
TOOL SOLUTIONS FOR MAXIMUM

# PRODUCTIVITY AND SAFETY

FACOM®

# SMART SOLUTIONS FOR ALL PROFESSIONS

Safety and productivity are now of paramount importance to industrial professions. The annual estimated impact of FOD (Foreign Object Damage) comes to $13 Bn, with indirect costs often exceeding direct costs. This observation is valid for all sectors, resulting from material and human accidents, production stoppages, late deliveries, etc.

## PRE-SHAPED FOAM MODULES

A precious visual aid for instant tool inventory and presence check in your roller cabinet.

## FACOM • FLUO RANGE

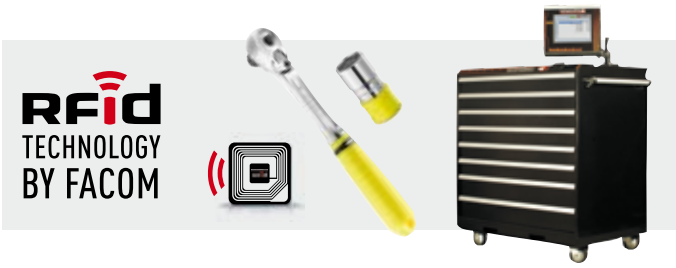
- Detectable with a UV lamp, the Fluo range is a simple and unique answer to find your tools when working in dark areas.
- A solution reinforcing safety by reducing the risks of accidents due to lost tools.
- Over 400 product references in the range.

FACOM FLUO

## RFID TECHNOLOGY

- Tools directly detectable thanks to a seamlessly integrated chip.
- Optimised traceability, no more lost tools in sensitive areas.
- Automated management of your tooling and its inventory with RFID Facom-Cribmaster technologies.
- A range of over 700 product references.

FACOM RFID CribMaster



# A RANGE OF TOOLS AT THE FOREFRONT OF INNOVATION

## RFID TECHNOLOGY BY FACOM

CribMaster

The RFID technology (Radio Frequency Identification) ensures remote tool identification by means of its built-in electronic chip. The latter uses energy propagated at short distances by the radio transmitter signal: no batteries required. Invisible and tough, RFID chips guarantee optimum operation for many years. The radio technology used has no impact on the external environment.

## **CHIP SEAMLESSLY INTEGRATED** TO THE TOOL

For each tool, the Facom Engineers have integrated the RFID chip guaranteeing the best possible data transmission. Encapsulated under an anti-shock shell, the chip is protected durably, including from chemical agents, without altering the tool's basic characteristics or its ergonomics.

## **MULTIPLE BENEFITS** IN THE WORKSHOP

- High quality chips programmed to guarantee the best detection.
- Tools traceable in the workshop by zones of use.
- Fluorescent tools can be found up to 3 meters away in dark areas.
- Broad range covering all applications.

Synergy between the Facom and Cribmaster brands from the Stanley Black&Decker group allowed the most advanced solution in the market for tooling traceability to be developed: tools, roller cabinets, zoning terminals, management software. As practices or risks are not the same in all companies, our advisors tailor your RFID solution to your requirements.

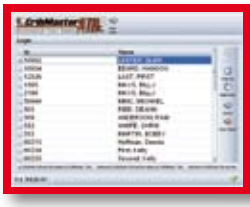
Two brands from the
Industrial & Automotive Repair division
of the Stanley Black&Decker group.

## BOOSTING YOUR PRODUCTIVITY

Your roller cabinets are operational as of their installation. The roller cabinet is supplied with its tools organised in customised foam modules. The software can be configured to meet your requirements:

- Tool entry-exit recording.
- Automatic inventory.
- Customised access control with restricted access possible.
- Tool localisation by workshop zone.

# CUTTING EDGE TECHNOLOGY FOR SAFETY AND PRODUCTIVITY

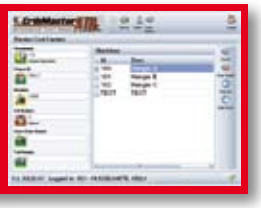


**1**

**User identification**
on the roller cabinet,
by badge or personal code

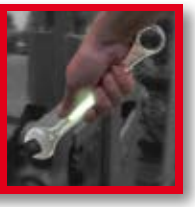
**2**

**The management software**
is activated



**3**

**The user picks or returns the tool, which is recorded.**



**4**

**The inventory**
is updated automatically
when the roller cabinet
is closed

**5**

**The zoning terminals**
monitor the tool throughout
its use.

RFid
TECHNOLOGY
BY FACOM

CribMaster
Inventory Management System

# ALWAYS A FACOM TOOL SUITED TO YOUR NEEDS

In fields such as nuclear, power grids, wind generators, drilling platforms, aerospace, or naval construction or repair, Facom develops on-demand securing solutions.

## FACOM FOREIGN MATERIAL EXCLUSION SECURES YOUR TOOLS FOR WORKING AT HEIGHT.

For your teams working at height, Facom offers securing cords built into the tools and complying with their original ergonomics of use.
By preventing falling tools, they offer a considerable benefit in terms of productivity and safety.


Tools and roller cabinet developed upon request from EDF

# CUSTOM-MADE SOLUTIONS


- **Your workshop in your color scheme.**
- **Tool organisation modules** adapted per product selection.
- **Workshop roller cabinets** with specific drawer assortments.
- **Special bits** for torque wrenches.
- **Finish** and marking of specific products.
- **Change** of material.

Contact:
Services outils spéciaux
+33 (0)1 64 54 46 70
Fax: +33(0)1 69 74 29 04
Monday to Friday from 8:15 to 12:15 and 13:30 to 17:00

# CLOSE TO YOUR NEEDS, ALL OVER THE WORLD

Wherever you operate, our international distribution network and our partners offer access to the best tooling and all the FACOM services you need.

**FACOM CUSTOMERS INCLUDE**
AIR FRANCE, ALSTOM, AREVA, BOMBARDIER, EADS, EDF, PEUGEOT CITROËN, RENAULT NISSAN, ROLLS-ROYCE, SAFRAN, THALES, TOTAL, TOYOTA, VALEO, VINCI.

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FACOM.RFID



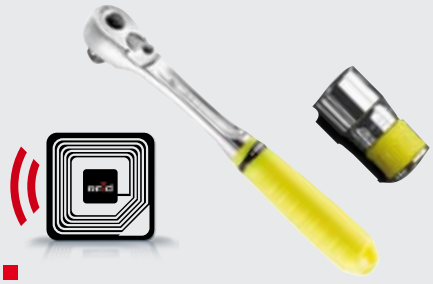
FACOM.FLUO

# Combination wrenches



## PRODUCTIVITY AND SAFETY

RFID TECHNOLOGY BY FACOM



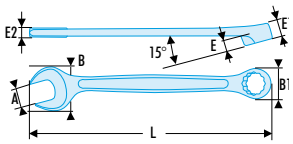
CribMaster Inventory Management System

For further information on RFID technology, scan this QR code with your smartphone or your tablet.

www.facom.com

## Combination wrenches

### 440 - Metric combination wrenches - RFID




**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 ISO 1711-1, DIN 3113, ASME B107.100**

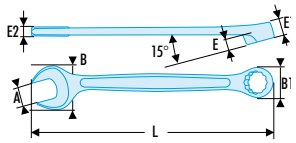
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Standard wrench for all current applications.
- High mechanical 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: 5 to 41 mm.
- Presentation: satin chrome finish.

RFID

| | A [mm] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ⚖ [g] |
|---|---|---|---|---|---|---|---|---|
| **440.5HRFID** | 5 | 13,3 | 9,2 | 3,1 | 6,0 | 3,6 | 115 | 20 |
| **440.5.5HRFID** | 5,5 | 13,3 | 9,2 | 3,1 | 6,0 | 3,8 | 115 | 20 |
| **440.6RFID** | 6 | 14,1 | 10,0 | 3,1 | 6,0 | 3,8 | 115 | 25 |
| **440.7RFID** | 7 | 17,2 | 11,2 | 3,4 | 6,2 | 3,9 | 122 | 25 |
| **440.8RFID** | 8 | 19,2 | 12,8 | 3,5 | 6,7 | 4,7 | 133 | 35 |
| **440.9RFID** | 9 | 21,2 | 14,2 | 3,9 | 7,1 | 4,7 | 138 | 40 |
| **440.10RFID** | 10 | 23,0 | 15,0 | 4,2 | 7,6 | 5,2 | 145 | 45 |
| **440.11RFID** | 11 | 24,5 | 16,9 | 4,6 | 8,1 | 5,5 | 155 | 50 |
| **440.12RFID** | 12 | 27,0 | 18,0 | 4,4 | 8,4 | 5,8 | 162 | 65 |
| **440.13RFID** | 13 | 28,7 | 19,3 | 4,8 | 8,6 | 6,1 | 170 | 75 |
| **440.14RFID** | 14 | 31,0 | 21,1 | 5,7 | 9,5 | 6,4 | 180 | 90 |
| **440.15RFID** | 15 | 32,6 | 22,2 | 5,9 | 10,0 | 6,8 | 185 | 100 |
| **440.16RFID** | 16 | 35,6 | 23,9 | 6,4 | 10,5 | 7,3 | 195 | 120 |
| **440.17RFID** | 17 | 37,0 | 25,3 | 6,5 | 10,9 | 7,6 | 202 | 135 |
| **440.18RFID** | 18 | 38,7 | 26,0 | 7,2 | 11,4 | 8,1 | 208 | 160 |
| **440.19RFID** | 19 | 41,2 | 27,8 | 7,2 | 11,9 | 8,3 | 216 | 180 |
| **440.20RFID** | 20 | 43,1 | 29,5 | 6,3 | 12,3 | 8,6 | 224 | 195 |

| | A [mm] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ⚖ [g] |
|---|---|---|---|---|---|---|---|---|
| **440.21RFID** | 21 | 45,4 | 30,9 | 7,8 | 12,8 | 8,8 | 233 | 215 |
| **440.22RFID** | 22 | 46,9 | 32,3 | 8,3 | 13,3 | 9,0 | 248 | 240 |
| **440.23RFID** | 23 | 49,0 | 33,6 | 8,7 | 13,8 | 9,3 | 257 | 265 |
| **440.24RFID** | 24 | 51,0 | 35,0 | 8,9 | 14,2 | 9,7 | 267 | 300 |
| **440.25RFID** | 25 | 53,0 | 36,4 | 9,4 | 14,7 | 9,9 | 274 | 325 |
| **440.26RFID** | 26 | 55,5 | 37,8 | 9,8 | 15,1 | 10,1 | 285 | 355 |
| **440.27RFID** | 27 | 58,0 | 39,2 | 8,9 | 15,6 | 10,4 | 295 | 385 |
| **440.28RFID** | 28 | 60,7 | 40,6 | 10,6 | 16,1 | 10,7 | 305 | 425 |
| **440.29RFID** | 29 | 63,0 | 42,0 | 10,8 | 16,6 | 11,2 | 320 | 485 |
| **440.30RFID** | 30 | 65,0 | 43,5 | 11,2 | 17,1 | 11,5 | 340 | 540 |
| **440.32RFID** | 32 | 68,0 | 46,1 | 11,5 | 18,0 | 12,5 | 355 | 650 |
| **440.33RFID** | 33 | 69,8 | 47,0 | 11,8 | 18,5 | 12,8 | 380 | 425 |
| **440.34RFID** | 34 | 72,0 | 48,9 | 12,8 | 19,0 | 13,0 | 390 | 755 |
| **440.35RFID** | 35 | 74,3 | 51,0 | 12,8 | 19,5 | 13,5 | 430 | 900 |
| **440.36RFID** | 36 | 76,0 | 53,0 | 13,2 | 20,0 | 14,0 | 440 | 955 |
| **440.38RFID** | 38 | 80,0 | 56,0 | 14,1 | 22,0 | 15,2 | 450 | 1140 |
| **440.41RFID** | 41 | 85,0 | 58,3 | 14,7 | 23,0 | 16,0 | 460 | 1300 |

## 440 - Inch combination wrenches - RFID



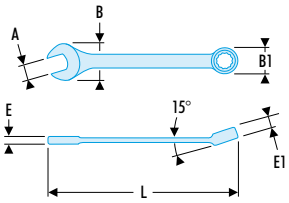

**ASME B107.100, SAE AS954G**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|---|---|
| **440.1/4RFID** | 1/4 | 14,1 | 10,0 | 3,1 | 6,0 | 3,8 | 115 | 25 |
| **440.5/16RFID** | 5/16 | 19,2 | 12,8 | 3,5 | 6,7 | 4,7 | 133 | 35 |
| **440.11/32RFID** | 11/32 | 21,2 | 14,2 | 3,9 | 7,1 | 4,7 | 138 | 40 |
| **440.3/8RFID** | 3/8 | 23,0 | 15,0 | 4,2 | 7,6 | 5,2 | 145 | 50 |
| **440.7/16RFID** | 7/16 | 24,5 | 16,9 | 4,6 | 8,1 | 5,5 | 155 | 55 |
| **440.1/2RFID** | 1/2 | 28,7 | 19,3 | 4,8 | 8,6 | 6,1 | 170 | 75 |
| **440.9/16RFID** | 9/16 | 31,0 | 21,1 | 5,7 | 9,5 | 6,4 | 180 | 90 |
| **440.5/8RFID** | 5/8 | 35,6 | 23,9 | 6,4 | 10,5 | 7,3 | 195 | 120 |
| **440.11/16RFID** | 11/16 | 37,0 | 25,3 | 6,5 | 10,9 | 7,6 | 202 | 135 |

| | A ["] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **440.3/4RFID** | 3/4 | 41,2 | 27,8 | 7,2 | 11,9 | 8,3 | 216 | 180 |
| **440.13/16RFID** | 13/16 | 43,1 | 29,5 | 6,3 | 12,3 | 8,6 | 224 | 195 |
| **440.7/8RFID** | 7/8 | 46,9 | 32,3 | 8,3 | 13,3 | 9,0 | 248 | 240 |
| **440.15/16RFID** | 15/16 | 51,0 | 35,0 | 8,9 | 14,2 | 9,7 | 267 | 300 |
| **440.1PRFID** | 1 | 53,0 | 36,4 | 9,4 | 14,7 | 9,9 | 274 | 325 |
| **440.1P1/16RFID** | 1'1/16 | 58,0 | 39,2 | 8,9 | 15,6 | 10,4 | 295 | 385 |
| **440.1P1/8RFID** | 1'1/8 | 60,7 | 40,6 | 10,6 | 16,1 | 10,7 | 305 | 425 |
| **440.1P1/4RFID** | 1'1/4 | 68,0 | 46,1 | 11,5 | 18,0 | 12,5 | 355 | 650 |

## 39 - Metric short-reach combination wrenches - RFID




**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 ISO 1711-1, ASME B107.100**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Short combination wrenches: the short handle and compact head allow for ease of access. 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] |
|---|---|---|---|---|---|---|---|
| **39.5HRFID** | 5 | 11,8 x 9,0 | 3,5 | 4,0 | 6 | 82 | 15 |
| **39.5.5HRFID** | 5,5 | 11,8 x 9,5 | 3,5 | 4,0 | 6 | 84 | 15 |
| **39.6RFID** | 6 | 15,0 x 10,4 | 4,1 | 5,0 | 12 | 90 | 20 |
| **39.7RFID** | 7 | 15,0 x 11,5 | 4,1 | 5,0 | 12 | 90 | 25 |
| **39.8RFID** | 8 | 17,2 x 12,5 | 4,5 | 5,8 | 12 | 94 | 25 |
| **39.9RFID** | 9 | 19,4 x 14,0 | 4,8 | 6,0 | 12 | 98 | 30 |
| **39.10RFID** | 10 | 21,5 x 15,3 | 5,1 | 6,4 | 12 | 103 | 35 |

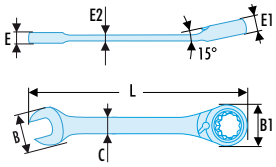
| | A [mm] | B x B1 [mm] | E [mm] | E1 [mm] | [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|
| **39.11RFID** | 11 | 23,7 x 16,8 | 5,3 | 6,8 | 12 | 109 | 40 |
| **39.12RFID** | 12 | 26,0 x 18,0 | 5,5 | 7,5 | 12 | 127 | 55 |
| **39.13RFID** | 13 | 28,0 x 19,5 | 5,8 | 8,0 | 12 | 141 | 60 |
| **39.14RFID** | 14 | 30,2 x 20,8 | 6,0 | 8,5 | 12 | 147 | 75 |
| **39.15RFID** | 15 | 32,3 x 22,1 | 6,4 | 9,0 | 12 | 152 | 85 |
| **39.16RFID** | 16 | 34,4 x 23,6 | 6,7 | 9,6 | 12 | 158 | 95 |
| **39.17RFID** | 17 | 36,5 x 25,0 | 6,9 | 10,0 | 12 | 165 | 105 |

# Standard ratchet combination wrenches



## Standard ratchet combination wrenches

### 467 - Metric standard ratchet combination wrenches - RFID



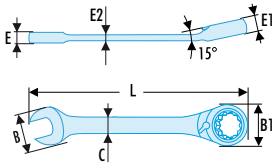

**NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|---|---|---|
| **467.6RFID** | 6 | 15,0 | 14,0 | 9,7 | 4,0 | 6,9 | 4,5 | 128 | 35 |
| **467.7RFID** | 7 | 16,7 | 17,0 | 9,7 | 4,3 | 6,5 | 4,5 | 140 | 35 |
| **467.8RFID** | 8 | 16,7 | 17,0 | 9,7 | 4,3 | 6,5 | 4,5 | 140 | 35 |
| **467.9RFID** | 9 | 18,7 | 18,6 | 10,3 | 4,5 | 6,9 | 4,5 | 149 | 45 |
| **467.10RFID** | 10 | 20,8 | 20,2 | 11,3 | 5,0 | 7,3 | 4,9 | 158 | 55 |
| **467.11RFID** | 11 | 23,0 | 22,0 | 12,2 | 5,3 | 7,7 | 5,2 | 165 | 65 |
| **467.12RFID** | 12 | 24,6 | 23,4 | 13,0 | 5,5 | 8,2 | 8 | 171 | 75 |
| **467.13RFID** | 13 | 26,8 | 25,5 | 14,5 | 6,1 | 8,6 | 8 | 178 | 95 |
| **467.14RFID** | 14 | 29,0 | 26,9 | 15,1 | 6,5 | 9,0 | 8,5 | 190 | 115 |
| **467.15RFID** | 15 | 31,0 | 28,3 | 16,1 | 6,8 | 9,4 | 9 | 199 | 135 |

| | A [mm] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| **467.16RFID** | 16 | 33,0 | 29,8 | 17,3 | 7,1 | 9,9 | 10 | 208 | 150 |
| **467.17RFID** | 17 | 35,5 | 31,8 | 18,2 | 7,5 | 10,3 | 11 | 225 | 180 |
| **467.18RFID** | 18 | 37,5 | 32,7 | 19,6 | 8,1 | 10,7 | 11,1 | 236 | 210 |
| **467.19RFID** | 19 | 39,4 | 34,0 | 20,4 | 8,6 | 11,2 | 11,1 | 247 | 240 |
| **467.21RFID** | 21 | 45,8 | 40,1 | 23,9 | 9,0 | 13,0 | 12 | 287,8 | 350 |
| **467.22RFID** | 22 | 45,8 | 40,1 | 23,9 | 9,0 | 13,0 | 12 | 287,8 | 350 |
| **467.24RFID** | 24 | 51,8 | 46,5 | 26,4 | 10,0 | 14,5 | 12,5 | 321 | 490 |
| **467.27RFID** | 27 | 56,4 | 52,4 | 29,2 | 10,8 | 15,5 | 13 | 356,6 | 670 |
| **467.30RFID** | 30 | 62,7 | 58,1 | 31,7 | 11,5 | 17,0 | 13,5 | 400,7 | 880 |
| **467.32RFID** | 32 | 66,4 | 61,9 | 33,7 | 12,4 | 17,5 | 14 | 423,5 | 1090 |

### 467 - Inch standard ratchet combination wrenches - RFID




**ASME B107.100**

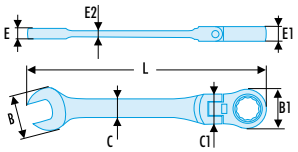
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Standard ratchet combination wrenches: for all current applications.
- 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°.
- Open end head angled at 15°.
- Dimensions in inches: from 1/4" to 15/16".
- Presentation: satin chrome finish.

| | A [mm] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| **467.1/4RFID** | 1/4 | 15,0 | 14,0 | 9,7 | 4,0 | 6,9 | 4,5 | 128 | 35 |
| **467.5/16RFID** | 5/16 | 16,7 | 17,0 | 9,7 | 4,3 | 6,5 | 4,5 | 140 | 35 |
| **467.11/32RFID** | 11/32 | 18,7 | 18,6 | 10,3 | 4,5 | 6,9 | 4,5 | 149 | 45 |
| **467.3/8RFID** | 3/8 | 20,8 | 20,2 | 11,3 | 5,0 | 7,3 | 4,9 | 158 | 55 |
| **467.7/16RFID** | 7/16 | 23,0 | 22,0 | 12,2 | 5,3 | 7,7 | 5,2 | 165 | 65 |
| **467.1/2RFID** | 1/2 | 26,8 | 25,5 | 14,5 | 6,1 | 8,6 | 8 | 178 | 95 |

| | A [mm] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| **467.9/16RFID** | 9/16 | 29,0 | 26,9 | 15,1 | 6,5 | 9,0 | 8,5 | 190 | 115 |
| **467.5/8RFID** | 5/8 | 33,0 | 29,8 | 17,3 | 7,1 | 9,9 | 10 | 208 | 150 |
| **467.11/16RFID** | 11/16 | 35,5 | 31,8 | 18,2 | 7,5 | 10,3 | 11,1 | 225 | 180 |
| **467.3/4RFID** | 3/4 | 39,4 | 34,0 | 20,4 | 8,6 | 11,2 | 11,1 | 247 | 240 |
| **467.7/8RFID** | 7/8 | 45,8 | 40,1 | 23,9 | 9,0 | 13,0 | 12 | 287,8 | 350 |
| **467.15/16RFID** | 15/16 | 51,8 | 46,5 | 26,4 | 10,0 | 14,5 | 12,5 | 321 | 490 |

## Hinged ratchet combination wrench series

### 467F - Metric hinged jointed combination wrenches - RFID

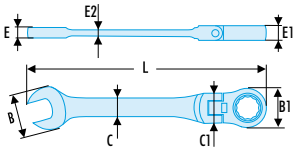



**NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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: 8 to 19 mm.
- Presentation: satin chrome finish.

| | A [mm] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ⚖ [g] |
|---|---|---|---|---|---|---|---|---|---|
| **467F.8RFID** | 8 | 16,2 | 16,7 | 9,0 | 4,3 | 6,5 | 4,5 | 127,5 | 50 |
| **467F.9RFID** | 9 | 18,2 | 18,6 | 10,0 | 4,6 | 6,9 | 4,5 | 132,0 | 55 |
| **467F.10RFID** | 10 | 20,3 | 20,1 | 10,8 | 5,0 | 7,3 | 4,9 | 136,5 | 65 |
| **467F.11RFID** | 11 | 22,5 | 21,8 | 11,8 | 5,4 | 7,7 | 5,2 | 141,5 | 70 |
| **467F.12RFID** | 12 | 24,8 | 23,0 | 12,8 | 5,8 | 8,2 | 8 | 148,0 | 85 |
| **467F.13RFID** | 13 | 26,8 | 25,2 | 13,6 | 6,1 | 8,6 | 8 | 155,0 | 100 |
| **467F.14RFID** | 14 | 28,7 | 26,8 | 14,2 | 6,4 | 9,0 | 8,5 | 161,0 | 115 |
| **467F.15RFID** | 15 | 30,5 | 28,3 | 15,4 | 6,9 | 9,4 | 9 | 170,0 | 135 |
| **467F.16RFID** | 16 | 32,9 | 29,8 | 16,0 | 7,2 | 9,9 | 10 | 180,0 | 160 |
| **467F.17RFID** | 17 | 34,5 | 31,8 | 16,9 | 7,6 | 10,3 | 11 | 191,0 | 180 |
| **467F.18RFID** | 18 | 37,0 | 32,8 | 18,0 | 8,0 | 10,7 | 11,1 | 204,0 | 210 |
| **467F.19RFID** | 19 | 39,2 | 33,9 | 19,5 | 8,6 | 11,2 | 11,1 | 216,0 | 240 |

### 467F - Inch hinged jointed combination wrenches - RFID




**ASME B107.100**

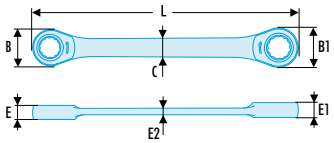
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Hinged head ratchet combination wrenches: to reach difficult 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°.
- Dimensions in inches: from 5/16 to 3/4".
- Presentation: satin chrome finish.

| | A ["] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ⚖ [g] |
|---|---|---|---|---|---|---|---|---|---|
| **467F.5/16RFID** | 5/16 | 16,2 | 16,7 | 9,0 | 4,3 | 6,5 | 4,5 | 127,5 | 50 |
| **467F.3/8RFID** | 3/8 | 20,3 | 20,1 | 10,8 | 5,0 | 7,3 | 4,9 | 136,5 | 65 |
| **467F.7/16RFID** | 7/16 | 22,5 | 21,8 | 11,8 | 5,4 | 7,7 | 5,2 | 141,5 | 70 |
| **467F.1/2RFID** | 1/2 | 26,8 | 25,2 | 13,6 | 6,1 | 8,6 | 8 | 155,0 | 100 |
| **467F.9/16RFID** | 9/16 | 28,7 | 26,8 | 14,2 | 6,4 | 9,0 | 8,5 | 161,0 | 115 |
| **467F.5/8RFID** | 5/8 | 32,9 | 29,8 | 16,0 | 7,2 | 9,9 | 10 | 180,0 | 165 |
| **467F.11/16RFID** | 11/16 | 34,5 | 31,8 | 16,9 | 7,6 | 10,3 | 11,1 | 191,0 | 180 |
| **467F.3/4RFID** | 3/4 | 39,2 | 33,9 | 19,5 | 8,6 | 11,2 | 11,1 | 216,0 | 240 |

# Ratchet wrenches

## Ratchet ring wrenches

### 64 - Metric straight ratchet ring wrenches - RFID

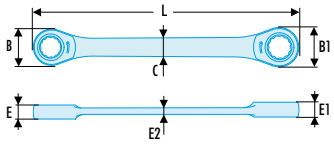



**NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| **64.6X7RFID** | 6x7 | 14,2 | 17,2 | 8,0 | 6,3 | 6,5 | 5 | 115 | 40 |
| **64.8X9RFID** | 8x9 | 16,8 | 20,2 | 8,3 | 6,5 | 6,9 | 5,2 | 128 | 50 |
| **64.10X11RFID** | 10x11 | 20,2 | 21,8 | 9,1 | 7,3 | 7,7 | 9 | 150 | 70 |
| **64.12X13RFID** | 12x13 | 23 | 24,8 | 11,3 | 8,2 | 8,6 | 9,5 | 170 | 90 |
| **64.14X15RFID** | 14x15 | 26,5 | 29,5 | 13,1 | 9,0 | 9,4 | 12 | 190 | 140 |
| **64.16X18RFID** | 16x18 | 29,5 | 33,5 | 14,8 | 9,9 | 10,7 | 12,5 | 210 | 195 |
| **64.17X19RFID** | 17x19 | 31,5 | 33,5 | 15,2 | 10,3 | 11,2 | 12,5 | 230 | 205 |
| **64.21X23RFID** | 21x23 | 40 | 46,0 | 15,2 | 13,0 | 14,5 | 16 | 260 | 490 |
| **64.22X24RFID** | 22x24 | 40 | 46,0 | 15,2 | 13,0 | 14,5 | 16 | 260 | 490 |

### 64 - Inch straight ratchet ring wrenches - RFID



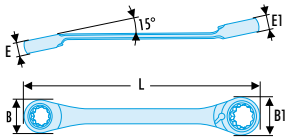

**ASME B107.100**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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 ["] | B [mm] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| **64.1/4X5/16RFID** | 1/4x5/16 | 14,2 | 17,2 | 8,0 | 6,3 | 6,5 | 5 | 115 | 40 |
| **64.5/16X11/32RFID** | 5/16x11/32 | 16,8 | 20,2 | 8,3 | 6,5 | 6,9 | 5,2 | 128 | 50 |
| **64.3/8X7/16RFID** | 3/8x7/16 | 20,2 | 21,8 | 9,1 | 7,3 | 7,7 | 9 | 150 | 70 |
| **64.1/2X9/16RFID** | 1/2x9/16 | 23 | 24,8 | 11,3 | 8,6 | 9,0 | 9,5 | 180 | 125 |
| **64.5/8X11/16RFID** | 5/8x11/16 | 29,5 | 33,5 | 14,8 | 9,9 | 10,7 | 12,5 | 210 | 195 |
| **64.3/4X13/16RFID** | 3/4x13/16 | 33,5 | 40,0 | 15,2 | 11,2 | 13,0 | 12,5 | 245 | 320 |
| **64.7/8X15/16RFID** | 7/8x15/16 | 44 | 46,0 | 15,2 | 13,0 | 14,5 | 16 | 260 | 490 |

## 15° hinged ratchet ring wrenches

### 65 - Metric 15° hinged ratchet ring wrenches - RFID

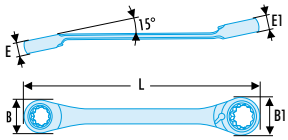



**NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | L [mm] | ⚖ [g] |
|---|---|---|---|---|---|---|---|
| **65.6X7RFID** | 6x7 | 14,0 | 17,0 | 6,3 | 6,5 | 115 | 35 |
| **65.8X9RFID** | 8x9 | 17,0 | 20,2 | 6,5 | 6,9 | 128 | 50 |
| **65.10X11RFID** | 10x11 | 20,2 | 22,0 | 7,3 | 7,7 | 150 | 75 |
| **65.12X13RFID** | 12x13 | 23,4 | 25,5 | 8,2 | 8,6 | 170 | 100 |
| **65.14X15RFID** | 14x15 | 26,9 | 29,8 | 9,0 | 9,4 | 190 | 140 |
| **65.16X18RFID** | 16x18 | 29,8 | 34,0 | 9,9 | 10,7 | 210 | 200 |
| **65.17X19RFID** | 17x19 | 31,8 | 34,0 | 10,3 | 11,2 | 230 | 220 |
| **65.21X23RFID** | 21x23 | 40,1 | 46,0 | 13,0 | 14,5 | 260 | 400 |
| **65.22X24RFID** | 22x24 | 40,1 | 46,5 | 13,0 | 14,5 | 260 | 435 |

### 65 - Inch 15° hinged ratchet ring wrenches - RFID




**ASME B107.100**

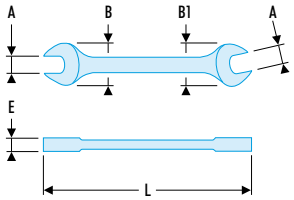
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 15° hinged ratchet ring wrenches: ring offset to clear fingers 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] |
|---|---|---|---|---|---|---|---|
| **65.1/4X5/16RFID** | 1/4x5/16 | 14,0 | 17,0 | 6,3 | 6,5 | 115 | 35 |
| **65.5/16X11/32RFID** | 5/16x11/32 | 17,0 | 20,2 | 6,5 | 6,9 | 128 | 50 |
| **65.3/8X7/16RFID** | 3/8x7/16 | 20,2 | 22,0 | 7,3 | 7,7 | 150 | 75 |
| **65.1/2X9/16RFID** | 1/2x9/16 | 25,5 | 26,9 | 8,6 | 9,0 | 180 | 120 |
| **65.5/8X11/16RFID** | 5/8x11/16 | 29,8 | 31,8 | 9,9 | 10,3 | 200 | 180 |
| **65.3/4X13/16RFID** | 3/4x13/16 | 34,0 | 40,1 | 11,2 | 13,0 | 245 | 300 |
| **65.7/8X15/16RFID** | 7/8x15/16 | 40,1 | 46,5 | 13,0 | 14,5 | 260 | 430 |

# Open end wrenches

## Open end wrenches

### 44 - Metric open end wrenches - RFID



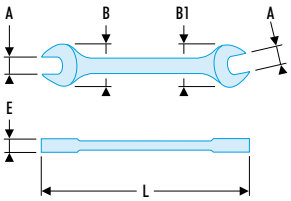

**NF ISO 10102, NF ISO 3318, NF ISO 1711-1, NF ISO 691, ISO 10102, ISO 3318, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, DIN 3110**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Open end wrenches = the open ends are slimmer than a standard combination wrench for better accessibility. Examples: brake calipers, hydraulic hose locknuts.
- Heads hinged at 15°.
- Metric sizes: 6 to 32 mm.
- Presentation: satin chrome finish.

| | A [mm] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.6X7RFID** | 6x7 | 15,0 x 17,5 | 3,5 | 120 | 25 |
| **44.8X9RFID** | 8x9 | 18,5 x 21,0 | 3,8 | 137 | 35 |
| **44.8X10RFID** | 8x10 | 19,0 x 23,0 | 4,2 | 143 | 45 |
| **44.10X11RFID** | 10x11 | 23,0 x 25,0 | 4,7 | 152 | 55 |
| **44.10X13RFID** | 10x13 | 23,0 x 29,0 | 5,1 | 162 | 65 |
| **44.12X13RFID** | 12x13 | 25,5 x 29,0 | 5,1 | 167 | 70 |
| **44.14X15RFID** | 14x15 | 31,0 x 33,0 | 5,5 | 182 | 95 |
| **44.16X17RFID** | 16x17 | 35,5 x 37,0 | 6,3 | 200 | 125 |
| **44.17X19RFID** | 17x19 | 37,0 x 42,0 | 6,8 | 210 | 155 |
| **44.18X19RFID** | 18x19 | 39,0 x 42,0 | 7,3 | 220 | 170 |

| | A [mm] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.20X22RFID** | 20x22 | 43,0 x 48,5 | 7,5 | 240 | 210 |
| **44.21X23RFID** | 21x23 | 47,0 x 50,5 | 8,3 | 242 | 230 |
| **44.22X24RFID** | 22x24 | 47,5 x 52,0 | 8,8 | 261 | 270 |
| **44.24X27RFID** | 24x27 | 51,0 x 58,0 | 8,8 | 270 | 335 |
| **44.25X28RFID** | 25x28 | 56,0 x 61,6 | 8,8 | 282 | 370 |
| **44.26X28RFID** | 26x28 | 56,0 x 61,6 | 8,8 | 282 | 370 |
| **44.27X29RFID** | 27x29 | 59,0 x 64,0 | 9,5 | 301 | 460 |
| **44.27X30RFID** | 27x30 | 59,0 x 64,0 | 9,5 | 301 | 460 |
| **44.30X32RFID** | 30x32 | 63,0 x 70,0 | 9,8 | 318 | 525 |

### 44 - Metric open end wrenches - RFID



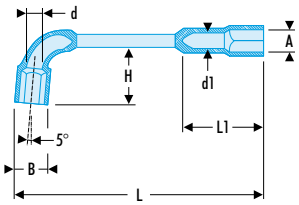

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Open end wrenches = the open ends are slimmer than a standard combination wrench for better accessibility. Examples: brake calipers, hydraulic hose locknuts.
- Heads hinged at 15°.
- Dimensions in inches: from 1/4" to 1'1/4.
- Presentation: satin chrome finish.

| | A ["] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.1/4X5/16RFID** | 1/4x5/16 | 15,0 x 17,5 | 3,5 | 120 | 25 |
| **44.11/32X13/32RFID** | 11/32X13/32 | 19,0 x 23,0 | 4,2 | 143 | 45 |
| **44.3/8X7/16RFID** | 3/8X7/16 | 23,0 x 25,0 | 4,7 | 152 | 55 |
| **44.1/2X9/16RFID** | 1/2X9/16 | 29,0 x 33,5 | 5,5 | 177 | 85 |
| **44.5/8X11/16RFID** | 5/8X11/16 | 37,0 x 42,0 | 6,8 | 210 | 155 |

| | A ["] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.11/16X3/4RFID** | 11/16X3/4 | 37,0 x 42,0 | 6,8 | 210 | 155 |
| **44.3/4X13/16RFID** | 3/4X13/16 | 43,0 x 48,5 | 7,5 | 240 | 210 |
| **44.7/8X15/16RFID** | 7/8X15/16 | 47,5 x 52,0 | 8,3 | 251 | 270 |
| **44.1PX1P1/16RFID** | 1'X1'1/16 | 56,0 x 61,6 | 8,8 | 282 | 370 |
| **44.1P1/8X1P1/4RFID** | 1'1/8X1'1/4 | 63,0 x 70,0 | 9,8 | 318 | 525 |

## Angled open-socket wrenches

### 76 - Forged metric 12 x 6 point angled open-socket wrenches - RFID



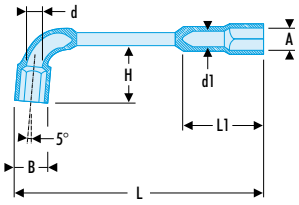

**NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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 16 mm.
- Presentation: satin chrome finish.

| | A [mm] | B [mm] | d [mm] | d1 [mm] | H [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **76.6RFID** | 6 | 10,0 | 4,5 | 4,5 | 16 | 102 | 21 | 60 |
| **76.7RFID** | 7 | 11,0 | 4,5 | 4,5 | 17 | 106 | 22 | 65 |
| **76.8RFID** | 8 | 12,5 | 7,0 | 6,0 | 19 | 114 | 25 | 90 |
| **76.9RFID** | 9 | 13,5 | 7,0 | 6,0 | 20 | 122 | 26 | 95 |
| **76.10RFID** | 10 | 15,0 | 8,0 | 7,0 | 24 | 129 | 28 | 125 |
| **76.11RFID** | 11 | 16,5 | 8,0 | 7,0 | 25 | 136 | 30 | 145 |

| | A [mm] | B [mm] | d [mm] | d1 [mm] | H [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **76.12RFID** | 12 | 18,0 | 9,0 | 8,0 | 28 | 144 | 36 | 185 |
| **76.13RFID** | 13 | 19,5 | 9,0 | 8,0 | 30 | 152 | 38 | 205 |
| **76.14RFID** | 14 | 21,0 | 10,5 | 9,0 | 32 | 160 | 40 | 235 |
| **76.15RFID** | 15 | 22,5 | 10,5 | 10,0 | 34 | 169 | 42 | 260 |
| **76.16RFID** | 16 | 24,0 | 13,0 | 12,0 | 37 | 178 | 46 | 315 |

### 75 - Forged metric 6 x 6 point angled open-socket wrenches - RFID




**NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN ISO 691**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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: 17 to 32 mm.
- Presentation: satin chrome finish.

| | A [mm] | B [mm] | d [mm] | d1 [mm] | H [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **75.17RFID** | 17 | 25,5 | 13,0 | 12,0 | 39 | 187 | 48 | 345 |
| **75.18RFID** | 18 | 26,5 | 13,0 | 12,0 | 40 | 195 | 50 | 395 |
| **75.19RFID** | 19 | 28,5 | 15,0 | 12,0 | 41 | 204 | 51 | 460 |
| **75.21RFID** | 21 | 30,5 | 15,0 | 14,0 | 46 | 221 | 55 | 520 |
| **75.22RFID** | 22 | 32,0 | 15,0 | 14,0 | 48 | 230 | 57 | 565 |

| | A [mm] | B [mm] | d [mm] | d1 [mm] | H [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **75.24RFID** | 24 | 34,5 | 18,0 | 16,0 | 54 | 250 | 67 | 690 |
| **75.27RFID** | 27 | 38,0 | 22,0 | 19,0 | 58 | 280 | 73 | 980 |
| **75.30RFID** | 30 | 42,0 | 24,0 | 21,0 | 64 | 310 | 83 | 1330 |
| **75.32RFID** | 32 | 44,5 | 24,0 | 22,6 | 74 | 330 | 88 | 1430 |

# Nut drivers and adjustable wrenches



## NUT DRIVERS

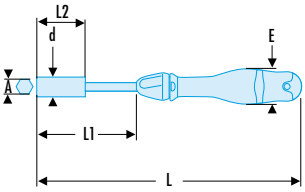
### Nut drivers

- 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 nut driver - metric - RFID



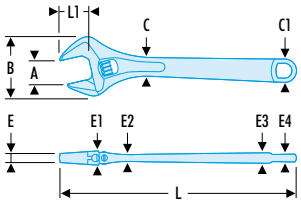

**NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- ideal for screws with limited access in height or precision mechanics.
- Protwist screwdriver handle for optimum comfort and 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] | [g] |
|---|---|---|---|---|---|---|---|
| 74A.3.2FRFID | 3,2 | 6,0 | 36 | 245 | 106 | 20 | 140 |
| 74A.4FRFID | 4,0 | 7,0 | 36 | 245 | 106 | 20 | 145 |
| 74A.4.5FRFID | 4,5 | 7,5 | 36 | 245 | 106 | 25 | 150 |
| 74A.5FRFID | 5,0 | 8,0 | 36 | 245 | 106 | 25 | 150 |
| 74A.5.5FRFID | 5,5 | 8,0 | 36 | 245 | 106 | 30 | 150 |
| 74A.6FRFID | 6,0 | 9,5 | 36 | 245 | 106 | 35 | 155 |
| 74A.7FRFID | 7,0 | 9,5 | 36 | 245 | 106 | 35 | 160 |

| | A [mm] | d [mm] | E [mm] | L [mm] | L1 [mm] | L2 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 74A.8FRFID | 8,0 | 12,0 | 36 | 245 | 106 | 50 | 185 |
| 74A.9FRFID | 9,0 | 12,0 | 36 | 245 | 106 | 50 | 190 |
| 74A.10FRFID | 10,0 | 14,5 | 40 | 250 | 106 | 50 | 230 |
| 74A.11FRFID | 11,0 | 16,0 | 40 | 250 | 106 | 50 | 250 |
| 74A.12FRFID | 12,0 | 17,0 | 40 | 250 | 106 | 50 | 250 |
| 74A.13FRFID | 13,0 | 18,5 | 40 | 250 | 106 | 55 | 290 |
| 74A.14FRFID | 14,0 | 20,0 | 40 | 250 | 106 | 55 | 295 |

## 113A.C - Chromed adjustable wrenches - RFID



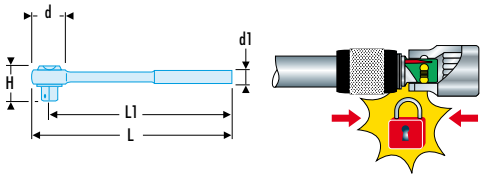

**NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Easy to access button for setting jaws.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Right-hand button rotation.
- Range from 6" to 18".
- 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.6CRFID | 20 | 45,0 | 14,8 x 18,5 | 5 | 11,8 | 6,0 | 8,3 | 5,8 | 155 | 19 | 155 |
| 113A.8CRFID | 27 | 61,5 | 18,5 x 24,0 | 6,5 | 13,5 | 9,0 | 11,0 | 8,5 | 206 | 24 | 305 |
| 113A.10CRFID | 30 | 69,5 | 21,5 x 28,5 | 9 | 15,5 | 9,5 | 12,7 | 10,0 | 255 | 29 | 510 |
| 113A.12CRFID | 34 | 80,0 | 25,0 x 31,0 | 10 | 18,0 | 10,2 | 13,0 | 10,0 | 306 | 34 | 730 |
| 113A.15CRFID | 44 | 97,0 | 28,0 x 35,0 | 13,5 | 20,0 | 12,0 | 14,8 | 11,5 | 380 | 44 | 1175 |
| 113A.18CRFID | 53 | 115,0 | 31,0 x 38,5 | 16 | 22,5 | 14,3 | 17,8 | 13,5 | 456 | 53 | 1820 |

## 1/4” ratchets

### 1/4” maintenance free pear head ratchet - RFID

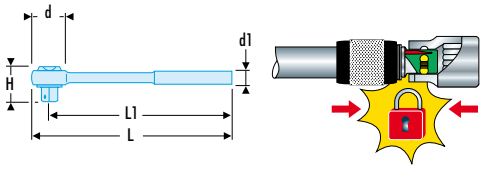



**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.171RFID | 22 | 20 | 25 | 120 | 110 | 90 |

### 1/4” fast action twist handle ratchet - RFID




**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Twist handle for working 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.360RFID | 27 | 21 | 29 | 120 | 120 | 160 |

### R.236AFRFID PROTWIST® fluorescent handle screwdriver 1/4” - 158 mm - RFID

**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Detectable by it’s fluorescence, activated by a lamp or UV neon light.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: chromed.

### 65.PERFID Bit-holder ratchet wrench 1/4” - 5/16” RFID

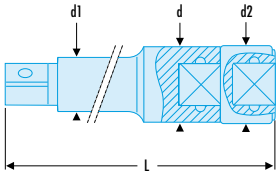
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Takes the following bits: - Series 1: hexagon 1/4”.
  - Series 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.

# Radio 1/4” range



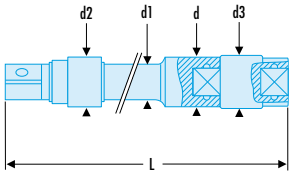
## R - 1/4” drive extension - RFID

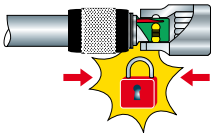



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Finish: chromed.

| | L [mm] | d [mm] | d1 [mm] | d2 [mm] | [g] |
|---|---|---|---|---|---|
| R.209RFID | 85 | 12 | 8,2 | 13 | 50 |

## R.RC - 1/4” drive locking extensions - RFID

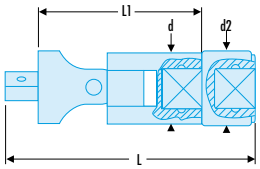


- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Locking mechanism.
- Finish: bright chrome.

| | L [mm] | d [mm] | d1 [mm] | d2 [mm] | d3 [mm] | [g] |
|---|---|---|---|---|---|---|
| R.210RCRFID | 130 | 8,2 | 12 | 13 | 13 | 65 |
| R.215RCRFID | 180 | 8,2 | 12 | 13 | 13 | 80 |
| R.217RCRFID | 280 | 8,2 | 12 | 13 | 13 | 120 |

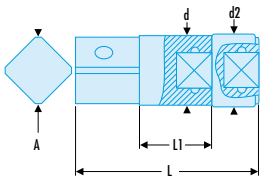
## 1/4” universal joint - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Spring-stiffened joints. Stays in position when reaching for fasteners.
- Finish: bright chrome.

| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| R.240ARFID | 13 | 13 | 63 | 25 | 40 |

## 1/4” to 3/8” coupler - RFID

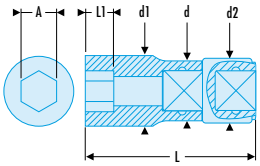



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 1/4” female to 3/8” male square drive.
- For adapting 3/8” drive sockets.
- Finish: bright chrome.

| | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|
| R.232RFID | 12 | 12 | 21 | 43,5 | 13,5 | 50 |

## 1/4” sockets

### R - 1/4” drive metric 6-point sockets - RFID



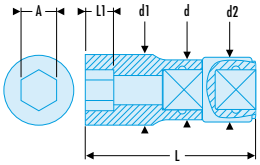

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.3.2RFID | 3,2 | 6 | 11,2 | 5,9 | 13 | 52 | 2,4 | 30 |
| R.4RFID | 4,0 | 6 | 11,2 | 6,9 | 13 | 52 | 2,6 | 30 |
| R.5RFID | 5,0 | 6 | 11,2 | 8,2 | 13 | 52 | 4,8 | 30 |
| R.5.5RFID | 5,5 | 6 | 11,2 | 8,8 | 13 | 52 | 4,8 | 30 |
| R.6RFID | 6,0 | 6 | 11,2 | 9,4 | 13 | 52 | 5,6 | 30 |
| R.7RFID | 7,0 | 6 | 11,0 | 11,0 | 13 | 52 | 6,0 | 30 |
| R.8RFID | 8,0 | 6 | 12,0 | 12,0 | 13 | 52 | 6,5 | 35 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.9RFID | 9,0 | 6 | 13,2 | 13,2 | 13 | 52 | 6,5 | 35 |
| R.10RFID | 10,0 | 6 | 14,7 | 14,7 | 13 | 52 | 7,8 | 40 |
| R.11RFID | 11,0 | 6 | 15,8 | 15,8 | 21 | 41 | 9,0 | 50 |
| R.12RFID | 12,0 | 6 | 17,0 | 17,0 | 21 | 41 | 9,5 | 55 |
| R.13RFID | 13,0 | 6 | 17,7 | 17,7 | 21 | 41 | 10,0 | 55 |
| R.14RFID | 14,0 | 6 | 18,7 | 18,7 | 21 | 41 | 10,0 | 60 |

### R - 1/4” drive inch 6-point sockets - RFID

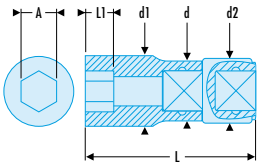



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.
- Available as rack set (Ref R.40U).

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.3/16RFID | 3/16 | 6 | 11,2 | 8,0 | 13 | 52 | 4,8 | 30 |
| R.7/32RFID | 7/32 | 6 | 11,2 | 9,0 | 13 | 52 | 5,5 | 30 |
| R.1/4RFID | 1/4 | 6 | 11,2 | 10,1 | 13 | 52 | 6,0 | 30 |
| R.9/32RFID | 9/32 | 6 | 11,0 | 11,0 | 13 | 52 | 6,0 | 30 |
| R.5/16RFID | 5/16 | 6 | 12,0 | 12,0 | 13 | 52 | 6,5 | 35 |
| R.11/32RFID | 11/32 | 6 | 13,2 | 13,2 | 13 | 52 | 6,5 | 35 |

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.3/8RFID | 3/8 | 6 | 14,7 | 14,7 | 13 | 52 | 7,8 | 40 |
| R.13/32RFID | 13/32 | 6 | 14,7 | 14,7 | 13 | 52 | 7,8 | 40 |
| R.7/16RFID | 7/16 | 6 | 15,8 | 15,8 | 21 | 41 | 9,0 | 50 |
| R.1/2RFID | 1/2 | 6 | 17,7 | 17,7 | 21 | 41 | 10,0 | 55 |
| R.9/16RFID | 9/16 | 6 | 18,7 | 18,7 | 21 | 41 | 10,0 | 55 |

### R.E - 1/4” drive metric 12-point sockets - RFID




**NF ISO 1711-1, ISO 1711-1**

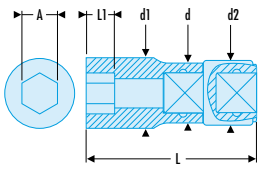
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.5.5ERFID | 5,5 | 12 | 11,2 | 8,8 | 13 | 52 | 4,8 | 30 |
| R.6ERFID | 6,0 | 12 | 11,2 | 9,4 | 13 | 52 | 5,6 | 30 |
| R.7ERFID | 7,0 | 12 | 11,0 | 11,0 | 13 | 52 | 6,0 | 30 |
| R.8ERFID | 8,0 | 12 | 12,0 | 12,0 | 13 | 52 | 6,5 | 35 |
| R.9ERFID | 9,0 | 12 | 13,2 | 13,2 | 13 | 52 | 6,5 | 35 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.10ERFID | 10,0 | 12 | 14,7 | 14,7 | 13 | 52 | 7,8 | 40 |
| R.11ERFID | 11,0 | 12 | 15,8 | 15,8 | 21 | 41 | 9,0 | 50 |
| R.12ERFID | 12,0 | 12 | 17,0 | 17,0 | 21 | 41 | 9,5 | 55 |
| R.13ERFID | 13,0 | 12 | 17,7 | 17,7 | 21 | 41 | 10,0 | 55 |
| R.14ERFID | 14,0 | 12 | 18,7 | 18,7 | 21 | 41 | 10,0 | 60 |

# Radio 1/4” range

## RB - 1/4” drive inch 12-point thin wall sockets - RFID



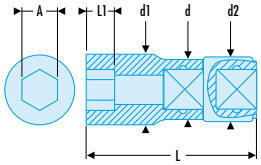

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Thin-wall for better access, conform with aeronautical standards.
- Dimensions in inches: from 3/16” to 9/16”.
- Finish: bright chrome.

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| RB.3/16RFID | 3/16 | 12 | 11,2 | 7,6 | 13 | 52 | 4,8 | 30 |
| RB.7/32RFID | 7/32 | 12 | 11,2 | 8,7 | 13 | 52 | 5,5 | 30 |
| RB.1/4RFID | 1/4 | 12 | 11,2 | 9,7 | 13 | 52 | 6,0 | 30 |
| RB.9/32RFID | 9/32 | 12 | 11,2 | 10,6 | 13 | 52 | 6,0 | 35 |
| RB.5/16RFID | 5/16 | 12 | 11,9 | 11,9 | 13 | 52 | 6,5 | 30 |

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| RB.11/32RFID | 11/32 | 12 | 12,9 | 12,9 | 13 | 52 | 6,5 | 35 |
| RB.3/8RFID | 3/8 | 12 | 13,7 | 13,7 | 13 | 52 | 7,8 | 35 |
| RB.7/16RFID | 7/16 | 12 | 14,8 | 15,8 | 21 | 41 | 9,0 | 50 |
| RB.1/2RFID | 1/2 | 12 | 16,0 | 16,9 | 21 | 41 | 10,0 | 50 |
| RB.9/16RFID | 9/16 | 12 | 17,5 | 18,7 | 21 | 41 | 10,0 | 55 |

# 1/4” long-reach sockets

## R.LA - 1/4” long-reach metric 6-point sockets - RFID



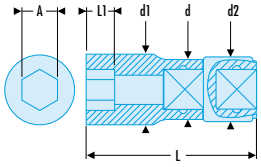

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Metric dimensions : from 3,2 to 14 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.3.2LARFID | 3,2 | 6 | 12,0 | 5,80 | 13 | 50,5 | 1,8 | 40 |
| R.4LARFID | 4 | 6 | 12,0 | 6,80 | 13 | 50,5 | 2,0 | 40 |
| R.5LARFID | 5 | 6 | 12,0 | 8,10 | 13 | 50,5 | 2,3 | 40 |
| R.5.5LARFID | 5,5 | 6 | 12,0 | 8,10 | 13 | 50,5 | 3,0 | 40 |
| R.6LARFID | 6 | 6 | 12,0 | 9,40 | 13 | 50,5 | 5,6 | 40 |
| R.7LARFID | 7 | 6 | 12,0 | 10,90 | 13 | 50,5 | 7,1 | 50 |
| R.8LARFID | 8 | 6 | 12,0 | 12,00 | 13 | 50,5 | 7,9 | 50 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.9LARFID | 9 | 6 | 12,8 | 12,80 | 13 | 50,5 | 7,9 | 55 |
| R.10LARFID | 10 | 6 | 14,3 | 14,30 | 13 | 50,5 | 7,9 | 65 |
| R.11LARFID | 11 | 6 | 16,0 | 16,00 | 21 | 50,5 | 7,9 | 85 |
| R.12LARFID | 12 | 6 | 16,8 | 16,80 | 21 | 50,5 | 8,4 | 80 |
| R.13LARFID | 13 | 6 | 18,2 | 18,20 | 21 | 50,5 | 8,4 | 90 |
| R.14LARFID | 14 | 6 | 19,2 | 19,20 | 21 | 50,5 | 10,2 | 100 |

## R.EL - 1/4” long-reach metric 12-point sockets - RFID




**NF ISO 1711-1, ISO 1711-1**

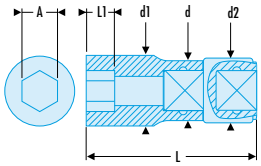
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- High performance, suitable for aircraft fasteners to AS954E.
- Thinner socket walls for better accessibility.
- Metric dimensions : from 4 to 14 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.4ELRFID | 4 | 12 | 6,7 | 11,2 | 13 | 80 | 4 | 40 |
| R.4.5ELRFID | 4,5 | 12 | 7,3 | 11,2 | 13 | 80 | 4,5 | 40 |
| R.5ELRFID | 5 | 12 | 7,8 | 11,2 | 13 | 80 | 5,5 | 40 |
| R.5.5ELRFID | 5.5 | 12 | 8,5 | 11,2 | 13 | 80 | 6 | 40 |
| R.6ELRFID | 6 | 12 | 9,2 | 11,2 | 13 | 80 | 7 | 40 |
| R.7ELRFID | 7 | 12 | 10,3 | 11,2 | 13 | 80 | 8 | 50 |
| R.8ELRFID | 8 | 12 | 11,2 | 11,7 | 13 | 80 | 9 | 50 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| R.9ELRFID | 9 | 12 | 13 | 12 | 13 | 80 | 10 | 55 |
| R.10ELRFID | 10 | 12 | 14,3 | 12,9 | 13 | 80 | 11 | 65 |
| R.11ELRFID | 11 | 12 | 15,5 | 14,3 | 21 | 69 | 12 | 85 |
| R.12ELRFID | 12 | 12 | 16,8 | 15,5 | 21 | 69 | 13 | 90 |
| R.13ELRFID | 13 | 12 | 18 | 16,4 | 21 | 69 | 14 | 90 |
| R.14ELRFID | 14 | 12 | 19,3 | 17,9 | 21 | 69 | 16 | 100 |

## R.EL - 1/4” long-reach metric 12-point sockets - RFID

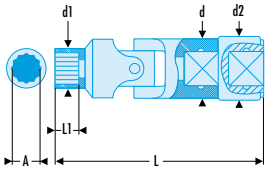
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- High performance, suitable for aircraft fasteners to AS954E.
- Thinner socket walls for better accessibility.
- Dimensions in inches: from 3/16” to 9/16”.
- Finish: bright chrome.




| | A [“] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **R.3/16ELRFID** | 3/16 | 12 | 10,9 | 7,7 | 13 | 80 | 6,0 | 35 |
| **R.7/32ELRFID** | 7/32 | 12 | 10,9 | 8,5 | 13 | 80 | 7,4 | 35 |
| **R.1/4ELRFID** | 1/4 | 12 | 10,9 | 9,4 | 13 | 80 | 7,4 | 40 |
| **R.9/32ELRFID** | 9/32 | 12 | 10,9 | 10,2 | 13 | 80 | 8,5 | 40 |
| **R.5/16ELRFID** | 5/16 | 12 | 11,8 | 11,4 | 13 | 80 | 9,0 | 45 |
| **R.11/32ELRFID** | 11/32 | 12 | 12,0 | 12,5 | 13 | 80 | 9,7 | 45 |
| **R.3/8ELRFID** | 3/8 | 12 | 12,8 | 13,7 | 13 | 80 | 11,2 | 55 |
| **R.7/16ELRFID** | 7/16 | 12 | 14,3 | 15,6 | 21 | 69 | 11,9 | 70 |
| **R.1/2ELRFID** | 1/2 | 12 | 16,2 | 17,3 | 21 | 69 | 13,8 | 75 |
| **R.9/16ELRFID** | 9/16 | 12 | 17,1 | 18,8 | 21 | 69 | 16,2 | 80 |

## R.F - 1/4” drive hinged 12-point sockets - RFID

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Compact solution used instead of universal joint.
- Dimensions in inches: from 3/16” to 9/16”.
- Finish: bright chrome.



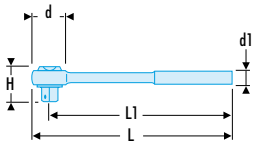

| | A [“] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **R.3/16FRFID** | 3/16 | 12 | 13 | 8,0 | 13 | 61,6 | 5,3 | 35 |
| **R.7/32FRFID** | 7/32 | 12 | 13 | 8,5 | 13 | 62,4 | 6,1 | 35 |
| **R.1/4FRFID** | 1/4 | 12 | 13 | 9,8 | 13 | 62,8 | 6,5 | 35 |
| **R.9/32FRFID** | 9/32 | 12 | 13 | 10,5 | 13 | 62,8 | 6,5 | 35 |
| **R.5/16FRFID** | 5/16 | 12 | 13 | 12,0 | 13 | 63,3 | 7,0 | 35 |
| **R.11/32FRFID** | 11/32 | 12 | 13 | 13,3 | 13 | 63,3 | 7,0 | 40 |
| **R.3/8FRFID** | 3/8 | 12 | 13 | 13,7 | 13 | 64,6 | 8,3 | 45 |
| **R.7/16FRFID** | 7/16 | 12 | 13 | 15,5 | 21 | 54,8 | 9,5 | 60 |
| **R.1/2FRFID** | 1/2 | 12 | 13 | 18,0 | 21 | 55,8 | 10,5 | 65 |
| **R.9/16FRFID** | 9/16 | 12 | 13 | 19,2 | 21 | 55,8 | 10,5 | 65 |

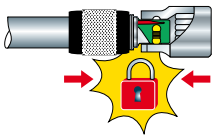
# Junior 3/8” range



## 3/8” ratchets

### 3/8” maintenance free pear head ratchet - RFID



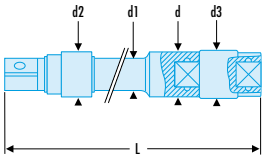



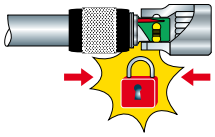
**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.171RFID | 29 | 27 | 29 | 210 | 195 | 220 |

### J.RC - 3/8” drive locking extensions - RFID

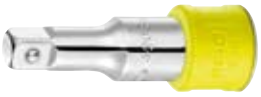


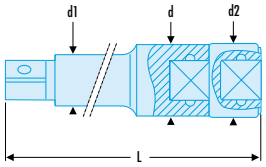



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Total safety as lock system prevents socket loss.
- Finish: bright chrome with phosphate-hardened ring.

| | L [mm] | d [mm] | d1 [mm] | d2 [mm] | d3 [mm] | [g] |
|---|---|---|---|---|---|---|
| J.210RCRFID | 145 | 18 | 12,5 | 18 | 25 | 185 |
| J.215RCRFID | 270 | 18 | 12,5 | 18 | 25 | 290 |
| J.217RCRFID | 520 | 18 | 12,5 | 18 | 25 | 540 |

### J - 3/8” drive extensions - RFID

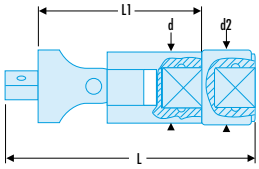





- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Finish: bright chrome.

| | L [mm] | d [mm] | d1 [mm] | d2 [mm] | d3 [mm] | [g] |
|---|---|---|---|---|---|---|
| J.208RFID | 70 | 18 | 10 | 12,6 | 25 | 115 |
| J.209RFID | 95 | 18 | 10 | 12,6 | 25 | 140 |

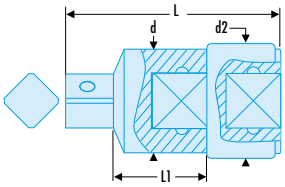
## 3/8” universal joint - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Spring-stiffened joints.
- Finish: bright chrome.

| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| J.240ARFID | 18 | 25 | 71,5 | 36,5 | 110 |

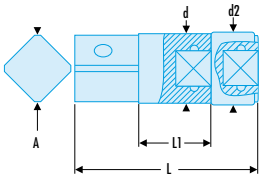
## 3/8” to 1/4” coupler - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For adapting 1/4” drive sockets.
- Max. torque 62 N.m.
- Finish: bright chrome.

| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| J.230RFID | 17,5 | 25 | 44,5 | 17 | 75 |

## 3/8” to 1/2” coupler - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For adapting 1/2” drive sockets.
- Finish: bright chrome.

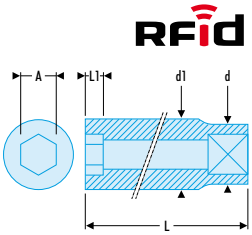
| | A [mm] | d [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|
| J.232RFID | 16,5 | 18 | 25 | 54,5 | 19 | 95 |

# Junior 3/8” range



## 3/8” sockets

### J.H - 3/8” metric 6-point sockets - RFID



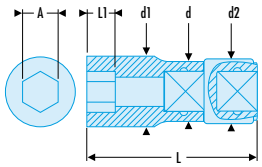

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Metric dimensions : from 7 to 24 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.7HRFID | 7 | 6 | 17,6 | 11,0 | 25 | 47 | 6,0 | 75 |
| J.8HRFID | 8 | 6 | 17,6 | 12,2 | 25 | 47 | 6,5 | 75 |
| J.9HRFID | 9 | 6 | 17,6 | 13,5 | 25 | 47 | 6,7 | 75 |
| J.10HRFID | 10 | 6 | 17,6 | 14,7 | 25 | 47 | 7,8 | 80 |
| J.11HRFID | 11 | 6 | 17,6 | 16,0 | 25 | 47 | 9,0 | 80 |
| J.12HRFID | 12 | 6 | 17,6 | 17,2 | 25 | 47 | 9,5 | 80 |
| J.13HRFID | 13 | 6 | 17,4 | 18,3 | 25 | 50 | 10,4 | 90 |
| J.14HRFID | 14 | 6 | 17,6 | 19,5 | 25 | 50 | 10,5 | 85 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.15HRFID | 15 | 6 | 18,9 | 20,8 | 25 | 50 | 12,0 | 90 |
| J.16HRFID | 16 | 6 | 19,9 | 22,0 | 25 | 50 | 12,0 | 95 |
| J.17HRFID | 17 | 6 | 21,7 | 23,4 | 25 | 50 | 13,0 | 105 |
| J.18HRFID | 18 | 6 | 21,7 | 24,7 | 25 | 53 | 13,0 | 120 |
| J.19HRFID | 19 | 6 | 22,7 | 26,0 | 25 | 53 | 14,0 | 115 |
| J.21HRFID | 21 | 6 | 23,5 | 28,5 | 25 | 53 | 16,0 | 125 |
| J.22HRFID | 22 | 6 | 24,7 | 29,7 | 25 | 53 | 16,5 | 130 |
| J.24HRFID | 24 | 6 | 26,3 | 31,3 | 25 | 53 | 16,5 | 140 |

### J - 3/8” metric 12-point sockets - RFID



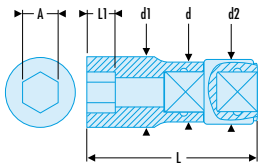

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Metric dimensions : from 7 to 24 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.7RFID | 7 | 12 | 17,6 | 11,0 | 25 | 47 | 6,0 | 75 |
| J.8RFID | 8 | 12 | 17,6 | 12,2 | 25 | 47 | 6,5 | 75 |
| J.9RFID | 9 | 12 | 17,6 | 13,5 | 25 | 47 | 6,7 | 75 |
| J.10RFID | 10 | 12 | 17,6 | 14,7 | 25 | 47 | 7,8 | 80 |
| J.11RFID | 11 | 12 | 17,6 | 16,0 | 25 | 47 | 9,0 | 80 |
| J.12RFID | 12 | 12 | 17,6 | 17,2 | 25 | 47 | 9,5 | 80 |
| J.13RFID | 13 | 12 | 17,5 | 18,3 | 25 | 50 | 10,4 | 90 |
| J.14RFID | 14 | 12 | 17,7 | 19,5 | 25 | 50 | 10,5 | 85 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.15RFID | 15 | 12 | 19,0 | 20,8 | 25 | 50 | 12,0 | 90 |
| J.16RFID | 16 | 12 | 20,0 | 22,0 | 25 | 50 | 12,0 | 95 |
| J.17RFID | 17 | 12 | 21,7 | 23,4 | 25 | 50 | 13,0 | 105 |
| J.18RFID | 18 | 12 | 21,7 | 24,7 | 25 | 53 | 13,0 | 120 |
| J.19RFID | 19 | 12 | 22,7 | 26,0 | 25 | 53 | 14,0 | 115 |
| J.21RFID | 21 | 12 | 23,5 | 28,5 | 25 | 53 | 16,0 | 125 |
| J.22RFID | 22 | 12 | 24,7 | 29,7 | 25 | 53 | 16,5 | 130 |
| J.24RFID | 24 | 12 | 26,3 | 31,3 | 25 | 53 | 16,5 | 140 |

### J - 3/8” inch 12-point sockets - RFID



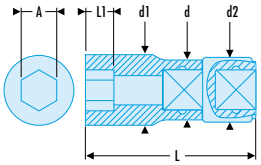

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Dimensions in inches: from 1/4” to 1”.
- Finish: bright chrome.

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.1/4RFID | 1/4 | 12 | 17,5 | 10,0 | 25 | 47 | 6,0 | 75 |
| J.5/16RFID | 5/16 | 12 | 17,5 | 11,9 | 25 | 47 | 6,5 | 75 |
| J.3/8RFID | 3/8 | 12 | 17,6 | 14,1 | 25 | 47 | 7,5 | 80 |
| J.7/16RFID | 7/16 | 12 | 17,5 | 16,0 | 25 | 47 | 9,0 | 80 |
| J.1/2RFID | 1/2 | 12 | 17,5 | 18,1 | 25 | 50 | 10,4 | 90 |
| J.9/16RFID | 9/16 | 12 | 17,7 | 19,5 | 25 | 50 | 10,5 | 85 |
| J.5/8RFID | 5/8 | 12 | 20,0 | 22,0 | 25 | 50 | 12,0 | 100 |

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.11/16RFID | 11/16 | 12 | 21,0 | 24,0 | 25 | 53 | 13,0 | 125 |
| J.3/4RFID | 3/4 | 12 | 22,7 | 26,0 | 25 | 53 | 14,0 | 130 |
| J.13/16RFID | 13/16 | 12 | 23,0 | 28,0 | 25 | 53 | 16,0 | 130 |
| J.7/8RFID | 7/8 | 12 | 24,7 | 29,7 | 25 | 53 | 16,5 | 155 |
| J.15/16RFID | 15/16 | 12 | 26,3 | 31,3 | 25 | 53 | 16,5 | 190 |
| J.1PRFID | 1 | 12 | 28,3 | 33,3 | 25 | 53 | 16,5 | 210 |

## 3/8” long-reach sockets

### J.HLA - 3/8” long-reach metric 6-point sockets - RFID



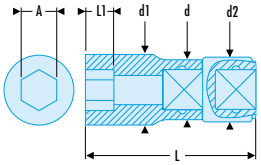

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Metric dimensions : from 7 to 24 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.7HLARFID | 7 | 6 | 17,3 | 10,6 | 25 | 75 | 6,0 | 95 |
| J.8HLARFID | 8 | 6 | 17,3 | 12,0 | 25 | 75 | 7,5 | 100 |
| J.9HLARFID | 9 | 6 | 17,3 | 13,0 | 25 | 75 | 7,5 | 100 |
| J.10HLARFID | 10 | 6 | 17,3 | 14,5 | 25 | 75 | 9,0 | 100 |
| J.11HLARFID | 11 | 6 | 17,3 | 16,0 | 25 | 75 | 10,5 | 105 |
| J.12HLARFID | 12 | 6 | 17,2 | 16,8 | 25 | 75 | 12,0 | 105 |
| J.13HLARFID | 13 | 6 | 17,0 | 18,0 | 25 | 75 | 12,0 | 105 |
| J.14HLARFID | 14 | 6 | 18,0 | 20,0 | 25 | 75 | 15,0 | 110 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.15HLARFID | 15 | 6 | 20,0 | 21,0 | 25 | 80 | 15,0 | 125 |
| J.16HLARFID | 16 | 6 | 20,0 | 22,0 | 25 | 80 | 15,0 | 135 |
| J.17HLARFID | 17 | 6 | 22,0 | 23,5 | 25 | 80 | 15,0 | 155 |
| J.18HLARFID | 18 | 6 | 23,0 | 24,5 | 25 | 80 | 18,0 | 160 |
| J.19HLARFID | 19 | 6 | 24,0 | 25,0 | 25 | 80 | 18,0 | 160 |
| J.21HLARFID | 21 | 6 | 26,0 | 27,0 | 25 | 80 | 18,0 | 175 |
| J.22HLARFID | 22 | 6 | 28,0 | 29,0 | 25 | 80 | 21,0 | 200 |
| J.24HLARFID | 24 | 6 | 30,0 | 31,0 | 25 | 80 | 24,0 | 230 |

### J.LA - 3/8” long-reach metric 12-point sockets - RFID



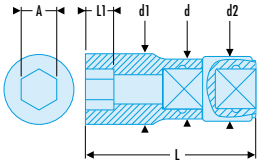

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Metric dimensions : from 7 to 24 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.7LARFID | 7 | 12 | 17,3 | 10,6 | 25 | 75 | 6,0 | 95 |
| J.8LARFID | 8 | 12 | 17,3 | 12,0 | 25 | 75 | 7,5 | 100 |
| J.9LARFID | 9 | 12 | 17,3 | 13,0 | 25 | 75 | 7,5 | 100 |
| J.10LARFID | 10 | 12 | 17,3 | 14,5 | 25 | 75 | 9,0 | 100 |
| J.11LARFID | 11 | 12 | 17,3 | 16,0 | 25 | 75 | 10,5 | 105 |
| J.12LARFID | 12 | 12 | 17,3 | 16,8 | 25 | 75 | 12,0 | 105 |
| J.13LARFID | 13 | 12 | 17,2 | 18,0 | 25 | 75 | 12,0 | 105 |
| J.14LARFID | 14 | 12 | 17 | 20,0 | 25 | 75 | 15,0 | 110 |

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.15LARFID | 15 | 12 | 18 | 21,0 | 25 | 75 | 15,0 | 125 |
| J.16LARFID | 16 | 12 | 20 | 22,0 | 25 | 80 | 15,0 | 135 |
| J.17LARFID | 17 | 12 | 20 | 23,5 | 25 | 80 | 15,0 | 155 |
| J.18LARFID | 18 | 12 | 22 | 24,5 | 25 | 80 | 18,0 | 160 |
| J.19LARFID | 19 | 12 | 23 | 25,0 | 25 | 80 | 18,0 | 160 |
| J.21LARFID | 21 | 12 | 24 | 27,0 | 25 | 80 | 18,0 | 175 |
| J.22LARFID | 22 | 12 | 26 | 29,0 | 25 | 80 | 21,0 | 200 |
| J.24LARFID | 24 | 12 | 30 | 31,0 | 25 | 80 | 21,0 | 230 |

### J.LA - 3/8” inch 12-point sockets - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Dimensions in inches: from 1/4” to 1”.
- Finish: bright chrome.

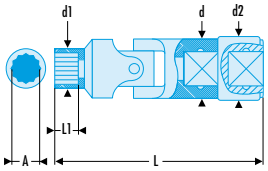
| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.1/4LARFID | 1/4 | 12 | 17,5 | 10,6 | 25 | 64,7 | 4,0 | 90 |
| J.5/16LARFID | 5/16 | 12 | 17,5 | 12,4 | 25 | 64,7 | 4,3 | 90 |
| J.3/8LARFID | 3/8 | 12 | 17,5 | 14,3 | 25 | 64,7 | 4,7 | 95 |
| J.7/16LARFID | 7/16 | 12 | 17,5 | 16,2 | 25 | 64,7 | 6,2 | 95 |
| J.1/2LARFID | 1/2 | 12 | 18,2 | 18,2 | 25 | 64,7 | 7,4 | 100 |
| J.9/16LARFID | 9/16 | 12 | 20,5 | 20,5 | 25 | 68 | 9,0 | 125 |
| J.5/8LARFID | 5/8 | 12 | 22,3 | 22,3 | 25 | 83,8 | 10,2 | 155 |

| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| J.11/16LARFID | 11/16 | 12 | 23,8 | 23,8 | 25 | 83,8 | 10,2 | 165 |
| J.3/4LARFID | 3/4 | 12 | 25,3 | 25,3 | 25 | 83,8 | 11,8 | 170 |
| J.13/16LARFID | 13/16 | 12 | 27,0 | 27,0 | 25 | 83,8 | 12,3 | 190 |
| J.7/8LARFID | 7/8 | 12 | 30,2 | 30,2 | 25 | 83,8 | 12,7 | 235 |
| J.15/16LARFID | 15/16 | 12 | 31,8 | 31,8 | 25 | 83,8 | 12,7 | 235 |
| J.1PLARFID | 1 | 12 | 33,4 | 33,4 | 25 | 83,8 | 12,7 | 235 |

## Junior 3/8” range



### J.F - 3/8” drive hinged inch 12-point sockets RFID

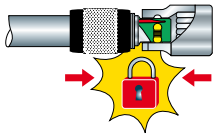


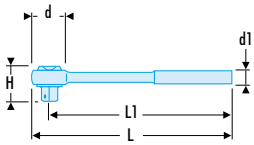

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Compact solution used instead of universal joint.
- Dimensions in inches: from 3/8” to 3/4”.
- Finish: bright chrome.

| | A [”] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **J.3/8FRFID** | 3/8 | 12 | 19 | 14,0 | 25 | 67,5 | 8,3 | 105 |
| **J.7/16FRFID** | 7/16 | 12 | 19 | 15,8 | 25 | 70,5 | 9,8 | 110 |
| **J.1/2FRFID** | 1/2 | 12 | 19 | 18,3 | 25 | 69 | 11,3 | 105 |
| **J.9/16FRFID** | 9/16 | 12 | 19 | 19,5 | 25 | 70,5 | 11,3 | 110 |
| **J.5/8FRFID** | 5/8 | 12 | 19 | 22,00 | 25 | 73,5 | 12,8 | 120 |
| **J.11/16FRFID** | 11/16 | 12 | 19 | 24,00 | 25 | 74,5 | 13,8 | 125 |
| **J.3/4FRFID** | 3/4 | 12 | 19 | 25,8 | 25 | 76,5 | 15,8 | 130 |

## 1/2” ratchets

### 1/2” maintenance free pear head ratchet - RFID



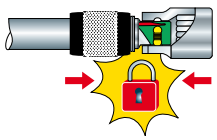


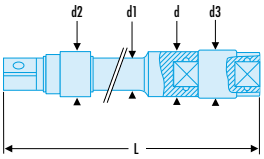

**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.171RFID | 37 | 32 | 37 | 262 | 245 | 470 |

### S.RC - 1/2” drive locking extensions - RFID

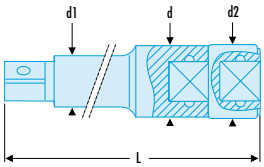





- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Total safety as lock system prevents socket loss.
- Safety 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.

| | L [mm] | d [mm] | d1 [mm] | d2 [mm] | d3 [mm] | E [mm] | [g] |
|---|---|---|---|---|---|---|---|
| S.210RCRFID | 154 | 23 | 16,5 | 23 | 29 | 16,5 | 330 |
| S.215RCRFID | 274 | 23 | 16,5 | 23 | 29 | 16,5 | 530 |
| S.217RCRFID | 524 | 23 | 16,5 | 23 | 29 | 16,5 | 940 |

### S - 1/2” drive extensions - RFID



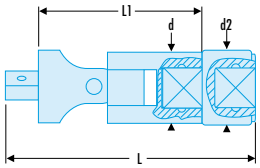

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Finish: bright chrome.

| | L [mm] | d [mm] | d1 [mm] | d2 [mm] | [g] |
|---|---|---|---|---|---|
| S.206RFID | 549 | 23 | 16,5 | 29 | 170 |
| S.208RFID | 99 | 23 | 16,5 | 29 | 210 |

# Standard 1/2” range



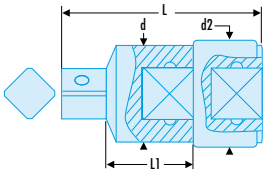
## 1/2” universal joint - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Spring-stiffened joint.
- Stays in position when reaching for fasteners.
- Significant time savings.
- Finish: bright chrome.

| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| **S.240ARFID** | 23 | 29 | 90 | 51 | 240 |

## 1/2” to 3/8” coupler - RFID

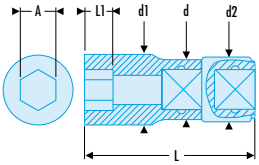



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Double 3/8” coupler
- Max torque: 212 N.m.
- Finish: bright chrome.

| | d [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| **S.230RFID** | 23 | 29 | 57,5 | 23 | 135 |

## 1/2" sockets

## S.H - 1/2” metric 6-point sockets - RFID




**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

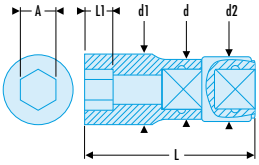
| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **S.10HRFID** | 10 | 6 | 22,8 | 15,3 | 29 | 60 | 7,8 | 130 |
| **S.11HRFID** | 11 | 6 | 22,8 | 16,5 | 29 | 60 | 9,0 | 135 |
| **S.12HRFID** | 12 | 6 | 22,8 | 17,8 | 29 | 60 | 9,5 | 135 |
| **S.13HRFID** | 13 | 6 | 22,8 | 18,9 | 29 | 60 | 10,4 | 135 |
| **S.14HRFID** | 14 | 6 | 22,8 | 20,2 | 29 | 60 | 10,5 | 140 |
| **S.15HRFID** | 15 | 6 | 22,8 | 21,4 | 29 | 60 | 12,0 | 140 |
| **S.16HRFID** | 16 | 6 | 21,6 | 22,6 | 29 | 60 | 12,0 | 140 |
| **S.17HRFID** | 17 | 6 | 23,1 | 24,1 | 29 | 60 | 13,0 | 145 |
| **S.18HRFID** | 18 | 6 | 23,4 | 25,5 | 29 | 60 | 13,0 | 150 |
| **S.19HRFID** | 19 | 6 | 24,6 | 26,6 | 29 | 60 | 14,0 | 150 |
| **S.21HRFID** | 21 | 6 | 25,1 | 29,1 | 29 | 62 | 16,0 | 175 |
| **S.22HRFID** | 22 | 6 | 26,4 | 30,4 | 29 | 62 | 16,5 | 185 |
| **S.24HRFID** | 24 | 6 | 28,7 | 32,7 | 29 | 62 | 16,5 | 210 |
| **S.27HRFID** | 27 | 6 | 29,2 | 36,6 | 29 | 68 | 19,0 | 220 |
| **S.30HRFID** | 30 | 6 | 33,0 | 40,4 | 29 | 68 | 20,0 | 285 |
| **S.32HRFID** | 32 | 6 | 35,1 | 42,6 | 29 | 68 | 20,0 | 295 |
| **S.34HRFID** | 34 | 6 | 37,5 | 44,9 | 29 | 68 | 20,0 | 320 |

## S - 1/2” metric 12-point sockets - RFID

RFid

**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Metric dimensions : from 10 to 34 mm.
- Finish: bright chrome.

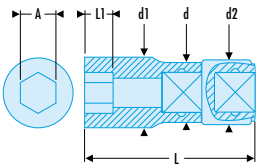



| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| S.10RFID | 10 | 12 | 22,8 | 15,3 | 29 | 60 | 7,8 | 130 |
| S.11RFID | 11 | 12 | 22,8 | 16,5 | 29 | 60 | 9,0 | 135 |
| S.12RFID | 12 | 12 | 22,8 | 17,8 | 29 | 60 | 9,5 | 135 |
| S.13RFID | 13 | 12 | 22,8 | 18,9 | 29 | 60 | 10,4 | 135 |
| S.14RFID | 14 | 12 | 22,8 | 20,2 | 29 | 60 | 10,5 | 140 |
| S.15RFID | 15 | 12 | 22,8 | 21,4 | 29 | 60 | 12,0 | 140 |
| S.16RFID | 16 | 12 | 21,6 | 22,6 | 29 | 60 | 12,0 | 140 |
| S.17RFID | 17 | 12 | 23,1 | 24,1 | 29 | 60 | 13,0 | 145 |
| S.18RFID | 18 | 12 | 23,4 | 25,4 | 29 | 60 | 13,0 | 150 |
| S.19RFID | 19 | 12 | 24,6 | 26,6 | 29 | 60 | 14,0 | 150 |
| S.21RFID | 21 | 12 | 25,1 | 29,1 | 29 | 62 | 16,0 | 175 |
| S.22RFID | 22 | 12 | 26,4 | 30,4 | 29 | 62 | 16,5 | 185 |
| S.24RFID | 24 | 12 | 28,7 | 32,7 | 29 | 62 | 16,5 | 210 |
| S.27RFID | 27 | 12 | 29,2 | 36,6 | 29 | 68 | 19,0 | 225 |
| S.30RFID | 30 | 12 | 33,0 | 40,4 | 29 | 68 | 20,0 | 265 |
| S.32RFID | 32 | 12 | 35,1 | 42,5 | 29 | 68 | 20,0 | 280 |
| S.34RFID | 34 | 12 | 37,5 | 44,9 | 29 | 68 | 20,0 | 305 |

## S - 1/2” metric 12-point sockets - RFID

RFid

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Dimensions in inches: from 3/8” to 1’1/4”.
- Finish: bright chrome.

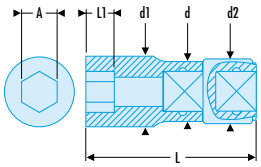



| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| S.3/8RFID | 3/8 | 12 | 22,8 | 14,7 | 29 | 60 | 7,8 | 130 |
| S.7/16RFID | 7/16 | 12 | 22,8 | 16,5 | 29 | 60 | 9,0 | 135 |
| S.1/2RFID | 1/2 | 12 | 22,8 | 18,9 | 29 | 60 | 10,4 | 135 |
| S.9/16RFID | 9/16 | 12 | 22,8 | 20,2 | 29 | 60 | 10,5 | 140 |
| S.19/32RFID | 19/32 | 12 | 22,8 | 21,4 | 29 | 60 | 12,0 | 140 |
| S.5/8RFID | 5/8 | 12 | 21,6 | 22,6 | 29 | 60 | 12,0 | 145 |
| S.21/32RFID | 21/32 | 12 | 23,1 | 24,1 | 29 | 60 | 13,0 | 145 |
| S.11/16RFID | 11/16 | 12 | 22,6 | 24,6 | 29 | 60 | 13,0 | 155 |
| S.3/4RFID | 3/4 | 12 | 25,0 | 27,0 | 29 | 60 | 14,0 | 150 |
| S.25/32RFID | 25/32 | 12 | 25,9 | 27,9 | 29 | 60 | 14,0 | 155 |
| S.13/16RFID | 13/16 | 12 | 24,6 | 28,6 | 29 | 62 | 16,0 | 180 |
| S.7/8RFID | 7/8 | 12 | 26,4 | 30,4 | 29 | 62 | 16,5 | 180 |
| S.15/16RFID | 15/16 | 12 | 28,7 | 32,7 | 29 | 62 | 16,5 | 215 |
| S.31/32RFID | 31/32 | 12 | 27,7 | 34,1 | 29 | 62 | 16,5 | 215 |
| S.1PRFID | 1 | 12 | 28,3 | 34,7 | 29 | 62 | 16,5 | 225 |
| S.1P1/16RFID | 1 1/16 | 12 | 29,2 | 36,6 | 29 | 68 | 19,0 | 230 |
| S.1P1/8RFID | 1 1/8 | 12 | 31,3 | 38,7 | 29 | 68 | 20,0 | 250 |
| S.1P3/16RFID | 1 3/16 | 12 | 33,0 | 40,4 | 29 | 68 | 20,0 | 265 |
| S.1P1/4RFID | 1 1/4 | 12 | 35,1 | 42,5 | 29 | 68 | 20,0 | 285 |

# Standard 1/2” range

## 1/2” long-reach sockets

### S.HLA - 1/2” long-reach metric 6-point sockets - RFID

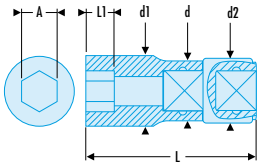



**NF ISO 1711-1, ISO 1711-1**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Metric dimensions : from 12 to 32 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| S.12HLARFID | 12 | 6 | 21 | 17,8 | 29 | 101 | 12 | 185 |
| S.13HLARFID | 13 | 6 | 21,8 | 19,0 | 29 | 101 | 12 | 195 |
| S.14HLARFID | 14 | 6 | 21,8 | 20,3 | 29 | 101 | 15 | 200 |
| S.15HLARFID | 15 | 6 | 21,8 | 21,5 | 29 | 101 | 15 | 205 |
| S.16HLARFID | 16 | 6 | 22,0 | 22,8 | 29 | 101 | 15 | 210 |
| S.17HLARFID | 17 | 6 | 23,0 | 24,0 | 29 | 101 | 15 | 220 |
| S.18HLARFID | 18 | 6 | 24,0 | 25,0 | 29 | 101 | 18 | 240 |
| S.19HLARFID | 19 | 6 | 25,0 | 26,5 | 29 | 101 | 18 | 240 |
| S.21HLARFID | 21 | 6 | 27,0 | 29,0 | 29 | 101 | 18 | 280 |
| S.22HLARFID | 22 | 6 | 28,0 | 30,0 | 29 | 101 | 21 | 295 |
| S.24HLARFID | 24 | 6 | 30,0 | 32,8 | 29 | 101 | 24 | 335 |
| S.27HLARFID | 27 | 6 | 33,0 | 36,5 | 29 | 101 | 27 | 390 |
| S.30HLARFID | 30 | 6 | 36,0 | 40,0 | 29 | 101 | 30 | 435 |
| S.32HLARFID | 32 | 6 | 38,0 | 42,8 | 29 | 101 | 33 | 490 |

### S.LA - 1/2” long-reach metric 12-point sockets - RFID




**NF ISO 1711-1, ISO 1711-1**

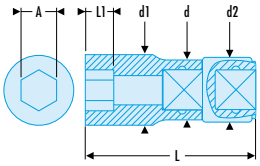
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Metric dimensions : from 12 to 32 mm.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| S.12LARFID | 12 | 12 | 21,0 | 17,8 | 29 | 101 | 12 | 185 |
| S.13LARFID | 13 | 12 | 21,8 | 19,0 | 29 | 101 | 12 | 195 |
| S.14LARFID | 14 | 12 | 21,8 | 20,3 | 29 | 101 | 15 | 205 |
| S.15LARFID | 15 | 12 | 21,8 | 21,5 | 29 | 101 | 15 | 205 |
| S.16LARFID | 16 | 12 | 22,0 | 22,8 | 29 | 101 | 15 | 215 |
| S.17LARFID | 17 | 12 | 23,0 | 24,0 | 29 | 101 | 15 | 225 |
| S.18LARFID | 18 | 12 | 24,0 | 25,0 | 29 | 101 | 18 | 240 |
| S.19LARFID | 19 | 12 | 25,0 | 26,5 | 29 | 101 | 18 | 260 |
| S.21LARFID | 21 | 12 | 27,0 | 29,0 | 29 | 101 | 18 | 290 |
| S.22LARFID | 22 | 12 | 28,0 | 30,0 | 29 | 101 | 21 | 295 |
| S.24LARFID | 24 | 12 | 30,0 | 32,8 | 29 | 101 | 24 | 335 |
| S.27LARFID | 27 | 12 | 33,0 | 36,5 | 29 | 101 | 27 | 395 |
| S.30LARFID | 30 | 12 | 36,0 | 40,0 | 29 | 101 | 30 | 445 |
| S.32LARFID | 32 | 12 | 36,0 | 42,8 | 29 | 101 | 33 | 495 |

## S.LA - 1/2” inch 12-point sockets - RFID

RFID

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool’s ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Dimensions in inches: from 1/2” to 1’1/4.
- Finish: bright chrome.




| | A ["] | [mm] | d [mm] | d1 [mm] | d2 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **S.1/2LARFID** | 1/2 | 12 | 22,3 | 19,0 | 29 | 106,2 | 8,1 | 215 |
| **S.9/16LARFID** | 9/16 | 12 | 22,3 | 20,6 | 29 | 106,2 | 9,6 | 220 |
| **S.5/8LARFID** | 5/8 | 12 | 22,3 | 22,3 | 29 | 106,2 | 10,9 | 230 |
| **S.11/16LARFID** | 11/16 | 12 | 24,4 | 24,4 | 29 | 106,2 | 10,9 | 240 |
| **S.3/4LARFID** | 3/4 | 12 | 26,9 | 26,9 | 29 | 106,2 | 12,4 | 245 |
| **S.13/16LARFID** | 13/16 | 12 | 28,7 | 28,7 | 29 | 106,2 | 12,9 | 255 |
| **S.7/8LARFID** | 7/8 | 12 | 30,2 | 30,2 | 29 | 106,2 | 14,0 | 280 |
| **S.15/16LARFID** | 15/16 | 12 | 31,7 | 31,7 | 29 | 106,2 | 15,0 | 305 |
| **S.1PLARFID** | 1 | 12 | 33,3 | 33,3 | 29 | 106,2 | 15,2 | 335 |
| **S.1P1/16LARFID** | 1 1/16 | 12 | 36,5 | 36,5 | 29 | 106,2 | 16,0 | 400 |
| **S.1P1/8LARFID** | 1 1/8 | 12 | 38,1 | 38,1 | 29 | 106,2 | 16,7 | 430 |
| **S.1P1/4LARFID** | 1 1/4 | 12 | 42,9 | 42,9 | 29 | 106,2 | 16,7 | 510 |

• Solutions FACOM.RFID

## "High performance" click wrenches

# 306 SERIES | CLICK WRENCHES "HIGH PERFORMANCE"

## WRENCHES FACOM.RFID

### TRACEABILITY

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.

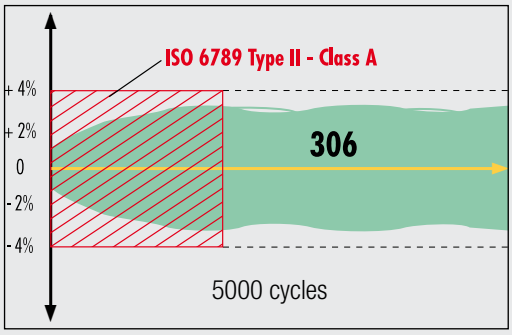
### REAL-TIME MANAGEMENT OF CALIBRATION CERTIFICATES

### PERFORMANCE

- Accurate, tamper-proof vernier. Easy to read and set for error-free adjustment.
- Automatically locking torque adjustment, no risk of accidental release.

### PRECISION

- Accurate, tamper-proof vernier. Easy to read and set for error-free adjustment.
- Automatically locking torque adjustment, no risk of accidental release.




RFID TECHNOLOGY BY FACOM

## 306D - Click wrenches without accessories - RFID

RFID

**NF EN ISO 6789, ISO 6789, DIN EN ISO 6789**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Factory accuracy: ± 2% except: - R.306-25DRFID (± 4%).
  - R.304DARFID (± 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.
- One-way wrenches usable for unscrewing by reversing the bits.
- Numbered wrenches supplied with ISO 6789 calibration certificate.

| | Capacity [N.m] | End Fitting | Graduation [N.m] | L [mm] | [kg] |
|---|---|---|---|---|---|
| R.304DARFID | 1 - 5 | 9 x 12 | 0,05 | 211,5 | 0,35 |
| R.306-25DRFID | 5 - 25 | 9 x 12 | 0,10 | 271 | 0,51 |
| J.306-50DRFID | 10 - 50 | 9 x 12 | 1,00 | 357 | 0,96 |
| S.306-100DRFID | 20 - 100 | 9 x 12 | 1,00 | 437 | 1,07 |
| S.306-200DRFID | 40 - 200 | 14 x 18 | 1,00 | 515 | 1,28 |
| S.306-350DRFID | 70 - 350 | 14 x 18 | 2,00 | 725 | 1,81 |

## "Low torque" click wrench with fixed ratchet - RFID

RFID

**NF EN ISO 6789, ISO 6789, DIN EN ISO 6789**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.

| | Capacity [N.m] | Graduation [N.m] | [“] | L [mm] | [kg] |
|---|---|---|---|---|---|
| R.306-5RFID | 1 - 5 | 0,05 | 1/4 | 215 | 0,36 |

## R-J.306U - Click wrenches with dual lbf.in and N.m graduation - RFID

RFID

**NF EN ISO 6789, ISO 6789, DIN EN ISO 6789**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Factory accuracy: ± 2%. - Reliability of mechanism: 50,000 cycles.
- Click wrenches with dual lbf.in and N.m graduation. - Full metal wrenches with knurled handle.
- Reversible model. - Numbered wrenches supplied with ISO 6789 calibration certificate.

| | Capacity [lbf.in] | End Fitting | Graduation [lbf.in] | [“] | L [mm] | [kg] |
|---|---|---|---|---|---|---|
| R.306URFID | 40 - 200 | 9 x 12 | 1 | 1/4 | 303,7 | 0,52 |
| J.306URFID | 200 - 1000 | 9 x 12 | 5 | 3/8 | 397 | 1,11 |

## S.305P Swivel handle - RFID

RFID

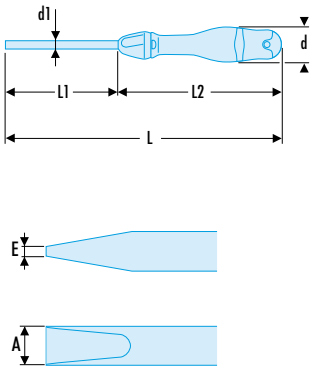
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Ability to keep the wrench parallel with the tightening plane.
- Use with 3/8" and 1/2" ratchets and drive squares.
- Max diam. size: 45 mm.
- Length: 66 mm.

Weight: 130 g.

# Screwdrivers

## PROTWIST® screwdrivers

### AN-AW - PROTWIST® screwdrivers for slotted head screws - RFID

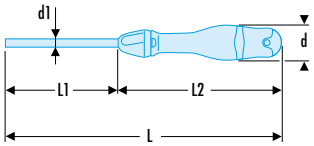



**NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|---|
| AN2X75FRFID | 2,0 | 0,4 | 19 | 2,0 x 58 | 169 | 94 | 60 |
| AN2.5X75FRFID | 2,5 | 0,4 | 19 | 2,5 x 58 | 169 | 94 | 65 |
| AN3X100FRFID | 3,0 | 0,5 | 25 | 3,0 x 83 | 203 | 103 | 75 |
| AN3.5X100FRFID | 3,5 | 0,6 | 25 | 3,5 x 82 | 203 | 103 | 85 |
| AN4X100FRFID | 4,0 | 0,8 | 30 | 4,0 x 82 | 209 | 109 | 90 |
| AN4X150FRFID | 4,0 | 0,8 | 30 | 4,0 x 132 | 259 | 109 | 95 |
| AN5.5X150FRFID | 5,5 | 1,0 | 30 | 5,5 x 132 | 259 | 109 | 135 |
| AN6.5X150FRFID | 6,5 | 1,2 | 36 | 6,5 x 131 | 270 | 120 | 180 |
| AW8X150FRFID | 8 | 1,2 | 40 | 7 x 131 | 275 | 125 | 260 |
| AW10X200FRFID | 10 | 1,6 | 40 | 9 x 181 | 325 | 125 | 295 |

### ANP - PROTWIST® screwdrivers for Phillips® screws - RFID

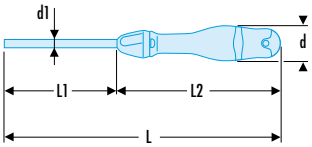



**NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|
| ANP0X75FRFID | PH0 | 25 | 3,0 x 57 | 178 | 103 | 85 |
| ANP1X100FRFID | PH1 | 30 | 4,5 x 82 | 209 | 109 | 120 |
| ANP1X250FRFID | PH1 | 30 | 4,5 x 232 | 359 | 109 | 140 |
| ANP2X125FRFID | PH2 | 36 | 6,0 x 106 | 245 | 120 | 170 |
| ANP2X250FRFID | PH2 | 36 | 6,0 x 231 | 370 | 120 | 195 |
| ANP2X400FRFID | PH2 | 36 | 6,0 x 381 | 520 | 120 | 230 |
| ANP3X150FRFID | PH3 | 40 | 8,0 x 131 | 275 | 125 | 235 |
| ANP1X35FRFID | PH1 | 36 | 4,5 x 25 | 91 | 56 | 70 |
| ANP2X35FRFID | PH2 | 36 | 6,0 x 25 | 91 | 56 | 75 |

## AND - PROTWIST® screwdrivers for Pozidriv® screws - RFID

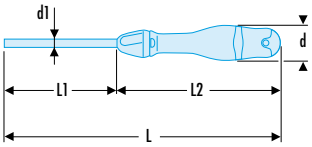



**NF ISO 2380-1, NF ISO 2380-2, ISO 2380-1, ISO 2380-2, DIN ISO 2380-1, DIN ISO 2380-2, ASME B107.600**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed round blade.

| | Phillips [No] | d [mm] | d1 x L1 [mm] | L [mm] | L2 [mm] | ΔΔ [g] |
|---|---|---|---|---|---|---|
| **AND0X75FRFID** | PZ0 | 25 | 3,0 x 57 | 178 | 103 | 85 |
| **AND1X100FRFID** | PZ1 | 30 | 4,5 x 82 | 209 | 109 | 120 |
| **AND1X250FRFID** | PZ1 | 30 | 4,5 x 232 | 359 | 109 | 140 |
| **AND2X125FRFID** | PZ2 | 36 | 6,0 x 106 | 245 | 120 | 170 |
| **AND2X250FRFID** | PZ2 | 36 | 6,0 x 231 | 370 | 120 | 195 |
| **AND3X150FRFID** | PZ3 | 40 | 8,0 x 131 | 275 | 125 | 235 |
| **AND1X35FRFID** | PZ1 | 36 | 4,5 x 25 | 91 | 56 | 70 |
| **AND2X35FRFID** | PZ2 | 36 | 6,0 x 25 | 91 | 56 | 75 |

## ANXR - PROTWIST® screwdrivers for Resistorx® screws - RFID

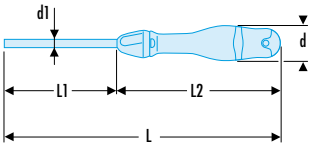



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Compliant with Resistorx® specifications.
- Silicon carbon 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] | ΔΔ [g] |
|---|---|---|---|---|---|---|---|
| **ANXR10X75FRFID** | 2,74 | TT10 | 25 | 3,0 x 57 | 184 | 109 | 90 |
| **ANXR15X75FRFID** | 3,26 | TT15 | 30 | 3,5 x 57 | 185 | 110 | 105 |
| **ANXR20X100FRFID** | 3,84 | TT20 | 36 | 4,0 x 81 | 220 | 120 | 110 |
| **ANXR25X100FRFID** | 4,40 | TT25 | 36 | 5,0 x 81 | 220 | 120 | 155 |
| **ANXR27X100FRFID** | 4,96 | TT27 | 36 | 5,5 x 81 | 220 | 120 | 155 |
| **ANXR30X125FRFID** | 5,49 | TT30 | 36 | 6,0 x 106 | 245 | 120 | 170 |
| **ANXR40X150FRFID** | 6,60 | TT40 | 40 | 7,0 x 131 | 275 | 125 | 215 |

## PROTWIST® hexagonal key

## AWSH.F - PROTWIST® handle hexagonal key - spherical head - RFID



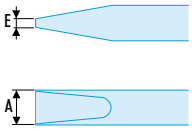

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Bi-material grip resists to impacts, abrasion, and chemicals.

| | A [mm] | d [mm] | d1 x L1 [mm] | L [mm] | L2 [mm] | ΔΔ [g] |
|---|---|---|---|---|---|---|
| **AWSH2X75FRFID** | 2 | 19 | 2,0 x 58 | 169 | 94 | 75 |
| **AWSH2.5X75FRFID** | 2,5 | 19 | 2,5 x 58 | 169 | 94 | 75 |
| **AWSH3X75FRFID** | 3 | 19 | 3,0 x 58 | 169 | 94 | 75 |
| **AWSH4X75FRFID** | 4 | 25 | 4,0 x 57 | 178 | 103 | 85 |
| **AWSH5X100FRFID** | 5 | 30 | 5,0 x 82 | 208 | 109 | 120 |
| **AWSH6X100FRFID** | 6 | 36 | 6,0 x 81 | 220 | 120 | 160 |
| **AWSH8X100FRFID** | 8 | 36 | 8,0 x 81 | 220 | 120 | 220 |

# Screwdrivers

## Insulated screwdrivers

### A.VE - PROTWIST® 1,000 Volt insulated screwdrivers for slotted-head screws - RFID

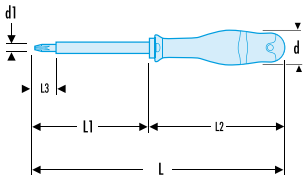



**NF ISO 2380-1, NF ISO 2380-2, NF EN 60900, ISO 2380-1, ISO 2380-2, EN 60900, DIN ISO 2380-1, DIN ISO 2380-2, DIN EN 60900, ASME B107.600**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|---|---|
| A2X75VERFID | 2,0 | 0,4 | 19 | 170 | 58 | 95 | 18 | 65 |
| A2.5X75VERFID | 2,5 | 0,4 | 25 | 178 | 58 | 103 | 18 | 75 |
| A3X75VERFID | 3,0 | 0,5 | 25 | 178 | 58 | 103 | 18 | 80 |
| A3.5X100VERFID | 3,5 | 0,6 | 25 | 204 | 82 | 104 | 18 | 85 |
| A4X100VERFID | 4,0 | 0,8 | 30 | 210 | 82 | 110 | 18 | 90 |
| A5.5X125VERFID | 5,5 | 1,0 | 30 | 235 | 106,5 | 110 | 18 | 130 |
| A6.5X150VERFID | 6,5 | 1,2 | 36 | 270 | 131 | 120 | 18 | 160 |
| A8X150VERFID | 8,0 | 1,2 | 40 | 275 | 131 | 125 | 18 | 200 |

### AP.VE - PROTWIST® 1,000 Volt insulated screwdrivers for Phillips® head screws - RFID

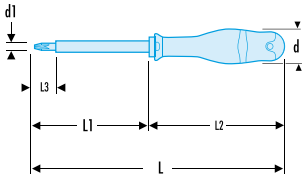



**NF ISO 8764-1, NF ISO 8764-2, NF EN 60900, ISO 8764-1, ISO 8764-2, EN 60900, DIN ISO 8764-1, DIN ISO 8764-2, DIN EN 60900, ASME B107.600**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|---|---|
| AP1X100VERFID | PH1 | 30 | 4,5 | 210 | 81,5 | 110 | 18 | 120 |
| AP2X125VERFID | PH2 | 36 | 6,0 | 245 | 106 | 120 | 18 | 170 |

## AD.VE - PROTWIST® 1,000 Volt insulated screwdrivers for Pozidriv® head screws - RFID



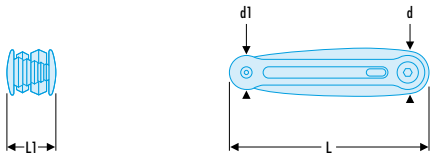

**NF ISO 8764-1, NF ISO 8764-2, NF EN 60900, ISO 8764-1, ISO 8764-2, EN 60900, DIN ISO 8764-1, DIN ISO 8764-2, DIN EN 60900, ASME B107.600**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | [g] |
|---|---|---|---|---|---|---|---|---|
| AD1X100VERFID | PZ1 | 30 | 4,5 | 209 | 81,5 | 109 | 18 | 120 |
| AD2X125VERFID | PZ2 | 36 | 6,0 | 245 | 106 | 120 | 18 | 170 |

## 86H - Hexagon keys on sleeve - RFID

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Very compact sleeve.
- Positive grip.
- Keys on 90° end stop for tightening.
- Keys in silicon steel issued from series 82H.
- Finish: phosphate-coated.

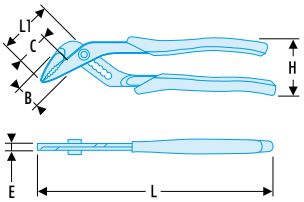



| | [mm] | ["] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 86H.JE7AFRFID | 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0 | - | 30 | 24 | 138 | 37 | 415 |
| 86H.JE7BFRFID | 1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 | - | 22 | 18 | 118 | 33 | 160 |
| 86H.JU6FRFID | - | 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8 | 30 | 24 | 138 | 37 | 430 |
| 86H.JU7FRFID | - | 1/16 - 5/64 - 3/32 - 1/8 - 5/32 - 3/16 - 1/4 | 22 | 18 | 118 | 33 | 155 |

# Pliers

## Engineers pliers

### High-performance multigrip plier - RFID

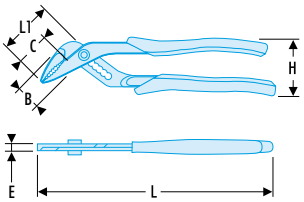



**NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Capacity: 44 mm.
- Ideal for confined spaces: long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- Finish: chrome finish, ergonomic grips.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | H [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **180.CPERFID** | 30 | 35 | 8 | 22 | 250 | 58 | 60 | 380 |

### 181A - Locking twin slip-joint multigrip pliers - RFID

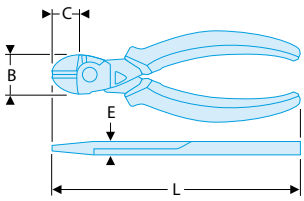



**NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | Hex capacity [mm] | Tube capacity [mm] | H [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|---|
| **181A.18CPERFID** | 22 | 24 | 7,5 | 20 | 185 | 48 | 36 | 36 | 52 | 250 |
| **181A.25CPERFID** | 28 | 28 | 7,5 | 22,5 | 245 | 54 | 41 | 42 | 58 | 380 |

### 192.CPE High-performance diagonal cutters RFID

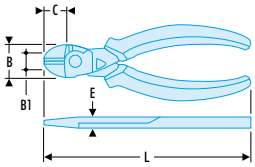



**NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|
| **192.16CPERFID** | 24,0 | 180 | 1,6 | 10,0 | 160 | 220 |
| **192.20CPERFID** | 28,0 | 22,0 | 2,0 | 11,5 | 200 | 340 |

## Electricians diagonal cutter - RFID

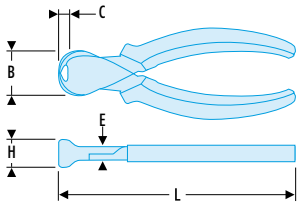



**NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | [g] |
|---|---|---|---|---|---|
| 391.16CPERFID | 19 | 21 | 9 | 165 | 210 |

## 190.CPE - High-performance end cutter - RFID

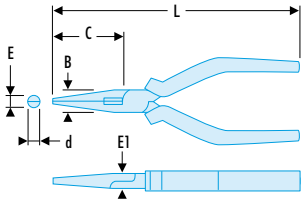



**NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | d maxi [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|
| 190.16CPERFID | 28 | 6,5 | 1,6 | 11,5 | 160 | 220 |
| 190.20CPERFID | 31 | 7,5 | 2,0 | 13,5 | 200 | 360 |

## 185-195.CPE - Long half-round nose pliers - RFID




**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**

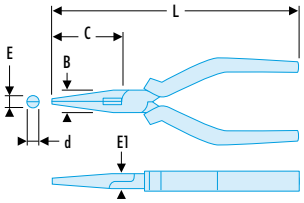
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Narrow, finely serrated tips with a pipe-grip.
- Side cutter 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] |
|---|---|---|---|---|---|---|---|
| 185.20CPERFID | 18 | 75 | 2,9 | 3,6 | 9 | 200 | 215 |
| 195.20CPERFID | 18 | 69 | 2,9 | 3,6 | 9 | 200 | 215 |

# Pliers



## 193-195.CPE - Short half-round nose pliers - RFID

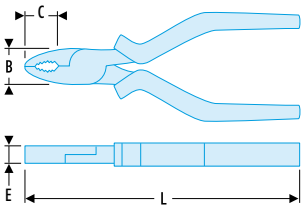



**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|---|---|
| **193.16CPERFID** | 17 | 50 | 2,5 | 3 | 9 | 160 | 200 |
| **195.16CPERFID** | 17 | 50 | 2,5 | 3 | 9 | 160 | 200 |

## 187.CPE - Combination pliers - RFID

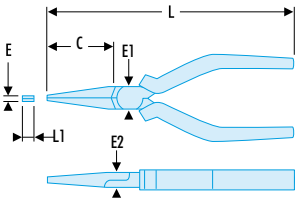



**NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|---|
| **187.16CPERFID** | 21 | 34 | 9,5 | 165 | 215 |
| **187.18CPERFID** | 23 | 36 | 10,0 | 185 | 245 |

## 188 - Flat nose pliers - RFID

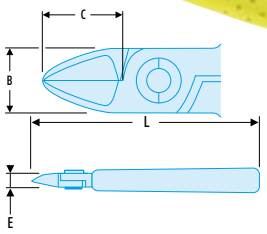



**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Serrated 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] |
|---|---|---|---|---|---|---|---|
| 188.16CPERFID | 46 | 4 | 18 | 9 | 168 | 6,5 | 160 |
| 188.20CPERFID | 75 | 4 | 18 | 9 | 200 | 6,5 | 220 |

## Micro-Tech® cutting pliers

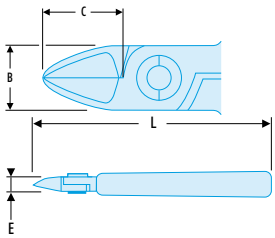
### Micro-Tech® "heavy-duty" cutters - RFID




**NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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 Ø [mm] | Fe 30 HRc diam. [mm] | Coupe | [g] |
|---|---|---|---|---|---|---|---|---|
| 405.10MTFRFID | 10,5 | 11,5 | 7 | 110 | 0,3 - 1,4 | 0,8 | | 80 |
| 405.12MTFRFID | 16 | 16 | 8 | 125 | 0,4 - 2,0 | 1,0 | | 115 |

### Micro-Tech® "long" cutters: access - RFID




**NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- These pliers allow to go further; up to + 1.5 to 2 mm compared with standard pliers.
- Fall prevention models avoid wire ejection.

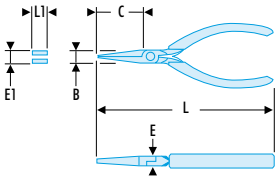
| | B [mm] | C [mm] | E [mm] | L [mm] | Cu - Ni Ø [mm] | Coupe | [g] |
|---|---|---|---|---|---|---|---|
| 425FRFID | 10,5 | 13 | 7 | 110 | 0,1 - 1,3 | | 80 |

# Pliers



## Micro-Tech® grippers

### Micro-Tech® long and rigid nose gripper - RFID

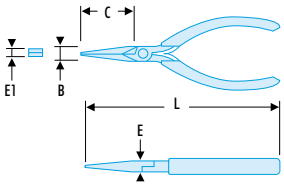



RFID

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 421.MTFRFID | 11 | 33 | 7 | 1 | 130 | 5 | 90 |

### Micro-Tech® thin nose gripper - RFID

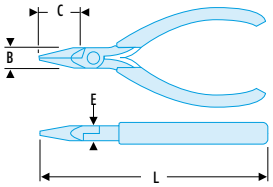



RFID

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Narrow mesh, for high precision works.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|
| 431.LMTFRFID | 9 | 35 | 6 | 1 | 135 | 100 |

### Micro-Tech® long and rigid nose gripper - RFID

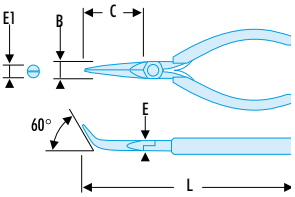



RFID

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Long and strong nose for precision and extra power works.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|
| 422.MTFRFID | 11 | 33 | 7 | 0,5 | 130 | 110 |

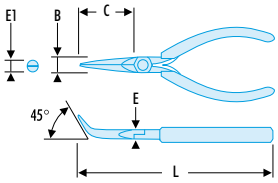
## Micro-Tech® gripping plier with fluorescent grips - RFID




**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.MTFRFID | 11 | 25 | 7 | 1,4 | 125 | 90 |

## Micro-Tech® 45° angled thin nose gripper - RFID

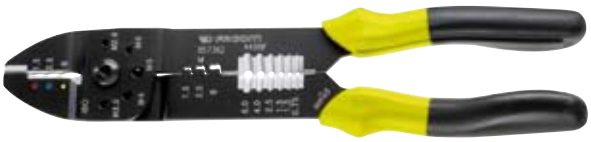



**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Fine mesh, for high precision works.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] |
|---|---|---|---|---|---|
| 433.LMTFRFID | 9 | 35 | 6 | 1,6 | 135 |

# Crimping plier

## 449BFRFID Standard crimping plier for insulated terminals - RFID



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.

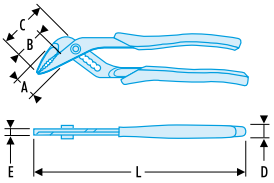
Weight: 340 g.

# Pliers



## 1,000 Volts insulated pliers VE series

### 180 - 1,000 Volt insulated multigrip plier - RFID

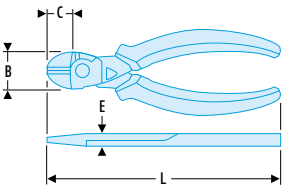



**NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Capacity: 44 mm.
- Ideal for confined spaces: long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- Varnish finish, ergonomic grips.

| | A [mm] | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 180.VERFID | 30 | 35 | 58 | 8 | 22 | 250 | 380 |

### 1,000 Volt insulated electricians diagonal cutter - RFID

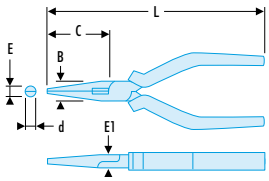



**NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | 160kg /mm² [Ømm] | Cu max Ø/mm² [Ømm] | [g] |
|---|---|---|---|---|---|---|---|
| 391.16VERFID | 19 | 21 | 9 | 165 | 1,6 | 0,7 - 3,5 | 210 |

### 185-195.VE - 1,000 Volt insulated long half-round nose pliers - RFID

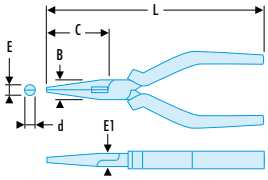



**NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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. - 185.VE: straight nose. - 195.VE: 40° angled nose.
- Lateral wire cutter for copper and hard steel wire.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

| | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | 160kg /mm² [Ømm] | Cu max Ø/mm² [Ømm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| 185.20VERFID | 18 | 75 | 2,9 | 3,6 | 9 | 200 | 1,6 | 0,7 - 3,5 | 215 |
| 195.20VERFID | 18 | 69 | 2,9 | 3,6 | 9 | 200 | 1,6 | 0,7 - 3,5 | 215 |

## 1,000 Volt insulated short half-round nose plier - RFID

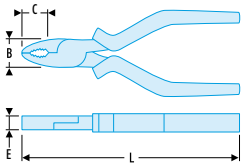



**NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim, straight, fine serrated noses.
- Lateral wire cutter for copper and hard steel wire.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

| | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | 160kg /mm² [Ømm] | Cu max Ø/ mm² [Ømm] | [g] |
|---|---|---|---|---|---|---|---|---|---|
| 193.16VERFID | 17 | 50 | 2,5 | 3 | 9 | 160 | 1,6 | 0,7 - 3,0 | 200 |

## 1,000 Volt insulated combination plier - RFID

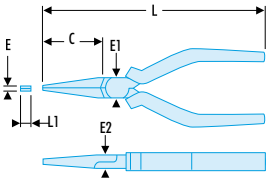



**NF ISO 5746, NF EN 60900, ISO 5746, EN 60900, DIN ISO 5746, DIN EN 60900, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] | 200kg /mm² [Ømm] | [g] |
|---|---|---|---|---|---|---|
| 187.18VERFID | 23 | 36 | 10,0 | 185 | 1,8 | 245 |

## 1,000 Volt insulated flat nose plier - RFID




**NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500**

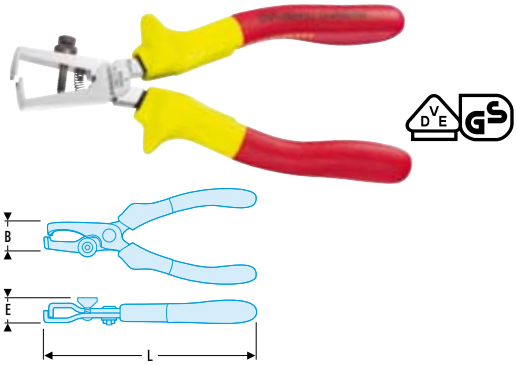
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For your safety, all pliers are tested individually at 10,000 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] |
|---|---|---|---|---|---|---|---|
| 188.20VERFID | 75 | 4 | 18 | 9 | 200 | 6,5 | 220 |

# Pliers



## 1,000 Volt insulated stripper - RFID




**NF EN 60900, EN 60900, DIN EN 60900**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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] |
|---|---|---|---|---|
| 194.17VERFID | 17 | 8,5 | 170 | 205 |

## Circlip® pliers

### 179A - Straight nose inside circlip® pliers - RFID

**NF E 73-130, DIN 5256, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For inside 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] |
|---|---|---|---|---|
| 179A.9RFID | 0,9 | 8 -13 | 140 | 135 |
| 179A.13RFID | 1,3 | 12 - 25 | 140 | 135 |
| 179A.18RFID | 1,8 | 19 - 60 | 185 | 235 |
| 179A.23RFID | 2,2 | 40 - 100 | 215 | 320 |

### 199A - 90° angled nose inside circlip® pliers - RFID

**NF E 73-130, DIN 5256, ASME B107.500**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For inside 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] |
|---|---|---|---|---|
| 199A.9RFID | 0,9 | 8 -13 | 130 | 135 |
| 199A.13RFID | 1,3 | 12 - 25 | 130 | 135 |
| 199A.18RFID | 1,8 | 19 - 60 | 170 | 235 |
| 199A.23RFID | 2,2 | 40 - 100 | 205 | 320 |

## 177A - Straight nose outside circlip® pliers - RFID

**NF E 73-130, DIN 5254, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For outside 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] |
|---|---|---|---|---|
| 177A.9RFID | 0,9 | 3 - 10 | 150 | 125 |
| 177A.13RFID | 1,3 | 10 - 25 | 150 | 125 |
| 177A.18RFID | 1,8 | 19 - 60 | 180 | 195 |
| 177A.23RFID | 2,2 | 40 - 100 | 215 | 300 |

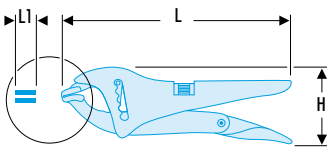
## 197A - 90° angled nose outside circlip® pliers - RFID

**NF E 73-130, DIN 5254, ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- For outside 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] |
|---|---|---|---|---|
| 197A.9RFID | 0,9 | 3 - 10 | 14 0 | 125 |
| 197A.13RFID | 1,3 | 10 - 25 | 140 | 125 |
| 197A.18RFID | 1,8 | 19 - 60 | 170 | 195 |
| 197A.23RFID | 2,2 | 40 - 100 | 200 | 300 |

# Lock-grip pliers

## Short-nose lock-grip plier - RFID



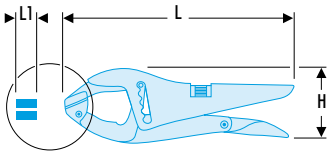

**ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 4-position slip joint system.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- Finish: chromed.

| | H [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|
| 500FRFID | 58 | 225 | 17 | 570 |

# Lock-grip pliers - Locking-wire pliers



## Long nose lock-grip plier - RFID




RFid

**ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 4-position slip joint system.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- Finish: chromed.

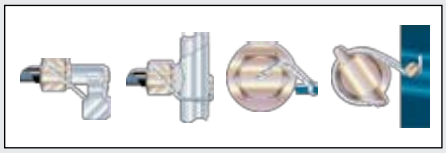
| | H [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|
| 501FRFID | 63 | 250 | 17 | 650 |

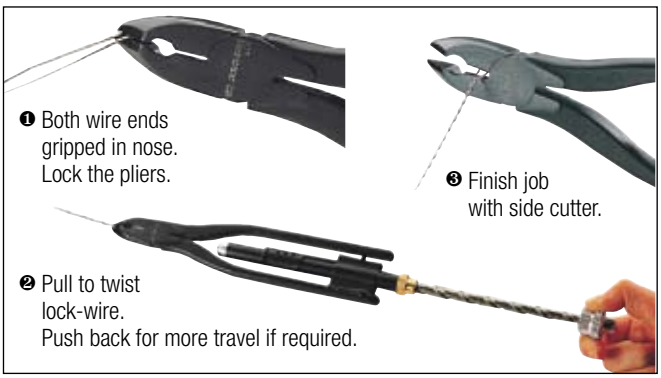
## Locking-wire pliers

### 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.
- 8" model: 2.5 turns, 95 mm travel.
- 10" model: 3 turns, 125 mm travel.

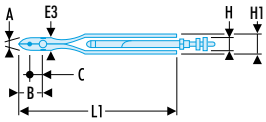


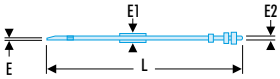



**Automatic model**
- Automatic-reset model for simplicity and time-saving.

## 445 - Locking-wire pliers 8 and 10" - RFID

RFid

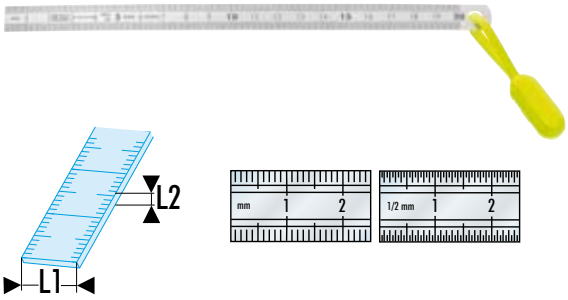



**ASME B107.500**
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- "Automatic" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 445.8RRFID = 2.5 turns: 95 mm length.
- 445.10RRFID = 3 turns: 125 mm length.
- Finish: phosphate-coated.

| | A [mm] | B [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | E3 [mm] | H [mm] | H1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 445.8RRFID | 3 | 20 | 7 | 2,5 | 15 | 10,5 | 15 | 22 | 37 | 215 | 170 | 265 |
| 445.10RRFID | 3 | 30 | 11 | 2,5 | 15,5 | 11,5 | 19 | 25 | 40 | 360 | 230 | 420 |

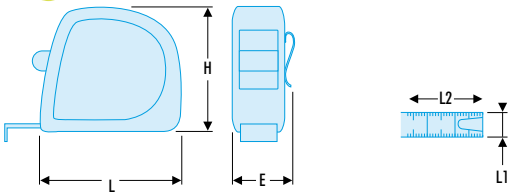
## Stainless steel rule - 2 sides - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.1051.03RFID | 200 | 13 x 0,5 | 45 |

## ABS body tape measure - RFID


- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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).

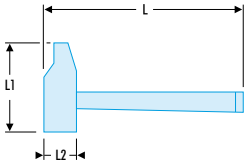
| | E [mm] | H [mm] | L [mm] | L1 [mm] | L2 [m] | [g] |
|---|---|---|---|---|---|---|
| 893.316FLUORFID | 27 | 60 | 60 | 16 | 3 | 160 |

# Hammer



## 200H - Graphite handle riveting engineers hammer - RFID

RFID



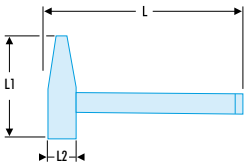

**NF E 71-016, NF ISO 15601, ISO 15601**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- High security Hickery handle.
- Triple wedge design - 1 wooden and 2 metal wedges.

| | L [mm] | L1 [mm] | L2 [mm] | [kg] |
|---|---|---|---|---|
| **200H.26RFID** | 245 | 80 | 25 | 0,345 |
| **200H.30RFID** | 270 | 93 | 30 | 0,470 |
| **200H.32RFID** | 300 | 100 | 32 | 0,585 |
| **200H.40RFID** | 330 | 108 | 40 | 1,025 |
| **200H.60RFID** | 380 | 151 | 60 | 2,800 |

## 205H - Graphite handle DIN engineers hammer - RFID

RFID

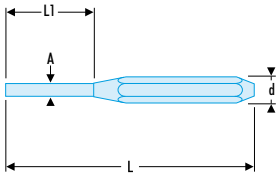



**NF ISO 15601, ISO 15601, DIN 1041**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- High security Hickery handle.
- Triple wedge design - 1 wooden and 2 metal wedges.

| | L [mm] | L1 [mm] | L2 [mm] | [kg] |
|---|---|---|---|---|
| **205H.20RFID** | 280 | 96 | 19 | 0,250 |
| **205H.30RFID** | 300 | 106 | 23 | 0,380 |
| **205H.50RFID** | 320 | 122 | 27 | 0,580 |
| **205H.80RFID** | 350 | 132 | 33 | 0,960 |
| **205H.100RFID** | 360 | 137 | 36 | 1,140 |

## 249 - Standard drift punches - RFID

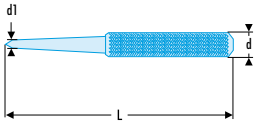




**NF E 71-211, DIN 6450, ASME B107.410**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Hexagonal shank, high-strength steel tip, hardened to 53-58 HRc.
- Zinc-plated finish.

| | A [mm] | d [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| **249.2RFID** | 1,9 | 10 | 115 | 30 | 40 |
| **249.3RFID** | 2,9 | 10 | 125 | 40 | 45 |
| **249.4RFID** | 3,9 | 12 | 150 | 50 | 75 |
| **249.5RFID** | 4,9 | 12 | 165 | 50 | 85 |
| **249.6RFID** | 5,9 | 14 | 180 | 50 | 130 |
| **249.8RFID** | 7,9 | 14 | 200 | 50 | 170 |
| **249.10RFID** | 9,9 | 18 | 200 | 50 | 230 |

## 256 - Precision centre punches - RFID


**NF E 71-211, DIN 7250, ASME B107.410**

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Chrome-vanadium steel forged, hardened to 52 to 58 HRc.
- Presentation: knurled body.
- Zinc-plated finish.

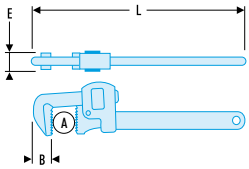
| | d1 [mm] | d [mm] | L [mm] | [g] |
|---|---|---|---|---|
| **256.4RFID** | 4 | 10 | 105 | 35 |
| **256.6RFID** | 6 | 12 | 115 | 55 |
| **256.8RFID** | 8 | 14 | 130 | 80 |

# Maintenance - Cutting



## Pipe wrenches

### 131A - Steel Stillson models - RFID




- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.8RFID | 27 | 3/4 | 19,5 | 12,5 | 200 | 8 | 0,3 |
| 131A.10RFID | 34 | 1 | 25,0 | 16,0 | 250 | 10 | 0,62 |
| 131A.14RFID | 49 | 1'1/2 | 29,5 | 21,0 | 350 | 14 | 1,08 |
| 131A.18RFID | 60 | 2 | 32,0 | 24,0 | 450 | 18 | 1,82 |
| 131A.24RFID | 76 | 2'1/2 | 41,5 | 27,5 | 600 | 24 | 3,02 |

## Scie

### 603FRFID "High performance" hacksaw frame - RFID

**NF E 73-073, DIN 6473**

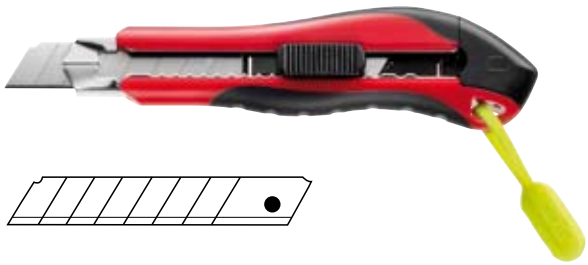
- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- Optimum and durable automatic blade tension control at 110 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: 850 g.

- Spare blades: 668B.

## Knife

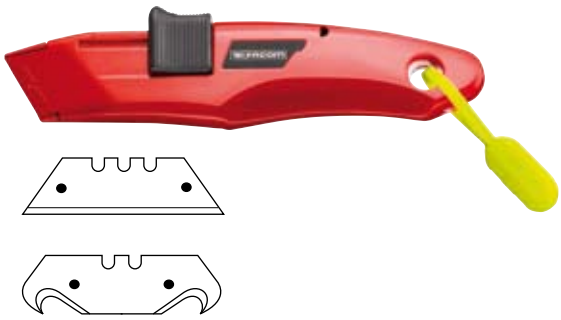
### 18 mm automatically reloading utility knife - RFID



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.S18RFID | 24 | 47 | 172 | 190 |

## Safety knife with retractable blade - RFID



- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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.DRFID | 27 | 40,5 - 44,0 | 176 | 215 |

## 840.F Lock-back knife with bi-material handle - RFID

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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: 200 g.

## 640180 Twin-blade electricians knife with plastic handle - RFID

- Tool with built-in RFID chip for workshop traceability.
- Chip integration by Facom guarantees maximum detection and strength, while preserving the tool's ergonomics.
- Radio frequency identification requires appropriate storage equipment.
- 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: 130g.

# NEW FLUORESCENT TOOL RANGE

## Your solution for "DARK OR DIMLY LIT AREAS"

**A UV lamp or tube is all you need to detect the fluorescent tools.**

Detectable in dark and dimly areas up to 3 meters.

### SAFETY
- High-visibility colour code ensuring easy detection, even in broad daylight.
- Better tool visibility, particularly in dark areas: less accidents, injuries, incidents...
- No chipping due to impacts, no product elements or accessories lost...

### IMPROVED PRODUCTIVITY
- Tools compatible with rolling cabinet organiser modules.
- Faster recovery of lost tools.
- Easy cleaning.

### ERGONOMICS
- Same dimensions as standard tools.
- Good product grip.

### COST REDUCTION
- No more lost tools to be replaced
- Durability identical to standard tools.

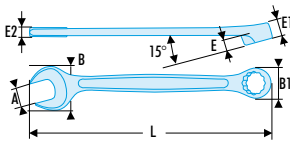
FLUO

FOD

**A comprehensive product range for most common applications.**
**Wrenches, ratchets, sockets, gauges, pliers, hammers, rules, etc.**

• Solutions FACOM.FLUO

## 440F - Metric combination wrenches - FLUO




**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 ISO 1711-1, DIN 3113, ASME B107.100**

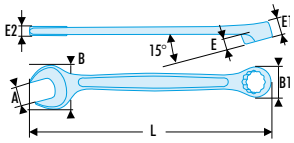
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Standard wrench for all current applications.
- High mechanical strength combined with compact size meeting aeronautical standards.
- Ring head:
  - Ring open end (size E) designed for better access 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 19 mm.
- Presentation: satin chrome finish.

FLUO

| | A [mm] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **440.4HF** | 4 | 10,0 | 7,8 | 2,1 | 3.5 | 3,0 | 106 | 10 |
| **440.5HF** | 5 | 13,3 | 9,2 | 3,1 | 6,0 | 3,6 | 115 | 16 |
| **440.5,5HF** | 5,5 | 13,3 | 9,2 | 3,1 | 6,0 | 3,8 | 115 | 15 |
| **440.6F** | 6 | 14,1 | 10,0 | 3,1 | 6,0 | 3,8 | 115 | 20 |
| **440.7F** | 7 | 17,2 | 11,2 | 3,4 | 6,2 | 3,9 | 122 | 20 |
| **440.8F** | 8 | 19,2 | 12,8 | 3,5 | 6,7 | 4,7 | 133 | 30 |
| **440.9F** | 9 | 21,2 | 14,2 | 3,9 | 7,1 | 4,7 | 138 | 35 |
| **440.10F** | 10 | 23,0 | 15,0 | 4,2 | 7,6 | 5,2 | 145 | 40 |
| **440.11F** | 11 | 24,5 | 16,9 | 4,6 | 8,1 | 5,5 | 155 | 50 |

| | A [mm] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **440.12F** | 12 | 27,0 | 18,0 | 4,4 | 8,4 | 5,8 | 162 | 60 |
| **440.13F** | 13 | 28,7 | 19,3 | 4,8 | 8,6 | 6,1 | 170 | 70 |
| **440.14F** | 14 | 31,0 | 21,1 | 5,7 | 9,5 | 6,4 | 180 | 85 |
| **440.15F** | 15 | 32,6 | 22,2 | 5,9 | 10,0 | 6,8 | 185 | 95 |
| **440.16F** | 16 | 35,6 | 23,9 | 6,4 | 10,5 | 7,3 | 195 | 115 |
| **440.17F** | 17 | 37,0 | 25,3 | 6,5 | 10,9 | 7,6 | 202 | 130 |
| **440.18F** | 18 | 38,7 | 26,0 | 7,2 | 11,4 | 8,1 | 208 | 150 |
| **440.19F** | 19 | 41,2 | 27,8 | 7,2 | 11,9 | 8,3 | 216 | 170 |

## 440F - Inch combination wrenches - FLUO




**ASME B107.100, SAE AS954G**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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.

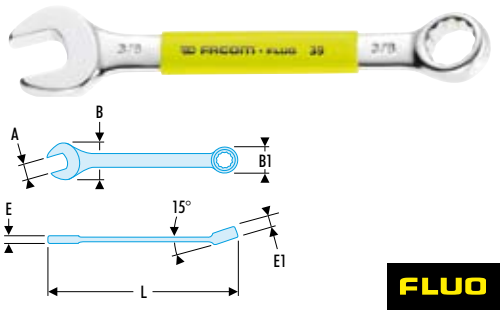
FLUO

| | A ["] | B [mm] | B1 [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **440.1/4F** | 1/4 | 14,1 | 10,0 | 3,1 | 6,0 | 3,8 | 115 | 20 |
| **440.5/16F** | 5/16 | 19,2 | 12,8 | 3,5 | 6,7 | 4,7 | 133 | 30 |
| **440.11/32F** | 11/32 | 21,2 | 14,2 | 3,9 | 7,1 | 4,7 | 138 | 35 |
| **440.3/8F** | 3/8 | 23,0 | 15,0 | 4,2 | 7,6 | 5,2 | 145 | 45 |
| **440.7/16F** | 7/16 | 24,5 | 16,9 | 4,6 | 8,1 | 5,5 | 155 | 50 |
| **440.1/2F** | 1/2 | 28,7 | 19,3 | 4,8 | 8,6 | 6,1 | 170 | 70 |
| **440.9/16F** | 9/16 | 31,0 | 21,1 | 5,7 | 9,5 | 6,4 | 180 | 85 |
| **440.5/8F** | 5/8 | 35,6 | 23,9 | 6,4 | 10,5 | 7,3 | 195 | 115 |
| **440.11/16F** | 11/16 | 37,0 | 25,3 | 6,5 | 10,9 | 7,6 | 202 | 130 |
| **440.3/4F** | 3/4 | 41,2 | 27,8 | 7,2 | 11,9 | 8,3 | 216 | 170 |
| **440.13/16F** | 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] |
|---|---|---|---|---|---|---|---|---|
| **440.7/8F** | 7/8 | 46,9 | 32,3 | 8,3 | 13,3 | 9,0 | 248 | 230 |
| **440.15/16F** | 15/16 | 51,0 | 35,0 | 8,9 | 14,2 | 9,7 | 267 | 290 |
| **440.1PF** | 1 | 53,0 | 36,4 | 9,4 | 14,7 | 9,9 | 274 | 315 |
| **440.1P1/16F** | 1'1/16 | 58,0 | 39,2 | 8,9 | 15,6 | 10,4 | 295 | 375 |
| **440.1P1/8F** | 1'1/8 | 60,7 | 40,6 | 10,6 | 16,1 | 10,7 | 305 | 415 |
| **440.1P1/4F** | 1'1/4 | 68,0 | 46,1 | 11,5 | 18,0 | 12,5 | 355 | 640 |
| **440.1P5/16F** | 1'5/16 | 69,8 | 47,0 | 11,8 | 18,5 | 12,8 | 380 | 715 |
| **440.1P3/8F** | 1'3/8 | 74,3 | 51,0 | 12,8 | 19,5 | 13,5 | 430 | 890 |
| **440.1P7/16F** | 1'7/16 | 76,0 | 53,0 | 13,2 | 20,0 | 14,0 | 440 | 945 |
| **440.1P1/2F** | 1'1/2 | 80,0 | 56,0 | 14,1 | 22,0 | 15,2 | 450 | 1130 |

# Combination wrenches - ratchet wrenches - FLUO

## 39F - Inch short-reach combination wrenches - FLUO




FLUO

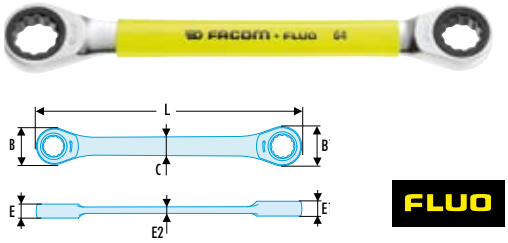
**ASME B107.100**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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 1/2".
- Presentation: satin chrome finish.

| | A ["] | B x B1 [mm] | E [mm] | E1 [mm] | [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|
| **39.1/8HF** | 1/8 | 10,0 x 7,0 | 3.1 | 3,1 | 6 | 77 | 10 |
| **39.5/32HF** | 5/32 | 10,0 x 8,0 | 3.1 | 3,1 | 6 | 77 | 10 |
| **39.3/16HF** | 3/16 | 11,8 x 9,0 | 3.5 | 4,0 | 6 | 82 | 10 |
| **39.7/32HF** | 7/32 | 11,8 x 9,5 | 3.5 | 4,0 | 6 | 84 | 10 |
| **39.1/4F** | 1/4 | 15,0 x 10,4 | 4.1 | 5,0 | 6 | 90 | 15 |
| **39.9/32F** | 9/32 | 15,0 x 11,5 | 4.1 | 5,0 | 6 | 90 | 15 |

| | A ["] | B x B1 [mm] | E [mm] | E1 [mm] | [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|
| **39.5/16F** | 5/16 | 17,2 x 12,5 | 4.5 | 5,8 | 6 | 94 | 20 |
| **39.11/32F** | 11/32 | 19,4 x 14,0 | 4.8 | 6,0 | 6 | 98 | 25 |
| **39.3/8F** | 3/8 | 21,5 x 15,3 | 5.1 | 6,4 | 6 | 103 | 30 |
| **39.7/16F** | 7/16 | 23,7 x 16,8 | 5.3 | 6,8 | 6 | 109 | 35 |
| **39.1/2F** | 1/2 | 28,0 x 19,5 | 5.8 | 8,0 | 12 | 141 | 50 |

## 64F - Inch straight ratchet ring wrenches - FLUO




FLUO

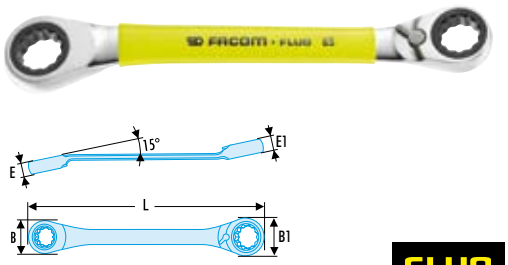
**ASME B107.100**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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"; 6° for dimensions 5/16" and 11/32").
- Dimensions in inches: from 1/4" to 15/16".
- Presentation: satin chrome finish.

| | A ["] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **64.1/4X5/16F** | 1/4x5/16 | 17,2 | 8,0 | 6,3 | 6,5 | 3,0 | 115 | 40 |
| **64.5/16X11/32F** | 5/16x11/32 | 20,2 | 8,3 | 6,5 | 6,9 | 3,2 | 128 | 45 |
| **64.3/8X7/16F** | 3/8x7/16 | 21,8 | 9,1 | 7,3 | 7,7 | 3,6 | 150 | 60 |
| **64.1/2X9/16F** | 1/2x9/16 | 24,8 | 11,3 | 8,6 | 9,0 | 4,2 | 180 | 115 |

| | A ["] | B1 [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|---|---|
| **64.5/8X11/16F** | 5/8x11/16 | 33,5 | 14,8 | 9,9 | 10,7 | 5,4 | 210 | 185 |
| **64.3/4X13/16F** | 3/4x13/16 | 40,0 | 15,2 | 11,2 | 13,0 | 5,4 | 245 | 310 |
| **64.7/8X15/16F** | 7/8x15/16 | 46,0 | 15,2 | 13 | 14,5 | 5,4 | 260 | 480 |

## 65F - Metric 15° hinged ratchet ring wrenches - FLUO



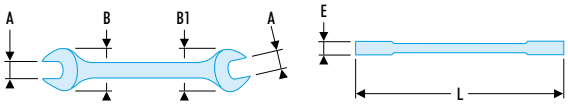

FLUO

**NF ISO 1711-1, NF ISO 691, ISO 1711-1, ISO 691, DIN ISO 1711-1, DIN ISO 691, ASME B107.100**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|---|---|
| **65.6X7F** | 6x7 | 14,0 | 17,0 | 6,3 | 6,5 | 115 | 30 |
| **65.8X9F** | 8x9 | 17,0 | 20,2 | 6,5 | 6,9 | 128 | 45 |
| **65.10X11F** | 10x11 | 20,2 | 22,0 | 7,3 | 7,7 | 150 | 65 |
| **65.12X13F** | 12x13 | 23,4 | 25,5 | 8,2 | 8,6 | 170 | 90 |
| **65.14X15F** | 14x15 | 26,9 | 29,8 | 9 | 9,4 | 190 | 130 |
| **65.16X18F** | 16x18 | 29,8 | 34,0 | 9,9 | 10,7 | 210 | 190 |
| **65.17X19F** | 17x19 | 31,8 | 34,0 | 10,3 | 11,2 | 230 | 210 |
| **65.21X23F** | 21x23 | 40,1 | 46,0 | 13 | 14,5 | 260 | 430 |
| **65.22X24F** | 22x24 | 40,1 | 46,5 | 13 | 14,5 | 260 | 425 |

## 44F - Metric open end wrenches - FLUO


FLUO

**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**

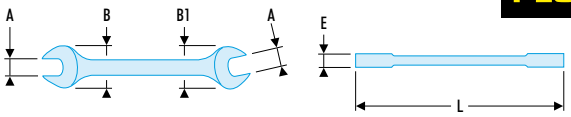
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Open end wrenches = the open ends are slimmer than a standard combination wrench for better thickness accessibility. Examples: brake calipers, hydraulic hose locknuts.
- Heads hinged at 15°.
- Metric sizes: 3.2 to 30 mm.
- Presentation: satin chrome finish.

| | A [mm] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.3.2X5.5F** | 3,2x5,5 | 11,0 x 13,5 | 3,0 | 90 | 10 |
| **44.4X5F** | 4x5 | 11,0 x 13,5 | 3,0 | 90 | 10 |
| **44.6X7F** | 6x7 | 15,0 x 17,5 | 3,5 | 120 | 20 |
| **44.8X9F** | 8x9 | 18,5 x 21,0 | 3,8 | 137 | 30 |
| **44.8X10F** | 8x10 | 19,0 x 23,0 | 4,2 | 143 | 40 |
| **44.10X11F** | 10x11 | 23,0 x 25,0 | 4,7 | 152 | 50 |
| **44.10X13F** | 10x13 | 23,0 x 29,0 | 5,1 | 162 | 60 |
| **44.11X13F** | 24x26 | 25,5 x 29,0 | 5,1 | 167 | 65 |
| **44.12X13F** | 12x13 | 25,5 x 29,0 | 5,1 | 167 | 65 |
| **44.12X14F** | 19x22 | 29,0 x 33,5 | 5,5 | 177 | 80 |

| | A [mm] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.13X17F** | 13x17 | 31,0 x 37,0 | 6,3 | 192 | 120 |
| **44.14X15F** | 14x15 | 31,0 x 33,0 | 5,5 | 182 | 90 |
| **44.16X17F** | 16x17 | 35,5 x 37,0 | 6,3 | 200 | 120 |
| **44.16X18F** | 41x46 | 37,0 x 42,0 | 6,8 | 210 | 145 |
| **44.17X19F** | 17x19 | 37,0 x 42,0 | 6,8 | 210 | 145 |
| **44.18X19F** | 18x19 | 39,0 x 42,0 | 7,3 | 220 | 160 |
| **44.20X22F** | 20x22 | 43,0 x 48,5 | 7,5 | 240 | 200 |
| **44.26X28F** | 26x28 | 56,0 x 61,6 | 8,8 | 282 | 360 |
| **44.27X29F** | 27x29 | 59,0 x 64,0 | 9,5 | 301 | 450 |
| **44.27X30F** | 27x30 | 59,0 x 64,0 | 9,5 | 301 | 450 |

## 44F - Inch open end wrenches - FLUO


FLUO



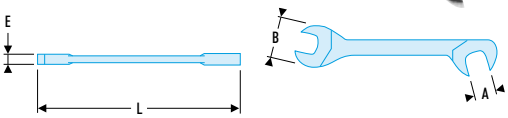

**ASME B107.100**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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 15/16".
- Presentation: satin chrome finish.

| | A ["] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.1/4X5/16F** | 1/4x5/16 | 15,0 x 17,5 | 3,5 | 120 | 20 |
| **44.11/32X13/32F** | 11/32X13/32 | 19,0 x 23,0 | 4,2 | 143 | 40 |
| **44.3/8X7/16F** | 3/8X7/16 | 23,0 x 25,0 | 4,7 | 152 | 50 |
| **44.1/2X9/16F** | 1/2X9/16 | 29,0 x 33,5 | 5,5 | 177 | 80 |
| **44.5/8X11/16F** | 5/8X11/16 | 37,0 x 42,0 | 6,8 | 210 | 145 |
| **44.3/4X13/16F** | 3/4X13/16 | 43,0 x 48,5 | 7,5 | 240 | 200 |

| | A ["] | B x B1 [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **44.1PX1P1/16F** | 1'X1'1/16 | 56,0 x 61,6 | 8,8 | 282 | 360 |
| **44.1P1/8X1P1/4F** | 1'1/8X1'1/4 | 63,0 x 70,0 | 9,8 | 318 | 515 |
| **44.1P3/16X1P5/16F** | 1'3/16X1'5/16 | 63,0 x 70,0 | 9,8 | 318 | 515 |
| **44.1P3/8X1P1/2F** | 1'3/8X1'1/2 | 78,0 x 87,0 | 12,0 | 381 | 945 |
| **44.7/8X15/16F** | 7/8X15/16 | 47,5 x 52,0 | 8,3 | 251 | 260 |

## 34F - Inch 15° and 75° hinged "midget" open end wrenches - FLUO


FLUO

**ASME B107.100, SAE AS954G**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- "Midget" open end wrenches: short shank and slim heads for manoeuvrability in confined spaces.
- Heads hinged at 15° and 75° for better acess than a standard wrench.
- Dimensions in inches: from 3/16" to 11/16".
- Presentation: satin chrome finish.

| | A ["] | B [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **34.3/16F** | 3/16 | 13 | 2,4 | 75 | 10 |
| **34.7/32F** | 7/32 | 13 | 2,4 | 75 | 10 |
| **34.1/4F** | 1/4 | 15 | 2,7 | 80 | 15 |
| **34.9/32F** | 9/32 | 15 | 2,7 | 80 | 15 |
| **34.5/16F** | 5/16 | 18,5 | 3,0 | 90 | 20 |
| **34.11/32F** | 11/32 | 18,5 | 3,0 | 90 | 20 |
| **34.3/8F** | 3/8 | 22 | 3,0 | 100 | 25 |

| | A ["] | B [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| **34.13/32F** | 13/32 | 22 | 3,0 | 100 | 30 |
| **34.7/16F** | 7/16 | 22 | 3 | 100 | 30 |
| **34.1/2F** | 1/2 | 27 | 3,5 | 120 | 35 |
| **34.9/16F** | 9/16 | 27 | 3,5 | 120 | 40 |
| **34.5/8F** | 5/8 | 33 | 4,5 | 140 | 70 |
| **34.11/16F** | 11/16 | 33 | 4,5 | 140 | 70 |

# Nut driver - adjustable wrenches - Fluo

## NUT DRIVER

### Nut driver

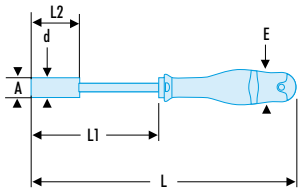
- Forged body for maximum strength.
- Hollow body allows insertion over long threaded rods.

### 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.

FLUO

## 74AF - Forged nut driver - metric - FLUO




FLUO

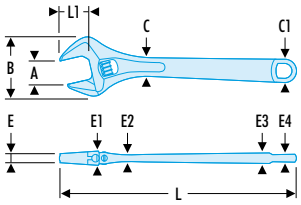
**NF ISO 2236, NF ISO 691, ISO 2236, ISO 691, DIN 3125, DIN ISO 691**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Nut driver 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.3,2F | 3,2 | 6,0 | 36 | 245 | 125 | 20 | 110 |
| 74A.4F | 4,0 | 7,0 | 36 | 245 | 125 | 20 | 115 |
| 74A.4,5F | 4,5 | 7,5 | 36 | 245 | 125 | 25 | 120 |
| 74A.5F | 5,0 | 8,0 | 36 | 245 | 125 | 25 | 120 |
| 74A.5,5F | 5,5 | 8,0 | 36 | 245 | 125 | 30 | 120 |
| 74A.6F | 6,0 | 9,5 | 36 | 245 | 125 | 35 | 125 |
| 74A.7F | 7,0 | 9,5 | 36 | 245 | 125 | 35 | 130 |

| | A [mm] | d [mm] | E [mm] | L [mm] | L1 [mm] | L2 [mm] L3 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 74A.8F | 8,0 | 12,0 | 36 | 245 | 125 | 50 | 155 |
| 74A.9F | 9,0 | 12,0 | 36 | 245 | 125 | 50 | 160 |
| 74A.10F | 10,0 | 14,5 | 40 | 250 | 125 | 50 | 200 |
| 74A.11F | 11,0 | 16,0 | 40 | 250 | 125 | 50 | 210 |
| 74A.12F | 12,0 | 17,0 | 40 | 250 | 125 | 50 | 210 |
| 74A.13F | 13,0 | 18,5 | 40 | 250 | 125 | 55 | 250 |
| 74A.14F | 14,0 | 20,0 | 40 | 250 | 125 | 55 | 255 |

## 113A.CF - Chromed adjustable wrenches - FLUO




FLUO

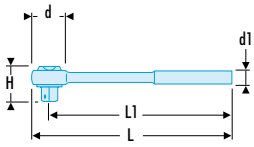
**NF ISO 6787, ISO 6787, DIN 3117, ASME B107.100**

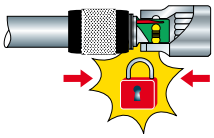
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Good access to the button = easy setting.
- Non-protruding moving jaw at maximum capacity.
- Pre-adjustment of jaw opening thanks to millimetric gradation.
- Right-hand button rotation.
- Range from 4" to 12".
- Presentation: 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.4CF | 13 | 34,0 | 11,0 x 14,0 | 14 | 9,5 | 5,0 | 6,5 | 5,0 | 114 | 13 | 65 |
| 113A.6CF | 20 | 45,0 | 14,8 x 18,5 | 18,5 | 11,8 | 6,0 | 8,3 | 5,8 | 155 | 19 | 125 |
| 113A.10CF | 30 | 69,5 | 21,5 x 28,5 | 28,5 | 15,5 | 9,5 | 12,7 | 10,0 | 255 | 29 | 480 |
| 113A.12CF | 34 | 80,0 | 25,0 x 31,0 | 31 | 18,0 | 10,2 | 13,0 | 10,0 | 306 | 34 | 700 |

## Ratchet 1/4”

### 1/4” maintenance free pear head ratchet - FLUO



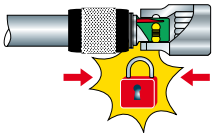
FLUO

**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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.171F | 22 | 20 | 25 | 120 | 110 | 78 |

### R.RCF - 1/4” drive locking extensions - FLUO

FLUO

**NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Locking mechanism.
- Finish: bright chrome.

| | d [mm] | d1 [mm] | d2 [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| R.210RCF | 8,2 | 12 | 13 | 100 | 45 |
| R.215RCF | 8,2 | 12 | 13 | 150 | 60 |
| R.217RCF | 8,2 | 12 | 13 | 250 | 100 |

### 65.PEF Bit-holder ratchet wrench 1/4” - 5/16” - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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.

# Radio 1/4” range - FLUO

## R.236CF 1/4” drive short spinner - FLUO

FLUO

**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Ergonomic bi-material grip.
- Ideal for confined spaces.

Weight: 76 g.

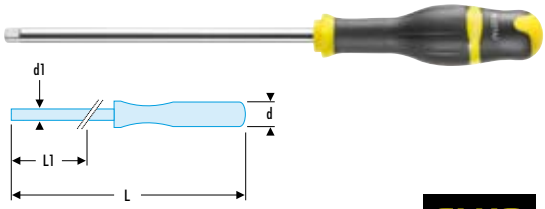
## R.236AF 1/4” drive medium spinner - FLUO

FLUO

**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Ergonomic bi-material grip.
- Ideal for confined spaces.

Weight: 79 g.

## 1/4” drive standard spinner - FLUO

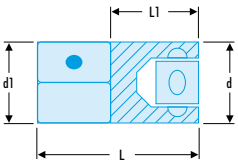



FLUO

**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Ergonomic bi-material grip.
- Ideal for confined spaces.

| | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|
| R.227AF | 23,5 | 8 | 260 | 160 | 125 |

## 1/4” to 3/8” coupler - FLUO



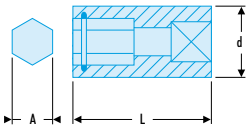

FLUO

**NF ISO 3316, ISO 3316, DIN 3123, ASME B107.10**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] | [g] |
|---|---|---|---|---|---|
| R.232F | 12 | 12 | 24,5 | 13,5 | 16 |

## 1/4” drive standard spring-clip bit holder - FLUO



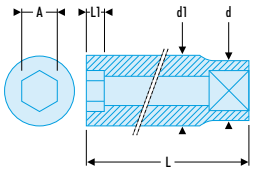

FLUO

**NF ISO 1173, ISO 1173**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Spring clip for frequent bit changes.
- Finish: bright chrome.

| | A [”] | Carré [”] | d [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| R.235F | 1/4 | 1/4 | 11,3 | 22 | 10 |

## 1/4” sockets

### R.FLUO - 1/4” Drive metric 6-point sockets - FLUO



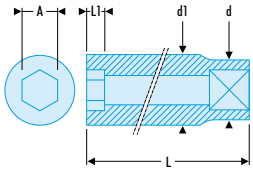

**NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| R.3.2FLUO | 3,2 | 6 | 11,2 | 5,9 | 22 | 2,4 | 7,30 |
| R.4FLUO | 4,0 | 6 | 11,2 | 6,9 | 22 | 2,6 | 7,70 |
| R.5FLUO | 5,0 | 6 | 11,2 | 8,2 | 22 | 4,8 | 8,10 |
| R.5.5FLUO | 5,5 | 6 | 11,2 | 8,8 | 22 | 4,8 | 8,40 |
| R.6FLUO | 6,0 | 6 | 11,2 | 9,4 | 22 | 5,6 | 8,60 |
| R.7FLUO | 7,0 | 6 | 11,0 | 11,0 | 22 | 6,0 | 9,20 |
| R.8FLUO | 8,0 | 6 | 12,0 | 12,0 | 22 | 6,5 | 11,50 |
| R.9FLUO | 9,0 | 6 | 13,2 | 13,2 | 22 | 6,5 | 14,30 |
| R.10FLUO | 10,0 | 6 | 14,7 | 14,7 | 22 | 7,8 | 17,70 |
| R.11FLUO | 11,0 | 6 | 15,8 | 15,8 | 22 | 9,0 | 19,40 |
| R.12FLUO | 12,0 | 6 | 17,0 | 17,0 | 22 | 9,50 | 23,20 |
| R.13FLUO | 13,0 | 6 | 17,7 | 17,7 | 22 | 10,00 | 23,70 |
| R.14FLUO | 14,0 | 6 | 18,7 | 18,7 | 22 | 10,00 | 26,10 |

FLUO

### R.FLUO - 1/4” Drive inch 6-point sockets - FLUO



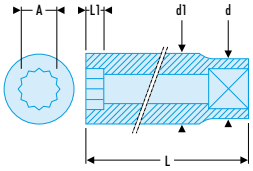

**ASME B107.1**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

| | A ["] | [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| R.3/16FLUO | 3/16 | 6 | 11,2 | 8,0 | 22 | 4,75 | 8,20 |
| R.7/32FLUO | 7/32 | 6 | 11,2 | 9,0 | 22 | 5,50 | 8,30 |
| R.1/4FLUO | 1/4 | 6 | 11,2 | 10,1 | 22 | 6,00 | 9,30 |
| R.9/32FLUO | 9/32 | 6 | 11,0 | 11,0 | 22 | 6,00 | 8,90 |
| R.5/16FLUO | 5/16 | 6 | 12,0 | 12,0 | 22 | 6,50 | 11,50 |
| R.11/32FLUO | 11/32 | 6 | 13,2 | 13,2 | 22 | 6,50 | 14,50 |
| R.3/8FLUO | 3/8 | 6 | 14,7 | 14,7 | 22 | 7,80 | 17,80 |
| R.13/32FLUO | 13/32 | 6 | 14,7 | 14,7 | 22 | 7,80 | 17,00 |
| R.7/16FLUO | 7/16 | 6 | 15,8 | 15,8 | 22 | 9,00 | 19,50 |
| R.1/2FLUO | 1/2 | 6 | 17,7 | 17,7 | 22 | 10,00 | 24,50 |
| R.9/16FLUO | 9/16 | 6 | 18,7 | 18,7 | 22 | 10,00 | 25,20 |

FLUO

### R.EF - 1/4” Drive inch 12-point sockets - FLUO




**ASME B107.1**

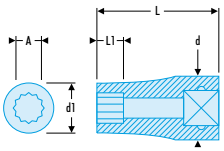
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

| | A ["] | [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| R.3/16EF | 3/16 | 12 | 11,2 | 8,0 | 22 | 4,75 | 8,20 |
| R.7/32EF | 7/32 | 12 | 11,2 | 9,0 | 22 | 5,50 | 8,30 |
| R.1/4EF | 1/4 | 12 | 11,2 | 10,1 | 22 | 6,00 | 9,30 |
| R.9/32EF | 9/32 | 12 | 11,2 | 10,6 | 22 | 6,00 | 8,90 |
| R.5/16EF | 5/16 | 12 | 12,0 | 12,0 | 22 | 6,50 | 11,50 |
| R.11/32EF | 11/32 | 12 | 13,0 | 13,0 | 22 | 6,50 | 14,50 |
| R.3/8EF | 3/8 | 12 | 14,7 | 14,7 | 22 | 7,80 | 17,80 |
| R.13/32EF | 13/32 | 12 | 14,7 | 14,7 | 22 | 7,80 | 17,00 |
| R.7/16EF | 7/16 | 12 | 15,8 | 15,8 | 22 | 9,00 | 19,5 |
| R.1/2EF | 1/2 | 12 | 17,7 | 17,7 | 22 | 10,00 | 24,5 |
| R.9/16EF | 9/16 | 12 | 18,7 | 18,7 | 22 | 10,00 | 25,20 |

FLUO

# Radio 1/4” range - FLUO

## R.ELF - 1/4” long-reach metric 12-point sockets - FLUO



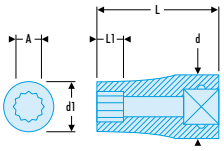

FLUO

**NF ISO 2725-1, NF ISO 1711-1, ISO 2725-1, ISO 1711-1, DIN 3124, ASME B107.5**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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.
- Finish: bright chrome.

| | A [mm] | [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| R.4ELF | 4 | 12 | 6,7 | 11,2 | 50 | 4 | 18 |
| R.4,5ELF | 4,5 | 12 | 7,3 | 11,2 | 50 | 4,5 | 18 |
| R.5ELF | 5 | 12 | 7,8 | 11,2 | 50 | 5,5 | 18 |
| R.5,5ELF | 5,5 | 12 | 8,5 | 11,2 | 50 | 6 | 18 |
| R.6ELF | 6 | 12 | 9,2 | 11,2 | 50 | 7 | 18 |
| R.7ELF | 7 | 12 | 10,3 | 11,2 | 50 | 8 | 27 |
| R.8ELF | 8 | 12 | 11,2 | 11,7 | 50 | 9 | 27 |
| R.9ELF | 9 | 12 | 13 | 12 | 50 | 10 | 32 |
| R.10ELF | 10 | 12 | 14,3 | 12,9 | 50 | 11 | 41 |
| R.11ELF | 11 | 12 | 15,5 | 14,3 | 50 | 12 | 54 |
| R.12ELF | 12 | 12 | 16,8 | 15,5 | 50 | 13 | 56 |
| R.13ELF | 13 | 12 | 18 | 16,4 | 50 | 14 | 59 |
| R.14ELF | 14 | 12 | 19,3 | 17,9 | 50 | 16 | 68 |

## R.ELF - 1/4” long-reach inch 12-point sockets - FLUO




FLUO

**ASME B107.1**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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.3/16ELF | 3/16 | 12 | 10,9 | 7,7 | 50 | 6,0 | 14 |
| R.7/32ELF | 7/32 | 12 | 10,9 | 8,5 | 50 | 7,4 | 15 |
| R.1/4ELF | 1/4 | 12 | 10,9 | 9,4 | 50 | 7,4 | 17 |
| R.9/32ELF | 9/32 | 12 | 10,9 | 10,2 | 50 | 8,5 | 17 |
| R.5/16ELF | 5/16 | 12 | 11,8 | 11,4 | 50 | 9,0 | 23 |
| R.11/32ELF | 11/32 | 12 | 12,0 | 12,5 | 50 | 9,7 | 25 |
| R.3/8ELF | 3/8 | 12 | 12,8 | 13,7 | 50 | 11,2 | 32 |
| R.7/16ELF | 7/16 | 12 | 14,3 | 15,6 | 50 | 11,9 | 40 |
| R.1/2ELF | 1/2 | 12 | 16,2 | 17,3 | 50 | 13,8 | 45 |
| R.9/16ELF | 9/16 | 12 | 17,1 | 18,8 | 50 | 16,2 | 49 |

## REL.40UF 1/4” inch long socket set on rack - FLUO

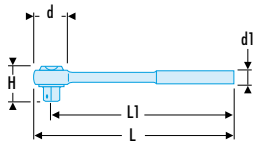
FLUO

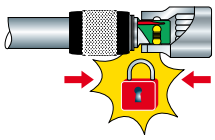
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 10 long socket set from 3/16” to 9/16”

Weight: 45 g.

## Ratchet 3/8”

### 3/8” maintenance free pear head ratchet - RFID



FLUO

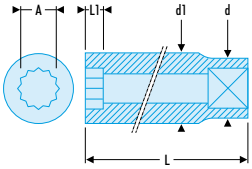
**NF ISO 3315, ISO 3315, DIN 3122, ASME B107.10**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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 downon 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.171F | 29 | 27 | 29 | 210 | 195 | 200 |

## 3/8” sockets

### J.FLUO - 3/8” inch 12-point sockets - FLUO



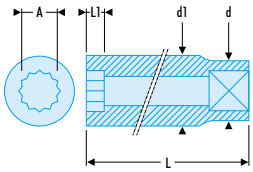

FLUO

**ASME B107.1**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- OGV® profile: more powerful tightening, preserves fasteners.
- Finish: bright chrome.

| | A ["] | [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| J.1/4FLUO | 1/4 | 12 | 17,5 | 10,0 | 27 | 6,0 | 24 |
| J.5/16FLUO | 5/16 | 12 | 17,5 | 11,9 | 27 | 6,5 | 25 |
| J.3/8FLUO | 3/8 | 12 | 17,6 | 14,1 | 27 | 7,5 | 26 |
| J.7/16FLUO | 7/16 | 12 | 17,5 | 16,0 | 27 | 9,0 | 27 |
| J.1/2FLUO | 1/2 | 12 | 17,5 | 18,1 | 30 | 10,4 | 36 |
| J.9/16FLUO | 9/16 | 12 | 17,7 | 19,5 | 30 | 10,5 | 34 |
| J.5/8FLUO | 5/8 | 12 | 20,0 | 22,0 | 30 | 12,0 | 46 |
| J.11/16FLUO | 11/16 | 12 | 21,0 | 24,0 | 33 | 13,0 | 74 |
| J.3/4FLUO | 3/4 | 12 | 22,7 | 26,0 | 33 | 14,0 | 76 |
| J.13/16FLUO | 13/16 | 12 | 23,0 | 28,0 | 33 | 16,0 | 79 |
| J.7/8FLUO | 7/8 | 12 | 24,7 | 29,7 | 33 | 16,5 | 104 |

### J.LAF - 3/8” inch 12-point sockets - FLUO




FLUO

**ASME B107.1**

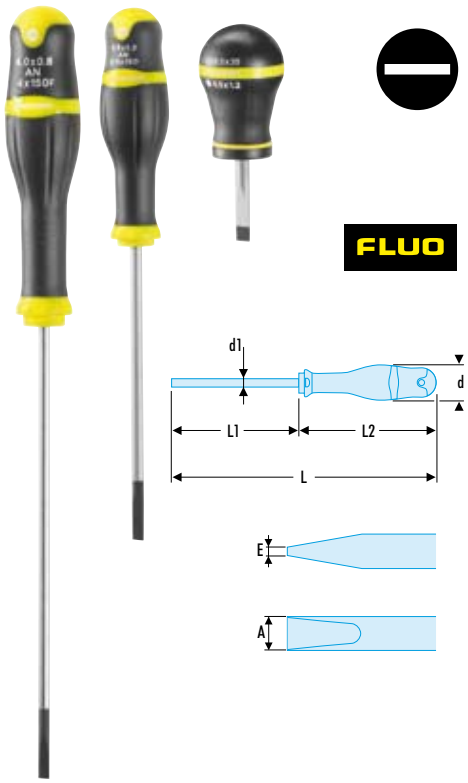
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- OGV® profile: more powerful tightening, preserves fasteners.
- Long-reach sockets for long recess or thread access.
- Finish: bright chrome.

| | A ["] | [mm] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| J.1/4LAF | 1/4 | 12 | 17,5 | 10,6 | 44,7 | 4,0 | 36 |
| J.5/16LAF | 5/16 | 12 | 17,5 | 12,4 | 44,7 | 4,3 | 36 |
| J.3/8LAF | 3/8 | 12 | 17,5 | 14,3 | 44,7 | 4,7 | 41 |
| J.7/16LAF | 7/16 | 12 | 17,5 | 16,2 | 44,7 | 6,2 | 45 |
| J.1/2LAF | 1/2 | 12 | 18,2 | 18,2 | 44,7 | 7,4 | 50 |
| J.9/16LAF | 9/16 | 12 | 20,5 | 20,5 | 48,0 | 9,0 | 72 |
| J.5/8LAF | 5/8 | 12 | 22,3 | 22,3 | 63,8 | 10,2 | 104 |
| J.11/16LAF | 11/16 | 12 | 23,8 | 23,8 | 63,8 | 10,2 | 113 |
| J.3/4LAF | 3/4 | 12 | 25,3 | 25,3 | 63,8 | 11,8 | 127 |
| J.13/16LAF | 13/16 | 12 | 27,0 | 27,0 | 63,8 | 12,3 | 140 |
| J.7/8LAF | 7/8 | 12 | 30,2 | 30,2 | 63,8 | 12,7 | 181 |

# Fluo Screwdrivers

## PROTWIST® FLUO Screwdrivers

### ANF - PROTWIST® screwdrivers for slotted head screws - milled blades - FLUO




**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**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] | d [mm] | d1 x L1 [mm] | E [mm] | L [mm] | L2 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| **AN2X75F** | 2,0 | 19 | 2,0 x 75 | 0,4 | 169 | 94 | 18 |
| **AN2.5X75F** | 2,5 | 19 | 2,5 x 75 | 0,4 | 169 | 94 | 21 |
| **AN3X100F** | 3,0 | 25 | 3,0 x 100 | 0,5 | 203 | 103 | 33 |
| **AN3.5X100F** | 3,5 | 25 | 3,5 x 100 | 0,6 | 203 | 103 | 43 |
| **AN4X35F** | 4,0 | 36 | 4,0 x 35 | 0,8 | 91 | 56 | 36 |
| **AN4X100F** | 4,0 | 30 | 4,0 x 100 | 0,8 | 209 | 109 | 47 |
| **AN4X150F** | 4,0 | 30 | 4,0 x 150 | 0,8 | 259 | 109 | 52 |
| **AN5.5X150F** | 5,5 | 30 | 5,5 x 150 | 1,0 | 259 | 109 | 91 |
| **AN6.5X35F** | 6,5 | 36 | 6,5 x 35 | 1,2 | 91 | 56 | 46 |
| **AN6.5X150F** | 6,5 | 36 | 6,5 x 150 | 1,2 | 270 | 120 | 140 |

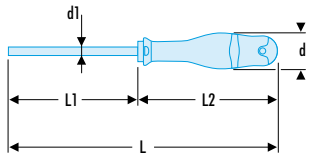
### ANPF - PROTWIST® screwdrivers for Phillips® screws - round blades - FLUO


**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**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] | [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 |
| **ANP1X250F** | PH1 | 30 | 4,5 x 250 | 359 | 109 | 99 |
| **ANP2X35F** | PH2 | 36 | 6,0 x 35 | 91 | 56 | 44 |
| **ANP2X125F** | PH2 | 36 | 6,0 x 125 | 245 | 120 | 126 |
| **ANP2X250F** | PH2 | 36 | 6,0 x 250 | 370 | 120 | 153 |
| **ANP2X400F** | PH2 | 36 | 6,0 x 400 | 520 | 120 | 186 |
| **ANP3X150F** | PH3 | 40 | 8,0 x 150 | 275 | 125 | 194 |
| **ANP4X200F** | PH4 | 40 | 10,0 x 200 | 325 | 125 | 277 |

## AWF - PROTWIST® screwdrivers for slotted head screws - hexagonal blades - FLUO



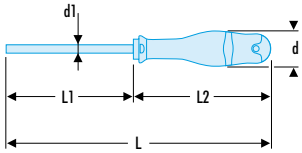

FLUO

**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**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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.

| | 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 |

## AWPF - PROTWIST® screwdrivers for Phillips® screws - hexagonal blades - FLUO



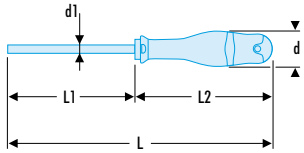

FLUO

**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**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] | [g] |
|---|---|---|---|---|---|---|
| AWP2X125F | PH2 | 36 | 6 x 125 | 245 | 120 | 130 |

## ANDF - PROTWIST® screwdrivers for Pozidriv® screws - round blades - FLUO




FLUO

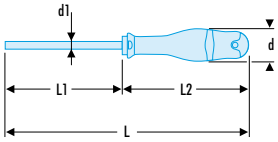
**NF ISO 8764-1, NF ISO 8764-2, ISO 8764-1, ISO 8764-2, DIN ISO 8764-1, DIN ISO 8764-2, ASME B107.600**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed round blade.

| | A [mm] | d [mm] | d1 x L1 [mm] | L [mm] | L2 [mm] | [g] |
|---|---|---|---|---|---|---|
| AND0X75F | PZ0 | 25 | 3,0 x 75 | 178 | 103 | 45 |
| AND1X100F | PZ1 | 30 | 4,5 x 100 | 209 | 109 | 76 |
| AND1X250F | PZ1 | 30 | 4,5 x 250 | 359 | 109 | 99 |
| AND2X125F | PZ2 | 36 | 6,0 x 125 | 245 | 120 | 126 |
| AND2X250F | PZ2 | 36 | 6,0 x 250 | 370 | 120 | 153 |
| AND3X150F | PZ3 | 40 | 8,0 x 150 | 275 | 125 | 194 |
| AND1X35F | PZ1 | 36 | 4,5 x 35 | 91 | 56 | 40 |
| AND2X35F | PZ2 | 36 | 6,0 x 35 | 91 | 56 | 45 |

# Fluo Screwdrivers

## ANXRF - PROTWIST® screwdrivers for Torx® and Resistorx® screws



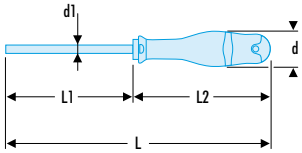

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Compliant with Resistorx® specifications.
- Silicon carbon blade: strong and resistant to flexion.
- Bi-material grip resists to impacts, abrasion, and chemicals.
- Finish: black tipped mat chromed blade.

| | A [mm] | Resistorx [No] | d [mm] | d1 x L1 [mm] | L [mm] | L2 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| **ANXR10X75F** | 2,74 | TT10 | 25 | 3,0 x 75 | 184 | 109 | 50 |
| **ANXR15X75F** | 3,26 | TT15 | 30 | 3,5 x 75 | 185 | 110 | 61 |
| **ANXR20X100F** | 3,84 | TT20 | 36 | 4,0 x 100 | 220 | 120 | 67 |
| **ANXR25X100F** | 4,40 | TT25 | 36 | 5,0 x 100 | 220 | 120 | 113 |
| **ANXR27X100F** | 4,96 | TT27 | 36 | 5,5 x 100 | 220 | 120 | 113 |
| **ANXR30X125F** | 5,49 | TT30 | 36 | 6,0 x 125 | 245 | 120 | 126 |
| **ANXR40X150F** | 6,60 | TT40 | 40 | 7,0 x 150 | 275 | 125 | 173 |

FLUO

## PROTWIST® FLUO hexagon keys

## AWSH.F - Spherical head spinner hexagon keys - FLUO




- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Bi-material ergonomic PROTWIST® handle for comfortable and reliable screwing.

| | A [mm] | d [mm] | d1 x L1 [mm] | L [mm] | L2 [mm] | [g] |
|---|---|---|---|---|---|---|
| **AWSH2X75F** | 2,0 | 19 | 2,0 x 75 | 169 | 94 | 31 |
| **AWSH2,5X75F** | 2,5 | 19 | 2,5 x 75 | 169 | 94 | 33 |
| **AWSH3X75F** | 3,0 | 19 | 3,0 x 75 | 169 | 94 | 35 |
| **AWSH4X75F** | 4,0 | 25 | 4,0 x 75 | 178 | 103 | 45 |
| **AWSH5X100F** | 5,0 | 30 | 5,0 x 100 | 208 | 109 | 80 |
| **AWSH6X100F** | 6,0 | 36 | 6,0 x 100 | 220 | 120 | 120 |
| **AWSH8X100F** | 8,0 | 36 | 8,0 x 100 | 220 | 120 | 180 |

FLUO

## Set of hexagon keys in wallet FLUO

### 83SH.JP8UF Set of 8 hexagon keys in wallet - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 8 keys 83SH in inches: 3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8".
- Very compact sleeve.
- Positive grip.
- Keys on 90° end stop for tightening.
- Keys in silicon steel issued from series 82H.
- Finish: phosphate-coated.

Weight: 365 g.

### 83SH.JP9F Set of 9 hexagon keys in wallet - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 9 metric keys 83SH: 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm.
- Very compact sleeve.
- Positive grip.
- Keys on 90° end stop for tightening.
- Keys in silicon steel issued from series 82H.
- Finish: phosphate-coated.

Weight: 380 g.

### 86HF - Hexagon keys on sleeve - FLUO


FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Very compact sleeve.
- Positive grip.
- Keys on 90° end stop for tightening.
- Keys in silicon steel issued from series 82H.
- Finish: phosphate-coated.

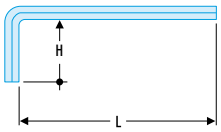
| | [mm] | ["] | d [mm] | d1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 86H.JE7AF | 2,5 - 3,0 - 4,0 - 5,0 - 6,0 - 8,0 - 10,0 | - | 30 | 24 | 138 | 32 | 405 |
| 86H.JE7BF | 1,5 - 2,0 - 2,5 - 3,0 - 4,0 - 5,0 - 6,0 | - | 22 | 18 | 118 | 28 | 147 |
| 86H.JU6F | - | 5/32 - 3/16 - 7/32 - 1/4 - 5/16 - 3/8 | 30 | 24 | 138 | 32 | 420 |
| 86H.JU7F | - | 1/16 - 5/64 - 3/32 - 1/8 - 5/32 - 3/16 - 1/4 | 22 | 18 | 118 | 28 | 142 |

# Fluo hexagon keys

## 82HF - Short metric and inch keys - FLUO

FLUO



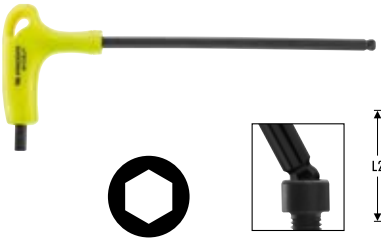

**ASME B18.3 - for keys in inch**
**NF ISO 2936, ISO 2936, DIN ISO 2936,**
**ASME B18.3.2M - for metric keys**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Manufactured in silicon steel.
- Finish: phosphate-coated.

| | A [mm] | A ["] | H [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| 82H.0,9F | 0,9 | - | 12 | 38 | 0,30 |
| 82H.1,3F | 1,3 | - | 13 | 45 | 0,70 |
| 82H.1,5F | 1,5 | - | 13 | 45 | 0,90 |
| 82H.2F | 2,0 | - | 16 | 50 | 2,00 |
| 82H.2,5F | 2,5 | - | 17 | 62 | 3,00 |
| 82H.3F | 3,0 | - | 20 | 65 | 5,00 |
| 82H.3,5F | 3,5 | - | 22 | 66 | 8,00 |
| 82H.4F | 4,0 | - | 25 | 70 | 10,00 |
| 82H.4,5F | 4,5 | - | 26 | 75 | 15,00 |
| 82H.5F | 5,0 | - | 28 | 80 | 20,00 |
| 82H.6F | 6,0 | - | 32 | 90 | 30,00 |
| 82H.7F | 7,0 | - | 34 | 95 | 45,00 |
| 82H.8F | 8,0 | - | 36 | 100 | 60,00 |
| 82H.9F | 9,0 | - | 38 | 105 | 80,00 |
| 82H.10F | 10,0 | - | 40 | 112 | 100,00 |
| 82H.11F | 11,0 | - | 42 | 118 | 130,00 |
| 82H.12F | 12,0 | - | 45 | 125 | 165,00 |
| 82H.13F | 13,0 | - | 50 | 135 | 205,00 |

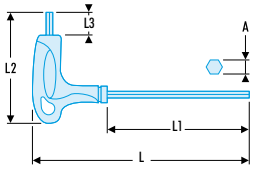
| | A [mm] | A ["] | H [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| 82H.050F | | 0,50 | 12 | 38 | 0,40 |
| 82H.3/64F | | 3/64 | 12 | 38 | 0,50 |
| 82H.1/16F | | 1/16 | 13 | 45 | 0,70 |
| 82H.5/64F | | 5/64 | 16 | 50 | 2,00 |
| 82H.3/32F | | 3/32 | 17 | 62 | 3,00 |
| 82H.7/64F | | 7/64 | 18 | 60 | 4,00 |
| 82H.1/8F | | 1/8 | 20 | 65 | 6,00 |
| 82H.9/64F | | 9/64 | 22 | 66 | 8,00 |
| 82H.5/32F | | 5/32 | 25 | 70 | 10,00 |
| 82H.3/16F | | 3/16 | 28 | 80 | 16,00 |
| 82H.7/32F | | 7/31 | 32 | 90 | 24,00 |
| 82H.1/4F | | 1/4 | 32 | 90 | 33,00 |
| 82H.5/16F | | 5/16 | 36 | 100 | 59,00 |
| 82H.3/8F | | 3/8 | 40 | 112 | 90,00 |
| 82H.1/2F | | 1/2 | 45 | 125 | 202,00 |
| 82H.5/8F | | 5/8 | 60 | 160 | 383,00 |
| 82H.7/8F | | 7/8 | 80 | 200 | 955,00 |

## 84TZSF - Spherical head metric hexagon keys - FLUO



FLUO



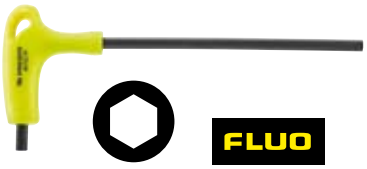



- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Ergonomic T handle for efficient use of the two ends of the key.
- The spherical head allows for screwing with a tilt angle up to 30°. Use the short hexagon key for tightening.
- Silicon steel.
- Finish: polished, phosphate-coated.

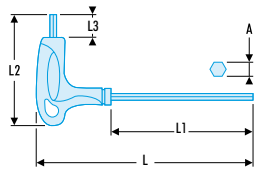
| | A [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | [g] |
|---|---|---|---|---|---|---|
| 84TZS.4F | 4 | 183 | 130 | 77 | 12 | 58 |
| 84TZS.5F | 5 | 183 | 130 | 77 | 12 | 70 |
| 84TZS.6F | 6 | 240 | 175 | 95 | 15 | 112 |

| | A [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | [g] |
|---|---|---|---|---|---|---|
| 84TZS.7F | 7 | 240 | 175 | 95 | 15 | 120 |
| 84TZS.8F | 8 | 240 | 175 | 95 | 15 | 125 |
| 84TZS.10F | 10 | 240 | 175 | 95 | 15 | 192 |

## 84TZF - Metric and inch hexagon keys - FLUO



FLUO

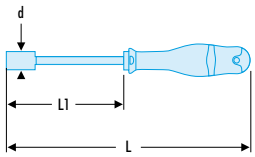



- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Ergonomic T handle for efficient use of the two ends of the key.
- Silicon steel.
- Finish: polished, phosphate-coated.

| | A [mm] | A ["] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 84TZ.2,5F | 2,5 | - | 133 | 90 | 63 | 11 | 9 |
| 84TZ.3F | 3,0 | - | 133 | 90 | 63 | 11 | 12 |
| 84TZ.4F | 4,0 | - | 183 | 130 | 77 | 12 | 58 |
| 84TZ.5F | 5,0 | - | 183 | 130 | 77 | 12 | 70 |
| 84TZ.6F | 6,0 | - | 240 | 175 | 95 | 15 | 112 |
| 84TZ.8F | 8,0 | - | 240 | 175 | 95 | 15 | 125 |
| 84TZ.10F | 10,0 | - | 240 | 175 | 95 | 15 | 192 |

| | A [mm] | A ["] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 84TZ.5/32F | - | 5/32 | 183 | 130 | 77 | 12 | 58 |
| 84TZ.3/16F | - | 3/16 | 183 | 130 | 77 | 12 | 65 |
| 84TZ.7/32F | - | 7/32 | 240 | 175 | 95 | 15 | 80 |
| 84TZ.1/4F | - | 1/4 | 240 | 175 | 95 | 15 | 115 |
| 84TZ.5/16F | - | 5/16 | 240 | 175 | 95 | 15 | 125 |
| 84TZ.3/8F | - | 3/8 | 240 | 175 | 95 | 15 | 180 |

## AM.F - PROTWIST® bit holder screwdriver - FLUO




FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Bit lock.
- Square drive has side-hole for ball or plunger lock.

| | d [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|
| AM.M2F | 10 | 245 | 125 | 150 |

## Bit holder and accessories for non impact powered screwing

## EF.F - 1/4" drive lock-ring bit holder - FLUO

FLUO

**NF ISO 2725-3, NF ISO 1173, ISO 2725-3, ISO 1173, DIN 3124**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Bit lock.
- Square drive has side-hole for ball or plunger lock.

| | A ["] | L [mm] | Carré ["] | [g] |
|---|---|---|---|---|
| EF.RF | 1/4 | 30 | 1/4 | 26 |
| EF.JF | 1/4 | 43 | 3/8 | 48 |

## EF.6RF Socket holder - ◻ 1/4" square drive - FLUO

FLUO

**NF ISO 1173, ISO 1173**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Drive 1/4" - 6.35 mm.
- Locking by plunger.
- Length: 50 mm.

Weight: 16 g.

## EF.6RLF Long socket holder - ◻ 1/4" square drive - FLUO


FLUO

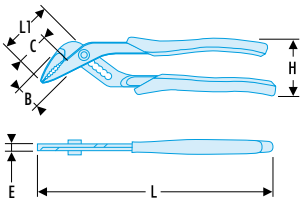
**NF ISO 1173, ISO 1173**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Drive 1/4" - 6.35 mm.
- Locking by plunger.
- Length: 100 mm.

Weight: 38 g.

# Fluo pliers

## 181A.F - Locking twin slip-joint multigrip pliers - FLUO



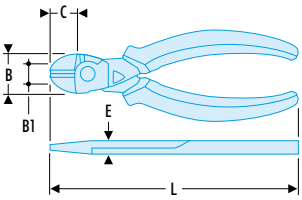

FLUO

**NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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

| | B [mm] | C [mm] | E [mm] | L [mm] | L1 [mm] | Capacité écrous [mm] | [g] |
|---|---|---|---|---|---|---|---|
| 181A.18CPEF | 22 | 24 | 7,5 | 185 | 48 | 36 | 230 |
| 181A.25CPEF | 28 | 28 | 7,5 | 245 | 54 | 41 | 360 |

## 192.CPEF - High-performance diagonal cutters - FLUO



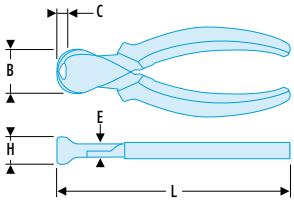

FLUO

**NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|---|
| 192.14CPEF | 21,5 | 15,5 | 1,4 | 9,5 | 145 | 160 |
| 192.16CPEF | 24,0 | 180 | 1,6 | 10,0 | 160 | 200 |
| 192.20CPEF | 28,0 | 22,0 | 2,0 | 11,5 | 200 | 320 |

## 190.CPEF - High-performance end cutters - FLUO




FLUO

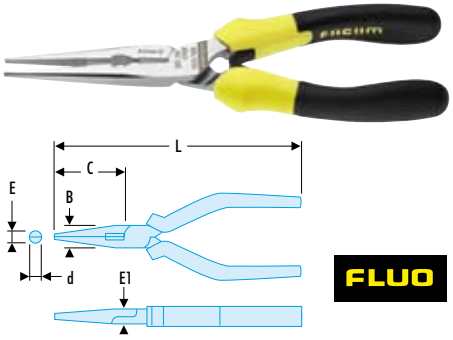
**NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|---|
| 190.16CPEF | 6,5 | 28 | 6,5 | 11,5 | 160 | 200 |
| 190.20CPEF | 7,5 | 31 | 7,5 | 13,5 | 200 | 340 |

# Fluo pliers

## Long half-round nose pliers - FLUO

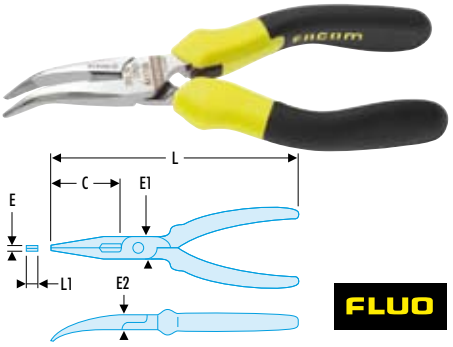



FLUO

**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm²).
- Straight 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] |
|---|---|---|---|---|---|---|---|
| 185.20CPEF | 18 | 75 | 2,9 | 3,6 | 9 | 200 | 192 |

## Short half-round nose pliers - FLUO

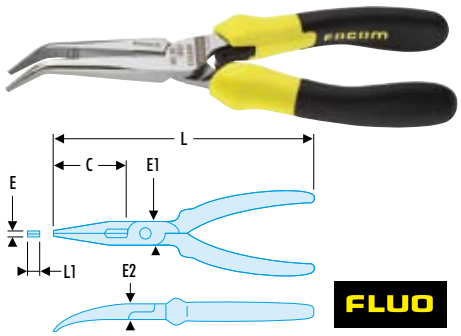



FLUO

**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|---|---|
| 195.16CPEF | 17 | 50 | 2,5 | 3 | 9 | 160 | 177 |

## Half-round long snipe-nose pliers - FLUO

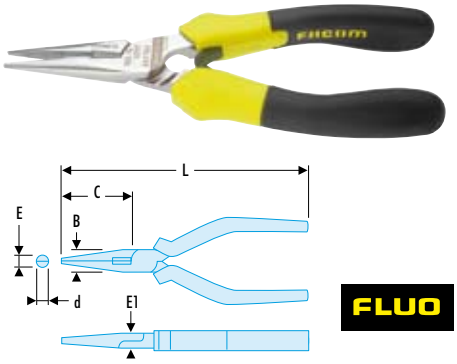



FLUO

**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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 - FLUO



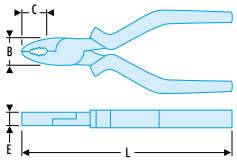

FLUO

**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|---|---|
| 193.16CPEF | 17 | 50 | 2,5 | 3 | 9 | 160 | 177 |

# Fluo pliers

## 187.CPEF - Combination pliers - FLUO



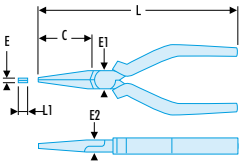

FLUO

**NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|
| **187.16CPEF** | 21 | 34 | 9,5 | 165 | 195 |
| **187.18CPEF** | 23 | 36 | 10,0 | 185 | 225 |

## 188.CPEF - Flat nose pliers - FLUO



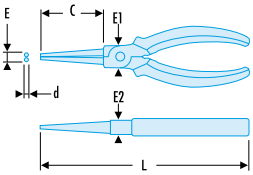

FLUO

**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|---|---|
| **188.16CPEF** | 46 | 4,0 | 18 | 9 | 168 | 6,5 | 140 |
| **188.20CPEF** | 75 | 4,0 | 18 | 9 | 200 | 6,5 | 200 |

## Round nose pliers - FLUO



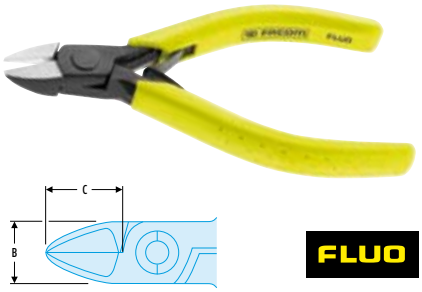

FLUO

**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|---|---|---|
| **189.17CPEF** | 41 | 2 | 4 | 18 | 9 | 170 | 135 |

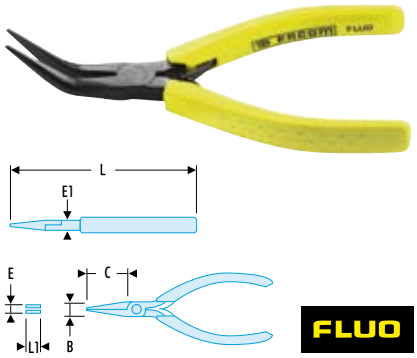
## Micro-Tech® Diagonal cutters - FLUO




**NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Axial cut.
- Finish: mat burnished finish, red grips - return spring.

| | B [mm] | C [mm] | E [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|
| **405.12F** | 16,0 | 16,0 | 16,0 | 120 | 8 | 95 |

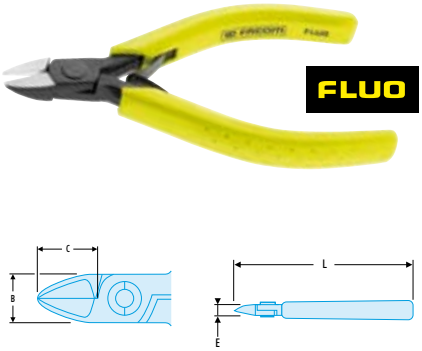
## Micro-Tech® Half-round nose pliers - FLUO




**NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Smooth jaws, angled 40°.
- Finish: mat burnished finish, red grips - return spring.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | [g] |
|---|---|---|---|---|---|---|---|
| **403F** | 45 | 14 | 14 | 1,2 | 155 | 8 | 75 |

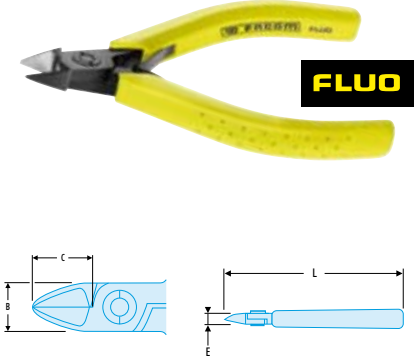
## Micro-Tech® Diagonal cutters - FLUO - FLUO




**NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 425: Flush cut, nose extended 13 mm.
- Finish: mat burnished finish, red grips - return spring.

| | B [mm] | C [mm] | E [mm] | L [mm] | Cu - Ni Ø [mm] | Coupe | [g] |
|---|---|---|---|---|---|---|---|
| **425F** | 13,0 | 10,5 | 10,5 | 110 | 0,1 - 1,3 | | 60 |

## Micro-Tech® "compact" cutters: handling - FLUO



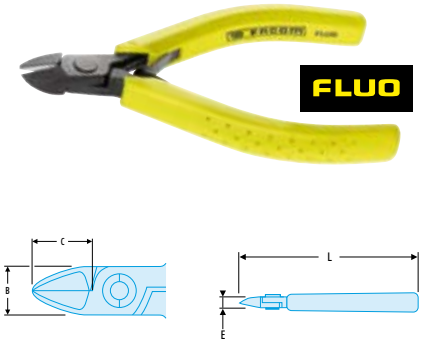

**NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- These pliers combine cutting performance with handling thanks to their new slim diagonal shape.
- Fall prevention models avoid wire ejection. 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] | Retenue de chute | Coupe | Fe 30 HRc diam. [mm] | Cu - Ni Ø [mm] | Piano diam. [mm] |
|---|---|---|---|---|---|---|---|---|---|
| **406.RMTF** | 10,5 | 9,5 | 7 | 110 | • | | 0,6 | 0,1 - 1,1 | - |

# Fluo pliers

## Micro-Tech® "rugged" cutters: versatility - FLUO



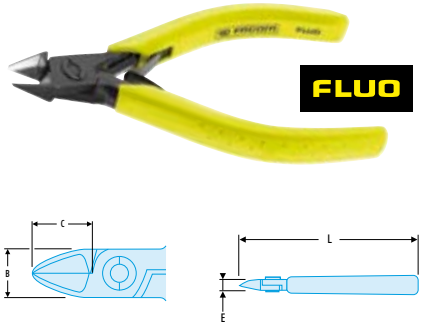

**NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- These pliers allow neat cutting of multiple materials: from copper wire to piano wire up to 0.5 mm.
- 405.10RMT: Fall prevention models avoid wire ejection.

Weight: 60 g.

| | B [mm] | C [mm] | E [mm] | L [mm] | Cu - Ni Ø [mm] | Fe 30 HRc diam. [mm] | Coupe | [g] |
|---|---|---|---|---|---|---|---|---|
| **405.10MTF** | 10,5 | 11,5 | 7 | 110 | 0,3 - 1,4 | 0,8 | | 60 |
| **405.10RMTF** | 10,5 | 11,5 | 7 | 110 | 0,3 - 1,4 | 0,7 | | 60 |

## Micro-Tech® "machined" cutters - FLUO



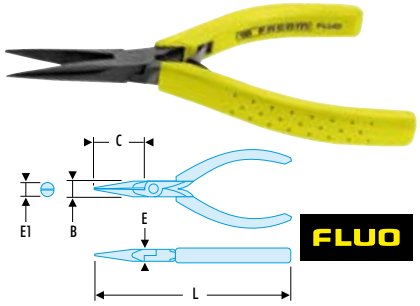

**NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Compact noses for difficult access.
- Fall prevention models avoid wire ejection.

Weight: 60 g.

| | B [mm] | C [mm] | E [mm] | L [mm] | Retenue de chute | Coupe | Fe 30 HRc diam. [mm] | Cu - Ni Ø [mm] |
|---|---|---|---|---|---|---|---|---|
| **416.RMTF** | 10,5 | 10,5 | 7 | 110 | • | | 0,5 | 0,1 - 0,9 |

## Micro-Tech® long and rigid nose grippers - FLUO



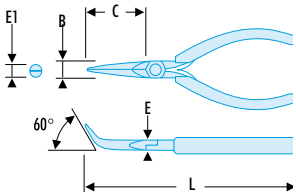

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.

Weight: 70 g.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] |
|---|---|---|---|---|---|
| **422.MTF** | 11 | 33 | 7 | 0,5 | 130 |

## Micro-Tech® 60° angled rigid nose grippers - FLUO



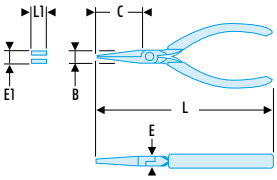

FLUO

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.

Weight: 70 g.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] |
|---|---|---|---|---|---|
| 423.MTF | 11 | 25 | 7 | 1,4 | 125 |

## Micro-Tech® long and rigid nose grippers - FLUO



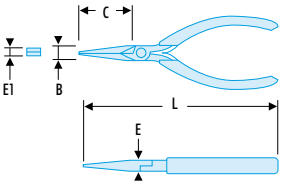

FLUO

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.

Weight: 70 g.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] |
|---|---|---|---|---|---|---|
| 421.MTF | 11 | 33 | 7 | 1 | 130 | 5 |

## Micro-Tech® thin nose grippers - FLUO



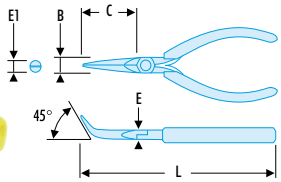

FLUO

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Narrow mesh, for high precision works.

Weight: 80 g.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] |
|---|---|---|---|---|---|
| 431.LMTF | 9 | 20 | 6 | 1 | 135 |

## Micro-Tech® 45° angled thin nose grippers - FLUO




FLUO

**NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Fine mesh, for high precision works.

Weight: 75 g.

| | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] |
|---|---|---|---|---|---|
| 433.LMTF | 9 | 35 | 6 | 1,6 | 135 |

# Fluo pliers

## Outside circlip® pliers - FLUO


**NF E 73-130, DIN 5254, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 177A.18F = Straight nose
  197A.18F = 90° angled nose
- For outside Circlips® 19 --> 60 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.

| | d [mm] | d mini - maxi [mm] | L [mm] | [g] |
|---|---|---|---|---|
| **177A.18F** | 1,8 | 19 - 60 | 180 | 175 |
| **197A.18F** | 1,8 | 19 - 60 | 170 | 175 |

## Inside circlip® pliers - FLUO


**NF E 73-130, DIN 5256, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 179A.18F = Straight nose
  199A.18F = 90° angled nose
- For inside Circlips® 19 --> 60 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.

| | d [mm] | d mini - maxi [mm] | L [mm] | [g] |
|---|---|---|---|---|
| **179A.18F** | 1,8 | 19 - 60 | 185 | 215 |
| **199A.18F** | 1,8 | 19 - 60 | 170 | 215 |

## 467FLUO Outside circlip® pliers - FLUO


**NF E 73-130, DIN 5254, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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.

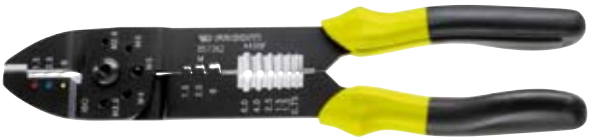
Weight: 160 g.

## 469F Outside circlip® pliers - FLUO


**NF E 73-130, DIN 5256, ASME B107.500**
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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.

## 449BF Standard crimping pliers for insulated terminals - FLUO

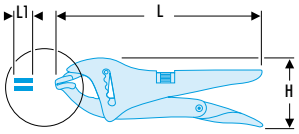


FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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: 320 g.

## Short-nose lock-grip pliers - FLUO




FLUO

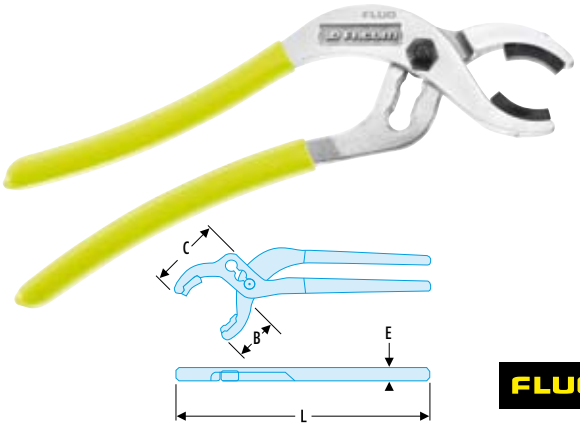
**ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] |
|---|---|---|---|---|
| 500F | 58 | 225 | 17 | 540 |

# "Connector" pliers

## "Connector" pliers - FLUO




FLUO

**ASME B107.500**

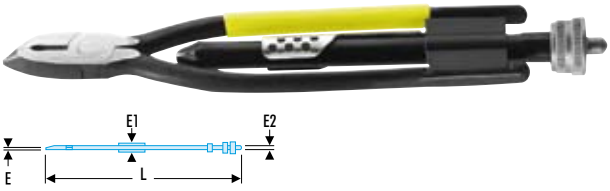
- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- For handling fragile round components, e.g. screwed connector sleeves, tubes, lamps or wire looms, etc.
- Wide capacity from 3-position slip joint: max. diameter 55 mm.
- Replaceable plastic jaws available in 2 jaw hardness options:
  - 410.SF: soft jaws - 55 shore B.
- Finish: polished chrome, red PVC grips.

- 410.SF: Set of 2 jaws with screws (soft).

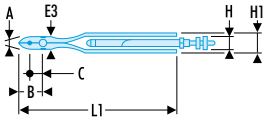
| | B [mm] | C [mm] | E [mm] | L [mm] | [g] |
|---|---|---|---|---|---|
| 410.SF | 68 | 47 | 10 | 230 | 320 |

# Locking-wire pliers

## 445.F - Locking-wire pliers - FLUO






FLUO

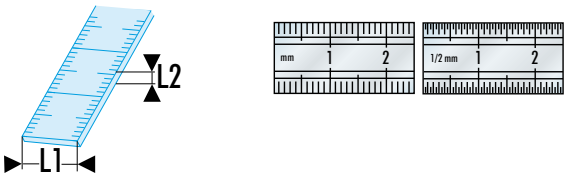
**ASME B107.500**

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 445.8RF = short 8" / 445.10RF = 10"
- 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 445.8RF | 3 | 20 | 7 | 2,5 | 15 | 10,5 | 15 | 22 | 37 | 215 | 170 | 245 |
| 445.10RF | 3 | 30 | 11 | 2,5 | 15,5 | 11,5 | 19 | 25 | 40 | 360 | 230 | 400 |

# Rules - Gauges

## DELA.1051F - Stainless steel rules - 2 sides - FLUO

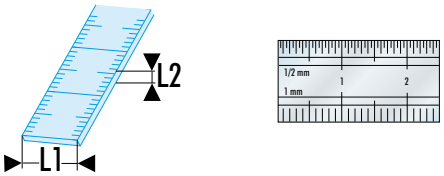



FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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.1051.02F | 150 | 13 x 0,5 | 8,5 |
| DELA.1051.03F | 200 | 13 x 0,5 | 10,9 |
| DELA.1051.04F | 250 | 13 x 0,5 | 13,5 |
| DELA.1051.05F | 300 | 13 x 0,5 | 16,1 |

## Stainless steel rules - 1 side - FLUO




FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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.1021.02F | 150 | 13 x 0,5 | 8,5 |

## 804F Round tip metric thickness gauges - FLUO


FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Set of 19 feeler gauges (round tip): 4/100 --> 100/100 mm.
- Blade length: 90 mm.

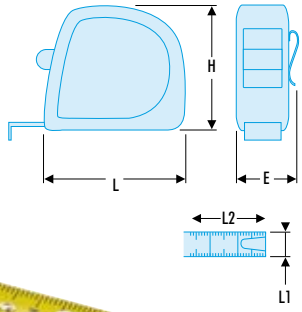
Weight: 60 g.

## 804.LF Long metric thickness gauges - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Set of 19 feeler gauges (round tip): 4/100 --> 25/100 mm.
- Blade length: 150 mm.

## 893.FLUO - ABS body tape measure - FLUO


FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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] | [g] |
|---|---|---|---|---|---|---|
| 893.213FLUO | 24 | 52 | 55 | 13 | 2 | 78 |
| 893.316FLUO | 27 | 60 | 60 | 16 | 3 | 126 |
| 893.519FLUO | 31 | 67 | 70 | 19 | 5 | 197 |

## Steel scribers

## 234F Steel scriber - FLUO

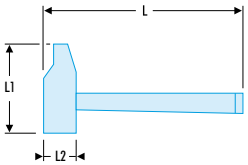
FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- Tip treated in chrome vanadium steel.
- Tip: Ø 4 mm.
- Length: 190 mm.

Weight: 20 g.

# Hammers - Mallets

## Graphite handle riveting engineers hammer - FLUO




FLUO

**NF E 71-016, NF ISO 15601, ISO 15601**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Ergonomic safety handle with graphite core.

| | L [mm] | L1 [mm] | L2 [mm] | [kg] |
|---|---|---|---|---|
| **200C.30F** | 270 | 93 | 30 | 0,470 |

## 208A.F - Adaptable-tip mallets - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- 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] | Embouts | [kg] |
|---|---|---|---|
| **208A.32BBAF** | 32 | EB - EB | 0,350 |
| **208A.32CBAF** | 32 | EC - EB | 0,345 |

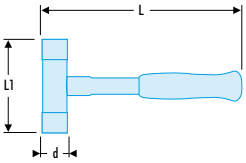
## Mallet tips - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Heavyweight steel body, hickory handle.

| | d [mm] | L [mm] | Manche | Présentation | [kg] |
|---|---|---|---|---|---|
| **208A.32AF** | 32 | 300 | 210.MHB13 | Laiton | 0,295 |

## 212AF - Dead-blow hammers, interchangeable tips - FLUO




- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Glass fiber handle.
- Steel body.
- Easily replaceable, special nylon tips shore hardness D74 ± 5.
- Ergonomic PVC grip.
- Presentation: black epoxy.

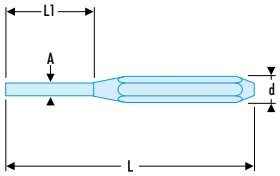
- Spare tip: 212.E35 to E60.

| | d [mm] | L [mm] | L1 [mm] | Embouts | [kg] |
|---|---|---|---|---|---|
| 212A.35F | 35 | 305 | 112 | 212.E35 | 0,698 |
| 212A.40F | 40 | 310 | 117 | 212.E40 | 0,839 |

FLUO

## Drifts

## 249.F - Standard drift punches - FLUO




**NF E 71-211, DIN 6450, ASME B107.410**

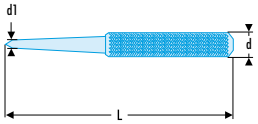
- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Hexagonal shank, high-strength steel tip, hardened to 53-58 HRc.
- Zinc-plated finish.

| | A [mm] | d [mm] | L [mm] | L1 [mm] | [kg] |
|---|---|---|---|---|---|
| 249.2F | 1,9 | 8 | 115 | 30 | 0,030 |
| 249.3F | 2,9 | 8 | 125 | 40 | 0,035 |
| 249.4F | 3,9 | 10 | 150 | 50 | 0,065 |
| 249.5F | 4,9 | 10 | 165 | 50 | 0,075 |
| 249.6F | 5,9 | 12 | 180 | 50 | 0,120 |
| 249.8F | 7,9 | 12 | 200 | 50 | 0,160 |
| 249.10F | 9,9 | 16 | 200 | 50 | 0,220 |

FLUO

## Drift punches

## 256.F - Precision centre punches - FLUO




**NF E 71-211, DIN 7250, ASME B107.410**

- Fluorescent tool, detectable by ultraviolet light. Detectable in dark and dimly lit areas for 3 metres.
- Chrome-vanadium steel forged, hardened to 52 to 58 HRc.
- Presentation: knurled body.
- Zinc-plated finish.

| | A [mm] | d [mm] | L [mm] | [kg] |
|---|---|---|---|---|
| 256.4F | 4 | 8 | 105 | 0,035 |
| 256.6F | 6 | 10 | 115 | 0,060 |
| 256.8F | 8 | 12 | 130 | 0,100 |

FLUO

## Lighting

### 779.CL3FL LED INSPECTION LAMP

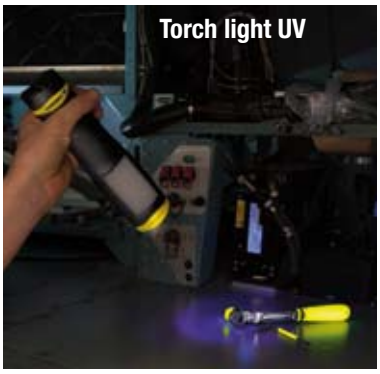
**Dual light**
- Directive UV torch light for detection of fluorescent tools.
- Soft permanent lighting on the front to light a work zone.

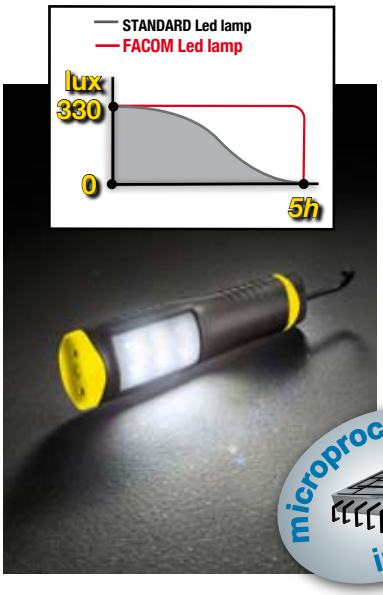
**Hautes performances**
- Very long lasting LEDs.
- White fluorescent panel lighting with diffusing glass.

**Extended use**
- 5h panel lighting.
- Charges in 2h30.
- High capacity Lithium-Ion battery without memory effect.

**Proven resistance**
- Shock-proof structure (IK08). Drop resistant.
- Watertight construction (IP55).
- Resists workshop solvents and common chemicals.

**Safety - Comfort**
- Low operating temperature -> does not burn.
- Compact design -> for better accessibility.
- Magnet fastener or notched 360° swivel hook.
- Wall or worktop charger.
- 2 m mains cable.
- Blinks 15 min before lamp discharges.




microprocessor inside

### 779.CL3FL Cordless LED Inspection lamp - FLUO


- Directive UV torch light for detection of fluorescent tools.
- Wide light diffusion on work area for productivity in every kind of work place. (front)
- Battery charger EURO 100-240V.
- 360 Lumen.
- Extended use: up to 5 hours.
- 100% “hands free” : magnet fastener or notched 360° swivel hook.
- Shock-proof structure.
- Short press: Soft permanent lighting on the front to light a work zone.
- Long press: Powerful directive torch light UV.
- Dimensions (L. x l. x H.): 242 x 61 x 50 mm.

Weight: 380 g.

779.CL3FLUK - model equipped with a UK plug

# Scissors - Mirror

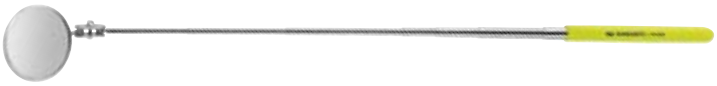
## Electricians scissors - FLUO

FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 100% metal handles, left/right hand.
- Short reinforced blades, with wire cutter.
- Finish: polished chromed.

| | L [mm] | Lame | [g] |
|---|---|---|---|
| **841F** | 150 | 33 | 95 |

## 834B.RTF Inspection mirror - FLUO



FLUO

- Fluorescent tool, detectable by ultraviolet light.
  Detectable in dark and dimly lit areas for 3 metres.
- 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.

RFid
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