



8. Pliers

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480



Bolt croppers



NEW

"New generation" Facom pliers

New process, better performance

Advantages

- ▶ Designed and manufactured in our own factory
- ▶ On numerically-controlled robotic production machines
- ▶ Machined after heat treatment



N  **382**

NEW

"High performance" nippers

Reduced cutting effort

Advantages

- ▶ Clean cut
- ▶ Maximum cutting power
- ▶ Optimum accessibility



N  **408**

New pivot pin
Improved performance

Advantages

- ▶ Equal comfort for large hands or small.
- ▶ Double the number of positions.
- ▶ Operator safety



N 373



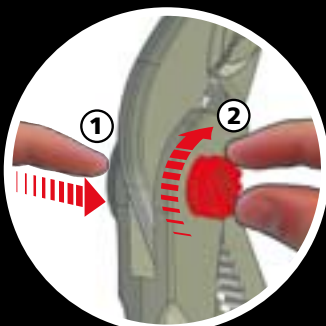
► Locking multigrip pliers

New**181 Locking twin slip-joint multigrip pliers**

Example for 181.25 pliers

**NEW PIVOT PIN
NEW PERFORMANCE!****Equal comfort for large hands and small.**

- The pivot pin allows you to adjust handle travel to suit the size of your hand.

More force, less fatigue!

② = 1/2 tour

Double the number of positions.

- Twice the number of positions, for more accurate adjustment.

Optimum grip on the workpiece!

Quick, permanent push-button adjustment.



Mini

Operator safety

- Gap reduced for increased torsional strength,

Guaranteed strength and grip!

Teeth self-gripping on pipes.



Designed to grip nuts without damage.



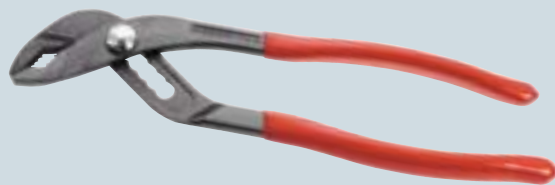
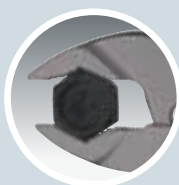
Integral wire-cutter.

Handle travel adjusts to suit your hand!**Possible number of positions :**

180 mm model : 10 notches = 20 positions / 250 mm : 12 notches = 24 positions / 300 mm : 14 notches = 28 positions.

New!**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.



Engineers multigrip pliers

181 Locking twin slip-joint multigrip pliers

▷ ISO 8976, DIN ISO 8976, NF ISO 8976.

- Fast, precise push-button adjustment with safety lock.
- Reduced gap :
 - Reduced play.
 - high torsional strength.
- 62 HRc high-frequency treated jaws.
- Finger protection.
- 181.CPE : Chrome finish, ergonomic grips.
- 181.TE : Varnish finish, ergonomic grips.
- 181.G : Varnish finish, PVC grips.

181.18G



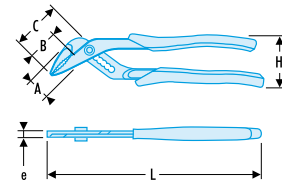
181.25CPE



181.18TE



| ED | L mm | Tube capacity Ø mm | Hex capacity mm | A mm | B mm | C mm | D mm | E mm | ΔΔ g |
|-----------|---------|-----------------------|--------------------|---------|---------|---------|---------|---------|---------|
| 181.18CPE | 185 | 36 | 36 | 24 | 24 | 48 | 22 | 7,5 | 270 |
| 181.25CPE | 250 | 42 | 41 | 33,8 | 28 | 55 | 22 | 7,5 | 400 |
| 181.18TE | 185 | 36 | 36 | 24 | 24 | 48 | 22 | 7,5 | 270 |
| 181.25TE | 250 | 42 | 41 | 33,8 | 28 | 55 | 22 | 7,5 | 400 |
| 181.18G | 180 | 36 | 36 | 24 | 24 | 48 | 14,5 | 7,5 | 250 |
| 181.25G | 245 | 42 | 41 | 33,8 | 28 | 55 | 14,5 | 7,5 | 370 |
| 181.30G | 304 | 49 | 46 | 40,6 | 33 | 79 | 16,3 | 9 | 740 |

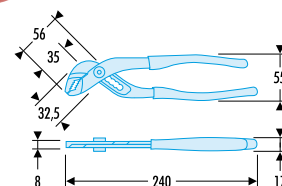


Standard multigrip pliers

170A

▷ ISO 8976, DIN ISO 8976, NF ISO 8976.

- PVC sheathed spatula handle for user comfort.
- ΔΔ : 310 g.



► Standard multigrip pliers

180

SLIP-JOINT MULTIGRIP PLIERS - RIVETED PIVOT PIN



IDEAL FOR CONFINED SPACES !

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

44 mm




Safe



- Finger clearance.
- Insulated VE model for working on or near live components up to 1,000V AC.
- To european standard **EN 60900**.

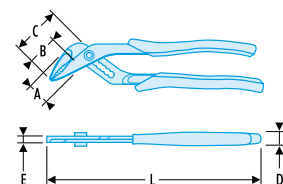
180 High-performance multigrip pliers

► ISO 8976, DIN ISO 8976, NF ISO 8976.

- Double heat-treated tips; High wear resistance, hardness 60/62 HRC.
- 4 options :
 - 180.CPE : Chrome finish, ergonomic grips.
 - 180.TE : Varnish finish, ergonomic grips.
 - 180 : chrome finish.
 - 180 VE : Varnish finish, 1,000V insulated grips designed for electrical safety to EN 60900 and , for working on or near live components.



| | A mm | B mm | C mm | D mm | E mm | L mm | ΔΔ g |
|--|--------------------------------|---------|---------|---------|---------|---------|---------|
|  180.CPE | 30 | 35 | 58 | 22 | 8 | 250 | 360 |
| 180.TE | 30 | 35 | 58 | 22 | 8 | 250 | 360 |
| 180 | 30 | 35 | 58 | 14 | 8 | 250 | 320 |
| 180.VE | 30 | 35 | 58 | 22 | 8 | 250 | 360 |
|  180A.SE | Description Spare pivot pin | | | | | | |

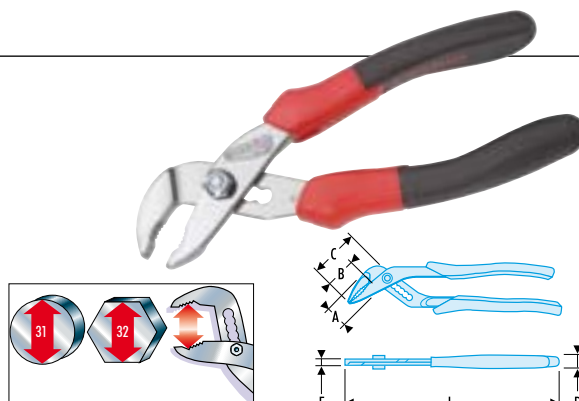


Engineers multigrip pliers

176A "Junior" pliers

176A.CPY : Polished chrome finish, comfortable grips.

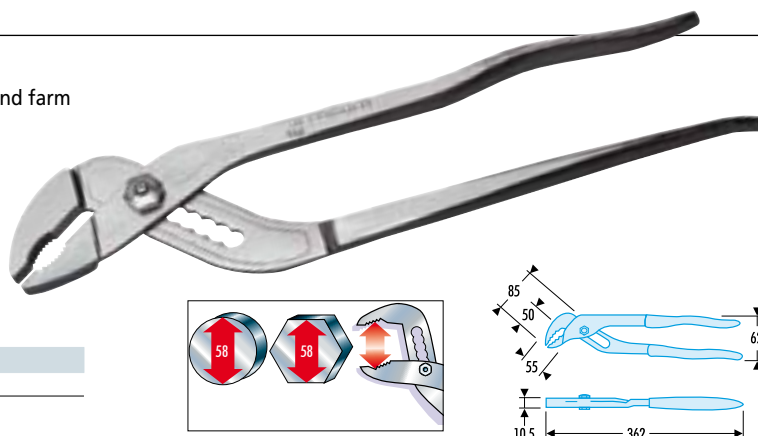
| | A | B | C | e | H | L | ΔΔ |
|-----------------|------|----|----|-----|----|-----|-----|
| | mm | mm | mm | mm | mm | mm | g |
| 176A.CPY | 23,5 | 23 | 40 | 5,6 | 45 | 165 | 160 |



"Mammoth" pliers

182A.CP

- Powerful, two-handed use ideal for heavy engineering and farm machinery.
- Forged and hardened to 48 HRC.
- Thick-gauge jaws withstand torsion.
- 7 settings.
- Chrome finish, polished tips.
- Capacity 58 mm.
- ΔΔ : 810 g.



| | Description |
|---------------|-----------------|
| 182.SE | Spare pivot pin |

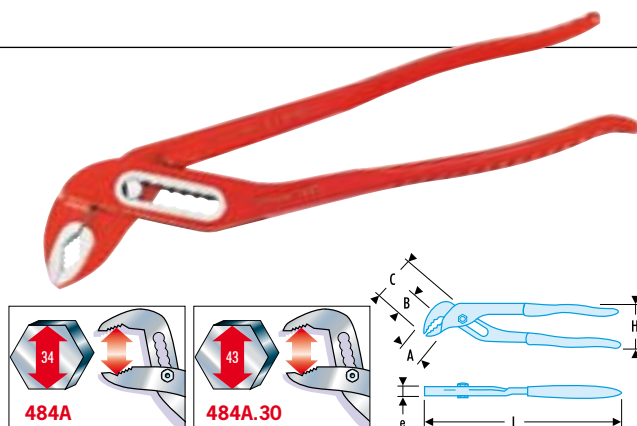
► Twin slip-joint multigrip pliers

484 Twin slip-joint multigrip pliers

► ISO 8976, DIN ISO 8976, NF ISO 8976.

- Inter-slotted jaws distribute load either side of central pin, in two heavy-gauge slots, for optimum safety and durability.
- 7 settings.
- Satin finish.
- 484A : capacity 34 mm.
- 484A.30, capacity 43 mm.

| | e | A | B | C | H | L | ΔΔ |
|----------------|-----|----|----|----|----|-----|-----|
| | mm | mm | mm | mm | mm | mm | g |
| 484A | 7,0 | 33 | 38 | 60 | 50 | 240 | 345 |
| 484A.30 | 9,5 | 38 | 40 | 66 | 52 | 300 | 560 |



► Notch-joint multigrip pliers

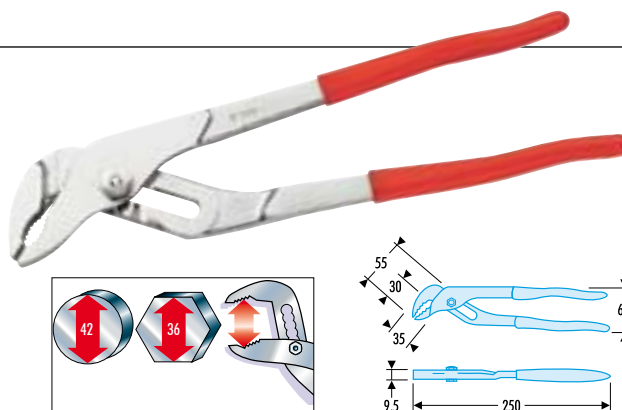
Notch-joint multigrip pliers

480.ECG

► ISO 8976, DIN ISO 8976, NF ISO 8976.

- Undercut arcs :
 - Positive engagement of notches provides high power.
 - Pivot pin is not load bearing.
 - Smooth adjustment.
- 5 settings.
- Chrome finish, red PVC grips.

ΔΔ : 320 g.



482 Notch-joint multigrip pliers

▷ ISO 8976, DIN ISO 8976, NF ISO 8976.

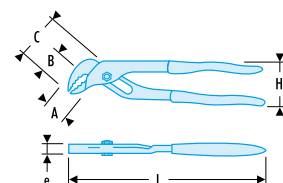
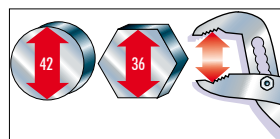
- Undercut arcs :
- Positive engagement of notches provides high power.
- Pivot pin is not load bearing.
- Self-gripping teeth.
- 5 settings.
- Presentation :
- CPE model : Chrome finish, ergonomic grips.
- EG model : Burnished finish, red PVC grips.

| | e mm | A mm | B mm | C mm | H mm | L mm | ΔΔ g |
|----------------|---------|---------|---------|---------|---------|---------|---------|
| 482.CPE | 9,5 | 35 | 30 | 55 | 60 | 255 | 365 |
| 482.EG | 9,5 | 35 | 30 | 55 | 60 | 255 | 320 |

482.CPE



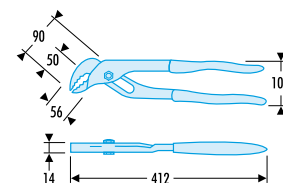
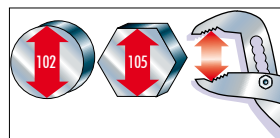
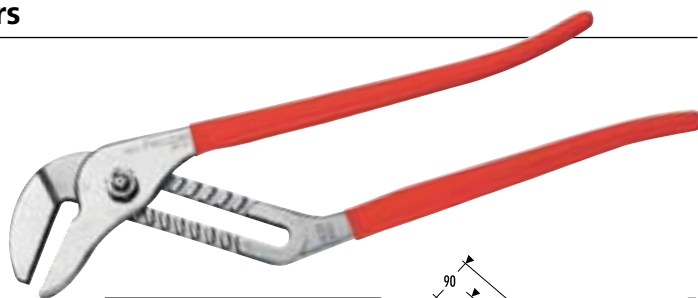
482.EG



"Extra-wide capacity" straight-jaw pliers

481.40

- 11 positions.
 - Notch joint.
 - Straight serrated jaw.
 - Chrome finish, PVC grips.
 - Capacity : 105 mm.
- ΔΔ : 1.1 kg.

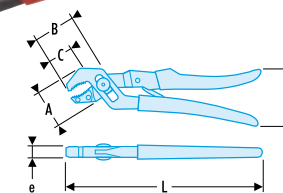
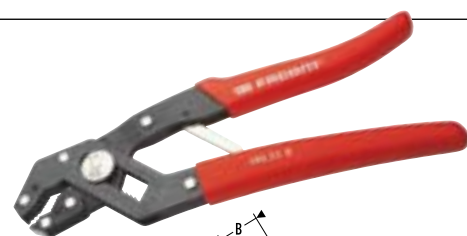
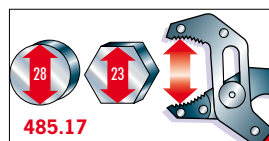
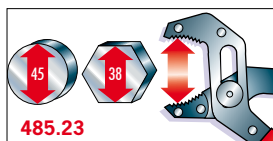


► Automatic multigrip pliers

485 Automatic multigrip pliers

- Burnished finish. PVC grips.
- 485.17 : Capacity Ø 28 mm, ⌀ 23 mm.
485.23 : Capacity Ø 45 mm, ⌀ 38 mm.

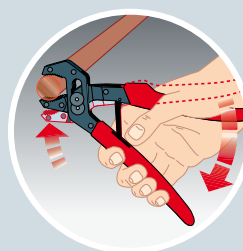
| | e mm | A mm | B mm | C mm | H mm | L mm | ΔΔ g |
|---------------|---------|---------|---------|---------|---------|---------|---------|
| 485.17 | 7 | 28 | 23 | 42 | 42 | 170 | 150 |
| 485.23 | 10 | 40 | 30 | 57 | 70 | 230 | 380 |



Self-adjusting multigrip pliers

FAST ADJUSTMENT

Instant automatic setting
with one hand while
clamping.



Electrical engineers pliers

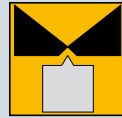


Precision cutters

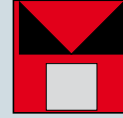
3 TYPES OF CUT :



AXIAL
Hard cutting edges
for all materials.



SEMI-FLUSH
Clean cut in semi-
hard materials.



FLUSH
Smooth burr-free
finish.

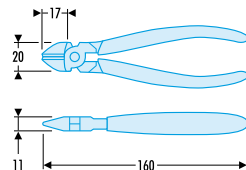
▶ Cutting pliers

"Compact" diagonal cutters

405.15

▷ ISO 5749, DIN ISO 5749, NF ISO 5749.

- Capacity :
 - hard wire 160 kg/mm² : Ø 1.6 mm
 - semi-hard wire 100 kg/mm² : Ø 1.8 mm.
 - Varnished finish, red PVC grips.
- ΔΔ : 195 g.



Diagonal cutters

▷ ISO 9654, DIN ISO 9654, NF ISO 9654.

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



405



425



435

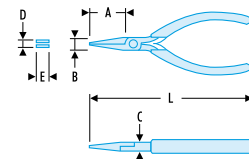
| Σ | Ø max mm Cu-Ni | FE 100 Kg/mm ² | A mm | B mm | C mm | L mm | ΔΔ g |
|--------|-------------------|------------------------------|---------|---------|---------|---------|---------|
| 405.12 | 2,0 | 1,0 | 16,0 | 16,0 | 8 | 120 | 95 |
| 405.10 | 1,4 | 0,8 | 11,5 | 10,5 | 7 | 110 | 60 |
| 435 | 1,3 | 0,7 | 13,0 | 10,5 | 7 | 110 | 60 |
| 416 | 1,0 | 0,5 | 11,5 | 10,5 | 7 | 110 | 60 |
| 425 | 1,2 | / | 13,0 | 10,5 | 7 | 110 | 60 |

▶ Flat nose pliers

401 - 421 Flat nose pliers

▷ ISO 9655, DIN ISO 9655, NF ISO 9655.

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



| Σ | A mm | B mm | C mm | D mm | E mm | L mm | ΔΔ g |
|-----|---------|---------|---------|---------|---------|---------|---------|
| 401 | 48 | 14 | 8 | 1 | 5 | 160 | 80 |
| 421 | 33 | 11 | 7 | 1 | 5 | 130 | 70 |

▶ Half-round nose pliers

Half-round nose pliers

▷ ISO 5745, DIN ISO 5745, NF ISO 5745.

- 402 : Short smooth jaws.
- 442 : short serrated jaws with side wire-cutter (2 mm dia. copper, 1 mm dia. steel 100 Kg/mm²).
- 403 : Short jaws, angled 40°.
- Matt burnished finish, red grips - opening spring.



403



402

| Σ | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|-----|---------|---------|---------|---------|---------|---------|
| 402 | 48 | 14 | 8 | 1,5 | 160 | 76 |
| 442 | 42 | 14 | 8 | 3,8 | 150 | 88 |
| 403 | 45 | 14 | 8 | 1,2 | 155 | 75 |

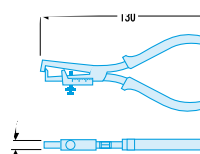
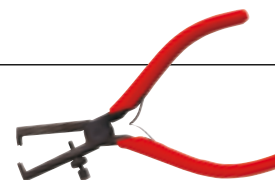
▶ Wire strippers

Fine wire strippers

194.12

- Max. AWG 14.
- For light-gauge wire.
- Narrow blades.
- Cutting depth presetting.
- Burnished finish, PVC grips.
- Ø 1.5 mm single and multi-core wire.
- Cross section 1.8 mm².

ΔΔ : 70 g.





Facom cutting pliers

PERFORMANCE !

Facom's cutting pliers are designed to meet the 3 main requirements of professional users.

1- One tool for cutting all materials

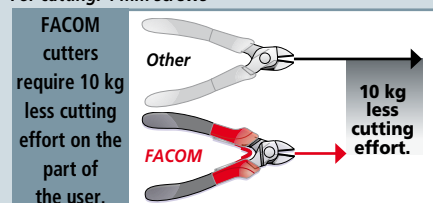
- FACOM's universal cutters can cut cleanly through all types of materials:
copper wire, semi-hard wire, hard wire, piano wire, steel strip, nylon strip, binding wire, bronze wire, Ertalon, etc....

2- A reduced cutting effort

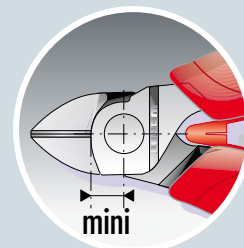
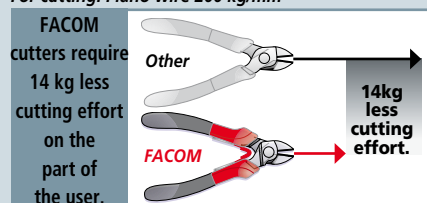
Facom cutting pliers reduce the cutting effort by 20% :

- Optimised cutting-edge geometry - Long lever arm - Pivot pin offset as close as possible to the cutting edges.

For cutting: 4 mm screws



For cutting: Piano wire 200 kg/mm²

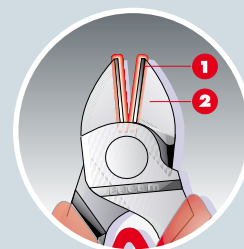


3- Durable cutting power

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/mm²")

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

Copper (electrical fitters cutters)

| | Ø max | | Ø max | | Ø max |
|-----|----------|-----|----------|-----|----------|
| 391 | : 3.5 mm | 435 | : 1.3 mm | 425 | : 1.2 mm |
| 405 | : 2.0 mm | 416 | : 1.0 mm | | |

Plastic

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

Four levels of finish

- CPE series chromed
- TE series varnished
- VE-VSE series 1000 Volts insulated
- G series PVC-coated



Série CPE

Chrome-finished pliers



Return spring



Résistance

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

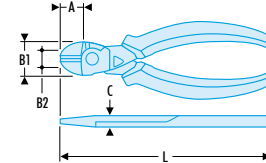
► Diagonal cutters

192.CPE High-performance diagonal cutters

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Cutting edges designed to cleanly cut all types of wire : Piano wire, soft wire and modern materials
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | Ø max mm 200 kg/mm ² | Ø mm Cu | A mm | B mm | C mm | L mm | ΔΔ g |
|------------------|---------------------------------------|------------|---------|---------|---------|---------|---------|
| 192.14CPE | 1,5 | 0,7 - 3,0 | 15,5 | 21,5 | 9,5 | 145 | 160 |
| 192.16CPE | 2,0 | 0,7 - 4,0 | 18 | 24 | 10 | 160 | 200 |
| 192.18CPE | 2,2 | 0,7 - 4,5 | 20 | 26 | 11 | 180 | 260 |
| 192.20CPE | 2,5 | 0,7 - 5,0 | 22 | 28 | 11,5 | 200 | 320 |



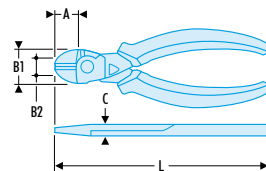
Electricians diagonal cutters

391.16CPE

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Snipe nose for confined spaces (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire : Hard wires (max. 160 kg/mm²), thin copper wires, modern materials
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | 160 kg/mm ² | Ø mm Cu | B mm | A mm | C mm | L mm | ΔΔ g |
|------------------|------------------------|------------|---------|---------|---------|---------|---------|
| 391.16CPE | 1,6 | 0,7 - 3,5 | 19 | 21 | 9 | 165 | 190 |



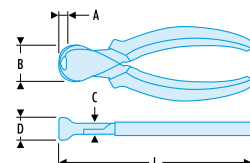
► End cutters

190.CPE High-performance end cutters

► ISO 5748, DIN ISO 5748, NF ISO 5748.

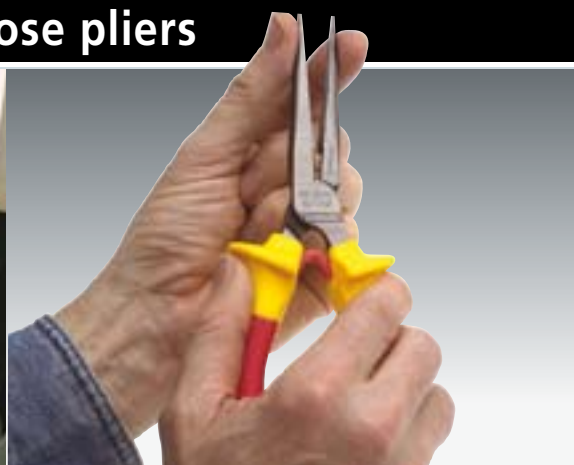
- Cutting edge designed to cleanly cut piano wire, hard and soft wire.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | Ø max mm 200 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|------------------|---------------------------------------|---------|---------|---------|---------|---------|---------|
| 190.16CPE | 1,6 | 6,5 | 28 | 11,5 | 23 | 160 | 200 |
| 190.20CPE | 2 | 7,5 | 31 | 13,5 | 29 | 200 | 340 |





Facom half-round nose pliers



A COMPREHENSIVE RANGE TO SUIT EVERY NEED

High-performance.

Facom's half-round nose pliers are precision made -machined on numerically-controlled robotic production machinery. For gripping and manipulating all types of components or wires, even in difficult-to-reach places. Perfectly finished, with no sharp edges.

Straight and 40° angled short-nose pliers.

- Narrow, finely serrated tips (0.5mm pitch), with a side wire-cutter.

Straight and 40° angled long-nose pliers.

- Reinforced, serrated tips (0.8mm pitch), with a tube grip and side wire-cutter. For mechanics, industrial maintenance, automotive trades, etc. Finishes CPE and TE.
- Narrow, finely serrated tips (0.5mm pitch), with a side wire-cutter. For electricians, electrical fitters, delicate tasks. Finishes G and VE (1,000 V insulated - EN60900).

Guaranteed cutting accuracy and consistency.

- For cleanly cutting thin copper wire and modern materials, hard wires (max. 1.6mm diameter at 160 kg/mm²).



- Industrial, automotive applications, etc...

- Electrical, electromechanical applications, etc...



► Half-round nose pliers

185-195.CPE Long half-round nose pliers

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).

185 : Straight nose.

195 : 40° angled nose.



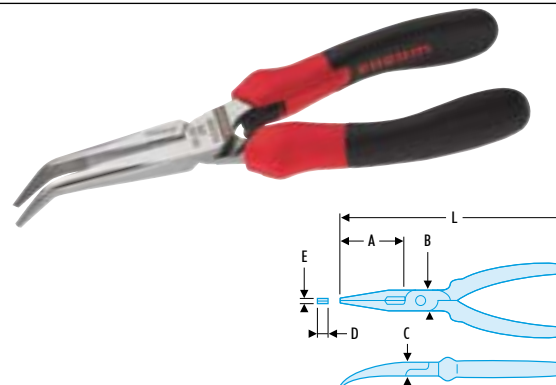
| | Ø max mm Cu | Ø maxi mm 160 kg/mm ² | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|------------------|----------------|-------------------------------------|-------------|---------|---------|---------|---------|---------|
| 185.20CPE | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 75 | 18 | 9 | 200 | 192 |
| 195.20CPE | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 69 | 18 | 9 | 200 | 192 |

Half-round long snipe-nose pliers

183.20CPE

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).
- 40° angled nose.



| | Ø max mm Cu | Ø maxi mm 160 kg/mm ² | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|------------------|----------------|-------------------------------------|-------------|---------|---------|---------|---------|---------|
| 183.20CPE | 0,7 - 3,5 | 1,6 | 2,5 x 3,0 | 69 | 18 | 9 | 200 | 185 |

193 - 195.CPE Short half-round nose pliers

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).

193 : Straight nose.

195 : 40° angled nose.



| | Ø max mm Cu | Ø maxi mm 160 kg/mm ² | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|------------------|----------------|-------------------------------------|-------------|---------|---------|---------|---------|---------|
| 193.16CPE | 0,7 - 3,0 | 1,6 | 2,5 x 3,0 | 50 | 17 | 9 | 160 | 177 |
| 195.16CPE | 0,7 - 3,0 | 1,6 | 2,5 x 3,0 | 50 | 17 | 9 | 160 | 177 |

► Combination pliers

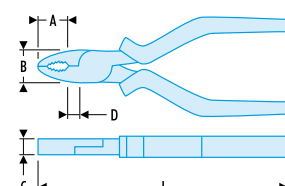
187.CPE Combination pliers

► ISO 5746, DIN ISO 5746, NF ISO 5746.

- Cutting edges designed to cut all types of wire : Piano wire, soft wire and modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.



| | Ø max mm Fe wire 200 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|------------------|---|---------|---------|---------|---------|---------|---------|
| 187.16CPE | 1,6 | 34 | 21 | 9,5 | 12 | 165 | 195 |
| 187.18CPE | 1,8 | 36 | 23 | 10 | 13 | 185 | 225 |
| 187.20CPE | 2 | 42 | 26 | 11,5 | 15 | 205 | 300 |



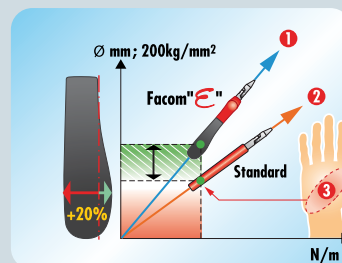


Series "E" pliers



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.



Spring

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

Three levels of finish

CPE series chromed

TE series varnished

VE series 1,000 V insulated



Highly resistant materials

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



Safety

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

See the "VE" series range of 1,000 V insulated tools, p.

368

1000V
EN 60900



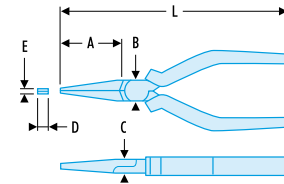
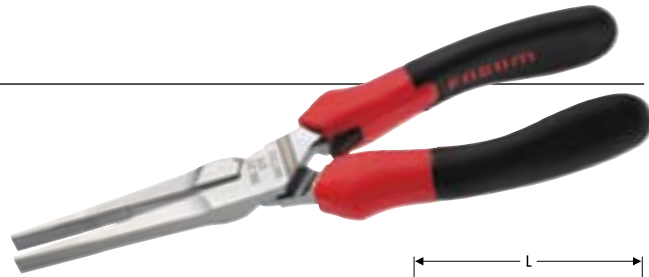
► Flat nose pliers

188.CPE Flat nose pliers

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Serrated jaws for a firm grip.

188.E : Snipe nose version for confined spaces.



| | A mm | B mm | C mm | D x E mm | L mm | ΔΔ g |
|-------------------|---------|---------|---------|-------------|---------|---------|
| 188.16CPE | 46 | 18 | 9 | 6,5 x 4,0 | 168 | 140 |
| 188.20CPE | 75 | 18 | 9 | 6,5 x 4,0 | 200 | 200 |
| 188E.16CPE | 46 | 18 | 9 | 3,5 x 2,5 | 168 | 130 |

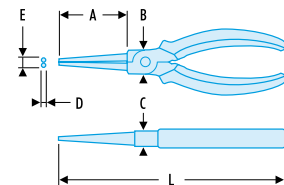
► Round-nose pliers

Round nose pliers

189.17CPE

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- For shaping loops, bends or rings.
- Finely serrated jaws for positive grip.
- Ø at end of each tip : 2 mm.



| | A mm | B mm | D x E mm | C mm | L mm | ΔΔ g |
|------------------|---------|---------|-------------|---------|---------|---------|
| 189.17CPE | 41 | 18 | 2 x 4 | 9 | 170 | 135 |

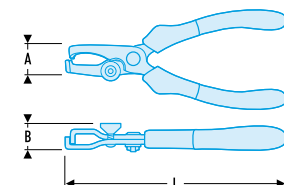
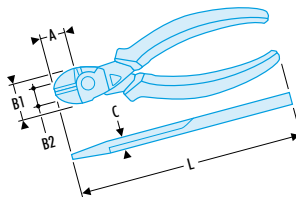
► Standard wire strippers

Wire stripper

189.17CPE

194.17: Standard forged pliers.

- For single and multi-core wires 0.5 to 6 mm².
- Knurled adjustment screw with locknut.
- Metal return spring



| | ⊙ ⊗ mm ² | A mm | B mm | L mm | ΔΔ g |
|------------------|------------------------|---------|---------|---------|---------|
| 194.17CPE | 0,5 - 6 | 17 | 8.5 | 170 | 185 |

► Diagonal cutters

8E

Varnished, polished pliers

**Ergonomic !**

- **Spatula-shaped pressure area**
20% more slip-resistant
Maximum comfort.
Reduced pressure
on the hand.

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

- **Guard**
Designed to provide a
firm, comfortable grip for
pushing or pulling
pressure.

**Resistant**

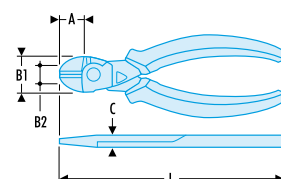
Sleeves made of high-performance materials chosen for their resistance to chemicals High-performance materials chosen for their resistance to workshop chemicals (Skydrol, chlorothene, acetone, petrol, etc...).

192.TE High-performance diagonal cutters

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Cutting edges designed to cleanly cut all types of wire : Piano wire, soft wire and modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.

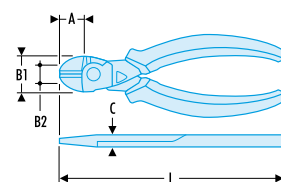
| 192 | Ø max mm 200 kg/mm ² | Ø mm Cu | A mm | B mm | C mm | L mm | ΔΔ g |
|----------|---------------------------------------|------------|---------|---------|---------|---------|---------|
| | | | | | | | |
| 192.14TE | 1,5 | 0,7 - 3,0 | 15,5 | 21,5 | 9,5 | 145 | 160 |
| 192.16TE | 2,0 | 0,7 - 4,0 | 18 | 24 | 10 | 160 | 200 |
| 192.18TE | 2,2 | 0,7 - 4,5 | 20 | 26 | 11 | 180 | 260 |
| 192.20TE | 2,5 | 0,7 - 5,0 | 22 | 28 | 11,5 | 200 | 320 |

**Electricians diagonal cutters****391.16TE**

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Snipe nose for confined spaces (electrical cabinets, wiring). Semi-flush cutting edges, designed to cleanly cut through all types of wire : Hard wires (max. 160 kg/mm²), thin copper wires, modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRc.

| 391 | 160 kg/mm ² | Ø mm Cu | B mm | A mm | C mm | L mm | ΔΔ g |
|----------|------------------------|------------|---------|---------|---------|---------|---------|
| | | | | | | | |
| 391.16TE | 1,6 | 0,7 - 3,5 | 19 | 21 | 9 | 165 | 190 |



► Half-round nose pliers

185-195.TE Long half-round nose pliers

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and steel wire (max 160 kg/mm²).

185 : Straight nose.

195 : 40° angled nose.



| | Ø mm | | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|----------|-----------|------------------------|-------------|---------|---------|---------|---------|---------|
| | Cu | 160 kg/mm ² | | | | | | |
| 185.20TE | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 75 | 18 | 9 | 200 | 192 |
| 195.20TE | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 69 | 18 | 9 | 200 | 192 |

► Half-round nose pliers

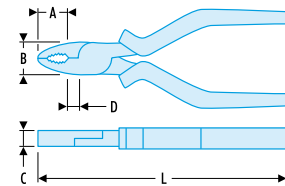
187.TE Combination pliers

► ISO 5746, DIN ISO 5746, NF ISO 5746.

- Cutting edges designed to cut all types of wire : Piano wire, soft wire and modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.



| | Ø max mm Fe wire 200 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|----------|---|---------|---------|---------|---------|---------|---------|
| 187.18TE | 1,8 | 36 | 23 | 10,0 | 13 | 185 | 225 |
| 187.20TE | 2,0 | 42 | 26 | 11,5 | 15 | 205 | 300 |



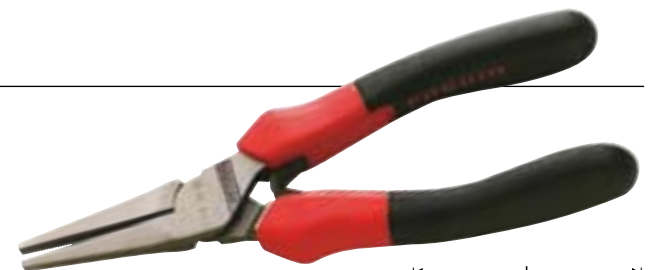
► Flat nose pliers

Flat-nose pliers

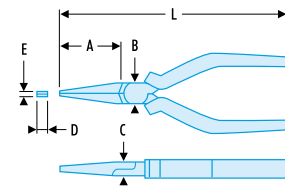
188.16TE

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Serrated jaws for a firm grip.



| | A mm | B mm | D x E mm | C mm | L mm | ΔΔ g |
|----------|---------|---------|-------------|---------|---------|---------|
| 188.16TE | 46 | 18 | 6,5 x 4,0 | 9 | 168 | 140 |

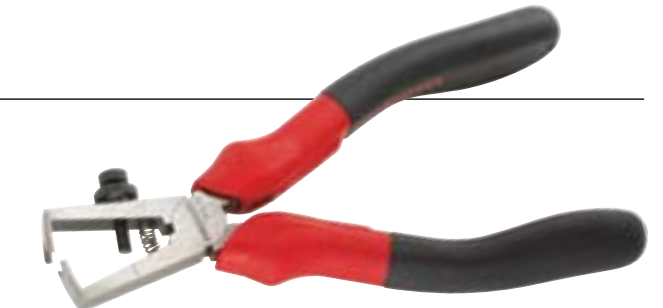


► Standard wire strippers

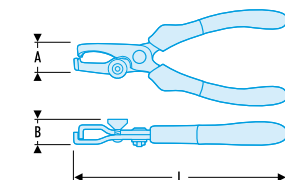
194.TE Wire stripper

194.17: Standard forged pliers.

- For single and multi-core wires 0.5 to 6 mm².
- Knurled adjustment screw with locknut.
- Metal return spring



| | ⊙ ⊗ mm ² | A mm | B mm | L mm | ΔΔ g |
|----------|------------------------|---------|---------|---------|---------|
| 194.17TE | 0,5 - 6 | 17 | 8,5 | 170 | 185 |



► Diagonal cutters

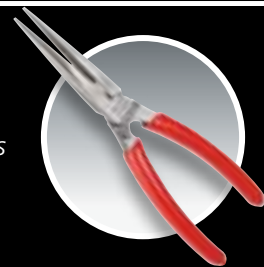
Série "G"

Varnished, polished pliers



PVC GRIPS

- Identical characteristics and specifications to series CPE and TE.

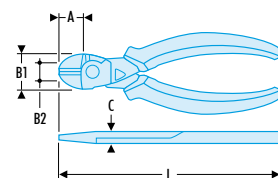
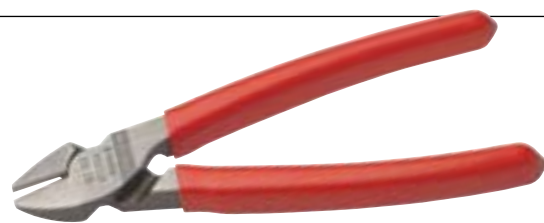


192.G High-performance diagonal cutters

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Cutting edges designed to cleanly cut all types of wire : Piano wire, soft wire and modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | Ø max mm 200 kg/mm ² | Ø mm Cu | A mm | B mm | C mm | L mm | ΔΔ g |
|---------|---------------------------------------|------------|---------|---------|---------|---------|---------|
| 192.14G | 1,5 | 0,7 - 3,0 | 15,5 | 21,5 | 9,5 | 145 | 130 |
| 192.16G | 2,0 | 0,7 - 4,0 | 18 | 24 | 10 | 160 | 170 |
| 192.18G | 2,2 | 0,7 - 4,5 | 20 | 26 | 11 | 180 | 230 |
| 192.20G | 2,5 | 0,7 - 5,0 | 22 | 28 | 11,5 | 200 | 290 |



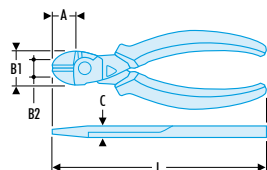
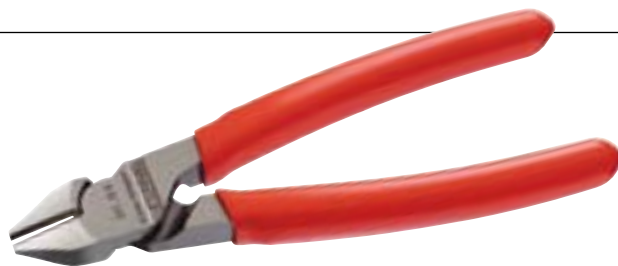
Electricians diagonal cutters

391.16G

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Snipe nose for confined spaces (electrical cabinets, wiring).
- Semi-flush cutting edges, designed to cleanly cut through all types of wire : Hard wires (max. 160 kg/mm²), thin copper wires, modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | 160 kg/mm ² | Ø mm Cu | A mm | B mm | C mm | L mm | ΔΔ g |
|---------|------------------------|------------|---------|---------|---------|---------|---------|
| 391.16G | 1,6 | 0,7 - 3,5 | 21 | 19 | 9 | 165 | 160 |



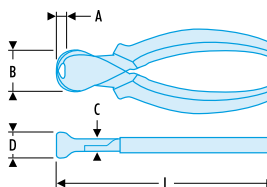
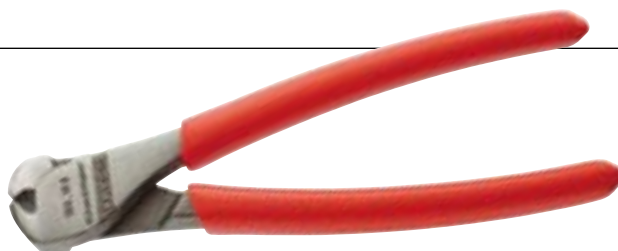
► End cutters

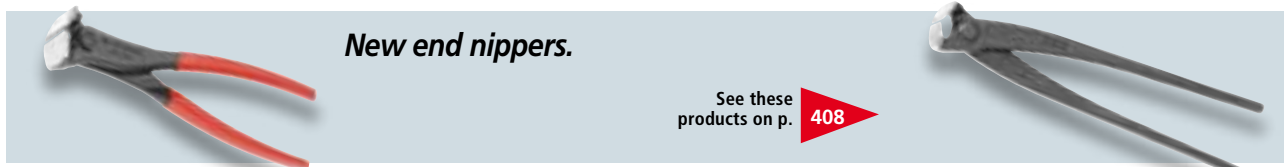
190.G High-performance end cutters

► ISO 5748, DIN ISO 5748, NF ISO 5748.

- Cutting edge designed to cleanly cut piano wire, hard and soft wire.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | Ø max mm 200 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|---------|------------------------------------|---------|---------|---------|---------|---------|---------|
| 190.16G | 1,6 | 6,5 | 28 | 11,5 | 23 | 160 | 170 |
| 190.20G | 2,0 | 7,5 | 31 | 13,5 | 29 | 200 | 310 |





► Half-round nose pliers

185 - 195.G Long half-round nose pliers

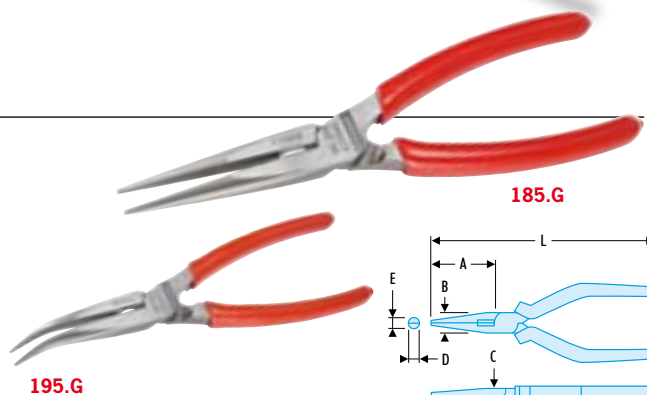
► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips with a pipe-grip.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).

185 : Straight nose.

195 : 40° angled nose.

| | Ø max mm Cu | Ø maxi mm 160 kg/mm ² | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|----------------|----------------|-------------------------------------|-------------|---------|---------|---------|---------|---------|
| 185.20G | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 75 | 18 | 9 | 200 | 192 |
| 195.20G | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 69 | 18 | 9 | 200 | 192 |



193 Short half-round nose pliers

193.16EG

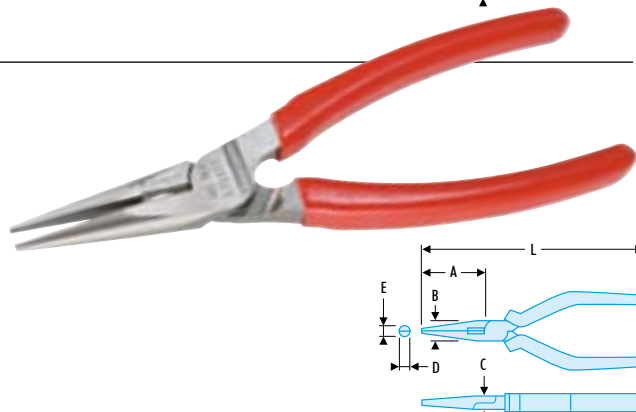
► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).

193 : Straight nose.

- (max 160 Kg/mm²).

| | Ø max mm Cu | Ø maxi mm 160 kg/mm ² | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|----------------|----------------|-------------------------------------|-------------|---------|---------|---------|---------|---------|
| 193.16G | 0,7 - 3,0 | 1,6 | 2,5 x 3,0 | 50 | 17 | 9 | 160 | 177 |



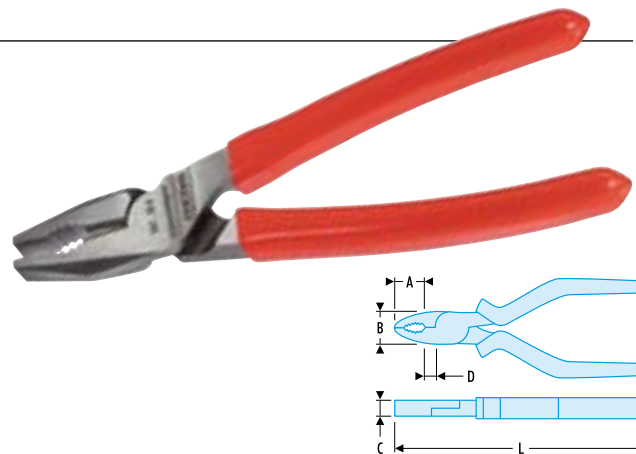
► Combination pliers

187.G Combination pliers

► ISO 5746, DIN ISO 5746, NF ISO 5746.

- Cutting edges designed to cut all types of wire : Piano wire, soft wire and modern materials.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

| | Ø max mm Fe wire 200 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|----------------|---|---------|---------|---------|---------|---------|---------|
| 187.16G | 1,6 | 34 | 21 | 9,5 | 12 | 165 | 195 |
| 187.18G | 1,8 | 36 | 23 | 10,0 | 13 | 185 | 225 |
| 187.20G | 2,0 | 42 | 26 | 11,5 | 15 | 205 | 300 |



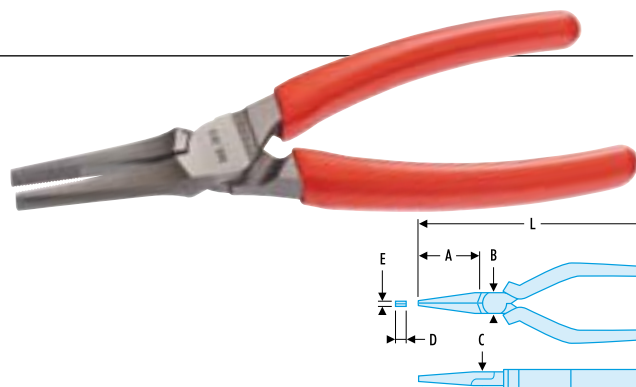
► Flat nose pliers

188.G Flat nose pliers

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- Serrated jaws for a firm grip.

| | A mm | B mm | C mm | D x E mm | L mm | ΔΔ g |
|----------------|---------|---------|---------|-------------|---------|---------|
| 188.16G | 46 | 18 | 9 | 6,5 x 4,0 | 168 | 140 |
| 188.20G | 75 | 18 | 9 | 6,5 x 4,0 | 200 | 200 |



► Diagonal cutters



"VE" series 1,000 Volt insulated pliers

1000VOLTS
EN 60900



Spatula-shaped pressure area,
20% more slip-resistant

Guard

- Firm, comfortable grip for pushing or pulling pressure.

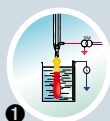
**Return spring for added**

- 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)

- 1-10000 V immersion test
- 2-5000 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****Certified electrical safety**

- 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.

**Safety****Prevent damage to insulation from :**

- Heat (-20 to +70°C working temperature)
- Chemicals.
- Cuts or perforations

Visually check the insulation before use.

Wear glasses and gloves.

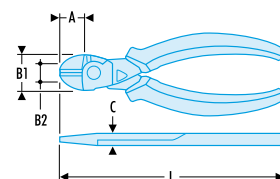
192.VE 1,000 Volt insulated high-performance diagonal cutters

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Cutting edges designed to cleanly cut all types of wire : Piano wire, soft wire and modern materials, etc.
 - Long lever arm, offset pivot for minimum cutting effort.
 - High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- VDE tested.



| | Ø max mm 200 kg/mm ² | ≤ Ø mm Cu | A mm | B mm | C mm | L mm | ΔΔ g |
|-----------------|---------------------------------------|--------------|---------|---------|---------|---------|---------|
| 192.14VE | 1,5 | 0,7 - 3,0 | 15,5 | 21,5 | 9,5 | 145 | 160 |
| 192.16VE | 2,0 | 0,7 - 4,0 | 18 | 24 | 10 | 160 | 200 |
| 192.18VE | 2,2 | 0,7 - 4,5 | 20 | 26 | 11 | 180 | 260 |




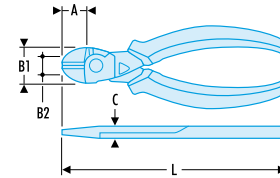
1,000 Volt VE series pliers

1,000 Volt insulated electricians diagonal cutters

391.16VE

▷ ISO 5749, DIN ISO 5749, NF ISO 5749.

- Snipe nose for confined spaces (electrical cabinets, wiring). Semi-flush cutting edges, designed to cleanly cut through all types of wire : Hard wires (max. 160 kg/mm²), thin copper wires, modern materials.
 - Long lever arm, offset pivot for minimum cutting effort.
 - High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- VDE tested. 




| | 160 kg/mm ² | Cu | B | A | C | L | ΔΔ |
|----------|------------------------|-----------|----|----|----|-----|-----|
| | mm | mm | mm | mm | mm | mm | g |
| 391.16VE | 1,6 | 0,7 - 3,5 | 19 | 21 | 9 | 165 | 190 |

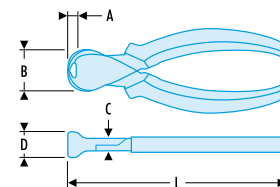
► End cutters

1,000 Volt insulated high-performance end cutters

190.16VE

▷ ISO 5748 - DIN ISO 5748, NF ISO 5748.

- Cutting edge designed to cleanly cut piano wire, hard and soft wire.
 - Long lever arm, offset pivot for minimum cutting effort.
 - High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.
- VDE tested. 



| | 200 kg/mm ² | A | B | C | D | L | ΔΔ |
|----------|------------------------|-----|----|------|----|-----|-----|
| | mm | mm | mm | mm | mm | mm | g |
| 190.16VE | 1,6 | 6,5 | 28 | 11,5 | 23 | 160 | 200 |

► Half-round nose pliers

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

▷ ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).

185 : Straight nose.

195 : 40° angled nose.


VDE tested. 



185.VE



195.VE

|  | Ø mm | | D x E | A | B | C | L | ΔΔ |
|---|-----------|------------|-----------|----|----|----|-----|-----|
| | Cu | 160 kg/mm² | mm | mm | mm | mm | mm | g |
| 185.20VE | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 75 | 18 | 9 | 200 | 192 |
| 195.20VE | 0,7 - 3,5 | 1,6 | 2,9 x 3,6 | 69 | 18 | 9 | 200 | 192 |



193 - 195.VE 1,000 Volt insulated short half-round nose pliers

▷ ISO 5745, DIN ISO 5745, NF ISO 5745.

- Narrow, finely serrated tips.
- Side cutter for copper and hard steel wire (max 160 kg/mm²).

193 : Straight nose.

195 : 40° angled nose.

VDE tested. 

| E | Ø mm | | D x E mm | A mm | B mm | C mm | L mm | ΔΔ g |
|----------|-----------|------------------------|-------------|---------|---------|---------|---------|---------|
| | Cu | 160 kg/mm ² | | | | | | |
| 193.16VE | 0,7 - 3,0 | 1,6 | 2,5 x 3,0 | 50 | 17 | 9 | 160 | 177 |
| 195.16VE | 0,7 - 3,0 | 1,6 | 2,5 x 3,0 | 50 | 17 | 9 | 160 | 177 |

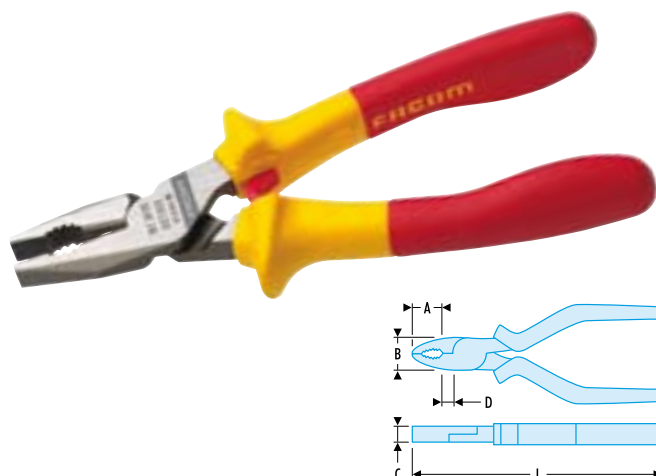
**► Combination pliers****187.VE 1,000 Volt insulated combination pliers**

▷ ISO 5746, NF ISO 5746.

- Cutting edges designed to cut all types of wire : Piano wire, soft wire and modern materials, etc.
- Long lever arm, offset pivot for minimum cutting effort.
- High durability Chrome-Molybdenum-Vanadium steel, very hard cutting edges 61/63 HRC.

VDE tested. 

| E | Ø max mm Fe wire 200 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|----------|---|---------|---------|---------|---------|---------|---------|
| | | | | | | | |
| 187.16VE | 1,6 | 34 | 21 | 9,5 | 12 | 165 | 195 |
| 187.18VE | 1,8 | 36 | 23 | 10,0 | 13 | 185 | 225 |

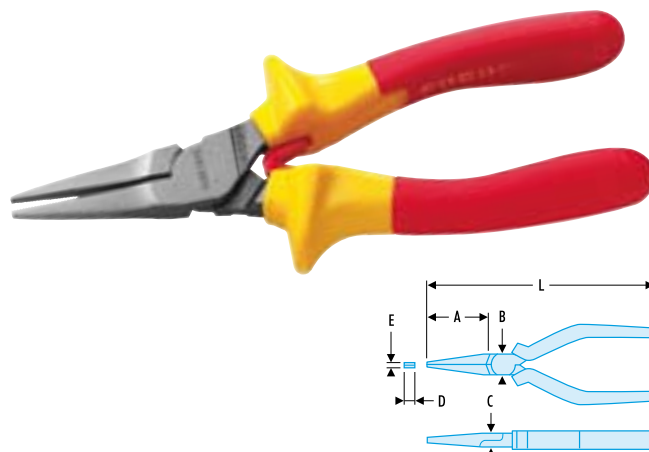
**► Flat nose pliers****188.VE 1,000 Volt insulated flat nose pliers**

▷ ISO 5745, DIN ISO 5745, NF ISO 5745.

- Serrated jaws for a firm grip.

VDE tested. 

| E | A mm | B mm | C mm | D x E mm | L mm | ΔΔ g |
|----------|---------|---------|---------|-------------|---------|---------|
| | | | | | | |
| 188.16VE | 46 | 18 | 9 | 6,5 x 4,0 | 168 | 140 |
| 188.20VE | 75 | 18 | 9 | 6,5 x 4,0 | 200 | 200 |



1,000 Volt VE series pliers

► Round-nose pliers


1,000 Volt insulated round-nose pliers

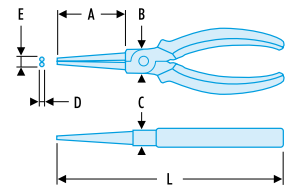
189.17VE

► ISO 5745, DIN ISO 5745, NF ISO 5745.

- For shaping loops, bends or rings.
- Finely serrated jaws for positive grip.
- Ø at end of each tip : 2 mm.

VDE tested. 

|  | A | B | C | D x E | L | ΔΔ |
|--|----|----|----|-------|-----|-----|
| | mm | mm | mm | mm | mm | g |
| 189.17VE | 41 | 18 | 9 | 2 x 4 | 170 | 135 |



► Standard wire strippers

1,000 Volt insulated wire stripper


194.17VE

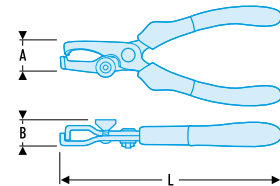
► EN 60900.

- For single and multi-core wires 0.5 to 6 mm².

194.17 : Standard forged pliers.

- Knurled adjustment screw with locknut.
- Metal return spring.

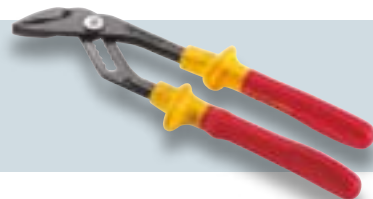
|  | ⊙ ⊗ | A | B | L | ΔΔ |
|--|---------|----|-----|-----|-----|
| | mm² | mm | mm | mm | g |
| 194.17VE | 0,5 - 6 | 17 | 8,5 | 170 | 185 |



Multigrip pliers 180.VE - Riveted pivot

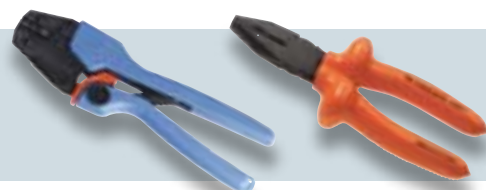


For the 180 VE plier range, see p. 374



VSE insulated crimping pliers, wire strippers, etc.

See the electricity section, p. 622



► High-performance piano wire circlip® pliers



High-performance circlip® pliers

INCREASED POWER AND DURABILITY

High-strength calibrated piano wire tips

- Invented by FACOM : reinforced piano wire* tips : 15% stronger than the best on the market.
- Angled tips for better retention of circlips®.

HIGH-STRENGTH TIPS

Capacity markings.
For easy tool selection.

Opening spring** for.
Smooth operation.

Smooth-action joint for.
Reduced fatigue.

Forged non-slip pattern for.
A firm non-slip grip.

* Except pliers E.9, standard tips.
** Except size 32.

INVENTED BY
FACOM



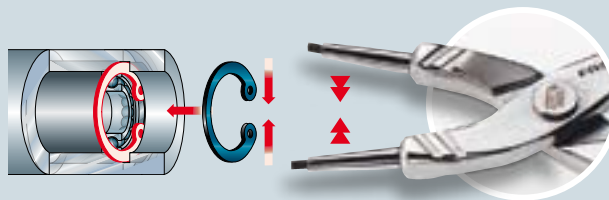
Inside circlip® pliers

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



Safety

Eye protection is
recommended



179E Straight-tip "compression" pliers

► DIN 5256, NF E 73-130, ASME B 107.19.

- For inside circlips®.
- 179E.15 /19/24 : with reinforced tips.




| Model | Tip mm | Capacity mm Ø min - max | Length mm | Weight g |
|---------|-----------|-------------------------------|--------------|-------------|
| 179E.9 | 0,9 | 8 - 11 | 140 | 105 |
| 179E.13 | 1,3 | 12 - 25 | 140 | 105 |
| 179E.15 | 1,8 | 18 - 30 | 140 | 105 |
| 179E.18 | 1,8 | 18 - 60 | 185 | 175 |
| 179E.19 | 2,3 | 31 - 60 | 180 | 175 |
| 179E.23 | 2,3 | 31 - 100 | 215 | 260 |
| 179E.24 | 2,8 | 65 - 100 | 215 | 260 |
| 179E.32 | 3,2 | 85 - 200 | 310 | 395 |



169E 45°-tip "compression" pliers

▷ NF E 73-130, ASME B.107.19.

- For inside circlips®.




| |  |  mm |  mm Ø min - max | Length mm | $\Delta\Delta$ g |
|----------------|--|--|---|--------------|---------------------|
| 169E.9 | | 0,9 | 8 - 11 | 140 | 110 |
| 169E.13 | | 1,3 | 12 - 25 | 140 | 110 |
| 169E.18 | | 1,8 | 18 - 60 | 180 | 150 |
| 169E.23 | | 2,3 | 31 - 100 | 215 | 210 |



199E 90°-tip "compression" pliers

▷ DIN 5256, NF E 73-130, ASME B 107.19.

- For inside circlips®.
- 199E.15 : with reinforced tips.

| |  |  mm |  mm Ø min - max | Length mm | $\Delta\Delta$ g |
|----------------|--|--|---|--------------|---------------------|
| 199E.9 | | 0,9 | 8 - 11 | 130 | 105 |
| 199E.13 | | 1,3 | 12 - 25 | 130 | 105 |
| 199E.15 | | 1,8 | 18 - 30 | 130 | 105 |
| 199E.18 | | 1,8 | 18 - 60 | 170 | 175 |
| 199E.23 | | 2,3 | 31 - 100 | 205 | 260 |
| 199E.32 | | 3,2 | 85 - 200 | 290 | 395 |



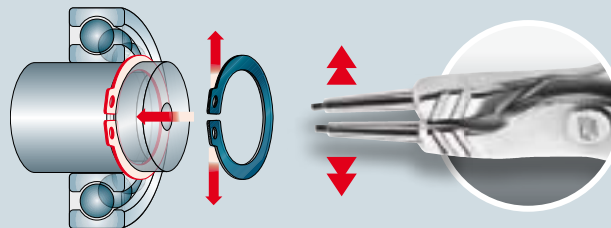
Outside circlip® pliers

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



Safety




Eye protection is recommended



177E Straight-tip "expansion" pliers

▷ DIN 5254, NF E 73-130, ASME B 107.19.

- For outside circlips®.
- 177E.15/19/24 : with reinforced tips.




| |  |  mm |  mm Ø min - max | Length mm | $\Delta\Delta$ g |
|----------------|--|--|---|--------------|---------------------|
| 177E.9 | | 0,9 | 3 - 10 | 150 | 105 |
| 177E.13 | | 1,3 | 10 - 25 | 150 | 105 |
| 177E.15 | | 1,8 | 18 - 30 | 150 | 105 |
| 177E.18 | | 1,8 | 18 - 60 | 180 | 175 |
| 177E.19 | | 2,3 | 32 - 63 | 190 | 120 |
| 177E.23 | | 2,3 | 32 - 100 | 215 | 260 |
| 177E.24 | | 2,8 | 65 - 100 | 215 | 200 |
| 177E.32 | | 3,2 | 85 - 200 | 310 | 395 |



167E 45°-tip "expansion" pliers

▷ NF E 73-130, ASME B 107.19.

- For outside circlips®.

| |  |  mm |  mm Ø min - max | Length mm | $\Delta\Delta$ g |
|----------------|--|--|---|--------------|---------------------|
| 167E.9 | | 0,9 | 3 - 10 | 145 | 105 |
| 167E.13 | | 1,3 | 10 - 25 | 145 | 105 |
| 167E.18 | | 1,8 | 18 - 60 | 175 | 175 |
| 167E.23 | | 2,3 | 32 - 100 | 215 | 260 |



197E 90°-tip "expansion" pliers

▷ DIN 5254, NF E 73-130, ASME B 107.19.

- For outside circlips®.

| Ref | mm | mm Ø min - max | Length mm | ΔΔ g |
|---------|-----|-------------------|--------------|---------|
| 197E.9 | 0,9 | 3 - 10 | 140 | 105 |
| 197E.13 | 1,3 | 10 - 25 | 140 | 105 |
| 197E.18 | 1,8 | 18 - 60 | 170 | 175 |
| 197E.23 | 2,3 | 32 - 100 | 200 | 260 |
| 197E.32 | 3,2 | 85 - 200 | 290 | 395 |



4-piece circlip® plier module

MOD.PC1PB

- Comprising :
 - Inside circlip® pliers 177E.18 (straight tip) ,and 197E.18 (90° tip).
 - Inside circlip® pliers 179E.18 straight tip ,and 199E.18 (90° tip).
 - Tray PL.332.
- ΔΔ : 930 g.



▶ Machined-nose pliers



Machined-nose pliers

- Inverted cone tips for secure retention of circlips®.
- Special heat-treated steel inserts for optimum strength.
- Spring-assisted opening.
- Varnished finish, PVC sheathing.



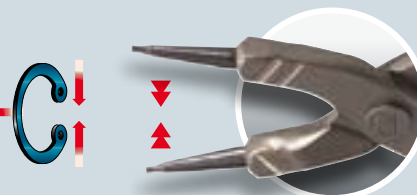
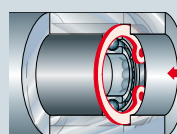
Inside circlip® pliers

- Straight, 45° or 90° tip profiles.
- Varnished finish, PVC sheathing.



Safety

Eye protection is recommended

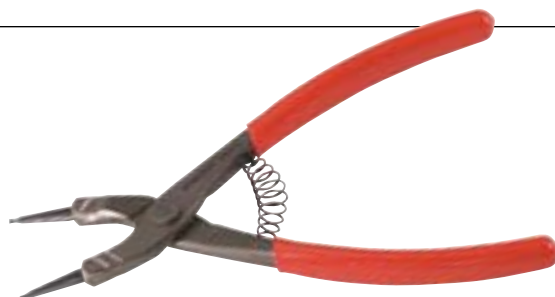


179G Straight-tip "compression" pliers

▷ DIN 5256, NF E 73-130, ASME B 107.19.

- For inside circlips®.



| Ref | mm | mm Ø min - max | Length mm | ΔΔ g |
|---------|-----|-------------------|--------------|---------|
| 179G.9 | 0,9 | 8 - 11 | 140 | 120 |
| 179G.13 | 1,3 | 12 - 25 | 145 | 120 |
| 179G.18 | 1,8 | 18 - 60 | 185 | 190 |
| 179G.23 | 2,3 | 31 - 100 | 215 | 275 |



169G 45°-tip "compression" pliers

▷ NF E 73-130, ASME B.107.19.

• For inside circlips®.



| |  |  | mm Ø min - max | Length mm | ΔΔ g |
|----------------|--|---|-------------------|--------------|---------|
| 169G.9 | | 0,9 | 8 - 11 | 140 | 120 |
| 169G.13 | | 1,3 | 12 - 25 | 140 | 120 |
| 169G.18 | | 1,8 | 18 - 60 | 180 | 190 |
| 169G.23 | | 2,3 | 31 - 100 | 215 | 275 |



199G 90°-tip "compression" pliers

▷ DIN 5256, NF E 73-130, ASME B 107.19.

• For inside circlips®.

| |  |  | mm Ø min - max | Length mm | ΔΔ g |
|----------------|--|---|-------------------|--------------|---------|
| 199G.9 | | 0,9 | 8 - 11 | 130 | 120 |
| 199G.13 | | 1,3 | 12 - 25 | 130 | 120 |
| 199G.18 | | 1,8 | 18 - 60 | 170 | 190 |
| 199G.23 | | 2,3 | 31 - 100 | 205 | 275 |



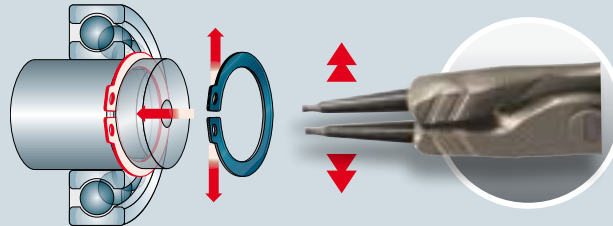
Outside circlip® pliers

- Straight, 45° or 90° tip profiles.
- Varnished finish, PVC sheathing.



Safety



Eye protection is recommended



177G Straight-tip "expansion" pliers

▷ DIN 5254, NF E 73-130, ASME B 107.19.

• For inside circlips®.



| |  |  | mm Ø min - max | Length mm | ΔΔ g |
|----------------|--|---|-------------------|--------------|---------|
| 177G.9 | | 0,9 | 8 - 11 | 150 | 120 |
| 177G.13 | | 1,3 | 10 - 25 | 150 | 120 |
| 177G.18 | | 1,8 | 18 - 60 | 180 | 190 |
| 177G.23 | | 2,3 | 32 - 100 | 215 | 275 |



167G 45°-tip "expansion" pliers

▷ NF E 73-130, ASME B 107.19.

• For inside circlips®.



| |  |  | mm Ø min - max | Length mm | ΔΔ g |
|----------------|--|---|-------------------|--------------|---------|
| 167G.9 | | 0,9 | 3 - 10 | 145 | 120 |
| 167G.13 | | 1,3 | 10 - 25 | 145 | 120 |
| 167G.18 | | 1,8 | 18 - 60 | 175 | 190 |
| 167G.23 | | 2,3 | 32 - 100 | 210 | 275 |



197G 90°-tip "expansion" pliers

▷ DIN 5254, NF E 73-130, ASME B 107.19.

• For inside circlips®.

| |  |  | mm Ø min - max | Length mm | ΔΔ g |
|----------------|--|---|-------------------|--------------|---------|
| 197G.9 | | 0,9 | 3 - 10 | 140 | 120 |
| 197G.13 | | 1,3 | 10 - 25 | 140 | 120 |
| 197G.18 | | 1,8 | 18 - 60 | 170 | 190 |
| 197G.23 | | 2,3 | 32 - 100 | 200 | 275 |



4-piece circlip® plier module®

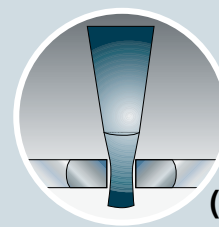
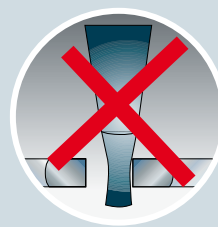
MOD.PC2PB

- Comprising :
 - Inside circlip® pliers 177G.18 (straight tip) ,and 197G.18 (90° tip).
 - Inside circlip® pliers 179G.18 straight tip ,and 199G.18 (90° tip).
- Tray PL.332.
- ΔΔ : 930 g.



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®.



► Large-capacity pliers

479-499 Rack-type "compression" pliers for inside circlips®

- Interchangeable tips.
 - Rack holds circlips® compressed for easy fitting and removal.
 - Chrome finish, red PVC grips.
- 479.32 : straight tips.
499.32 : 45° tips.

| | Tips | mm | mm Ø min - max | Length max | ΔΔ g |
|---------------|------|-----|-------------------|---------------|---------|
| 479.32 | | 3,2 | 85 - 200 | 310 | 480 |
| 499.32 | | 3,2 | 85 - 200 | 310 | 480 |



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

- Similar overall design to 479-499.
- 477.32 : straight tips.
497.32 : 45° tips.

| | Tips | mm | mm Ø min - max | Length mm | ΔΔ g |
|---------------|------|-----|-------------------|--------------|---------|
| 477.32 | | 3,2 | 85 - 200 | 310 | 480 |
| 497.32 | | 3,2 | 85 - 200 | 310 | 480 |



490.SE Spare tips for pliers 477 to 499

- Each reference includes 2 tips and 2 screws.

| | Tips | mm | mm Ø min - max |
|-------------------|------|-----|-------------------|
| 490.SE28-1 | | 2,8 | 65 - 120 |
| 490.SE32-1 | | 3,2 | 85 - 200 |
| 490.SE38-1 | | 3,8 | 120 - 200 |
| 490.SE28-2 | | 2,8 | 65 - 120 |
| 490.SE32-2 | | 3,2 | 85 - 200 |
| 490.SE38-2 | | 3,8 | 120 - 200 |



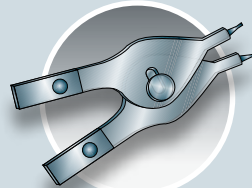
► Reversible pliers



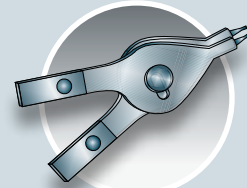
Reversible circlip® pliers

REVERSIBLE CIRCLIP® PLIERS 475A

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



Circlip 1 for outside Circlips®.



Position 2 for inside Circlips®

475A Reversible inside and outside circlip® pliers

- Single tool for both inside and outside circlips®
- Burnished finish, PVC grips.

| | mm | mm Ø min - max | mm Ø min - max | Length mm | ΔΔ g |
|----------------|-----|-------------------|-------------------|--------------|---------|
| 475A.15 | 1,0 | 10 - 30 | 10 - 18 | 150 | 75 |
| 475A.20 | 1,8 | 20 - 48 | 19 - 45 | 200 | 155 |



Set of two reversible pliers

475A.J1

- Comprising :
 - 475A.15 circlip® Ø 10 to 30 mm inside circlips® and Ø 10 to 18 mm.
 - 475A.20 circlip® Ø 20 to 48 mm inside circlips® and Ø 19 to 45 mm.
- Supplied in a case 245 x 135 x 35 mm.
- ΔΔ : 430 g.



► Removable tip pliers

Inside and outside circlip® pliers

470

- Interchangeable tips for :
 - Ø 8 to 63 mm for outside circlips®.
 - Ø 3 to 63 mm for outside circlips®.
- Comprising :
 - 469.PA Inside-circlip® pliers.
 - 467.PA Outside circlip® pliers.
 - 82.2.5 key.
 - Set of 18 removable tips.
 - Supplied in a plastic case.
- ΔΔ : 1.5 kg.



| | Description |
|------------------|---------------------|
| 467.01AJ2 | Set of spare screws |

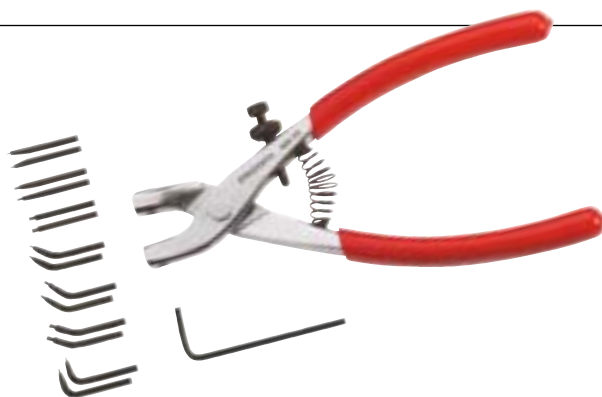


Inside circlip® pliers

469

- Interchangeable tips for Ø 8 to 63 mm.
 - Screw-stop adjustment.
 - Spring-assisted opening.
 - Chrome finish, red PVC grips.
 - Supplied in a wallet with a key and set of tips E1 - E2 - E3 - E5 - E6 - E8 - E9.
- ΔΔ : 160 g.

| | Description |
|------------------|---------------------|
| 467.01AJ2 | Set of spare screws |

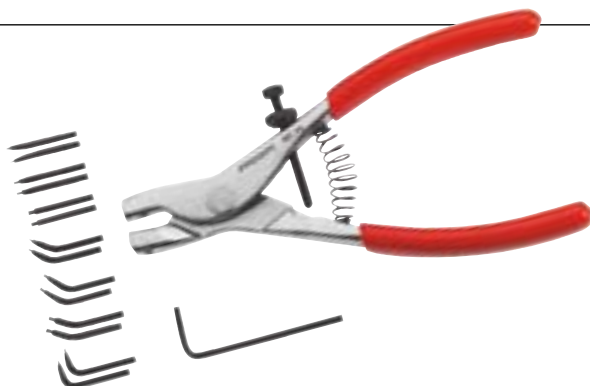


Outside circlip® pliers.

467

- Interchangeable tips for Ø 3 to 63 mm.
 - Screw-stop adjustment.
 - Spring-assisted opening.
 - Chrome finish, red PVC grips.
 - Supplied in a wallet with a key and set of tips E1 - E2 - E3 - E5 - E6 - E8 - E9.
- ΔΔ : 160 g.

| | Description |
|------------------|---------------------|
| 467.01AJ2 | Set of spare screws |



470E Spare tips for circlip® pliers 467 and 469

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

| | Tips | mm | mm Ø min - max | mm Ø min - max |
|----------------|------|-----|-------------------|-------------------|
| 470.E1 | | 0,9 | 8 - 12 | 3 - 10 |
| 470.E2 | | 0,9 | 8 - 12 | 3 - 10 |
| 470.E3 | | 0,9 | 8 - 12 | 3 - 10 |
| 470.E5 | | 1,3 | 12 - 25 | 10 - 25 |
| 470.E6 | | 1,3 | 12 - 25 | 10 - 25 |
| 470.E7 | | 1,3 | 12 - 25 | 10 - 25 |
| 470.E8 | | 1,8 | 19 - 63 | 19 - 63 |
| 470.E9 | | 1,8 | 19 - 63 | 19 - 63 |
| 470.E10 | | 1,8 | 19 - 63 | 19 - 63 |



▶ Snap-ring pliers

411A Outside snap-ring pliers

- Special tips for snap-rings and spring clips.
- Chrome finish, PVC grips.

| | mm Ø min - max | Length mm | ΔΔ g |
|----------------|-------------------|--------------|---------|
| 411A.17 | 15 - 62 | 150 | 190 |
| 411A.20 | 60 - 160 | 190 | 275 |

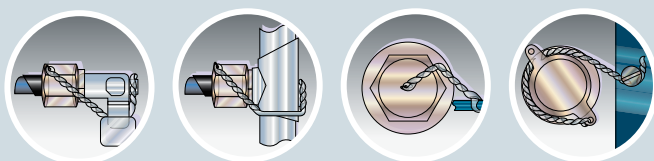




Facom locking-wire pliers

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

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



An extensive range

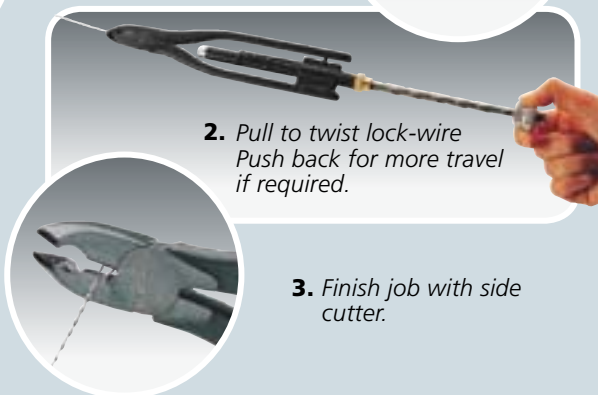
- Compact model for locking fasteners standard pliers cannot reach.
- Automatic-reset model for simplicity and time-saving.
- Reversible model for working in either direction.
- An extensive range



1. Both wire ends gripped in nose.



2. Pull to twist lock-wire
Push back for more travel if required.



3. Finish job with side cutter.

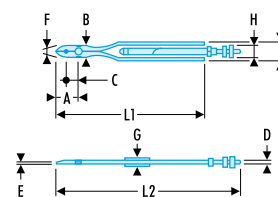


Locking-wire pliers

Short locking-wire pliers (8")

- 445.8 : standard model. $\Delta\Delta$ 245 g.
445.8R : "automatic" model. $\Delta\Delta$ 245 g.
445.8DS : reversible model. $\Delta\Delta$ 260 g.
• For stainless wire Ø 1 mm.

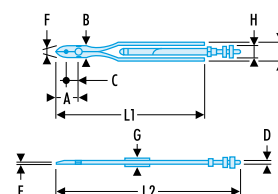
| | F mm | G mm | A mm | B mm | C mm | D mm | E mm | H mm | Ø Stain- less max mm | I mm | L1 mm | L2 mm | $\Delta\Delta$ g |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------------------|---------|----------|----------|---------------------|
| 445.8 | 3 | 15 | 20 | 15 | 7 | 10,5 | 2,5 | 22 | 1 | 37 | 170 | 215 | 245 |
| 445.8R | 3 | 15 | 20 | 15 | 7 | 10,5 | 2,5 | 22 | 1 | 37 | 170 | 215 | 245 |
| 445.8DS | 3 | 23 | 21,5 | 15 | 7 | 10,5 | 2,5 | 31,5 | 1 | 37 | 170 | 215 | 260 |



Locking-wire pliers (10")

- 445.10 : standard model.
445.10R : "automatic" model
445.10DS : reversible model.

| | F mm | G mm | E mm | A mm | B mm | C mm | D mm | H mm | I mm | Ø Stain- less max mm | L1 mm | L2 mm | $\Delta\Delta$ g |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------------------|----------|----------|---------------------|
| 445.10 | 3 | 15,5 | 2,5 | 30 | 19 | 11 | 11,5 | 25 | 40 | 1 | 230 | 360 | 395 |
| 445.10R | 3 | 15,5 | 2,5 | 30 | 19 | 11 | 11,5 | 25 | 40 | 1 | 230 | 360 | 400 |
| 445.10DS | 3 | 15,5 | 2,5 | 30 | 20 | 11 | 11,5 | 31,5 | 44 | 1 | 230 | 360 | 445 |



► "T5" lock-grip pliers



Ergonomic and safe lock-grip pliers



T5

**SAFE, PRACTICAL AND
ERGONOMIC**

Articulated upper jaw
for a clearer view
of workpieces.

Thumbscrew
jaw
adjustment.

Totally enclosed mecha-
nism
and screw.

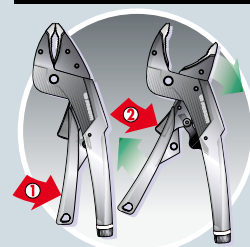
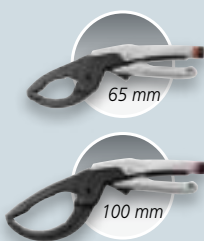
Smooth-action
release
trigger.

Fixed lower jaw for resting on a workbench
or clamping in a vice.

Multipurpose forged
and hardened jaws.
Capacity 40 mm
65 mm 100 mm

**Smooth, controlled
release.**

ONE-HAND OPERATION



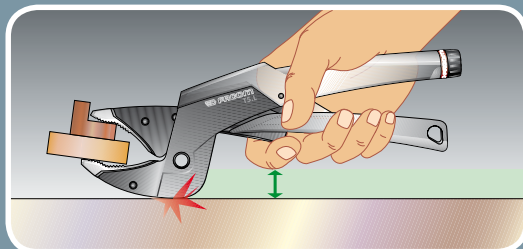
T5 : Increased safety.

No shocks to the hand

- The trigger system eliminates shocks to the hand on release.

Hand protection

- Good finger clearance between lever and work surface.



T5 : More practical and ergonomic.

One-hand operation

- The pliers clamp and release with one hand even when very tight.
- Leaves the other hand free to hold components.

Controlled release

- The trigger system ensures progressive and controlled release.
- T5 pliers maintain pressure and components remain assembled between the jaws during unclamping.

Ergonomic

- Ergonomic sheathed handles and demultiplication reduces fatigue.

Lock-grip pliers

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.

| | Dimensions mm | Opening maxi mm | ΔΔ g |
|----------------|------------------|--------------------|---------|
| T5.L | 250 x 75 x 22 | Ø 40 mm | 631 |
| T5.L65 | 290 x 80 x 22 | Ø 65 mm | 819 |
| T5.L100 | 320 x 100 x 22 | Ø 100 mm | 943 |



T5.L



T5.L65



T5.L100



Plastic-sheathed trigger-release lock-grip pliers

T5.1L

- 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.
- ΔΔ : 565 g.





"Original 500" lock-grip pliers

LARGE CAPACITY LOCKS ON TO ANY SHAPE



Round up to 135 mm



Hexagonal up to 125 mm



Angle section up to 70 mm



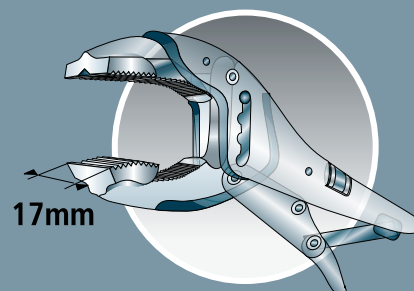
"ORIGINAL 500" lock-grip pliers feature the efficient slip-joint developed by Facom.

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

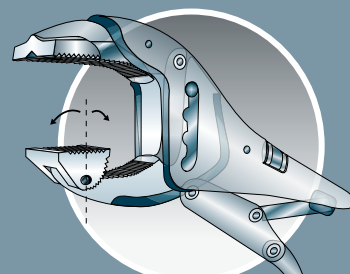


Jaws engineered for secure grip.

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

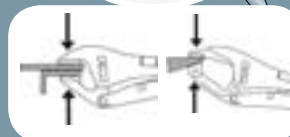


17mm



Hinged tip versions.

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

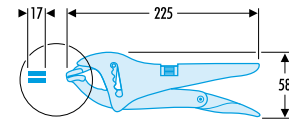
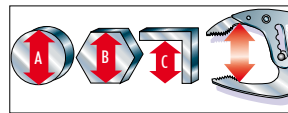


► Large-capacity lock-grip pliers

Short-nose pliers

500

- 4-position slip joint system.
 - Chrome finish.
- ΔΔ : 540 g.

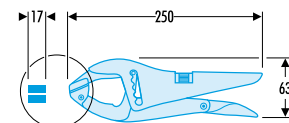


501 - 506 Long-nose pliers

- 501 :
 - 4-position slip joint system.
 - Chrome finish.

ΔΔ : 620 g.
- 506 - Type 501 with hinged tip.
 - The hinged jaw tip adapts to any grip configuration.
 - 4-position slip joint system.

ΔΔ : 640 g.

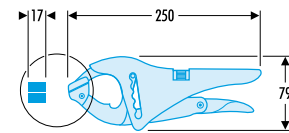
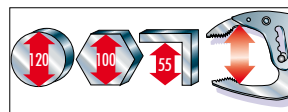
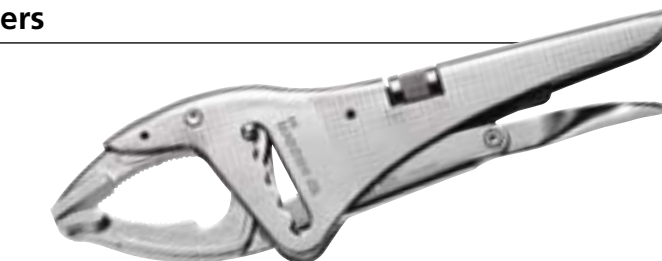


511 - 516 5-position slip joint long-nose pliers

- 511 :
 - 5-position slip joint for increased capacity.
 - Chrome finish.

ΔΔ : 680 g.
- 516 - Type 511 with hinged tip.
 - The hinged jaw tip adapts to any grip configuration.
 - 5-position slip joint system.

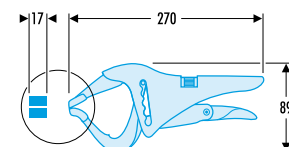
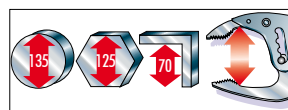
ΔΔ : 695 g.

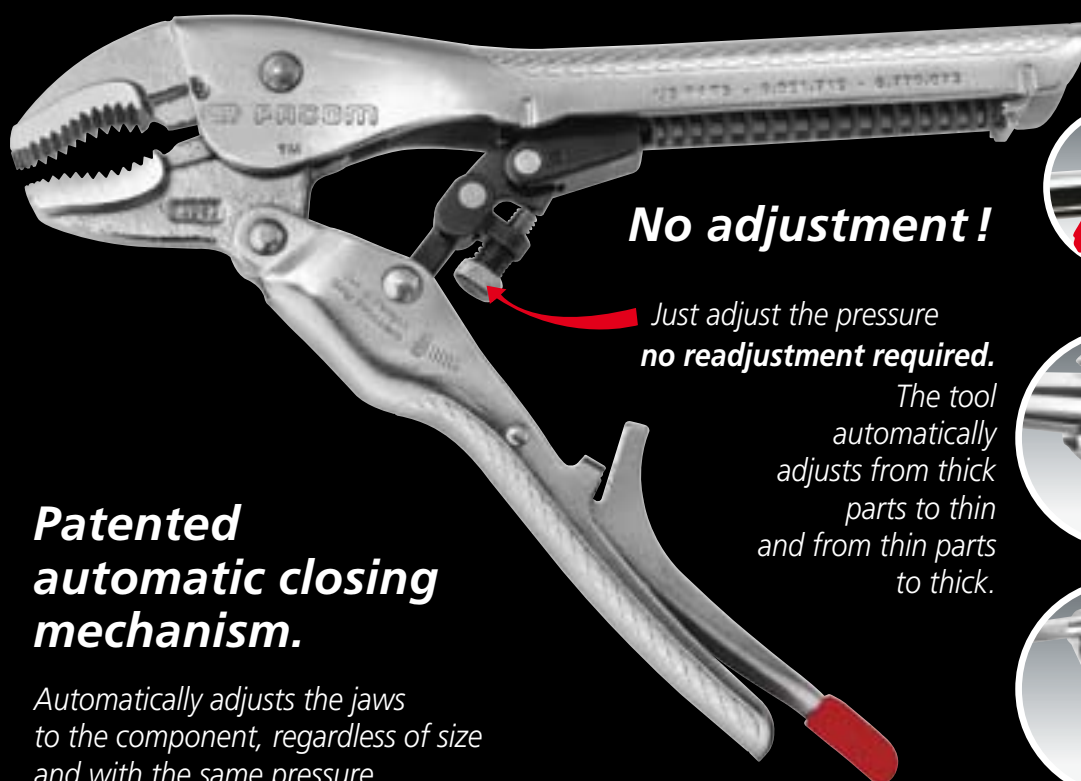


5-position slip joint large-capacity pliers

505

- 5-position slip joint, deep jaw.
 - Chrome finish.
- ΔΔ : 720 g.



New**SERIES 580 : Automatic lock-grip pliers***Ideal for saving time and for production work.***No adjustment !***Just adjust the pressure
no readjustment required.**The tool
automatically
adjusts from thick
parts to thin
and from thin parts
to thick.***Patented
automatic closing
mechanism.***Automatically adjusts the jaws
to the component, regardless of size
and with the same pressure***► Automatic lock-grip pliers****580 Multi-purpose angle-nose lock-grip pliers**

- Suitable for industrial and automotive production and maintenance applications.
- Forged in Chrome Molybdenum steel with treated jaws for longer working life.
- Non-slip chequered handle.
- One-hand unlocking by internal opening lever.
- Chrome finish, burnished mechanism (patented).

| | L x H mm | A mm | B mm | C mm | ΔΔ g |
|---------------|-------------|---------|---------|---------|---------|
| 580.6 | 150 x 45 | 30 | 21 | 8 | 235 |
| 580.10 | 250 x 63 | 38 | 30 | 12 | 642 |

**Long-nose lock-grip pliers****582.7**

- For holding, placing or removing components where access is difficult.
- Tips designed for holding flat or circular sections.
- Forged in Chrome Molybdenum steel with treated jaws for longer working life.
- Non-slip chequered handle.
- One-hand unlocking by internal opening lever.
- Chrome finish, burnished mechanism (patented).

| | L x H mm | A mm | B mm | C mm | ΔΔ g |
|--------------|-------------|---------|---------|---------|---------|
| 582.7 | 175 x 45 | 45 | 61 | 5,5 | 256 |



► Compact lock-grip pliers



507 series compact lock-grip pliers



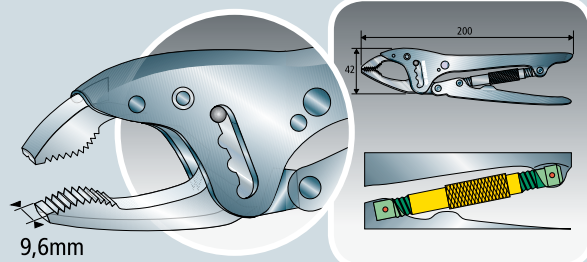
The "compact 507" range offers two major benefits

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

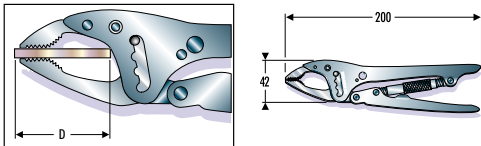
- Compact tool with narrow nose.
- Fine adjustment with the unique Facom knurl system.



Short-nose lock-grip pliers

507A

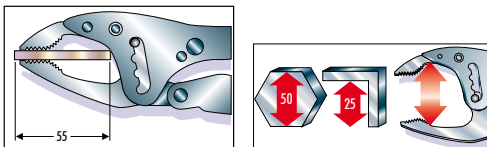
- Forged jaws.
- Chrome finish.
- Length 200 mm.

 $\Delta\Delta : 330 \text{ g.}$ 

Long-nose lock-grip pliers

509


- Forged jaws.
- Chrome finish.
- Length : 215 mm.

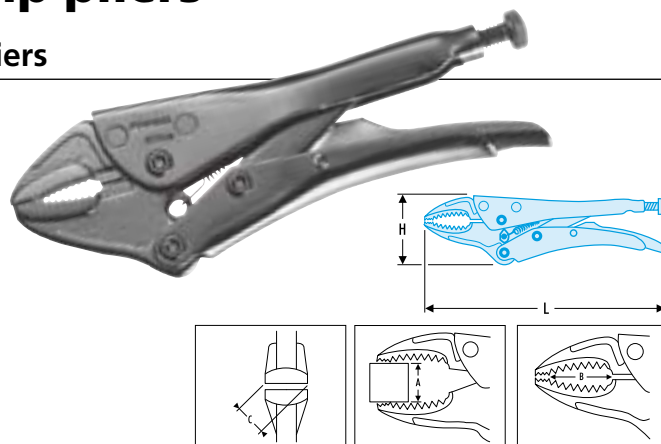
 $\Delta\Delta : 370 \text{ g.}$ 

► "Single-setting" lock-grip pliers

513 Short-nose single setting lock-grip pliers


- Slim jaws.
- Hand-screw adjustment.
- Black cataphoretic finish.

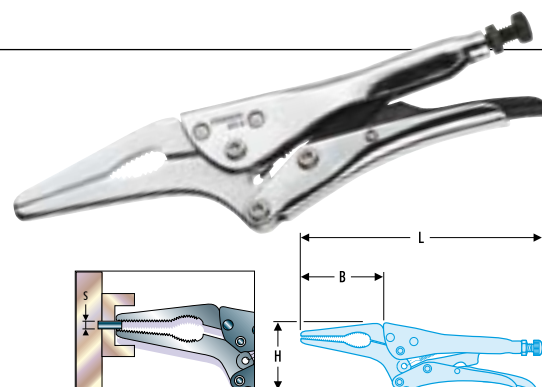
|  | L x H mm | A mm | B mm | C mm | ΔΔ g |
|---|-------------|---------|---------|---------|---------|
| 513.5 | 140 x 49 | 25 | 18 | 6,4 | 180 |
| 513A.7 | 190 x 59 | 35 | 27 | 9,0 | 380 |
| 513.10 | 235 x 71 | 55 | 35 | 10,3 | 628 |



517 Long-reach single setting lock-grip pliers

- For reaching and gripping components in confined spaces.
- Chrome finish.

|  | S max mm | B mm | H mm | L mm | ΔΔ g |
|---|-------------|---------|---------|---------|---------|
| 517.6 | 55 | 50 | 48 | 165 | 200 |
| 517.10 | 70 | 80 | 60 | 235 | 430 |



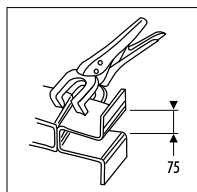
► "Metalworking" lock-grip pliers

Arc-welding lock-grip pliers

502A


- Light alloy spatter-proof jaws.
- Steel body.
- Secure and precise alignment of work pieces.
- Ample clearance for the welding tool.
- Chrome finish.
- Dimensions 280 x 82 x 70 mm.

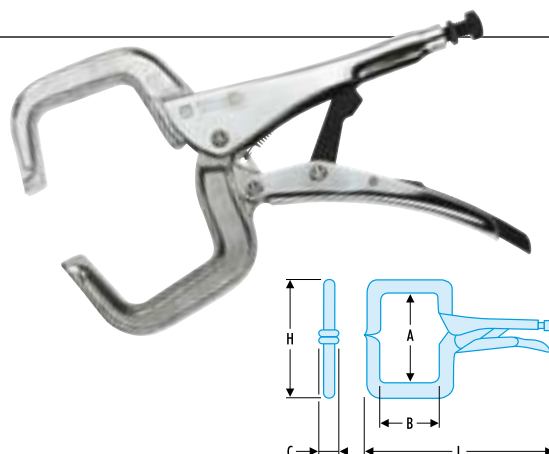
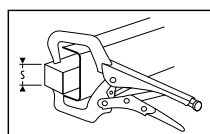
ΔΔ : 735 g.



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

- Light alloy spatter-proof jaws.
- Steel body.
- Secure clamp for welding shaped or angled sections, and channels.
- Chrome finish.

|  | S max mm | A mm | B mm | C mm | H mm | L mm | ΔΔ g |
|---|-------------|---------|---------|---------|---------|---------|---------|
| 504A.100 | 80 | 100 | 65 | 12 | 147 | 280 | 655 |
| 504A.180 | 125 | 180 | 120 | 20 | 240 | 350 | 927 |



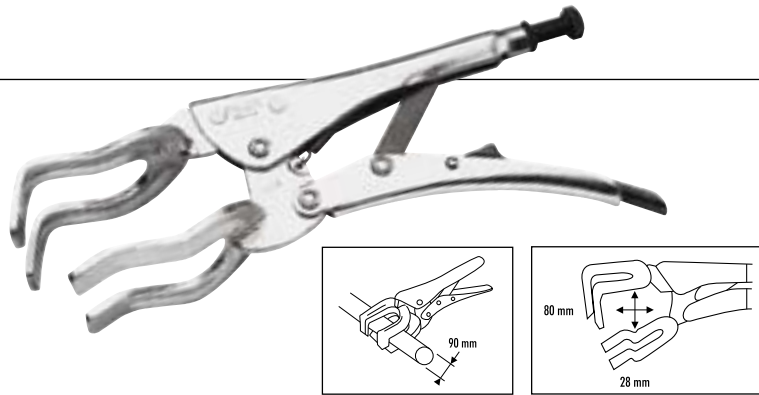
Lock-grip pliers

Lock-grip pliers for round sections

503

- Secure clamping of round sections.
- Pressed-steel jaws and body.
- Chrome finish.
- Dimensions 280 x 85 x 68 mm.

ΔΔ : 945 g.

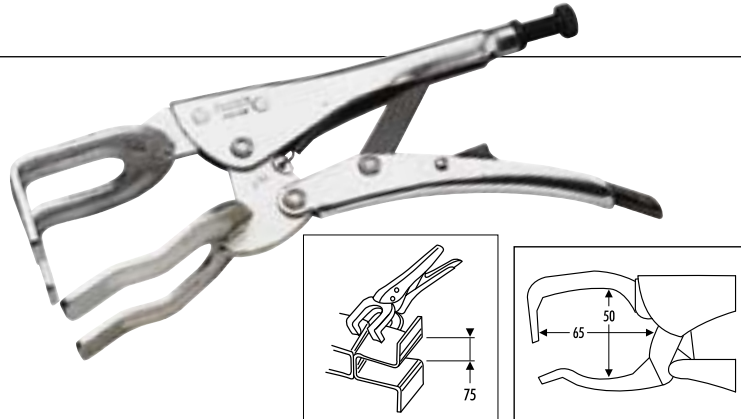


Lock-grip pliers for angle sections

512

- Secure clamping of angle and channel sections.
- Pressed-steel jaws and body.
- Chrome finish.
- Dimensions 280 x 85 x 70 mm.

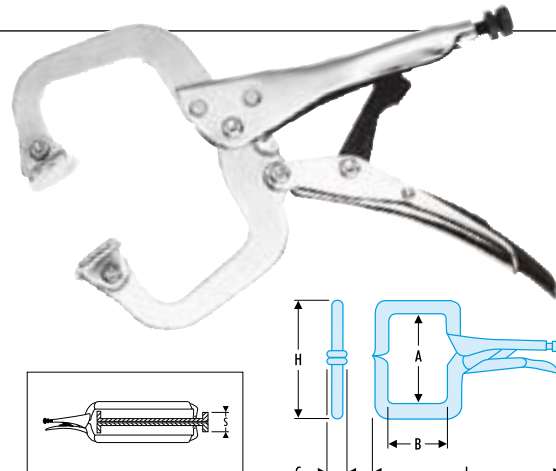
ΔΔ : 953 g.



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

- Special forged-steel jaws for secure clamping of angle sections and deep channels.
- Pressed-steel body.
- Chrome finish.
- "R" models have hinged shoes at their tips.

| | S max mm | A mm | B mm | C mm | H mm | L mm | ΔΔ kg |
|------------------|----------------|---------|---------|---------|---------|---------|----------|
| 514.45R | 45 | 60 | 45 | 19 | 90 | 175 | 0,270 |
| 514A.65 | 70 | 100 | 65 | 12 | 150 | 300 | 0,905 |
| 514A.240 | 230 | 100 | 240 | 20 | 165 | 460 | 1,420 |
| 514A.240R | 230 | 100 | 240 | 32 | 165 | 460 | 1,530 |
| 514A.400 | 370 | 100 | 400 | 20 | 165 | 630 | 1,705 |

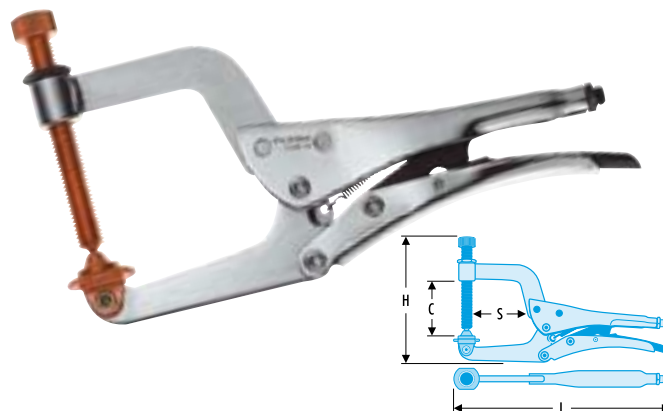


► Bar clamp lock-grip pliers

520A Lock-grip G-clamps

- Coppered screw with swivel shoe.
- Fine setting with locknut.
- Chrome finish.

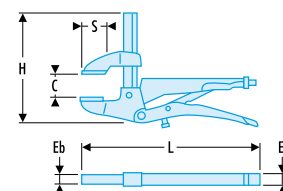
| | S mm | C mm | L mm | H mm | ΔΔ kg |
|-----------------|---------|---------|---------|---------|----------|
| 520A.70 | 70 | 70 | 280 | 165 | 1,02 |
| 520A.100 | 70 | 100 | 280 | 196 | 1,095 |
| 520A.170 | 70 | 170 | 280 | 270 | 1,250 |



521 G-clamp pliers with sliding jaw

- Clamping force 4,000 N, adjustable.
- Zinc-plated, forged and hardened sliding jaw.
- Case-hardened and chromed teeth.
- Lower jaw angle screw-adjustable through 9°.
- Chrome finish.

| | C max mm | Eb mm | S mm | E mm | H mm | L mm | ΔΔ kg |
|----------------|-------------|----------|---------|---------|---------|---------|----------|
| 521.100 | 100 | 15 | 65 | 28 | 190 | 260 | 1,02 |
| 521.150 | 150 | 15 | 65 | 28 | 240 | 260 | 1,11 |
| 521.200 | 200 | 15 | 65 | 28 | 290 | 260 | 1,18 |



End nippers

High-performance nippers and cutters

CUTTING EFFORT REDUCED TO A MINIMUM
For tying and cutting in one operation

Clean cut.

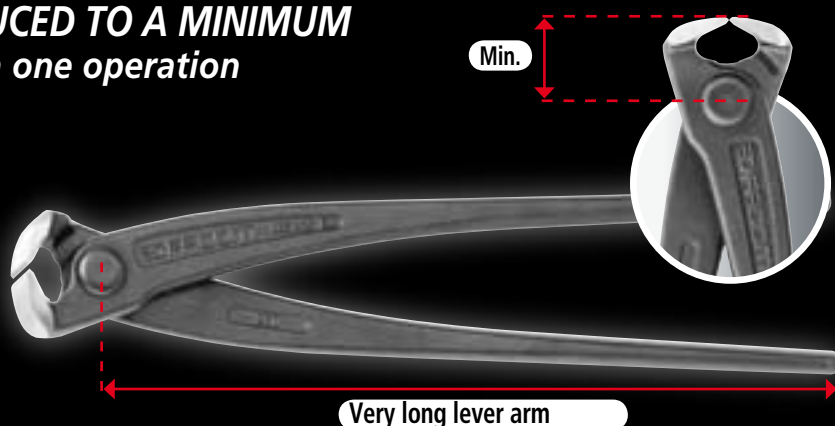
- Cutting edges sharpened after heat treatment for cleanly cutting lacing cord.

Maximum cutting power.

- Offset pivot.

Maximum accessibility.

- Tapered shape.



New

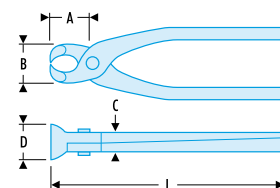
495A Heavy-duty end nippers

▷ ISO 9242, DIN ISO 9242, NF 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 Ø 4.5 mm on soft wire (300 mm model).
 - Max. on hard wire 160 Kg/mm².
- Burnished finish, polished head.



| | A mm | B mm | C mm | L mm | D mm | ΔΔ g |
|------------------|---------|---------|---------|---------|---------|---------|
| 495A.20EL | 10 | 28 | 12 | 200 | 20 | 240 |
| 495A.22EL | 10,5 | 31 | 13 | 23 | 23 | 310 |
| 495A.25EL | 12 | 35 | 14 | 250 | 25 | 390 |
| 495A.28EL | 12 | 35 | 14 | 280 | 25 | 450 |
| 495A.30EL | 12 | 35 | 14 | 300 | 25 | 510 |

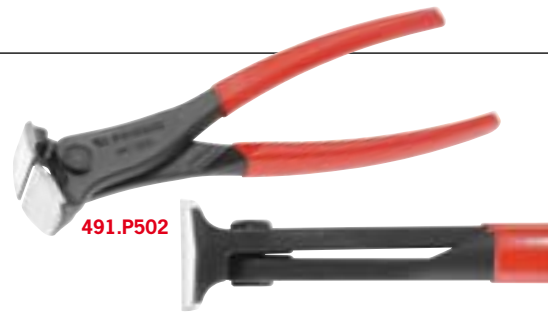


New

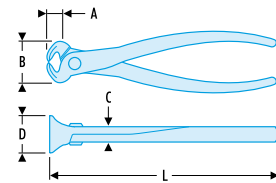
491 End nippers

▷ ISO 5748, DIN ISO 5748, NF ISO 5748.

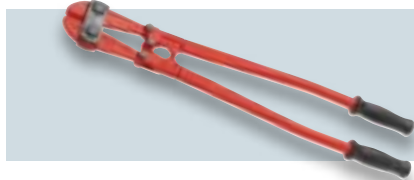
- Protruding cutting edges, for mild and hard wire (max. 160 Kg/mm²).
- Offset pivot for maximum cutting power.
- 60/62 HRC high-frequency hardened cutting edges for long life.
- Burnished finish, polished head, PVC grips.



491.P502



| End nipper | Ø maxi mm 160 kg/mm ² | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|------------|-------------------------------------|------|------|------|------|------|------|
| 491.18G | 2,6 | 11,5 | 39 | 14,6 | 32 | 180 | 300 |
| 491.20G | 3,0 | 11,5 | 39 | 14,6 | 32 | 200 | 400 |
| 491.22G | 3,6 | 12,7 | 43 | 14,6 | 34 | 220 | 450 |



For bolt croppers
see p. 503



For PVC grip pliers
see p. 386

Special pliers

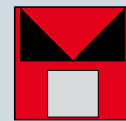
Plastics cutters



Plastics cutters



*Special cutters to remove tails and burrs from injection-moulded components
HF hardened cutting edges and flush cut for clean result*



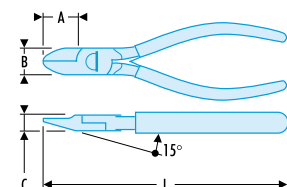
FLUSH CUT

395 Plastics cutters

- 2 joint and length sizes.
- Polished burnish finish, red PVC grips.
- Spring-assisted opening.



| End nipper | Ø maxi mm | A mm | B mm | C mm | L mm | ΔΔ g |
|------------|-----------|------|------|------|------|------|
| 395.14 | 6 | 20 | 16 | 10 | 140 | 115 |
| 395.16 | 7 | 22 | 18 | 11 | 160 | 150 |

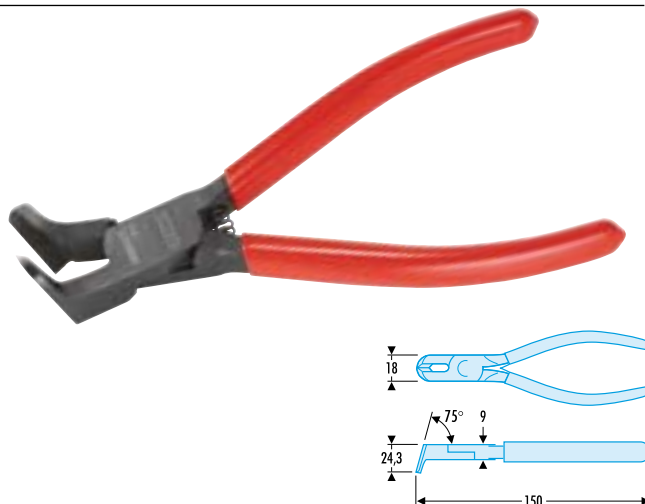


75° plastics cutters

396

- 75° cutting edges.
- Polished burnish finish, red PVC grips.
- Spring-assisted opening.

ΔΔ : 145 g.



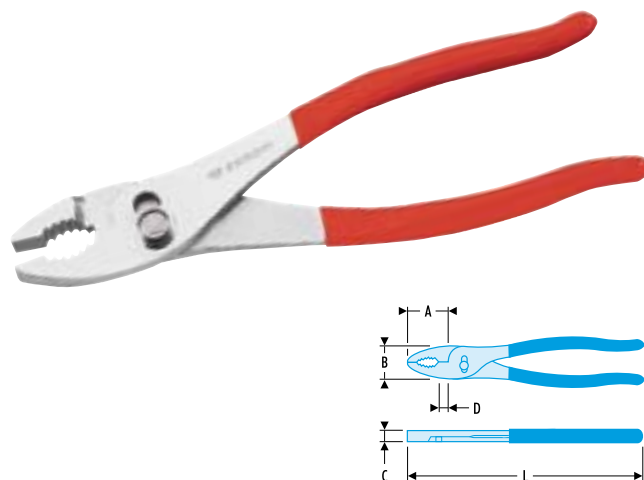
► Motorists pliers

186 Motorists pliers

► ISO 9343, DIN ISO 9343, NF ISO 9343, ASME B 107.23 M.

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

| | A | B | C | D | L | ΔΔ |
|-----------------|----|----|------|-----|-----|-----|
| | mm | mm | mm | mm | mm | g |
| 186.7CPG | 31 | 29 | 9,0 | 6,5 | 166 | 170 |
| 186.8CPG | 35 | 31 | 10,5 | 7,5 | 204 | 270 |



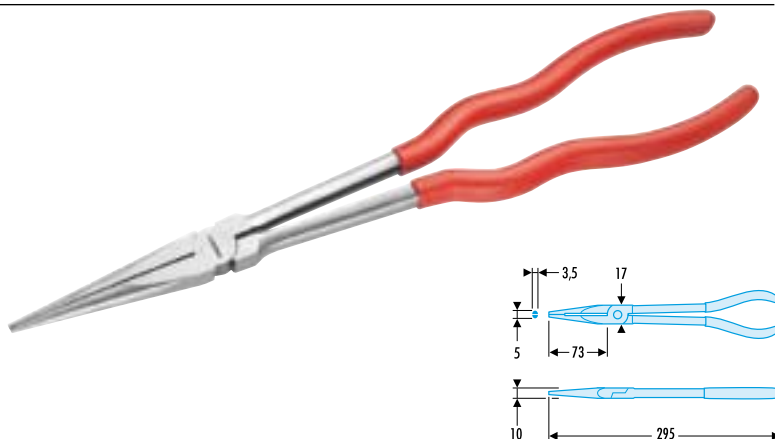
► Extra-long reach half-round nose pliers

Extra-long reach half-round nose pliers

185.28EG

- For reaching components in confined spaces.
- Serrated jaws.
- Polished, red PVC grips.

ΔΔ : 304 g.



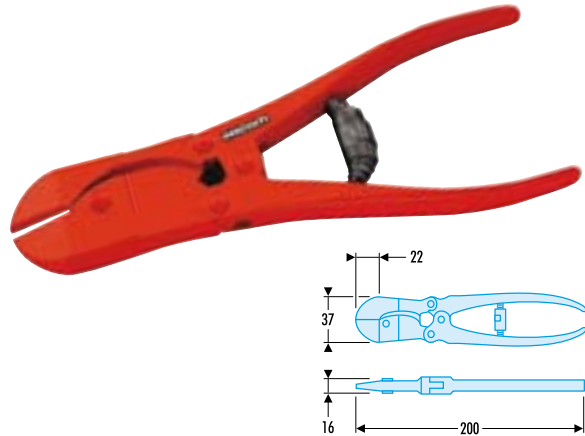
► Low-effort cutters

Diagonal cutters

171.20EL

► ISO 5749, DIN ISO 5749, NF ISO 5749.

- Demultiplication system for increased capacity with minimum cutting effort. Piano wire 200 kg/mm² : Ø 2.5 mm.
- Red paint finish.
- ΔΔ : 515 g.



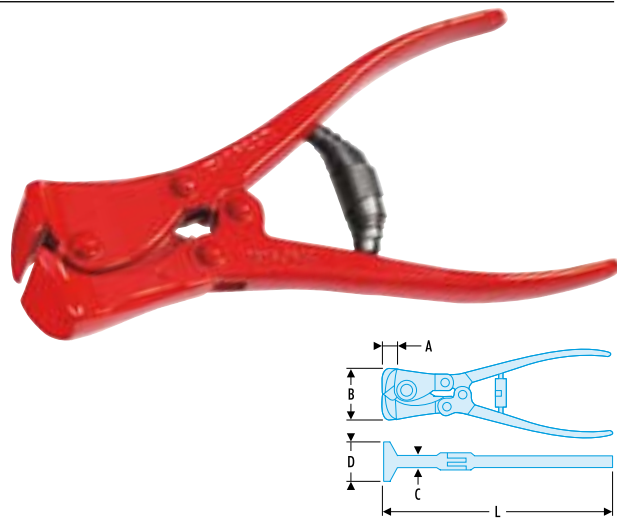
End-cutters

191A.22EL

► ISO 5748, DIN ISO 5748, NF ISO 5748.

- Compound leverage for increased capacity with minimum cutting effort. Piano wire up to 200 kg/mm².
- Red paint finish.

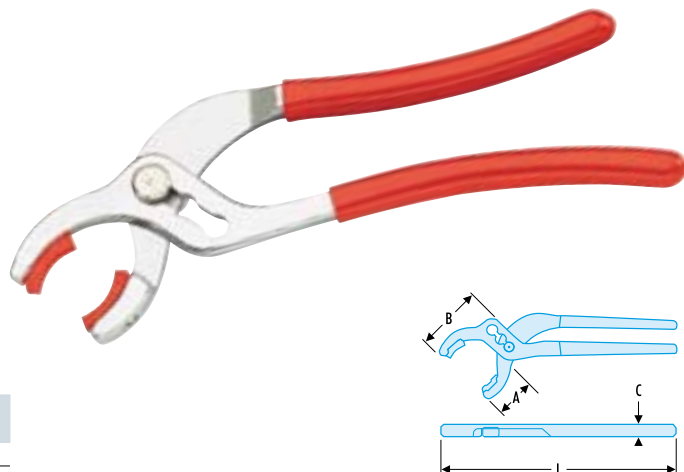
| | Ø max mm | A mm | B mm | C mm | D mm | L mm | ΔΔ g |
|------------------|-------------|---------|---------|---------|---------|---------|---------|
| 191A.22EL | 2,5 | 9 | 48 | 17 | 34 | 210 | 660 |



► "Connector" pliers

410 Connector pliers

- For handling fragile round components, e.g. screwed connector sleeves, tubes, lamps or wire looms, etc.).
- Replaceable plastic jaws.
- Wide capacity (up to Ø 55 mm) from 3-position slip-joint.
- Polished chrome finish, red PVC grips.
- 2 jaw hardness options :
 - 410 : 410 : Hard jaws - 70 Shore B.
 - 410.S : Soft jaws - 55 Shore B.
- Spare jaws :
 - 410.1 : Set of 2 jaws with screws (hard).
 - 410.S1 : Set of 2 jaws with screws (soft).



| | A mm | B mm | C mm | L mm | ΔΔ g |
|--------------|---------|---------|---------|---------|---------|
| 410 | 47 | 68 | 10 | 230 | 320 |
| 410.S | 47 | 68 | 10 | 230 | 320 |



"Mechanics" set**184.J2**

- Comprising :
 - 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 260 x 100 x 50 mm.

| | | |
|---|---|---|
|  |  |  |
| 184.J2 | N.38A-4B | g 985 |

**"Maintenance" set****184.J3CPE**

- 12 tools.
- Comprising :
 - Locking multigrip pliers 181.25CPE.
 - Combination pliers 187.18CPE.
 - Diagonal cutters 192.18CPE.
 - End cutters 190.20CPE.
 - 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.

| | | |
|---|---|---|
|  |  |  |
| 184.J3CPE | N.38A-12C | kg 2,2 |

**"Electrical fitters" set****184.J4CPE**

- Comprising :
 - 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, 1,000V insulated A2.5X75VE, A3.5X100VE, A5.5X125VE.
 - Adjustable wrench 113A.8C.

| | | |
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|  |  |  |
| 184.J4CPE | N.38A-10C | kg 1,7 |



Plier sets and modules

"Electricians" set

184.J5VE

- 1,000V insulated tools to EN 60900.
- Comprising :
 - Diagonal cutters 192.16VE.
 - Combination pliers 187.18VE.
 - Half-round nose pliers 185.20VE.
 - 2 screwdrivers for slotted heads A.VE (4x100-5.5x125).
 - Screwdrivers for Pozidriv® heads AD1X100VE.

| | | |
|---|---|---|
| | | |
| 184.J5VE | N.38A-6F | kg 1,1 |



3-piece CPE plier set

CPE.3

- Comprising :
 - Locking multigrip pliers 181.25CPE.
 - Diagonal cutters 192.16CPE.
 - Half-round nose pliers 185.20CPE.
- Supplied in a cardboard box.

 $\Delta\Delta : 790 \text{ g.}$ 

4-piece CPE plier set

CPE.4

- Comprising :
 - Locking multigrip pliers 181.25CPE.
 - Diagonal cutters 192.16CPE.
 - Half-round nose pliers 185.20CPE.
 - Combination pliers 187.18 CPE.

- Supplied in a cardboard box.

 $\Delta T \Delta : 1.02 \text{ kg.}$ 

3-piece set of 1,000 Volt pliers to EN 60900

VE.3

- Comprising :
 - Multigrip pliers 180.VE.
 - Diagonal cutters 391.16VE.
 - Angled half-round nose pliers 195.20VE.
- Supplied in a cardboard box.

 $\Delta\Delta : 790 \text{ g.}$ 

New**Foam 4-piece plier module****MODM.CPE1**

- Comprising :
 - 192.16CPE : diagonal cutters.
 - 185.20CPE : half-round nose pliers.
 - 181.25CPE : locking twin slip-joint multigrip pliers
 - 501 : large-capacity lock-grip pliers
 - Foam tray PM.MODCPE1.
- ΔΔ : 1.480 kg.

**3-piece "mechanics" CPE plier module****MOD.CPE**

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

**3-piece "mechanics" TE plier module****MOD.TE**

- Comprising :
 - Half-round nose pliers 185.20TE.
 - Combination pliers 187.18TE.
 - Diagonal cutters 192.16TE.
- Tray PL.627.
- ΔΔ : 942 g.

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

- Comprising :
 - Multigrip pliers 180.VE.
 - Diagonal cutters 391.16VE.
 - Wire strippers 194.17VE.
- Tray PL.622.
- ΔΔ : 950 g.

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

- Comprising :
 - Locking multigrip pliers 181.25CPE.
 - Trigger-release lock-grip pliers T5.L.
- Tray PL.330.
- ΔΔ 1.160 kg.

**2-piece adjustable plier module****MOD.PR4**

- Comprising :
 - Multigrip pliers 180.CPE.
 - Trigger-release lock-grip pliers T5.L.
- Tray PL.330.
- ΔΔ : 1.158 kg.



Plier sets and modules

2-piece adjustable plier module

MOD.PR6

- Comprising :
 - Locking multigrip pliers 181.25CPE.
 - Large capacity lock-grip pliers 501.
 - Tray PL.330.
- ΔΔ : 1.19 kg.



2-piece adjustable plier module

MOD.PR8

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



2-piece adjustable plier module

MOD.PR1

- Comprising :
 - Notch-joint multigrip pliers 482.CPE.
 - Short-nose lock-grip pliers 500.
 - Tray PL.330.
- ΔΔ : 1.1 kg.



2-piece adjustable plier module

MOD.PR7

- Comprising :
 - Multigrip pliers 180.TE.
 - Trigger-release lock-grip pliers T5.L.
 - Tray PL.330.
- ΔΔ : 1.158 kg.



2-piece adjustable plier module

MOD.PR5

- Comprising :
 - Multigrip pliers 180.TE.
 - Short-nose lock-grip pliers 500.
 - Tray PL.330.
- ΔΔ : 1.094 kg.

