



## ENGINEERS MULTIGRIP PLIERS

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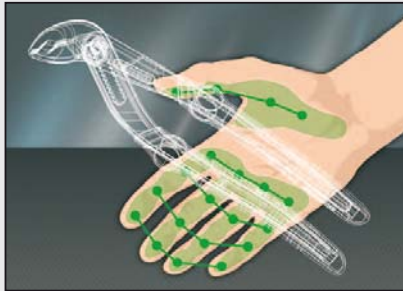


# MULTIGRIP PLIERS

## POWER AND PRECISION

### POWERFUL

- The closed position of the ergonomic comfort grip handles increases the tightening power.



### STURDY

- Accurate and strong thanks to its rack and offset pin.



### SLIM-LINE NOSE

- With self-gripping teeth.



### 2 FINISHES AVAILABLE



- **CPE version:**- Chrome-finished.- Bi-material ergonomic grips.

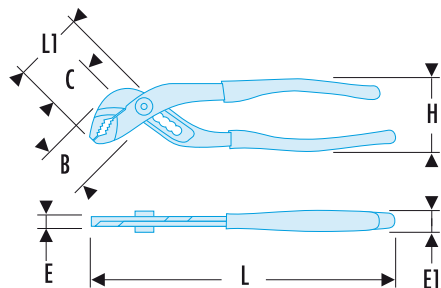


- **G version:**- Varnished.- Ergonomic grips.



181EF version: long nose

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

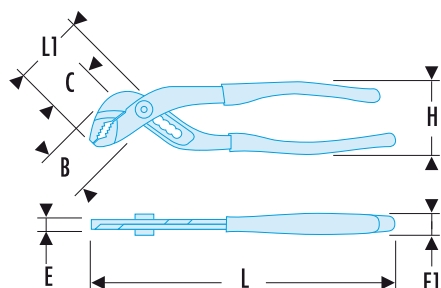


NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Fast, precise push-button adjustment with safety lock.
- 12-position notches.
- The closed position of the ergonomic comfort grip handles increases the tightening power.
- High torsional strength.
- Slim-profile self-gripping nose.
- 62 HRc high-frequency treated jaws.
- Finish:
  - Chromed, bi-material ergonomic grips: 181A.CPE.
  - Varnish finish, PVC grips: 181A.G.

| ➤                 | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | Capacity Nuts [mm] | Capacity Maxi Tube [mm] | ΔΔ [g] |
|-------------------|--------|--------|--------|---------|--------|---------|--------------------|-------------------------|--------|
| <b>181A.18CPE</b> | 22     | 24     | 7,5    | 20,0    | 185    | 48      | 36                 | 36                      | 230    |
| <b>181A.25CPE</b> | 28     | 28     | 7,5    | 22,5    | 245    | 54      | 41                 | 42                      | 360    |
| <b>181A.18G</b>   | 22     | 24     | 7,5    | 20,0    | 185    | 48      | 36                 | 36                      | 225    |
| <b>181A.25G</b>   | 28     | 28     | 7,5    | 19,0    | 245    | 54      | 41                 | 42                      | 350    |
| <b>181A.30G</b>   | 35     | 33     | 9,0    | 22,5    | 300    | 73      | 46                 | 49                      | 680    |

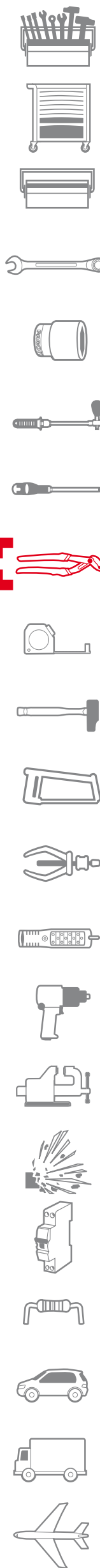
## 181EF- Locking twin slip-joint multigrip pliers



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

- Long slim nose for improved reach in confined spaces.
- Fast, precise push-button adjustment with safety lock.
- 12-position notches.
- The closed position of the ergonomic comfort grip handles increases the tightening power.
- High torsional strength.
- Slim-profile self-gripping nose.
- 62 HRc high-frequency treated jaws.
- Packaging:
  - Chromed, bi-material ergonomic grips: 181EF.CPE .
  - Varnish finish, PVC grips: 181EF.G .

| ➤                  | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | Capacity Nuts [mm] | Capacity Maxi Tube [mm] | ΔΔ [g] |
|--------------------|--------|--------|--------|---------|--------|---------|--------------------|-------------------------|--------|
| <b>181EF.25CPE</b> | 25     | 37,5   | 7,5    | 22,5    | 256    | 63      | 41                 | 42                      | 350    |
| <b>181EF.25G</b>   | 25     | 37,5   | 7,5    | 19,0    | 256    | 63      | 41                 | 42                      | 340    |



180

## SLIP-JOINT MULTIGRIP PLIERS - RIVETED PIVOT PIN

### IDEAL FOR CONFINED SPACES!

- ① Long slim nose for improved reach in confined spaces.
- ② 7 positions.
- ③ Capacity (parallel jaws): 44 mm.

#### SAFE

- Finger clearance.
- Insulated VE model for working on or near live components up to 1,000V AC.
- To European standard EN60900.



### 180 - High-performance multigrip pliers



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

- Capacity: 44 mm.
- Ideal for confined spaces: long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- 3 options:
  - 180.CPE: Chrome finish, ergonomic grips.
  - 180: Chrome finish.
  - 180.VE: Varnish finish, 1,000V insulated grips designed for electrical safety to EN 60 900 and qualified for working on or near live components.

|                | A [mm] | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|---------|--------|---------|--------|
| <b>180</b>     | 30     | 30     | 35     | 8      | 14      | 250    | 58      | 320    |
| <b>180.CPE</b> | 30     | 30     | 35     | 8      | 22      | 250    | 58      | 360    |
| <b>180.VE</b>  | 30     | 30     | 35     | 8      | 22      | 250    | 58      | 360    |

## SLIP-JOINT MULTIGRIP PLIERS

### SELF-TIGHTENING PLIERS

- Teeth self-gripping on pipes.
- Tightens and loosens nuts without damage.
- Capacity: 46 mm.
- Safe: finger protection.
- Riveted pivot.

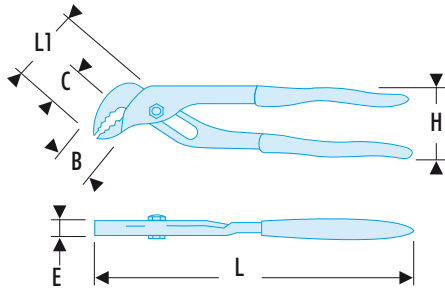






## Standard multigrip pliers

### ■ "Mammoth" multigrip pliers



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

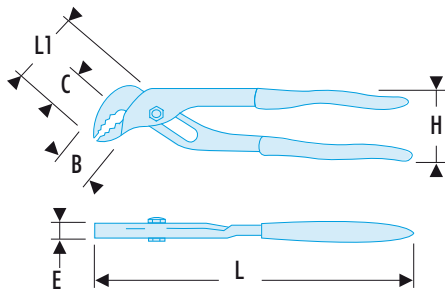
- Powerful, two-handed use ideal for heavy engineering and farm machinery.
- Forged and hardened to 48 HRc.
- Thick-gauge jaws withstand torsion.
- 7 positions.
- Capacity: 58 mm.
- Finish: chromed, polished tips.

Spare pivot pin: 182.SE.

| ➤              | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|--------|---------|--------|
| <b>182A.CP</b> | 55     | 50     | 10,5   | 62     | 362    | 85      | 810    |

## Notch-joint multigrip pliers

### ■ Notch-joint multigrip pliers

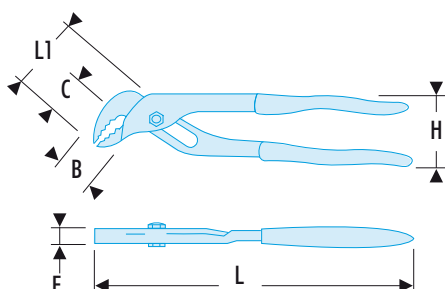


#### NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Undercut arcs:
  - Positive engagement of notches provides high power.
  - Pivot pin is not load bearing.
  - Smooth adjustment.
- 5 positions.
- Capacity: 36 mm.
- Finish: chrome finish, red PVC grips.

| ➤              | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|--------|---------|--------|
| <b>480.ECG</b> | 35     | 30     | 9,5    | 60     | 250    | 55      | 320    |

### ■ 482 - Notch-joint multigrip pliers

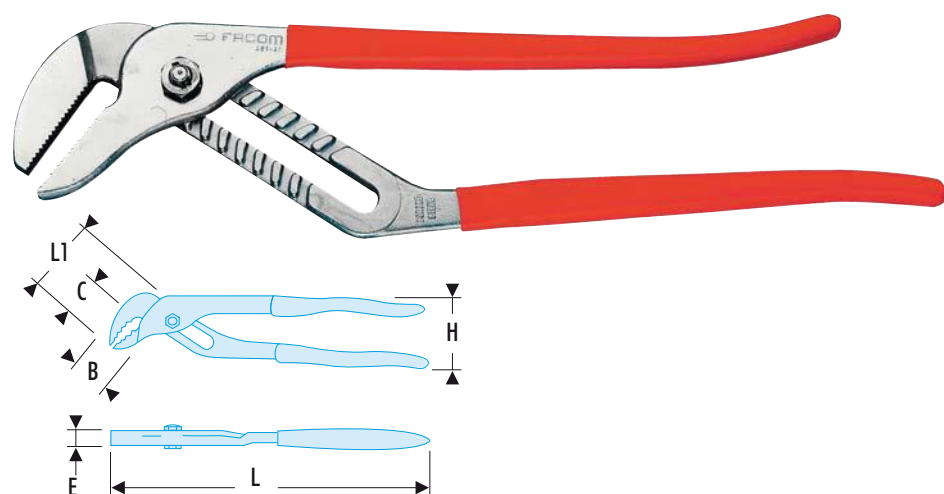


#### NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Self-gripping teeth.
- Undercut arcs:
  - Positive engagement of notches provides high power.
  - Pivot pin is not load bearing.
- 5 positions.
- Capacity: 36 mm.
- Packaging:
  - CPE model: chrome finish, ergonomic grips.
  - EG model: burnished finish, red PVC grips.

| ➤              | A [mm] | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|--------|--------|---------|--------|
| <b>482.CPE</b> | 35     | 35     | 30     | 9,5    | 60     | 255    | 55      | 365    |
| <b>482.EG</b>  | 35     | 35     | 30     | 9,5    | 60     | 255    | 55      | 320    |

### ■ "Extra-wide capacity" straight-jaw pliers



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

- Straight serrated jaw.
- Notch joint.
- 11 positions.
- Capacity: 105 mm.
- Finish: chrome finish, PVC grip.

| ➤             | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | L1 [mm] | ΔΔ [kg] |
|---------------|--------|--------|--------|--------|--------|---------|---------|
| <b>481.40</b> | 56     | 50     | 14     | 102    | 412    | 90      | 1,10    |

### Cutting pliers

#### PRECISION CUTTERS

#### 3 TYPES OF CUT:

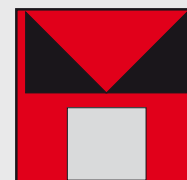
**AXIAL**  
Hard cutting edges for all materials.



**SEMI-FLUSH**  
Clean cut in semi-hard materials.

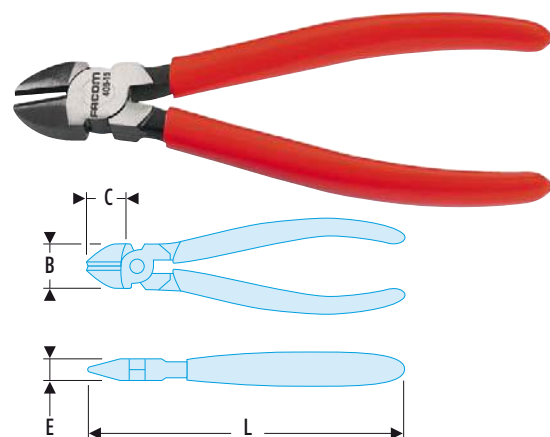


**FLUSH**  
Smooth burr-free finish.



➤ **Micro-Tech® electronic pliers. See Electronic Section p.814.**

### ■ "Compact" diagonal cutters

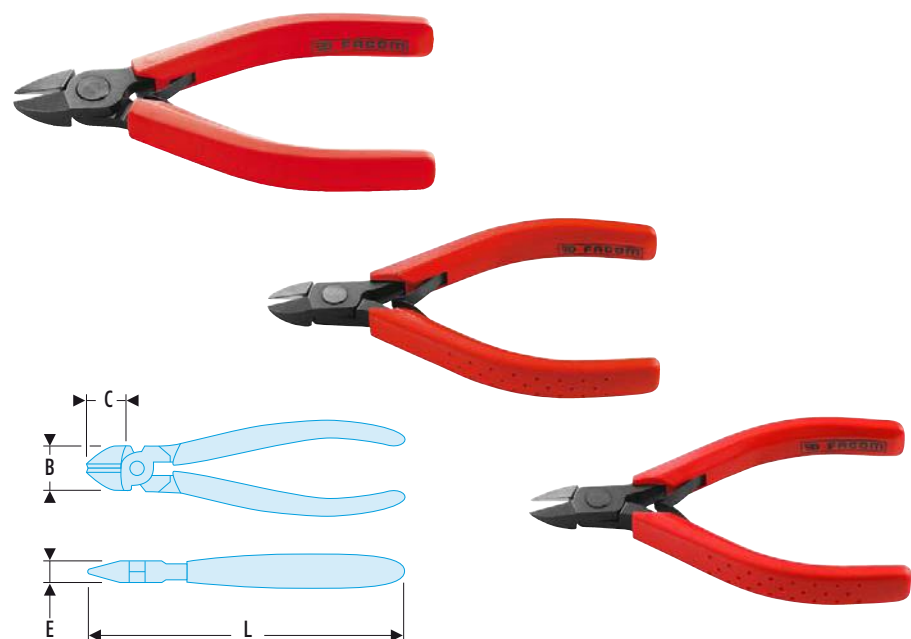


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Capacity:
  - Hard wire 160 kg/mm<sup>2</sup>: diameter 1.6 mm.
  - Semi-hard wire 100 kg/mm<sup>2</sup>: diameter 1.8 mm.
- Finish: varnished finish, red PVC grips.

| ➤             | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|---------------|--------|--------|--------|--------|--------|
| <b>405.15</b> | 20     | 17     | 11     | 160    | 195    |

### ■ Diagonal cutters



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

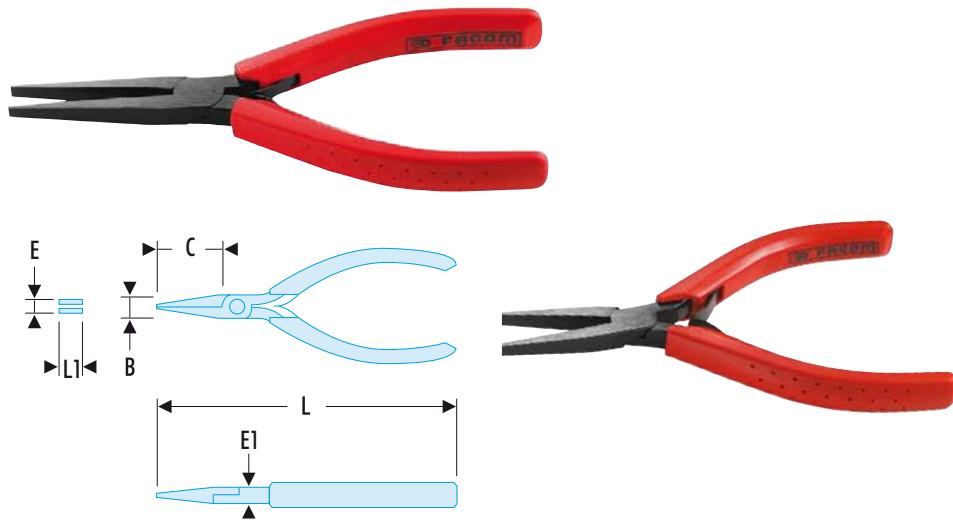
- 405: Axial cut.
- 416 - 435: Semi-flush cut, slim nose.
- 425: Flush cut, nose extended 13 mm.
- Finish: Matt burnished finish, red grips - return spring.

| ➤             | B [mm] | C [mm] | E [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|---------------|--------|--------|--------|--------|---------|--------|
| <b>405.12</b> | 16,0   | 16,0   | 16,0   | 120    | 8       | 95     |
| <b>405.10</b> | 11,5   | 10,5   | 10,5   | 110    | 7       | 60     |
| <b>435</b>    | 13,0   | 10,5   | 10,5   | 110    | 7       | 60     |
| <b>416</b>    | 11,5   | 10,5   | 10,5   | 110    | 7       | 60     |
| <b>425</b>    | 13,0   | 10,5   | 10,5   | 110    | 7       | 60     |



## Flat-nose pliers

### 401-421 - Flat nose pliers



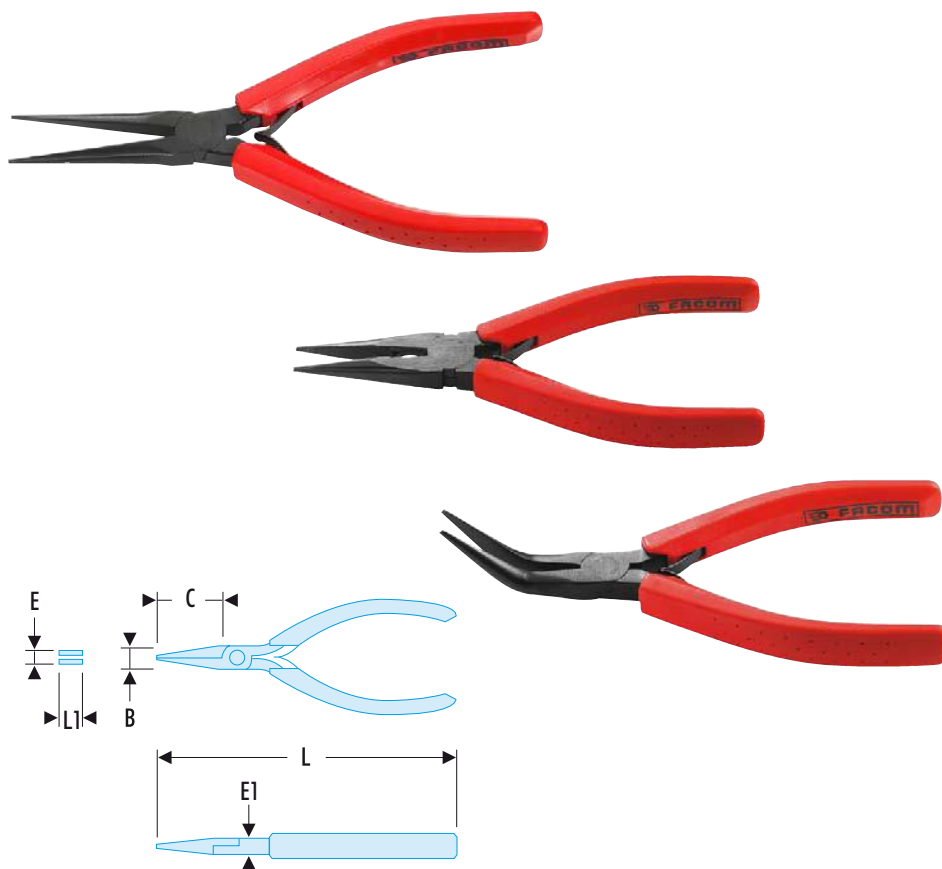
NF ISO 9655, ISO 9655, DIN ISO 9655, ASME B107.500

- Smooth jaws with contoured inside edges to protect components.
- Finish: Matt burnished finish, red grips.

| ➤          | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|------------|--------|--------|--------|---------|--------|---------|--------|
| <b>401</b> | 48     | 14     | 5      | 1       | 160    | 8       | 80     |
| <b>421</b> | 33     | 11     | 3      | 1       | 130    | 7       | 70     |

## Half-round nose pliers

### Half-round nose pliers



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

- 402: Short smooth jaws.
- 442: Short serrated jaws with side wire-cutter (2 mm dia. copper, 1 mm dia. steel 100 kg/mm<sup>2</sup>).
- 403: Smooth jaws, angled 40°.
- Finish: Matt burnished finish, red grips - return spring.

| ➤          | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|------------|--------|--------|--------|---------|--------|---------|--------|
| <b>402</b> | 48     | 14     | 14     | 1,5     | 160    | 8       | 76     |
| <b>442</b> | 42     | 14     | 14     | 3,8     | 150    | 8       | 88     |
| <b>403</b> | 45     | 14     | 14     | 1,2     | 155    | 8       | 75     |

## Wire strippers

### 194.12 Fine wire strippers



- Max. AWG 14.
  - For light-gauge wire.
  - Narrow blades.
  - Cutting depth presetting.
  - Single and multi-core wire diameter: 1,5 mm.
  - Cross-section: 1,8 mm<sup>2</sup>.
  - Length: 130 mm.
  - Finish: burnished, PVC grip.
- Weight: 70 g.

Diagonal cutters

# FACOM CUTTING PLIERS

## HIGH PERFORMANCE !

**FACOM'S CUTTING PLIERS ARE DESIGNED TO MEET THE 3 MAIN REQUIREMENTS OF PROFESSIONAL USERS.**

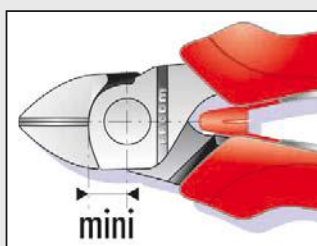
### 1- One tool for cutting all materials

- FACOM's universal cutters can cut cleanly through all types of materials:
- Copper wire, semi-hard wire, hard wire, piano wire, steel strip, nylon strip, binding wire,
- Bronze wire, Ertalon, etc.



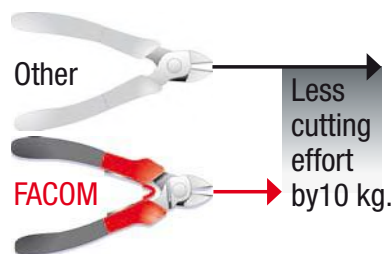
### 2- A reduced cutting effort

- Facom cutting pliers reduce the cutting effort by 20% :
  - Optimised cutting-edge geometry.
  - Long lever arm.
  - Pivot pin offset as close as possible to the cutting edges.



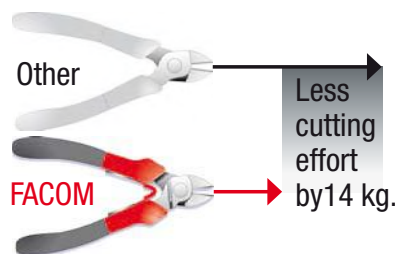
For cutting: 4 mm screws

FACOM cutters require 10 kg less cutting effort on the part of the user.



For cutting: Piano wire 200 kg/mm<sup>2</sup>

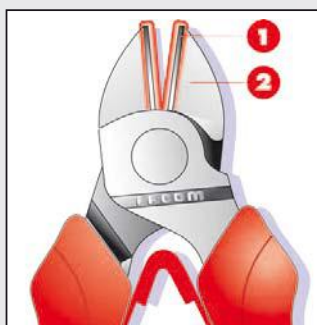
FACOM cutters require 14 kg less cutting effort on the part of the user.



### 3- Durable cutting power

- Very high resistance to wear when used to cut hard wire or subject to intensive use.
- FACOM cutters are made of high strength steel for maximum durability. The cutting edges are double heat treated.

- ① Very hard cutting edges: 61/63 HRc.
- ② CHROME-MOLYBDENUM-VANADIUM steel.



### Cutting capacity

• (Max. diameter of wires in "mm" - Tensile strength in "Kg/mm<sup>2</sup>")

| 200 kg/mm <sup>2</sup><br>Piano wire |          | 160 kg/mm <sup>2</sup><br>Hard wire |          | 80 kg/mm <sup>2</sup><br>Semi-hard wire |          |
|--------------------------------------|----------|-------------------------------------|----------|---|----------|
| ➤                                    | ∅ max    | ➤                                   | ∅ max    | ➤                                       | ∅ max    |
| 192                                  | : 2.0 mm | 391                                 | : 1.6 mm | 405                                     | : 1.0 mm |
| 190                                  | : 2.0 mm | 193                                 | : 1.6 mm | 436                                     | : 0.7 mm |
| 187                                  | : 2.0 mm | 185                                 | : 1.6 mm | 416                                     | : 0.5 mm |
| 171                                  | : 2.5 mm | 195                                 | : 1.6 mm |   |          |
| 191A                                 | : 2.5 mm | 183                                 | : 1.6 mm |   |          |
| 405.12                               | : 0.8 mm | 491                                 | : 3.6 mm |   |          |

### Copper

• (Electrical fitters cutters)

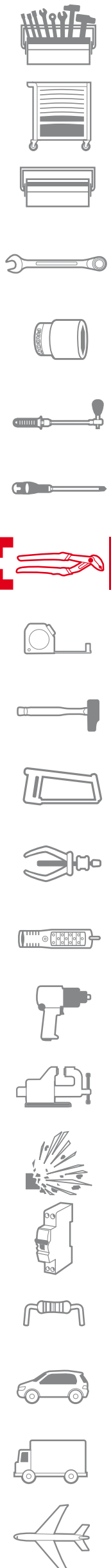
| ➤   | ∅ max    | ➤   | ∅ max    | ➤   | ∅ max    |
|-----|----------|-----|----------|-----|----------|
| 391 | : 3.5 mm | 435 | : 1.3 mm | 405 | : 1.0 mm |
| 405 | : 2.0 mm | 416 | : 1.0 mm | 436 | : 0.7 mm |

### Plastic

|   |     |     |
|---|-----|-----|
| ➤ | 395 | 396 |
|---|-----|-----|

### Four types of finish

- ① CPE series chromed
- ② TE series varnished
- ③ VE-VSE series 1000 Volts insulated
- ④ G series PVC grip



## CPE SERIES CHROME-FINISHED PLIERS

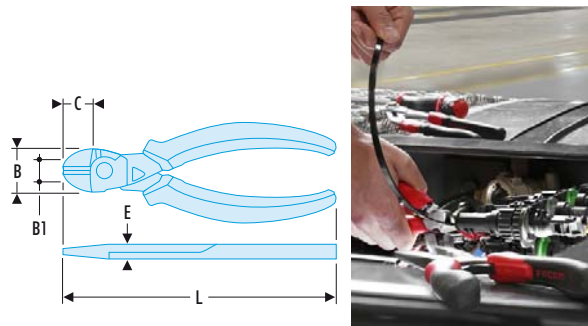
### STRENGTH

- High-performance materials chosen for their resistance to workshop chemicals (skydrol, chlorothene, acetone, petrol, etc...).



1 Return spring.

### 192.CPE High-performance diagonal cutters

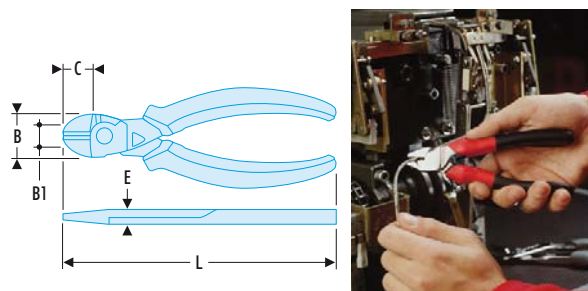


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, soft wires and modern materials 200 kg/mm<sup>2</sup>).
- 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] | ΔΔ [g] |
|------------------|--------|--------|-------------|--------|--------|--------|
| <b>192.14CPE</b> | 21,5   | 15,5   | 1,4         | 9,5    | 145    | 160    |
| <b>192.16CPE</b> | 24,0   | 18,0   | 1,6         | 10,0   | 160    | 200    |
| <b>192.18CPE</b> | 26,0   | 20,0   | 1,8         | 11,0   | 180    | 260    |
| <b>192.20CPE</b> | 28,0   | 22,0   | 2,0         | 11,5   | 200    | 320    |

### Electricians diagonal cutters



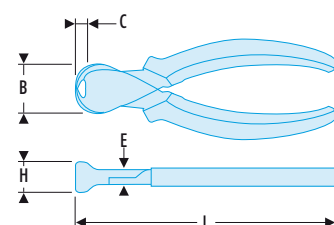
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Snipe nose for confined space (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire: hard wires (max. 160 kg/mm<sup>2</sup>), thin copper wires, modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                  | B [mm] | C [mm] | E [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|------------------|--------|--------|--------|--------|---------|--------|
| <b>391.16CPE</b> | 19     | 21     | 9      | 165    | 9       | 190    |

## End cutters

### 190.CPE - High-performance end cutters



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

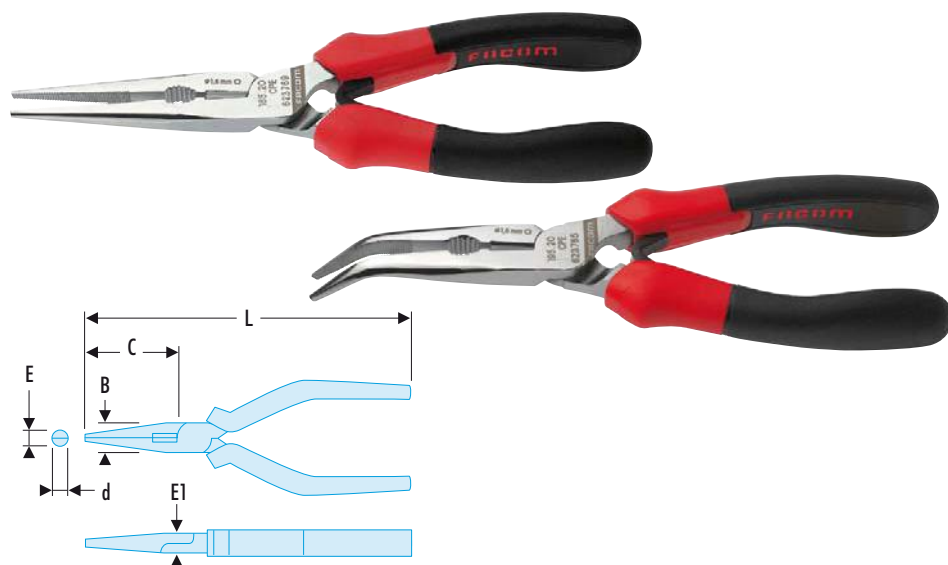
- Cutting edges designed to cleanly cut all types of wire: piano wire, hard and soft wires (max. 200 kg/mm<sup>2</sup>).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                  | A [mm] | B [mm] | C [mm] | d maxi [mm] | E [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------|--------|-------------|--------|--------|--------|
| <b>190.16CPE</b> | 6,5    | 28     | 6,5    | 1,6         | 11,5   | 160    | 200    |
| <b>190.20CPE</b> | 7,5    | 31     | 7,5    | 2,0         | 13,5   | 200    | 340    |





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

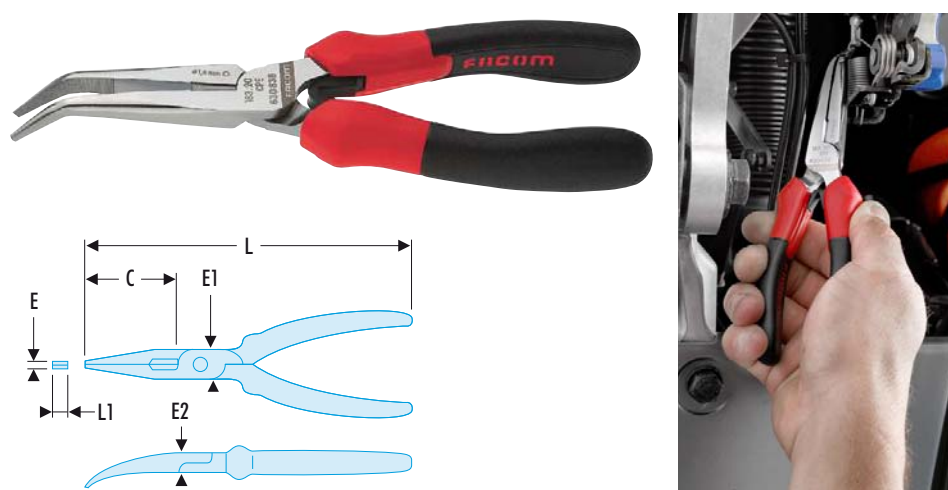


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- 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] | ΔΔ [g] |
|------------------|--------|--------|--------|--------|---------|--------|--------|
| <b>185.20CPE</b> | 18     | 75     | 2,9    | 3,6    | 9       | 200    | 192    |
| <b>195.20CPE</b> | 18     | 69     | 2,9    | 3,6    | 9       | 200    | 192    |

## Half-round long snipe-nose pliers

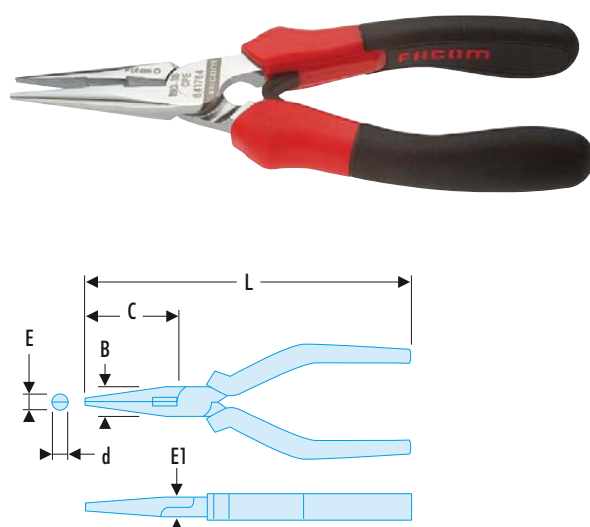


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                  | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|------------------|--------|--------|---------|---------|--------|---------|--------|
| <b>183.20CPE</b> | 69     | 3      | 18      | 9       | 200    | 2,5     | 185    |

## Short half-round nose pliers

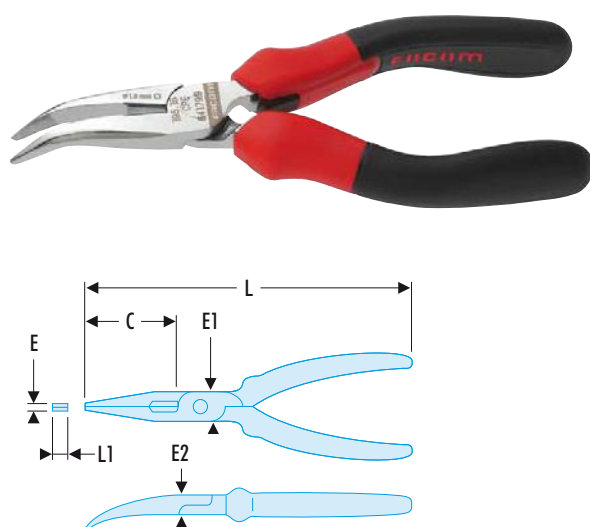


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                  | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------|--------|--------|---------|--------|--------|
| <b>193.16CPE</b> | 17     | 50     | 2,5    | 3      | 9       | 160    | 177    |

## Short half-round nose pliers



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

- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                  | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------|--------|--------|---------|--------|--------|
| <b>195.16CPE</b> | 17     | 50     | 2,5    | 3      | 9       | 160    | 177    |

### Combination pliers

#### 187.CPE - Combination pliers



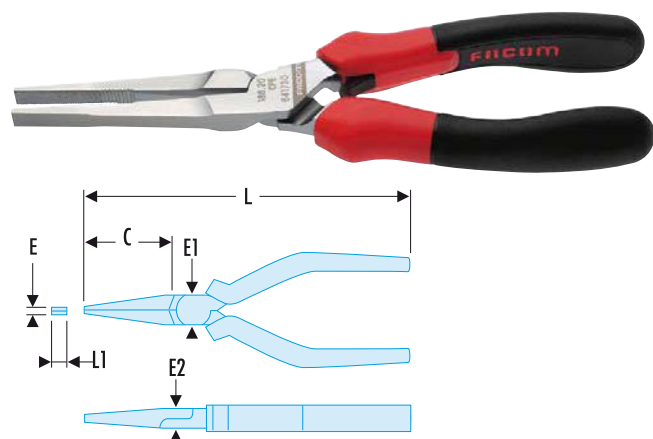
NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

- Cutting edges designed to cut all types of wire: piano wire, soft wires and modern materials (Fe 200 kg/mm<sup>2</sup>).
- 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] | ΔΔ [g] |
|------------------|--------|--------|--------|--------|--------|
| <b>187.16CPE</b> | 21     | 34     | 9,5    | 165    | 195    |
| <b>187.18CPE</b> | 23     | 36     | 10,0   | 185    | 225    |
| <b>187.20CPE</b> | 26     | 42     | 11,5   | 205    | 300    |

### Flat-nose pliers

#### 188 - Flat nose pliers



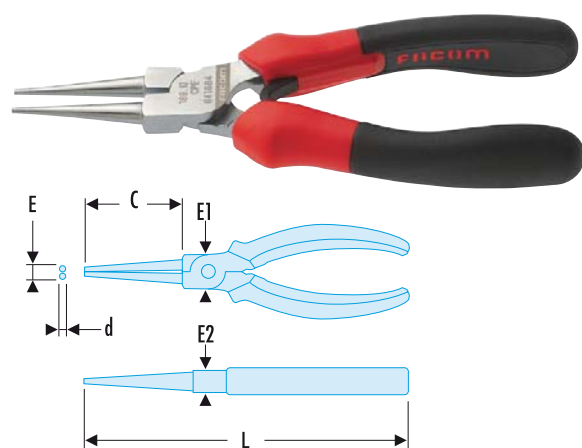
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Serrated nose for a firm grip.
- 188.E: snipe nose version for confined spaces.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

| ➤                 | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|-------------------|--------|--------|---------|---------|--------|---------|--------|
| <b>188.16CPE</b>  | 46     | 4,0    | 18      | 9       | 168    | 6,5     | 140    |
| <b>188.20CPE</b>  | 75     | 4,0    | 18      | 9       | 200    | 6,5     | 200    |
| <b>188E.16CPE</b> | 46     | 2,5    | 18      | 9       | 168    | 3,5     | 130    |

### Round nose pliers

#### Round nose pliers



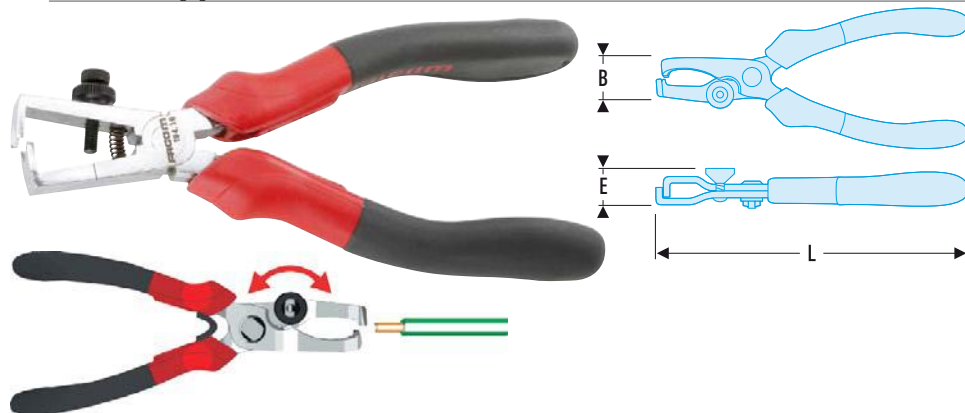
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- For shaping loops, bends or rings.
- Finely serrated jaws for positive grip.
- Diameter of each nose at the end: 2 mm.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

| ➤                | C [mm] | d [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------|--------|---------|---------|--------|--------|
| <b>189.17CPE</b> | 41     | 2      | 4      | 18      | 9       | 170    | 135    |

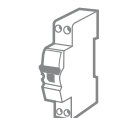
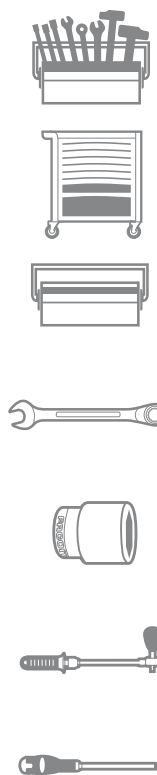
### Standard wire strippers

#### Wire strippers



- For single and multi-core wires 0.5 to 6 mm<sup>2</sup>.
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic grips resistant to chemical agents.
- Finish: chromed.

| ➤                | B [mm] | d mini - maxi [mm] | E [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------------------|--------|--------|--------|
| <b>194.17CPE</b> | 17     | 0,5 - 6,0          | 8,5    | 170    | 185    |



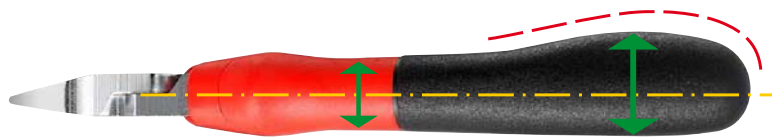
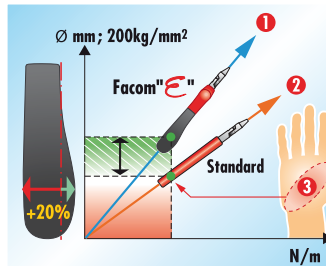


# SERIES "E" PLIERS

## ERGONOMIC

### Non-slip spatula-shaped pressure area

- The ergonomic features of series "E" pliers represent the culmination of an intensive programme of testing and analysis of tools in service, with additional support from specialist ergonomics laboratories.
- Extended contact area and asymmetric profile fit naturally in the hand. Reduced risk of repetitive strain injury, inflammation and fatigue, especially in intensive use.



### Guard

- Firm, comfortable grip for pushing or pulling pressure.



### Return spring

- Comfort and precision.
- The spring wedges the handles snugly between fingers and palm.

### Three levels of finish



TE series varnished



CPE series chromed



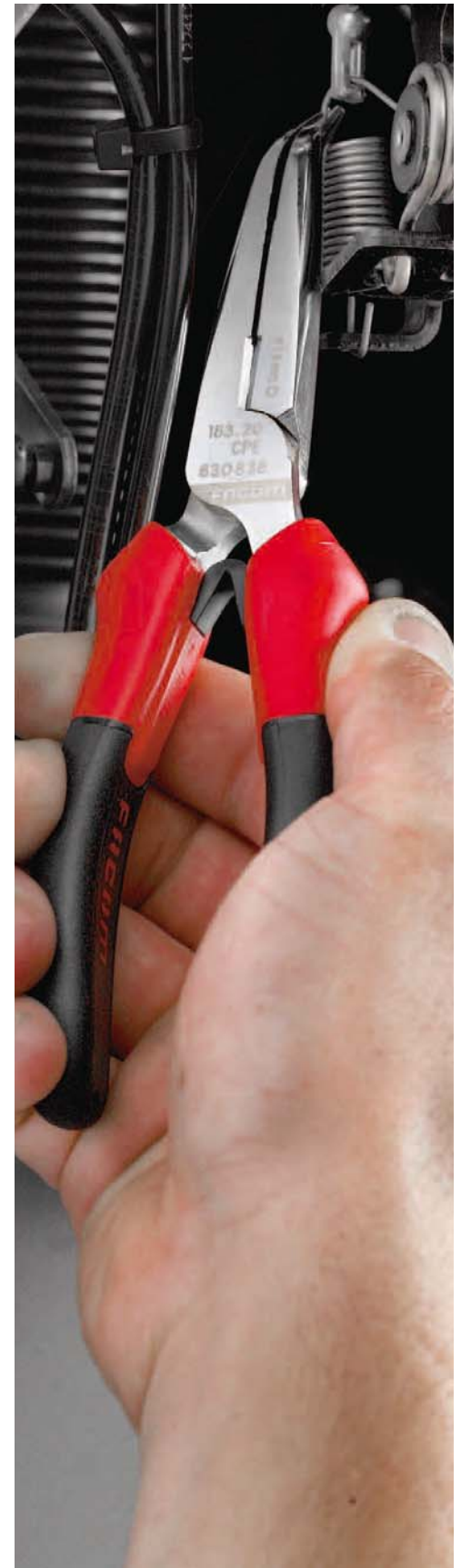
VE series 1,000 V insulated

### Highly resistant materials

- Materials used for the grips are chosen for their resistance to workshop chemicals (Skydrol, chloroethene, acetone, petrol, etc.).
- Spring tested to over one million cycles.

### SAFE

- Facom 1,000 V insulated safety pliers meet the requirements of EN 60900 European standard



Diagonal cutters

TE SERIES

VARNISHED, POLISHED PLIERS

Ergonomic!

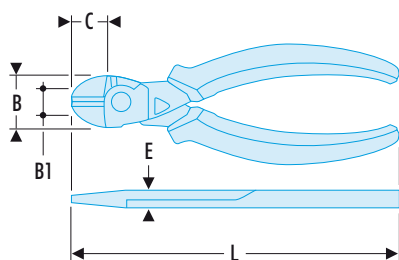
- 1 **Spatula-shaped pressure areas**
  - + 20% more slip-resistant.
  - Maximum comfort. Reduced pressure on the hand.
- 2 **Return spring**
  - Comfort and precision.
  - The spring naturally wedges the handles snugly between fingers and palm.
- 3 **Guard**
  - Designed to provide a firm, comfortable grip for pushing or pulling pressure.

RESISTANT

- High-performance materials chosen for their resistance to workshop chemicals (skydrol, chlorothene, acetone, petrol, etc...).



192.TE - High-performance diagonal cutters



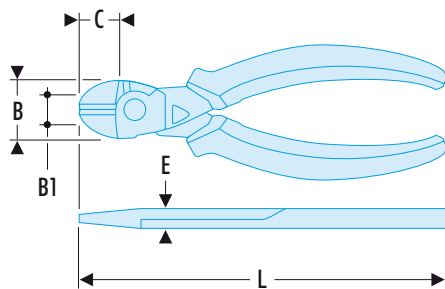
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, soft wires and modern materials 200 kg/mm<sup>2</sup>.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

| Ref      | B [mm] | C [mm] | d maxi [mm] | E [mm] | L [mm] | ΔΔ [g] |
|----------|--------|--------|-------------|--------|--------|--------|
| 192.14TE | 21,5   | 15,5   | 1,4         | 9,5    | 145    | 160    |
| 192.16TE | 24,0   | 18,0   | 1,6         | 10,0   | 160    | 200    |
| 192.18TE | 26,0   | 20,0   | 1,8         | 11,0   | 180    | 260    |
| 192.20TE | 28,0   | 22,0   | 2,0         | 11,5   | 200    | 320    |



## Electricians diagonal cutters



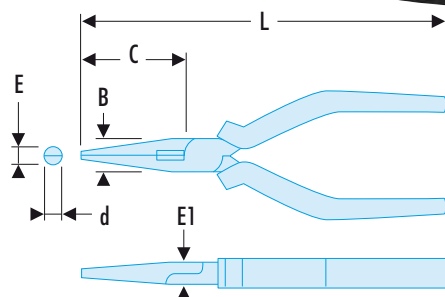
NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Snipe nose for confined space (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire: hard wires (max. 160 kg/mm<sup>2</sup>), thin copper wires, modern materials.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

| 🔧               | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|
| <b>391.16TE</b> | 19     | 21     | 9      | 165    | 190    |

## Half-round nose pliers

### 185-195.TE - Long half-round nose pliers



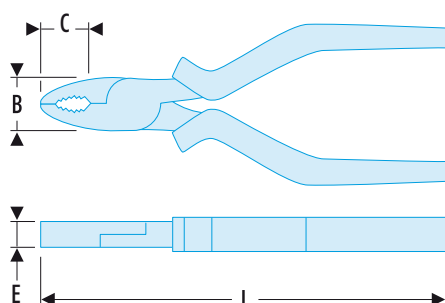
NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- 185.TE: straight nose.
- 195.TE: 40° angled nose.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

| 🔧               | B [mm] | C [mm] | d [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|---------|--------|--------|
| <b>185.20TE</b> | 18     | 75     | 2,9    | 9       | 200    | 192    |
| <b>195.20TE</b> | 18     | 69     | 2,9    | 9       | 200    | 192    |

## Combination pliers

### 187.TE - Combination pliers



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

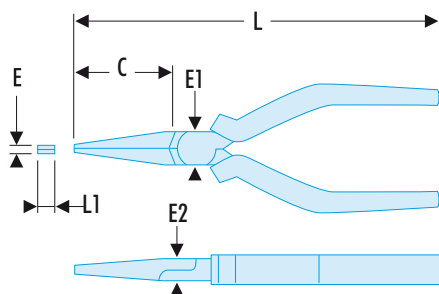
- Cutting edges designed to cut all types of wire: piano wire, soft wires and modern materials (Fe 200 kg/mm<sup>2</sup>).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

| 🔧               | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|
| <b>187.18TE</b> | 23     | 36     | 10,0   | 185    | 225    |
| <b>187.20TE</b> | 26     | 42     | 11,5   | 205    | 300    |



Flat-nose pliers

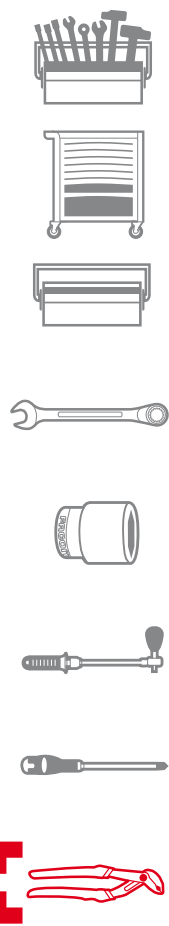
Flat-nose pliers



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

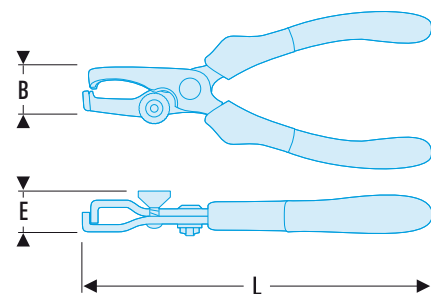
- Serrated jaws for a firm grip.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: polished, varnished.

|                 | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|-----------------|--------|--------|---------|---------|--------|---------|--------|
| <b>188.16TE</b> | 46     | 4      | 18      | 9       | 168    | 6,5     | 140    |



Standard wire strippers

Wire strippers



- For single and multi-core wires 0.5 to 6 mm<sup>2</sup>.
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic grips resistant to chemical agents.
- Finish: polished, varnished.

|                 | A [mm] | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|--------|
| <b>194.17TE</b> | 17     | 17     | 8,5    | 8,5    | 170    | 185    |

VSE INSULATED CRIMPING PLIERS, WIRE STRIPPERS, ETC.



Electricity section p. 758

## Diagonal cutters

### SERIES "G"

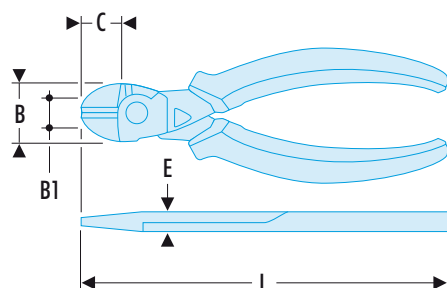
### VARNISHED, POLISHED PLIERS

#### PVC GRIPS

- Identical characteristics and specifications to series CPE and TE.



### 192.G - High-performance diagonal cutters

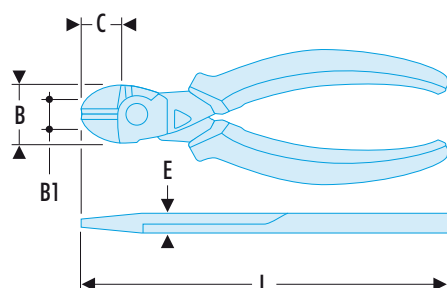


#### NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Cutting edges designed to cleanly cut all types of wire: piano wire, soft wires and modern materials (max. 200 kg/mm<sup>2</sup>).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

| ➤              | B [mm] | C [mm] | d maxi [mm] | E [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|-------------|--------|--------|--------|
| <b>192.14G</b> | 21,5   | 15,5   | 1,4         | 9,5    | 145    | 130    |
| <b>192.16G</b> | 24,0   | 18,0   | 1,6         | 10,0   | 160    | 170    |
| <b>192.18G</b> | 26,0   | 20,0   | 1,8         | 11,0   | 180    | 230    |
| <b>192.20G</b> | 28,0   | 22,0   | 2,0         | 11,5   | 200    | 290    |

### Electricians diagonal cutters



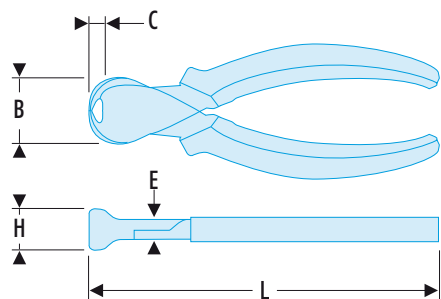
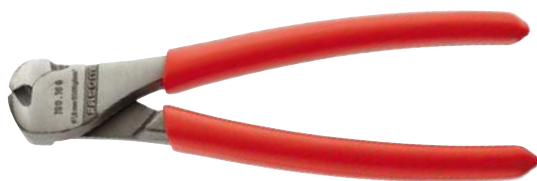
#### NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Snipe nose for confined space (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire: hard wires (max. 160 kg/mm<sup>2</sup>), thin copper wires, modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

| ➤              | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|--------|
| <b>391.16G</b> | 19     | 21     | 9      | 165    | 160    |

### End cutters

#### 190.G - High-performance end cutters



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

- Cutting edges designed to cleanly cut all types of wire: piano wire, hard and soft wires (max. 200 kg/mm<sup>2</sup>).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

| ➤              | B [mm] | C [mm] | d maxi [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|-------------|--------|--------|--------|--------|
| <b>190.16G</b> | 28     | 6,5    | 1,6         | 11,5   | 23     | 160    | 170    |
| <b>190.20G</b> | 31     | 7,5    | 2,0         | 13,5   | 29     | 200    | 310    |

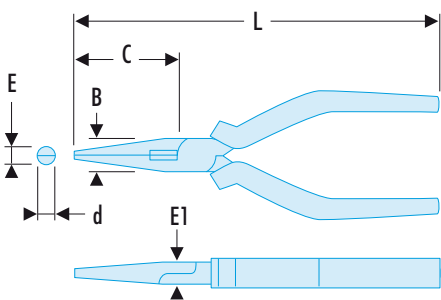
### CUTTING PLIERS END "CUTTING" AND "NIPPER"



➤ Find these products in p. 512

### Half-round nose pliers

#### 185-195.G - Long half-round nose pliers

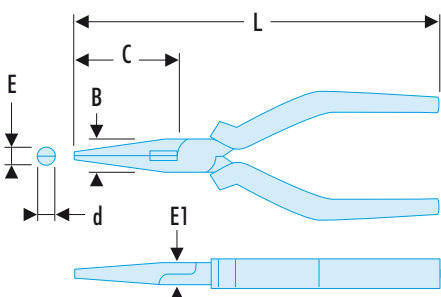
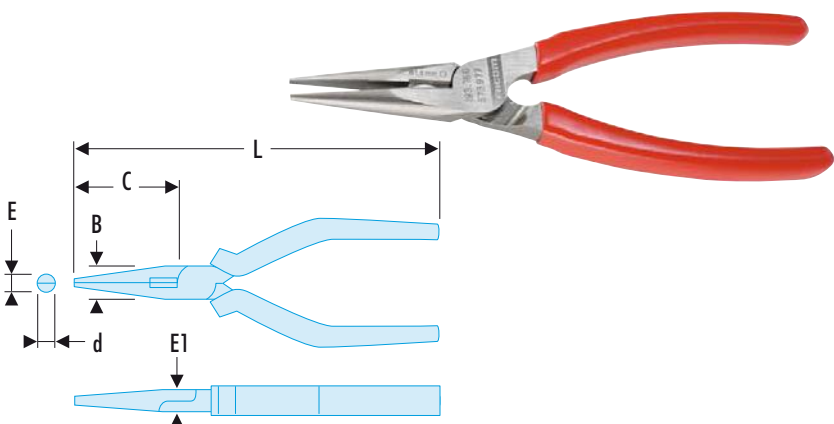


NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- 185.G: straight nose.
- 195.G: 40° angled nose.
- PVC grips.
- Finish: polished, varnished.

| ➤              | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|---------|--------|--------|
| <b>185.20G</b> | 18     | 75     | 2,9    | 3,6    | 9       | 200    | 192    |
| <b>195.16G</b> | 17     | 50     | 2,5    | 3,0    | 9       | 160    | 177    |
| <b>195.20G</b> | 18     | 69     | 2,9    | 3,6    | 9       | 200    | 192    |

#### Short half-round nose pliers



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

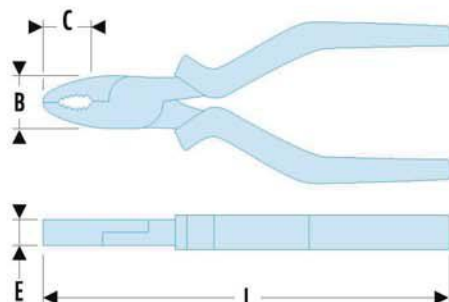
- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- PVC grips.
- Finish: polished, varnished.

| ➤              | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|---------|--------|--------|
| <b>193.16G</b> | 17     | 50     | 2,5    | 3      | 9       | 160    | 177    |



## Combination pliers

### 187.G - Combination pliers



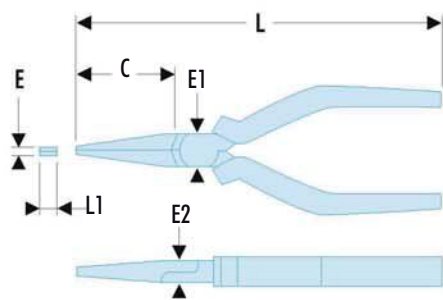
NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

- Cutting edges designed to cut all types of wire: piano wire, soft wires and modern materials (Fe 200 kg/mm<sup>2</sup>)
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- PVC grips.
- Finish: polished, varnished.

|                | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|---------|--------|--------|
| <b>187.16G</b> | 21     | 34     | 21     | 9,5     | 165    | 195    |
| <b>187.18G</b> | 23     | 36     | 23     | 10,0    | 185    | 225    |
| <b>187.20G</b> | 26     | 42     | 26     | 11,5    | 205    | 300    |

## Flat-nose pliers

### 188.G - Flat nose pliers



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

- Serrated nose for a firm grip.
- PVC grips.
- Finish: polished, varnished.

|                | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|----------------|--------|--------|---------|---------|--------|---------|--------|
| <b>188.16G</b> | 46     | 4      | 18      | 9       | 168    | 6,5     | 140    |
| <b>188.20G</b> | 75     | 4      | 18      | 9       | 200    | 6,5     | 200    |

Diagonal cutters

VE SERIES

1,000 V INSULATED PLIERS



**20% MORE SLIP RESISTANT WITH SPATULA SHAPED PRESSURE AREAS**

**Guard**

- Firm, comfortable grip for pushing or pulling pressure.

**Return spring for added safety**

- The elastomer spring closes off the metal parts of the tool and prevents the finger slipping towards the uninsulated area.

**Insulation tests**

(to European standard EN 60900)

- 1 10,000 V immersion test
- 2 5,000 V after penetration test
- 3 Adhesion test after heating to 70°C
- 4 Impact test after chilling to -25°C
- 5 Flame propagation test

**INFORMATION**

- Compliance with European standard EN 60900
- For working on live components up to 1,000 volts AC.
- Each tool is individually electrically tested to 10,000 volts for 10 seconds.
- Our production site is accredited and certified to produce insulated tools.



**Guard**



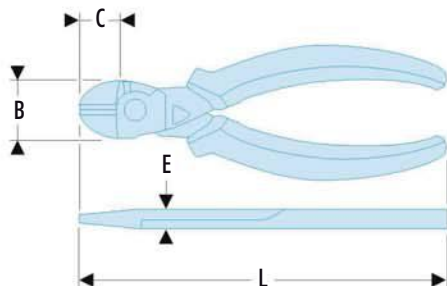
**Return spring for added safety**

**SAFETY**

- Prevent damage to insulation from:
  - heat (-20 to +70° working temperature)
  - chemicals
  - cuts or perforations
- Visually check the insulation before use.
- Wear glasses and gloves.



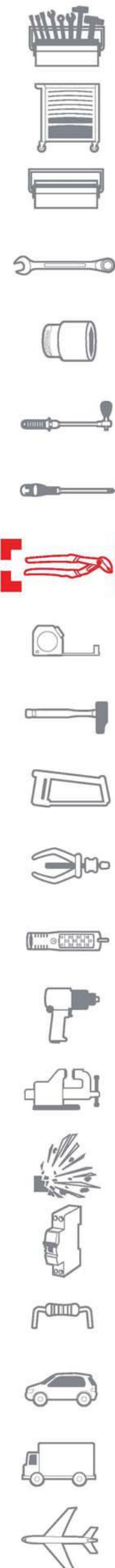
192.VE - 1,000 Volt insulated high-performance diagonal cutters



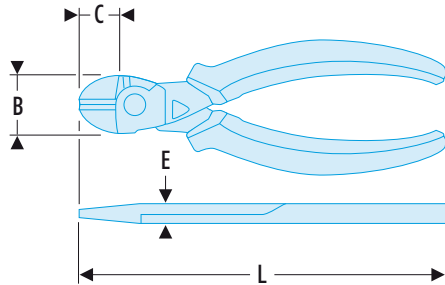
NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, soft wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRC).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

|                 | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|
| <b>192.14VE</b> | 21,5   | 15,5   | 9,5    | 145    | 160    |
| <b>192.16VE</b> | 24,0   | 18,0   | 10,0   | 160    | 200    |
| <b>192.18VE</b> | 26,0   | 20,0   | 11,0   | 180    | 260    |



## 1,000 Volt insulated electricians diagonal cutters



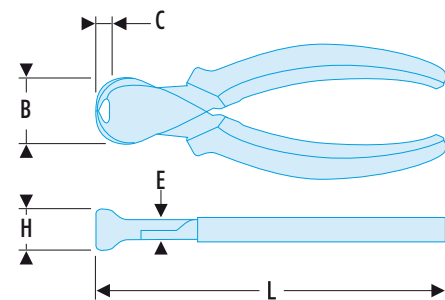
NF ISO 5749, NF EN 60900, ISO 5749, EN 60900, DIN ISO 5749, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Slim head for confined access (electric cabinets, wiring works, etc.).
- Semi-flush cutting edges to cleanly cut through all types of wire: hard wire, thin copper wires, modern materials, etc.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRC).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

| ➤               | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|
| <b>391.16VE</b> | 19     | 21     | 9      | 165    | 190    |

## End cutters

### 1,000 Volt insulated high-performance end cutters



NF ISO 5748, NF EN 60900, ISO 5748, EN 60900, DIN ISO 5748, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, hard and soft wires.
- Minimum cutting force thanks to long lever arm and offset axis.
- High durability thanks to Chrome-Molybdenum-Vanadium steel (hard cutting edges: 61/63 HRC).
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

| ➤               | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|--------|
| <b>190.16VE</b> | 28     | 6,5    | 11,5   | 23     | 160    | 200    |

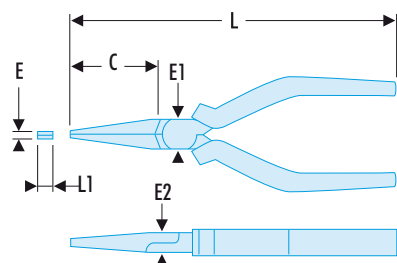




# VE series 1,000 Volt pliers

## Flat-nose pliers

### 188.VE - 1,000 Volt insulated flat nose pliers



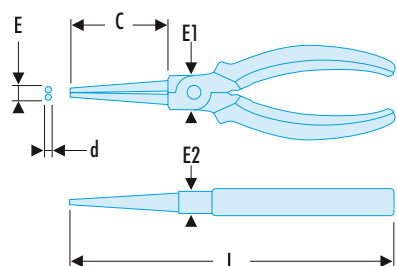
NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- Serrated nose for stronger grip.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

|                 | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|-----------------|--------|--------|---------|---------|--------|---------|--------|
| <b>188.16VE</b> | 46     | 4      | 18      | 9       | 168    | 6,5     | 140    |
| <b>188.20VE</b> | 75     | 4      | 18      | 9       | 200    | 6,5     | 200    |

## Round nose pliers

### 1,000 Volt insulated round nose pliers



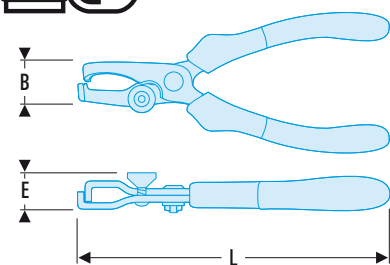
NF ISO 5745, NF EN 60900, ISO 5745, EN 60900, DIN ISO 5745, DIN EN 60900, ASME B107.500

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- To make loops, angles or rings.
- Nose finely serrated inside for stronger grip.
- Diameter of each nose at the end: 2 mm.
- Removable return spring.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

|                 | C [mm] | d [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|---------|---------|--------|--------|
| <b>189.17VE</b> | 41     | 2      | 4      | 18      | 9       | 170    | 135    |

## Standard wire strippers

### 1,000 Volt insulated strippers



NF EN 60900, EN 60900, DIN EN 60900

- For your safety, all pliers are tested individually at 10,000 Volt for 10 seconds, at the end of the manufacturing cycle.
- For multiple or single strand wires 0.5 --> 6 mm<sup>2</sup>.
- Adjustment screw with lock nut.
- Metal return screw.
- Ergonomic anti-slip grips.
- Finish: polished, varnished.

|                 | B [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|
| <b>194.17VE</b> | 17     | 8,5    | 170    | 185    |

## MULTIGRIP PLIERS 180.VE - RIVETED PIVOT



➔ Find the 180.VE pliers p. 792

## Slip-joint locking multigrip pliers with fluorescent grips

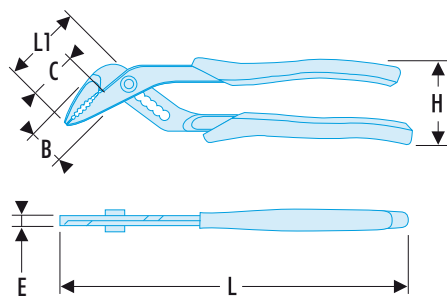


NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Fast, precise push-button adjustment with safety lock.
- Self-tightening.
- Double heat-treated noses; hardness 60/62 HRc.
- Finish: chromed.

| ➤                 | A [mm] | C [mm] | E [mm] | Capacity Nuts [mm] |
|-------------------|--------|--------|--------|--------------------|
| <b>181.25CPEF</b> | 33,8   | 55     | 28     | 41                 |

## Slip-joint multigrip pliers with fluorescent grips

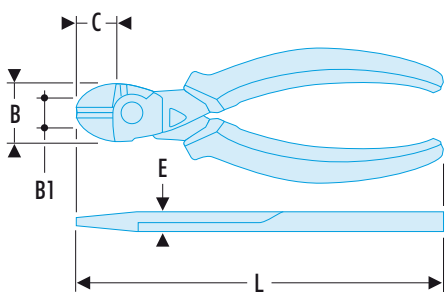


NF ISO 8976, ISO 8976, DIN ISO 8976, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Capacity: 44 mm.
- Ideal for confined spaces: Long reach thin noses.
- Double heat-treated tips: high wear resistance, hardness 60/62 HRc.
- Finish: chromed, bi-material ergonomic grips.

| ➤               | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | L1 [mm] |
|-----------------|--------|--------|--------|---------|--------|---------|
| <b>180.CPEF</b> | 30     | 35     | 8      | 22      | 250    | 58      |

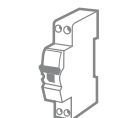
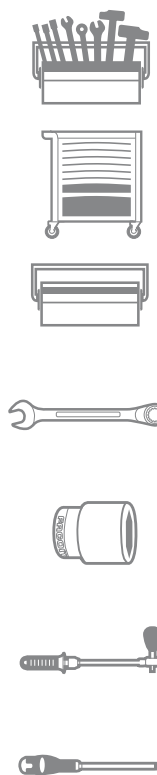
## 192.CPEF - Diagonal cutters with fluorescent grips



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

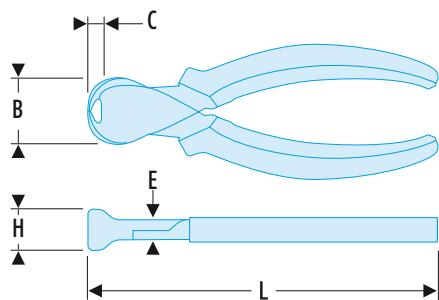
- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, soft wires and modern materials (max. 200 kg/mm<sup>2</sup>).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

| ➤                 | B [mm] | C [mm] | d maxi [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-------------------|--------|--------|-------------|--------|--------|--------|
| <b>192.14CPEF</b> | 21,5   | 15,5   | 1,5         | 9,5    | 145    | 160    |
| <b>192.20CPEF</b> | 28,0   | 22,0   | 2,5         | 11,5   | 200    | 320    |





## Front cutters with fluorescent grips

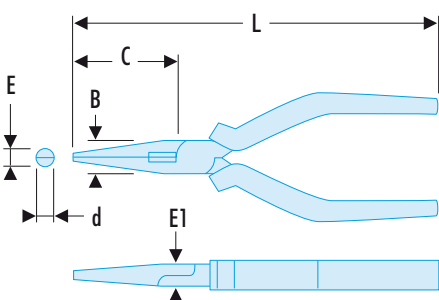


### NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cleanly cut through all types of wire: piano wire, hard and soft wires (max. 200 kg/mm<sup>2</sup>).
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                   | A [mm] | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-------------------|--------|--------|--------|--------|--------|--------|
| <b>190.20CPEF</b> | 7,5    | 31     | 7,5    | 13,5   | 200    | 340    |

## Long-reach half-round nose pliers with fluorescent grips

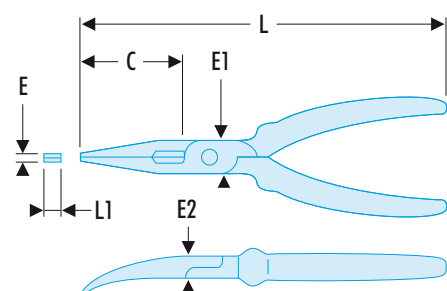


### NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                   | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|-------------------|--------|--------|--------|--------|---------|--------|--------|
| <b>185.20CPEF</b> | 18     | 75     | 2,9    | 3,6    | 9       | 200    | 200    |

## Long-reach slim half-round nose pliers with fluorescent grips

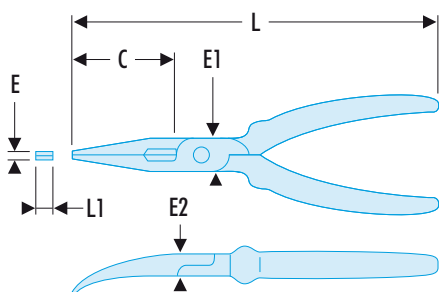


### NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips, 40° angled nose.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                   | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|-------------------|--------|--------|---------|---------|--------|---------|--------|
| <b>183.20CPEF</b> | 69     | 3      | 18      | 9       | 200    | 2,5     | 185    |

### Short half-round nose pliers with fluorescent grips

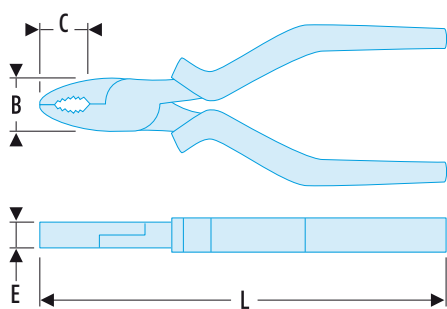


#### NF ISO 5745, ISO 5745, DIN ISO 5745, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Narrow, finely serrated tips, 40° angled, with a pipe-grip.
- Side cutter for copper and hard steel wire (max. 160 kg/mm<sup>2</sup>).
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                   | B [mm] | C [mm] | d [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|-------------------|--------|--------|--------|--------|---------|--------|--------|
| <b>195.16CPEF</b> | 17     | 50     | 2,5    | 3      | 9       | 160    | 177    |

### Combination pliers with fluorescent grips

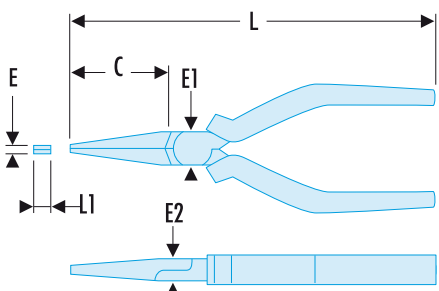


#### NF ISO 5746, ISO 5746, DIN ISO 5746, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Cutting edges designed to cut through all types of wire: piano wire, soft wires and modern materials (max. Fe 200 kg/mm<sup>2</sup>).
- 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] | ΔΔ [g] |
|-------------------|--------|--------|--------|--------|--------|
| <b>187.16CPEF</b> | 21     | 34     | 9,5    | 165    | 195    |

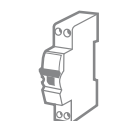
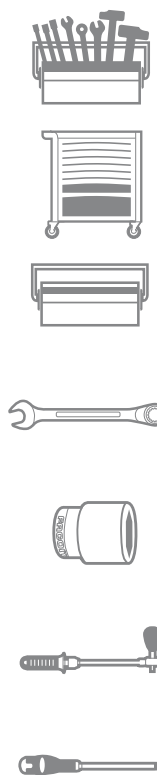
### Flat nose pliers with fluorescent grips



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

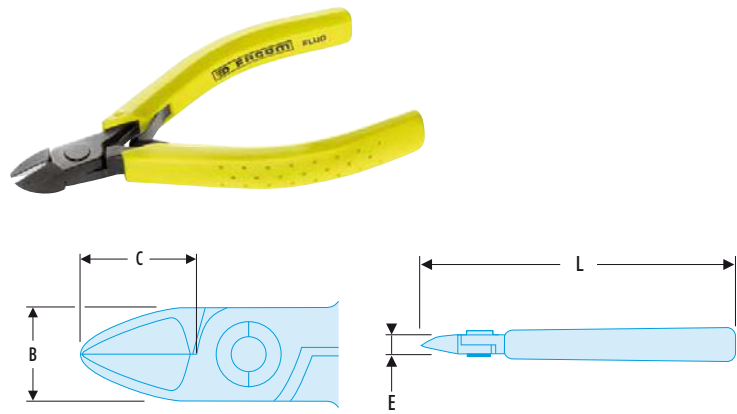
- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Serrated nose for stronger grip.
- Ergonomic grips resistant to chemical agents.
- Removable return spring.
- Finish: chromed.

|                   | C [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | L1 [mm] | ΔΔ [g] |
|-------------------|--------|--------|---------|---------|--------|---------|--------|
| <b>188.20CPEF</b> | 75     | 4      | 18      | 9       | 200    | 6,5     | 200    |



# Fluorescent sheath pliers

## Micro-Tech® "heavy-duty" cutters with fluorescent grips

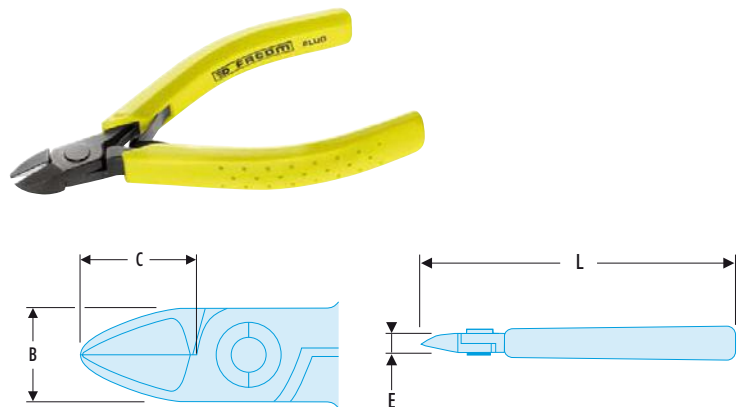


NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Pliers for clear cutting multiple materials: from copper wire to piano wire up to 0.5 mm.

|                  | B [mm] | C [mm] | E [mm] | L [mm] | Cu - Ni wire diameter [mm] | Fe wire 30 HRc diameter [mm] | Cut | ΔΔ [g] |
|------------------|--------|--------|--------|--------|----------------------------|------------------------------|-----|--------|
| <b>405.10MTF</b> | 10,5   | 11,5   | 7      | 110    | 0,3 - 1,4                  | 0,8                          | ∧   | 60     |

## Micro-Tech® long-reach cutters with fluorescent grips

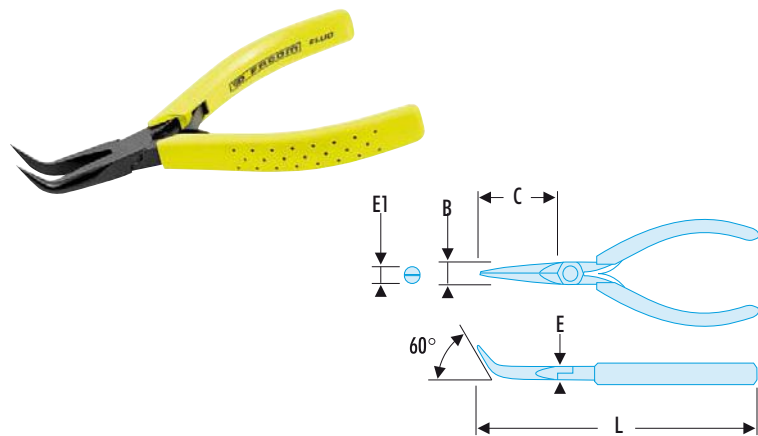


NF ISO 9654, ISO 9654, DIN ISO 9654, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Long-reaching pliers up to 1.5 to 2 mm more than with standard pliers.
- The model with retention system prevents the wire from being ejected.

|             | B [mm] | C [mm] | E [mm] | L [mm] | Cu - Ni wire diameter [mm] | Cut | ΔΔ [g] |
|-------------|--------|--------|--------|--------|----------------------------|-----|--------|
| <b>425F</b> | 10,5   | 13     | 7      | 110    | 0,1 - 1,3                  | ↔   | 60     |

## Micro-Tech® gripping pliers with fluorescent grips



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

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- Rigid jaws, angled 60°.

|                | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|---------|--------|--------|
| <b>423.MTF</b> | 11     | 25     | 7      | 1,4     | 125    | 70     |

## Inside Circlip® pliers with fluorescent grips - straight nose



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

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

|                 | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------------------|--------|--------|
| <b>179A.18F</b> | 1,8    | 19 - 60            | 185    | 215    |

## Inside Circlip® pliers with fluorescent grips - 45° angled



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

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

|                 | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------------------|--------|--------|
| <b>199A.18F</b> | 1,8    | 19 - 60            | 170    | 215    |



## Outside Circlip® pliers with fluorescent grips - straight nose



NF E 73-130, DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

| ➤               | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------------------|--------|--------|
| <b>177A.18F</b> | 1,8    | 19 - 60            | 180    | 175    |

## Outside Circlip® pliers with fluorescent grips - 90° angled

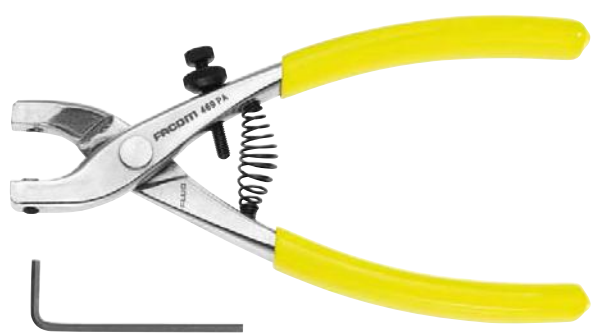


NF E 73-130, DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
- For Circlips® 19 --> 60 mm.

| ➤               | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------------------|--------|--------|
| <b>197A.18F</b> | 1,8    | 19 - 60            | 170    | 175    |

## 469F Inside Circlip® pliers with fluorescent grips



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

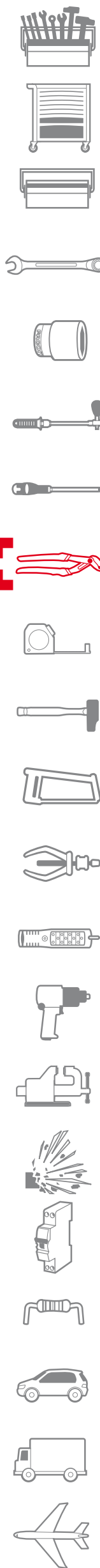
- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
  - Interchangeable tips for a capacity of diam. 8 --> 63 mm.
  - Thumbscrew position setting.
  - Opening return spring.
  - Finish: chrome finish, PVC grip.
  - Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.
- Weight: 160 g.

## 467FLUO Outside Circlip® pliers with fluorescent grips



NF E 73-130DIN 5254, ASME B107.500

- Detect the tool thanks to its fluorescence, activated by a lamp or UV neon light.
  - Interchangeable tips for a capacity of diam. 8 --> 63 mm.
  - Thumbscrew position setting.
  - Opening return spring.
  - Finish: chrome finish, PVC grip.
  - Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.
- Weight: 160 g.



## Inside circlip® pliers

### FACOM CIRCLIP® PLIERS

#### PACKED WITH FEATURES!

##### Performance and safety

- Piano wire tips:
  - Resistant to deformation.
  - Reinforced to limit risks of breakage.
- Integral spring: optimum flexibility of use:
  - Spring protection.
  - Limits risks of spring loss and/or ejection.
- Tips extended and angled at 10°:
  - Better circlip holding.
  - Reduces risks of circlips warping and falling.

##### Comfort and ergonomics

- Grips in anti-slip granite PVC.
- Reduces risks of slipping or falling during use.
- Improves ergonomics during intensive operations.
- Easy to clean.



##### Slim-line and accessibility

- Slim-line head and nose for easy access even in crowded spaces.

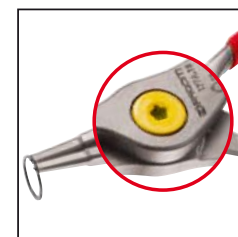


##### Productivity

- Colour code: opening / closing.
- Improved productivity thanks to faster identification of the pliers in the tool box.



Closing



Opening

### INSIDE CIRCLIP® PLIERS

- Straight, 45° or 90° tip profiles.
- Chrome finish.

#### SAFETY

- Eye protection is recommended.



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



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

- For Circlips® 8 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

| ➤              | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------------------|--------|--------|
| <b>179A.9</b>  | 0,9    | 8 - 13             | 140    | 115    |
| <b>179A.13</b> | 1,3    | 12 - 25            | 140    | 115    |
| <b>179A.18</b> | 1,8    | 19 - 60            | 185    | 215    |
| <b>179A.23</b> | 2,2    | 40 - 100           | 215    | 300    |
| <b>179A.32</b> | 3,2    | 85 - 200           | 310    | 565    |

## 169A - 45° angled nose inside circlip® pliers



### NF E 73-130ASME B107.500

- For Circlips® 8 --> 100 mm
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

| ⇒              | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------------------|--------|--------|
| <b>169A.9</b>  | 0,9    | 8 - 13             | 140    | 115    |
| <b>169A.13</b> | 1,3    | 12 - 25            | 140    | 115    |
| <b>169A.18</b> | 1,8    | 19 - 60            | 180    | 215    |
| <b>169A.23</b> | 2,2    | 40 - 100           | 215    | 115    |

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



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

- For Circlips® 8 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

| ⇒              | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------------------|--------|--------|
| <b>199A.9</b>  | 0,9    | 8 - 13             | 130    | 115    |
| <b>199A.13</b> | 1,3    | 12 - 25            | 130    | 115    |
| <b>199A.18</b> | 1,8    | 19 - 60            | 170    | 215    |
| <b>199A.23</b> | 2,2    | 40 - 100           | 205    | 215    |
| <b>199A.32</b> | 3,2    | 85 - 200           | 290    | 215    |

## Outside circlip® pliers

### OUTSIDE CIRCLIP® PLIERS

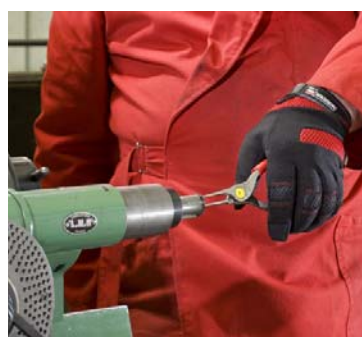
- Straight, 45° or 90° profiles.
- Chrome finish.

#### SAFETY

- Eye protection is recommended.



## 177A - Straight nose outside circlip® pliers



### NF E 73-130, DIN 5254, ASME B107.500

- For Circlips® 3 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

| ⇒              | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------------------|--------|--------|
| <b>177A.9</b>  | 0,9    | 3 - 10             | 150    | 105    |
| <b>177A.13</b> | 1,3    | 10 - 25            | 150    | 105    |
| <b>177A.18</b> | 1,8    | 19 - 60            | 180    | 175    |
| <b>177A.23</b> | 2,2    | 40 - 100           | 215    | 280    |
| <b>177A.32</b> | 3,2    | 85 - 200           | 310    | 600    |



## 167A - 45° angled nose outside circlip® pliers



### NF E 73-130ASME B107.500

- For Circlips® 3 --> 100 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

| ➤              | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------------------|--------|--------|
| <b>167A.9</b>  | 0.9    | 3 - 10             | 145    | 105    |
| <b>167A.13</b> | 1.3    | 10 - 25            | 145    | 105    |
| <b>167A.18</b> | 1.8    | 19 - 60            | 175    | 175    |
| <b>167A.23</b> | 2.2    | 40 - 100           | 215    | 280    |

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



### NF E 73-130, DIN 5254, ASME B107.500

- For Circlips® 3 --> 200 mm.
- Piano wire tips: high distortion resistance.
- Long 10° angled tips for optimum circlip holding.
- Identification colour code: saves time.
- Grips in anti-slip granite PVC.

| ➤              | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------------------|--------|--------|
| <b>197A.9</b>  | 0,9    | 3 - 10             | 140    | 105    |
| <b>197A.13</b> | 1,3    | 10 - 25            | 140    | 105    |
| <b>197A.18</b> | 1,8    | 19 - 60            | 170    | 175    |
| <b>197A.23</b> | 2,2    | 40 - 100           | 200    | 280    |
| <b>197A.32</b> | 3,2    | 85 - 200           | 290    | 600    |

## PCJ4 Set of 4 straight and 90° angled nose circlip® pliers - 18 to 60 mm



- Including:
    - 177A.18: Straight nose outside Circlip® pliers for Circlips® 19 --> 60 mm.
    - 197A.18: 90° angled nose outside Circlip® pliers for Circlips® 19 --> 60mm.
    - 179A.18: Straight nose inside Circlip® pliers for Circlips® 19 --> 60 mm.
    - 199A.18: 90° angled nose inside Circlip® pliers for Circlips® 19 --> 60 mm.
- Weight: 860 g.

## PCSNJ4 Set of 4 straight nose circlip® pliers - 10 to 60 mm

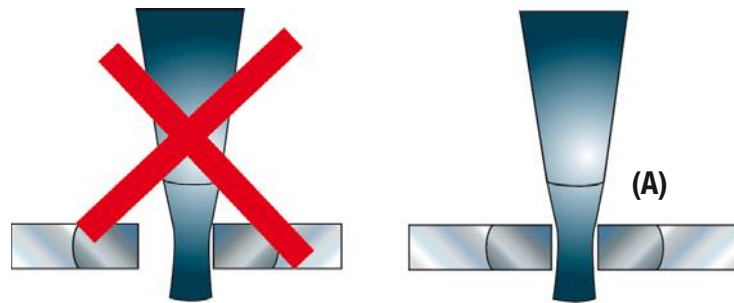


- Including:
    - 177A.13: Straight nose outside Circlip® pliers for Circlips® 10 --> 25 mm.
    - 177A.18: Straight nose outside Circlip® pliers for Circlips® 19 --> 60 mm.
    - 179A.13: Straight nose inside Circlip® pliers for Circlips® 12 --> 25 mm.
    - 179A.18: Straight nose inside Circlip® pliers for Circlips® 19 --> 60 mm.
- Weight: 740 g.

High-performance pliers

CHOOSING THE RIGHT CIRCLIP® PLIERS

- Always select the nearest tip diameter to the size of Circlip® holes (A)
- Never attempt to reshape the tips of the pliers.
- Safety first: always wear eye protection when handling circlips®.



Rack-type "compression" pliers for inside circlips®



ASME B107.500

- Interchangeable tip.
- Rack holds circlips® compressed for easy fitting and removal (with release trigger).
- Finish: chrome finish, red PVC grips.

| ➤             | Tips     | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|---------------|----------|--------|--------------------|--------|--------|
| <b>499.32</b> | 45°      | 3,2    | 85 - 200           | 310    | 480    |
| <b>479.32</b> | Straight | 3,2    | 85 - 200           | 310    | 480    |

477-497 Rack-type "expansion" pliers for outside circlips® pliers



ASME B107.500

- Interchangeable tip.
- Rack holds circlips® compressed for easy fitting and removal (with release trigger).
- Finish: chrome finish, red PVC grips.

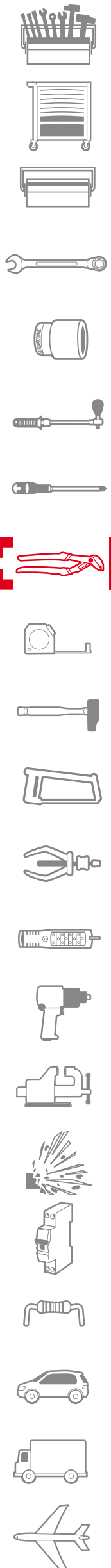
| ➤             | Tips     | d [mm] | d mini - maxi [mm] | L [mm] | ΔΔ [g] |
|---------------|----------|--------|--------------------|--------|--------|
| <b>477.32</b> | 45°      | 3,2    | 85 - 200           | 310    | 480    |
| <b>497.32</b> | Straight | 3,2    | 85 - 200           | 310    | 480    |

490.SE - Spare tips for pliers 477 to 499



- Each reference includes 2 tips and 2 screws.

| ➤                 | Tips     | d [mm] | d mini - maxi [mm] |
|-------------------|----------|--------|--------------------|
| <b>490.SE28-1</b> | Straight | 2,8    | 65 - 120           |
| <b>490.SE32-1</b> | Straight | 3,2    | 85 - 200           |
| <b>490.SE38-1</b> | 45°      | 3,8    | 120 - 200          |
| <b>490.SE28-2</b> | 45°      | 2,8    | 65 - 120           |
| <b>490.SE32-2</b> | 45°      | 3,2    | 85 - 200           |
| <b>490.SE38-2</b> | 45°      | 3,8    | 120 - 200          |

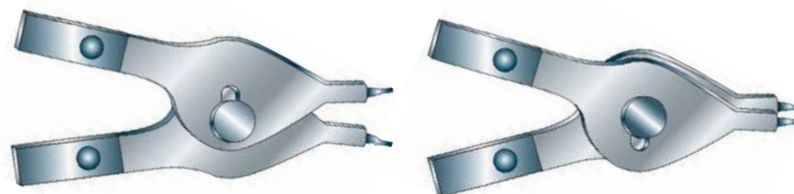


## Reversible pliers

### REVERSIBLE CIRCLIP® PLIERS

#### REVERSIBLE CIRCLIP® PLIERS 475A

- Single tool for both inside and outside circlips®.
- Quick thumbscrew position setting.



Position 1 for outside Circlips®.

Position 2 for inside Circlips®.

#### 475A - Reversible inside and outside circlip® pliers



- Single tool for both inside and outside circlips®.
- Finish: burnished, PVC grip.

|                | d [mm] | d mini - maxi [mm]    | L [mm] | ΔΔ[g] |
|----------------|--------|-----------------------|--------|-------|
| <b>475A.15</b> | 1,0    | 10 --> 30 - 10 --> 18 | 150    | 75    |
| <b>475A.20</b> | 1,8    | 20 --> 48 - 19 --> 45 | 200    | 155   |

#### 475A.J1 Set of two reversible pliers



- Including:
  - 475A.15: for inside circlips®, diam. 10 --> 30 mm and outside, diam. 10 --> 18 mm.
  - 475A.20: for inside circlips®, diam. 20 --> 48 mm and outside, diam. 19 --> 45 mm.
- Supplied in a case, dim. (L. x W. x H.): 245 x 135 x 35 mm.
- Weight: 430 g.

## Removable tip pliers

#### 470 Inside and outside circlip® pliers



- Interchangeable tips for:
  - diam. 8 --> 63 mm, for inside circlips®.
  - diam. 3 --> 63 mm, for outside circlips®.
- Including:
  - 469.PA: Inside circlip® pliers.
  - 467.PA: Outside circlip® pliers.
  - 82H.2.5: Key.
  - Set of 18 removable tips.
  - Supplied in a plastic case.
- Weight: 1.50 kg.



469 Inside circlip® pliers



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

- Interchangeable tips for a capacity of diam. 8 --> 63 mm.
  - Thumbscrew position setting.
  - Opening return spring.
  - Finish: chrome finish, red PVC grips.
  - Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.
- Weight: 160 g.

467 Outside circlip® pliers



NF E 73-130, DIN 5254, ASME B107.500

- Interchangeable tips for a capacity of diam. 3 --> 63 mm.
  - Thumbscrew position setting.
  - Opening return spring.
  - Finish: chrome finish, red PVC grips.
  - Supplied in a case with key and set of bits E1 - E2 - E3 - E5 - E6 - E8 - E9.
- Weight: 160 g.

467.01AJ2 Spare tips



- For products Ref: 467 - 469 - 470.

470.E - Spare tips for circlip® pliers 467 and 469



- Available as straight, 45° and 90° tip.
- Each reference includes a set of 2 tips.

| Ref     | Tips     | d [mm] | d mini - maxi [mm]    |
|---------|----------|--------|-----------------------|
| 470.E1  | Straight | 0,9    | 8 --> 12 - 3 --> 10   |
| 470.E2  | 45°      | 0,9    | 8 --> 12 - 3 --> 10   |
| 470.E3  | 90°      | 0,9    | 8 --> 12 - 3 --> 10   |
| 470.E5  | Straight | 1,3    | 12 --> 25 - 10 --> 25 |
| 470.E6  | 45°      | 1,3    | 12 --> 25 - 10 --> 25 |
| 470.E7  | 90°      | 1,3    | 12 --> 25 - 10 --> 25 |
| 470.E8  | Straight | 1,8    | 19 --> 63 - 19 --> 63 |
| 470.E9  | 45°      | 1,8    | 19 --> 63 - 19 --> 63 |
| 470.E10 | 90°      | 1,8    | 19 --> 63 - 19 --> 63 |

Snap-ring pliers

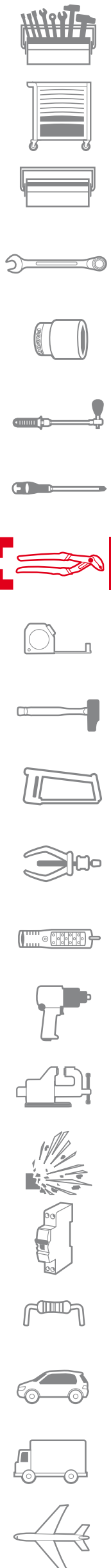
411A - Outside snap-ring pliers



ASME B107.500

- Special tips for snap-rings and spring clips.
- Finish: chrome finish, PVC grip.

| Ref     | d mini - maxi [mm] | L [mm] | [g] |
|---------|--------------------|--------|-----|
| 411A.17 | 15 - 62            | 150    | 190 |
| 411A.20 | 60 - 160           | 190    | 275 |

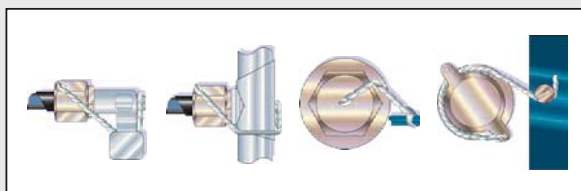




## FACOM LOCKING-WIRE PLIERS

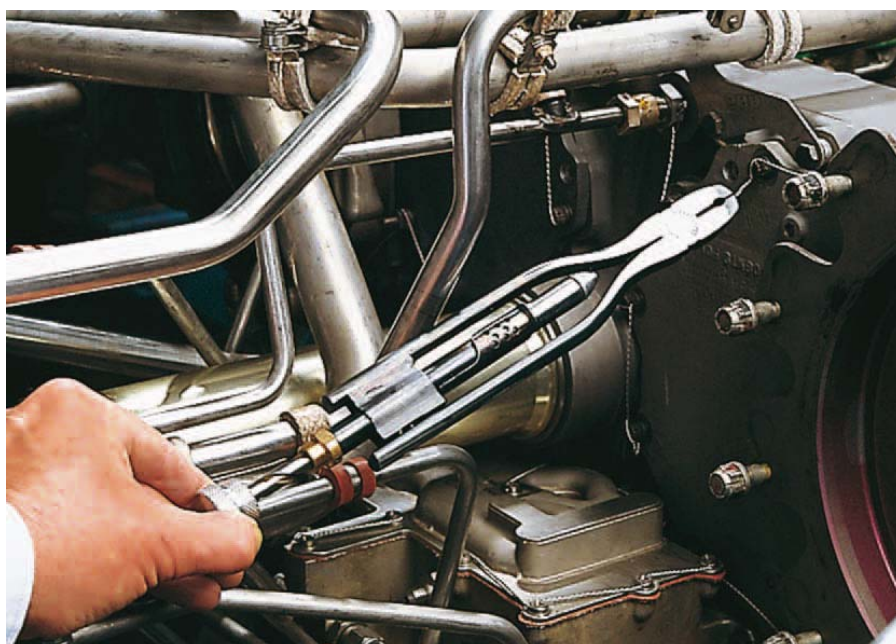
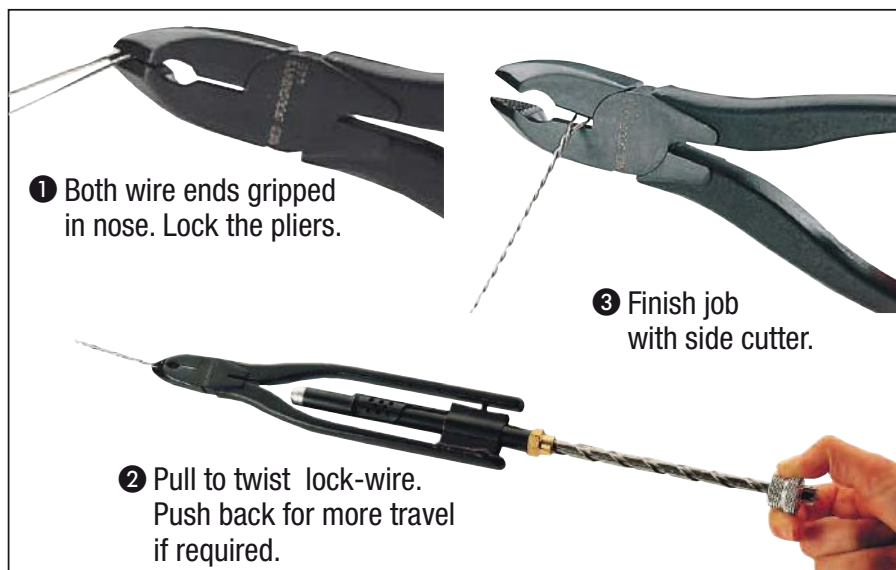
### Fast twist in lock-wire securing assemblies subject to vibration.

- For stainless and Inconel wire  $\varnothing$  1 mm.
- Side wire cutter.
- Slim nose-tip for optimum manoeuvrability.
- 10" model: 3 turns, 125 mm travel.
- 8" model: 2.5 turns, 95 mm travel.

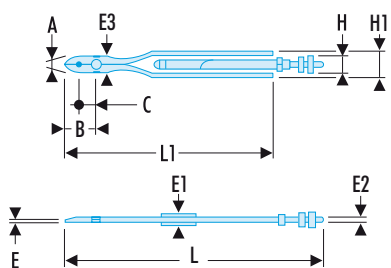


### Automatic model

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



### Short locking-wire pliers 8"

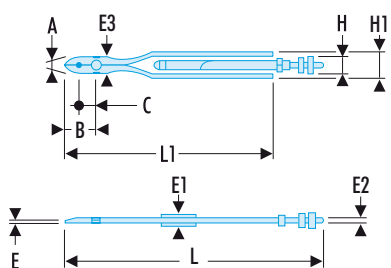


#### ASME B107.500

- "automatic" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 2.5 turns: 95 mm length.

|               | A [mm] | B [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | E3 [mm] | H [mm] | H1 [mm] | L [mm] | L1 [mm] | $\Delta\Delta$ [g] |
|---------------|--------|--------|--------|--------|---------|---------|---------|--------|---------|--------|---------|--------------------|
| <b>445.8R</b> | 3      | 20     | 7      | 2,5    | 15      | 10,5    | 15      | 22     | 37      | 215    | 170     | 245                |

### Locking-wire pliers 10"



#### ASME B107.500

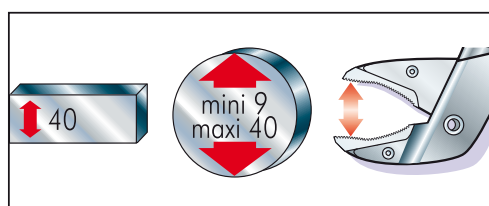
- "automatic" model.
- Side wire-cutter: stainless steel diameter 1 mm.
- 3 turns: 125 mm length.

|                | A [mm] | B [mm] | C [mm] | E [mm] | E1 [mm] | E2 [mm] | E3 [mm] | H [mm] | H1 [mm] | L [mm] | L1 [mm] | $\Delta\Delta$ [g] |
|----------------|--------|--------|--------|--------|---------|---------|---------|--------|---------|--------|---------|--------------------|
| <b>445.10R</b> | 3      | 30     | 11     | 2,5    | 15,5    | 11,5    | 19      | 25     | 40      | 360    | 230     | 400                |





## ▣ T5.L - Aluminium-sheathed trigger-release lock-grip pliers



- Ergonomic aluminium sheathing, protects against weld spatter.
- Controlled, progressive release.
- Practical and comfortable: one-handed operation, small grip opening at all jaw openings.
- Forged in Chrome Molybdenum steel with treated jaws for a longer working life.

|               | Open Position 0 maxi [mm] | Dimension [mm]/ | ΔΔ [g] |
|---------------|---------------------------|-----------------|--------|
| <b>T5.L</b>   | d. 40 mm                  | 250 x 75 x 22   | 631    |
| <b>T5.L65</b> | d. 65 mm                  | 290 x 80 x 22   | 819    |

## ▣ T5.1L Plastic-sheathed trigger-release lock-grip pliers



- Ideal for on-site maintenance.
- Controlled, progressive release.
- Practical and comfortable: one-handed operation, small grip opening.
- Forged in Chrome Molybdenum steel with treated jaws for a longer working life.
- Dimensions: 250 x 75 x 22 mm.
- Weight: 565 g.

Large-capacity lock-grip pliers

**SERIES 500**

**LOCK-GRIP PLIERS**  
"ORIGINAL 500" LOCK-GRIP PLIERS

**LARGE CAPACITY LOCKS  
ON TO ANY SHAPE**



Round up to 135 mm

The range of "ORIGINAL 500" lock-grip pliers feature the efficient slip-joint developed by FACOM.

- Wide opening.
- Constantly parallel jaws
- Reach beyond edges up to 70 mm high.



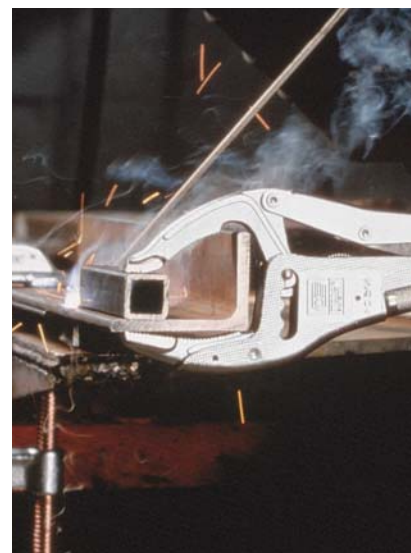
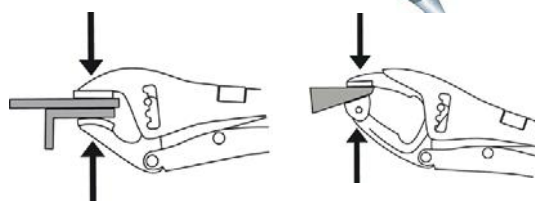
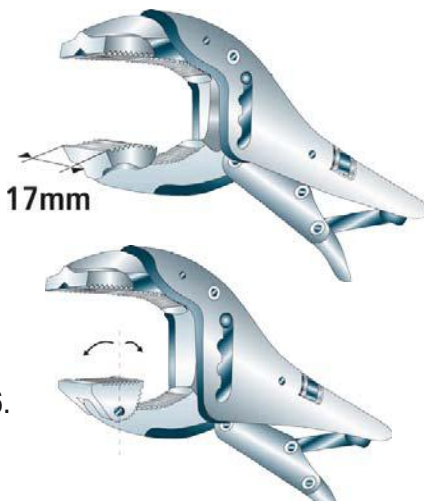
Hexagonal up to 125 mm

Jaws engineered for secure grip.

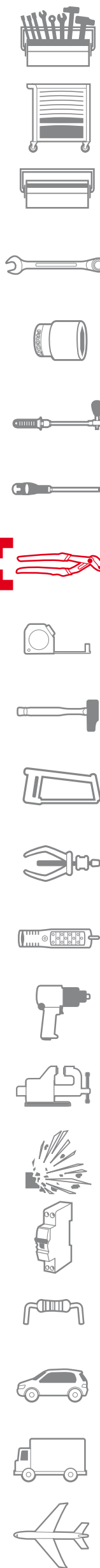
- 17 mm wide.
- Machined groove in upper jaw holds small round sections.
- Serrations along full jaw length.
- Chrome-molybdenum steel. For better wear resistance.

**Hinged tip versions.**

- To adapt to any grip configuration. Moving-tip options on model 506/516.

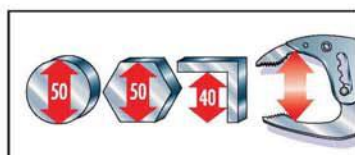
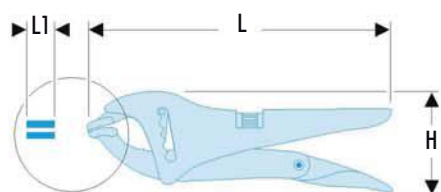


Angle section up to 70 mm





## Short-nose lock-grip pliers

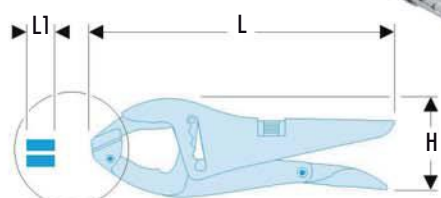


### ASME B107.500

- 4-position slip joint system.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- Finish: chromed.

|            | H [mm] | L [mm] | L1 [mm] | $\Delta\Delta$ [g] |
|------------|--------|--------|---------|--------------------|
| <b>500</b> | 58     | 225    | 17      | 540                |

## 501-506 - Long-nose lock-grip pliers

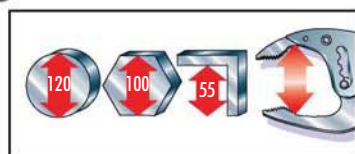
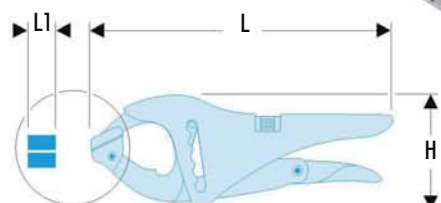


### ASME B107.500

- 4-position slip joint system.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- 506 models: type 501 with hinged tip, adapts to all grip configurations.
- Finish: chromed.
- Weight: 620 g.

|            | H [mm] | L [mm] | L1 [mm] | $\Delta\Delta$ [g] |
|------------|--------|--------|---------|--------------------|
| <b>501</b> | 63     | 250    | 17      | 620                |
| <b>506</b> | 63     | 250    | 17      | 640                |

## 511-516 5-position slip joint large-capacity pliers

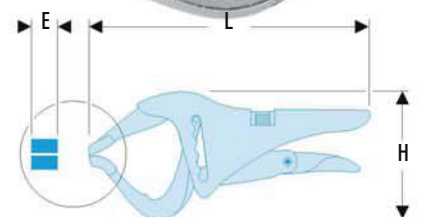


### ASME B107.500

- 5-position slip joint for increased capacity.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- 516 models: type 511 with hinged tip, adapts to all grip configurations.
- Finish: chromed.
- Weight: 680 g.

|            | H [mm] | L [mm] | L1 [mm] | $\Delta\Delta$ [g] |
|------------|--------|--------|---------|--------------------|
| <b>511</b> | 79     | 250    | 17      | 680                |
| <b>516</b> | 79     | 250    | 17      | 695                |

## 5-position slip joint large-capacity pliers



### ASME B107.500

- 5-position slip joint system, deep jaw.
- Nose width 17 mm.
- Machined groove in upper jaw holds small round sections.
- Finish: chromed.

|            | H [mm] | L [mm] | L1 [mm] | $\Delta\Delta$ [g] |
|------------|--------|--------|---------|--------------------|
| <b>505</b> | 89     | 270    | 17      | 720                |

SERIES 580

AUTOMATIC LOCK-GRIP PLIERS

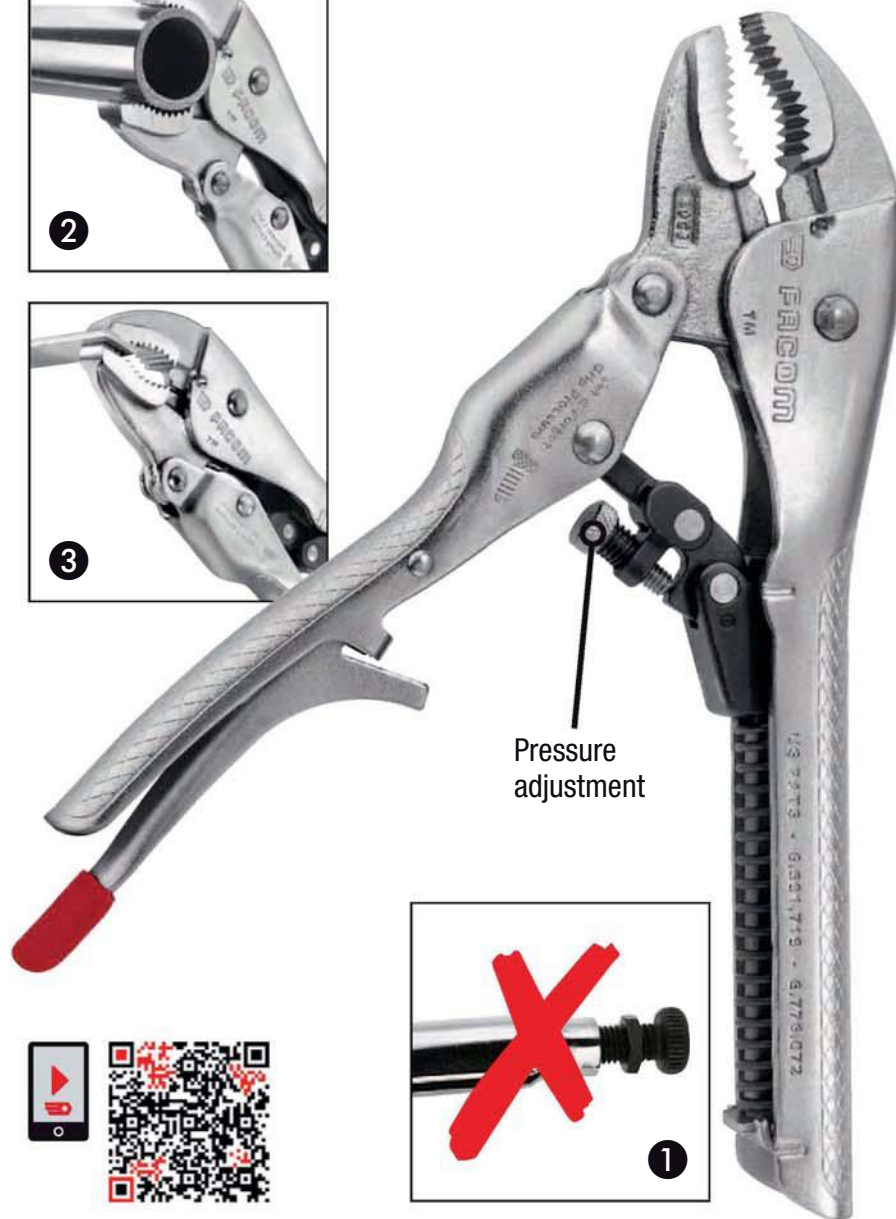
**IDEAL FOR SAVING TIME AND FOR PRODUCTION WORK**

**No adjustment!**

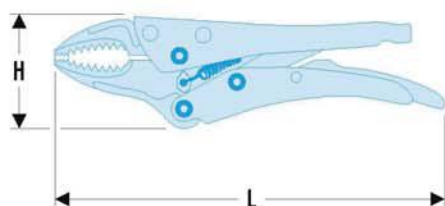
- ① Just adjust the pressure no readjustment required.
- ② The tool automatically adjusts from thick parts to thin and from thin parts to thick.

**Patented automatic closing mechanism.**

- ③ Automatically adjusts the jaws to the component, regardless of size and with the same pressure.



580 - Multi-purpose angle-nose lock-grip pliers



**ASME B107.500**

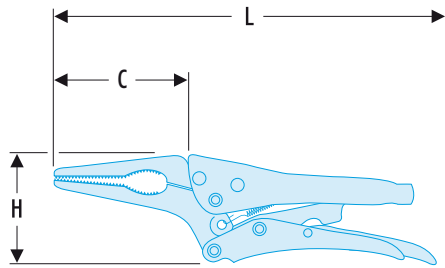
- Suitable for industrial and automotive production and maintenance applications.
- Automatically adjusts the jaws to the component, regardless of size and with the same pressure.
- Forged in Chrome Molybdenum steel: with treated jaws for longer working life.
- Non-slip chequered handle.
- One-hand unlocking by internal opening lever.
- Finish: chromed, burnished mechanism (patented).

|               | A [mm] | B [mm] | C [mm] | H [mm] | L [mm] | ΔΔ [g] |
|---------------|--------|--------|--------|--------|--------|--------|
| <b>580.6</b>  | 30     | 21     | 8      | 45     | 150    | 235    |
| <b>580.10</b> | 38     | 30     | 12     | 63     | 250    | 642    |





## Long-nose automatic lock-grip pliers



### ASME B107.500

- For holding, placing or removing components where access is difficult.
- Tips designed for holding flat or circular sections.
- Automatically adjusts the jaws to the component, regardless of size and with the same pressure.
- Forged in Chrome Molybdenum steel: with treated jaws for longer working life.
- Non-slip chequered handle.
- One-hand unlocking by internal opening lever.
- Finish: chromed, burnished mechanism (patented).

| ➤            | A [mm] | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| <b>582.7</b> | 45     | 61     | 5,5    | 61     | 45     | 175    | 270    |

## Compact lock-grip pliers

### SERIES 507

### 507 SERIES COMPACT LOCK-GRIP PLIERS

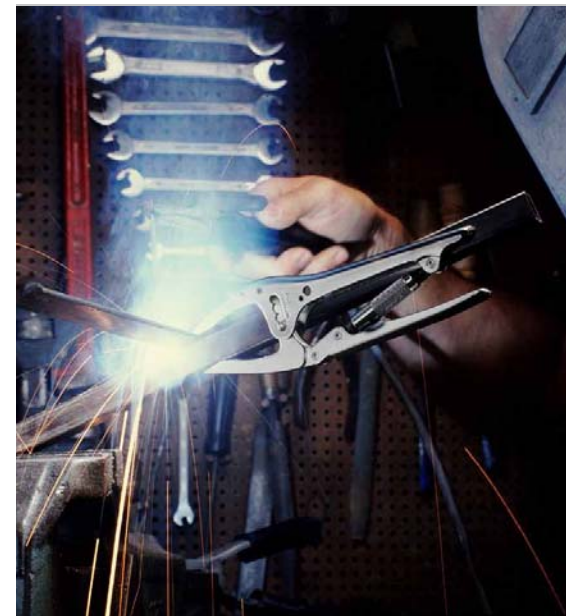
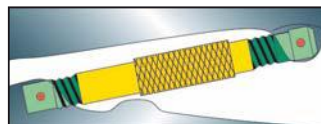
#### The “compact 507” range offers two major benefits

Versatility provided by the slip-joint system designed and developed by Facom that combines:

- Wide opening.
- Constantly parallel jaws.
- Reach beyond edges.

#### Slim profile and precision

- Compact tool with narrow nose.
- Fine adjustment with the unique Facom knurl system.



## 507A Short-nose compact lock-grip pliers



### ASME B107.500

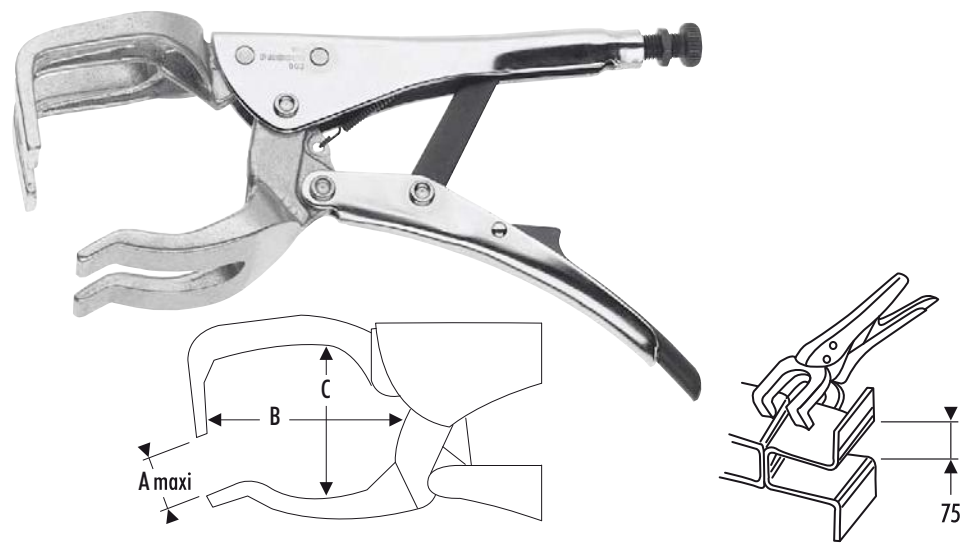
- 4-position slip joint system.
  - Fine adjustment with the unique Facom knurl system.
  - Forged jaws.
  - Nose width 9.6 mm.
  - Length: 200 mm.
  - Height: 42 mm.
  - Finish: chromed.
- Weight: 330 g.





## "Metalworking" lock-grip pliers

### ▣ Arc-welding lock-grip pliers

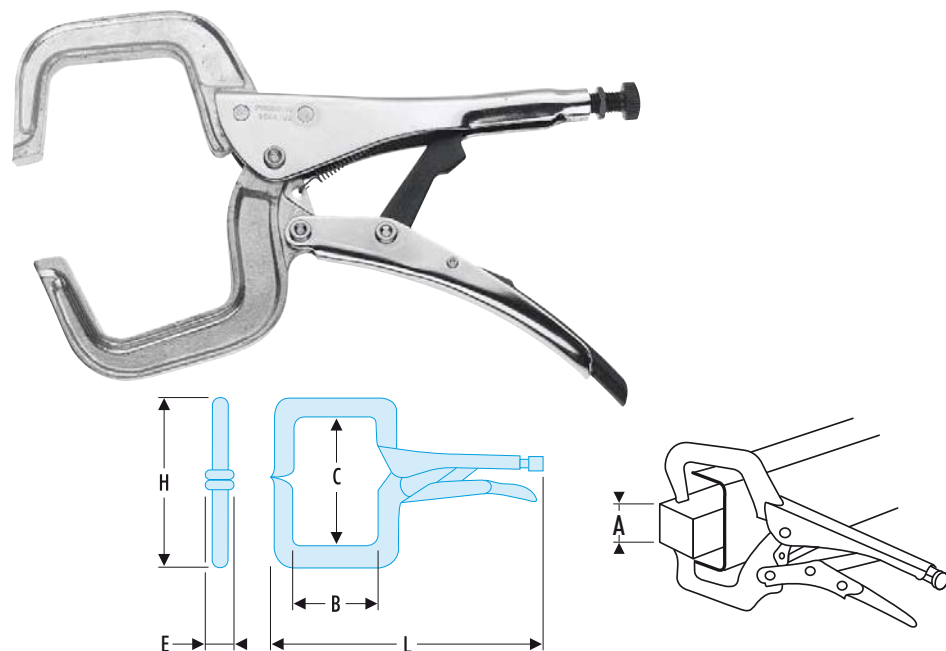


#### ASME B107.500

- Light alloy spatter-proof jaws.
- Steel body.
- Secure and precise alignment of work pieces.
- Ample clearance for the welding tool.
- Hand-screw adjustment.
- Dimensions: 280 x 82 x 70 mm.
- Finish: chromed.

| ➤           | A maxi [mm] | B [mm] | C [mm] | $\frac{\Delta\Delta}{[g]}$ |
|-------------|-------------|--------|--------|----------------------------|
| <b>502A</b> | 75          | 65     | 50     | 735                        |

### ▣ 504A - "C-clamp" arc-welding lock-grip pliers

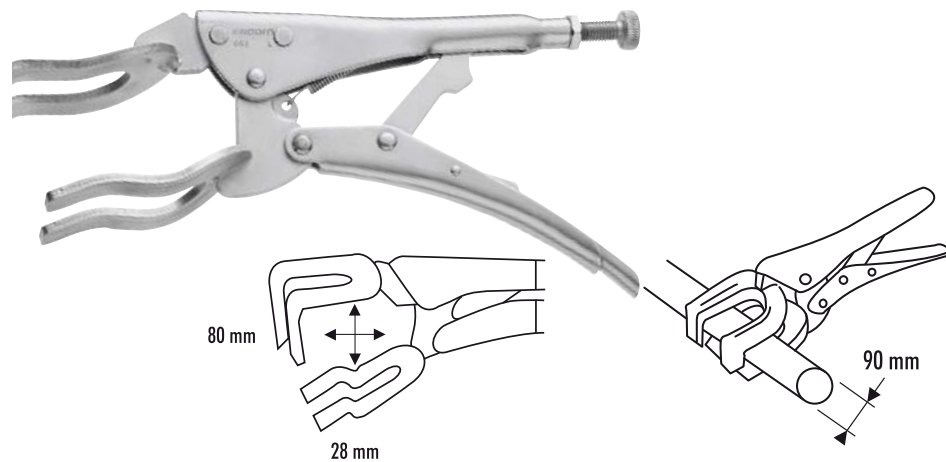


#### ASME B107.500

- Light alloy spatter-proof jaws.
- Steel body.
- Secure clamp for welding shaped or angled sections, and channels.
- Hand-screw adjustment.
- Finish: chromed.

| ➤               | A maxi [mm] | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] |
|-----------------|-------------|--------|--------|--------|--------|--------|
| <b>504A.100</b> | 80          | 65     | 100    | 12     | 147    | 280    |
| <b>504A.180</b> | 125         | 120    | 180    | 20     | 240    | 350    |

### ▣ Lock-grip pliers for round sections

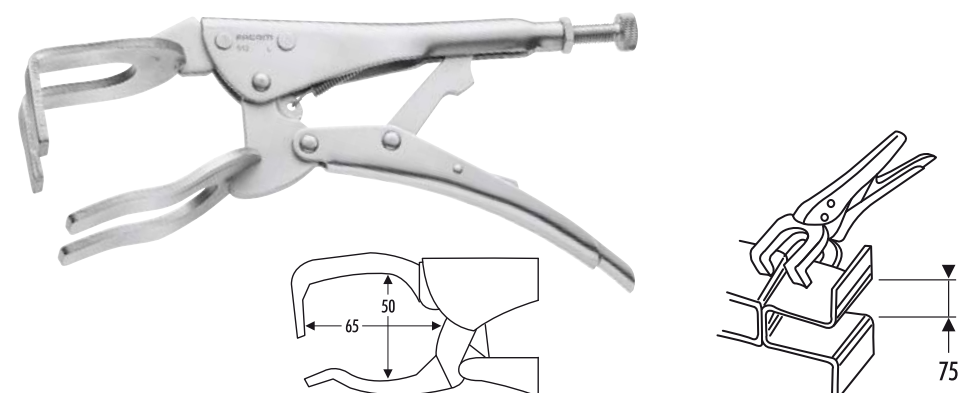


#### ASME B107.500

- Secure clamping of round sections.
- Pressed-steel jaws and body.
- Hand-screw adjustment.
- Dimensions: 280 x 85 x 68 mm.
- Finish: chromed.

| ➤          | A maxi [mm] | B [mm] | C [mm] | $\frac{\Delta\Delta}{[g]}$ |
|------------|-------------|--------|--------|----------------------------|
| <b>503</b> | 90          | 80     | 28     | 945                        |

### ▣ Lock-grip pliers for angle sections

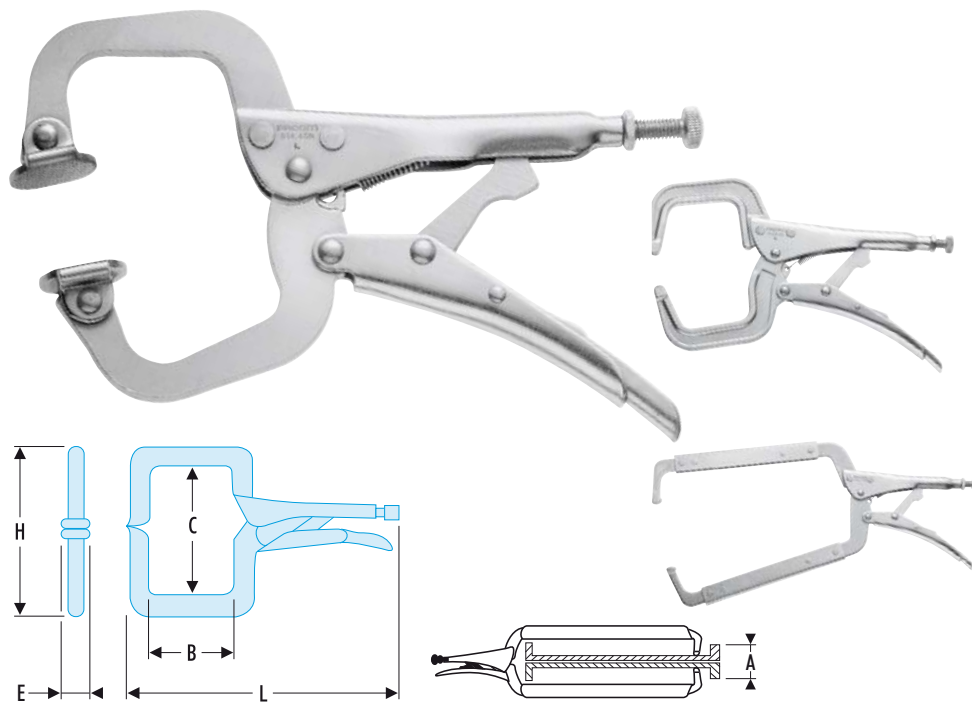


#### ASME B107.500

- Secure clamping of angle and channel sections.
- Pressed-steel jaws and body.
- Hand-screw adjustment.
- Dimensions: 280 x 85 x 70 mm.
- Finish: chromed.

| ➤          | A maxi [mm] | B [mm] | C [mm] | $\frac{\Delta\Delta}{[g]}$ |
|------------|-------------|--------|--------|----------------------------|
| <b>512</b> | 75          | 65     | 50     | 953                        |

## 514A-514A.R - Long-reach lock-grip pliers



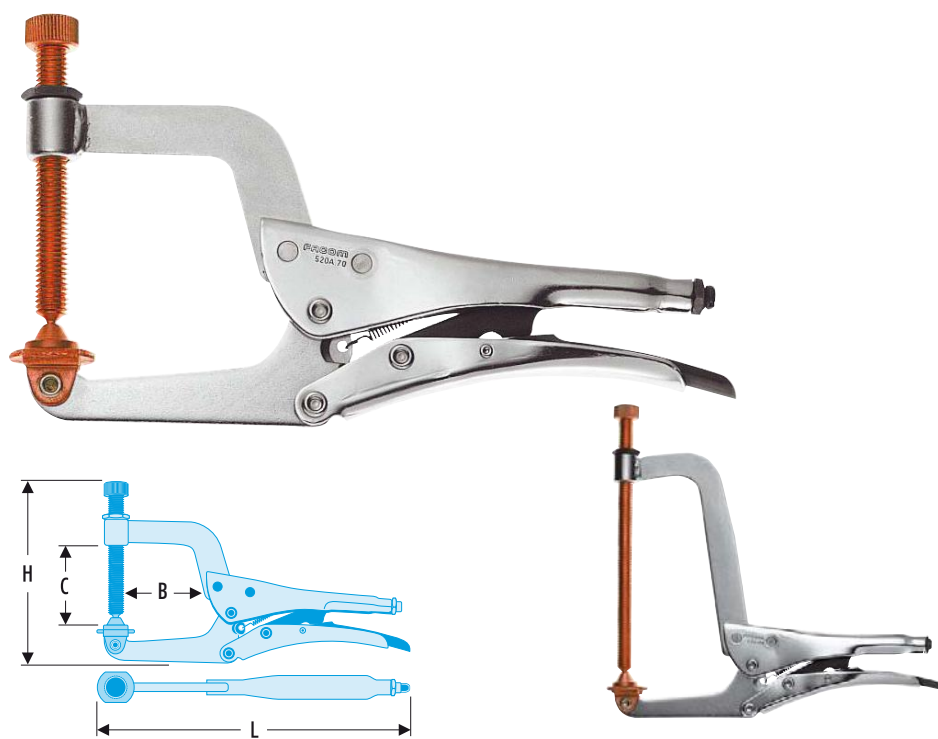
### ASME B107.500

- Special forged-steel jaws for secure clamping of angle sections and deep channels
- Pressed-steel body.
- "R" models have hinged shoes at their tips.
- Hand-screw adjustment.
- Finish: chromed.

| ➤                | A maxi [mm] | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [kg] |
|------------------|-------------|--------|--------|--------|--------|--------|---------|
| <b>514.45R</b>   | 45          | 45     | 60     | 19     | 90     | 175    | 0,270   |
| <b>514A.65</b>   | 70          | 65     | 100    | 12     | 150    | 300    | 0,905   |
| <b>514A.240</b>  | 230         | 240    | 100    | 20     | 165    | 460    | 1,420   |
| <b>514A.240R</b> | 230         | 240    | 100    | 32     | 165    | 460    | 1,530   |
| <b>514A.400</b>  | 370         | 400    | 100    | 20     | 165    | 630    | 1,705   |

## Bar clamp lock-grip pliers

### 520A - Lock-grip G-clamps

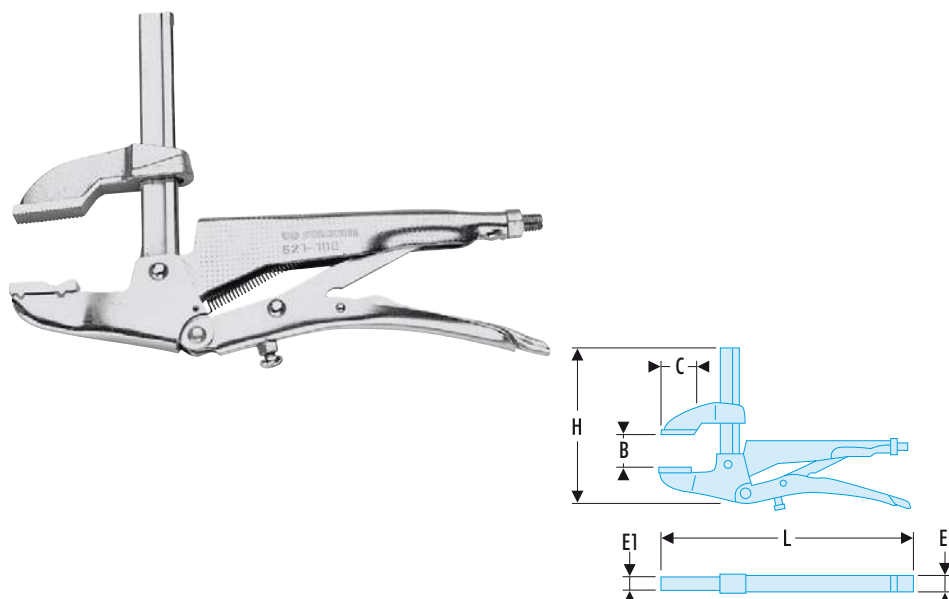


### ASME B107.500

- Coppered screw with swivel shoe.
- Fine setting with locknut.
- Finish: chromed.

| ➤               | B [mm] | C [mm] | H [mm] | L [mm] | ΔΔ [kg] |
|-----------------|--------|--------|--------|--------|---------|
| <b>520A.70</b>  | 70     | 70     | 165    | 280    | 1,020   |
| <b>520A.100</b> | 70     | 100    | 196    | 280    | 1,095   |
| <b>520A.170</b> | 70     | 170    | 270    | 280    | 1,250   |

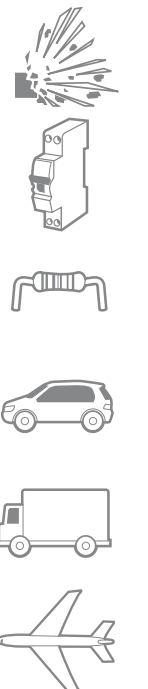
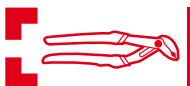
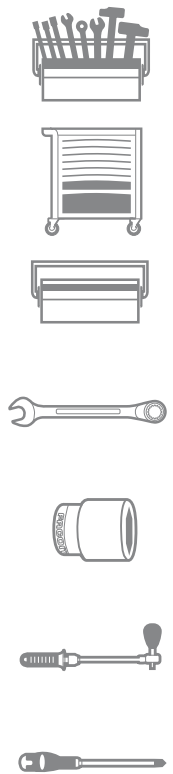
### 521 - G-clamp pliers with sliding jaw



### ASME B107.500

- Clamping force: 4000 N, adjustable.
- Zinc-plated, forged and hardened sliding jaw.
- Case-hardened and chromed teeth.
- Lower jaw angle screw-adjustable through 9°.
- Finish: chromed.

| ➤              | B [mm] | C [mm] | E [mm] | E1 [mm] | H [mm] | L [mm] | ΔΔ [kg] |
|----------------|--------|--------|--------|---------|--------|--------|---------|
| <b>521.100</b> | 100    | 65     | 28     | 15      | 190    | 260    | 1,020   |
| <b>521.150</b> | 150    | 65     | 28     | 15      | 240    | 260    | 1,110   |
| <b>521.200</b> | 200    | 65     | 28     | 15      | 290    | 260    | 1,180   |



## Heavy-duty end nippers

### HIGH PERFORMANCE NIPPERS AND CUTTERS

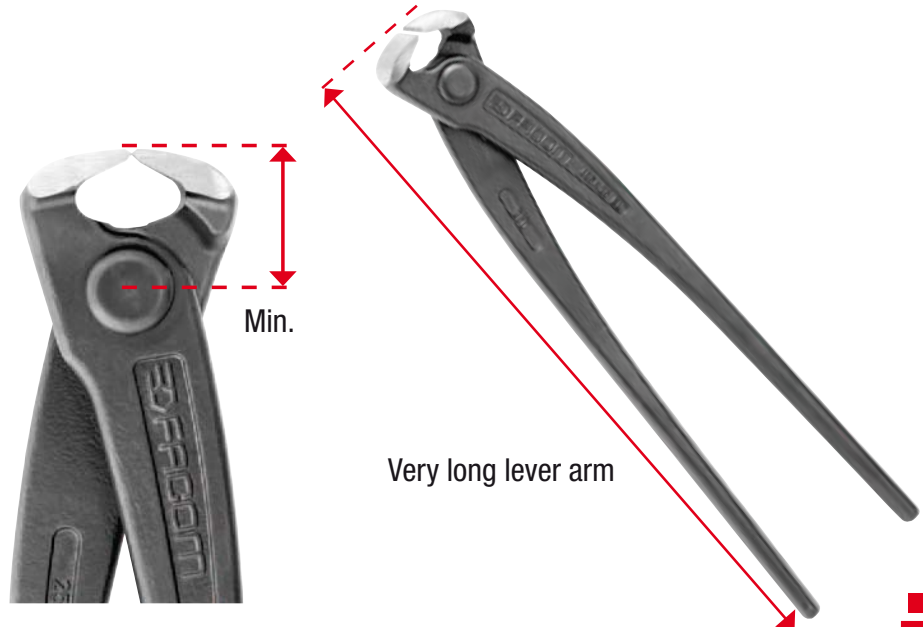
#### CUTTING EFFORT REDUCED TO A MINIMUM

#### For tying and cutting in one operation

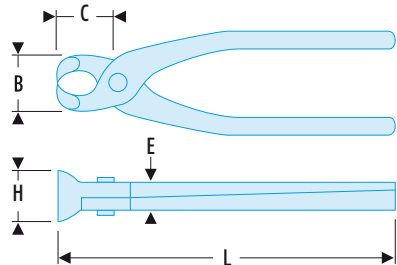
- Clean cut.
- Cutting edges sharpened after heat treatment for cleanly cutting lacing cord.

#### Maximum cutting power.

- Offset pivot.
- Maximum accessibility.
- Tapered shape.



#### 495A - Heavy-duty end nippers



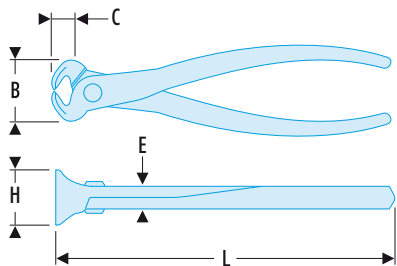
#### NF ISO 9242, ISO 9242, DIN ISO 9242

- Rounded, semi-rigid handles designed to turn quickly in the hand.
- 60/62 HRc high-frequency hardened cutting edges for long life.
- Cutting capacity:
  - To diameter 4.5 mm on soft wire (300 mm model).
  - Max. on hard wire 160 kg/mm<sup>2</sup>.
- Finish: burnished, polished head.

| ➤                | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------|--------|--------|--------|--------|
| <b>495A.20EL</b> | 28     | 10,0   | 12     | 20     | 200    | 240    |
| <b>495A.22EL</b> | 31     | 10,5   | 13     | 23     | 220    | 310    |
| <b>495A.25EL</b> | 35     | 12,0   | 14     | 25     | 250    | 390    |
| <b>495A.28EL</b> | 35     | 12,0   | 14     | 25     | 280    | 450    |
| <b>495A.30EL</b> | 35     | 12,0   | 14     | 25     | 300    | 510    |

## Heavy-duty end nippers

#### 491 - End nippers



#### NF ISO 5748, ISO 5748, DIN ISO 5748

- Protruding cutting edges, for soft and hard wire (max. 160 kg/mm<sup>2</sup>).
- Offset pivot for maximum cutting power.
- 60/62 HRc high-frequency hardened cutting edges for long life.
- Finish: burnished, polished head, PVC grips.

| ➤              | B [mm] | C [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|----------------|--------|--------|--------|--------|--------|--------|
| <b>491.18G</b> | 39     | 11,5   | 14,6   | 32     | 180    | 300    |
| <b>491.20G</b> | 39     | 11,5   | 14,6   | 32     | 200    | 400    |
| <b>491.22G</b> | 43     | 12,7   | 14,6   | 34     | 220    | 450    |



➤ For bolt croppers see p. 612



➤ For PVC grip pliers see p. 484



PLASTICS CUTTERS

**SPECIAL CUTTERS TO REMOVE TAILS AND BURRS FROM INJECTION-MOULDED COMPONENTS.**

- HF hardened cutting edges and flush cut for clean result.

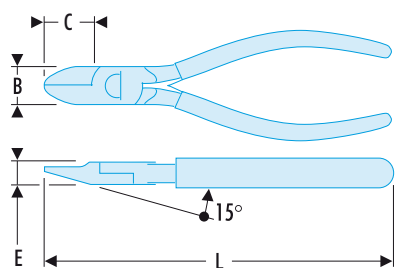
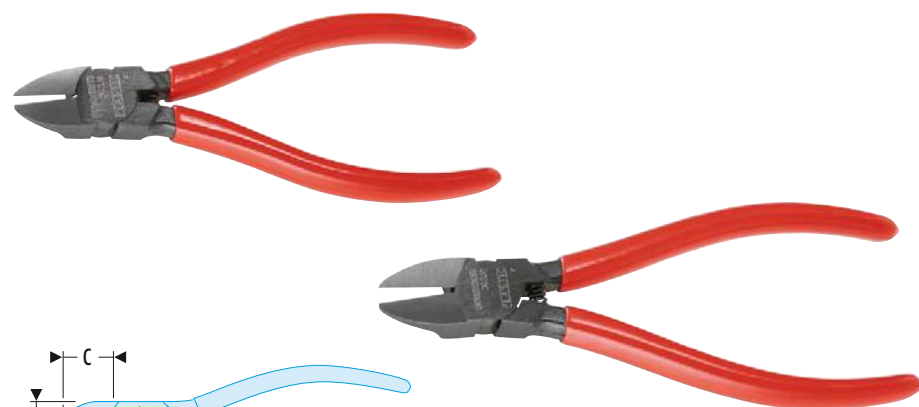


Flush cut



Plastics cutters

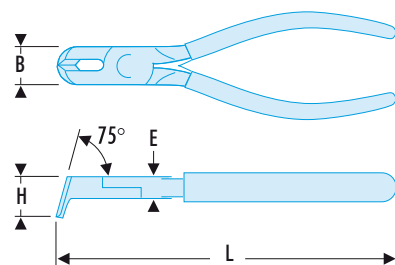
395 - Diagonal plastics cutters



- Two joint and length sizes.
- Opening return spring.
- Finish: polished burnish, PVC grip.

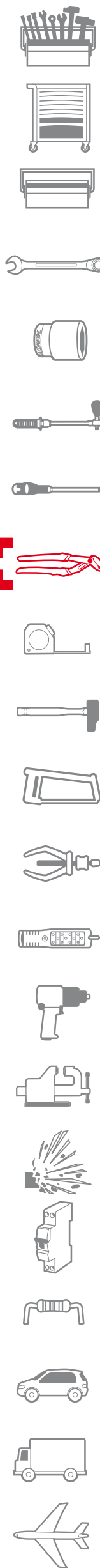
| ➤             | B [mm] | C [mm] | d maxi [mm] | E [mm] | L [mm] | ΔΔ [g] |
|---------------|--------|--------|-------------|--------|--------|--------|
| <b>395.14</b> | 16     | 20     | 6           | 10     | 140    | 115    |
| <b>395.16</b> | 18     | 22     | 7           | 11     | 160    | 150    |

75° plastics cutters



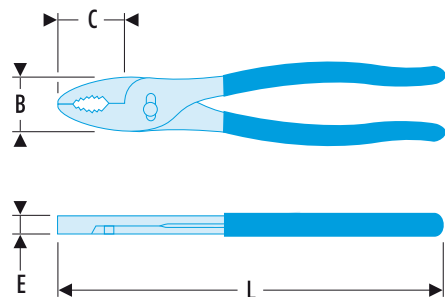
- 75° cutting edges.
- Opening return spring.
- Finish: polished burnish, red PVC grips.

| ➤          | B [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|------------|--------|--------|--------|--------|--------|
| <b>396</b> | 18     | 9      | 24,3   | 150    | 145    |



## Motorists pliers

### 186 - Motorists pliers



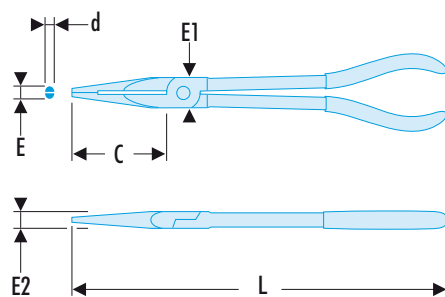
NF ISO 9343, ISO 9343, DIN ISO 9343, ASME B107.500

- 2-position adjustable slip-joint.
- Slim nose for accessibility.
- Finish: chrome finish, red PVC grips.

| ➤                | B [mm] | C [mm] | E [mm] | E1 [mm] | L [mm] |
|------------------|--------|--------|--------|---------|--------|
| <b>186.7CPG</b>  | 29     | 31     | 9,0    | 6,5     | 166    |
| <b>186.8CPG</b>  | 31     | 35     | 10,5   | 7,5     | 204    |
| <b>186.10CPG</b> | 37     | 45     | 11,5   | 8,5     | 250    |

## Extra-long reach half-round nose pliers

### Extra-long reach half-round nose pliers

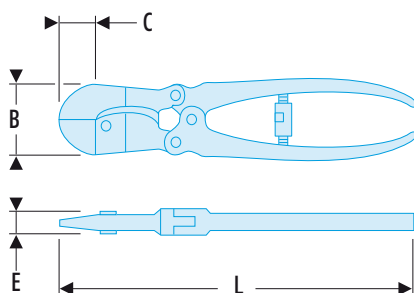


- For reaching components in confined spaces.
- Serrated jaws.
- Finish: polished, red PVC grips.

| ➤               | C [mm] | d [mm] | E [mm] | E1 [mm] | E2 [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|---------|---------|--------|--------|
| <b>185.28EG</b> | 73     | 3,5    | 5      | 17      | 10      | 295    | 304    |

### Low-effort cutters

#### Diagonal cutters

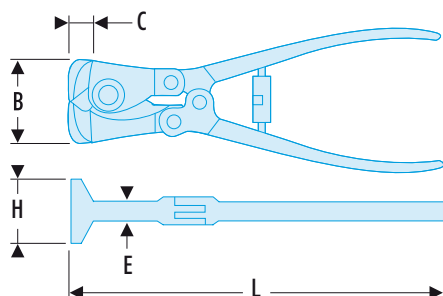


NF ISO 5749, ISO 5749, DIN ISO 5749, ASME B107.500

- Demultiplication system for increased capacity with minimum cutting effort. piano wire 200 kg/mm<sup>2</sup>, diameter 2.5 mm.
- Finish: red paint finish.

| ➤               | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|-----------------|--------|--------|--------|--------|--------|
| <b>171.20EL</b> | 37     | 22     | 16     | 200    | 515    |

#### End-cutters



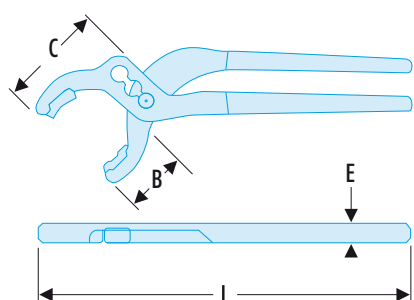
NF ISO 5748, ISO 5748, DIN ISO 5748, ASME B107.500

- Compound leverage for increased capacity with minimum cutting effort. piano wire 200 kg/mm<sup>2</sup>, diameter 2.5 mm.
- Finish: red paint finish.

| ➤                | B [mm] | C [mm] | d maxi [mm] | E [mm] | H [mm] | L [mm] | ΔΔ [g] |
|------------------|--------|--------|-------------|--------|--------|--------|--------|
| <b>191A.22EL</b> | 48     | 9      | 2,5         | 17     | 34     | 210    | 660    |

### "Connector" pliers

#### 410 - "Connector" pliers



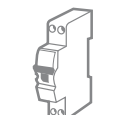
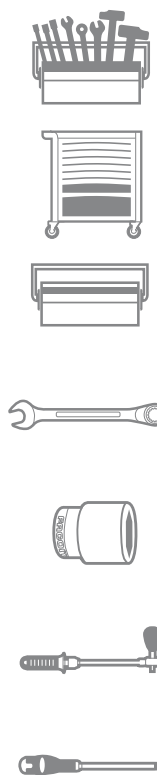
ASME B107.500

- For handling fragile round components, e.g. screwed connector sleeves, tubes, lamps or wire looms, etc.
- Wide capacity from 3-position slip joint: max. diameter 55 mm.
- Replaceable plastic jaws available in 2 jaw hardness options:
  - 410: hard jaws - 70 shore B.
  - 410.S: soft jaws - 55 shore B.
- Finish: polished chrome, red PVC grips.

Spare jaws:

- 410.1: Set of 2 jaws with screws (hard).
- 410.S1: Set of 2 jaws with screws (soft).

| ➤            | B [mm] | C [mm] | E [mm] | L [mm] | ΔΔ [g] |
|--------------|--------|--------|--------|--------|--------|
| <b>410</b>   | 68     | 47     | 10     | 230    | 320    |
| <b>410.S</b> | 68     | 47     | 10     | 230    | 320    |





## ▣ 184.J2 "Mechanics" set



- Comprising 4 tools:
  - Multigrip pliers 170A.
  - Two-position slip-joint pliers 186.7CPG.
  - Diagonal cutters 192.18G.
  - Half-round nose pliers 193.16G.
- Supplied as a roll set N.38A-4B, dim. (L. x W. x H.): 260 x 100 x 50 mm.
- Weight: 985 g.

## ▣ 184.J3CPE "Maintenance" set



- Comprising 12 tools:
  - Locking multigrip pliers 181A.25CPE.
  - Combination pliers 187.18CPE.
  - Diagonal cutters 192.18CPE.
  - End cutters 190.20CPE.
  - 1 Flat-nose pliers 188.16CPE.
  - Straight half-round nose pliers 185.20CPE.
  - Angled half-round nose pliers 195.20CPE.
  - Screwdriver for slotted heads AN4X100.
  - Screwdriver for slotted heads AWH6.5X150.
  - Screwdriver for slotted heads ANF6.5X150.
  - Screwdriver for Phillips® heads ANP1X100.
  - Screwdriver for Phillips® heads ANP2X125.
- Supplied as a roll set N.38A-12C.
- Weight: 2.200 kg

## ▣ 184.J4CPE "Electrical fitters" set



- Comprising 10 tools:
  - Combination pliers 187.18CPE.
  - Diagonal cutters 391.16CPE.
  - Wire strippers 194.17CPE.
  - Round-nose pliers 189.17CPE.
  - Half-round nose pliers 195.20CPE.
  - Flat-nose pliers 188.16CPE.
  - 3 screwdrivers for slotted heads, 1,000 V insulated A2.5X75VE - A3.5X100VE - A5.5X125VE.
  - Adjustable wrench 113A.8C.
- Supplied as a roll set N.38A-10C.
- Weight: 1.700 kg.

▣ **184.J5VE "Electricians" set**



- 1,000V insulated tools to EN 60900900.
- Comprising 6 tools:
  - Diagonal cutters 192.16VE.
  - Combination pliers 187.18VE.
  - Half-round nose pliers 185.20VE.
  - 2 screwdrivers for slotted heads A.VE (4x100 - 5.5x125).
  - 1 screwdriver for Pozidriv® heads AD1X100VE.
- Supplied as a roll set N.38A-6F.
- Weight: 1.100 kg.

▣ **CPE.3 3-piece CPE plier set**



- Including:
  - Locking multigrip pliers 181A.25CPE.
  - Diagonal cutters 192.16CPE.
  - Half-round nose pliers 185.20CPE.
- Supplied in a cardboard box.
- Weight: 790 g.

▣ **CPE.4 4-piece CPE plier set**

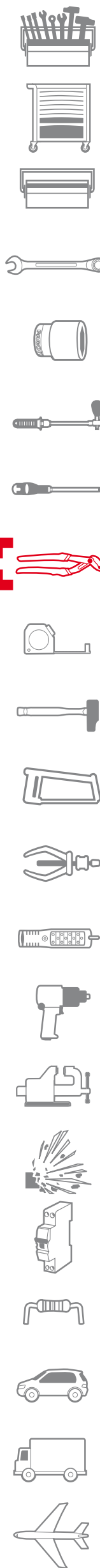


- Including:
  - Locking multigrip pliers 181A.25CPE.
  - Diagonal cutters 192.16CPE.
  - Half-round nose pliers 185.20CPE.
  - Combination pliers 187.18CPE.
- Supplied in a cardboard box.
- Weight: 1.020 kg.

▣ **VE.3 3-piece set of 1,000 Volt pliers**



- 1,000V insulated tools to EN 60900900.
- Including:
  - Multigrip pliers 180.VE.
  - Diagonal cutters 391.16VE.
  - Angled half-round nose pliers 195.20VE.
- Supplied in a cardboard box.
- Weight: 790 g.



## ▣ MODM.CPE1 Foam 4-piece plier set



- Including:
    - Diagonal cutters 192.16CPE.
    - Half-round nose pliers 185.20CPE.
    - Locking twin slip-joint multigrip pliers 181A.25CPE.
    - Large-capacity lock-grip pliers 501.
    - PM.MODCPE1 foam tray.
- Weight: 1.480 kg.

## ▣ MOD.CPE 3-piece "mechanics" CPE plier module



- Including:
    - Half-round nose pliers 185.20CPE.
    - Combination pliers 187.18CPE.
    - Diagonal cutters 192.16CPE.
    - Tray PL.627.
- Weight: 942 g.

## ▣ MOD.TE 3-piece "mechanics" TE plier module



- Including:
    - Half-round nose pliers 185.20TE.
    - Combination pliers 187.18TE.
    - Diagonal cutters 192.16TE, .
    - Tray PL.627.
- Weight: 942 g.

## ▣ MOD.VE 3-piece EN 60900-compliant 1,000 Volt VE plier module



- 1,000V insulated tools to EN 60900900.
  - Including:
    - Slip-joint locking multigrip pliers 180.VE.
    - Diagonal cutters 391.16VE.
    - Standard wire strippers 194.17VE.
    - Tray PL.622.
- Weight: 950 g.

## ▣ MOD.PR4 PR4 - 2-piece adjustable plier module



- Including:
    - Multigrip pliers 180.CPE.
    - Multigrip lock-grip pliers T5.L.
    - Tray PL.330.
- Weight: 1.158 kg.

## ▣ MOD.PR5 PR5 - 2-piece adjustable plier module



- Including:
    - Multigrip pliers 181EF.25CPE.
    - Multigrip lock-grip pliers T5.L.
    - Tray PL.330.
- Weight: 1.158 kg.



**MOD.PR7** PR7 - 2-piece adjustable plier module



- Including:
  - Multigrip pliers 181EF.25CPE.
  - Short-nose lock-grip pliers 500.
  - Tray PL.330.
- Weight: 1.094 kg.

**MOD.PR8** PR8 - 2-piece adjustable plier module



- Including:
  - Multigrip pliers 180.CPE.
  - Short-nose lock-grip pliers 500.
  - Tray PL.330.
- Weight: 1.094 kg.

**MOD.PR9** PR9 - 2-piece adjustable plier module



- Including:
  - Locking multigrip pliers 181A.25CPE.
  - Long-nose lock-grip pliers 501.
  - Tray PL.330.
- Weight: 1.094 kg.

**MOD.PR11** PR11 - 2-piece adjustable plier module

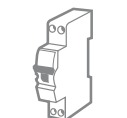
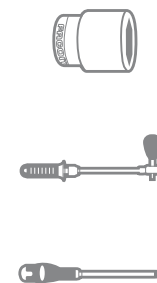
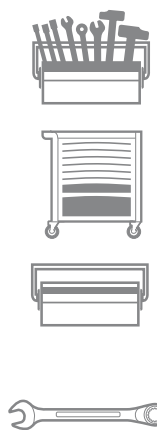


- Including:
  - Locking multigrip pliers 181A.25CPE.
  - Multigrip lock-grip pliers T5.L.
  - Tray PL.330.
- Weight: 1.160 kg.

**MOD.PR12** PR12 - 2-piece adjustable plier module



- Including:
  - Locking multigrip pliers 181A.25CPE.
  - Angled nose lock-grip pliers 580.10.
  - Tray PL.330.
- Weight: 1.160 kg.



# **IDEMCO**

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