.
- Load descent rate regulation.
- Conformity with EC Directive on machinery 2006 and EN 1494.

6T - 10T trolley jacks



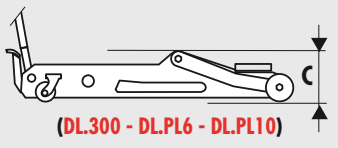
- Load capacity: 6 t and 10 t.
- Maximum lifting height:
- 6 t jack: 580 mm.
- 10 t jack: 605 mm.
- Minimum height under body: 170 mm.
- Quick installation device.

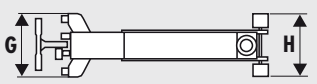
	⚖ [kg]
DL.PL6	81,0
DL.PL10	122,5

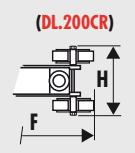
"HEAVY-DUTY" MOBILE LIFTING ROLLER JACKS

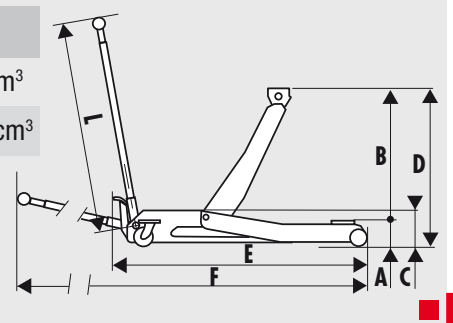
	F (t)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	L mm	Weight	Oil
DL.PL6	6	170	410	220	580	1310	2215	414	336	950	81 kg	775 cm^3
DL.PL10	10	170	435	270	605	1600	2530	414	336	950	123 kg	1,150 cm^3

CE









Hydropneumatic jacks

MOBILE LIFTING HYDROPNEUMATIC JACKS

CHARACTERISTICS COMMON TO “HEAVY DUTY” HYDROPNEUMATIC JACKS

- Fast empty approach.
- “Dead man”device.
- Load descent automatic rate regulation.
- Air pressure required 7 to 10 bar.
- Conformity with EC Directive on machinery 2006/42/EC and EN 1494.

DL.PLHP1530P 15T - 30T intervention carry jack





EN 1494

Compact and light: designed for use in intervention vehicles.
- Dual stage hydropneumatic jack:
- 15 t.
- 30 t.
- Height:
- Minimum: 150 mm.
- Maximum: 300 mm.
- Jack identical to workshop model, but with shorter body.
- Supplied with 100 mm extension.

Weight: 31 kg.

DL.PLHP1530A 15T - 30T workshop jack





EN 1494

- Dual stage hydropneumatic jack:
- 15 t, lift 370 mm.
- 30 t, lift 275 mm.
- Minimum height under body 185 mm.
- Supplied with 100 mm extension.

Weight: 51.500 kg.

DL.PLHP1035A 10T - 20T - 35T extra-flat workshop jack



EN 1494

- Designed specifically for low ground clearance heavy goods vehicles, e.g. Renault Middlum.
- Triple stage hydropneumatic jack:

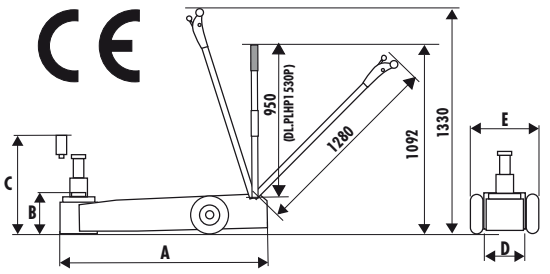
- 10 t.
- 20 t.
- 35 t.

- Maximum lifting height: 345 mm including 60 mm extension (supplied).
- Minimum height under body: 125 mm.

Weight: 42.500 kg.

MOBILE LIFTING HYDROPNEUMATIC JACKS

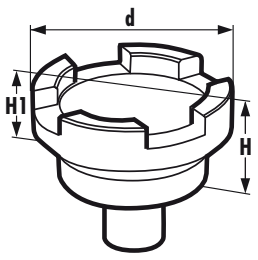
	F (t)	A mm	B mm	C mm	D mm	E mm	Weight	Oil
DL.PLHP1530	15-30	805	185	470	183	300	51.5 kg	1,300 cm^3
DL.PLHP1530P	15-30	518	150	400	154	253	31 kg	1,300 cm^3
DL.PLHP1035	10-35	805	125	345	183	280	42.5 kg	1,300 cm^3



Accessories for hydropneumatic jacks

Wide head for jacks DL.PLHP1530



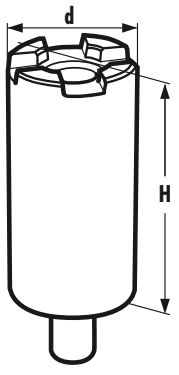


- Wider contact surface with the jack head.
- Adaptable on jacks: DL.PLHP1530 - DL.PLHP1530P

	d [mm]	H [mm]	H1 [mm]
DL.PLHP15305204	79,8	40,2	17,03

Extension





- Extension 100 mm.
- Adaptable on jack: DL.PLHP1035.

	d [mm]	H [mm]
DL.PLHP10355205	50	100

Bottle jacks

10T - 20T - 30T bottle jacks



2005 / 42 / CE

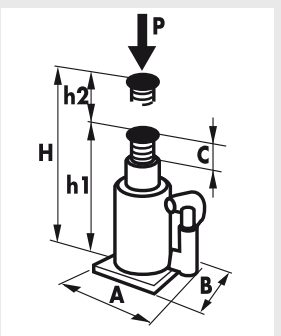
- Designed for heavy-duty professional use.
- Welded base plate jacks:
  - High strength.
  - Less leaks.
- 20 t and 30 t versions fitted with a carry handle.
- Possible use for special works: the internal pump system allows for horizontal use as a pusher jack.

	H mini [mm]	H maxi [mm]	[kg]
DL.10T	231	444	6,500
DL.20TA	250	459	12,100
DL.30T	263	467	15,500

MOBILE LIFTING BOTTLE JACKS

	P (kg)	A mm	B mm	C mm	h1 (min) mm	h2 mm	H (max) mm	Weight	Oil
DL.10T	10000	140	95	75	231	213	444	6.5 kg	275 cm³
DL.20TA	20000	170	143	75	250	209	459	12.1 kg	525 cm³
DL.30T	30000	185	143	75	263	204	467	15.5 kg	800 cm³







MOBILE LIFTING ACCESSORIES FOR HYDROPNEUMATIC JACKS

BOTTLE JACKS

- Designed for heavy-duty professional use: the welded base provides enhanced strength to the jack, reducing risks of leaks.

Can be used for special applications:

- The internal pump system allows for horizontal use as a pusher jack. The 20T and 30T are fitted with a carrying handle.
- CE



Props

DL.PL12 Pin props 12T



- Load capacity: 12 t.
- Height adjustable from 485 to 750 mm.
- Adjustment pitch: 50 mm.
- Captive pin fastened to the body of the prop by a sheathed steel wire.
- CE.

Weight: 25 kg (per pair).

Heavy load props

DL.PL22 22T HGV's jack stands





- Load capacity: 22 t.
- Height:

- Minimum: 310 mm.
- Maximum: 505 mm.

- Safety pin pitch: 55 mm.
- Pin attached by a metallic cable.
- Housing on the base of the stand for the pin.
- Head dimensions: 70 x 80 mm.
- Overall floor dimensions: 250 x 250 mm.
- Supplied in pairs.
- CE.

Weight: 29 kg (per pair).

Hoists

WORKSHOP CRANES

Exclusive performance:
- Easy boom length adjustment without tool nor pin.
- Load lowering with one millimetre accuracy with the high-precision control.
- Rotating jack at 270°: controls boom rising and lowering by the back or side of the crane.





DL.20EU 2T workshop hoist





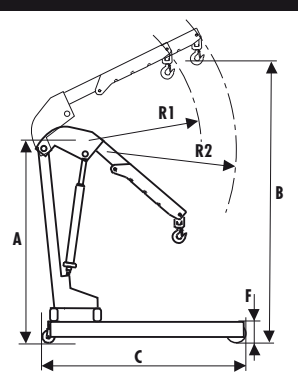
- Capacity: 2000 kg.
- Effective load with boom deployed: 1.650 kg.
- Hoist can be disassembled for European pallets.
- Tool-free boom deployment.
- Effective, fast, precise.
- Easy use, instant adjustment.
- Footprint 1870 x 820 mm.
- CE.
- Exists in 1t version: DL.10EU.

Weight: 180 kg.

CRANES

	A mm	B mm	C mm	D mm	E mm	F mm	G mm	R1 mm	R2 mm	Weight
DL.20EU	1690	2470	1870	820	-	200	-	1275	1570	180

- Exists in 1T version, section 19 workshop equipment.



DL.10F Drum lifter



- To handle metal drums with a crane.
- Max. load: 300 kg.

Weight: 8.600 kg.

DL.101 Load balancer



- Allows to balance the load under the hoist according to the shape of the part or engine to lift.
- Maximum load: 600 kg.
- Supplied with 4 fastening chains.
- Easy adjustment by crank.
- Center distance: 330 mm.

Weight: 6.600 kg.

Unit lifting jacks

DL.700 HGV's wheel lift







CE EN 1494

- To handle dual wheels + drum.
- Maximum load: 700 kg.
- Maximum lifting height: 630 mm.
- Minimum fork height: 105 mm.
- Double rollers adjustable in width, from 480 to 750 mm (5 positions).
- Foot or hand control.
- Wheel holding safety chain.
- Easy rolling thanks to 4 large diameter wheels.
- Load-regulated lowering rate.
- "Dead man" device.
- Overload valve.
- Dimensions: 1000 x 990 x 1150 mm.

Weight: 134 kg.

DL.1200 2-stage telescopic pit jack





- For 4WD, LUV and HV below 6 t.
- Max. load: 1200 kg.
- Adjustable height:

- Minimum: 900 mm.
- Maximum: 1.900 mm.

- Adjustable arms.
- Load holding chains.
- Foot control.
- "Dead man" device.
- Floor diameter: 650 mm.
- Can be fitted with two optional high density foam pads (Ref DL.20SUP).
- Supplied with swivel head.

Weight: 35.500 kg.

Workshop presses

HYDRAULIC PRESSES

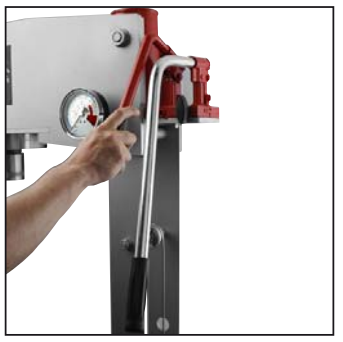
30T AND 50T WORKSHOP PRESSES

- Table raised by a single operator using the integral winch.
- Integral pusher support (set of pushers not supplied).
- Jack mobile laterally.
- Supplied assembled with a pair of Vees.
- Piston with automatic return spring.
- Base allowing to move it using a pallet jack, ground anchorage.
- CE.

W.430HA 30T hydraulic workshop press







- Table raised by a single operator using the integral winch.
- Manual two-speed hydraulic jack, mobile laterally.
- Piston with automatic return spring.
- Piston travel: 150 mm.
- Screw extension: 75 mm.
- Floor anchoring possible.
- Integral pusher support (set of pushers not supplied).
- Supplied assembled with pair of Vees.
- CE.

Weight: 195 kg.

W.450HPA 50T hydropneumatic workshop press



- Hydropneumatic foot control.
- Table raised by a single operator using the integral winch.
- Integral pusher support (set of pushers not supplied).
- Lateral moving jack.
- Piston travel: 150 mm.
- Screw extension: 75 mm.
- Piston with automatic return spring.
- Floor anchoring possible.
- Supplied assembled with pair of Vees.
- CE.

Weight: 229 kg.

W.430-6 Set of 7 press pushers

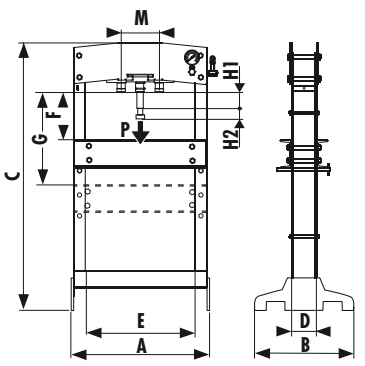


- To be used with presses Ref. W.415HA - W.430HA - W.450HPA.
- Diameters: 12 - 16 - 18 - 20 - 22 - 25 - 30 mm.
- Length: 57 - 57 - 82 - 82 - 84 - 115 - 108 mm.
- Max loads: 3 - 8 - 12 - 14 - 18 - 18 - 20 t.

HYDRAULIC PRESSES

	P (t)	A mm	B mm	C mm	D mm	E mm
W.430HA	30	880	650	1830	145	710
W.450HPA	50	880	650	1910	145	710

	F mm	G mm	H1 mm	H2 mm	M	Weight	Oil
W.430HA	150	700	120	75	250	195 kg	900 cm^3
W.450HPA	155	720	120	75	250	229 kg	900 cm^3



PROTECTION FOR WORKSHOP PRESSES

SAFETY FIRST

- 2 impact-proof polycarbonate windows protect against risks of projection should a part break under the press.

FLEXIBILITY

- Several height positions of the protection according to the part's size. Allows to position the protection flush with the part for large parts.
- Adapts to 30T and 50 T workshop presses.
- Available under a special reference: ask your local dealer.



Roller cabinets and mobile tables

HEAVY LOAD MOBILE WORKBENCHES

Max resistance:
• Acceptable load 500 kg
- Extremely strong welded steel tubular structure.
• Upper top and lower shelf in 20/10th steel.

Max manoeuvrability:
• 4 large wheels: 2 castors with brake and 2 fixed wheels, Ø 160 mm, rubber tread, for easy manoeuvrability even with heavy load.
• Sturdy and comfortable manoeuvring handle.

Multi function:
• Laying plan (for 600 x 800 mm pallet), Worktop (locked wheels) and Transport.

Max safety:
• Upper worktop with retaining lips on 3 sides (including 2 folding), 25 mm high preventing objects/tools from falling while moving.
• Rounded base providing ankle protection.







2702 Heavy-duty roller table




• Ideal to deposit and transport heavy loads.
• Max strength and handling:
- Load acceptable 500 kg - extreme resistance mechanically welded steel tubular structure.
- Upper surface and lower shelf in steel 20/10th.
• Handling:
- 4 large size wheels: 2 castors with brake and 2 fixed rollers, Ø 160 mm, rubber tire, for easy handling of the trolley, even when heavily loaded.
- Robust and comfortable handle.
• Multi function:
- Laying surface (for pallet 600x800 mm), worktop (locked wheels) and transport.
• Max safety:
- Worktop with edges on 3 sides (including 2 retractible), height 25 mm to avoid prevent objects/tools from falling during transport.
- Lower panel rounded to protect ankles.
• Colours: grey ELIAN.
• Dimensions: L.1092 x D.617 x H.903 mm.

Accessories:
• Additional shelf in galvanised metal sheet thickness 2 mm with anti-fall edges dimensions: L.960 x D.546 x H.20mm / 9kg.
Weight: 42 kg.

2702.TAB Additional shelf



• In galvanised metal sheet thickness 2 mm with anti-fall edges.
• Dimensions: L.960 x D.546 x H.20 mm.
Weight: 9 kg.

2703 Heavy-duty trolley





- Ideal for secured transport or storage of tools and components.
- Max strength and handling:
- Load acceptable 500 kg - extreme resistance mechanically welded steel tubular structure.
- Upper surface and lower shelf in steel 20/10th.
- Handling:
- 4 large size wheels: 2 castors with brake and 2 fixed rollers, Ø 160 mm, rubber tire, for easy handling of the trolley, even when heavily loaded.
- Robust and comfortable handle.
- Multi function:
- Laying surface (for pallet 600x800 mm), worktop (locked wheels) and transport.
- Max safety:
- Worktop with edges on 3 sides (including 2 retractible), height 25 mm to avoid prevent objects/ tools from falling during transport.
- Lower panel rounded to protect ankles.
- Steel grid sides. (deployed metal 40*23 thickness 1.5mm).
- Padlock clasp (padlock not supplied).
- Acceptable load 500 kg.
- Extreme resistance steel tubular structure.
- Colours: grey ELIAN.
- Dimensions: L.1092 x D.617 x H.903 mm.

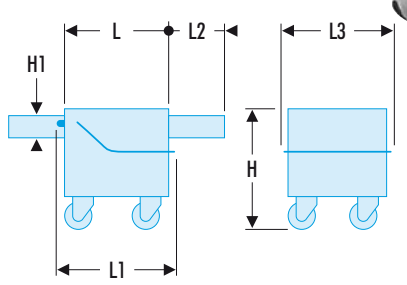
Accessories:
- Additional shelf in galvanised metal sheet thickness 2 mm with anti-fall edges.
- L.960 x D.546 x H.20mm / 9kg.

Weight: 54 kg.

Roller chest







- Vertical access model.
- Particularly interesting combination of size and volume.
- Transportable in a vehicle.
- Wheels = 125 mm allowing for long distances without tiring.
- 2 drawers, dim. (L. x D. x H.): 100 x 360 x 300 mm.
- Each drawer is includes a mobile compartment, dim. (L. x D. x H.): 360 x 148 x 40 mm (for small tool storage).
- 2 compartments, dim. (L. x D. x H.): 440 x 140 x 60 mm.
- The roller cabinet lid includes a storage for documents or flat objects.
- Large size chest, dim. (L. x D. x H.): 668 x 443 x 248 mm.
- Locking possible by padlock (not supplied).
- Achiles heels protection on the chest.

	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2092A	550	100	670	740	252	512

JET+ roller cabinets

M5 ROLLER CABINET

EXTRA WIDE WORKTOP,
UNEQUALLED STORAGE CAPACITY,
EXCEPTIONAL HANDLING.

- **Extra-wide drawers - 5 modules per drawer.**
- **25 to 45 modules** distributed in 60 and 130 mm high drawers (200 and 270 mm drawers can also be fitted with modules).
- **235 to 320 kg** total acceptable load in the drawers according to drawer composition.
- **250 to 255 litres** effective volume according to drawer composition.
- **0.40 m² effective working surface** (440 X 876 mm).

Technical data

- Overall dimensions (wheels and worktop included): L.1154 x D.546 x H.1000 mm.
- Effective drawer dimensions: L.948 x D.421 x H.60 / 130 / 200 / 270 mm.

Load per drawer for M5 versions

- Drawer 60 mm high: 35 kg
- Drawer 130 mm high: 40 kg
- Drawer 200 mm high: 50 kg
- Drawer 270 mm high: 60 kg

Effective drawer volume in litres on M5 version

- Drawer 60 mm high: 25 L
- Drawer 130 mm high: 50 L
- Drawer 200 mm high: 80 L
- Drawer 270 mm high: 110 L



JET+ 6-drawer roller cabinets - 5 modules per drawer



- 6 drawers = 25 modules distributed in the 60 and 130 mm drawers:
  - 3 drawer 60 mm wall = 15 modules.
  - 2 drawer 130 mm wall = 10 modules.
  - 1 drawer 200 mm wall.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 12 partitions for 60 mm drawers and 4 partitions for 130 mm drawers.
- Total load in the drawers: 235 kg.
- Wall storage capacity: 255 litres.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.948 x D.421 x H.60 / 130 / 200 mm.

	Colour	[kg]
JET.6M5	Red 3020	104,50
JET.6GM5	Black 9004	104,50

Jet+ 6-drawer mobile workbenches - 3 modules per drawer





- 6 drawers = 15 modules distributed in the 60 and 130 mm drawers:
- 4 drawers 60 mm high = 12 modules.
- 1 drawer 130 mm high = 3 modules.
- 1 drawer 270 mm high.
- The 200 and 270 mm drawers can also be fitted with modules.
- Supplied with 6 partitions for 60 mm drawers and 2 partitions for 130 mm drawers.
- Total load in the drawers: 140 kg.
- High storage capacity drawers: 155 litres.
- 1 full-length closed compartment for storing long tools:
- Door with key lock.
- Identical key for the drawers and the compartment.
- Supplied with the plastic carrier tray.
- For the wood top version, just add wood top JET.A14M5.
- Can be fitted with a JET.C4GM5 chest
- Compatible with the JET+ and JET.XL range of accessories.
- 4 very high performance wheels 160 mm diameter - 2 castors (including 2 with brakes) and 2 fixed.
- Overall dimensions (including wheels and worktop): L.1154 x D.546 x H.1000 mm.
- Drawer useful size: L.569 x D.421 x H.60/130/200 mm.
- Compartment dimensions: L.378 x D.430 x H.679 mm (passage width with door open 310 mm).

	Colour	⚖ [kg]
JET.T6M3	Red 3020	100
JET.T6GM3	Black 9004	100

Truck selections

CM.105 - 105-piece tool set with storage modules



- Set of 9 tool modules (3 drawers), detail below:
- MOD.A1.
- MOD.A3.
- MOD.PR9.
- MOD.R2.
- MOD.S7.
- MOD.440-1.
- MOD.440-2.
- MOD.M13.
- MOD.CPE.
- Selection compatible with JET+ and Chrono+ roll cabs.
- Thermoformed modules.

Weight: 13.570 kg.

CM.159 - 159-piece tool set with storage modules



- Set of 13 tool modules (5 drawers), detail below.
- MOD.A1.
- MOD.A3.
- MOD.PR9.
- MOD.R2.
- MOD.S1.
- MOD.440-1.
- MOD.440-2.
- MOD.MI3.
- MOD.ANX.
- MOD.PCSN.
- MOD.TX1.
- MOD.601.
- MOD.CPE.
- Selection compatible with JET+ and Chrono+ roll cabs.
- Thermoformed modules.

Weight: 19.270 kg.

K.500 3/4" 6-point sockets set 19 - 55 mm



Including:
- 1 K.152 3/4" 72-teeth square drive, length: 505 mm.
- 13 12-point OGV® sockets 3/4" square drive: 19 - 21 - 22 - 24 - 27 - 30 - 32 - 34 - 36 - 41 - 46 - 50 - 55 mm.
- 2 3/4" extensions:
- K.210B: length 200 mm.
- K.215B: length 400 mm.
- 1 K.240A 3/4" square drive universal joint, length: 105 mm.
- Supplied in plastic case BV.COMPO-K, compatible with drawers of JET+ rolling cabinets and JETLINE units.

Dimensions (L. x D. x H.): 565 x 412 x 105 mm.
Weight: 13.700 kg.

K.501 3/4" 12-point sockets set 19 - 55 mm

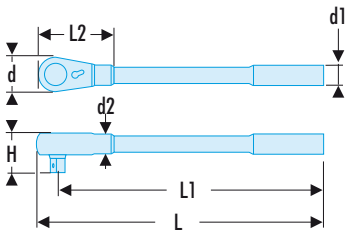


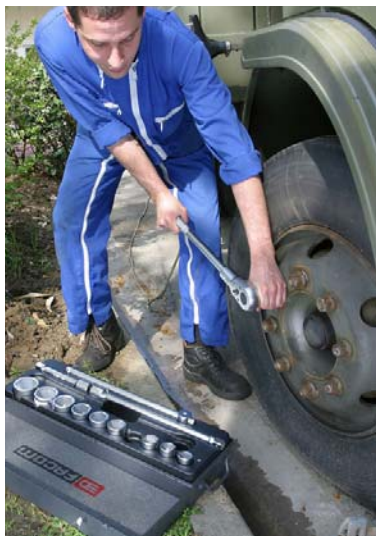
Including:
- 1 K.152 3/4" 72-teeth square drive, length: 505 mm.
- 13 6-point OGV® sockets 3/4" square drive, KHB or KB: 19 - 21 - 22 - 24 - 27 - 30 - 32 - 34 - 36 - 41 - 46 - 50 - 55 mm.
- 2 3/4" extensions:
- K.210B: length 200 mm.
- K.215B: length 400 mm.
- 1 K.240A 3/4" square drive universal joint, length: 105 mm.
- Supplied in plastic case BV.COMPO-K, compatible with drawers of JET+ rolling cabinets and JETLINE units.

Dimensions (L. x D. x H.): 565 x 412 x 105 mm.
Weight: 13.700 kg.

3/4" drive "heavy duty" ratchet







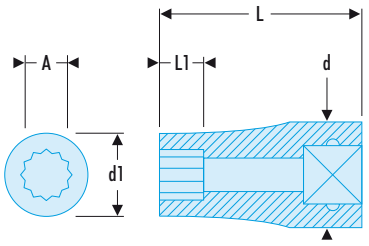
NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Suitable for outdoor working:
- Sturdy mechanism protected against dirt.
- Recessed reversing switch.
- 9° increments.
- 40 tooth mechanism.
- Removable handle.
- Plunger lock.
- Finish: mat chrome.

	d [mm]	d1 [mm]	d2 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	⧋ [kg]
K.149	65,5	25	32	62	510	475	151	2,85

3/4" hexagonal socket 43 mm "IVECO HGV's"





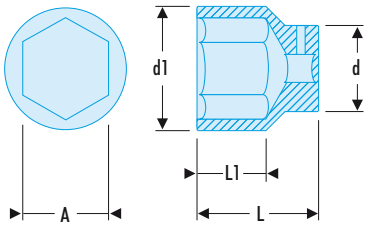
NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5

- Examples of use: IVECO HGV's hub removal.
- OGV® profile.
- Safe locking with ratchets and accessories fitted with plungers.
- Fitted with quick release button.
- Finish: chromed.

	A [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⧋ [g]
K.43HB	43	40	60,7	66,9	27	560

1" 12-point sockets 65 mm





ASME B107.1

- Example of use:
- IVECO: disc bearing nut.
- Mercedes: transfer or transmission box gears.
- Thinner, lighter body.
- Safe locking with ratchets and accessories fitted with plungers.
- Push-button release.
- Finish: chromed.

	A [mm]	d [mm]	d1 [mm]	L [mm]	L1 [mm]	⧋ [kg]
M.65B	65	58,3	85,4	92	42	1,652

Click wrenches with removable ratchet



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Factory accuracy: ± 4%.
- Reliability of mechanism: 50 000 cycles (wrenches up to 200 N.m).
- Can be used with Ø 30 mm accessories.
- One-way wrenches usable for unscrewing by reversing the bits.
- Numbered wrench supplied with ISO 6789 calibration certificate.
- Supplied in plastic box with ratchet.

	L [mm]	Graduation [N.m]	Capacity [N.m]	Attachment	Wrench	Ratchet	Box	⚖ [kg]
K.306A1000	1280	4,00	200 - 1000	Ø 30 mm	K.306-1000D	K.151A	BP.D1000	5,900

Torque and angle adapter



NF EN ISO 6789, ISO 6789, DIN EN ISO 6789

- Accuracy:

- Torque: ± 3% between 20% and 100% wrench capacity.
- Angle: ± 2°.

- Measuring mode: peak or follower.
- Cycle counter.
- Locking keypad (the operator has access only to program choices and result memorising).
- Measuring unit: N.m, ft.lb, In.lb, kg.cm, deg.
- Presetting possible of 9 torque and/or angle values.
- Memory: 50 values.
- Supplied in plastic case with calibration certificate.

	Capacity [N.m]	Resolution
E.506-340S	17 - 340	0,1

DM - Angular tightening wrenches



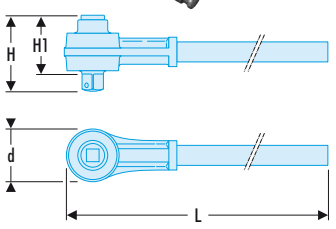
- Flat drum with top reading.
- Drum positioning on the value recommended by the manufacturer, then tightening to zero.
- Graduations: 2°.
- Male and female square drive.
- Fixed point by flexible with magnet.

	d [mm]	L [mm]	Square ["]	⚖ [g]
DM.360	63	410	1/2	350
DM.370	73	430	3/4	550

MC.B Torque Multiplier







- Compact and lightweight models suited to maintenance work on vans, trucks.
- Multiplication ratio: 5:1.
- Supplied with 2 reaction arms (straight and angled) and one spare drive square.

	A [mm]	B [mm]	d [mm]	L [mm]	⚖ [kg]
MC.130B	126	263	106	396	3,80
MC.270B	128	263	106	396	3,80

PNEUMATIC TOOLING

COMPLETE RANGE OF PNEUMATIC TOOLS. SEE SECTION 14 P. 676

3/4" titanium impact wrench



- Structure: titanium.
- Impact system: twin hammer.
- Max torque: 2,115 N.m.
- Progressive trigger.
- Power setting: 3.

	H [mm]	L [mm]	L1 [mm]	[kg]
NK.3000F	227	227	97	3,800

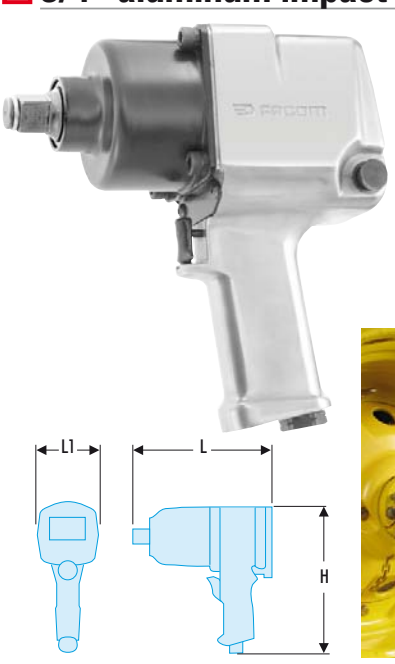
3/4" composite impact wrench



- Structure: composite.
- Impact system: twin hammer.
- Max torque: 1,700 N.m.
- Progressive trigger.
- Power setting: 3.

	H [mm]	L [mm]	L1 [mm]	[kg]
NK.2000F2	213	221	86	3,900

3/4" aluminum impact wrench





- Structure: aluminum.
- Impact system: twin hammer.
- Max torque: 2,400 N.m.
- Progressive trigger.
- Power setting.

	H [mm]	L [mm]	L1 [mm]	[kg]
NK.1000F2	233	222	93	5,600

PULLERS

COMPLETE RANGE OF PULLERS SEE SECTION 12 P. 626.

U.312HJ3 Hydraulic puller 10 T for outside puller - 3 sets of legs





- Versatile: takes 2 or 3 legs.
- Safety: power is limited hydraulically to 10 tonnes. No risk of breakage.
- Comprising:

- A 10-tonne hydraulic jack (100 kN) U.312-01 + and guide tip U.312-02 + set of 2 extensions U.312-03.
- A body with 2 or 3 legs U.312-04 + centering screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
- 3 sets of legs: U.312G160, U.312G210 and U.312G260.

- Supplied in plastic case U.312VAL, dimensions (L. x W. x H.): 565 x 412 x 105 mm.

Weight: 13.200 kg.

U.312HJ4 Hydraulic puller 10 T for outside puller - 4 sets of legs



- Versatile: takes 2 or 3 legs.
- Safety: power is limited hydraulically to 10 tonnes. No risk of breakage.
- Comprising:

- A 10-tonne hydraulic jack (100 kN) U.312-01 + and guide tip U.312-02 + set of 2 extensions U.312-03.
- A body with 2 or 3 legs U.312-04 + centering screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
- 4 sets of legs: U.312G110, U.312G160, U.312G210 and U.312G260.

- Supplied in plastic case U.312VAL, dimensions (L. x W. x H.): 565 x 412 x 105 mm.

Weight: 14.400 kg.

Cylinder head - pistons - valves

Piston ring compressors 100 - 160 mm

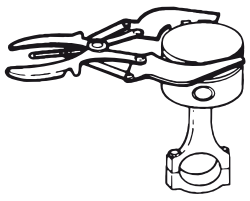


- For easy insertion of piston into cylinder bore and even compression over full ring length.
- Ratchet mechanism.
- Complete with key (length: 6 mm).

	d [mm]	L [mm]	⚖ [g]
750.KB	100...160	80	300

Piston ring pliers





- Even distribution of the load around the piston ring.
- Fast.

	d [mm]	⚖ [g]
751.K	90...150	330

Cooling

780A Refractometer





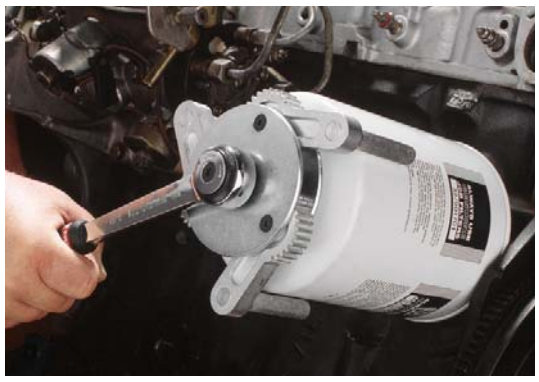
- Two quality control measuring cycles:
- Coolant: 0 to -50°C (graduations 5°C).
- Battery fluid density: 1.10 to 1.40 kg / l.
- Simple screw recalibration using distilled water.
- Supplied in a case with a sampling pipette and screwdriver.
- Dimensions (L. x W. x H.): 700 x 235 x 70 mm.

Weight: 550 g.

Automatic oil-filter wrench

D.151PL Self-gripping oil-filter wrench for HGV's





- For HGV's and farming vehicles.
- 1/2" drive bit.
- For oil filters diam.: 95 --> 165 mm.

Weight: 1.345 kg.

U.48PL Automatic oil-filter wrench for HGV's



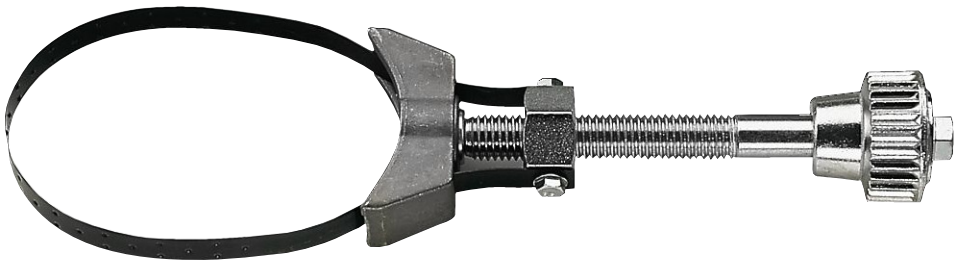




- For HGV's and farming vehicles.
- For filters diam.: 106 --> 145 mm.
- Ratchet effect increment: 5°.
- Optimised automatic tightening.
- Spare strap U.48-PL2 for oil filter wrench.

Weight: 290 g.

U.46PL Adjustable oil-filter wrench for HGV's



- Automatic oil filter wrench for HGV's and farming vehicles.
- For filters diam.: 105 --> 145 mm.
- Max length: 300 mm.
- Spare strap U.46APL2 for oil filter wrench.

Weight: 350 g.

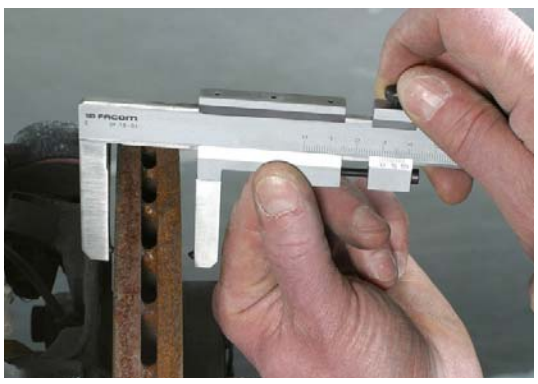
Inspection

DF.18-01 Disc brake vernier caliper



- Vernier caliper for checking the thickness of brake discs.
- Accurate, error-free reading.
- Measurements can be taken with wheel in place (if no protective bodywork).
- Can quickly demonstrate to customers the need for changing brakes.
- Capacity 0 to 50 mm, outer thickness measurement of the disc brakes of cars and LCV's.
- Nose length: 50 mm.
- 0.1 mm reading increments.
- Mechanical memory device.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.

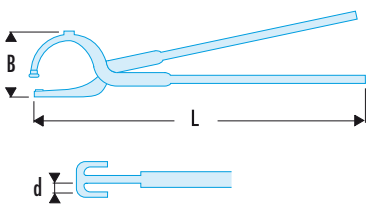
Weight: 250 g.



Drum

196 Brake-spring pliers





- For removing shoe springs.
- Suitable for right-handed and left-handed working.

	B [mm]	d [mm]	L [mm]	⚖ [kg]
196.TS	83	3	350	0,580
196.KS	100	5	485	1,230

Bleeding

HYDRAULIC CLUTCH BLEEDING AND FILLING

Performance suited to the requirements of HGV workshops!

- Bleeding and filling HGV hydraulic clutch circuits require a sufficient flow rate.
- The new pump and adjustable pressure of DF.21 ensure it meets this application perfectly.

Extended connections possible.

- The standard DF.21 is supplied with an aluminium plug suited to diameters 44 and 45 mm, and a multiple diameter plug adapting to all diameters up to 60 mm.





DF.21 Adjustable-pressure electronic brake bleeder



- For bleeding car and LCV brakes and HGV clutches.
- Pressure adjustment from 0.5 to 3 bar.
- Pressure adjustment keys: up and down.
- Electronic pressure control holds pressure steady at the selected value.
- ABS compatible.
- Portable, stand-alone appliance (12 V).
- Reservoir with visible level.
- Automatically stops below minimum level.
- Capacity: 5 L.
- Body: stainless/ABS.
- Length of hose and power cable: 4 m.
- Contains:

- 1 multi diameter plug for using the bleeder on vehicles with a bayonet plug (DF.20-12).
- 1 standard screw plug.
- 1 fluid collector with attaching chain.

Weight: 10.900 kg.

BLEEDING HYDRAULIC CLUTCH AND GEARBOX COMMAND

Using hydraulic mineral oil

- Certain HV manufacturers (Mercedes, Man) use mineral hydraulic oil in certain vehicles to command their gearbox or clutch.
- Special hydraulic oil is also sometimes found in farming equipment.

Precautions of use:

- Always observe compatibility of mineral oils.
- There are 2 CHF products 11S or LHM.
- These 2 fluids are not compatible and must never be mixed, the system must be dedicated to one or the other permanently.
- Caution! DF.22 is incompatible with DOT, vehicles with a circuit using DOT, always use DF.21.
- Any error of use of one or the other hydraulic fluids is detrimental to the vehicle circuit and bleeder.



DF.22 Hydraulic oil drain



- Special drain for mineral hydraulic oil (CHF11S, LHM).
- Pressure adjustable from 0.5 to 3 bar.
- Simple 4-key use.
- Digital pressure display.
- Pressure stabilisation by electronic pressure switch.
- Automatic preset pressure adjustable at 2 bar.
- Low tank warning and automatic stop.
- Tank can be filled while bleeding (non pressurised tank).
- Tank 5 L.
- High flow pump: rate 30 l / h at 2 bar.
- Supplied with Facom compliance certificate (ISO workshops).
- Supplied without cap nor fitting.
- Standard 12 V power supply, 4 m cable.

Weight: 12 kg.

DF.22KIT1 Mercedes connection kit



- Set of connections and collection can, compatible with mineral oil.
- To be used with Mercedes trucks.

DF.22KIT2 Man connection kit



- Set of connections and collection can compatible with mineral oil.
- For MAN truck.

Steering ball joints

U.18H36 Hydraulic ball joint puller





- Examples of allocation: Volvo, RVI, Scania, Mercedes.
- Capacity: diameter 36 mm, can be used on ball joints of trucks, coaches.
- Jack power: 8 tonnes.
- Dimensions (W. x L. x H.): 100 x 480 x 400 mm.

Weight: 6.800 kg.

U.18-36 HGV's ball joint puller



- Mechanical screw model.
- Diameter 36 mm.
- Dimensions (L. x D. x H.): 210 x 180 x 80 mm.

Weight: 4.320 kg.

Ball joint puller



- Used to dismount steering and suspension ball joints.
- Length: 158 mm, height: 75 mm.
- Capacity diameter 32 mm, opening 80 mm.

Weight: 2.410 kg.

- U.16A-45-05J3: Set of 3 safety pins.

	A [mm]	d [mm]	⚖ [kg]
U.16B32	80	32	2,452

LCV's, HGV's ball joint puller



- Used to dismount steering and suspension ball joints.
- Length: 158 mm, height: 90 mm.
- Capacity diameter 45 mm, opening 80 mm.

Weight: 2.543 kg.

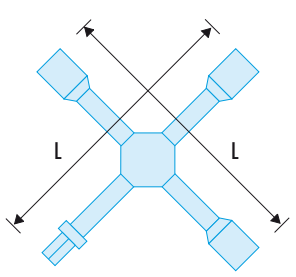
- U.16A-45-05J3: Set of 3 safety pins.

	A [mm]	d [mm]	⚖ [kg]
U.16A45	80	45	2,543

Wheels

77A.PL - HV Cross braces

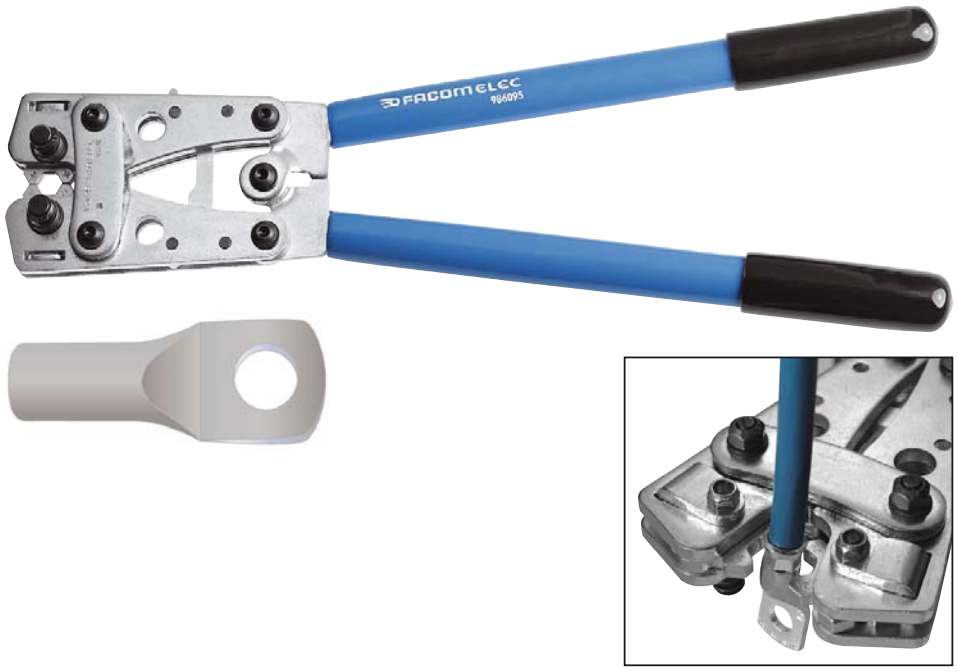




- Braces used to remove nuts from wheels of light, utility and heavy vehicles.
- When the brace has a drive bit, it is interchangeable.

	d [mm]	L [mm]	Square ["]	⚖ [kg]
77A.PL1	24 - 27 - 30 - 32	700	-	4,650
77A.PL2	24 - 27 - 33	700	3/4	4,580
77A.PL2D	24 - 27 - 32	700	3/4	4,600

986095 Crimping pliers for tubular terminals with rotating dies



NFC 20-130

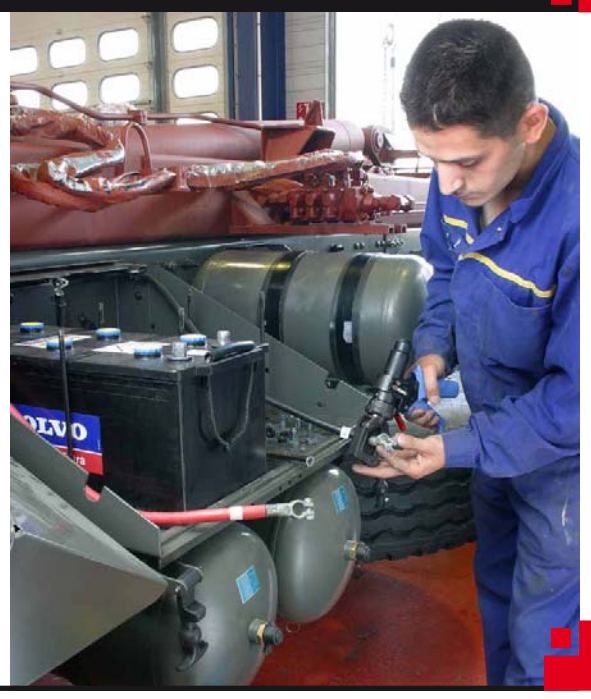
- Rotating dies indexable in 6 positions: 6 - 10 - 16 - 25 - 35 - 50 mm².
- The pliers can be disengaged during crimping.
- Capacity: 6 to 50 mm²
- Length: 390 mm.

Weight: 1.185 kg.

HYDRAULIC CRIMPING

RELIABILITY AND SAFETY

- Effortless crimping, identical to original fit, of all large-size electrical terminals (10 to 70 mm²) found on a heavy vehicle.
- Repair faster and higher quality than soldering.
- Easier access and better grip than mechanical pliers.
- Examples of use: terminals on batteries, alternators, starters, ground studs, electric lifts, gate links, etc.



789.5 Hydraulic crimping pliers





- Example of use: battery, alternator, starter, tailgate, trailors.
- High quality crimping in a shape identical to what is done in the factory thanks to the 35,000 N jack and crimping complete trigger system guaranteeing proper pressure.
- Faster and more reliable than welding.
- Crimps electric terminals from 10 to 70 mm.
- Heads rotating over 360° for difficult access.
- Travel adjustable from 5 to 8 mm.
- Pliers dimension (L. x D. x H.): 215 x 180 x 30 mm.
- Pliers supplied in a box with 5 hexagon-shaped dies: 10 - 25 - 35 - 50 - 70 mm².

Weight: 1.700 kg.

DX.8-24 Surge arrester 24V



- Protects electronic components in the vehicle.
- For 24 Volt vehicle.
- Cable length: 500 mm.
- Dimensions (L. x D. x H.): 100 x 20 x 45 mm.

Weight: 190 g.

BC2430A 12 - 24 volt battery charger for HGV's, CGV's, LGV's, farm equipment



- Compatible with all "lead acid" batteries: VLRA, GEL, AGM, CALCIUM, Liquid.
- "Standard" mode for humid battery.
- "Power supply" mode to supply and save memory when changing a battery.
- "Dry" mode for charging AGM, GEL and VLRA batteries.
- Can be used as maintaining charger.
- "BOOST" mode to save limit batteries.
- Automatic charge compensation according to the temperature around the battery.
- Automatic 12 - 24 V switching.
- For batteries 12 V and 24 V, 90 Ah to 600 Ah batteries.
- Power supply: 200 V, 50 - 60 Hz.
- Supplied with alligator clips.

714A Automotive multimeter





- Measures internal resistance of batteries.
- Automatic calibre.
- Voltmeter: AC / DC 0 --> 600 V.
- Ammeter: AC / DC 0 --> 400 mA.
- Ohmmeter: 0 0 --> 40 MO.
- Continuity and LED test.
- Temperature measurement.
- Cyclic ratio: 5% --> 99% .
- Cam angle.
- Tachometer.
- Frequency meter: 1 Hz --> 400 KHz.
- Compatible with clip-on ammeter Ref 711A.P500.



"FOD" FLUORESCENT TOOLS

1021



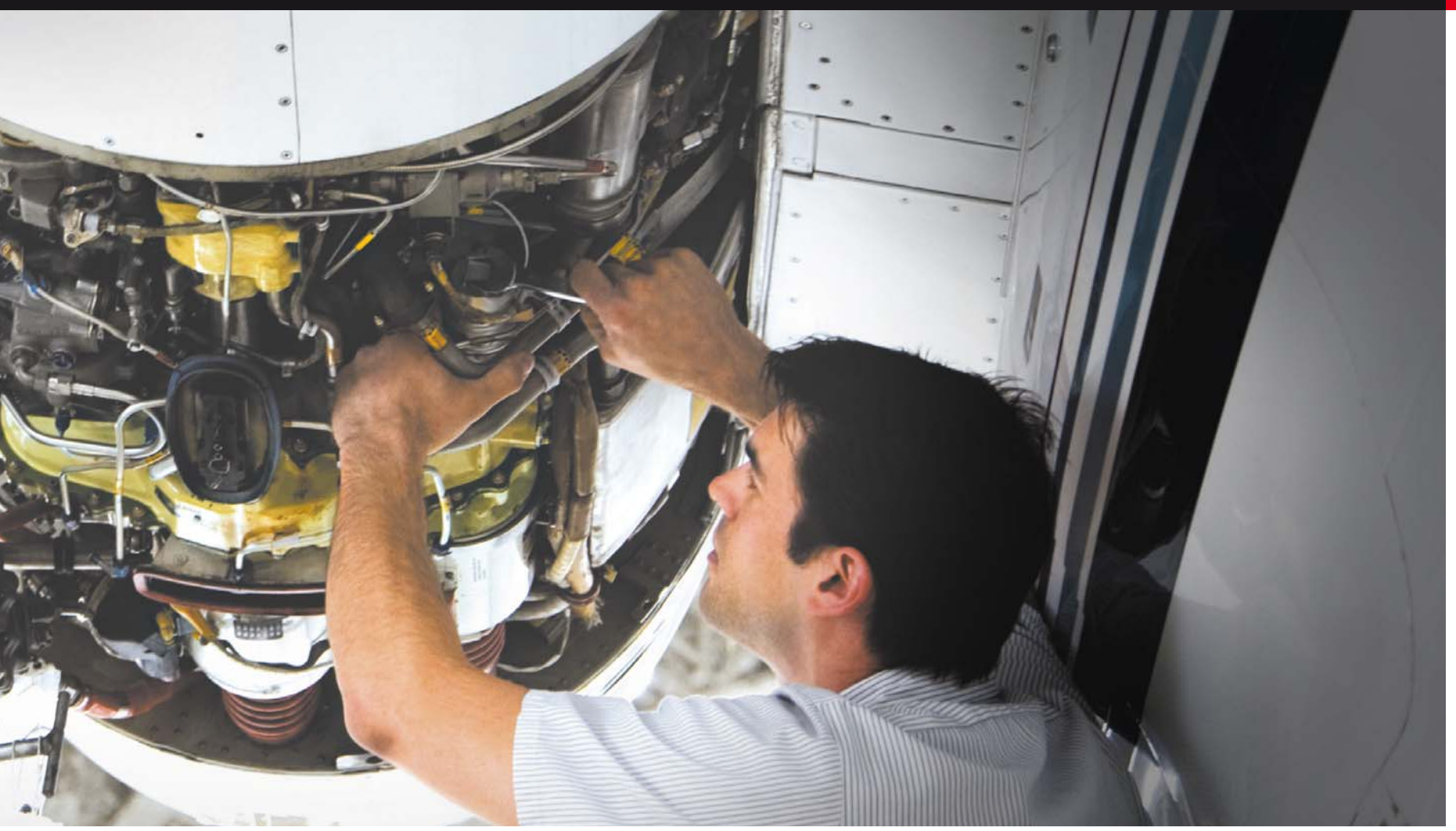
PROTWIST® FLUO screwdrivers **1022**
PROTWIST® FLUO handle keys **1023**
FLUO sleeve set of angled keys **1024**
FLUO pliers **1025**

SPECIFIC AEROSPACE TOOLS

1029



Ring wrenches **1029**
Spline profile tools **1029**
Crowfoot bits **1031**
Tools for aerospace fasteners **1032**
1/2" metal handle ratchets **1033**
3/8" metal handle ratchets **1033**
1/4" metal handle ratchets **1033**



AERONAUTIC TOOLKITS















Hinged sockets **1034**
Bristol wrenches **1034**
Torq Set® - Tri-wing bits **1035**
Special pliers **1036**





FACOM AEROSPACE



AEROSPACE SOLUTIONS SINCE 1918



FACOM

FACOM now at the heart of the Industrial & Automotive Repair division of the **Stanley Black & Decker group,** is an organisation which provides coherent, integral and competitive solutions with the same level of quality and service throughout the world.

- The Facom Aerospace catalogue is supplemented with products by PROTO, one of the US leaders in aerospace maintenance to complete the US dimension hand tool offer.
- Storage solutions and power tools by other group brands also extend the range of solutions available.
- FACOM also works in partnership with its customers from the aeronautical sector to develop the FOD solutions of the future, including innovative tool detection systems.

PROTO



FACOM SERVICE: CONTROLLED TORQUE

Facom calibration laboratory accredited by Cofrac delivers:
- Cofrac calibration certificates.
- Facom calibration certificates.



cofrac
ETALONNAGE
ACCREDITATION N° 2-1934. Range available on www.cofrac.fr

SAFETY FIRST | NEW RANGE OF FLUORESCENT TOOLS

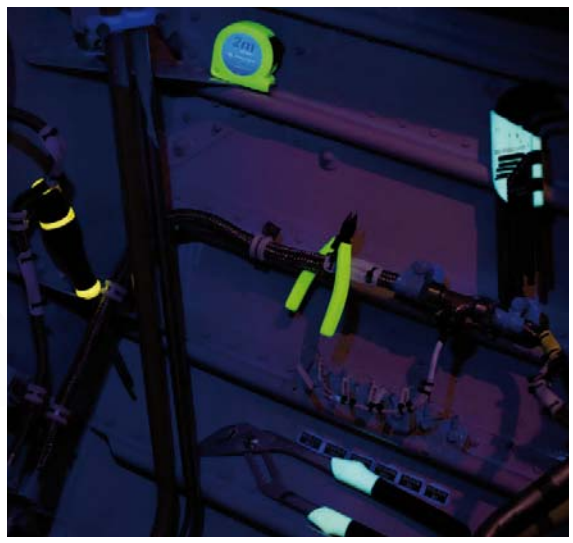
YOUR FOD SFLB solution for “BLACK OR DIMLY LIT AREAS”

SAFETY FIRST
- No tools lost or forgotten.
- Tool visibility.

COST REDUCTION
- Less tools replaced due to loss.

Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.





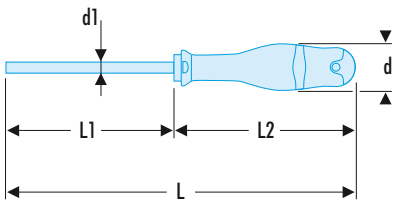


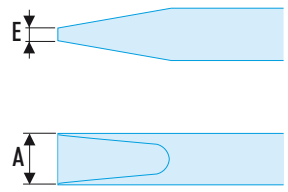


PROTWIST® FLUO screwdriver

AN.F - PROTWIST® fluorescent screwdrivers for slotted head screws - milled blade







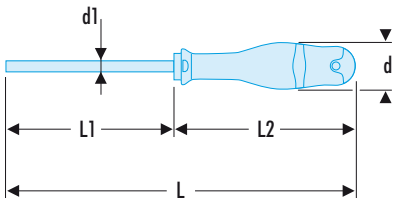
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	A [mm]	E [mm]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AN2,5X75F	2,5	0,4	19	2,5 x 75	169	94	21
AN3,5X100F	3,5	0,6	25	3,5 x 100	203	103	43
AN4X35F	4,0	0,8	36	4,0 x 35	91	56	36
AN4X100F	4,0	0,8	30	4,0 x 100	209	109	47
AN4X150F	4,0	0,8	30	4,0 x 150	259	109	52
AN5,5X150F	5,5	1,0	30	5,5 x 150	259	109	91
AN6,5X35F	6,5	1,2	36	6,5 x 35	91	56	46
AN6,5X150F	6,5	1,2	36	6,5 x 150	270	120	140

AW.F - PROTWIST® fluorescent screwdrivers for slotted head screws - hexagonal blade





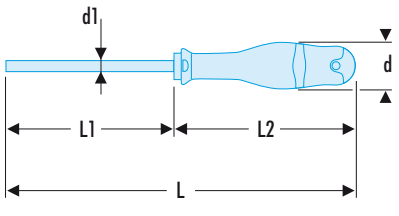
NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
AW8X150F	40	7 x 150	275	125	220
AW10X200F	40	9 x 200	325	125	255

ANP.F - PROTWIST® fluorescent screwdrivers for Phillips® screws - milled blade





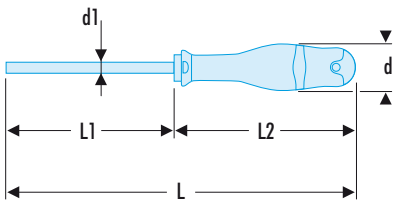
NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⚖ [g]
ANP0X75F	PH0	25	3,0 x 75	178	103	45
ANP1X35F	PH1	36	4,5 x 35	91	56	39
ANP1X100F	PH1	30	4,5 x 100	209	109	76
ANP2X35F	PH2	36	6,0 x 35	91	56	44
ANP2X125F	PH2	36	6,0 x 125	245	120	126
ANP3X150F	PH3	40	8,0 x 150	275	125	194
ANP4X200F	PH4	30	4,0 x 200	309	109	57

AWP.F - PROTWIST® fluorescent screwdrivers for Phillips® screws - hexagonal blade





NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Hexagonal blade: optimum endurance and performance.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	Phillips [No]	d [mm]	d1 x L1 [mm]	L [mm]	L2 [mm]	⧋ [g]
AWP2X125F	2	36	6 x 125	245	120	130

R.236AF PROTWIST® fluorescent handle screwdriver 1/4" - 158 mm

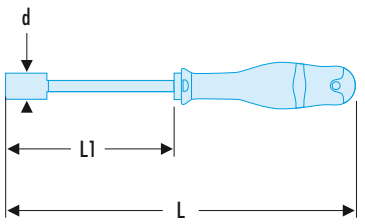


NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: chromed.

PROTWIST® bit holder screwdriver





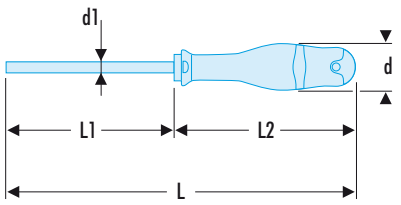
- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Long magnetic bit holders.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	d [mm]	L [mm]	L [mm]	⧋ [g]
AM.M2F	10	245	245	150

PROTWIST® FLUO keys

AWSH.F - PROTWIST® fluorescent handle hexagonal key - spherical head





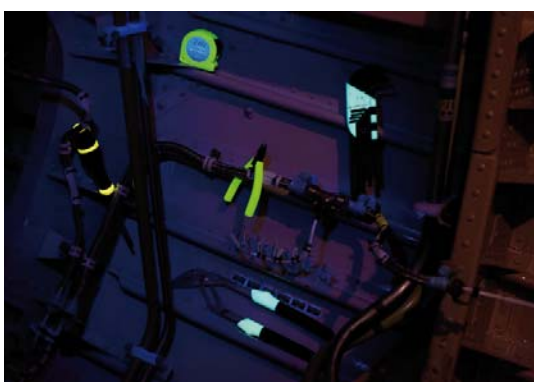
- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Bi-material grip resists to impacts, abrasion, and chemicals.

	A [mm]	d [mm]	d1 [mm]	L [mm]	L2 [mm]	⧋ [g]
AWSH3X75F	3	19	3	169	94	35
AWSH4X75F	4	25	4	178	103	45
AWSH5X100F	5	30	5	208	109	80

PROTWIST® FLUO key sleeve set

83SH.JP8UF 8-piece FLUO hexagonal key sleeve set





- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Keys are packaged in a compact wallet for easy selection of the dimension required.
- Inch 8 key sets 83SH:

- 3/32" - 1/8" - 5/32" - 3/16" - 7/32" - 1/4" - 5/16" - 3/8".

Weight: 365 g.

83SH.JP9F 9-piece FLUO hexagonal key sleeve set



- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Keys are packaged in a compact wallet for easy selection of the dimension required.
- Metric 9 keys sets 83SH:

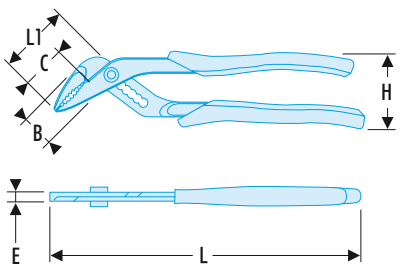
- 1.5 - 2.0 - 2.5 - 3.0 - 4.0 - 5.0 - 6.0 - 8.0 - 10 mm.

Weight: 380 g.

FLUO pliers

Slip-joint multigrip pliers with fluorescent grips





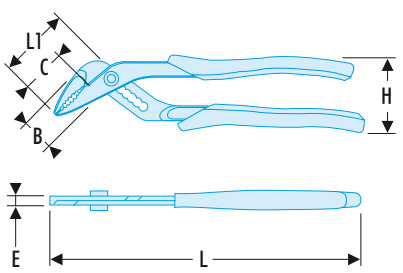
NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Capacity: 44 mm.
- Ideal for confined spaces: Long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- Finish: chromed, bi-material ergonomic grips.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	L1 [mm]
180.CPEF	30	35	8	22	250	58

Slip-joint locking multigrip pliers with fluorescent grips





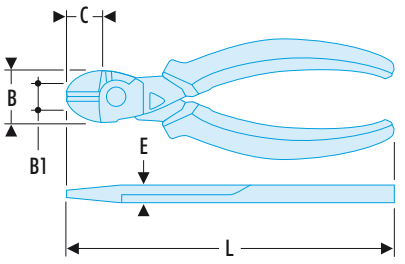
NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Fast, precise push-button adjustment with safety lock.
- Self-tightening.
- Double heat-treated noses; hardness 60/62 HRc.
- Finish: chromed.

	A [mm]	C [mm]	E [mm]	Capacity Nuts [mm]
181.25CPEF	33,8	55	28	41

192.CPEF - Diagonal cutters with fluorescent grips





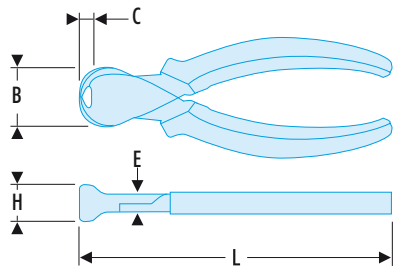
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, soft wires and modern materials (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d maxi [mm]	E [mm]	L [mm]	ΔΔ [g]
192.14CPEF	21,5	15,5	1,5	9,5	145	160
192.20CPEF	28,0	22,0	2,5	11,5	200	320

Front cutters with fluorescent grips



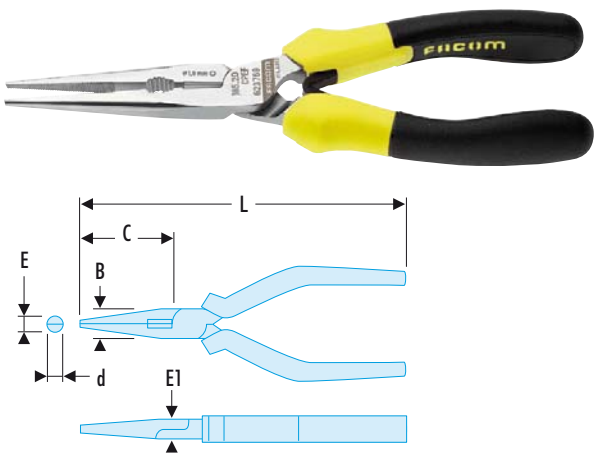


NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, hard and soft wires (max. 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	ΔΔ [g]
190.20CPEF	7,5	31	7,5	13,5	200	340

Long-reach half-round nose pliers with fluorescent grips

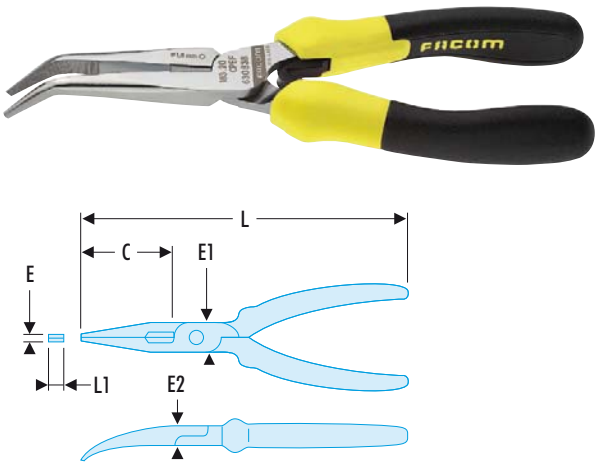


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	[g]
185.20CPEF	18	75	2,9	3,6	9	200	200

Long-reach slim half-round nose pliers with fluorescent grips

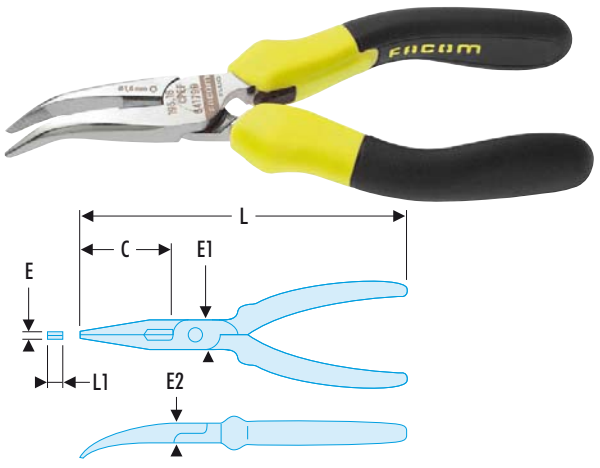


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	[g]
183.20CPEF	69	3	18	9	200	2,5	185

Short half-round nose pliers with fluorescent grips

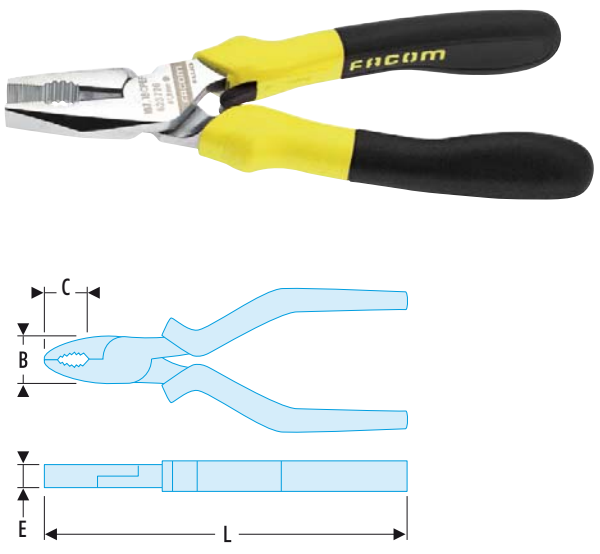


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips, 40° angled, with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	d [mm]	E [mm]	E1 [mm]	L [mm]	[g]
195.16CPEF	17	50	2,5	3	9	160	177

Combination pliers with fluorescent grips

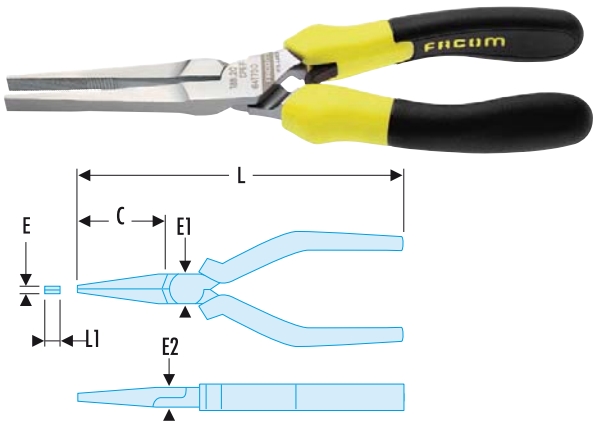


NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cut through all types of wire: piano wire, soft wires and modern materials (max. Fe 200 kg/mm²).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	B [mm]	C [mm]	E [mm]	L [mm]	[g]
187.16CPEF	21	34	9,5	165	195

Flat nose pliers with fluorescent grips

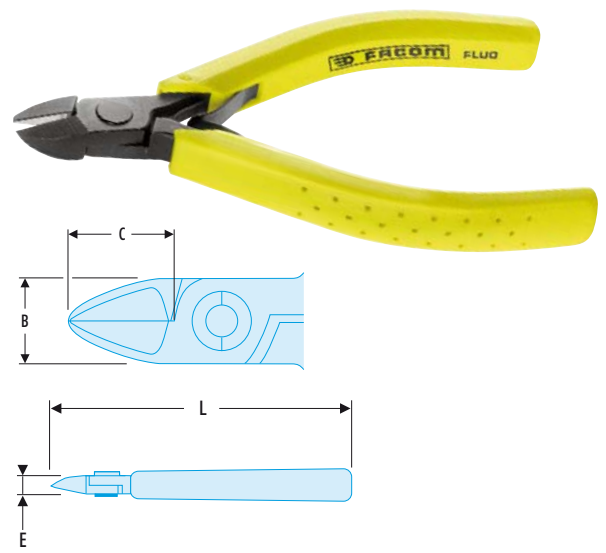


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Serrated nose for stronger grip.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

	C [mm]	E [mm]	E1 [mm]	E2 [mm]	L [mm]	L1 [mm]	⧋ [g]
188.20CPEF	75	4	18	9	200	6,5	200

Micro-Tech® "heavy-duty" cutters with fluorescent grips

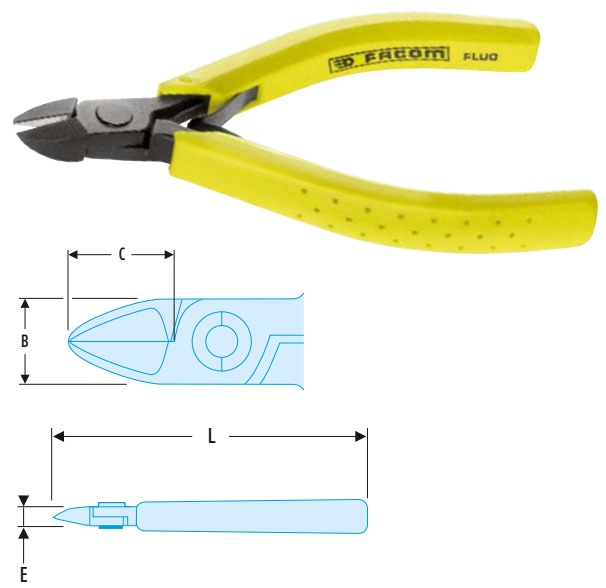


NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Pliers for clear cutting multiple materials: from copper wire to piano wire up to 0.5 mm.

	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]	Fe wire 30 HRc diameter [mm]	Cut	⧋ [g]
405.10MTF	10,5	11,5	7	110	0,3 - 1,4	0,8	⩘	60

Micro-Tech® long-reach cutters with fluorescent grips

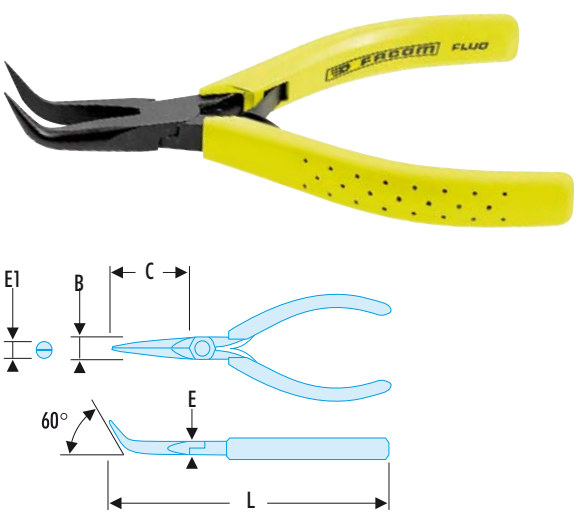


NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Long-reaching pliers up to 1.5 to 2 mm more than with standard pliers.
- The model with retention system prevents the wire from being ejected.

	B [mm]	C [mm]	E [mm]	L [mm]	Cu - Ni wire diameter [mm]	Cut	⧋ [g]
425F	10,5	13	7	110	0,1 - 1,3	⌐¬	60

Micro-Tech® gripping pliers with fluorescent grips



NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Rigid jaws, angled 60°.

	B [mm]	C [mm]	E [mm]	E1 [mm]	L [mm]	⧋ [g]
423.MTF	11	25	7	1,4	125	70

Outside Circlip® pliers with fluorescent grips - straight nose



NF E 73-130, DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]
177A.18F	1,8	19 - 60	180

Outside Circlip® pliers with fluorescent grips - 90° angled



NF E 73-130, DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
197A.18F	1,8	19 - 60	170	175

Inside Circlip® pliers with fluorescent grips - straight nose



NF E 73-130, DIN 5256, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
179A.18F	1,8	19 - 60	185	215

Inside Circlip® pliers with fluorescent grips - 45° angled

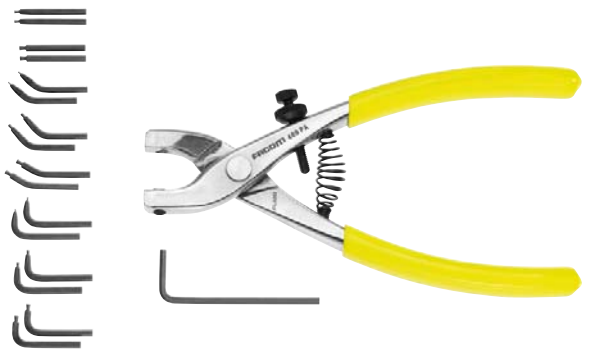


NF E 73-130, DIN 5256, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

	d [mm]	d mini - maxi [mm]	L [mm]	⚖ [g]
199A.18F	1,8	19 - 60	170	215

467FLUO Outside Circlip® pliers with fluorescent grips

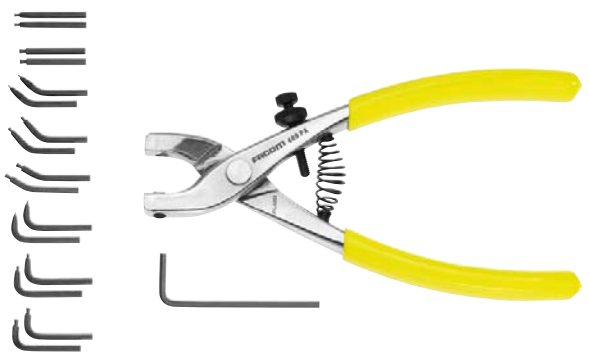


NF E 73-130DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Interchangeable tips for a capacity of diam. 8 --> 63 mm.
- Thumbscrew position setting.
- Opening return spring.
- Finish: chrome finish, PVC grip.
- Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.

Weight: 160 g.

469F Inside Circlip® pliers with fluorescent grips



NF E 73-130DIN 5256, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Interchangeable tips for a capacity of diam. 8 --> 63 mm.
- Thumbscrew position setting.
- Opening return spring.
- Finish: chrome finish, PVC grip.
- Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.

Weight: 160 g.

Ring wenches

Long-reach ring wrenches



ASME B107.100

- Bright finish.
- 12-pin for more secure nut tightening, improving speed and grip. Suitable for 4 - 6 - 12 point.

	A ["]	L [mm]	[g]
J1151	1-1/16x1-1/4	464	826
J1155	1-1/4x1-5/16	489	894
J1160	1-1/4x1-3/8	514	1007
J1162	1-7/16x1-1/2	565	1352
J1164	1-5/8x1-11/16	616	1696

Spline profile tools

Spline profile ring wrenches



ASME B107.100

- Bright finish.
- ASME B107.100: ring and performance specification.
- MS33787: spline profile specification.

	A ["]	L [mm]	[g]
J1118SPL	1/4x5/16	184	54
J1122SPL	3/8x7/16	229	82
J1126SPL	1/2x9/16	229	154
J1130SPL	9/16x5/8	248	181
J1135SPL	11/16x3/4	279	340
J1142SPL	13/16x15/16	324	467
J1144SPL	7/8x1	337	490

Spline profile combination wrenches



- Bright finish.
- Open end: anti-slip design.
- ASME B107.100: ring and performance specification.
- MS33787: spline profile specification.

Total head height: 18 mm.

	A ["]	L [mm]	[g]
J1208SPL	1/4	125	27
J1209SPL	9/32	131	32
J1210SPL	5/16	138	36
J1211SPL	11/32	144	41
J1212SPL	3/8	150	45
J1214SPL	7/16	176	64
J1216SPL	1/2	201	91
J1218SPL	9/16	224	118
J1220SPL	5/8	242	154
J1222SPL	11/16	261	191
J1224SPL	3/4	280	227
J1226SPL	13/16	300	268
J1228SPL	7/8	318	331
J1230SPL	15/16	338	408
J1232SPL	1	357	499

SBV - Spline profile head ratchet ring wrenches







- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Heads tilted by 15°.
- 5° increments.
- High performance level.
- High head capacity.
- Finish: black chromium.

	A ["]	L [mm]	⚖ [g]
SBV0709	7/32 x 9/32	114	36
SBV0810	1/4 x 5/16	114	36
SBV1214	3/8 x 7/16	151	54
SBV1618	1/2 x 9/16	179	104
SBV2022	5/8 x 11/16	200	159
SBV2428	3/4 x 7/8	245	259
SBV2630	13/16 x 15/16	260	381
SBV3236	1 x 1'1/8	330	431

1/4'' Spline profile sockets



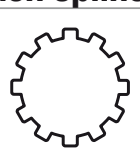


- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Thin walls.
- High performance level.
- Finish: chromed.

	A ["]	L [mm]	⚖ [g]
J4706SPL	3/16	23	9
4707SPL	7/32	23	9
4708SPL	1/4	23	9
4709SPL	9/32	23	9
4710SPL	5/16	23	14
4712SPL	3/8	23	18
4714SPL	7/16	26	23

1/4'' Long-reach spline profile sockets



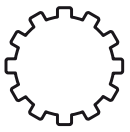


- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Thin walls.
- High performance level.
- Finish: chromed.

	A ["]	L [mm]	⚖ [g]
J4706DPL	3/16	51	14
J4707DPL	7/32	51	18
4708DPL	1/4	51	18
J4709DPL	9/32	51	23
4710DPL	5/16	51	27
J4712DPL	3/8	51	36
J4714DPL	7/16	51	41

3/8" long-reach spline profile sockets





PROTO®

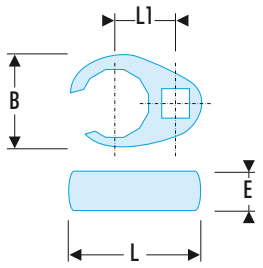
- Profile suited to "high strength" spline fasteners.
- Compatible with 12-point and 6-point inch fasteners.
- Thin walls.
- High performance level.
- Finish: chromed.

	A ["]	d1 [mm]	d2 [mm]	L [mm]	⧋ [g]
5012DPL	3/8	13.8	16.8	53.4	36
5014DPL	7/16	16	17.25	53.65	43
5016DPL	1/2	18.3	18.3	59.95	54
5018DPL	9/16	20.9	20.9	60.3	83
5020DPL	5/8	22.6	22.6	60.4	96

Crowfoot bits

12-point high crowfoot flare bits 3/8"





PROTO®

Dim II

- Thin wall 12-point high heads.
- Built to aeronautical specifications.
- 3/8" square drive bit.
- Dimensions: 5/8 --> 1'1/16.
- Finish: chromed.

	A ["]	E [mm]	B [mm]	C [mm]	L [mm]	⧋ [g]
4920FL	5/8	24,2	18,3	24,2	19,05	40
4922FL	11/16	26,3	18,3	26,3	20,20	44
4924FL	3/4	29,2	18,3	29,2	21,40	53
4926FL	13/16	31,1	18,9	31,1	22,60	56
4928FL	7/8	33,8	19,3	33,8	25,00	67
4930FL	15/16	35,9	19,0	35,9	24,20	68
4932FL	1	37,7	19,8	37,7	26,20	77
4934FL	1-1/16	39,5	20,0	39,5	27,00	84

J5100 9-piece set of 12-point 3/8" drive adaptors



PROTO®

- Length 2" between the centre of the square and the centre of the ring.
- Ring profile design guaranteeing mechanical strength while allowing use in confined spaces.
- Dimensions: 3/8" - 7/16" - 1/2" - 9/16"- 5/8" - 11/16" - 3/4" - 13/16" - 7/8".

1/2" crowfoot open end bits





PROTO®

- Open end: anti-slip design ensuring proper fitting of the crowfoot on the bolt.
- 1/2" square drive bit.

	A ["]	L [mm]	⧋ [g]
J5334CF	1-11/16	73	231
J5336CF	1-1/8	76	245
J5338CF	1-3/16	76	263
J5340CF	1-1/4	84	299
J5342CF	1-5/16	84	299
J5344CF	1-3/8	86	327
J5346CF	1-7/16	86	340
J5348CF	1-1/2	87	349
J5350CF	1-9/16	89	363
J5352CF	1-5/8	89	376
J5354CF	1-11/16	97	431
J5356CF	1-3/4	97	445
J5358CF	1-13/16	98	458
J5360CF	1-7/8	98	478
J5364CF	2	100	499

Tools for aerospace fasteners

TOOLS FOR AIRCRAFT FASTENERS

1/4" AND 3/8" RATCHETS FOR INSTALLING AIRCRAFT FASTENERS

Used with “standard” 1/4" and 3/8" square drive sockets.

• The sockets are locked onto square drive by a metal clip.

The ratchet head includes a hole for inserting a key

• to prevent rotation of the fastener during tightening.



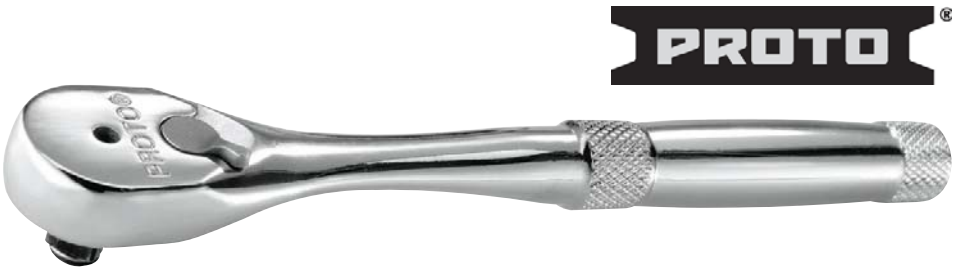


5249XLHS

4749XLHS



4749XLHS 1/4" ratchet for aerospace fasteners

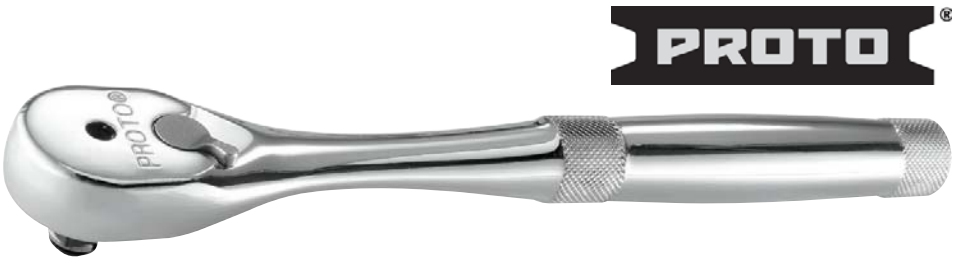


NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10, AS 4283

- Hole in 1/4" head and drive bit for passing keys.
- Smaller shape and volume for better accessibility.
- Increment: 8°.
- Head diameter: 21.5 mm.
- Total head height: 18 mm.
- Length: 144 mm.

Weight: 115 g.

5249XLHS 3/8" ratchet for aerospace fasteners



NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10, AS 4283

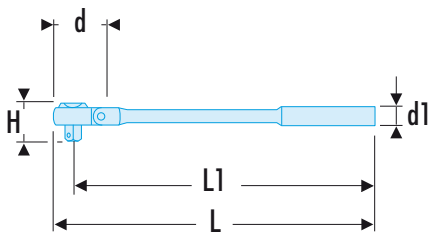
- Hole in 3/8" head and drive bit for passing keys.
- Smaller shape and volume for better accessibility.
- Increment: 8°.
- Head diameter: 33 mm.
- Total head height: 27 mm.
- Length: 215 mm.

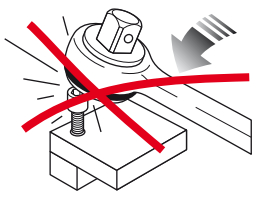
Weight: 400 g.

1/2" metal handle ratchet

"Palm control" 1/2" ratchet with metal handle







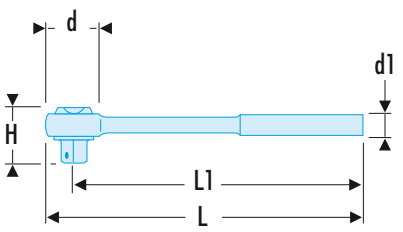
- Long-reach stiffened hinge ratchet allowing to clear an obstacle.
- Increment: 5°.
- "Palm control" switch.
- Finish: satin chrome.

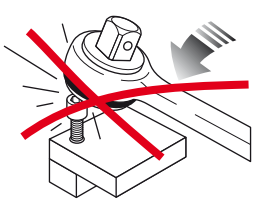
	d [mm]	d1 [mm]	H [mm]	L [mm]	⚖ [g]
S.158A	42	20	40	435	940

3/8" metal handle ratchet

"Palm control" 3/8'' long-reach ratchet with metal handle







NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10

- Stiffened hinge handle allowing to clear an obstacle.
- Increment: 5°.
- "Palm control" switch.
- Finish: satin chrome.

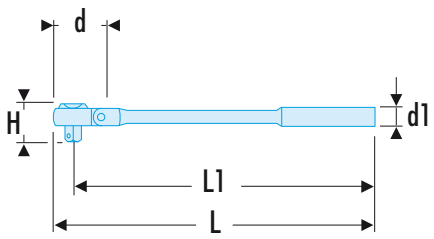
Weight: 360 g.

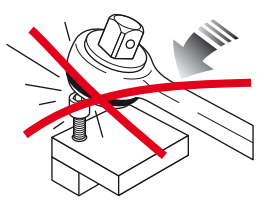
	d [mm]	d1 [mm]	H [mm]	L [mm]	⚖ [g]
J.158A	30	16	32	273	350

1/4" metal handle ratchet

"Palm control" 1/4'' long-reach ratchet with metal handle





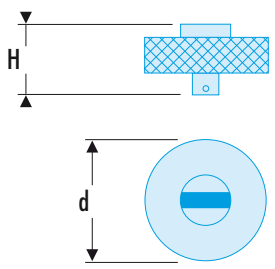


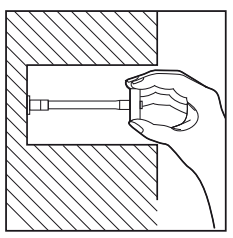
- Increment: 5°.
- Stiffened hinge handle allowing to clear an obstacle.
- Finish: satin chrome.

	d [mm]	d1 [mm]	H [mm]	L [mm]	⚖ [g]
R.158A	25	11	26,5	158	135

R.150A 1/4" ratchet without handle







- Increment: 5°.
- Finish: satin chrome.

Weight: 95 g.

65.PE Bit-holder ratchet wrench 1/4" - 5/16"



- Takes the following bits:
- Series 1: hexagon 1/4".
- Series 2: hexagon 5/16".
- Used for installing 1/4" and 5/16" aircraft fasteners.
- Increment: 5°.
- Heads angled at 15°.
- Bits held by a spring clip.
- Knurled head for fast pre-tightening.
- Length 150 mm.
- Satin chrome finish.

Weight: 74 g.

Hinged sockets

1/2" hinged sockets



PROTO®

Dim "

ASME B107.1, AS954G

	A ["]	L [mm]	[g]
J5475A	1/2	63	113
J5477A	9/16	67	118
J5476A	5/8	67	122

J47107 9-piece set of 1/4" hinged sockets



PROTO®

Dim "

- 9 sockets: 7/32'' - 1/4'' - 9/32'' - 5/16'' - 11/32'' - 3/8'' - 7/16'' - 1/2'' - 9/16''.

Weight: 213 g.

1/4" knurled extensions

PROTO®



- Finish: chromed.

	L [mm]	[g]
J4759	51	23
J4760	76	36
J4761	152	68
J4762	254	109
J4763	259	136

Bristol wrenches

85.JU10 Set of 10 wrenches for Bristol head screws





- Set of 10 85 keys: 033 - 048 - 060 - 072 - 096 - 111 - 133 - 145 - 168 - 183.
- Supplied in roll.

Weight: 37 g.

Torq Set® - Tri-wing bits

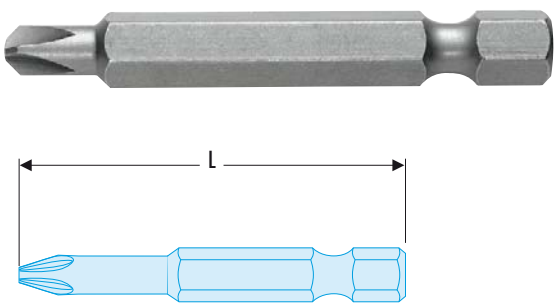
ETOR - 1/4" bits for Torq Set® head screws



NF ISO 1173, ISO 1173

	L [mm]	Screw Size[mm]	ΔΔ [g]
ETOR.100	25	0	5,50
ETOR.101	25	1	5,50
ETORM.103	25	3	6,00
ETORM.104	25	4	6,00
ETORM.105	25	5	6,00
ETORM.106	25	6	6,00
ETORM.108	25	8	6,00
ETORM.110	25	10	6,00
ETORM.101/4	32	1/4	13,00

ETORM.6 - 1/4" grooved bits for Torq Set® head screws

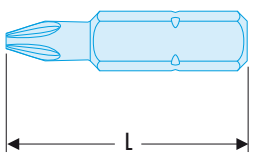


NF ISO 1173, ISO 1173

	Torq-set [No]	L [mm]	ΔΔ [g]
ETORM.602	2	50	12
ETORM.603	3	50	12
ETORM.604	4	50	12
ETORM.605	5	50	12
ETORM.606	6	50	12
ETORM.608	8	50	12
ETORM.610	10	50	12
ETORM.601/4	1/4	50	12

ETORM.2 - For Torq Set® screw head





NF ISO 1173, ISO 1173

	L [mm]	Screw Size[mm]	ΔΔ [g]
ETORM.208	32	8	14
ETORM.210	32	10	14
ETORM.201/4	32	1/4	14
ETORM.205/16	32	5/16	14
ETORM.203/8	32	3/8	14

For Tri-wing head screws



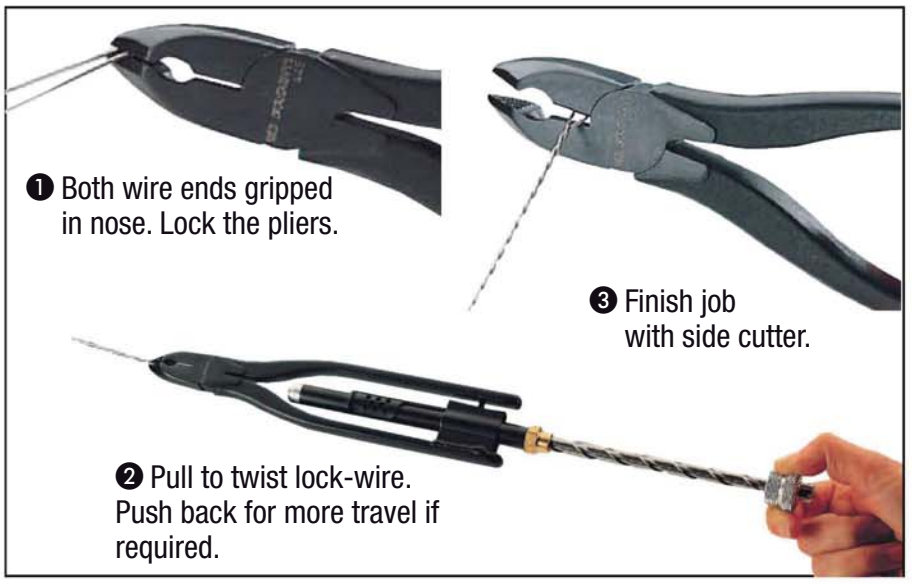
NF ISO 1173, ISO 1173

	L [mm]	Screw Size[mm]	ΔΔ [g]
ETRI.101	25	1	5,50
ETRI.102	25	2	5,50
ETRI.103	25	3	5,50
ETRI.104	25	4	5,50
ETRI.105	25	5	5,50

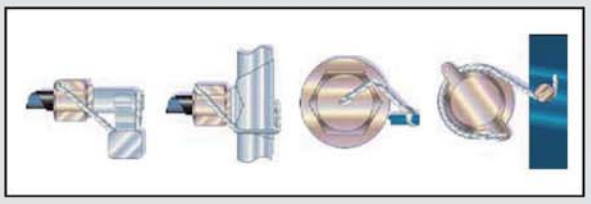
Locking-wire pliers

FACOM LOCKING-WIRE PLIERS

Fast twist in lock-wire securing assemblies subject to vibration.



- For stainless and inconel wire Ø 1 mm.
- Side wire cutter.
- Slim nose-tip for optimum manoeuvrability.
- 10" model: 3 turns, 125 mm travel.
- 8" model: 2.5 turns, 95 mm travel.



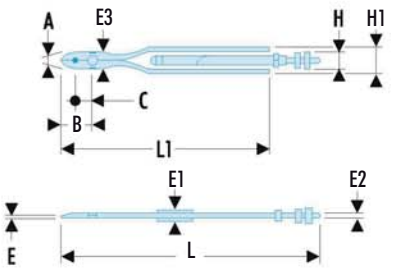
Automatic model

- Automatic-reset model for simplicity and time-saving.



8" short locking-wire pliers





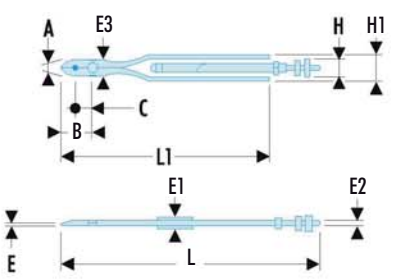
ASME B107.500

- "automatic" model.

	A [mm]	E [mm]	B [mm]	C [mm]	E1 [mm]	E2 [mm]	H [mm]	L [mm]	L2 [mm]	⚖ [g]
445.8R	3	2,5	20	7	15	10,5	22	215	215	245

10" locking-wire pliers





ASME B107.500

- "automatic" model.

	A [mm]	E [mm]	B [mm]	C [mm]	E1 [mm]	E2 [mm]	H [mm]	L [mm]	L2 [mm]	⚖ [g]
445.10R	3	2,5	30	11	15,5	11,5	25	360	360	400

SAFETY | FOAM MODULES

FACOM CONTROL SYSTEM

SAFETY FIRST
• A separate space for each tool prevents them being left in sensitive areas.

PRODUCTIVITY
• Tools quickly located and immediately returned after use. Avoiding loss.

SPEED
• Missing tools identified “at a glance”.







- Two-coloured modular system of foam tool trays designed to resist a wide range of hydrocarbons, hydraulic fluids and cleaning products.
- Modules compatible with JET.XL and CHRONO.XL roller cabinets. Dimensions: 420 x 190 x 55 mm.



Find the complete range of foam modules in the roller cabinets and workshop furniture section p. 52.

CU.AE50 153-piece engine mechanics set

- Set designed for full workshop overhaul and occasional interventions between overhauls on the main heavy jets using SNECMA, GE, PW or RR motors:

- Airbus A3xx, BoeinG 7xx,
Mc Donnel Douglas DCxx.

- 153 tools.

Weight: 17.800 kg.



	Qtys	Set Description
RB.40AU	10	Sockets 3/16" to 9/16"
R.240A	1	1/4" universal joint
R.232	1	Coupler 1/4" - 3/8"
R.236A	1	Short-reach spinner handle
R.215	1	1/4" extension 150 mm long
R.210	1	1/4" extension 100 mm long
R.155A	1	1/4" metal-grip “palm-control” ratchet
JL.40U	10	"Junior" long-reach sockets 1/2" to 9/16"
J.F	7	Hinged sockets 1/2"- 11/16"- 3/4"- 3/8"- 5/8"- 7/16"- 9/16"
JB.41AU	5	Sockets 5/8" to 7/8"
JB.40AU	6	Sockets 1/4" to 9/16"
J.240A	1	3/8" universal joint
J.230	1	Coupler 3/8" - 1/4"
J.215	1	"Junior" extension 250 mm
J.210	1	"Junior" extension 125 mm
J.155A	1	3/8" metal-grip "palm-control" ratchet
J.145	1	Metal-grip hinged handle
J.120A	1	Sliding tee
J.115	1	Metal-grip speed brace
CLE.MDAM100A	6	Second cut locksmiths files
ARZ.5,5	1	Round blade offset screwdriver
APZ.A	1	Dual-size offset screwdriver
APZ.B	1	Dual-size offset screwdriver
ANP	2	Stubby screwdrivers Phillips® heads 1x35 mm and 2x35 mm
AWP	4	Phillips® screwdrivers PH 1x100 - 2x125 - 3x150 - 4x200
AW	4	Forged hexagonal blade screwdrivers for slotted heads 4x100 - 5,5x150 - 6,5x150 - 8x200 mm
AN6.5X35	1	Stubby screwdriver for slotted heads
AN	3	Round blade screwdrivers for slotted heads 2,5x75 - 3,5x75 - 4x100 mm

	Qtys	Set Description
86H.JU7	7	Folding set of hexagon keys 1/16" to 1/4"
86H.JU6	6	Folding set of hexagon keys 5/32" to 3/8"
834.R2	1	Inspection mirror 55 mm
803.300M	1	Flexible stainless 2-sided rule
64.3/8X7/16	1	12-point ring wrench
55A.JU10	10	Offset ring wrenches 1/4" to 1"1/4"
445.10R	1	Locking-wire pliers
410.S	1	Connector pliers
440.JU17T	17	1/4" to 1 1/4" combination wrench wallet set
192.16CPE	1	"Piano wire" diagonal cutters
256.2,5	1	Precision centre punch
251A.JS9	9	Precision sleeved drift punches 1 to 6 mm
208A.40CBA	1	Heavyweight series adaptable tip mallet
195.20CPE	1	Sheathed angled half-round nose pliers
193.16CPE	1	Sheathed straight half-round nose "telephone" pliers
189.17CPE	1	Sheathed round-nose pliers
187.18CPE	1	Sheathed universal pliers
1830.1	1	Extra-soft silk brush
181A.25CPE	1	Locking twin slip-joint multigrip pliers
804	1	19 blade feeler gauge
603F	1	Hacksaw frame
234	1	Scriber
231	1	Three-square scraper
34	6	Midget open-end wrenches 1/4"- 11/32"- 3/8"- 5/16"- 7/16"- 9/32"
CKS.91	1	Socket rack set
JB.11/32	1	Sockets 11/32"
200C.26	1	Graphite handle riveting hammer
200C.30	1	Graphite handle riveting hammer

JETGXL.UAE50 CU.AE50 set supplied in foam modules and JET.8GM3S

• Engine mechanics selection CU.AE50 supplied in foam modules in roller cabinet JET.8GM3S.



CU.AE51 115-piece electricians set

• For minor and major workshop overhaul and interventions on electrical equipment: control harnesses, power supply circuits, connections and relays, lighting, audiovisual.
• 115 tools.
Weight: 6.880 kg.

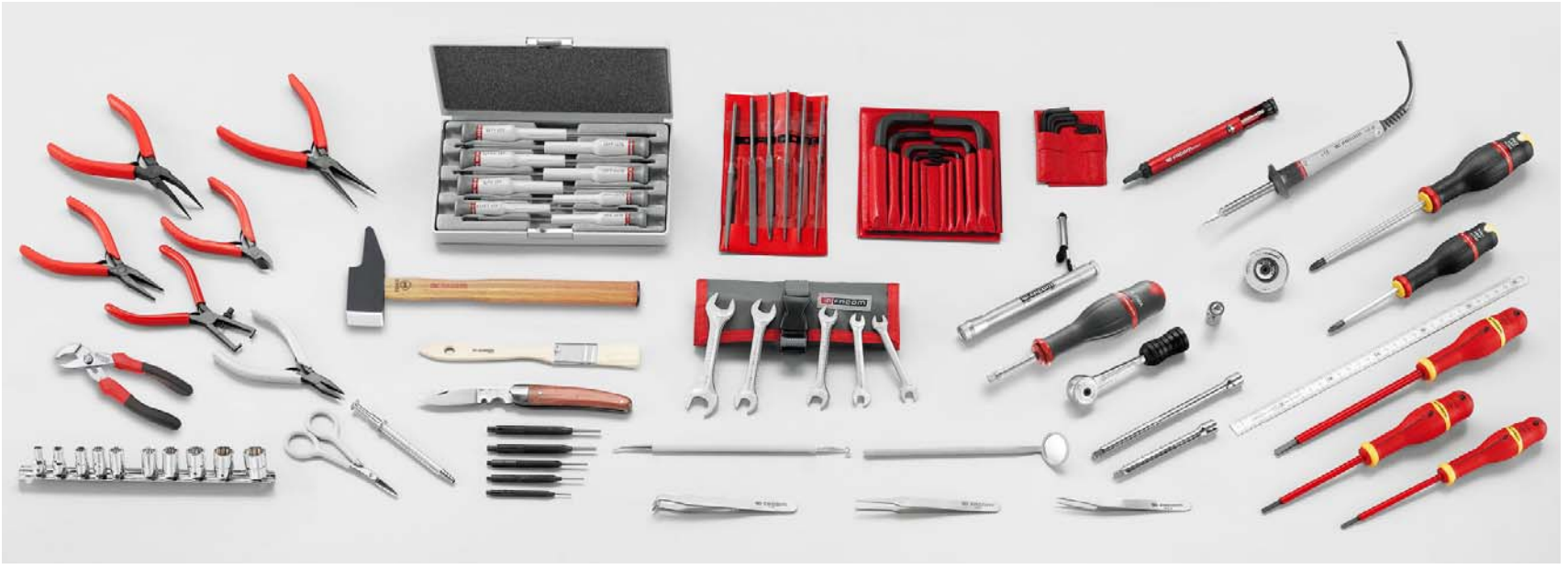


	Qtys	Set Description
R.EL	5	Long 6 point sockets 1/4"- 5/16"- 3/8"- 7/16"- 1/2"
RB.40AU	10	Sockets 3/16" to 9/16"
R.240A	1	1/4" universal joint
R.236A	1	Short-reach spinner handle
R.216	1	Flexible socket extension 150 mm long
R.215	1	1/4" extension 150 mm long
R.210	1	1/4" extension 100 mm long
R.151	1	1/4" ratchet
R.120A	1	Sliding tee
AS.6L160T2A	6	Needle file wallet set
ARZ.5,5	1	Round blade offset screwdriver
APZ.B	1	Dual-size offset screwdriver
AWP	2	Screwdriver for Phillips® heads PH 1x100 - 2x125
ANP0X75	1	Screwdriver for Phillips® heads PH 0
AN	2	Screwdrivers for slotted heads 2,5x75 and 3,5x75 mm
AW	4	Screwdrivers for slotted head 4x100 - 5,5x150 - 6,5x150 - 8x200 mm
85.JU10	10	Wallet set of hexagon keys 33 to 183 mm
841A.4	1	"Stubby" scissors
840.1	1	Electricians knife with wire stripper
839A.0	1	Desoldering pump
834.R1	1	Inspection mirror 36 mm
826.1	1	Mechanical retriver
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
445.8R	1	Locking-wire pliers
410.S	1	Connector pliers
405.15	1	Precision diagonal cutters, axial cut
34.JU13T	13	Roll set of open end wrenches 3/16" to 11/16"

	Qtys	Set Description
256.2,5	1	Precision centre punch
251A.JT9	9	Precision sleeved drift punches 1 to 6 mm
208A.32CBA	1	Plastic-tip mallet
200H.26	1	Graphite handle riveting hammer
193.16CPE	1	Short half-round nose plier
189.17CPE	1	Sheathed round-nose pliers
188.16CPE	1	Sheathed flat-nose pliers
1230.30	1	Extra-soft silk brush
183.20CPE	1	Sheathed angled half-round nose pliers
180.CPE	1	Multigrip pliers
BV.21-10	1	Soldering iron stand
113A.8C	1	10" adjustable wrench
1830.1	1	Extra-soft silk brush
836	1	Pen light
804	1	19 blade feeler gauge
803.300M	1	Flexible stainless 2-sided rule
234	1	Scriber
163	1	Wire stripper and cutter
144	1	Ultra-flat straight tweezers
R.235	5	1/4" drive bit holder
ES.148T	1	1/4" bit for slotted head 8 mm
ES.136,5T	1	1/4" bit for slotted head 6,5 mm
ES.134T	1	1/4" bit for slotted head 4 mm
EP.102T	1	1/4" bit for Phillips® head n°2
EP.101T	1	1/4" bit for Phillips® head n°1
APB.1X40	1	Stubby screwdriver for Phillips® head n°1

CU.AE52 86-piece flight instruments set

• For workshop revisions and interventions on panel instruments,
electric, electromechanical and electronic modules, on lamps and indicators.
• 86 tools.
Weight: 3.490 kg.



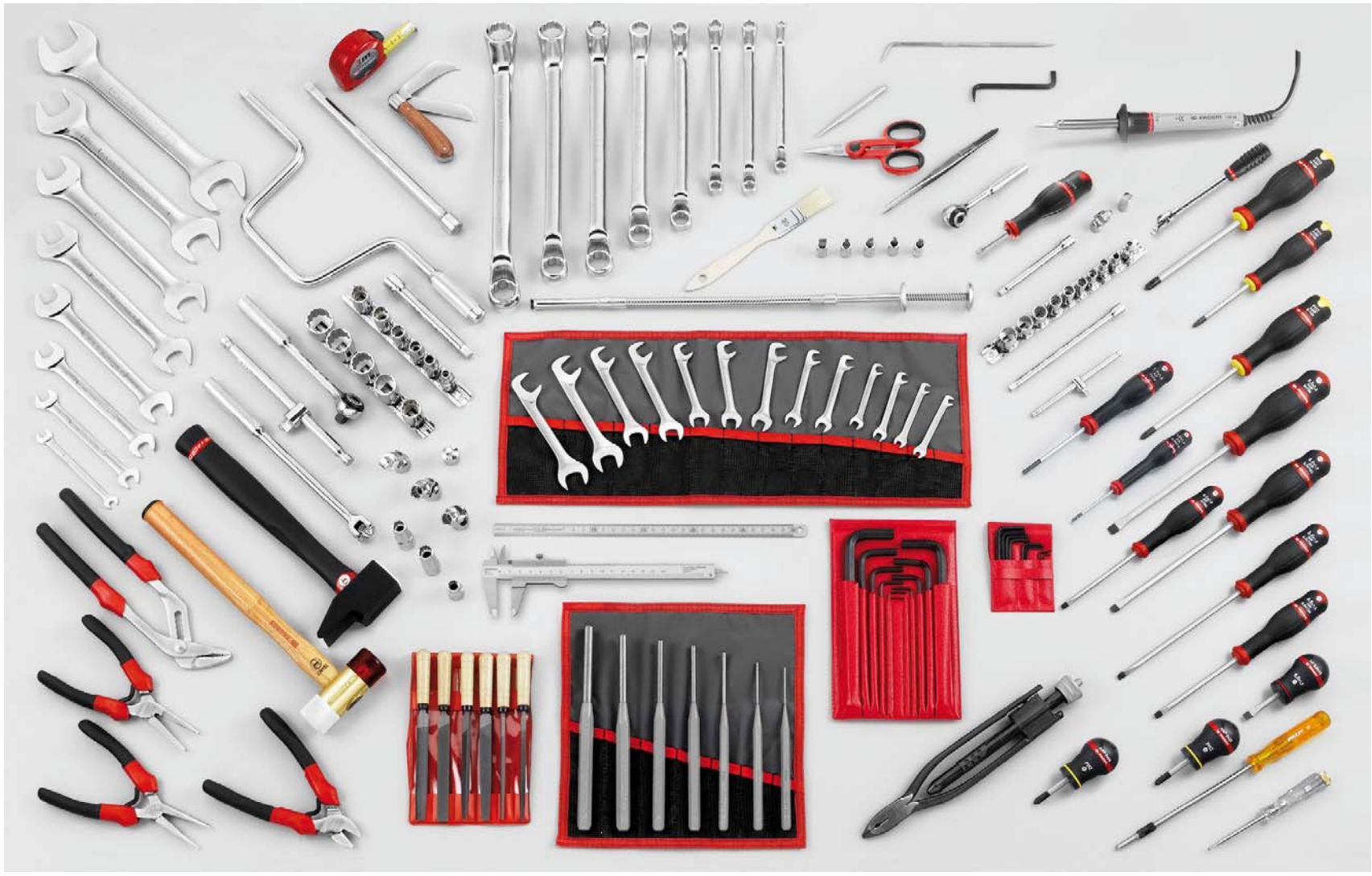
	Qtys	Set Description
RB.40AU	10	Sockets 3/16" to 9/16"
R.240A	1	1/4" universal joint
R.236A	1	Short-reach spinner handle
R.215	1	1/4" extension 150 mm long
R.210	1	1/4" extension 100 mm long
R.151	1	1/4" ratchet
R.150A	1	Finger-control ratchet
AVE	3	Screwdrivers for slotted heads 3,5x100 - 4x100 - 5,5x150 mm
AS.6L160T2A	6	Needle file wallet set
AEF.J3	8	"Micro-Tech®" screwdrivers with case
AWP	2	Screwdriver for Phillips® PH heads 1x100 - 2x125
85.JU10	10	Wallet set of hexagon keys 33 to 183 mm
841.1	1	Very short pointed scissors
840.1	1	Electricians knife with wire stripper
839A.0	1	Desoldering pump
835A	1	Spring hook
826.0	1	Mechanical retriever
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"

	Qtys	Set Description
803.300M	1	Flexible stainless 2-sided rule
405.10	1	"Electronics" coaxial cutting pliers
251A	5	Drift punches 1 - 1.5 - 2 - 2.5 - 3 mm
200H.26	1	Graphite handle riveting hammer
22.JU5T	5	Roll set of miniature open-end wrenches 3/16" to 9/16"
194.12	1	Fine wire strippers
1830.1	1	Extra-soft silk brush
176A.CPY	1	Sheathed multigrip pliers
142.2	1	15° angle-nose tweezers
1230.30	1	Soldering iron 30W
836	1	Pen light
834	1	Inspection mirror
431.MT	1	Micro-Tec® narrow short-nose pliers
421	1	"Electronics" short sheathed flat-nose pliers
403	1	"Electronics" sheathed half round-nosed pliers
402	1	Sheathed half-round nose pliers
144	1	Ultra-flat straight tweezers
139	1	End-cutting tweezers



CU.AE53 145-piece cell maintenance set

• For overhaul and interventions on the cell: control surfaces, flap cylinders, structure of heavy carrier aircraft.
• 145 tools.
Weight: 12.880 kg

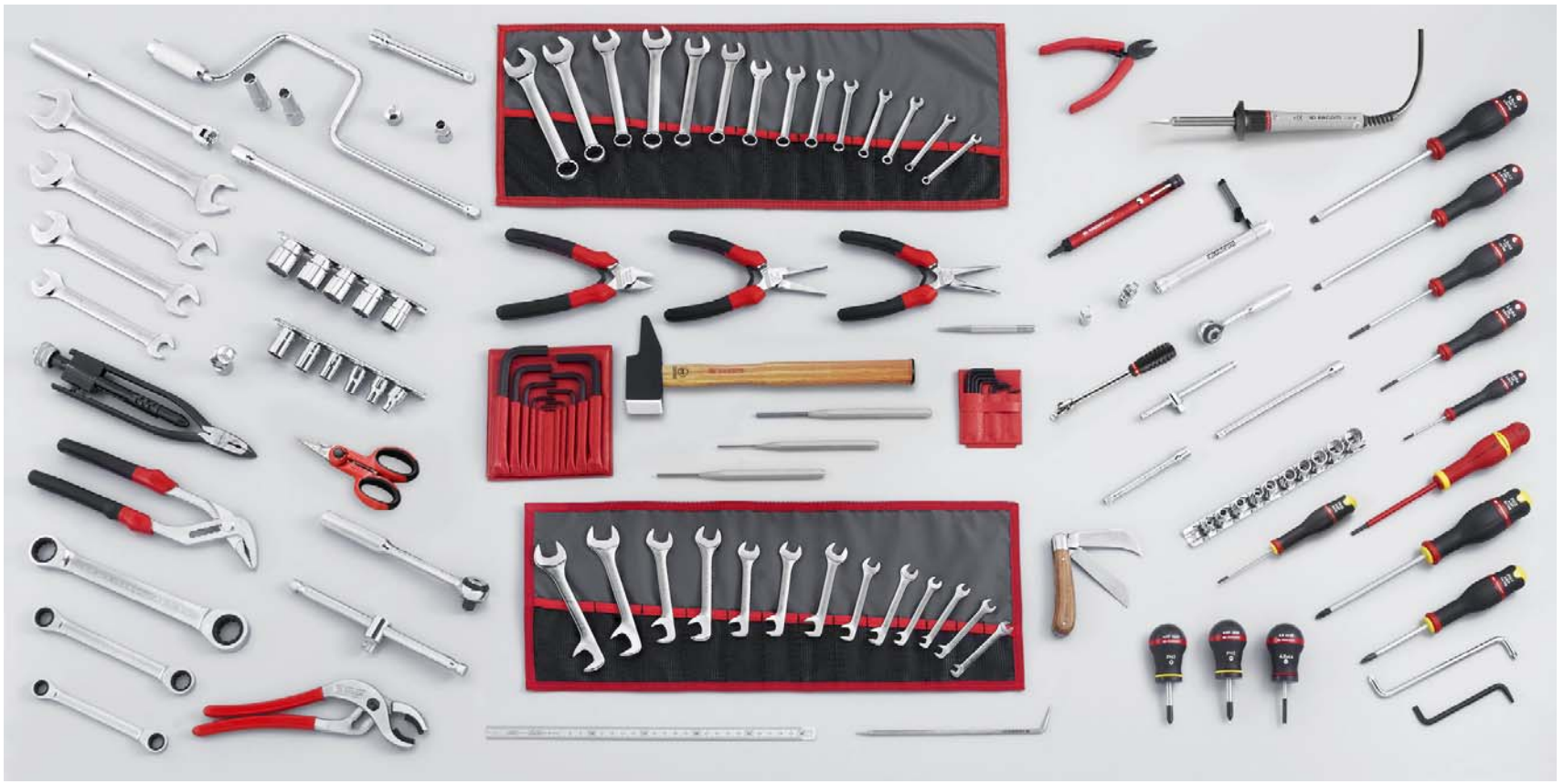


	Qtys	Set Description
RB.40AU	10	Sockets 3/16" to 9/16"
R.240A	1	1/4" universal joint
R.232	1	Coupler 1/4" - 3/8"
R.236A	1	Short-reach spinner handle
R.235	5	Bit-holder 1/4"
R.215	1	1/4" extension 150 mm long
R.210	1	1/4" extension 100 mm long
R.155A	1	1/4" metal-grip "palm-control" ratchet
R.140A	1	Drive-hinged handle 1/4"
R.120A	1	Sliding tee
JB.41AU	5	Sockets 5/8" to 7/8"
JB.40AU	6	Sockets 1/4" to 9/16"
J.LA	2	Long-reach sockets 7/16" and 3/8"
J.F	2	Hinged sockets 7/16" and 3/8"
JB.11/32	1	Sockets
J.240A	1	3/8" universal joint
J.230	1	Coupler 3/8" - 1/4"
J.215	1	"Junior" extension 250 mm
J.210	1	"Junior" extension 125 mm
J.155A	1	3/8" metal-grip "palm-control" ratchet
J.145	1	Metal-grip hinged handle
J.120A	1	Junior sliding tee
J.115	1	Metal-grip speed brace
CLE.MDAM100A	6	Second cut locksmiths files
AV.HT2B	1	110-250 V voltage tester screwdriver
ARZ.5,5	1	Dual-size offset screwdriver
AFU.1	1	Screw starter slotted heads
AN	2	Stubby screwdriver for Phillips® heads 2,5x75 and 3x75 mm
AWP	3	Screwdrivers for Phillips® heads 1x100 - 2x125 - 3x150
AW	4	Screwdrivers for slotted heads 4x100 - 5,5x100 - 6,5x150 - 8x200 mm
AN6,5X35	1	Stubby screwdriver for slotted heads 6,5x35 mm
ANP0X75	1	Screwdrivers for Phillips® heads PH 0

	Qtys	Set Description
APB	1	Short blade screwdriver Phillips® 1x40 - 2x 40
85.JU10	10	Wallet set of hexagon keys 33 to 183 mm
83H.JU10	10	Wallet set of long-reach hexagonal keys 1/16" to 3/8"
826.1	1	Mechanical retriever
805.1	1	Vernier caliper to 1/10 mm
803.300M	1	Flexible stainless 2-sided rule
55A.JU8	8	Ring wrenches 1/4" to 15/16"
445.10R	1	Locking-wire pliers
44.JU8	8	Inch combination wrenches 1/4" to 1"1/4
192.16CPE	1	"Piano wire" diagonal cutters
193.16CPE	1	Sheathed straight half-round nose"telephone"pliers
188.16CPE	1	Sheathed flat-nose pliers
180.CPE	1	Multigrip pliers
BV.21-10	1	Soldering iron stand
1230-30	1	Soldering iron (20/40W)
893.46	1	Case tape measure 2m
843	1	Twin-blade electricians knife
841	1	Electricians scissors
234	1	Scriber
150	1	Standard straight tweezers
34.JU13T	13	Roll set of open-end wrenches 3/16" to 11/16"
256.2,5	1	Precision centre punch
248.JT7	7	Long drift punches
208A.32CBA	1	Plastic-tip mallet
200H.28	1	Graphite handle riveting hammer
1830.1	1	Extra-soft silk brush
ES.148T	1	Bits for slotted heads 8 mm
ES.136,5T	1	Bits for slotted heads 6,5 mm
ES.134T	1	Bits for slotted heads 4 mm
EP.102T	1	Bits for Phillips heads n°2
EP.101T	1	Bits for Phillips heads n°1
ACL.1A	1	Ratchet bit-driver

CU.AE54 128-piece equipment maintenance set

• For interventions and fittings in the cockpit of airline and cargo aircraft: lighting, interior fixtures, seats, air conditioning circuits.
• 128 tools
Weight: 8.680 kg.



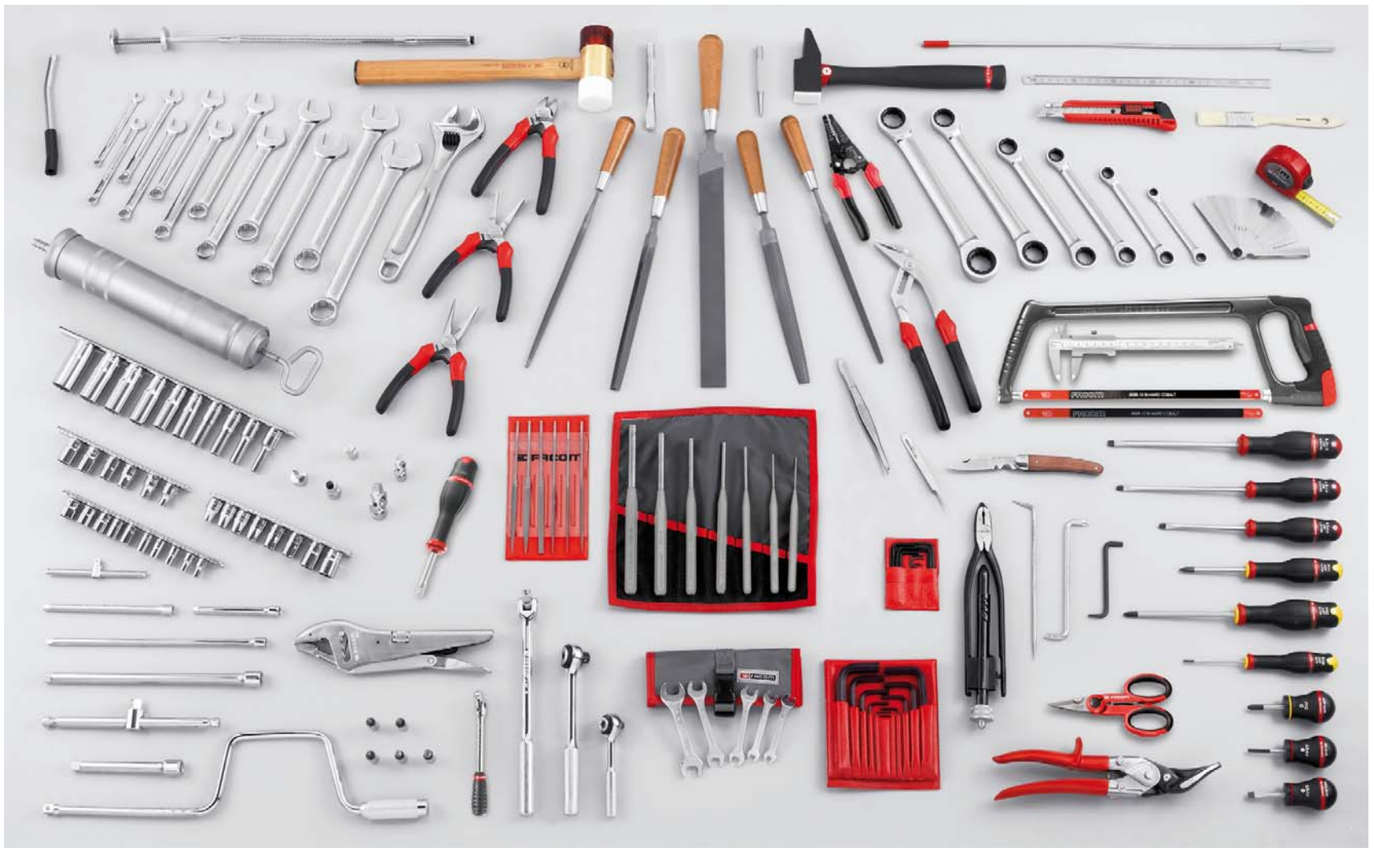
	Qtys	Set Description
39.JU14T	14	Short combination wrenches 1/8" to 11/16"
44	4	Open-end wrenches: 1/2 x 9/16 - 3/4 x 13/16 - 5/8 x 11/16 - 7/8 x1 5/16
34.JU13T	13	Roll set of open-end wrenches 3/16" to 11/16"
64	3	12-point ratchet ring wrenches: 1/4 x 5/16 -3/8 x 7/16 - 1/2 x 9/16
R.120A	1	Sliding tee
R.210	1	100 mm extension
R.215	1	150 mm extension
R.240A	1	1/4" universal joint
R.232	1	Coupler 1/4" - 3/8"
J.210	1	"Junior" extension 125 mm
J.215	1	"Junior" extension 250 mm
J.240A	1	3/8" universal joint
J.120A	1	Junior sliding tee
J.230	1	Coupler 3/8" - 1/4"
J.LA	2	Junior long-reach sockets 3/8" and 7/16"
AW	3	Screwdrivers for slotted heads 4x100 - 5.5x150 - 6.5x150
AN	2	Screwdrivers for slotted head 2.5x75 and 3.5x75 mm
AN4X35	1	Stubby screwdriver 4 x 35
ANP0X75	1	Screwdriver for Phillips® PH head 0
AWP2X125	3	Screwdriver for Phillips® PH head 2
ANP	2	Screwdrivers 1 x 35 and 2 x 35 mm
APZ.B	1	Offset screwdriver
A3,5X100VE	1	1000 V insulated screwdriver for slotted head 3.5 x 100 mm
ARZ.5,5	1	Dual-size offset screwdriver
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
192.16CPE	1	"Piano wire" diagonal cutters
R.155A	1	1/4" metal grip "palm control" ratchet

	Qtys	Set Description
J.155A	1	3/8" metal grip "palm control" ratchet
R.140A	1	Drive-hinged handle 1/4"
J.145	1	Metal-grip hinged handle
J.115	1	Metal-grip speed brace
RB.40AU	10	Sockets 3/16" to 9/16"
JB.41AU	5	Sockets 5/8" to 7/8"
JB.40AU	6	Sockets 1/14" to 9/16"
85.JU10	10	Wallet set of hexagonal keys 33 to 183 mm
188.16CPE	1	Sheathed flat-nose pliers
193.16CPE	1	Sheathed straight half-round nose"telephone"pliers
405.12	1	Precision diagonal cutters
1230.30	1	Dual-rating soldering iron (20/40W)
BV.21-10	1	Soldering iron stand
839A.0	1	Desoldering pump
841A.4	1	Bi-material electricians scissors
843	1	Twin-blade electricians knife
248	3	Long drift punches 2 - 3 - 4 mm
256.2,5	1	Precision centre punch
234	1	Scriber
803.300M	1	Flexible stainless rule 300 mm
836	1	Pen light
410.S	1	Connector pliers
445.8R	1	Locking-wire pliers
200H.26	1	Graphite handle riveting hammer
JB.11/32	1	Sockets
841A.4	1	Electrician scissors
176A.CPY	1	Multigrip plier

CU.AE56 167-piece stop-over mechanics set

- For interventions on motor, cell accessories, electrical equipment and circuits.
- 167 tools.

Weight: 16.960 kg.



	Qtys	Set Description
STG	5	File set
RB.40AU	10	Sockets 3/16" to 9/16"
R.240A	1	1/4" universal joint
R.232	1	Coupler 1/4" - 3/8"
R.236A	1	Short-reach spinner handle
R.235	5	Bit holder 1/4"
R.217	1	1/4" extension 250 mm long
R.215	1	1/4" extension 150 mm long
R.210	1	1/4" extension 100 mm long
R.155A	1	1/4" metal-grip "palm control" ratchet
R.140A	1	Drive-hinged handle 1/4"
R.120A	1	Sliding tee
JL.40U	10	Junior long-reach sockets 1/2" to 9/16"
JB.41AU	5	Sockets 5/8" to 7/8"
JB.40AU	6	Sockets 1/4" to 9/16"
J.240A	1	3/8" universal joint
J.230	1	Coupler 3/8" - 1/4"
J.215	1	"Junior" extension 250 mm
J.210	1	"Junior" extension 125 mm
J.155A	1	3/8" metal-grip "palm control" ratchet
J.145	1	Metal-grip hinged handle
J.120A	1	"Junior" sliding tee
J.115	1	Metal-grip speed brace
AS.6L160T2A	6	Needle file wallet set
ARZ.5,5	1	Round blade offset screwdriver
APZ.B	1	Dual-size offset screwdriver
ANP1X35	1	Stubby screwdriver for Phillips® heads 1
AWP	2	Screwdriver for Phillips® PH heads 1-2
ANP0X75	1	Screwdriver for Phillips® heads 0
AW	3	Screwdrivers for slotted head 4x100 - 5.5x150 and 6.5x150 mm
AN	4	Stubby screwdrivers 4x35 - 6.5x3 - 2x75 - 3x75 mm
882A	1	Scroll shears
85.JU10	10	Wallet set of hexagonal keys 33 to 183 mm
884.S18	1	18 mm snap-off blade cutter
841A.4	1	Bi-material electricians scissors

	Qtys	Set Description
840.1	1	Electricians knife with wire stripper
827.1	1	Extra-slim magneticretrievers
826.1	1	Mechanical retriever
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
805.1	1	Vernier caliper to 1/10 mm
803.300M	1	Flexible stainless 2-sided rule
64	6	Ring wrenches: 1/2x9/16" - 1/4x5/16" - 3/4x13/16" - 3/8x7/16" - 5/8x11/16" - 7/8x15/16"
668B.12	10	Pack of ten 12 teeth/cm bimetal blades
445.10R	1	Locking-wire pliers
440.JU12	12	Combination wrenches 1/4" to 15/16"
192.16CPE	1	"Piano wire" diagonal cutters
256.4	1	4 mm precision centre punch
263.G19	1	Chisel
248.JT7	7	Long drift punches 2 to 10 mm
22.JU5T	5	Roll set of miniature open-end wrenches 3/16" to 9/16"
208A.40CBA	1	Heavyweight series adaptable tip mallet
200H.32	1	Graphite handle riveting hammer
193.16CPE	1	Sheathed straight half-round nose"telephone"pliers
188.16CPE	1	Sheathed flat-nose pliers
1830.1	1	Extra-soft silk brush
180.CPE	1	Multigrip plier
142.1	1	Straight-shouldered tweezers
113A.10C	1	10" adjustable wrench
893.316	1	Case tape measure 3m
804	1	19 blade feeler gauge
603F	1	Hacksaw frame
500	1	Lock-grip pliers
376A	1	Manual oil syringe
234	1	Scriber
163	1	Wire cutter and stripper
154	1	Straight tweezers
JB.11/32	1	Sockets
ES.T	5	Bits 101 - 102 - 134 - 136,5 - 148

JETGXL.UAE56 CU.AE56 set supplied in foam modules and JET.8GM3S

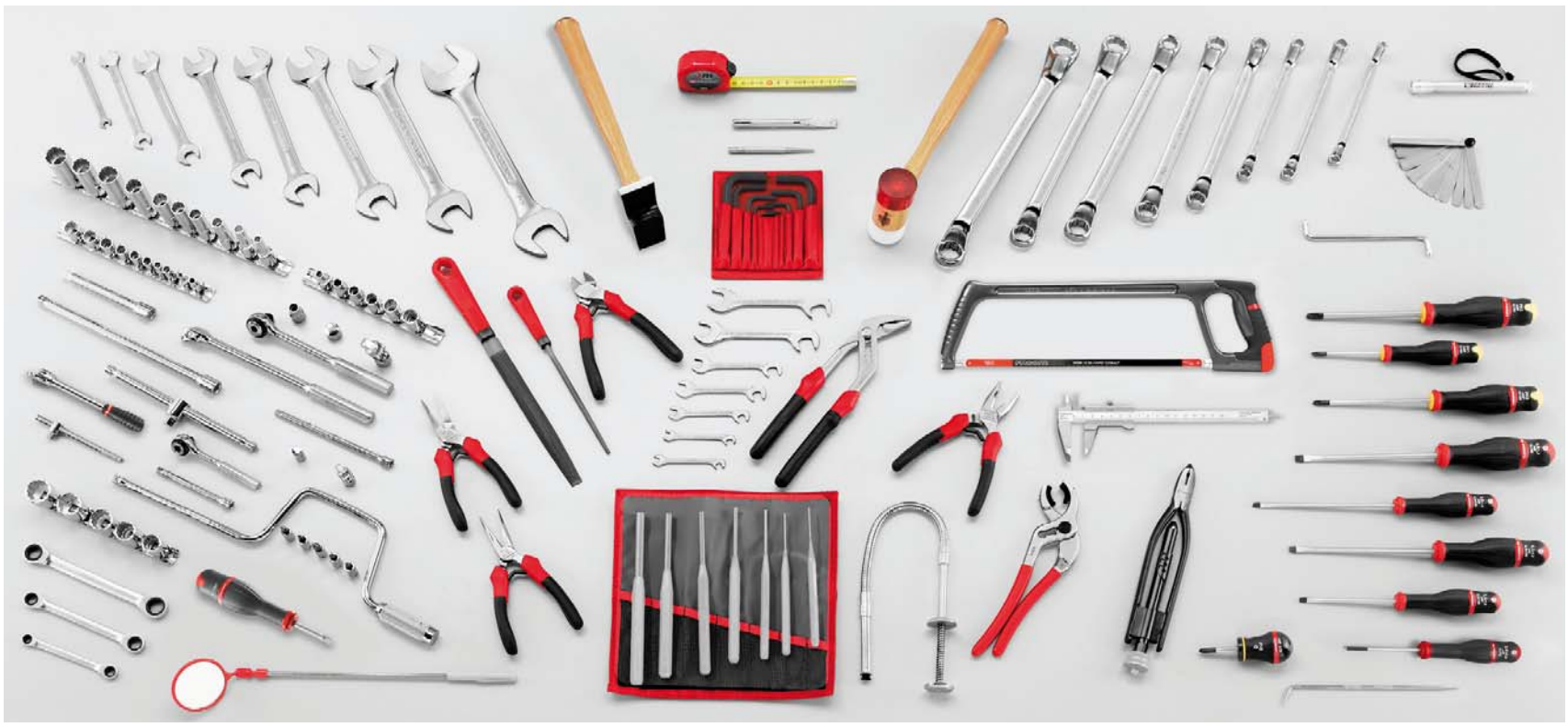
- CU.AE56 stopover mechanics set supplied in foam modules and JET.8GM3S



CU.AE57 127-piece major check set

- For periodical major checks on engines, trains, cells, hydraulic systems of wide-bodied aircraft: Airbus, Boeing, Mc Donnel Douglas.
- 127 tools.

Weight: 14.430 kg.



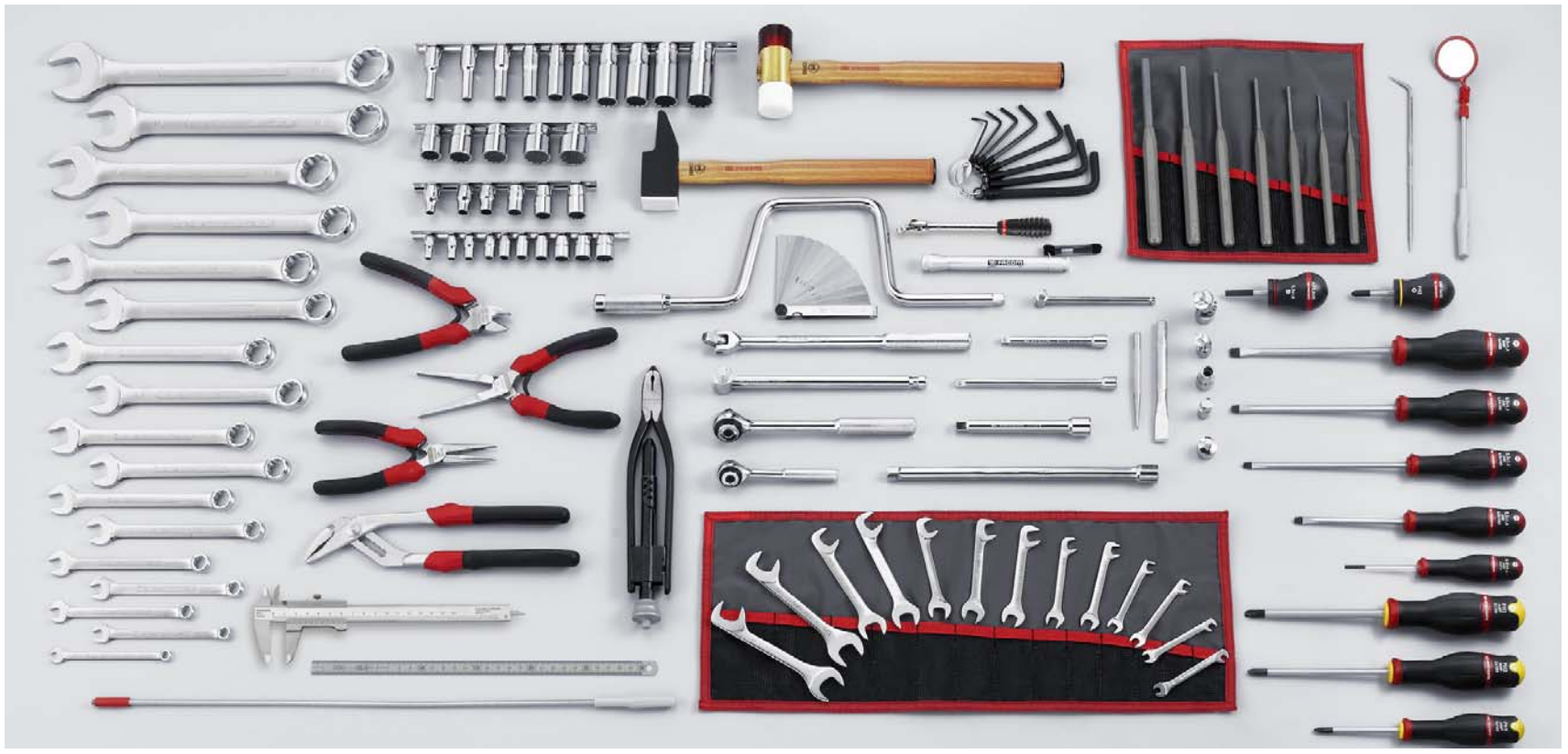
	Qtys	Set Description
RB.40AU	10	Sockets 3/16" to 9/16"
R.155A	1	"Radio" metal-grip ratchet
R.140A	1	Drive-hinged handle 1/4"
R.120A	1	Sliding tee
R.236A	1	Short-reach spinner handle
R.240A	1	1/4" universal joint
R.210	1	100 mm extension
R.215	1	150 mm extension
R.232	1	Coupler 1/4" - 3/8"
JB.41AU	5	Sockets 5/8" to 7/8"
JB.40AU	6	Sockets 1/4" to 9/16"
JL.40U	10	"Junior" long-reach sockets 1/4" to 13/16"
J.155A	1	"Junior" metal-grip ratchet
J.115	1	Metal-grip speed brace
J.145	1	Metal-grip hinged handle
J.120A	1	"Junior" sliding tee
J.210	1	"Junior" extension 125 mm
J.215	1	"Junior" extension 250 mm
J.240A	1	3/8" universal joint
J.230	1	Coupler 3/8" - 1/4"
44.JU8	8	Open-end wrenches 1/4" to 1"1/4
34	7	Open end wrenches 1/4" - 11/16" - 3/8" - 5/16" - 5/8" - 7/16" - 9/32"
55A.JU8	8	Ring wrenches 1/2x9/16" to 7/8x15/16"
64	3	Ring wrenches: 1/2x9/16" - 1/4x5/16" - 3/8x7/16"
82H.JU10	10	Wallet set of hexagonal keys 1/16" to 3/8"
AWP	3	Screwdriver for Phillips® heads 1-2-3
AW	4	Screwdrivers for slotted heads 4x100 - 5.5x150 - 6.5x150 - 8x200 mm

	Qtys	Set Description
AN3X75	1	Screwdriver for slotted heads 3x75 mm
APZ.B	1	Offset screwdriver for Phillips® heads
180.CPE	1	Multigrip pliers
188.16CPE	1	Sheathed flat-nose pliers
193.16CPE	1	Sheathed straight half-round nose"telephone"pliers
187.16CPE	1	Sheathed universal pliers
192.16CPE	1	"Piano wire" diagonal cutters
410.S	1	Connector pliers
445.10R	1	Locking-wire pliers
805.1	1	Vernier caliper to 1/10 mm
804	1	19 blade feeler gauge
234	1	Scriber
893.316	1	Case tape measure 3m
200H.32	1	Graphite handle riveting hammer
208A.40CBA	1	Heavyweight series adaptable tip mallet
248.JT7	7	Long drift punches 2 to 10 mm
256.2,5	1	Precision centre punch
263.619	1	Chisel
826.1	1	Mechanical retriever
834.R2	1	Articulated mirror
836	1	Pen light
DRD.MD200EMA	1	Half-round second-cut file 200 mm
RD.MD150EMA	1	Half-round second-cut file 150 mm
603F	1	Hacksaw frame
JB.11/32	1	Sockets
APB.2X40	1	Short blade screwdriver Phillips® 2x40
ES.T	3	Bits 134 - 136,5 - 148
EP.T	2	Bits 101 - 102
R.235	5	Bit-holder 1/4"

CU.AE10 118-piece engine cell set

- 118 tools.

Weight: 11.920 kg.



	Qtys	Set Description
RB.40AU	10	Sockets 3/16" to 9/16"
R.155A	1	"Radio" metal-grip ratchet
R.140A	1	Drive-hinged handle 1/4"
R.120A	1	Sliding tee
R.210	1	100 mm extension
R.215	1	150 mm extension
R.240A	1	1/4" universal joint
R.232	1	Coupler 1/4" - 3/8"
JB.41AU	5	Sockets 5/8" to 7/8"
JB.40AU	6	Sockets 1/4" to 9/16"
JB.11/32	1	Sockets
J.155A	1	"Junior" metal-grip ratchet
J.145	1	Metal-grip hinged handle
J.115	1	Metal-grip speed brace
J.120A	1	"Junior" sliding tee
J.210	1	"Junior" extension 125 mm
J.215	1	"Junior" extension 250 mm
J.240A	1	3/8" universal joint
J.230	1	Coupler 3/8" - 1/4"
JL.40U	10	"Junior" long-reach sockets 1/2" to 9/16"
440.JU17T	17	1/4" to 1"1/4 combination wrench wallet set
34.JU13T	13	Roll set of open-end wrenches 3/16" to 11/16"
87H.JU8	8	Short hexagonal key ring-set

	Qtys	Set Description
AN5,5X35	1	Stubby screwdriver for slotted heads 5,5x35 mm
AWP	2	Screwdriver for Phillips® heads PH 1x100 - 2x125
AW	4	Screwdrivers for slotted head 4x100 - 5,5x100 - 6,5x150 - 8x200 mm
AN3X75	1	Screwdriver for slotted heads 3 x 75 mm
180.CPE	1	Multigrip plier
188.20CPE	1	Sheathed flat-nose pliers
193.16CPE	1	Sheathed straight half-round nose “telephone” pliers
192.16CPE	1	"Piano wire" diagonal cutters
445.10R	1	Locking-wire pliers
803.300M	1	Flexible stainless 2-sided rule
804	1	19 blade feeler gauge
805.1	1	Vernier caliper to 1/10 mm
200H.28	1	Graphite handle riveting hammer
208A.32CBA	1	Plastic-tip mallet
256.2,5	1	Precision centre punch
248.JT7	7	Long drift punches 2 to 10 mm
234	1	Scriber
834.R1	1	Articulated mirror
827.1	1	Magnetic retriever
836	1	Pen light
APB.2X40	1	Short blade screwdriver Phillips® 2x40
ANP0X75	1	Screwdriver Phillips® n°0
ACL.1A	1	Ratchet bit-driver 1/4"

CM.AE22 115-piece maintenance mechanics set

• 115 tools.
Weight: 13.750 kg.



	Qtys	Set Description
440.JE14	14	Combination wrenches 7 to 24 mm
55A.JE8	8	Ring wrenches 8 to 26 mm
113A.10C	1	10" adjustable wrench
R.120A	1	Sliding tee
R.236A	1	Short-reach spinner handle 155 mm
R.210	1	1/4" extension 100 mm long
R.215	1	1/4" extension 150 mm long
R.240A	1	1/4" universal joint
R.232	1	Coupler 1/4" - 3/8"
R.155A	1	"Radio" metal-grip ratchet
R.140A	1	Drive-hinged handle 1/4"
RB.40AE	10	"Radio" sockets 5.5 to 14 mm
J.155A	1	"Junior" metal-grip ratchet
J.145	1	Metal-grip hinged handle
J.115	1	Metal-grip speed brace
J.120A	1	Sliding tee
J.210	1	3/8" extension 125 mm long
J.215	1	3/8" extension 250 mm long
J.240A	1	3/8" universal joint
J.230	1	Coupler 3/8" - 1/4"
JB.40AE	8	"Junior" sockets 7 to 14 mm
JB.41AE	6	"Junior" sockets 15 to 21 mm
AN3X75	1	Screwdriver for slotted head 3x75 mm
AWH	4	Screwdrivers for slotted heads 6,5x150 - 8x175 mm
AN	2	Screwdrivers for slotted heads 4x100 - 6,5x125 mm
ANP	1	Short blade screwdrivers Phillips® PH 1x100 - 2x125 - 3x150mm

	Qtys	Set Description
AFU.1	1	Screw starter for slotted heads
AFUX.1	1	Screw starter for cross-heads
AKZ.6	1	Offset screwdriver for slotted heads
APZ.B	1	Offset screwdriver for Phillips® heads
82.JL10	10	Hexagon keys
180.CPE	1	Multigrip pliers
188.16CPE	1	Sheathed flat-nose pliers
193.16CPE	1	Sheathed straight half-round nose "telephone" pliers
192.16CPE	1	"Piano wire" diagonal cutters
187.16CPE	1	Sheathed universal pliers
507A	1	Compact lock-grip pliers
985.ST	1	Shears
603F	1	Hacksaw frame
CLE.MDAM100A	6	Second cut locksmiths files
200H.28	1	Graphite handle riveting hammer
208A.32CBA	1	Plastic-tip mallets
256.2,5	1	Precision centre punch
262A	2	Forged chisels 15 and 18 mm
234	1	Scriber
893.316	1	Case tape measure 3m
803.300M	1	Stainless 2-sided rule
804	1	19 blade feeler gauge
836	1	Pen light
410.S	1	Connector pliers
445.10R	1	Locking-wire pliers

CM.AE21 97-piece instruments electrician set

• For servicing and interventions on electric controls, flight instruments, optical and firing equipment (fighters, bombers…).
• 97 tools.
Weight: 6.940 kg.



	Qtys	Set Description
39.JE16T	16	Roll set of combination wrenches 3.2 to 17 mm
34	6	Open-end wrenches 3.2 - 4 - 5 - 5.5 - 6 - 7 mm
R.120A	1	Sliding tee
R.236A	1	Short-reach spinner handle
R.210	1	100 mm extension
R.215	1	150 mm extension
R.240A	1	1/4" universal joint
R.140A	1	Drive-hinged handle 1/4"
AN	4	Screwdrivers for slotted heads 2,5x75 - 3x75 - 4x100 - 5,5x125 mm
AN4X35	1	Stubby screwdriver for slotted head 4x35 mm
ANP	2	Screwdriver for Phillips® head PH 0x75 - 1x25 - 1x100 - 2x125 mm
AWH6,5X150	1	Screwdrivers for slotted heads 6,5x150 mm
ARZ.4	1	Round blade offset screwdriver 4 mm
APZ.A	1	Dual-size offset screwdriver for Phillips® heads
82.JL10	10	Hexagon keys
193.16CPE	1	Sheathed straight half-round nose"telephone"pliers
181.18CPE	1	Locking twin slip-joint multigrip pliers
405.12	1	Precision diagonal cutters
431.MT	1	Short-nose pliers
401	1	Flat-nose pliers

	Qtys	Set Description
402	1	Sheathed half-round nose pliers
403	1	"Electronics" sheathed half-round nose pliers
1230.30	1	Soldering iron 30W
BV.21-10	1	Soldering iron stand
200H.26	1	Graphite handle riveting hammer
839A.0	1	Desoldering pump
841A.4	1	Bi-material electricians scissors
840.1	1	Electricians knife with wire stripper
AS.6L160T2A	6	Needle file wallet set
803.300M	1	Flexible stainless 2-sided rule
804	1	19 blade feeler gauge
AEF.J3	8	"Micro-Tech®" screwdrivers with case
149	1	Straight tweezers
R.155A	1	"Radio" metal-grip ratchet
RB.40AE	10	"Radio" sockets 5.5 to 14 mm
834.R1	1	Articulated mirror
826.0	1	Mechanical retriever
836	1	Pen light
1830.1	1	Extra-soft silk brush
445.8R	1	Locking-wire pliers

GLOVES p. 716
EYE PROTECTION p. 717
MASKS p. 717
MATS p. 717






Your health is important.
Protect yours by using the best quality tools designed for your specific application.
Using tools in the correct manner is your best guarantee.

General recommendations :

These safety recommendations for tool usage reflect good engineering practice and are not intended to be a comprehensive set of rules.
They complement, but do not replace, standard precautions to be taken by every user complying with professional guidelines, company procedures and national regulations.

Personal safety

- Wear eye protection for any job involving chips, splinters, sparks, dust, flashes or UV rays.
- Wear gloves to protect against cuts, knocks and burns.

1,000 V insulated tools for electrical safety

- Never work on or near live components without 1,000 V tools. Only these can provide the insulation required for adequate protection. Plastic handles of other tools are not designed to insulate.

Sensible precautions

- Secure balance especially when pushing and pulling, e.g. tight fasteners.
- Straight back and bent knees when lifting.

Correct tool selection

- Use the right tool. Each tool is designed for a specific application and should not be used for other jobs. Only the right tool will ensure safety, comfort and productivity.
- Never attempt DIY modifications to a tool, whether by grinding, welding or heating.
  Altered specifications could make it unsafe.
- Do not exceed tool capacities with inappropriate extensions or impact accessories.

Tool care

- Keep tools clean to prevent risk of slipping and give a more secure grip.
- Check tools before use for any defects such as excessive wear or breakage. Some mechanisms need regular cleaning and lubrication.
- Keep and follow manufacturers' operating instructions. Use the complete contents of any service kits.

WORKSHOP FURNITURE AND STORAGE

p. 52

Roller cabinets

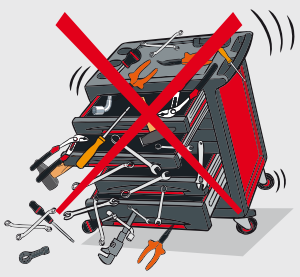
- Never open more than one loaded drawer at a time, otherwise the unit may tip.
- Do not exceed drawer load capacity.
- Apply the brake when stationary. Close and lock all drawers before moving.
- Do not pull the cabinet towards you, always push it and avoid balancing items on top.

Toolboxes and chests

- Watch your back when lifting heavy containers.
- Do not stand on toolboxes.
- Mind your hands and wear gloves. Sharp or rough objects should not be kept loose.



- Don't pull behind you.
- Nothing balanced on top.



- Only one drawer at a time

WRENCHES

p. 166

Sensible precautions

- Secure your balance and pull the wrench towards you rather than push it.
- Wear gloves and eye protection.
- Do not grind, weld or heat your tool. It could become unsafe.
- Check condition of both fastener and tool before use.

Correct tool selection, without overload

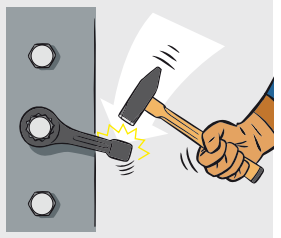
- Never exceed tool capacity. Do not use an extension or a hammer.
- Always use the right size for the fastener head.
- Select a ring wrench for high torques. When using an open-end wrench, engage fastener head fully to avoid distorting the nose of the wrench, and work in a straight line.



- Always pull the wrench towards you.



- No metric tools on inch sizes.



- Only fit slogging wrenches.

SOCKETS

p. 226

Personal safety with impact sockets

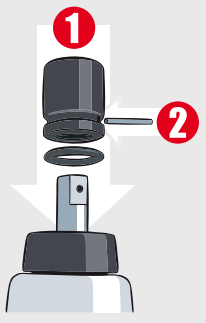
- Always secure sockets to the machine with locking ring and pin (references given for each socket).
- Never hold a socket or accessory while the machine is turning.
- Wear gloves and eye protection.
- Never use a manual or simple machine socket on a power impact tool.

Sensible precautions

- Secure your balance. Pull the tool towards you rather than push it.
- Use only recommended extensions and do not overload.
- Check that ratchet mechanisms engage fully.
- Select 6-point sockets if fasteners are worn or hardened.
- Do not use tools showing signs of breakage or excessive wear.



- Don't exceed tool capacity or use oversize extensions.



- Only use impact sockets when locked.

SCREWDRIVERS

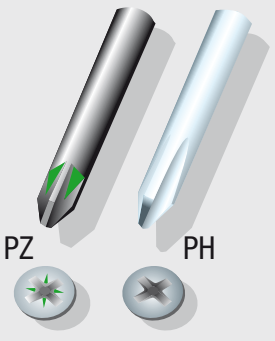
p. 382

Personal safety

- Plastic-handled screwdrivers are not insulated, with the exception of 1,000V tools.
- Keep your free hand clear when driving home a fastener in case the screwdriver slips.
- Wear gloves.

Correct tool selection

- Avoid using screwdrivers as chisels, levers or punches.
- Avoid damage to fastener heads or tool blades, always select the appropriate pattern.
- Do not modify or heat blades as this will impair performance.
- For extra torque select a screwdriver with a hexagonal bolster.
- Wood-handled through-blade screwdrivers withstand gentle tapping on the end to free seized fasteners.



- Select the correct pattern : Black blades PZ : Pozidriv®. Chrome blades PH : Phillips®.



- Never use a screwdriver as a chisel or lever.

PLIERS

p. 466

Personal safety

- Wear eye protection, especially when cutting wire and fitting circlips or rivets.
- Sheathed handles are not insulating. Only 1,000V tools are designed for working with live components.

Correct tool selection

- Keep within cutter capacity (wire diameter and hardness).
- Do not modify or heat tips as this will impair performance.
- Cut at right angles and avoid twisting the wire. Use the throat rather than the tip of cutting edges.
- When fitting circlips, use a tool within the correct range and only compress or expand the clip just enough.
- Lock-grip pliers should not be used as a permanent clamp. Components can move due to vibration or shock.



• Never modify the shape of a tool.



• Always use a 1,000V insulated tool when working with live components.

HAMMERS, IMPACT TOOLS

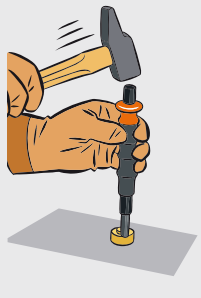
p. 560

Personal safety

- Wear gloves and eye protection.
- Avoid striking equally hard surfaces. Do not use a hammer on surfaces exceeding 46 HRc. Use a mallet instead.
- Do not use suspect tools such as hammers with chipped heads, insecure or cracked handles, excessively mushroomed chisels or punch ends. Check handle fit before use.
- Hammering may generate sparks. Do not use hammers in a fire-risk area.

Correct tool selection

- Rule of thumb: hammer head should have a diameter about 10 mm larger than the surface to be struck. Avoid hitting with the edge of the hammer.
- Select chisels and punches fitted with a guard for increased safety and comfort.
- Do not use punches for leverage.



• Select tools with a guard.



• Never use tools with ill-fitting or damaged handles.



• Never “hard on hard”.
• Check tool condition before use.

SAWING, CUTTING, DRILLING

p. 584

Watch out for chips

- Wear eye protection and gloves when sawing, cutting or drilling, and when handling sheet metal or metal objects while machining.
- Keep hands away from the cutting path.
- Metal shears are designed for cutting sheet metal, not for wire.
- Keep within capacities.



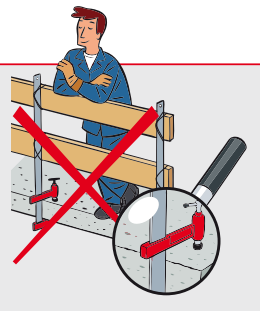
• Don’t cut wire with metal shears

PRESSES AND BAR CLAMPES

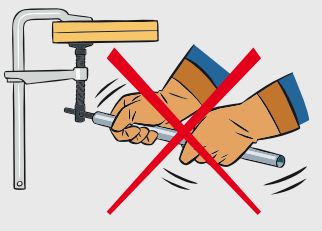
p. 734

Remain within capacity

- Presses and bar clamps are not designed for permanent clamping and should never be used to construct a guard rail or platform.
- Avoid using bar clamps to hold assemblies subject to vibration or shock, as the joint could work loose.
- Do not use these tools for lifting.
- Always check before use and keep within clamping capacity (do not use extensions or impact tools).



• Never erect guard rails or platforms using clamps.



• Don’t use an extension for tightening.

VICES

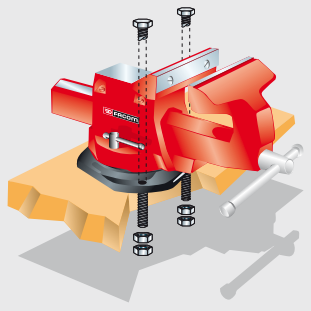
p. 732

Personal safety

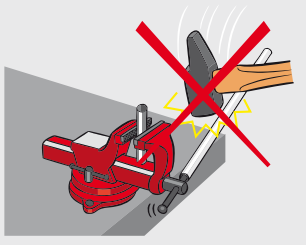
- Fit the vice securely to a suitably sized support.
- Never use an extension or a hammer to tighten a vice. Avoid clamping hard towards the end of the jaws.
- Do not use the jaws as an anvil.
- Never repair or modify a vice.
- Always wear eye protection and gloves when grinding, sawing, drilling and hammering.

Correct tool selection

- Select a swivel-base vice so that you approach the workpiece from the best angle.



• Fix vice securely to bench.



• Don’t use a hammer or extension to increase pressure.

TORQUE CONTROL

p. 340

Sensible precautions for precision tools

- Avoid overloading by applying torques beyond rated capacity.
- Never fit an extension as this would modify lever ratios and give incorrect readings.
- Always store torque wrenches carefully after use.
- Torque wrenches are precision tools. Have yours checked regularly by accredited Facom facilities.
- Read operating instructions before use.
- Do not use impact drivers on torque multipliers. Always use a torque wrench.



- Careful storage and regular inspection by accredited Facom facilities.



- Never fit an extension to a torque wrench.

PULLERS

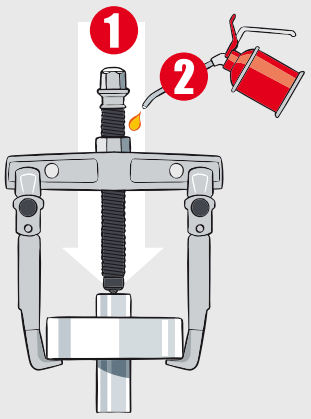
p. 626

Personal safety

- Wear gloves, eye protection and safety shoes.
- Pullers generate several tonnes of force during use.
- Ensure correct positioning – centred, in line with the pulling axis and with a good grip on each leg.
- Steady a puller where necessary to avoid rotation during tightening.
- Cover the assembly to contain components if the fitting splits suddenly or the puller slips.
- Do not stand in line with the puller and keep other people away.

Correct tool selection

- Never exceed puller capacity.
- Use a 3-leg puller rather than a 2-leg, and select short legs.
- Always check tool condition before use and lubricate the screw. If a leg needs changing, replace the complete set.
- Never modify or heat the legs as this will make them unsafe.
- Do not operate with an impact wrench.
- Use a mallet if the screw needs tapping to unstick a fitting.
- Do not use impact drivers on nut splitters.



- Always check that the pressure screw is properly centred and legs have secure purchase.
- Lubricate the screw regularly.



- Don't modify the legs of a puller as this will make it unsafe.

AIR TOOLS

p. 676

Personal safety

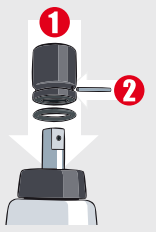
- Wear gloves and eye protection. Wear a dust mask when sanding.
- For intensive use, protect your hearing with ear muffs.
- Consider the safety of bystanders.

Sensible precautions

- Always disconnect tools before fitting drill bits, grinding wheels or impact sockets.
- Keep within accessory rated diameters and speeds.
- Retain original guards (e.g. on grinding tools).
- On impact power wrenches, use only impact sockets with appropriate locking pin and ring.
- Read operating instructions before use.



- Always wear appropriate protective gear.



- Always lock sockets to the machine.



- Always disconnect power tools before fitting accessories.
- Facom air tools conform to current standards.

WORKING ON OR NEAR LIVE COMPONENTS

p. 796

- Only 1,000V insulated tools protect from electrical hazards up to 1,000V AC.
- Facom 1,000V insulated tools conform to European standard EN 60900 and are individually tested and checked.
- Inspect your tool after each use. Discard if the insulation is damaged.
- Give yourself additional protection by using gloves, mats and anti-UV goggles.



- 1,000V insulated tools must be used when working near live components.



- Never use a tool with damaged insulation.

ELECTRICAL AND ELECTRONIC ASSEMBLIES

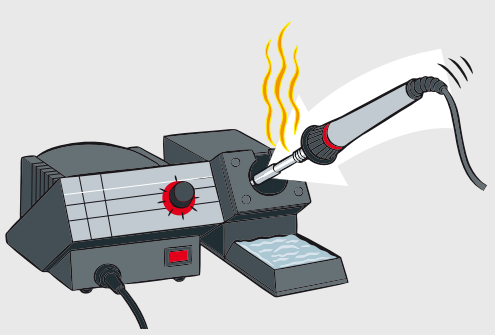
p. 758

Personal safety

- Wear eye protection when there is a risk of flying debris, e.g. for wire cutting, stripping, crimping or soldering. Choose wire strippers with off-cut retainers.
- Work with loaded capacitors or live components using antistatic tools (dissipating sheaths).

Correct tool selection

- Do not leave a hot soldering iron on fragile or flammable surfaces. Always use a stand. Do not store a soldering iron while hot. Disconnect after use.
- Use ESD antistatic tools to IEC 61340-5-1 and IEC 61340-5-2 to protect sensitive electronic components.



- Always rest a hot soldering iron on its stand.

The table below gives the SI unit conversion factors of a certain number of units that do not belong to the SI system. Some of these are still in use in France or abroad, in general or specialised applications, others belong to old systems of measurement that are now obsolete.
Units that are specific to the United States or the United Kingdom are indicated respectively by "US" or "UK" in brackets.

Symbols and abbreviations

UNITS	SYMBOL OR ABBREVIATION	SI UNIT CONVERSION FACTOR		PHYSICAL QUANTITY	COMMENT
Ampere-hour	Ah	3,6 x 10^3c	(exact)	Quantity of electricity	Used for storage batteries
Angström	A	10^{-10}m	(exact)	Length	Wavelength, atomic distance
Bar	bar	105Pa	(exact)	Pressure	Fluids
Barrel (US)	bbl	0,158 987 3 m^3		volume	1 barrel (US) = 42 gallons (US).
Calorie I.T	cal I.T	4,186 8 J	(exact)	Energy	Quantity of heat
Candela	cd	Basic SI unit		Luminous intensity	
Cheval vapeur (horsepower)	ch	735,498 75 W	(exact)	Power	1ch = 75 kgm/s (exact).
Degree	°	1.745 329 x 10^{-2} rad (2/360 rad)		Angle	
Degree Celsius	°C	Tk = 0°C+273,15	(exact)	Temperature	The origin of the Celsius scale is set by convention at 273.15 K.
Degree Fahrenheit	°F	Tk = 5/9 (0°F+459,67)	(exact)	Temperature	0°C = 5/9 (0°F-32) (exact)
Electronvolt	eV	1,602 177 33 x 10-19 J		Energy	Atomic and nuclear physics
Farad	F	Derived SI unit 1F = 1C/V		Electric capacitance	
Faraday		9,648 70 x 10-4 C		Quantity of electricity	Based on carbon 12.
Fluid ounce (UK)	fl oz (UK)	2,841 30 x 10-5 m^3		volume	
Fluid ounce (US)	fl oz (US)	2,957 35 x 10^{-5} m^3		volume	Liquids
Foot	ft	30,48 cm	(exact)	Length	The symbol ' is also used
Gallon (UK)	gal (UK)	4,546 09 x 10^{-3} m^3		volume	
Gallon (US)	gal (US)	3,785 41 x 10^{-3} m^3		volume	Liquids
Hertz	Hz	Derived SI unit 1Hz = $1s^{-1}$		Frequency	
Horsepower (UK)	hp	745,700 W		Power	The US value of horse power varies according to the field.
Inch	in	2,54 cm	(exact)	Length	The symbol " is also used.
Joule	J	Derived SI unit 1J = 1N.m		Energy	Work, quantity of heat
Kelvin	K	Basic SI unit		Temperature	Thermodynamics
Kilogram-meter	kgm	9,806 65 J	(exact)	Work	
Kilogram-force	kgf	9,806 65 N	(exact)	Force	
Kilowatt-hour	kWh	3,6 x 10-6 J	(exact)	Energy	Electrical energy consumption
Liquid pint (US)	liq pt (US)	4,731 76 x 10-4 m3		volume	Liquids
Liquid quart (US)	liq qt	9,463 529 x 10-4 m3		volume	Liquids
Litre	l, L	10-3 m3	(exact)	volume	C.G.P.M. 1964.
Lux	lx	Derived SI unit 1lx = 1lm/m^2		Illumination	
Micron	µ	10-6 m	(exact)	Length	Replaced by micrometer
Mile	mile	1,609 344 x 103 m	(exact)	Length	Also called "statute mile"
International nautical mile		1,852 x 103 m	(exact)	Length	Sea and air navigation
Millimetre of mercury (conventional)	mmHg	133,322 4 Pa		Pressure	Equal to 13..595 1 mmH2O. (exact).
Nautical mile (UK)		1,852 x 103 m	(exact)	Length	Since 1970, the UK nautical mile is equal to the international nautical mile.
Newton	N	Derived SI unit 1 N = 1 kg.m.s-2		Force	
Ohm	Ω	Derived SI unit 1 Ω = 1 V / A		Electrical resistance	
Ounce	oz	28,349 5 g		Mass	16 oz = 1 lb
Pascal	Pa	Derived SI unit 1 Pa = 1 N/m2		Pressure, stress	
Pound	lb	0,453 592 37 kg	(exact)	Mass	
Pound-force	lbf	4,448 22 N		Force	
Psi	psi	6,894 757 x 103 Pa		Pressure	Abbreviation of "poundforce per square inch".
Radian	rad	Derived SI unit 1 m/m		Angle (plane)	The symbol rd has also been used in France
Second	s	Basic SI unit		Time	
Torr	torr	133,322 4 Pa		Pressure	1/760 normal atmosphere (exact).
Volt	V	Derived SI unit 1 V = 1 W/A		Electric potential	
Voltampère	VA	1 W	(exact)	Apparent power	Electricity.
Watt	W	Derived SI unit 1 W = 1 J/s		Power	
Watthour	Wh	3600 J	(exact)	Energy	Electrical energy consumption
Weber	Wb	Derived SI unit 1 Wb = 1 V.s		Magnetic induction	
Yard	yd	0,914 4 m	(exact)	Length	

What is a standard?

- A standard is a reference document providing answers to product-related technical or commercial problems that present themselves repeatedly in relations between economic, scientific or technical partners, etc.
- It is drawn up by consensus within standardisation bureaux (or organisations) by all volunteering economic operators.
- Standardisation assists dialogue between manufacturers, users, public authorities and other partners.
- Standardisation is essentially a technical activity serving an economic purpose. It helps to clarify transactions, rationalise production, and assist commercial exchanges.



Extract from European standard NF EN 45020

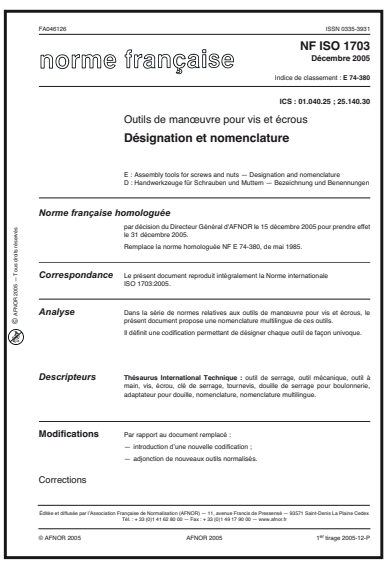
- Standard document established by consensus and approved by a recognised body, that provides, for common and repeated use, rules, guidelines for activities or their results, aimed at the achievement of the optimum degree of order in any given context.

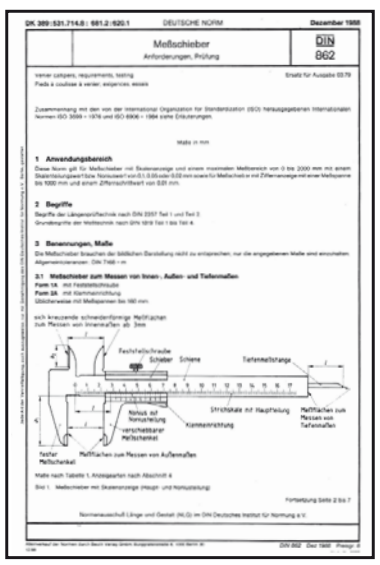
ISO/IEC guide 2

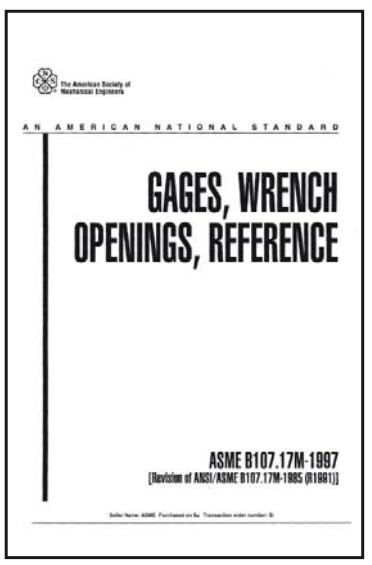
- A standard is a document established by consensus that provides, for common and repeated use, rules, guidelines for activities or their results, aimed at the achievement of the optimum degree of order in an given context

Facom, 30 years of involvement in International standardisation

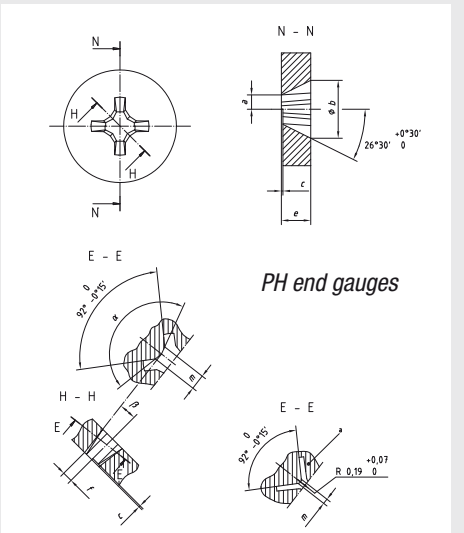
- Facom is actively involved in the various standardisation committees (French - NF, International - ISO or American ASME or SAE) for hand tools.
- Facom's involvement at an early stage in the elaboration process allows it to continuously adapt its products to the requirements of future standards and provide tools of the required quality, ensuring greater ease and safety of use.
- Facom informs its users by indicating the main standards applying to its tools :
  - European and International standards (EN / ISO)
  - French standards (NF)
  - German standards (DIN)
  - American standards (ASME / SAE)







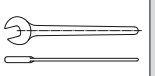
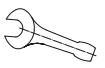
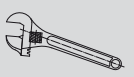
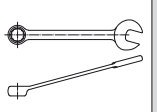
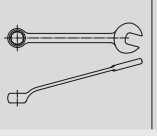
Extracts from the AFNOR standard. Only the full version of the standard has authority. It can be obtained from the Afnor Web site www.boutique-normes.afnor.org (DIN Standard) Reproduced by permission of DIN Deutsches Institut für Normung e.V. The definitive version for the implementation of this standard is the edition bearing the most recent date of issue, obtainable from Beuth Verlag GmbH, 10772 Berlin, Germany.



Dimensions of the PH end penetration gauge

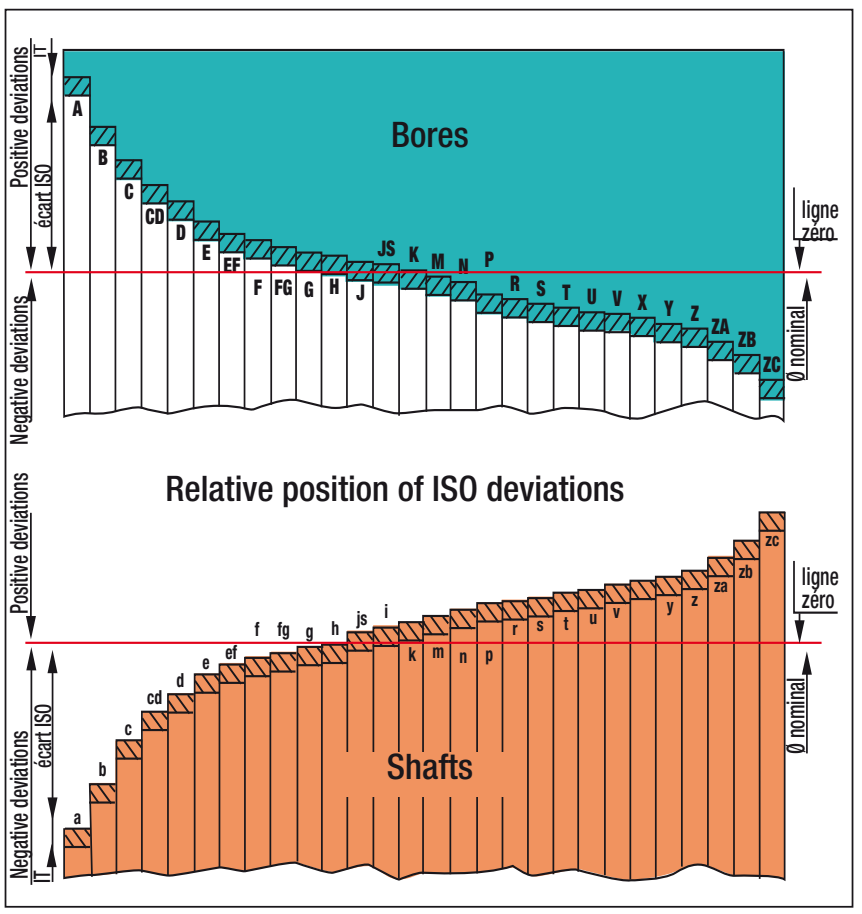
End no.	a ± 0,005	b min.	c ± 0,025	e max.	f ± 0,005	m 0	a 0	ß +0°15'
						-0,02	-0°15'	0
	mm	mm	mm	mm	mm	mm		
0	0,419	3		2,38	0,284	0,29	-	7°
1	0,648	4,5		2,38	0,493	0,49	138°	
2	1,156	6	0,254	3,97	0,769	1,08	140°	5°45'
3	1,918	8		6,34	1,257	2,07	146°	
4	2,553	10		7,94	1,804	2,71	153°	7°

Wrenches

Designation New	Designation Old	Term	ISO standards	Tool	Use
1 1 01 01 0 1 1 01 01 1	1	Single open-end	**4229** (691, 1711-1)		
1 1 01 02 0	4	Double open-end	**10102** (691, 1085, 1711-1, 3318)		
1 1 01 03 0	3	Open-end slogging wrench	(691)		
1 1 01 04 0	2	Adjustable wrench	**6787**		
1 1 01 05 0	13	Angled combination wrench	**7738** (691, 1711-1, 3318)		
1 1 01 06 0	14	Offset combination wrench	**7738** (691, 1711-1, 3318)		

Fits are categories of standard toleranced dimensions that are used for assembling two cylindrical or prismatic parts.

Standard designation and markings

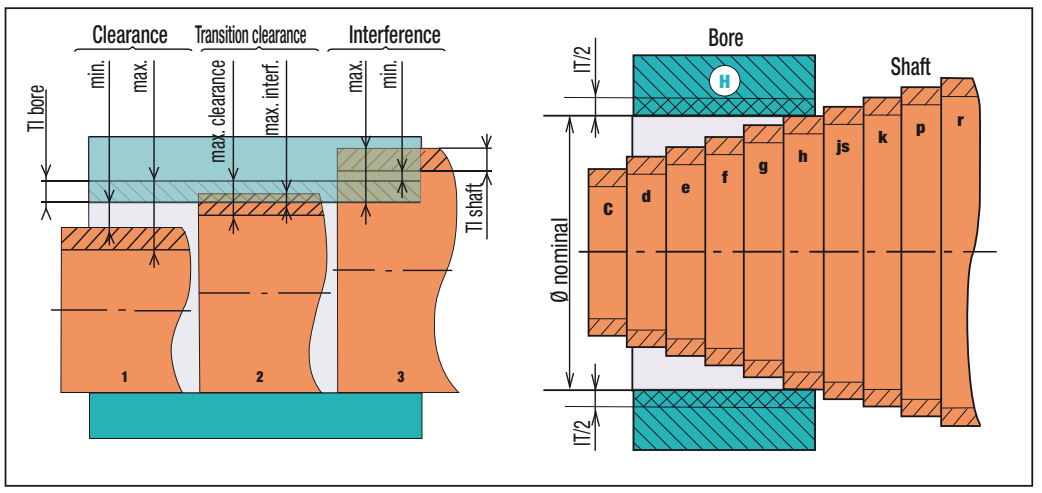


Standard fits

Standard fits (H bore system)											
Type			shaft	Bores H6	H7	H8	H9	H10	H11	Comments		
Moving parts	Clearance fits	high clearance	c11						■	Standard fits for long spans, poor alignment, expansion, etc.		
			c10									
			c9					■				
			d10						■			
		medium clearance	d9				■	■		Standard fits for rotating or sliding guides (good lubrication ensured)		
			d8				■					
			e9				■	■				
			e8			■	■					
			e7			■						
			f8				■					
			f7			■						
			f6		■							
		low clearance	g6		■					For high-precision guides		
			g5	■								
Non-moving parts	Clearance fits	adjusted	h9			■		■		Can be assembled by hand	For centring and locating, cannot transfer forces	Parts disassembled without damage
			h7			■						
			h6		■							
			h5	■								
	Transition fits	highly adjusted	js7			■						
			js6		■							
			js5	■								
		not very tight	k6		■					Can be assembled with a mallet (Press recommended)		
			k5	■								
			m7			■						
			m6		■							
			n6		■							
	Interference fits	tight	p6		■					Assembled with a press	For transmission of forces	Parts damaged when disassembled
			r6									
		very tight	s7			■				Assembled with a heavy-duty press or by dilation (shrink-fitting)		
			s6		■							
			t5		■							
			u6		■							
			x7			■						

■ most commonly used ■ most commonly used (to be known)

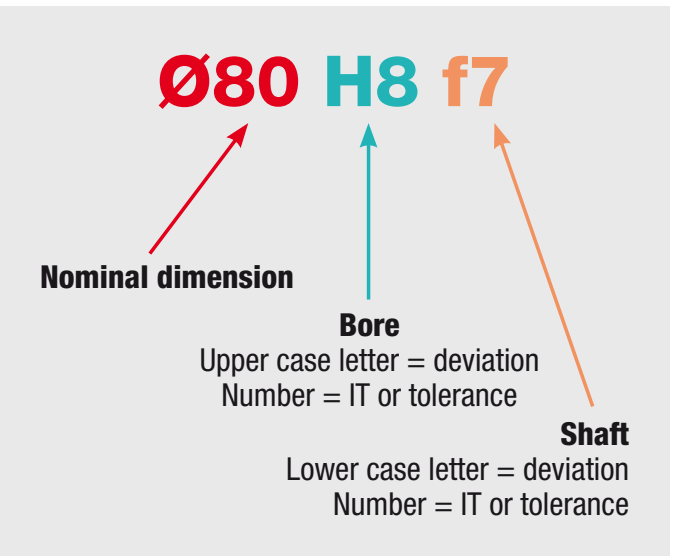
Standard tolerance intervals (or qualities)



- **Clearance fits :**
  Ø 80 H8f7
  Min clearance = 0.030 mm
  Max. clearance = 0.106 mm
- **Transition fits (clearance or interference) :**
  Ø 80 H7k6
  Max. clearance = 0.009 mm
  Max interference = 0.002 mm
- **Interference fits :**
  Ø 80 H7p6
  Min. interference = 0.002 mm
  Max interference = 0.051 mm

Main ISO qualities or tolerances (TI)
(IT in micrometres : 1µm = 0.001 mm)
Nominal dimensions (mm):

above →	1	3	6	10	18	30	50	80	120	180	250	315	400
to (inclusive) →	3	6	10	18	30	50	80	120	180	250	315	400	500
IT5	4	5	6	8	9	11	13	15	18	20	23	25	27
IT6	6	8	9	11	13	16	19	22	25	29	32	36	40
IT7	10	12	15	18	21	25	30	35	40	46	52	57	63
IT8	14	18	22	27	33	39	46	54	63	72	81	89	97
IT9	25	30	36	43	52	62	74	87	100	115	130	140	155
IT10	40	48	58	70	84	100	120	140	160	185	210	230	250
IT11	60	75	90	110	130	160	190	220	250	290	320	360	400
IT12	100	120	150	180	210	250	300	350	400	460	520	570	630
IT13	140	180	220	270	330	390	460	540	630	720	810	890	970



This data is published with the permission of AFNOR.

Lighting safety

- It is essential to use the correct light for the situation to avoid tired eyes and accidents at work.
- Engineering or maintenance tasks require an illumination of 300 to 500 lux.
- Inspection, finishing and painting tasks require an illumination of 750 to 1000 lux.
- The light source must be designed and arranged to avoid uncomfortable glare.

IP ingress protection rating

- The IP code indicates the degree of protection against access to hazardous parts, as well as the penetration of solid foreign bodies and of water.
- The code consists of two figures (e.g. IP 64), defined right according to NF EN 60529

IP rating: What does it mean?

1st FIGURE Protection of live components against ingress of solid objects		2nd FIGURE Protection of live components against ingress of liquids	
0	No protection	0	No protection
1	Solid objects greater than 50mm diameter cannot penetrate	1	Vertically falling drops of water
2	Solid objects greater than 12.5 mm diameter cannot penetrate	2	Water dripping on the enclosure tilted at 15° from its normal position
3	A steel wire of 2.5 mm diameter cannot penetrate	3	Spraying water at an angle of up to 60° from the vertical
4	A steel wire of 1 mm diameter cannot penetrate	4	Splashing water against the enclosure from any direction
5	Invisible amount of talcum powder deposited when tested in a dust chamber	5	Water projected in jets (6.3 mm) against the enclosure from any direction
6	No talcum powder deposited when tested in a dust chamber	6	Water projected in jets (12.5 mm) against the enclosure from any direction
		7	Immersion to 1 mm
		8	Submersible equipment according to manufacturer's specifications

There are a number of lighting technologies to choose from:

Technology	Advantages	Disadvantages	Lighting power	FACOM product
Incandescent lamps	Low cost	Poor impact resistance. High temperature = risk of burns, fire and explosion	200 to 1000 lux	No
Fluorescent and compact fluorescent lamps  IP 55	Diffuse lighting, low temperature, low consumption	Average impact resistance	300 to 400 lux	777 range p. 674
Leds IP 64 	Very good impact resistance, low temperature, very low consumption, long operating life	Cost, concentrated light beam	500 to 1000 lux	779 range p. 671

SAFETY RECOMMENDATIONS

- **Use fluorescent inspection lamps complying with the requirements of EN 60 598-2-8.**
- **For mains powered lights, preferably choose inspections lamps powered at a voltage of less than 50V.**





SOCKETS p. 226 PLIERS p. 466 WRENCHES p. 166 TIPS p. 383 SCREWDRIVERS p. 382

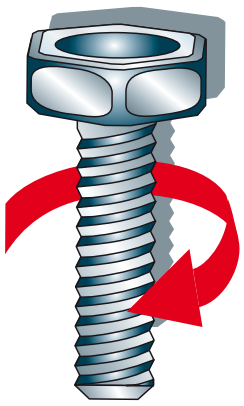




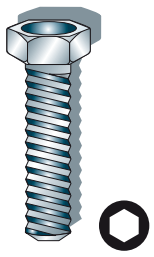


Tightening torques p. 496

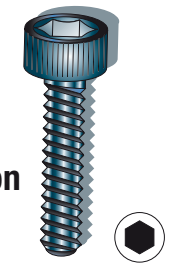
Nm



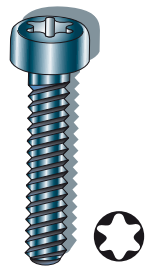

Circlips®



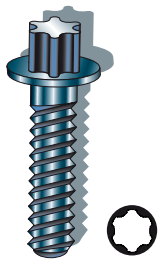
Hexagon heads



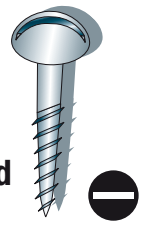
Hexagon socket heads



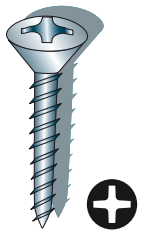
Torx® heads



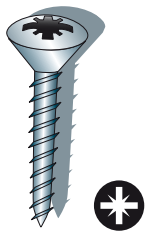
Male Torx® heads



Slotted heads



Phillips® heads



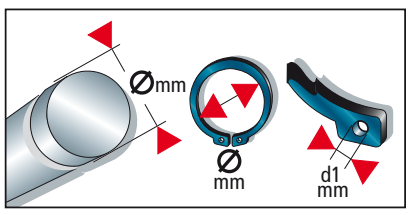
Pozidriv® heads

CIRCLIPS®



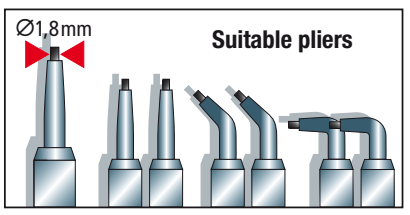
External Circlips®

• Solit spring rings for shafts to NF E 22-163



Standard range		
3 ➤ 5	2,7 ➤ 4,7	1
6 ➤ 9	5,6 ➤ 8,4	1,2
10 ➤ 13	9,3 ➤ 11,9	1,5
14 ➤ 17	12,9 ➤ 15,7	1,7
18 ➤ 30	16,5 ➤ 27,9	2
32 ➤ 63	31,5 ➤ 58,8	2,5
65 ➤ 82	60,8 ➤ 76,5	3
85 ➤120	82,5 ➤ 113	3,5
125 ➤200	118 ➤190,5	4

Heavy-duty range		
15 ➤ 30	13,8 ➤ 27,9	2
32 ➤ 60	29,6 ➤ 55,8	2,5
65 ➤ 80	60,8 ➤ 74,5	3
85 ➤100	79,5 ➤ 94,5	3,5



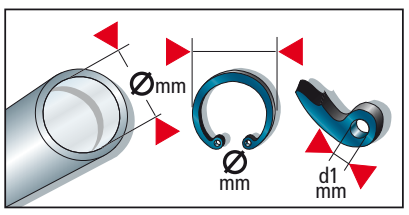
Ø			
0,9	**177A.9**	**167A.9**	**197A.9**
1,3	**177A.13**	**167A.13**	**197A.13**
1,8	**177A.18**	**167A.18**	**197A.18**
2,3	**177A.23**	**167A.23**	**197A.23**
3,2	**177A.32**		**197A.32**

Ø			
1,8	**177A.18**	**167A.18**	**197A.18**
2,3	**177A.23**	**167A.23**	**197A.23**
3,2	**177A.32**		**197A.32**

Internal Circlips®

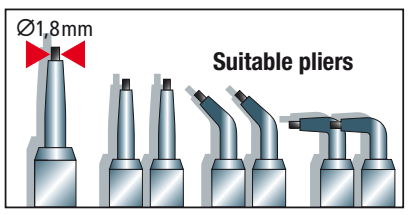
• Solit spring rings for shafts to NF E 22-165





Standard range		
8 ➤ 3	8,7 ➤ 9,8	1
10 ➤ 11	10,8 ➤ 11,8	1,2
12 ➤ 13	13 ➤ 14,1	1,5
14 ➤ 17	15,1 ➤ 18,3	1,7
18 ➤ 30	19,5 ➤ 32,1	2
31 ➤ 63	33,4 ➤ 67,2	2,5
65 ➤ 82	69,2 ➤ 87,5	3
85 ➤120	90,5 ➤ 127	3,5
125 ➤200	135 ➤209,5	4

Heavy-duty range		
20 ➤ 30	21,5 ➤ 32,1	2
32 ➤ 62	34,4 ➤ 66,2	2,5
65 ➤ 80	69,2 ➤ 85,5	3
85 ➤100	90,5 ➤105,5	3,5



Ø			
0,9	**179A.9**	**169A.9**	**199A.9**
1,3	**179A.13**	**169A.13**	**199A.13**
1,8	**179A.18**	**169A.18**	**199A.18**
2,3	**179A.23**	**169A.23**	**199A.23**
3,2	**179A.32**		**199A.32**

Ø			
1,8	**179A.18**	**169A.18**	**199A.18**
2,3	**179A.23**	**169A.23**	**199A.23**
3,2	**179A.32**		**199A.32**

Hexagon heads

Relationship screw diameter/size across flats

• For inch to mm conversions, see “Inch dimensions”.

Metric sizes (*recommended sizes)

	Screw diameter ISO 272 Ø				Wrench size ISO 691	
	standardhead Ø mm	wide head Ø mm	collar screw Ø mm	collar nut	Min.	Max.
3,2*	1,6				3,22	3,28
3,5					3,52	3,58
4*	2				4,02	4,12
4,5					4,52	4,62
5*	2,5				5,02	5,12
5,5*	3				5,52	5,62
6					6,03	6,15
7*	4		5		7,03	7,15
8*	5		6	5	8,03	8,15
9					9,03	9,15
10*	6		8	6	10,04	10,19
11*	7				11,04	11,19
12					12,04	12,24
13*	8		10	8	13,04	13,24
14					14,05	14,27
15*			12	10	15,05	15,27
16*	10				16,05	16,27
17					17,05	17,30
18*	12		14	12	18,05	18,30
19					19,06	19,36
21*	14	12	16	14	21,06	21,36
22					22,06	22,36
23					23,06	23,36
24*	16	14		16	24,06	24,36
26					26,08	26,48
27*	18	16	20		27,08	27,48
29					29,08	29,48
30*	20	18		20	30,08	30,48
32					32,08	32,48
34*	22	20			34,10	34,60
35					35,10	35,60
36*	24	22			36,10	36,60
38					38,10	38,60
41*	27	24			41,10	41,60
42					42,10	42,60
46*	30	27			46,10	46,60
50*	33	30			50,10	50,60
54					54,12	54,72
55*	36	33			55,12	55,72
58					58,12	58,72
60*	39	36			60,12	60,72
63					63,12	63,72
65*	42	39			65,12	65,72
67					67,12	67,72
70*	45				70,12	70,72
71					71,15	71,85
75*	48				75,15	75,85
77					77,15	77,85
80*	52				80,15	80,85
82					82,15	82,85
85*	56				85,15	85,85
88					88,15	88,85
90*	60				90,15	90,85
94					94,15	94,85
95*	64				95,15	95,85
100*	68				100,15	100,85
105*	72				105,20	106,00
110*	76				110,20	111,00
115*	80				115,20	116,00
116					116,20	117,00
120*	85				120,20	121,00

Inch sizes

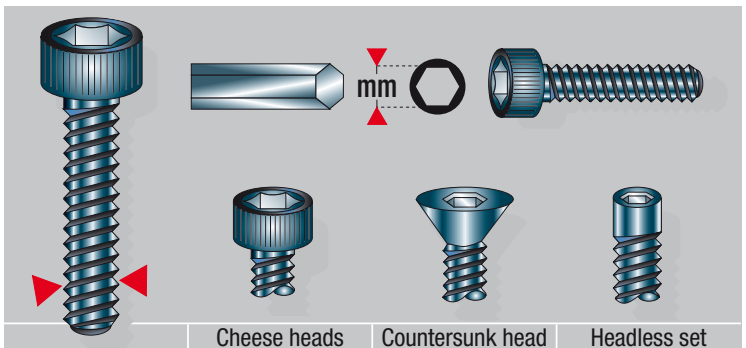
Screw diameter Ø Unified thread GB - USA - CANADA						Screw Ø UK		
Inch	mm	Heavy series BS.1769 ASME B 18-2-1 18-2-2	Standard series BS.1768 ASME B 18-2-1 18-2-2	BS. 1981	Machined or cast nuts	Thou. inch	mm	BSW BS. 916BSF 1083BSF
						.117	2,97	
						.131	3,32	
1/8	3,17			2		.152	3,86	
						.172	4,37	
3/16	4,76			3-4-5	2-3	.193	4,90	
7/32	5,56					.220	5,59	
1/4	6,35			6-8	4	.248	6,30	
9/32	7,14					.282	7,16	
5/16	7,94			10-12	5-6	.324	8,23	
11/32	8,73				8			
3/8	9,52				10	.365	9,27	
7/16	11,11		1/4		1/4 - 12	.413	10,49	
1/2	12,70	1/4 (1)	5/16			.445	11,30	1/4
9/16	14,29	5/16 (1)	3/8		5/16	.525	13,33	5/16
5/8	15,87		7/16		3/8	.600	15,24	3/8
11/16	17,46	3/8 (1)				.710	18,03	7/16
3/4	19,05	7/16 (1)	1/2					
13/16	20,64		9/16			.820	20,83	1/2
7/8	22,22	1/2						
15/16	23,81		5/8			.920	23,37	9/16
1”	25,40							
1’1/16	26,99	5/8				1.010	25,65	5/8
1’1/8	28,57		3/4					
1’1/4	31,75	3/4				1.200	30,48	3/4
1’5/16	33,34		7/8			1.300	33,02	7/8
1’3/8	34,92							
1’7/16	36,51	7/8						
1’1/2	38,10		1”			1.480	37,59	1”
1’5/8	41,27	1”						
1’11/16	42,86		1’1/8			1.670	42,42	1’1/8
1’13/16	46,04	1’1/8						
1’7/8	47,62		1’1/4			1.860	47,24	1’1/4
2”	50,80	1’1/4						
2’1/16	52,39		1’3/8			2.050	52,07	1’3/8
2’3/16	55,56	1’3/8						
2’1/4	57,15					2.200	56,39	1’1/2
2’3/8	60,32	1’1/2	1’ 1/2			2.410	61,22	1’5/8 (4)
2’7/16	61,91							
2’9/16	65,09					2.580	65,53	1’3/4
2’5/8	66,67		1’3/4 (2)					
2’3/4	69,85	1’3/4				2.760	70,10	2”
2’13/16	71,44							
2’15/16	74,61							
3”	76,20		2” (2)					
3’1/8	79,37	2”				3.150	80,01	2’1/4 (4)
3’3/8	85,72		2’1/4 (3)					
3’1/2	88,90	2’1/4				3.550	90,17	2’1/2 (4)
3’3/4	95,25		2’1/2 (3)					
3’7/8	98,42	2’1/2				3.890	98,81	2’3/4 (4)
4’1/8	104,80		2’3/4 (3)					
4’1/4	107,95	2’3/4				4.180	106,20	3” (4)
4’1/2	114,30		3” (3)			4.530	115,06	3’1/4 (4)
4’5/8	117,50	3”						
						4.850	123,20	3’1/2 (4)
						5.180	131,60	3’3/4 (4)
						5.550	141	4” (4)
						6.380	162	4’1/2 (4)

For inch sizes
(1) **USA ASME B.18-2-2** only.
(2) Except Norway.
(3) Except Norway.
(4) **BSW BS 916 BSF** only.

Hexagon socket heads

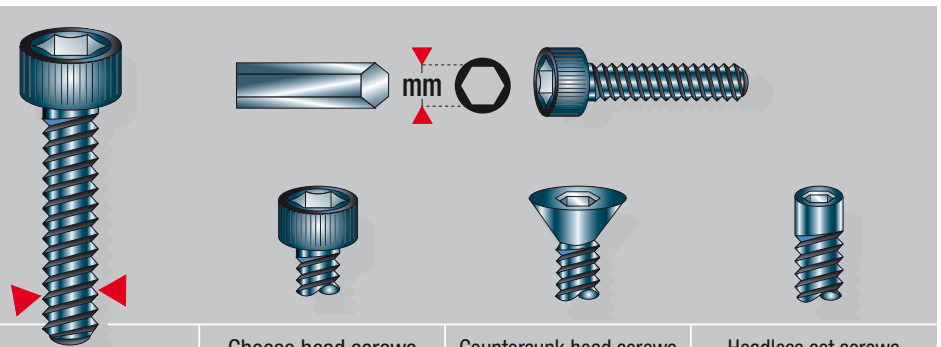
Relationship screw diameter/hexagon socket size

Metric sizes



Ø Screw mm	Cheese heads screws ISO 4762	Countersunk head screws ISO 10642	Headless set screws ISO 4026
M1,6	1,5		0,7
M2	1,5		0,9
M2,5	2		1,3
M3	2,5	2	1,5
M4	3	2,5	2
M5	4	3	2,5
M6	5	4	3
M8	6	5	4
M10	8	6	5
M12	10	8	6
M14	12	10	
M16	14	10	8
M18	14		
M20	17	12	10
M22	17		
M24	19		12
M27	19		
M30	22		
M33	24		
M36	27		
M42	32		

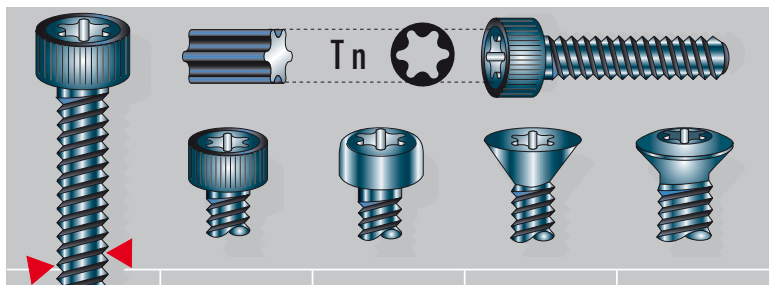
Inch sizes



Ø Screw mm		Cheese head screws		Countersunk head screws		Headless set screws	
		"	mm	"	mm	"	mm
n° 0	1,52	0,50	1,27	.035	0,89	.028	0,711
n° 1	1,85	1/16	1,59	.050	1,27	.035	0,89
n° 2	2,18	5/64	1,98	.050	1,27	.035	0,89
n° 3	2,51	5/64	1,98	1/16	1,59	.050	1,27
n° 4	2,84	3/32	2,38	1/16	1,59	.050	1,27
n° 5	3,17	3/32	2,5	5/64	1,98	1/16	1,59
n° 6	3,5	7/64	3	5/64	1,98	1/16	1,59
n° 7	3,5	1/8	4				
n° 8	4,16	9/64	5	3/32	2,38	5/64	1,98
n° 10	4,82	5/32	6	7/64	2,78	3/32	2,38
n° 10	4,82			1/8	3,17		
1/4	6,35	3/16	4,75	9/64	3,57	7/64	2,78
1/4	6,35	7/32	5,55	5/32	3,97	1/8	3,17
5/16	7,94	1/4	6,35	3/16	4,75	9/64	3,57
5/16	7,94					5/32	3,97
3/8	9,52	5/16	7,94	7/32	5,55	3/16	4,75
7/16	11,11	3/8	9,52	1/4	6,35	7/32	5,55
1/2	12,7	3/8	9,52	5/16	7,94	1/4	6,35
5/8	15,87	1/2	12,7	3/8	9,52	5/16	7,94
3/4	19,05	5/8	15,88	1/2	12,7	3/8	9,52
7/8	22,2	3/4	19,05	9/16	14,29	1/2	12,7
1	25,4	3/4	19,05	5/8	15,88	9/16	14,29
1"1/8	28,57	7/8	22,2	3/4	19,05	9/16	14,29
1"1/4	31,75	7/8	22,2	7/8	22,2	5/8	15,88
1"3/8	34,92	1"	25,4	7/8	22,2	5/8	15,88
1"1/2	38,10	1"	25,4	1"	25,4	3/4	19,05

Torx® heads

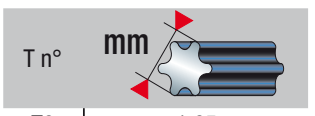
Relationship NF EN ISO 10664 screw diameter / TORX® key



Ø Screw mm	Cheese head ISO 14579/14580	Oval cheese head ISO 14584	Countersunk head NF E 25-107	Oval countersunk head ISO 14583
M2,0	T6	T6	T6	T6
M2,5	T8	T8	T8	T8
M3,0	T10	T10	T10	T10
M3,5	T15 (1)	T15	T10	T15
M4,0	T20	T20	T20	T20
M5,0	T25	T25	T20	T25
M6,0	T30	T30	T30	T30
M8,0	T45	T45	T40	T45
M10,0	T50 (1)	T50	T50	T50
M12,0			T55	

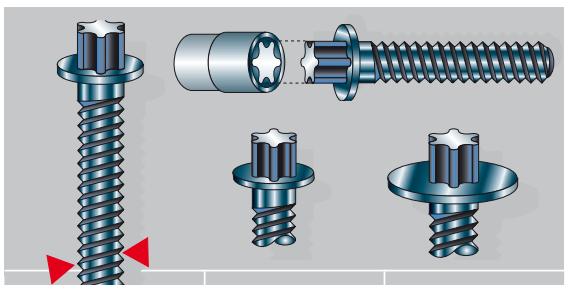
(1) ISO 14580

Key pattern identification



T n°	
T6	1,65
T8	2,30
T10	2,72
T15	3,26
T20	3,84
T25	4,40
T27	4,96
T30	5,49
T40	6,60
T45	7,77
T50	8,79
T55	11,22

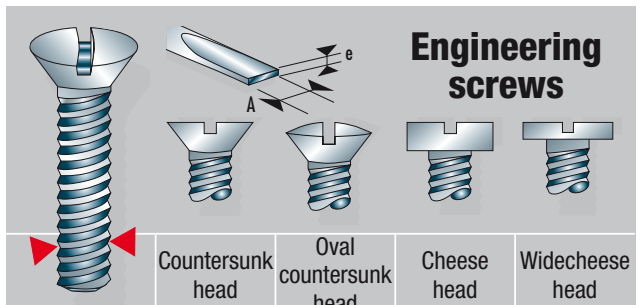
Relationship screw diameter / TORX® socket



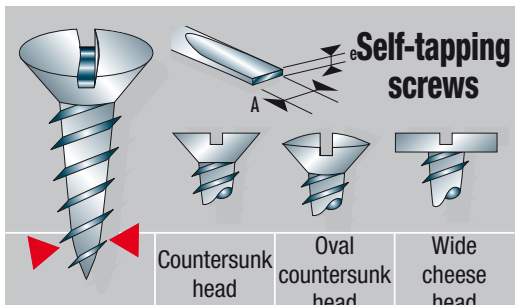
Ø Screw mm		Wide collar
M3	E4	
M4	E5	E6
M5	E6	E8
M6	E8	E10
M8	E10	E12
M10	E12	E14
M12	E14	E18
M14	E18	E20
M16	E20	

Slotted heads

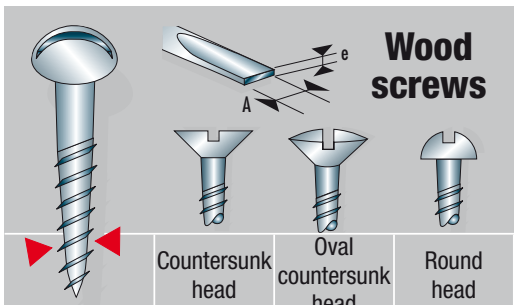
Relationship screw diameter/slot size



Ø Screw mm	Countersunk head NF EN ISO 2009	Oval countersunk head NF EN ISO 2010	Cheese head NF EN ISO 1207	Widecheese head NF EN ISO 1580
	e x A	e x A	e x A	e x A
M1,6	0,4 x 2,5	0,4 x 2,5	0,4 x 2,5	0,4 x 2,5
M2	0,5 x 3	0,5 x 3	0,5 x 3	0,5 x 3
M2,5	0,6 x 3,5	0,6 x 3,5	0,6 x 3,5	0,6 x 3,5
M3	0,8 x 4	0,8 x 4	0,8 x 4	0,8 x 4
M3,5	1,0 x 5,5	1,0 x 5,5	1,0 x 5,5	1,0 x 5,5
M4	1,2 x 6,5	1,2 x 6,5	1,2 x 6,5	1,2 x 6,5
M5	1,2 x 8	1,2 x 8	1,2 x 8	1,2 x 8
M6	1,6 x 10	1,6 x 10	1,6 x 8	1,6 x 10
M8	2,0 x 12	2,0 x 12	2,0 x 12	2,0 x 12
M10	2,5 x 14	2,5 x 14	2,5 x 14	2,5 x 14



Ø Screw mm	Countersunk head NF EN ISO 1482	Oval countersunk head NF EN ISO 1483	Wide cheese head NF EN ISO 1481
	e x A	e x A	e x A
ST.2,2	0,5 x 3	0,5 x 3	0,5 x 3
ST.2,9	0,8 x 4	0,8 x 4	0,8 x 4
ST.3,5	1 x 5,5	1 x 5,5	1 x 5,5
ST.4,2	1,2 x 6,5	1,2 x 6,5	1,2 x 6,5
ST.4,8	1,2 x 8	1,2 x 8	1,2 x 8
ST.5,5	1,6 x 8	1,6 x 8	1,6 x 10
ST.6,3	1,6 x 10	1,6 x 10	1,6 x 10
ST.8	2 x 12	2 x 12	2 x 1,2
ST.9,5	2,5 x 14	2,5 x 14	2,5 x 14



Ø Screw mm	Countersunk head NF E 25-604	Oval countersunk head NF E 25-605	Round head NF E 25-606
	e x A	e x A	e x A
1,6	0,4 x 2,5		0,4 x 2
2	0,5 x 3	0,5 x 3	0,5 x 3
2,5	0,6 x 3,5	0,6 x 3,5	0,6 x 3,5
3	0,8 x 4	0,8 x 4	0,8 x 4
3,5	1,0 x 5,5	1,0 x 5,5	1,0 x 5,5
4	1,2 x 6,5	1,2 x 6,5	1,2 x 6,5
4,5	1,2 x 8	1,2 x 8	1,2 x 6,5
5	1,2 x 8	1,2 x 8	1,2 x 8
6	1,6 x 10	1,6 x 10	1,6 x 10
7	2,0 x 12		2,0 x 10
8	2,0 x 12		2,0 x 12

PROTWIST p. 382



HEXAGON KEYS p. 420

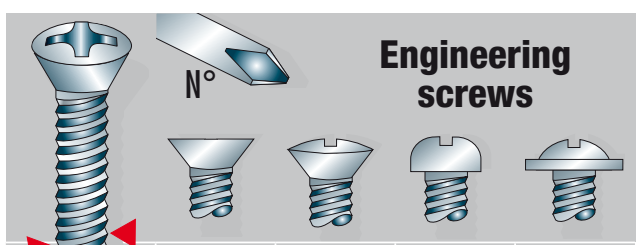


BITS p. 435

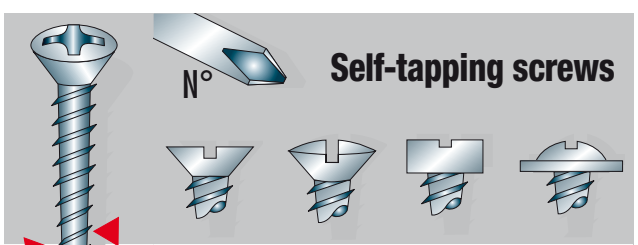


Phillips® and Pozidriv® heads

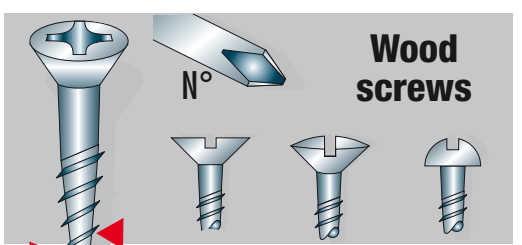
Relationship screw diameter/pattern size



Ø Screw mm	Countersunk head ISO 7046	Oval countersunk head ISO 7047	Oval cheese head ISO 7045	Wide oval cheese head NFE 25-122
	Nbr.	Nbr.	Nbr.	Nbr.
M 1,6	0	0	0	-
M 2,0	0	0	0	-
M 2,5	1	1	1	-
M 3,0	1	1	1	1
M 3,5	2	2	2	2
M 4,0	2	2	2	2
M 5,0	2	2	2	2
M 6,0	3	3	3	3
M 8,0	4	4	4	4
M 10,0	4	4	4	-



Ø Screw mm	Countersunk head ISO 7050	Oval countersunk head ISO 7051	Cheese head ISO 7049	Wide oval cheese head NF E 25-659
	Nbr.	Nbr.	Nbr.	Nbr.
ST2,2	0	0	0	
ST2,9	1	1	1	1
ST3,5	2	2	2	2
ST4,2	2	2	2	2
ST4,8	2	2	2	2
ST5,5	3	3	3	3
ST6,3	3	3	3	3
ST8	4	4	4	
ST9,5	4	4	4	



Ø Screw mm	Countersunk head NF E 25-601	Oval countersunk head NF E -25-602	Round head NF E 25-603
	Nbr.	Nbr.	Nbr.
2,5	1	1	1
3	1	1	1
3,5	2	2	2
4	2	2	2
4,5	2	2	2
5	2	2	2
6	3	3	3

GARANTIE FACOM GUARANTEE

FACOM guarantees its products against faulty materials or workmanship under the conditions defined below.



Implementation of the guarantee

- The FACOM guarantee takes the form of an exchange or repair limited to replacement of the faulty parts in accordance with the terms and conditions specified below.
- The faulty product must be returned to the Facom distributor, failing which repair under guarantee may be refused.
- This guarantee includes the parts and the labour provided by the Facom after sales service or the approved distributor.
- All repairs are guaranteed six months parts and labour.
  This guarantee only applies to the components changed during the previous repair, with the exception of consumables.
- In line with its policy of continual product improvements to meet user needs and technological developments, Facom may upgrade or discontinue the models shown in its catalogue without notice and without entailing any obligation on its part to repair tools or equipment sold previously. Those items no longer included in the range will then be replaced by a technically equivalent product or a credit note will be issued.

Conditions of application of the Facom guarantee

- Unless otherwise specified, the Facom guarantee applies to all tools under normal conditions of use.

The guarantee excludes the following :

Consumables (i.e. products that become deteriorated or damaged during use). These include, but are not limited to, drill bits, saw blades, abrasive discs, knife blades, files, batteries, driving bits, etc.

Normal wear and tear (in particular of wearing parts), failure to use the product for its intended purpose or in accordance with our instructions, neglect or inadequate maintenance on the part of the user.

Defective operation due to modifications or repairs not carried out by Facom's after sales service or that of its approved distributors. Defective operation due to causes external to the product (theft, dropping, lightening, flooding, fire, damage during transport, product not returned in its original packaging, etc.).

- The guarantee period takes effect from the date of purchase by the customer from the Facom customer-distributor. A copy of the invoice proving the date of purchase from the distributor may be requested in the event of a claim under the guarantee. In the case of technical products covered by a limited guarantee type D, it shall systematically be supplied by the user customer together with the serial number where one is indicated on the tool.
- The guarantee will apply for the period indicated in the price list applying on the date of purchase.
- Where the product is no longer covered by the guarantee (expiry of the guarantee period, guarantee inapplicable for the reasons given in paragraph 2) yet is repairable, this repair will be carried out only after acceptance by the user of the repair estimate.
- The application of the guarantee will not give risk to any kind of indemnity or damages for any reason whatsoever.

Types of guarantee (price list column G)

GUARANTEE TYPE E : the tool will be exchanged free of charge, in accordance with the conditions of implementation and application of the guarantee (cf. paragraphs 1 and 2 above) and without limit of time.

GUARANTEE TYPE R : the tool will be repaired or replaced with a repaired tool in a similar condition in accordance with the conditions of implementation and application of the guarantee (cf. paragraphs 1 and 2 above) and without limit of time.

GUARANTEE TYPE D : this guarantee is subject to a time limit. The guarantee period is specified by a figure after the D. It applies mainly to technical products or machines. In accordance with the conditions of implementation and application of the guarantee (in particular the exclusion of wearing parts - cf. paragraphs 1 and 2 above), this guarantee covers the repair and replacement of defective parts, free of charge, during the period of validity.

- In the event that Facom is no longer able to exchange a product under guarantee with another having the same reference, it undertakes to provide a technically equivalent product or to issue a credit note if no corresponding product is available.
- The type of guarantee applying to a product can be determined simply by referring to the current price list (column G) available at any Facom distributor. For certain product references, the type of guarantee is indicated on the packaging or in the accompanying documentation.
- Those items for which no guarantee type is specified (column G empty), are covered only by the statutory guarantee.
- Each item of a set continues to be covered by its own guarantee jurisdiction. Applicable legislation.

Jurisdiction. Applicable legislation

- In the event of problems concerning the application hereof, the user can contact :

In France :
– Facom Customer Services, 6 and 8 rue Gustave Eiffel, 91420 Morangis.

Outside France:
– The Facom subsidiaries listed on page 868 of the Catalogue and on the Facom Web site www.facom.fr
– Facom distributors

- Any dispute in relation to the interpretation or execution hereof that cannot be amicably resolved between the parties will be subject to French law and the sole jurisdiction of the Paris Courts.

Territorial extent

- The Facom contractual guarantee applies in all countries in which the product is officially sold and distributed.

Statutory guarantee

- Irrespective of the Facom contractual guarantee, the user is also covered by the provisions of articles 1641 to 1649 of the French Civil Code relating to hidden defects.

A

Acid hydrometer 898
Adapter bit for clamp pullers U.49P....653
Adaptor, 1/2" drive hinged 293
Adaptor, 1/2" drive hinged 292
Adaptor, 1/2" drive offset 296
Adaptor, 1/4" drive hinged 248
Adaptor, drive hinged, 3/8" 266
Adaptor, fixed, 3/4" drive 312
ADF non-sparking 1" sockets 747
ADF non-sparking 1/2" sockets 745
ADF non-sparking 1/2" - 3/4" - 1" extensions 748
ADF non-sparking 1/2" - 3/4" - 1" ratchets 745
ADF non-sparking 1/2" - 3/4" - 1" universal joints 748
ADF non-sparking 3/4" sockets 746
ADF non-sparking adjustable wrenches 740
ADF non-sparking angled socket wrenches 742
ADF non-sparking chain pipe wrenches 756
ADF non-sparking chisels 753
ADF non-sparking combination wrenches 739
ADF non-sparking cutters 743
ADF non-sparking drift punches 753
ADF non-sparking files 754
ADF non-sparking gas pliers 744
ADF non-sparking hexagon keys 750
ADF non-sparking Lineman's pliers 744
ADF non-sparking monkey wrenches 756
ADF non-sparking motorists pliers 743
ADF non-sparking multigrip pliers 743
ADF non-sparking open end impact wrenches 742
ADF non-sparking ring wrenches 741
ADF non-sparking round head hammers 752
ADF non-sparking saw blades 755
ADF non-sparking saw frame 755
ADF non-sparking screwdrivers 749
ADF non-sparking sledgehammers 751
ADF non-sparking sliding handle 748
ADF non-sparking valve wrenches 757
ADF non-sparking wedges 752
Adjustable oil-filter wrenches 884
Adjustable tap wrench 603
Adjustable wrenches 220
Adjustable-pressure electronic brake bleeder940, 1012
Aeronautics set 1038
Air disc grinders 697
Air impact wrenches 682
Air needle rust remover 706
Air power chisel set 702
Air ratchets 1/2" 690
Air scriber pen 706
Air windshield cutter 704
Air-hose reel 707
Air-line connector and gauge 954
All cutting scissors 621
Aluminium rivet maintenance riveting set 729
Aluminium worktop for roller cabinet 75
Angled box wrenches 209
Angled open-socket wrenches 206
Angled screwdrivers 419
Angular tightening wrenches 380
Anti-freeze hydrometer 915
Antimagnetic or antireflection tweezers 841
Antistatic tweezers 844
Arc-welding press 734
Assembly presses 734
Automatic centre punch 581
Automatic clamps for fuel circuit clamps 912
Automatic lateral wire strippers 764
Automatic screwdriver with hex 1/4" bit holder 417
Automatic wire strippers 763
Automotive engineering set 40
Automotive voltage tester 894
Axial ball-joint unlocking tool 956

B

Ball joint pullers 1014
Ball joint pullers 955
Bar clamp lock-grip pliers 510
Bar for 3/4" ratchet 311
Bar, angle 3/4" drive 312
Bars for 1" ratchet M.151 317
Bars for wrenches 91A - 92A - 97 210
Battery charger for impact wrench 713
Battery charger for vehicles 896
Battery filler 898
Battery impact wrenches 713
Battery terminals puller 897
Beams 657
Beams for jacks 658
Beams for pullers 651
Bearing pullers 649
Bearing pulling pliers 652
Belt sander 696
Belt tension-meter 932
Bench press, hydraulic, 15T 867
Bender 722
Bevel protractors 539
Bimetal hacksaw blades 589
Bit holder 459
Bit-holding handle 443
Bit-holding screwdrivers 417
Bits for circlip pliers 499
Bits set, impact, 1/2" drive 325
Bits set, impact, 3/8" drive 323
Bits, crowfoot box end 3/8" 1031
Blind nut pliers 728
Blind nut riveting set 729
Blocking gutters for roller cabinet drawer 79
Blue talcum powder 558
Bodywork component horizontal stand 982
Bodywork component storage stand 959
Bodywork dollies 973
Bodywork dolly 974
Bodywork repair workstation 971
Bodywork set 43, 978
Bodywork spoons 976
Bodywork tools 958
Bolt croppers 612
Borehole drill bits 605
BORNEO® screwdriver for electric terminal screws 409
Bottle holders for roller cabinet 76
Box wrenches for 16 and 21 mm spark plugs 888
Box wrenches with screwdriver handle 212
Brace, 1/4" drive speed 249
Brake and clutch system bleeder 939
Brake caliper steel brush 942
Brake disc and drum vernier calipers 937
Brake fluid tester 938
Brake tools 937
Brake-spring pliers 943, 1011
Break-in protection bar for roller cabinet 75
BRISTOL head keys 434
Brushes 848
Brushes 848

C

Cabinet with folding doors 106
Cable sheath strippers 760
Cape chisels 582
Car radio removal tools 900
Carpenters hammer 569
Cast iron surface plates 531
Caterpillar equipment set 48
Chain wrenches 721
Chains for electric vehicles maintenance marking out 874
Chalk line reels 557
Checking sheets - diesel for compression meter 903
Checking sheets - petrol for compression meter 902
Chest trolley 152
Chisels 582
CHRONO+ Roller cabinets 70
Circlip® pliers 496
Circlip® pliers with fluorescent grips 1028
Clamp tool-holder 846
Clamp tools 725
Clamps 735
Cleanliness set for roller cabinet 76
Click torque wrenches 350
Clip-on ammeter 788
Clockwork screwdrivers 840
Coax cable sheath-stripper and stripper tools 762
Collar device 726
Combination pliers with fluorescent grips 1026
Combination wrenches 171
Common Rail diesel injector return flow tester 907
Compact diagonal cutters 473
Compact lock-grip pliers 508
Composite cap wrench sockets 885
Compressor holder 951
Computer - RS232 connection cable for digital metrology 525
Comté type end nippers 512
Connector pliers 515
Consigning posts for electric vehicle maintenance 874
Consigning sets for electric vehicle maintenance 872
Construction finish work set 35
Contact file 890
Contact tips 851
Container foam divider 158
Continuity tester 894
Copper and aluminium cable cutters 614
Countersunk mill 90° 608
Coupler 1 1/2" to 1", impact 338
Coupler 1 1/2" to 2 1/2", impact 338
Coupler 1" to 3/4" 317
Coupler, 1" to 1/2", impact 337
Coupler, 1" to 1/2", impact 337
Coupler, 1" to 3/4", impact 337
Coupler, 1/2" to 3/4" 296
Coupler, 1/2" to 3/8" 295
Coupler, 1/2" to CDX® 295
Coupler, 1/4" to 3/8" 251
Coupler, 3/4" to 1" 313
Coupler, 3/4" to 1/2" 313
Coupler, 3/8" to 1/2" 270
Coupler, 3/8" to 1/4" 270
Coupler, impact, 1/2" to 3/4" 329
Coupler, impact, 1/2" to 3/8" 329
Coupler, impact, 3/4" to 1" 334
Coupler, impact, 3/4" to 1/2" 334
Coupler, impact, 3/8" to 1/2" 322
Coupler, impact, 3/8" to 1/4" 322
CPE series combination pliers 479
CPE series diagonal cutters 476
CPE series end nippers 476
CPE series flat nose pliers 479
CPE series half-round nose pliers 477
CPE series round nose pliers 479
Crane, workshop, 2t 996
Crimpers 766
Crimping and punch pliers 980
Crimping dies 766
Crimping pliers 766
Crowfoot open end bits, 1/2" 1031
Cup press for 16-valve engines 917
Cups for spring compressor 947
Curved head dolly 975
Cut bits 604
Cut out foam worktops 141
Cylinder head angular tightening wrenches 922
Cylinder-head rest 917

D

Dead-blow hammers 571
Deburrer 725
Deburring-chamfer case set 725
Deburring-chamfering sets 725
Deburring-chamfering tools 725
Desoldering harness 855
Desoldering pump 855
Detachable compartmented magnetic shelf + paper roll holder for roller cabinet 77
Diagonal cutters with fluorescent grips 1025
Dial gauge-hinged magnetic base set 530
Die holder 603
Diesel compression tester 902
Diesel dummy glow plug 905
Diesel injection hose wrenches 910
Digital display calipers 523
Digital display depth gages 524
Digital display dial gauge 524
Digital display micrometer 524
Dinging hammer 568
Disengaging torque wrenches 362
Document holder for roller cabinet 76
Double scale torque wrenches Lbf.In or Lbf.Ft and N.m. 352
Drain kit 877
Drain plug bits 878
Drain plug wrenches 876
Drawer block for workbench 98
Drawer for cabinet 2940B 106
Drawer rubber mat 78
Drift punches 576
Drill bit gauges 541
Drill bit sets 604
Drive squares for torque wrenches - 14 x 18 mm coupler 377
Drive squares for torque wrenches - 20 x 7 mm coupler 378
Drive squares for torque wrenches - 9 x 12 mm coupler 375
Drum lifter 865
Drum lifter 300 kg 996
Dummy injectors 905
Dummy squares and dummy sliding squares 556
Dynapact manual impact wrenches 339

E

Electric door removal and installation stand 960
Electric wire clamps 851
Electricians hammers 569
Electricians knife 623
Electricians scissors 621
Electricity set 30, 810
Electromechanical - aftersales set 18
Electronic angular torque coupler 369
Electronic infrared thermometer 789
Electronic torque and angle torque couplers 369
Electronics set 23
End mills 966
End nippers 512
Engine tools 901
Engineers surface gauges 531
Exhaust tools 924
Expandable threads 601
Express roller cabinet 859
Extensions 1/2" 294
Extensions 1/4" 249
Extensions 3/4" 312
Extensions 3/8" 268
Extensions for torque wrench series 203 358
Extensions, 1" 317
Extensions, 1" drive impact 336
Extensions, 1/4" knurled 1034
Extensions, impact 3/4" drive 333
Extensions, impact, 1 1/2'' 338
Extensions, impact, 1/2" drive 329
Extensions, impact, 3/8" drive 321
Extensions, wobble, 3/8" 269
Extra-fine wire strippers 765
Extra-long reach half-round nose pliers 514

F

Fabric tool boxes 144
False squares 538
Farming machinery set 50
Fast fuel fitting pliers 912
Fastener removal tool 962
Fastener support board for roller cabinets 74
Feeler gauges 540
Feet for Jetline workbench 92
File mill 965
File mills 608
File sets 592
Files 593
First equipment set 42
Fitting bits for pneumatic machines 708
Flange press 944
Flange press set for S.A.E - DIN - S.A.E./DIN fittings 725
Flare-nut wrenches 217
Flat nose pliers with fluorescent grips 1027
Flat shrinking blade 977
Flexible back-pack 164
Flexible coupling for compression meter 903
Flexible dummy glow plugs 902
Flexible magnetic fingers 849
Flexible mechanical fingers 849
Flexible needle guide head 778
Flexible nose for grease pump 378A 730
Flexible screwdrivers 914
Flexible spark-plug fitter 890
Flexible spatulas 967
Fluorescent bit holder screwdriver 1023
Fluorescent hexagon spinner keys 1023
Fluorescent sheath multigrip pliers 1025
Fluorescent sheath pliers 1025
Fluorescent sheathed angled half-round nose pliers 1026
Flywheel stay 932
Folding rules 555
Foot for Jetline workbench 91
Forged socket wrenches with "T" handle 212
Forged socket wrenches with screwdriver handle ..211
Frame for milled files 977
Fuel fitting clamps 913
FVS POCKET LED inspection lamp 672

G

G series combination pliers 486
G series diagonal cutters 484
G series end nippers 485
G series flat nose pliers 486
G series half-round nose pliers 485
Gage sticks 527
Galvanized top for MBAPP Jetline angle unit 93
Gasket punch sets 624
Gauge well remover 911
Gearbox and axle drain plug wrenches 880
Glass fibre rod repair kit 777
Glow plug hinged wrenches 892
Glue gun 711, 775
Grease pump 730
Greasing end bits 731
Green park spaces equipment set 38
Grinding wheels on rod 699
Groove socket for lower ball joint 956

H

Hacksaw frame 586
Half-moon ring wrenches 201
Half-round nose pliers 474
Hand pump, hydraulic, 2-speed 641
Hand-brake pliers 943
Hand-brake pliers 942
Handle for torque wrench M.200DB 359
Handle, engaged, 1/4" 248
Handle, fluorescent, 1/4" 1023
Handle, metal-grip hinged, 3/8" drive 266
Handling machinery set 39
Heat gun 711
Heavy goods vehicle bottle jacks 994
Heavy goods vehicle hydropneumatic trolley jacks ..992
Heavy goods vehicle set 44, 1003
Heavy goods vehicle stands 995
Heavy goods vehicle wheel lift 997
Heavy load industrial units with drawers 102
Heavy-duty scissors 622
Heavy-duty support stand for engines, gearboxes, etc... 961
Heavy-duty trolley jacks 861
Heavy-duty trolleys 101
Hexagon fast T-handle spinner keys 433
Hexagon keys on sleeve 422
Hexagon safety keys 421
Hexagon spinner keys 434
Hexagon T-handle spinner keys 432
HGV oil-filter wrenches 1010
High Perf' series 1 bits 446
High Perf' Titanium series 1 bits 449
High Perf' titanium series 6 bits 456
High precision center punches 581
High precision scissors 845
High-torque wrenches 359
Hinged ratchet combination wrenches 186
Hinged socket wrenches 215
Holding suction cups 986
Holesaw sets 607
Hollow jacks for pullers U.320H and U.330H 641
Hollow punch for gasket cutter 625
Hook and pin wrenches 223
Hook and pin wrenches for VAG damper 952
Hook blades for utility knives 620
Hooks for CKS fastening system 109
Hose clamps 916
Hydraulic bodywork straightening sets 987
Hydraulic devices for hollow punches 784
Hydraulic jack for puller U.312H 641
Hydraulic jack oil 987
hydraulic oil drain 1013
Hydraulic pullers 639
Hydraulic screw 10 t 641

I

Impact ring wrenches 203
Impact screwdriver sets 464
Impact screwdrivers 464
Impact sockets 1/2" 326
Impact sockets 3/4" 331
Impact sockets 3/8" 321
Individual hook kit for CKS storage system 111
Injector gaskets slide hammer 908
Injector test pump 911
Inspection creepers 870
Inspection lamp 24 and 230 Volt 674
Inspection lamp and its roller cabinet holder 75
Insulating mats 717
Interchangeable 1/2" male drive 313
Interchangeable 3/4" male drive 318
Interchangeable blade high precision utility knife 846
ISO - PG staged drill bit 785
ISO-PG hollow punch set 787
ISORYL screwdrivers 410

J

Jacks, trolley, 6 t - 10 t 991
JET+ chests 65
JET+ Mobile workbench 63
JET+ roller cabinets 56
JET+ rolling chests 66
Jetline assembly kit 92
Jetline high unit 85
Jetline low angle unit 83
Jetline low unit 82
Jetline technical gutter kit....93
Jetline top cabinets....87
Jetline upper chests 86
Jetline wall fastening boards 89
Jetline wall-mounted cabinets 86
Jets 574

L

Lambda probe sockets....924
Lambda probe wrenches 924
Large-capacity lock-grip pliers 505
Latex insulating gloves 716
Leather bags 162
Leather tool bag 162
LED head lamp 673
LED inspection lamp 671
LED pen light....673
Legs for pullers....666
Letter and digit punches 544
Levels....552
Lever grease pump....730
Lifting plate 866
Limiter, surge 12V 897
Liquid capacity gauge....558
Liquid gaging probes 558
Lithium-Ion battery for impact wrench 713
Load balancer....865
Lock back blade 623
Lock-grip pliers 503
Locking clips for CKS fastening system....109
Locking-wire pliers....502
Long standard bits series 2....451
Long tape measures 549
Long tie-rod for U.27AS3 puller....637
Long-reach combination wrenches 177
Long-reach hexagon key ring sets 423
Long-reach hexagon keys 426
Long-reach impact sockets for alloy rims....954
Long-reach impact sockets for wheel nuts....324
Long-reach offset combination wrenches 178
Long-reach ring wrenches....1029
Long-reach Torx® keys - spherical heads....429
Low voltage-tester screwdrivers....417
Low-effort diagonal cutters....515
Low-effort nippers....515
Lubricating paste for hole punch....786
LV oil-filter wrenches 884

M

MAC PHERSON clamp separator sets....951
Magnetic drain plug sockets 878
Magnetic sockets for hexagon screws - 1/4" groove drive....455
Magnetizer - Demagnetizer....418
Maintenance case fastening base plate 160
Maintenance range trolley jacks....863
Mallet body....573
Man connection kit 1013
Manual oil syringe 730
Manual pressure/vacuum pump....906
Manual reset torque wrenches....357
Mechanical calipers....525
Mechanical claw finger 848
Mechanical component storage stand....959
Mechanical depth gauges 527
Mechanical dial gauges 530
Mechanical micrometers....527
Mechanical screw jack for pulling assistance 642
Mechanics hammers 563
Memory protector 897
Mercedes connection kit....1013
Metal chests....151
Metal shears....610
Metal tool boxes 148
Metalworking lock-grip pliers 510
Metrology-control sets 529
Micro-Tech saw blades....846
Micro-Tech® "low torque" screwdrivers 371
Micro-Tech® bit holder screwdrivers 834
Micro-Tech® combination pliers 823
Micro-Tech® cutters 819
Micro-Tech® ESD antistatic cutters 827
Micro-Tech® ESD antistatic grippers....832
Micro-Tech® grippers 822
Micro-Tech® grippers with fluorescent grips....1027
Micro-Tech® joint vice 847
Micro-Tech® precision screwdrivers 833
Micro-Tech® saw frame....846
Micro-Tech® screwdrivers 833
Micro-Tech® tool set....839
Micromechanic screwdrivers 833
Mid-height work seat....870
Mill for battery terminals 897
Milled files....977
Mini mechanical set....948
Mirrors 850
Mobile support....961
Mobile tables 100
Monkey wrenches 222
Motorists pliers....514
Multi-diameter damper pulley pulley....933
Multi-diameter timing and injection pump pulley puller 933
Multi-functional bodywork support cradle 982
Multi-purpose scissors....622
Multiblade screwdrivers 415
Multifunction air brush....695
Multigrip pliers 468
Multimeters 788
Multiple blade screwdrivers sets....414
Multiple diameter cups for spring compressor 950
Multiple use plastic scrapers 963

N

Nail-sets 576
Natural Briançon chalk sticks....558
Needle holder casing 777
Needle pulling eyelet 778
Nibblers....612
No vernier adjustable angle torque wrenches 364
No vernier adjustable click torque wrenches....364
Non-magnetic wing cover with suction fasteners....871
Non-return valves for compression meter 903
Nozzle sets 575
Numbering stamps 545
Nut splitters 664
Nut starter 847
Nylon strap wrenches 722
Nylon tool roll bags 164

O

Offset ring wrenches 198
Offset wrenches 176
Offset-ring wrenches....198
Oil can 731
Oil change tools....876
Oil filter chain wrenches 884
Oil filter tools 881
Oil pressure tester 906
Oil-filter wrenches....881
Oil-filter wrenches for heavy goods vehicles 1010
Oil-filter wrenches for light vehicles....882
Open end bits for torque wrenches - 14 x 18 mm coupler....377
Open end bits for torque wrenches - 20 x 7 mm coupler....379
Open end bits for torque wrenches - 9 x 12 mm coupler....376
Open-end wrenches 193
Organizers....145
Outside snap-ring pliers....501

P

Painters support 982
Palmer....527
Panel beating hammers....972
Paper roll holder for roller cabinet....77
Partitions for roller cabinet drawers 78
Partitions for unit drawer 105
Pen light....673
Pen oil can....847
Petrol engine compression tester....901
PG - ISO - ISO Plus punches - dies....781
PG - ISO hollow punch....781
Pipe bending clamps 722
Pipe clamp....720
Pipe cutter 723
Pipe wrenches....720
Piston ring compressors 923
Piston ring pliers....924
Pit jacks....866
Pivot grip for torque wrenches....378
Pivoting shelf....74
Plastic cable-tie pliers....774
Plastic cases....148
Plastic handles for files and rasps....591
Plastic parts removal tools....962
Plastic tool boxes....146
Plastic trays for CKS storage system....113
Plastic trays for drawers....104
Plastics cutters....513
Plastics diagonal cutters....513
Pliers for removing and fitting self-tightening spring clips....913
Plug for brake or clutch bleeding 940
Plumb-bob....557
Plumbing set 36
Pneumatic angle buffer....701
Pneumatic angle grinders - cutters....700
Pneumatic blow gun....706
Pneumatic cartridge gun....705, 987
Pneumatic clamp grinders....698
Pneumatic disc brake piston pushing/turning tool ...941
Pneumatic drills 692
Pneumatic grease gun....731
Pneumatic network coupling....709
Pneumatic nibbler....703
Pneumatic nut runners 691
Pneumatic orbital sander 693
Pneumatic power chisel....702
Pneumatic riveter 705
Pneumatic sabre saw 702
Pneumatic sanders....697
Pneumatic welding spot mill....705
Polyurethane spiral extensions for pneumatic machines 708
Port kit for Jetline furniture 93
Power cables 851
Power levers....718
Power levers....718
Production torque screwdrivers....373
Production wire end crimping pliers....772
Protection glasses 717
PROTWIST® 1,000 Volt insulated screwdrivers 405
PROTWIST® fluorescent screwdrivers 1022
PROTWIST® impact screwdrivers 401

PROTWIST® power screwdrivers....391
PROTWIST® screwdrivers 387
PROTWIST® STAINLESS STEEL screwdrivers 398
PSA exhaust collar pliers....924
Puller, 2-leg 643
Puller, 3-leg 631
Pulley stay....934
Punch kits....624
Punch pliers....980
Pushers for presses....869
PVC hose for pneumatic machines....710
PW - Farming maintenance set 47

R

Radius gauges....541
Rasps 598
Ratchet bit holder screwdrivers 416
Ratchet blade holder handle 415
Ratchet combination wrenches 183
Ratchet effect open end combination wrenches 174
Ratchet handle for torque screwdrivers....372
Ratchet ring wrenches....192
Ratchet ring wrenches 187
Ratchet spare parts, 1/4" 247
Ratchet spare parts, 3/4" 311
Ratchet spare parts, 3/8" 266
Ratchet tool-holder 603
Ratchet wrenches....179
Ratchets 1/2" 289
Ratchets 1/4" 245
Ratchets 3/4" 309
Ratchets 3/8" 264
Ratchets for aerospace fasteners, 1/4" 1032
Ratchets for aerospace fasteners, 3/8" 1032
Ratchets for torque wrenches....374
Ratchets without handle, 1" drive 317
Ratchets without handle, 1/4" 1033
Ratchets, 1/4" air 688
Ratchets, 1/4" metal handle 1033
Ratchets, air, 3/8" 689
Ratchets, metal handle, 1/2" 1033
Ratchets, metal handle, 3/8" 1033
Reamer....897
Refractometer....898
Refrigeration - A/C set 37
Regulator - lubricator filters for pneumatic machines 707
Repair kits for tool holder....603
Repair order holder for roller cabinet....76
Respiratory protection mask....717
Retractable utility knife with interchangeable blades....618
Reversible blade holder handle 415
Reversible screwdriver blades 415
Ring bits for torque wrenches - 14 x 18 mm coupler....378
Ring bits for torque wrenches - 9 x 12 mm coupler 376
Riser for bodywork support CR.S6 961
Riveting pliers....727
Rod puller pliers....777
Roller cabinet waste bin....77
Roller chest 66, 153, 1001
Round crowbars with crook beak....719
Rules....533
Rules 534

S

Safety boards for electric vehicle maintenance 875
Safety grip for impact wrench....205
Safety knife with retractable blade....617
Safety overgloves 716
Scraper for stuck motor gaskets....919
Scrapers 608
Screw bits sets....443
Screw for hydraulic puller jack....641
Screw pitch gauges....541
Screw starter....418
Screw starter for cross-heads....419
Screw starter for slotted heads....419
Screw-type hose clamps....916
Screwdriver rack 386
Screwdriver sockets 1/2" 300
Screwdriver sockets 1/4" 255
Screwdriver sockets 3/4" 315
Screwdriver sockets 3/8" 274
Screwdriver sockets with 6 grooves 302
Screwdriver sockets with multiple XZN teeth 302
Screwdriver, handle, 1/4" 248
Scriber 542
SE series 1000 Volt insulated hacksaw frame 800
Seized common rail injector screw puller....908
Seized Common Rail injector slide hammer 907
Self-tightening clamp pliers....914
Separator....847
Separator and beam sets....655
Separator and beam sets 651
Separators for extraction....656
Series 1 - 1/4" bits - grooved length 50 mm....445
Series 2 impact bits 460
Series 3 impact bits 462
Service cases 157
Service station cabinet....41
Service station set 41
Set for electric vehicle maintenance 875
Set of 3 plastic boxes....158
Set of Circlip® pliers 498
Sets of clamps 517
Sets of jaws....733
Sheath strippers 760
Sheathed automatic centre punch 578
Sheathed center punches 577
Sheet of tags 77
Shelves fir Jetline MBS units....93
Short combination wrenches 175
Short hexagon key ring sets....423
Short hexagon spinner keys 427
Short length tape measures....546
Short ratchet combination wrenches 184
Short Resistorx® keys 430
Short Torx® keys 429
Shutter cabinets 107
Side cabinet for roller cabinet 75
Silicon leather gloves....716
Simple "power" open end wrench 197
Single stud puller, right-hand pitch....661
Sledgehammers 570
Sleeving pliers 774
Slide hammers 654
Sliding tee, 1" drive 317
Sliding tee, 1/2" drive 292
Snap hook....779
Snap ring bit holder sockets 459
Snap ring bit holder sockets for 1/4" - 6.35 mm hex series 1 bits....458
Snap ring bit holder sockets for 5/16” - 7.94 mm series 2 bits....458
Snap-off utility knife blades 620
Socket for angular tightening of the hub nut 957
Socket for injector castle nuts 1/2" square drive....910
Socket holder - 1/4" square drive....459
Socket holder - 3/8" square drive....460
Socket holder bit - 1/4" 371
Socket holder bit - 1/4" 6-point drive....836
Socket holder bit - 1/4" drive - 1/4" 6-point 458
Socket holder bit 4 mm - 1/4" 371
Socket sets 1" 316
Socket sets 1/2'' 276
Socket sets 3/4'' 1004
Socket sets 3/4" 1004
Socket sets 3/8'' 257
Socket sets 3/8" 257
Socket sets, 1/2" 276
Socket sets, 1/4'' 237
Socket sets, 1/4" 237
Socket sets, impact , 1/2" 323
Socket sets, impact, 1/2'' 323
Socket sets, impact, 3/4'' 330
Socket sets, impact, 3/4" 330
socket with locking ring for 1/4" squares, bit holder 3/8" 271
Socket wrenches 210
Socket, hexagonal 43 mm "PL-IVECO", 3/4" 1005
Sockets 1" 318
Sockets 1/2" 297
Sockets 1/4" 252
Sockets 3/4" 314
Sockets 3/8" 271
Sockets 65 mm, 1" 12-point 1005
Sockets for 1/2" square drive Diesel injectors....910
Sockets for 14 mm bi-hexagonal spark plugs, 3/8" square drive....887
Sockets for 16, 18 and 21 mm spark plugs, 1/2" square drive 887
Sockets for 16, 18 and 21 mm spark plugs, 3/8" square drive 887
Sockets for glow plugs, 3/8" square drive 892
Sockets for hexagon screws - 1/4" groove drive....455
sockets with retaining clip, bit holder 3/8" 270
Sockets, 1" impact 334
Sockets, 1/2" bit holder 296
Sockets, 1/2" impact screwdriver 328
Sockets, 1/4'' Spline profile 1030
Sockets, 1/4" bit holder 252
Sockets, hinged, 1/2" 1034
Sockets, hinged, 3/8" 274
Sockets, impact screwdriver, 3/4"....333
Sockets, impact, 1" 1/2" 337
Sockets, impact, 1/2" bit holder 328
Sockets, impact, 3/8" bit holder 322
Sockets, long-reach spline profile, 3/8'' 1031
Soft face hammers 572
Soldering iron stand....852
Soldering irons 853
Sounding line gauges 559
Spare bits for mallets....573
Spare blades for bolt croppers....613
Spare noses for Circlip® pliers 501
Spare parts, 1/2" ratchet 292
Spare pins 224
Spare strap....722
Spare tie rods for jib 658
Spark plug fitter....890
spark plug jointed wrenches....888
Spark plug lead pliers....888
Spark plug tools....886
Spark plug wrenches....888
Special "Trailor" impact socket 336
Special workbench vice for damper 951
Speed brace, 1/2" drive 293
Speed brace, 3/8" drive 267
Spherical head extra-long reach hexagon keys....425
Spherical head long-reach hexagon keys....425
Spherical head spinner hexagon keys....433
Spinner, drive flexible, 3/8" 267
Spline profile combination wrenches....1029
Spline profile ratchet ring wrenches 1030
Spline profile ring wrenches....1029
Spring compressor workstation 950
Spring compressors 946
Spring hook....847
Square tips....544
Squares 536

Stainless steel flexible spatulas 609
STAINLESS STEEL hexagon spinner keys 428
Stainless steel knife 622
Stainless steel scrapers.....609
Standard bits series 0 - drive 4 mm.....436
Standard bits series 1 437
Standard bits series 1 for Robertson® square heads 438
Standard bits series 1 for Toq Set® heads.....1035
Standard bits series 1 for Tri-wing heads.....1035
Standard bits series 2 450
Standard bits series 2 for BNAE heads.....442
Standard bits series 6 453
Stands, 2.2 t 864
Start-up cable for compression meter.....903
Steady-spring tools.....943
Steel cable cutters 615
Steel ribbons for weighted probes.....559
Steel scribers 543
Steel V-blocks for surface plate.....531
Steel wire brush 719
Stepped bits 605
Sterizable tweezers 844
Straight ring wrenches 200
Straight Torx® ring wrenches 200
Stud pullers, right or left hand pitch 662
Stud removers 663
Support for 6 electric vehicle maintenance posts 875
Support for work in high locations.....982
Supports for CKS fastening system 112
Surface preparation workstation 981
Surge arrester 24V.....1017
Suspension tools 946

T

T socket universal joint wrenches with slide handle 214
T socket wrenches with slide handle 213
tall roller cabinet.....68
Tap, die and tool holder sets 602
Taps 600
TE series combination pliers 482
TE series diagonal cutters.....482
TE series flat nose pliers.....483
TE series half-round nose pliers.....482
Tee with universal joint, 1/4" drive 250
Tee with universal joint, 3/8" drive 268
Tee, sliding 3/8" drive 267
Tee, sliding, 1/4" drive 247
Tee, sliding, 3/4" drive 311
Tee, with universal joint, 1/2" drive 293
Temperature probes.....789
Thread restoring tools.....602
Threaded bit couplers.....658
Timing sets 928
Timing tools 928
Tip type puller - inside grip 650
Tire levers.....955
Tool box trolley.....150
Tool sets for MAC PHERSON damper rods 952
Tool storage foam modules for drawers 135
Tool storage heat formed modules for drawers 116
Tools for cylinder heads fitted with glow plugs 909
Tools for electric vehicle maintenance 872
Tools for fitting / removing filter elements 912
Tools for gearbox-clutch 936
Tools for RG-type coax cables.....762
Tools for Truarc® rings.....845
Torque controllers 381
Torque drivers with adjustment Vernier 371
Torque multipliers.....361
Torque reading electronic torque wrenches.....367
Torque wrench couplers - 20 x 7 mm coupler.....379
Torque/angle electronic torque wrenches.....368
Torx® 1/2" impact sockets.....328
Torx® key ring sets.....423
Torx® key ring sets.....422
Torx® sockets 1/2" 300
Torx® sockets 1/4" 255
Torx® sockets 3/8" 274
Torx® T-handle spinner keys.....431
Transmission collar clamps.....936
Trapezoid blades for utility knives 619
Tray support for CKS storage system 113
Trigger lock-grip pliers 503
Trim removal tools.....962
Tropicalized steel turret.....779
Tube vices 733
Tuning screwdriver for slotted head screw.....848
Tweezers 841
Twisting pliers 502

U

Ultra compact multi-tightening ratchet set 185
Universal clutch centrer 936
Universal joint 1/2" 295
Universal joint, 1" drive impact 337
Universal joint, 1/4" 251
Universal joint, 3/4" 313
Universal joint, 3/8" 269
Universal joint, impact, 1 1/2" 338
Universal joint, impact, 1/2" drive 329
Universal joint, impact, 3/4" drive 333
Universal joint, impact, 3/8" drive 322
Universal pulley wrenches 934
Unstapling pliers.....962
Utility knives 618

V

Vacuum cooling circuit fillers 915
Valve core remover 955
Valve grinders.....918
Valve lifter.....916
Valve retaining ring pliers.....918
Valve stem seal pliers 918
Vapour extractor 911
Variable pitch holesaws 606
Varnished wire strippers 765
VE series 1,000 Volt insulated combination pliers....489
VE series 1,000 Volt insulated diagonal cutters 487
VE series 1,000 Volt insulated flat nose pliers 490
VE series 1,000 Volt insulated multigrip pliers.....792
VE series 1,000 Volt insulated pliers.....790
VE series 1,000 Volt insulated round nose pliers 490
VE series 1,000 Volt insulated strippers.....490
Vehicle kits 51
Vertical board for JET+ roller cabinets 73
Vibrating sander 694
Vice for lower grip on MacPherson strut.....947
Vices 732
VSE series 1,000 Volt insulated 1/2" extensions.....808
VSE series 1,000 Volt insulated 1/2" handle.....807
VSE series 1,000 Volt insulated 1/2" ratchet sets....808
VSE series 1,000 Volt insulated 1/2" ratchets.....807
VSE series 1,000 Volt insulated 1/2" socket sets.....808
VSE series 1,000 Volt insulated 1/2" sockets 806
VSE series 1,000 Volt insulated 1/4" extensions.....804
VSE series 1,000 Volt insulated 1/4" ratchet sets....804
VSE series 1,000 Volt insulated 1/4" ratchets.....803
VSE series 1,000 Volt insulated 1/4" socket sets.....804
VSE series 1,000 Volt insulated 3/8" extensions.....806
VSE series 1,000 Volt insulated 3/8" handle.....805
VSE series 1,000 Volt insulated 3/8" ratchet sets....806
VSE series 1,000 Volt insulated 3/8" ratchets.....805
VSE series 1,000 Volt insulated 3/8" socket sets.....806
VSE series 1,000 Volt insulated 3/8" sockets 804
VSE series 1,000 Volt insulated 6-point 1/4" sockets 803
VSE series 1,000 Volt insulated adjustable wrenches 802
VSE series 1,000 Volt insulated combination pliers..798
VSE series 1,000 Volt insulated copper-aluminium cable cutter 800
VSE series 1,000 Volt insulated diagonal cutters 797
VSE series 1,000 Volt insulated flat nose pliers 798
VSE series 1,000 Volt insulated hexagon keys.....802
VSE series 1,000 Volt insulated knife 801
VSE series 1,000 Volt insulated long-reach 1/2" sockets.....807
VSE series 1,000 Volt insulated male 6-point 3/8" sockets.....805
VSE series 1,000 Volt insulated multigrip pliers.....797
VSE series 1,000 Volt insulated offset ring wrenches 801
VSE series 1,000 Volt insulated open end wrenches801
VSE series 1,000 Volt insulated pliers.....796
VSE series 1,000 Volt insulated round nose pliers ...799
VSE series 1,000 Volt insulated semi-round nose pliers 489
VSE series 1,000 Volt insulated semi-round nose pliers 799
VSE series 1,000 Volt insulated strippers 799
VSE series 1,000 Volt insulated torque wrenches....809

W

Wall-mounted cabinets 108
Wallet set of hexagonal keys.....421
Wallet set of hexagonal keys.....424
Wallet set of Torx® keys.....421
Wallet-set of fluorescent hexagon keys.....1024
Wallet-set of Torx® keys 424
Wallet-set of Torx® keys 421
Welder.....852
Welders chipping hammers.....569
Welding spot mill 966
Welding station 852
Wheel nut cross braces.....953
Wheel nut cross braces for HGV.....1015
Wheel-hub-transmission tools 953
Wide head for jacks DL.PLHP1530.....993
Windshield cutter blades CAD.P300F 704
Windshield replacement kit.....985
Windshield tools 985
Windshield wiper arm remover 985
Wire basket for CKS fastening system.....113
Wire cutters-strippers 764
Wire puller.....776
Wire puller lubricant.....778
Wire puller needles.....776
Wire strippers 479
Wood and galvanized worktop for Jetline units.....91
Wood handle screwdrivers 413
Wood handles for files and rasps 591
Wood mallets.....570
Wood worktop for roller cabinet 74
Woodwork hammers.....569
Workbench drawers.....98
Workbenches.....94
Workshop cranes, 500 kg - 1t 864
Workshop press, hydraulic, 30T 867, 998
Workshop press, hydropneumatic, 50T 868, 998
Workstation trolley and service case holder 159
Wrecking bars 719
Wrench, box, 1,000 Volt insulated 802
Wrenches for electric cabinets.....775
Wrenches for side-slot nuts 223
Wrenches, 1/4" - 5/16" bit holder, ratchet 246

X

XZN head keys.....434

A

A.300MT-A.301MT ... 371
A.300MTJ1-A.301MTJ1 ... 372
A.300PA ... 372
A.340MT-A.341MT ... 373
A.402-A.404 ... 371
A.402J-A.404J ... 372
A.442-A.444 ... 373
A1000PP ... 88
A1000PP.04 ... 93
A1000PV ... 89
AVE ... 406
AST ... 398
A500PP ... 87
A500PP.03 ... 93
A500PV ... 88
AAM.PE ... 417
AB.J4VE ... 408
ACL.1A ... 416
ACL.2 ... 415
AD ... 411
AD.JVE ... 405
ADST ... 399
ADVE ... 407
ADB ... 411
ADB.JVE ... 408
ADBVE ... 409
ADST.J ... 397
AE.J1 ... 837
AEF ... 833
AEF.J ... 836
AEFD ... 834
AEFP ... 834
AEFP.J ... 837
AEM.J ... 839
AEM.M ... 834
AEP ... 833
AEX ... 834
AEX.J ... 838
AF ... 418
AFST ... 398
AFP ... 418
AFR ... 418
AFU ... 419
AGT ... 410
AJ.3 ... 409
AJT.2 ... 412
AKZ ... 419
AM ... 414
AM.D ... 415
AM.H ... 417
AM.M ... 417
AM.M2F ... 404
AME.B ... 443
AMEX.3 ... 283
AMJ ... 415
AMR ... 415
AMS ... 416
AMZ ... 415
AMZ.M1 ... 978
ANSR ... 749
AN ... 387
ANSR ... 749
AND.J ... 386
AND ... 392
ANDSR ... 749
ANF ... 388
ANP ... 391
ANP.J ... 386
ANPSR ... 749
ANPF ... 1022
ANSQ ... 393
ANWH.J ... 386
ANX.J ... 386
ANX ... 394
ANXP.J ... 386
ANXR.J ... 386
ANXRP.J ... 386
ANXRP ... 395
AP ... 412
AP.J5VE ... 405
AP.VE ... 407
APST ... 398
AP6X80 ... 544
AP8x125 ... 544
APB ... 412
APB.J7VE ... 408
APBVE ... 409
APST.J6 ... 398
APZ ... 419
AR ... 410
AR.J5 ... 409
ARA ... 410
ARB ... 411
ARZ ... 419
AS.12L ... 599
AS.15 ... 409
AS.4 ... 409
AS.6L ... 599
AS ... 395
ASD ... 396
ASF ... 395
ASP.J6 ... 395
ASP ... 396
ASX ... 396
AT.J9 ... 409
ATH ... 413
ATH.JS5 ... 412
ATHH ... 413
ATHH.D ... 414
ATHH.J7 ... 412
ATHH.JS5 ... 412
ATHH.P ... 413
ATHH.PJ3 ... 412
AV.BT ... 417
AV.HT ... 417
AW ... 388
AWCK ... 400
AWD ... 392
AWD.J6 ... 386
AWDH ... 393
AWDHCK ... 401
AWF ... 1022
AWH ... 389
AWHCK ... 400
AWHH ... 434
AWHH.JT6 ... 434
AWP ... 391
AWP.J6 ... 386
AWPF ... 1023
AWPH ... 391
AWPHCK ... 401
AWSH ... 433
AWSH.JT6 ... 433
AWSHF ... 1023
AXST ... 399

B

B.10R ... 892
B.12-1 ... 892
B.J14BH ... 887
B.J16A ... 887
B.J16R ... 888
B.J18A1 ... 887
B.J18R1A ... 888
B.J19R1A ... 888
B.J21A ... 887
B.J21R ... 888
B.S16A ... 887
B.S18A1 ... 887
B.S21A ... 887
BC.109VSE ... 716
BC.110VSE ... 716
BC.1J20 ... 717
BC.20VSE ... 717
BC.21VSE ... 717
BC.25VSE ... 810
BC.5 ... 717
BC.80VSE ... 716
BC.81VSE ... 716
BC.90VSE ... 716
BC.91VSE ... 716
BC124A ... 896
BC128A ... 896
BC2430A ... 896
BP. ... 148
BP.C ... 147
BP.P ... 146
BP.Z ... 145
BS.12 ... 163
BS.T ... 144
BT.11A ... 149
BT.13A ... 149
BT.23L ... 151
BT.28 ... 152
BT.4A ... 150
BT.62A ... 151
BT.64 ... 151
BT.66 ... 151
BT.6A ... 150
BT.9 ... 149
BT.A2 ... 150
BV.100 ... 162
BV.105 ... 162
BV.16 ... 163
BV.17 ... 164
BV.21BP ... 158
BV.21M ... 158
BV.21ST ... 158
BV.21SX ... 157
BV.21TR1 ... 160
BV.29 ... 158
BV.51A ... 157
BV.5A ... 161
BV.61 ... 160
BV.7A ... 161
BV.C ... 159

C

CAD.10 ... 980
CAD.9 ... 980
CAD.P300F ... 704
CAR.B ... 597
CAR.MD ... 596
CHA ... 87
CHD ... 86
CHDPP ... 87
CHRONO.5M3 ... 70
CHRONO.6M3 ... 70
CHRONO.7M3 ... 71
CHRONO.8M3 ... 71
CHS ... 86
CHSPP ... 87
CK ... 109
CKLA ... 109
CKS ... 110
CL2.BA19 ... 713
CL2.C19 ... 713
CL2.C1913 ... 713
CL2.C1913D ... 713
CL2.CH1419 ... 713
CLE.BAM100A ... 592
CM.100A ... 16
CM.105 ... 45

CM.110A 14
CM.120A 12
CM.130A 10
CM.140A 8
CM.150A 6
CM.159 44
CM.160A 4
CM.A1 42
CM.A2 40
CM.AG4 50
CM.BUR1 22
CM.E15 33
CM.E16 32
CM.E17 31
CM.E18 30
CM.EL29 29
CM.EL30 28
CM.EL31 27
CM.EL32 26
CM.EL33 25
CM.EL34 24
CM.EL35 23
CM.ELPSA 872
CM.EM40A 19
CM.EM41A 20
CM.HYELPB 872
CM.INFO 21
CM.JA 38
CM.LT3 17
CM.MAN 39
CM.RFCL 37
CM.S1 41
CM.SE 34
CM.SG3A 36
CM.SG4A 35
CM.V9 47
CPE 517
CR.CM92 43
CR.D1 962
CR.D10 978
CR.D2 871
CR.D4 963
CR.D5 962
CR.P 982
CR.S1 959
CR.S11 959
CR.S12 961
CR.S2 982
CR.S5 960
CR.S6 961
CR.S7 982
CR.S8 961
CR.S9 961
CR.T 987
CR.T3XL 69
CR.T4XL 69
CR4.M110A 15
CR4.MAN 39
CU.100A 16
CU.110A 15
CU.120A 13
CU.130A 11
CU.140A 9
CU.V12 48

D

D.1 919
D.104B 943
D.106-10 879
D.109-10 879
D.110 890
D.115A 962
D.120-16 879
D.132B 910
D.133A 914
D.137A 962
D.138 956
D.139 885
D.13A 880
D.140 885
D.141 885
D.142 910
D.143B 957
D.144 911
D.145A 924
D.146A 924
D.149 884
D.151 884
D.151PL 884
D.154 885
D.155 885
D.156 885
D.157 885
D.159 885
D.160 885
D.161 885
D.162 885
D.163 884
D.163-24 885
D.163-27 885
D.163-30 885
D.163-32 885
D.163-36 885
D.163-38 885
D.163-J6 885
D.164 885
D.169 251
D.22B 951
D.27A 910
D.28B 985
D.3 718
D.3-300/600 955
D.34B 302
D.34J7 919
D.360L 380
D.3-7 718
D.3J3 718
D.48 877
D.48-KIT 877
D.51 918
D.79A 943
D.80 985
D.83C 952
D.84 952
D.86 932
D.93 955
DA.160 906
DCR. 907
DCR.20J6 986
DE.66-18 885
DE.96-18 885
DE.C 924
DELA.1021 534
DELA.1051 534
DELA.1052 536
DELA.1056 535
DELA.1061 535
DELA.1207 556
DELA.1208 556
DELA.1223 556
DELA.1256 537
DELA.1257 537
DELA.1272 538
DELA.1276 556
DELA.1290.00 538
DELA.1292.00 538
DELA.13299 557
DELA.1586.00 543
DELA.1589.00 544
DELA.1786.00 541
DELA.1787.00 541
DELA.1790.00 541
DELA.1880.00 539
DELA.1897.02 539
DELA.1901 542
DELA.1902 542
DELA.1905.05 542
DELA.1908 543
DELA.1952.00 541
DELA.25.00EX 548
DELA.2831 551
DELA.2881 550
DELA.2882.20 551
DELA.2883.04 550
DELA.3151.01 552
DELA.3180 552
DELA.3180 552
DELA.3224.00 557
DELA.3298.15 557
DELA.3298.30 557
DELA.3310.00 558
DELA.3400.00 558
DELA.3402.00 558
DELA.3404.00 558
DELA.35.00EX 548
DELA.401.00 555
DELA.5111 558
DELA.5300 559
DELA.5301.03 559
DELA.5360 527
DELA.55.00EX 548
DELA.61058.10C 533
DELA.625.00 555
DELA.626.00 555
DELA.62881 549
DELA.62883 550
DELA.8947 551
DF.16 938
DF.17 941
DF.18-01 937
DF.19-01 937
DF.2 942
DF.20 939
DF.21 940
DF.22 1013
DF.3 942
DF.475A 944
DL.101 865
DL.10EU 865
DL.10F 865
DL.10T 994
DL.1200 866
DL.150HL 862
DL.19 863
DL.200CR 862
DL.200LP 861
DL.200SL 861
DL.20EU 996
DL.20SUP 866
DL.20TA 994
DL.3 864
DL.30 866
DL.300 862
DL.30T 994
DL.32 863
DL.5 864
DL.60 866
DL.700 997
DL.PL10 991
DL.PL12 995
DL.PL22 995
DL.PL6 991
DL.PLHP 992
DLS.300-03 951
DLS.400 950

DLS.500 ... 947
DLS.T ... 859
DM.10A ... 918
DM.14 ... 936
DM.15 ... 913
DM.16 ... 933
DM.17A ... 933
DM.19 ... 910
DM.20 ... 890
DM.25 ... 914
DM.27 ... 914
DM.28 ... 888
DM.29 ... 914
DM.30 ... 936
DM.33 ... 916
DM.34 ... 916
DM.34GM ... 916
DM.360 ... 380
DM.370 ... 380
DM.38 ... 911
DM.50 ... 933
DM.7 ... 918
DM.8 ... 934
DM.90 ... 916
DM.91 ... 916
DM.APR ... 935
DM.CC ... 912
DM.F ... 912
DM.FR2 ... 912
DM.J ... 911
DM.MUB ... 913
DMP.360L ... 380
DP. ... 885
DRD.B ... 595
DRD.MD ... 594
DRD.MDSR ... 754
DS.J5 ... 951
DT.CLE ... 934
DT.FIAT ... 928
DT.FORD ... 929
DT.HERTZ ... 932
DT.OPEL ... 929
DT.PSA ... 930
DT.REN ... 930
DT.SFB ... 935
DT.TW ... 934
DT.VAG ... 931
DTS. ... 870
DX.11 ... 897
DX.12 ... 789
DX.25 ... 900
DX.8-12 ... 897
DX.8-24 ... 1017
DX.T100 ... 789

E

E.110 ... 444
E.111 ... 444
E.112 ... 444
E.113 ... 445
E.114 ... 445
E.116 ... 445
E.120 ... 445
E.2000 ... 381
E.2005 ... 711
E.306 ... 367
E.316 ... 368
E.406 ... 369
E.506 ... 369
E.611 ... 445
E.612 ... 446
E.900A ... 711
EA ... 573
EB ... 573
EBNA. ... 442
EC ... 573
ECAR.10 ... 438
ECAR.60 ... 454
ECR ... 371
ECR.0 ... 371
ED.000-001 ... 436
ED.0X2 ... 436
ED.100 ... 438
ED.101T-103T ... 447
ED.111-112 ... 438
ED.131T-133T ... 449
ED.201-204 ... 451
ED.601T-603T ... 456
ED.631T-633T ... 457
ED.661-663 ... 453
ED.691-693 ... 453
ED1.J3 ... 449
ED101T-103T.J3 ... 448
ED131T-133T.J3 ... 450
ED601T6603T.J3 ... 456
ED631T6633T.J3 ... 457
EF.6D ... 455
EF.6D10L ... 455
EF.6J ... 460
EF.6JL ... 460
EF.6P ... 459
EF.6R ... 459
EF.6RL ... 460
EF.J ... 459
EF.R ... 459
EF.S ... 459
EFPZ ... 443
EH.000,9-002,5 ... 436
EH.101,5-110 ... 441
EH.101/4-107/32 ... 442
EH.201/4 ... 451
EH.203/8 ... 451
EH.204-210 ... 451
EH.204L-210L ... 451
EH.205/16 ... 451
EH.603-608 ... 454
EH1.J3 ... 441
EH102,5.J3 ... 441
EH102.J3 ... 441
EH103-108.J3 ... 441
EH603-606.J3 ... 454
END.201-204 ... 461
ENH.204-210 ... 461
ENH.301/2 ... 462
ENH.303/4 ... 462
ENH.303-319 ... 462
ENH.305/8 ... 462
ENH.307/16 ... 462
ENH.309/16 ... 462
ENP.201-204 ... 460
ENS.205,5-214 ... 460
ENS.312-316 ... 462
ENX.220-255 ... 461
EP.000 ... 436
EP.0X2 ... 436
EP.100-122 ... 438
EP.101T-103T ... 447
EP.131T-133T ... 449
EP.201-204 ... 450
EP.601T-603T ... 456
EP.631T-633T ... 457
EP.661-692 ... 453
EP1.J3 ... 448
EP101T-103T.J3 ... 447
EP131T-133T.J3 ... 450
EP601T-603T.J3 ... 456
EP631T-633T.J3 ... 457
ES.001,8-004,5 ... 436
ES.124,5T-128T ... 449
ES.133 ... 437
ES.134,5T-148T ... 446
ES.175,5T ... 449
ES.206,5-212 ... 450
ES.603-625,5 ... 453
ES1.J3 ... 448
ES134,5T-148T.J3 ... 447
ES603-608.J3 ... 455
ETOR.100-101 ... 443
ETORM.101/4 ... 443
ETORM.102-110 ... 443
ETORM.201/4 ... 452
ETORM.203/8 ... 452
ETORM.205/16 ... 452
ETORM.208-210 ... 452
ETORM.601/4 ... 452
ETORM.602-610 ... 454
ETRI.101-105 ... 442
ETS.001,5-002,5 ... 437
ETS.102,5-106 ... 441
EV.104-110 ... 442
EV.205L-208L ... 452
EV.206-212 ... 452
EV.BAP ... 874
EV.CH ... 874
EV.JET ... 875
EV.PP ... 875
EX.006-010 ... 437
EX.106-140 ... 438
EX.220-255 ... 451
EX.220L-250L ... 451
EX.610-640 ... 453
EX108-140.J3 ... 439
EX11.J3 ... 439
EX12.J3 ... 439
EX610-640.J3 ... 455
EXP.106-140 ... 440
EXR.110-140 ... 440
EXR.110L-140L ... 440
EXRP.108-140 ... 440

F

F.63C ... 880

H

HB. ... 840
HT.3 ... 848

J

J. ... 271
J.110A ... 267
J.115 ... 267
J.120A ... 267
J.121AVSE ... 805
J.140A ... 266
J.145 ... 266
J.151A ... 265
J.151AVSE ... 805
J.152 ... 378
J.153A ... 265
J.155A ... 1033
J.158A ... 266
J.15AVSE ... 804
J.16 ... 271
J.161 ... 264
J.171 ... 265
J.174 ... 265
J.202A ... 357
J.203A ... 357
J.203DA ... 357
J.203E ... 378
J.205E ... 358
J.208 ... 268
J.208-50 ... 356
J.208A50 ... 356
J.209 ... 268
J.210 ... 268

J.210AVSE ... 806
J.210RC ... 269
J.210S ... 268
J.215 ... 268
J.215AVSE ... 806
J.215RC ... 269
J.216 ... 269
J.217 ... 268
J.217RC ... 269
J.222A ... 267
J.228 ... 268
J.229A ... 268
J.230 ... 270
J.232 ... 270
J.235 ... 270
J.236 ... 270
J.240A ... 269
J.248-50D ... 364
J.274 ... 379
J.306 ... 351
J.306-50VSE ... 809
J.306U ... 352
J.360 ... 264
J.360DBOX ... 257
J.372 ... 375
J.373 ... 375
J.400AVSE ... 806
J.401AVSE ... 804
J.40E ... 261
J.40U ... 261
J.420AU ... 260
J.420E ... 258
J.426M ... 259
J.430AP ... 258
J.430ASP ... 258
J.430MU ... 260
J.430UP ... 260
J.431AP ... 258
J.431ASP ... 258
J.446-50 ... 364
J.447E ... 259
J.450U ... 260
J.451EP ... 259
J.648-50 ... 362
J.AVSE ... 804
J.DBOX500 ... 257
J.DBOX501 ... 257
J.F ... 274
J.H ... 271
J.HLA ... 272
J.LA ... 273
J.LAVSE ... 805
J.VSE ... 804
J1118SPL ... 1029
J1122SPL ... 1029
J1126SPL ... 1029
J1130SPL ... 1029
J1135SPL ... 1029
J1142SPL ... 1029
J1144SPL ... 1029
J1151 ... 1029
J1155 ... 1029
J1160 ... 1029
J1162 ... 1029
J1164 ... 1029
J1208SPL ... 1029
J1209SPL ... 1029
J1210SPL ... 1029
J1211SPL ... 1029
J1212SPL ... 1029
J1214SPL ... 1029
J1216SPL ... 1029
J1218SPL ... 1029
J1220SPL ... 1029
J1222SPL ... 1029
J1224SPL ... 1029
J1226SPL ... 1029
J1228SPL ... 1029
J1230SPL ... 1029
J1232SPL ... 1029
J4706DPL ... 1030
J4706SPL ... 1030
J4707DPL ... 1030
J4709DPL ... 1030
J47107 ... 1034
J4712DPL ... 1030
J4714DPL ... 1030
J4759 ... 1034
J5100 ... 1031
J5334CF ... 1031
J5336CF ... 1031
J5338CF ... 1031
J5340CF ... 1031
J5342CF ... 1031
J5344CF ... 1031
J5346CF ... 1031
J5348CF ... 1031
J5350CF ... 1031
J5352CF ... 1031
J5354CF ... 1031
J5356CF ... 1031
J5358CF ... 1031
J5360CF ... 1031
J5364CF ... 1031
J5475A ... 1034
JB ... 272
JET.11M3-GM3 ... 58
JET.3H ... 68
JET.3WS ... 68
JET.5M3-GM3 ... 56
JET.6GM3S ... 62
JET.6M3-GM3 ... 56
JET.6M4-GM4 ... 58
JET.6M5-GM5 ... 60
JET.7M3-GM3 ... 57
JET.7M4-GM4 ... 59
JET.7M5-GM5 ... 60
JET.8GM3S ... 62
JET.8M3-GM3 ... 57
JET.8M4-GM4 ... 59
JET.8M5-GM5 ... 61
JET.9M3-GM3 ... 57
JET.9M4-GM4 ... 59
JET.9M5-GM5 ... 61
JET.A11 ... 75
JET.A12XL ... 75
JET.A13GXL ... 76
JET.A14M3-M4-M5 ... 74
JET.A1GXL ... 76
JET.A2GXL ... 76
JET.A3 ... 74
JET.A5-1GXL ... 77
JET.A5-2XL ... 77
JET.A5-3GXL ... 77
JET.A5GXL ... 76
JET.A6M3-M4-M5 ... 73
JET.A7GXL ... 74
JET.A8-A8GPOWER ... 67
JET.A8GXL ... 75
JET.A9M ... 75
JET.C4GM3-M4-M5 ... 65
JET.C4M3-M4-M5 ... 65
JET.CR4-CR4GM3 ... 66
JET.T6-T6GM3 ... 63
JET.T7M3-GM3 ... 64
JET2. ... 78
JET5.M120A ... 13
JET6.M130A ... 10
JET7.M140A ... 9
JET7.M150A ... 6
JET8.M160A ... 4
JHX.14 ... 323
JL.161 ... 264
JL.40E ... 261
JL.40U ... 261
JL.41E ... 261
JL.430MU ... 260
JL.DBOX ... 257
JLS-LIGHT ... 93
JLS-PB ... 91
JLS-PBG ... 91
JLS-PS ... 91
JLS-TRAA ... 92
JT. ... 274
JT.(") ... 275
JT.40 ... 261
JT.415E ... 259
JT.AVSE ... 805
JTX. ... 274
JTX.40 ... 261
JX. ... 275
JX.415EP ... 259

K

K.120B ... 311
K.120SR ... 748
K.125A ... 311
K.126A ... 311
K.130A ... 312
K.140A ... 312
K.149 ... 310
K.149SR ... 745
K.151B ... 310
K.152 ... 309
K.154AM ... 311
K.154B ... 310
K.200 ... 359
K.200E ... 312
K.201B ... 359
K.202 ... 359
K.203B ... 359
K.208B ... 312
K.210B ... 312
K.210SR ... 748
K.214A ... 358
K.215B ... 312
K.230B ... 313
K.232A ... 313
K.240A ... 313
K.240SR ... 748
K.306 ... 351
K.382A ... 377
K.383 ... 377
K.405E ... 307
K.411 ... 306
K.415E ... 307
K.420N ... 307
K.421N ... 307
K.432E ... 307
K.433E ... 307
K.436E ... 306
K.437E ... 306
K.441A ... 306
K.442E ... 306
K.442U ... 308
K.B ... 314
K.HB ... 314
K.LA ... 315
K.SR ... 746
KIT-GTECH ... 93
KIT-TUBES ... 92
KT.A ... 315

L

L.16A ... 888

L.21 ... 888
LIM200EM.J5 ... 593
LIM250EM.J5 ... 593

M

M.65B ... 318
M.77TR ... 336
M.120A ... 317
M.120SR ... 748
M.125A ... 317
M.126A ... 317
M.151 ... 317
M.200B ... 359
M.200DB ... 359
M.200M ... 359
M.201B ... 359
M.210A ... 317
M.210SR ... 748
M.215A ... 317
M.230C ... 317
M.230C1 ... 318
M.240SR ... 748
M.423E ... 316
M.431E ... 316
M.431U ... 316
M.441E ... 316
M.HA ... 318
M.SR ... 747
MAN. ... 591
MB ... 878
MB.H ... 879
MB.S ... 879
MB.T ... 878
MBAPP ... 83
MBAPP.06 ... 93
MBDPP ... 82
MBDPV ... 84
MB-J15 ... 877
MBS6T ... 84
MBS7T ... 85
MBSPP ... 82
MBSPP.04 ... 93
MBSPV ... 83
MC.130B ... 361
MC.270B ... 361
MHDPV ... 86
MHSPP ... 85
MHSPP.01 ... 93
MHSPV ... 85
MOD.208 ... 134
MOD.234 ... 131
MOD.43 ... 119
MOD.44 ... 118
MOD.440 ... 116
MOD.467 ... 117
MOD.55 ... 118
MOD.601 ... 131
MOD.64J7 ... 117
MOD.65J7 ... 118
MOD.66A ... 119
MOD.75-1 ... 119
MOD.84TZS ... 126
MOD.89TX ... 126
MOD.97 ... 119
MOD.99B ... 119
MOD.A1 ... 124
MOD.A1VE ... 124
MOD.A2 ... 125
MOD.A3 ... 125
MOD.A4 ... 125
MOD.A5 ... 125
MOD.A6 ... 125
MOD.A7 ... 125
MOD.ANX ... 126
MOD.ANXR ... 126
MOD.BJC ... 132
MOD.BJ-GM ... 132
MOD.BRA ... 133
MOD.BSB ... 132
MOD.CAR ... 134
MOD.CG ... 130
MOD.CH ... 133
MOD.CPE ... 127
MOD.DF ... 133
MOD.E20L ... 126
MOD.E41 ... 126
MOD.HLA ... 121
MOD.J ... 121
MOD.K ... 124
MOD.LIM ... 131
MOD.MET ... 131
MOD.MI ... 129
MOD.MT1 ... 129
MOD.NS ... 124
MOD.NS260 ... 127
MOD.PC ... 128
MOD.PCSN ... 129
MOD.PR ... 127
MOD.R ... 120
MOD.S ... 123
MOD.SHP ... 123
MOD.SL1 ... 123
MOD.SM ... 123
MOD.TE ... 127
MOD.TX1 ... 120
MOD.U306 ... 131
MOD.U46CL ... 132
MOD.U48 ... 132
MOD.VE ... 129
MOD.Y105 ... 129
MODM.440 ... 135
MODM.467FJ12 ... 136
MODM.467J12 ... 135
MODM.75 ... 136
MODM.84TZS ... 139
MODM.89TX ... 139
MODM.99B ... 136
MODM.A ... 138
MODM.ANXR ... 139
MODM.CG ... 141
MODM.CPE ... 139
MODM.HLA ... 137
MODM.J ... 137
MODM.MI ... 140
MODM.PCSN ... 140
MODM.PR12 ... 139
MODM.R ... 136
MODM.S ... 137
MP. ... 591
MT.J ... 839

N

N.38A ... 164
N.580-582 ... 707
N.600 ... 707
N.630-633 ... 709
N.641 ... 710
N.643 ... 710
N.644 ... 708
N.650 ... 708
N.651 ... 708
N.709 ... 707
N.820 ... 709
N.841 ... 710
N.842 ... 710
NEX. ... 462
NG. ... 337
NG.210A ... 338
NG.215A ... 338
NG.230A ... 338
NG.232A ... 338
NG.240A ... 338
NHX.14A ... 325
NJ ... 321
NJ.1300F2 ... 682
NJ.1400F ... 683
NJ.2000F2 ... 682
NJ.210A ... 321
NJ.211A ... 321
NJ.230A ... 322
NJ.232A ... 322
NJ.236A ... 322
NJ.237A ... 322
NJ.240A ... 322
NJ.260 ... 464
NJ.261M ... 464
NJ.262 ... 464
NJ.3000F ... 682
NK.1000F2 ... 686
NK.2000F2 ... 686
NK.209A ... 333
NK.210A ... 333
NK.215A ... 333
NK.218A ... 333
NK.230A ... 334
NK.232A ... 334
NK.240A ... 333
NK.300 ... 339
NK.3000F ... 686
NK.301AE ... 339
NK.500E ... 330
NK.500U ... 330
NK.A ... 331
NK.LA ... 332
NKB. ... 332
NKD. ... 332
NKHM. ... 333
NM.1000F2 ... 687
NM.1010LF2 ... 687
NM.209A ... 336
NM.210A ... 336
NM.215A ... 336
NM.230A ... 337
NM.231A ... 337
NM.232A ... 337
NM.240A ... 337
NM.24A ... 334
NM.300 ... 339
NM.A ... 334
NM.ELA ... 336
NM.LA ... 335
NMB. ... 335
NP. ... 361
NS.1010F2 ... 685
NS.1500F2 ... 684
NS.1800F2 ... 685
NS.2000F ... 684
NS.210A ... 329
NS.215A ... 329
NS.218A ... 329
NS.219A ... 329
NS.230A ... 329
NS.232B ... 329
NS.236A ... 328
NS.237A ... 328
NS.240A ... 329
NS.260A ... 465
NS.263M ... 465
NS.265M ... 465
NS.3000F ... 684
NS.405A ... 324
NS.500A ... 323
NS.500AU ... 324
NS.550A ... 323
NS.A ... 326

NS.J9 324
NS.LA 327
NSAL.3 954
NSB. 327
NSB.3 324
NSHM. 328
NSHM.J8 325
NSTX. 328
NSTX.J7 325
NSX. 328

P

P.27B 880
PAM.B 594
PAM.D 754
PAM.MD 593
PAM.MDSR 754
PAV 89
PCJ4 498
PCSNJ4 498
PL.384 135
PL.636 79
PL.655 79
PL.656 79
PL.656M4 79
PL.656M5 79
PM.384 141
PM.MOD3/3 141
PPAV1 90
PPAV1ELEC 90
PPAV2 90
PPAVA 90

R

R 252
R.110 249
R.120A 247
R.140A 248
R.142 247
R.145 1046
R.150A 246
R.151 246
R.155A 1038
R.158A 247
R.161 245
R.200P 378
R.203A 357
R.203DA 357
R.205E 358
R.208-25 356
R.209 249
R.209S 250
R.210 249
R.210AVSE 804
R.210RC 250
R.210S 250
R.215 249
R.215RC 250
R.216 250
R.217 249
R.217RC 250
R.222A 248
R.227A 248
R.228 251
R.229A 250
R.232 251
R.235 252
R.236A 248
R.236AF 1023
R.236C 248
R.240A 251
R.245 252
R.248-25D 364
R.301A 351
R.304DA 351
R.306-25D 351
R.306-5 352
R.306A25 351
R.306U 352
R.344DA 364
R.360 245
R.372 375
R.373 375
R.3A 239
R.400AVSE 811
R.40E 242
R.40U 242
R.410AE 239
R.410D 239
R.411MU 240
R.418AU 241
R.420MU 240
R.420P 239
R.425A 239
R.425AP 239
R.426AP 239
R.430AP 241
R.440EP 241
R.440UP 241
R.446-25 364
R.447EP 241
R.450AP 241
R.648-10 362
R.648-25 362
R.AVSE 803
R.E 253
R.EL 254
R.F 255
R.LA 254
R.PE 246
R2NANO 237
R360NANO 237
R360NANO-U 238
RAB.DRD 598
RAB.PB 599
RAB.PMD 599
RAB.RD 599
RB. 254
RD.B 596
RD.MD 595
RD.MDSR 755
REL.40U 242
RL.161 245
RL.40E 242
RL.41E 242
RL.NANO1 237
RL.NANO-U 238
RS.100 303
RS.360 303
RS.430E 304
RS.440E 304
RSL.100 303
RSX.19A 304
RSX.19A 962
RSX.427P 304
RSX.J6 303
RSX.J6 284
RT. 255
RT.AVSE 803
RTX 255
RTX.40 242
RX 256

S

S 298
S.110 293
S.120A 292
S.120SR 748
S.121AVSE 807
S.140A 292
S.141A 292
S.143A 290
S.145 293
S.151 290
S.151AVSE 807
S.152 378
S.153A 291
S.154 290
S.155SR 745
S.156 291
S.158A 291
S.161 289
S.171 290
S.200DP 278
S.200P 378
S.202A 357
S.203A 357
S.203DA 357
S.203E 378
S.205E 358
S.206 294
S.208 294
S.208 356
S.208S 294
S.208SR 748
S.210 294
S.210AVSE 808
S.210RC 295
S.210S 294
S.210-S.215 49
S.210SR 748
S.212SR 748
S.215 294
S.215AVSE 808
S.215RC 295
S.215S 294
S.215SR 748
S.217 294
S.217RC 295
S.228 293
S.229A 293
S.230 295
S.231 295
S.232B 296
S.234 296
S.236 296
S.237 296
S.240A 295
S.240SR 748
S.248 364
S.284 379
S.305P 379
S.306A 351
S.306-D 351
S.306-R 352
S.306U 352
S.360 289
S.360DBOX 277
S.372 375
S.372V 375
S.373 375
S.382 377
S.382V 377
S.383 377
S.400A 283
S.400AVSE 808
S.401A 283
S.401AVSE 808
S.404E 283
S.405E 283
S.40E 284
S.40U 284
S.41E 284
S.41U 284
S.420AU 282

S.420B ... 278
S.422AP ... 278
S.423AP ... 278
S.428EP ... 279
S.429EP ... 279
S.430ADP ... 279
S.431ADP ... 279
S.440AP ... 279
S.440AUP ... 282
S.440E ... 280
S.441AP ... 279
S.441AUP ... 282
S.441E ... 280
S.442EP ... 281
S.446-100 ... 364
S.446DP ... 280
S.447DP ... 280
S.450EP ... 281
S.450UP ... 282
S.600 ... 278
S.648-110 ... 362
S.800 ... 280
S.900 ... 280
S.AVSE ... 806
S.AVSE ... 806
S.DBOX500 ... 277
S.DBOX501 ... 277
S.H ... 297
S.HLA ... 299
S.LA ... 300
S.LA ... 299
S.LAVSE ... 807
S.SR ... 745
SBV0709 ... 1030
SBV0810 ... 1030
SBV1214 ... 1030
SBV1618 ... 1030
SBV2022 ... 1030
SBV2428 ... 1030
SBV2630 ... 1030
SBV3236 ... 1030
SE.1A ... 920
SHP.LA ... 301
SJ.214 ... 358
SJ.235 ... 458
SJ.236 ... 458
SK.452N ... 305
SK.452U ... 305
SK.453N ... 305
SL.161 ... 289
SL.440AUP ... 282
SL.440E ...
SL.441AUP ... 282
SL.DBOX ... 276
SM.440EP ... 281
SM.441EP ... 281
ST. ... 301
ST.40 ... 285
ST.41 ... 285
ST.AVSE ... 807
STG ... 592
STM ... 300
STM.J9 ... 283
STU ... 592
STX ... 300
STX.40 ... 284
SV.40A ... 285
SV.41A ... 285
SV.B ... 302
SV.ELB ... 302
SV.J5 ... 920
SV.J8A ... 285
SV.LB ... 302
SV.LJ6A ... 285
SX.41 ... 285
SX.LA ... 301
SXM ... 301

T

T.273 ... 880
T5 ... 504
TRI.B ... 598
TRI.MD ... 597

U

U.102T ... 660
U.103A ... 660
U.13D ... 917
U.13L ... 916
U.14 ... 645
U.16 ... 955
U.179A ... 954
U.18 ... 1014
U.2 ... 654
U.20 ... 635
U.232 ... 645
U.23D ... 650
U.23J ... 649
U.23K1A ... 657
U.25A ... 936
U.27AS3 ... 636
U.27B ... 637
U.27D ... 636
U.28 ... 651
U.3 ... 641
U.30 ... 651
U.301 ... 645
U.301BJ1 ... 660
U.301E ... 653
U.301L ... 647
U.301M ... 647
U.301P ... 647
U.302 ... 634
U.306 ... 632
U.306J1 ... 633
U.306M ... 654
U.310-170 ... 633
U.310-230N ... 634
U.310-250 ... 633
U.312-01 ... 641
U.312G ... 639
U.312H ... 639
U.320 ... 637
U.320H ... 640
U.32T ... 643
U.32T15GA ... 644
U.32T2GA ... 644
U.32T6GA ... 644
U.330 ... 637
U.330H ... 640
U.33A ... 642
U.34 ... 647
U.35 ... 647
U.40 ... 651
U.42 ... 648
U.43 ... 917
U.46 ... 883
U.46ACL ... 881
U.46PL ... 883
U.48 ... 882
U.48PL ... 883
U.49AM ... 654
U.49BR1 ... 653
U.49L ... 654
U.49P ... 652
U.49PJ1 ... 652
U.49PJ2 ... 652
U.49PJ3 ... 653
U.49PJ4 ... 653
U.51B ... 650
U.52 ... 648
U.53E ... 658
U.53H ... 658
U.53J1 ... 655
U.53J2 ... 656
U.53K ... 657
U.53KL ... 657
U.53R ... 658
U.53S ... 658
U.53T ... 656
U.54A ... 918
U.66A ... 642
U.7 ... 956
U.89JMA ... 950
U.89M ... 949
U.89M2 ... 949
U.89M20 ... 948
U.89M230 ... 949
U.89M2JM ... 949
U.89M30 ... 949
U.J2 ... 659
U.JA1 ... 659
U.JA3 ... 659
UWG. ... 641
UWP. ... 641

V

V.103MF ... 692
V.252F ... 693
V.254F ... 694
V.256F ... 693
V.258F ... 693
V.260F ... 694
V.320FH ... 702
V.321AH ... 702
V.345F ... 698
V.347F ... 699
V.352F ... 706
V.401F ... 697
V.402F ... 696
V.403F ... 696
V.410F ... 697
V.411F ... 697
V.445F ... 698
V.462F ... 700
V.472F ... 700
V.482F ... 700
V.492F ... 701
V.500F ... 695
V.582F ... 700
V.610RF ... 691
V.620RF ... 691
V.770F ... 702
V.775F ... 703
V.781F ... 705
V.801F ... 705
V.820F ... 706
V.850F ... 703
V.902F ... 701
V.97F ... 692
V.999A ... 706
VE.3 ... 517
VFA. ... 608
VH ... 757
VM ... 699
VR.J154 ... 689
VR.J254 ... 689
VR.J3108 ... 690
VR.R127 ... 688
VR.R227 ... 689
VR.S3136 ... 690

W

W.415HA ... 867
W.430-6 ... 869

W.430HA ... 867
W.450HPA ... 868
WA.21 ... 987
WB.2000GS ... 99
WB.2000W ... 99
WB.DRAWER ... 99
WF ... 752

Y

Y.103B ... 727
Y.105B ... 727
Y.107 ... 728
Y.113B ... 728
Y.116B ... 727
Y.135F ... 728
Y.M46 ... 729
Y.RIV1 ... 729
Y.RIV3 ... 729

10 ... 376
11 ... 377
12 ... 376
13 ... 378
20 ... 379
22 ... 195
31 ... 195
34 ... 196
39 ... 175
40.LA ... 177
40R ... 174
41 ... 176
41.L ... 178
42 ... 219
43 ... 218
44 ... 193
45 ... 197
46.AVSE ... 801
49.SR ... 742
50 ... 203
50.SH ... 205
50.SR ... 741
54A ... 202
55A ... 198
55A.VSE ... 801
57 ... 201
59TX ... 200
59 ... 200
64 ... 187
64C ... 190
65 ... 188
65.PE ... 246
65.PEJ13 ... 443
66A ... 215
66TX ... 216
70A ... 217
74A ... 211
74T ... 212
75 ... 206
75.SR ... 742
76 ... 208
77A ... 953
80.JL7 ... 434
82H ... 427
82H.J ... 424
82H.JP ... 421
82H.SR ... 750
83.AVSE ... 802
83H ... 426
83H.JL ... 424
83H.JP ... 421
83R.JP6 ... 421
83S ... 425
83S.JP ... 421
83SH ... 425
83SH.J ... 424
83SH.JP ... 421
83SH.JPF ... 1024
83SH.ST ... 428
83SHST.JP9 ... 429
84E ... 834
84E.J1 ... 838
84TC ... 432
84TCS ... 433
84TZ ... 431
84TZS ... 430
85.JU10 ... 434
86H ... 422
87H ... 423
89 ... 429
89.JA8 ... 423
89.JL ... 424
89.JP ... 421
89A.JM8 ... 422
89R ... 430
89R.JM8 ... 422
89R.JP6 ... 421
89S ... 429
89S.JP8A ... 421
89TX ... 431
92A ... 209
94A ... 212
94T.AVSE ... 802
94TL.AVSE ... 802
97 ... 210
98B ... 213
99C ... 214
105 ... 222
113A ... 221
113A.SR ... 740
113TA.VSE ... 802
115A ... 223
116 ... 224
117B ... 225
118A ... 225
119 ... 224
120A ... 721
120A.SR ... 756
121A ... 721
121A.SR ... 757
122A.SR ... 757
125A ... 223
126A ... 224
131A ... 720
133A ... 720
134A ... 720
134A.SR ... 756
135A ... 720
136A ... 721
136A.SR ... 756
136B.4 ... 721
137A ... 721
137A.SR ... 756
138A ... 722
139 ... 844
140 ... 841
141 ... 842
142 ... 843
143 ... 843
144 ... 843
145 ... 843
146 ... 842
147 ... 844
148 ... 841
149 ... 841
149.Y ... 842
150 ... 841
150.P ... 844
151 ... 841
152 ... 841
152.Y ... 842
153 ... 842
154 ... 842
156 ... 844
160A ... 210
163 ... 765
165.1 ... 764
167A ... 498
169A ... 497
170A ... 471
171.20EL ... 515
173A ... 765
177A ... 497
177A.F ... 1028
179A ... 496
179A.F ... 1028
180.CPE ... 470
180.CPEF ... 1025
180.VE ... 792
180.VSE ... 797
181A ... 469
181EF ... 469
182A.CP ... 472
183.20CPE ... 478
183.20CPEF ... 1026
184.J ... 516
185.20CPEF ... 1026
185.20G ... 485
185.20TE ... 482
185.20VE ... 791
185.28EG ... 514
186.CPG ... 514
186.SR ... 743
187.AVSE ... 798
187.CPE ... 479
187.CPEF ... 1026
187.G ... 486
187.SR ... 744
187.TE ... 482
187.VE ... 792
188.AVSE ... 798
188.CPE ... 479
188.CPEF ... 1027
188E.16CPE ... 479
188.G ... 486
188.TE ... 483
188.VE ... 793
189.17AVSE ... 799
189.17CPE ... 479
189.17VE ... 793
190.16AVSE ... 798
190.16VE ... 791
190.20CPEF ... 1025
190.CPE ... 476
190.G ... 485
191A.22EL ... 515
192.AVSE ... 797
192.CPE ... 476
192.CPEF ... 1025
192.G ... 484
192.SR ... 743
192.TE ... 481
192.VE ... 790
193.16AVSE ... 799
193.16CPE ... 478
193.16G ... 485
193.16VE ... 792
194.12 ... 474
194.17AVSE ... 799
194.17CPE ... 479
194.17TE ... 483
194.17VE ... 793
195.16CPEF ... 1026
195.16VE ... 792

195.20AVSE 799
195.20TE 482
195.20VE 791
195.CPE 478
195.G 485
196.KS 943
196.TS 943
197A 498
197A.18F 1028
199A 497
199A.18F 494
199A.18F 1028
200C 563
200H 566
202H 567
202H.SR 752
203H 569
204 569
205C 563
205H 566
207A 572
208A 572
209 570
212A 572
213H 569
214 574
215H 569
216 571
217 575
221 601
222A 604
223.S 606
225 966
227 600
227.J 602
227.S 601
229A 605
229.TT 608
230 966
231 608
232 609
233A 544
235.J1 609
236 544
237 602
237.J1 609
238 724
239 726
240.M 726
242 726
245 625
245.J 624
246 580
246.J 581
247 580
247.249JS12 581
247.265JT10 581
247.G 576
248 579
248.J 581
249 579
249.G 576
249.GJ 577
249.J 581
249.SR 753
251A 580
251A.J 581
255G 577
256 581
257A 581
257G 578
259 582
260.P 583
262A 583
263.G 578
263 582
263.SR 753
265 582
265.G18 578
265.SR 753
268 719
269 719
270A.MA 719
271A 734
272A 735
274 735
275 735
283 733
285 661
285.F 662
286A 663
287B 663
292A 544
293A 545
307B 554
307BM 553
309BM 554
311B 554
320B 554
325 725
329 609
334 723
335 724
337A 723
338B 723
344A 722
347 725
373 731
374A 731
376A 730
377A 730
378 730
379A 731
380 731
391.16AVSE 798
391.16CPE 476
391.16G 484
391.16TE 482
391.16VE 791
395 513
396 513
401 474
401.MT 822
402 474
402.MT 824
403 474
403.MT 825
405.10 473
405.10E 828
405.10MT 818
405.10MTF 1027
405.10RE 828
405.10RMT 818
405.12 473
405.12E 829
405.12MT 819
405.15 473
405.8E 827
405.8MT 818
405.E 828
405.MT 818
406.8E 827
406.8MT 818
406.E 828
406.MT 818
406.RMT 818
407.8E 827
407.8MT 818
407.E 828
407.MT 818
410 515
410.S 515
411A 501
412 614
412.AVSE 800
413 614
414.AVSE 800
415.E 829
415.MT 819
416 473
416.12E 830
416.12MT 820
416.E 829
416.MT 820
416.PE 829
416.PMT 820
416.RMT 820
417.PE 829
417.PMT 820
417.SPE 831
417.SPMT 822
418.MT 821
420.E 831
420.MT 823
421 474
421.MT 822
422.MT 824
423.MT 825
423.MTF 1027
424.MT 826
425 473
425.E 828
425F 1027
425.MT 819
426.E 828
426.MT 819
427.E 830
427.MT 821
429.E 830
429.MT 821
431.E 831
431.LE 832
431.LMT 823
431.MT 823
432.E 832
432.LE 832
432.LMT 825
432.MT 825
433.LE 832
433.LMT 826
435 473
435.E 828
435.MT 819
435.RE 828
437.E 831
440 171
440.J 172
440.SR 739
442 474
442.MT 824
443.12MT 823
445.R 502
449B 769
449.Z1B 899
449.Z3A 773
455B 774
464.J1 192
467 501
467 183
467F 186
467FLUO 1028
467S 184
467S.BOX 185
467.01AJ2 501
467.ADAPT 189

469 ... 501
469F ... 1028
470 ... 501
470.MT ... 845
475A ... 500
477.32 ... 499
479.32 ... 499
480.ECG ... 472
481.40 ... 473
482.CPE ... 472
482.EG ... 472
482.SR ... 743
484A ... 471
485 ... 471
490 ... 499
491.G ... 512
495A.EL ... 512
497.32 ... 499
499.32 ... 499
500 ... 506
501 ... 506
502A ... 510
503 ... 510
504A ... 510
505 ... 506
506 ... 506
507A ... 508
509 ... 509
511 ... 506
512 ... 510
513 ... 509
514 ... 511
516 ... 506
517 ... 509
518 ... 978
520A ... 511
521 ... 511
580 ... 507
582.7 ... 508
599 ... 588
599SR ... 755
601 ... 587
602.AVSE ... 800
603F ... 586
605.B ... 588
606A ... 588
607.MT ... 846
608.L12 ... 846
609A ... 606
609A.J ... 607
660A.10SR ... 755
668B ... 589
700 ... 894
705 ... 894
711A ... 788
712A ... 788
714A ... 893
750 ... 923
751 ... 924
777A ... 675
777B ... 674
778A ... 915
779.CL2 ... 671
779.FRT ... 673
779.PC ... 672
779.PEN ... 673
780A ... 915
781 ... 897
784B ... 898
785 ... 898
789.5 ... 1016
795A ... 531
796B ... 531
800A ... 548
801A ... 548
803 ... 534
804 ... 540
805 ... 525
806 ... 527
807C ... 528
809 ... 533
809.J ... 529
811 ... 527
812 ... 530
813B.S ... 539
814 ... 541
816 ... 526
817 ... 538
818 ... 536
819 ... 536
819B ... 537
823 ... 542
825.MT ... 847
826 ... 849
826.0 ... 848
826.1 ... 849
826.2 ... 850
827 ... 849
828 ... 849
829 ... 850
830A ... 603
831 ... 603
832 ... 603
834 ... 850
835 ... 847
836 ... 673
837 ... 418
838.CX58 ... 762
839A ... 855
840 ... 623
840LE ... 622
841 ... 622
841.1 ... 845
841.2 ... 845
841.7 ... 622
841A.4 ... 621
841A.9 ... 622
843 ... 624
844.D ... 617
844.R ... 618
844.S18 ... 618
844.S18L10 ... 620
844.S9 ... 618
844.S9L10 ... 620
844.SE18 ... 618
844.TCL10 ... 620
844.TRL10 ... 619
844.TTL10 ... 619
845.1 ... 846
848B.100 ... 854
850 ... 977
851B ... 977
859H ... 568
860H ... 568
861D ... 972
862D ... 973
863D ... 973
864D ... 973
866D ... 972
867D ... 974
868D ... 972
870 ... 974
871B ... 975
872A ... 975
874A ... 975
875 ... 976
876A ... 976
877A ... 977
880 ... 610
882A ... 610
883 ... 610
884A ... 610
885 ... 662
887A ... 612
891A.PL ... 977
893 ... 547
895A ... 977
897 ... 546
902 ... 976
906A ... 976
908A ... 974
909A ... 975
911 ... 902
911B ... 903
912 ... 901
914 ... 906
916 ... 911
935A ... 915
947 ... 854
980 ... 621
982 ... 611
985 ... 611
990.B ... 613
990.BF ... 612
990.LB ... 613
990.LRB0 ... 613
990.RB0 ... 613
996.16 ... 616
996.5 ... 615
996.8 ... 616
996A.12 ... 616
997A.20 ... 614
1003B ... 852
1075.G ... 855
1116B.BW ... 853
1130.1 ... 855
1150.MT ... 847
1200 ... 531
1202 ... 531
1222 ... 732
1223 ... 733
1230 ... 853
1260 ... 719
1261H.SR ... 751
1262H ... 570
1262H.SR ... 751
1263H ... 570
1300 ... 523
1300.C2 ... 525
1300E ... 523
1320 ... 523
1350 ... 524
1355A ... 524
1365 ... 524
1500 ... 94
1802A ... 851
1803A ... 851
1804B ... 851
1813 ... 845
1817 ... 846
1820.AVSE ... 801
1830 ... 848
1885.00 ... 539
2000.AA1 ... 94
2000.AB1M3 ... 95
2000.AB32M3 ... 96
2000.BB1M3 ... 96
2000.BBM140A ... 9
2000.BBM150A ... 7
2000.BBM160A ... 5
2026.M100A ... 16
2029.BUR1 ... 22
2029.EM41A ... 20
2038.BUR1 ... 22
2038.EM40A ... 19

2038.INFO 21
2046.JA 38
2046.SG3A 36
2046.SG4A 35
2050.E15 33
2050.E17 31
2050.LT3 17
2050.M100A 16
2050.M110-A 14
2060.LT3 17
2061.EM41A 20
2068.MV9 47
2068.UV12 48
2070.E18 30
2070.M120A 12
2074.M130A 10
2074.M140A 8
2092.M120A 12
2092.M130A 11
2092A 153
2120.E18 30
2120.M110A 14
2138.EL29 29
2138.EL30 28
2138.EL31 27
2138.EL32 26
2138.EL33 25
2138.EL34 24
2138.EL35 23
2143.M 42
2163.E16 32
2163.RFCL 37
2180.SE 34
2201 86
2201.M130A 11
2201.M120A 13
2201.MS1 41
2202XL 108
2205 107
2208.EM41A 20
2210 107
2216 108
2220A 152
2225.A1 77
2235 98
2238.EM40A 19
2245 98
2250 97
2600.A2 78
2701 101
2702 100
2702.TAB 101
2703 101
2930.B 104
2930.C 105
2936B 102
2937B 103
2938B 103
2939B 104
2940B 106
3067 552
3071 552
4707SPL 1030
4708DPL 1030
4708SPL 1030
4709SPL 1030
4710DPL 1030
4710SPL 1030
4712SPL 1030
4714SPL 1030
4749XLHS 1032
4920FL 1031
4922FL 1031
4924FL 1031
4926FL 1031
4928FL 1031
4930FL 1031
4932FL 1031
4934FL 1031
5012DPL 1031
5014DPL 1031
5016DPL 1031
5018DPL 1031
5020DPL 1031
5112 559
5116 559
5117 559
5249XLHS 1032
587110 787
629731 776
629757 776
629765 777
629773 777
629781 778
629790 778
629853 777
629861 777
629888 777
629896 778
629909 779
629968 779
629984 778
640171 774
640180 623
643743 785
653255 785
658689 787
661600 787
664499 782
664501 782
664510 782
664528 782
664536 782
664544 782
669273 776
673838 768
678006 605
678014 605
693687 782
693695 782
693708 782
693716 782
697469 783
697493 783
697506 783
697514 783
697522 783
697531 783
697549 783
697590 782
697602 782
697611 782
697637 782
697645 782
697653 782
702571 787
703232 162
793898 607
793936 763
809100 533
809150 533
809200 533
819391 767
819809 767
821415 766
821431 767
821440 766
821458 767
838305 775
855367 773
872271 760
985510 786
985548 775
985734 781
985753 769
985755 772
985756 772
985757 771
985758 773
985761 764
985762 764
985763 774
985764 774
985765 774
985801 781
985817 781
985818 781
985820 781
985824 781
985826 781
985829 781
985836 781
985894 769
985895 771
985896 772
985897 772
985898 771
985899 772
985902 772
985912 615
985913 770
985914 770
985915 770
985916 770
985917 770
985918 770
985919 770
985920 770
985921 770
985922 770
985923 770
985925 615
985933 781
985936 762
985951 761
985952 761
985953 761
985954 761
985955 761
985956 761
985957 761
985962 762
985964 762
985966 769
985968 781
985969 781
985972 781
985974 781
985978 781
985984 781
985995 781
986014 772
986015 772
986022 772
986026 772
986051 786
986052 784
986058 764
986059 764
986075 774
986095 770
986107 786
986108 784

LEGAL INFORMATION



www.facom.com

FACOM SAS, capital €24 414 487.20
328 630 645 R.C.S. EVRYIntra-Community VAT No. FR 49328630645

- This catalogue supersedes all previous issues. All rights reseved in all countries.
  No part of this publication may be reproduced without our prior written consent.
- Printed in France.
- Copyright: 15/11/2012.
- Print run of this catalogue 489,400 copies in 7 languages.
- In line with Facom's policy of continual product improvements to meet user needs and technological developments, all models and sets listed in this catalogue (photographs, specifications, sizes and weights) may be upgraded or discontinued without notice and without any obligation on our part to modify tools or equipment sold previously.
- Sections 01, 17, 19, and 21 show tool sets, the contents of which are listed in tables. Tool quantities (Qty) given for each reference indicate the number of items included in the set. Set contents may be revised as product ranges are developed, or subject to availability.
- The recommendations for use and safety given in this catalogue do not replace accepted good practice or the safety-related legal and regulatory provisions.
- References to standards in force on the date of publishing of this catalogue are not contractually binding.
- Product performances quoted are based on tests carried out in Facom laboratories, and are not binding.
- Facom undertakes to continue to provide spare parts for its discontinued products for a period of two years following their removal from sale.
  In the event that said parts become unavailable before the end of this two year period, Facom will propose an alternative solution.

- Trademarks held by Stanley Works (Europe) GmbH used under licence by Facom SAS:
Facom – Facom Aerospace – Facom Elec – Facom MICRO-TECH – Facom Technospace - Ergonomie Facom – Couleur Bleu et rouge – Couleur Bleue - Facom VSE 1000 VOLTS - Garantie Facom – Service Facom – L'Outillage Facom – L'atelier Le Club des Pros - Borneo – Challenger – CDX - Dela – Discover - Easotork – Enduro - Ergotwist – Jivaro – Megaflex – Megalock – Neolock - OGV – ProBlade – Profiber - Protwist – Proto - Serkan – Swingo - Toukan.

- Trademarks held by third parties: **Circlips** by Nomel - **Tri-wing,Torq set** by Phillips Screw C° - **Pozidriv** by European Industrial Service - **Robertson** by Robertson Inc. - **Teflon** by E.I. Du Pont De Nemours - **Torx,Torx Plus,Resistorx** byAcument Intellectual Properties - **Truarc** by Truarc Cy.

Design and production: EVOLUTION
HAVAS 360

Photography:
BRANDADDICTIVE
MELISSE

Printing, finishing and binding: MAURY Group Printer

Catalogue printed with respect to the environment.

IMPRIM'VERT
Votre imprimeur agit pour l'environnement

TABLE OF CONTENTS

WORKSTATIONS AND TOOL STORAGE

1	TOOL SETS	2
2	ROLLER CABINETS AND WORKSHOP FURNITURE	52
3	TOOLBOXES, CASES AND CHESTS	142

GENERAL TOOLING

4	FIXED-SIZE AND ADJUSTABLE WRENCHES	166
5	RATCHETS - SOCKETS - ACCESSORIES	226
6	TORQUE CONTROL	340
7	SCREWDRIVERS - KEYS - BITS	382
8	PLIERS - CIRCLIPS® PLIERS - LOCK-GRIP PLIERS	466
9	METROLOGY - MEASURING - MARKING-OUT	520
10	HAMMERS - IMPACT TOOLS	560
11	SAWING - DRILLING - CUTTING	584
12	PULLERS	626
13	LIGHTING	668
14	POWER TOOLS	676
15	PERSONAL EQUIPMENT - MAINTENANCE	714
16	NON-SPARKING TOOLS	736

SPECIALIST TOOLING

17	ELECTRICITY	758
18	ELECTRONICS	814
19	AUTOMOTIVE	856
20	HEAVY GOODS VEHICLES - INDUSTRIAL VEHICLES	988
21	AEROSPACE	1018



AN INTERNATIONAL PRESENCE

Eastern Europe, North West Africa, Middle East
FACOM SAS
6/8 rue Gustave Eiffel - BP 99
91423 MORANGIS CEDEX - FRANCE
Tél. +33 (0)1 64 54 45 45
Fax +33 (0)1 69 09 60 93
www.facom.com

South East Asia, Singapore, China, Thailand, Indonesia, Malaisia
The Stanleyworks (Shanghai) Co.
Ltd8/F,Lujiazui Fund Tower
No.101,Zhulin Road,PuDong
District Shanghai,20122,China.
Tél. 8621-6162 1858
Fax 8621-5080 5101

USA
Stanley Black & Decker, Inc.
505 North Cleveland Ave
Westerville, OH 43082
Phone 800-800-TOOL
Fax 770-648-9108

Latin America
FACOM S.L.A
9786 Premier Parkway
Miramar, Florida 33025 USA
Tél. +1 954 624 1110
Fax +1 954 624 1152

Belgium
Luxembourg
Stanley Black&Decker Belgium BVBA
Egide Walschaertsstraat 14-16
2800 Mechelen
Tél. +32 (0)15 47 39 30
Fax +32 (0)15 47 39 70
Facom.Belgium@sbdinc.com

Scandinavia
FACOM Nordic
Flöjelbergsgatan 1c
SE-431 35 Mölndal, Sweden
Box 94, SE-431 22 Mölndal, Sweden
Tel. +45 7020 1510
Tel. +46 (0)31 68 60 60
Tel. +47 22 90 99 10
Tel. +358 (0)10 400 4333
Facom-Nordic@sbdinc.com

Spain
FACOM HERRAMIENTAS SRLU
C/Luis 1°, n° 60 - Nave 95 - 2ª Pta
Polígono Industrial de Vallecas
28031 MADRID
Tél. 91,778,21,13
Fax 91,778,27,53
facom@facomherramientas.com

The Netherlands
Stanley Black & Decker Netherlands B.V.
Holtum Noordweg 35
6121 RE BORN - NEDERLAND
Tél. 0800 236 23 62
Fax 0800 237 60 20
Facom.Netherlands@sbdinc.com

Switzerland
Stanley Works Europe Gmbh
Sitz: Dübendorf
In der Luberzen 42
CH-8902 Urdorf
Tél. +41-44-755-60-70
Fax +41-44-730-70-67
verkaufch.sbd@sbdinc.com
www.facom.com

Portugal
FACOM S.A.S.
6/8 rue Gustave Eiffel - BP 99
91423 MORANGIS CEDEX - France
Tél. +33 (0)1 64 54 45 45
Fax +33 (0)1 69 09 60 93
www.facom.com

CONTACTS



Germany
STANLEY BLACK & DECKER Deutschland GmbH
Geschäftsbereich FACOM
Black & Decker Str. 40
65510 Idstein
Tel. +49 (0) 6126 21 0
Fax +49 (0) 6126 21 2114
verkaufde.facom@sbdinc.com
www.facom.com

Czech Republic
Slovakia
Stanley Black & Decker Czech Republic s.r.o.
Türkova 5b
149 00 Praha 4 - Chodov
Tél. +420 261 009 780
Fax +420 261 009 784

Italy
SWK UTENSILERIE S.R.L.
Sede Operativa : Via Volta 3
21020 MONVALLE (VA)
Tél. 0332.790284 / 0332.790320
Fax 0332.790330
www.facom-tools.it

Austria
STANLEY BLACK & DECKER Austria GmbH
Oberlaaerstrasse 248
A-1230 Wien
Tel. +43 (0) 1 66116-0
Fax. +43 (0) 1 66116-613
verkaufat.sbd@sbdinc.com
www.facom.at

Poland
Stanley Black & Decker Polska Sp. z o.o
ul. Postępu 21D, 02-676 Warszawa
Tél. +48 22 46 42 700
Fax +48 22 46 42 701
facom@facom.pl

United Kingdom
Stanley Black & Decker UK Limited
3 Europa Court-Sheffield Business Park
Sheffield, S9 1XE
Tél. +44 1142 917266
Fax +44 1142 917131
www.facom.com

Greece
ΜΠΑΡΜΠΕΡΗΣ ΕΠΕ
Αργοναυτών 7-9
151 26 ΜΑΡΟΥΣΙ
Τηλ. 210-8062811 ή 12
Fax 210-8029352
www.facom.gr

France
FACOM S.A.S.
6/8 rue Gustave Eiffel - BP 99
91423 MORANGIS CEDEX - France
Tél. +33 (0)1 64 54 45 45
Fax +33 (0)1 69 09 60 93
www.facom.com

Technical information :
+33 (0)1 64 54 45 14
Monday to Friday, 8.00 to 12.30 and 13.15 to 18.00

Customised tools :
+33 (0)1 64 54 46 70
Fax : 33 (0)1 69 74 29 04
Monday to Friday, 8.00 to 12.15 and 13.30 à 17.00

Your Facom contact or distributor :

Name : .....

Tel. : .....

@ .....

F13

FACOM

WWW.FACOM.COM