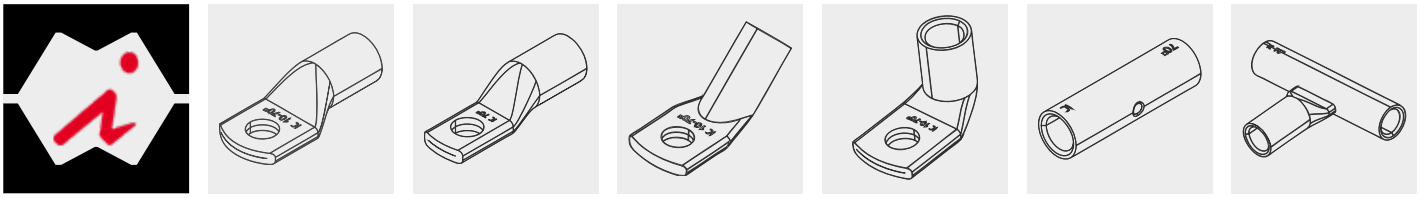



product design award



# GENERAL CATALOG TOOLS

www.intercable-tools.com

intercable




# INTERCABLE - HISTORY

Intercable is one of the world's leading manufacturers of professional electrical products for Utilities, Power Boards, Contractors, Electricians and Industry. Our main ambition is to improve efficiency, safety and quality of our customers' daily work. As a family owned company, established in 1972, we currently count more than 1.000 employees in our manufacturing plants around the world.

Our product range is attuned to LV ,MV and HV cable preparation and consists of five main product lines:
• insulated safety tools up to 1000V
• hydraulical and mechanical crimping and cutting tools
• stripping tools
• special electro technical devices
• cable accessories

Furthermore we are also leading in the development and production of special plastic and metal parts for the automotive market and so an important partner of the biggest car and truck manufacturers worldwide.

Quality is never an accident but the result of advantageous application of a certified quality system: Our Company comply with the latest DIN EN ISO 9001:2015 , ISO/TS 16949:2009 and ISO 14001 International Standards. Constant internal and external audits help us to identify weaknesses and promote a continuous improvement in all the company processes.

Our tools are produced according to latest international IEC, DIN standards and are certified by independent, accredited German and Italian test institutes such us VDE, BG or CESI.

Our aim is a long lasting customer relation based on confidence. We daily try to recognize the demands and expectations of our customers to be able to fulfil them quickly and effectively but in any case to our customer's satisfaction. Further we satisfy the changing market needs by a constant improvement and development of our product range.

We are proud to be known as an expert and flexible partner on the international market.

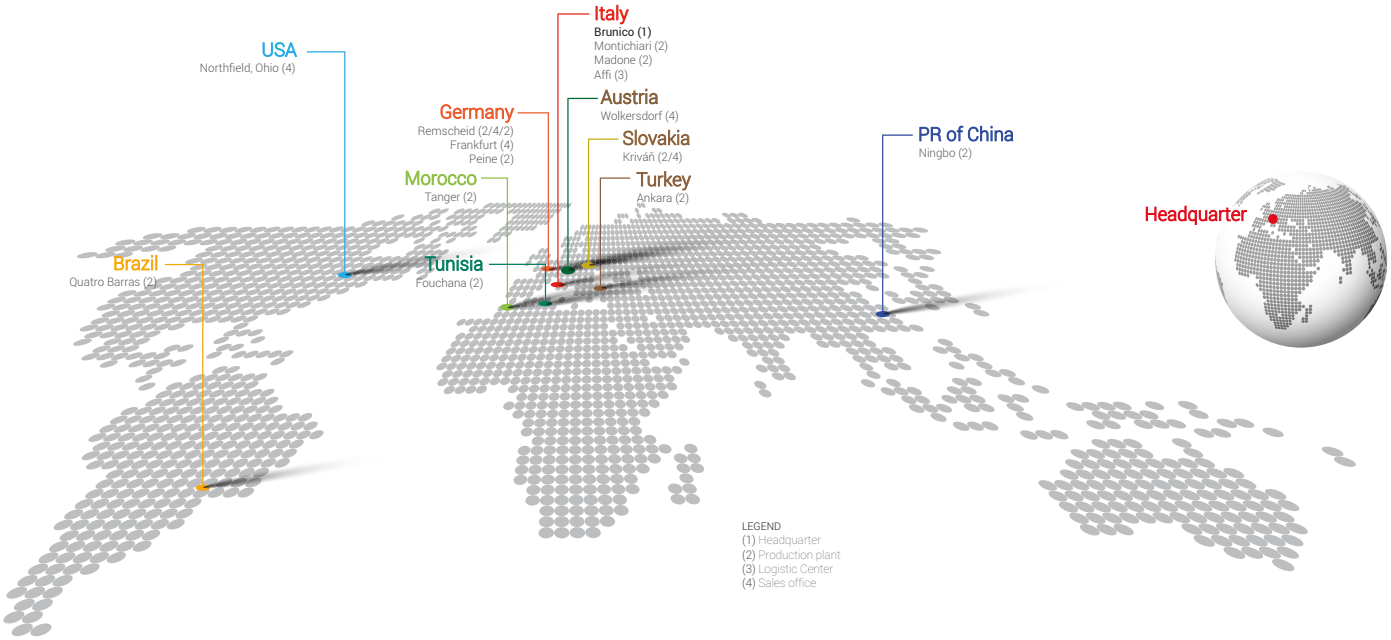
# THE GROUP

We are stronger as a group!

Through our headquarter in Brunico/Bruneck and locations in Italy, Germany, Morocco, Tunisia, Slovakia and China, we supply customers in the automotive, power distribution, industrial and railway sectors.

As a modern, industrial group we strive for the optimum usage of synergies within the group.

intercable GROUP

















1.000V voltage test

Assembling of hydraulic tools in the headquarter





Assembling of hydraulic tools in the headquarter

# INTERCABLE STANDS FOR HIGH QUALITY

Products and service! An efficient organisation, as well as a quality management according to the EN ISO 9001 International Standards, guarantees optimum processes and continual improvement.
In-house design and production in Italy and Germany and full commitment of our highly trained personnel is our main recipe of success.



Assembling of hydraulic tools in the headquarter



# TECHNOLOGY IS OUR PASSION

DIN EN ISO 9001: Reg.-Nr. 067378
ISO/TS 16949: Reg.-Nr. 067378

Our specialists set themselves a clear goal: provide workers in the electrical technology sector with the very best tools and equipment for performing their daily tasks.
Our own innovation department with its highest qualified experts and the latest technologies in the planning and construction sector is the assurance for our success and the continuous improvements.




product design award

# QUALITY CERTIFICATIONS




Quality Management System ISO 9001:2015




Environmental Management System ISO 14001

## Quality Certificates:

- IATF 16949
- DIN EN ISO 9001
- ISO 14001
- OHSAS 18001

## Other Quality Certificates:

- VDE-/GS-Certifications

## Active member of:

- CEI (Italian Electro Technical Commitee)
- UNI (Italian Standaristaion Commitee)
- Working groups of the European and International Standaristaion Commitee



# STANDARD: IEC 60900

Live working or close to live parts working
- up to 1000V a.c. and 1500V d.c.

SAFETY TOOLS SUITABLE FOR
LIVE LINE WORKING ARE MARKED
WITH THE DOUBLE TRIANGLE

1000V
IEC 60900



# QUALITY AND SAFETY TESTS

## INSULATING HAND TOOLS

Made totally or essentially from insulating materials except for inserts made from conductive material (reinforcement purpose), but with no exposed conductive parts.

SCOPE: **Protection of users against electric shock and avoid short circuit between two parts of different potential**

# INSULATED HAND TOOLS

Made of conductive material, fully or partially covered by insulating material

SCOPE: **Protection of users against electric shock**



# TECHNICAL INSPECTIONS



## DIELECTRIC TEST

**10kV at 50Hz or 60Hz for 3min**
Linked to following conditioning:
- Water bath 24h - after dry wiping dielectric test
- Wet chamber 48h (23°C ±5°C) - after dry wiping dielectric test

## IMPACT TEST

- Ambient temperature impact test .....(23°C ±5°C / 2m)
- Low temperature impact test ..... (2h -25°C ±3°C / 0,6m)
- Extreme low temperature impact test ..... (2h -40°C ±3°C / 0,6m)

# INTERNAL TESTING LABORATORY

- 3D-measuring systems
- 3D-videomeasuring systems (SmartScope)
- Hardness-testing systems
- Compression-tension testing machines (50 kN)
- Thermic chambers (until 300°C/-40°C to 180°C)
- Climate chamber (-70°C to 180°C / 0-99% humidity)
- High-tension testing devices (10 kV)
- High-current testing device up to 1.000 A
- Photomicrograph equipment (section analysis)
- Surface thickness measurement
- Coating testing device (high tension)
- Special ohmmeter
- Tightness test equipment
- Torque moment testing device
- Fischerscope X-ray
- Saltspray chamber

## ADHESION TEST

a) of the insulation of the entire tool
  - 500N for 3min
  - handle must remain firmly on conducting part

b) of conducting adjusting or switching elements





Climate chamber

# OUR QUALITY ASSURANCE PLAN

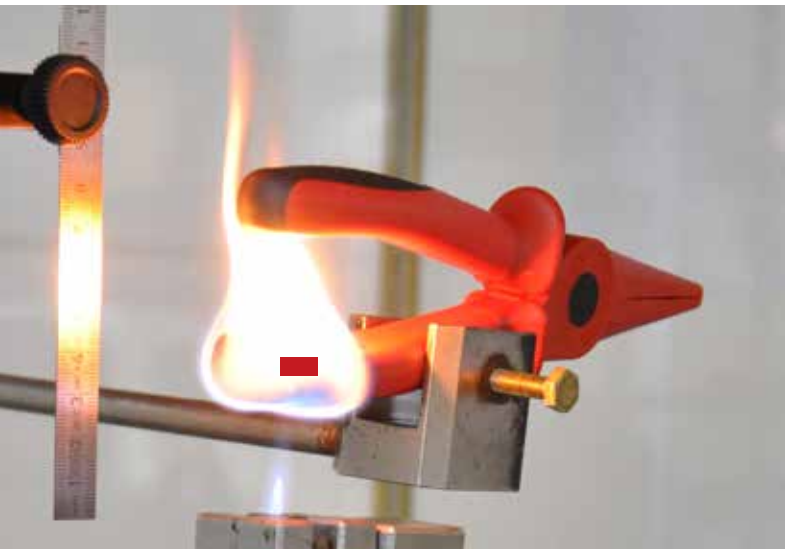
- Visual check
- Checking the compatibility of the tools for the final assembly
- Sampling tests
- Records
- Quality audits
- 100% dialectric 10kV for 10sec for every single tool that is marked 1000V


VDE Prüf- und Zertifizierungsinstitut

ZEICHENGENEHMIGUNG
MARKS APPROVAL

VDE

VDE - EN 60900 approval



# FLAME RETARDANCY TEST

1. Step: yellow tipped blue flame of 20mm ± 2mm to be pointed for 10sec on the insulation
2. Step: withdrawn the flame and observe 20sec test piece
3. Step: test is passed if the flame height on the tool does not exceed 120mm during 20sec of observation period

# INDENTATION TEST

Linked to following conditioning:

- Test pointing in horizontal conditions based on determined data (20N);
  The test is considered successful if no electrical puncture, sparkover of flashover occurs during test period. (5kV x 3min)



SAFETY HAND TOOLS
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INSULATED PLIERS
MECHANICAL CUTTING TOOLS
INSULATED WRENCHES
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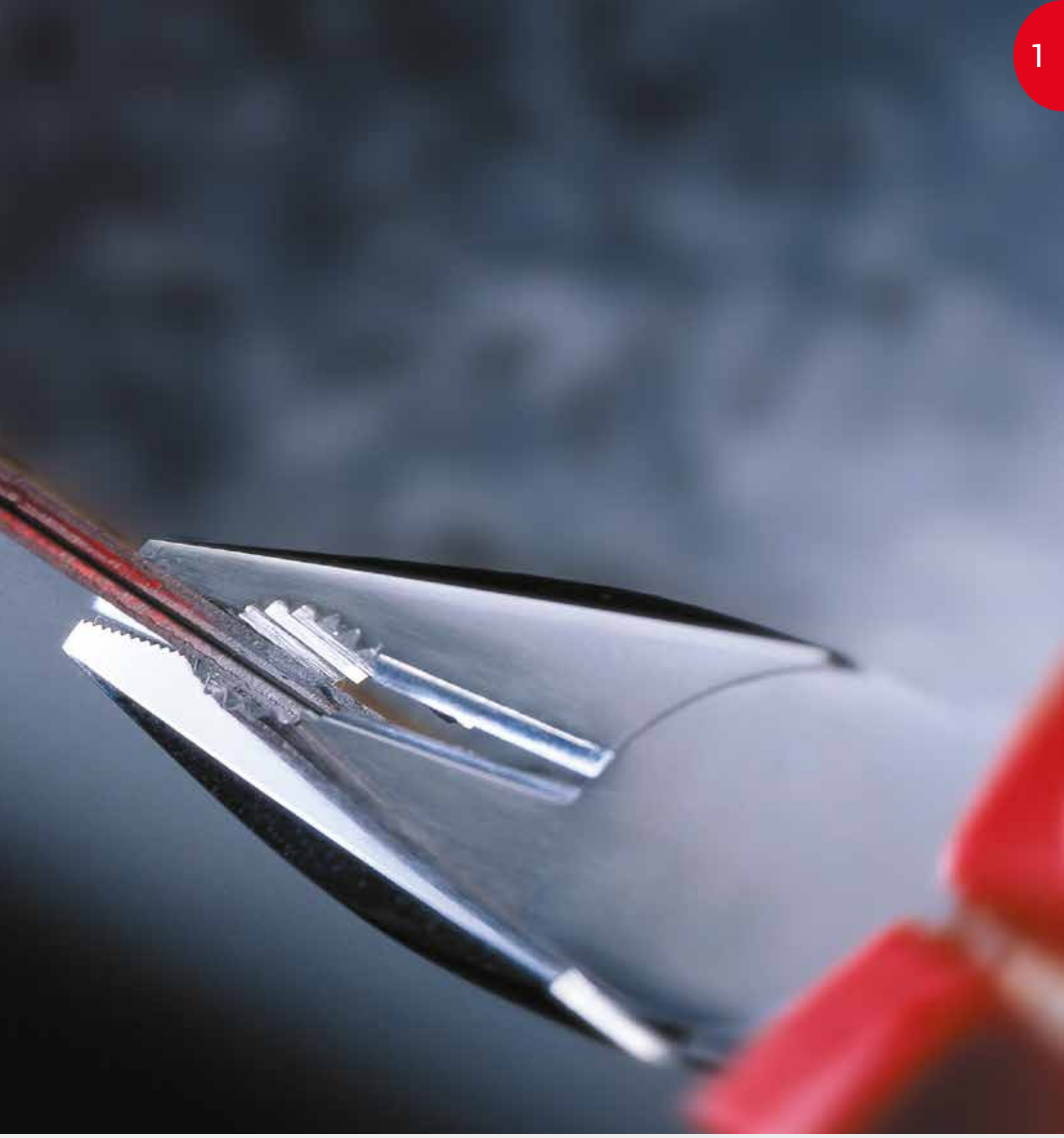
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Already fan of intercable ?





# SAFETY HAND TOOLS

INSULATED SCREWDRIVERS
INSULATED PLIERS
MECHANICAL CUTTING TOOLS
INSULATED WRENCHES
MODULAR INSULATED HANDTOOLS
TOOL CASES AND EQUIPMENT

# THE QUALITY AND THE UNIQUE INTERCABLE DESIGN!

The new series of SLIM screwdrivers is the result of extensive studies performed in cooperation with numerous electrical installers.

Standard:
VDE 0682 / 201

1000V IEC 60900

slim

## Slim

Very thin insulated blade diameter for a smooth workability in limited space

## Ergonomic

Handles in non-slip material, guarantees the maximum force application with minimum strain




## Precision

Milled blade tip for a perfect fit and grip on the screw

## Clear

Color coding with respective blade symbol under a transparent, impact-resistant plastic lens for fast and reliable tool determination

**Identification lens for an easy choice of the proper screwdriver**
**Color codification:**



For slotted head screws
**yellow**



For “Phillips”-head screws
**red**



For “Pozidriv®”-head screws
**green**



For hex socked-head screws
**white**



For hex-head screws
**violet**



For spherical hex socket-head screws
**grey**



For TORX® -head screws
**blue**



For combinated “Phillips”-head screws
**red / yellow**



For combinated “Pozidriv®”-head screws
**green / yellow**

TORX®

registred trademark of
CAMCAR TEXTRON,
Rockford, Illinois, USA



## Screwdrivers for slotted head screws - FUTUR II

| mm | mm | mm | mm | Order No. |
|---|---|---|---|---|
| 2,5 | 75 | 0,4 | 175 | 1301025 * |
| 3,0 | 100 | 0,5 | 200 | 1301030 * |
| 3,5 | 100 | 0,6 | 200 | 1301035 |
| 4,0 | 100 | 0,8 | 200 | 1301040 |
| 4,5 | 125 | 1,0 | 230 | 1301045 |
| 5,5 | 125 | 1,0 | 230 | 1301055 |
| 6,5 | 150 | 1,2 | 255 | 1301065 |
| 8,0 | 175 | 1,2 | 290 | 1301080 * |
| 10,0 | 200 | 1,6 | 320 | 1301100 * |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection
- * NOT SLIM - Version



## Screwdrivers for “Phillips” screws - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| 0 | 60 | 160 | 13020 * |
| 1 | 75 | 175 | 13021 |
| 2 | 100 | 205 | 13022 |
| 3 | 150 | 265 | 13023 * |
| 4 | 200 | 320 | 13024 * |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection
- * NOT SLIM - Version



## Screwdrivers for “Pozidriv®” screws - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| 0 | 60 | 160 | 13030 * |
| 1 | 75 | 175 | 13031 |
| 2 | 100 | 205 | 13032 |
| 3 | 150 | 265 | 13033 * |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection
- * NOT SLIM - Version

# INSULATED SCREWDRIVERS



## Combination screwdriver “Phillips” - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| ⊕ | | | |
| 1 | 75 | 175 | 13131 |
| 2 | 100 | 205 | 13132 |

- For combined slotted-/intersecting slot screws in electrical systems
- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



## Combination screwdriver “Pozidriv®” - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| ✳ | | | |
| 1 | 75 | 175 | 13141 |
| 2 | 100 | 205 | 13142 |

- For combined slotted-/intersecting slot screws in electrical systems
- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



## TORX® - Screwdriver - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| ✶ | | | |
| 10 | 60 | 160 | 1307010 |
| 15 | 75 | 175 | 1307015 |
| 20 | 75 | 180 | 1307020 |
| 25 | 75 | 180 | 1307025 |
| 30 | 100 | 215 | 1307030 |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



## Screwdriver for hexagon socket screws - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| ⬢ | | | |
| 2 | 60 | 160 | 1304020 |
| 2,5 | 75 | 175 | 1304025 |
| 3 | 75 | 180 | 1304030 |
| 4 | 75 | 180 | 1304040 |
| 5 | 75 | 190 | 1304050 |
| 6 | 100 | 215 | 1304060 |
| 8 | 100 | 220 | 1304080 |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



## Ball-Point screwdriver for hexagon socket screws

| mm | mm | mm | Order No. |
|---|---|---|---|
| ○ | | | |
| 2 | 100 | 200 | 1305020 |
| 2,5 | 100 | 200 | 1305025 |
| 3 | 100 | 205 | 1305030 |
| 4 | 100 | 205 | 1305040 |
| 5 | 100 | 215 | 1305050 |
| 6 | 125 | 230 | 1305060 |
| 8 | 150 | 270 | 1305080 |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



## Screwdriver for hexagon screws - FUTUR II

| mm | mm | mm | Order No. |
|---|---|---|---|
| ○ | | | |
| 4 | 125 | 225 | 1306040 |
| 5 | 125 | 225 | 1306050 |
| 5,5 | 125 | 225 | 1306055 |
| 6 | 125 | 230 | 1306060 |
| 7 | 125 | 230 | 1306070 |
| 8 | 125 | 230 | 1306080 |
| 9 | 125 | 230 | 1306090 |
| 10 | 125 | 240 | 1306100 |
| 11 | 125 | 240 | 1306110 |
| 12 | 125 | 240 | 1306120 |
| 13 | 125 | 240 | 1306130 |

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection

# INSULATED SCREWDRIVERS



1000V

## Magazine screwdriver

| Length | Order No. |
|---|---|
| 230 mm | 119300 |

- Bit Holder 1/4"; magnetic
- The transparent selection disc inside the handle prevents the bits from falling out of the magazine
- Includes 6 bits of the standard equipment (25 mm long) as shown in picture on the left
- Power grip: high-quality plastic, shock resistant, red, cadmium-free
- Bit sizes to 119300: Slot: 4.5 x 0.6 / 6.5 x 1.2 / 8.0 x 1.6
- Cross slot: PH 1 / PH 2 / PH



1000V IEC 60900

## Phase screwdriver

| mm | mm | mm | Order No. |
|---|---|---|---|
| | | | |
| 3,0 | 65 | 140 | AV6104 |
| 3,5 | 105 | 190 | AV6105 |



## Screwdriver set - Slotted/"Phillips" - head

| Equipment | Order No. |
|---|---|
| 1 Slotted head screwdriver 0,8 x 4 x 100 - **SLIM** | 1399001 |
| 1 Slotted head screwdriver 1 x 5,5 x 125 - **SLIM** | |
| 1 Screwdriver "Phillips" PH1 x 75 - **SLIM** | |
| 1 Screwdriver "Phillips" PH2 x 100 - **SLIM** | |

slim 1000V IEC 60900



## Screwdriver set - "Phillips"

| Equipment | Order No. |
|---|---|
| 1 Screwdriver "Phillips" PH0 x 60 | 1399003 |
| 1 Screwdriver "Phillips" PH1 x 75 - **SLIM** | |
| 1 Screwdriver "Phillips" PH2 x 100 - **SLIM** | |

slim 1000V IEC 60900



## Combination screwdriver set - "Phillips"

| Equipment | Order No. |
|---|---|
| 1 Combination screwdriver "Phillips" +- PH1 x 80 - **SLIM** | 1399005 |
| 1 Combination screwdriver "Phillips" +- PH2 x 100 - **SLIM** | |

slim 1000V IEC 60900

# INSULATED SCREWDRIVERS



## Screwdriver set - slotted head

| Equipment | Order No. |
|---|---|
| 1 Slotted head screwdriver 0,5 x 3 x 100 | 1399002 |
| 1 Slotted head screwdriver 0,8 x 4 x 100 - **SLIM** | |
| 1 Slotted head screwdriver 1 x 5,5 x 125 - **SLIM** | |
| 1 Slotted head screwdriverr 1,2 x 6,5 x 150 - **SLIM** | |

slim 1000V IEC 60900



## Screwdriver set - “Pozidriv®”

| Equipment | Order No. |
|---|---|
| 1 Screwdriver “Pozidriv®” PZ0 x 60 | 1399004 |
| 1 Screwdriver “Pozidriv®” PZ1 x 75 - **SLIM** | |
| 1 Screwdriver “Pozidriv®” PZ2 x 100 - **SLIM** | |

slim 1000V IEC 60900



## Combination screwdriver set - “Pozidriv®“

| Equipment | Order No. |
|---|---|
| 1 Combination screwdriver “Pozidriv®” +- PZ1 x 80 - **SLIM** | 1399006 |
| 1 Combination screwdriver “Pozidriv®” +- PZ2 x 100 - **SLIM** | |

slim 1000V IEC 60900



## Screwdriver set for hexagon screws

| Dimensions | Order No. |
|---|---|
| 270 x 195 x 35 mm | 1399010 |

Equipment:
- 1 Hexagon screw - size 4 ..... 1306 040
- 1 Hexagon screw - size 5 ..... 1306 050
- 1 Hexagon screw - size 5,5 ..... 1306 055
- 1 Hexagon screw - size 6 ..... 1306 060
- 1 Hexagon screw - size 7 ..... 1306 070
- 1 Hexagon screw - size 8 ..... 1306 080
- 1 Hexagon screw - size 9 ..... 1306 090
- 1 Hexagon screw - size 10 ..... 1306 100
- 1 Hexagon screw - size 11 ..... 1306 110
- 1 Hexagon screw - size 12 ..... 1306 120
- 1 Hexagon screw - size 13 ..... 1306 130



## Screwdriver set for hexagon socket screws

| Dimensions | Order No. |
|---|---|
| 290 x 165 x 35 mm | 1399011 |

Equipment:
- 1 Hexagon socket screw - size 2 ..... 1304 020
- 1 Hexagon socket screw - size 2,5 ..... 1304 025
- 1 Hexagon socket screw - size 3 ..... 1304 030
- 1 Hexagon socket screw - size 4 ..... 1304 040
- 1 Hexagon socket screw - size 5 ..... 1304 050
- 1 Hexagon socket screw - size 6 ..... 1304 060
- 1 Hexagon socket screw - size 8 ..... 1304 080



## Ball-Point screwdriver set for hexagon socket screws

| Dimensions | Order No. |
|---|---|
| 290 x 165 x 35 mm | 1399012 |

Equipment:
- 1 Ball-Point screwdriver - size 2 ..... 1305 020
- 1 Ball-Point screwdriver - size 2,5 ..... 1305 025
- 1 Ball-Point screwdriver - size 3 ..... 1305 030
- 1 Ball-Point screwdriver - size 4 ..... 1305 040
- 1 Ball-Point screwdriver - size 5 ..... 1305 050
- 1 Ball-Point screwdriver - size 8 ..... 1305 080



## TORX® - Screwdriver set

| Dimensions | Order No. |
|---|---|
| 290 x 165 x 35 mm | 1399013 |

Equipment:
- 1 TORX® - Screwdriver - size 10 ..... 1307 010
- 1 TORX® - Screwdriver - size 15 ..... 1307 015
- 1 TORX® - Screwdriver - size 20 ..... 1307 020
- 1 TORX® - Screwdriver - size 25 ..... 1307 025
- 1 TORX® - Screwdriver - size 30 ..... 1307 030

# INSULATED SCREWDRIVERS






## Torque screwdriver set 0,8 - 5,0 Nm

| Description | Order No. |
|---|---|
| Torque screwdriver set | 1308804 |

Suitable for controlled fastening in the presence of live parts up to 1,000V AC, e.g. In case of switching devices.

**Technical Characteristics:**
- Insulation according IEC 60900/VDE0682/201
- Torque continually variable from 0,8 to 5,0 Nm
- Bit-holder with galvanic insulation
- Tested by VDE, ergonomically shaped handle

**Set Equipment:**
- 1 Torque screwdriver + insulated Bit-holder, T-adjusting tool 0,8 Nm .... 13085
- 1 Blade slotted screw 0,8 x 4 mm ..... 1381040
- 1 Blade slotted screw 1,0 x 5,5 mm ..... 1381055
- 1 Blade for screwdriver PH size 1 ..... 13821
- 1 Blade for screwdriver PH size 2 ..... 13822
- 1 Blade for screwdriver PZ size 1 ..... 13831
- 1 Blade for screwdriver PZ size 2 ..... 13832
- 1 Blade for screwdriver SW3,0..... 1384030
- 1 Blade for screwdriver SW4,0 ..... 1384040
- Plastic case with foam insert ..... 1308800

*** Individual set-equipments on request**



## Torque screwdriver set 0,8 - 5,0 Nm - ZAK1

| Description | Order No. |
|---|---|
| Torque screwdriver set - ZAK1 | 1308808 |

Suitable for controlled fastening in the presence of live parts up to 1,000V AC, e.g. In case of switching devices.

**Technical Characteristics:**
- Insulation according IEC 60900/VDE0682/201
- Torque continually variable from 0,8 to 5,0 Nm
- Bit-holder with galvanic insulation
- Tested by VDE, ergonomically shaped handle

**Set Equipment:**
- 1 Torque screwdriver + insulated Bit-holder, T-adjusting tool 0,8 Nm .... 13085
- 1 Slim change bit Torx T10 ..... 1387010
- 1 Slim change bit Torx T15 ..... 1387015
- 1 Slim change bit Torx T25 ..... 1387025
- 1 Slim change bit plus/minus PZ1 ..... 13841
- 1 Slim change bit plus/minus PZ2 ..... 13842
- Nylon folding bag with velcro ..... 1308800B

*** Individual set-equipments on request**



## Torque screwdriver set 0,8 - 5,0 Nm - ZAK2

| Description | Order No. |
|---|---|
| Torque screwdriver set - ZAK2 | 1308811 |

Suitable for controlled fastening in the presence of live parts up to 1,000V AC, e.g. In case of switching devices.

Technical Characteristics:
- Insulation according IEC 60900/VDE0682/201
- Torque continually variable from 0,8 to 5,0 Nm
- Bit-holder with galvanic insulation

Set Equipment:
- 1 Torque screwdriver + insulated Bit-holder, T-adjusting tool 0,8 Nm .... 13085
- 1 Slim change bit Torx T10 ..... 1387010
- Telescope plastic packaging

* Individual set-equipments on request



## Adjusting tool Quickcheck

| Description | Order No. |
|---|---|
| Adjusting tool Quickcheck | 13091 |

Suitable for all torque screwdrivers that can be set to the test value of 2.8 Nm.

Technical Characteristics:
- Regular inspection of the torque tool guarantees safe and precise working with the correct torque value
- Quick and easy inspection of the torque tool due to its mobile, compact shape
- Test result can be quite clearly read at the LED light.



## Grip 2 - 7 Nm

| Description | Order No. |
|---|---|
| Grill 2 - 7 Nm | 13090 |

Suitable for controlled fastening in the presence of live parts up to 1,000 V AC, to be used exclusively in combination with a SlimTorque VDE bit-holder for 6 mm SlimBits.

Technical Characteristics:
- Accuracy ±6%, traceable to national standards
- Insulation in accordance with IEC 60900/VDE0682/201 standard
- Infinitely adjustable torque from 2 - 7 Nm with setting tool Torque-Setter (included).
- Ergonomic multi-component handle, protective insulation 1000V AC, GS approved.
- Optimally matched to the torque range grip size.
- Click signal when reaching the set torque value.
- Compatible with all 138xxseries SLIM blades in combination with the bit-holder
- Bit-holder with galvanic isolation
- SlimTorque VDE bit holder (included) for 6 mm slim bits

Set Equipment:
- 1 Torque screwdriver 2 - 7 Nm
- 1 Insulated Bit-holder
- 1 T-adjusting tool

# INSULATED SCREWDRIVERS




ISO 2380-1-2 (excluded AC1501, AC1503) UNI 10562-1-2

1000V IEC 60900

## Screwdriver for slotted head screws - FUTUR

| Description | Order No. | mm | mm | mm | mm |
|---|---|---|---|---|---|
| | | ◐ | ▭ | ⊖ | ▭ |
| Screwdriver | AC1501 | 3,0 | 75 | 0,6 | 155 |
| | AC1502 | 4,0 | 100 | 0,8 | 180 |
| | AC1503 | 4,5 | 125 | 1,0 | 215 |
| | AC1504 | 5,5 | 150 | 1,0 | 250 |
| | AC1505 | 6,5 | 150 | 1,2 | 250 |
| | AC1506 | 8,0 | 150 | 1,6 | 260 |
| | AC1507 | 10,0 | 200 | 1,6 | 320 |

- Insulation of the blade and handles by shock–proof thermoplastic resin
- High resistance alloy, hardened steel with surface burnish protection
- Ergonomic handles for operations with maximum effort




ISO 8764-1-2
UNI ISO 8764-1-2

1000V IEC 60900

## Screwdriver for Phillips screws - FUTUR

| Description | Order No. | mm | mm | mm |
|---|---|---|---|---|
| | | ⊕ | ▭ | ▭ |
| Screwdriver | AC1600 | 0 | 60 | 140 |
| | AC1601 | 1 | 80 | 170 |
| | AC1602 | 2 | 100 | 200 |
| | AC1603 | 3 | 150 | 260 |
| | AC1604 | 4 | 200 | 320 |

- Insulation of the blade and handles by shock–proof thermoplastic resin
- High resistance alloy, hardened steel with surface burnish protection
- Egonomic handles for operations with maximum effort




ISO 8764-1-2
UNI ISO 8764-1-2

## Screwdriver for Pozidriv® screws - FUTUR

| Description | Order No. | mm | mm | mm |
|---|---|---|---|---|
| | | ⊛ | ▭ | ▭ |
| Screwdriver | AC1610 | 0 | 60 | 140 |
| | AC1611 | 1 | 80 | 170 |
| | AC1612 | 2 | 100 | 200 |
| | AC1613 | 3 | 150 | 260 |
| | AC1614 | 4 | 200 | 320 |

- Insulation of the blade and handles by shock–proof thermoplastic resin
- High resistance alloy, hardened steel with surface burnish protection
- Ergonomic handles for operations with maximum effort




1000V IEC 60900

## Set - screwdrivers - FUTUR

| Description | Order No. | dimensions | - |
|---|---|---|---|
| Set - screwdrivers | AS2001 | 112 x 345 mm | - |

• Screwdriver for slotted head screws:

Equipment:
• 0.6 x 3 x 75 mm ..... AC1501
• 0.8 x 4 x 100 mm ..... AC1502
• 1.0 x 5.5 x 150 mm ..... AC1504
• 1.6 x 8 x 150 mm ..... AC1506




1000V IEC 60900

## Set - screwdrivers - FUTUR

| Description | Order No. | dimensions | - |
|---|---|---|---|
| Set - screwdrivers | AS2002 | 95 x 285 mm | - |

• Screwdriver for Phillips screws:

Equipment:
• "Phillips" PH0 x 60 mm ..... AC1600
• "Phillips" PH1 x 80 mm ..... AC1601
• "Phillips" PH2 x 100 mm ..... AC1602




1000V IEC 60900

## Set - screwdrivers - FUTUR

| Description | Order No. | dimensions | - |
|---|---|---|---|
| Set - screwdrivers | AS2003 | 132 x 335 mm | - |

Equipment:
• Screwdriver for slotted head screws:
• 0.6 x 3 x 75 mm ..... AC1501
• 0.8 x 4 x 100 mm ..... AC1502
• 1.0 x 5.5 x 150 mm ..... AC1504

• Screwdriver for Phillips screws:
• "Phillips" PH1 x 80 mm ..... AC1601
• "Phillips" PH2 x 100 mm ..... AC1602




1000V IEC 60900

## Set - screwdrivers - FUTUR

| Description | Order No. | dimensions | - |
|---|---|---|---|
| Set - screwdrivers | AS2004 | 112 x 345 mm | - |

• Screwdriver for Pozidriv® screws:

Equipment:
• "Pozidriv®" PZ0 x 60 mm ..... AC1610
• "Pozidriv®" PZ1 x 80 mm ..... AC1611
• "Pozidriv®" PZ2 x 100 mm ..... AC1612

# THE QUALITY AND THE UNIQUE INTERCABLE DESIGN!

This new series of PLIERS is the result of extensive studies performed in cooperation with numerous electrical installers.

**Standards:**
ISO 5746
UNI 9894
VDE 0682-201

1000V IEC 60900

## Slim

Makes it easier for working in hard-to-reach areas

## Resistant

Blank produced from high alloy tool steel, cutting edges specially hardened, chrome-plated surface

## Powerful

Extra long cutting edges for large cable cross sections, suitable for cutting soft and hard wire, as well as piano wire



## Smooth

One-hand operation due to a special, smooth-running joint

## Ergonomic

The ergonomic handle guarantees the maximal application of the force with a minimum of labor

## Environmentally friendly

Skin-friendly, special plastic material free of cadmium and heavy metals



1000V IEC 60900

## Engineers pliers 2K

| Description | Order No. | Length |
|---|---|---|
| Engineers pliers 2K | 1201160 | 160 mm |
| | 1201180 | 180 mm |
| | 1201200 | 200 mm |

• Head laterally rounded



1000V IEC 60900

## Telephone pliers with straight jaws 2K

| Description | Order No. | Length |
|---|---|---|
| Telephone pliers with straight jaws 2K | 1203160 | 160 mm |
| | 1203200 | 200 mm |

• For cutting soft and medium hard wires



1000V IEC 60900

## Telephone pliers with bent jaws 2K

| Description | Order No. | Length |
|---|---|---|
| Telephone pliers with bent jaws 2K | 1204160 | 160 mm |
| | 1204200 | 200 mm |

• Head laterally rounded



1000V IEC 60900

## Flat nose pliers 2K

| Description | Order No. | Length |
|---|---|---|
| Flat nose pliers 2K | 1206160 | 160 mm |

# INSULATED PLIERS



1000V IEC 60900

## Round nose pliers 2K

| Description | Order No. | Length |
|---|---|---|
| Round nose pliers 2K | 1207160 | 160 mm |



1000V IEC 60900

## Wire stripper 2K

| Description | Order No. | Length |
|---|---|---|
| Wire stripper 2K | 1205160 | 160 mm |

- With locking screw and opening spring
- For cables from 0,75 to 6 mm²



1000V IEC 60900

## Side cutter 2K

| Description | Order No. | Length |
|---|---|---|
| Side cutter 2K | 1202160 | 160 mm |

- Very slim design with dropped forged head
- For cutting hard and soft wire



1000V IEC 60900

## Pipe wrench 2K

| Description | Order No. | Length |
|---|---|---|
| Pipe wrench 2K | 1110250 | 240 mm |

- Adjustable (7 different positions)
- Chrome-Vanadium

# INSULATED PLIERS OF INTERCABLE ISOPLUS

1000V IEC 60900

## THE QUALITY AND DISTINCTIVE DESIGN OF INTERCABLE guarantees the maximum degree of ergonomics and the highest level of safety

These pliers are made entirely of shock-resistant plastic with excellent insulation and mechanical properties and can be used even at very low temperatures down to -40 ° C. The completely insulated headboard and the jaws are insulated from each other to prevent the danger of a short-circuit during their use.

The benefit of the pliers is on the contrary to conventional metal models with a weight reduction of approx. 30-40%. All Intercable insulated pliers comply with applicable regulations and are approved by an accredited laboratory.
Special custom-made heads on request.



### 2 in 1

- Gripping surface with 3 indentations for various cable diameters
- Cutting inserts

### Powerful

Cutting inserts made of high-strength special steel, hardened and also suitable for cutting hard steel wire.

### The highest level of safety

Completely made of impact-resistant, glass fibre-reinforced plastic, no metal parts in contact zones

### Ergonomic

The ergonomic handle guarantees the maximal application of the force with a minimum of labor

# INSULATED PLIERS




## Insulating gripping pliers ISOplus 2K

| Description | Order No. | Length |
|---|---|---|
| Insulating gripping pliers ISOplus 2K | 11091 | 180 mm |

- Gripping surface with 8 indentations for various cable diameters
- No exposed metal parts




## Engineers pliers ISOplus 2K

| Description | Order No. | Length |
|---|---|---|
| Engineers pliers ISOplus 2K | 11092 | 190 mm |

- Extra long blades
- Corrosion protection treatment of the cutting edges
- For copper and aluminium cables with maximum 16 mm²
- Gripping surface with 3 indentations for various cable diameters




## Cable cutter D15 ISOplus 2K

| Description | Order No. | Length |
|---|---|---|
| Cable cutter D15 ISOplus 2K | 11094 | 170 mm |

- For cutting flexible Al and Cu conductors up to 50 mm²
- High cutting capacity for the smallest dimensions
- Blades induction hardened




## Insulating telephone pliers ISOplus 2K

| Description | Order No. | Length |
|---|---|---|
| Insulating telephone pliers D15 ISOplus 2K | 11095 | 200 mm |

- Gripping surface toothed
- Thin head for operation in restricted places
- No exposed metal parts

# CABLE CUTTER AND CRIMPER ELECTRICIAN SCISSORS



Special blade design:
to cut and strip cables



To cut Cu/Al cables
up to 50 mm²



Special slot to crimp
(0,5 - 4 mm²)

## Strip

easy to strip of cables due to unique shape



## Cut

non slip blade with micro-indentations
heavy duty stainless steel blades

## Durable

possibility to readjust the tool to
avoid the natural wear

## Crimp

crimping of terminal-sleeves
from 0,5 up to 4mm²

## Suitable

2 component handle for a
perfect grip to ensure the
best cutting performance



### Cable cutter and crimper electrician scissor 2K + Safetybox

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Scissor with Safetybox | 16020-F1 | straight | 160 mm |

- To cut Cu/Al cables up to 50 mm²
- With slot to crimp insulated or non insulated end sleeves from 0,5 to 4 mm²
- Blades with optimized teeth
- High cutting performance
- Loose-free screw/pin hinge
- 2 component handle

Attention: Not suitable for work under voltage!

# MECHANICAL CUTTING TOOLS



## Special electricians' scissors

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Special scissors | 16011 | straight | 140 mm |

- Loose-free screw/pin fixing
- High cutting performance
- Blades with micro-toothing

Attention: Not suitable for work under voltage!



## Special electricians' scissors 2K

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Special scissors | 16012 | straight | 140 mm |

- 2-component handles
- High cutting performance
- Blades with optimized teeth
- Loose-free screw/pin fixing

Attention: Not suitable for work under voltage!



## Cable cutter scissors + safety box and Voltage tester

| Description | Order No. |
|---|---|
| 1 Cable scissors - 16020-F1<br>1 Voltage tester | 16020-CF1 |

- Voltage range: 50 - 600 VAC, 50 - 60 Hz
- Voltage display: optical and acoustic signal
- Application range: 0 - 50°C

Suitable for determining the voltage without contact





## Safetybox

| Description | Order No. |
|---|---|
| Safetybox empty for model 1601 1, 1601 2, 1602 0, 1604 0 | 16029 |





• Universal cutting blade

C 1000V EN/IEC60900:2004

## Universal knife with clappable blade protection

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Cable knife | AV3910 | interch. 50 mm | 185 mm |
| Spare blade | AV3911 | - | 50 mm |

- 1000V insulated tool
- With replaceable standard blade (thickness 0,65 mm)
- Made of shock-proofed material
- Integrated, captive blade guard





- Special stripping blade shape
- Special blade grinding suitable for stripping cable without damaging the individual wires

C 1000V IEC 60900

## Cable stripping knife with clappable blade protection

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Cable knife | AV3920 | interch. 50 mm | 185 mm |
| Spare blade | AV3921 | - | 50 mm |

- 1000V insulated tool
- Specially hardened blade suitable for stripping cables
- With replaceable solid blade and insulated blade-back
- Made of shock-proofed material
- Integrated, captive blade guard





- Special blade grinding suitable for stripping cable without damaging the
- Individual wires
- Insulating blade with a very long
- service life

C 1000V IEC 60900

## Special cable stripping knife with ceramic blade

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Cable knife | AV3930 | fixed 46 mm | 185 mm |

- 1000V insulated tool
- Integrated, captive blade guard
- High cutting capacity

**No replacing blade**



C 1000V IEC 60900

## Cable stripping knife with safety cap

| Description | Order No. | Blade | Length |
|---|---|---|---|
| Cable knife | 288700 | fixed 47 mm | 175 mm |

- Special blade with guide blade prevents damage of conductor strands
- For removal of insulation and sheath
- Blade and blade back sharpened
- Blade of tempered stainless steel
- Insulation of tough non-brittle plastic

# MECHANICAL CUTTING TOOLS



C 1000V EN/IEC60900:2004

## Insulated electrician's shears 2K

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Electrician shears | 16032 | 180 mm | 100 g |

- Adjustable screwjoint
- High cutting performance
- Surface treatment: burnished and polished
- 2-component-handles



C 1000V EN/IEC60900:2004

## Side cutter 2K

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Side cutter 2K | 1202160 | 160 mm | 208 g |

- Very slim design of the head with pronounced tip shape
- For cutting hard and soft wire
- Induction hardened precision cutting
- High cutting performance
- 2-component impact resistant insulated handles



C 1000V EN/IEC60900:2004

## Cable cutter D17 2K

| | |
|---|---|
| APPLICATION RANGE | max. 50 mm² |
| SUGGESTED APPLICATION | Copper and Aluminium |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable cutter D17 | 1602160 | 160 mm | 218 g |

- High cutting capacity for the smallest dimensions
- With adjustable screw joint
- Special tool steel with chrome finish
- Handles of impact resistant plastic in 2-component-design
- Jaw opening: 17 mm



C 1000V EN/IEC60900:2004

## Cable cutter D22 2K

| | |
|---|---|
| APPLICATION RANGE | Ø 25 mm / 80 mm² |
| SUGGESTED APPLICATION | Copper and Aluminium |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable cutter D22 | 1602200 | 200 mm | 345 g |

- With break down and resaw (1st and 2nd cutting edge)
- High cutting capacity for the smallest dimensions
- Easy and clean cut with single hand use
- With adjustable screw joint
- Special tool steel with chrome finish
- Handles of impact resistant plastic in 2-component-design



## MultiCutter 3 in 1

| Description | Order No. | Length | Weight |
|---|---|---|---|
| MultiCutter 3 in 1 | MSA180 | 185 mm | 0,270 kg |

- Multifunctional cable shears off wire and cut
- Stripper: Cable Ø < 11 mm
- Soft wire < Ø 6 mm,
- Hard wire < Ø 2 mm,
- Inductively hardened cutting edges
- Ergonomic grip
- Stripping (dismantling): Cable Ø 5 - 16 mm, 3 x 1,5 mm² < 5 x 1,5 mm²
- Stripping (insulation): Cable < Ø 5 mm

Attention: Not suitable for work under voltage!



## Wire cutter

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Wire cutter | MKS200 | 200 mm | 0,330 kg |

- Precision cutter for piano wire 62 HRC
- Cutting length: 24 mm
- Special tool steel, oil-hardened
- Leverage, thus 40% power savings

Attention: Not suitable for work under voltage!

# MECHANICAL CUTTING TOOLS



ISO 5746

1000V IEC 60900

## Engineers pliers

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Engineers pliers | AP0116N | 160 mm | 210 g |
| Engineers pliers | AP0119N | 180 mm | 240 g |

- For cutting soft and medium hard wires
- High resistant gripping surface



ISO 5749

1000V IEC 60900

## Diagonal cutting nipper

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Diagonal cutting nipper | AP0616N | 160 mm | 190 g |

- For cutting soft and medium hard wires



ISO 5745

1000V IEC 60900

## Telephone pliers with straight jaws

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Telephone pliers | AP0416N | 160 mm | 160 g |
| Telephone pliers | AP0420N | 200 mm | 190 g |

- For cutting soft and medium hard wires
- Toothed gripping surface



ISO 5745

1000V IEC 60900

## Telephone pliers with bent jaws

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Flat nose pliers | AP0516N | 160 mm | 155 g |
| Flat nose pliers | AP0520N | 200 mm | 195 g |

- For cutting soft and medium hard wires
- Toothed gripping surface



ISO 5745

1000V IEC 60900

## Flat nose pliers

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Flat nose pliers | AP0216N | 160 mm | 160 g |

• Toothed gripping surface



ISO 5745

1000V IEC 60900

## Round nose pliers

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Round nose pliers | AP0316N | 160 mm | 160 g |

• Toothed gripping surface



ISO 5745

1000V IEC 60900

## Set - pliers and cable cutter

| Description | Order No. | Length blank | Weight |
|---|---|---|---|
| Set | AS1001 | 240 x 260mm | - |

• 1 engineers pliers 190mm ..... AP0119N
• 1 diagonal cutting nipper 160mm ..... AP0616N
• 1 telephone pliers with straight jaws ..... AP0420N
• 1 cable cutter ..... AP1017

# INSULATED WRENCHES



1000V IEC 60900

## Insulated adjustable wrench

| Description | Order No. | Opening | Length | Weight |
|---|---|---|---|---|
| Adjustable wrench | 151904 | 0 - 13 mm | 110 mm | 140 g |
| | 151906 | 0 - 20 mm | 130 mm | 190 g |
| | 151908 | 0 - 27 mm | 210 mm | 260 g |
| | 151910 | 0 - 30 mm | 260 mm | 400 g |
| | 151912 | 0 - 34 mm | 310 mm | 870 g |
| | 151915 | 0 - 44 mm | 360 mm | 1230 g |
| | 151918 | 0 - 53 mm | 450 mm | 1900 g |

- Read off scale for jaw opening
- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation
- Not recommended for working on live parts



1000V IEC 60900

## Insulated open-end wrench

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Open-end wrench | 151306 | 6 | 76 mm | 20 g |
| | 151307 | 7 | 82 mm | 20 g |
| | 151308 | 8 | 96 mm | 20 g |
| | 151309 | 9 | 105 mm | 24 g |
| | 151310 | 10 | 110 mm | 29 g |
| | 151311 | 11 | 115 mm | 33 g |
| | 151312 | 12 | 130 mm | 44 g |
| | 151313 | 13 | 137 mm | 48 g |
| | 151314 | 14 | 140 mm | 54 g |
| | 151315 | 15 | 150 mm | 58 g |
| | 151316 | 16 | 160 mm | 70 g |
| | 151317 | 17 | 161 mm | 84 g |
| | 151318 | 18 | 163 mm | 100 g |
| | 151319 | 19 | 175 mm | 105 g |
| | 151320 | 20 | 172 mm | 149 g |
| | 151321 | 21 | 200 mm | 159 g |
| | 151322 | 22 | 200 mm | 192 g |
| | 151324 | 24 | 220 mm | 242 g |
| | 151327 | 27 | 242 mm | 322 g |
| | 151330 | 30 | 285 mm | 343 g |
| | 151332 | 32 | 280 mm | 500 g |
| | 151334 | 34 | 280 mm | 500 g |
| | 151336 | 36 | 310 mm | 575 g |

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



1000V IEC 60900

## Insulated 12-point wrench

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| 12-point wrench | 161306 | 6 | 146 mm | 41 g |
| | 161307 | 7 | 151 mm | 50 g |
| | 161308 | 8 | 159 mm | 62 g |
| | 161309 | 9 | 157 mm | 68 g |
| | 161310 | 10 | 179 mm | 84 g |
| | 161311 | 11 | 183 mm | 90 g |
| | 161312 | 12 | 195 mm | 106 g |
| | 161313 | 13 | 188 mm | 113 g |
| | 161314 | 14 | 197 mm | 135 g |
| | 161315 | 15 | 191 mm | 160 g |
| | 161316 | 16 | 218 mm | 175 g |
| | 161317 | 17 | 204 mm | 205 g |
| | 161318 | 18 | 236 mm | 227 g |
| | 161319 | 19 | 240 mm | 296 g |
| | 161320 | 20 | 250 mm | 300 g |
| | 161321 | 21 | 264 mm | 305 g |
| | 161322 | 22 | 255 mm | 308 g |
| | 161324 | 24 | 268 mm | 422 g |
| | 161327 | 27 | 290 mm | 455 g |
| | 161330 | 30 | 272 mm | 561 g |
| | 161332 | 32 | 317 mm | 646 g |
| | 161334 | 34 | 322 mm | 1060 g |
| | 161336 | 36 | 306 mm | 1060 g |

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



1000V IEC 60900

## Insulated 90° bent 12-point wrench

| Description | Order No. | (12) Size | Dimensions | Weight |
|---|---|---|---|---|
| 90° bent 12-point wrench | 161410 | 10 | 70 x 190 mm | 100 g |
| | 161412 | 12 | 70 x 195 mm | 100 g |
| | 161413 | 13 | 70 x 215 mm | 180 g |
| | 161414 | 14 | 80 x 245 mm | 220 g |
| | 161417 | 17 | 90 x 245 mm | 240 g |
| | 161418 | 18 | 90 x 245 mm | 240 g |
| | 161419 | 19 | 95 x 245 mm | 240 g |
| | 161420 | 20 | 100 x 250 mm | 280 g |
| | 161422 | 22 | 100 x 250 mm | 280 g |
| | 161424 | 24 | 100 x 250 mm | 280 g |
| | 161430 | 30 | 110 x 260 mm | 470 g |

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation
- For nuts placed in hard-to-get-at positions

# INSULATED WRENCHES



1000V IEC 60900

## Insulated hex socket T-wrench

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex socket T-wrench 200mm shank length | 137410 | 10 | 160 x 200 mm | 310 g |
| | 137411 | 11 | 160 x 200 mm | 330 g |
| | 137412 | 12 | 160 x 200 mm | 350 g |
| | 137413 | 13 | 160 x 200 mm | 360 g |
| | 137414 | 14 | 160 x 200 mm | 440 g |
| | 137416 | 16 | 160 x 200 mm | 450 g |
| | 137417 | 17 | 160 x 200 mm | 450 g |
| | 137418 | 18 | 160 x 200 mm | 470 g |
| | 137419 | 19 | 160 x 200 mm | 510 g |
| | 137420 | 20 | 160 x 200 mm | 510 g |
| | 137422 | 22 | 160 x 200 mm | 520 g |
| | 137424 | 24 | 160 x 200 mm | 540 g |

- 200 mm shank length
- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



1000V IEC 60900

## Insulated hex socket T-wrench long

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex socket T-wrench 300mm shank length | 138410 | 10 | 160 x 300 mm | 370 g |
| | 138411 | 11 | 160 x 300 mm | 380 g |
| | 138412 | 12 | 160 x 300 mm | 400 g |
| | 138413 | 13 | 160 x 300 mm | 420 g |
| | 138414 | 14 | 160 x 300 mm | 470 g |
| | 138416 | 16 | 160 x 300 mm | 520 g |
| | 138417 | 17 | 160 x 300 mm | 520 g |
| | 138418 | 18 | 160 x 300 mm | 560 g |
| | 138419 | 19 | 160 x 300 mm | 560 g |
| | 138420 | 20 | 160 x 300 mm | 600 g |
| | 138422 | 22 | 160 x 300 mm | 600 g |
| | 138424 | 24 | 160 x 300 mm | 660 g |

- 300 mm shank length
- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



1000V IEC 60900

## Insulated cross wrench

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Cross wrench | 121401 | 10 11 14 17 | 140 x 140 mm | 220 g |
| | 121402 | 10 12 14 17 | 140 x 140 mm | 220 g |
| | 121403 | 11 12 13 17 | 140 x 140 mm | 220 g |
| | 121404 | 10 13 14 17 | 140 x 140 mm | 230 g |
| | 121405 | 11 13 14 17 | 140 x 140 mm | 230 g |
| | 121406 | 13 17 19 22 | 140 x 140 mm | 340 g |
| | 121407 | 14 17 19 22 | 140 x 140 mm | 360 g |
| | 121408 | 10 11 12 13 | 140 x 140 mm | 200 g |
| | 121409 | 10 11 13 17 | 140 x 140 mm | 220 g |

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



1000V IEC 60900

## Insulated 90° hex wrench

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| 90° hex wrench | 116325 | 2,5 | 35 x 104 mm | 30 g |
| | 116303 | 3 | 35 x 104 mm | 31 g |
| | 116304 | 4 | 35 x 104 mm | 34 g |
| | 116305 | 5 | 35 x 106 mm | 36 g |
| | 116306 | 6 | 40 x 110 mm | 46 g |
| | 116308 | 8 | 45 x 120 mm | 80 g |
| | 116310 | 10 | 50 x 120 mm | 125 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V IEC 60900

## Insulated 90° hex wrench heavy duty

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| 90° hex wrench heavy duty | 116505 | 5 | 35 x 150 mm | 75 g |
| | 116506 | 6 | 40 x 150 mm | 88 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V IEC 60900

## Insulated hex T-wrench light-weight

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex T-wrench light-weight | 117325 | 2,5 | 95 x 115 mm | 80 g |
| | 117303 | 3 | 95 x 115 mm | 80 g |
| | 117304 | 4 | 95 x 115 mm | 80 g |
| | 117305 | 5 | 95 x 115 mm | 80 g |
| | 117306 | 6 | 95 x 115 mm | 90 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V IEC 60900

## Insulated hex T-wrench heavy duty

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex T-wrench heavy duty | 117504 | 4 | 95 x 160 mm | 105 g |
| | 117505 | 5 | 95 x 160 mm | 105 g |
| | 117506 | 6 | 95 x 160 mm | 110 g |
| | 117508 | 8 | 95 x 160 mm | 115 g |
| | 117510 | 10 | 95 x 160 mm | 120 g |
| | 117513 | 13 | 95 x 160 mm | 145 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation

# INSULATED WRENCHES



1000V IEC 60900

## Insulated hex T-wrench small

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex T-wrench small | 117973 | 5 | 70 x 120 mm | 80 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V IEC 60900

## Insulated hex T- wrench long

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex T-wrench long | 117972 | 5 | 90 x 200 mm | 105 g |
| | 117970 | 6 | 90 x 200 mm | 105 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V IEC 60900

## Insulated hex T-wrench extra long

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Hex T- wrench extra long | 117335 | 5 | 90 x 240 mm | 100 g |
| | 117336 | 6 | 90 x 240 mm | 115 g |
| | 117338 | 8 | 90 x 240 mm | 130 g |
| | 117331 | 10 | 90 x 240 mm | 115 g |

- Hardened and tempered alloy steel
- Shockproof resin insulation

# INTERCABLE MODULAR INSULATED HANDTOOLS 1000V

1000V IEC 60900

Tools made of shockproof insulated material

**Standards:**
ISO 1174-1
DIN 3120

Tools are suitable for very low temperature use: down to -40°C

**Interchangeable**
Guarantees compatibility with tools of various manufacturers, insofar as the inner square follows ISO Standard 117401-1



Square connection, size 1/2" or 3/8" in compliance with ISO 1174-1 Standards

intercable Locking System

Patented lock device (Intercable Locking System) that ensures a coupling in compliance with IEC 60900 Standards for any bush carrying a square fitting according to ISO 1174 DIN 3120 Standards



DIN7436

## Insulated T-wrench

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| T-wrench Size 3/8" | 15012 | 210 x 160 mm | 240 g |
| T-wrench Size 1/2" | 15011 | 195 x 160 mm | 340 g |

- Lock device can be actuated by a single hand
- Two-component insulation with excellent grip handle
- Square connection in compliance with ISO1174 DIN 3120 Standards



DIN7449

## Insulated reversible ratchet wrench

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Ratchet wrench Size 3/8" | 15022 | 200 x 65 mm | 250 g |
| Ratchet wrench Size 1/2" | 15021 | 260 x 75 mm | 525 g |

- Lock device can be actuated by a single hand
- Two-component insulation with excellent grip handle
- Reverse commutator
- Square connection in compliance with ISO1174 DIN 3120 Standards



## Insulated torque wrench

| Description | Order No. | Torque | Dimensions | Weight |
|---|---|---|---|---|
| Torque wrench Size 3/8" | 1508008 | 8 Nm | 110 x 160 mm | 400 g |
| | 1508010 | 10 Nm | 140 x 160 mm | 400 g |
| | 1508012 | 12 Nm | 140 x 160 mm | 400 g |
| | 1508015 | 15 Nm | 140 x 160 mm | 400 g |
| | 1508020 | 20 Nm | 140 x 160 mm | 400 g |
| | 1508025 | 25 Nm | 140 x 160 mm | 400 g |
| Torque wrench Size 1/2" | AC3708 | 8 Nm | 110 x 160 mm | 560 g |
| | AC3710 | 10 Nm | 140 x 160 mm | 560 g |
| | AC3712 | 12 Nm | 140 x 160 mm | 560 g |
| | AC3715 | 15 Nm | 140 x 160 mm | 560 g |
| | AC3720 | 20 Nm | 140 x 160 mm | 560 g |
| | AC3725 | 25 Nm | 140 x 160 mm | 560 g |

- Fixed adjusted torque in compliance with EN26789 (±6% tolerance from rated value)
- Lock device can be actuated by a single hand
- Square connection in compliance with ISO1174 DIN3120 in sizes 3/8" and 1/2"



1000V IEC 60900 intercable Locking System

## Insulated torque limiter (with galvanic separation)

| Description | Order No. | Torque | Dimensions | Weight |
|---|---|---|---|---|
| Torque limiter Size 3/8" | 1509007 | 7 Nm | 37 x 152 mm | 430 g |
| | 1509008 | 8 Nm | 37 x 152 mm | 430 g |
| | 1509010 | 10 Nm | 37 x 152 mm | 430 g |
| | 1509012 | 12 Nm | 37 x 152 mm | 430 g |
| | 1509015 | 15 Nm | 37 x 152 mm | 430 g |
| | 1509020 | 20 Nm | 37 x 152 mm | 430 g |
| | 1509025 | 25 Nm | 37 x 152 mm | 430 g |
| Torque limiter Size 1/2" | AC3807 | 7 Nm | 37 x 154 mm | 460 g |
| | AC3808 | 8 Nm | 37 x 154 mm | 460 g |
| | AC3810 | 10 Nm | 37 x 154 mm | 460 g |
| | AC3812 | 12 Nm | 37 x 154 mm | 460 g |
| | AC3815 | 15 Nm | 37 x 154 mm | 460 g |
| | AC3820 | 20 Nm | 37 x 154 mm | 460 g |
| | AC3825 | 25 Nm | 37 x 154 mm | 460 g |

- Torque limitation switch in compliance with EN 6789
- Lock device can be actuated by a single hand
- Square connection in compliance with ISO1174 DIN3120 in sizes 3/8" and 1/2"
- Insulation according to EN 60900
- Galvanic isolation



1000V IEC 60900

## Insulated adjustable torque ratchet

| Description | Order No. | Torque | Dimensions | Weight |
|---|---|---|---|---|
| Torque ratchet Size 3/8" | 131937 | 10-50 Nm | 75 x 280 mm | 700 g |
| | 131938 | 10-50 Nm | 75 x 350 mm | 900 g |
| Torque ratchet Size 1/2" | 131911 | 10-50 Nm | 75 x 280 mm | 700 g |
| | 131912 | 10-50 Nm | 75 x 350 mm | 1000 g |
| | 131931 | 30-130 Nm | 75 x 465 mm | 1300 g |

- Made of alloyed and hardened steel
- Anticlockwise rotation without limitation
- Adjustable torque
- Professional multi-coated insulation
- When adjusted setting is achieved, the ratchet head drops sideways with a haptic and acoustic feedback
- Please observe operating instructions
- Suitable for all types of screwdriver heads
- Adjustment tolerance can be ± 10% of the nominal value



1000V IEC 60900

## Insulated adjustable torque ratchet

| Description | Order No. | Torque | Dimensions | Weight |
|---|---|---|---|---|
| Torque ratchet Size 3/8" | 131915 | 5-50 Nm | 84 x 370 mm | 500 g |
| Torque ratchet Size 1/2" | 131913 | 5-50 Nm | 84 x 370 mm | 900 g |
| | 131918 | 40-220 Nm | 84 x 555 mm | 1500 g |

- Made of alloyed and hardened steel
- Anticlockwise rotation without limitation
- Adjustable torque
- Professional multi-coated insulation
- When adjusted setting is achieved, the ratchet head drops sideways with a haptic and acoustic feedback
- Please observe operating instructions
- Suitable for all types of screwdriver heads
- Adjustment tolerance can be ± 10% of the nominal value



1000V IEC 60900 intercable Locking System

DIN7434

## Insulated extension bar

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Extension bar Size 3/8" | 15032125<br>15032250 | 125 mm<br>250 mm | 140 g<br>300 g |
| Extension bar Size 1/2" | 15031125<br>15031250 | 125 mm<br>250 mm | 200 g<br>400 g |

- Made of alloyed steel
- Fixing of inserts by expanding ball
- Expanding ball bearings by means of threaded pin
- Insulation of shock proof plastic
- Suitable for all types of screwdriver heads
- Patented lock device that guarantees a coupling in compliance with DIN
- IEC 60900, Standards for any brush carrying a square fitting according to ISO-DIS 1174-1/DIN 3120 Standard.



1000V IEC 60900 intercable Locking System

## Insulated special reducer 1/2" to 3/8"

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Special reducer | 15031238 | 125 mm | 145 g |

- Reducer from 1/2" to 3/8"
- Lock device actuated by a single hand
- Square connection in compliance with ISO1174 DIN 3120 Standards



1000V IEC 60900

## Insulated special enlarger 3/8" to 1/2"

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Special enlarger | 132238 | 125 mm | 100 g |

- Enlarger from 3/8" to 1/2"
- Dip Insulation



1000V IEC 60900

## Insulated cross socket tool for 4 inserts

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cross socket tool Size 3/8" | 121400 | 150 x 150 mm | 180 g |
| Cross socket tool Size 1/2" | 121399 | 150 x 150 mm | 340 g |

- Square ends made of alloyed and hardened steel, galvanically isolated
- Insulation of non-brittle plastic
- For 8 - 22 mm SW standard socket pieces
- Inserts can be locked in place
- Expanding ball interlock system for inserts



1000V IEC 60900

DIN7448
DIN3124

## Insulated 12-point female socket 3/8”

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| 12-point female socket Size 3/8” | 135206* | 6 | 45 mm | 22 g |
| | 135207* | 7 | 45 mm | 23 g |
| | 1504208 | 8 | 45 mm | 30 g |
| | 135209* | 9 | 45 mm | 28 g |
| | 1504210 | 10 | 45 mm | 31 g |
| | 1504211 | 11 | 45 mm | 31 g |
| | 1504212 | 12 | 45 mm | 32 g |
| | 1504213 | 13 | 45 mm | 32 g |
| | 1504214 | 14 | 45 mm | 35 g |
| | 135215* | 15 | 45 mm | 38 g |
| | 1504216 | 16 | 45 mm | 37 g |
| | 1504217 | 17 | 45 mm | 40 g |
| | 1504218 | 18 | 45 mm | 42 g |
| | 1504219 | 19 | 45 mm | 45 g |
| | 135220* | 20 | 45 mm | 70 g |
| | 135221* | 21 | 45 mm | 83 g |
| | 1504222 | 22 | 45 mm | 47 g |
| | 135224* | 24 | 45 mm | 112 g |

- Greatly reduced outside diameter for use on screws in hard-to-get-at positions
- Square connection to ISO1174 DIN3120 Standards

*Bush with dip insulation (fig.1)



fig. 1

1000V IEC 60900



1000V IEC 60900

## Extra deep insulated 12-point female socket 3/8”

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| Extra deep 12-point female socket Size 3/8” | 135308 | 8 | 75 mm | 50 g |
| | 135309 | 9 | 75 mm | 55 g |
| | 135310 | 10 | 75 mm | 63 g |
| | 135311 | 11 | 75 mm | 67 g |
| | 135312 | 12 | 75 mm | 70 g |
| | 135313 | 13 | 75 mm | 77 g |
| | 135314 | 14 | 75 mm | 85 g |
| | 135315 | 15 | 75 mm | 100 g |
| | 135316 | 16 | 75 mm | 113 g |
| | 135317 | 17 | 75 mm | 122 g |
| | 135318 | 18 | 75 mm | 130 g |
| | 135319 | 19 | 75 mm | 144 g |
| | 135320 | 20 | 75 mm | 150 g |
| | 135321 | 21 | 75 mm | 160 g |
| | 135322 | 22 | 75 mm | 185 g |
| | 135323 | 23 | 75 mm | 210 g |
| | 135324 | 24 | 75 mm | 250 g |
| | 135327 | 27 | 75 mm | 315 g |

- Extra deep version - min. 70 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip Insulation



1000V IEC 60900

## Long insulated 12-point female socket 3/8"

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| Long 12-point female socket Size 3/8" | 135110 | 10 | 140 mm | 140 g |
| | 135111 | 11 | 140 mm | 148 g |
| | 135112 | 12 | 140 mm | 152 g |
| | 135113 | 13 | 140 mm | 161 g |
| | 135114 | 14 | 140 mm | 173 g |
| | 135115 | 15 | 140 mm | 180 g |
| | 135116 | 16 | 140 mm | 195 g |
| | 135117 | 17 | 140 mm | 205 g |
| | 135118 | 18 | 140 mm | 213 g |
| | 135119 | 19 | 140 mm | 223 g |
| | 135120 | 20 | 140 mm | 230 g |
| | 135121 | 21 | 140 mm | 238 g |
| | 135122 | 22 | 140 mm | 250 g |

- Long version - 140 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip Insulation



1000V IEC 60900

## Extra long insulated 12-point female socket 3/8"

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| Extra long 12-point female socket Size 3/8" | 135712 | 12 | 270 mm | 287 g |
| | 135713 | 13 | 270 mm | 295 g |
| | 135714 | 14 | 270 mm | 300 g |
| | 135717 | 17 | 270 mm | 351 g |
| | 135718 | 18 | 270 mm | 370 g |
| | 135719 | 19 | 270 mm | 385 g |
| | 135721 | 21 | 270 mm | 420 g |
| | 135722 | 22 | 270 mm | 445 g |
| | 135724 | 24 | 270 mm | 480 g |
| | 135727 | 27 | 270 mm | 520 g |

- Extra long version - 270 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip Insulation



1000V IEC 60900

ISO691

## Short insulated male hex socket 3/8” - 50 mm

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Short male hex socket Size 3/8” | 1505204 | 4 | 50 mm | 28 g |
| | 1505205 | 5 | 50 mm | 29 g |
| | 1505206 | 6 | 50 mm | 30 g |
| | 1505208 | 8 | 50 mm | 33 g |

• Square connection to ISO1174 DIN3120 Standards



1000V IEC 60900

## Insulated male hex socket 3/8” - 90 mm

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Male hex socket Size 3/8” | 140302 | 2 | 90 mm | 27 g |
| | 140325 | 2,5 | 90 mm | 52 g |
| | 140303 | 3 | 90 mm | 49 g |
| | 140304 | 4 | 90 mm | 50 g |
| | 140305 | 5 | 90 mm | 56 g |
| | 140306 | 6 | 90 mm | 60 g |
| | 140307 | 7 | 90 mm | 66 g |
| | 140308 | 8 | 90 mm | 78 g |
| | 140309 | 9 | 90 mm | 75 g |
| | 140310 | 10 | 90 mm | 103 g |
| | 140311 | 11 | 90 mm | 114 g |
| | 140312 | 12 | 90 mm | 124 g |
| | 140313 | 13 | 90 mm | 135 g |
| | 140314 | 14 | 90 mm | 118 g |

• Square connection to ISO1174 DIN3120 Standards
• Dip Insulation



1000V IEC 60900

ISO691

## Medium long insulated male hex socket 3/8” - 120 mm

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Medium long male hex socket Size 3/8” | 1506204 | 4 | 120 mm | 49 g |
| | 1506205 | 5 | 120 mm | 54 g |
| | 1506206 | 6 | 120 mm | 69 g |
| | 1506208 | 8 | 120 mm | 70 g |

• Square connection to ISO1174 DIN3120 Standards



1000V IEC 60900

## Long insulated male hex socket 3/8” - 140 mm

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Long male hex socket Size 3/8” | 140105 | 5 | 140 mm | 63 g |
| | 140106 | 6 | 140 mm | 73 g |
| | 140108 | 8 | 140 mm | 90 g |
| | 140110 | 10 | 140 mm | 151 g |

• Square connection to ISO1174 DIN3120 Standards
• Dip Insulation



1000V IEC 60900

## Extra long insulated male hex socket 3/8” - 265 mm

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Extra long male hex socket Size 1/2” | 140705 | 5 | 265 mm | 89 g |
| | 140706 | 6 | 265 mm | 109 g |
| | 140708 | 8 | 265 mm | 156 g |
| | 140710 | 10 | 265 mm | 219 g |

• Square connection to ISO1174 DIN3120 Standards
• Dip Insulation

## Combi set series 3/8"



| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Combi set | 1598001 | 275 x 65 x 210 mm | 1,5 kg |

Equipment:
- Insulated T-wrench ..... 1501 2
- Insulated reversible ratchet wrench ..... 1502 2
- Insulated extension bar 125 mm ..... 1503 2125
- Insulated extension bar 250 mm ..... 1503 2250
- Insulated 12-point female sockets 8–10–13–14–17–19–22 ..... 1504 2...
- Short Insulated male hex sockets 4–5–6–8 ..... 1505 2...
- Resin case ..... 1588 001

## Basis ratchet set series 3/8"



| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Basis ratchet set | 1598002 | 225 x 50 x 180 mm | 1,0 kg |

Equipment:
- Insulated reversible ratchet wrench ..... 1502 2
- Insulated 12-point female sockets 8–10–13–17–19–22 ..... 1504 2...
- Medium long insulated male hex sockets 4–5–6 ..... 1506 2...
- Resin case ..... 1588 002

## Basis T-wrench set series 3/8"



| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Basis T-wrench set | 1598004 | 275 x 65 x 210 mm | 1,0 kg |

Equipment:
- Insulated T-wrench ..... 1501 2
- Insulated 12-point female sockets 10–13–14–17–19–22 ..... 1504 2...
- Short insulated male hex sockets 5–6–8 ..... 1505 2...
- Medium long insulated male hex sockets 5–6 ..... 1506 2...
- Resin case ..... 1588 002

## Torque wrench set series 3/8"



| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Torque wrench set | 1598009 | 275 x 65 x 210 mm | 2,0 kg |

Equipment:
- Insulated torque wrench T 8–10–15Nm ..... 1508 0...
- Medium long insulated male hex sockets 4–5–6 ..... 1506 2...
- Resin case ..... 1588 009

## Torque wrench set series 3/8" reduced



| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Torque wrench set red. | 1598010 | 192 x 40 x 140 mm | 0,6 kg |

Equipment:
- Insulated torque wrench T 20Nm ..... 1508 020
- Short insulated male hex socket 8 ..... 1505 208
- Insulated 12-point female socket 13 ..... 1504 213
- Resin case ..... 1588 010



1000V IEC 60900

DIN7448
DIN3124



fig. 1

1000V IEC 60900

## Insulated 12-point female socket 1/2”

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| 12-point female socket Size 1/2” | 135408* | 8 | 55 mm | 53 g |
| | 135409* | 9 | 55 mm | 53 g |
| | 1504110 | 10 | 55 mm | 55 g |
| | 1504111 | 11 | 55 mm | 56 g |
| | 1504112 | 12 | 55 mm | 57 g |
| | 1504113 | 13 | 55 mm | 58 g |
| | 1504114 | 14 | 55 mm | 59 g |
| | 135415* | 15 | 55 mm | 70 g |
| | 135416* | 16 | 55 mm | 74 g |
| | 1504117 | 17 | 55 mm | 63 g |
| | 135418* | 18 | 55 mm | 82 g |
| | 1504119 | 19 | 55 mm | 71 g |
| | 135420* | 20 | 55 mm | 116 g |
| | 135421* | 21 | 55 mm | 127 g |
| | 1504122 | 22 | 55 mm | 87 g |
| | 135423* | 23 | 55 mm | 140 g |
| | 1504124 | 24 | 55 mm | 98 g |
| | 135425* | 25 | 55 mm | 180 g |
| | 135426* | 26 | 55 mm | 180 g |
| | 1504127 | 27 | 55 mm | 121 g |
| | 135430* | 30 | 55 mm | 252 g |
| | 1504132 | 32 | 55 mm | 162 g |
| | 130434* | 34 | 55 mm | 300 g |

*Bush with Dip insulation (fig.1)

- Greatly reduced outside diameter for use on screws in hard-to-get-at positions
- Square connection to ISO1174 DIN3120 Standards



1000V IEC 60900

## Extra deep insulated 12-point female socket 1/2”

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| Extra deep 12-point female socket Size 1/2” | 135508 | 8 | 95 mm | 102 g |
| | 135509 | 9 | 95 mm | 105 g |
| | 135510 | 10 | 95 mm | 118 g |
| | 135511 | 11 | 95 mm | 120 g |
| | 135512 | 12 | 95 mm | 123 g |
| | 135513 | 13 | 95 mm | 127 g |
| | 135514 | 14 | 95 mm | 134 g |
| | 135515 | 15 | 95 mm | 140 g |
| | 135517 | 17 | 95 mm | 170 g |
| | 135518 | 18 | 95 mm | 188 g |
| | 135519 | 19 | 95 mm | 204 g |
| | 135520 | 20 | 95 mm | 210 g |
| | 135522 | 22 | 95 mm | 226 g |
| | 135523 | 23 | 95 mm | 241 g |
| | 135524 | 24 | 95 mm | 270 g |
| | 135526 | 26 | 95 mm | 300 g |
| | 135527 | 27 | 95 mm | 337 g |
| | 135530 | 30 | 95 mm | 390 g |
| | 135532 | 32 | 95 mm | 423 g |

- Extra deep version - 95 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



1000V IEC 60900

## Long insulated 12-point female socket 1/2"

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| Long 12-point female socket Size 1/2" | 135610 | 10 | 140 mm | 230 g |
| | 135614 | 14 | 140 mm | 253 g |
| | 135617 | 17 | 140 mm | 302 g |
| | 135619 | 19 | 140 mm | 312 g |
| | 135622 | 22 | 140 mm | 360 g |
| | 135624 | 24 | 140 mm | 403 g |
| | 135627 | 27 | 140 mm | 484 g |
| | 135630 | 30 | 140 mm | 510 g |
| | 135632 | 32 | 140 mm | 560 g |

- Long version - 140 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



1000V IEC 60900

## Extra long insulated 12-point female socket 1/2"

| Description | Order No. | (12) Size | Length | Weight |
|---|---|---|---|---|
| Extra long 12-point female socket Size 1/2" | 135813 | 13 | 270 mm | 457 g |
| | 135814 | 14 | 270 mm | 480 g |
| | 135817 | 17 | 270 mm | 530 g |
| | 135819 | 19 | 270 mm | 550 g |
| | 135824 | 24 | 270 mm | 680 g |
| | 135830 | 30 | 270 mm | 800 g |
| | 135832 | 32 | 270 mm | 840 g |

- Extra long version - 270 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



1000V IEC 60900

DIN7448
DIN3124

## Insulated male hex socket 1/2"

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Male hex socket Size 1/2" | 1505104 | 4 | 85 mm | 76 g |
| | 1505105 | 5 | 85 mm | 78 g |
| | 1505106 | 6 | 85 mm | 81 g |
| | 140507* | 7 | 90 mm | 79 g |
| | 1505108 | 8 | 85 mm | 84 g |
| | 1505110 | 10 | 85 mm | 90 g |
| | 140512* | 12 | 90 mm | 126 g |
| | 140514* | 14 | 90 mm | 158 g |

*Bush with Dip insulation (fig.1)

- Normal version - min. 85 mm
- Square connection to ISO1174 DIN3120 Standards



1000V IEC 60900



1000V IEC 60900

ISO691

## Long insulated male hex socket 1/2"

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Long male hex socket Size 1/2" | 1506104 | 4 | 135 mm | 83 g |
| | 1506105 | 5 | 135 mm | 88 g |
| | 1506106 | 6 | 135 mm | 95 g |
| | 1506108 | 8 | 135 mm | 100 g |
| | 1506110 | 10 | 135 mm | 107 g |

- Long version - 135 mm
- Square connection to ISO1174 DIN3120 Standards



1000V IEC 60900

## Extra long insulated male hex socket 1/2"

| Description | Order No. | Size | Length | Weight |
|---|---|---|---|---|
| Extra long male hex socket Size 1/2" | 140805 | 5 | 265 mm | 122 g |
| | 140806 | 6 | 265 mm | 143 g |
| | 140808 | 8 | 265 mm | 143 g |
| | 140810 | 10 | 265 mm | 185 g |

- Extra long version - 265 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation

intercable Locking System

1000V IEC 60900



## Combi set series 1/2"

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Combi set | 1599002 | 330 x 75 x 270 mm | 3.1kg |

Equipment:
- Insulated T-wrench ..... 1501 1
- Insulated reversible ratchet wrench ..... 1502 1
- Insulated extension bar 125 mm ..... 1503 1125
- Insulated extension bar 250 mm ..... 1503 1250
- Insulated 12-point female sockets 10-13-14-17-19-22-24-27 ..... 1504 1...
- Insulated male hex sockets 4-5-6-8-10 ..... 1505 1...
- Resin case ..... 1589 002

intercable Locking System

1000V IEC 60900



## Basis ratchet set series 1/2"

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Basis ratchet set | 1599005 | 275 x 65 x 210 mm | 1,6 kg |

Equipment:
- Insulated reversible ratchet wrench ..... 1502 1
- Insulated 12-point female sockets 10–13–17–19–22–24 ..... 1504 1...
- Insulated male hex sockets 4–5–6 ..... 1505 1...
- Resin case ..... 1589 005

intercable Locking System

1000V IEC 60900



## Basis T-wrench set series 1/2"

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Basis T-wrench set | 1599001 | 275 x 65 x 210 mm | 1,5 kg |

Equipment:
- Insulated T-wrench ..... 1501 1
- Insulated 12-point female sockets 10-13-14-17-19-22 ..... 1504 1...
- Insulated male hex sockets 5-6-8 ..... 1505 1...
- Long insulated male hex sockets 5-6 ..... 1506 1...
- Resin case ..... 1589 001

intercable Locking System

1000V IEC 60900



## Torque wrench set series 1/2"

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Torque wrench set | AV3755 | 275 x 65 x 210 mm | 2,0 kg |

Equipment:
- Insulated torque wrench T 8–10–15Nm ..... AC37...
- Long insulated male hex sockets 4–5–6 ..... 1506 1...
- Resin case ..... 1589 001

intercable Locking System

1000V IEC 60900



## Torque wrench set series 1/2" reduced

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Torque wrench set red. | AV3760 | 192 x 40 x 140 mm | 0,7 kg |

Equipment:
- Insulated torque wrench T 20Nm ..... AC3720
- Insulated male hex socket 8 ..... 1505 108
- Insulated 12-point female socket 13 ..... 1504 113
- Resin case ..... 1588 010

# ALIGNMENT TOOL FOR SECTOR CABLE




## Alignment tool for sector cable

| Description | Order No. | Cross Section | Length | Weigth |
|---|---|---|---|---|
| Alignment tool Size 3/8“ | **132095**<br>**132185**<br>**132030** | 95 - 150<br>185 - 240<br>300 | 75 mm<br>83 mm<br>83 mm | 80 g<br>140 g<br>140 g |
| Alignment tool Size 1/2“ | **132096**<br>**132186**<br>**132031** | 95 - 150<br>185 - 240<br>300 | 75 mm<br>83 mm<br>83 mm | 80 g<br>140 g<br>140 g |

- Insulation of non-brittle plastic
- To align 3 or 4 strand sectoral conductor
- Used with INTERCABLE insulated T-Wrenches (15011, 15012) or ratched wrenches (15021, 15022)
- Other sizes on request



## Belt pouch “EuroMario”

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| EuroMario with tools (red) | 19122 | 110 x 220 x 65 mm | 0,6 kg |
| EuroMario with tools (black) | 19132 | 120 x 230 x 70 mm | 0,7 kg |
| EuroMario without tools (red) | 19120 | 110 x 220 x 65 mm | 0,1 kg |
| EuroMario without tools (black) | 19130 | 120 x 230 x 70 mm | 0,1 kg |

Equipment:
1000V insulated tools (IEC 60900, IEC900, VDE0682-201)
- Engineers pliers 180 mm 2K ..... 1101 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for Phillips screws PH 1 x 75 - PH 1 x 75 - **SLIM** ..... 1302 1

NOT insulated tools
- Special electricians scissors 2K ..... 1601 2



## Belt Pouch “IperMario”

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| IperMario with tools | 19152 | 245 x 245 x 50 mm | 1,20 kg |
| IperMario without tools | 19150 | 245 x 245 x 50 mm | 0,3 kg |

Equipment:
1000V insulated tools (IEC 60900, IEC900, VDE0682-201)
- Engineers pliers 180 mm 2K ..... 1101 180
- Diagonal cutting nipper 2K ..... 1102 160
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1 x 5,5 x 125 - **SLIM** ..... 1301 055
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 2 x 100 - **SLIM** ..... 1303 2

NOT insulated tools
- Special electricians scissors 2K ..... 1601 2
- Voltage tester 3 x 65 mm ..... AV6104



## Belt pouch in leather

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Belt pouch with tools | 19142 | 200 x 100 x 200 mm | 1,5 kg |
| Belt pouch without tools | 19140 | 200 x 100 x 200 mm | 0,7 kg |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K ..... 1101 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2
- Cable cutter D17 2K ..... 1602 160

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- Voltage tester 3 x 65 mm ..... AV6104
- EnerGrip - cable puller ..... AV8902





## Pouch 1000/EN60900 “Euronorm”

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Pouch with tools | 19231 | 360 x 270 x 70 mm | 2,4 kg |
| Pouch without tools | 19230 | 360 x 270 x 70 mm | 1,0 kg |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K ..... 1201 180
- Telephone pliers with straight jaws 160 mm 2K ..... 1203 160
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - **SLIM** ..... 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - **SLIM** ..... 1303 2
- Cable stripping knife with clappable blade protection ..... AV3920
- Insulated electrician's shears 2K ..... 1603 2
- Cable cutter D17 2K ..... 1602 160

# TOOL CASES AND EQUIPMENT



## “EUROBAG” Tool box with shoulder strap

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Tool box with tools | 19331 | 350 x 310 x 80 mm | 1,6 kg |
| Tool box without tools | 19330 | 350 x 310 x 80 mm | 0,8 kg |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K ..... 1201 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2
- Cable cutter D17 2K ..... 1602 160

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- Voltage tester 3 x 65 mm ..... AV6104
- 2 containers for small parts



## Tool bag with rechargeable flashlight

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Tool bag with tools | 19401 | 200 x 300 x 100 mm | 2,4 kg |
| Tool bag without tools | 19400 | 200 x 300 x 100 mm | 1,6 kg |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K ..... 1201 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- Flexometer 3 m ..... 7406 030
- Baby spirit level ..... 7404 100
- 2 containers for small parts
- Rechargeable flashlight 12V ..... 50 x 20 x 20 mm



## “INTERCABLE” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Tool box with tools | 19601 | 450 x 240 x 250 mm | 3,0 kg |
| Tool box without tools | 19600 | 450 x 240 x 250 mm | 2,3 kg |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K ..... 1201 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1 x 4,5 x 125 - **SLIM** ..... 1301 045
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2

NOT insulated tools

- Cable cutter and crimper electrician scissor 2K ..... 16020-F1
- Voltage tester 3 x 65 mm ..... AV6104
- Flexometer 3 m ..... 7406 030
- Pocket saw “PUK” ..... 7402 150
- Baby spirit level ..... 7404 100
- Gloves GRIP ..... 7407 009

# TOOL CASES AND EQUIPMENT



## “EuroCompact” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Leather box with tools | 19162 | 440 x 200 x 300mm | 4,2 kg |
| Hard top box with tools | 19172 | 430 x 340 x 160mm | 4,5 kg |
| Leather box without tools | 19160 | 440 x 200 x 300 mm | 3,0 kg |
| Hard top box without tools | 19170 | 430 x 340 x 160 mm | 3,3 kg |
| Shoulder strap (for leather box) | 19199 | - | 0,2 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K ..... 1101 180
- Telephone pliers with straight jaws 160 mm 2K ..... 1103 160
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1 x 5,5 x 125 - **SLIM** ..... 1301 055
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws “Phillips” - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws “Phillips” - PH 2 x 100 - **SLIM** ..... 1302 2
- Cable cutter D17 2K ..... 1602 160

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- EnerGrip - cable puller ..... AV8902
- Universal key ..... QUATTRO





## “EUROPROFI” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Leather box with tools | 19182 | 440 x 200 x 360 mm | 5,0 kg |
| Hard top box with tools | 19192 | 470 x 360 x 200 mm | 6,2 kg |
| Leather box without tools | 19180 | 440 x 200 x 360 mm | 3,8 kg |
| Hard top box without tools | 19190 | 470 x 360 x 200 mm | 5,0 kg |
| Shoulder strap for leather box | 19199 | - | 0,2 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K ..... 1101 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 ..... 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 1 x 5,5 x 125 - **SLIM** ..... 1301 055
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws “Phillips” - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws “Phillips” - PH 2 x 100 - **SLIM** ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - **SLIM** ..... 1303 1
- Insulated scissors 2K ..... 1603 1
- Cable cutter D17 2K ..... 1602 160

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- Baby spirit level ..... 7404 100
- EnerGrip - cable puller ..... AV8902
- Voltage tester - 3 x 65 mm ..... AV6104





## "ALU" Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Alu box with tools | 19281 | 485 x 380 x 200 mm | 9,4 kg |
| Alu box without tools | 19280 | 485 x 380 x 200 mm | 6,3 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Screwdriver for slotted head screws - 4 x 100 - SLIM ..... 1301 040
- Screwdriver for slotted head screws - 5,5 x 125 - SLIM ..... 1301 055
- Screwdriver for slotted head screws - 6,5 x 150 - SLIM ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM ..... 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM ..... 1303 2
- Engineers pliers 180 mm 2K ..... 1101 180
- Cable cutter D17 2K ..... 1602 160
- Telephone pliers with straight jaws ..... 1103 200

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- Voltage tester 3 x 65 mm ..... AV6104
- Universal key ..... QUATTRO
- Hammer 300 g ..... 7130 582
- Chisel ..... 7130 008
- Pliers for tubes and nuts ..... 7101 237
- Spirit level 250 mm ..... 7211 440
- Baby spirit level ..... 7404 100
- Flexometer 3 m ..... 7406 030
- Pocket saw "PUK" ..... 7402 150
- Hexagon screw set Pocketstar ..... 7401 208
- Universal knife ..... 7120 081



## 1000V shockproof resin tool kit

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hard top box with tools | 19501 | 480 x 360 x 235 mm | 10,4 kg |
| Hard top box without tools | 19500 | 480 x 360 x 235 mm | 6,5 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm ..... AP0119N
- Telephone pliers with straight jaws 200 mm ..... AP0420N
- Insulating engineers pliers ..... 1108 1
- Cable cutter D17 ..... AP1017
- Insulated wire stripper 2,5-10 mm ..... AE6200
- Screwdriver for slotted head screws - 3 x 75 ..... AC1501
- Screwdriver for slotted head screws - 4 x 100 ..... AC1502
- Screwdriver for slotted head screws - 5,5 x 150 ..... AC1504
- Screwdriver for slotted head screws - 8 x 150 ..... AC1506
- Screwdriver for Phillips screws PH1 ..... AC1601
- Screwdriver for Phillips screws PH2 ..... AC1602
- Screwdriver for Phillips screws PH3 ..... AC1603
- Insulated T- wrench 1/2" ..... 1501 1
- Insulated 12-point female sockets 10, 13, 14, 17, 17, 19, 22 ..... 1504 1....
- Insulated male hex sockets 5, 6, 8, ..... 1505 10..
- Long Insulated male hex sockets 5, 6 ..... 1506 10..
- 4 insulated safety clamps ..... 6514 09
- Screwdriver for hexagon sockets 2,5, 3, 4 ..... 1304 0....
- Rubber cover material 600 x 600 ..... AV4102

# TOOL CASES AND EQUIPMENT



## “NEW PROFESSIONAL” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hard top box with tools | 19311 | 460 x 400 x 200 mm | 8,1 kg |
| Hard top box without tools | 19310 | 460 x 400 x 200 mm | 5,5 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Screwdriver for slotted head screws - 4 x 100 - SLIM ..... 1301 040
- Screwdriver for slotted head screws - 5,5 x 125 - SLIM ..... 1301 055
- Screwdriver for slotted head screws - 6,5 x 150 - SLIM ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM ..... 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM ..... 1303 2
- Engineers pliers 180 mm 2K ..... 1101 180
- Cable cutter D17 2K ..... 1602 160
- Telephone pliers with straight jaws ..... 1103 200

NOT insulated tools

- Special electricians scissors 2K ..... 1601 2
- Gloves GRIP ..... 7407 009
- Flexometer 3 m ..... 7406 030
- Baby spirit level ..... 7404 100
- Hexagon screw set Pocketstar ..... 7401 208
- Universal knife ..... 7120 081
- Voltage tester 3 x 65 mm ..... AV6104
- Switch cabinet spanner ProfiKey ..... AV9312
- Pocket saw “PUK” ..... 7402 150
- Hammer 300 g ..... 7130 582
- Pliers for tubes and nuts ..... 7101 237



## “PROFESSIONAL TROLLEY” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hard top box with tools | 19321 | 460 x 400 x 250 mm | 9,5 kg |
| Hard top box without tools | 19320 | 460 x 400 x 250 mm | 6,9 kg |
| Other tool cases available on request | | | |



## “EUROTROLLEY” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hard top box with tools | AO0511 | 430 x 320 x 160 mm | 6,3 kg |
| Hard top box without tools | 19163 | 430 x 320 x 160 mm | 5,0 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Screwdriver for slotted head screws - 3 x 100 - **SLIM** ..... 1301 030
- Screwdriver for slotted head screws - 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 4,5 x 125 - **SLIM** ..... 1301 045
- Screwdriver for slotted head screws - 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - **SLIM** ..... 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - **SLIM** ..... 1303 2
- Engineers pliers 180 mm 2K ..... 1201 180

NOT insulated tools

- Assortment of hexagonal spanners 8 pc ..... 7110 592
- Cable cutter and crimper electrician scissor 2K ..... 16020-F1
- Voltage tester 3 x 65 mm ..... AV6104
- Flexometer 3 m ..... 7406 030
- Baby spirit level ..... 7404 100
- Gloves GRIP ..... 7407 009

# TOOL CASES AND EQUIPMENT





## “INTERCABLE” Tool box

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hard top box with tools | AO0108 | 460 x 370 x 200 mm | 5,8 kg |
| Hard top box without tools | AO0108B | 460 x 370 x 200 mm | 4,3 kg |
| Other tool cases available on request | | | |

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Screwdriver for slotted head screws - 3 x 100 - **SLIM** ..... 1301 030
- Screwdriver for slotted head screws - 4 x 100 - **SLIM** ..... 1301 040
- Screwdriver for slotted head screws - 4,5 x 125 - **SLIM** ..... 1301 045
- Screwdriver for slotted head screws - 6,5 x 150 - **SLIM** ..... 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - **SLIM** ..... 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - **SLIM** ..... 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - **SLIM** ..... 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - **SLIM** ..... 1303 2
- Engineers pliers 180 mm 2K ..... 1201 180

NOT insulated tools

- Assortment of hexagonal spanners 8 pc ..... 7110 592
- Cable cutter and crimper electrician scissor 2K ..... 16020-F1
- Voltage tester 3 x 65 mm ..... AV6104
- Gloves GRIP ..... 7407 009
- Flexometer 3 m ..... 7406 030
- Baby spirit level ..... 7404 100
- Universal knife ..... 7120 081
- Pocket saw “PUK” ..... 7402 150
- Hammer 300 g ..... 7130 582



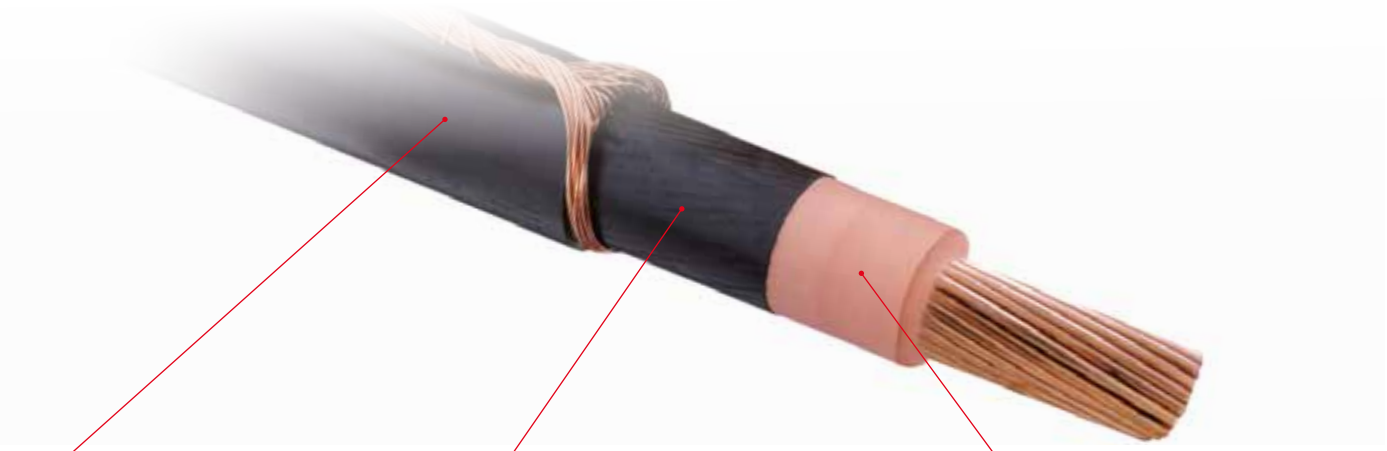

# STRIPPING TOOLS

# PRODUCT OVERVIEW



| Insulation | Type | Order No. | Application range | Insulation thickness | Suggested application | 1000V certified | Page |
|---|---|---|---|---|---|---|---|
| STRIPPING TOOLS FOR EXTERNAL INSULATION | AMS | AV6220 | ø > 25 mm | 0 - 5 mm | PVC / Rubber | | 69 |
| | AMS 1000V | 17130 | ø > 25 mm | 0 - 5 mm | PVC / Rubber | X | 69 |
| | AMS MAXI | AV6240 | ø > 45 mm | 0 - 5 mm | PVC / Rubber / Polyethylene | | 70 |
| | MSU | AE6210 | ø 24 - 60 mm | 0 - 5 mm | Polyethylene / lead cables | | 71 |
| | AMX | 17300 | ø 16 - 54 mm | 0 - 5 mm | Polyethylene / fully bonded aluminium outer insulation | | 72 |
| | AIS | 17190 | ø 16 - 54 mm | 0,5 - 5 mm | High density polyethylene | X | 73 |
| | FSI 150 | 17170 | 6 - 150 mm² | Preadjusted stripping inserts | ABC cables (overhead, twisted, insulated) | X | 74 |
| | FSI | AE6200 | 2.5, 4, 6 and 10 mm² | | Rigid and flexible single pole | X | 75 |
| STRIPPING TOOLS FOR SEMICONDUCTOR | FBS | 17220 | ø 10 - 52 mm | 0 - 1,5 mm | Vulcanized, extruded, bonded semiconductive layer | | 76 |
| | HLS | AV6400 | ø 16 - 41 mm | 0 - 2 mm | Non vulcanized, peelable semiconductive layer | | 77 |
| STRIPPING TOOL FOR PRIMARY INSULATION | IMS 20 - 22kV | AV6310 + inserts | 25 - 240 mm² | Preadjusted stripping inserts | Any type of primary insulation | | 78 |
| | IMS 10 - 11kV | AV6310 + inserts | 25 - 240 mm² | Preadjusted stripping inserts | Any type of primary insulation | | 78 |
| | IMS II | 17230 | ø 15 - 52 mm | 0 - 15 mm | Any type of primary insulation | | 80 |
| STRIPPING TOOL FOR CHAMFERING PRIMARY INSULATION | UFS | 17240 | ø 15 - 60 mm | | Any type of primary insulation | | 81 |
| STRIPPING TOOL FOR ARMOURED CABLE | Roller chains cutter | 1609076 | ø 20 - 76 mm cable up to 150 mm² | | Armoured cable | | 82 |

## APPLICATION EXAMPLE



### STRIPPING TOOLS FOR EXTERNAL INSULATION

- AMS (AV6220)
- AMS 1000V (17131)
- AMS MAXI (AV6240)
- MSU (AE6210)
- AMX (17300)
- AIS (17190)
- FSI 150 (17170)
- FSI (AE6200)

### STRIPPING TOOLS FOR SEMICONDUCTOR

- FBS (vulcanized / bonded / semiconductor) (17221)
- HLS (not vulcanized / semiconductor / peeleable) (AV6410 & AV6411)

### STRIPPING TOOL FOR PRIMARY INSULATION

- IMS II (17231)
- IMS (AV6310)
- UFS (17241)

### ARMOURED WIRES

- Roller chain cutter (1609076)

# WE

# LOVE

# **TOOLS**



## Cable stripper

| | |
|---|---|
| APPLICATION RANGE | Ø 8 - 28 mm |
| INSULATION THICKNESS | 3 |
| SUGGESTED APPLICATION | PVC |

| Description | Order No. | Weight | Length |
|---|---|---|---|
| Quadro-cable stripper | AV3840 | 530 g | 125 mm |
| Replacement blade | AV3820 | - | - |

• To quickly remove all common circular cables from Ø 8 to 28 mm. The cutting depth is adjustable using the adjustment screw at the end of the handle according to the thickness of the insulating cable.

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!



## Self adjustable cable stripper

| | |
|---|---|
| APPLICATION RANGE | Ø 4,5 - 28 mm |
| INSULATION THICKNESS | 2,5 |
| SUGGESTED APPLICATION | PVC |

| Description | Order No. | Weight | Length |
|---|---|---|---|
| Universal cable stripper | AV3810 | | 138 mm |
| Replacement blade | AV3819 | - | - |

• Round-, longitudinal- and spiral-cut possible

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!



## Self adjustable cable stripper

| | |
|---|---|
| APPLICATION RANGE | Ø 4,5 - 29 mm |
| INSULATION THICKNESS | 3 mm |
| SUGGESTED APPLICATION | PVC and rubber |

| Description | Order No. | Weight | Length |
|---|---|---|---|
| Universal cable stripper | ABI1 | 150 g | 140 mm |
| Spare blade | 110059 | - | - |

HANDY AND EFFORTLESS USAGE

SMALL AND COMPACT DESIGN

STEP BY STEP DEPTH ADJUSTMENT (IN CLICKS OF 0.1 MM)

• Very small self rotating (<200 mm)
• For every kind of insulation
• Round-, longitudinal- and spiral-cut possible
• Easy to change blade

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!




## Universal cable stripper

| | |
|---|---|
| APPLICATION RANGE | Ø 0,2 - 6 mm² |
| INSULATION THICKNESS | ANY |
| SUGGESTED APPLICATION | PVC |

| Description | Order No. | Length |
|---|---|---|
| Universal cable stripper | PTS4 | 170 mm |

- To strip off off and cut flexible cables 0,2 - 6 mm²
- Integrated blade with safety lock
- Adjustable length

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!




## Universal cable stripper 0,03 - 16 mm²

| | |
|---|---|
| APPLICATION RANGE | Ø 0,03 - 16 mm² |
| INSULATION THICKNESS | ANY |
| SUGGESTED APPLICATION | PVC |

| Description | Order No. | Length |
|---|---|---|
| Universal cable stripper | AB16 | 210 mm |

- To strip off and cut flexible cables 0,03 - 16 mm²
- Integrated blade with safety lock
- Adjustable length

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!




## Universal cable stripper

| | |
|---|---|
| APPLICATION RANGE | Ø 1,5 - 35 mm² |
| INSULATION THICKNESS | ANY |
| SUGGESTED APPLICATION | outer PVC insulation |

| Description | Order No. | Length |
|---|---|---|
| Universal cable stripper | AV8203 | 170 mm |

- To strip off flexible cables 1,5 - 35 mm²

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!



## AMS / AMS 1000V - Universal cable stripper for external insulation

| | |
|---|---|
| APPLICATION RANGE | Ø > 25 mm |
| INSULATION THICKNESS | 0 - 5 mm |
| SUGGESTED APPLICATION | PVC / Rubber |

Technical characteristics:
- Designed to strip outer sheath from MV and LV cables
- Longitudinal and circular cuts
- Designed to strip ends and or middle parts
- Stripping without hurting the lower layers
- Interchangeable two-sided blade
- Snap closure mechanism (AMS only)

Additional features model AMS 1000V - 17130:
- Suitable for work on live parts up to 1000V AC und 1500V DC (model AMS 1000V - 1713 0 only)
- Model AMS 1000V is also designed for very low temperature uses, down to -40°C




Universal cable stripper AMS - AV6221



AMS-Set - AV6220




1000V IEC 60900

Universal cable stripper AMS 1000V - 1713 1

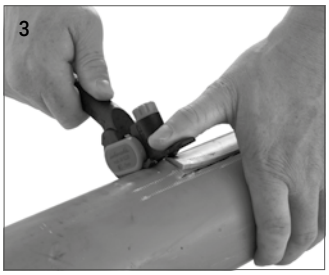


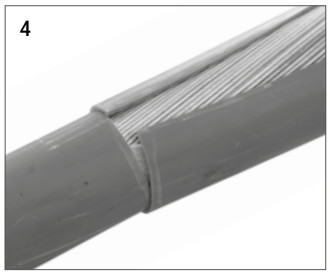
AMS 1000V-Set - 1713 0










- NO DAMAGING OF BELOW SURFACE
- SUITABLE FOR WORK ON LIVE PARTS (ONLY MODEL 17130)
- LONG LASTING PRECISE INTERCHANGEABLE TWO SIDED BLADE

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: AMS | AV6220 | 160 x 65 x 35 mm | 200 g |
| Set: AMS 1000V | 17130 | 170 x 75 x 50 mm | 200 g |
| Spare blade | AV6299 | - | - |

Set equipment:
- Plastic case to contain the tool and its instructions for use (AMS)
- Soft nylon case to contain the tool and its instructions for use (AMS 1000V)



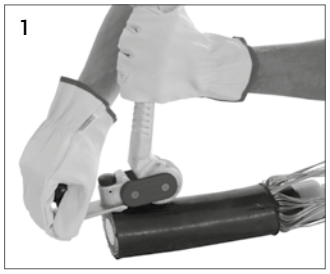
## AMS MAXI - Universal cable stripper for large difficult cable insulation

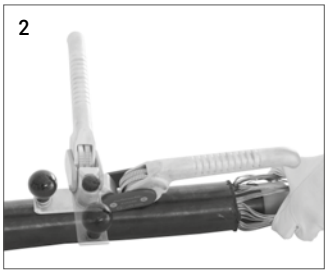
| | |
|---|---|
| APPLICATION RANGE | Ø > 45 mm |
| INSULATION THICKNESS | 0 - 5 mm |
| SUGGESTED APPLICATION | PVC / Rubber / Polyethylene |

Technical characteristics:
- Designed to strip outer sheath from LV, MV and HV cables
- Longitudinal and circular cuts
- Designed to strip ends or middle parts
- Stripping without hurting the lower layers
- Interchangeable two-sided blade




Universal cable stripper AMS MAXI - AV6240










- NO DAMAGING OF BELOW SURFACE
- LONG LASTING PRECISE INTERCHANGEABLE TWO SIDED BLADE
- SUITABLE TO WORK ON LARGE DIFFICULT CABLES INSULATION



AMS MAXI-Set - AV6240

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: AMS MAXI | AV6240 | 250 x 110 x 60 mm | 800 g |
| Spare blade | AV6299 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:
- Soft nylon case to contain the tool and its instructions for use



## MSU - Special cable stripper for external insulation

| | |
|---|---|
| APPLICATION RANGE | Ø 24 - 60 mm |
| INSULATION THICKNESS | 0 - 5 mm |
| SUGGESTED APPLICATION | Polyethylene / lead cables |

Technical characteristics:
- Designed to strip outer sheath from MV and LV cables
- Circular and helical cuts
- Operates by simply rotating it around the cable axis
- Designed to strip both ends
- Interchangeable blade




MSU - AE6210



Cable knife - AV3920



Soft case - AB6210













- NO DAMAGING OF BELOW SURFACE
- SUITABLE FOR WORK ON LIVE PARTS (ONLY MODEL 17130)
- LONG LASTING PRECISE INTERCHANGEABLE TWO SIDED BLADE

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: MSU | AE6210 | 290 x 110 x 90 mm | 900 g |
| Spare blade | AE6219 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:
- Special MSU cable stripper ..... AE6211
- Cable knife ..... AV3920
- Soft case ..... AB6210

# STRIPPING TOOLS FOR EXTERNAL INSULATION



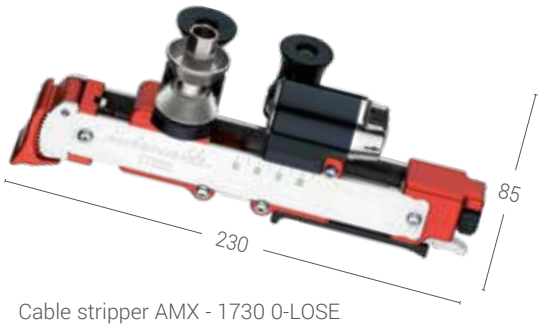


Norm: EN10020

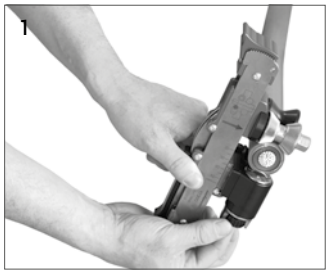
## AMX - Universal cable stripper for heavy duty outer sheaths

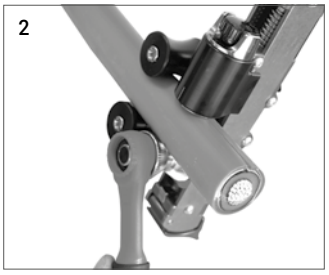
| | |
|---|---|
| APPLICATION RANGE | Ø 16 - 54 mm |
| INSULATION THICKNESS | 0 - 5 mm |
| SUGGESTED APPLICATION | Polyethylene / fully bonded aluminium outer insulation |

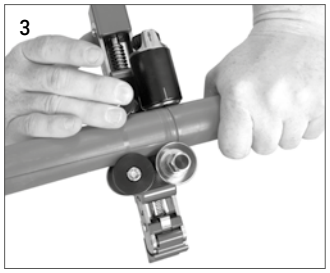
Technical characteristics:
- Designed to strip aluminium armed outer sheaths of LV/MV
- Suitable for longitudinal and circular cutting
- Additional claw to break hard insulation
- The initial setting of the correct cable diameter is done by adjusting the handle
- The fixation of the device on the cable is performed by a quick-release system with toggle lever princip
- The cutting depth is adjustable in steps of 0,1 mm
- Switchable between longitudinal and circular cut
- Maximal rotation diameter of the tool: 300 mm

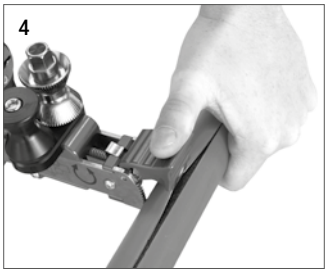



Cable stripper AMX - 1730 0-LOSE






Feed lever - 1719 4

- SMALL SELF ROTATING TO WORK ON LIMITED SPACE
- EASY AND PRECISE WORKING THROUGH FAST LOCKING SYSTEM
- GRADUALLY DEPTH ADJUSTMENT AND MAX. SAFETY OF OPERATOR



Soft nylon case - AB6230

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: AMX | 17300 | 260 x 140 x 65 mm | 1,3 kg |
| Spare blade | 17301 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:
- AMX - cable stripper ..... 1730 0
- Feed lever ..... 1719 4
- 2,5 mm Allen wrench ..... 1710 1
- Soft nylon case ..... AB6230




## AIS - Cable stripper for external insulation

| | |
|---|---|
| APPLICATION RANGE | Ø 16 - 54 mm |
| INSULATION THICKNESS | 0,5 - 5 mm |
| SUGGESTED APPLICATION | High density polyethylene |

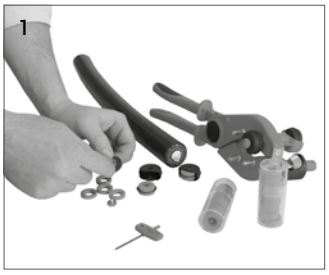
Technical characteristics:
- Longitudinal and circular cuts on MV cables
- Used to work on live parts up to 1000V AC and 1500V DC
- Designed to strip ends or middle parts
- Hooked blade for removing the sheath that has been cut
- 100° tool rotation makes a complete 360° circumference cut
- Longitudinal feed in both directions using the ratchet lever
- Electrically insulated interchangeable blades
- Two-component handles in compliance with CEI/EN60900 Standards
- The tool head (except for the blades) is totally insulated




Cable stripper AIS - 1719 6

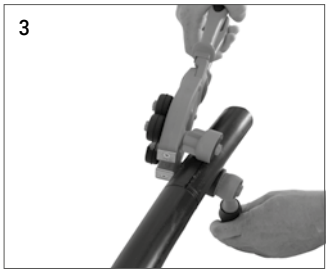


Feed lever - 1719 4













- ADJUSTABLE CUTTING DEPTH LIMITATION
- SUITABLE TO WORK ON LIVE PARTS
- FEED LEVER FOR PRECISE WORKING AND MAX. SAFETY OF OPERATOR

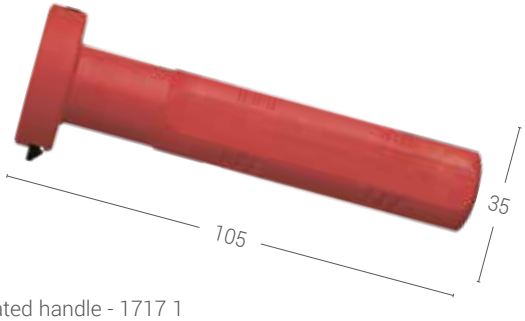


AIS-Set - 1719 0

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: AIS | 17190 | 390 x 340 x 90 mm | 2,0 kg |
| Spare blade | 17195 | - | - |

Set equipment:
- AIS - cable stripper ..... 1719 6
- Feed lever ..... 1719 4
- 10 x 14 Colored identification washers ..... -
- 2 Spare screws to fasten the blade ..... 1719 7
- 2,5 mm Allen wrench ..... 1710 1
- Rigid resin case ..... AB17190




Insulated handle - 1717 1




Stripping insert - 1717...



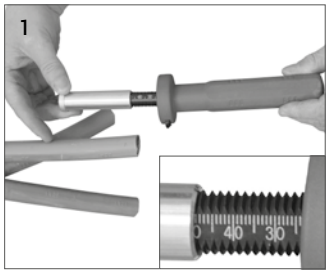
FSI 150 - Set - 1717 0

## FSI 150 - Insulated wire stripper for ABC cables

| | |
|---|---|
| APPLICATION RANGE | 6 - 150 mm² |
| INSULATION THICKNESS | Preadjusted stripping inserts |
| SUGGESTED APPLICATION | ABC cables (overhead, twisted, insulated) |

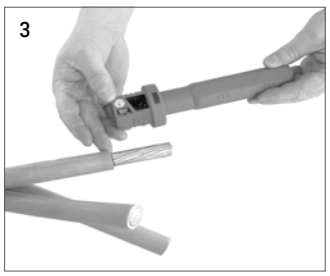
Technical characteristics:
- Designed to work on live parts up to 1000V AC and 1500V DC
- Stripping depth adjustment built inside the handle
- Insulated handle with bayonet connection
- Stripping length adjustable from 20 to 80 mm
- Scale marked on the built-in device to display the preset length
- Interchangeable blade

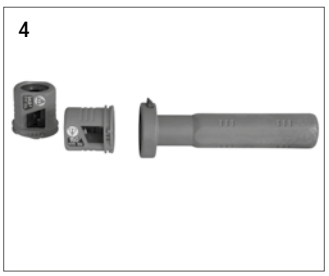
Inserts available:
- Stripping insert 6 mm² ..... 1717 006
- Stripping insert 10 mm² ..... 1717 010
- Stripping insert 16 mm² ..... 1717 016
- Stripping insert 25 mm² ..... 1717 025
- Stripping insert 35 mm² ..... 1717 035
- Stripping insert 50 mm² ..... 1717 050
- Stripping insert 54,6 mm² ..... 1717 054
- Stripping insert 70 mm² ..... 1717 070
- Stripping insert 95 mm² ..... 1717 095
- Stripping insert 150 mm² ..... 1717 150
- Other inserts on request










- EASY HANDLING THROUGH PREADJUSTED INSERTS
- SUITABLE TO WORK ON LIVE PARTS 1000V
- DESIGNED TO WORK IN LIMITED SPACE

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: FSI 150 | 17170 | 235 x 210 x 55 mm | 950 g |
| Spare blade | 17179 | - | - |

Set equipment:
- Insulated handle ..... 1717 1
- Stripping inserts: 16, 25, 35, 50, 54,6 , 70 mm²
- 3 Spare blades ..... 1717 9
- Allen wrench 2,5 mm ..... 1710 0
- Rigid resin case ..... AB17170



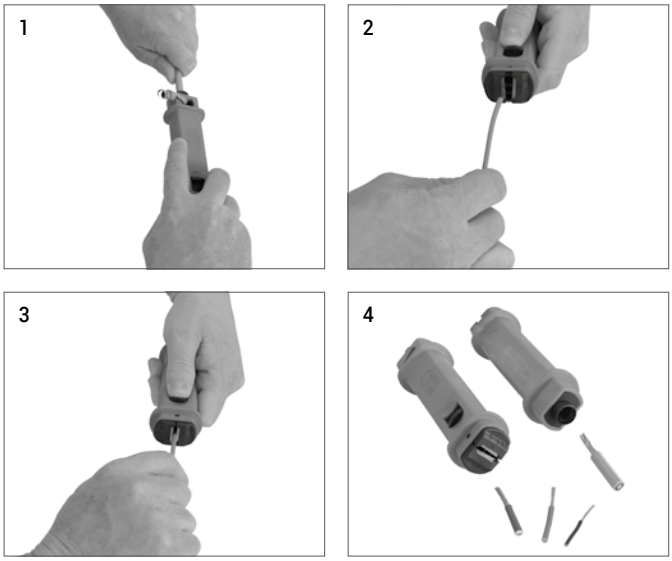

## FSI - Insulated wire stripper for cables from 2.5 to 10 mm²

| | |
|---|---|
| RIGID SINGLE POLE | 10 mm² |
| FLEXIBLE SINGLE POLE | 2,5 - 4 - 6 mm² |

Technical characteristics:
- 20 mm stripping depth
- Blade built into the tool
- The tool can be used with one hand only and allow easy stripping of cables lenghts of 20 mm
- The tool is provided with two hand - guards. Central handling permits all stripping operations
- Blades are located in a secure position to prevent accidental contact with worker's hands during the stripping operations and to assure the clean stripping of the insulation




Wire stripper - AE6200




- EASY HANDLING THROUGH PREADJUSTED INSERTS
- SUITABLE TO WORK ON LIVE PARTS 1000V
- DESIGNED TO WORK IN LIMITED SPACE



Soft nylon case - AB6200

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: FSI | AE6200 | 175 x 65 x 50 mm | 150 g |

Set equipment:
- Insulated stripping tool ..... AE6200
- Soft nylon case ..... AB6200

# STRIPPING TOOLS FOR SEMICONDUCTOR





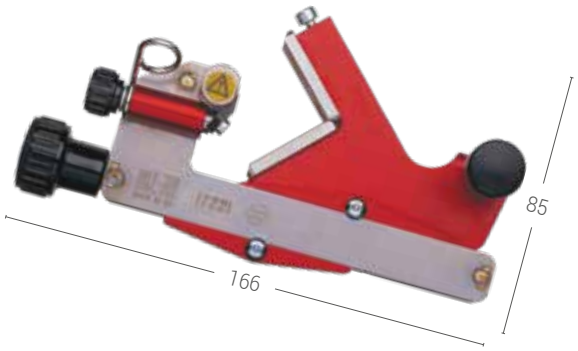
Norm: EN10020

## FBS - Cable stripper for vulcanized semiconductive layer

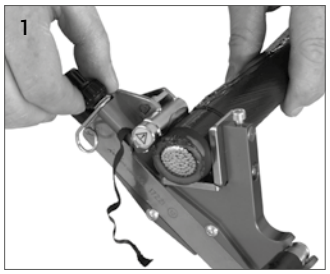
| | |
|---|---|
| APPLICATION RANGE | Ø 10 - 52 mm |
| INSULATION THICKNESS | 0 - 1,5 mm |
| SUGGESTED APPLICATION | Vulcanized, extruded, bonded semiconductive layer |

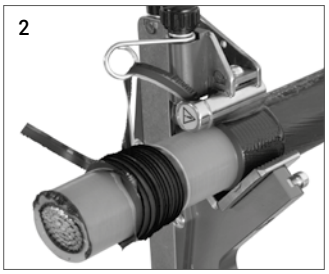
Technical characteristics:

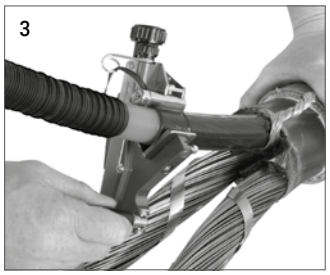
- Positioning on the cable comparable to a vice system
- Axial feed activation/deactivation device (usable in both directions): Through the stripping operation starting from outside of the cable, 25mm of the semicon layer will not be stripped (as shown in the pictures). By the stripping operation from inside to outside about 6 mm of semicon layer will remain.
- Stripping can be done starting from any position on the cable
- Maximal rotating diameter 200 mm
- Interchangeable blade

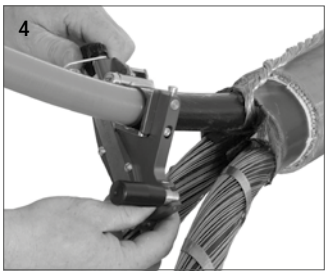



Cable stripper FBS - 1722 1






FBS-Set - 1722 0

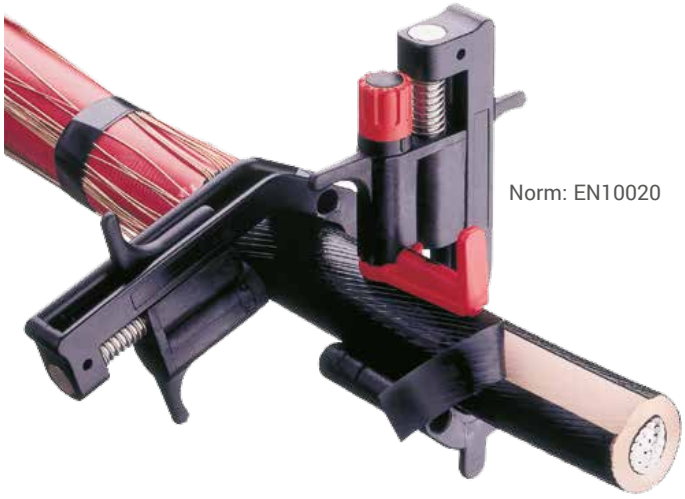
- SMALL AND COMPACT DESIGN
- PERFECT CIRCULAR CUT
- STEP BY STEP DEPTH ADJUSTMENT (WITH LOCKING POSSIBILITY)

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: FBS | 17220 | 235 x 200 x 55 mm | 800 g |
| Spare blade 17" | 17142 | - | - |
| Spare parts kit (2x plates, 1x roll, suitable screws) | 17145 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- FBS - cable stripper ..... 1722 1
- 2,5 mm Allen wrench ..... 1710 0
- Tube of silicone grease ..... AG1013
- Rigid resin case ..... AB17220



Norm: EN10020




Cable stripper - AV6410




Stop clamp - AV6411



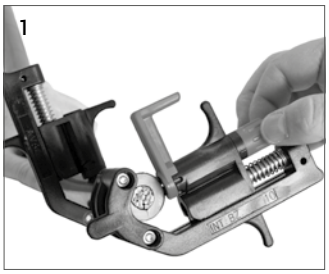
HLS-Set - AV6400

## HLS - Cable stripper for non-vulcanized semiconductive layer

| | |
|---|---|
| APPLICATION RANGE | Ø 16 - 41 mm |
| INSULATION THICKNESS | 0 - 2 mm |
| SUGGESTED APPLICATION | Non vulcanized, peelable semiconductive layer |

Technical characteristics:

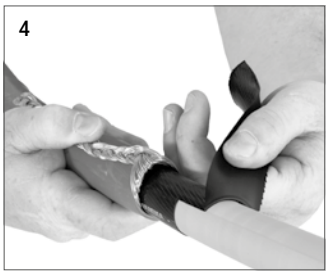
- To strip the non-vulcanized semiconductive layer of MV cables
- Longitudinal, helical and circular cuts
- Positioned on the cable comparable to a vice system
- Stop clamp to limit the stripping length
- Gradually depth adjustment
- Maximal rotating diameter 130 mm
- The positioning of the stripper and holding of stops-clamp is assured by the pressure of the spring
- The incision depth can be adjusted from 0 to 0,9 mm with 0,1 mm steps each by turning the corresponding knob
- The start of longitudinal incision can be done in exact correspondence with the circumferential incision.










- SMALL AND COMPACT DESIGN
- PERFECT PRECISE CIRCULAR CUT
- NO INCISIONS ON SURFACE BELOW

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: HLS | AV6400 | 175 x 65 x 50 mm | 600 g |
| Spare blade | AV6499 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- HLS - cable stripper ..... AV6410
- Stop clamp ..... AV6411
- Tube of silicone grease ..... AG1013
- Rigid resin case ..... AB6400

2



Norm: EN10020




Handle - AV6300




Stripping insert - AV63...



IMS 20kV-Set - AV6310

## IMS - Cable stripper for primary insulation

| | |
|---|---|
| APPLICATION RANGE | 25 - 240 mm² |
| INSULATION THICKNESS | Preadjusted stripping inserts |
| SUGGESTED APPLICATION | Any type of primary insulation |

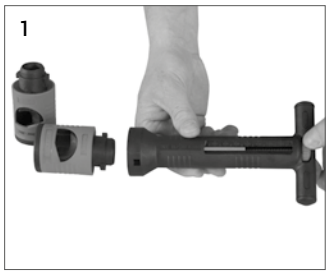
Technical characteristics:
- Suitable for MV cables 10/11kV or 20/22kV
- Stripping length adjustable from 20 to 100 mm using the device integrated in the handle
- Scale marked on the handle for preset stripping length
- Handle with bayonet connection
- Interchangeable blade

Inserts available:

10 - 11kV
- Insert for 35 mm² ..... 1716021
- Insert for 50 mm² ..... 1716024
- Insert for 120 mm² ..... 1716013
- Insert for 150 mm² ..... 1716027
- Insert for 185 mm² ..... 1716020
- Insert for 240 mm² ..... 1716006

20 - 22kV
- Insert for 25 mm² ..... AV63025
- Insert for 35 mm² ..... AV63035
- Insert for 50 mm² ..... AV63050
- Insert for 70 mm² ..... AV63070
- Insert for 95 mm² ..... AV63095
- Insert for 120 mm² ..... AV63120
- Insert for 150 mm² ..... AV63150
- Insert for 185 mm² ..... AV63185
- Insert for 240 mm² ..... AV63240

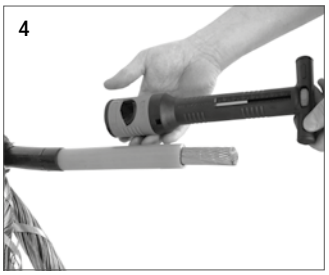
Other inserts available on request (10kV, 30kV, customized sizes), by sending PE-Coating Ø and Conductor Ø in mm










- EASY HANDLING THROUGH PREADJUSTED INSERTS
- ADJUSTABLE STRIPPING LENGTH
- DESIGNED TO WORK IN LIMITED SPACE

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: IMS 20kV | AV6310 | 330 x 290 x 75 mm | 600 g |
| Set: IMS 20kV + AMS | AV6320 | 330 x 290 x 75 mm | 1,70 kg |
| Spare blade | AV6399 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment: - AV6310:
- Handle ..... AV6300
- Stripping inserts 25, 35, 50, 70, 95, 120, 150, 185, 240 mm²
- Rigid resin case ..... AB6300

Set equipment - AV6320 like model AV6310 including:
- AMS - cable stripper ..... AV6221



## Cable stripper for primary insulation

| | |
|---|---|
| APPLICATION RANGE | 300 or 400 mm² |
| INSULATION THICKNESS | Preadjusted stripping inserts |
| SUGGESTED APPLICATION | Any type of primary insulation |

Technical characteristics:
- Suitable for MV cables 10/11kV or 20/22kV
- Unlimited stripping length
- Devise with two integrated handles
- Interchangeable blade
- Designed to strip both ends

- UNLIMITED STRIPPING LENGTH
- EXCELLENT TO WORK IN EMPTY SPACE
- COMFORTABLE HANDLING



| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Stripping insert for **300 mm²** | AV63300 | 231 x 90 mm | 1380 g |
| Stripping insert for **400 mm²** | AV63400 | 231 x 90 mm | 1330 g |

# STRIPPING TOOLS FOR PRIMARY INSULATION





Norm: EN10020




Stripping Tool IMS II - 1723 1

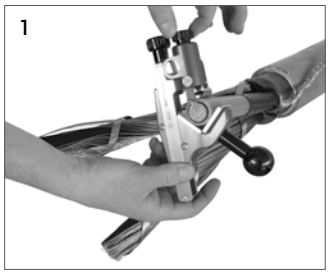


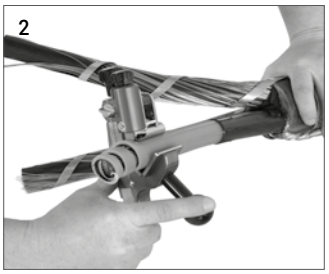
IMS II-Set - 1723 0

## IMS II - Universal cable stripper for primary insulation

| | |
|---|---|
| APPLICATION RANGE | Ø 15 - 52 mm |
| INSULATION THICKNESS | 0 - 15 mm |
| SUGGESTED APPLICATION | Any type of primary insulation |

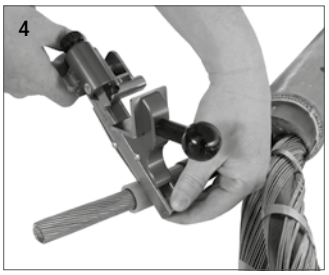
Technical characteristics:
- Designed to remove the primary insulation of 6 to 45kV cables
- Helical and circular cuts
- Max. rotating diameter 220 mm
- Snap knob to activate/deactivate axial feed
- Positioned on the cable like a vice system
- Designed to strip both ends
- Unlimited stripping length
- Interchangeable blade







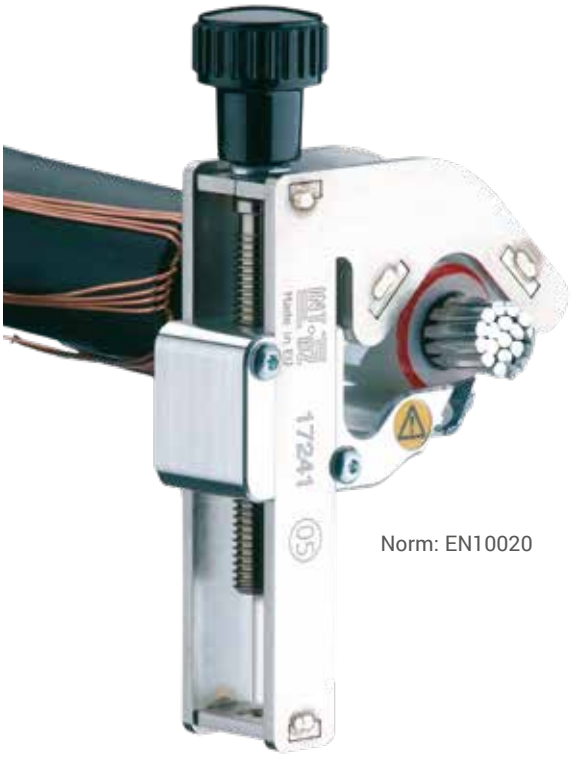



- REDUCED ROTATION ENABLES TO WORK ON LIMITED SPACE
- PERFECT CIRCULAR CUT
- NO INCISIONS ON SURFACE BELOW

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: IMS II | 17230 | 280 x 210 x 65 mm | 1,0 kg |
| Spare blade | 17232 | - | - |
| Spare parts kit (2x plates, 1x roll, suitable screws) | 17235 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:
- IMS II - cable stripper ..... 1723 1
- 2,5 mm Allen wrench ..... 1710 0
- Tube of silicone grease ..... AG1013
- Rigid resin case ..... AB17230




Norm: EN10020

## UFS - Tool for chamfering primary insulation

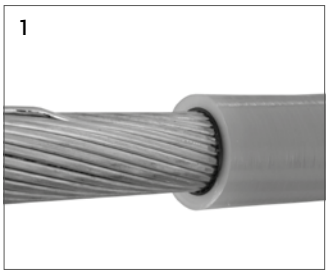
| | |
|---|---|
| APPLICATION RANGE | Ø 15 - 60 mm |
| SUGGESTED APPLICATION | Any type of primary insulation |

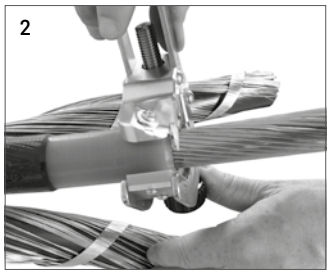
**Technical characteristics:**

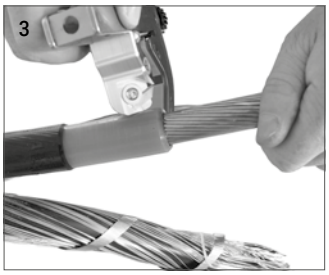
- Designed for chamfered cuts of primary insulation of MV cables (2 x 45°)
- Positioning on the cable with a clamp system
- Tool fitted with PTFE plates ensuring optimal sliding on the cable without the use of silicone paste
- Replaceable blade
- Rotation diameter max. 130 mm
- This tool is not suitable for pencilling

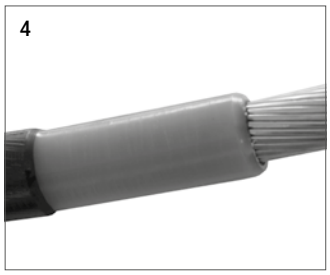



UFS - 1724 1




- SMALL SELFROTATING TO WORK ON LIMITED SPACE
- EASY HANDLING THROUGH 1 ADJUSTING KNOB
- UNIVERSAL UP TO 45 KV

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: UFS | 17240 | 170 x 100 x 50 mm | 390 g |
| Spare blade | 17242 | - | - |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!



UFS-Set - 1724 0

**Set equipment:**

- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- 2,5 mm Allen wrench ..... 1710 0
- Soft nylon case ..... AB17130

# CUTTING TOOL FOR ARMOURED CABLE

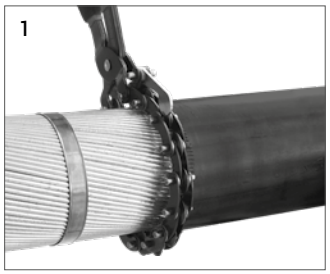


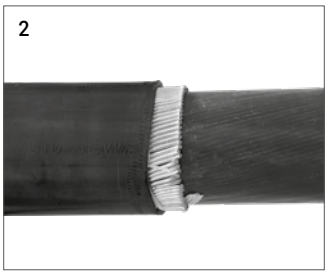


## Roller chains cutter

| | |
|---|---|
| APPLICATION RANGE | Ø 20 - 76 mm |
| SUGGESTED APPLICATION | Armoured cables |

**Technical characteristics:**
- Designed for effortles and fast settling of the F-armouring
- Practical tool, works in hard-to-reach areas small space for turning




- PERFECT STRAIGHT CLEAN CUT
- QUICK SETTLING AROUND THE CABLE
- EASY HANDLING

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set roller chains cutter | 1609076 | 260 x 140 x 65 mm | 0,8 kg |

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

**Set equipment:**
- Roller chains cutter ..... 1609076
- Pressure spring RF5 ..... 126299
- Soft nylon case ..... AB6230




Roller chains cutter - 1609076



Available in different sizes
(cable Ø 6-92 mm) on request

Pressure spring RF5 - 126299



Soft nylon case - AB6230



## Set - Stripping tools - 1799 001

Suitable to strip the outer sheaths, semiconductive layer and to remove the primary insulation. Optimal equipment for the realization of the entire stripping procedure of most diverse cable types.

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Stripping tools | 1799001 | 390 x 340 x 100 mm | 4,0 kg |

Set equipment:

- AIS - cable stripper ..... 1719 6
- Feed lever ..... 1719 4
- 14 pieces of 10 colored indication washers ..... -
- 2 spare screws to fasten the blade ..... 1719 7
- FBS - cable stripper ..... 1722 1
- IMS II - cable stripper ..... 1723 1
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... 1799 000



## Set - Stripping tools - 1799 002

Suitable to strip the outer sheaths, semiconductive layer and to remove the primary insulation. Optimal equipment for the realization of the entire stripping procedure of most diverse cable types

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Stripping tools | 1799002 | 390 x 340 x 100 mm | 3,0 kg |

Set equipment:

- Universal cable stripper - AMS ..... AV6221
- IMS II - cable stripper ..... 1723 1
- FBS - cable stripper ..... 1722 1
- Cable knife ..... AV3920
- Special electricians scissors ..... 1601 0
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AG3000

Optional (to be ordered separately):

- Handle IMS 20kV ..... AV6300
- 4 stripping inserts of your choice (see page xx) ..... AV63...



## Set - Stripping tools for MV cable

Suitable to strip the outer sheaths, semiconductive layer and to remove the primary insulation on 10 / 20 / 30 kV cables

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Stripping MV cable | 1799004 | 390 x 340 x 100 mm | 3,4 kg |

Set equipment:
- AMX cable stripper ..... 1730 0
- Feed lever ..... 1719 4
- AMS cable stripper without case ..... AV6221
- FBS wire stripper ..... 1722 1
- Cable stripper IMS II ..... 1723 1
- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AB17250



## AMX - AIRBAG - Complete cable stripping tool set for AIRBAG-cable

Designed for complete stripping of individual sheaths from AIRBAG cables. AMX stripping pliers can also cut into the POLYLAM jacket without touching the semiconductive layer below

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: AMX - AIRBAG | 17210 | 390 x 340 x 100 mm | 3,2 kg |

Set equipment:
- AMX cable stripper ..... 1730 0
- Feed lever ..... 1719 4
- AMS cable stripper without case ..... AV6221
- FBS wire stripper ..... 1722 1
- Handle for IMS ..... AV6300
- Spec. 70 mm² stripping insert ..... 1716 012
- Spec. 185 mm² stripping insert ..... 1716 010
- 3 spare blades for IMS insert ..... AV6399
- Universal knife with blade guard ..... AV3910
- 3 spare blades for universal knife ..... AV3911
- Special electricians scissors ..... 1601 0
- Round jacket spread ..... 652 002
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AB17240



1716 010 - Stripping insert for reduced insulation - section 185 mm²



1716 012 - Stripping insert for reduced insulation - section 70 mm²



## AIS - AIRBAG - Complete cable stripping tool set for AIRBAG-cable

Designed for complete stripping of individual sheaths from AIRBAG cables. AIS - AIRBAG stripping pliers can also cut into the POLYLAM jacket without touching the semiconductive layer below

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: AIS - AIRBAG | 17200 | 390 x 340 x 100 mm | 3,2 kg |
| Set: AIS - AIRBAG red. | 17201 | 390 x 340 x 100 mm | 1,9 kg |

Set equipment (1720 0):
- AIS - AIRBAG cable stripper ..... 1719 8
- Feed lever ..... 1719 4
- 2 blade fastening screws (spares) ..... 1719 7
- Set of spare blades with washers ..... 1719 9
- AMS cable stripper without case ..... AV6221
- FBS wire stripper ..... 1722 1
- Handle for IMS ..... AV6300
- Spec. 70 mm² stripping insert ..... 1716 012
- Spec. 185 mm² stripping insert ..... 1716 010
- 3 spare blades for IMS insert ..... AV6399
- Universal knife with blade guard ..... AV3910
- 3 spare blades for universal knife ..... AV3911
- Special electricians scissors ..... 1601 0
- Round jacket spread ..... 652 002
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid plastic case ..... AB17200

Reduced equipment (1720 1):
- AIS - AIRBAG cable stripper ..... 1719 8
- Feed lever ..... 1719 4
- Blade fastening screws (spares) ..... 1719 7
- Set of spare blades with washers ..... -
- 2,5 mm Allen wrench ..... 1710 1
- Rigid resin case ..... AB17200



## Set 1 - Stripping tools for armoured cables

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set 1 | 1799005 | 390 x 340 x 100 mm | 3,2 kg |

Set equipment:
- AMS cable stripper without case ..... AV6221
- FBS wire stripper ..... 1722 1
- Cable stripper IMS II ..... 1723 1
- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- Tube of silicone grease ..... AG1013
- Roller chains cutter ..... 1609076
- 2x pressure spring RF5 ..... 126299
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AB17260



## Set 2 - Stripping tools for armoured cables

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set 2 | 1799006 | 390 x 340 x 100 mm | 3,9 kg |

Set equipment:

- Cable stripper AMS-MAXI without case ..... AV6240
- Cable stripper IMS II ..... 1723 1
- FBS wire stripper ..... 1722 1
- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- Roller chains cutter ..... 1609076
- 2x pressure spring RF5 ..... 126299
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AB17260



## Set 3 - Stripping tools for armoured cables

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set 3 | 1799007 | 390 x 340 x 100 mm | 3,7 kg |

Set equipment:

- Cable stripper AMS-MAXI without case ..... AV6240
- Cable stripper IMS II ..... 1723 1
- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- HLS - cable stripper ..... AV6410
- Stop clamp ..... AV6411
- Roller chains cutter ..... 1609076
- 2x pressure spring RF5 ..... 126299
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AB17260



## Set 4 - Stripping tools for armoured cables

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set 4 | 1799008 | 390 x 340 x 100 mm | 3,0 kg |

Set equipment:

- AMS cable stripper without case ..... AV6221
- Cable stripper IMS II ..... 1723 1
- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- HLS - cable stripper ..... AV6410
- Stop clamp ..... AV6411
- Roller chains cutter ..... 1609076
- 2x pressure spring RF5 ..... 126299
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0
- Rigid resin case ..... AB17260



## Stripping tools KIT

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set 5 | 1799013 | 390 x 340 x 100 mm | 3,0 kg |

Set equipment:

- AMS cable stripper without case ..... AV6221
- Cable stripper IMS II ..... 1723 1
- HLS - cable stripper ..... AV6410
- Stop clamp ..... AV6411
- Tube of silicone grease ..... AG1013
- FBS wire stripper ..... 1722 1
- UFS - tool for chamfered cuts of primary insulation ..... 1724 1
- 2,5 mm Allen wrench ..... 1710 0
- FBS wire stripper ..... 1722 1
- Rigid resin case .....

# CABLE JOINTERS CASE





## Tool kit for cable jointers

Basic equipment (AG2020):

- Case ..... AG2000
- 1/20 sliding caliper 150 mm ..... AG1001
- Measuring rod 3 m ..... 7406 030
- Steel brush for files ..... AG1014
- Rasp without handle ..... AG1005
- Half round file with handle ..... AG1004
- Screwdriver slotted screws 3x100 mm FII ..... 1301 030
- Screwdriver slotted screws 4x100 mm FII ..... 1301 040
- Screwdriver slotted screws 5x125 mm FII ..... 1301 055
- Ball-point screwdriver hex socket 6 mm FII ..... 1305 060
- Mallet 300 g ..... 7130 582
- Mallet Ø 35 mm ..... AG1010
- Sheath spreader ..... AG1011
- Special electricians' scissors ..... 1601 1
- Cable knife with interch. blade. ..... AV3920
- Spare blade for AV3920 ..... AV3921
- Knife with trapezoidal blade ..... AV3910
- 3 spare blades for AV3910 ..... AV3911
- High precision lens with light ..... AG1012
- Universal pliers 180 mm ..... AP0119 N
- Cable cutter 160 mm ..... AP1017
- Tube of silicone grease ..... AG1013
- 2,5 mm Allen wrench ..... 1710 0





## Codes for kit with additional tools:

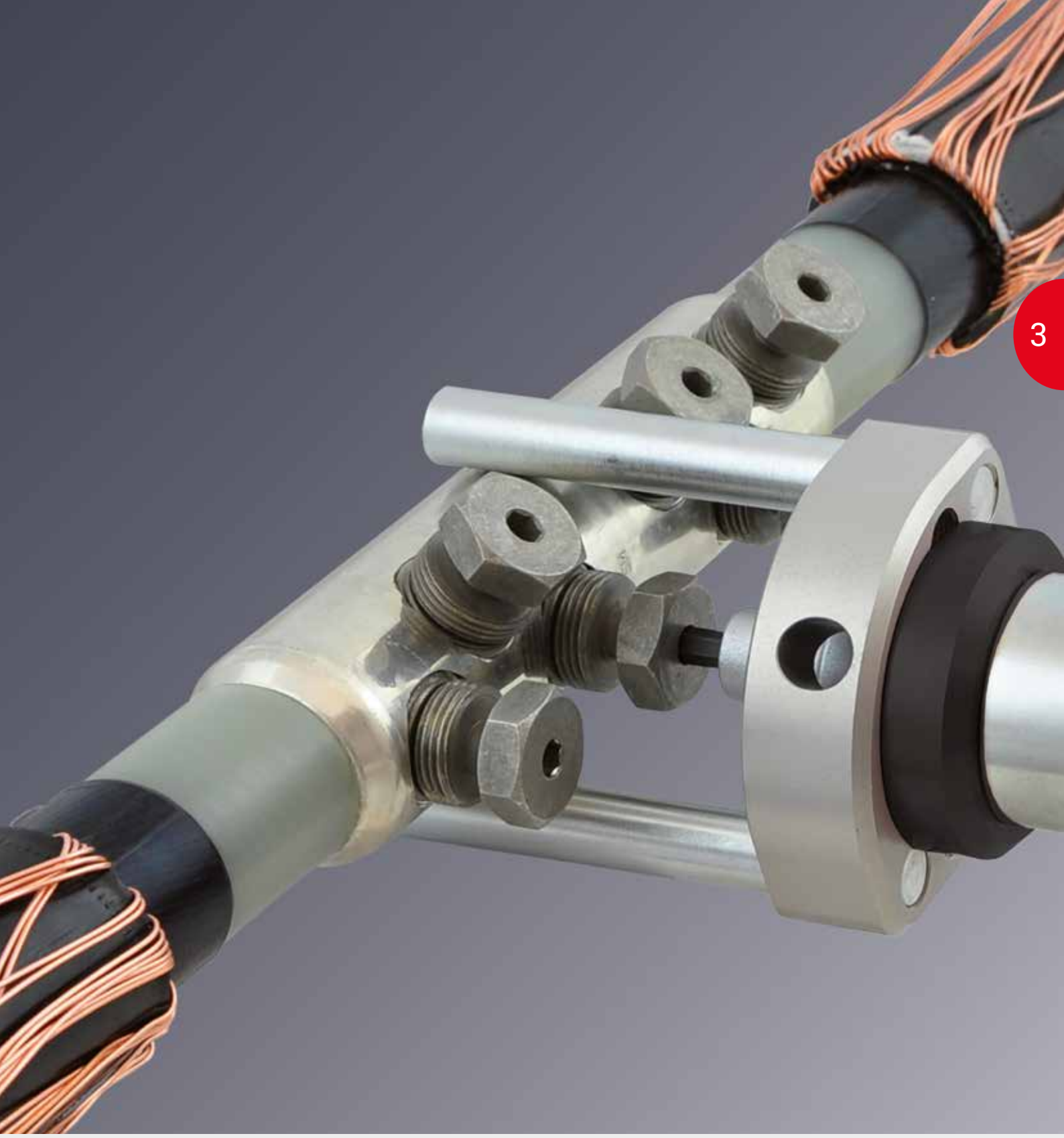
| AG2020+... | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
|  | Ratchet cable cutter Ø 54 mm  | Cable stripper AMS (without case) (see page 69)  | Stripper MV cables IMS20kV (without case) (see page 78)  | Stripper non-vulcanized semiconductive - HLS (without case) (see page 77)  | Stripper vulcanized semiconductive - FBS (without case) (see page 76)  | Tool for chamfering primary insulation - UFS (without case) (see page 81)  |

Example of ordering: AG2020ADF

Equipment:

- AG2020 - standard case
- A - ratchet cutter
- D - HLS stripper
- F - UFS chamfering tool

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Basic tool kit | AG2020 | 450 x 380 x 200 mm | 6,3 kg |
| Individual tool kit | AG2020... | 450 x 380 x 200 mm | - |
| Empty case | AG2000 | 450 x 380 x 200 mm | 3,7 kg |



3

# TOOLS FOR MECHANICAL CONNECTORS



1000V IEC 60900



## Clamp device for screw connectors

| Description | Order No. | Dimensions | for screw connectors Ø | Weight |
|---|---|---|---|---|
| Clamp device for screw connectors all sizes | 161910 | 310 mm | 25 - 50 mm | 540 kg |
| Clamp device for screw connectors all sizes | 161900 | 280 mm | 14 - 32 mm | 400 kg |
| Clamp device for screw connectors to Ø 15 mm | 161906 | 240 mm | 0 - 15 mm | 350 kg |

- For a better handling of screw connectors on the installation of connecting boxes
- Infinitely adjustable
  for screw connectors 16 mm² - 240 mm² (161910)
  for screw connectors 2.5 mm² - 150 mm² (161900)
  for screw connectors 1.5 mm² - 16 mm² (161906)
  maximum holding capacity Ø 15/32/50 mm



1000V IEC 60900





## Clamp device for screw connectors

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Clamp device | 22013 | 192 x 65 x 64 mm | 350 g |

Gives excellent clamping while screwing on screw connectors with diameters from 14 to 40mm.

Technical characteristics:
- Can work on live parts with voltages up to 1000V AC and 1500V DC
- Vice clamp system
- Usable with insulated and non-insulated connectors
- Insulated in compliance with IEC 60900/IEC900 Standards
- Tool designed for very low temperature work, down to -40°C

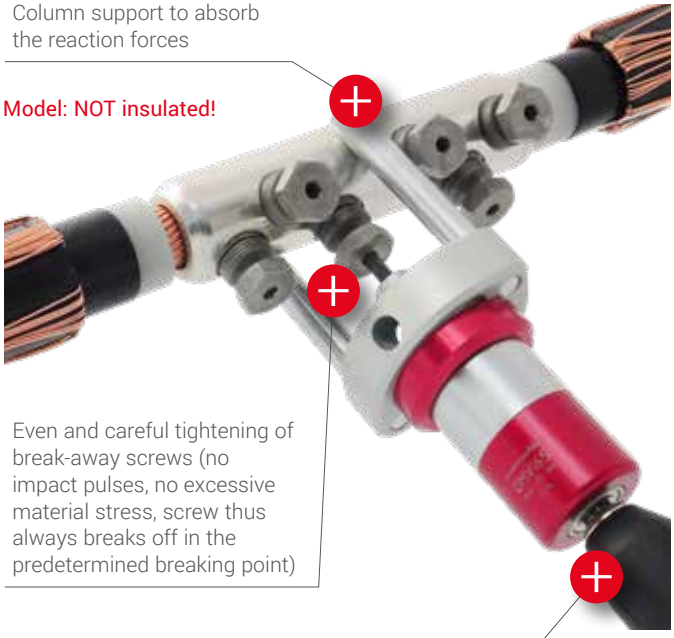
Standards:
- IEC 60900
- IEC 900
- EN10020



## Set clamp device for screw connectors

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set clamp device | 22010 | 192 x 140 x 40 mm | 1,8 kg |

Set equipment:
- Clamp device ..... 2201 3
- Insulated reversible ratchet wrench ½" ..... 1502 1
- Insulated 12-point female socket 13 ..... 1504 113
- Insulated 12-point female socket 17 ..... 1504 117
- Insulated 12-point female socket 19 ..... 1504 119
- Insulated male hex socket 5 ..... 1505 105
- Insulated male hex socket 6 ..... 1505 106
- Insulated male hex socket 8 ..... 1505 108




## Torque amplifier for screw connectors

For controlled tightening of break-away screws on screw connectors, usable with all standard cordless screwdrivers with a chuck holder up to min. Ø 14 mm

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set of torque amplifiers | DMVI65 | 370x245x115 mm | approx. 1925 g |

Technical characteristics:
- Simple and precise handling
- Material-friendly tightening of the screws by means of a transmission multiplier
- Transmission ratio 1: 24
- Use with standard cordless screwdriver
- Load capacity up to 65 Nm
- 3-edge adapter for drill chucks min. Ø 14 mm
- Tool dimensions: 199 x 89 mm
- Tool weight: approx. 1050 g

ATTENTION: DO NOT USE IN COMBINATION WITH IMPACT WRENCHES!



## Torque amplifier set for screw connectors

Set equipment:
- Torque amplifier DMVI65
- Allen wrench SW5
- Spanner sockets SW10, SW13, SW14, SW17, SW19, SW22, SW24
- Wrench inserts SW5, SW6, SW8, SW10
- Case
- Use instructions



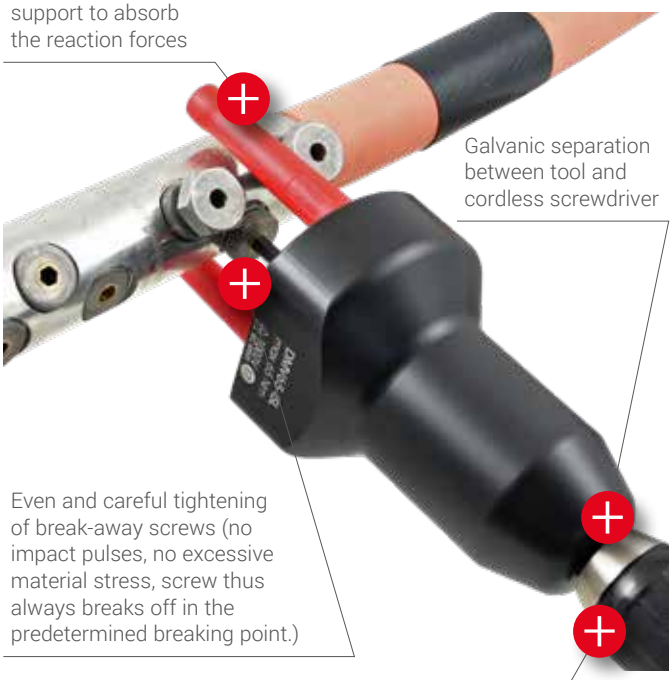
Wrench inserts



Spanner sockets

Spare parts:
Spanner sockets:
- SW10 ..... 109159
- SW13 ..... 109160
- SW14 ..... 109161
- SW17 ..... 109162
- SW19 ..... 109163
- SW22 ..... 109164
- SW24 ..... 109165

Wrench inserts:
- SW5 ..... M3105
- SW6 ..... M3106
- SW8 ..... M3108
- SW10 ..... M3110




## Set of torque amplifiers electrically isolated - 1000V

Suitable for mounting screw connectors with voltage up to 1,000V

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set of torque amplifiers | DMVI-ISL | 370x245x115 mm | approx. 3 kg |

**Technical characteristics:**
- Simple and precise handling
- Insulated/ touch-protected pillar support to absorb the reaction forces
- 3-edge adapter for drill chucks min. Ø 14 mm
- Use with standard cordless screwdriver
- Material-friendly tightening of the screws by means of a transmission multiplier
- Transmission ratio 1: 24
- Load capacity up to 65 Nm
- Tool dimensions: 97 x 240 mm
- Tool weight: approx. 1050 g

ATTENTION: DO NOT USE IN COMBINATION WITH IMPACT WRENCHES!



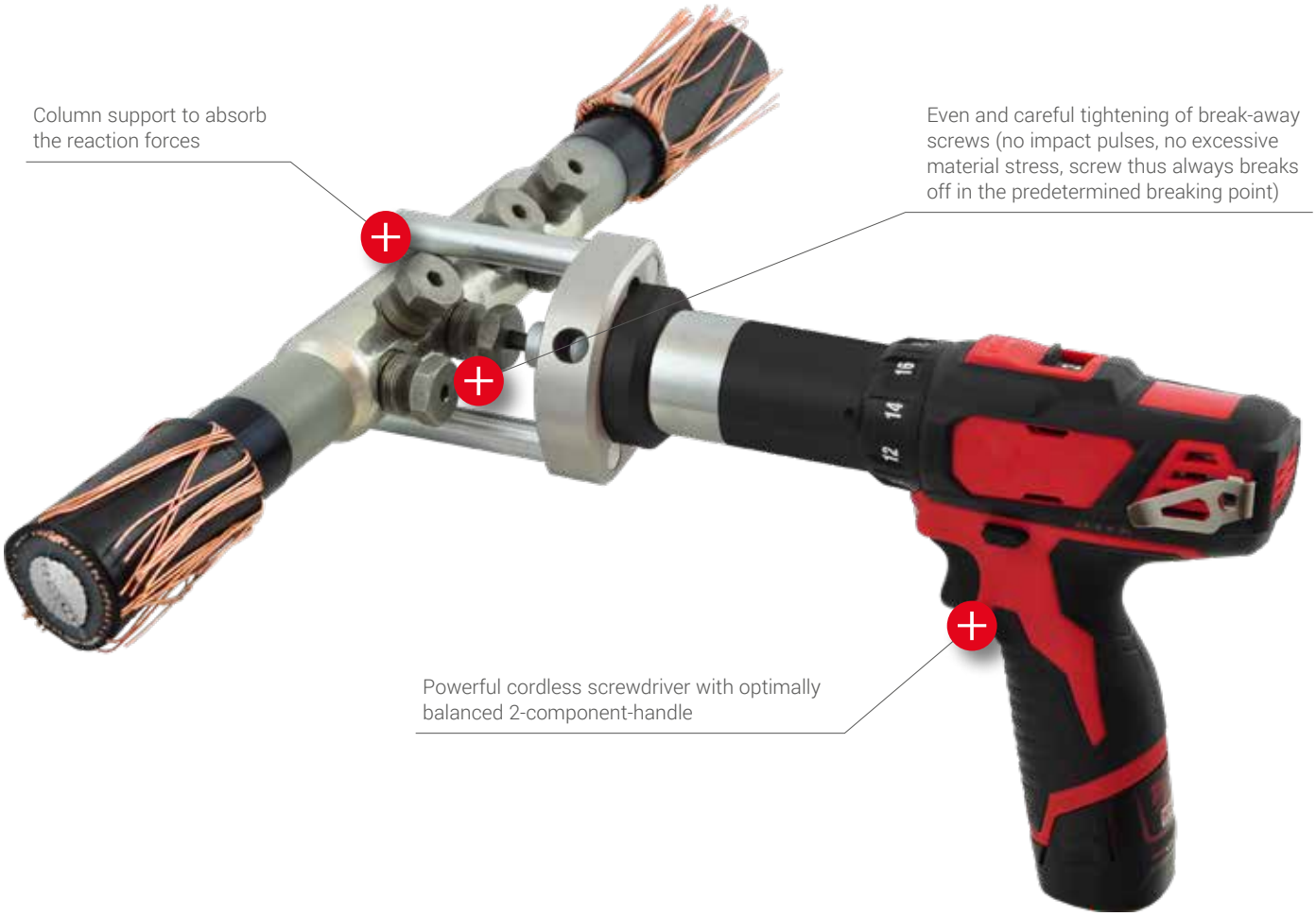

**Set equipment:**
- Set DMV65-PTG
- Case with foam insert
- Insulated torque amplifier
- Angle screwdriver S5
- Allen screwdriver bit 1/2" - 05
- Allen screwdriver bit 1/2" - 06
- Allen screwdriver bit 1/2" - 08
- Allen screwdriver bit 1/2" - 10
- Wrench socket 1/2" x 10
- Wrench socket 1/2" x 13
- Wrench socket 1/2" x 14
- Wrench socket 1/2" x 17
- Wrench socket 1/2" x 19
- Wrench socket 1/2" x 22
- Wrench socket 1/2" x 24
- Operating instructions



Wrench inserts



Spanner sockets






## Battery operated torque amplifier for screw connectors

For controlled tightening of breake-away screws on screw connectors

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set battery torque amplifier | DMVI65A | 480x280x125 mm | approx. 4,6 kg |

**Technical characteristics:**
- Simple and precise handling
- Material-friendly tightening of the screws by means of a transmission multiplier
- Metal parts in high strength alloy steel, aluminium body with anodized surface
- Cordless screwdriver-body made entirely of shock-resistant plastic material
- Handle in 2-components material with soft grip for fatigue-free working
- The device is very well balanced
- Transmission ratio 1:24
- Load capacity up to 65 Nm - 2 speed positions
- ½" connector for female an male hex Socket
- Two positions for the bars: max. Ø 40 mm or max. Ø 53 mm
- Length bars: 80,5 mm
- Lithium-ion battery 12V-2,0 Ah - Charging time approx. 30 min
- Protection IP40 - Operating temperature -10°C - +40°C
- Tool dimensions 340 x 210 x 70 mm - Tool weight: approx. 2,1 kg

**Set equipment**
- Set DMV65-PTG
- Case with foam insert
- Insulated torque amplifier
- Angle screwdriver S5
- Allen screwdriver bit 1/2" - 05 / 06 / 08 / 10
- Wrench socket 1/2" x 10 / 13 / 14 / 17 / 19 / 22 / 24
- Operating instructions




4

# CUTTING TOOLS

MECHANIC CUTTING TOOLS
HYDRAULIC CUTTING TOOLS
SAFETY CUTTING UNIT



Order No. 1623 032



C 1000V EN/IEC60900:2004

## Insulated front ratchet cutter D32

| | |
|---|---|
| APPLICATION RANGE | Ø 32 mm / 240 mm² |
| SUGGESTED APPLICATION | Copper and aluminium |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Ratchet cutter | **1621032** | 315 mm | 1200 g |
| Insulated ratchet cutter | **1623032** | 315 mm | 1300 g |

- Comfortable one hand tool
- No jamming of the blade
- Cutting can be interrupted at any point in the cut
- Professional multi-layer dipped insulation
- Blades can be opened by acting on spring loaded lever

✓ SUITABLE TO WORK UNDER VOLTAGE



C 1000V EN/IEC60900:2004

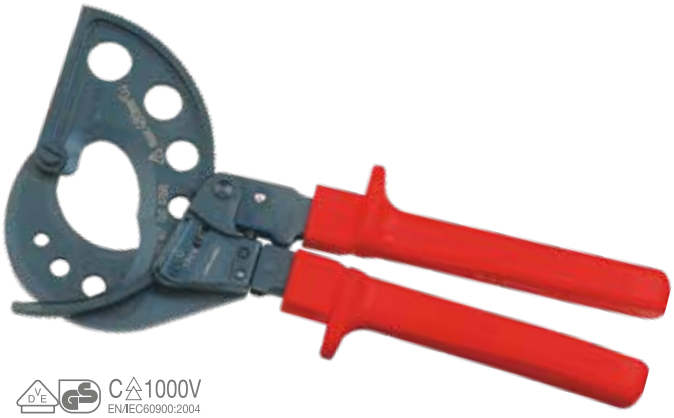
## Ratchet cutter ACSR (Al/Steel) D32

| | |
|---|---|
| APPLICATION RANGE | Ø 32 mm / 240 mm² |
| SUGGESTED APPLICATION | ACSR (Al/Steel) |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Ratchet cutter | **1608032** | 346 mm | 1400 g |

- Replaceable cutting inserts
- High cutting capacity
- Low effort and small handle opening enable one-hand operation
- Progressive feed mechanism for cutting

✓ SUITABLE TO WORK UNDER VOLTAGE



C 1000V EN/IEC60900:2004

## Insulated ratchet cable cutter D32/D54

| ORDER NO. 160... | ...5 032 | ... 054 |
|---|---|---|
| APPLICATION RANGE | Ø 32 mm/260 mm² | Ø 54 mm/480 mm² |
| SUGGESTED APPLICATION | Copper and aluminium | |

- High leverage ratchet mechanism for single handed cutting of copper and aluminium cables leaving no burrs or sharp edges
- Patented Two-step ratchet mechanism requires fewer strokes per cut
- Quick release opens blades easily in every cutting position (allows removal of the cable even before complete cut, if necessary)
- Hardened steel cutting blades for lasting strength and sharpness
- 1000 V Plastic covered handles with hand guards for comfort and firm grip
- Locking lever keeps handles closed for easy transport fits in a tool box or bag

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Ratchet cutter D32 | **1605032** | 265 mm | 650 g |
| Ratchet cutter D54 short | **1607054** | 285 mm | 800 g |
| Ratchet cutter D54 long | **1605054** | 320 mm | 900 g |
| Ratchet cutter D54 long (non ins.) | **1606054** | 320 mm | 900 g |



ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE



## Cable shears in ratchet design

| | | |
|---|---|---|
| APPLICATION RANGE | Ø 100 mm | Ø 60 mm |
| SUGGESTED APPLICATION | Cooper and aluminium | |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable shears | MSR100 | 820 mm | 6,2 kg |
| Cable shears | MSR60 | 720 mm | 4,8 kg |

- Suitable for cutting Al/Cu cables
- Two-hand operation with lever transmission
- Cutting range: up to max. Ø 100 mm / Ø 60 mm
- Not suitable for cutting steel and steel wire

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE



## Cable shears

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable shears | MS30 | 600 mm | 2,2 kg |

- Cable shears for cutting Al/Cu cable cutting area: 30 mm Ø, e.g. 4 x 35 mm² stranded

Accessories:
EK30 - replacement cutting head MS30

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE



## Cable cutter

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable cutter | MS50 | 770 mm | 3,0 kg |

- Compound leverage two-hand snips for cutting of Al/Cu cable
- Cutting area: Ø 50 mm
- Flat ground knives made of high-quality steel
- Sickle-shaped, rounded blades for a safe and precise cut
- Impact-resistant, hardened handle tubes

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE




## Cable cutter with telescopic handles

| | |
|---|---|
| APPLICATION RANGE | 185 mm² |
| JAW OPENING | 28 mm |
| SUGGESTED APPLICATION | Copper and aluminium |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable cutter | 253260 | 350 - 500 mm | 2000 g |
| Spare blades | 253760 | - | 300 g |

- For smooth cutting of copper and aluminium conductors
- Replaceable cutting head
- The razor-sharp cutters guarantee a smooth and effortless cut
- For copper and aluminium cables only
- Handles with multi-coated insulation

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE




## Cable cutter

| ORDER NO. 2773... | ... 46 | ... 61 | ... 80 |
|---|---|---|---|
| JAW OPENING | 30 mm | 35 mm | 60 mm |
| APPLICATION RANGE | 120 mm² | 180 mm² | 500 mm² |
| SUGGESTED APPLICATION | Copper and aluminium | | |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable cutter | 277346 | 460 mm | 1430 g |
| Spare blades | 277946 | | 640 g |
| Cable cutter | 277361 | 600 mm | 2070 g |
| Spare blades | 277961 | | 660 g |
| Cable cutter | 277380 | 800 mm | 3800 g |
| Spare blades | 277980 | | 1140 g |

- Cutting head made of oil-hardened steel
- The razor-sharp blades guarantee a smooth and effortless cut
- Light metal handles
- Professional multi-coated insulation

## Insulated wire rope cutter



| ORDER NO. 277... | ...4 46 | ...3 60 |
|---|---|---|
| JAW OPENING | 10 mm | 20 mm |
| APPLICATION RANGE - STEEL (ROPE) | 95 mm² | 150 mm² |
| APPLICATION RANGE - STEEL (ROPE) | Ø 10 mm | Ø 12 mm |
| APPLICATION RANGE - STEEL (ROUND) | Ø 7 mm | Ø 9 mm |
| SUGGESTED APPLICATION | Copper, aluminium and steel | |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Wire rope cutter | 277446 | 460 mm | 1340 g |
| Spare blades | 277846 | | 475 g |
| Wire rope cutter | 277360 | 600 mm | 2710 g |
| Spare blades | 277860 | | 910 g |

- Replaceable cutting head
- Cutting head made of special alloyed steel
- Square cut blades for the hardest steel wires
- Handles made of light metal
- Professional multi-coated insulation

## Wire rope cutter



| Description | Order No. | Length | Weight |
|---|---|---|---|
| Wire rope cutter C112 | 277562 | 730 mm | 3600 g |

- The elaborate transmission system of these tools develops amazing cutting power with little effort. This allows the separation of hardest wire ropes, bars and wires up to a Ø of 12.7 mm.
- All parts easily replaceable
- Light-metal mounting
- Case-hardened knives, for cutting very hard cables
- Handles made of forged aluminium
- Also available in insulation 23/5000

ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE

## Insulated bolt cutter



| ORDER NO. 2752... | ... 46 | ... 61 | ... 76 | ... 91 | ... 95 |
|---|---|---|---|---|---|
| APPLICATION RANGE Ø | 7 mm | 9 mm | 11 mm | 13 mm | 15 mm |
| SUGGESTED APPLICATION | High tensile steel ropes / bolts | | | | |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Bolt cutter insulated | 275246 | 460 mm | 1400 g |
| Spare blades | 275047 | | 1400 g |
| Bolt cutter insulated | 275261 | 610 mm | 2500 g |
| Spare blades | 275062 | | 1600 g |
| Bolt cutter insulated | 275276 | 760 mm | 4500 g |
| Spare blades | 275077 | | 1800 g |
| Bolt cutter insulated | 275291 | 910 mm | 6300 g |
| Spare blades | 275092 | | 1800 g |




## Hacksaw

| | |
|---|---|
| WIDTH OF BLADE | 5 mm |
| THICKNESS OF BLADE | 0,80 mm |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Hacksaw | **424200** | 280 mm | 230 g |
| Spare saw-blade | **433010** | 150 mm | 3 g |

- Made of flat steel 10 x 5 mm, galvanized
- For 148 mm saw-blades
- With insulated rotary handle for blade tension
- Insulation of soft, non-brittle plastic

ATTENTION: NOT SUGGESTED FOR WORK UNDER VOLTAGE




## Hacksaw

| | |
|---|---|
| WIDTH OF BLADE | 13 mm |
| THICKNESS OF BLADE | 0,63 mm |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Hacksaw / saw-blade | **424300** | 470 mm | 660 g |
| Blade 22/32 teeth<br>width 13 mm, thickn. 0,63 mm | **421000** | 300 mm | 17 g |
| Blade 18 teeth<br>width 13 mm, thickn. 0,63 mm | **421016** | 300 mm | 17 g |
| Blade double-sided 22/32 teeth<br>width 25 mm, thickn. 0,8 mm | **421920** | 300 mm | 40 g |

- With insulated wing bold for blade tension
- Insulation of soft, non-brittle plastic

ATTENTION: NOT SUGGESTED FOR WORK UNDER VOLTAGE




## Insulated cable sheath saw

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Cable sheat saw (24 teeth, fine) | **430302** | 250 mm | 140 g |
| Saw-blade (14 teeth, coarse) | **430801** | 120 mm | 6 g |
| Saw-blade (24 teeth, fine) | **430805** | 120 mm | 6 g |

- For steel strip armoured cable
- Adjustable stopper
- Replaceable saw-blade
- Coarse toothed saw-blade for soft materials
- Fine toothed saw-blade for sheet metal cutting, saw-blade no. 430805 - 24 teeth fine
- Insulation made of shock-proof material
- If desired, alternatively 14 saw blade teeth can be supplied

ATTENTION: NOT SUGGESTED FOR WORK UNDER VOLTAGE

# BATTERY POWERED CUTTING TOOLS

The new battery operated hydraulic cutting tools are now more ergonomic, faster and more reliable than ever.



## Reliable

3 years warranty




## Clever

Easier work, thanks to the variable approach speed for precise positioning of the cutting tool

## Always keep your sight

Integrated LED for illuminating the working area in poor light conditions

## Powerful

18V 3Ah Lithium-Ion battery for even more cuts during one battery life

## Ergonomic

Effortless working and ease handling due to equilibrate 2-component handle

# HYDRAULIC CUTTING TOOLS - OVERVIEW



| | Cutting heads | Hand operated | Battery operated tools | | Max. cutting diameter | Application range | |
|---|---|---|---|---|---|---|---|
| SERIES 25 |  PS25 |  HS25 |  STILO-S25 |  AS25 | Ø 25 mm | • Steel<br>• ACSR<br>• Aluminium<br>• Copper | PAGE 103-105 |
| SERIES 26 | | |  STILO-S26 | | Ø 26 mm | • Steel<br>• ACSR<br>• Aluminium<br>• Copper | PAGE 106 |
| SERIES 40 | | |  STILO-S | | Ø 40 mm | • Aluminium<br>• Copper | PAGE 107 |
| SERIES 45 |  PS45 |  HSI45 | |  AS45 | Ø 45 mm | • Steel<br>• ACSR<br>• Aluminium<br>• Copper | PAGE 108-109 |
| SERIES 50 |  PS50 |  HSI50 | |  AS50 | Ø 50 mm | • Aluminium<br>• Copper<br>• Light armoured cables | PAGE 110-111 |
| SERIES 54 | | |  STILO54 | | Ø 54 mm | • Aluminium<br>• Copper | PAGE 112 |
| SERIES 65 |  PS65 | | |  AS65 | Ø 65 mm | • Aluminium<br>• Copper<br>• Light armoured cables | PAGE 113-114 |
| SERIES 85 |  PS85 |  HSI85 | |  AS85 | Ø 85 mm | • Aluminium<br>• Copper<br>• Light armoured cables | PAGE 115-116 |
| SERIES 95 |  PS95 | | |  AS95 | Ø 95 mm | • Aluminium<br>• Copper<br>• Light armoured cables | PAGE 117-118 |
| SERIES 120-2 |  PS120-2 | | |  AS120-2 | Ø 120 mm | • Aluminium<br>• Copper<br>• Light armoured cables | PAGE 119-120 |
| SERIES 120 |  PS120 (SK160) | | | | Ø 120 mm | • Aluminium<br>• Copper<br>• Heavy armoured cables | PAGE 121 |

## Main characteristics PS25 - HS25 - STILO25 - AS25

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 25 mm |
| SUGGESTED APPLICATION | Steel, ACSR, copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 60 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |

✓ SUITABLE TO CUT HEAVY DUTY WIRE ARMOURED CABLES






Soft nylon case
for PS25 - ST01



GMPS25

SMPS25

Spare blades

### PS25 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

Technical characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions: ..... 81 x 206 x 54 mm
Tool weight: ..... 1,9 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting head PS25 | PS25 | 140 x 230 x 60 mm | 2,2 kg |
| Fixed cutting blade | GMPS25 | - | 200 g |
| Movable cutting blade | SMPS25 | - | 40 g |

Set equipment:
- Hydraulic cutting head
- Soft nylon case for cutting head






Set HS25



GMPS25

SMPS25

Spare blades

### HS25 - Hand operated hydraulic cutting tool

Technical characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 360°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: ..... 165 x 393 x 54 mm
Tool weight: ..... 2,9 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool HS25 | HS25 | 440 x 190 x 80 mm | 4,0 kg |
| Fixed cutting blade | GMPS25 | - | 200 g |
| Movable cutting blade | SMPS25 | - | 40 g |

Set equipment:
- Test report
- Manual hydraulic cutting tool
- Rigid plastic case





GMPS25

SMPS25

Spare blades



Set STILO-S25

## STILO-S25 - Battery operated cutting tool

**The STILO25 battery powered hydraulic cable cutter is suitable for cutting through hard steel up to a thickness of 25mm**

Technical characteristics:
- Right or left hand ergonomic non-slip cushioned grip
- Latch head design
- 360° tool head rotation
- Lightweight and compact design
- Extremely fast work due to triple axial piston pump
- DataTrack mini USB-port for connectivity
- Cutting curve and error message output
- No aborted cutting cycles due to ongoing monitoring of the remaining battery running time
- Multifunction LED indicator lights even to indicate the maintenance intervals
- LED battery charge indicator
- Heavy duty blades
- Soft start and quick stop increase the service life
- Manual return possible in any position
- Shutdown and automatic return after completion of a cutting cycle
- Automatic energy-saving mode after approx. 5 minutes

Tool dimensions: ..... 380 x 63 x 76 mm
Tool weight (with battery): ..... 3,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool STILO-S25 | STILO-S25 | 450 x 500 x 140 mm | 6,5 kg |
| Fixed cutting blade | GMPS25 | - | 200 g |
| Movable cutting blade | SMPS25 | - | 40 g |

Accessories see page 209-212

Set equipment:
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



## AS25 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Latch head design
- 360° tool head rotation
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 359 x 75 mm
Tool weight (with battery): ..... 4,2 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS25 | **AS25** | 580 x 470 x 115 mm | 7,6 kg |
| Fixed cutting blade | **GMPS25** | - | 200 g |
| Movable cutting blade | **SMPS25** | - | 40 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS25



GMPS25

SMPS25

Spare blades

## CUTTING RANGE TABLE PS25 - HS25 - STILO-S25 - AS25

| Sector of use: | | Tensile strength N/mm² | <Ø 9 mm | Ø 10 mm | Ø 11 mm | Ø 12 mm | Ø 13 mm | Ø 14 mm | Ø 15 mm | Ø 16 mm | Ø 17 mm | Ø 18 mm | Ø 19 mm | Ø 20 mm | Ø 21 mm | Ø 22 mm | Ø 23 mm | Ø 24 mm | Ø 25 mm | Ø 26 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Rope and cable | <410 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| | Bar | <250 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | |
| | Bar | <300 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | |
| Aluminium | Rope and cable | <200 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| | Bar | <160 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | Bar | <340 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | |
| Aldrey | Cable | <340 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Alu/Steel | Rope | <1800 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| Steel | Rope (>200 wires) | <180 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| | Bar | <420 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | |
| | Bar | <600 | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| | Rope | <2200 | ■ | ■ | ■ | | | | | | | | | | | | | | | |

## Main characteristics STILO-S26

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 26 mm |
| SUGGESTED APPLICATION | Steel, ACSR, copper and aluminium |



SE26ST





Set STILO-S26

## STILO-S26 - Battery operated cutting tool

**The STILO26 battery powered hydraulic cable cutter is suitable for cutting through hard steel up to a thickness of 26mm**

Technical characteristics:
- Right or left hand ergonomic non-slip cushioned grip
- Open cutting head design
- 360° tool head rotation
- Lightweight and compact design
- Extremely fast work due to triple axial piston pump
- DataTrack mini USB-port for connectivity
- Cutting curve and error message output
- No aborted cutting cycles due to ongoing monitoring of the remaining battery running time
- Multifunction LED indicator lights even to indicate the maintenance intervals
- LED battery charge indicator
- Heavy duty blades
- Soft start and quick stop increase the service life
- Manual return possible in any position
- Shutdown and automatic return after completion of a cutting cycle
- Automatic energy-saving mode after approx. 5 minutes

Tool dimensions: ..... 457 x 126 x 82 mm
Tool weight (with battery): ..... 4,2 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool STILO26 | STILO-S26 | 450 x 500 x 140 mm | 6,9 kg |
| Cutting insert Steel | SE26ST | - | 40 g |

Accessories see page 209-212

Set equipment:
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case

## CUTTING RANGE TABLE STILO-S26

| Sector of use: | | Tensile strength N/mm² | <Ø 9 mm | Ø 10 mm | Ø 11 mm | Ø 12 mm | Ø 13 mm | Ø 14 mm | Ø 15 mm | Ø 16 mm | Ø 17 mm | Ø 18 mm | Ø 19 mm | Ø 20 mm | Ø 21 mm | Ø 22 mm | Ø 23 mm | Ø 24 mm | Ø 25 mm | Ø 26 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Rope and cable | <410 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | Bar | <250 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | |
| | Bar | <300 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | |
| Aluminium | Rope and cable | <200 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | Bar | <160 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | Bar | <340 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | |
| Aldrey | Cable | <340 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Alu/Steel | Rope | <1800 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| Steel | Rope (>200 wires) | <180 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| | Bar | <420 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | |
| | Bar | <600 | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| | Rope | <2200 | ■ | ■ | ■ | | | | | | | | | | | | | | | |

## Main characteristics STILO-S

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 40 mm |
| SUGGESTED APPLICATION | Copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 30 kN |
| OPERATING PRESSURE | 550 bar (55 MPa) |





SET-SMI-S



Set STILO-S

### STILO-S - Battery operated hydraulic cutting tool DN 40mm

**The Stilo-S battery powered hydraulic cable cutter is suitable for cutting thin and multi-core aluminium and copper cables up to 40 mm in diameter.**

Technical characteristics:
- Light and compact structure
- Cutting head with 360° endless rotation allows easy operation also in confined spaces
- Ergonomic 2-component handle for fatigue-proof one handed working
- Extremely fast work due to triple axial piston pump
- Automatic return at the end of the cutting cycle
- Emergency manual return
- Ergonomic design provides easy operation for both left- and right-handed users
- Output of cutting curves and fault messages through mini-USB-port
- Maintenance control

Tool dimensions: ..... 440 x 124 x 81 mm
Tool weight (with battery): ..... 3,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting toolSTILO-S | STILO-S | 450 x 500 x 140 mm | 6,3 kg |
| Spare blades 2 blades already assembled | SET-SMI-S | - | 500 g |

Accessories see page 209-212

Set equipment:
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case

## CUTTING RANGE TABLE STILO-S

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics PS45 - HSI45 - AS45

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 45 mm |
| SUGGESTED APPLICATION | Steel, ACSR, copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 60 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |

✓ SUITABLE TO CUT HEAVY DUTY WIRE ARMOURED CABLES








Soft nylon case for PS45 - ST02



GMPS45

SMPS45

Spare blades

## PS45 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

Technical characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions ..... 98 x 305 x 69 mm
Tool weight: ..... 3,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS45 | 380 x 145 x 70 mm | 3,0 kg |
| Fixed cutting blade | GMPS45 | - | 120 g |
| Movable cutting blade | SMPS45 | - | 100 g |

Set equipment:
- Hydraulic cutting head
- Soft nylon case for cutting head






Set HSI45



GMPS45

SMPS45

Spare blades

## HSI45 - Hand operated hydraulic cutting tool

Technical characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: ..... 184 x 601 x 69 mm
Tool weight: ..... 5,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool | HSI45 | 700 x 260 x 105 mm | 7,4 kg |
| Fixed cutting blade | GMPS45 | - | 120 g |
| Movable cutting blade | SMPS45 | - | 100 g |

Set equipment:
- Test report
- Manual hydraulic cutting tool
- Plastic case



## AS45 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful led for working space illumination

Tool dimensions: ..... 331 x 434 x 75 mm
Tool weight (with battery): ..... 5,4 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS45 | **AS45** | 580 x 470 x 115 mm | 8,8 kg |
| Fixed cutting blade | **GMPS45** | - | 120 g |
| Movable cutting blade | **SMPS45** | - | 100 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS45



GMPS45

SMPS45

Spare blades

## CUTTING RANGE TABLE PS45 - HSI45 - AS45

| Sector of use: | | Tensile strength N/mm² | <Ø 28 mm | Ø 29 mm | Ø 30 mm | Ø 31 mm | Ø 32 mm | Ø 33 mm | Ø 34 mm | Ø 35 mm | Ø 36 mm | Ø 37 mm | Ø 38 mm | Ø 39 mm | Ø 40 mm | Ø 41 mm | Ø 42 mm | Ø 43 mm | Ø 44 mm | Ø 45 mm | Ø 46 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Rope and cable | <410 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Aluminium | Rope and cable | <200 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| | Bar | <340 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | |
| Alu/Steel | Rope | <1800 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |

| Sector of use: | | Tensile strength N/mm² | Ø 9 mm | Ø 11 mm | Ø 12 mm | Ø 13 mm | Ø 14 mm | Ø 15 mm | Ø 16 mm | Ø 17 mm | Ø 18 mm | Ø 19 mm | Ø 20 mm | Ø 21 mm | Ø 22 mm | Ø 23 mm | Ø 24 mm | Ø 25 mm | Ø 26 mm | Ø 27 mm | Ø 28 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Bar | <250 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | Bar | <300 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| Aluminium | Bar | <160 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Aldrey | Cable | <340 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | Rope (>200 wires) | <180 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | |
| Steel | Bar | <420 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | |
| | Bar | <600 | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| | Rope | <2200 | ■ | ■ | | | | | | | | | | | | | | | | | |

## Main characteristics PS50 - HSI50 - AS50

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 50 mm |
| SUGGESTED APPLICATION | Copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 60 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |





Soft nylon case for PS50 - ST02






GMPS50

SMPS50

Spare blades

### PS50 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

Technical characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions ..... 110 x 317 x 55 mm
Tool weight: ..... 2,9 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS50 | 380 x 140 x 70 mm | 3,0 kg |
| Fixed cutting blade | GMPS50 | - | 320 g |
| Movable cutting blade | SMPS50 | - | 150 g |

Set equipment:
- Hydraulic cutting head
- Soft case for cutting head

NOTE:
By adding "F" to the end of the order code (e.g. PS50F), you will order the tool equipped with sharper blades, suitable for very "F"ine stranded cables



Set HSI50






GMPS50

SMPS50

Spare blades

### HSI50 - Hand operated hydraulic cutting tool

Technical characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: ..... 195 x 612 x 58 mm
Tool weight: ..... 5,1 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool | HSI50 | 700 x 260 x 105 mm | 6,8 kg |
| Fixed cutting blade | GMPS50 | - | 320 g |
| Movable cutting blade | SMPS50 | - | 150 g |

Set equipment:
- Test report
- Manual hydraulic cutting tool
- Plastic case

NOTE:
By adding "F" to the end of the order code (e.g. HSI50F), you will order the tool equipped with sharper blades, suitable for very "F"ine stranded cables



## AS50 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 445 x 75 mm
Tool weight (with battery): ..... 5,4 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS50 | **AS50** | 580 x 470 x 115 mm | 8,8 kg |
| Fixed cutting blade | **GMPS50** | - | 320 g |
| Movable cutting blade | **SMPS50** | - | 150 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)

NOTE:
By adding "**F**" to the end of the order code (e.g. AS50**F**), you will order the tool equipped with sharper blades, suitable for very "**F**"ine stranded cables



GMPS50

SMPS50

Spare blades



Set AS50

## CUTTING RANGE TABLE PS50 - HSI50 - AS50

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics STILO-S54

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 54 mm |
| SUGGESTED APPLICATION | Copper and aluminium |





Set STILO-S54

## STILO-S54 - Battery operated cutting tool

**The STILO54 battery powered hydraulic cable cutter is suitable for cutting through thin and multi-core aluminium and copper cables up to a thickness of 54mm**

Technical characteristics:
- Right or left hand ergonomic non-slip cushioned grip
- Open cutting head design
- 360° tool head rotation
- Lightweight and compact design
- Extremely fast work due to triple axial piston pump
- DataTrack mini USB-port for connectivity
- Cutting curve and error message output
- No aborted cutting cycles due to ongoing monitoring of the remaining battery running time
- Multifunction LED indicator lights even to indicate the maintenance intervals
- LED battery charge indicator
- Heavy duty blades
- Soft start and quick stop increase the service life
- Manual return possible in any position
- Shutdown and automatic return after completion of a cutting cycle
- Automatic energy-saving mode after approx. 5 minutes

Tool dimensions: ..... 495 x 126 x 115 mm
Tool weight (with battery): ..... 4,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool STILO-S54 | STILO-S54 | 450 x 500 x 140 mm | 7,2 kg |
| Movable cutting blade | - | - | - |

Accessories see page 209-212

Set equipment:
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case

## CUTTING RANGE TABLE STILO-S54

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 54 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics PS65 - AS65

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 65 mm |
| SUGGESTED APPLICATION | Copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 44 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |






Set PS65

## PS65 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

Technical characteristics:
- Light and compact structure
- Open cutting head with guide blade
- Easy handling through open cutting head
- Quick male connector with automatic lock system and dust cap

Tool dimensions ..... 146 x 372 x 88 mm
Tool weight: ..... 4,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS65 | 400 x 330 x 140 mm | 6,3 kg |
| Movable cutting blade | SMI65 | - | 450 g |
| Knife guiding plate | MFI65 | - | 70 g |

Set equipment:
- Hydraulic cutting head
- Plastic case

SMI65



Spare blade and blade guide

MFI65

## SERIES 65 - MAX. 65 MM CUTTING DIAMETER





### AS65 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 502 x 88 mm
Tool weight (with battery): ..... 7,6 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS65 | AS65 | 580 x 470 x 115 mm | 11 kg |
| Movable cutting blade | SMI65 | - | 450 g |
| Knife guiding plate | MFI65 | - | 70 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS65

SMI65



Spare blade and blade guide

MFI65

### CUTTING RANGE TABLE PS65 - AS65

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics PS85 - HSI85 - AS85

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 85 mm |
| SUGGESTED APPLICATION | Copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 70 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |






Set PS85



GMPS85

SMPS85

Spare blades

### PS85 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical Characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions: ..... 135 x 391 x 70 mm
Tool weight: ..... 4,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS85 | 465 x 370 x 110 mm | 5,8 kg |
| Fixed cutting blade | GM85 | - | 150 g |
| Movable cutting blade | SM85 | - | 250 g |

Set equipment:
- Hydraulic cutting head
- Plastic case






Set HSI85



GMPS85

SMPS85

Spare blades

### HSI85 - Hand Operated Hydraulic Cutting Tool

Technical Characteristics:
- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: ..... 203 x 697 x 64 mm
Tool weight: ..... 7,3 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set Cutting Tool | HSI85 | 700 x 230 x 75mm | 13,1 kg |
| Fixed Cutting Blade | GMPS85 | - | 600 g |
| Movable Cutting Blade | SMPS85 | - | 400 g |

Set equipment:
- Test report
- Manual hydraulic cutting tool
- Plastic case

## SERIES 85 - MAX. 85 MM CUTTING DIAMETER



### AS85 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure; rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 522 x 75 mm
Tool weight (with battery): ..... 7,2 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS85 | **AS85** | 580 x 470 x 115 mm | 10,7 kg |
| Fixed cutting blade | **GM85** | - | 150 g |
| Movable cutting blade | **SM85** | - | 250 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS85



GMPS85

SMPS85

Spare blades

### CUTTING RANGE TABLE PS85 - HSI85 - AS85

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics PS95 - AS95

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 95 mm |
| SUGGESTED APPLICATION | Copper and Aluminium |

| | |
|---|---|
| CUTTING FORCE | 65 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |




## PS95 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

Technical characteristics:
- Light and compact structure
- Open cutting head with guide blade
- Easy handling by open cutting head
- Quick male connector with automatic lock system and dust cap

Tool dimensions: ..... 200 x 472 x 88 mm
Tool weight: ..... 7,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS95 | 610 x 400 x 140 mm | 10,1 kg |
| Movable cutting blade | SMI95 | - | 900 g |
| Knife guiding plate | MFI95 | - | 80 g |

Set equipment:
- Hydraulic cutting head
- Plastic case

SMI95



Spare blade and blade guide

MFI95



Set PS95

## SERIES 95 - MAX. 95 MM CUTTING DIAMETER





### AS95 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 344 x 603 x 91 mm
Tool weight (with battery): ..... 9,8 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS95 | **AS95** | 725 x 480 x 170 mm | 13,9 kg |
| Movable cutting blade | **SMI95** | - | 900 g |
| Knife guiding plate | **MFI95** | - | 80 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS95

SMI95



Spare blade and blade guide

MFI95

### CUTTING RANGE TABLE PS95 - AS95

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics PS120-2 - AS120-2

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 120 mm |
| SUGGESTED APPLICATION | Copper and aluminium |

| | |
|---|---|
| CUTTING FORCE | 60 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |




### PS120-2 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

Technical characteristics:
- Light and compact structure
- Open cutting head with guide blade
- Easy handling by open cutting head
- Quick male connector with automatic lock system and dust cap

Tool dimensions: ..... 239 x 508 x 88 mm
Tool weight: ..... 8,2 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS120-2 | 610 x 400 x 140 mm | 10,7 kg |
| Movable cutting blade | SMI120-2 | - | 1300 g |
| Knife guiding plate | MFI120-2 | - | 140 g |

Set equipment:
- Hydraulic cutting head
- Plastic case



Set PS120-2

SMI120-2



Spare blade and blade guide

MFI120-2

# SERIES 120-2 - MAX. 120 MM CUTTING DIAMETER





## AS120-2 - Battery operated hydraulic cutting tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 359 x 639 x 91 mm
Tool weight (with battery): ..... 10,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set cutting tool AS120-2 | **AS120-2** | 725 x 480 x 170mm | 14,6 kg |
| Movable cutting blade | **SMI120-2** | - | 1300 g |
| Knife guiding plate | **MFI120-2** | - | 140 g |

Accessories see page 209-212

**Set equipment:**
- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS120-2

SMI120-2



Spare blade and blade guide

MFI120-2

## CUTTING RANGE TABLE PS120-2 - AS120-2

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |

## Main characteristics PS120 - PS120-SK160

| | |
|---|---|
| CUTTING DIAMETER | max. Ø 120 mm |
| SUGGESTED APPLICATION | Copper, aluminium, armoured cables |

| | |
|---|---|
| CUTTING FORCE | 100 kN (PS120)/135 kN (PS120-SK160) |
| OPERATING PRESSURE | 700 bar (70 MPa) |

✓ SUITABLE TO CUT HEAVY DUTY STEEL WIRE ARMOURED CABLES






Set PS120



GMPS120TNB

SMPS120TNB

Spare blades

## PS120 - Hydraulic cutting head

**The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).**

**Technical characteristics:**
- Light and compact structure
- Blades made of high strength treated steel
- Quick male connector with automatic lock system and non detachable dust cap
- Head can be opened for easy cable insertion

Tool dimensions: ..... 174 x 491 x 89 mm
Tool weight: ..... 9,6 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS120 | 610 x 400 x 140 mm | 14,8 kg |
| Fixed cutting blade | GMPS120TNB | - | 1240 g |
| Movable cutting blade | SMPS120TNB | - | 940 g |

**Set equipment:**
- Hydraulic cutting head
- Metal case






Set PS120-SK160



GMPS120

SMPS120

Spare blades

## PS120-SK160 - Hydraulic cutting head (for wire armoured aluminium and copper cables)

**The unit is suggested to 700 bar hydraulic pump (max operating pressure 850 bar/85 MPa) (pages 201-208).**

**Technical characteristics:**
- Light and compact structure
- The blades are made of high strength treated tool steel
- Head can be opened for easy cutting
- Cutting force 135 kN (700 bar) resp. 160 kN (850 bar)

Tool dimensions: ..... 174 x 491 x 89 mm
Tool weight: ..... 11 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cutting head with case | PS120-SK160 | 600 x 220 x 90 mm | 16 kg |
| Fixed cutting blade | GMPS120 | - | 2,55 kg |
| Movable cutting blade | SMPS120 | - | 940 g |

**Set equipment:**
- Hydraulic cutting head
- Metal case

## CUTTING RANGE TABLE PS120 - SK160

| Sector of use: | | Tensile strength N/mm² | <Ø 30 mm | Ø 35 mm | Ø 40 mm | Ø 45 mm | Ø 50 mm | Ø 55 mm | Ø 60 mm | Ø 65 mm | Ø 70 mm | Ø 75 mm | Ø 80 mm | Ø 85 mm | Ø 90 mm | Ø 95 mm | Ø 100 mm | Ø 105 mm | Ø 110 mm | Ø 115 mm | Ø 120 mm | Ø 125 mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Copper | Cable | <410 | | | | | | | | | | | | | | | | | | | | |
| Aluminium | Cable | <210 | | | | | | | | | | | | | | | | | | | | |
| Armoured | Cable | <200 | | | | | | | | | | | | | | | | | | | | |

## Electric Arc in a Test Shortcircuit

### Photo:

The photographs below show the development of an electric arc during an experimental short circuit, and show clearly the danger that may threaten operators in the case of work done under tension. Personal injury can be avoided only by using insulated cable cutters.



**Photo 1:** 200 ms



**Photo 2:** 800 ms



**Photo 3:** 1.200 ms



**Photo 4:** 1.600 ms

## Insulated Cable Shears

### Description of the insulated cable shears:

The insulated cable cutter is a device for safe cable cutting when the cable may be live and the absence of tension cannot be checked with complete safety. Such a check is particularly difficult in metallic screened cables. Therefore, before proceeding with any cutting operations, it is essential to take adequate measures to guarantee the operator's safety. One such measure is the use of an insulated cable cutter. This device – conforming to DIN EN 50340 (VDE 0682 part 661) – is made up essentially of a hydraulic pump and a cutting head to which a high pressure non-metallic hose of length 10.5 m is connected by a steady fitting.

### Field of application:

According to § 6.2 of the safety regulations "Electric Systems and Materials" (BGV A 2, ex VGB 4) and § 6.2 of EN 50 110 standard (VDE 0105 part 100), before carrying out any work on grounding systems for voltages up to 60kV the absence of tension must be guaranteed for the entire duration of the operations. As it is not always possible to make sure there is no tension at the point where we must operate, especially for ground cables, it is essential to avoid the problem by cutting the cable with a special insulated cable cutter and at the same time carrying out a check at the point of interruption, e.g. by checking at the main switchboard.

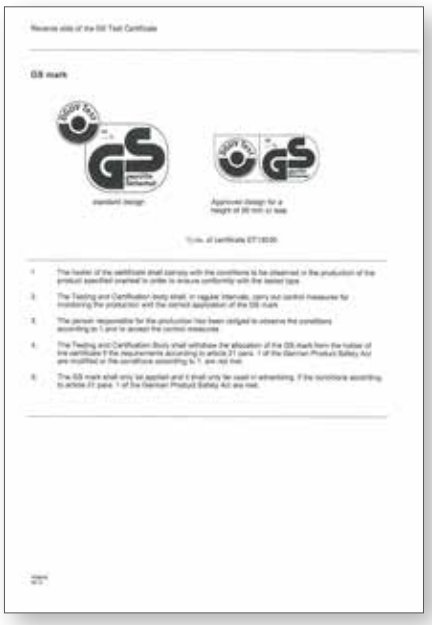
### Equipotential connection - Grounding:

For insulated cable cutters the DIN EN 50340 standard requires grounding the cutter head and establishing an equipotential connection between the pump and the ground. These regulations must however be implemented while respecting directives currently applicable in single countries. According to the "BGI 845-ZH1 / 437" directives, for instance, in Germany the cutting head cannot be individually grounded because the networks themselves are already grounded. There must be however an equipotential connection between the pump and the ground.



DGUV Test

GS Test Certificate



GS mark

# BATTERY OPERATED SAFETY CUTTING UNIT

## with remote control

Highest safety level and easy handling even in rough working conditions. Guaranteed safe Cutting of copper and aluminium cables up to a max. diameter of 120mm and 60kV nominal voltage (Single core cables up to 110kV/60Hz)



### Compact

Fibreglass plastic case -
4,5 kg - 290 x 190 x 205 mm

### Light and Robust

Throught the inset of restistant materials




### Remote control

For a ordinary handling

### Powerful

Increased batterypower throught a
18V-Lithium-Ionen battery 3Ah

Tested for safety

60.000V



60.000V

## SSA - Safety cutting unit with hydraulic pump and accumulator

**Ideal for safe cutting of copper and aluminium cables up to the maximum allowable diameter for the head being used (see table below)**

Technical characteristics:
- Very light, compact and robust structure of the pump and cutting heads, throught the inset from fibregass plastic and corrosion resistant materials
- Double piston technology for rapid high pressure feed
- Remote control
- Multifunktion LED to maintenance and battery state control
- Rotary quick coupling with dust cap
- Protection IP43

Operating pressure: ..... 625 bar (62.5 MPa)
Low pressure (< 100 bar) Pump capacity: ..... 1,5 l / min
High pressure (up to 700 bar) Pump capacity: ..... 0,1 l / min
Tank capacity: ..... 1200 ml
Operating temperature: ..... -20°C to +40°C

| | SSA85-CP | SSA95-CP | SSA120S-CP | SSA120-2-CP |
|---|---|---|---|---|
| |  |  |  |  |
| Cutting range | Ø 85 mm | Ø 95 mm | Ø 120 mm | Ø 120 mm |
| Cutting force | 63 kN | 58 kN | 90 kN | 54 kN |
| Working pressure | 625 bar | 625 bar | 625 bar | 625 bar |
| Headtype | close | open with blade guide | close | open with blade guide |
| Accumulator voltage | 18 V | 18 V | 18 V | 18 V |
| Tool weight | 12,2 kg | 14,8 kg | 17,2 kg | 15,6 kg |
| Dimensions pump | 354 x 187 x 204 mm | 354 x 187 x 204 mm | 354 x 187 x 204 mm | 354 x 187 x 204 mm |
| Dimensions head | 345 x 135 x 65 mm | 426 x 200 x 88 mm | 491 x 190 x 80 mm | 461 x 239 x 88 mm |
| Set with case | 800 x 450 x 360 mm / 22 kg | 800 x 450 x 360 mm / 24,6 kg | 800 x 450 x 360 mm / 27 kg | 800 x 450 x 360 mm / 25,4 kg |



Set equipment
- Pump CP625-SSA
- Equipotential earthing rod with connection cable
- Hydraulic cutting head with flexible high pressure hose length 10,5 m
- Remote control with 1,5 m cable
- Transporting bag for CP625SSA
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Shoulder strap (TG3)
- USB-cable
- Plastic case with integral handle and wheels for easy transport of the entire equipment

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Grounding SSA120-CP, SSA85-CP | SSA-ERD1 | length 1100 mm | 4,6 kg |
| Set: Grounding SSA95-CP, SSA120-2-CP | SSA-ERD4 | length 1100 mm | 5,8 kg |

Set equipment SSA-ERD:
- Earthing rod 1,1m
- Insulated earthing cable 6 m

GROUNDING DEVICE:
to be ordered separately



SSA-ERD3



60.000V

SSA95

## SSA - Safety cutting unit

**Ideal for safe cutting of copper and aluminium cables up to the maximum allowable diameter for the head being used (see table below)**

Technical characteristics:
- Light and compact structure
- Reduced weight due to the use of light alloys and corrosion resistant materials
- Easy use and high stability due to the ergonomic pedal and the non-slip base
- Fast feeds by means of a double hydraulic cylinder
- Pressure control by pressure gauge
- Manual return in any position
- Rotary quick coupling with dust cap

Operating pressure: ..... 625 bar (62.5 MPa)
Low pressure pump capacity: ..... 18,3 cm³ / stroke
High pressure pump capacity: ..... 2 cm³ / stroke
Tank capacity: ..... 1200 ml
Operating temperature: ..... -20°C to +40°C



| | SSA85 | SSA95 | SSA120 | SSA120-2 |
|---|---|---|---|---|
| |  |  |  |  |
| Cutting range | Ø 85 mm | Ø 95 mm | Ø 120 mm | Ø 120 mm |
| Cutting force | 63 kN | 58 kN | 90 kN | 54 kN |
| Working pressure | 625 bar | 625 bar | 625 bar | 625 bar |
| Headtype | close | open with blade guide | close | open with blade guide |
| Tool weight | 15,4 kg | 17,4 kg | 20,4 kg | 18,7 kg |
| Dimensions pump | 570 x 230 x 209 mm | 570 x 230 x 209 mm | 570 x 230 x 209 mm | 570 x 230 x 209 mm |
| Dimensions head | 345 x 135 x 65 mm | 426 x 200 x 88 mm | 491 x 190 x 80 mm | 461 x 239 x 88 mm |
| Set with case | 800 x 450 x 360 / 24 kg | 800 x 450 x 360 / 26 kg | 800 x 450 x 360 / 29,4 kg | 800 x 450 x 360 / 27 kg |



Set SSA

Set equipment
- Foot operated pump - FPI 63-SSA
- Equipotential earthing rod with connection cable
- Hydraulic cutting head with flexible high pressure hose length 10,5m
- Plastic case with integral handle and wheels for easy transport of the entire equipment (metal case available on request)

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Grounding SSA120, SSA85 | SSA-ERD1 | length 1100 mm | 4,6 kg |
| Set: Grounding SSA95, SSA120-2 | SSA-ERD4 | length 1100 mm | 5,8 kg |

Set equipment SSA-ERD:
- Earthing rod 1,1m
- Insulated earthing cable 6 m

GROUNDING DEVICE:
to be ordered separately



SSA-ERD3

# SAFETY CUTTING UNIT



60.000V



## Adapter for insulated hydraulic cutting units proofed and certified according to GS-ET-23

Suitable for creating an insulated hydraulic cutting unit with the hydraulic battery pump CP700 / CP700EC. The adapter reduces the pressure of the hydraulic battery pump CP700 from 700 bar to the cutting heads of the insulated hydraulic cutting unit to 625 bar. It also ensures that between the safety cutting head and the hydraulic pump CP700 the oil doesn't mix and thus no "conductive contamination" gets into the insulating hose.

Technical characteristics:
- Functional parts made of high-quality steel with burnished surface
- Base made of stainless steel with aluminium tubes and high quality plastic plates for increased stability
- Pressure reduction from 700 bar to 625 bar
- Avoidance of oil mixing of the hydraulic unit to the cutting heads
- Position control and oil loss indicator
- Pressure gauge for pressure indication and control of the cutting process
- Connection for equipotential bonding

| | AD-SSA85 | AD-SSA95 | AD-SSA120S | AD-SSA120-2 |
|---|---|---|---|---|
| |  |  |  |  |
| Cutting range | Ø 85 mm | Ø 95 mm | Ø 120 mm | Ø 120 mm |
| Cutting force | 63 kN | 58 kN | 90 kN | 54 kN |
| Working pressure | 625 bar | 625 bar | 625 bar | 625 bar |
| Headtype | close | open with blade guide | close | open with blade guide |
| Dimensions head | 345 x 135 x 65 mm | 426 x 200 x 88 mm | 491 x 190 x 80 mm | 461 x 239 x 88 mm |
| Set with case | 800 x 450 x 360 / 24 kg | 800 x 450 x 360 / 27 kg | 800 x 450 x 360 / 29,5 kg | 800 x 450 x 360 / 28 kg |



Set SSA

Set equipment
- Foot operated pump - FPI 63-SSA
- Equipotential earthing rod with connection cable
- Hydraulic cutting head with flexible high pressure hose length 10,5m
- Plastic case with integral handle and wheels for easy transport of the entire equipment (metal case available on request)

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Grounding AD-SSA85, AD-SSA120S | SSA-ERD1 | length 1100 mm | 4,6 kg |
| Set: Grounding AD-SSA95, AD-SSA120-2 | SSA-ERD4 | length 1100 mm | 5,8 kg |

Set equipment SSA-ERD:
- Earthing rod 1,1m
- Insulated earthing cable 6 m

GROUNDING DEVICE:
to be ordered separately



SSA-ERD3



5

# CRIMPING TOOLS

MECHANICAL CRIMPING TOOLS
HYDRAULICAL CRIMPING TOOLS
CRIMPING TOOLS

# NEXT GENERATION OF MECHANICAL CRIMPING TOOLS







## Set mechanical crimping tool with interchangeable dies

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Mechanic crimping tool | PM-TRE | 220 mm | 0,74 kg |

**Set equipment:**
- Mechanic crimping tool
- Rigid resin case
- Crimping die for insulated cable connections 0,5 - 6 mm² - UEIQ6
- Crimping die for wire end sleeves 0,14 - 2,5 mm² - UEAE2R
- Crimping die for wire end sleeves 4 - 16 mm² - UEAE16R

**Technical characteristics:**
- By 2 additional slots in the handle it is workable to transport up to 3 inserts directly in the tool
- Outstanding crimpings are reached due to a side crimping mechanism
- Inserts can be changed easily and without effort
- Further inserts are available from intercable to cover many different applications

## Included dies



### Crimping die for insulated cable connections

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CROSS-SECTION | 0,5 - 6 mm² |

| Description | Order No. |
|---|---|
| Crimping die for insulated cable connections | UEIQ6 |



### Crimping die for brazed seam and pin terminals

| | |
|---|---|
| CRIMPING TYPE | Indent |
| CROSS-SECTION | 0,5 - 10 mm² |

| Description | Order No. |
|---|---|
| Crimping die for brazed seam and pin terminals | UEQ10 |



### Crimping die for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Trapezoid crimping |
| CROSS-SECTION | 0,14 - 10 mm² |

| Description | Order No. |
|---|---|
| Crimping die for insulated cable connections | UEAE10T |

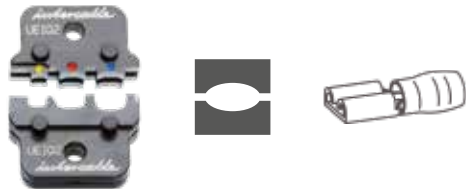


## Set mechanical crimping tool with interchangeable dies

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Mechanic crimping tool | MPUSET-2 | 440 x 230 x 80 mm | 0,9 kg |

**Set equipment:**
- Mechanic crimping tool
- Rigid resin case
- Crimping die for insulated cable connections 0,5 - 6 mm² - UEIQ6
- Crimping die for wire end sleeves 0,14 - 2,5 mm² - UEAE2R
- Crimping die for wire end sleeves 4 - 16 mm² - UEAE16R

## Crimping dies for basic tool MPU + MPU-L



### Crimping die for insulated cable connections

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CROSS-SECTION | 0,1 - 2,5 mm² |
| CRIMPING | Double crimping |

| Description | Order No. |
|---|---|
| Crimping die for insulated cable connections | UEIQ2 |



### Crimping die for insulated cable connections

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CROSS-SECTION | 0,5 - 6 mm² |
| CRIMPING | Double crimping |

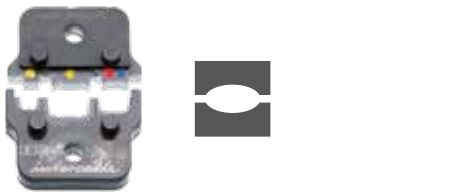
| Description | Order No. |
|---|---|
| Crimping die for insulated cable connections | UEIQ6 |



### Crimping die for insulated flag female disconnects

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CROSS-SECTION | 0,5 - 2,5 mm² |

| Description | Order No. |
|---|---|
| Crimping die for insulated flag female disconnects | UEIQ2WF |



### Crimping die for insulated thermo-shrinking connector

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CROSS-SECTION | 0,14 - 6 mm² |
| CRIMPING | Einfachverpressung |

| Description | Order No. |
|---|---|
| Crimping die for insulated thermo-shrinking connector | UEIQ6WS |



### Crimping die for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| CROSS-SECTION | 0,14 - 2,5 mm², 2 x 0,25 - 2 x 1,5 mm |

| Description | Order No. |
|---|---|
| Crimping die for end sleeves | UEAE2R |



### Crimping die for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| CROSS-SECTION | 4 - 16 mm², 2 x 2,5 mm |

| Description | Order No. |
|---|---|
| Crimping die for end sleeves | UEAE16R |





## Crimping die for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| CROSS-SECTION | 25 - 35 mm² |

| Description | Order No. |
|---|---|
| Crimping die for end sleeves | UEAE35R |





## Crimping die for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| CROSS-SECTION | 50 mm² |

| Description | Order No. |
|---|---|
| Crimping die for end sleeves | UEAE50R |





## Crimping die for twin end-sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| CROSS-SECTION | 2 x 4 - 2 x 16 mm² |

| Description | Order No. |
|---|---|
| Crimping die for twin end-sleeves | UEAE2X16R |





## Crimping die for brazed seam and pin terminals

| | |
|---|---|
| CRIMPING TYPE | Indent |
| CROSS-SECTION | 0,5 - 10 mm² |

| Description | Order No. |
|---|---|
| Crimping die for brazed seam and pin terminals | UEQ10 |





## Crimping die for tubular cable lugs, R-series

| | |
|---|---|
| CRIMPING TYPE | Double indent |
| CROSS-SECTION | 0,5 - 2,5 mm² |

| Description | Order No. |
|---|---|
| Crimping die for tubular cable lugs, R-series | UER2 |





## Crimping die for tubular cable lugs, R-series

| | |
|---|---|
| CRIMPING TYPE | Double indent |
| CROSS-SECTION | 4 - 10 mm² |

| Description | Order No. |
|---|---|
| Crimping die for tubular cable lugs, R-series | UER10 |





## Crimping die for tubular cable lugs, R-series

| | |
|---|---|
| CRIMPING TYPE | Double indent |
| CROSS-SECTION | 10 - 16 mm² |

| Description | Order No. |
|---|---|
| Crimping die for tubular cable lugs, R-series | UER16 |





## Crimping die for non-insulated open barrel terminals

| | |
|---|---|
| CRIMPING TYPE | Double crimping |
| TAB WIDTH | 2,8 mm |
| CROSS-SECTION | 0,1 - 1 mm² |

| Description | Order No. |
|---|---|
| Crimping die for non-insulated open barrel terminals | UEFV28 |





## Crimping die for non-insulated open barrel terminals

| | |
|---|---|
| CRIMPING TYPE | Double crimping |
| TAB WIDTH | 4,8 mm |
| CROSS-SECTION | 0,5 - 2,5 mm² |

| Description | Order No. |
|---|---|
| Crimping die for non-insulated open barrel terminals | UEFV48 |



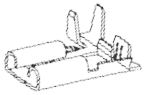


## Crimping die for non-insulated open barrel terminals

| | |
|---|---|
| CRIMPING TYPE | Double crimpung |
| TAB WIDTH | 6,3 mm |
| CROSS-SECTION | 0,5 - 6 mm² |

| Description | Order No. |
|---|---|
| Crimping die for non-insulated open barrel terminals | UEFV63 |





## Crimping die non-insulated open barrel terminals flag type

| | |
|---|---|
| CRIMPING TYPE | Double crimpung |
| TAB WIDTH | 6,3 mm |
| CROSS-SECTION | 10 - 16 mm² |

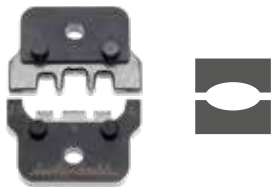
| Description | Order No. |
|---|---|
| Crimping die non-insulated open barrel terminals flag type | UEFVS63 |




## Crimping die for photovoltaics

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CONTACT TYPE | MC4 |
| CROSS-SECTION | 1,5 - 4 mm² |

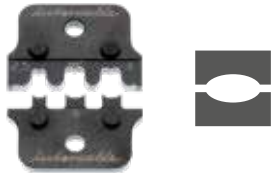
| Description | Order No. |
|---|---|
| Crimping die for photovoltaics | UEMC41 |



## Crimping die for photovoltaics

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CONTACT TYPE | MC3 |
| CROSS-SECTION | 2,5 - 6 mm² |

| Description | Order No. |
|---|---|
| Crimping die for photovoltaics | UEMC3 |

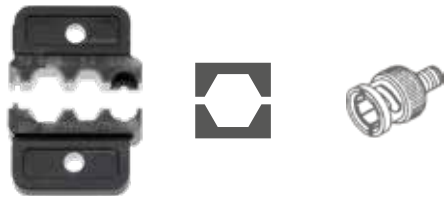


## Crimping die for photovoltaics

| | |
|---|---|
| CRIMPING TYPE | Oval |
| CONTACT TYPE | MC4 |
| CROSS-SECTION | 2,5 - 6 mm² |

| Description | Order No. |
|---|---|
| Crimping die for photovoltaics | UEMC4 |





## Crimping die for Koax-connectors for BNC-cables

| | |
|---|---|
| CRIMPING TYPE | Oval |
| | RG 58 / 59 / 62 / 71 |

| Description | Order No. |
|---|---|
| Crimping die Koax-connectors for BNC-cables | UEBNC |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Trapezoidal |
| APPLICATION RANGE | 0,25 - 2,5 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE2T | 160 mm | 170 g |



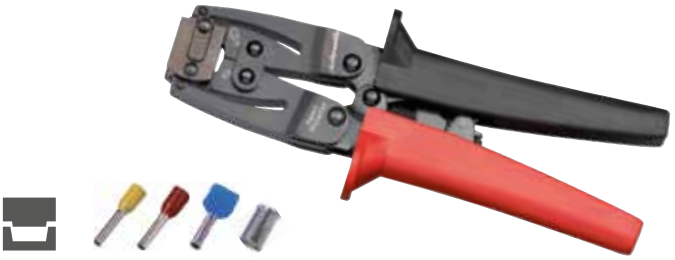
## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Indent |
| APPLICATION RANGE | 0,5 - 16 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE16K | 190 mm | 250 g |

# MECHANICAL CRIMPING TOOLS





## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Trapezoidal - Front |
| APPLICATION RANGE | 0,14 - 6 mm² / 2x0,5 - 2x2,5 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE6TF | 210 mm | 525 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Trapezoidal - Front |
| APPLICATION RANGE | 6 - 16 mm² / 2x4 - 2x6 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE16TF | 210 mm | 690 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Trapezoidal |
| APPLICATION RANGE | 0,14 - 16 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE16T | 230 mm | 485 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Trapezoidal |
| APPLICATION RANGE | 10 - 50 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | PMT50 | 304 mm | 600 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Square |
| APPLICATION RANGE | 0,08 - 10 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE10V | 195 mm | 320 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Hexagonal |
| APPLICATION RANGE | 0,08 - 16 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE16S | 215 mm | 450 g |

- Automatic adjustment to the cross section from 0,08 to 16 mm² without setting
- Movable locator for a precise location of small cross sections



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| APPLICATION RANGE | 0,14 - 2,5 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE2R | 195 mm | 320 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| APPLICATION RANGE | 1,5 - 6 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE6R | 195 mm | 320 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| APPLICATION RANGE | 10 - 16 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE16R | 190 mm | 320 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| APPLICATION RANGE | 10 - 25 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE25R | 195 mm | 350 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| APPLICATION RANGE | 10 - 50 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE50R | 300 mm | 700 g |



## Mechanical crimping tool for end sleeves

| | |
|---|---|
| CRIMPING TYPE | Round crimping |
| APPLICATION RANGE | 50 - 95 mm² |
| SUGGESTED APPLICATION | End sleeves |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPAE95R | 300 mm | 700 g |

# MECHANICAL CRIMPING TOOLS





## Mechanical crimping tool for insulated terminals

| | |
|---|---|
| CRIMPING TYPE | Oval |
| APPLICATION RANGE | 0,5 - 6 mm² |
| SUGGESTED APPLICATION | Insulated terminals |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPIQ | 210 mm | 190 g |



## Mechanical crimping tool for insulated terminals

| | |
|---|---|
| CRIMPING TYPE | Oval / double crimping |
| APPLICATION RANGE | 0,5 - 6 mm² |
| SUGGESTED APPLICATION | Insulated terminals |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPIQ6 | 220 mm | 480 g |

• Crimping of conductor and insulation in one step



## Mechanical crimping tool for insulated terminals

| | |
|---|---|
| CRIMPING TYPE | Oval |
| APPLICATION RANGE | 6 - 16 mm² |
| SUGGESTED APPLICATION | Insulated terminals |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPIQ16 | 285 mm | 710 g |

• Crimping of conductor and insulation in one step



## Mechanical crimping tool for heat shrinkable butt-splice and insulated closed end connectors

| | |
|---|---|
| CRIMPING TYPE | Oval |
| APPLICATION RANGE | 0,5 - 6 mm² |
| SUGGESTED APPLICATION | Heat shrinkable butt-splice and insulated closed end connectors |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | PMGI6 | 220 mm | 480 g |



## Mechanical crimping tool for non-insulated open barrel terminals

| | |
|---|---|
| CRIMPING TYPE | Double indent |
| APPLICATION RANGE | 0,25 - 6 mm² |
| SUGGESTED APPLICATION | Non-insulated open barrel terminals |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPFV | 220 mm | 475 g |



## Mechanical crimping tool for non-insulated cable connectors

| | |
|---|---|
| CRIMPING TYPE | Double indent |
| APPLICATION RANGE | 10 - 16 mm² |
| SUGGESTED APPLICATION | Non-insulated cable connectors |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | PMC16 | 285 mm | 700 g |



## Mechanical crimping tool for non-insulated cable connectors

| | |
|---|---|
| CRIMPING TYPE | Double indent |
| APPLICATION RANGE | 0,5 - 16 mm² |
| SUGGESTED APPLICATION | Non-insulated cable connectors |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | PMCL16 | 280 mm | 700 g |



## Mechanical crimping tool for non-insulated cable connectors

| | |
|---|---|
| CRIMPING TYPE | Hexagonal |
| APPLICATION RANGE | 10 - 25 mm² |
| SUGGESTED APPLICATION | Non-insulated cable connectors |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | PMC25 | 270 mm | 700 g |



## EPU-SET Electromechanical battery crimping tool 12V

Suitable to crimp insulated and non-insulated cable lugs and connectors as well as end-sleeves.

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Battery crimping tool 12V | EPU-SET | - | - |

Characteristics:
- Electromechanically driven handheld device with lithium ion battery
- Light, slim and robust construction
- Due to a parallel closure of the jaws an optimal crimp result will be achieved without any violation of the insulation
- Tap-operation for exact positioning of the contacts
- Cost-effective in operation due to low susceptibility and long maintenance intervals
- Emergency release and reset-function
- Fast engine stop, no risk of overshoot
- Low noise generation
- Automatic rewind after the completed crimping
- Process monitoring by multifunction display:
  - Battery level
  - Service interval
  - Warning function against overheating / overload

Set equipment:
- Electromechanical battery crimping tool 12V
- Crimping die for insulated cable lugs and connectors 0,5-1,0/1,5-2,5/4-6mm²
- Lithium ion battery with charger
- Allen wrench
- Resin case with foam insert

*Further crimping dies on request





Crimping die for insulated terminals



Crimping die for end sleeves



## Mechanical crimping tool for non-insulated tubular cable lugs and connectors, R series

| | |
|---|---|
| CRIMPING TYPE | i crimping |
| APPLICATION RANGE | 10 - 25 mm² |
| SUGGESTED APPLICATION | Non-insulated R series |

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool | MPR25i | 270 mm | 700 g |




## Mechanical crimping tool for non-insulated tubular cable lugs and connectors

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool 6-50² (I series) | MPR-1 | 380 mm | 1,5 kg |
| Crimping tool 6-50² (R series) | MPR50i | 380 mm | 1,5 kg |
| Crimping tool 10-70² (F series) | MPF70i | 515 mm | 2,1 kg |
| Crimping tool 25-150² (I series) | MPR-2 | 550 mm | 3,7 kg |
| Crimping tool 10-120² (R series) | MPR120i | 550 mm | 3,7 kg |

- Crimping type: i crimp
- Reduces crimping force
- Die selection with revolver system




## Mechanical crimping tool for non-insulated tubular cable lugs and connectors

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Crimping tool 6-50² (DIN series) | MPD50S | 380 mm | 1,5 kg |
| Crimping tool 6-50² (British series) | MPB50 | 380 mm | 1,5 kg |
| Crimping tool 10-120² (DIN series) | MPD120S | 550 mm | 3,7 kg |
| Crimping tool 10-120² (British series) | MPB120 | 550 mm | 3,7 kg |

- Crimping type: Hexagon crimp
- Reduces crimping force
- Die selection with revolver system



## Mechanical crimping tool for non-insulated tubular cable lugs and connectors standard type 10 - 120 mm²

10 - 120 mm²

| Description | Order No. | Length | Weight |
|---|---|---|---|
| Mechanical crimping tool | MPR-3 | 535 mm | 3,1 kg |

- Crimping type: Indent

NOTE:
For the crimp of insulated terminals please order **MPR-4**




## MP60-1 - Mechanical crimping tool 60 kN

| | |
|---|---|
| CRIMPING SECTION | max 240 mm² |
| MAXIMUM STROKE | 20 mm |
| CRIMPING FORCE | 60 kN |

**Technical characteristics:**
- Light and compact structure
- Telescopic handles adjustable from 560 to 860 mm
- Snap closure crimping head, rotates 360°

Tool dimensions: ..... 160 x 560 x 50 mm
Tool weight: ..... 2.9 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | MP60-1 | 700 x 260 x 105 mm | 4,6 kg |

**Set equipment:**
- Mechanical crimping tool

For the crimping dies of tool MP60-1 an additional opening spring (order ref. OEF1) is also required.



5


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 166 - 170 |
| PLASTIC CASE FOR DIES | Page 170 |
| ADAPTER FOR CRIMPING DIES | Page 170 |




## MP60-3 - Mechanical crimping tool 60 kN

| | |
|---|---|
| CRIMPING SECTION | max 240 mm² |
| MAXIMUM STROKE | 20 mm |
| CRIMPING FORCE | 60 kN |

**Technical characteristics:**
- Light and compact structure
- Telescopic handles adjustable from 560 to 860 mm
- Snap closure crimping head, rotates 360°

Tool dimensions: ..... 154 x 550 x 44 mm
Tool weight: ..... 3,6 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | MP60-3 | 700 x 260 x 105 mm | 5,3 kg |

**Set equipment:**
- Mechanical crimping tool
- Nylon case



5


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 166 - 170 |
| PLASTIC CASE FOR DIES | Page 170 |
| ADAPTER FOR CRIMPING DIES | Page 170 |




## MP60-2 - Mechanical crimping tool - 60 kN

| | |
|---|---|
| CRIMPING SECTION | max 300 mm² |
| MAXIMUM STROKE | 19 mm |
| CRIMPING FORCE | 60 kN |

**Technical characteristics:**
- Light and compact structure
- Telescopic handles adjustable from 560 to 860 mm
- Snap closure crimping head, rotates 360°

Tool dimensions: ..... 154 x 552 x 44 mm
Tool weight: ..... 3,6 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | MP60-2 | 700 x 260 x 105 mm | 5,3 kg |

**Set equipment:**
- Mechanical crimping tool
- Nylon case



5


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 171 - 174 |
| PLASTIC CASE FOR DIES | Page 174 |




MPSF6-1

## MPSF6 - Manual mechanical tool for SF6-insulated MT-switchboard terminals

**Designed for assembly and disassembly of the connector for external cone terminals of MT cables operate at voltages from 12 to 36kV.**

Technical characteristics:
- Mechanical tool with symmetrical operation
- Removable compression head
- Telescopic handles ..... 350 - 560 mm
- Maximum stroke: ..... 10 mm
- Maximum threaded terminal travel: ..... 30 mm
- Crimping force: ..... 60 kN
- Handgrip opening angle: ..... 120°

Tool dimensions: ..... 160 x 507 x 85 mm
Tool weight: ..... 3,1 kg

Application range

| Head size | Voltage range | Amperage | Cross section |
|---|---|---|---|
| 1 | 12 kV, 24 kV, 36 kV | 630 A | 25 mm² - 240 mm² |
| 2 | 12 kV, 24 kV, 36 kV | 800 A | 50 mm² - 300 mm² |
| 3 | 12 kV, 24 kV, 36 kV, 52 kV | 1.250 A | 150 mm² - 630 mm² |



Set MPSF6-1

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Mechanical tool for SF6 System size 1 | MPSF6-1 | 570 x 155 x 75 mm | 5,5 kg |
| Set: Mechanical tool for SF6 System size 2 | MPSF6-2 | 570 x 155 x 75 mm | 5,1 kg |
| Set: Mechanical tool for SF6 System size 3 | MPSF6-3 | 630 x 155 x 95 mm | 7,4 kg |

Set equipment MPSF6-X:
- Mechanical crimping tool
- Terminal dies
- Metallic case (BKMPSF6)



MPSF6-6 lose



MKGR1

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Mechanical tool for SF6 system without terminals and case | MPSF6-lose | 515 x 155 x 73 mm | 3,1 kg |
| Terminal dies size 1 SF6 system | MKGR1 | 125 x 65 x 65 mm | 1,9 kg |
| Terminal dies size 2 SF6 system | MKGR2 | 125 x 65 x 65 mm | 1,7 kg |
| Terminal dies size 3 SF6 system | MKGR3 | 185 x 95 x 95 mm | 4,0 kg |

# STILO60

## THE STILO PRODUCT FAMILY CONTINUES TO GROW



### Manageable

Rotating crimping head 360° for optimal crimping in any position

### Automatic return

At the end of the crimping cycle

### Ergonomic

Effortless working and easy handling thanks to equilibrate 2-component handle

### Intelligent

Multifunction LED to indicate the maintenance intervals (20.000 cycles)

### Powerful

18V 1,5 Ah Lithium-Ion battery for even more pressings during one battery life

# HYDRAULIC CRIMPING TOOLS - OVERVIEW

| | Heads | Hand operated | Battery operated | | max. Crimping section * | Crimping force | |
|---|---|---|---|---|---|---|---|
| SERIES 45 | |  HP45 |  STILO45 | | 150 mm² | 45 kN | PAGE 145-146 |
| SERIES 50 | |  HP50 |  STILO50 | | 240 mm² | 50 kN | PAGE 147-148 |
| SERIES 60-2/4 |  PP60-1 |  HP60-3 | |  AP60-1 | 240 mm² | 60 kN | PAGE 149-150 |
| SERIES 60-2/4 |  PP60-2 |  HP60-4 |  STILO60 |  AP60-2 | 300 mm² | 60 kN | PAGE 151-152 |
| SERIES 130-C |  PP130-C |  HPI130-C | |  AP130-C | 400 mm² | 130 kN | PAGE 153-154 |
| SERIE 130-C2 |  PP130-C2 |  HPI130-C2 | |  AP130-C2 | 400 mm² | 130 kN | PAGE 155-156 |
| SERIES 130-H |  PP130-H |  HPI130-H | |  AP130-H | 400 mm² | 130 kN | PAGE 157-158 |
| SERIE 230 | PP230-630  PP230 | | | | 630 mm² | 230 kN | PAGE 159 |
| SERIES 520 |  PP520 | | | | 1.000 mm² | 520 kN | PAGE 161 |
| SERIES 600 |  PP600 | | | | 1.600 mm² | 600 kN | PAGE 162 |

*depending on type and size of terminals used

## MAIN CHARACTERISTICS HP45

| | |
|---|---|
| CRIMPING SECTION | max. 150 mm² |
| MAXIMUM STROKE | 16 mm |

| | |
|---|---|
| CRIMPING FORCE | 45 kN |
| OPERATING PRESSURE | 470 bar (47 MPa) |




### HP45 - Hand operated hydraulic crimping tool

**Technical characteristics:**
- Light and compact structure
- Pump body in light alloy
- Snap closure crimping head, rotates 180°
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: ..... 157 x 375 x 54 mm
Tool weight: ..... 2,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | HP45 | 440 x 190 x 80 mm | 3,5 kg |

**Set equipment:**
- Test report
- Manual crimping tool
- Plastic case for manual hydraulic tool and maximum 15 crimping dies



Set HP45



## STILO45 - Battery operated hydraulic crimping tool

**Technical characteristics:**
see page 143

Tool dimensions: ..... 124 x 369 x 81 mm
Tool weight (incl. battery): ..... 2,3 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | STILO45 | 560 x 375 x 118 mm | 5,1 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



Set STILO45


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Page 164 - 165 |
| PLASTIC CASE FOR DIES | Page 165 |

## MAIN CHARACTERISTICS HP50

| | |
|---|---|
| CRIMPING SECTION | max. 240 mm² |
| MAXIMUM STROKE | 16 mm |

| | |
|---|---|
| CRIMPING FORCE | 50 kN |
| OPERATING PRESSURE | 520 bar (52 MPa) |




### HP50 - Hand operated hydraulic crimping tool

Technical characteristics:
- Light and compact structure
- Pump body in light alloy
- Snap closure crimping head, rotates 180°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: ..... 157 x 398 x 54 mm
Tool weight: ..... 2,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | HP50 | 440 x 190 x 80 mm | 3,7 kg |

Set equipment:
- Test report
- Manual crimping tool
- Plastic case for manual hydraulic tool and maximum 15 crimping dies



Set HP50



## STILO50 - Battery operated hydraulic crimping tool

**Technical characteristics:**
see page 143

Tool dimensions: ..... 120 x 403 x 75 mm
Tool weight (incl. battery): ..... 2,3 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | STILO50 | 560 x 375 x 118 mm | 5,3 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



Set STILO50


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 166 - 170 |
| PLASTIC CASE FOR DIES | Page 170 |
| ADAPTER FOR CRIMPING DIES | Page 170 |

## MAIN CHARACTERISTICS PP60-1 - HP60-3 - AP60-1

| | |
|---|---|
| CRIMPING SECTION | max. 240 mm² |
| MAXIMUM STROKE | 17 mm |

| | |
|---|---|
| CRIMPING FORCE | 60 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |






Set PP60-1

### PP60-1 - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 60 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: ..... 74 x 198 x 54 mm
Tool weight: ..... 1,6 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP60-1 | 320 x 260 x 75 mm | 2,1 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and maximum 18 crimping dies






Set HP60-3

### HP60-3 - Hand operated hydraulic crimping Tool

Technical characteristics:
- Sturdy and compact structure
- Snap closure crimping head, rotates 180°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: ..... 168 x 392 x 54 mm
Tool weight: ..... 2,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set Crimping Tool | HP60-3 | 440 x 190 x 80 mm | 3,7 kg |

Set equipment:
- Test report
- Manual crimping tool
- Plastic case for manual hydraulic tool and maximum 15 crimping dies



Insulated version
on request

## AP60-1 - Battery operated hydraulic crimping tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 329 x 331 x 75 mm
Tool weight: ..... 4,3 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | AP60-1 | 580 x 470 x 115 mm | 7,7 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP60-1


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 166 - 170 |
| PLASTIC CASE FOR DIES | Page 170 |
| ADAPTER FOR CRIMPING DIES | Page 170 |

## MAIN CHARACTERISTICS PP60-2 - HP60-4 - STILO-60 - AP60-2

| | |
|---|---|
| CRIMPING SECTION | max. 300 mm² |
| MAXIMUM STROKE | 17 mm |

| | |
|---|---|
| CRIMPING FORCE | 60 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |






Set PP60-2

### PP60-2 - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 60 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: ..... 93 x 198 x 93 mm
Tool weight: ..... 1,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP60-2 | 320 x 260 x 75 mm | 2,3 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and maximum 18 crimping dies






Set HP60-4

### HP60-4 - Hand operated hydraulic crimping tool

Technical characteristics:
- Sturdy and compact structure
- Snap closure crimping head, rotates 180°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions ..... 176 x 396 x 54 mm
Tool weight: ..... 2,8 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | HP60-4 | 700 x 260 x 105 mm | 4,6 kg |

Set equipment:
- Test report
- Manual crimping tool
- Plastic case for crimping tool and 21 crimping dies





Set STILO60

### STILO60 - Battery operated hydraulic crimping tool

Technical characteristics:
see page 143

Tool dimensions: ..... 124 x 383 x 81 mm
Tool weight: ..... 3,3 kg (incl. battery)

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | STILO60 | 560 x 357 x 118 mm | 6,3 kg |

Accessories see page 209 - 212

Set equipment:
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



## AP60-2 - Battery operated hydraulic crimping tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 334 x 75 mm
Tool weight: ..... 4,4 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set Crimping Tool | AP60-2 | 580 x 470 x 115 mm | 7,8 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP60-2


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 171 - 174 |
| PLASTIC CASE FOR DIES | Page 174 |

## MAIN CHARACTERISTICS PP130-C - HPI130-C - AP130-C

| | |
|---|---|
| CRIMPING SECTION | max. 400 mm² |
| MAXIMUM STROKE | 30 mm |

| | |
|---|---|
| CRIMPING FORCE | 130 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |

HEAD OPENING: 29 mm






Set PP130-C

### PP130-C - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 130 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- C head for easy positioning of dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: ..... 128 x 254 x 78 mm
Tool weight: ..... 4,1 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP130-C | 400 x 350 x 130 mm | 5,6 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and 14 crimping dies






Set HPI130-C

### HPI130-C - Hand operated hydraulic crimping tool

Technical characteristics:
- Sturdy and compact structure
- Snap closure crimping head, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: ..... 222 x 561 x 78 mm
Tool weight: ..... 6,6 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set Crimping Tool | HPI130-C | 700 x 260 x 105 mm | 8,2 kg |

Set equipment:
- Test report
- Manual crimping tool
- Plastic case for crimping tool and 9 crimping dies




## AP130-C - Battery operated hydraulic crimping tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 401 x 79 mm
Tool weight: ..... 6,7 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | AP130-C | 580 x 470 x 115 mm | 10,1 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP130-C


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 175 - 179 |
| PLASTIC CASE FOR DIES | Page 179 |

## MAIN CHARACTERISTICS PP130-C2 - AP130-C2

| | |
|---|---|
| CRIMPING SECTION | max. 400 mm² |
| MAXIMUM STROKE | 42 mm |

| | |
|---|---|
| CRIMPING FORCE | 130 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |

HEAD OPENING: 42 mm






Set PP130-C2

### PP130-C2 - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 130 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- C head for easy positioning of dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: ..... 129 x 271 x 78 mm
Tool weight: ..... 4,4 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP130-C2 | 400 x 350 x 130 mm | 5,9 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and 14 crimping dies






Set HPI130-C2

### HPI130-C2 - Hand operated hydraulic crimping tool

Technical characteristics:
- Sturdy and compact structure
- Snap closure crimping head, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: ..... 225 x 577 x 78 mm
Tool weight: ..... 6,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set Crimping Tool | HPI130-C2 | 700 x 260 x 105 mm | 8,2 kg |

Set equipment:
- Test report
- Manual crimping tool
- Plastic case for crimping tool and 9 crimping dies




## AP130-C2 - Battery operated hydraulic crimping Tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 417 x 79 mm
Tool weight: ..... 6,8 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | AP130-C2 | 580 x 470 x 115 mm | 10,6 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP130-C2

5


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 175 - 179 |
| PLASTIC CASE FOR DIES | Page 179 |

## MAIN CHARACTERISTICS PP130-H - HPI130-H - AP130-H

| | |
|---|---|
| CRIMPING SECTION | max. 400 mm² |
| MAXIMUM STROKE | 30 mm |

| | |
|---|---|
| CRIMPING FORCE | 130 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |

HEAD OPENING: 35 mm






Set PP130-H



Adapters and punch for deep indent crim-pin on request

### PP130-H - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 130 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap
- Adapters and punch for deep indent crimping

Head opening: ..... 35 mm
Tool dimensions: ..... 78 x 263 x 70 mm
Tool weight: ..... 3,4 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP130-H | 410 x 360 x 135 mm | 5,1 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and 14 crimping dies






Set HPI130-H



Adapters and punch for deep indent crimping on request

### HPI130-H - Hand operated hydraulic crimping tool

Technical characteristics:
- Sturdy and compact structure
- Crimping H-head, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position
- Adapters and punch for deep indent compression

Tool dimensions: ..... 174 x 569 x 78 mm
Tool weight: ..... 5,8 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | HPI130-H | 700 x 260 x 105 mm | 7,6 kg |

Set equipment:
- Test report
- Manual crimping tool
- Plastic case for crimping tool and 11 crimping dies






Adapters and punch for deep indent crimping on request

## AP130-H - Battery operated hydraulic crimping tool

**Technical characteristics:**
- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: ..... 331 x 409 x 75 mm
Tool weight: ..... 6,2 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping tool | AP130-H | 580 x 470 x 115 mm | 10,0 kg |

Accessories see page 209 - 212

**Set equipment:**
- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP130-H


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 175 - 179 |
| PLASTIC CASE FOR DIES | Page 179 |

## Main characteristics PP230

| | |
|---|---|
| CRIMPING SECTION | max. 630 mm² |
| MAXIMUM STROKE | 28 mm |

| | |
|---|---|
| CRIMPING FORCE | 230 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |






Set PP230

## PP230 - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 230 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: ..... 121 x 286 x 88 mm
Tool weight: ..... 5,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP230 | 410 x 360 x 135 mm | 7,2 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and two crimping dies and one adapter

5



| | |
|---|---|
| SELECTION OF CRIMPING DIES | Pages 180 - 181 |
| ADAPTER FOR CRIMPING DIES | Page 182 |

## MAIN CHARACTERISTICS PP230-630

| | |
|---|---|
| CRIMPING SECTION | max. 630 mm² |
| MAXIMUM STROKE | 60 mm |

| | |
|---|---|
| CRIMPING FORCE | 230 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |




CE

## PP230-630 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 230 kN (pages 201 - 208).

Technical characteristics:
- Sturdy and compact structure
- The H - Bail allows simple inlaying from the cables
- This pressing tool can be used to crimp aluminium and bimetallic connectors by deep-step indent system

Tool dimensions: ..... 105 x 365 x 50 mm
Tool weight: ..... 8,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP230-630 | 440 x 270 x 150 mm | 15 kg |

Set equipment:
- Hydraulic crimping head
- Metal case



Set PP230-630

## MAIN CHARACTERISTICS PP520

| | |
|---|---|
| CRIMPING SECTION | max. 1.000 mm² |
| MAXIMUM STROKE | 25 mm |

| | |
|---|---|
| CRIMPING FORCE | 520 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |




### PP520 - Hydraulic crimping head

**The unit must be operated through 700 bar hydraulic pump to reach crimping force of 520 kN (pages 201 - 208).**

Technical characteristics:
- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap
- Tilting system for coupler

Tool dimensions: ..... 218 x 261 x 124 mm
Tool weight: ..... 13,2 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP520 | 410 x 360 x 135 mm | 15,4 kg |

Set equipment:
- Hydraulic crimping head
- Plastic case for crimping head and two crimping dies



Set PP520

5



| | |
|---|---|
| SELECTION OF CRIMPING DIES | Page 183 |
| ADAPTER FOR CRIMPING DIES | Page 183 |

## Main characteristics PP600

| | |
|---|---|
| CRIMPING SECTION | max. 1.600 mm² |
| MAXIMUM STROKE | 30 mm |

| | |
|---|---|
| CRIMPING FORCE | 600 kN |
| OPERATING PRESSURE | 700 bar (70 MPa) |






Set PP600

## PP600 - Hydraulic Crimping Head - 600 kN

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 600 kN (pages 201 - 208).

Technical characteristics:
- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

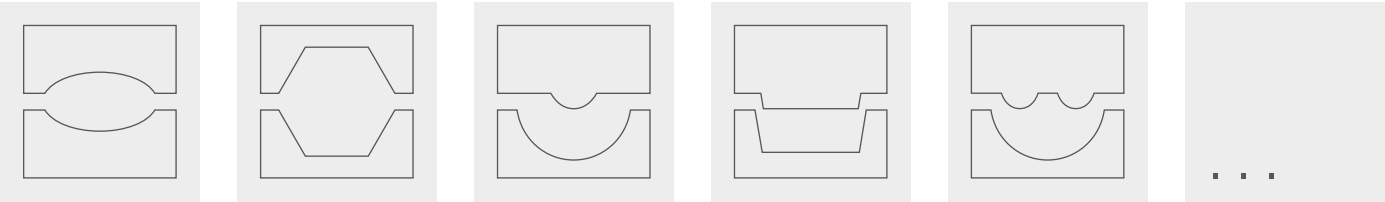
Tool dimensions: ..... 200 x 335 x 130 mm
Tool weight: ..... 17 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set crimping head | PP600 | 400 x 260 x 360 mm | 26 kg |

Set equipment:
- Hydraulic crimping head
- Metal case for crimping head


| | |
|---|---|
| SELECTION OF CRIMPING DIES | Page 184 |
| METAL CASE FOR DIES | Page 184 |

5




# CRIMPING DIES

# CRIMPING DIES - SERIES 45

SERIES 45


HP45


STILO45



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)


ICD ICD_90 ICD_V ICD_VL

### Aluminium

cable lugs (DIN 46239 - connectors (DIN 46267, part 2)


ICAL_LD ICAL_LDV ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 6 | 5 | 5 | MK5-45 | | | |
| 10 | 6 | 5 | MK6-45 | 10 | 7 | MK10B-45 |
| 16 | 8 | 5 | MK8-45 | 12 | 7 | MK12B-45 |
| 25 | 10 | 5 | MK10-45 | | | |
| 35 | 12 | 5 | MK12-45 | 14 | 7 | MK14B-45 |
| 50 | 14 | 5 | MK14-45 | 16 | 7 | MK16B-45 |
| 70 | 16 | 5 | MK16-45 | 18 | 7 | MK18B-45 |
| 95 | 18 | 5 | MK18-45 | 22 | 7 | MK22B-45 |
| 120 | 20 | 5 | MK20-45 | | | |
| 150 | 22 | 5 | MK22-45 | | | |



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Aluminum-Steel connectors

| Code No. | Width (mm) | Cross section (mm²) | | Order No. |
|---|---|---|---|---|
| | | Al-connectors | Steel - connectors | |
| 6 | 5 | | 16/2,5 25/4 35/6 | MK6-45 |
| 7 | 5 | | 50/8 | MK7-45 |
| 9 | 5 | | 70/12 95/15 | MK9-45 |
| | 5 | | | |
| 13 | 7 | 16/2,5 25/4 | | MK12B-45 |
| 15 | 7 | 35/6 | | MK14B-45 |
| 17 | 7 | 50/8 | | MK16B-45 |
| 19 | 7 | 70/12 | | MK18B-45 |
| 22 | 7 | 95/15 | | MK22B-45 |



## I-SERIES CABLE LUGS

Hexagon crimping dies for I-series type cable lugs and connectors




| Cross section (mm²) | | Compr. width (mm) | Order No. |
|---|---|---|---|
| Rigid | Flexible | | |
| 10 | | 7 | U4-K07M |
| 16 | | 7 | U4-K08M |
| 25 | | 7 | U4-K10M |
| 35 | 35 | 7 | U4-K11M |
| 50 | 50 | 7 | U4-K13M |
| 70 | 70 | 7 | U4-K14 |
| 95 | 95 | 7 | U4-K17M |
| 120 | 120 | 7 | U4-K18 |
| 150 | 150 | 7 | U4-K20D |

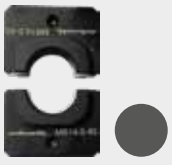


## WIRE END SLEEVES

Trapezoid crimping dies for wire end sleeve



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 20 | MTT10-45 |
| 16 | 20 | MTT16-45 |
| 25 | 20 | MTT25-45 |
| 35 | 20 | MTT35-45 |
| 50 | 20 | MTT50-45 |
| 70 | 20 | MTT70-45 |
| 95 | 20 | MTT95-45 |



Round dies to round off copper and aluminum sector shaped conductor

| Type | | | |
|---|---|---|---|
| | | SE* | SM** |
| Cross section (mm²) | Compr. width (mm) | Compr. width (mm) | Order No. |
| 10 | 20 | | MR4,1-45 |
| 16 | 20 | | MR5,1-45 |
| 25 | 20 | MR5,1-45 | MR6,3-45 |
| 35 | 20 | MR6,3-45 | MR7,5-45 |
| 50 | 20 | MR7,5-45 | MR9,0-45 |
| 70 | 20 | MR9,0-45 | MR10,5-45 |
| 95 | 20 | MR10,5-45 | MR12,5-45 |
| 120 | 20 | MR12,5-45 | MR14,0-45 |
| 150 | 20 | MR14,0-45 | MR15,7-45 |
| 185 | 20 | MR15,7-45 | |

* SE sector solid
** SM sector multi-stranded

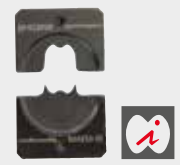


## R-SERIES CABLE LUGS

Hexagon crimping dies for R-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 6 | 5 | MH6-45 |
| 10 | 7 | MH10-45 |
| 16 | 7 | MH16-45 |
| 25 | 7 | MH25-45 |
| 35 | 7 | MH35-45 |
| 50 | 7 | MH50-45 |
| 70 | 7 | MH70-45 |
| 95 | 7 | MH95-45 |
| 120 | 7 | MH120-45 |
| 150 | 7 | MH150-45 |



## WIRE END SLEEVES

Circular I-CRIMP crimping dies for wire end sleeve



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 6 | 18 | MIAE6-45 |
| 10 | 18 | MIAE10-45 |
| 16 | 18 | MIAE16-45 |
| 25 | 18 | MIAE25-45 |
| 35 | 18 | MIAE35-45 |
| 50 | 18 | MIAE50-45 |
| 70 | 18 | MIAE70-45 |
| 95 | 18 | MIAE95-45 |
| 120 | 18 | MIAE120-45 |
| 150 | 18 | MIAE150-45 |

### Plastic case for crimping dies

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Case for dies 45kN-60kN | KKPE-45-50 | 250 x 170 x 50 mm | 200 g |



Plastic case - KKPE-45-50

# CRIMPING DIES - SERIES 50 - SERIES 60-1/3

SERIES 50


HP50


STILO50

SERIES 60-1/3


MP60-1


MP60-3


PP60-1


HP60-3


AP60-1



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

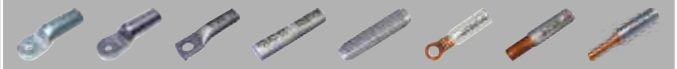
### Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)


ICD ICD_90 ICD_V ICD_VL

### Aluminum

cable lugs (DIN 46239) - connectors (DIN 46267, part 2)


ICAL_LD ICAL_LDV ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 6 | 5 | 5 | MK5-50 | | | |
| 10 | 6 | 5 | MK6-50 | 10 | 7 | MK10B-50 |
| 16 | 8 | 5 | MK8-50 | 12 | 7 | MK12B-50 |
| 25 | 10 | 5 | MK10-50 | | | |
| 35 | 12 | 5 | MK12-50 | 14 | 7 | MK14B-50 |
| 50 | 14 | 5 | MK14-50 | 16 | 7 | MK16B-50 |
| 70 | 16 | 5 | MK16-50 | 18 | 7 | MK18B-50 |
| 95 | 18 | 5 | MK18-50 | 22 | 7 | MK22B-50 |
| 120 | 20 | 5 | MK20-50 | | | |
| 150 | 22 | 5 | MK22-50 | 25 | 7 | MK25B-50 |
| 185 | 25 | 5 | MK25-50 | 28 | 7 | MK28B-50 |
| 240 | 28 | 5 | MK28-50 | 32 | 5 | MK32-50V |



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Aluminum-Steel connectors

| Code No. | Width (mm) | Cross section (mm²) | | Order No. |
|---|---|---|---|---|
| | | Al-connectors | Steel - connectors | |
| 6 | 5 | | 16/2,5 25/4 35/6 | MK6-50 |
| 7 | 5 | | 50/8 | MK7-50 |
| 9 | 5 | | 70/12 95/15 | MK9-50 |
| 11 | 5 | | 25 | MK11-50 |
| 12 | 7 | 16/2,5 25/4 | | MK12B-50 |
| 13 | 5 | | 120/20 150/25 | MK13-50 |
| 14 | 7 | 35/6 | | MK14B-50 |
| 16 | 7 | 50/8 | | MK16B-50 |
| 22 | 7 | 95/15 | | MK22B-50 |
| 25 | 7 | 44/32 50/30 120/20 | | MK25B-50 |
| 28 | 7 | 125/30 150/25 | | MK28B-50 |

For the compression dies of tool MP60-1 Opening Spring (Order ref. OEF1) is also required



## I-SERIES CABLE LUGS

Hexagon crimping dies for I-series type cable lugs and connectors




| Cross section (mm²) | | Compr. width (mm) | Order No. |
|---|---|---|---|
| Rigid | Flexible | | |
| 10 | | 7 | U5-K07M |
| 16 | | 7 | U5-K08M |
| 25 | | 7 | U5-K10M |
| 35 | 35 | 7 | U5-K11M |
| 50 | 50 | 7 | U5-K13M |
| 70 | 70 | 7 | U5-K14 |
| 95 | 95 | 7 | U5-K17M |
| 120 | 120 | 7 | U5-K18 |
| 150 | 150 | 7 | U5-K20D |
| 185 | 185 | 7 | U5-K22D |
| 240 | 240 | 7 | U5-K25M |



## I-SERIES CABLE LUGS

Hexagon I-CRIMP crimping dies for I-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 7 | U5-I10 |
| 16 | 7 | U5-I16 |
| 25 | 7 | U5-I25 |
| 35 | 7 | U5-I35 |
| 50 | 7 | U5-I50 |
| 70 | 7 | U5-I70 |
| 95 | 7 | U5-I95 |
| 120 | 7 | U5-I120 |
| 150 | 7 | U5-I150 |
| 185 | 7 | U5-I185 |
| 240 | 7 | U5-I240 |



## R-SERIES CABLE LUGS

Hexagon crimping dies for R-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 6 | 5 | MH6-50 |
| 10 | 7 | MH10-50 |
| 16 | 7 | MH16-50 |
| 25 | 7 | MH25-50 |
| 35 | 7 | MH35-50 |
| 50 | 7 | MH50-50 |
| 70 | 7 | MH70-50 |
| 95 | 7 | MH95-50 |
| 120 | 7 | MH120-50 |
| 150 | 7 | MH150-50 |
| 185 | 7 | MH185-50 |
| 240 | 5 | MH240-50 |



## INSULATED CABLE LUGS

Oval crimping dies for insulated cable lugs




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 9 | U5-P10 |
| 16 | 9 | U5-P16 |
| 25 | 9 | U5-P25 |
| 35 | 9 | U5-P35 |
| 50 | 9 | U5-P50 |
| 70 | 9 | U5-P70 |
| 95 | 7 | U5-P95 |
| 120 | 7 | U5-P120 |



## TERMINALS

Indent crimping dies for terminals DIN 46234 pin terminals - DIN 46230, solder-less conn. DIN 46341, steel cable lug




| Cross section (mm²) | Order No. |
|---|---|
| 10 | MD10-50 |
| 16 | MD16-50 |
| 25 | MD25-50 |
| 35 | MD35-50 |
| 50 | MD50-50 |
| 70 | MD70-50 |
| 95 | MD95-50 |



## FINE WIRE

Indent crimping dies for fine wire conductors F-series




| Cross section (mm²) | Order No. |
|---|---|
| 10 | MDF10-50 |
| 16 | MDF16-50 |
| 25 | MDF25-50 |
| 35 | MDF35-50 |
| 50 | MDF50-50 |

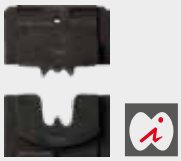


## WIRE END SLEEVES

Trapezoid crimping dies for wire end sleeve



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 20 | MTT10-50 |
| 16 | 20 | MTT16-50 |
| 25 | 20 | MTT25-50 |
| 35 | 20 | MTT35-50 |
| 50 | 20 | MTT50-50 |
| 70 | 20 | MTT70-50 |
| 95 | 20 | MTT95-50 |



## WIRE END SLEEVES

Circular I-CRIMP crimping dies for wire end sleeve



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 18 | U5-T10 |
| 16 | 18 | U5-T16 |
| 25 | 18 | U5-T25 |
| 35 | 18 | U5-T35 |
| 50 | 18 | U5-T50 |
| 70 | 18 | U5-T70 |
| 95 | 18 | U5-T95 |
| 120 | 18 | U5-T120 |

5



## C- CLAMP

Oval crimping dies for C-branch terminals



| Cross section (mm²) | | Order No. |
|---|---|---|
| Main | Branch | |
| 6 ÷ 2,5 | 6 ÷ 1,5 | U5-DC6 |
| 10 | 10 ÷ 1,5 | U5-DC10 |
| 16 | 16 ÷ 1,5 | U5-DC25 |
| 25 | 25 ÷ 16 | |
| 35 | 16 ÷ 1,5 | U5-DC35 |
| 35 | 35 ÷ 25 | |
| 50 | 25 ÷ 6 | U5-DC70 |
| 70 ÷ 50 | 35 ÷ 6 | |
| 70 ÷ 50 | 70 ÷ 35 | |



## MV CABLE LUGS

Hexagon crimping dies for mediun voltage type copper cable lugs and connectors



| Cross section (mm²) | Order No. |
|---|---|
| 25 | U5-E96 |
| 35 | U5-E118 |
| 50 RC | |
| 50 S | |
| 70 | U5-E158 |
| 95 RC | U5-E173 |
| 120÷95 S | |
| 150 RC÷120 S÷125 C | U5-E190 |



## LV OVERHEAD CABLE LUGS

Hexagon crimping dies for Al/Cu lugs and uninsulated/insulated connectors type cable lugs and connectors for low voltage overhead cables



| Cross section (mm²) | | Order No. | |
|---|---|---|---|
| | | Uninsulated | Insulated |
| 35 Al | | U5-E113 | U5-E173 |
| 35 Al | 25 Cu | | |
| 35 Al | 35 Al | | |
| 54,6 Aldr. | | U5-E173 | |
| 54,6 Aldr. | 25 Cu | | |
| 70 Al | | U5-E173 | |
| 70 Al | 35 Al | | |
| 70 Al | 50 Cu | | |
| 70 Al | 70 Al | | |



## FULL TENSION CONNECTORS

Hexagon crimping dies for Al and Cu full tension connectors for low voltage overhead cables



| Cross section (mm²) | Order No. |
|---|---|
| 10 Cu | U5-E70 |
| 16 Cu | U5-E75 |
| 25 Cu | U5-E96 |
| 35 Al | U5-E118 |
| 35 Cu | |
| 54,6 Aldr. | U5-E140 |
| 70 Al | U5-E158 |
| 70 Cu | |



Oval crimping dies for the compression of dead-ends and oval connectors according to DIN 48217 and H branch terminals (not for MP60-3)

| | | Dead end clamps and oval connectors | | | H-Clamp Copper |
|---|---|---|---|---|---|
| | | Copper | Aluminum | Steel | |
| Cross section (mm²) | Compr. width (mm) | Order No. | Order No. | Order No. | Order No. |
| 6RE* | 5 | MO7-50 | | | |
| 6 | 5 | | | | MO10-50 |
| 10 | 5 | | | | |
| 10RE* | 5 | MO8-50 | MO10-50 | | |
| 10RM** | 5 | MO10-50 | | | |
| 16RE* | 5 | | | | |
| 16 | 5 | MO12-50 | MO12-50 | | MO16-50 |
| 25 | 5 | MO16-50 | MO16-50 | | MO18-50 |
| 35 | 5 | MO18-50 | MO18-50 | MO18-50 | MO21-50 |
| 50 | 5 | MO20-50 | MO20-50 | MO20-50 | |
| 70 | 5 | MO22-50 | MO22-50 | MO22-50 | |
| 95 | 5 | MO24-50 | MO24-50 | | |
| 120 | 5 | | MO26-50 | | |

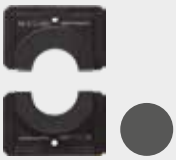


## NOTCH CONNECTOR

Oval crimping dies for notch connector (not for MP60-3)

| | Cu-Conductor | Al-Conductor | Al-Steel-rope |
|---|---|---|---|
| Cross section (mm²) | Order No. | Order No. | Order No. |
| 10 | MKO10-50CU | | |
| 16 | MKO16-50CU | | |
| 25 | MKO25-50CU | MKO25-50AL | |
| 35/6 | | | MKO35/6-50 |
| 35 | MKO35-50CU | MKO35-50AL | |
| 50 | MKO50-50CU | MKO50-50AL | |
| 50/8 | | | MKO50/8-50 |
| 50/30 | | | MKO50/30-50 |
| 70 | MKO70-50CU | MKO70-50AL | |
| 70/12 | | | MKO70/12-50 |
| 95 | MKO95-50CU | MKO95-50AL | |
| 120 | MKO120-50CU | MKO120-50AL | |

* SE sector solid
** SM sector multi-stranded



Round dies to round off copper and aluminum sector shaped conductor

| Cross section (mm²) | Compr. width (mm) | Type SE* Order No. | Type SM** Order No. |
|---|---|---|---|
| 10 | 20 | | MR4,1-50 |
| 16 | 20 | | MR5,1-50 |
| 25 | 20 | | MR6,3-50 |
| 35 | 20 | MR6,3-50 | MR7,5-50 |
| 50 | 20 | MR7,5-50 | MR9,0-50 |
| 70 | 20 | MR9,0-50 | MR10,5-50 |
| 95 | 20 | MR10,5-50 | MR12,5-50 |
| 120 | 20 | MR12,5-50 | MR14,0-50 |
| 150 | 20 | MR14,0-50 | MR15,7-50 |
| 185 | 20 | MR15,7-50 | MR17,5-50 |
| 240 | 20 | MR17,5-50 | MR20,2-50 |
| 300° | 20 | MR20,2-50° | |



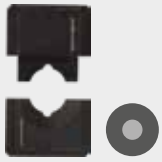
## I-SERIES CABLE LUGS

Indent crimping dies for I-series cablelugs and connectors



CI-M.. CI-M..-90 CI-M..-45 CTT-.. CI-M..-CL CI-M..-SF

| Die reference | Indent | Cross section mm² rigid | Cross section mm² flexible | No. of crimpings |
|---|---|---|---|---|
| U5-S6 | U5-PZ6 | 4-16 | | 1 |
| U5-S16 | U5-PZ25 | 10 | | 1 |
| | | 16 | | |
| U5-S25 | | 25 | | 1 |
| U5-S35 | U5-PZ50 | 35 | 25 | 1 |
| | | | 35 | |
| U5-S50 | | 50 | 35 | 1 |
| | | | 50 | |
| U5-S70 | U5-PZ95 | 70 | 50 | 1 |
| | | | 70 | |
| U5-S95 | | 95 | 70 | 1 |
| | | | 95 | |
| U5-S120 | U5-PZ120 | 120 | 95 | 1 |
| | | | 120 | |



## STRIP OFF ACSR

Strip off Aluminum part of ACSR cables***

| Cross section (mm²) | Order No. |
|---|---|
| 25/4 | AL-ST25/4-50 |
| 35/6 | AL-ST35/6-50 |
| 50/8 | AL-ST50/8-50 |
| 70/12 | AL-ST70/12-50 |
| 95/15 | AL-ST95/15-50 |
| 120/20 | AL-ST120/20-50 |



## I-SERIES CABLE LUGS

I crimping dies for the compression of tubular cablelugs for flexible conductor / class 5 / 6



CI-M..-SF

| Die reference | Cross section mm² | Width | No. of crimpings |
|---|---|---|---|
| U5-FI35 | 35 | 7 | 1 |
| U5-FI50 | 50 | 7 | 2 |
| U5-FI70 | 70 | 7 | 2 |
| U5-FI95 | 95 | 7 | 2 |
| U5-FI120 | 120 | 7 | 2 |
| U5-FI150 | 150 | 7 | 3 |
| U5-FI185 | 185 | 7 | 3 |





Plastic case - KKPE-45-50

* SE sector solid
** SM sector multi-stranded
*** depending on type and size of joining accessories
° not for HP50

### Adapter for crimping dies 45 kN

Allows use of all dies for the tool 45kN on models HP50, HP60-3, PP60-1 and AP60-1, except MIAEXX-45

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Adapter | AD50-45 | 45 kN | 50 g |

### Plastic case for crimping dies

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Case for dies 45kN-60kN | KKPE-45-50 | 250 x 170 x 50 mm | 200 g |

SERIES 50


MP60-2


PP60-2


HP60-4


STILO60


AP60-2



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Copper

cable lugs (DIN 46235) - connectors
(DIN 46267, part 1)


ICD ICD_90 ICD_V ICD_VL

### Aluminum

cable lugs (DIN 46239) - connectors
(DIN 46267, part 2)


ICAL_LD ICAL_LDV ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 6 | 5 | 5 | MK5-CK | | | |
| 10 | 6 | 5 | MK6-CK | 10 | 7 | MK10B-CK |
| 16 | 8 | 5 | MK8-CK | 12 | 7 | MK12B-CK |
| 25 | 10 | 5 | MK10-CK | | | |
| 35 | 12 | 5 | MK12-CK | 14 | 7 | MK14B-CK |
| 50 | 14 | 5 | MK14-CK | 16 | 7 | MK16B-CK |
| 70 | 16 | 5 | MK16-CK | 18 | 7 | MK18B-CK |
| 95 | 18 | 5 | MK18-CK | 22 | 7 | MK22B-CK |
| 120 | 20 | 5 | MK20-CK | | | |
| 150 | 22 | 5 | MK22-CK | 25 | 7 | MK25B-CK |
| 185 | 25 | 5 | MK25-CK | 28 | 7 | MK28B-CK |
| 240 | 28 | 5 | MK28-CK | 32 | 7 | MK32B-CK |
| 300 | 32 | 5 | MK32-CK | 34 | 5 | MK34-CK |



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Aluminum-Steel connectors

| Code No. | Width (mm) | Cross section (mm²) | | Order No. |
|---|---|---|---|---|
| | | Al-connectors | Steel - connectors | |
| 6 | 5 | | 16/2,5 25/4 35/6 | MK6-CK |
| 7 | 5 | | 50/8 | MK7-CK |
| 9 | 5 | | 70/12 95/15 | MK9-CK |
| 12 | 7 | 16/2,5 25/4 | | MK11B-CK |
| 13 | 5 | | 120/20 150/25 | MK13-CK |
| 14 | 7 | 35/6 | | MK14B-CK |
| 16 | 7 | 50/8 | | MK16B-CK |
| 18 | 7 | 70/12 | | MK18B-CK |
| 22 | 7 | 95/15 | | MK22B-CK |
| 25 | 7 | 44/32 50/30 120/20 | | MK25B-CK |
| 28 | 7 | 125/30 150/25 | | MK28B-CK |

# CRIMPING DIES - SERIES 60-2/4



## R-SERIES CABLE LUGS

Hexagon icrimping dies for R-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 6 | 5 | MI6-CK |
| 10 | 5 | MI10-CK |
| 16 | 5 | MI16-CK |
| 25 | 5 | MI25-CK |
| 35 | 5 | MI35-CK |
| 50 | 5 | MI50-CK |
| 70 | 5 | MI70-CK |
| 95 | 5 | MI95-CK |
| 120 | 5 | MI120-CK |
| 150 | 5 | MI150-CK |
| 185 | 5 | MI185-CK |
| 240 | 5 | MI240-CK |
| 300 | 5 | MI300-CK |



## R-SERIES CABLE LUGS

Hexagon crimping dies for R-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 6 | 5 | MH6-CK |
| 10 | 5 | MH10-CK |
| 16 | 5 | MH16-CK |
| 25 | 5 | MH25-CK |
| 35 | 5 | MH35-CK |
| 50 | 5 | MH50-CK |
| 70 | 5 | MH70-CK |
| 95 | 5 | MH95-CK |
| 120 | 5 | MH120-CK |
| 150 | 5 | MH150-CK |
| 185 | 5 | MH185-CK |
| 240 | 5 | MH240-CK |
| 300 | 5 | MH300-CK |



## FINE WIRE

Hexagon icrimping dies for F-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 5 | MFI10-CK |
| 16 | 5 | MFI16-CK |
| 25 | 5 | MFI25-CK |
| 35 | 5 | MFI35-CK |
| 50 | 5 | MFI50-CK |
| 70 | 5 | MFI70-CK |
| 95 | 5 | MFI95-CK |
| 120 | 5 | MFI120-CK |
| 150 | 5 | MFI150-CK |
| 185 | 5 | MFI185-CK |
| 240 | 5 | MFI240-CK |
| 300 | 5 | MFI300-CK |

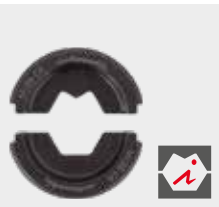


## FINE WIRE

Indent crimping dies for fine wire conductors F-series




| Cross section (mm²) | Order No. |
|---|---|
| 10 | MDF10-CK |
| 16 | MDF16-CK |
| 25 | MDF25-CK |
| 35 | MDF35-CK |
| 50 | MDF50-CK |
| 70 | MDF70-CK |

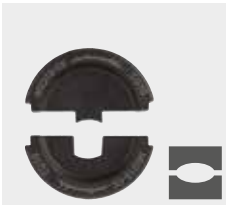


## I-SERIES CABLE LUGS

Hexagon icrimp crimping dies for I-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 7 | U6-I10 |
| 16 | 7 | U6-I16 |
| 25 | 9 | U6-I25 |
| 35 | 5 | U6-I35 |
| 50 | 5 | U6-I50 |
| 70 | 5 | U6-I70 |
| 95 | 5 | U6-I95 |
| 120 | 5 | U6-I120 |
| 150 | 5 | U6-I150 |
| 185 | 5 | U6-I185 |
| 240 | 5 | U6-I240 |
| 300 | 5 | U6-I300 |



## INSULATED TERMINALS

Circular crimping dies for insulated terminals DIN 46237 and insulated pin terminals DIN 46231



| Cross section (mm²) | Order No. |
|---|---|
| 10 | MIQ10-CK |
| 16 | MIQ16-CK |
| 25 | MIQ25-CK |
| 35 | MIQ35-CK |
| 50 | MIQ50-CK |
| 70 | MIQ70-CK |
| 95 | MIQ95-CK |



## TERMINALS

Indent crimping dies for terminals DIN 46234 pin terminals - DIN 46230, solderless conn. DIN 46341, steel cable lug




| Cross section (mm²) | Order No. |
|---|---|
| 10 | MD10-CK |
| 16 | MD16-CK |
| 25 | MD25-CK |
| 35 | MD35-CK |
| 50 | MD50-CK |
| 70 | MD70-CK |



## WIRE END SLEEVES

Trapezoid crimping dies for wire end sleeve



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 20 | MTT10-CK |
| 16 | 20 | MTT16-CK |
| 25 | 20 | MTT25-CK |
| 35 | 20 | MTT35-CK |
| 50 | 20 | MTT50-CK |
| 70 | 20 | MTT70-CK |
| 95 | 20 | MTT95-CK |
| 120 | 20 | MTT120-CK |
| 150 | 20 | MTT150-CK |
| 185 | 20 | MTT185-CK |
| 240 | 20 | MTT240-CK |



## WIRE END SLEEVES

Circular I-CRIMP crimping dies for wire end sleeve



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 18 | MIAE10-CK |
| 16 | 18 | MIAE16-CK |
| 25 | 18 | MIAE25-CK |
| 35 | 18 | MIAE35-CK |
| 50 | 18 | MIAE50-CK |
| 70 | 18 | MIAE70-CK |
| 95 | 18 | MIAE95-CK |
| 120 | 18 | MIAE120-CK |
| 150 | 18 | MIAE150-CK |
| 185 | 18 | MIAE185-CK |
| 240 | 18 | MIAE240-CK |



## NOTCH CONNECTOR

Oval crimping dies for notch connector

| Cross section (mm²) | Cu-Conductor<br>Order No. | Al-Conductor<br>Order No. | Al-Steel-rope<br>Order No. |
|---|---|---|---|
| 10 | MKO10-CK-CU | | |
| 16 | MKO16-CK-CU | | |
| 25 | MKO25-CK-CU | MKO25-CK-AL | |
| 35 | MKO35-CK-CU | MKO35-CK-AL | |
| 50 | MKO50-CK-CU | MKO50-CK-AL | |
| 50/8 | | | MKO50/8-CK |
| 50/30 | | | MKO50/30-CK |
| 70 | MKO70-CK-CU | MKO70-CK-AL | |
| 70/12 | | | MKO70/12-CK |
| 95/15 | | | MKO95/15-CK |

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Round dies to round off copper and aluminum sector shaped conductor

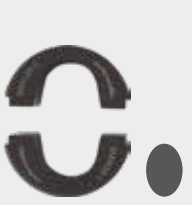
| Cross section (mm²) | Compr. width (mm) | Type<br>SE*<br>Order No. | Type<br>SM**<br>Order No. |
|---|---|---|---|
| 10 | 20 | | MR4,1-CK |
| 16 | 20 | | MR5,1-CK |
| 25 | 20 | | MR6,3-CK |
| 35 | 20 | MR6,3-CK | MR7,5-CK |
| 50 | 20 | MR7,5-CK | MR9,0-CK |
| 70 | 20 | MR9,0-CK | MR10,5-CK |
| 95 | 20 | MR10,5-CK | MR12,5-CK |
| 120 | 20 | MR12,5-CK | MR14,0-CK |
| 150 | 20 | MR14,0-CK | MR15,7-CK |
| 185 | 20 | MR15,7-CK | MR17,5-CK |
| 240 | 20 | MR17,5-CK | MR20,2-CK |
| 300 | 20 | MR20,2-CK | |

### Plastic case for crimping dies

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Case for 24 crimping dies for 60kN | KKPE-C-CK | 410 x 360 x 110 mm | 1,4 kg |



Plastic case - KKPE-C-CK



## H BRANCH TERMINALS

Oval crimping dies for H branch terminals



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 2 x 50 | 5 | MRH22-CK |
| 2 x 70 | 5 | MRH26-CK |

## TWIN CABLE LUGS

Oval crimping dies for twin cable lugs



| Compr. width (mm) | Order No. |
|---|---|
| 5 | MRD22-CK |
| 5 | MRD24-CK |

* SE sector solid
** SM sector multi-stranded

SERIES 130






## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Copper

cable lugs (DIN 46235) - connectors
(DIN 46267, part 1)




### Aluminum

cable lugs (DIN 46239) - connectors
(DIN 46267, part 2)




| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 10 | 6 | 5 | MK6-C | | | |
| 16 | 8 | 14 | MK8-C | 12 | 14 | MK12-C |
| 25 | 10 | 14 | MK10-C | | | |
| 35 | 12 | 14 | MK12-C | 14 | 14 | MK14-C |
| 50 | 14 | 14 | MK14-C | 16 | 14 | MK16-C |
| 70 | 16 | 14 | MK16-C | 18 | 14 | MK18-C |
| 95 | 18 | 14 | MK18-C | 22 | 14 | MK22-C |
| 120 | 20 | 14 | MK20-C | | | |
| 150 | 22 | 14 | MK22-C | 25 | 14 | MK25-C |
| 185 | 25 | 14 | MK25-C | 28 | 14 | MK28L-C |
| 240 | 28 | 10 | MK28-C | 32 | 17 | MK32L-C |
| 300 | 32 | 7 | MK32-C | 34 | 17 | MK34L-C |



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Aluminum-Steel connectors

| Code No. | Width (mm | Cross section (mm²) | | Order No. |
|---|---|---|---|---|
| | | Al-connectors | Steel - connectors | |
| 6 | 5 | | 16/2,5 25/4 35/6 | MK6-C |
| 7 | 5 | | 50/8 | MK7-C |
| 9 | 5 | | 70/12 95/15 | MK9-C |
| 12 | 14 | 16/2,5 25/4 | | MK12-C |
| 13 | 12 | | 120/20 150/25 | MK13-C |
| 14 | 14 | 35/6 | | MK14-C |
| 15 | 12 | | 44/32 50/30 125/30 170/40 185/30 210/35 230/30 240/40 265/35 305/40 340/30 385/35 450/40 495/35 570/40 | MK15-C |
| 16 | 14 | 50/8 | | MK16-C |
| 17 | 12 | | 210/50 300/50 380/50 510/45 560/50 650/45 | MK17-C |
| 18 | 14 | 70/12 | | MK18-C |
| 19 | 12 | | 95/55 435/55 | MK19-C |
| 25 | 14 | 44/32 50/30 120/20 | | MK25-C |
| 28 | 14 | 125/30 150/25 | | MK28L-C |
| 30 | 14 | 95/55 170/40 185/30 | | MK30L-C |
| 34 | 17 | 105/75 120/70 210/35 210/50 230/30 240/40 | | MK34L-C |

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# CRIMPING DIES - SERIES 130





## R-SERIES CABLE LUGS

Hexagon crimping dies for R-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 8 | MH10-C |
| 16 | 8 | MH16-C |
| 25 | 10 | MH25-C |
| 35 | 14 | MH35-C |
| 50 | 14 | MH50-C |
| 70 | 14 | MH70-C |
| 95 | 14 | MH95-C |
| 120 | 14 | MH120-C |
| 150 | 14 | MH150-C |
| 185 | 14 | MH185-C |
| 240 | 14 | MH240-C |
| 300 | 7 | MH300-C |
| 400 | 7 | MH400-C |



## I-SERIES CABLE LUGS

Hexagon crimping dies for I-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 7 | U13-K07M |
| 16 | 7 | U13-K08M |
| 25 | 12 | U13-K10M |
| 35 | 12 | U13-K11M |
| 50 | 12 | U13-K13M |
| 70 | 12 | U13-K14 |
| 95 | 12 | U13-K17M |
| 120 | 12 | U13-K18 |
| 150 | 12 | U13-K20D |
| 185 | 14 | U13-K22D |
| 240 | 14 | U13-K25M |
| 300 | 7 | U13-K28D |
| 400 | 7 | U13-K34D |



## BRITISH STANDARD

Hexagon crimping dies according British Standard or equivalent

### Copper

| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 10 | BS10-C |
| 16 | 10 | BS16-C |
| 25 | 10 | BS25-C |
| 35 | 14 | BS35-C |
| 50 | 14 | BS50-C |
| 70 | 16 | BS70-C |
| 95 | 16 | BS95-C |
| 120 | 16 | BS120-C |
| 150 | 16 | BS150-C |
| 185 | 16 | BS185-C |
| 240 | 14 | BS240-C |
| 300 | 7 | BS300-C |
| 400 | 7 | BS400-C |



## FINE WIRE

Indent crimping dies for fine wire conductors F-series




| Cross section (mm²) | Order No. |
|---|---|
| 16 | MDF16-C |
| 25 | MDF25-C |
| 35 | MDF35-C |
| 50 | MDF50-C |
| 70 | MDF70-C |
| 95 | MDF95-C |
| 120 | MDF120-C |
| 150 | MDF150-C |



## INSULATED TERMINALS

Circular crimping dies for insulated terminals DIN 46237 and insulated pin terminals DIN 46231



| Cross section (mm²) | Order No. |
|---|---|
| 10 | MIQ10-C |
| 16 | MIQ16-C |
| 25 | MIQ25-C |
| 35 | MIQ35-C |
| 50 | MIQ50-C |
| 70 | MIQ70-C |
| 95 | MIQ95-C |
| 120 | MIQ120-C |



## TERMINALS

Indent crimping dies for terminals DIN 46234 pin terminals - DIN 46230, solder-less conn. DIN 46341, steel cable lug




| Cross section (mm²) | Order No. |
|---|---|
| 16 | MD16-C |
| 25 | MD25-C |
| 35 | MD35-C |
| 50 | MD50-C |
| 70 | MD70-C |
| 95 | MD95-C |
| 120 | MD120-C |
| 150 | MD150-C |



## INSULATED CABLE LUGS

Oval crimping dies for insulated cable lugs



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 10 | 9 | U13-P10 |
| 16 | 9 | U13-P16 |
| 25 | 9 | U13-P25 |
| 35 | 9 | U13-P35 |
| 50 | 9 | U13-P50 |
| 70 | 9 | U13-P70 |
| 95 | 16 | U13-P95 |
| 120 | 16 | U13-P120 |
| 150 | 16 | U13-P150 |



## INSULATED CABLE LUGS

Oval crimping dies for insulated cable lugs



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 16 | 20 | MTT16-C |
| 25 | 20 | MTT25-C |
| 35 | 20 | MTT35-C |
| 50 | 26 | MTT50-C |
| 70 | 26 | MTT70-C |
| 95 | 26 | MTT95-C |
| 120 | 26 | MTT120-C |
| 150 | 26 | MTT150-C |
| 185 | 26 | MTT185-C |
| 240 | 28 | MTT240-C |

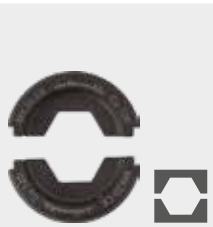


## MV CABLE LUGS

Hexagon crimping dies for mediun voltage type copper cable lugs and connectors



| Cross section (mm²) | Order No. |
|---|---|
| 25 | MMT25-C |
| 35 | MMT50-C |
| 50 RC | |
| 50 S | |
| 70 | MMT95-C |
| 95 RC | |
| 120 ÷ 95 S | |
| 150 ÷ 95 S | MMT200-C |
| 150 RC ÷ 120 S ÷ 125C | |
| 240 RC ÷ 185 S | MMT315-C |
| 300 RC ÷ 300 S | |
| 300 S | |
| 400 RC | U13-K34D |

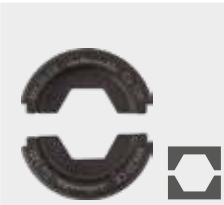


## LV OVERHEAD CABLE LUGS

Hexagon crimping dies for Al/Cu lugs and uninsulated/insulated connectors type cable lugs and connectors for low voltage overhead cables



| Cross section (mm²) | | Order No. | |
|---|---|---|---|
| | | Uninsulated | Insulated |
| 35 Al | | U13-E113 | U13-E173 |
| 35 Al | 25 Cu | | |
| 35 Al | 35 Al | | |
| 54,6 Aldr. | | U13-E173 | |
| 54,6 Aldr. | 25 Cu | | |
| 70 Al | | U13-E173 | |
| 70 Al | 35 Al | | |
| 70 Al | 50 Cu | | |
| 70 Al | 70 Al | | |

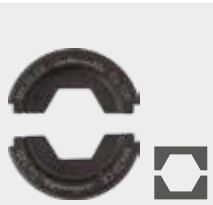


## FULL TENSION CONNECTORS

Hexagon crimping dies for Al and Cu full tension connectors for low voltage overhead cables



| Cross section (mm²) | Order No. |
|---|---|
| 10 Cu | U13-E70 |
| 16 Cu | U13-E75 |
| 25 Cu | U13-E96 |
| 35 Al | U13-E118 |
| 35 Cu | |
| 54,6 Aldr. | U13-E140 |
| 70 Al | U13-E158 |
| 70 Cu | |



## AL-ALLOY OVERHEAD CABLE LUGS

Hexagon crimping dies for Al/Cu type cable lugs for low Al-alloy overhead cables



| Cross section (mm²) | Order No. |
|---|---|
| 35 Al | U13-E118 |
| 70 Al | U13-E158 |
| 150 Al | U13-E215 |

# CRIMPING DIES - SERIES 130



Oval crimping dies for the compression of compression dead-ends and oval connector according to DIN 48217 and H branch terminals

| Cross section (mm²) | Compr. width (mm) | Dead end clamps and oval connectors | | | H-Clamp |
|---|---|---|---|---|---|
| | | Copper | Aluminum | Steel | Copper |
| | | Order No. | Order No. | Order No. | Order No. |
| 10 | 5 | MO10-C | MO10-C | | |
| 16 | 5 | MO12-C | MO12-C | | MO16-C |
| 25 | 5 | MO16-C | MO16-C | | MO18-C |
| 35 | 5 | MO18-C | MO18-C | MO18-C | MO21-C |
| 50 | 5 | MO20-C | MO20-C | MO20-C | |
| 70 | 5 | MO22-C | MO22-C | MO22-C | |
| 95 | 5 | MO24-C | MO24-C | MO25-C | |
| 120 | 5 | MO26-C | MO26-C | | |

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## H BRANCH TERMINALS

Oval crimping dies for H branch terminals



| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 2 x 50 | 30 | MRH22-C |
| 2 x 70 | 30 | MRH26-C |
| 2 x 95 | 30 | MRH30-C |
| 2 x 120 | 2x5 | MRH32-C |

## TWIN CABLE LUGS

Oval crimping dies for twin cable lugs



| Compr. width (mm) | Order No. |
|---|---|
| 12 | MRD22-C |
| 12 | MRD24-C |
| 12 | MRD29-C |
| 12 | MRD32-C |



## C CONNECTORS

Oval crimping dies for copper C connectors for Italian type or equivalent



| Cross section (mm²) | | Order No. |
|---|---|---|
| Run | Tap | |
| 10 | 10 ÷ 1,5 | U13-DC10 |
| 16 | 16 ÷ 1,5 | U13-DC25 |
| 25 ÷ 16 | 10 ÷ 1,5 | |
| 25 | 25 ÷ 16 | |
| 40 ÷ 35 | 16 ÷ 1,5 | U13-DC35 |
| 40 ÷ 35 | 40 ÷ 25 | |
| 50 | 25 ÷ 10 | |
| 70 ÷ 63 | 25 ÷ 1,5 | |
| 50 | 25 ÷ 4 | U13-DC70 |
| 50 | 50 ÷ 35 | |
| 70 ÷ 50 | 40 ÷ 4 | |
| 70 ÷ 50 | 70 ÷ 35 | |
| 100 ÷ 95 | 40 ÷ 4 | U13-DC95 |
| 100 ÷ 95 | 70 ÷ 40 | |
| 100 ÷ 95 | 100 ÷ 63 | |
| 125 ÷ 110 | 125 ÷ 25 | U13-DC185 |
| 160 ÷ 150 | 125 ÷ 25 | |
| 150 | 150 ÷ 63 | |
| 185 | 100 ÷ 16 | |



Round dies to round off copper and aluminum sector shaped conductor

| Cross section (mm²) | Compr. width (mm) | Type | |
|---|---|---|---|
| | | SE | SM |
| | | Order No. | Order No. |
| 10 | 35 | | MR4,1-C |
| 16 | 35 | | MR5,1-C |
| 25 | 35 | MR5,1-C | MR6,3-C |
| 35 | 35 | MR6,3-C | MR7,5-C |
| 50 | 35 | MR7,5-C | MR9,0-C |
| 70 | 35 | MR9,0-C | MR10,5-C |
| 95 | 35 | MR10,5-C | MR12,5-C |
| 120 | 35 | MR12,5-C | MR14,0-C |
| 150 | 35 | MR14,0-C | MR15,7-C |
| 185 | 35 | MR15,7-C | MR17,5-C |
| 240 | 35 | MR17,5-C | MR20,2-C |
| 300 | 35 | MR20,2-C | MR22,5-C |



## STRIP OFF ACSR

Strip off Aluminum part of ACSR cables***

| Cross section (mm²) | Order No. |
|---|---|
| 50/8 | AL-ST 50/8-C |
| 50/30 | AL-ST 50/30-C |
| 70/12 | AL-ST 70/12-C |
| 95/15 | AL-ST 95/15-C |
| 95/55 | AL-ST 95/55-C |
| 120/20 | AL-ST 120/20-C |
| 150/25 | AL-ST 150/25-C |
| 170/40 | AL-ST 170/40-C |
| 185/30 | AL-ST 185/30-C |
| 210/35 | AL-ST 210/35-C |
| 240/40 | AL-ST 240/40-C |
| 265/35 | AL-ST 265/35-C |



## I-SERIES CABLE LUGS

Indent crimping dies for I-series cablelugs and connectors



CI-M.. CI-M..-90 CI-M..-45 CTT-.. CI-M..-CL CI-M..-PR

| Die reference | Indent | Cross section mm² | | No. of crimpings |
|---|---|---|---|---|
| | | rigid | flexible | |
| U13-S6 | U13-PZ6 | 4-6 | | 1 |
| U13-S16 | U13-PZ25 | 10<br>16 | | 1 |
| U13-S25 | | 25 | | 1 |
| U13-S35 | U13-PZ50 | 35 | 25<br>35 | 1 |
| U13-S50 | | 50 | 35<br>50 | 1 |
| U13-S70 | U13-PZ95 | 70 | 50<br>70 | 1 |
| U13-S95 | | 95 | 70<br>95 | 1 |
| U13-S120 | U13-PZ120 | 120 | 95<br>120 | 1 |
| U13-S150 | U13-PZ240 | 150 | 120<br>150 | |
| U13-S185 | | 185 | 150<br>185 | |
| U13-S240 | | 240 | 185<br>240 | |
| U13-S300 | U13-PZ300 | 300 | 240<br>300 | |



Plastic case - KKPE-C-CK



Plastic case - KKPE-TN

## Plastic cases for crimping dies

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Case for 24 crimping dies for 130kN | KKPE-C-CK | 410 x 360 x 110 mm | 1,4 kg |
| Case for deep indent dies | KKPE-TN | 410 x 360 x 110 mm | 1,4 kg |

* SE sector solid
** SM sector multi-stranded
*** depending on type and size of joining accessories

SERIES 230



PP230



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Copper

cable lugs (DIN 46235) - connectors
(DIN 46267, part 1)



ICD ICD_90 ICD_V ICD_VL

### Aluminum

cable lugs (DIN 46239) - connectors
(DIN 46267, part 2)



ICAL_LD ICAL_LDV ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 16 | | | | 12 | 14 | MK12-230 |
| 25 | 10 | 14 | MK10-230 | | | |
| 35 | 12 | 14 | MK12-230 | 14 | 14 | MK14-230 |
| 50 | 14 | 14 | MK14-230 | 16 | 14 | MK16-230 |
| 70 | 16 | 14 | MK16-230 | 18 | 12 | MK18-230 |
| 95 | 18 | 12 | MK18-230 | 22 | 40 | MK22B-230 |
| 120 | 20 | 14 | MK20-230 | | | |
| 150 | 22 | 14 | MK22-230 | 25 | 40 | MK25B-230 |
| 185 | 25 | 14 | MK25-230 | 28 | 40 | MK28B-230 |
| 240 | 28 | 14 | MK28-230 | 32 | 25 | MK32B-230 |
| 300 | 32 | 17 | MK32-230 | 34 | 25 | MK34B-230 |
| 400 | 38 | 17 | MK38-230 | 38 | 25 | MK38B-230 |
| 500 | 42 | 17 | MK42-230 | 44 | 17 | MK44-230 |
| 630 | 44 | 17 | MK44-230 | 46 | 25 | MK46B-230 |



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Aluminum-Steel connectors

| Code No. | Width (mm) | Cross section (mm²) | | Order No. |
|---|---|---|---|---|
| | | Al-connectors | Steel - connectors | |
| 12 | 14 | 16/2,5 25/4 | | MK12-230 |
| 13 | 14 | | 120/20 150/25 | MK13-230 |
| 14 | 14 | 35/6 | | MK14-230 |
| 15 | 14 | | 44/32 50/30 125/30 170/40 185/30 210/35 230/30 240/40 265/35 305/40 340/30 385/35 450/40 495/35 570/40 | MK15-230 |
| 16 | 14 | 50/8 | | MK16-230 |
| 17 | 14 | | 210/50 300/50 380/50 510/45 560/50 650/45 | MK17-230 |
| 18 | 14 | 70/12 | | MK18-230 |
| 19 | 14 | | 95/55 435/55 | MK19-230 |
| 21 | 14 | | 105/75 120/70 490/65 550/70 | MK21-230 |
| 22 | 40 | 95/15 | | MK22B-230 |
| 23 | 14 | | 680/85 | MK23-230 |
| 25 | 40 | 44/32 50/30 120/20 | | MK25B-230 |
| 28 | 40 | 125/30 150/25 | | MK28B-230 |
| 30 | 25 | 95/55 170/40 185/30 | | MK30B-230 |
| 34 | 25 | 105/75 120/70 210/35 210/50 230/30 240/40 | | MK34B-230 |
| 38 | 25 | 265/35 300/50 305/40 340/30 | | MK38B-230 |
| 42 | 25 | 380/50 385/35 | | MK42B-230 |



## R-SERIES CABLE LUGS

Hexagonal crimping dies for R-series type cable lugs and connectors




| Cross section (mm²) | Compr. width (mm) | Order No. |
|---|---|---|
| 120 | 14 | MH120-230 |
| 150 | 14 | MH150-230 |
| 185 | 14 | MH185-230 |
| 240 | 17 | MH240-230 |
| 300 | 17 | MH300-230 |
| 400 | 17 | MH400-230 |
| 500 | 17 | MH500-230 |
| 630 | 17 | MH625-230 |



## FINE WIRE

Indent crimping dies for fine wire conductors F-series




| Cross section (mm²) | Order No. |
|---|---|
| 120 | MDF120-230 |
| 150 | MDF150-230 |
| 185 | MDF185-230 |
| 240 | MDF240-230 |
| 300 | MDF300-230 |



## NOTCH CONNECTOR

Oval crimping dies for notch connector

| Cross section (mm²) | Cu-Conductor<br>Order No. | Al-Conductor<br>Order No. | Al-Steel-rope<br>Order No. |
|---|---|---|---|
| 10 | MKO10-230-CU | | |
| 16 | MKO16-230-CU | | |
| 25 | MKO25-230-CU | MKO25-230-AL | |
| 35 | MKO35-230-CU | MKO35-230-AL | |
| 50 | MKO50-230-CU | MKO50-230-AL | |
| 50/8 | | | MKO50/8-230 |
| 50/30 | | | MKO50/30-230 |
| 70 | MKO70-230-CU | MKO70-230-AL | |
| 70/12 | | | MKO70/12-230 |
| 95 | MKO95-230-CU | MKO95-230-AL | |
| 95/15 | | | MKO95/15-230 |
| 120 | MKO120-230-CU | MKO120-230-AL | |
| 120/21 | | | MKO120/21-230 |
| 125/30 | | | MKO125/30-230 |
| 150 | MKO150-230-CU | MKO150-230-AL | |
| 150/25 | | | MKO150/25-230 |
| 185 | | MKO185-230-AL | |
| 185/32 | | | MKO185/32-230 |
| 240 | | MKO240-230-AL | |
| 210/36 | | | MKO210/36-230 |
| 210/50 | | | MKO210/50-230 |
| 240/40 | | | MKO240/40-230 |



## H BRANCH TERMINALS

Oval crimping dies for H branch terminals



## TWIN CABLE LUGS

Oval crimping dies for twin cable lugs



| Cross section (mm²) | Compr. width (mm) | Order No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|
| 2 x 50 | 40 | MRH22-230 | 40 | MRD22-230 |
| 2 x 70 | 40 | MRH26-230 | 40 | MRD24-230 |
| 2 x 95 | 40 | MRH30-230 | 40 | MRD29-230 |
| 2 x 120 | 40 | MRH32-230 | 40 | MRD32-230 |
| 2 x 150 | 40 | MRH34-230 | | |

5



## Adapter for crimping dies 130 kN

Allows use of all dies up to 185² (C-shape) for the tool 130kN on model PP230

| Description | Order No. | For Dies | Weight |
|---|---|---|---|
| Adapter | AD230-130 | 130 kN | 0,82 kg |

SERIES 520



PP520



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Copper

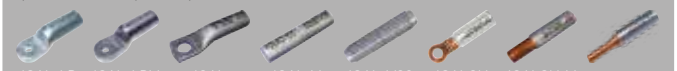
cable lugs (DIN 46235) - connectors
(DIN 46267, part 1)



ICD ICD_90 ICD_V ICD_VL

### Aluminum

cable lugs (DIN 46239) - connectors
(DIN 46267, part 2)



ICAL_LD ICAL_LDV ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 16 | | | | 12 | 14 | MK12-520 |
| 25 | | | | | | |
| 35 | 12 | 14 | MK12-520 | 14 | 14 | MK14-520 |
| 50 | 14 | 14 | MK14-520 | 16 | 14 | MK16-520 |
| 70 | 16 | 14 | MK16-520 | 18 | 14 | MK18-520 |
| 95 | 18 | 14 | MK18-520 | 22 | 40 | MK22B-520 |
| 120 | 20 | 14 | MK20-520 | | | |
| 150 | 22 | 14 | MK22-520 | 25 | 40 | MK25B-520 |
| 185 | 25 | 14 | MK25-520 | 28 | 40 | MK28B-520 |
| 240 | 28 | 14 | MK28-520 | 32 | 40 | MK32B-520 |
| 300 | 32 | 17 | MK32-520 | 34 | 40 | MK34B-520 |
| 400 | 38 | 17 | MK38-520 | 38 | 40 | MK38B-520 |
| 500 | 42 | 17 | MK42-520 | 44 | 40 | MK44B-520 |
| 630 | 44 | 17 | MK44-520 | 52 | 40 | MK52B-520 |
| 800 | 52 | 25 | MK52-520 | 58 | 25 | MK58-520 |
| 1000 | 58 | 25 | MK58-520 | 60 | 25 | MK60-520 |



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Aluminum-Steel connectors

| Code No. | Width (mm) | Cross section (mm²) | | Order No. |
|---|---|---|---|---|
| | | Al-connectors | Steel - connectors | |
| 12 | 14 | 16/2,5 25/4 | | MK12-520 |
| 13 | 14 | | 120/20 150/25 | MK13-520 |
| 21 | 14 | | 105/75 120/70 490/65 550/70 | MK21-520 |
| 22 | 40 | 95/15 | | MK22B-520 |
| 23 | 14 | | 680/85 | MK23-520 |
| 25 | 40 | 44/32 50/30 120/20 | | MK25B-520 |
| 28 | 40 | 125/30 150/25 | | MK28B-520 |
| 30 | 40 | 95/55 170/40 185/30 | | MK30B-520 |
| 34 | 40 | 105/75 120/70 210/35 210/50 230/30 240/40 | | MK34B-520 |
| 38 | 40 | 265/35 300/50 305/40 340/30 | | MK38B-520 |
| 42 | 40 | 380/50 385/35 | | MK42B-520 |
| 46 | 40 | 435/55 450/40 | | MK46B-520 |
| 50 | 40 | 495/35 510/45 490/65 | | MK50B-520 |
| 52 | 40 | 570/40 580/50 550/70 | | MK52B-520 |
| 58 | 25 | 650/45 680/85 | | MK58-520 |



### Adapter for crimping dies 130 kN

Allows use of all dies (C-shape) for the tool 130kN on model PP520

| Description | Order No. | For Dies | Weight |
|---|---|---|---|
| Adapter | AD520-130 | 130 kN | 1,78 kg |

# CRIMPING DIES - SERIES 600

SERIES 600



PP600



## DIN STANDARD

Hexagon crimping dies according to DIN 48083

### Copper

cable lugs (DIN 46235) - connectors
(DIN 46267, part 1)



ICD ICD_90 ICD_V ICD_VL

### Aluminum

cable lugs (DIN 46239) - connectors
(DIN 46267, part 2)



ICAL_LD ICAL_LDV ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

| Cross section (mm²) | Code No. | Compr. width (mm) | Order No. | Code No. | Compr. width (mm) | Order No. |
|---|---|---|---|---|---|---|
| 16 | | | | 12 | 14 | MK12-600 |
| 25 | 10 | 14 | MK10-600 | | | |
| 35 | 12 | 14 | MK12-600 | 14 | 14 | MK14-600 |
| 50 | 14 | 14 | MK14-600 | 16 | 14 | MK16-600 |
| 70 | 16 | 14 | MK16-600 | 18 | 14 | MK18-600 |
| 95 | 18 | 14 | MK18-600 | 22 | 40 | MK22B-600 |
| 120 | 20 | 14 | MK20-600 | | | |
| 150 | 22 | 14 | MK22-600 | 25 | 40 | MK25B-600 |
| 185 | 25 | 14 | MK25-600 | 28 | 40 | MK28B-600 |
| 240 | 28 | 14 | MK28-600 | 32 | 40 | MK32B-600 |
| 300 | 32 | 17 | MK32-600 | 34 | 40 | MK34B-600 |
| 400 | 38 | 17 | MK38-600 | 38 | 40 | MK38B-600 |
| 500 | 42 | 17 | MK42-600 | 44 | 40 | MK44B-600 |
| 630 | 44 | 17 | MK44-600 | 52 | 40 | MK52B-600 |
| 800 | 52 | 25 | MK52-600 | 58 | 25 | MK58-600 |
| 1000 | 58 | 25 | MK58-600 | 60 | 25 | MK60-600 |
| 1200 | 60 | 25 | MK60-600 | | | |
| 1600 | 70 | 25 | MK70-600 | | | |

Dies for full tension and Aluminum-Steel, ACSR available on request




6

# PUNCHING TOOLS

## HP60-BL - Hand-operated hydraulic hole punching tool 60 kN

**Suitable for punching round, square, and rectangular holes through materials up to a max. thickness of 3 mm**

Technical characteristics:
- Light, compact, and rugged construction
- Head can be pivoted/rotated by 360°
- Hydraulic head made of high-strength aluminium
- Fast feed due to double-piston hydraulics
- Automatic pressure limiter
- Manual return possible in any position by turning the handle
- Application temperature range: -10°C / +40°C.
- Punching force: ..... 60 kN
- Operating pressure: ..... 700 bar

Punching capacity (max. sheet thicknesses):
- Up to Ø 63.5 mm: ..... 3.0 mm steel / 2.5 mm stainless steel
- Up to Ø 68.0 x 68.0 mm: ..... 3.0 mm steel / 1.5 mm stainless steel
- Up to Ø 92.0 x 92.0 mm: ..... 2.5 mm steel / 1.5 mm stainless steel
- Larger than 92.0 x 92.0 mm, up to 138.0 x 138.0 mm 2 mm steel

Pivoting/rotating head






| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| HP60-BL | Hand-operated hydraulic hole punching tool 60 kN | 700 x 260 x 105 mm | 4.2 kg |

Set equipment:
- Hand-operated hydraulic hole punching tool
- 1 draw stud 9.5 x 19.0 mm
- 1 draw stud 19.0 x 125.0 mm
- 1 spacer sleeve
- 1 tube of anti-wear paste
- 1 HSS-E step drill
- Operating instructions, safety and maintenance instructions
- Carrying case for the tool and accessories as well as 8 pairs of round hole inserts

Dimensions:
- Tool alone ..... 430 x 166 x 67 mm

Weight:
- Alone ..... approx 2.8 kg
- As a set ..... 4.2 kg

## STILO-BL - Battery-operated hydraulic hole punching tool 18V

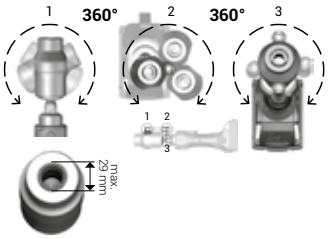
**Suitable for punching round, square, and rectangular holes through materials up to a max. thickness of 3 mm.**

Technical characteristics:
- Light, compact, and rugged construction
- Ergonomic 2-component handle allows fatigue-free working
- Head can be pivoted/rotated by 360°
- Hydraulic head made of high-strength aluminium
- Fast feed due to 3-stage axial piston pump
- Pressure monitored by an electronic pressure sensor
- Fast tool returns due to patented return valve
- Manual return possible in any position
- Automatic pressure limiter and monitor with pressure sensor
- Punch detection, automatic return after releasing the start switch when punching cycle complete
- Powerful Li-ion battery
- Fall protection provided by wrist strap
- Application temperature range: -10°C / +40°C.
- Punching force: ..... 60 kN
- Battery voltage: ..... 18V DC
- Battery capacity: ..... 1.5 Ah (2.0 Ah)
- Battery charging time: ..... approx. 30 - 40 min

Punching capacity (max. sheet thicknesses):
- Up to Ø 63.5 mm: ..... 3.0 mm steel / 2.5 mm stainless steel
- Up to Ø 68.0 x 68.0 mm: ..... 3.0 mm steel / 1.5 mm stainless steel
- Up to Ø 92.0 x 92.0 mm: ..... 2.5 mm steel / 1.5 mm stainless steel
- Larger than 92.0 x 92.0 mm, up to 138.0 x 138.0 mm 2 mm steel



Pivoting/rotating head






| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| Stilo-BL | Battery-operated hydraulic hole punching tool 18V | 540 x 360 x 120 mm | 6.3 kg |

Set equipment:
- Battery-operated hydraulic hole punching tool
- Li-ion battery 18V - 1.5Ah
- Battery charger LG8
- 1 draw stud 9.5 x 19.0 mm
- 1 draw stud 19.0 x 125.0 mm
- 1 spacer sleeve
- 1 tube of anti-wear paste
- 1 HSS-E step drill
- USB cable
- CD-ROM (software)
- Operating instructions, safety and maintenance instructions
- Carrying case for the tool, spare batteries, charger, and 8 pairs of round hole inserts

Dimensions:
- Alone with battery ..... 398 x 126 x 82 mm

Weight:
- With battery ..... 2.3 kg
- Without battery ..... 1.7 kg

## PBL60 - Hydraulic hole punching tool 700 bar

**Suitable for punching round, square, and rectangular holes through materials up to a max. thickness of 3 mm**




**Technical characteristics:**
- Small, compact design
- Burnished surface
- Operating pressure: ..... 700 bar
- The punch head can be operated with a hydraulic pump (maximum pressure 700 bar / 70 MPa), see pages 204-207, hydraulic pumps

**Punching capacity (max. sheet thicknesses):**
- Up to Ø 63.5 mm: ..... 3.0 mm steel / 2.5 mm stainless steel
- Up to Ø 68.0 x 68.0 mm: ..... 3.0 mm steel / 1.5 mm stainless steel
- Up to Ø 92.0 x 92.0 mm: ..... 2.5 mm steel / 1.5 mm stainless steel
- Larger than 92.0 x 92.0 mm, up to 138.0 x 138.0 mm 2 mm steel

**Dimensions:**
- Tool alone ..... 150 x 73 mm

**Weight:**
- Alone ..... ca. 2.5 kg

Scope of delivery: Hydraulic cylinder (without draw bolts - see page 195-196).

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| PBL60 | Hydraulic hole punching tool | 150 x 73 mm | 2.5 kg |

6

## Keyway punch

Quick and simple punching of keyways 3.2 mm and 4.8 mm wide in max. 2.0 mm thick steel. Makes the time-consuming sawing and filing of the anti-twist keyways on pushbuttons unnecessary.



| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| KNZ | Keyway punch | 400 x 120 x 30 mm | 1.4 kg |



## TRE SPLIT hole punching tool

The splitter hole punching system TRE SPLIT for ST 37 sheet steel splits the slug into 3 parts. This prevents the slug from getting stuck on the draw bolt and/or in the die. This in turn enables fast and burr-free hole punching.

Max. ST steel thicknesses:
- 2 mm with 9.5 mm draw bolt/draw stud
- 3 mm with 19 mm draw bolt/draw stud

Technical characteristics:
- The hole punches are suitable for manual and hydraulic operation.
- Due to the special cutting geometry of the TRE SPLIT punch, the cutting pressure required is reduced, which means less force is required when manually punching with ball bearing draw studs
  This also means less stress on the hydraulic tool
- The anti-wear paste protects against wear and seizing

Universal accessories / spare parts
- DB22 - Spacer sleeve 22 mm - short
- STB21 - HSS-E step drill Ø 9, 11, 12, 15, 17, 19, 21 mm
- AVP - Anti-wear paste

| Hole dimensions | | Order No. | | | | |
|---|---|---|---|---|---|---|
| Ø of hole | Standard size | Set punch die Order No. | Hydraulic operation/ draw stud Order No. | Manual operation/ draw stud with ball bearing Order No. | Replacement punch Order No. | Thread / punch mm |
| 16,2 | M16 | BLTM16 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTM16S | 9,5 |
| 20,4 | M20 | BLTM20 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTM20S | 9,5 |
| 25,4 | M25 | BLTM25 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTM25S | 9,5 |
| 32,5 | M32 | BLTM32 | 19x125 ZB19x125 | 19x55 ZSKL19x55 | BLTM32S | 19,0 |
| 40,5 | M40 | BLTM40 | 19x125 ZB19x125 | 19x55 ZSKL19x55 | BLTM40S | 19,0 |
| 50,5 | M50 | BLTM50 | 19x125 ZB19x125 | 19x75 ZSKL19x75 | BLTM50S | 19,0 |
| 63,5 | M63 | BLTM63 | 19x125 ZB19x125 | 19x75 ZSKL19x75 | BLTM63S | 19,0 |
| 15,2 | PG9 | BLTPG9 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTPG9S | 9,5 |
| 18,6 | PG11 | BLTPG11 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTPG11S | 9,5 |
| 20,4 | PG13 | BLTPG13 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTPG13S | 9,5 |
| 22,5 | PG16 | BLTPG16 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTPG16S | 9,5 |
| 28,3 | PG21 | BLTPG21 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTPG21S | 9,5 |
| 37,0 | PG29 | BLTPG29 | 19x125 ZB19x125 | 19x75 ZSKL19x75 | BLTPG29S | 19,0 |
| 47,0 | PG36 | BLTPG36 | 19x125 ZB19x125 | 19x75 ZSKL19x75 | BLTPG36S | 19,0 |
| 54,0 | PG42 | BLTPG42 | 19x125 ZB19x125 | 9,5x50 ZSKL9,5x50 | BLTPG42S | 19,0 |
| 60,0 | PG48 | BLTPG48 | 19x125 ZB19x125 | 19x75 ZSKL19x75 | BLTPG48S | 19,0 |
| 30,5 | - | BLTN30,5 | 9,5x19 ZB9,5x19 | 9,5x50 ZSKL9,5x50 | BLTN30,5S | 9,5 |

Bigger sizes with standard punching dies on request



## VA SPLIT hole punching tool

This hole punching tool for stainless steel splits the slug into in 2 pieces. This prevents the slug from getting stuck on the draw bolt and/or in the die.

Max. ST steel thicknesses:
- 2 mm with 9.5 mm draw bolt/draw stud
- 3 mm with 19.0 mm draw bolt/draw stud

Technical characteristics:
- For manual and hydraulic operation
- We recommend the use of a hand-operated hydraulic tool
- Working with a ball bearing draw stud is possible, but is not recommended
- The used high-alloyed tool steel and the thermal treatment guarantee a long tool life

Universal accessories / spare parts
- DB22 - Spacer sleeve 22 mm - short
- STB21 - HSS-E step drill Ø 9, 11, 12, 15, 17, 19, 21 mm
- AVP - Anti-wear paste

| Hole dimensions | | Order No. | | | | |
|---|---|---|---|---|---|---|
| Ø of hole | Standard size | Set Punch die Order No. | Hydraulic operation/ draw stud Order No. | Manual operation/draw stud with ball bearing Order No. | Replacement punch Order No. | Thread / punch mm |
| 16,2 | M16 | BLVAM16 | 11,1x19 ZB11,1x19 | | BLVAM16S | 11,1 |
| 20,4 | M20 | BLVAM20 | 11,1x19 ZB11,1x19 | | BLVAM20S | 11,1 |
| 25,5 | M25 | BLVAM25 | 11,1x19 ZB11,1x19 | | BLVAM25S | 11,1 |
| 32,5 | M32 | BLVAM32 | 19x125 ZB19x125 | | BLVAM32S | 19,0 |
| 40,5 | M40 | BLVAM40 | 19x125 ZB19x125 | | BLVAM40S | 19,0 |
| 50,5 | M50 | BLVAM50 | 19x125 ZB19x125 | | BLVAM50S | 19,0 |
| 63,5 | M63 | BLVAM63 | 19x125 ZB19x125 | | BLVAM63S | 19,0 |
| 15,2 | PG9 | BLVAPG9 | 11,1x19 ZB11,1x19 | | BLVAPG9S | 11,1 |
| 18,6 | PG11 | BLVAPG11 | 11,1x19 ZB11,1x19 | | BLVAPG11S | 11,1 |
| 20,4 | PG13 | BLVAPG13 | 11,1x19 ZB11,1x19 | | BLVAPG13S | 11,1 |
| 22,5 | PG16 | BLVAPG16 | 11,1x19 ZB11,1x19 | | BLVAPG16S | 11,1 |
| 28,3 | PG21 | BLVAPG21 | 11,1x19 ZB11,1x19 | | BLVAPG21S | 11,1 |
| 37,0 | PG29 | BLVAPG29 | 19x125 ZB19x125 | | BLVAPG29S | 19,0 |
| 47,0 | PG36 | BLVAPG36 | 19x125 ZB19x125 | | BLVAPG36S | 19,0 |
| 54,0 | PG42 | BLVAPG42 | 19x125 ZB19x125 | | BLVAPG42S | 19,0 |
| 60,0 | PG48 | BLVAPG48 | 19x125 ZB19x125 | | BLVAPG48S | 19,0 |
| 30,5 | - | BLVAN30,5 | 11,1x19 ZB11,1x19 | | BLVAN30,5S | 11,1 |



## Draw bolt with ball bearing

To extend the life of the draw bolts we recommend to lubricate the draw bolts with our anti-wear paste AVP

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| ZSKL19X55 | Draw bold with ball bearing | 19 x 55 mm | 0,24 kg |



| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| ZSKL19xX75 | Draw bold with ball bearing | 19 x 75 mm | 0,28 kg |



| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| ZSKL9,5X50 | Draw bold with ball bearing | 9,5 x 50 mm | 0,06 kg |



## Draw stud for hydraulics

To extend the life of the draw bolts we recommend to lubricate the draw bolts with our anti-wear paste AVP



| Order No. | Description | Ø | Weight |
|---|---|---|---|
| ZB11,1x19 | Draw stud for hydraulics | 11,1 X 19 mm | 0,11 kg |



| Order No. | Description | Ø | Weight |
|---|---|---|---|
| ZB19x125 | Draw stud for hydraulics | 19 x 125 mm | 0,26 kg |



| Order No. | Description | Ø | Weight |
|---|---|---|---|
| ZB9,5x19 | Draw stud for hydraulics | 9,5 x 19 mm | 0,10 kg |




| Order No. | Description | Ø | Weight |
|---|---|---|---|
| ZB9,5x72 | Draw stud for hydraulics | 9,5 x 72 mm | 0,04 kg |



## Set TRE SPLIT M16-M40

TRE SPLIT triple splitter hole punching tool for St steels
5 sizes. Delivered in a plastic case.

Equipment:
- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40
- 2 ball bearing draw studs 9.5 × 50.0 mm
- 1 ball bearing draw stud 19.0 × 55.0 mm
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| SETBLTM40 | Set TRE SPLIT M16-M40 | 340 x 275 mm | 2.25 kg |

Other accessories available on request



## Set TRE SPLIT M16-M63

TRE SPLIT triple splitter hole punching tool for St steels
7 sizes. Delivered in a plastic case.

Equipment:
- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40 - M 50 - M 63
- 2 ball bearing draw studs 9.5 × 50.0 mm
- 1 ball bearing draw stud 19.0 × 55.0 mm
- 1 ball bearing draw stud 19.0 × 75.0 mm
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| SETBLTM63 | Set TRE SPLIT M16-M63 | 340 x 275 mm | 3.85 kg |

Other accessories available on request



## Set TRE SPLIT M16-M40

VA SPLIT double splitter hole punching tool for VA steels 5 sizes.
Delivered in a plastic case.

Equipment:
- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| SETBLVAM40 | Set VA SPLIT M16-M40 | 340 x 275 mm | 1.55 kg |

Other accessories available on request



## Set VA SPLIT M16-M63

VA SPLIT double splitter hole punching tool for VA steels
7 sizes. Delivered in a plastic case.

Equipment:
- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40 - M 50 - M 63
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| SETBLVAM63 | Set VA SPLIT M16-M63 | 340 x 275 mm | 3.45 kg |

Other accessories available on request



## Rectangular/shaped hole punch tool for heavy connectors with 2 centering tips integrated into the die

Workable with St steels - equipped with centering tips integrated into the matrix for marking the mounting holes. Only for hydraulic operations.

Equipment:
- Shaped hole punch
- Draw stud
- Locknut
- Plastic case with foam inlay

| Size mm | Max. sheet thickness | Order No. | Pole | Axle | Weight |
|---|---|---|---|---|---|
| 24,0 x 42,0 | 3,0 mm | BLF24x42 | 6 | B | 0,85 kg |
| 24,0 x 65,0 | 3,0 mm | BLF24x65 | 10 | B | 1,81 kg |
| 24,0 x 86,0 | 3,0 mm | BLF24x86 | 16 | B | 1,87 kg |
| 24,0 x 112,0 | 3,0 mm | BLF24x112 | 24 | B | 2,52 kg |

Other sizes available on request
Universal accessories / spare parts see page xxx



## Accessories / spare parts:



### Draw stud 19 mm flattened on two sides for shaped hole punch

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| ZA19X14X120 | Draw stud 19 mm | 14 x 120 mm | 0,24 kg |



### Locknut for shaped hole punch

| Order No. | Description | Ø | Weight |
|---|---|---|---|
| KM19 | Locknut | 19 mm | 0,13 kg |





## Square / shape punch for St steels

Very long service life of the tool due to special protective gas hardening. The CAD-optimized cutting geometry of the punch reduces the need for cutting pressure and thus the effort of work. When using a hand-held hydraulic device, the reduced pressure requirement reduces the pressure on the seals.

Equipment:
- Shaped hole punch
- Draw stud
- Locknut
- Plastic case with foam liner

| Size mm | Max. sheet thickness mm | Order No. | | Weight |
|---|---|---|---|---|
| 45,0 x 45,0 | 3,0 | BLF45x45 | ✓ | 2,30 kg |
| 46,0 x 46,0 | 3,0 | BLF46x46 | ✓ | 2,30 kg |
| 68,0 x 68,0 | 3,0 | BLF68x68 | ✓ | 3,35 kg |
| 92,0 x 92,0 | 3,0 | BLF92x92 | ✓ | 5,05 kg |

Other sizes available on request
Universal accessories / spare parts see page 196







## Rectangular/shaped hole punch tool for heavy connectors with 4 centering tips integrated into the die

For St steels - equipped with centering tips integrated into the matrix for marking the mounting holes. Only for hydraulic operations.

Equipment:
- Shaped hole punch
- Draw stud
- Locknut
- Plastic case with foam liner

| Size mm | Max. sheet thickness | Order No. | | Pole | Axle | Weight |
|---|---|---|---|---|---|---|
| 36,0 x 52,0 | 3,0 mm | BLF36x52 | ✓ | 6 | B | 1,78 kg |
| 36,0 x 65,0 | 3,0 mm | BLF36x65 | ✓ | 10 | B | 2,14 kg |
| 36,0 x 86,0 | 3,0 mm | BLF36x86 | ✓ | 16 | B | 2,55 kg |
| 36,0 x 112,0 | 3,0 mm | BLF36x112 | ✓ | 24 | B | 3,05 kg |

Other sizes available on request
Universal accessories / spare parts see page 196

## Accessories / spare parts:



### Draw stud 25 mm flattened on two sides for shaped hole punch

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| ZA25X21X150 | Draw stud 25 mm | 21 x 150 mm | 0,38 kg |



### Locknut for shaped hole punch

| Order No. | Description | Ø | Weight |
|---|---|---|---|
| KM19 | Locknut | 19 mm | 0,13 kg |





## Rectangular/shaped hole punching tool for St steels

Very long service life of the tool due to special protective gas hardening. The CAD-optimized cutting geometry of the punch reduces the need for cutting pressure and thus the effort of work. When using a hand-held hydraulic device, the reduced pressure requirement reduces the pressure on the seals.

Equipment:
- Shaped hole punch
- Draw stud
- Locknut
- Ball bearing pressure nut
- Adapter
- Plastic case with foam inlay

| Size mm | Max. sheet thickness mm | Order No. | | | Weight |
|---|---|---|---|---|---|
| 22,0 x 42,0 | 2,0 | BLF22x42 | ✓ | ✓ | 0,73 kg |
| 22,0 x 45,0 | 2,0 | BLF22x45 | ✓ | ✓ | 0,73 kg |

Other sizes available on request
Universal accessories / spare parts see page 196



## Accessories / spare parts:

### Draw stud 13 mm flattened on one side for shaped hole punch

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| ZA13X11X105 | Draw stud 13 mm | 11 x 105 mm | 0,09 kg |



### Locknut for shaped hole punch

| Order No. | Description | Ø | Weight |
|---|---|---|---|
| KM12,7 | Locknut | 12,7 mm | 0,02 kg |



### Ball bearing pressure nut for hole punch (manual operation)

| Order No. | Description | Ø | Weight |
|---|---|---|---|
| KMKL12,7 | Ball bearing pressure | 12,7 mm | 0,10 kg |

## Universal accessories / spare parts:



### Adapter for hydraulics Ø 19,0 x 48 mm

| Order No. | Description | Inside thread Ø | Weight |
|---|---|---|---|
| ZBA19x9,5 | Adapter<br>Ø 19,0 x 48 mm | 9,5 mm | 0,07 kg |



### Spacer sleeve 22 mm - short

| Order No. | Description | Lenght | Weight |
|---|---|---|---|
| DB22 | Spacer sleeve - short | 22 mm | 0,16 kg |



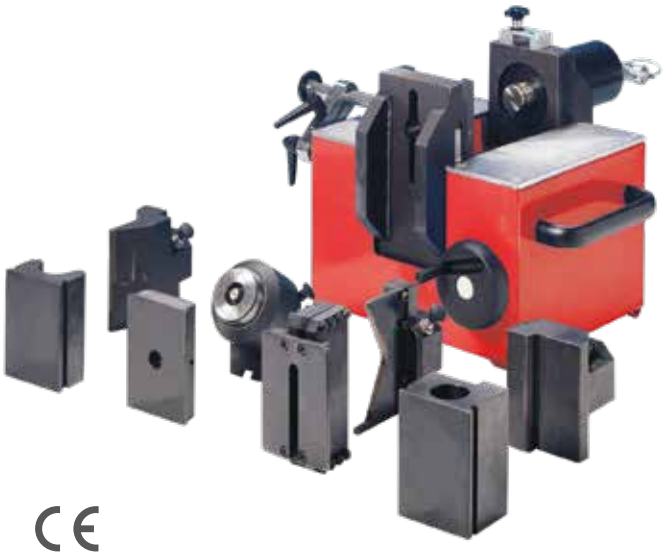
### HSS-E step drill

| Order No. | Description | Ø mm | Weight |
|---|---|---|---|
| STB21 | HSS-E step drill | 9, 11, 12, 15, 17, 19, 21 | 0,05 kg |



### Anti-wear paste

| Order No. | Description | Weight |
|---|---|---|
| AVP | Anti-wear paste | 0,01 kg |



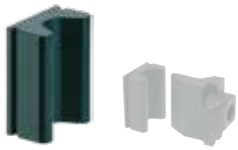
## BLS120 - Power rail work station

**Designed to bend, punch, cut and crimp bus bars in copper or aluminium up to 120 x 12 mm. The works station must becombined with a hydraulic pump (max. pressure 700bar/70MPa). (s. pages 201-208, Hydraulic Pumps)**

Technical characteristics:
- Sturdy and compact, suitable for use in workshops and on construction sites
- Composed of a base unit and a variety of work tools, interchangeable tools depending on the task being performed
- Simple and quick tool changing
- The electrical proximity switch guarantees 100% bending repeatability
- The work bench adjusts in height with a side stop to make holes without tracing and measuring
- Quick automatic-lock connection of hydraulics and undetachable dust cap
- Cutting tool for clean burr-free cuts due to special shape of the blade
- Exact dimensional bending of bow in one operation
- Perforates and cutts laminated power rails and earthing strips

Force generated: ..... max. 185 kN
Operating pressure: ..... 700bar (70 MPa)
Bus bar width: ..... up to 120 mm
Bus bar thickness: ..... up to 12 mm

| Order No. | Description | Dimensions | Weight |
|---|---|---|---|
| BLS-120 | Power rail work station | 480x500x360 mm | 53 kg |



## Accessories:

| Order No. | Description | Power rail dimensions | Weight |
|---|---|---|---|
| BLS-M | Bending female die | bis 120 x 12 mm | 3,3 kg |



| Order No. | Description | Bending radius | Bending angle | Weight |
|---|---|---|---|---|
| BLS-R5 | Bending tool | R5 mm | bis 110° | 4 kg |
| BLS-R8 | Bending tool | R8 mm | bis 110° | 4,1 kg |
| BLS-R10 | Bending tool | R10 mm | bis 110° | 4,4 kg |
| BLS-R20 | Bending tool | R20 mm | bis 110° | 5 kg |
| BLS-R | Back pending die | | | 3,8 kg |

Attention: The necessary bending female die BLS-M must be ordered separately



| Order No. | Description | Power rail dimensions | Weight |
|---|---|---|---|
| BLS-S | Cutting tool for massive power rails | bis 120 x 12 mm | 5,8 kg |



| Order No. | Description | Power rail dimensions | Weight |
|---|---|---|---|
| BLS-SL | Cutting tool for laminated power rails | bis 120 x 12 mm | 9,0 kg |



| Order No. | Description | Power rail dimensions | Weight |
|---|---|---|---|
| BLS-K | Offset shaping tool | bis 120 x 12 mm | 11,0 kg |

# PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT



**Technical characteristics:**
- For solid and laminated bus bars
- Perforation near the isolation possible (min. 5 mm) by step in the tool
- Round hole: Ø 6.5 to 21.0 mm
- Longitudinal slot: 6.5 x 13 tos 17 x 20 mm

| Order No. | Description | Power rail dimensions | Weight |
|---|---|---|---|
| BLS-L4 | Perforation tool IV for laminated and solid rails | up to 120 x 12 mm | 4,3 kg |



| Description | Ø | Female die | Punch | Stripper |
|---|---|---|---|---|
| Round hole punch and female dies for laminated and solid bus bars | 6,5 mm | LS4R06,5M | LS4R06,5S | LS4R06,5N |
| | 7,0 mm | LS4R07,0M | LS4R07,0S | LS4R07,0N |
| | 8,5 mm | LS4R08,5M | LS4R08,5S | LS4R08,5N |
| | 9,0 mm | LS4R09,0M | LS4R09,0S | LS4R09,0N |
| | 10,0 mm | LS4R10,0M | LS4R10,0S | LS4R10,0N |
| | 10,5 mm | LS4R10,5M | LS4R10,5S | LS4R10,5N |
| | 11,0 mm | LS4R11,0M | LS4R11,0S | LS4R11,0N |
| | 12,0 mm | LS4R12,0M | LS4R12,0S | LS4R12,0N |
| | 13,0 mm | LS4R13,0M | LS4R13,0S | LS4R13,0N |
| | 14,0 mm | LS4R14,0M | LS4R14,0S | LS4R14,0N |
| | 14,5 mm | LS4R14,5M | LS4R14,5S | LS4R14,5N |
| | 15,0 mm | LS4R15,0M | LS4R15,0S | LS4R15,0N |
| | 17,0 mm | LS4R17,0M | LS4R17,0S | LS4R17,0N |
| | 18,0 mm | LS4R18,0M | LS4R18,0S | LS4R18,0N |
| | 19,0 mm | LS4R19,0M | LS4R19,0S | LS4R19,0N |
| | 21,0 mm | LS4R21,0M | LS4R21,0S | LS4R21,0N |



| Description | Ø | Female die | Punch | Stripper |
|---|---|---|---|---|
| Long hole punch and female dies for laminated and solid bus bars on request | 6,5x13,0 | LS4L06,5x13,0M | LS4L06,5x13,0S | LS4L06,5x13,0N |
| | 10,5x13,0 | LS4L10,5x13,0M | LS4L10,5x13,0S | LS4L10,5x13,0N |
| | 8,5x16,0 | LS4L08,5x16,0M | LS4L08,5x16,0S | LS4L08,5x16,0N |
| | 6,5x21,0 | LS4L06,5x21,0M | LS4L06,5x21,0S | LS4L06,5x21,0N |
| | 8,0x20,0 | LS4L08,0x20,0M | LS4L08,0x20,0S | LS4L08,0x20,0N |
| | 9,0x20,0 | LS4L09,0x20,0M | LS4L09,0x20,0S | LS4L09,0x20,0N |
| | 13,0x20,0 | LS4L13,0x17,0M | LS4L13,0x17,0S | LS4L13,0x17,0N |
| | 11,0x20,0 | LS4L11,0x20,0M | LS4L11,0x20,0S | LS4L11,0x20,0N |
| | 13,0x20,0 | LS4L13,0x20,0M | LS4L13,0x20,0S | LS4L13,0x20,0N |
| | 14,0x20,0 | LS4L14,0x20,0M | LS4L14,0x20,0S | LS4L14,0x20,0N |
| | 17,0x20,0 | LS4L17,0x20,0M | LS4L17,0x20,0S | LS4L17,0x20,0N |



## Accessories:

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Trolley for BLS | BLS-W | 800x500x750 mm | ca. 45 kg |
| Trestle for BLS | BLS-B | 800x440 mm | ca. 5 kg |
| Plastic case for BLS | ACBLSWZG | 400x250x250 | 6,5 kg |
| Spray Metalflux | SPRAY-M | 400 ml | ca. 450 g |



Plastic case for BLS tools and dies (Accessories)



Spray for cutting and punching



Trolley/Trestle for positioning the Bus Bar Work Station on ergonomic high




## LSK120 - Hydraulic punching head

**Designed to punch bus bars rails (dimensions up to 120 x 12mm) made of copper, aluminium or steel with tensile strength up to 470N/mm². The hydraulic punching head must be combined with a hydraulic pump (Maximum pressure 700bar/70MPa)**
**(s. pages 201-208, Hydraulic Pumps)**

Technical characteristics:
- Strong and compact structure
- "C" head for easy positioning of the power rails
- Easy insertion of inserts (die and punch)
- Also useable on mounted bus bars without disassembly
- Quick automatic-lock connection and undetachable dust cap
- Centrally punched holes in bars up to 120 mm wide
- Functional range for the following bars:

12 mm Cu/Al ..... max. Ø 21,0 mm
8 mm steel ..... max. Ø 21,0 mm
9 mm steel ..... max. Ø 19,5 mm
12 mm steel ..... max. Ø 14,0 mm
Punching force: ..... max. 218 kN
Operating pressure: ..... 700bar (70MPa)

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hydraulic punching head | LSK120 | 234x174x88 mm | ca. 9,3 kg |
| Rigid case | KKLSK120 | 400x365x135 mm | ca. 1,8 kg |





| Description | Ø | Punch | Stripper |
|---|---|---|---|
| Round hole punch and female dies for solid rails | 6,0 mm | LSR06,0M | LSR06,0S |
| | 6,5 mm | LSR06,5M | LSR06,5S |
| | 7,0 mm | LSR07,0M | LSR07,0S |
| | 8,0 mm | LSR08,0M | LSR08,0S |
| | 8,5 mm | LSR08,5M | LSR08,5S |
| | 9,0 mm | LSR09,0M | LSR09,0S |
| | 10,0 mm | LSR10,0M | LSR10,0S |
| | 10,5 mm | LSR10,5M | LSR10,5S |
| | 11,0 mm | LSR11,0M | LSR11,0S |
| | 12,0 mm | LSR12,0M | LSR12,0S |
| | 12,5 mm | LSR12,5M | LSR12,5S |
| | 13,0 mm | LSR13,0M | LSR13,0S |
| | 13,5 mm | LSR13,5M | LSR13,5S |
| | 14,0 mm | LSR14,0M | LSR14,0S |
| | 14,5 mm | LSR14,5M | LSR14,5S |
| | 15,0 mm | LSR15,0M | LSR15,0S |
| | 16,0 mm | LSR16,0M | LSR16,0S |
| | 17,0 mm | LSR17,0M | LSR17,0S |
| | 18,0 mm | LSR18,0M | LSR18,0S |
| | 18,5 mm | LSR18,5M | LSR18,5S |
| | 19,0 mm | LSR19,0M | LSR19,0S |
| | 19,5 mm | LSR19,5M | LSR19,5S |
| | 20,0 mm | LSR20,0M | LSR20,0S |
| | 21,0 mm | LSR21,0M | LSR21,0S |

Already fan of intercable ?






7

# HYDRAULIC PUMPS

# SERIES CP700

- **Small** - 205 x 290 x 190 mm
- Light - 4,5 kg
- Powerful - 700 bar / LP= 1,2 lit/min. / HP= 0,2 lit/min.

## i-Drive

Several setting possibilities, selection through setting knob.
- hold function (CP700 version only)
- pressure adjustment (CP700 version only)
- selectable piston return

## USB Port

Direct USB-port on the pump allows special settings and detailed reporting of your daily work



## Comfort

Light, compact and robust structure

## Reliable

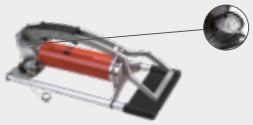
Long lifetime, the first maintenance is not necessary before 20,000 cycles

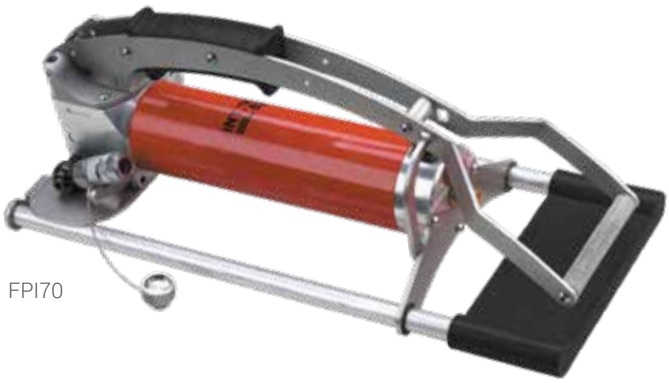
## Powerful

Powerful and replaceable 18V lithium-ion battery with own management controlled by the pump for max. safe and efficient working.

## Resistant

Body made of polyamide reinforced with fibreglass, completely insulating and shock resistant

| | Pump | Operation | Set equipment (pump + ...) | |
|---|---|---|---|---|
| FPI70 | FPI70  | Foot | • Metal case<br>• Pressure gauge | PAGE 204 |
| FPI AS85 70S | FPI70S  | Foot | • Flexible hose 3m<br>• Metal case<br>• Pressure gauge | PAGE 204 |
| FPI70 EC | FPI70 EC  | Foot | • Metal case | PAGE 204 |
| FPI70S EC | FPI70S EC  | Foot | • Flexible hose 3m<br>• Metal case | PAGE 204 |
| CP700 | CP700  | Battery<br>↳ Main adapter available | • Battery and charger<br>• Flexible hose 1,5 m<br>• Remote control 1,5 m<br>• USB-cable<br>• Nylon bag with shoulder strap | PAGE 205 |
| CP700 EC | CP700 EC  | Battery<br>↳ Main adapter available | • Battery and charger<br>• Flexible hose 1,5 m<br>• Remote controle 1,5 m<br>• USB-Cable<br>• Nylon bag with shoulder strap | PAGE 205 |
| ANP24/220 | ANP24/220  | Battery or Mains | • Remote controle 5 m<br>• Power cord 3 m<br>• Shoulder strap | PAGE 206 |
| NP220 | NP220  | Mains | • Remote control 5 m<br>• Power cord 3 m | PAGE 206 |
| 90404 | 90404  | Mains | • Remote control 5 m<br>• Power cord 3 m | PAGE 207 |
| 90418 | 90418  | Mains | • Remote control 5 m<br>• Power cord 3 m | PAGE 207 |
| 90415 | 90415  | Mains | • Remote control 5 m<br>• Power cord 3 m | PAGE 208 |
| 91421 | 91421  | Mains | • Remote control 5 m<br>• Power cord 3 m | PAGE 208 |



FPI70



Pressure gauge and tilting coupling is standard on FPI70 and FPI70s models (not on models "-EC")



FPI70S



FPI70S EC



FPI70 EC
Hose must be ordered seperately



Set FPI70

## FPI70 / FPI70-EC – Foot operated hydraulic pump

**Designed to operate hydraulic tools up to 700bar (70MPa).**

Technical characteristics:
- Compact dimensions
- Lightweight due to use of light alloys and corrosion-resistant materials
- Handy and stable due to a firm fitting pedal and sturdy non slip base
- Automatic two speed device (fast advancing under no-load and slow under load)
- Tilting system for coupler (not on models "-EC")
- Pressure monitoring by oil pressure gauge (not on models "-EC")
- Manual pressure release at any time
- High mounted quick release coupling with dust cap
- Operating pressure: ..... 700 bar (70 MPa)
- Low pressure pump capacity: ..... 18,3 cm³/stroke
- High pressure pump capacity: ..... 2 cm³/stroke
- Amount of oil: ..... 1200 ml
- Operating temperature: ..... -20°C to a +40°C

Tool dimensions:
- FPI70 ..... 570 x 230 x 209 mm
- FPI70S ..... 570 x 230 x 209 mm
- FPI70 EC ..... 545 x 212 x 198 mm
- FPI70S EC ..... 545 x 212 x 198 mm

Tool weight:
- FPI70 ..... 9,6 kg
- FPI70S ..... 10,9 kg
- FPI70 EC ..... 9,6 kg
- FPI70S EC ..... 10,3 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Foot pump | FPI70 | 650 x 240 x 220 mm | 19 kg |
| Set: Foot pump with flexible hose 3 m | FPI70S | 650 x 240 x 220 mm | 21 kg |
| Set: Foot pump EC | FPI70 EC | 650 x 240 x 220 mm | 19 kg |
| Set: Foot pump EC with flexible hose 3 m | FPI70S EC | 750 x 300 x 220 mm | 24 kg |

Accessories see pages 209 - 212
On request special models with different operating-pressures up to a maximum of 850bar (85MPa).

Set equipment FPI70:
- Foot operated pump with oil pressure gauge
- Metal case

Set equipment FPI70S:
- Foot operated pump with oil pressure gauge
- Flexible hose 3 m
- Metal case

Set equipment FPI70 EC:
- Foot operated pump
- Metal case

Set equipment FPI70S EC:
- Foot operated pump
- Flexible hose 3 m
- Metal case



CP700EC

## CP700 - Compact hydraulic pump with battery

**Designed to operate hydraulic tools up to 700bar (70MPa).**

**Technical characteristics:**

- Light, compact and robust structure
- Ergonomic design for right or left handers
- Optional transportation bag with pockets, with a shoulder strap or attached to a belt (optional)
- Manual or automatic return
- Rapid return of piston due to high return capacity
- Free pressure calibration (only model CP700)
- Freely programmable pump (only model CP700)
- Preinstalled standard programs for cutting and crimping
- Maintenance program (only model CP700)
- Possibility to set up maintenance times (only model CP700)
- Electronic sensor pressure control
- High performance lithium ion battery
- Charge indicator on the battery
- Double piston technology for rapid high pressure feed
- Flow range at low pressures < 100 bar: 1.2 lit./min.
- Flow range at pressures up to 700 bar: 0.2 lit./min.
- Operating pressure: ..... 700 bar (70 MPa)
- Power: ..... 200 W
- Battery voltage: ..... 18,0 V DC
- Battery capacity: ..... 3,0 Ah
- Range of use: ..... -20°C / +55°C (integrated cooling system)
- Remote control (1.5 m) two buttons and LED indicator
- Possibility to attach the remote control to the unit with the integrated magnet
- A belt or shoulder strap can be added through a clamp support
- Anti-scratch and shock resistant display protection (only model CP700)
- Current and required pressure visible on display (only model CP700)
- Error indication
- Possibility of reading the curves on the pump (only model CP700) and on PC
- Possibility of reading all the cycles and error indications by USB
- Including software

Tool dimensions: ..... 290 x 190 x 205 mm
Tool weight: ..... 4,5 kg

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Hydraulic pump | CP700 | 480 x 250 x 250 mm | 7,7 kg |
| Set: Hydraulic pump | CP700EC | 480 x 250 x 250 mm | 7,7 kg |

Accessories see pages 209 - 212

On request special models with different operating-pressures up to a maximum of 850bar (85MPa).

**Set equipment:**

- Compact hydraulic pump
- Battery 18 V/3,0 Ah lithium-ion (RA11)
- Battery charger (LG8)
- Flexible high pressure hose – length 1,5 m
- Remote control 1,5 m (CP-F)
- Shoulder strap (TG3)
- USB cable + software
- Comfortable sturdy nylon bag

**Application:**





**Top version CP700 (with display):**



- Selectable piston return
- Hold function
- Free pressure calibration
- Patented cable cutting detection
- Installed cutting / crimping programes
- Freely programmable
- Possibility of reading all cycles and error indications directly on the pump and on the PC by USB

**Standard version CP700EC:**



- Selectable piston return
- Patented cable cutting detection
- Installed cutting / crimping programmes
- Possibility of reading all cycles and error indications on the PC by USB



## ANP 24/220 - Combined electro hydraulic battery and mains pump

Designed to operate hydraulic tools up to 700bar (70MPa).

Technical characteristics:
- Battery-operated or mains-operated
- High pump performance in 2 stages (fast and slow)
- Remote control
- Manual pressure release at any time
- Automatic pressure release when maximum force is achieved
- Engine brake operates when pressure released
- Fitted battery charger with battery condition indicator
- Quick automatic-lock hydraulic connection and undetachable dustcap
- Compact design, light weight
- Pump capacity: 0,4 l/min - 0,7 l/min
- Mains voltage: ..... 230 V (50/60 Hz)
- Cell Voltage: ..... 2 x 12 V
- Motor rating: ..... 360 W
- Protection class: ..... IP43
- Operating temperature: ..... -10°C to +40°C

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Electro hydraulic battery pump | ANP24/220 | 550 x 350 x 180 mm | 20 kg |

Accessories see pages 209 - 212
On request special models with different mains voltage.

Set equipment ANP24/220:
- Electro-hydraulic battery-mains pump
- Remote control with 5m connecting cable
- Power cord 3m
- Carrying shoulder strap with shoulder pads

7



## NP220-1 and NP220-2 mains operated hydraulic pump

Designed to operate hydraulic tools up to 700bar (70MPa).

Technical characteristics:
- Mains-operated
- High pump performance (fast and slow in 2 stages only NP220-2)
- High pump performance in application of large cross-sections and power rails processing
- Protection support
- Remote control
- Oil check by external sensor
- Engine brake operates when pressure released
- Quick automatic-lock connection and undetachable dust cap
- Pump capacity: ..... 0.6 l/min (NP220-1) 0.6 - 1.1 l/min (NP220-2)
- Mains voltage: ..... 230 V (50/60 Hz)
- Motor rating: ..... 750 W
- Protection class: ..... IP54
- Operating temperature: ..... -10°C to +40°C

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Pump 1 stage | NP220-1 | 370 x 185 x 490 mm | 25 kg |
| Pump 2 stage | NP220-2 | 370 x 185 x 490 mm | 25 kg |

Accessories see pages 209 - 212
On request special models (NP220-1; NP220-2) with different mains voltage.

Set equipment:
- Mains-operated hydraulic pump – NP220-1 or NP220-2
- Remote control push-button with 5m connecting cable
- Power cord 3m



Art.-no.: 90404

## Electro-hydraulic 3-cylinder-radial-piston-pump with transport cart

Our electro-hydraulic pumps are delivered completely with an electrical control, pressure control valve, magnet valve, oil sight glass and a 3 meter high-pressure hose. The operating pressure is normally set to 700 bar. The control is effected with a foot pedal. The pedal is equipped with a high-quality 3-point-safety wiring. All our pumps are delivered without cutting and crimping tool.

**The following variants are deliverable:**

- Operating pessure ..... max. 700 bar (70 MPa)
- Operating voltage/pump delivery volume: ..... 230V 50Hz / 0.64 l/min. 3 x 400V 50Hz / 0.82 l/min.
- With transport cart or with rack
- Foot pedal with one switch = version without positioning
- Foot pedal with two switches = version with positioning

The version with positioning should be used at the power rail work station and the hydraulic puncher (catalogue pages xx). The positioning guaranteed a save and point exactly work. We recommend to use the pump (art.-no. 91421) if you buy the power rail work station BLS 120 (page 195). This tool combination ensures you a high precision.

**Further components and special solutions are available on request**

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | **90404** | 31,0 kg |

- Transport cart, with positioning
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 3 x 400V 50Hz
- Delivery rate: ..... 0.82 l/min.

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | **90417** | 31,0 kg |

- Transport cart, with positioning and automatic pressure shutdown
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 3 x 400V 50 Hz
- Delivery rate: ..... 0.82 l/min.



Art.-no.: 90418

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | **90407** | 30,4 kg |

- Transport cart
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 3 x 400V 50 Hz
- Delivery rate: ..... 0.82 l/min.

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | **90413** | 33,0 kg |

- Transport cart, with positioning
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 230V 50 Hz
- Delivery rate: ..... 0.64 l/min.

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | **90418** | 33,0 kg |

- Transport cart
- Nominal capacity: ..... 0.75 kW,
- Voltage: ..... 230V 50 Hz
- Delivery rate: ..... 0.64 l/min.



Art.-no.: 90415

## Electro-hydraulic 3-cylinder-radial-piston-pump with rack

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | 99962 | 24,0 kg |

- Rack, with positioning
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 3 x 400V 50Hz
- Delivery rate: ..... 0.82 l/min.

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | 90406 | 24,0 kg |

- Rack
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 3 x 400V 50Hz
- Delivery rate : ..... 0.82 l/min.



Art.-no.: 91421

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | 90416 | 30,0 kg |

- Rack, with positioning
- Nominal capacity: ..... 0.75 kW
- Voltage: ..... 230V 50Hz
- Delivery rate: ..... 0.64 l/min.

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | 90415 | 24,0 kg |

- Rack
- Nominal capacity: ..... 0.75 kW
- Voltage: 230V 50Hz,
- Delivery rate: ..... 0.64 l/min.

| Description | Order No. | Weight |
|---|---|---|
| Electro-hydraulic 3-cylinder-radial-piston-pump | 91421 | 24,0 kg |

- rack, with positioning,
- nominal capacity: 0.75 kW, with automatical pressure switching-off and connection for end switch (for BLS120), voltage 3 x 400V 50Hz, delivery rate 0.82 l/min.




8

# ACCESSORIES

# ACCESSORIES



Shoulder strap (for hydraulic battery operated tools) - TG2



Shoulder strap for ANP 24/220 - TG1



Shoulder strap for CP700 / CP700-EC - TG3

## Strap

| Description | Order No. | Weight |
|---|---|---|
| Shoulder strap for ANP 24/220 | TG1 | 150 g |
| Shoulder strap (for hydraulic battery operated tools) | TG2 | 90 g |
| Shoulder strap for CP700 / CP700-EC | TG3 | 90 g |



NG3

## Adapter

| Description | Order No. | Weight |
|---|---|---|
| Adapter 18V for mains operation 230V AC/ 115V A | NG3 | 800 g |



RA11



RA12

## Storage batteries

| Description | Order No. | Weight |
|---|---|---|
| Storage battery 18 V / 3.0 Ah Li-Ion | RA11 | 680 g |
| Storage battery 18 V / 1.5 Ah Li-Ion | RA12 | 680 g |
| Storage battery 18 V / 2.1 Ah Li-Ion | RA13 | 680 g |
| Storage battery 18 V / 4.1 Ah Li-Ion | RA14 | 680 g |
| Storage battery 18 V / 5.1 Ah Li-Ion | RA15 | 680 g |



LG8



LGZ3 - Car lighter adapter Version

## Battery charger

| Description | Order No. | Weight |
|---|---|---|
| Battery charger | LG8 | 700 g |
| Vehicle battery charger (12 V source) - 18V | LGZ3 | 580 g |

| Battery charger | Tension | | | | | | Battery | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4,8 V | 7,2 V | 9,6 V | 12,0 V | 14,4 V | 18 V | RA 4 | RA 5 | RA 6 | RA 7 | RA 9 | RA 10 | RA 11 | RA 12 | RA 12 | RA 13 | RA 14 |
| LG8 | | | | | | • | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ |
| LGZ3 | | | | | | • | | | | | | | ✔ | ✔ | ✔ | ✔ | ✔ |



Set PP130-C

## Flexible hose

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hose without armour | SCH1,5 | 1,5 m | 0,60 kg |
| | SCH3 | 3 m | 1,19 kg |
| | SCH5 | 5 m | 1,45 kg |
| | SCH10 | 10 m | 2,29 kg |
| Hose with armour | SCHA3 | 3 m | 1,19 kg |
| | SCHA5 | 5 m | 1,7 kg |
| | SCHA10 | 10 m | 3,8 kg |

- Flexible High Pressure Hoses for connecting heads to pumps
- Cannot be used with insulated cable shears
- Quick male and female automatic locking connections mounted on the ends and with related protective plugs




Battery 24V - EA24-1

## Storage battery for hydraulic pump

| Description | Order No. | Weight |
|---|---|---|
| Storage battery for ANP24/220 (24V) ANP24/220) | EA24-1 | 4,5 kg |



## Voltage transformer (for hydraulic pump ANP24/220)

| Description | Order No. | Weight |
|---|---|---|
| Voltage transformer 12 V DC to 230 V AC (50/60Hz) | SW12/230 | 0,8 kg |

- to power the hydraulic pump ANP24/220 from an external12V-source



## Remote control (for pump CP700/CP700-EC)

| Description | Order No. | Weight |
|---|---|---|
| Remote control, 1,5 m | CP-F | 150 g |
| Remote control, 3 m | CP-F3 | 230 g |
| Remote control, 5 m | CP-F5 | 320 g |

# ACCESSORIES



Foot operated switch – FS01



Foot operated switch – FS02

## Electric bus bar processing units

| Description | Order No. | Weight |
|---|---|---|
| Foot operated switch for ANP 24/220, NP 220 and BLS | FS01 | 1,6 kg |
| Foot operated switch for CP700 /CP700-EC | FS02 | 4,2 kg |



## Remote control extension Cable

| Description | Order No. | Weight |
|---|---|---|
| Remote control extension cable, 5 m | KABEL5 | 120 g |

• Extension cable for hand or foot operation



## USB cable (for CP700/CP700-EC)

| Description | Order No. | Weight |
|---|---|---|
| USB cable, 2 m | CP-USB | 70 g |





Bag for CP700 / CP700-EC - TTCP01



Accessory bag - TTPZ01

## Accessory bags

| Description | Order No. | Weight |
|---|---|---|
| Bag for CP700 / CP700-EC | TTCP01 | 1,2 kg |
| Accessory bag for hydraulic tools | TTPZ01 | 1,0 kg |

• for hydraulic hose, storage battery and other accessories



# ELECTROTECHNICAL EQUIPMENT 9





## Insulated D8mm pin

Designed to connect up a variety of electrotechnical equipment (for example: Shunt devices, current tappings, connection cables, etc.)

**Technical characteristics:**
- For application on contacts with hole diameter 8 mm (e.g. insulated terminals D8 mm, perforated insulation terminals or terminal strips)
- Spreader pin can be spread open up to a Ø of 8.5 mm
- Contact protection of the contact pin by means of a springy insulating sleeve
- Clamping device for connecting the conductor (max. 35 mm²) inside the pin
- Identification of terminals with phase colour coding
- Elbow form
- Protection against short circuits 8kA for 0,2 sec. or 1,3kA for 60 sec.
- For currents up to 200A for 60 min. or 250A for 15 min.
- Nominal voltage up to 600V AC / DC (50-60 Hz)
- Slip protection according to EN CEI 60900

**Standards:**
- EN/CEI 60900
- EN/CEI 61010-2-31 (if applicable)
- EN/CEI 10020

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Pin D8 black neutral | 21011 | 110x105x30 mm | 160 g |
| Pin D8 grey R | 21014 | 110x105x30 mm | 160 g |
| Pin D8 brown S | 21013 | 110x105x30 mm | 160 g |
| Pin D8 black T | 21012 | 110x105x30 mm | 160 g |
| Pin D8 blue N | 21015 | 110x105x30 mm | 160 g |



## Connection cable with D8mm pin

Suitable for bridging a phase under load in LV systems (e.g. replacing / changing fuses, Connecting /disconnecting lines, etc.).

**Technical characteristics:**
- Connection by means of insulated spreader pins D8
- Flexible cable with double insulation according to IEC 228 standards
- Cable length 3 m
- Rated voltage of the cable up to U/U0 1.8 /3 kV
- Designed for a load of 200A for 60 min. or 250A for 15 min.
- Rated voltage up to 600V AC / DC (50-60Hz)
- Short-circuit strength 8kA for sec. or 1.3kA for 60 sec.

| Description | Order No. | Color/Descrip. | Cable cross sect. |
|---|---|---|---|
| Connection cable | 21195 | black / L3 | 25 mm² |
| Connection cable | 21192 | blue / N | 25 mm² |
| Connection cable | 21196 | brown / L2 | 25 mm² |
| Connection cable | 21197 | grey / L1 | 25 mm² |

**Set equipment:**
- Connection cable - 2119...
- Strudy case

Other lenghts on request



Strudy case - AB4712



Clamp 10 - 95 mm² - 2103 1



Clamp 70 - 240 mm² - 2103 4



Phases identified



Sturdy case - 2103 0

## Insulated perforation clamp

Designed to connect up a variety of electrotechnical equipment (for example: Shunt devices, current tappings, connection cables, etc.)

Technical characteristics:
- Connection by perforation of the insulating covering
- Size 10 - 95 for NS cables from 10 to approx. 95 mm² (outer diameter max.16 mm)
- Size 95 - 240 for NS-cable up to 240 mm²
- **Note:** Maximum thickness of the insulation wall 3 mm
- Shock protection for the perforating point by spring loaded insulating sleeve
- Identification of terminals with phase colour coding, definable by grip rotation
- Nominal voltage up to 600V AC / DC (50-60Hz)
- Insulation and slip protection based on EN / IEC 60900: 2004
- Contact protection based on DIN EN 61010-034
- Connection socket D4mm according to DIN EN 61010-034 designed for one load by max. 16A (see picture D4)
- Connection socket D8 designed for a load of 200A for 60 min. or 250A 15 min.
- Rated voltage up to 600V AC / DC (50-60Hz)
- Slip protection according to EN CEI 60900

Standards:
EN/CEI 60900
EN/CEI 61010-2-31
EN/CEI 10020

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set 10-95 | **21030** | 200x170x75 mm | 878 g |
| Insulated perforation clamp 10-95 | **21033** | 175x35x42 mm | 187 g |
| Set 95-240 | **21040** | 200x170x80 mm | 1300 g |
| Insulated perforation clamp 95-240 | **21034** | 185x38x50 mm | 300 g |

Set equipment:
- 4 insulated perforation clamps
- Sturdy case

D4



Socket D4 mm for current take-off and electric measurements

D8



Socket D8 mm with D8 Intercable plug for shunts and current take-off



## Set of D4mm adapter for measurement kit

Used to connect up test or measurement instruments and equipment on hex or cylindrical heads and threaded bars or pins.

Technical characteristics:
- D4mm contact hole in compliance with standards EN CEI 61010-2-31
- Permanent use up to 32A
- Insulated terminals with 600V/Cat. III operating voltages

Standards:
EN/CEI 60900
EN/CEI 10020
EN/CEI 61010-2-31

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Set: Measurement kit D6 | **22305** | 345x265x65 mm | 1,8 kg |
| Case: empty | **2209080** | 345x265x65 mm | - |

Insulated clamp D4 mm
**2130 003**



Insulated clamp D4 mm
**2130 002**



Insulated clamp D4 mm
**2130 001**



Insulated clamp D4 mm
**2130 005**



Insulated clamp D4 mm
**2130 004**





Model Version A



Model Version B

## Set adapters D8 mm for electrotechnical equipment

Adapter for current shunts and electrical measurements (e.g. shunts, current take-off devices, connection cables, measuring instruments, etc.) from hexagonal head bolts and socket head screws, studs, bolts and cylindrical plugs.

**Technical characteristics:**
- Connect the adapters or inserts using an insulated attachment handle
- Current capacity 200A for 60 min., 250A for 15 min.
- Nominal voltage up to 600 V AC / DC (50-60 Hz)

| Description | Order No. | Dimensions |
|---|---|---|
| Set adapters with D6 (Vers. A) 1 pol. | **22202** | 320x115x45 mm |
| Set adapters with D6 (Vers. A) 2 pol. | **22204** | 320x115x45 mm |
| Set adapters with D6 (Vers. B) 3 pol. | **22206** | 230x210x55 mm |
| Set adapters with D6 (Vers. B) 4 pol. | **22208** | 230x210x55 mm |
| Set adapters with D6L (Vers. A) 1 pol. | **22212** | 320x115x45 mm |
| Set adapters with D6L (Vers. A) 2 pol. | **22214** | 320x115x45 mm |
| Set adapters with D6L (Vers. B) 3 pol. | **22216** | 230x210x55 mm |
| Set adapters with D6L (Vers. B) 4 pol. | **22218** | 230x210x55 mm |
| Version A empty: Transparent case | **D990112** | 320x115x45 mm |
| Version B empty: Rigid case | **AB22208** | 230x210x45 mm |

- Short circuit protection 8 kA for 0,2 sec. or 1,3 kA for 60 sec.
- Slip protection according to IEC 60900

**Set equipment: (*depending on the number of poles)**
- 1 insulated grip - 2101 1
- * insulated clamp - 2202 1
- * Hex tightening inserts 13/17/19 mm - 2203 0...
- * Standard tightening insert D6 - 2203 106 or 2104 106
- Rigid case A or B



Insulated grip D8 mm - 2201 1

1000V EN/IEC60900:2004



Allows adjustment of the connection torque of 10Nm via a torque wrench



Insulated D8 mm clamp - 2202 1




## Protection ultra-rapid AC waR

• For screw fuse holder Item No. 073326

| Description | Order No. | Dimensions | Tension |
|---|---|---|---|
| Protection ultra-rapid AC aR | 07343081 | 27 x 60 mm | 12 A |
| | 07343083 | 27 x 60 mm | 32 A |
| | 07343086 | 27 x 60 mm | 63 A |
| | 07343087 | 27 x 60 mm | 100 A |
| | 07343088 | 27 x 60 mm | 125 A |
| | 07343089 | 27 x 60 mm | 160 A |
| | 07343090 | 27 x 60 mm | 200 A |
| | 07343091 | 27 x 60 mm | 250 A |



## Insulated grip

• For assembly of insulated terminals D4mm/D8mm
• To standards EN/IEC 60900

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulated grip | 22011 | 180 x 55 mm | 164 g |



## Insulated D4mm clamp for electrical measurements

• Connector D4mm to standards DIN EN 61010-031 for maximum current 16A
• Nominal voltage up to 600V AC / DC (50-60Hz)
• Over-volt protection category III

| Description | Order No. | Color | Weight |
|---|---|---|---|
| Insulated clamp D4 mm | 2130001 | black | 62 g |
| Insulated clamp D4 mm | 2130002 | green | 64 g |
| Insulated clamp D4 mm | 2130003 | red | 63 g |
| Insulated clamp D4 mm | 2130004 | blue | 64 g |
| Insulated clamp D4 mm | 2130005 | yellow/green | 62 g |



## Standard D6 tightening insert

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screws
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insert D6 | **2203106** | 21 x 19 mm | 18 g |



## Hex tightening insert SW8-SW22 for insulated terminals

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screw
- Current load 200A for 60 min. or 250 A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.

| Description | Order No. | Hex wrench | Weight |
|---|---|---|---|
| Insert SW8 | **2203008** | SW8 | 16 g |
| Insert SW10 | **2203010** | SW10 | 16 g |
| Insert SW11 | **2203011** | SW11 | 16 g |
| Insert SW13 | **2203013** | SW13 | 16 g |
| Insert SW14 | **2203014** | SW14 | 12 g |
| Insert SW16 | **2203016** | SW16 | 14 g |
| Insert SW17 | **2203017** | SW17 | 14 g |
| Insert SW18 | **2203018** | SW18 | 16 g |
| Insert SW19 | **2203019** | SW19 | 28 g |



## Tightening insert for allen screws

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screw
- Current load 200A for 60 min. or 250 A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec..

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Insert I-S8 | **2208080** | SW 8 | 35 x 20 mm | 24 g |



## Insulated clamp D8mm

- For shunts, current take-off devices, connection cables, etc.
- Connection socket D8mm
- Max. current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.
- Nominal voltage up to 600V AC / DC (50-60Hz)

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulated clamp D8 mm | **22021** | 45 x 39 mm | 60 g |



## Insert for hexagonal socket screws with insulated shank

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screws
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection: SW 5 = 5kA for 0,2 sec.
  SW 6 = 6kA for 0,2 sec.
  SW 10 = 7kA for 0,2 sec.
- Shank insulation in plastic material

| Description | Order No. | Size | Dimensions | Weight |
|---|---|---|---|---|
| Insert I-S5L | 2208050 | SW 5 | 56 x 20 mm | 30 g |
| Insert I-S6L | 2208060 | SW 6 | 56 x 20 mm | 34 g |
| Insert I-S10L | 2208100 | SW 10 | 56 x 20 mm | 40 g |



## Insert for D8mm holes

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the
- socket head screws
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 7kA for 0,2 sec.

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Adapter D8 | 2209080 | 8 mm | approx. 40 g |



## Hex cap nut SW13

- Used to make contact with threaded bolts M8, M10, M12 using SW13
- To allow correct assembly and disassembly, use an adapter for cap nuts and an insulated handle
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.

| Description | Order No. | Inside thread | Weight |
|---|---|---|---|
| Hex cap nut SW 13-M8 | 2206008 | M8 | 10 g |
| Hex cap nut SW 13-M10 | 2208010 | M10 | 8 g |
| Hex cap nut SW 13-M12 | 2208012 | M12 | 4 g |



## Insulated hex cap nut SW13

- Use exclusively in combination with isolated handle (Item No. 22011) and Intercable cap nut SW13
- To fasten the SW13 cap nut on threaded rods and bolts
- Electrocution protection through plastic bushing

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Hex cap nut | 22051 | - | 38 g |



## Magnetic adapter Ø 6,6 mm

Suitable for connecting measuring analyzers, e.g. for applications on machines, contact with magnet.

Technical characteristics:
- Overvoltage category 1000V CATIII / 600V CAT IV
- Completely isolated from touch
- Connection of measuring device by means of D4 mm socket
- Maximum current carrying capacity 4A

Standards:
IEC 61010-031

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Magnet adapter | DA606/6,6 | 60x50x16 mm | approx. 18 g |



Clamp 10 - 95 mm² - 2105 0 ⚠1000V



Clamp 50 - 300 mm² - 2105 1 ⚠1000V

## Perforation alligator clip

Suitable for measuring voltage by means of perforation directly on the cable.

Technical characteristics:
- Connection of measuring tips by means of a hole, lockable via a fixing screw
- Low perforation of the insulation on the cable

Standards:
EN/CEI 61010-031

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Clamp 10 - 95 mm² | 21050 | - | approx. 44 g |
| Clamp 50 - 300 mm² | 21051 | - | approx. 52 g |

Example of use:







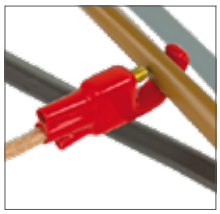


## PEN - Clamp compact for rails up to 10 mm

Very narrow insulated version for attaching to the PEN rail. Due to the clamping range up to 10 mm, it is ideally suited to the current rails.

| Description | Order No. | Weight |
|---|---|---|
| PEN - Clamp compact for rails up to 10 mm | 07311102 | 100 g |







## Insulated perforation clamp up to 240 mm²

Very slim and compact design, especially for cramped connection conditions in the distribution cabinet or house connection box.

| Description | Order No. | Weight |
|---|---|---|
| Insulated perforation clamp up to 240 mm² | 073474 | 140 g |



## Adapter extension D8

Suitable as a connection element for bridging devices and current collecting devices, especially in hard-to-reach places in various cable distribution systems.

Technical characteristics:
- For currents of 200A for 60 min and/or 250A for 15 min
- Nominal voltage 600 V AC/DC (50-60 Hz)
- Protection against short circuit 8kA/0,2 sec.
- Extra flexible cable with double insulation, cable cross section 35 mm²
- Socket D8mm for connecting the spreading systems (ship lifting devices)
- Adapter D8 for holding all clamping inserts
- Can only be used with insulated handle - 2201 1

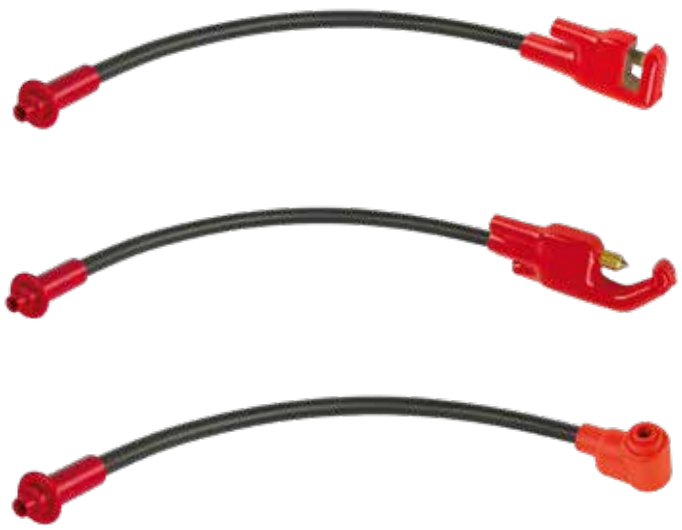
| Description | Order No. | Lenght | Weight |
|---|---|---|---|
| Adapter extension | 21211 | 404 mm | ca. 24 g |



## Flexible connections for temporary connections 35 mm²

Application range:
- Input for current loads 63 amps at 230V AC
- Connection via insulated screw connector for 50 mm²

| Description | Order No. | Cable length |
|---|---|---|
| Earthing screw cap E27 with cable and screw connector | 073333 | 400 mm |
| Earthing screw cap E33 with cable and screw connector | 073334 | 400 mm |



## Flexible connections for temporary connections 35 mm²

Application range:
- For shunt device, current collection set and connection cable
- For current loads 250A for 3 min or 150A continuous load at 230V AC
- Connection via socket for insulated expansion pin D8 mm
- Fastening with hexagon socket screw SW4 mm to PEN and perforation clamp (Allen screwdriver SW4 Nr.: 2115304

| Description | Order No. | Cable length |
|---|---|---|
| Isolated PEN terminal with cable and D8 connector for expanding pin | 07332302 | 400 mm |
| Insulated perforation clamp and D8 connection for expanding pin | 073323 | 400 mm |
| Insulated terminal D8 mm with cable and D8 connection for expansion pin | 073322 | 400 mm |



## Flexible connections for temporary connections 35 mm²

Application range:
- For shunt device, current collection set and connection cable
- Taps with internal fuse Ultra Rapid AC 660V aR for current loads 250A for 3 min. or 150A continuous load at 230V AC
- Connection via socket for insulated expansion pin D8 mm
- Fuse must be ordered separately (No. 073430xx)

| Description | Order No. | Cable length |
|---|---|---|
| Screw securing holder with terminal D8 mm | 073325 | 400 mm |



## Flexible connections for temporary connections 35 mm²

Application range:
- Connection cable (bypass) for connecting phase - phase or PEN - PEN
- For cable distribution systems for temporary bridging
- Taps with internal fuse Ultra Rapid AC 660V aR for current loads 250A for 3 min. or 150A continuous load at 230V AC
- Connection via D8m jack for adapter system for frame, clamp and V terminals Current load 250A for 15 min., 200A 60 min. and continuous load 150A, nominal voltage up to 600V AC / DC (50 - 60 Hz)
- Fuse must be ordered separately (No. 073430xx)

| Description | Order No. | Cable length |
|---|---|---|
| Connecting cable with 2 perforation clamps and screw securing holder | 073324 | 1500 mm |
| Connecting cable with 2 perforation clamps | 073327 | 1500 mm |
| Connection cable with 2x D8 terminal 35 mm² and screw fuse holder | 073468 | 2000 mm |



## Current tapping device 220V

Designed for two-pole tapping of currents up to 16A to power electrical equipment.

**Technical characteristics:**
- Protection contact sockets IP44, 2x16A-230V
- Rubber cover insulation grade IP44
- 2 connection cables 16 mm², lenght 1500 mm
- Connection cable with double insulation; nominal voltage U/U0 1,8/3kV
- Overload switch 16A characteristic C, short circuit current 25kA
- Differential switch 0,03A
- Nominal voltage 230V AC / DC (50-60Hz)
- Short circuit protection 8kA for 0,2 sec or 1,3kA for 60 sec

**Set equipment:**
- Current tapping device
- Plastic case to contain the device housing

**Standards (Housing):**
- EN 61009
- EN 60493/4
- IEC 309

A= with pin



B= with bush cable terminal



C= with PEN connection terminal



| Description | Order No. | Connection | Weight |
|---|---|---|---|
| Current tapping device | 2320212 | 2 x A | approx. 4,8 kg |
| Current tapping device | 2320213 | 2 x B | approx. 4,8 kg |
| Current tapping device | - | A + C | approx. 4,8 kg |
| Current tapping device | - | B + C | approx. 4,8 kg |





## Current tapping device 380V/16A three phase current

4 pole device for current take-off up to 16A for supply of electro-technical device.

Technical characteristics:
- 5 pole CEE three-phase sockets (3pol + N + PE) 380V/16a IP44
- Rubber cover protection grade IP44
- 4 connection cables 16 mm², length 1500 mm
- Connection cable with double insulation; nominal voltage U/U0 1,8/3 kV
- Overload switch 16A characteristic C, short circuit current 25 kA
- Differential switch 0,03A
- Nominal voltage 380/400V AC / DC (50-60Hz)
- Short circuit protection 8 kA for 0,2 sec. or 1,3 kA for 60 sec.

Set equipment:
- Current tapping device
- Plastic case to contain the device housing

Standards (Housing):
- EN 61009
- EN 60493/4
- IEC 309

| Description | Order No. | Dimensions | Connection | Weight |
|---|---|---|---|---|
| Current tapping device | 2208060 | 500x380x190 mm | 3xB + 1xC | approx. 8 kg |



## Single-pole Shunt device

For opening and closing circuit breaker bridges in lines under load in low voltage systems (e.g. to replace fuses, connect/disconnect electric connections etc).

Technical characteristics:
- Red LED to signal polarity inversion
- Connection by insulated plug D8mm
- Cover protection grade IP44
- Connection cable 16 mm2, Length 1500 mm
- Connection cable with double insulation; nominal tension U/U0 1,8/3 kV
- With fixed overload cut-out level
- Nominal automatic switch current 160A; short circuit current 25 kA,
- Current load 160A for 30 min.
- Nominal tension max. 600V AC / DC (50-60Hz)
- Short circuit protection 8 kA for 0,2 sec. or 1,3 kA for 60 sec.

Set equipment:
- Single-pole Shunt device
- Plastic case to contain the Shunt device

Assembly option accessories for insulated terminal D8 + dies or insulation perforation terminal see page .xxx

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Shunt device | 21201160 | 430x310x120 mm | approx. 5,1 kg |





## Multi-pole Shunt device

Suitable for 3-pole bridging of external conductors under load in LV systems up to 230 / 400V AC - 50Hz (e.g. replacement / replacement of intact fuses or fuse strips, connection / disconnection of cables, etc.) without interrupting the power supply.

Technical characteristics:
- Protection against polarity inversion for correct phase connection
- Digital counter for number of operation cycles
- Connection by insulated pin D8 mm
- Cover protection grade IP44
- Connection cable 35 mm², length 6x1.800 mm
- Connection cable with double insulation, nominal tension U/U0-470/750V
- Circuit-breaker T3N-250-TMD (ABB) with thermomagnetic overcurrent release (TMD) 3-pole, rated current 200A. Rated operational voltage 380-415V AC, breaking capacity ICU 36kA, utilization category A acc.
- Max current load (maximum duration of use) of the bridging device: Current load (maximum operating time) of the bridging device: 200A for 60 minutes or 250A for 15 minutes at an ambient temperature of -5° C / + 40° C
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.
- Integrated meter in the electronics for determining the maintenance intervals
- Display showing the phases (load supply side), faults, hazard warnings and prompts
- Push button green: Push button with integrated green light which signals that everything has been connected correctly and that the bridging can now be started by activating the circuit breaker
- Button: to acknowledge the buzzer in case of error message (approx. 5 sec.), as well as to acknowledge the message "Expiry of max. recommended circuits"
- LED red: Attention error, see display.
- Buzzer: electronic buzzer which sounds in the event of a fault during the bridging (if contacting of a spreader pin faulty, voltage drop)
- Electronic polarity reversal protection

Set equipment:
- Three-pole bridging device with electronic reverse polarity protection
- Plastic case to contain the Shunt device

Assembly option accessories for insulated terminal D8 and dies or insulation perforation terminal: see page 215.

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Shunt 3-pole | 212703250 | 430x310x200 mm | approx. 19,1 kg |



# PERSONAL PROTECTIVE EQUIPMENT

10





## Electric arc flame and heat protection clothing 7kA

The electric arc protection clothing are usable in low voltage areas in order to protect people against the danger of an electric arc.

| Description | Order No. | Size | Weight |
|---|---|---|---|
| Electric arc flame and heat protection safety jacket | AI0301 | 44 | 690 g |
| | AI0302 | 46 | 750 g |
| | AI0303 | 48 | 950 g |
| | AI0304 | 50 | 980 g |
| | AI0305 | 52 | 860 g |
| | AI0306 | 54 | 900 g |
| | AI0307 | 56 | 930 g |
| | AI0308 | 58 | 1130 g |
| | AI0309 | 60 | 1150 g |
| | AI0310 | 62 | 990 g |
| Electric arc flame and heat protection safety trousers | AI0401 | 44 | 560 g |
| | AI0402 | 46 | 600 g |
| | AI0403 | 48 | 670 g |
| | AI0404 | 50 | 870 g |
| | AI0405 | 52 | 710 g |
| | AI0406 | 54 | 720 g |
| | AI0407 | 56 | 750 g |
| | AI0408 | 58 | 940 g |
| | AI0409 | 60 | 970 g |
| | AI0410 | 62 | 800 g |

Other sizes available on request

**Tested and produced according following norms:**
- UNI EN 340:2004
- UNI EN 11612/09 A1B1C1
- UNI EN 1149-5:2008
- IEC 61482-2/09
- IEC 61482-1-2/08
- Material: 87% cotton, 12% nylon, 1% antistatic fiber
- Colour: blue royal

1000V IEC 60900

- UNI EN 340:2004
- UNI EN 11612/09 A1B1C1
- UNI EN 1149-5:2008
- IEC 61482-2/09
- IEC 61482-1-2/08





## Safety vest 4kA

Appropriate for wearing over electric arc flame and heat protection clothing.

| Description | Order No. | Size | Weight |
|---|---|---|---|
| Safety vest | AI0701 | M | xx g |
| | AI0702 | L | xx g |
| | AI0703 | XL | xx g |
| | AI0704 | XXL | xx g |

- High visibility
- Covered zipper closure
- Left breast pocket with Velcro® closure and flap
- Two side pockets with covered zipper closure
- Encircling, reflective stripes, height 7 cm

**Tested and produced according to the following norms:**
- UNI EN ISO 13688:2013
- UNI EN ISO 1149-5:2008
- UNI EN ISO 20471:2013 (cl. 2)
- UNI EN ISO 11612 A1A2B1C1E1
- UNI EN ISO 13034 tipo 6
- IEC 61482-2/09 4kA (cl. 1)
- Materials: 87% cotton, 12% nylon, 1% conductive fiber
- Color: bright yellow

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- UNI EN ISO 13688:2013
- UNI EN ISO 1149-5:2008
- UNI EN ISO 20471:2013 (cl. 2)
- UNI EN ISO 11612 A1A2B1C1E1
- UNI EN ISO 13034 tipo 6
- IEC 61482-2/09 4kA (cl. 1)

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EN 345
EN 50321
VDE 0680 part 1



## Insulated electrical safety boots

| Description | Order No. | Size | Weight |
|---|---|---|---|
| Electrical safety boots | 661341 | 41 | 2,2 kg |
| | 661342 | 42 | 2,3 kg |
| | 661343 | 43 | 2,4 kg |
| | 661344 | 44 / 45 | 2,5 kg |
| | 661346 | 46 | 2,7 kg |
| | 661347 | 47 | 2,8 kg |

- Tested and produced according to EN 345 / EN 50321
- Safety Boots with steel toe cap
- Legs and soles are resistant to oil, petrol, grease, alkaline solution and acid complying with VDE 0680 Part 1
- Colour: Shaft white, sole: blue



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EN 60903 / IEC 903
VDE 0682 part 311

## Insulated electrical safety gloves

| Description | Order No. | Operating Voltage | Test Voltage | Thickness | Size |
|---|---|---|---|---|---|
| Safety gloves class 00 | AV4711 | 500 V | 2.500 V | 0,5 mm | 8 |
| | AV4712 | 500 V | 2.500 V | 0,5 mm | 9 |
| | AV4713 | 500 V | 2.500 V | 0,5 mm | 10 |
| Safety gloves class 0 | AV4720 | 1.000 V | 5.000 V | 1 mm | 8 |
| | AV4721 | 1.000 V | 5.000 V | 1 mm | 9 |
| | AV4722 | 1.000 V | 5.000 V | 1 mm | 10 |
| Safety gloves class 1 | AV4731 | 7.500 V | 10.000 V | 1,35 mm | 9 |
| | AV4732 | 7.500 V | 10.000 V | 1,35 mm | 10 |
| Safety gloves class 2 | AV4741 | 17.000 V | 20.000 V | 2 mm | 9 |
| | AV4742 | 17.000 V | 20.000 V | 2 mm | 10 |
| Safety gloves class 3 | AV4750 | 26.500 V | 30.000 V | 2,6 mm | 9 |
| | AV4751 | 26.500 V | 30.000 V | 2,6 mm | 10 |

- Tested and produced according to EN 60903 / IEC 903, VDE 0682 part 311
- For work on live MV/LV parts
- Material: natural latex
- Length: 360mm
- Smooth inside/outside
- Color: beige



CE 1000V IEC 60900

EN 60903 / IEC 903
EN 61482-1-2
VDE 0682 part 311

## Insulated electrical arc 7kA protection gloves

| Description | Order No. | Operating Voltage | Test Voltage | Size |
|---|---|---|---|---|
| Gloves class 0 | **AV4701** | 1000V - 7kA | 5.000 V | 8 |
| Gloves class 0 | **AV4702** | 1000V - 7kA | 5.000 V | 9 |
| Gloves class 0 | **AV4703** | 1000V - 7kA | 5.000 V | 10 |

- Tested and produced according to
  norm EN 61482-1-2 / class II (resistant to electric arc 7kA/0,5 seconds)
  norm EN 60903 / class 0 (suitable to work under voltage 1000 V)
  VDE 0682 part 31
- Mechanical protection
- Material: natural latex
- Length: 360 mm
- Color: red



1000V IEC 60900



## Safety fuse (NH fuse) withdrawal glove

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Withdrawal glove | **659001** | 385x220 mm | 460 g |
| Withdrawal glove long | **659004** | 445x220 mm | 460 g |
| ↳ Leather cover | **659302** | 360x220 mm | 210 g |
| ↳ Safety fuse hold. | **659500** | 40x125 mm | 250 g |

The fuse withdrawal glove is suitable for removing or fitting fuses or other pieces of equipment such as earthing and short circuit protection devices, dummy fuse components etc. to protect the operator's hand and lower part of the arm. The operators limbs are under severe risk from the effects of power arcing.

- For removal of NH fuses sizes 00 - 3



## Shockproof resin container

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Resin container | **AB4700** | 420x170x50 mm | 350 g |

- To contain and protect insulated gloves



## Nylon case

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Nylon case | **AB4710** | 380x170x40 mm | 170 g |

- To carry insulated gloves at the belt



## Pump for testing insulated gloves

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Pump | 631800 | 140 x Ø -130 mm | 800 g |

- To inflate insulating gloves and check for any leaks.
- Material: thermoplastic resin, light alloy, anti-oxidation metal and other equivalent material.



## Anti–perspiration gloves

| Description | Order No. | Size | Weight |
|---|---|---|---|
| Gloves | 631000 | Single | 30 g |

- Inner glove for insulating gloves to absorb skin perspiration
- Material: highly elastic interlock cotton
- Color: white



EN 420
EN 388

## Protective gloves

| Description | Order No. | Size | Weight |
|---|---|---|---|
| Protective gloves | AV4771 | 9 | 200 g |
| Protective gloves | AV4772 | 10 | 200 g |
| Protective gloves | AV4773 | 11 | 200 g |

- Tested and produced according to EN 420 / EN 388
- Overglove to protect the insulating glove.
- Material: water-repellent silicone-treated grain leather

1000V IEC 60900

400V AC



EN 50362
EN 397

## Safety helmet for electricians

| Description | Order No. | Color | Weight |
|---|---|---|---|
| Helmet | AV9305 | white | 305 g |

- Tested and produced accorind to EN 50362 / EN 397
- Adjustable headband
- Material: polyethylene
- Color: white



## Visor for safety helmet

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Visor | AV9306 | 395 x 240 mm | 300 g |

- Face screen to protect against electric arcs
- Shell: polycarbonate
- Protection against UV rays and short circuit



EN 166

## Safety goggles

| Description | Order No. | Weigth |
|---|---|---|
| Safety goggles | 666000 | 27 g |

- Tested and produced according to EN 166 3-1.21F
- Light weight and comfortable
- Clear scratch-resistant spectacle glass
- Modern design



1000V IEC 60900

400V AC

EN 397
VDE 0680 part 1

## Safety helmet with built-in visor for electricians

| Description | Order No. | Color | Weight |
|---|---|---|---|
| Safety helmet | AV9303W | white | 740 g |
| Safety helmet | AV9303R | red | 740 g |

- Tested and produced according to EN 397, VDE 0680 part 1
- Protective helmet with built-in visor for working under live LV electrical systems
- Suitable for work on live parts
- Protection against electric arc
- Built-in visor: 1.2mm thick
- Adjustable headband from size 52 to 66 (rack-adjustment), neck strap with Velcro® closure
- Helmet material: polyethylene
- Visor material: scratchproof polycarbonate
- Color: white, red



1000V

## Safety helmet with built-in visor for electricians 7kA

| Description | Order No. | Color | Weight |
|---|---|---|---|
| Safety helmet | 662555 | white | 740 g |

- The safety helmet for electricians is a helmet constructed according the current insights of head protection development, which was designed especially for professional use in live electrical systems.
- The helmet has a visor that completely covers the face and can be retracted completely into the double-wall helmet as needed.
- The helmet has a single-handed screw cap that allows the modification of the headband without requiring the wearer to remove the helmet.
- With built-in, retractable visor that provides complete protection for the entire face area
- For protection against electric arcs up to 7 kA when working on live electrical systems
- Helmet material: HD polypropylene, UV stabilized, white
- Double wall helmet for increased protection and for storing the built-in visor and its safety cloth
- Interior helmet equipment: Adjustable 6-point textile band for all head sizes, sweatband, adjustable 4-point chin strap
- Visor made of high-impact, tinted polycarbonate with infrared filter and special surface treatment against fogging
- Aramid-base safety cloth, orange
- Minimum durability: 5 years
- Norms:
- Visor: EN 166, 170, ASTM F2178,GS-ET-29/ IEC 61482-1-2
- Class 2: 7kA electric arcs / 0.5 sec. light transition, 75% (Class 0 in accordance with GS-ET-29)
- Helmet: EN 397, EN 50365, ANSI Z89.1
- Safety cloth: IEC 61482-1-2 Class 2, ASTM F1959, 1506 NFPA 70E
- Identification, Visor: 2C-1,2 XXX 1 B 8-2-0 3 CE 0497



1000V

## Rubber insulating matting

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating matting | **AV4301** | 1 x 1 m | ca. 4,6 kg |
| Insulating matting | **AV4303** | 3 x 1 m | ca. 12,0 kg |
| Insulating matting | **AV4310** | 10 x 1 m | ca. 43,8 kg |

Other dimensions available on request

- To insulate high-risk zones when making joints on LV-MV cables in trenches
- Non-slip surface
- Thickness: 4mm – 1.20g/cm2 (53 Shore)
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray



IEC 61111:2009
VDE 0680 part 1

1000V

## Rubber insulating matting

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating matting | **642415** | 1,5 x 1 m | 5,0 kg |
| Insulating matting | **642410** | 10 x 1 m | 33,5 kg |

Other dimensions available on request

- Tested and produced according to VDE 0680 part 1
- To insulate high-risk zones when making joints on LV-MV cables in trenches
- Non-slip surface
- Thickness: 3mm – 166g/cm2 (56 Shore)
- Material: Chloroprene mixture
- Resistance: Mechanical Puncture, Oil, Acid, Slip and Ageing
- Flame Retardancy
- Color: gray



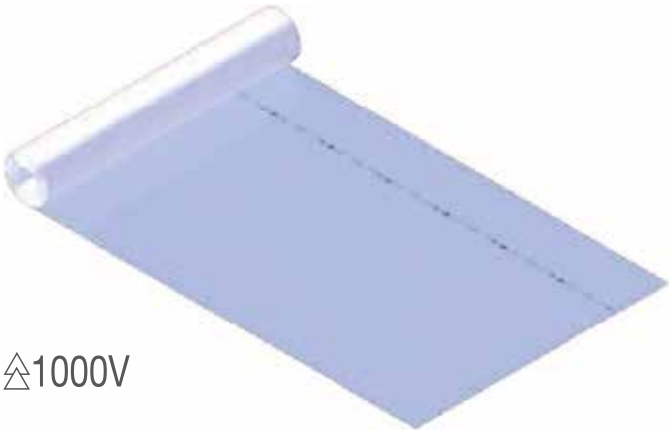
1000V

## Rubber cover material

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Rubber cover material | **AV4102** | 0,60 x 0,60 m | ca. 0,7 kg |
| Rubber cover material | **AV4104** | 1 x 1 m | ca. 2,1 kg |
| Rubber cover material | **AV4110** | 10 x 1 m | ca. 20,6 kg |
| Rubber cover material | **AV4111** | 1 x 1,20 m | ca. 2,3 kg |
| Rubber cover material | **AV4120** | 10 x 1,20 m | ca. 25,1 kg |

Other dimensions available on request

- Tested and produced according to VDE 0680 part 1
- For temporary protection of live uninsulated components of LV systems
- Resistant to oils and acids
- Self-extinguishing
- Thickness: 1.6mm - 1.21g/cm2 (44 Shore)
- Material: high quality neoprene
- Color: orange



1000V

## Cover transparent

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Cover | **641960** | 10000 x 1400 mm | 8000 g |
| Cover | **641952** | 2000 x 1400 mm | 1600 g |
| Cover | **641951** | 1000 x 1400 mm | 800 g |
| Cover | **641949** | 600 x 600 mm | 220 g |
| Cover | **641948** | 250 x 350 mm | 50 g |
| Cover | **641947** | 130 x 230 mm | 20 g |
| Cover | **641946** | 120 x 120 mm | 10 g |

- In accordance with DIN EN 61112 (VDE 0682-511) : 2010-03
- EN/IEC 61112 : 2009
- Highly flexible, cold resistant
- Materials: UV-stabilized film
- Thickness: 0.5 mm



CE

30.000V

IEC 61111:2009
VDE 0680 part 1

## Tappeto isolante 30.000V

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Safety carpet | AV4331 | 1 x 1 m | ca. 4,0 kg |
| Safety carpet | AV4335 | 5 x 1 m | ca. 11,0 kg |
| Safety carpet | AV4330 | 10 x 1 m | ca. 40,0 kg |

Other dimensions available on request

- Tested and produced according to VDE 0303
- For permanent insulation in cabins or rooms that require a high degree of Insulation
- Non-slip pavement side / ribbed non-slip support side (top)
- Thickness: 4,5mm
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray



CE

50.000V

VDE 0303

## Safety rubber carpet 50.000V

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Safety carpet | AV4341 | 1 x 1m | 5,6 kg |
| Safety carpet | AV4350 | 10 x 1m | 57 kg |
| Safety carpet | AV4351 | 1 x 1.20m | 6,8 kg |
| Safety carpet | AV4360 | 10 x 1.20m | 69 kg |

Other dimensions available on request

- Tested and produced according to VDE 0303
- For permanent insulation in cabins or rooms that require a high degree of Insulation
- Non-slip pavement side / ribbed non-slip support side (top)
- Thickness: 4,5mm - 1.65g/cm2 (77 Shore)
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray



30.000V / 45.000V

## 30kV/45kV insulating platform

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Platform 30.000V | AV5000 | 500 x 500 x 260 mm | 3,2 kg |
| Platform 45.000V | AV5001 | 500 x 500 x 310 mm | 4,2 kg |

- To insulate workers from the pavement when working
- Material: glass-fiber reinforced plastic resin
- Non-slip surface
- 30.000V/45.000V operating insulating level



## Thermal blanket

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Thermal blanket | HSD1 | 1800 x1800 mm | 3,8 kg |
| Thermal blanket | HSD2 | 1200 x 900 mm | 1,3 kg |
| Thermal blanket | HSD3 | 450 x 600 mm | 0,3 kg |

- Free of asbestos and other dangerous ingredients
- Composed 98% of silicone oxide (amorphous SiO2)
- Usable for temperatures up to 1260°C
- Melting temperature above 1600°C
- Non-toxic product



1000V IEC 60900

## Sheath spreader

| Description | Order No. | Height | Dimensions | Weight |
|---|---|---|---|---|
| Sheath spreader | 652002 | 30 to 0mm | 165 x 20 mm | 43 g |

- Reinforced polyamide material
- Lightweight model



1000V IEC 60900

## Sheath spreader

| Description | Order No. | Height | Dimensions | Weight |
|---|---|---|---|---|
| Sheath spreader | 652003 | 10 to 0mm | 170 x 20 mm | 100 g |

- Reinforced polyamide material
- Designed for assembly of branch terminals



1000V IEC 60900

## Bordering chisel

| Description | Order No. | Diameter | Length | Weight |
|---|---|---|---|---|
| Bordering chisel | 654000 | Ø 25 mm | 140 mm | 63 g |

- For NKBA-Cable
- Tape 70 mm with 30 mm radius
- Non brittle red plastic



1000V IEC 60900

VDE 0680

## Insulating safety clamp short

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating clamp | 651409 | 140 x 85 mm | 52 g |

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the jaws
- Material: shockproof thermoplastic resin
- Opening: 45 mm



1000V IEC 60900

VDE 0680

## Insulating safety clamp small

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating clamp | 651406 | 80 x 40 mm | 40 g |

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 25 mm



1000V IEC 60900

VDE 0680

## Insulating safety clamp with hook

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating clamp | 651402 | 165 x 130 mm | 60 g |

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 45 mm



1000V IEC 60900

VDE 0680

## Insulating safety clamp without hook

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating clamp | 651407 | 175 x 110 mm | 76 g |

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 40 mm



1000V IEC 60900

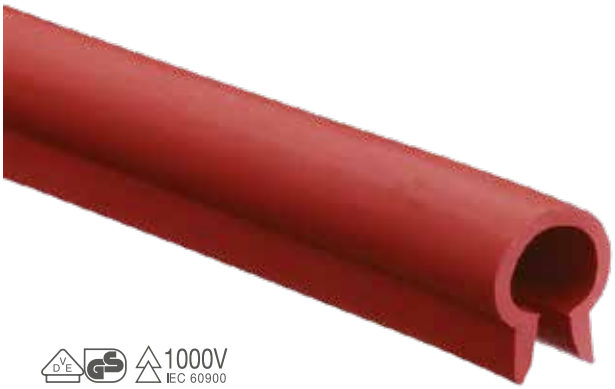
VDE 0680

## Insulating safety clamp large opening

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Insulating clamp | 651412 | 160 x 115 mm | 70 g |

- Tested and produced according to VDE 0680
- For fastening insulation sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 65 mm

## Protecting tube



1000V IEC 60900

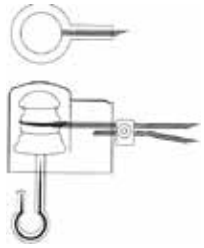
EN 60529

| Description | Order No. | Length | Ø Conductor |
|---|---|---|---|
| Protective shaped profiles up to 10mm | AV4410<br>AV4413<br>AV4418 | 1m<br>3m<br>18m roll | up to 10mm<br>up to 10mm<br>up to 10mm |
| Protective shaped profiles up to 14mm | AV4510<br>AV4513<br>AV4518 | 1m<br>3m<br>18m roll | up to 14mm<br>up to 14mm<br>up to 14mm |

Other lenghts available on request

- Tested and produced according to EN 60529
- For temporary insulation of bare aerial LV lines carrying up to 1000V of live voltage
- Material: natural rubber or synthetic vulcanized elastomer
- Weight per meter: approx. 350g
- Color: red
- Other lengths on request



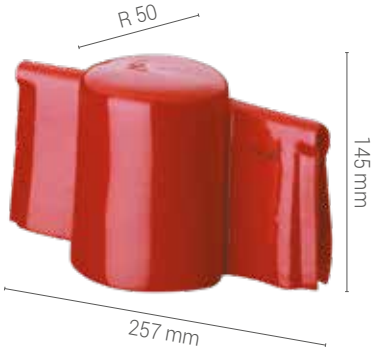
1000V IEC 60900

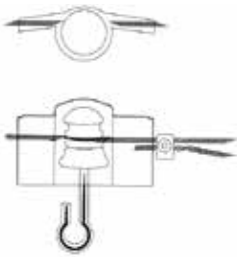
## Insulator cap with single outlet

| Description | Order No. | Version | Weight |
|---|---|---|---|
| Insulator cap | AV4401 | 1 Outlet | 350g |

Other insulator caps available on request

- Suitable for long-term operations
- Simple and robust design to slide over
- Material: flexible plastic resin
- Color: red



1000V IEC 60900

## Insulator cap with double outlet

| Description | Order No. | Version | Weight |
|---|---|---|---|
| Insulator cap | AV4402 | 2 Outlets | 450g |

Other insulator caps available on request

- Suitable for long-term operations
- Simple and robust design to slide over
- Material: flexible plastic resin
- Color: red



1000V IEC 60900

VDE 0680

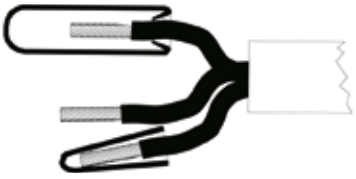
## Insulating safety caps

| Description | Order No. | Ø | Length |
|---|---|---|---|
| Insulating caps | AV4094 | 8 - 13 mm | 60mm |
| | AV4095 | 13 - 20 mm | 80mm |

- Tested and produced according to VDE 0680
- To protect rigid cables
- Material: rigid thermoplastic resin
- Color: red



• Slip over side
• with grip



1000V IEC 60900

VDE 0680

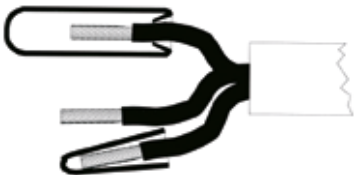
## Push on cover with grip

| Description | Order No. | Length | Opening | Suitable for | Weight |
|---|---|---|---|---|---|
| Push on cover with grip | 646004 | 40 mm | 10 mm | 1 - 25 mm² | 4 g |
| | 646006 | 60 mm | 10 mm | 6 - 35 mm² | 14 g |
| | 646010 | 100 mm | 10 mm | 6 - 35 mm² | 21 g |
| | 646015 | 100 mm | 15 mm | 10 - 50 mm² | 31 g |
| | 646020 | 110 mm | 20 mm | 35 - 95 mm² | 40 g |
| | 646030 | 130 mm | 30 mm | 95 - 185 mm² | 70 g |
| | 646040 | 150 mm | 40 mm | 185 - 240 mm² | 135 g |
| | 646050 | 185 mm | 50 mm | 240 - 400 mm² | 140 g |
| | 646060 | 185 mm | 60 mm | 240 - 500 mm² | 220 g |
| | 646070 | 210 mm | 70 mm | 300 - 500 mm² | 300 g |
| | 646090 | 255 mm | 90 mm | - 630 mm² | 550 g |
| | 646120 | 240 mm | 120 mm | - 800 mm² | 700 g |

• Tested and produced according to VDE 0680
• For temporary insulation of the ends of live LV single-pole cables
• Also suitable for protecting cables with cable terminals
• Material: flexible thermoplastic resin
• Color: red



Slip over side
without grip



1000V IEC 60900

VDE 0680

## Push on cover conical

| Description | Order No. | Length | Opening | Suitable for | Weight |
|---|---|---|---|---|---|
| Push on cover conical | 647030 | 30 mm | 10 mm | 10 - 25 mm² | 10 g |
| | 645006 | 50 mm | 10 mm | 10 - 25 mm² | 10 g |
| | 647010 | 60 mm | 10 mm | 6 - 25 mm² | 15 g |
| | 645000 | 100 mm | 10 mm | 10 - 35 mm² | 7 g |
| | 645001 | 100 mm | 20 mm | 120 - 150 mm² | 19 g |

Transparent conical puch on covers available on request

• Tested and produced according to VDE 0680
• For temporary insulation of the ends of live LV single-pole cables
• Also suitable for protecting cables with cable terminals
• Material: flexible thermoplastic resin
• Color: red



1000V IEC 60900

EN 57680
VDE 0680

## Insulating safety sleeve

| Description | Order No. | Ø | Length |
|---|---|---|---|
| Insulating sleeve | AV4082 | 5 – 12 mm | 117 mm |
| Insulating sleeve | AV4083 | 12 – 21 mm | 159 mm |
| Insulating sleeve | AV4084 | 21 – 30 mm | 190 mm |

• Tested and produced according to EN 57680, VDE 0680
• To protect ends of electric conductors
• Optimized holding force with the screw joint
• Material: Safety sleeve made out of flexible shock- resistant plastics
Screw joint made out of a red transparent prim plastics
• Color: red



## Safety bag with tools

| Description | Order No. | Dimensions | Weigth |
|---|---|---|---|
| Safety bag with tools | AB7712 | 560x360x320mm | ca. 7,7 kg |
| Safety bag without tools | AB7710 | 560x360x320mm | ca. 1,7 kg |

Equipment:
- 1 pair of insulated electrical safety gloves – size 10 ..... AV4722
- 1 pair of safety goggles ..... 6660 00
- 1 safety helmet with build in visor ..... AV9303W
- 1 rubber insulating matting 1000 x 1000 x 4 mm ..... AV4301
- 1 pair of anti-perspiration gloves ..... 6130 00
- 1 shockproof resin container ..... AB4700

Optionals:
- 7 kA protection clothing (see page 42)
- 7 kA protection gloves (see page 43)



## Bag with tools to work on LV

| Description | Order No. | Dimensions | Weigth |
|---|---|---|---|
| Bag with tools | AB7721 | 560x360x320 mm | ca. 6,1 kg |
| Bag without tools | AB7720E | 560x360x320 mm | ca. 1,7 kg |

Equipment:
- 1 transparent cover material 560 x 560 mm ..... AV4102E
- 1 transparent cover material 910 x 910 mm ..... AV4104E
- 8 insulating safety clamps ..... 6514 09
- 8 push on covers with grip, opening 15 mm ..... 6460 15
- 8 push on covers with grip, opening 20 mm ..... 6460 20
- 8 push on covers with grip, opening 30 mm ..... 6460 30
- 1 insulating mastic ..... 1033 74




## Protective cover for distribution cabinets

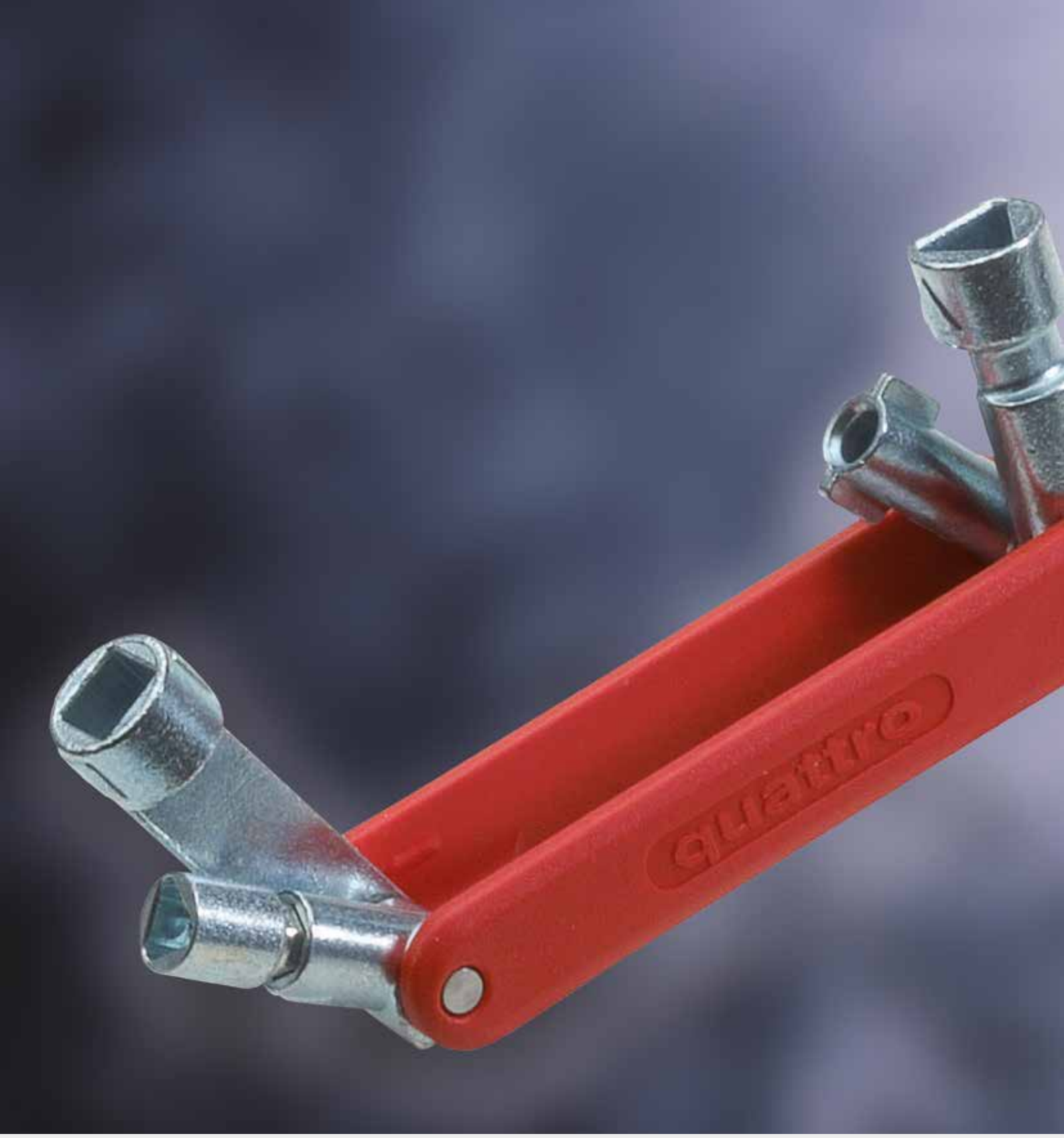
| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Prot. cover DIN Gr.00, F3, F3/1 | 06614710 | 1100x550x440 mm | 3,3 kg |
| Prot. cover DIN Gr.0, F4 | 06614810 | 1100x700x440 mm | 3,8 kg |
| Prot. cover DIN Gr.1, F5 | 06614510 | 1100x900x440 mm | 4,5 kg |
| Prot. cover DIN Gr.2, F6 | 06614610 | 1100x1300x440 mm | 5,8 kg |
| Prot. cover DIN Gr.3 | 06614910 | 1100x1600x440 mm | 7,0 kg |

- The protective cover serves to cover damaged distribution cabinets tem-
- porarily.
- Increased 1,100 mm height, suitable for also covering the base
- A belt has been inserted under the lower edge of the cover for securing the cover, when drawn tight.
- The protective cover has two layers, which have been permanently welded together.
- The internal layer consists of a 0.5 mm thick, highly flexible and transparent cloth
- The external layer is made of a PVC-coated, UV and weather resistant polyester fabric.
- Both layers are highly flexible and cold-resistant.
- Color: signal yellow and printed with the "Caution: Dangerous Electrical Voltage"

WE

LOVE

**TOOLS**



# ADDITIONAL RANGE

## ADDITIONAL RANGE



### Universal cabinet key in pocket format

| Description | Order No. | Dimensions | Weight |
|---|---|---|---|
| Universal Key | QUATTRO | 91 x 26 x 15 mm | 95 g |
| Universal Key - D | QUATTRO-D | 91 x 26 x 15 mm | 95 g |
| Universal kKey - S | QUATTRO-S | 91 x 26 x 15 mm | 103 g |

- Designed to use in opening and closing electric panels and the most common systems of closure
- Suitable for all common electrical panels and cabinets
- Five different key profiles
- The magnetic attachment gives the possibility to use the key with any type of bit

| Order No. | Additional Bit | | Standard Bits | | | |
|---|---|---|---|---|---|---|
| QUATTRO | | 11,5 x 6 mm Triangular Key | 10 x 6,5 mm 6.3 Bit magnetic Attachment | 14 x 8 mm Square Key insert | 14 x 9 mm Triangular Key insert | 14 x 9 x 2 mm 2 x 14 Key Insert |
| QUATTRO-D | | 10 x 7,4 x 2 mm Square Key | | | | |
| QUATTRO-S | | 10 x 7 mm Daimler Benz Key | | | | |



### Switch cabinet spanner

| | | | | | Order No. |
|---|---|---|---|---|---|
| 8/9 | 14/8 | 12/7 | 9/5 | 6/9 | AV9312 |

- With 1/4" bits adapter and two screwdriver insertsdimensions: 90 x 62 mm
- Weight approx. 65 g



### Universal key - Sub key

| | | | | | | Order No. |
|---|---|---|---|---|---|---|
| ¼" | 7-8 | 5 | 9 | 7 | 3-5 | AV9314 |

- With 1/4" bits adapter and two screwdriver inserts
- For all current systems of technical closures



### Universal key

| | | | | Order No. |
|---|---|---|---|---|
| 12/6,2 | 14/9 | 14/8 | 9/5 | AV9310 |



## Universal cable stripper

| Measures | Order No. |
|---|---|
| 1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 | 7110592 |

• Chrome vanadium steel



## Key set TORX®

| Measures | Order No. |
|---|---|
| 9 - 10 - 15 - 20 - 25 - 27 - 30 - 40 | 7409002 |



## Allen wrench set

| Measures | Order No. |
|---|---|
| 2,5 - 3 - 4 - 5 - 6 - 8 - 10 | 7401002 |



## Allen wrench set

| Measures | Order No. |
|---|---|
| 2,5 - 3 - 4 - 5 - 6 - 8 - 10 | 7401202 |

• Easy opening via a lever integrated in the handle
• Shock-resistant resin handle
• Chrome-vanadium keys according DIN 911, galvanic coating

## ADDITIONAL RANGE



### Assortment of 1/4"socket wrenches (39 pcs)

| Equipment | Order No. |
|---|---|
| Hexagonal sockets from mm 4 - 4.5 - 5 - 5.5 - 6-7 - 8 - 9 - 10 - 11 - 12 - 13 - 14<br>Inserts PH1 - PH2,<br>Inserts PZ1 - PZ2<br>Slotted inserts mm 4 - 5.5 - 7<br>Hexagonal inserts mm 3 - 4 - 5 - 6 - 7 - 8<br>Torx inserts T10 - T15 - T20 - T25 - T27 - T30 - T40<br>1 adapter screwdriver<br>1 torsion bar<br>2 extensions of 50 mm and 100 mm<br>1 jointed adapter<br>1 reversible jack | 7113104 |



### Assortment of 1/2", 1/4" socket wrenches (108 pcs)

| Equipment | Order No. |
|---|---|
| Sockets 1/2" mm 10-11-12-13-14-15-16-17-18-19-20-21-22-24-27-30-32<br>Sockets 1/4" mm 4-4,5-5-5,5-6-7-8-9-10-11-12-13-14<br>Ratchets 1/2" + 1/4"<br>Joint 1/2" + 1/4"<br>Sockets 1/2" for spark plugs (16+21 mm)<br>Extensions 1/2" (125+250 mm)<br>Extensions 1/4" (50+100 mm)<br>Long sockets 1/4" mm 6-7-8-9-10-11-12-13<br>Long sockets 1/2" mm 13-15-17-19-22<br>Claw hammer handle with sliding panel 1/4"<br>Claw hammer handle 1/2"<br>Adapter 1/2" for inserts 5/16"<br>Connector 1/4"<br>Sockets 1/2" Torx E 10-11-12-14-16-18-20-24,<br>Sockets 1/4" Torx E 4-5-6-7-8<br>Inserts 5/16" hex (7-8-10-12-14) TG (8-10-12) PH (3-4) PZ (3-4) Torx (T40-45-50-55-60)<br>Bent male hex keys 1.5-2-2.5<br>Sockets chrome 1/4" + inserts hex (3-4-5-6) TG (4-5.5-6.5) PH (1-2) PZ (1-2) Torx (T8-10-15-20-25-27-30) | 7113152 |



### Combined wrenches

| Equipment | Order No. |
|---|---|
| 17 pieces:<br>measures from 6 to 22 | 7112315 |

- DIN 3113
- Chrome vanadium steel
- Polished chrome plating



## Assortment of double fork wrenches

| Equipment | Order No. |
|---|---|
| **8 pieces:** 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 | 7112310 |
| **12 pieces:** 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32 | 7112312 |

- DIN 3110
- Chrome vanadium steel
- Polished chrome plating



## Gripper universal key

| Equipment | Order No. |
|---|---|
| Ratchet and compass set included of drill adapter | 7410001 |
| Compass | 7410002 |

- Ratchet and compass set included of drill adapter
- The compass adapts perfectly to any screw or nut up to a diameter of 8 mm - 19 mm



## Pipe wrenches

| Length | Order No. |
|---|---|
| 245 mm | 7101237 |
| 180 mm | 7101180 |

- Chrome vanadium steel
- With clamp
- closed zipper
- Handles with protection
- Finger anti-crushing



## Precision screwdriver set

| Dimensions | Order No. |
|---|---|
| 1,0 1,5 1,8 2,3 2,9 3,6 | 7111810 |

- For slotted screws
- Nickel-plated handle
- Metal case

## ADDITIONAL RANGE



### Measuring tape

| Length | Width | Order No. |
|---|---|---|
| 3 | 16 mm | 7406030 |
| 5 | 19 mm | 7406050 |
| 8 | 25 mm | 7406080 |

- Accuracy class 2
- Sturdy ABS case
- Double black graduation on a yellow background



### Universal knife

| Length | Order No. |
|---|---|
| 135 mm | 7120081 |
| Replacement blade | 7120082 |

- Very light two-component handle
- Pre-set sliding and adjustable blade



### Universal scissors

| Length | Order No. |
|---|---|
| 190 mm | 7120122 |

- Stainless steel
- Shockproof handle
- For cables and sheet metal
- Leather, plastic material etc.



### Universal tube cutter

| Length | Ø tube | Order No. |
|---|---|---|
| 200 mm | max. 29 mm | 7120450 |

| replacement blade | Order No. |
|---|---|
| For hard PVC pipes | 7120452 |
| For rubber hoses | 7120453 |

- With two types of interchangeable blades
- For insulating pipes, PVC pipes
- Hard and rubber hoses



## Pipe cutter for resin pipes

| Length | Order No. |
|---|---|
| For pipes with Ø from 6 to 35 mm | 7120410 |
| Replacement blade 135 mm | 7120412 |





## Set - EnerGrip

| Equipment | Order No. |
|---|---|
| 4 EnerGrip (AV8902) | AS8902 |

• Cable glands for excellent grip (Ø 3-12 mm)



## Universal Marker

| Color | Content | Order No. |
|---|---|---|
| Red | 400 ml | 7212110 |
| Blue | 400 ml | 7212120 |
| Black | 400 ml | 7212130 |

• Long lasting tracker, ideal for all markings



## Gel / Liquid lubricant for cables (1 litro)

| | Order No. |
|---|---|
| Liquid | 7142160 |
| Gel | 7142161 |

## ADDITIONAL RANGE



### NYLON FISHTAPES PA6

Ø4 mm with interchangeable terminals M5, flexible head (mod. 7142145) and eyelet head (mod. 714148)

| Ø mm | Colour | length m | Order No. |
|---|---|---|---|
| 4 | | 5 | FTN4-05 |
| | | 10 | FTN4-10 |
| | | 15 | FTN4-15 |
| | | 20 | FTN4-20 |
| | | 25 | FTN4-25 |
| | | 30 | FTN4-30 |



### PERLON® FISHTAPES PA6

Ø4 mm with interchangeable terminals M5, flexible head (mod. 7142145) and eyelet head (mod. 714148)

| Ø mm | Colour | length m | Order No. |
|---|---|---|---|
| 4 | | 5 | FTE4-05 |
| | | 10 | FTE4-10 |
| | | 15 | FTE4-15 |
| | | 20 | FTE4-20 |
| | | 25 | FTE4-25 |
| | | 30 | FTE4-30 |



### THREE-WIRE POLYESTER FISHTAPES

Ø 4,2 mm with interchangeable terminals, flexible head (mod. 7142145) and eyelet head (mod. 714148)

| Ø mm | Colour | length m | Order No. |
|---|---|---|---|
| 4,2 | | 10 | FTP4-10 |
| | | 15 | FTP4-15 |
| | | 20 | FTP4-20 |
| | | 25 | FTP4-25 |
| | | 30 | FTP4-30 |
| | | 40 | FTP4-40 |
| | | 50 | FTP4-50 |
| | | 60 | FTP4-60 |



### SINGLE-WIRE POLYESTER FISHTAPES

Ø 3,3 mm with fixed terminals, flexible head and eyelet head.

| Ø mm | Colour | length m | Order No. |
|---|---|---|---|
| 3,3 | | 10 | FTP3-10 |
| | | 15 | FTP3-15 |
| | | 20 | FTP3-20 |
| | | 25 | FTP3-25 |
| | | 30 | FTP3-30 |



### CABLE DUCT RODDING SYSTEM WITH THREE-WIRE POLYESTER

Ø 4,2 mm with interchangeable terminals, flexible head (mod. 7142145) and eyelet head (mod. 714148)

| Ø mm | Colour | length m | Order No. |
|---|---|---|---|
| 4,2 | | 10 | FTP4-10AV |
| | | 15 | FTP4-15AV |
| | | 20 | FTP4-20AV |
| | | 25 | FTP4-25AV |
| | | 30 | FTP4-30AV |

| Description | | Order No. |
|---|---|---|
| Flexible head with rolling ferrule Ø 7 mm |  | 7142141 |
| Flexible head with eyelet 4,8 x 3 mm |  | 7142145 |
| Flexible head with eyelet 8,5 x 3 mm |  | 7142146 |
| Flexible head Ø 6 mm |  | 7142143 |
| Pulling eyelet 6,5 x 3 mm |  | 7142148 |
| Pulling eyelet 10 x 3 mm |  | 7142149 |



## Cabinet level

| Length | Width | Heigh | Order No. |
|---|---|---|---|
| 250 mm | 20 mm | 40 mm | 7211440 |

• Made of impact-resistant plastic



## Aluminium level

| Length | Order No. |
|---|---|
| 400 mm | 7211420 |
| 600 mm | 7211422 |



## PUK pocket saw

| Length | Order No. |
|---|---|
| 150 mm | 7120502 |
| Spare saw blade PUK pocket saw | 7120506 |





## Ultralight handy metal sawframe

| Length | Order No. |
|---|---|
| 300 mm | 7120600 |
| spare blade for metal HSS | 7120610 |

• Ergonomical structural shape
• 2 component plastic handle, glass fiber reinforced
• Integrated clamping key and integrated blade magazine

## ADDITIONAL RANGE



### Foldable pocket knife with wooden handle

| Length | Order No. |
|---|---|
| 200 (110) mm | 282001 |

- Extra strong blade with half round wire scraper
- Sturdy iron mountings



### Folding ruler

| Length | Order No. |
|---|---|
| 2000 mm | 525004 |

- Folding ruler made of fiberglass
- 10 links



### Sledge- / engineer's hammer with wooden grip

| Weight | Order No |
|---|---|
| 1.250g | 7130602 |
| 300g | 7130582 |

- According to DIN1041 and DIN6475 with polished wooden handle
- Hammer head hardened and ground



## Electrician chisel

| Slot width | Length | Diameter body | Order No. |
|---|---|---|---|
| 12 mm | 250 mm | 8 x 8 | 7130008 |
| 29 mm | 300 mm | 23 x 13 | 7130024 |

• Made of chrome vanadium steel



## Painter's spatula

| Width | Length | Order No. |
|---|---|---|
| 50 mm | 205 mm | 7131326 |

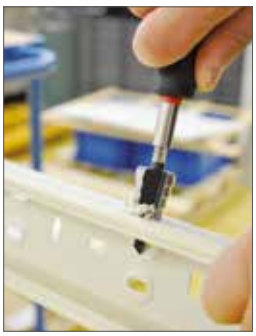
• Made of steel, ground spade with wooden grip



## Set of multi diameter and conical drill bits with handle

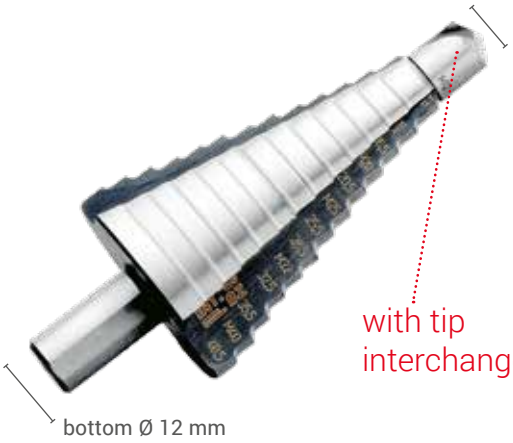
| | Order No. |
|---|---|
| Multi diameter drill set with handle | 74130 |

• Ergonomic handle with magnetic attachment for bits 1/4"
• Multi diameter tip for through holes with Ø 9, 11, 12, 15, 17, 19, 21 mm
• Multi diameter tip for through holes with Ø 4, 6, 8, 10, 12 mm
• Conical tip Ø 3 - 14 mm
• 90° conical tip with 20.5 mm head diameter





## ADDITIONAL RANGE



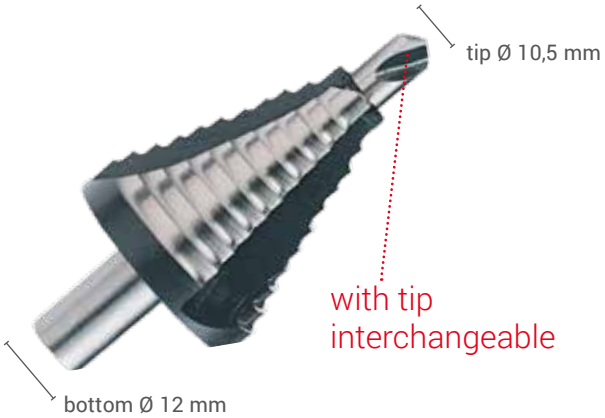

### Multi diameter tips for cable glands with metric thread

| Metric multi diameter tip | Clearance hole | Ø core hole mm | Order No. |
|---|---|---|---|
| M12-M40 | M12, M16, M20, M25, M32, M40 | 12,5, 16,5, 20,5, 25,5, 28,5, 32,5, 35,5, 40,5 | 74121 |
| Interchangeable tip M12 | | | 74129 |



### Multi diameter tips for cable glands with metric thread

| Metric multidiameter tip | Clearance hole | Ø core hole mm | Order No. |
|---|---|---|---|
| M12-M40 | M12, M16, M20, M25, M32, M40 | 10,5, 14,5, 18,5, 23,5, 30,5, 38,5 | 74110 |




### Multi diameter tips for cable glands with metric thread

| PG multi diameter tip | Ø core hole mm | Order No. |
|---|---|---|
| PG7 - PG29 | PG7, PG9, PG11, PG13,5, PG16, PG21, PG29 | 7201200 |
| Interchangeable tip | | 7201273 |



### Multi diameter tips for cable glands with metric thread

| PG multi diameter tip | Ø core hole mm | Order No. |
|---|---|---|
| PG7 - PG29 | PG7, PG9, PG11, PG13,5, PG16, PG21, PG29 | 7201100 |

- Multi diameter HSS steel tips for metal sheet, plastic, wood or other material up to a thickness of 3 mm
- Bottom diameter ø 12 mm



## PCS chisels with SDS-plus connection

| Equipment | Order No. |
|---|---|
| 3 pieces | 7212000 |

- High precision chisels
- Kit consisting of 3 pieces:
  - flat chisel
  - pointed chisel
  - wide flat chisel
- Reduced length (140 mm) to facilitate use



## SDS-plus wall tips

| Ø drill | Length | Order No. |
|---|---|---|
| 5,0 mm | 50/110 mm | 98035601 |
| 5,0 mm | 100/160 mm | 98035602 |
| 6,0 mm | 50/110 mm | 98035603 |
| 6,0 mm | 100/160 mm | 98035604 |
| 8,0 mm | 50/110 mm | 98035606 |
| 8,0 mm | 100/160 mm | 98035607 |
| 8,0 mm | 150/210 mm | 98035608 |
| 8,0 mm | 200/260 mm | 98035609 |
| 10,0 mm | 100/160 mm | 98035610 |
| 10,0 mm | 150/210 mm | 98035611 |
| 10,0 mm | 200/260 mm | 98035612 |
| 12,0 mm | 100/160 mm | 98035613 |
| 12,0 mm | 150/210 mm | 98035614 |
| 12,0 mm | 200/260 mm | 98035615 |
| 12,0 mm | 400/450 mm | 98035616 |
| 14,0 mm | 150/210 mm | 98035617 |
| 14,0 mm | 200/260 mm | 98035618 |
| 16,0 mm | 150/210 mm | 98035619 |
| 16,0 mm | 400/450 mm | 98035634 |
| 18,0 mm | 250/300 mm | 98035621 |
| 20,0 mm | 250/300 mm | 98035623 |



## Assortment of hammer drills

| Ø drill | Order No. |
|---|---|
| 5, 6, 8, 10, 12 x 100/160 | 93304001 |

- Carbide tips of special quality
- With SDS-PLUS connection



## Bit box - Phillips, pozidriv and Torx inserts

| Equipment | Order No. |
|---|---|
| 32 pieces:<br>PH 1–3, PZ 1–3, T 15–40 | 98041903 |



## 5 Bit box - Phillips, pozidriv and slotted inserts

| Equipment | Order No. |
|---|---|
| 10 pieces:<br>PH 0–2, PZ 0–2, slotted head 4 –5,5–7 | 7114604 |



## Assortment of twist drills

| Pieces | Lengh mm | Thickness mm | Order No. |
|---|---|---|---|
| 19 | 1-10 | 0,5 | 7201352 |

• With metal case



## Range of holesawss

| Ø mm | Order No. |
|---|---|
| 20 22 25 29 35 40 51 60 | 74200 |

• Spindle M34
• Spindle M46PS
• Spare tip
• Storage box

## Accessories (optional)

| | Order No. |
|---|---|
| Holesaw 16 | 74216 |
| Holesaw 20 | 74220 |
| Holesaw 21 | 74221 |
| Holesaw 22 | 74222 |
| Holesaw 25 | 74225 |
| Holesaw 29 | 74229 |
| Holesaw 32 | 74232 |
| Holesaw 35 | 74235 |
| Holesaw 38 | 74238 |
| Holesaw 40 | 74240 |
| Holesaw 51 | 74251 |
| Holesaw 60 | 74260 |
| Holesaw 64 | 74264 |
| Holesaw 67 | 74267 |
| Holesaw 70 | 74270 |
| Saw shaft 14-30 | 74280 |
| Saw shaft 32-152 | 74284 |
| Tip for product 7428 0 | 74290 |
| Tip for product 7428 4 | 74292 |



## Gas equipment for welding and heat shrinking

| Equipment | Order No. |
|---|---|
| Two-component piezoelectric handle 8001001<br>Hot air burner 8001002<br>Soft flame burner 8001003<br>Burner for welding / brazing 8001004<br>Burner with pointed and precise flame 8001005<br>Copper tip for welding / brazing 8001006<br>Flexible hose 8001007<br>Safety valve unit and pressure reducer 8001008/8001009<br>Open-end spanners E17, E19, E25,<br>Resin case with foam insert | 80010 |

Technical characteristics:
- Piezoelectric handle in two-component material
- Bayonet quick coupling for burners
- Rotary knob on the handle for opening / closing and adjusting the flame
- Gas supply interruption when the burners are removed
- Burners in steel / brass material with chrome-plated surface treatment
- Hose connected with two metal spiral protection reinforcements
- Length 4 meters
- Safety valve and pressure reducer with adjustable angle connection
- Resin case with foam insert

**Dimensions:** 460 x 370 x 105 mm



8001 001


8001 002


8001 003


8001 004


8001 005


8001 006

| Accessories | Order No. |
|---|---|
| Handle with piezoelectric device | 8001001 |
| Burner for soft flame | 8001002 |
| Burner for wide flame | 8001003 |
| Burner for welding | 8001004 |
| Burner for sharp-pointed/precise flame | 8001005 |
| Copper tip Ø 18 (to be used with 8001 005) | 8001006 |
| Flexible hose 4 m | 8001007 |
| Safety valve | 8001008 |
| Brass pressure reducer | 8001009 |
| Rigid plastic case | 8001010 |



## Gas / cartridge equipment for welding and heat shrinking

| Equipment | Order No. |
|---|---|
| Piezoelectric handle<br>80024 - 2x Ultragas cartridges<br>80023 - Burner hot air for shrinking<br>80022 - Pin point burner for soldering<br>80025 - Soldering Iron<br>Resin case with foam insert | 80020 |

Technical characteristics:
- Shockproof plastic handle
- Bayonet quick coupling for burners
- Rotary knob on the handle for opening / closing and adjusting the flame
- Gas supply interruption in rest position and / or after extraction of the burners
- Holder for safe depositing
- Burners in steel / brass material with chrome-plated surface treatment
- Cartridges with propane / butane and propene gas mixture
- Resin case with foam insert

**Dimensions:** 460 x 370 x 105 mm




8002 4



8002 1



8002 5



8002 2



8002 3

| Accessories | Order No. |
|---|---|
| Ultragas cartridge 210 gr. | 80024 |
| Piezoelectric handle | 80021 |
| Fine flame burner | 80022 |
| Copper stick with burner | 80025 |
| Burner for soft flame | 80023 |
| Rigid plastic case | 8002020 |

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