

GB

CATALOGUE 2019/2020

GREENLEE

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# KLAUKE CATALOGUE 2019/2020

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Electrical connection system Crimping tools Cutting tools Holemaking tools Universal tools
Hand tools Cable pulling technology Testing and measuring instruments



Verbindungen mit System
The Power of Partnership

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MORE THAN 135 YEARS OF EXPERIENCE




OUR COMPANY CERTIFICATES



ISO 9001:2015
Quality management system

ISO 14001:2015
Environmental management system

IATF 16949:2016
Quality standard for the automotive industry

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ELECTRICAL CONNECTION SYSTEM, CRIMPING AND CUTTING TOOLS, HAND TOOLS

GREENLEE

HOLEMAKING TOOLS, CABLE PULLING TECHNOLOGY, TESTING AND MEASURING INSTRUMENTS

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## KLAUKE NEWS 2019



SYNCRO CRIMPING TOOL
SERIES K 06 AND K 09

PAGE 236



CRIMPING TOOL FOR
INSULATED CABLE
CONNECTIONS - NOW
WITH ADDITIONAL
LOCATOR
K 82 AND K 82 T

PAGE 221





D HY-
TOOL
TROL

NEW

VDE-BATTERY POWERED
HYDRAULIC CRIMPING TOOL
EKM 60 ID ISM
10 - 240 MM²

CHAPTER ORANGE LINE
PAGE 205-7



# ALWAYS THE BEST TOOL FOR YOUR NEEDS.


Electrical connection systems

Orange Line NEW
VDE-battery powered hydraulic tools

Crimping

Cutting

Punching

Universal tools

Pumps

Hand tools

Cable-pulling technology

Testing and measuring instruments

Technical Appendix
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Alpha Numerical Index


NEW

VDE-BATTERY POWERED HYDRAULIC CUTTING TOOL 50 MM DIA. FOR COPPER AND ALUMINIUM CABLE

CHAPTER ORANGE LINE
PAGE 205-8



# OUR FIELDS OF EXPERTISE
# FIVE SECTORS, ONE QUALITY

We take your needs seriously. For us, “Made by Klauke” means that all products are produced to the highest quality.

## ELECTRICAL DISTRIBUTION - STRONG PARTNER WORLDWIDE



Klauke and Greenlee are your strong team - innovative, reliable and cost-effective. Together they form a connection that has been established for professional service providers worldwide in the energy supply and panel building industries.

## CUSTOMIZED TOOLS - IMPROVING FOR THE FUTURE



We are market leaders: Our battery-powered hydraulic tools for the plumbing, heating and ventilation industries are at the forefront of the crimped connections sector. But that’s not enough for us: In the Customized Tools sector, our tool experts together with our customers are always developing new prototypes, no matter whether for the cutting, crimping or punching segment.
We support you through the development process to the finished product including the After Sales service. We are at your service.

## AUTOMOTIVE CONNECTOR SOLUTIONS - KNOW-HOW FOR EXTRAORDINARY SOLUTIONS



Decades of experience go into the development and manufacture of our products for the automobile sector. From standard to custom and non-standard cable lugs - our solutions are used in any onboard systems.

## ASSEMBLY SOLUTIONS - SPECIAL TYPE OF QUALITY



We are at our customers' service. Klauke offers highly-flexible solutions for your specific requirements for small production runs in the industrial commodity sector. This includes punched parts, wiring harnesses and pre-assembled cables and connectors.
For your custom products, we rely on our in-house development and production expertise. Customers from sectors such as automotive, heating, air-conditioning, white goods, renewable energies or e-mobility rely on our quality.

## CUSTOMIZED TOOLS - MATCHED SPECIFICALLY TO YOUR REQUIREMENTS



Klauke is a specialist for top-quality, hydraulic tools. Innovation has always taken top priority. We continuously develop new products in collaboration with our customers. We advise, develop and manufacture. Product design and fabrication are rounded out by the development and manufacture of matching processing tools. Perfectly adapted to the customer's manufacturing process and to meeting the exacting requirements of a quality management system. The proprietary CAD design allows customised solutions to be developed to the highest possible level and brought to production maturity.

# KLAUKE AFTER SALES SERVICE - PERFECTLY TAILORED FOR YOUR DAY-TO-DAY WORK

Information exchange and close cooperation are an important Klauke quality feature, which is key to our customers' success. We look at the initial requirements through product development to find the best solution together. The best solution for us, though, does not end when the product is delivered, but continues with advice and service support.

## KLAUKE HOTLINE

**HOTLINE:**
0800 4 68 55 28

**Your direct link to our tool service offers:**
http://www.klauke.com/en/support/tool-service/

**Link to our support video:**
youtube.com/watch?v=0PMgCGz7GQk

## KLAUKE SERVICE OFFERS

- Video support with live demonstration of your application and the product
- Your questions are answered immediately after prior agreement
- Service van for on-site service

## KLAUKE GUARANTEE

- Worldwide repair and maintenance service through over 60 authorised Service Centers (Klauke ASC).
- Full maintenance service with annual inspection and maintenance at fixed prices


KlauKe ASC®
Authorised Service Center

# THE BEST CONNECTION.

Thanks to the Klauke system, you can be sure that your connection will withstand any load. We find the right connector for every conductor.





# Electrical connection systems


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# THE CLASSIC - COPPER TUBULAR CABLE LUGS

Not every product becomes a classic at Klauke. Only the best ones. Tubular cable lugs made from high-quality electrolytic copper have been part of the Klauke standard range since 1960. The hallmarks: We handle all phases, from development to production. We monitor each and every step. The result: The certified classic remains - in every version.



**In brief**

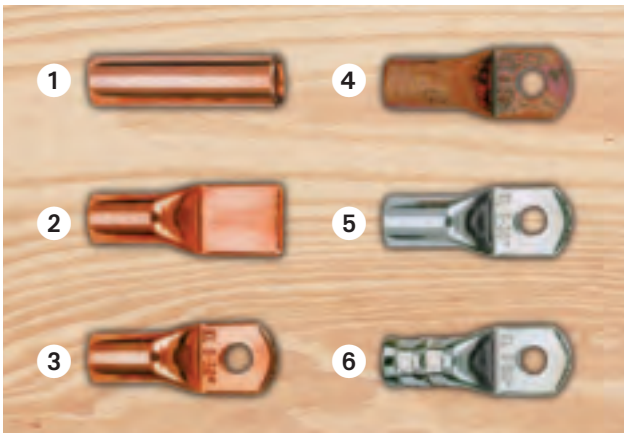
- Everything from a single source, from development to production
- Best electrical conductivity thanks to electrolytic copper
- Available for all cross sections and in many special versions
- Tested to international standards

## The system - Klauke connectors

At Klauke all products are matched to one another and we manufacture in our own factories. We think in your work steps – and produce everything systematically. Every cable lug, every tool for the perfect connection.

- Full flexibility through solutions for all conductor classes to DIN EN 60228
- For cables with compacted round conductors, cables with sector-shaped conductors and to suit individual requirements
- A single source - for everything from the cable lug to the tool for professional electrical installations






1. Source material
2. Folding and crimping
3. Punching
4. Annealing
5. Tinned end product
6. After crimping

## The preparation - Traditional quality

The best material is the basis for quality products.
For our classics we use - as for all Klauke products - exclusively high-quality material from certified suppliers. You get all our cable lugs with the optimum features. To achieve this, we manufacture using a special annealing process.

- Optimum conductivity, high loading capacity and increased safety thanks to high-quality materials
- Outstanding processing properties

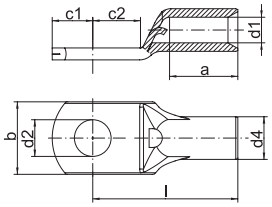
## The proof - independent quality tests

Klauke aspires to its own high standard. We have this verified by several independent inspection authorities and have put ourselves through the tough IEC tests - with success.

- IEC (International Electric Commission): The IEC is an advisory board for standards in the electrical engineering and electronics sector. The certifications encompass all areas of electrical engineering that have to meet especially high demands.
- UL (Underwriters Laboratories): UL is an independent organisation that examines and certifies products for safety. The certification is particularly important on the American market.
- DNV (Det Norske Veritas) and GL (Germanischer Lloyd): DNV and GL have now merged to form the world's largest consulting company for onshore and offshore systems.

## Tubular cable lugs, Cu, standard type






- Cable lug for fine-stranded round conductors, e.g. to DIN EN 60228 Cl. 5
- Simple processing thanks to inspection hole for monitoring full conductor insertion

### Characteristics

- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Item identification on cable lug

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

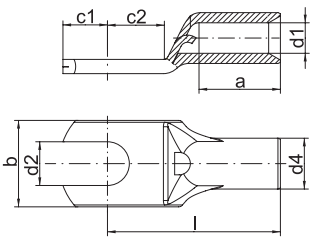
### Technical instructions

- Tool: see page 38

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 0.75 | M3 | **91R3** | 1.3 | 6 | 6.0 | 3.2 | 2.8 | 3.25 | 4.0 | 12 | 0.060 | 100 |
| | M4 | **91R4** | 1.3 | 6 | 6.5 | 4.3 | 2.8 | 4.00 | 5.0 | 13 | 0.060 | 100 |
| | M5 | **91R5** | 1.3 | 6 | 7.5 | 5.3 | 2.8 | 4.75 | 5.5 | 14 | 0.060 | 100 |
| 1.5 | M3 | **92R3** | 1.8 | 6 | 6.5 | 3.2 | 3.3 | 3.25 | 4.0 | 12 | 0.080 | 100 |
| | M4 | **92R4** | 1.8 | 6 | 6.5 | 4.3 | 3.3 | 4.00 | 5.0 | 13 | 0.080 | 100 |
| | M5 | **92R5** | 1.8 | 6 | 7.5 | 5.3 | 3.3 | 4.75 | 5.5 | 14 | 0.080 | 100 |
| | M6 | **92R6** | 1.8 | 6 | 9.0 | 6.5 | 3.3 | 6.50 | 6.5 | 16 | 0.090 | 100 |
| 2.5 | M3 | **93R3** | 2.3 | 6 | 7.5 | 3.2 | 4.2 | 3.25 | 4.0 | 12 | 0.120 | 100 |
| | M4 | **93R4** | 2.3 | 6 | 7.5 | 4.3 | 4.2 | 4.00 | 5.0 | 13 | 0.120 | 100 |
| | M5 | **93R5** | 2.3 | 6 | 8.5 | 5.3 | 4.2 | 4.75 | 5.5 | 14 | 0.130 | 100 |
| | M6 | **93R6** | 2.3 | 6 | 9.5 | 6.5 | 4.2 | 6.50 | 6.5 | 16 | 0.150 | 100 |
| | M8 | **93R8** | 2.3 | 6 | 13.0 | 8.5 | 4.2 | 7.75 | 9.5 | 20 | 0.180 | 100 |
| 4 | M4 | **94R4** | 3.0 | 8 | 8.5 | 4.3 | 5.0 | 4.75 | 5.5 | 18 | 0.210 | 100 |
| | M5 | **94R5** | 3.0 | 8 | 9.0 | 5.3 | 5.0 | 4.75 | 6.0 | 18 | 0.213 | 100 |
| | M6 | **94R6** | 3.0 | 8 | 10.0 | 6.5 | 5.0 | 6.50 | 6.5 | 19 | 0.220 | 100 |
| | M8 | **94R8** | 3.0 | 8 | 13.0 | 8.5 | 5.0 | 8.50 | 9.5 | 22 | 0.280 | 100 |
| 6 | M4 | **95R4** | 4.0 | 9 | 9.5 | 4.3 | 6.0 | 5.00 | 5.5 | 18 | 0.290 | 100 |
| | M5 | **95R5** | 4.0 | 9 | 9.5 | 5.3 | 6.0 | 6.00 | 6.0 | 19 | 0.300 | 100 |
| | M6 | **95R6** | 4.0 | 9 | 10.0 | 6.5 | 6.0 | 7.00 | 6.5 | 19 | 0.300 | 100 |
| | M8 | **95R8** | 4.0 | 9 | 14.0 | 8.5 | 6.0 | 8.50 | 9.5 | 22 | 0.320 | 100 |

## Tubular cable lugs, Cu, fork type











- Cable lug to 6 mm² for fine-stranded round conductors Cl. 5, 10 mm² and 16 mm² for multi-stranded round conductors Cl. 2, e.g. to DIN EN 60228
- Simple fork-type mounting
- Simple processing thanks to inspection hole to check the inserted conductor

### Characteristics

- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Item identification on cable lug

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

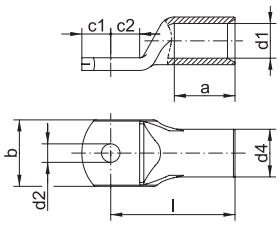
### Technical instructions

- Tool: see page 38

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 0.75 | M3 | **91C3** | 1.3 | 6 | 6.0 | 3.2 | 2.8 | 3.25 | 4.0 | 12 | 0.06 | 100 |
| | M4 | **91C4** | 1.3 | 6 | 6.5 | 4.3 | 2.8 | 4.00 | 5.0 | 13 | 0.05 | 100 |
| | M5 | **91C5** | 1.3 | 6 | 7.5 | 5.3 | 2.8 | 4.75 | 5.5 | 14 | 0.06 | 100 |
| 1.5 | M3 | **92C3** | 1.8 | 6 | 6.5 | 3.2 | 3.3 | 3.25 | 4.0 | 12 | 0.07 | 100 |
| | M4 | **92C4** | 1.8 | 6 | 6.5 | 4.3 | 3.3 | 4.00 | 5.0 | 13 | 0.07 | 100 |
| | M5 | **92C5** | 1.8 | 6 | 7.5 | 5.3 | 3.3 | 4.75 | 5.5 | 14 | 0.07 | 100 |
| | M6 | **92C6** | 1.8 | 6 | 9.0 | 6.5 | 3.3 | 6.50 | 6.5 | 16 | 0.08 | 100 |
| 2.5 | M3 | **93C3** | 2.3 | 6 | 7.5 | 3.2 | 4.2 | 3.25 | 4.0 | 12 | 0.12 | 100 |
| | M4 | **93C4** | 2.3 | 6 | 7.5 | 4.3 | 4.2 | 4.00 | 5.0 | 13 | 0.11 | 100 |
| | M5 | **93C5** | 2.3 | 6 | 8.5 | 5.3 | 4.2 | 4.75 | 5.5 | 14 | 0.12 | 100 |
| | M6 | **93C6** | 2.3 | 6 | 9.5 | 6.5 | 4.2 | 6.50 | 6.5 | 16 | 0.10 | 100 |
| 4 | M4 | **94C4** | 3.0 | 8 | 8.5 | 4.3 | 5.0 | 4.75 | 5.5 | 17 | 0.19 | 100 |
| | M5 | **94C5** | 3.0 | 8 | 9.0 | 5.3 | 5.0 | 4.75 | 6.0 | 17 | 0.19 | 100 |
| | M6 | **94C6** | 3.0 | 8 | 10.0 | 6.5 | 5.0 | 6.50 | 6.5 | 19 | 0.21 | 100 |
| | M8 | **94C8** | 3.0 | 8 | 13.0 | 8.5 | 5.0 | 8.50 | 9.5 | 22 | 0.24 | 100 |
| 6 | M4 | **95C4** | 4.0 | 9 | 9.5 | 4.3 | 6.0 | 5.00 | 5.5 | 18 | 0.27 | 100 |
| | M5 | **95C5** | 4.0 | 9 | 9.5 | 5.3 | 6.0 | 6.00 | 6.0 | 19 | 0.32 | 100 |
| | M6 | **95C6** | 4.0 | 9 | 10.0 | 6.5 | 6.0 | 7.00 | 6.5 | 19 | 0.27 | 100 |
| | M8 | **95C8** | 4.0 | 9 | 14.0 | 8.5 | 6.0 | 8.50 | 9.0 | 22 | 0.31 | 100 |
| 10 | M5 | **96C5** | 4.5 | 10 | 12.0 | 5.5 | 7.0 | 6.50 | 7.5 | 22 | 0.45 | 100 |
| | M6 | **96C6** | 4.5 | 10 | 12.0 | 6.5 | 7.0 | 6.50 | 7.5 | 22 | 0.41 | 100 |
| | M8 | **96C8** | 4.5 | 10 | 15.0 | 8.5 | 7.0 | 10.00 | 10.0 | 25 | 0.52 | 100 |
| 16 | M5 | **97C5** | 5.5 | 13 | 12.0 | 5.5 | 8.5 | 5.50 | 6.5 | 26 | 0.81 | 100 |
| | M6 | **97C6** | 5.5 | 13 | 12.0 | 6.5 | 8.5 | 6.25 | 7.5 | 27 | 0.81 | 100 |
| | M8 | **97C8** | 5.5 | 13 | 15.0 | 8.5 | 8.5 | 8.50 | 9.5 | 29 | 0.90 | 100 |

## Tubular cable lugs, Cu, standard type












- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded multi-stranded sector shaped conductors
- Ideal cable lug for control cabinet construction
- In combination with EKM 60 ID suitable for fine-stranded conductors

### Characteristics
- Annealed material optimises material and crimping properties
- To DIN EN 61373 class 1B vibration-tested
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Item identification on cable lug

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

### Additional information
- Also available as featured article with inspection hole, part number appendix „MS“

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 6 | M5 | **1R5** | 3.5 | 9 | 10 | 5.5 | 6.5 | 6.50 | 7.5 | 21 | 0.50 | 100 |
| | M6 | **1R6** | 3.5 | 9 | 12 | 6.5 | 6.5 | 6.50 | 7.5 | 21 | 0.47 | 100 |
| | M8 | **1R8** | 3.5 | 9 | 15 | 8.5 | 6.5 | 10.00 | 10.0 | 23 | 0.54 | 100 |
| | M10 | **1R10** | 3.5 | 9 | 17 | 10.5 | 6.5 | 12.00 | 12.0 | 25 | 0.59 | 100 |
| | M12 | **1R12** | 3.5 | 9 | 19 | 13.0 | 6.5 | 13.00 | 13.0 | 28 | 0.63 | 100 |
| 10 | M5 | **2R5** | 4.5 | 10 | 12 | 5.5 | 7.0 | 6.50 | 7.5 | 22 | 0.50 | 100 |
| | M6 | **2R6** | 4.5 | 10 | 12 | 6.5 | 7.0 | 6.50 | 7.5 | 22 | 0.49 | 100 |
| | M8 | **2R8** | 4.5 | 10 | 15 | 8.5 | 7.0 | 10.00 | 10.0 | 25 | 0.58 | 100 |
| | M10 | **2R10** | 4.5 | 10 | 17 | 10.5 | 7.0 | 12.00 | 12.0 | 27 | 0.62 | 100 |
| | M12 | **2R12** | 4.5 | 10 | 19 | 13.0 | 7.0 | 13.00 | 13.0 | 29 | 0.64 | 100 |
| 16 | M5 | **3R5** | 5.5 | 13 | 12 | 5.5 | 8.5 | 5.50 | 6.5 | 26 | 0.84 | 100 |
| | M6 | **3R6** | 5.5 | 13 | 12 | 6.5 | 8.5 | 6.25 | 7.5 | 27 | 0.86 | 100 |
| | M8 | **3R8** | 5.5 | 13 | 15 | 8.5 | 8.5 | 8.50 | 9.5 | 29 | 0.93 | 100 |
| | M10 | **3R10** | 5.5 | 13 | 17 | 10.5 | 8.5 | 10.50 | 11.5 | 31 | 0.99 | 100 |
| | M12 | **3R12** | 5.5 | 13 | 19 | 13.0 | 8.5 | 12.00 | 13.0 | 33 | 1.02 | 100 |
| 25 | M5 | **4R5** | 7.0 | 15 | 14 | 5.5 | 10.0 | 7.50 | 7.5 | 30 | 1.22 | 25 |
| | M6 | **4R6** | 7.0 | 15 | 14 | 6.5 | 10.0 | 7.50 | 7.5 | 30 | 1.20 | 100 |
| | M8 | **4R8** | 7.0 | 15 | 16 | 8.5 | 10.0 | 10.00 | 10.0 | 32 | 1.31 | 100 |
| | M10 | **4R10** | 7.0 | 15 | 18 | 10.5 | 10.0 | 12.00 | 12.0 | 34 | 1.57 | 100 |
| | M12 | **4R12** | 7.0 | 15 | 19 | 13.0 | 10.0 | 13.00 | 13.0 | 35 | 1.39 | 25 |
| | M14 | **4R14** | 7.0 | 15 | 21 | 15.0 | 10.0 | 14.50 | 14.5 | 38 | 1.49 | 25 |
| 35 | M6 | **5R6** | 8.5 | 17 | 17 | 6.5 | 12.0 | 7.50 | 7.5 | 32 | 1.85 | 100 |
| | M8 | **5R8** | 8.5 | 17 | 17 | 8.5 | 12.0 | 10.00 | 10.0 | 34 | 2.00 | 100 |
| | M10 | **5R10** | 8.5 | 17 | 19 | 10.5 | 12.0 | 12.00 | 12.0 | 37 | 2.13 | 100 |
| | M12 | **5R12** | 8.5 | 17 | 21 | 13.0 | 12.0 | 13.00 | 13.0 | 38 | 2.12 | 100 |
| | M14 | **5R14** | 8.5 | 17 | 21 | 15.0 | 12.0 | 14.50 | 14.5 | 40 | 2.18 | 25 |
| | M16 | **5R16** | 8.5 | 17 | 26 | 17.0 | 12.0 | 16.00 | 16.0 | 42 | 2.24 | 25 |

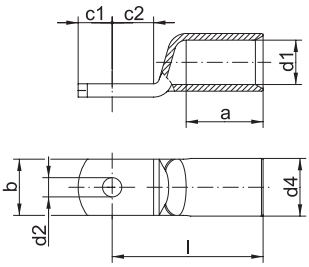
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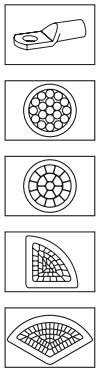
## Tubular cable lugs, Cu, standard type

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 50 | M6 | **6R6** | 10.0 | 19 | 20 | 6.5 | 14.0 | 10.00 | 10.0 | 37 | 3.00 | 25 |
| | M8 | **6R8** | 10.0 | 19 | 20 | 8.5 | 14.0 | 10.00 | 10.0 | 37 | 2.93 | 50 |
| | M10 | **6R10** | 10.0 | 19 | 20 | 10.5 | 14.0 | 12.00 | 12.0 | 39 | 3.08 | 50 |
| | M12 | **6R12** | 10.0 | 19 | 23 | 13.0 | 14.0 | 13.00 | 13.0 | 43 | 3.23 | 50 |
| | M14 | **6R14** | 10.0 | 19 | 23 | 15.0 | 14.0 | 14.50 | 14.5 | 45 | 3.32 | 25 |
| | M16 | **6R16** | 10.0 | 19 | 28 | 17.0 | 14.0 | 16.00 | 16.0 | 46 | 3.38 | 25 |
| | M20 | **6R20** | 10.0 | 19 | 30 | 21.0 | 14.0 | 19.00 | 19.0 | 48 | 3.46 | 25 |
| 70 | M6 | **7R6** | 12.0 | 21 | 23 | 6.5 | 16.5 | 10.00 | 10.0 | 43 | 4.49 | 25 |
| | M8 | **7R8** | 12.0 | 21 | 23 | 8.5 | 16.5 | 10.00 | 10.0 | 43 | 4.38 | 50 |
| | M10 | **7R10** | 12.0 | 21 | 23 | 10.5 | 16.5 | 12.00 | 12.0 | 44 | 4.54 | 50 |
| | M12 | **7R12** | 12.0 | 21 | 23 | 13.0 | 16.5 | 13.00 | 13.0 | 46 | 4.63 | 50 |
| | M14 | **7R14** | 12.0 | 21 | 23 | 15.0 | 16.5 | 14.50 | 14.5 | 48 | 4.76 | 25 |
| | M16 | **7R16** | 12.0 | 21 | 28 | 17.0 | 16.5 | 16.00 | 16.0 | 50 | 4.24 | 25 |
| | M20 | **7R20** | 12.0 | 21 | 30 | 21.0 | 16.5 | 19.00 | 19.0 | 53 | 5.09 | 25 |
| 95 | M8 | **8R8** | 13.5 | 25 | 26 | 8.5 | 18.0 | 12.00 | 12.0 | 48 | 5.44 | 25 |
| | M10 | **8R10** | 13.5 | 25 | 26 | 10.5 | 18.0 | 12.00 | 12.0 | 48 | 5.40 | 50 |
| | M12 | **8R12** | 13.5 | 25 | 26 | 13.0 | 18.0 | 13.00 | 13.0 | 49 | 5.56 | 50 |
| | M14 | **8R14** | 13.5 | 25 | 26 | 15.0 | 18.0 | 14.50 | 14.5 | 51 | 5.62 | 25 |
| | M16 | **8R16** | 13.5 | 25 | 28 | 17.0 | 18.0 | 16.00 | 16.0 | 54 | 5.82 | 50 |
| | M20 | **8R20** | 13.5 | 25 | 36 | 21.0 | 18.0 | 22.00 | 22.0 | 60 | 6.71 | 25 |
| 120 | M8 | **9R8** | 15.0 | 26 | 28 | 8.5 | 19.5 | 14.00 | 14.0 | 51 | 6.72 | 25 |
| | M10 | **9R10** | 15.0 | 26 | 28 | 10.5 | 19.5 | 14.00 | 14.0 | 51 | 6.57 | 50 |
| | M12 | **9R12** | 15.0 | 26 | 28 | 13.0 | 19.5 | 14.00 | 14.0 | 51 | 6.38 | 50 |
| | M14 | **9R14** | 15.0 | 26 | 28 | 15.0 | 19.5 | 15.00 | 15.0 | 52 | 6.45 | 25 |
| | M16 | **9R16** | 15.0 | 26 | 30 | 17.0 | 19.5 | 16.00 | 16.0 | 54 | 6.51 | 50 |
| | M20 | **9R20** | 15.0 | 26 | 36 | 21.0 | 19.5 | 22.00 | 22.0 | 63 | 7.74 | 25 |
| 150 | M8 | **10R8** | 16.5 | 30 | 31 | 8.5 | 21.0 | 14.00 | 14.0 | 56 | 7.78 | 10 |
| | M10 | **10R10** | 16.5 | 30 | 31 | 10.5 | 21.0 | 14.00 | 14.0 | 56 | 7.62 | 10 |
| | M12 | **10R12** | 16.5 | 30 | 31 | 13.0 | 21.0 | 15.00 | 15.0 | 57 | 7.73 | 25 |
| | M14 | **10R14** | 16.5 | 30 | 31 | 15.0 | 21.0 | 15.00 | 15.0 | 57 | 7.64 | 10 |
| | M16 | **10R16** | 16.5 | 30 | 31 | 17.0 | 21.0 | 16.00 | 16.0 | 58 | 7.53 | 10 |
| | M20 | **10R20** | 16.5 | 30 | 36 | 21.0 | 21.0 | 22.00 | 22.0 | 66 | 8.80 | 10 |
| 185 | M10 | **11R10** | 19.0 | 30 | 35 | 10.5 | 24.0 | 18.00 | 18.0 | 65 | 11.75 | 10 |
| | M12 | **11R12** | 19.0 | 30 | 35 | 13.0 | 24.0 | 18.00 | 18.0 | 65 | 11.82 | 10 |
| | M14 | **11R14** | 19.0 | 30 | 35 | 15.0 | 24.0 | 18.00 | 18.0 | 65 | 11.39 | 10 |
| | M16 | **11R16** | 19.0 | 30 | 35 | 17.0 | 24.0 | 18.00 | 18.0 | 65 | 11.24 | 25 |
| | M20 | **11R20** | 19.0 | 30 | 39 | 21.0 | 24.0 | 22.00 | 22.0 | 69 | 12.00 | 10 |
| 240 | M10 | **12R10** | 21.0 | 35 | 39 | 10.5 | 26.0 | 21.50 | 19.0 | 72 | 14.72 | 10 |
| | M12 | **12R12** | 21.0 | 35 | 39 | 13.0 | 26.0 | 21.50 | 19.0 | 72 | 14.55 | 10 |
| | M14 | **12R14** | 21.0 | 35 | 39 | 15.0 | 26.0 | 21.50 | 19.0 | 72 | 14.24 | 10 |
| | M16 | **12R16** | 21.0 | 35 | 39 | 17.0 | 26.0 | 21.50 | 19.0 | 72 | 14.09 | 25 |
| | M20 | **12R20** | 21.0 | 35 | 39 | 21.0 | 26.0 | 21.50 | 19.0 | 72 | 13.60 | 10 |
| 300 | M12 | **13R12** | 23.5 | 44 | 43 | 13.0 | 29.5 | 24.00 | 24.0 | 87 | 23.33 | 5 |
| | M14 | **13R14** | 23.5 | 44 | 43 | 15.0 | 29.5 | 24.00 | 24.0 | 87 | 23.14 | 5 |
| | M16 | **13R16** | 23.5 | 44 | 43 | 17.0 | 29.5 | 24.00 | 24.0 | 87 | 22.74 | 5 |
| | M20 | **13R20** | 23.5 | 44 | 43 | 21.0 | 29.5 | 24.00 | 24.0 | 87 | 22.19 | 5 |
| 400 | M12 | **14R12** | 27.0 | 44 | 49 | 13.0 | 34.0 | 24.00 | 24.0 | 90 | 32.41 | 5 |
| | M14 | **14R14** | 27.0 | 44 | 49 | 15.0 | 34.0 | 24.00 | 24.0 | 90 | 32.24 | 5 |
| | M16 | **14R16** | 27.0 | 44 | 49 | 17.0 | 34.0 | 24.00 | 24.0 | 90 | 31.98 | 5 |
| | M20 | **14R20** | 27.0 | 44 | 49 | 21.0 | 34.0 | 24.00 | 24.0 | 90 | 31.41 | 5 |

## Tubular cable lugs for switchgear connections, standard type





- For multi-stranded, round conductors e.g. to DIN EN 60228 Cl. 2
- For pre-rounded multi-stranded sector shaped conductors
- For connecting in switch cabinets with reduced connecting space
- Narrow palm version manufactured without material loss
- In combination with EKM 60 ID suitable for fine-stranded conductors

### Characteristics
- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

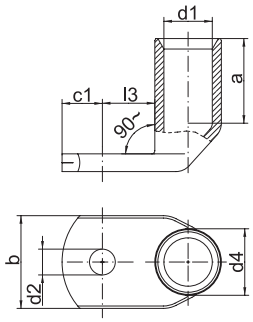
### Technical instructions
- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

### Additional information
- Also available as featured article with inspection hole, part number appendix „MS“

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 35 | M6 | **5SG6** | 8.5 | 17 | 15.0 | 6.5 | 12.0 | 7.5 | 7.5 | 32 | 1.78 | 25 |
| 50 | M6 | **6SG6** | 10.0 | 19 | 15.0 | 6.5 | 14.0 | 10.0 | 10.0 | 37 | 2.95 | 25 |
| | M8 | **6SG8** | 10.0 | 19 | 17.0 | 8.5 | 14.0 | 10.0 | 10.0 | 37 | 2.82 | 25 |
| | M10 | **6SG10** | 10.0 | 19 | 19.0 | 10.5 | 14.0 | 11.5 | 12.0 | 39 | 3.08 | 25 |
| 70 | M6 | **7SG6** | 12.0 | 21 | 17.0 | 6.5 | 16.5 | 10.0 | 10.0 | 43 | 4.22 | 25 |
| | M8 | **7SG8** | 12.0 | 21 | 17.0 | 8.5 | 16.5 | 10.0 | 10.0 | 43 | 4.10 | 25 |
| | M10 | **7SG10** | 12.0 | 21 | 19.0 | 10.5 | 16.5 | 11.5 | 12.0 | 44 | 4.45 | 25 |
| | M12 | **7SG12** | 12.0 | 21 | 19.0 | 13.0 | 16.5 | 13.0 | 13.0 | 46 | 4.22 | 25 |
| 95 | M6 | **8SG6** | 13.5 | 25 | 19.0 | 6.5 | 18.0 | 11.5 | 12.0 | 48 | 5.49 | 25 |
| | M8 | **8SG8** | 13.5 | 25 | 19.0 | 8.5 | 18.0 | 11.5 | 12.0 | 48 | 5.46 | 25 |
| | M10 | **8SG10** | 13.5 | 25 | 19.0 | 10.5 | 18.0 | 11.5 | 12.0 | 48 | 5.13 | 25 |
| | M12 | **8SG12** | 13.5 | 25 | 19.0 | 13.0 | 18.0 | 13.0 | 13.0 | 49 | 5.15 | 25 |
| 120 | M6 | **9SG6** | 15.0 | 26 | 19.0 | 6.5 | 19.5 | 11.5 | 14.0 | 51 | 6.16 | 10 |
| | M8 | **9SG8** | 15.0 | 26 | 19.0 | 8.5 | 19.5 | 11.5 | 14.0 | 51 | 5.94 | 10 |
| | M10 | **9SG10** | 15.0 | 26 | 19.0 | 10.5 | 19.5 | 11.5 | 14.0 | 51 | 5.81 | 10 |
| | M12 | **9SG12** | 15.0 | 26 | 19.0 | 13.0 | 19.5 | 14.0 | 14.0 | 51 | 5.92 | 10 |
| 150 | M6 | **10SG6** | 16.5 | 30 | 19.0 | 6.5 | 21.0 | 11.5 | 14.0 | 56 | 6.85 | 10 |
| | M8 | **10SG8** | 16.5 | 30 | 19.0 | 8.5 | 21.0 | 11.5 | 14.0 | 56 | 6.80 | 10 |
| | M10 | **10SG10** | 16.5 | 30 | 19.0 | 10.5 | 21.0 | 11.5 | 14.0 | 56 | 6.75 | 10 |
| | M12 | **10SG12** | 16.5 | 30 | 19.0 | 13.0 | 21.0 | 15.0 | 15.0 | 57 | 7.15 | 10 |
| 185 | M10 | **11SG10** | 19.0 | 30 | 24.5 | 10.5 | 24.0 | 11.5 | 18.0 | 65 | 10.59 | 10 |
| | M12 | **11SG12** | 19.0 | 30 | 31.0 | 13.0 | 24.0 | 18.0 | 18.0 | 65 | 11.09 | 10 |
| | M16 | **11SG16** | 19.0 | 30 | 31.0 | 17.0 | 24.0 | 18.0 | 18.0 | 65 | 9.76 | 10 |
| 240 | M10 | **12SG10** | 21.0 | 35 | 31.0 | 10.5 | 26.0 | 11.5 | 19.0 | 72 | 12.70 | 5 |
| | M12 | **12SG12** | 21.0 | 35 | 31.0 | 13.0 | 26.0 | 21.5 | 19.0 | 72 | 13.72 | 5 |
| | M16 | **12SG16** | 21.0 | 35 | 31.0 | 17.0 | 26.0 | 21.5 | 19.0 | 72 | 13.28 | 5 |
| 300 | M10 | **13SG10** | 23.5 | 44 | 31.0 | 10.5 | 30.0 | 11.5 | 24.0 | 87 | 19.70 | 5 |
| | M12 | **13SG12** | 23.5 | 44 | 31.0 | 13.0 | 30.0 | 24.0 | 24.0 | 87 | 22.72 | 5 |
| | M16 | **13SG16** | 23.5 | 44 | 31.0 | 17.0 | 30.0 | 24.0 | 24.0 | 87 | 22.50 | 5 |

# Angled tubular cable lugs, Cu, 90° angled, standard type












- For multi-stranded, round conductors e.g. to DIN EN 60228
- For pre-rounded multi-stranded sector shaped conductors
- Flat contact surface by special angle pressing technology
- In combination with the EKM 60 ID suitable for fine stranded conductors

## Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer
- Item identification on cable lug

## Material

- Copper (EN13600)

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

## Additional information

- Also available as featured article with inspection hole, part number appendix „MS“

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | l3 | | |
| 6 | M5 | **41R5** | 3.5 | 9 | 10 | 5.5 | 6.5 | 7.5 | 9 | 0.59 | 50 |
| | M6 | **41R6** | 3.5 | 9 | 12 | 6.5 | 6.5 | 7.5 | 10 | 0.58 | 50 |
| | M8 | **41R8** | 3.5 | 9 | 14 | 8.5 | 6.5 | 10.0 | 13 | 0.61 | 50 |
| | M10 | **41R10** | 3.5 | 9 | 17 | 10.5 | 6.5 | 12.0 | 15 | 0.65 | 50 |
| | M12 | **41R12** | 3.5 | 9 | 19 | 13.0 | 6.5 | 13.0 | 17 | 0.62 | 50 |
| 10 | M5 | **42R5** | 4.5 | 10 | 12 | 5.5 | 7.0 | 6.5 | 10 | 0.57 | 50 |
| | M6 | **42R6** | 4.5 | 10 | 12 | 6.5 | 7.0 | 6.5 | 10 | 0.57 | 50 |
| | M8 | **42R8** | 4.5 | 10 | 15 | 8.5 | 7.0 | 10.0 | 13 | 0.63 | 50 |
| | M10 | **42R10** | 4.5 | 10 | 17 | 10.5 | 7.0 | 12.0 | 15 | 0.66 | 50 |
| | M12 | **42R12** | 4.5 | 10 | 19 | 13.0 | 7.0 | 13.0 | 18 | 0.81 | 50 |
| 16 | M5 | **43R5** | 5.5 | 13 | 12 | 5.5 | 8.5 | 7.5 | 10 | 1.01 | 50 |
| | M6 | **43R6** | 5.5 | 13 | 12 | 6.5 | 8.5 | 7.5 | 11 | 1.01 | 50 |
| | M8 | **43R8** | 5.5 | 13 | 15 | 8.5 | 8.5 | 10.0 | 13 | 1.08 | 50 |
| | M10 | **43R10** | 5.5 | 13 | 17 | 10.5 | 8.5 | 12.0 | 15 | 1.09 | 50 |
| | M12 | **43R12** | 5.5 | 13 | 19 | 13.0 | 8.5 | 13.0 | 18 | 1.15 | 50 |
| 25 | M5 | **44R5** | 7.0 | 15 | 14 | 5.5 | 10.0 | 7.5 | 11 | 1.40 | 25 |
| | M6 | **44R6** | 7.0 | 15 | 14 | 6.5 | 10.0 | 7.5 | 11 | 1.32 | 25 |
| | M8 | **44R8** | 7.0 | 15 | 16 | 8.5 | 10.0 | 10.0 | 13 | 1.44 | 25 |
| | M10 | **44R10** | 7.0 | 15 | 18 | 10.5 | 10.0 | 12.0 | 15 | 1.49 | 25 |
| | M12 | **44R12** | 7.0 | 15 | 19 | 13.0 | 10.0 | 13.0 | 18 | 1.44 | 25 |
| | M14 | **44R14** | 7.0 | 15 | 21 | 15.0 | 10.0 | 14.5 | 20 | 1.55 | 25 |
| 35 | M6 | **45R6** | 8.5 | 17 | 17 | 6.5 | 12.0 | 7.5 | 11 | 2.05 | 25 |
| | M8 | **45R8** | 8.5 | 17 | 17 | 8.5 | 12.0 | 10.0 | 13 | 2.20 | 25 |
| | M10 | **45R10** | 8.5 | 17 | 19 | 10.5 | 12.0 | 12.0 | 15 | 2.28 | 25 |
| | M12 | **45R12** | 8.5 | 17 | 21 | 13.0 | 12.0 | 13.0 | 18 | 2.38 | 25 |
| | M14 | **45R14** | 8.5 | 17 | 21 | 15.0 | 12.0 | 14.5 | 20 | 2.41 | 25 |
| | M16 | **45R16** | 8.5 | 17 | 26 | 17.0 | 12.0 | 16.0 | 22 | 2.40 | 25 |

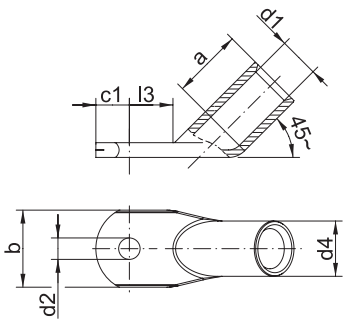
See next page

## Angled tubular cable lugs, Cu, 90° angled, standard type

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | l3 | | |
| 50 | M6 | **46R6** | 10.0 | 19 | 20 | 6.5 | 14.0 | 10.0 | 13 | 3.34 | 25 |
| | M8 | **46R8** | 10.0 | 19 | 20 | 8.5 | 14.0 | 10.0 | 13 | 3.28 | 25 |
| | M10 | **46R10** | 10.0 | 19 | 20 | 10.5 | 14.0 | 12.0 | 16 | 3.47 | 25 |
| | M12 | **46R12** | 10.0 | 19 | 23 | 13.0 | 14.0 | 13.0 | 18 | 3.42 | 25 |
| | M14 | **46R14** | 10.0 | 19 | 23 | 15.0 | 14.0 | 14.5 | 20 | 3.55 | 25 |
| | M16 | **46R16** | 10.0 | 19 | 28 | 17.0 | 14.0 | 16.0 | 22 | 3.58 | 25 |
| | M20 | **46R20** | 10.0 | 19 | 30 | 21.0 | 14.0 | 19.0 | 24 | 3.15 | 25 |
| 70 | M6 | **47R6** | 12.0 | 21 | 23 | 6.5 | 16.5 | 10.0 | 13 | 4.90 | 25 |
| | M8 | **47R8** | 12.0 | 21 | 23 | 8.5 | 16.5 | 10.0 | 14 | 4.80 | 25 |
| | M10 | **47R10** | 12.0 | 21 | 23 | 10.5 | 16.5 | 12.0 | 16 | 4.88 | 25 |
| | M12 | **47R12** | 12.0 | 21 | 23 | 13.0 | 16.5 | 13.0 | 18 | 4.99 | 25 |
| | M14 | **47R14** | 12.0 | 21 | 23 | 15.0 | 16.5 | 14.5 | 20 | 5.38 | 25 |
| | M16 | **47R16** | 12.0 | 21 | 28 | 17.0 | 16.5 | 16.0 | 22 | 5.35 | 25 |
| | M20 | **47R20** | 12.0 | 21 | 30 | 21.0 | 16.5 | 19.0 | 24 | 5.30 | 25 |
| 95 | M8 | **48R8** | 13.5 | 25 | 26 | 8.5 | 18.0 | 12.0 | 14 | 5.89 | 25 |
| | M10 | **48R10** | 13.5 | 25 | 26 | 10.5 | 18.0 | 12.0 | 17 | 5.88 | 25 |
| | M12 | **48R12** | 13.5 | 25 | 26 | 13.0 | 18.0 | 13.0 | 18 | 5.93 | 25 |
| | M14 | **48R14** | 13.5 | 25 | 26 | 15.0 | 18.0 | 14.5 | 20 | 6.03 | 25 |
| | M16 | **48R16** | 13.5 | 25 | 28 | 17.0 | 18.0 | 16.0 | 22 | 6.17 | 25 |
| | M20 | **48R20** | 13.5 | 25 | 36 | 21.0 | 18.0 | 22.0 | 24 | 6.42 | 25 |
| 120 | M8 | **49R8** | 15.0 | 26 | 28 | 8.5 | 19.5 | 14.0 | 16 | 7.26 | 10 |
| | M10 | **49R10** | 15.0 | 26 | 28 | 10.5 | 19.5 | 14.0 | 17 | 7.30 | 10 |
| | M12 | **49R12** | 15.0 | 26 | 28 | 13.0 | 19.5 | 14.0 | 18 | 7.19 | 10 |
| | M14 | **49R14** | 15.0 | 26 | 28 | 15.0 | 19.5 | 15.0 | 20 | 7.30 | 10 |
| | M16 | **49R16** | 15.0 | 26 | 30 | 17.0 | 19.5 | 16.0 | 22 | 7.35 | 10 |
| | M20 | **49R20** | 15.0 | 26 | 36 | 21.0 | 19.5 | 22.0 | 24 | 7.60 | 10 |
| 150 | M8 | **50R8** | 16.5 | 30 | 31 | 8.5 | 21.0 | 14.0 | 16 | 8.41 | 10 |
| | M10 | **50R10** | 16.5 | 30 | 31 | 10.5 | 21.0 | 14.0 | 17 | 8.27 | 10 |
| | M12 | **50R12** | 16.5 | 30 | 31 | 13.0 | 21.0 | 15.0 | 18 | 8.34 | 10 |
| | M14 | **50R14** | 16.5 | 30 | 31 | 15.0 | 21.0 | 15.0 | 20 | 8.52 | 10 |
| | M16 | **50R16** | 16.5 | 30 | 31 | 17.0 | 21.0 | 16.0 | 22 | 8.62 | 10 |
| | M20 | **50R20** | 16.5 | 30 | 36 | 21.0 | 21.0 | 22.0 | 24 | 9.10 | 10 |
| 185 | M10 | **51R10** | 19.0 | 30 | 35 | 10.5 | 24.0 | 18.0 | 22 | 12.17 | 10 |
| | M12 | **51R12** | 19.0 | 30 | 35 | 13.0 | 24.0 | 18.0 | 22 | 11.97 | 10 |
| | M14 | **51R14** | 19.0 | 30 | 35 | 15.0 | 24.0 | 18.0 | 22 | 11.77 | 10 |
| | M16 | **51R16** | 19.0 | 30 | 35 | 17.0 | 24.0 | 18.0 | 22 | 11.53 | 10 |
| | M20 | **51R20** | 19.0 | 30 | 39 | 21.0 | 24.0 | 22.0 | 24 | 12.00 | 10 |
| 240 | M10 | **52R10** | 21.0 | 35 | 39 | 10.5 | 26.0 | 21.5 | 22 | 15.60 | 10 |
| | M12 | **52R12** | 21.0 | 35 | 39 | 13.0 | 26.0 | 21.5 | 22 | 15.60 | 10 |
| | M14 | **52R14** | 21.0 | 35 | 39 | 15.0 | 26.0 | 21.5 | 22 | 15.41 | 10 |
| | M16 | **52R16** | 21.0 | 35 | 39 | 17.0 | 26.0 | 21.5 | 22 | 15.18 | 10 |
| | M20 | **52R20** | 21.0 | 35 | 39 | 21.0 | 26.0 | 21.5 | 24 | 14.80 | 10 |
| 300 | M12 | **53R12** | 23.5 | 44 | 43 | 13.0 | 29.5 | 24.0 | 24 | 23.60 | 5 |
| | M14 | **53R14** | 23.5 | 44 | 43 | 15.0 | 29.5 | 24.0 | 24 | 23.40 | 5 |
| | M16 | **53R16** | 23.5 | 44 | 43 | 17.0 | 29.5 | 24.0 | 24 | 20.99 | 5 |
| | M20 | **53R20** | 23.5 | 44 | 43 | 21.0 | 29.5 | 24.0 | 24 | 22.70 | 5 |
| 400 | M12 | **54R12** | 27.0 | 44 | 49 | 13.0 | 34.0 | 24.0 | 24 | 32.53 | 5 |
| | M14 | **54R14** | 27.0 | 44 | 49 | 15.0 | 34.0 | 24.0 | 24 | 33.40 | 5 |
| | M16 | **54R16** | 27.0 | 44 | 49 | 17.0 | 34.0 | 24.0 | 24 | 32.60 | 5 |
| | M20 | **54R20** | 27.0 | 44 | 49 | 21.0 | 34.0 | 24.0 | 24 | 31.80 | 5 |

# Angled tubular cable lugs, Cu, 45° angled, standard type












- For multi-stranded, round conductors e.g. to DIN EN 60228
- For pre-rounded multi-stranded sector shaped conductors
- Flat contact surface by special angle pressing technology
- In combination with EKM 60 ID suitable for fine-stranded conductors

## Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer
- Item identification on cable lug

## Material

- Copper (EN13600)

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

## Additional information

- Also available as featured article with inspection hole, part number appendix „MS“

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | l3 | | |
| 6 | M5 | **41R545** | 3.5 | 9 | 10 | 5.5 | 6.5 | 7.5 | 9 | 0.60 | 50 |
| | M6 | **41R645** | 3.5 | 9 | 12 | 6.5 | 6.5 | 7.5 | 10 | 0.58 | 50 |
| | M8 | **41R845** | 3.5 | 9 | 14 | 8.5 | 6.5 | 10.0 | 13 | 0.68 | 50 |
| | M10 | **41R1045** | 3.5 | 9 | 17 | 10.5 | 6.5 | 12.0 | 15 | 0.70 | 50 |
| | M12 | **41R1245** | 3.5 | 9 | 19 | 13.0 | 6.5 | 13.0 | 17 | 0.70 | 50 |
| 10 | M5 | **42R545** | 4.5 | 10 | 12 | 5.5 | 7.0 | 6.5 | 10 | 0.57 | 50 |
| | M6 | **42R645** | 4.5 | 10 | 12 | 6.5 | 7.0 | 6.5 | 10 | 0.57 | 50 |
| | M8 | **42R845** | 4.5 | 10 | 15 | 8.5 | 7.0 | 10.0 | 13 | 0.63 | 50 |
| | M10 | **42R1045** | 4.5 | 10 | 17 | 10.5 | 7.0 | 12.0 | 15 | 0.68 | 50 |
| | M12 | **42R1245** | 4.5 | 10 | 19 | 13.0 | 7.0 | 13.0 | 18 | 0.68 | 50 |
| 16 | M5 | **43R545** | 5.5 | 13 | 12 | 5.5 | 8.5 | 7.5 | 10 | 1.01 | 50 |
| | M6 | **43R645** | 5.5 | 13 | 12 | 6.5 | 8.5 | 7.5 | 11 | 1.06 | 50 |
| | M8 | **43R845** | 5.5 | 13 | 15 | 8.5 | 8.5 | 10.0 | 13 | 1.15 | 50 |
| | M10 | **43R1045** | 5.5 | 13 | 17 | 10.5 | 8.5 | 12.0 | 15 | 1.09 | 50 |
| | M12 | **43R1245** | 5.5 | 13 | 19 | 13.0 | 8.5 | 13.0 | 18 | 1.15 | 50 |
| 25 | M5 | **44R545** | 7.0 | 15 | 14 | 5.5 | 10.0 | 7.5 | 11 | 1.40 | 25 |
| | M6 | **44R645** | 7.0 | 15 | 14 | 6.5 | 10.0 | 7.5 | 11 | 1.32 | 25 |
| | M8 | **44R845** | 7.0 | 15 | 16 | 8.5 | 10.0 | 10.0 | 13 | 1.44 | 25 |
| | M10 | **44R1045** | 7.0 | 15 | 18 | 10.5 | 10.0 | 12.0 | 15 | 1.49 | 25 |
| | M12 | **44R1245** | 7.0 | 15 | 19 | 13.0 | 10.0 | 13.0 | 18 | 1.44 | 25 |
| | M14 | **44R1445** | 7.0 | 15 | 21 | 15.0 | 10.0 | 14.5 | 20 | 1.55 | 25 |
| 35 | M6 | **45R645** | 8.5 | 17 | 17 | 6.5 | 12.0 | 7.5 | 11 | 2.05 | 25 |
| | M8 | **45R845** | 8.5 | 17 | 17 | 8.5 | 12.0 | 10.0 | 13 | 2.20 | 25 |
| | M10 | **45R1045** | 8.5 | 17 | 19 | 10.5 | 12.0 | 12.0 | 15 | 2.28 | 25 |
| | M12 | **45R1245** | 8.5 | 17 | 21 | 13.0 | 12.0 | 13.0 | 18 | 2.38 | 25 |
| | M14 | **45R1445** | 8.5 | 17 | 21 | 15.0 | 12.0 | 14.5 | 20 | 2.41 | 25 |
| | M16 | **45R1645** | 8.5 | 17 | 26 | 17.0 | 12.0 | 16.0 | 22 | 2.40 | 25 |

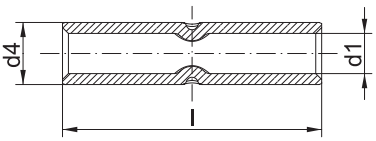
See next page

## Angled tubular cable lugs, Cu, 45° angled, standard type

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | l3 | | |
| 50 | M6 | **46R645** | 10.0 | 19 | 20 | 6.5 | 14.0 | 10.0 | 13 | 3.43 | 25 |
| | M8 | **46R845** | 10.0 | 19 | 20 | 8.5 | 14.0 | 10.0 | 13 | 3.28 | 25 |
| | M10 | **46R1045** | 10.0 | 19 | 20 | 10.5 | 14.0 | 12.0 | 16 | 3.47 | 25 |
| | M12 | **46R1245** | 10.0 | 19 | 23 | 13.0 | 14.0 | 13.0 | 18 | 3.42 | 25 |
| | M14 | **46R1445** | 10.0 | 19 | 23 | 15.0 | 14.0 | 14.5 | 20 | 3.65 | 25 |
| | M16 | **46R1645** | 10.0 | 19 | 28 | 17.0 | 14.0 | 16.0 | 22 | 3.76 | 25 |
| | M20 | **46R2045** | 10.0 | 19 | 30 | 21.0 | 14.0 | 19.0 | 24 | 3.30 | 25 |
| 70 | M6 | **47R645** | 12.0 | 21 | 23 | 6.5 | 16.5 | 10.0 | 13 | 5.06 | 25 |
| | M8 | **47R845** | 12.0 | 21 | 23 | 8.5 | 16.5 | 10.0 | 14 | 5.06 | 25 |
| | M10 | **47R1045** | 12.0 | 21 | 23 | 10.5 | 16.5 | 12.0 | 16 | 5.25 | 25 |
| | M12 | **47R1245** | 12.0 | 21 | 23 | 13.0 | 16.5 | 13.0 | 18 | 5.30 | 25 |
| | M14 | **47R1445** | 12.0 | 21 | 23 | 15.0 | 16.5 | 14.5 | 20 | 5.60 | 25 |
| | M16 | **47R1645** | 12.0 | 21 | 28 | 17.0 | 16.5 | 16.0 | 22 | 5.61 | 25 |
| | M20 | **47R2045** | 12.0 | 21 | 30 | 21.0 | 16.5 | 19.0 | 24 | 5.60 | 25 |
| 95 | M8 | **48R845** | 13.5 | 25 | 26 | 8.5 | 18.0 | 12.0 | 14 | 6.19 | 25 |
| | M10 | **48R1045** | 13.5 | 25 | 26 | 10.5 | 18.0 | 12.0 | 17 | 5.70 | 25 |
| | M12 | **48R1245** | 13.5 | 25 | 26 | 13.0 | 18.0 | 13.0 | 18 | 6.67 | 25 |
| | M14 | **48R1445** | 13.5 | 25 | 26 | 15.0 | 18.0 | 14.5 | 20 | 6.60 | 25 |
| | M16 | **48R1645** | 13.5 | 25 | 28 | 17.0 | 18.0 | 16.0 | 22 | 6.78 | 25 |
| | M20 | **48R2045** | 13.5 | 25 | 36 | 21.0 | 18.0 | 22.0 | 24 | 6.80 | 25 |
| 120 | M8 | **49R845** | 15.0 | 26 | 28 | 8.5 | 19.5 | 14.0 | 16 | 7.92 | 10 |
| | M10 | **49R1045** | 15.0 | 26 | 28 | 10.5 | 19.5 | 14.0 | 17 | 7.99 | 10 |
| | M12 | **49R1245** | 15.0 | 26 | 28 | 13.0 | 19.5 | 14.0 | 18 | 7.96 | 10 |
| | M14 | **49R1445** | 15.0 | 26 | 28 | 15.0 | 19.5 | 15.0 | 20 | 7.94 | 10 |
| | M16 | **49R1645** | 15.0 | 26 | 30 | 17.0 | 19.5 | 16.0 | 22 | 8.26 | 10 |
| | M20 | **49R2045** | 15.0 | 26 | 36 | 21.0 | 19.5 | 22.0 | 24 | 8.20 | 10 |
| 150 | M8 | **50R845** | 16.5 | 30 | 31 | 8.5 | 21.0 | 14.0 | 16 | 9.00 | 10 |
| | M10 | **50R1045** | 16.5 | 30 | 31 | 10.5 | 21.0 | 14.0 | 17 | 9.15 | 10 |
| | M12 | **50R1245** | 16.5 | 30 | 31 | 13.0 | 21.0 | 15.0 | 18 | 8.75 | 10 |
| | M14 | **50R1445** | 16.5 | 30 | 31 | 15.0 | 21.0 | 15.0 | 20 | 9.20 | 10 |
| | M16 | **50R1645** | 16.5 | 30 | 31 | 17.0 | 21.0 | 16.0 | 22 | 9.22 | 10 |
| | M20 | **50R2045** | 16.5 | 30 | 36 | 21.0 | 21.0 | 22.0 | 24 | 9.26 | 10 |
| 185 | M10 | **51R1045** | 19.0 | 30 | 35 | 10.5 | 24.0 | 18.0 | 22 | 13.30 | 10 |
| | M12 | **51R1245** | 19.0 | 30 | 35 | 13.0 | 24.0 | 18.0 | 22 | 13.32 | 10 |
| | M14 | **51R1445** | 19.0 | 30 | 35 | 15.0 | 24.0 | 18.0 | 22 | 13.40 | 10 |
| | M16 | **51R1645** | 19.0 | 30 | 35 | 17.0 | 24.0 | 18.0 | 22 | 12.80 | 10 |
| | M20 | **51R2045** | 19.0 | 30 | 39 | 21.0 | 24.0 | 22.0 | 24 | 13.10 | 10 |
| 240 | M10 | **52R1045** | 21.0 | 35 | 39 | 10.5 | 26.0 | 21.5 | 22 | 16.28 | 10 |
| | M12 | **52R1245** | 21.0 | 35 | 39 | 13.0 | 26.0 | 21.5 | 22 | 16.80 | 10 |
| | M14 | **52R1445** | 21.0 | 35 | 39 | 15.0 | 26.0 | 21.5 | 22 | 16.40 | 10 |
| | M16 | **52R1645** | 21.0 | 35 | 39 | 17.0 | 26.0 | 21.5 | 22 | 16.10 | 10 |
| | M20 | **52R2045** | 21.0 | 35 | 39 | 21.0 | 26.0 | 21.5 | 24 | 16.10 | 10 |
| 300 | M12 | **53R1245** | 23.5 | 44 | 43 | 13.0 | 29.5 | 24.0 | 24 | 24.08 | 5 |
| | M14 | **53R1445** | 23.5 | 44 | 43 | 15.0 | 29.5 | 24.0 | 24 | 24.20 | 5 |
| | M16 | **53R1645** | 23.5 | 44 | 43 | 17.0 | 29.5 | 24.0 | 24 | 23.23 | 5 |
| | M20 | **53R2045** | 23.5 | 44 | 43 | 21.0 | 29.5 | 24.0 | 24 | 23.50 | 5 |
| 400 | M12 | **54R1245** | 27.0 | 44 | 49 | 13.0 | 34.0 | 24.0 | 24 | 34.00 | 5 |
| | M14 | **54R1445** | 27.0 | 44 | 49 | 15.0 | 34.0 | 24.0 | 24 | 33.40 | 5 |
| | M16 | **54R1645** | 27.0 | 44 | 49 | 17.0 | 34.0 | 24.0 | 24 | 34.28 | 5 |
| | M20 | **54R2045** | 27.0 | 44 | 49 | 21.0 | 34.0 | 24.0 | 24 | 31.80 | 5 |

## Butt connectors, Cu, standard type












- For multi-stranded, round conductors e.g. to DIN EN 60228 Cl. 2
- For pre-rounded multi-stranded sector shaped conductors
- Simple cable entry for internal chamfer
- In combination with EKM 60 ID suitable for fine-stranded conductors

### Characteristics

- Simple and safe processing due to butt mark
- Annealed material optimises material and crimping properties
- Item identification on cable lug

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

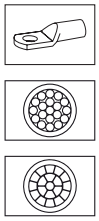
### Additional information

- Also available as featured article without buttmark, part number appendix „OM“

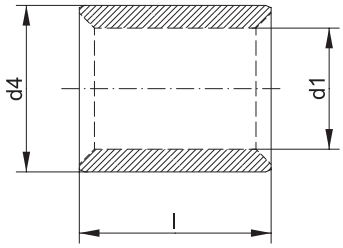
| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 0.75 | **17R** | 1.3 | 2.8 | 20 | 0.09 | 100 |
| 1.5 | **18R** | 1.8 | 3.3 | 25 | 0.12 | 100 |
| 2.5 | **19R** | 2.3 | 4.2 | 25 | 0.20 | 100 |
| 4 | **20R** | 3.0 | 5.0 | 25 | 0.26 | 100 |
| 6 | **21R** | 3.5 | 6.5 | 25 | 0.50 | 100 |
| 10 | **22R** | 4.5 | 7.0 | 30 | 0.72 | 100 |
| 16 | **23R** | 5.5 | 8.5 | 35 | 1.00 | 100 |
| 25 | **24R** | 7.0 | 10.0 | 40 | 1.41 | 50 |
| 35 | **25R** | 8.5 | 12.0 | 45 | 2.24 | 50 |
| 50 | **26R** | 10.0 | 14.0 | 50 | 3.36 | 50 |
| 70 | **27R** | 12.0 | 16.5 | 55 | 4.87 | 50 |
| 95 | **28R** | 13.5 | 18.0 | 60 | 5.91 | 25 |
| 120 | **29R** | 15.0 | 19.5 | 65 | 7.00 | 25 |
| 150 | **30R** | 16.5 | 21.0 | 70 | 8.12 | 10 |
| 185 | **31R** | 19.0 | 24.0 | 75 | 10.06 | 10 |
| 240 | **32R** | 21.0 | 26.0 | 85 | 13.82 | 10 |
| 300 | **33R** | 23.5 | 29.5 | 100 | 21.94 | 5 |
| 400 | **34R** | 27.0 | 34.0 | 100 | 29.65 | 5 |

## Parallel connectors, Cu, standard type





- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- Ideal for connecting differing cable cross-sections
- Simple cable entry due to internal chamfer




### Characteristics
- Annealed material optimises material and crimping properties

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

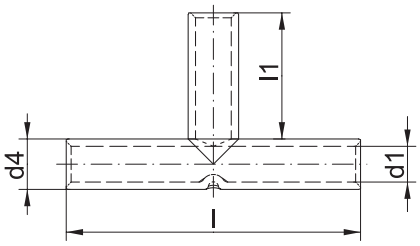
### Technical instructions
- Tool: see page 38

### Additional information
- The stated nominal cross-section corresponds to the total cross-section of the cable
- Additional conductor types and combinations on request

| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 1.5 | **148R** | 1.8 | 3.3 | 5 | 0.03 | 100 |
| 2.5 | **149R** | 2.3 | 4.2 | 5 | 0.04 | 100 |
| 4 | **150R** | 3.0 | 5.0 | 7 | 0.08 | 100 |
| 6 | **151R** | 4.0 | 6.0 | 7 | 0.09 | 100 |
| 10 | **152R** | 4.5 | 7.0 | 9 | 0.17 | 100 |
| 16 | **153R** | 5.5 | 8.5 | 10 | 0.28 | 100 |
| 25 | **154R** | 7.0 | 10.0 | 13 | 0.44 | 100 |
| 35 | **155R** | 8.5 | 12.0 | 16 | 0.78 | 100 |
| 50 | **156R** | 10.0 | 14.0 | 19 | 1.22 | 100 |
| 70 | **157R** | 12.0 | 16.5 | 19 | 1.62 | 50 |
| 95 | **158R** | 13.5 | 18.0 | 20 | 1.90 | 50 |
| 120 | **159R** | 15.0 | 19.5 | 22 | 2.28 | 50 |
| 150 | **160R** | 16.5 | 21.0 | 26 | 3.00 | 50 |
| 185 | **161R** | 19.0 | 24.0 | 30 | 4.37 | 50 |
| 240 | **162R** | 21.0 | 26.0 | 32 | 5.30 | 25 |
| 300 | **163R** | 23.5 | 29.5 | 36 | 8.05 | 25 |

## T-connectors, Cu, standard type












- For multi-stranded, round conductors e.g. to DIN EN 60228
- For pre-rounded multi-stranded sector shaped conductors
- Special version for cable tap conductors

### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

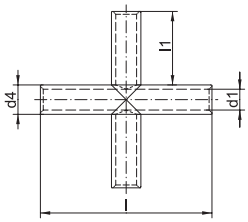
### Technical instructions

- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

| Nominal cross section mm² | Part No. | Dimension mm | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | d1 | d4 | l | l1 | | |
| 1.5 | **TV15** | 1.8 | 3.3 | 30 | 12 | 0.23 | 50 |
| 2.5 | **TV2.5** | 2.3 | 4.2 | 30 | 12 | 0.37 | 50 |
| 4 | **TV4** | 3.0 | 5.0 | 30 | 12 | 0.45 | 50 |
| 6 | **TV6** | 4.0 | 6.0 | 35 | 14 | 0.73 | 50 |
| 10 | **TV10** | 4.5 | 7.0 | 35 | 14 | 1.05 | 50 |
| 16 | **TV16** | 5.5 | 8.5 | 50 | 21 | 2.20 | 50 |
| 25 | **TV25** | 7.0 | 10.0 | 55 | 23 | 2.90 | 25 |
| 35 | **TV35** | 8.5 | 12.0 | 70 | 30 | 5.20 | 25 |
| 50 | **TV50** | 10.0 | 14.0 | 80 | 34 | 7.90 | 25 |
| 70 | **TV70** | 12.0 | 16.5 | 85 | 35 | 11.20 | 10 |
| 95 | **TV95** | 13.5 | 18.0 | 90 | 36 | 13.00 | 10 |
| 120 | **TV120** | 15.0 | 19.5 | 95 | 38 | 14.70 | 10 |
| 150 | **TV150** | 16.5 | 21.0 | 110 | 44 | 18.90 | 10 |
| 185 | **TV185** | 19.0 | 24.0 | 115 | 45 | 25.00 | 5 |
| 240 | **TV240** | 21.0 | 26.0 | 130 | 52 | 31.10 | 5 |

## Cross-connectors, Cu, standard type






- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded multi-stranded sector shaped conductors
- Version for double cable tap conductors

### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

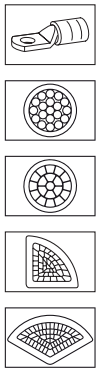
### Technical instructions

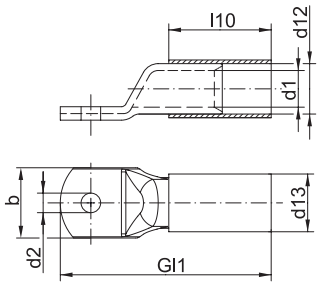
- Tool: see page 38
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

| Nominal cross section mm² | Part No. | Dimension mm | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | d1 | d4 | l | l1 | | |
| 1.5 | **KV15** | 1.8 | 3.3 | 30 | 12 | 0.320 | 25 |
| 2.5 | **KV2.5** | 2.3 | 4.2 | 30 | 12 | 0.490 | 25 |
| 4 | **KV4** | 3.0 | 5.0 | 30 | 12 | 0.650 | 25 |
| 6 | **KV6** | 4.0 | 6.0 | 35 | 14 | 0.950 | 25 |
| 10 | **KV10** | 4.5 | 7.0 | 35 | 14 | 1.350 | 25 |
| 16 | **KV16** | 5.5 | 8.5 | 50 | 21 | 2.950 | 25 |
| 25 | **KV25** | 7.0 | 10.0 | 55 | 23 | 4.000 | 15 |
| 35 | **KV35** | 8.5 | 12.0 | 70 | 30 | 6.900 | 15 |
| 50 | **KV50** | 10.0 | 14.0 | 80 | 34 | 10.400 | 15 |
| 70 | **KV70** | 12.0 | 16.5 | 85 | 35 | 14.600 | 15 |
| 95 | **KV95** | 13.5 | 18.0 | 90 | 36 | 17.100 | 15 |
| 120 | **KV120** | 15.0 | 19.5 | 95 | 38 | 19.400 | 5 |
| 150 | **KV150** | 16.5 | 21.0 | 110 | 44 | 24.100 | 5 |
| 185 | **KV185** | 19.0 | 24.0 | 115 | 45 | 32.100 | 5 |
| 240 | **KV240** | 21.0 | 26.0 | 130 | 52 | 41.100 | 5 |

# Insulated tubular cable lugs, Cu, standard type








- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded multi-stranded sector shaped conductors
- No additional insulation of the crimped connection required
- Is directly crimped with the insulation

## Characteristics

- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Heat resistant to 105° C

## Material

- Cable lug: Copper to EN 13600
- Insulation sleeve: PA, halogen-free

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 40
- Dimensions of tubular cable lugs can be found from page 14
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

## Additional information

- Also available as featured article with inspection hole, part number appendix „MS“

| Nominal cross section mm² | Size of bolt dia. | Part No. | Colour | Dimension mm | | | | | weight 100 pcs. ~kg Cu | weight 100 pcs. ~kg Total | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d12 | d13 | d2 | Gl1 | l10 | | | |
| 10 | M5 | **602R5** | red | 7.0 | 9.0 | 5.5 | 35.5 | 17.0 | 0.50 | 0.548 | 25 |
| | M6 | **602R6** | red | 7.0 | 9.0 | 6.5 | 35.5 | 17.0 | 0.49 | 0.538 | 25 |
| | M8 | **602R8** | red | 7.0 | 9.0 | 8.5 | 42.0 | 17.0 | 0.58 | 0.628 | 25 |
| | M10 | **602R10** | red | 7.0 | 9.0 | 10.5 | 46.0 | 17.0 | 0.62 | 0.668 | 25 |
| | M12 | **602R12** | red | 7.0 | 9.0 | 13.0 | 49.0 | 17.0 | 0.64 | 0.688 | 25 |
| 16 | M5 | **603R5** | blue | 8.5 | 10.5 | 5.5 | 39.5 | 21.0 | 0.84 | 0.907 | 25 |
| | M6 | **603R6** | blue | 8.5 | 10.5 | 6.5 | 41.3 | 21.0 | 0.86 | 0.927 | 25 |
| | M8 | **603R8** | blue | 8.5 | 10.5 | 8.5 | 45.5 | 21.0 | 0.93 | 0.997 | 25 |
| | M10 | **603R10** | blue | 8.5 | 10.5 | 10.5 | 49.5 | 21.0 | 0.99 | 1.057 | 25 |
| | M12 | **603R12** | blue | 8.5 | 10.5 | 13.0 | 54.0 | 21.0 | 1.02 | 1.087 | 25 |
| 25 | M5 | **604R5** | yellow | 10.0 | 12.0 | 5.5 | 45.0 | 24.0 | 1.22 | 1.312 | 25 |
| | M6 | **604R6** | yellow | 10.0 | 12.0 | 6.5 | 46.5 | 24.0 | 1.20 | 1.292 | 25 |
| | M8 | **604R8** | yellow | 10.0 | 12.0 | 8.5 | 51.0 | 24.0 | 1.31 | 1.402 | 25 |
| | M10 | **604R10** | yellow | 10.0 | 12.0 | 10.5 | 55.0 | 24.0 | 1.57 | 1.662 | 25 |
| | M12 | **604R12** | yellow | 10.0 | 12.0 | 13.0 | 57.0 | 24.0 | 1.39 | 1.482 | 25 |
| | M14 | **604R14** | yellow | 10.0 | 12.0 | 15.0 | 61.5 | 24.0 | 1.49 | 1.582 | 25 |
| 35 | M6 | **605R6** | red | 12.0 | 14.5 | 6.5 | 49.5 | 27.0 | 1.85 | 2.010 | 25 |
| | M8 | **605R8** | red | 12.0 | 14.5 | 8.5 | 54.0 | 27.0 | 2.00 | 2.160 | 25 |
| | M10 | **605R10** | red | 12.0 | 14.5 | 10.5 | 59.0 | 27.0 | 2.13 | 2.290 | 25 |
| | M12 | **605R12** | red | 12.0 | 14.5 | 13.0 | 61.0 | 27.0 | 2.12 | 2.280 | 25 |
| | M14 | **605R14** | red | 12.0 | 14.5 | 15.0 | 64.5 | 27.0 | 2.18 | 2.340 | 25 |
| | M16 | **605R16** | red | 12.0 | 14.5 | 17.0 | 68.0 | 27.0 | 2.24 | 2.400 | 25 |

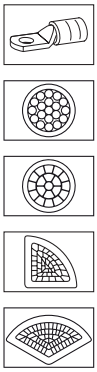
See next page

## Insulated tubular cable lugs, Cu, standard type

| Nominal cross section mm² | Size of bolt dia. | Part No. | Colour | Dimension mm | | | | | Gewicht 100 St. ~kg Cu | Gewicht 100 St. ~kg Ges. | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d12 | d13 | d2 | Gl1 | l10 | | | |
| 50 | M6 | **606R6** | | 14.0 | 16.5 | 6.5 | 59.0 | 32.0 | 3.00 | 3.220 | 25 |
| | M8 | **606R8** | | 14.0 | 16.5 | 8.5 | 59.0 | 32.0 | 2.93 | 3.150 | 25 |
| | M10 | **606R10** | | 14.0 | 16.5 | 10.5 | 63.0 | 32.0 | 3.08 | 3.300 | 25 |
| | M12 | **606R12** | | 14.0 | 16.5 | 13.0 | 68.0 | 32.0 | 3.23 | 3.450 | 25 |
| | M14 | **606R14** | | 14.0 | 16.5 | 15.0 | 71.5 | 32.0 | 3.32 | 3.540 | 25 |
| | M16 | **606R16** | | 14.0 | 16.5 | 17.0 | 77.0 | 32.0 | 3.38 | 3.600 | 25 |
| | M20 | **606R20** | | 14.0 | 16.5 | 21.0 | 83.5 | 32.0 | 3.46 | 3.680 | 25 |
| 70 | M6 | **607R6** | | 16.4 | 18.9 | 6.5 | 65.5 | 33.5 | 4.49 | 4.760 | 25 |
| | M8 | **607R8** | | 16.4 | 18.9 | 8.5 | 65.5 | 33.5 | 4.38 | 4.650 | 25 |
| | M10 | **607R10** | | 16.4 | 18.9 | 10.5 | 66.5 | 33.5 | 4.54 | 4.810 | 25 |
| | M12 | **607R12** | | 16.4 | 18.9 | 13.0 | 70.5 | 33.5 | 4.63 | 4.900 | 25 |
| | M14 | **607R14** | | 16.4 | 18.9 | 15.0 | 73.5 | 33.5 | 4.76 | 5.030 | 25 |
| | M16 | **607R16** | | 16.4 | 18.9 | 17.0 | 78.5 | 33.5 | 4.24 | 4.510 | 25 |
| | M20 | **607R20** | | 16.4 | 18.9 | 21.0 | 84.5 | 33.5 | 5.09 | 5.360 | 25 |
| 95 | M8 | **608R8** | | 17.8 | 20.8 | 8.5 | 74.0 | 40.0 | 5.44 | 5.85 | 25 |
| | M10 | **608R10** | | 17.8 | 20.8 | 10.5 | 74.0 | 40.0 | 5.40 | 5.81 | 25 |
| | M12 | **608R12** | | 17.8 | 20.8 | 13.0 | 76.0 | 40.0 | 5.56 | 5.97 | 25 |
| | M14 | **608R14** | | 17.8 | 20.8 | 15.0 | 79.5 | 40.0 | 5.62 | 6.03 | 25 |
| | M16 | **608R16** | | 17.8 | 20.8 | 17.0 | 84.0 | 40.0 | 5.82 | 6.23 | 25 |
| | M20 | **608R20** | | 17.8 | 20.8 | 21.0 | 96.0 | 40.0 | 6.71 | 7.12 | 25 |
| 120 | M8 | **609R8** | | 19.3 | 22.3 | 8.5 | 80.5 | 41.5 | 6.72 | 7.18 | 10 |
| | M10 | **609R10** | | 19.3 | 22.3 | 10.5 | 80.5 | 41.5 | 6.57 | 7.03 | 10 |
| | M12 | **609R12** | | 19.3 | 22.3 | 13.0 | 80.5 | 41.5 | 6.38 | 6.84 | 10 |
| | M16 | **609R16** | | 19.3 | 22.3 | 17.0 | 85.5 | 41.5 | 6.51 | 6.97 | 10 |

# Insulated butt connectors, Cu, standard type





- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded multi-stranded sector shaped conductors
- No additional insulation of the crimped connection required
- Is directly crimped with the insulation

## Characteristics

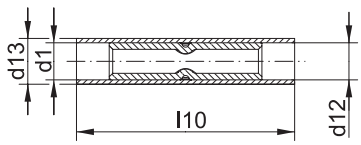
- With buttmarks for precise cable insertion
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer
- Heat resistant to 105° C

## Material

- Connector: Copper (EN 13600)
- Insulation sleeve: PA, halogen-free

## Surface

- Tin-plated to protect against corrosion



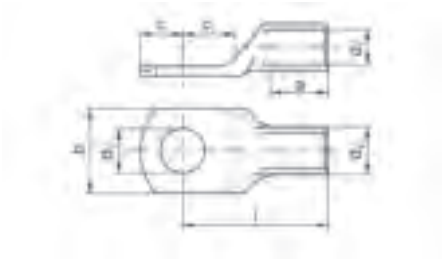

## Technical instructions

- Tool: see page 40
- Dimensions of butt connectors can be found on page 21
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | Gewicht 100 St. ~kg Cu | Gewicht 100 St. ~kg Ges. | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | d12 | d13 | l10 | | | |
| 10 | **622R** | | 4,5 | 7.0 | 9.0 | 42 | 0.72 | 0.84 | 25 |
| 16 | **623R** | | 5,5 | 8.5 | 10.5 | 50 | 1.00 | 1.16 | 25 |
| 25 | **624R** | | 7,0 | 10.0 | 12.0 | 57 | 1.41 | 1.63 | 25 |
| 35 | **625R** | | 8,5 | 12.0 | 14.4 | 65 | 2.24 | 2.60 | 25 |
| 50 | **626R** | | 10,0 | 14.0 | 16.4 | 72 | 3.36 | 3.81 | 25 |
| 70 | **627R** | | 12,0 | 16.4 | 19.0 | 80 | 4.87 | 5.46 | 25 |
| 95 | **628R** | | 13,5 | 17.8 | 20.8 | 87 | 5.91 | 6.74 | 25 |

## Tubular cable lugs, blue connection®, Cu





- For compacted multi-stranded round conductors to DIN EN 60228 Cl. 2
- Accurate assignment of crimping tool/crimping die through colour-coding system
- Fewer crimps due to max. crimping width
- Reduced costs due to compact dimensions

### Characteristics

- Rigid design thanks to special shaped radius
- Processing takes place without the use of additional sleeves
- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 41

### Additional information

- 10-300 mm² IEC-tested

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 6 | M5 | **6B5** | 3.20 | 9.0 | 10.50 | 5.30 | 5.00 | 5.00 | 6.50 | 20.50 | 0.24 | 50 |
| | M6 | **6B6** | 3.20 | 9.0 | 11.00 | 6.40 | 5.00 | 6.00 | 8.00 | 22.00 | 0.26 | 50 |
| | M8 | **6B8** | 3.20 | 9.0 | 12.50 | 8.40 | 5.00 | 8.00 | 10.00 | 24.00 | 0.29 | 50 |
| | M10 | **6B10** | 3.20 | 9.00 | 14.00 | 10.50 | 5.00 | 10.00 | 11.50 | 25.50 | 0.30 | 50 |
| 10 | M5 | **10B5** | 4.10 | 9.00 | 11.50 | 5.30 | 6.50 | 5.00 | 6.50 | 21.00 | 0.35 | 50 |
| | M6 | **10B6** | 4.10 | 9.00 | 12.00 | 6.40 | 6.50 | 6.00 | 8.00 | 22.50 | 0.39 | 50 |
| | M8 | **10B8** | 4.10 | 9.00 | 14.00 | 8.40 | 6.50 | 8.00 | 10.00 | 24.50 | 0.43 | 50 |
| | M10 | **10B10** | 4.10 | 9.00 | 15.00 | 10.50 | 6.50 | 10.00 | 11.50 | 26.00 | 0.44 | 50 |
| 16 | M6 | **16B6** | 5.50 | 10.0 | 13.50 | 6.40 | 7.70 | 6.00 | 8.00 | 25.00 | 0.61 | 50 |
| | M8 | **16B8** | 5.50 | 10.0 | 15.00 | 8.40 | 7.70 | 8.00 | 10.00 | 27.00 | 0.65 | 50 |
| | M10 | **16B10** | 5.50 | 10.00 | 16.50 | 10.50 | 7.70 | 10.00 | 11.50 | 28.00 | 0.69 | 50 |
| | M12 | **16B12** | 5.50 | 10.00 | 18.50 | 13.00 | 7.70 | 12.00 | 13.00 | 29.50 | 0.72 | 50 |
| 25 | M6 | **25B6** | 6.60 | 10.0 | 15.00 | 6.40 | 9.00 | 6.00 | 8.00 | 25.50 | 0.81 | 25 |
| | M8 | **25B8** | 6.60 | 10.0 | 16.00 | 8.40 | 9.00 | 8.00 | 10.00 | 27.50 | 0.88 | 50 |
| | M10 | **25B10** | 6.60 | 10.0 | 18.00 | 10.50 | 9.00 | 10.00 | 11.50 | 29.00 | 0.93 | 50 |
| | M12 | **25B12** | 6.60 | 10.0 | 19.50 | 13.00 | 9.00 | 12.00 | 13.00 | 30.50 | 0.97 | 25 |
| 35 | M8 | **35B8** | 7.70 | 11.0 | 18.00 | 8.40 | 10.60 | 8.00 | 10.00 | 29.50 | 1.34 | 50 |
| | M10 | **35B10** | 7.70 | 11.0 | 19.50 | 10.50 | 10.60 | 10.00 | 11.50 | 31.00 | 1.42 | 50 |
| | M12 | **35B12** | 7.70 | 11.0 | 21.00 | 13.00 | 10.60 | 12.00 | 13.00 | 32.50 | 1.48 | 25 |
| 50 | M8 | **50B8** | 9.20 | 11.0 | 19.00 | 8.40 | 12.40 | 8.00 | 10.00 | 31.00 | 1.87 | 25 |
| | M10 | **50B10** | 9.20 | 11.0 | 21.00 | 10.50 | 12.40 | 10.00 | 11.50 | 32.50 | 1.95 | 25 |
| | M12 | **50B12** | 9.20 | 11.0 | 23.00 | 13.00 | 12.40 | 12.00 | 13.00 | 34.00 | 2.05 | 25 |
| 70 | M8 | **70B8** | 11.00 | 21.0 | 22.00 | 8.40 | 14.60 | 8.00 | 10.00 | 41.50 | 3.17 | 25 |
| | M10 | **70B10** | 11.00 | 21.0 | 24.00 | 10.50 | 14.60 | 10.00 | 11.50 | 43.00 | 3.33 | 25 |
| | M12 | **70B12** | 11.00 | 21.0 | 25.00 | 13.00 | 14.60 | 12.00 | 13.00 | 44.50 | 3.46 | 25 |
| | M16 | **70B16** | 11.00 | 21.0 | 28.00 | 17.00 | 14.60 | 15.00 | 17.00 | 48.50 | 3.73 | 10 |
| 95 | M10 | **95B10** | 13.00 | 21.0 | 26.00 | 10.50 | 17.00 | 10.00 | 11.50 | 44.50 | 4.55 | 25 |
| | M12 | **95B12** | 13.00 | 21.0 | 28.00 | 13.00 | 17.00 | 12.00 | 13.00 | 46.00 | 4.75 | 25 |
| | M16 | **95B16** | 13.00 | 21.0 | 30.00 | 17.00 | 17.00 | 15.00 | 17.00 | 50.00 | 5.01 | 10 |

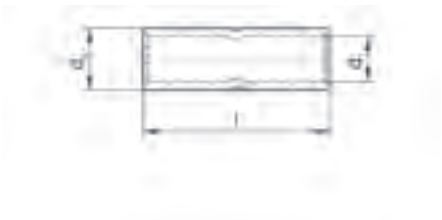
See next page

## Rohrkabelschuhe, blue connection®, Cu

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 120 | M10 | **120B10** | 14.50 | 22.0 | 28.00 | 10.50 | 19.00 | 10.00 | 11.50 | 47.00 | 6.02 | 25 |
| | M12 | **120B12** | 14.50 | 22.0 | 29.50 | 13.00 | 19.00 | 12.00 | 13.00 | 48.50 | 6.26 | 25 |
| | M16 | **120B16** | 14.50 | 22.0 | 32.00 | 17.00 | 19.00 | 15.00 | 17.00 | 52.50 | 6.73 | 10 |
| 150 | M10 | **150B10** | 16.20 | 22.0 | 30.00 | 10.50 | 21.00 | 10.00 | 11.50 | 48.50 | 7.41 | 10 |
| | M12 | **150B12** | 16.20 | 22.0 | 32.00 | 13.00 | 21.00 | 12.00 | 13.00 | 50.00 | 7.71 | 10 |
| 185 | M10 | **185B10** | 18.00 | 24.0 | 33.00 | 10.50 | 23.00 | 10.00 | 11.50 | 52.00 | 9.21 | 10 |
| | M12 | **185B12** | 18.00 | 24.0 | 33.00 | 13.00 | 23.00 | 12.00 | 13.00 | 53.50 | 9.43 | 10 |
| | M16 | **185B16** | 18.00 | 24.0 | 36.00 | 17.00 | 23.00 | 15.00 | 17.00 | 57.70 | 10.14 | 10 |
| 240 | M12 | **240B12** | 20.60 | 24.0 | 38.00 | 13.00 | 26.00 | 12.00 | 13.00 | 56.00 | 12.46 | 10 |
| | M16 | **240B16** | 20.60 | 24.0 | 38.00 | 17.00 | 26.00 | 15.00 | 17.00 | 60.00 | 13.24 | 10 |
| 300 | M12 | **300B12** | 23.10 | 33.0 | 41.00 | 13.00 | 28.00 | 12.00 | 13.00 | 67.00 | 14.39 | 5 |
| | M16 | **300B16** | 23.10 | 33.0 | 41.00 | 17.00 | 28.00 | 15.00 | 17.00 | 71.00 | 15.27 | 5 |

## Butt connectors, blue connection®, Cu





blue connection

IEC

- For compacted multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- Accurate assignment of crimping tool/crimping die through colour-coding system
- Fewer crimps due to max. crimping width
- Reduced costs due to compact dimensions

### Characteristics

- Processing takes place without the use of additional sleeves
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 41

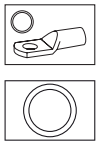
### Additional information

- 10-300 mm² IEC-tested

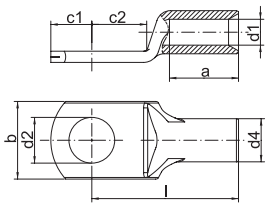
| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 6 | **6B** | 3.20 | 5.00 | 25.00 | 0.255 | 50 |
| 10 | **10B** | 4.10 | 6.50 | 25.00 | 0.360 | 50 |
| 16 | **16B** | 5.50 | 7.70 | 27.00 | 0.543 | 50 |
| 25 | **25B** | 6.60 | 9.00 | 27.00 | 0.699 | 50 |
| 35 | **35B** | 7.70 | 10.60 | 28.00 | 1.026 | 50 |
| 50 | **50B** | 9.20 | 12.40 | 28.00 | 1.334 | 25 |
| 70 | **70B** | 11.00 | 14.60 | 48.00 | 3.065 | 25 |
| 95 | **95B** | 13.00 | 17.00 | 48.00 | 3.987 | 25 |
| 120 | **120B** | 14.50 | 19.00 | 50.00 | 5.157 | 25 |
| 150 | **150B** | 16.20 | 21.00 | 52.00 | 6.379 | 10 |
| 185 | **185B** | 18.00 | 23.00 | 56.00 | 7.889 | 10 |
| 240 | **240B** | 20.60 | 26.00 | 58.00 | 10.000 | 10 |
| 300 | **300B** | 23.10 | 28.00 | 76.00 | 13.079 | 5 |

## Tubular cable lugs, Cu, solid conductor type





- For single-stranded round conductors, e.g. to DIN EN 60228 Cl. 1
- For pre-rounded sector shaped conductors
- Safe and secure connecting of solid conductors




### Characteristics

- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material

- Copper (EN13600)

### Surface

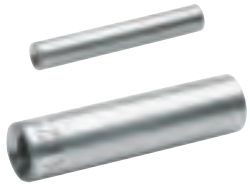
- Tin-plated to protect against corrosion

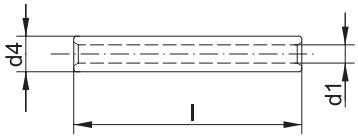
### Technical instructions

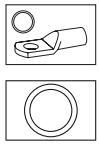
- Tool: see page 44

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 6 | M5 | **SR65** | 3.0 | 8 | 9.0 | 5.3 | 5 | 4.75 | 6.0 | 17.0 | 0.213 | 25 |
| | M6 | **SR66** | 3.0 | 8 | 10.0 | 6.5 | 5 | 6.50 | 6.5 | 19.0 | 0.220 | 25 |
| 10 | | **SR106** | 4.0 | 9 | 10.0 | 6.5 | 6 | 7.00 | 6.5 | 19.0 | 0.300 | 25 |
| | M8 | **SR108** | 4.0 | 9 | 14.0 | 8.5 | 6 | 8.50 | 9.5 | 22.0 | 0.320 | 25 |
| 16 | M6 | **SR166** | 5.0 | 12 | 12.5 | 6.5 | 8 | 6.50 | 7.0 | 23.5 | 0.800 | 25 |
| | M8 | **SR168** | 5.0 | 12 | 15.0 | 8.5 | 8 | 9.00 | 9.0 | 26.0 | 0.900 | 25 |
| 25 | M6 | **SR256** | 6.2 | 15 | 14.0 | 6.5 | 10 | 7.50 | 7.5 | 30.0 | 1.560 | 25 |
| | M8 | **SR258** | 6.2 | 15 | 16.0 | 8.5 | 10 | 10.00 | 10.0 | 32.0 | 1.700 | 25 |
| 35 | M6 | **SR356** | 7.0 | 15 | 14.0 | 6.5 | 10 | 7.50 | 7.5 | 30.0 | 1.200 | 25 |
| | M8 | **SR358** | 7.0 | 15 | 16.0 | 8.5 | 10 | 10.00 | 10.0 | 32.0 | 1.310 | 25 |
| | M10 | **SR3510** | 7.0 | 15 | 18.0 | 10.5 | 10 | 12.00 | 12.0 | 34.0 | 1.570 | 25 |
| 50 | M6 | **SR506** | 8.5 | 17 | 17.0 | 6.5 | 12 | 7.50 | 7.5 | 32.0 | 1.850 | 25 |
| | M8 | **SR508** | 8.5 | 17 | 17.0 | 8.5 | 12 | 10.00 | 10.0 | 34.0 | 2.000 | 25 |
| | M10 | **SR5010** | 8.5 | 17 | 19.0 | 10.5 | 12 | 12.00 | 12.0 | 37.0 | 2.130 | 25 |

## Butt connectors, Cu, solid conductor type





- For single-stranded round conductors, e.g. to DIN EN 60228 Cl. 1
- Also pre-rounded sector shaped conductors
- Safe and secure connecting of solid conductors

### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

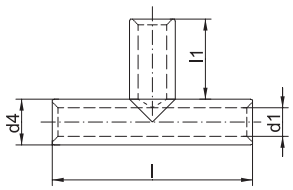
### Technical instructions

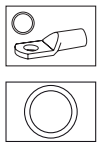
- Tool: see page 44

| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 1.5-2.5 | **SV1525** | 1.9 | 3.9 | 25 | 0.210 | 100 |
| 4 | **SV4** | 2.4 | 4.4 | 25 | 0.240 | 100 |
| 6 | **SV6** | 3.0 | 5.0 | 25 | 0.275 | 100 |
| 10 | **SV10** | 4.0 | 6.0 | 25 | 0.350 | 100 |
| 16 | **SV16** | 5.0 | 8.0 | 35 | 0.960 | 100 |
| 25 | **SV25** | 6.2 | 10.0 | 40 | 1.700 | 50 |
| 35 | **SV35** | 7.0 | 10.0 | 40 | 1.420 | 50 |
| 50 | **SV50** | 8.5 | 12.0 | 70 | 3.550 | 50 |

## T-connectors, Cu, solid conductor type





- For single-stranded round conductors, e.g. to DIN EN 60228 Cl. 1
- Also pre-rounded sector shaped conductors
- Safe and secure connecting of solid conductors
- Special version for cable tap conductors

### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

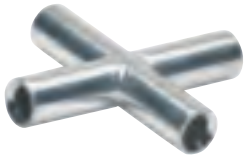
- Tin-plated to protect against corrosion

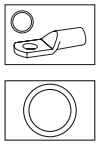
### Technical instructions

- Tool: see page 44

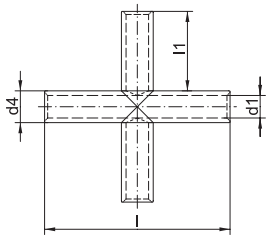
| Nominal cross section mm² | Part No. | Dimension mm | | | | Draht-Ø mm | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | d1 | d4 | l | l1 | | | |
| 1.5-2.5 | **STV1525** | 1.9 | 3.9 | 30 | 12 | 1.38/1.78 | 0.34 | 50 |
| 4 | **STV4** | 2.4 | 4.4 | 30 | 12 | 2.25 | 0.40 | 50 |
| 6 | **STV6** | 3.0 | 5.0 | 30 | 12 | 2.75 | 0.48 | 50 |
| 10 | **STV10** | 4.0 | 6.0 | 35 | 14 | 3.55 | 0.72 | 50 |
| 16 | **STV16** | 5.0 | 8.0 | 35 | 14 | 4.5 | 1.40 | 50 |
| 25 | **STV25** | 6.2 | 10.0 | 50 | 21 | 5.65 | 3.20 | 25 |
| 35 | **STV35** | 7.0 | 10.0 | 55 | 23 | 6.7 | 2.95 | 25 |
| 50 | **STV50** | 8.5 | 12.0 | 76 | 32 | 8 | 5.60 | 25 |

## Cross-connectors, Cu, solid conductor type





- For single-stranded round conductors, e.g. to DIN EN 60228 Cl. 1
- Also pre-rounded sector shaped conductors
- Safe and secure connecting of solid conductors
- Special version for double cable tap conductors




### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

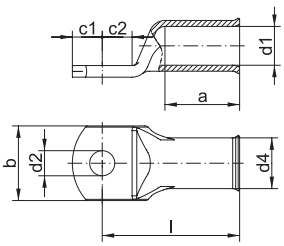
### Technical instructions

- Tool: see page 44

| Nominal cross section mm² | Part No. | Dimension mm | | | | Draht-Ø mm | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | d1 | d4 | l | l1 | | | |
| 1.5-2.5 | **SKV1525** | 1.9 | 3.9 | 30 | 12 | 1.38/1.78 | 0.47 | 25 |
| 4 | **SKV4** | 2.4 | 4.4 | 30 | 12 | 2.25 | 0.56 | 25 |
| 6 | **SKV6** | 3.0 | 5.0 | 30 | 12 | 2.75 | 0.67 | 25 |
| 10 | **SKV10** | 4.0 | 6.0 | 35 | 14 | 3.55 | 0.92 | 25 |
| 16 | **SKV16** | 5.0 | 8.0 | 35 | 14 | 4.5 | 1.86 | 25 |
| 25 | **SKV25** | 6.2 | 10.0 | 50 | 21 | 5.65 | 4.20 | 15 |
| 35 | **SKV35** | 7.0 | 10.0 | 55 | 23 | 6.7 | 3.80 | 15 |
| 50 | **SKV50** | 8.5 | 12.0 | 76 | 32 | 8 | 7.35 | 15 |

# Tubular cable lugs, Cu, F-series






- For fine and superfine stranded round conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Pipe dimension adjusted for fine and superfine stranded conductors
- Special wide opening for the easy entry of fine conductors

## Characteristics

- Annealed material optimises material and crimping properties
- To DIN EN 61373 class 1B vibration-tested
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Reliable assignment owed to item designation on the cable lug

## Material

- Copper (EN13600)

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 42

## Additional information

- Also available as featured article with inspection hole, part number appendix „MS“
- 10 - 240 mm² UL-tested

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 10 | M5 | **702F5** | 5.5 | 14 | 12 | 5.3 | 8.0 | 6.25 | 7.5 | 27 | 0.72 | 100 |
| | M6 | **702F6** | 5.5 | 14 | 12 | 6.5 | 8.0 | 6.25 | 7.5 | 27 | 0.71 | 100 |
| | M8 | **702F8** | 5.5 | 14 | 16 | 8.5 | 8.0 | 8.50 | 9.5 | 29 | 0.77 | 100 |
| | M10 | **702F10** | 5.5 | 14 | 16 | 10.5 | 8.0 | 10.50 | 11.5 | 31 | 0.82 | 100 |
| | M12 | **702F12** | 5.5 | 14 | 19 | 13.0 | 8.0 | 12.00 | 13.0 | 32 | 0.82 | 100 |
| 16 | M5 | **703F5** | 6.6 | 15 | 13 | 5.3 | 9.5 | 6.25 | 7.5 | 30 | 1.10 | 100 |
| | M6 | **703F6** | 6.6 | 15 | 13 | 6.5 | 9.5 | 6.25 | 7.5 | 30 | 1.07 | 100 |
| | M8 | **703F8** | 6.6 | 15 | 16 | 8.5 | 9.5 | 10.00 | 10.0 | 32 | 1.21 | 100 |
| | M10 | **703F10** | 6.6 | 15 | 17 | 10.5 | 9.5 | 12.00 | 12.0 | 34 | 1.28 | 100 |
| | M12 | **703F12** | 6.6 | 15 | 19 | 13.0 | 9.5 | 13.00 | 13.0 | 35 | 1.28 | 100 |
| 25 | M5 | **704F5** | 7.9 | 17 | 15 | 5.3 | 11.0 | 7.50 | 7.5 | 32 | 1.52 | 25 |
| | M6 | **704F6** | 7.9 | 17 | 15 | 6.5 | 11.0 | 7.50 | 7.5 | 32 | 1.50 | 100 |
| | M8 | **704F8** | 7.9 | 17 | 17 | 8.5 | 11.0 | 10.00 | 10.0 | 34 | 1.61 | 100 |
| | M10 | **704F10** | 7.9 | 17 | 17 | 10.5 | 11.0 | 12.00 | 12.0 | 37 | 1.71 | 100 |
| | M12 | **704F12** | 7.9 | 17 | 19 | 13.0 | 11.0 | 13.00 | 13.0 | 38 | 1.74 | 25 |
| 35 | M6 | **705F6** | 9.2 | 19 | 17 | 6.5 | 12.5 | 7.50 | 7.5 | 35 | 1.91 | 100 |
| | M8 | **705F8** | 9.2 | 19 | 18 | 8.5 | 12.5 | 10.00 | 10.0 | 37 | 2.08 | 100 |
| | M10 | **705F10** | 9.2 | 19 | 18 | 10.5 | 12.5 | 12.00 | 12.0 | 40 | 2.24 | 100 |
| | M12 | **705F12** | 9.2 | 19 | 19 | 13.0 | 12.5 | 13.00 | 13.0 | 41 | 2.22 | 25 |
| | M14 | **705F14** | 9.2 | 19 | 21 | 15.0 | 12.5 | 14.50 | 14.5 | 43 | 2.41 | 25 |
| 50 | M6 | **706F6** | 11.0 | 21 | 21 | 6.5 | 15.0 | 10.00 | 10.0 | 41 | 3.54 | 25 |
| | M8 | **706F8** | 11.0 | 21 | 21 | 8.5 | 15.0 | 10.00 | 10.0 | 41 | 3.44 | 50 |
| | M10 | **706F10** | 11.0 | 21 | 21 | 10.5 | 15.0 | 12.00 | 12.0 | 43 | 3.64 | 50 |
| | M12 | **706F12** | 11.0 | 21 | 21 | 13.0 | 15.0 | 13.00 | 13.0 | 46 | 3.73 | 50 |
| | M14 | **706F14** | 11.0 | 21 | 23 | 15.0 | 15.0 | 14.50 | 14.5 | 48 | 3.89 | 25 |
| | M16 | **706F16** | 11.0 | 21 | 28 | 17.0 | 15.0 | 16.00 | 16.0 | 50 | 4.02 | 25 |

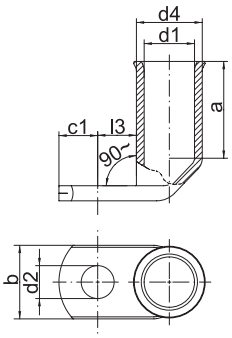
See next page

## Tubular cable lugs, Cu, F-series

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 70 | M8 | **707F8** | 13.0 | 25 | 25 | 8.5 | 17.0 | 10.00 | 10.0 | 46 | 4.46 | 50 |
| | M10 | **707F10** | 13.0 | 25 | 25 | 10.5 | 17.0 | 12.00 | 12.0 | 48 | 4.62 | 50 |
| | M12 | **707F12** | 13.0 | 25 | 25 | 13.0 | 17.0 | 13.00 | 13.0 | 50 | 4.71 | 50 |
| | M14 | **707F14** | 13.0 | 25 | 25 | 15.0 | 17.0 | 14.50 | 14.5 | 52 | 4.87 | 25 |
| | M16 | **707F16** | 13.0 | 25 | 25 | 17.0 | 17.0 | 16.00 | 16.0 | 54 | 5.85 | 25 |
| 95 | M8 | **708F8** | 14.5 | 26 | 28 | 8.5 | 19.0 | 12.00 | 12.0 | 52 | 6.35 | 25 |
| | M10 | **708F10** | 14.5 | 26 | 28 | 10.5 | 19.0 | 12.00 | 12.0 | 52 | 6.23 | 50 |
| | M12 | **708F12** | 14.5 | 26 | 28 | 13.0 | 19.0 | 13.00 | 13.0 | 53 | 6.31 | 50 |
| | M14 | **708F14** | 14.5 | 26 | 28 | 15.0 | 19.0 | 14.50 | 14.5 | 55 | 6.46 | 25 |
| | M16 | **708F16** | 14.5 | 26 | 28 | 17.0 | 19.0 | 16.00 | 16.0 | 56 | 6.56 | 50 |
| 120 | M10 | **709F10** | 16.2 | 30 | 30 | 10.5 | 21.0 | 14.00 | 14.0 | 57 | 8.31 | 50 |
| | M12 | **709F12** | 16.2 | 30 | 30 | 13.0 | 21.0 | 15.00 | 15.0 | 58 | 8.39 | 50 |
| | M14 | **709F14** | 16.2 | 30 | 30 | 15.0 | 21.0 | 15.00 | 15.0 | 58 | 8.06 | 25 |
| | M16 | **709F16** | 16.2 | 30 | 30 | 17.0 | 21.0 | 16.00 | 16.0 | 59 | 8.17 | 50 |
| | M20 | **709F20** | 16.2 | 30 | 36 | 21.0 | 21.0 | 22.00 | 22.0 | 66 | 9.56 | 25 |
| 150 | M10 | **710F10** | 18.0 | 32 | 34 | 10.5 | 23.0 | 15.00 | 16.0 | 64 | 10.91 | 10 |
| | M12 | **710F12** | 18.0 | 32 | 34 | 13.0 | 23.0 | 16.00 | 17.0 | 65 | 10.89 | 25 |
| | M14 | **710F14** | 18.0 | 32 | 34 | 15.0 | 23.0 | 18.00 | 19.0 | 67 | 11.42 | 10 |
| | M16 | **710F16** | 18.0 | 32 | 34 | 17.0 | 23.0 | 19.00 | 20.0 | 68 | 11.30 | 10 |
| | M20 | **710F20** | 18.0 | 32 | 40 | 21.0 | 23.0 | 21.00 | 22.0 | 70 | 11.36 | 10 |
| 185 | M12 | **711F12** | 20.6 | 35 | 39 | 13.0 | 26.0 | 21.50 | 19.0 | 72 | 15.40 | 10 |
| | M14 | **711F14** | 20.6 | 35 | 39 | 15.0 | 26.0 | 21.50 | 19.0 | 72 | 15.20 | 10 |
| | M16 | **711F16** | 20.6 | 35 | 39 | 17.0 | 26.0 | 21.50 | 19.0 | 72 | 15.00 | 25 |
| | M20 | **711F20** | 20.6 | 35 | 39 | 21.0 | 26.0 | 21.50 | 19.0 | 72 | 14.20 | 10 |
| 240 | M10 | **712F10** | 23.1 | 44 | 41 | 10.5 | 28.0 | 16.00 | 17.0 | 80 | 16.50 | 10 |
| | M12 | **712F12** | 23.1 | 44 | 41 | 13.0 | 28.0 | 16.00 | 17.0 | 80 | 16.30 | 10 |
| | M14 | **712F14** | 23.1 | 44 | 41 | 15.0 | 28.0 | 19.00 | 20.0 | 83 | 16.80 | 10 |
| | M16 | **712F16** | 23.1 | 44 | 41 | 17.0 | 28.0 | 19.00 | 20.0 | 83 | 16.71 | 25 |
| | M20 | **712F20** | 23.1 | 44 | 41 | 21.0 | 28.0 | 21.00 | 22.0 | 85 | 17.12 | 10 |
| 300 | M12 | **713F12** | 26.1 | 44 | 47 | 13.0 | 32.0 | 19.00 | 22.0 | 96 | 25.60 | 5 |
| | M14 | **713F14** | 26.1 | 44 | 47 | 15.0 | 32.0 | 19.00 | 22.0 | 96 | 26.56 | 5 |
| | M16 | **713F16** | 26.1 | 44 | 47 | 17.0 | 32.0 | 19.00 | 22.0 | 96 | 25.60 | 5 |
| | M20 | **713F20** | 26.1 | 44 | 47 | 21.0 | 32.0 | 22.00 | 22.0 | 96 | 26.24 | 5 |

# Angled tubular cable lugs, Cu, 90° angled, F-series






- For fine and superfine stranded round conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Tube dimension adjusted for fine and superfine stranded conductors
- Special wide opening for the easy entry of fine conductors
- Flat contact surface by special angle pressing technology

## Characteristics

- Annealed material optimises material and crimping properties
- Tube dimensions suitable for fine stranded conductors
- Flat contact surface and internal chamfer for simple cable insertion

## Material

- Copper (EN13600)

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 42

## Additional information

- Also available as featured article 45° angled, part number appendix „45“
- Also available as featured article with inspection hole, part number appendix „MS“
- 90° angled version: 10 - 240 mm² UL-tested

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | l3 | | |
| 10 | M5 | **742F5** | 5.5 | 14 | 12 | 5.3 | 8.0 | 6.25 | 7.5 | 0.80 | 50 |
| | M6 | **742F6** | 5.5 | 14 | 12 | 6.5 | 8.0 | 6.25 | 7.5 | 0.78 | 50 |
| | M8 | **742F8** | 5.5 | 14 | 16 | 8.5 | 8.0 | 9.00 | 9.5 | 0.84 | 50 |
| | M10 | **742F10** | 5.5 | 14 | 16 | 10.5 | 8.0 | 10.50 | 12.0 | 0.88 | 50 |
| | M12 | **742F12** | 5.5 | 14 | 19 | 13.0 | 8.0 | 12.00 | 13.0 | 0.90 | 50 |
| 16 | M5 | **743F5** | 6.6 | 15 | 13 | 5.3 | 9.5 | 6.25 | 7.5 | 1.12 | 50 |
| | M6 | **743F6** | 6.6 | 15 | 13 | 6.5 | 9.5 | 6.25 | 7.5 | 1.12 | 50 |
| | M8 | **743F8** | 6.6 | 15 | 16 | 8.5 | 9.5 | 10.00 | 10.0 | 1.30 | 50 |
| | M10 | **743F10** | 6.6 | 15 | 17 | 10.5 | 9.5 | 12.00 | 12.0 | 1.38 | 50 |
| | M12 | **743F12** | 6.6 | 15 | 19 | 13.0 | 9.5 | 13.00 | 13.0 | 1.34 | 50 |
| 25 | M5 | **744F5** | 7.9 | 17 | 15 | 5.3 | 11.0 | 7.50 | 7.5 | 1.52 | 25 |
| | M6 | **744F6** | 7.9 | 17 | 15 | 6.5 | 11.0 | 7.50 | 7.5 | 1.54 | 25 |
| | M8 | **744F8** | 7.9 | 17 | 17 | 8.5 | 11.0 | 10.00 | 10.0 | 1.80 | 25 |
| | M10 | **744F10** | 7.9 | 17 | 17 | 10.5 | 11.0 | 12.00 | 12.0 | 1.79 | 25 |
| | M12 | **744F12** | 7.9 | 17 | 19 | 13.0 | 11.0 | 13.00 | 13.0 | 1.76 | 25 |
| 35 | M6 | **745F6** | 9.2 | 19 | 17 | 6.5 | 12.5 | 7.50 | 7.5 | 2.02 | 25 |
| | M8 | **745F8** | 9.2 | 19 | 18 | 8.5 | 12.5 | 10.00 | 10.0 | 2.18 | 25 |
| | M10 | **745F10** | 9.2 | 19 | 18 | 10.5 | 12.5 | 12.00 | 12.0 | 2.30 | 25 |
| | M12 | **745F12** | 9.2 | 19 | 19 | 13.0 | 12.5 | 13.00 | 13.0 | 2.26 | 25 |
| | M14 | **745F14** | 9.2 | 19 | 21 | 15.0 | 12.5 | 14.50 | 14.5 | 2.65 | 25 |
| 50 | M6 | **746F6** | 11.0 | 21 | 21 | 6.5 | 15.0 | 10.00 | 10.0 | 3.75 | 25 |
| | M8 | **746F8** | 11.0 | 21 | 21 | 8.5 | 15.0 | 10.00 | 10.0 | 3.57 | 25 |
| | M10 | **746F10** | 11.0 | 21 | 21 | 10.5 | 15.0 | 12.00 | 12.0 | 3.83 | 25 |
| | M12 | **746F12** | 11.0 | 21 | 21 | 13.0 | 15.0 | 13.00 | 13.0 | 3.74 | 25 |
| | M14 | **746F14** | 11.0 | 21 | 23 | 15.0 | 15.0 | 14.50 | 14.5 | 4.20 | 25 |
| | M16 | **746F16** | 11.0 | 21 | 28 | 17.0 | 15.0 | 16.00 | 16.0 | 4.35 | 25 |

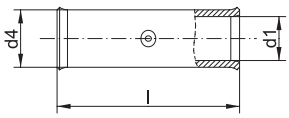
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## Angled tubular cable lugs, Cu, 90° angled, F-series

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | l3 | | |
| 70 | M8 | **747F8** | 13.0 | 25 | 25 | 8.5 | 17.0 | 10.00 | 10.0 | 4.83 | 25 |
| | M10 | **747F10** | 13.0 | 25 | 25 | 11.0 | 17.0 | 12.00 | 12.0 | 5.18 | 25 |
| | M12 | **747F12** | 13.0 | 25 | 25 | 13.0 | 17.0 | 13.00 | 13.0 | 5.16 | 25 |
| | M14 | **747F14** | 13.0 | 25 | 25 | 15.0 | 17.0 | 14.50 | 14.5 | 5.38 | 25 |
| | M16 | **747F16** | 13.0 | 25 | 25 | 17.0 | 17.0 | 16.00 | 16.0 | 6.50 | 25 |
| 95 | M8 | **748F8** | 14.5 | 26 | 28 | 8.5 | 19.0 | 12.00 | 12.0 | 6.66 | 25 |
| | M10 | **748F10** | 14.5 | 26 | 28 | 11.0 | 19.0 | 12.00 | 12.0 | 6.04 | 25 |
| | M12 | **748F12** | 14.5 | 26 | 28 | 13.0 | 19.0 | 13.00 | 13.0 | 6.58 | 25 |
| | M14 | **748F14** | 14.5 | 26 | 28 | 15.0 | 19.0 | 14.50 | 14.5 | 7.24 | 25 |
| | M16 | **748F16** | 14.5 | 26 | 28 | 17.0 | 19.0 | 16.00 | 16.0 | 7.34 | 25 |
| 120 | M10 | **749F10** | 16.2 | 30 | 30 | 11.0 | 21.0 | 14.00 | 14.0 | 8.76 | 10 |
| | M12 | **749F12** | 16.2 | 30 | 30 | 13.0 | 21.0 | 15.00 | 15.0 | 8.76 | 10 |
| | M14 | **749F14** | 16.2 | 30 | 30 | 15.0 | 21.0 | 15.00 | 15.0 | 9.15 | 10 |
| | M16 | **749F16** | 16.2 | 30 | 30 | 17.0 | 21.0 | 16.00 | 16.0 | 8.54 | 10 |
| | M20 | **749F20** | 16.2 | 30 | 36 | 21.0 | 21.0 | 22.00 | 22.0 | 9.60 | 10 |
| 150 | M10 | **750F10** | 18.0 | 32 | 34 | 11.0 | 23.0 | 15.00 | 16.0 | 11.54 | 10 |
| | M12 | **750F12** | 18.0 | 32 | 34 | 13.0 | 23.0 | 16.00 | 18.0 | 11.58 | 10 |
| | M14 | **750F14** | 18.0 | 32 | 34 | 15.0 | 23.0 | 18.00 | 19.0 | 11.90 | 10 |
| | M16 | **750F16** | 18.0 | 32 | 34 | 17.0 | 23.0 | 19.00 | 20.0 | 11.80 | 10 |
| | M20 | **750F20** | 18.0 | 32 | 40 | 21.0 | 23.0 | 21.00 | 22.0 | 12.00 | 10 |
| 185 | M12 | **751F12** | 20.6 | 35 | 39 | 13.0 | 26.0 | 21.50 | 19.0 | 16.36 | 10 |
| | M14 | **751F14** | 20.6 | 35 | 39 | 15.0 | 26.0 | 21.50 | 19.0 | 16.20 | 10 |
| | M16 | **751F16** | 20.6 | 35 | 39 | 17.0 | 26.0 | 21.50 | 19.0 | 15.36 | 10 |
| | M20 | **751F20** | 20.6 | 35 | 39 | 21.0 | 26.0 | 21.50 | 19.0 | 15.80 | 10 |
| 240 | M16 | **752F16** | 23.1 | 44 | 41 | 17.0 | 28.0 | 19.00 | 20.0 | 17.80 | 5 |

## Butt connectors, Cu, F-series






- For fine and superfine stranded round conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Pipe dimension adjusted for fine and superfine stranded conductors
- Special wide opening for the easy entry of fine conductors

### Characteristics

- Simple and safe processing due to butt mark
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

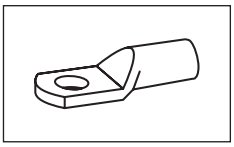
### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 42

| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 10 | **722F** | 5.5 | 8.0 | 38 | 0.90 | 100 |
| 16 | **723F** | 6.6 | 9.5 | 38 | 1.25 | 100 |
| 25 | **724F** | 7.9 | 11.0 | 38 | 1.56 | 50 |
| 35 | **725F** | 9.2 | 12.5 | 45 | 2.19 | 50 |
| 50 | **726F** | 11.0 | 15.0 | 45 | 3.37 | 50 |
| 70 | **727F** | 13.0 | 17.0 | 54 | 4.65 | 50 |
| 95 | **728F** | 14.5 | 19.0 | 56 | 6.05 | 25 |
| 120 | **729F** | 16.2 | 21.0 | 60 | 7.58 | 25 |
| 150 | **730F** | 18.0 | 23.0 | 68 | 9.83 | 10 |
| 185 | **731F** | 20.6 | 26.0 | 75 | 13.30 | 10 |

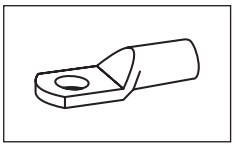


## Tool application chart

**Tubular cable lugs, butt connectors, parallel connectors and T-connectors „standard type“ and tubular cable lugs for switchgear connections made from Cu**
**Part 1 of 2**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.75 - 16 | K2 | | 229 | | |
| | 1 - 4 | K511 | | 239 | | |
| | 6 - 50 | K5 | | 231 | | |
| | | K05 | | 235 | | |
| | 6 + 10 | K512 | | 239 | | |
| | 10 - 25 | K04 | | 234 | | |
| | 10 - 120 | K06 | | 236 | | |
| | 16 - 95 | K95 | | 230 | | |
| | | TK95 | | 231 | | |
| | 25 - 150 | K09 | | 238 | | |
| | 50 - 120 | K6 | | 232 | | |
| | 120 - 240 | K7 | | 233 | | |
| | 185 - 400 | K07 | | 232 | | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 0.75 - 2.5 | KP1 | +KP232 | 240 | | |
| | | KP1L | +KP232 | 240 | | |
| | 0.75 - 10 | K50 | | 244 | 326 | |
| | | EK50ML | | 254 | 326 | |
| | 4 - 10 | KP1 | +KP242 | 240 | | |
| | | KP1L | +KP242 | 240 | | |
| | 6 - 150 | K354 | | 246 | 328 | |
| | 6 - 185 | K18 | | 248 | 337 | |
| | 6 - 300 | K22 | | 250 | 341 | |
| Hand hydraulic crimping tools | 6 - 185 | HK6018 | | 292 | 337 | |
| | | HK60UNV | +UA18 | 473 | 337 | |
| | 6 - 300 | HK6022 | | 294 | 341 | |
| | | HK60UNV | +UA22 | 473 | 341 | |
| | 10 - 240 | HK60VP | | 296 | | |
| | 16 - 300 | HK60VPFT | | 297 | | |
| | 16 - 400 | HK12030 | | 298 | 347 | |
| | | HK12042 | | 300 | 347 | |
| | | HK120U | | 302 | 347 | |
| Battery powered crimping tools | 0.75 - 10 | EK1550ML | | 258 | 326 | |
| | 6 - 150 | EK354ML | | 262 | 328 | |
| | | EK354 | | 266 | 328 | |
| | 6 - 185 | EK5018 | | 270 | 337 | |
| | | EK60UNV | +UA18 | 476 | 337 | |
| | | EKM60UNV | +UA18 | 475 | 337 | |
| | 6 - 240 | EK505 | | 268 | 333 | |

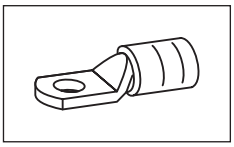
See next page



## Tool application chart

**Tubular cable lugs, butt connectors, parallel connectors and T-connectors „standard type“ and tubular cable lugs for switchgear connections made from Cu**
Part 2 of 2

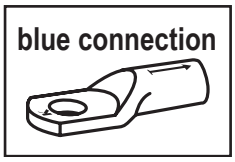
| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Battery powered crimping tools | 6 - 300 | EK6022 | | 274 | 341 | ⬡ |
| | | EKM6022 | | 272 | 341 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 341 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 341 | ⬡ |
| | 10 - 240 | EK60VP | | 276 | | ⌓ |
| | | EKM60ID | | 278 | | ⌓ |
| | 16 - 300 | EK60VPFT | | 277 | | ✕ |
| | 16 - 400 | EK12032 | | 280 | 347 | ⬡ |
| | | EK12042 | | 282 | 347 | ⬡ |
| | | EK120U | | 284 | 347 | ⬡ |
| | | EK135FT | +UA12T | 286 | 347 | ⬡ |
| | | EK120UNV | +UA15T | 477 | 347 | ⬡ |
| | 35 - 500 | EK120ID | | 279 | | ⌓ |
| | 500 - 630 | EK135FT | | 286 | 352 | ⬡ |
| Hydraulic crimping systems | 6 - 185 | THK18 | | 306 | 337 | ⬡ |
| | 6 - 300 | THK22 | | 308 | 341 | ⬡ |
| | 16 - 400 | HK122EL380 | | 322 | 347 | ⬡ |
| | | HK252 | | 320 | 353 | ⬡ |
| | | HK252EL380 | | 322 | 353 | ⬡ |
| Hydraulic crimping heads | 6 - 185 | PK18 | | 306 | 337 | ⬡ |
| | | PK60UNV | +UA18 | 474 | 337 | ⬡ |
| | 6 - 300 | PK22 | | 308 | 341 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 341 | ⬡ |
| | 10 - 240 | PK60VP | | 310 | | ✕ |
| | | PK60ID | | 311 | | ⌓ |
| | 16 - 300 | PK60VPFT | | 310 | | ✕ |
| | 16 - 400 | PK12042 | | 312 | 347 | ⬡ |
| | | PK120U | | 314 | 347 | ⬡ |
| | | PK252 | | 316 | 353 | ⬡ |



## Tool application chart

**Insulated tubular cable lugs and butt connectors „standard type“**

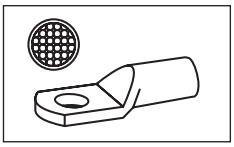
| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 10 - 70 | K354 | | 246 | 328 | ⬭ |
| | 10 - 95 | K18 | | 248 | 337 | ⬭ |
| | 10 - 150 | K22 | | 250 | 341 | ⬭ |
| Hand hydraulic crimping tools | 10 - 95 | HK6018 | | 292 | 337 | ⬭ |
| | | HK60UNV | +UA18 | 473 | 337 | ⬭ |
| | 10 - 150 | HK6022 | | 294 | 341 | ⬭ |
| | | HK60UNV | +UA22 | 473 | 341 | ⬭ |
| | | HK12030 | | 298 | 347 | ⬭ |
| | | HK12042 | | 300 | 347 | ⬭ |
| | | HK120U | | 302 | 347 | ⬭ |
| Battery powered crimping tools | 10 - 70 | EK354ML | | 262 | 328 | ⬭ |
| | | EK354 | | 266 | 328 | ⬭ |
| | 10 - 95 | EK5018 | | 270 | 337 | ⬭ |
| | | EK505 | | 268 | 333 | ⬭ |
| | | EK60UNV | +UA18 | 476 | 337 | ⬭ |
| | | EKM60UNV | +UA18 | 475 | 337 | ⬭ |
| | 10 - 150 | EK6022 | | 274 | 341 | ⬭ |
| | | EKM6022 | | 272 | 341 | ⬭ |
| | | EK60UNV | +UA22 | 476 | 341 | ⬭ |
| | | EKM60UNV | +UA22 | 475 | 341 | ⬭ |
| | | EK12032 | | 280 | 347 | ⬭ |
| | | EK12042 | | 282 | 347 | ⬭ |
| | | EK120U | | 284 | 347 | ⬭ |
| | | EK135FT | +UA15T | 286 | 347 | ⬭ |
| | | EK120UNV | +UA12T | 477 | 347 | ⬭ |
| Hydraulic crimping systems | 10 - 95 | THK18 | | 306 | 337 | ⬭ |
| | 10 - 150 | THK22 | | 308 | 341 | ⬭ |
| | | HK122EL380 | | 322 | 347 | ⬭ |
| | | HK252EL380 | | 323 | 353 | ⬭ |
| | | HK252 | | 320 | 353 | ⬭ |
| Hydraulic crimping heads | 10 - 95 | PK18 | | 306 | 337 | ⬭ |
| | | PK60UNV | +UA18 | 474 | 337 | ⬭ |
| | 10 - 150 | PK22 | | 308 | 341 | ⬭ |
| | | PK60UNV | +UA22 | 474 | 341 | ⬭ |
| | | PK12042 | | 312 | 347 | ⬭ |
| | | PK120U | | 314 | 347 | ⬭ |
| | | PK252 | | 316 | 353 | ⬭ |




## Tool application chart

**Tubular cable lugs and butt connectors**
**blue connection©**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 6 - 50 | K05BC | | 234 | | ⬡ |
| | 6 - 300 | K22 | | 250 | 342 | ⬡ |
| | 10 - 120 | K06BC | | 236 | | ⬡ |
| | 25 - 150 | K09BC | | 237 | | ⬡ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 6 - 150 | K354 | | 246 | 329 | ⬡ |
| Hand hydraulic crimping tools | 6 - 240 | HK60UNV | +UA5 | 473 | 333 | ⬡ |
| | 6 - 300 | HK6022 | | 294 | 342 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 342 | ⬡ |
| Battery powered crimping tools | 6 - 150 | EK354ML | | 262 | 329 | ⬡ |
| | | EK354 | | 266 | 329 | ⬡ |
| | 6 - 240 | EK505 | | 268 | 333 | ⬡ |
| | | EKM60UNV | +UA5 | 475 | 333 | ⬡ |
| | | EK60UNV | +UA5 | 475 | 333 | ⬡ |
| | 6 - 300 | EK6022 | | 274 | 342 | ⬡ |
| | | EKM6022 | | 272 | 342 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 342 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 342 | ⬡ |
| Hydraulic crimping systems | 6 - 300 | THK22 | | 308 | 342 | ⬡ |
| | 16 - 400 | HK122EL380 | | 322 | | ⬡ |
| Hydraulic crimping heads | 6 - 300 | PK22 | | 308 | 342 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 342 | ⬡ |



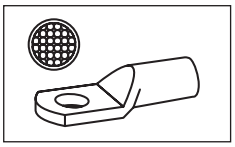
## Tool application chart

**Tubular cable lugs and butt connectors for fine stranded conductors**

**Part 1 of 2**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 6 - 50 | K5 | | 231 | | |
| | 16 - 95 | K95 | | 230 | | |
| | | TK95 | | 231 | | |
| | 50 - 120 | K6 | | 232 | | |
| | 120 - 240 | K7 | | 233 | | |
| | 185 - 400 | K07 | | 232 | | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 10 - 35 | K354 | | 246 | 329 | |
| | 10 - 50 | K18 | | 248 | 337 | |
| | 10 - 70 | K22 | | 250 | 342 | |
| Hand hydraulic crimping tools | 10 - 50 | HK6018 | | 292 | 337 | |
| | | HK60UNV | +UA18 | 473 | 337 | |
| | 10 - 70 | HK6022 | | 294 | 342 | |
| | | HK60UNV | +UA22 | 473 | 342 | |
| | 10 - 240 | HK60VP | | 296 | | |
| | 16 - 150 | HK12030 | | 298 | 348 | |
| | | HK12042 | | 300 | 348 | |
| | | HK120U | | 302 | 348 | |
| | 16 - 300 | HK60VPFT | | 297 | | |
| Battery powered crimping tools | 10 - 35 | EK354ML | | 262 | 329 | |
| | | EK354 | | 266 | 329 | |
| | 10 - 50 | EK505 | | 268 | 334 | |
| | | EK5018 | | 270 | 337 | |
| | | EK60UNV | +UA18 | 476 | 337 | |
| | | EKM60UNV | +UA18 | 475 | 337 | |
| | 10 - 70 | EK6022 | | 274 | 342 | |
| | | EKM6022 | | 272 | 342 | |
| | | EK60UNV | +UA22 | 476 | 342 | |
| | | EKM60UNV | +UA22 | 475 | 342 | |
| | 10 - 240 | EK60VP | | 276 | | |
| | | EKM60ID | | 278 | | |
| | 16 - 150 | EK12032 | | 280 | 348 | |
| | | EK12042 | | 282 | 348 | |
| | | EK120U | | 284 | 348 | |
| | | EK135FT | +UA15T | 286 | 348 | |
| | | EK120UNV | +UA12T | 322 | 348 | |
| | 16 - 300 | EK60VPFT | | 277 | | |
| | 35 - 500 | EK120ID | | 279 | | |
| Hydraulic crimping systems | 10 - 50 | THK18 | | 306 | 337 | |
| | 10 - 70 | THK22 | | 308 | 342 | |
| | 16 - 300 | HK252 | | 320 | 354 | |
| | | HK252EL380 | | 323 | 354 | |

See next page

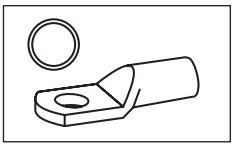


## Tool application chart

**Tubular cable lugs and butt connectors for fine stranded conductors**

Part 2 of 2

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| **Hydraulic crimping heads** | **10 - 50** | PK18 | | 306 | 337 | |
| | | PK60UNV | +UA18 | 474 | 337 | |
| | **10 - 70** | PK22 | | 308 | 342 | |
| | | PK60UNV | +UA22 | 474 | 342 | |
| | **10 - 240** | PK60VP | | 310 | | |
| | | PK60ID | | 311 | | |
| | **16 - 150** | PK12042 | | 312 | 348 | |
| | | PK120U | | 314 | 348 | |
| | **16 - 300** | PK60VPFT | | 310 | | |
| | | PK252 | | 316 | 354 | |



## Tool application chart

**Tubular cable lugs and butt connectors for solid conductors**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.75-16 | K02 | | 229 | | ◡ |
| | 1.5-4 | K93 | | 228 | | ⬡ |
| | 6-10 | K94 | | 228 | | ⬡ |
| | 25-50* | K05 | | 235 | | ⬡ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 1.5-10 | K50 | | 244 | 326 | ⬡ |
| | | EK50ML | | 254 | 326 | ⬡ |
| | 1.5-16 | K354 | | 246 | 329 | ⬡ |
| | | K18 | | 248 | 338 | ⬡ |
| | | K22 | | 250 | 342 | ⬡ |
| Hand hydraulic crimping tools | 1.5-16 | HK6018 | | 292 | 338 | ⬡ |
| | | HK60UNV | +UA18 | 473 | 338 | ⬡ |
| | | HK6022 | | 294 | 342 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 342 | ⬡ |
| Battery powered crimping tools | 1.5-10 | EK1550ML | | 258 | 326 | ⬡ |
| | 1.5-16 | EK354ML | | 262 | 329 | ⬡ |
| | | EK354 | | 266 | 329 | ⬡ |
| | | EK5018 | | 270 | 338 | ⬡ |
| | | EK60UNV | +UA18 | 476 | 338 | ⬡ |
| | | EKM60UNV | +UA18 | 475 | 338 | ⬡ |
| | | EK6022 | | 274 | 342 | ⬡ |
| | | EKM6022 | | 272 | 342 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 342 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 342 | ⬡ |
| Hydraulic crimping systems | 1.5-16 | THK18 | | 306 | 338 | ⬡ |
| | | THK22 | | 308 | 342 | ⬡ |
| Hydraulic crimping heads | 1.5-16 | PK18 | | 306 | 338 | ⬡ |
| | | PK60UNV | +UA18 | 474 | 338 | ⬡ |
| | | PK22 | | 308 | 342 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 342 | ⬡ |

*For cross-sections 25 + 35 mm² use the die size 25 mm².
For cross-section 50 mm² use the die size 35 mm².
We recommend 2 crimps on each side

# THE RESISTANT – TUBULAR CABLE LUGS AND CONNECTORS, NICKEL OR STAINLESS STEEL

We also develop for use in tough conditions. Our tubular cable lugs and connectors made from nickel and stainless steel are a cut above: withstanding temperatures of up to 650 °C, our Klauke products have without doubt developed to meet the requirements of the chemical industry, the foodstuff sector and foodstuff industry. You can also rely on our high-quality products for special applications. We know what we are doing.



**In brief**

- Tough to 650 °C
- Suitable for the chemical and foodstuff industry sectors, for instance
- Suitable even for aggressive environments, such as contact with salt water

## When things get hot: Nickel cable lugs

Nickel cable lugs are especially suitable for use in applications at high temperatures of up to 650 °C. Thanks to their high resilience they no longer need to be frequently replaced at connections exposed to heat.

- High-quality nickel
- Heat-resistant to 650 °C
- No constant replacement of the cable lug at hot locations





## Safe in aggressive environments with stainless steel

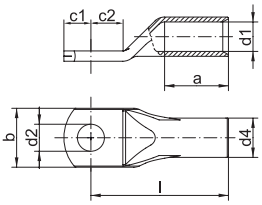
High-quality stainless steel ensures extra resilience, especially in aggressive environments. The resistance is retained.

- High-quality V2A and V4A stainless steel
- Acid resistant
- Can be used at temperatures to 400 °C
- V2A stainless steel for the chemical and foodstuff sectors and salt water applications
- V4A stainless steel in chlorinated environments such as swimming pools, for instance



## Tubular cable lugs, stainless steel



















- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded stranded sector shaped conductors
- Ideal for aggressive environmental conditions, acid and rust-resistant
- Heat resistant up to 400 °C

### Characteristics
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material
- V2A (X5CrNi18-10)

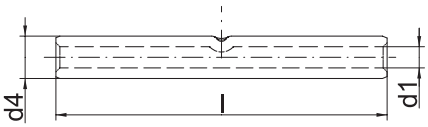
### Technical instructions
- Tool: see page 53

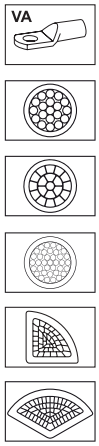
### Additional information
- Also available as featured article in stainless steel V4A (X5CrNiMo17-12-2)

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | c1 | c2 | d2 | d4 | l | | |
| 0.5 - 1 | M4 | **79V4** | 1.6 | 6 | 6.5 | 4.5 | 4.5 | 4.3 | 3.2 | 13 | 0.080 | 100 |
| | M5 | **79V5** | 1.6 | 6 | 7.5 | 5 | 5.5 | 5.3 | 3.2 | 14 | 0.080 | 100 |
| 1.5 - 2.5 | M4 | **80V4** | 3.0 | 8 | 9.0 | 5 | 5.5 | 4.3 | 5.0 | 17 | 0.260 | 100 |
| | M5 | **80V5** | 3.0 | 8 | 9.0 | 5 | 6 | 5.5 | 5.0 | 17 | 0.190 | 100 |
| | M6 | **80V6** | 3.0 | 8 | 9.5 | 6.5 | 6.5 | 6.5 | 5.0 | 19 | 0.215 | 100 |
| 4 - 6 | M4 | **81V4** | 4.0 | 9 | 9.0 | 5 | 5.5 | 4.3 | 6.0 | 18 | 0.260 | 100 |
| | M5 | **81V5** | 4.0 | 9 | 9.5 | 6 | 6 | 5.5 | 6.0 | 19 | 0.280 | 100 |
| | M6 | **81V6** | 4.0 | 9 | 10.0 | 7 | 6.5 | 6.5 | 6.0 | 19 | 0.280 | 100 |
| 10 | M5 | **82V5** | 5.0 | 10 | 12.5 | 6.5 | 7.5 | 5.5 | 8.0 | 22 | 0.710 | 100 |
| | M6 | **82V6** | 5.0 | 10 | 12.5 | 6.5 | 7.5 | 6.5 | 8.0 | 22 | 0.780 | 100 |
| | M8 | **82V8** | 5.0 | 10 | 15.0 | 9 | 10 | 8.5 | 8.0 | 25 | 0.780 | 100 |
| 16 | M5 | **83V5** | 6.0 | 13 | 12.0 | 5.5 | 6.5 | 5.5 | 8.0 | 28 | 0.500 | 50 |
| | M6 | **83V6** | 6.0 | 13 | 12.0 | 6 | 7.5 | 6.5 | 8.0 | 28 | 0.550 | 50 |
| | M8 | **83V8** | 6.0 | 13 | 15.0 | 8.5 | 9.5 | 8.5 | 8.0 | 29 | 0.600 | 50 |
| 25 | M6 | **84V6** | 7.0 | 15 | 14.0 | 7.5 | 7.5 | 6.5 | 10.0 | 30 | 1.210 | 50 |
| | M8 | **84V8** | 7.0 | 15 | 16.0 | 9 | 10 | 8.5 | 10.0 | 32 | 1.850 | 50 |
| 35 | M6 | **85V6** | 9.0 | 17 | 17.0 | 7.5 | 7.5 | 6.5 | 12.0 | 32 | 1.600 | 50 |
| | M8 | **85V8** | 9.0 | 17 | 17.0 | 10 | 10 | 8.5 | 12.0 | 35 | 1.850 | 50 |
| 50 | M6 | **86V6** | 10.0 | 19 | 20.0 | 10 | 10 | 6.5 | 14.0 | 37 | 2.800 | 50 |
| | M8 | **86V8** | 10.0 | 19 | 20.0 | 10 | 10 | 8.5 | 14.0 | 37 | 2.600 | 50 |
| | M10 | **86V10** | 10.0 | 19 | 20.0 | 12 | 12 | 10.5 | 14.0 | 39 | 2.800 | 50 |
| | M12 | **86V12** | 10.0 | 19 | 20.0 | 13 | 13 | 13.0 | 14.0 | 43 | 2.960 | 50 |
| 70 | M8 | **87V8** | 12.0 | 21 | 23.0 | 10 | 10 | 8.5 | 16.0 | 43 | 3.650 | 25 |
| | M10 | **87V10** | 12.0 | 21 | 23.0 | 12 | 12 | 10.5 | 16.0 | 44 | 3.930 | 25 |
| | M12 | **87V12** | 12.0 | 21 | 23.0 | 13 | 13 | 13.0 | 16.0 | 46 | 3.850 | 25 |
| | M16 | **87V16** | 12.0 | 21 | 26.0 | 16 | 16 | 17.0 | 16.0 | 46 | 3.960 | 25 |
| 95 | M8 | **88V8** | 14.0 | 25 | 26.0 | 12 | 12 | 8.5 | 18.0 | 48 | 4.650 | 25 |
| | M10 | **88V10** | 14.0 | 25 | 26.0 | 12 | 12 | 10.5 | 18.0 | 48 | 5.610 | 25 |
| | M12 | **88V12** | 14.0 | 25 | 26.0 | 13 | 13 | 13.0 | 18.0 | 49 | 5.540 | 25 |

## Butt connectors, stainless steel






- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded stranded sector shaped conductors
- Ideal for aggressive environmental conditions, acid and rust-resistant
- Heat resistant up to 400 °C

### Characteristics

- Simple and safe processing due to butt mark
- Simple cable entry due to internal chamfer

### Material

- V2A (X5CrNi18-10)

### Technical instructions

- Tool: see page 53

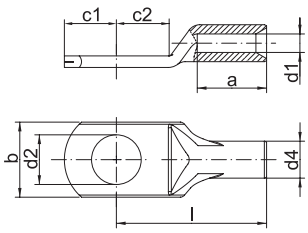
### Additional information

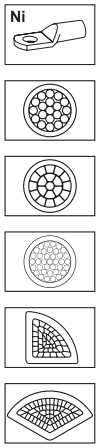
- Also available as featured article in stainless steel V4A (X5CrNiMo17-12-2)

| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 0.5 - 1 | **79R** | 1.6 | 3.2 | 25 | 0.135 | 50 |
| 1.5 - 2.5 | **80R** | 3.0 | 5.0 | 25 | 0.250 | 50 |
| 4 - 6 | **81R** | 4.0 | 6.0 | 25 | 0.325 | 50 |
| 10 | **82R** | 5.0 | 8.0 | 25 | 0.360 | 50 |
| 16 | **83R** | 6.0 | 8.0 | 30 | 0.510 | 50 |
| 25 | **84R** | 7.0 | 10.0 | 35 | 1.100 | 25 |
| 35 | **85R** | 9.0 | 12.0 | 40 | 1.560 | 25 |
| 50 | **86R** | 10.0 | 14.0 | 45 | 2.670 | 25 |
| 70 | **87R** | 12.0 | 16.0 | 50 | 3.400 | 25 |
| 95 | **88R** | 14.0 | 18.0 | 55 | 4.300 | 25 |

## Tubular cable lug, Ni






- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded stranded sector shaped conductors
- Suitable for high temperatures up to 650 °C

### Characteristics

- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material

- High-grade nickel

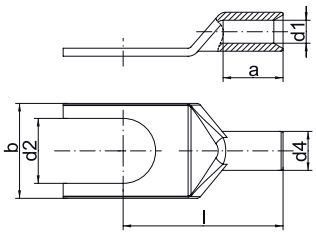
### Technical instructions

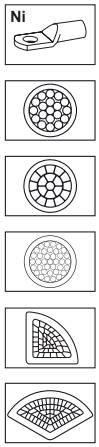
- Tool: see page 53

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | c1 | c2 | l | | |
| 0.5 - 1 | M3 | **56N3** | 1.6 | 4 | 6.5 | 3.2 | 3.2 | 3.5 | 4.5 | 13 | 0.080 | 100 |
| | M4 | **56N4** | 1.6 | 6 | 6.5 | 4.3 | 3.2 | 4.5 | 4.5 | 13 | 0.080 | 100 |
| | M5 | **56N5** | 1.6 | 6 | 7.5 | 5.3 | 3.2 | 5.0 | 5.5 | 14 | 0.080 | 100 |
| 1.5 - 2.5 | M3 | **57N3** | 2.3 | 6 | 7.0 | 3.2 | 3.9 | 3.5 | 5.0 | 13 | 0.105 | 100 |
| | M4 | **57N4** | 2.3 | 6 | 7.0 | 4.3 | 3.9 | 4.5 | 5.0 | 13 | 0.105 | 100 |
| | M5 | **57N5** | 2.3 | 6 | 7.5 | 5.3 | 3.9 | 5.0 | 5.5 | 14 | 0.105 | 100 |
| | M6 | **57N6** | 2.3 | 6 | 9.5 | 6.5 | 3.9 | 6.0 | 6.5 | 16 | 0.130 | 100 |
| 4 - 6 | M4 | **58N4** | 3.6 | 9 | 9.5 | 4.3 | 5.6 | 4.5 | 5.0 | 18 | 0.275 | 100 |
| | M5 | **58N5** | 3.6 | 9 | 9.5 | 5.3 | 5.6 | 5.0 | 5.5 | 19 | 0.275 | 100 |
| | M6 | **58N6** | 3.6 | 9 | 9.5 | 6.5 | 5.6 | 6.0 | 6.5 | 19 | 0.260 | 100 |
| | M8 | **58N8** | 3.6 | 6 | 14 | 8.5 | 5.6 | 8.5 | 9.0 | 22 | 0.260 | 100 |
| 10 | M5 | **59N5** | 4.5 | 10 | 12.0 | 5.5 | 6.5 | 5.5 | 6.5 | 21 | 0.340 | 100 |
| | M6 | **59N6** | 4.5 | 10 | 12.0 | 6.5 | 6.5 | 6.5 | 7.5 | 22 | 0.360 | 100 |
| 16 | M5 | **60N5** | 5.5 | 13 | 12.0 | 5.5 | 7.5 | 5.5 | 6.5 | 26 | 0.470 | 100 |
| | M6 | **60N6** | 5.5 | 13 | 12.0 | 6.5 | 7.5 | 6.5 | 7.5 | 27 | 0.480 | 100 |
| | M8 | **60N8** | 5.5 | 13 | 13.5 | 8.5 | 7.5 | 8.5 | 9.5 | 29 | 0.560 | 100 |
| | M10 | **60N10** | 5.5 | 11 | 17 | 10.5 | 7.5 | 12.0 | 12.0 | 31 | 0.560 | 100 |
| 25 | M6 | **61N6** | 7.0 | 15 | 14.0 | 6.5 | 10.0 | 7.5 | 7.5 | 30 | 1.200 | 50 |
| | M8 | **61N8** | 7.0 | 15 | 16.0 | 8.5 | 10.0 | 10.0 | 10.0 | 32 | 1.320 | 50 |
| | M10 | **61N10** | 7.0 | 13 | 17.0 | 10.5 | 10.0 | 12.0 | 12.0 | 34 | 1.320 | 50 |
| 35 | M6 | **62N6** | 8.5 | 17 | 17.0 | 6.5 | 12.0 | 7.5 | 7.5 | 32 | 1.850 | 50 |
| | M8 | **62N8** | 8.5 | 17 | 17.0 | 8.5 | 12.0 | 10.0 | 10.0 | 34 | 2.000 | 50 |
| | M10 | **62N10** | 8.5 | 14.5 | 19.0 | 10.5 | 12.0 | 12.0 | 12.0 | 36 | 2.000 | 50 |
| 50 | M8 | **63N8** | 10.0 | 19 | 20.0 | 8.5 | 14.0 | 10.0 | 10.0 | 37 | 2.900 | 50 |
| | M10 | **63N10** | 10.0 | 19 | 20.0 | 10.5 | 14.0 | 12.0 | 12.0 | 39 | 3.100 | 50 |
| 70 | M10 | **64N10** | 12.0 | 21 | 23.0 | 10.5 | 16.5 | 12.0 | 12.0 | 44 | 4.600 | 25 |
| | M12 | **64N12** | 12.0 | 21 | 23.0 | 13.0 | 16.5 | 13.0 | 13.0 | 46 | 4.660 | 25 |
| 95 | M10 | **65N10** | 13.5 | 25 | 26.0 | 10.5 | 18.0 | 12.0 | 12.0 | 48 | 5.550 | 25 |
| | M12 | **65N12** | 13.5 | 25 | 26.0 | 13.0 | 18.0 | 13.0 | 13.0 | 49 | 5.600 | 25 |

## Tubular cable lugs, Cu, fork type






- For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2
- For pre-rounded stranded sector shaped conductors
- Suitable for high temperatures up to 650 °C
- Simple fork-type mounting

### Characteristics

- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material

- High-grade nickel

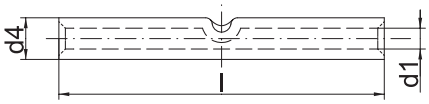
### Technical instructions

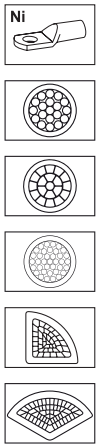
- Tool: see page 53

| Nominal cross section mm² | Size of bolt dia. | Part No. | Dimension mm | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | a | b | d2 | d4 | l | | |
| 0.5 - 1 | M4 | **56C4** | 1.6 | 6 | 6.5 | 4.3 | 3.2 | 13 | 0.070 | 50 |
| | M5 | **56C5** | 1.6 | 6 | 7.5 | 5.3 | 3.2 | 14 | 0.075 | 50 |
| 1.5 - 2.5 | M4 | **57C4** | 2.3 | 6 | 7.0 | 4.3 | 3.9 | 13 | 0.095 | 50 |
| | M5 | **57C5** | 2.3 | 6 | 7.5 | 5.3 | 3.9 | 14 | 0.095 | 50 |
| | M6 | **57C6** | 2.3 | 6 | 9.5 | 6.5 | 3.9 | 16 | 0.110 | 50 |
| 4 - 6 | M4 | **58C4** | 3.6 | 9 | 9.5 | 4.3 | 5.6 | 18 | 0.250 | 50 |
| | M5 | **58C5** | 3.6 | 9 | 9.5 | 5.3 | 5.6 | 19 | 0.255 | 50 |
| | M6 | **58C6** | 3.6 | 9 | 9.5 | 6.5 | 5.6 | 19 | 0.235 | 50 |
| 10 | M5 | **59C5** | 4.5 | 10 | 12.0 | 5.5 | 6.5 | 21 | 0.320 | 50 |
| | M6 | **59C6** | 4.5 | 10 | 12.0 | 6.5 | 6.5 | 22 | 0.340 | 50 |
| 16 | M5 | **60C5** | 5.5 | 13 | 12.0 | 5.5 | 7.5 | 26 | 0.440 | 50 |
| | M6 | **60C6** | 5.5 | 13 | 12.0 | 6.5 | 7.5 | 27 | 0.450 | 50 |
| | M8 | **60C8** | 5.5 | 13 | 13.5 | 8.5 | 7.5 | 29 | 0.520 | 50 |

## Butt connectors, Ni






- **For multi-stranded round conductors, e.g. to DIN EN 60228 Cl. 2**
- **For pre-rounded stranded sector shaped conductors**
- **Suitable for high temperatures to 650 °C**

### Characteristics

- Simple and safe processing due to butt mark
- Simple cable entry due to internal chamfer

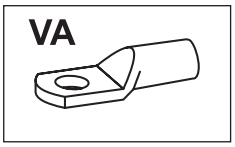
### Material

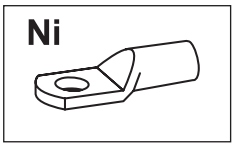
- High-grade nickel

### Technical instructions

- Tool: see page 53

| Nominal cross section mm² | Part No. | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 0.5 - 1 | **62R** | 1.6 | 3.2 | 25 | 0.135 | 50 |
| 1.5 - 2.5 | **63R** | 2.3 | 3.9 | 25 | 0.170 | 50 |
| 4 - 6 | **64R** | 3.6 | 5.6 | 25 | 0.325 | 50 |
| 10 | **65R** | 4.5 | 6.5 | 25 | 0.360 | 50 |
| 16 | **66R** | 5.5 | 7.5 | 30 | 0.510 | 50 |




## Tool application chart

**Tubular cable lugs and butt connectors made from stainless steel or nickel**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.5 - 6 | K25 | | 230 | | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 0.5 - 16 | K354 | | 246 | 329 | |
| | 10 - 50 | K22 | | 250 | 342 | |
| Hand hydraulic crimping tools | 10 - 50 | HK6022 | | 294 | 342 | |
| | | HK6022 | +UA22 | 473 | 342 | |
| | 70 - 95 | HK12030 | | 298 | 348 | |
| | | HK12042 | | 300 | 348 | |
| | | HK120U | | 302 | 348 | |
| Battery powered crimping tools | 0.5 - 16 | EK354ML | | 262 | 329 | |
| | | EK354 | | 266 | 342 | |
| | 10 - 50 | EKM6022 | | 272 | 342 | |
| | | EK6022 | | 274 | 342 | |
| | | EK60UNV | +UA22 | 476 | 342 | |
| | | EKM60UNV | +UA22 | 475 | 342 | |
| | 70 - 95 | EK12032 | | 280 | 348 | |
| | | EK12042 | | 282 | 348 | |
| | | EK120U | | 284 | 348 | |
| | | EK120UNV | +UA12T | 477 | 348 | |
| | | EK135FT | +UA15T | 286 | 348 | |
| Hydraulic crimping systems | 10 - 50 | THK22 | | 308 | 342 | |
| Hydraulic crimping heads | 10 - 50 | PK22 | | 308 | 342 | |
| | | PK60UNV | +UA22 | 474 | 342 | |
| | 70 - 95 | PK12042 | | 312 | 348 | |
| | | PK120U | | 314 | 348 | |

# CONFORMITY - COPPER COMPRESSION CABLE LUGS AND CONNECTORS TO DIN

Klauke products conform not only to its own standards. But also to DIN standards with strict standardised dimensions. Our compression cable lugs and connectors range to 1000 mm$^2$ nominal cross-section, with standardised designations and markings. We have the quality certified by the IEC test, including our special versions.



**In brief**

- Standardised sizes even for special versions
- Clear markings for standardised processing
- For all conductor classes to DIN EN 60228

## Tested and certified for safety

Our DIN cable lugs and connectors are strictly manufactured to standard. In addition, the test suggested in the standard has been passed with ease.

- Simple processing with DIN system
- Safety through standardised tests (IEC 61238-1)
- For all conductor classes to DIN EN 60228 and copper wires to DIN 46267-1



IEC
DIN



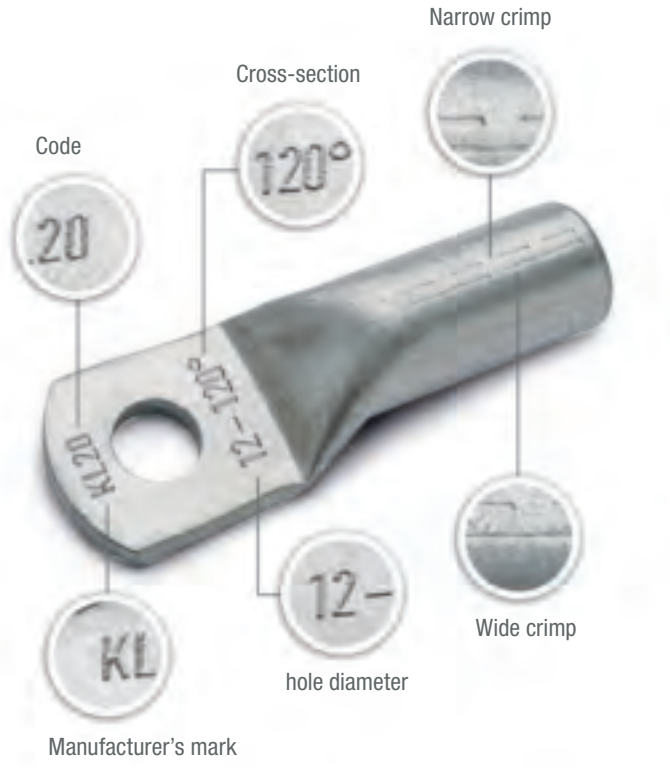
## Every version standardised

We offer cable lugs with tube dimension to DIN in numerous different forms and versions. If there happens to be no suitable connector for you, we will of course make you one to suit your needs.

- Flexible thanks to numerous versions
- Various surfaces available
- Many special versions based on the DIN standard available
- Manufactured to suit your particular requirements

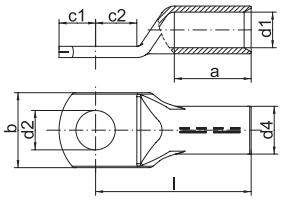
## Clear markings

Where simplicity and safety are key: Every cable lug to DIN comes with the appropriate crimping instruction. Readily visible markings indicate the crimping location required to work in compliance with the standard. Code numbers on the dies and cable lugs show the correct crimp at a glance.

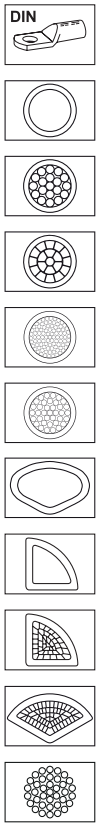


## Compression cable lugs to DIN, Cu






IEC DNV·GL




- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6
- For non-tension copper cables, e.g. to DIN 48201-1
- For pre-rounded multi-stranded sector shaped conductors
- With code number for clear tool assignment
- To DIN 46235

### Characteristics
- Easy to process due to crimp markings
- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 69
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“

### Additional information
- Part Number appendix for bright version „BK“
- Item in barrier sealed design upon request
- 10 - 800 mm² IEC-tested
- * = not standardised

| Nominal cross section mm² | Size of bolt diameter | Part No. | Hint | Code | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a | b | d1 | d2 | d4 | c1 | c2 | l | | |
| 6 | M 5 | **101R5** | | 5 | 10 | 8.5 | 3.8 | 5.3 | 5.5 | 6.5 | 7.5 | 24 | 0.24 | 100 |
| | M 6 | **101R6** | | 5 | 10 | 8.5 | 3.8 | 6.4 | 5.5 | 7.5 | 8.0 | 24 | 0.30 | 100 |
| | M 8 | **101R8** | * | 5 | 10 | 13.0 | 3.8 | 8.4 | 5.5 | 10.0 | 10.0 | 24 | 0.34 | 100 |
| 10 | M 5 | **102R5** | | 6 | 10 | 9.0 | 4.5 | 5.3 | 6.0 | 7.0 | 8.5 | 27 | 0.37 | 100 |
| | M 6 | **102R6** | | 6 | 10 | 9.0 | 4.5 | 6.4 | 6.0 | 7.5 | 8.5 | 27 | 0.36 | 100 |
| | M 8 | **102R8** | * | 6 | 10 | 13.0 | 4.5 | 8.4 | 6.0 | 10.0 | 10.0 | 27 | 0.38 | 100 |
| 16 | M 6 | **103R6** | | 8 | 20 | 13.0 | 5.5 | 6.4 | 8.5 | 7.5 | 8.0 | 36 | 1.19 | 100 |
| | M 8 | **103R8** | | 8 | 20 | 13.0 | 5.5 | 8.4 | 8.5 | 10.0 | 10.0 | 36 | 1.22 | 100 |
| | M 10 | **103R10** | | 8 | 20 | 17.0 | 5.5 | 10.5 | 8.5 | 12.0 | 12.0 | 36 | 1.30 | 100 |
| | M 12 | **103R12** | * | 8 | 20 | 18.0 | 5.5 | 13.0 | 8.5 | 13.0 | 13.0 | 36 | 1.27 | 100 |
| 25 | M 6 | **104R6** | | 10 | 20 | 14.0 | 7.0 | 6.4 | 10.0 | 7.5 | 8.0 | 38 | 1.51 | 50 |
| | M 8 | **104R8** | | 10 | 20 | 16.0 | 7.0 | 8.4 | 10.0 | 10.0 | 10.0 | 38 | 1.54 | 50 |
| | M 10 | **104R10** | | 10 | 20 | 17.0 | 7.0 | 10.5 | 10.0 | 12.0 | 12.0 | 38 | 1.62 | 50 |
| | M 12 | **104R12** | | 10 | 20 | 19.0 | 7.0 | 13.0 | 10.0 | 13.0 | 13.0 | 38 | 1.66 | 25 |
| 35 | M 6 | **105R6** | * | 12 | 20 | 17.0 | 8.2 | 6.4 | 12.5 | 7.5 | 8.0 | 42 | 2.77 | 50 |
| | M 8 | **105R8** | | 12 | 20 | 17.0 | 8.2 | 8.4 | 12.5 | 10.0 | 10.0 | 42 | 2.85 | 50 |
| | M 10 | **105R10** | | 12 | 20 | 19.0 | 8.2 | 10.5 | 12.5 | 12.0 | 12.0 | 42 | 2.84 | 50 |
| | M 12 | **105R12** | | 12 | 20 | 21.0 | 8.2 | 13.0 | 12.5 | 13.0 | 13.0 | 42 | 2.79 | 50 |
| | M 14 | **105R14** | * | 12 | 20 | 21.0 | 8.2 | 15.0 | 12.5 | 14.5 | 14.5 | 42 | 2.70 | 25 |

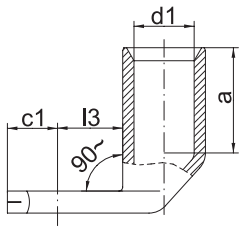
see next page

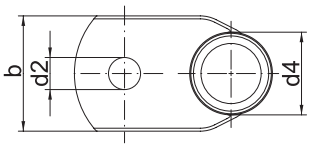
## Compression cable lugs to DIN, Cu

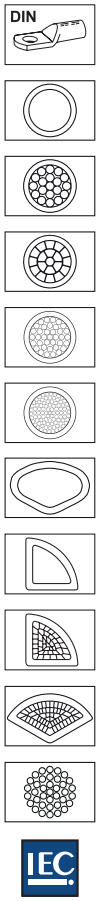
| Nominal cross section mm² | Size of bolt diameter | Part No. | Hint | Code | Dimension mm | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a | b | d1 | d2 | d4 | c1 | c2 | l | | |
| 50 | M 8 | **106R8** | | 14 | 28 | 20.0 | 10.0 | 8.4 | 14.5 | 10.0 | 10.0 | 52 | 4.46 | 50 |
| | M 10 | **106R10** | | 14 | 28 | 22.0 | 10.0 | 10.5 | 14.5 | 12.0 | 12.0 | 52 | 4.48 | 50 |
| | M 12 | **106R12** | | 14 | 28 | 24.0 | 10.0 | 13.0 | 14.5 | 13.0 | 13.0 | 52 | 4.40 | 50 |
| | M 14 | **106R14** | * | 14 | 28 | 24.0 | 10.0 | 15.0 | 14.5 | 14.5 | 14.5 | 52 | 4.30 | 25 |
| | M 16 | **106R16** | | 14 | 28 | 28.0 | 10.0 | 17.0 | 14.5 | 16.0 | 16.0 | 52 | 4.57 | 25 |
| 70 | M 8 | **107R8** | | 16 | 28 | 24.0 | 11.5 | 8.4 | 16.5 | 10.0 | 10.0 | 55 | 5.92 | 50 |
| | M 10 | **107R10** | | 16 | 28 | 24.0 | 11.5 | 10.5 | 16.5 | 12.0 | 12.0 | 55 | 6.02 | 50 |
| | M 12 | **107R12** | | 16 | 28 | 24.0 | 11.5 | 13.0 | 16.5 | 13.0 | 13.0 | 55 | 5.89 | 50 |
| | M 14 | **107R14** | * | 16 | 28 | 24.0 | 11.5 | 15.0 | 16.5 | 14.5 | 14.5 | 55 | 5.80 | 25 |
| | M 16 | **107R16** | | 16 | 28 | 30.0 | 11.5 | 17.0 | 16.5 | 16.0 | 16.0 | 55 | 6.13 | 25 |
| 95 | M 8 | **108R8** | * | 18 | 35 | 28.0 | 13.5 | 8.4 | 19.0 | 12.0 | 12.0 | 65 | 9.21 | 25 |
| | M 10 | **108R10** | | 18 | 35 | 28.0 | 13.5 | 10.5 | 19.0 | 12.0 | 12.0 | 65 | 8.97 | 50 |
| | M 12 | **108R12** | | 18 | 35 | 28.0 | 13.5 | 13.0 | 19.0 | 13.0 | 13.0 | 65 | 8.62 | 50 |
| | M 14 | **108R14** | * | 18 | 35 | 28.0 | 13.5 | 15.0 | 19.0 | 14.5 | 14.5 | 65 | 8.78 | 25 |
| | M 16 | **108R16** | | 18 | 35 | 32.0 | 13.5 | 17.0 | 19.0 | 16.0 | 16.0 | 65 | 9.00 | 50 |
| 120 | M 10 | **109R10** | | 20 | 35 | 32.0 | 15.5 | 10.5 | 21.0 | 15.0 | 16.0 | 70 | 11.40 | 50 |
| | M 12 | **109R12** | | 20 | 35 | 32.0 | 15.5 | 13.0 | 21.0 | 16.0 | 17.0 | 70 | 11.31 | 50 |
| | M 14 | **109R14** | * | 20 | 35 | 32.0 | 15.5 | 15.0 | 21.0 | 18.0 | 19.0 | 70 | 11.45 | 25 |
| | M 16 | **109R16** | | 20 | 35 | 32.0 | 15.5 | 17.0 | 21.0 | 19.0 | 20.0 | 70 | 11.24 | 50 |
| | M 20 | **109R20** | | 20 | 35 | 38.0 | 15.5 | 21.0 | 21.0 | 21.0 | 22.0 | 70 | 11.03 | 25 |
| 150 | M 10 | **110R10** | | 22 | 35 | 34.0 | 17.0 | 10.5 | 23.5 | 15.0 | 16.0 | 78 | 16.38 | 10 |
| | M 12 | **110R12** | | 22 | 35 | 34.0 | 17.0 | 13.0 | 23.5 | 16.0 | 17.0 | 78 | 16.29 | 25 |
| | M 14 | **110R14** | * | 22 | 35 | 34.0 | 17.0 | 15.0 | 23.5 | 19.0 | 20.0 | 78 | 16.38 | 10 |
| | M 16 | **110R16** | | 22 | 35 | 34.0 | 17.0 | 17.0 | 23.5 | 19.0 | 20.0 | 78 | 16.17 | 10 |
| | M 20 | **110R20** | | 22 | 35 | 40.0 | 17.0 | 21.0 | 23.5 | 21.0 | 22.0 | 78 | 15.90 | 10 |
| 185 | M 10 | **111R10** | | 25 | 40 | 37.0 | 19.0 | 10.5 | 25.5 | 15.0 | 16.0 | 82 | 18.96 | 10 |
| | M 12 | **111R12** | | 25 | 40 | 37.0 | 19.0 | 13.0 | 25.5 | 16.0 | 17.0 | 82 | 18.11 | 10 |
| | M 14 | **111R14** | * | 25 | 40 | 37.0 | 19.0 | 15.0 | 25.5 | 19.0 | 20.0 | 82 | 19.21 | 10 |
| | M 16 | **111R16** | | 25 | 40 | 37.0 | 19.0 | 17.0 | 25.5 | 19.0 | 20.0 | 82 | 18.74 | 25 |
| | M 20 | **111R20** | | 25 | 40 | 40.0 | 19.0 | 21.0 | 25.5 | 21.0 | 22.0 | 82 | 18.69 | 10 |
| 240 | M 12 | **112R12** | | 28 | 40 | 42.0 | 21.5 | 13.0 | 29.0 | 16.0 | 17.0 | 92 | 27.00 | 10 |
| | M 14 | **112R14** | * | 28 | 40 | 42.0 | 21.5 | 15.0 | 29.0 | 19.0 | 20.0 | 92 | 27.58 | 10 |
| | M 16 | **112R16** | | 28 | 40 | 42.0 | 21.5 | 17.0 | 29.0 | 19.0 | 20.0 | 92 | 27.37 | 25 |
| | M 20 | **112R20** | | 28 | 40 | 45.0 | 21.5 | 21.0 | 29.0 | 21.0 | 22.0 | 92 | 26.88 | 10 |
| 300 | M 12 | **113R12** | * | 32 | 50 | 46.0 | 24.5 | 13.0 | 32.0 | 14.0 | 22.0 | 100 | 32.89 | 5 |
| | M 14 | **113R14** | * | 32 | 50 | 46.0 | 24.5 | 15.0 | 32.0 | 19.0 | 22.0 | 100 | 33.29 | 5 |
| | M 16 | **113R16** | | 32 | 50 | 46.0 | 24.5 | 17.0 | 32.0 | 19.0 | 22.0 | 100 | 32.94 | 5 |
| | M 20 | **113R20** | | 32 | 50 | 46.0 | 24.5 | 21.0 | 32.0 | 22.0 | 22.0 | 100 | 33.24 | 5 |
| 400 | M 14 | **114R14** | * | 38 | 70 | 54.0 | 27.5 | 15.0 | 38.5 | 25.0 | 25.0 | 115 | 69.38 | 5 |
| | M 16 | **114R16** | | 38 | 70 | 54.0 | 27.5 | 17.0 | 38.5 | 25.0 | 25.0 | 115 | 68.54 | 5 |
| | M 20 | **114R20** | | 38 | 70 | 54.0 | 27.5 | 21.0 | 38.5 | 25.0 | 25.0 | 115 | 65.40 | 5 |
| 500 | M 16 | **115R16** | * | 42 | 70 | 60.0 | 31.0 | 17.0 | 42.0 | 25.0 | 25.0 | 125 | 83.31 | 1 |
| | M 20 | **115R20** | | 42 | 70 | 60.0 | 31.0 | 21.0 | 42.0 | 25.0 | 25.0 | 125 | 81.58 | 1 |
| 625 | M 16 | **116R16** | * | 44 | 80 | 64.0 | 34.5 | 17.0 | 44.0 | 25.0 | 25.0 | 135 | 79.60 | 1 |
| | M 20 | **116R20** | | 44 | 80 | 64.0 | 34.5 | 21.0 | 44.0 | 25.0 | 25.0 | 135 | 79.69 | 1 |
| 800 | M 16 | **117R16** | * | 52 | 100 | 75.0 | 40.0 | 17.0 | 52.0 | 30.0 | 30.0 | 165 | 150.00 | 1 |
| | M 20 | **117R20** | | 52 | 100 | 75.0 | 40.0 | 21.0 | 52.0 | 30.0 | 30.0 | 165 | 149.00 | 1 |
| 1000 | M 16 | **118R16** | * | 58 | 100 | 83.0 | 44.0 | 17.0 | 58.0 | 30.0 | 30.0 | 165 | 199.00 | 1 |
| | M 20 | **118R20** | | 58 | 100 | 83.0 | 44.0 | 21.0 | 58.0 | 30.0 | 30.0 | 165 | 195.00 | 1 |

## Angled compression cable lugs, Cu, 90° angled






- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6
- For non-tension copper cables, e.g. to DIN 48201-1
- For pre-rounded multi-stranded sector shaped conductors
- Tube dimensions according to DIN 46235
- With code number for clear tool assignment

### Characteristics
- With crimp markings for correct crimp positioning
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Annealed material optimises material and crimping properties

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“
- Tool: see page 69

### Additional information
- Part Number appendix for bright version „BK“
- 10 - 240 mm² IEC-tested

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | d4 | c1 | l3 | | |
| 6 | M 5 | **161R5** | 5 | 10 | 8.5 | 3.8 | 5.3 | 5.5 | 6.5 | 9 | 0.28 | 50 |
| | M 6 | **161R6** | 5 | 10 | 8.5 | 3.8 | 6.4 | 5.5 | 7.5 | 10 | 0.32 | 50 |
| 10 | M 5 | **162R5** | 6 | 10 | 9.0 | 4.5 | 5.3 | 6.0 | 7.0 | 10 | 0.34 | 50 |
| | M 6 | **162R6** | 6 | 10 | 9.0 | 4.5 | 6.4 | 6.0 | 7.5 | 10 | 0.35 | 50 |
| | M 8 | **162R8** | 6 | 10 | 13.0 | 4.5 | 8.4 | 6.0 | 10.0 | 13 | 0.37 | 50 |
| 16 | M 6 | **163R6** | 8 | 20 | 13.0 | 5.5 | 6.4 | 8.5 | 7.5 | 11 | 1.20 | 50 |
| | M 8 | **163R8** | 8 | 20 | 13.0 | 5.5 | 8.4 | 8.5 | 10.0 | 13 | 1.30 | 50 |
| | M 10 | **163R10** | 8 | 20 | 17.0 | 5.5 | 10.5 | 8.5 | 12.0 | 15 | 1.40 | 50 |
| | M 12 | **163R12** | 8 | 20 | 18.0 | 5.5 | 13.0 | 8.5 | 13.0 | 18 | 1.33 | 50 |
| 25 | M 6 | **164R6** | 10 | 20 | 14.0 | 7.0 | 6.4 | 10.0 | 7.5 | 11 | 1.54 | 25 |
| | M 8 | **164R8** | 10 | 20 | 16.0 | 7.0 | 8.4 | 10.0 | 10.0 | 13 | 1.60 | 25 |
| | M 10 | **164R10** | 10 | 20 | 17.0 | 7.0 | 10.5 | 10.0 | 12.0 | 15 | 1.63 | 25 |
| | M 12 | **164R12** | 10 | 20 | 19.0 | 7.0 | 13.0 | 10.0 | 13.0 | 18 | 1.70 | 25 |
| 35 | M 8 | **165R8** | 12 | 20 | 17.0 | 8.2 | 8.4 | 12.5 | 10.0 | 13 | 2.72 | 25 |
| | M 10 | **165R10** | 12 | 20 | 19.0 | 8.2 | 10.5 | 12.5 | 12.0 | 15 | 2.76 | 25 |
| | M 12 | **165R12** | 12 | 20 | 21.0 | 8.2 | 13.0 | 12.5 | 13.0 | 18 | 2.85 | 25 |
| | M 14 | **165R14** | 12 | 20 | 21.0 | 8.2 | 15.0 | 12.5 | 14.5 | 20 | 2.92 | 25 |
| 50 | M 8 | **166R8** | 14 | 28 | 20.0 | 10.0 | 8.4 | 14.5 | 10.0 | 16 | 4.39 | 25 |
| | M 10 | **166R10** | 14 | 28 | 22.0 | 10.0 | 10.5 | 14.5 | 12.0 | 16 | 4.46 | 25 |
| | M 12 | **166R12** | 14 | 28 | 24.0 | 10.0 | 13.0 | 14.5 | 13.0 | 18 | 4.49 | 25 |
| | M 14 | **166R14** | 14 | 28 | 24.0 | 10.0 | 15.0 | 14.5 | 14.5 | 20 | 4.73 | 25 |
| | M 16 | **166R16** | 14 | 28 | 28.0 | 10.0 | 17.0 | 14.5 | 16.0 | 22 | 4.66 | 25 |

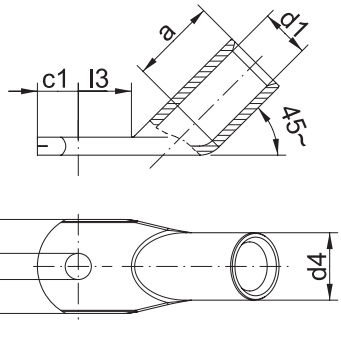
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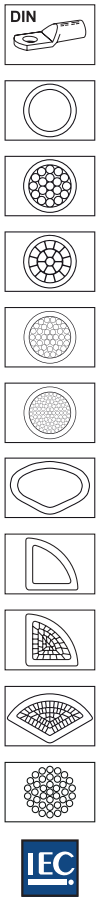
## Angled compression cable lugs, Cu, 90° angled

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | d4 | c1 | l3 | | |
| 70 | M 8 | **167R8** | 16 | 28 | 24.0 | 11.5 | 8.4 | 16.5 | 10.0 | 14 | 5.92 | 25 |
| | M 10 | **167R10** | 16 | 28 | 24.0 | 11.5 | 10.5 | 16.5 | 12.0 | 16 | 6.31 | 25 |
| | M 12 | **167R12** | 16 | 28 | 24.0 | 11.5 | 13.0 | 16.5 | 13.0 | 18 | 6.34 | 25 |
| | M 14 | **167R14** | 16 | 28 | 24.0 | 11.5 | 15.0 | 16.5 | 14.5 | 20 | 6.50 | 25 |
| | M 16 | **167R16** | 16 | 28 | 30.0 | 11.5 | 17.0 | 16.5 | 16.0 | 22 | 6.63 | 25 |
| 95 | M 10 | **168R10** | 18 | 35 | 28.0 | 13.5 | 10.5 | 19.0 | 12.0 | 17 | 9.03 | 25 |
| | M 12 | **168R12** | 18 | 35 | 28.0 | 13.5 | 13.0 | 19.0 | 13.0 | 18 | 9.27 | 25 |
| | M 14 | **168R14** | 18 | 35 | 28.0 | 13.5 | 15.0 | 19.0 | 14.5 | 20 | 9.06 | 25 |
| | M 16 | **168R16** | 18 | 35 | 32.0 | 13.5 | 17.0 | 19.0 | 16.0 | 22 | 9.18 | 25 |
| 120 | M 10 | **169R10** | 20 | 35 | 32.0 | 15.5 | 10.5 | 21.0 | 15.0 | 17 | 10.41 | 10 |
| | M 12 | **169R12** | 20 | 35 | 32.0 | 15.5 | 13.0 | 21.0 | 16.0 | 18 | 10.65 | 10 |
| | M 14 | **169R14** | 20 | 35 | 32.0 | 15.5 | 15.0 | 21.0 | 18.0 | 20 | 10.75 | 10 |
| | M 16 | **169R16** | 20 | 35 | 32.0 | 15.5 | 17.0 | 21.0 | 19.0 | 22 | 10.72 | 10 |
| | M 20 | **169R20** | 20 | 35 | 38.0 | 15.5 | 21.0 | 21.0 | 21.0 | 24 | 11.00 | 10 |
| 150 | M 10 | **170R10** | 22 | 35 | 34.0 | 17.0 | 10.5 | 23.5 | 15.0 | 17 | 14.18 | 10 |
| | M 12 | **170R12** | 22 | 35 | 34.0 | 17.0 | 13.0 | 23.5 | 16.0 | 18 | 14.33 | 10 |
| | M 14 | **170R14** | 22 | 35 | 34.0 | 17.0 | 15.0 | 23.5 | 19.0 | 20 | 15.60 | 10 |
| | M 16 | **170R16** | 22 | 35 | 34.0 | 17.0 | 17.0 | 23.5 | 19.0 | 22 | 15.24 | 10 |
| | M 20 | **170R20** | 22 | 35 | 40.0 | 17.0 | 21.0 | 23.5 | 21.0 | 24 | 15.70 | 10 |
| 185 | M 10 | **171R10** | 25 | 40 | 37.0 | 19.0 | 10.5 | 25.5 | 15.0 | 22 | 18.60 | 10 |
| | M 12 | **171R12** | 25 | 40 | 37.0 | 19.0 | 13.0 | 25.5 | 16.0 | 22 | 18.69 | 10 |
| | M 14 | **171R14** | 25 | 40 | 37.0 | 19.0 | 15.0 | 25.5 | 19.0 | 22 | 19.10 | 10 |
| | M 16 | **171R16** | 25 | 40 | 37.0 | 19.0 | 17.0 | 25.5 | 19.0 | 22 | 19.00 | 10 |
| | M 20 | **171R20** | 25 | 40 | 40.0 | 19.0 | 21.0 | 25.5 | 21.0 | 24 | 18.72 | 10 |
| 240 | M 12 | **172R12** | 28 | 40 | 42.0 | 21.5 | 13.0 | 29.0 | 16.0 | 22 | 25.09 | 10 |
| | M 14 | **172R14** | 28 | 40 | 42.0 | 21.5 | 15.0 | 29.0 | 19.0 | 22 | 25.70 | 10 |
| | M 16 | **172R16** | 28 | 40 | 42.0 | 21.5 | 17.0 | 29.0 | 19.0 | 22 | 24.96 | 10 |
| | M 20 | **172R20** | 28 | 40 | 45.0 | 21.5 | 21.0 | 29.0 | 21.0 | 24 | 25.26 | 10 |

## Angled compression cable lugs, Cu, 45° angled






- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6
- For non-tension copper cables, e.g. to DIN 48201-1
- For pre-rounded multi-stranded sector shaped conductors
- Tube dimensions according to DIN 46235
- With code number for clear tool assignment

### Characteristics
- Flat contact surface by special angle pressing process
- Easy to process due to crimp markings
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“
- Tool: see page 69

### Additional information
- Part Number appendix for bright version „BK“
- 10 - 240 mm² IEC-tested

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | d4 | c1 | l3 | | |
| 6 | M 5 | **161R545** | 5 | 10 | 8.5 | 3.8 | 5.5 | 5.5 | 6.5 | 9 | 0.32 | 50 |
| | M 6 | **161R645** | 5 | 10 | 8.5 | 3.8 | 6.5 | 5.5 | 7.5 | 10 | 0.34 | 50 |
| 10 | M 5 | **162R545** | 6 | 10 | 9.0 | 4.5 | 5.5 | 6.0 | 7.0 | 10 | 0.36 | 50 |
| | M 6 | **162R645** | 6 | 10 | 9.0 | 4.5 | 6.5 | 6.0 | 7.5 | 10 | 0.35 | 50 |
| | M 8 | **162R845** | 6 | 10 | 13.0 | 4.5 | 8.5 | 6.0 | 10.0 | 13 | 0.39 | 50 |
| 16 | M 6 | **163R645** | 8 | 20 | 13.0 | 5.5 | 6.5 | 8.5 | 7.5 | 11 | 1.20 | 50 |
| | M 8 | **163R845** | 8 | 20 | 13.0 | 5.5 | 8.5 | 8.5 | 10.0 | 13 | 0.28 | 50 |
| | M 10 | **163R1045** | 8 | 20 | 17.0 | 5.5 | 10.5 | 8.5 | 12.0 | 15 | 1.34 | 50 |
| | M 12 | **163R1245** | 8 | 20 | 18.0 | 5.5 | 13.0 | 8.5 | 13.0 | 18 | 1.35 | 50 |
| 25 | M 6 | **164R645** | 10 | 20 | 14.0 | 7.0 | 6.5 | 10.0 | 7.5 | 11 | 1.49 | 25 |
| | M 8 | **164R845** | 10 | 20 | 16.0 | 7.0 | 8.5 | 10.0 | 10.0 | 13 | 1.60 | 25 |
| | M 10 | **164R1045** | 10 | 20 | 17.0 | 7.0 | 10.5 | 10.0 | 12.0 | 15 | 1.64 | 25 |
| | M 12 | **164R1245** | 10 | 20 | 19.0 | 7.0 | 13.0 | 10.0 | 13.0 | 18 | 1.73 | 25 |
| 35 | M 8 | **165R845** | 12 | 20 | 17.0 | 8.2 | 8.5 | 12.5 | 10.0 | 13 | 2.72 | 25 |
| | M 10 | **165R1045** | 12 | 20 | 19.0 | 8.2 | 10.5 | 12.5 | 12.0 | 15 | 2.92 | 25 |
| | M 12 | **165R1245** | 12 | 20 | 21.0 | 8.2 | 13.0 | 12.5 | 13.0 | 18 | 2.98 | 25 |
| | M 14 | **165R1445** | 12 | 20 | 21.0 | 8.2 | 15.0 | 12.5 | 14.5 | 20 | 3.03 | 25 |
| 50 | M 8 | **166R845** | 14 | 28 | 20.0 | 10.0 | 8.5 | 14.5 | 10.0 | 13 | 4.63 | 25 |
| | M 10 | **166R1045** | 14 | 28 | 22.0 | 10.0 | 10.5 | 14.5 | 12.0 | 16 | 4.84 | 25 |
| | M 12 | **166R1245** | 14 | 28 | 24.0 | 10.0 | 13.0 | 14.5 | 13.0 | 18 | 4.94 | 25 |
| | M 14 | **166R1445** | 14 | 28 | 24.0 | 10.0 | 15.0 | 14.5 | 14.5 | 20 | 4.96 | 25 |
| | M 16 | **166R1645** | 14 | 28 | 28.0 | 10.0 | 17.0 | 14.5 | 16.0 | 22 | 4.92 | 25 |

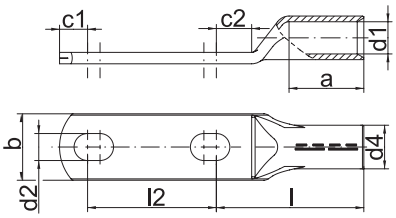
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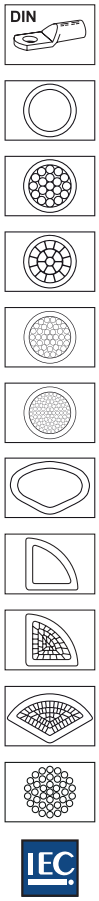
## Angled compression cable lugs, Cu, 45° angled

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | d4 | c1 | l3 | | |
| 70 | M 8 | **167R845** | 16 | 28 | 24.0 | 11.5 | 8.5 | 16.5 | 10.0 | 14 | 6.40 | 25 |
| | M 10 | **167R1045** | 16 | 28 | 24.0 | 11.5 | 10.5 | 16.5 | 12.0 | 16 | 6.76 | 25 |
| | M 12 | **167R1245** | 16 | 28 | 24.0 | 11.5 | 13.0 | 16.5 | 13.0 | 18 | 6.90 | 25 |
| | M 14 | **167R1445** | 16 | 28 | 24.0 | 11.5 | 15.0 | 16.5 | 14.5 | 20 | 6.72 | 25 |
| | M 16 | **167R1645** | 16 | 28 | 30.0 | 11.5 | 17.0 | 16.5 | 16.0 | 22 | 6.96 | 25 |
| 95 | M 10 | **168R1045** | 18 | 35 | 28.0 | 13.5 | 10.5 | 19.0 | 12.0 | 17 | 9.64 | 25 |
| | M 12 | **168R1245** | 18 | 35 | 28.0 | 13.5 | 13.0 | 19.0 | 13.0 | 18 | 9.21 | 25 |
| | M 14 | **168R1445** | 18 | 35 | 28.0 | 13.5 | 15.0 | 19.0 | 14.5 | 20 | 9.51 | 25 |
| | M 16 | **168R1645** | 18 | 35 | 32.0 | 13.5 | 17.0 | 19.0 | 16.0 | 22 | 9.40 | 25 |
| 120 | M 10 | **169R1045** | 20 | 35 | 32.0 | 15.5 | 10.5 | 21.0 | 15.0 | 17 | 11.09 | 10 |
| | M 12 | **169R1245** | 20 | 35 | 32.0 | 15.5 | 13.0 | 21.0 | 16.0 | 18 | 11.45 | 10 |
| | M 14 | **169R1445** | 20 | 35 | 32.0 | 15.5 | 15.0 | 21.0 | 18.0 | 20 | 11.55 | 10 |
| | M 16 | **169R1645** | 20 | 35 | 32.0 | 15.5 | 17.0 | 21.0 | 19.0 | 22 | 11.76 | 10 |
| | M 20 | **169R2045** | 20 | 35 | 38.0 | 15.5 | 21.0 | 21.0 | 21.0 | 24 | 11.55 | 10 |
| 150 | M 10 | **170R1045** | 22 | 35 | 34.0 | 17.0 | 10.5 | 23.5 | 15.0 | 17 | 15.93 | 10 |
| | M 12 | **170R1245** | 22 | 35 | 34.0 | 17.0 | 13.0 | 23.5 | 16.0 | 18 | 16.08 | 10 |
| | M 14 | **170R1445** | 22 | 35 | 34.0 | 17.0 | 15.0 | 23.5 | 19.0 | 20 | 16.38 | 10 |
| | M 16 | **170R1645** | 22 | 35 | 34.0 | 17.0 | 17.0 | 23.5 | 19.0 | 22 | 16.90 | 10 |
| | M 20 | **170R2045** | 22 | 35 | 40.0 | 17.0 | 21.0 | 23.5 | 21.0 | 24 | 16.49 | 10 |
| 185 | M 10 | **171R1045** | 25 | 40 | 37.0 | 19.0 | 10.5 | 25.5 | 15.0 | 22 | 20.16 | 10 |
| | M 12 | **171R1245** | 25 | 40 | 37.0 | 19.0 | 13.0 | 25.5 | 16.0 | 22 | 19.60 | 10 |
| | M 14 | **171R1445** | 25 | 40 | 37.0 | 19.0 | 15.0 | 25.5 | 19.0 | 22 | 20.05 | 10 |
| | M 16 | **171R1645** | 25 | 40 | 37.0 | 19.0 | 17.0 | 25.5 | 19.0 | 22 | 19.68 | 10 |
| | M 20 | **171R2045** | 25 | 40 | 40.0 | 19.0 | 21.0 | 25.5 | 21.0 | 24 | 19.95 | 10 |
| 240 | M 12 | **172R1245** | 28 | 40 | 42.0 | 21.5 | 13.0 | 29.0 | 16.0 | 22 | 26.46 | 10 |
| | M 14 | **172R1445** | 28 | 40 | 42.0 | 21.5 | 15.0 | 29.0 | 19.0 | 22 | 26.99 | 10 |
| | M 16 | **172R1645** | 28 | 40 | 42.0 | 21.5 | 17.0 | 29.0 | 19.0 | 22 | 26.92 | 10 |
| | M 20 | **172R2045** | 28 | 40 | 45.0 | 21.5 | 21.0 | 29.0 | 21.0 | 24 | 26.88 | 10 |

## Compression cable lugs to DIN special type, Cu with 2 holes






- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6
- For non-tension copper cables, e.g. to DIN 48201-1
- For pre-rounded sector shaped conductors
- Tube dimensions according to DIN 46235
- With code number for clear tool assignment

### Characteristics

- Easy to process due to crimp markings
- Annealed material optimises material and crimping properties
- Flat contact surface by special pressing technique
- Internal chamfer for simple cable insertion

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“
- Tool: see page 69

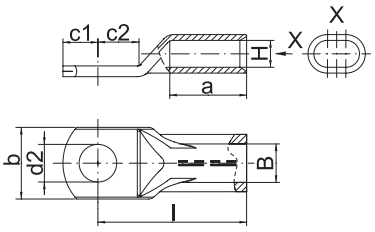
### Additional information

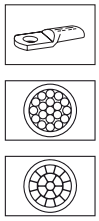
- Part Number appendix for bright version „BK“

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | d4 | c1 | c2 | l | l2 | | |
| 70 | 2 x M 12 | **147D212** | 16 | 28 | 24 | 11.5 | 13 | 16.5 | 13 | 13 | 55 | 50 - 62 | 10.82 | 5 |
| 95 | | **148D212** | 18 | 35 | 28 | 13.5 | 13 | 19.0 | 13 | 13 | 65 | 50 - 62 | 15.24 | 5 |
| 120 | | **149D212** | 20 | 35 | 32 | 15.5 | 13 | 21.0 | 16 | 17 | 70 | 50 - 62 | 18.62 | 5 |
| 150 | | **150D212** | 22 | 35 | 34 | 17.0 | 13 | 23.5 | 16 | 17 | 78 | 50 - 62 | 26.10 | 5 |
| 185 | | **151D212** | 25 | 40 | 37 | 19.0 | 13 | 25.5 | 16 | 17 | 82 | 50 - 62 | 30.48 | 5 |
| 240 | | **152D212** | 28 | 40 | 42 | 21.5 | 13 | 29.0 | 16 | 17 | 92 | 50 - 62 | 41.52 | 5 |

## Compression cable lugs, special type, Cu with 1 hole, double crimping





- **Special design for mounting of 2 multi-stranded cables, e.g. to DIN EN 60228 Cl. 2**
- **With crimp markings for correct crimp positioning**

### Characteristics

- Annealed material optimises material and crimping properties
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

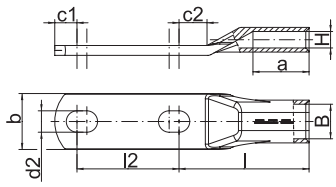
### Technical instructions

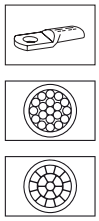
- Tool: see page 70

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | H | B | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d2 | c1 | c2 | l | | | | |
| 2 x 50 | M 12 | **136DP12** | 22 DP | 35 | 34 | 13 | 16 | 17 | 78 | 10.0 | 20 | 16.30 | 5 |
| 2 x 70 | | **137DP12** | 24 DP | 40 | 37 | 13 | 16 | 17 | 82 | 11.5 | 23 | 18.90 | 5 |
| 2 x 95 | | **138DP12** | 29 DP | 40 | 42 | 13 | 16 | 17 | 92 | 13.5 | 27 | 27.12 | 5 |
| 2 x 120 | | **139DP12** | 32 DP | 50 | 48 | 13 | 19 | 22 | 100 | 15.5 | 31 | 33.50 | 5 |

## Compression cable lugs, special type, Cu with 2 long holes, double crimping





- **Special design for mounting of 2 multi-stranded cables, e.g. to DIN EN 60228 Cl. 2**
- **With crimp markings for correct crimp positioning**

### Characteristics

- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer
- Flat contact surface by special pressing technique

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

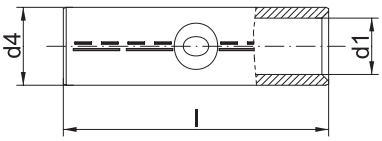
### Technical instructions

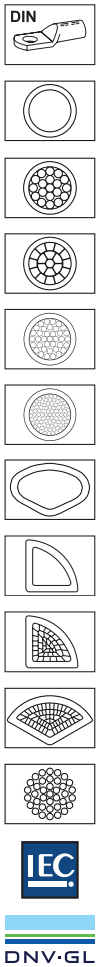
- Tool: see page 70

| Nominal cross section mm² | Size of bolt diameter | Part No. | Code | Dimension mm | | | | | | | H | B | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d2 | c1 | c2 | l | l2 | | | | |
| 2 x 50 | 2 x M 12 | **136DP212** | 22 DP | 35 | 34 | 13 | 16 | 17 | 78 | 50 - 62 | 10.0 | 20 | 23.20 | 5 |
| 2 x 70 | | **137DP212** | 24 DP | 40 | 37 | 13 | 16 | 17 | 82 | 50 - 62 | 11.5 | 23 | 29.64 | 5 |
| 2 x 95 | | **138DP212** | 29 DP | 40 | 42 | 13 | 16 | 17 | 92 | 50 - 62 | 13.5 | 27 | 38.50 | 5 |
| 2 x 120 | | **139DP212** | 32 DP | 50 | 48 | 13 | 19 | 22 | 100 | 50 - 62 | 15.5 | 31 | 45.80 | 5 |

## Compression joints to DIN, Cu






- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6 and pre-rounded sector shaped conductors
- For non-tension copper cables, e.g. to DIN 48201-1
- To DIN 46267, Part 1
- With code number for clear tool assignment
- With crimp markings for correct crimp positioning

### Characteristics

- Simple and safe processing due to butt mark
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“
- Tool: see page 69
- Reduction sleeves for connecting unequal cross-sections can be found on page 68

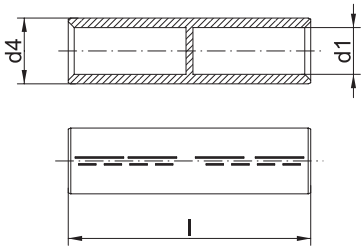
### Additional information

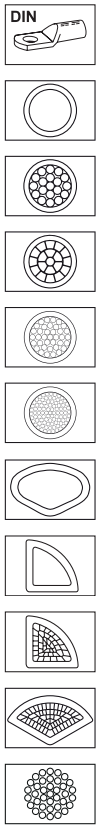
- Part Number appendix for bright version „BK“
- 10 - 800 mm² IEC-tested

| Nominal cross section mm² | Part No. | Code | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | d4 | l | | |
| 6 | **121R** | 5 | 3.8 | 5.5 | 30 | 0.31 | 100 |
| 10 | **122R** | 6 | 4.5 | 6.0 | 30 | 0.34 | 100 |
| 16 | **123R** | 8 | 5.5 | 8.5 | 50 | 1.45 | 100 |
| 25 | **124R** | 10 | 7.0 | 10.0 | 50 | 1.77 | 50 |
| 35 | **125R** | 12 | 8.2 | 12.5 | 50 | 2.89 | 50 |
| 50 | **126R** | 14 | 10.0 | 14.5 | 56 | 4.26 | 50 |
| 70 | **127R** | 16 | 11.5 | 16.5 | 56 | 5.41 | 50 |
| 95 | **128R** | 18 | 13.5 | 19.0 | 70 | 8.62 | 25 |
| 120 | **129R** | 20 | 15.5 | 21.0 | 70 | 9.66 | 25 |
| 150 | **130R** | 22 | 17.0 | 23.5 | 80 | 14.50 | 10 |
| 185 | **131R** | 25 | 19.0 | 25.5 | 85 | 17.00 | 10 |
| 240 | **132R** | 28 | 21.5 | 29.0 | 90 | 23.41 | 10 |
| 300 | **133R** | 32 | 24.5 | 32.0 | 100 | 29.23 | 5 |
| 400 | **134R** | 38 | 27.5 | 38.5 | 150 | 74.32 | 5 |
| 500 | **135R** | 42 | 31.0 | 42.0 | 160 | 89.09 | 1 |
| 625 | **136R** | 44 | 34.5 | 44.0 | 160 | 79.10 | 1 |
| 800 | **137R** | 52 | 40.0 | 52.0 | 200 | 151.00 | 1 |
| 1000 | **138R** | 58 | 44.0 | 58.0 | 200 | 198.00 | 1 |

## Compression joints, Cu






- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6 and pre-rounded sector shaped conductors
- For non-tension copper cables, e.g. to DIN 48201-1
- Barrier design with oil stop
- Tube dimension to DIN 46267, part 1
- With code number for clear tool assignment

### Characteristics

- Easy to process due to crimp markings
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Suitable for

- Non-tension connections

### Material

- Copper (EN13600)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

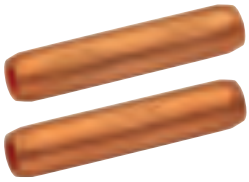
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“
- Tool: see page 69
- Reduction sleeves for connecting unequal cross-sections can be found on page 68

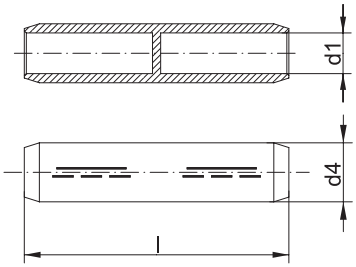
### Additional information

- Part Number appendix for bright version „BK“

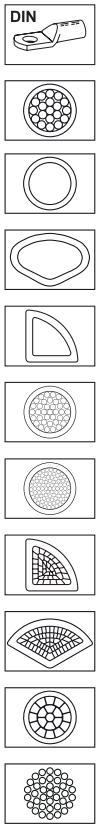
| Nominal cross section mm² | Part No. | Code | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | d4 | l | | |
| 16 | **523R** | 8 | 5.5 | 8.5 | 50 | 1.54 | 25 |
| 25 | **524R** | 10 | 7.0 | 10.0 | 50 | 1.84 | 25 |
| 35 | **525R** | 12 | 8.2 | 12.5 | 50 | 2.99 | 25 |
| 50 | **526R** | 14 | 10.0 | 14.5 | 56 | 4.46 | 25 |
| 70 | **527R** | 16 | 11.5 | 16.5 | 56 | 5.61 | 25 |
| 95 | **528R** | 18 | 13.5 | 19.0 | 70 | 8.88 | 25 |
| 120 | **529R** | 20 | 15.5 | 21.0 | 70 | 10.06 | 5 |
| 150 | **530R** | 22 | 17.0 | 23.5 | 80 | 14.89 | 5 |
| 185 | **531R** | 25 | 19.0 | 25.5 | 85 | 17.57 | 5 |
| 240 | **532R** | 28 | 21.5 | 29.0 | 90 | 24.23 | 5 |
| 300 | **533R** | 32 | 24.5 | 32.0 | 100 | 30.15 | 5 |
| 400 | **534R** | 38 | 27.5 | 38.5 | 150 | 75.60 | 5 |
| 500 | **535R** | 42 | 31.0 | 42.0 | 160 | 92.00 | 1 |

## Compression joint for cable connections 10 - 30 kV, copper






IEC DNV·GL




- For round conductors, e.g. to DIN EN 60228 Cl. 2 and pre-rounded sector shaped conductors
- For non-tension copper cables, e.g. to DIN 48201-1
- Tube dimension to DIN 46267, part 1
- For copper medium-voltage cable connections 10 - 30 kV
- With chamfered edges for reduced electrical stress in the assembly

### Characteristics
- Also available as barrier design with oil stop
- Easy to process due to crimp markings
- Annealed material optimises material and crimping properties
- Simple cable entry due to internal chamfer

### Suitable for
- Non-tension connections

### Material
- Copper (EN13600)

### Surface
- Bright

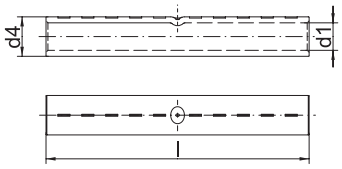
### Technical instructions
- Tool: see page 69
- Reduction sleeves for connecting unequal cross-sections can be found on page 68

### Additional information
- Part Number appendix for tinned version „V“

| Nominal cross section mm² | Part No. | Code | Dimension mm | | | Number of crimps | | Weight/ 100 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | d4 | l | Cu (5 mm) | Cu (wide) | | |
| Normalversion | | | | | | | | | |
| 25 | **504R** | 12 | 7.5 | 12.5 | 60 | 2/2 | 1/1 | 4.08 | 10 |
| 35 | **505R** | 12 | 8.2 | 12.5 | 60 | 2/2 | 1/1 | 3.56 | 10 |
| 50 | **506R** | 14 | 10.0 | 14.5 | 65 | 3/3 | 1/1 | 4.90 | 10 |
| 70 | **507R** | 16 | 11.5 | 16.5 | 65 | 3/3 | 1/1 | 6.10 | 10 |
| 95 | **508R** | 18 | 13.5 | 19 | 90 | 4/4 | 2/2 | 10.98 | 10 |
| 120 | **509R** | 20 | 15.5 | 21 | 90 | 4/4 | 2/2 | 12.68 | 5 |
| 150 | **510R** | 22 | 17.0 | 23.5 | 105 | 4/4 | 2/2 | 18.09 | 5 |
| 185 | **511R** | 25 | 19.0 | 25.5 | 105 | 4/4 | 2/2 | 20.35 | 5 |
| 240 | **512R** | 28 | 21.5 | 29 | 125 | | 2/2 | 31.64 | 5 |
| 300 | **513R** | 32 | 24.5 | 32 | 125 | | 2/2 | 35.40 | 1 |
| 400 | **514R** | 38 | 27.5 | 38.5 | 160 | | 3/3 | 75.42 | 1 |
| Barrier version | | | | | | | | | |
| 25 | **504RLD** | 12 | 7.5 | 12.5 | 60 | 2/2 | 1/1 | 4.08 | 25 |
| 35 | **505RLD** | 12 | 8.2 | 12.5 | 60 | 2/2 | 1/1 | 3.56 | 10 |
| 50 | **506RLD** | 14 | 10.0 | 14.5 | 65 | 3/3 | 1/1 | 4.90 | 10 |
| 70 | **507RLD** | 16 | 11.5 | 16.5 | 65 | 3/3 | 1/1 | 6.40 | 10 |
| 95 | **508RLD** | 18 | 13.5 | 19 | 90 | 4/4 | 2/2 | 10.98 | 10 |
| 120 | **509RLD** | 20 | 15.5 | 21 | 90 | 4/4 | 2/2 | 12.68 | 5 |
| 150 | **510RLD** | 22 | 17.0 | 23.5 | 105 | 4/4 | 2/2 | 18.84 | 5 |
| 185 | **511RLD** | 25 | 19.0 | 25.5 | 105 | 4/4 | 2/2 | 20.35 | 5 |
| 240 | **512RLD** | 28 | 21.5 | 29 | 125 | | 2/2 | 31.64 | 5 |
| 300 | **513RLD** | 32 | 24.5 | 32 | 125 | | 2/2 | 35.40 | 1 |
| 400 | **514RLD** | 38 | 27.5 | 38.5 | 160 | | 3/3 | 75.42 | 1 |

## Compression joints to DIN, Cu






- For connecting copper cables to DIN 48201, Part 1
- For full tension cable connections
- To DIN 48085, Part 1
- With code number for clear tool assignment
- With crimp markings for correct crimping

### Characteristics

- Easy to process due to crimp markings
- Simple and safe processing due to butt mark
- Simple cable entry due to internal chamfer

### Material

- Copper (EN13600)

### Surface

- Bright

### Technical instructions

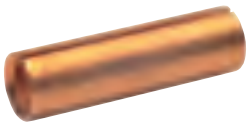
- To process item 192R use crimping die HAD45240
- Tool: see page 69

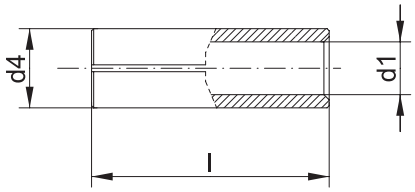
### Additional information

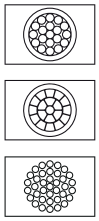
- * = not standardised
- 16 - 70 mm² IEC-tested

| Nominal cross section mm² | Part No. | Hint | Code | Dimension mm | | | Number of crimps | | conductor dia. mm | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d4 | l | Cu (5 mm) | Cu (wide) | | | |
| 6 | **181R** | * | 6 | 3.5 | 6.5 | 65 | 4/4 | | 3.00 | 1.4 | 10 |
| 10 | **182R** | | 8 | 4.5 | 8.5 | 80 | 5/5 | | 4.05 | 3.0 | 10 |
| 16 | **183R** | | 8 | 5.5 | 8.5 | 95 | 5/5 | | 5.10 | 2.8 | 10 |
| 25 | **184R** | | 10 | 7.0 | 10.0 | 95 | 5/5 | | 6.30 | 3.4 | 10 |
| 35 | **185R** | | 12 | 8.2 | 12.5 | 95 | 5/5 | | 7.50 | 5.6 | 10 |
| 50 | **186R** | | 14 | 10.0 | 14.5 | 110 | 5/5 | | 9.00 | 8.6 | 10 |
| 70 | **187R** | | 16 | 11.5 | 16.5 | 110 | 5/5 | | 10.50 | 10.8 | 10 |
| 95 | **188R** | | 20 | 13.5 | 21.0 | 145 | 8/8 | 4/4 | 12.50 | 26.2 | 10 |
| 120 | **189R** | | 22 | 15.0 | 23.5 | 160 | 8/8 | 4/4 | 14.00 | 36.8 | 10 |
| 150 | **190R** | | 25 | 16.5 | 25.5 | 180 | 8/8 | 4/4 | 15.70 | 47.5 | 5 |
| 185 | **191R** | * | 32 | 18.5 | 31.5 | 260 | | 5/5 | 17.50 | 118.0 | 5 |
| 240 | **192R** | * | 34 | 21.0 | 34.5 | 310 | | 6/6 | 20.20 | 163.0 | 5 |
| 300 | **193R** | * | 38 | 23.5 | 38.5 | 360 | | 7/7 | 22.50 | 235.0 | 1 |

## Reduction sleeves, Cu





- For multi-stranded, round conductors e.g. to DIN EN 60228 Cl. 2
- For non-tension copper cables, e.g. to DIN 48201-1
- For connecting different conductor cross-sections
- For use in DIN compression joints and connectors, standard type

### Characteristics
- Simple cable entry due to internal chamfer

### Suitable for
- For non-tension compression joints

### Material
- Copper (EN13600)

### Surface
- Bright

### Technical instructions
- Refer to the installation instructions in the technical appendix on page i-7

| Part No. | Nominal cross section mm² from | Nominal cross section mm² to | Dimension mm | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | d4 | l | | |
| **RH2510** | 25 | 10 | 4.6 | 6.6 | 25 | 0.358 | 25 |
| **RH2516** | 25 | 16 | 5.5 | 6.6 | 25 | 0.350 | 25 |
| **RH3510** | 35 | 10 | 4.5 | 8.0 | 25 | 0.707 | 25 |
| **RH3516** | 35 | 16 | 5.5 | 8.0 | 25 | 0.570 | 25 |
| **RH3525** | 35 | 25 | 7.0 | 8.0 | 25 | 0.253 | 25 |
| **RH5016** | 50 | 16 | 5.5 | 9.5 | 33 | 1.326 | 25 |
| **RH5025** | 50 | 25 | 7.0 | 9.5 | 33 | 0.923 | 25 |
| **RH5035** | 50 | 35 | 8.5 | 9.5 | 33 | 0.404 | 25 |
| **RH7025** | 70 | 25 | 7.0 | 11.0 | 33 | 1.580 | 25 |
| **RH7035** | 70 | 35 | 8.5 | 11.0 | 33 | 1.102 | 25 |
| **RH7050** | 70 | 50 | 10.0 | 11.0 | 33 | 0.486 | 25 |
| **RH9535** | 95 | 35 | 8.5 | 13.0 | 45 | 2.940 | 25 |
| **RH9550** | 95 | 50 | 10.0 | 13.0 | 45 | 2.136 | 25 |
| **RH9570** | 95 | 70 | 11.5 | 13.0 | 45 | 1.100 | 25 |
| **RH12050** | 120 | 50 | 10.0 | 15.0 | 45 | 3.802 | 25 |
| **RH12070** | 120 | 70 | 11.5 | 15.0 | 45 | 2.874 | 25 |
| **RH12095** | 120 | 95 | 13.5 | 15.0 | 45 | 1.340 | 25 |
| **RH15070** | 150 | 70 | 11.5 | 16.5 | 53 | 5.008 | 5 |
| **RH15095** | 150 | 95 | 13.5 | 16.5 | 53 | 3.212 | 5 |
| **RH150120** | 150 | 120 | 15.5 | 16.5 | 53 | 1.248 | 5 |
| **RH18595** | 185 | 95 | 13.5 | 18.5 | 53 | 5.824 | 5 |
| **RH185120** | 185 | 120 | 15.5 | 18.5 | 53 | 3.756 | 5 |
| **RH185150** | 185 | 150 | 17.0 | 18.5 | 53 | 1.660 | 5 |
| **RH240120** | 240 | 120 | 15.5 | 21.0 | 55 | 7.412 | 5 |
| **RH240150** | 240 | 150 | 17.0 | 21.0 | 55 | 5.740 | 5 |
| **RH240185** | 240 | 185 | 19.0 | 21.0 | 55 | 3.036 | 5 |
| **RH300150** | 300 | 150 | 17.0 | 24.0 | 58 | 11.200 | 5 |
| **RH300185** | 300 | 185 | 19.0 | 24.0 | 58 | 8.390 | 5 |
| **RH300240** | 300 | 240 | 21.5 | 24.0 | 58 | 4.526 | 5 |
| **RH400185** | 400 | 185 | 19.0 | 27.0 | 80 | 20.100 | 5 |
| **RH400240** | 400 | 240 | 21.5 | 27.0 | 80 | 14.270 | 5 |
| **RH400300** | 400 | 300 | 24.5 | 27.0 | 80 | 8.800 | 5 |

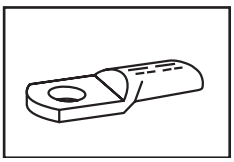
DIN



## Tool application chart

**Compression cable lugs and compression joints**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 6 - 50 | K05D | | 235 | | ⬡ |
| | 10 - 120 | K06D | | 237 | | ⬡ |
| | 25 - 150 | K09D | | 238 | | ⬡ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 6 - 120 | K354 | | 246 | 330 | ⬡ |
| | 6 - 185 | K18 | | 248 | 338 | ⬡ |
| | 6 - 300 | K22 | | 250 | 343 | ⬡ |
| Hand hydraulic crimping tools | 6 - 185 | HK6018 | | 292 | 338 | ⬡ |
| | | HK60UNV | +UA18 | 473 | 338 | ⬡ |
| | 6 - 300 | HK6022 | | 294 | 343 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 343 | ⬡ |
| | 16 - 300 | HK12030 | | 298 | 348 | ⬡ |
| | | HK12042 | | 300 | 348 | ⬡ |
| | | HK120U | | 302 | 348 | ⬡ |
| | 120 - 1000 | HK45 | | 321 | 358 | ⬡ |
| Battery powered crimping tools | 6 - 120 | EK354ML | | 262 | 330 | ⬡ |
| | | EK354 | | 266 | 330 | ⬡ |
| | 6 - 185 | EK505 | | 268 | 334 | ⬡ |
| | | EK5018 | | 270 | 338 | ⬡ |
| | | EK60UNV | +UA18 | 476 | 338 | ⬡ |
| | | EKM60UNV | +UA18 | 475 | 338 | ⬡ |
| | 6 - 300 | EK6022 | | 247 | 343 | ⬡ |
| | | EKM6022 | | 272 | 343 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 343 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 343 | ⬡ |
| | 16 - 300 | EK12032 | | 280 | 348 | ⬡ |
| | | EK12042 | | 282 | 348 | ⬡ |
| | | EK120U | | 284 | 348 | ⬡ |
| | | EK120UNV | +UA12T | 477 | 348 | ⬡ |
| | | EK135FT | +UA15T | 286 | 348 | ⬡ |
| | 400 - 625 | EK135FT | | 286 | 352 | ⬡ |
| Hydraulic crimping systems | 6 - 185 | THK18 | | 306 | 338 | ⬡ |
| | 6 - 240 | THK22 | | 308 | 343 | ⬡ |
| | | HK122EL380 | | 322 | 343 | ⬡ |
| | 16 - 625 | HK252 | | 320 | 354 | ⬡ |
| | | HK252EL380 | | 323 | 354 | ⬡ |
| Hydraulic crimping heads | 6 - 185 | PK18 | | 306 | 338 | ⬡ |
| | | PK60UNV | +UA18 | 474 | 338 | ⬡ |
| | 6 - 300 | PK22 | | 308 | 343 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 343 | ⬡ |
| | 16 - 300 | PK12042 | | 312 | 348 | ⬡ |
| | | PK120U | | 314 | 348 | ⬡ |
| | 16 - 625 | PK252 | | 316 | 354 | ⬡ |
| | 120 - 1000 | PK45 | | 318 | 358 | ⬡ |



## Tool application chart

**Double compression cable lugs**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 2x50 - 2x70 | K22 | | 250 | 343 | ⬭ |
| Hand hydraulic crimping tools | 2x50 - 2x70 | HK6022 | | 294 | 343 | ⬭ |
| | | HK60UNV | +UA22 | 473 | 343 | ⬭ |
| | 2x50 - 2x95 | HK12030 | | 298 | 348 | ⬭ |
| | | HK12042 | | 300 | 348 | ⬭ |
| | | HK120U | | 302 | 348 | ⬭ |
| Battery powered crimping tools | 2x50 - 2x70 | EK6022 | | 274 | 343 | ⬭ |
| | | EKM6022 | | 272 | 343 | ⬭ |
| | | EK60UNV | +UA22 | 476 | 343 | ⬭ |
| | | EKM60UNV | +UA22 | 475 | 343 | ⬭ |
| | 2x50 - 2x95 | EK12032 | | 280 | 348 | ⬭ |
| | | EK12042 | | 282 | 348 | ⬭ |
| | | EK120U | | 284 | 348 | ⬭ |
| | | EK135FT | +UA15T | 286 | 348 | ⬭ |
| | | EK120UNV | +UA12T | 477 | 348 | ⬭ |
| Hydraulic crimping systems | 2x50 - 2x70 | THK22 | | 308 | 343 | ⬭ |
| | 2x50 - 2x95 | HK122EL380 | | 322 | 348 | ⬭ |
| | 2x50 - 2x120 | HK252 | | 320 | 354 | ⬭ |
| | | HK252EL380 | | 323 | 354 | ⬭ |
| Hydraulic crimping heads | 2x50 - 2x70 | PK22 | | 308 | 343 | ⬭ |
| | | PK60UNV | +UA22 | 474 | 343 | ⬭ |
| | 2x50 - 2x95 | PK12042 | | 312 | 348 | ⬭ |
| | | PK120U | | 314 | 348 | ⬭ |
| | 2x50 - 2x120 | PK252 | | 316 | 354 | ⬭ |

# PUNCHED - SOLDERLESS TERMINALS MADE FROM COPPER TO DIN 46234

Unlike the tubular cable lugs, Klauke solderless terminals are punched from a sheet, bent and then hard soldered in the crimp area. The grooved profile on the inside ensures higher conductor pull-out values. This product's small dimensions make it the ideal solution for confined areas.



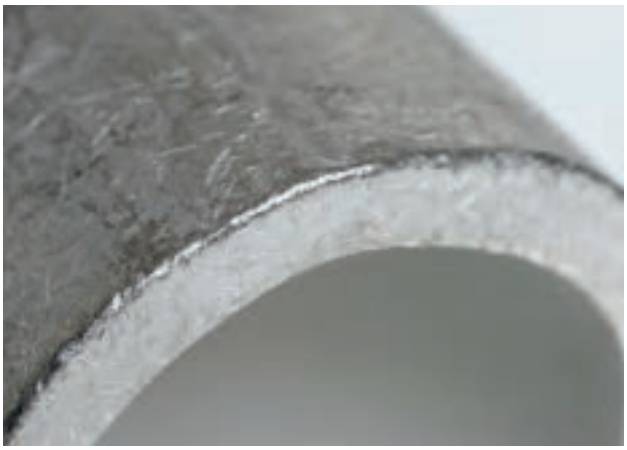
**In brief**

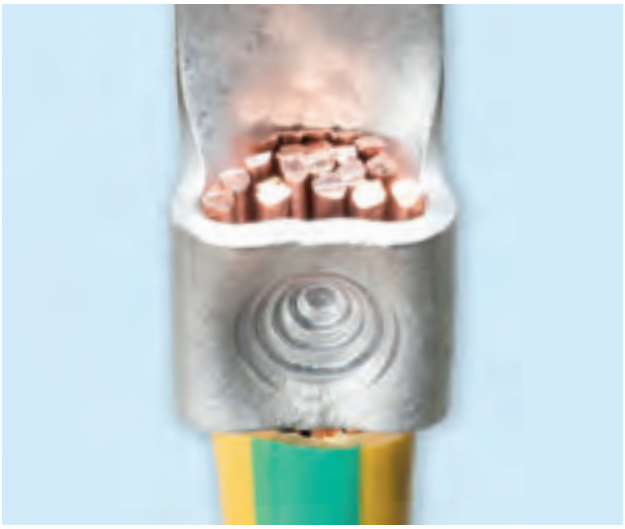
- Reliable crimping due to high-quality solder seam
- Small dimensions for confined areas
- Suitable for multi-stranded, fine-stranded and superfine-stranded conductors

## Hard soldered for reliable contact

The quality of Klauke cable lugs is also evident during the crimping operation: The solderless terminal always remains intact due to the high-quality solder seam. Guaranteed quality.

- Reliable contact due to high-quality solder seam and tinning
- Best possible contacting with ribbed profile
- Optimum solution for confined areas thanks to highly-compact dimensions
- Insulated and non-insulated versions





## Well insulated

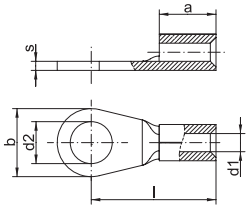
Klauke products make your day-to-day work easier. Thanks to the widened insulation, the conductor can be very conveniently inserted into our insulated solderless terminals. The insulation remains intact even after crimping, eliminating the need for retrospective insulation. Everything accomplished in one operation.

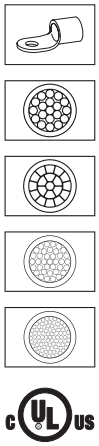
- Easy to use thanks to widened sleeve
- No additional insulation, hence fast processing
- As a fork-type, ideal for connecting meters in confined areas for example
- Easy conductor insertion thanks to widened sleeve



## Solderless terminals to DIN, Cu





- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- To DIN 46234
- High-quality brazing process in the crimp area

### Characteristics
- Improved contact properties due to grooved profile

### Material
- Copper (ETP)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 82

### Additional information
- * = not standardised
- 0.5 - 6 mm² not UL-tested

| Nominal cross section mm² | Nominal size to DIN | Part No. | Hint | Dimension mm | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | l | s | | |
| 0.5 - 1 | 2.5 - 1 | **162025** | | 5 | 6 | 1.6 | 2.8 | 11 | 0.8 | 0.060 | 100 |
| | 3 - 1 | **16203** | | 5 | 6 | 1.6 | 3.2 | 11 | 0.8 | 0.060 | 100 |
| | 3.5 - 1 | **162035** | | 5 | 6 | 1.6 | 3.7 | 11 | 0.8 | 0.055 | 100 |
| | 4 - 1 | **16204** | | 5 | 8 | 1.6 | 4.3 | 12 | 0.8 | 0.070 | 100 |
| | 5 - 1 | **16205** | | 5 | 10 | 1.6 | 5.3 | 13 | 0.8 | 0.090 | 100 |
| | 6 - 1 | **16206** | * | 5 | 11 | 1.6 | 6.5 | 15 | 0.8 | 0.080 | 100 |
| | 8 - 1 | **16208** | * | 5 | 14 | 1.6 | 8.4 | 17 | 0.8 | 0.130 | 100 |
| | 10 - 1 | **162010** | * | 5 | 18 | 1.6 | 10.5 | 19 | 0.8 | 0.130 | 100 |
| 1.5 - 2.5 | 3 - 2.5 | **16303** | | 5 | 6 | 2.3 | 3.2 | 11 | 0.8 | 0.065 | 100 |
| | 4 - 2.5 | **16304** | | 5 | 8 | 2.3 | 4.3 | 12 | 0.8 | 0.080 | 100 |
| | 3.5 - 2.5 | **163035** | | 5 | 6 | 2.3 | 3.7 | 11 | 0.8 | 0.065 | 100 |
| | 5 - 2.5 | **16305** | | 5 | 10 | 2.3 | 5.3 | 14 | 0.8 | 0.090 | 100 |
| | 6 - 2.5 | **16306** | | 5 | 11 | 2.3 | 6.5 | 16 | 0.8 | 0.110 | 100 |
| | 8 - 2.5 | **16308** | | 5 | 14 | 2.3 | 8.4 | 17 | 0.8 | 0.130 | 100 |
| | 10 - 2.5 | **163010** | * | 5 | 18 | 2.3 | 10.5 | 19 | 0.8 | 0.160 | 100 |
| | 12 - 2.5 | **163012** | * | 5 | 18 | 2.3 | 13.0 | 19 | 0.8 | 0.160 | 100 |
| 4 - 6 | 4 - 6 | **16504** | | 6 | 8 | 3.6 | 4.3 | 14 | 1.0 | 0.140 | 100 |
| | 5 - 6 | **16505** | | 6 | 10 | 3.6 | 5.3 | 15 | 1.0 | 0.160 | 100 |
| | 6 - 6 | **16506** | | 6 | 11 | 3.6 | 6.5 | 16 | 1.0 | 0.170 | 100 |
| | 8 - 6 | **16508** | | 6 | 14 | 3.6 | 8.4 | 19 | 1.0 | 0.220 | 100 |
| | 10 - 6 | **165010** | | 6 | 18 | 3.6 | 10.5 | 21 | 1.0 | 0.290 | 100 |
| | 12 - 6 | **165012** | * | 6 | 18 | 3.6 | 13.0 | 21 | 1.0 | 0.280 | 100 |
| 10 | 5 - 10 | **16525** | | 8 | 10 | 4.5 | 5.3 | 16 | 1.1 | 0.230 | 100 |
| | 6 - 10 | **16526** | | 8 | 11 | 4.5 | 6.5 | 17 | 1.1 | 0.24 | 100 |
| | 8 - 10 | **16528** | | 8 | 14 | 4.5 | 8.4 | 20 | 1.1 | 0.340 | 100 |
| | 10 - 10 | **165210** | | 8 | 18 | 4.5 | 10.5 | 21 | 1.1 | 0.340 | 100 |
| | 12 - 10 | **165212** | | 8 | 22 | 4.5 | 13.0 | 23 | 1.1 | 0.420 | 100 |
| 16 | 5 - 16 | **16535** | | 10 | 11 | 5.8 | 5.3 | 20 | 1.2 | 0.390 | 100 |
| | 6 - 16 | **16536** | | 10 | 11 | 5.8 | 6.5 | 20 | 1.2 | 0.380 | 100 |
| | 8 - 16 | **16538** | | 10 | 14 | 5.8 | 8.4 | 22 | 1.2 | 0.43 | 100 |
| | 10 - 16 | **165310** | | 10 | 18 | 5.8 | 10.5 | 24 | 1.2 | 0.500 | 100 |
| | 12 - 16 | **165312** | | 10 | 18 | 5.8 | 13.0 | 24 | 1.2 | 0.500 | 100 |

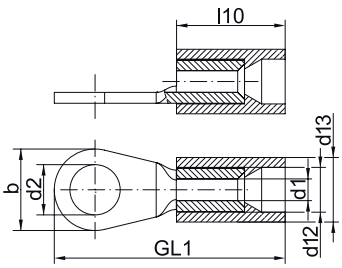
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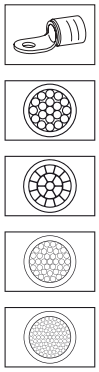
## Solderless terminals to DIN, Cu

| Nominal cross section mm² | Nominal size to DIN | Part No. | Hint | Dimension mm | | | | | | Weight/ 100 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a | b | d1 | d2 | l | s | | |
| 25 | 5 - 25 | **16545** | | 11 | 12 | 7.5 | 5.3 | 25 | 1.5 | 0.750 | 100 |
| | 6 - 25 | **16546** | | 11 | 12 | 7.5 | 6.5 | 25 | 1.5 | 0.750 | 100 |
| | 8 - 25 | **16548** | | 11 | 16 | 7.5 | 8.4 | 25 | 1.5 | 0.750 | 100 |
| | 10 - 25 | **165410** | | 11 | 18 | 7.5 | 10.5 | 26 | 1.5 | 0.750 | 100 |
| | 12 - 25 | **165412** | | 11 | 22 | 7.5 | 13.0 | 31 | 1.5 | 0.920 | 100 |
| | 16 - 25 | **165416** | | 11 | 28 | 7.5 | 17.0 | 35 | 1.5 | 1.320 | 100 |
| 35 | 6 - 35 | **16556** | | 12 | 16 | 9.0 | 8.4 | 26 | 1.6 | 0.980 | 100 |
| | 8 - 35 | **16558** | | 12 | 16 | 9.0 | 8.4 | 26 | 1.6 | 0.980 | 100 |
| | 10 - 35 | **165510** | | 12 | 18 | 9.0 | 10.5 | 27 | 1.6 | 1.000 | 100 |
| | 12 - 35 | **165512** | | 12 | 22 | 9.0 | 13.0 | 31 | 1.6 | 1.260 | 100 |
| | 16 - 35 | **165516** | | 12 | 28 | 9.0 | 17.0 | 36 | 1.6 | 1.550 | 100 |
| 50 | 6 - 50 | **16566** | | 16 | 18 | 11.0 | 6.5 | 34 | 1.8 | 1.650 | 100 |
| | 8 - 50 | **16568** | | 16 | 18 | 11.0 | 8.4 | 34 | 1.8 | 1.650 | 100 |
| | 10 - 50 | **165610** | | 16 | 18 | 11.0 | 10.5 | 34 | 1.8 | 1.600 | 100 |
| | 12 - 50 | **165612** | | 16 | 22 | 11.0 | 13.0 | 36 | 1.8 | 1.800 | 100 |
| | 16 - 50 | **165616** | | 16 | 28 | 11.0 | 17.0 | 40 | 1.8 | 2.100 | 100 |
| 70 | 6 - 70 | **16576** | | 18 | 22 | 13.0 | 6.5 | 38 | 2.0 | 2.600 | 50 |
| | 8 - 70 | **16578** | | 18 | 22 | 13.0 | 8.4 | 38 | 2.0 | 2.500 | 50 |
| | 10 - 70 | **165710** | | 18 | 22 | 13.0 | 10.5 | 38 | 2.0 | 2.500 | 50 |
| | 12 - 70 | **165712** | | 18 | 22 | 13.0 | 13.0 | 38 | 2.0 | 2.400 | 50 |
| | 16 - 70 | **165716** | | 18 | 28 | 13.0 | 17.0 | 42 | 2.0 | 2.700 | 50 |
| 95 | 8 - 95 | **16588** | | 20 | 24 | 15.0 | 8.4 | 42 | 2.5 | 4.300 | 50 |
| | 10 - 95 | **165810** | | 20 | 24 | 15.0 | 10.5 | 42 | 2.5 | 4.1 | 50 |
| | 12 - 95 | **165812** | | 20 | 24 | 15.0 | 13.0 | 42 | 2.5 | 3.900 | 50 |
| | 16 - 95 | **165816** | | 20 | 28 | 15.0 | 17.0 | 44 | 2.5 | 4.100 | 50 |
| 120 | 8 - 120 | **16598** | | 22 | 24 | 17.0 | 8.4 | 44 | 3.0 | 5.601 | 50 |
| | 10 - 120 | **165910** | | 22 | 24 | 17.0 | 10.5 | 44 | 3.0 | 5.600 | 50 |
| | 12 - 120 | **165912** | | 22 | 24 | 17.0 | 13.0 | 44 | 3.0 | 5.400 | 50 |
| | 16 - 120 | **165916** | | 22 | 28 | 17.0 | 17.0 | 48 | 3.0 | 5.800 | 50 |
| 150 | 10 - 150 | **166010** | | 24 | 30 | 19.0 | 10.5 | 50 | 3.2 | 7.600 | 50 |
| | 12 - 150 | **166012** | | 24 | 30 | 19.0 | 13.0 | 50 | 3.2 | 7.600 | 50 |
| | 16 - 150 | **166016** | | 24 | 30 | 19.0 | 17.0 | 50 | 3.2 | 7.500 | 50 |
| 185 | 12 - 185 | **166112** | | 28 | 36 | 21.0 | 13.0 | 50 | 3.5 | 11.300 | 50 |
| | 16 - 185 | **166116** | | 28 | 36 | 21.0 | 17.0 | 50 | 3.5 | 11.300 | 50 |
| 240 | 12 - 240 | **166212** | | 32 | 38 | 23.5 | 13.0 | 56 | 4.0 | 15.900 | 25 |
| | 16 - 240 | **166216** | | 32 | 38 | 23.5 | 17.0 | 56 | 4.0 | 15.900 | 25 |

## Insulated solderless terminals, Cu with Easy-Entry





- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- High-quality brazing process in the crimp area
- Fast preparation as no additional insulation of the crimped connection is required
- Simple processing due to crimping over the insulation
- Insulation sleeve halogen-free

### Characteristics

- Insulating, halogen-free with easy-entry cable insertion
- Dimensions in tube according to DIN 46234
- Improved contact properties due to grooved profile
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material

- Copper (ETP)
- Insulation sleeve: PA

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 84

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | | | Weight 100 pcs. ~kg Cu | Weight 100 pcs. ~kg Total | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | b | d1 | d12 | d13 | d2 | Gl1 | l10 | | | |
| 10 | **6525** | | 10 | 4.5 | 6.7 | 8.6 | 5.3 | 34.0 | 19.0 | 0.27 | 0.27 | 100 |
| | **6526** | | 11 | 4.5 | 6.7 | 8.6 | 6.5 | 34.0 | 19.0 | 0.24 | 0.28 | 100 |
| | **6528** | | 14 | 4.5 | 6.7 | 8.6 | 8.4 | 37.5 | 19.0 | 0.29 | 0.33 | 100 |
| | **65210** | | 18 | 4.5 | 6.7 | 8.6 | 10.5 | 41.5 | 19.0 | 0.34 | 0.38 | 100 |
| | **65212** | | 22 | 4.5 | 6.7 | 8.6 | 13.0 | 45.5 | 19.0 | 0.42 | 0.46 | 100 |
| 16 | **6535** | | 11 | 5.8 | 7.7 | 9.6 | 5.3 | 39.5 | 20.5 | 0.39 | 0.44 | 100 |
| | **6536** | | 11 | 5.8 | 7.7 | 9.6 | 6.5 | 39.5 | 20.5 | 0.38 | 0.43 | 100 |
| | **6538** | | 14 | 5.8 | 7.7 | 9.6 | 8.4 | 41.5 | 20.5 | 0.43 | 0.48 | 100 |
| | **65310** | | 18 | 5.8 | 7.7 | 9.6 | 10.5 | 43.5 | 20.5 | 0.50 | 0.55 | 100 |
| | **65312** | | 18 | 5.8 | 7.7 | 9.6 | 13.0 | 50.5 | 20.5 | 0.58 | 0.63 | 100 |
| 25 | **6545** | | 12 | 7.5 | 11.0 | 13.0 | 5.3 | 40.0 | 20.0 | 0.75 | 0.84 | 50 |
| | **6546** | | 12 | 7.5 | 11.0 | 13.0 | 6.5 | 42.5 | 20.0 | 0.69 | 0.78 | 50 |
| | **6548** | | 16 | 7.5 | 11.0 | 13.0 | 8.4 | 43.0 | 20.0 | 0.75 | 0.84 | 50 |
| | **65410** | | 18 | 7.5 | 11.0 | 13.0 | 10.5 | 45.0 | 20.0 | 0.80 | 0.89 | 50 |
| | **65412** | | 22 | 7.5 | 11.0 | 13.0 | 13.0 | 51.0 | 20.0 | 0.92 | 1.00 | 50 |
| | **65416** | | 28 | 7.5 | 11.0 | 13.0 | 17.0 | 59.0 | 20.0 | 1.32 | 1.40 | 50 |
| 35 | **6556** | | 16 | 9.0 | 12.7 | 15.0 | 6.5 | 44.0 | 22.5 | 1.01 | 1.14 | 50 |
| | **6558** | | 16 | 9.0 | 12.7 | 15.0 | 8.4 | 44.5 | 22.5 | 0.98 | 1.10 | 50 |
| | **65510** | | 18 | 9.0 | 12.7 | 15.0 | 10.5 | 46.5 | 22.5 | 1.00 | 1.12 | 50 |
| | **65512** | | 22 | 9.0 | 12.7 | 15.0 | 13.0 | 52.5 | 22.5 | 1.26 | 1.38 | 50 |
| | **65516** | | 28 | 9.0 | 12.7 | 15.0 | 17.0 | 54.5 | 22.5 | 1.55 | 1.67 | 50 |
| 50 | **6566** | | 18 | 11.0 | 15.4 | 18.0 | 6.5 | 54.5 | 27.5 | 1.65 | 1.90 | 50 |
| | **6568** | | 18 | 11.0 | 15.4 | 18.0 | 8.4 | 60.5 | 27.5 | 1.65 | 1.90 | 50 |
| | **65610** | | 18 | 11.0 | 15.4 | 18.0 | 10.5 | 60.5 | 27.5 | 1.60 | 1.85 | 50 |
| | **65612** | | 22 | 11.0 | 15.4 | 18.0 | 13.0 | 60.5 | 27.5 | 1.80 | 2.05 | 50 |
| | **65616** | | 28 | 11.0 | 15.4 | 18.0 | 17.0 | 67.5 | 27.5 | 2.10 | 2.35 | 50 |

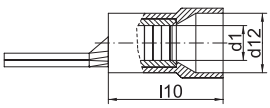
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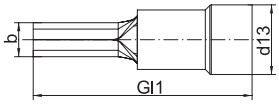
## Insulated solderless terminals, Cu with Easy-Entry

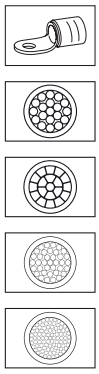
| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | | | Weight 100 pcs. ~kg Cu | Weight 100 pcs. ~kg Total | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | b | d1 | d12 | d13 | d2 | Gl1 | l10 | | | |
| | **6576** | | 22 | 13.0 | 17.4 | 20.0 | 6.5 | 61.5 | 30.5 | 2.60 | 2.90 | 50 |
| | **6578** | | 22 | 13.0 | 17.4 | 20.0 | 8.4 | 61.5 | 30.5 | 2.50 | 2.80 | 50 |
| 70 | **65710** | | 22 | 13.0 | 17.4 | 20.0 | 10.5 | 66.5 | 30.5 | 2.50 | 2.80 | 50 |
| | **65712** | | 22 | 13.0 | 17.4 | 20.0 | 13.0 | 66.5 | 30.5 | 2.40 | 2.70 | 50 |
| | **65716** | | 28 | 13.0 | 17.4 | 20.0 | 17.0 | 70.5 | 30.5 | 2.70 | 3.00 | 50 |
| | **65810** | | 24 | 15.0 | 20.5 | 23.5 | 10.5 | 70.0 | 34.0 | 4.10 | 4.50 | 25 |
| 95 | **65812** | | 24 | 15.0 | 20.5 | 23.5 | 13.0 | 70.0 | 34.0 | 3.90 | 4.40 | 25 |
| | **65816** | | 28 | 15.0 | 20.5 | 23.5 | 17.0 | 76.0 | 34.0 | 4.10 | 4.50 | 25 |
| | **65910** | | 24 | 17.0 | 23.5 | 26.7 | 10.5 | 79.0 | 36.0 | 5.60 | 6.10 | 25 |
| 120 | **65912** | | 24 | 17.0 | 23.5 | 26.7 | 13.0 | 82.0 | 36.0 | 5.40 | 5.90 | 25 |
| | **65916** | | 28 | 17.0 | 23.5 | 26.7 | 17.0 | 90.0 | 36.0 | 5.80 | 6.30 | 25 |
| | **66010** | | 30 | 19.0 | 26.0 | 29.2 | 10.5 | 80.0 | 39.0 | 7.60 | 8.40 | 25 |
| 150 | **66012** | | 30 | 19.0 | 26.0 | 29.2 | 13.0 | 83.0 | 39.0 | 7.60 | 8.40 | 25 |
| | **66016** | | 30 | 19.0 | 26.0 | 29.2 | 17.0 | 83.0 | 39.0 | 7.50 | 8.30 | 25 |

## Insulated pin terminals, Cu with Easy-Entry





- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- High-quality brazing process in the crimp area
- Fast preparation as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

### Characteristics

- Insulating, halogen-free with easy-entry cable insertion
- Improved contact properties due to grooved profile
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material

- Copper (ETP)
- Insulation sleeve: PA

### Surface

- Tin-plated to protect against corrosion

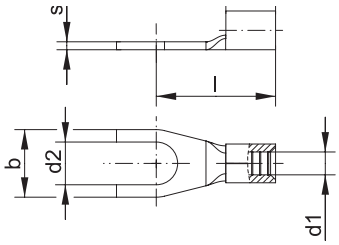
### Technical instructions

- Tool: see page 84

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | | Weight 100 pcs. ~kg Cu | Weight 100 pcs. ~kg Total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | b | d1 | d12 | d13 | Gl1 | l10 | | | |
| 10 | **ST1716IS** | | 4.3 | 4.3 | 7.4 | 9.4 | 33.0 | 19.0 | 0.27 | 0.31 | 100 |
| 16 | **ST1717IS** | | 5.5 | 5.4 | 8.6 | 10.6 | 38.0 | 20.0 | 0.39 | 0.44 | 100 |
| 25 | **ST1718IS** | | 6.8 | 6.7 | 12.5 | 14.5 | 43.5 | 23.5 | 0.63 | 0.73 | 50 |
| 35 | **ST1719IS** | | 8.0 | 8.2 | 14.0 | 16.4 | 51.5 | 27.5 | 1.17 | 1.34 | 50 |
| 50 | **ST1720IS** | | 9.5 | 9.5 | 15.5 | 18.0 | 59.0 | 33.0 | 1.79 | 2.10 | 50 |
| 70 | **ST1721IS** | | 11.0 | 11.2 | 18.0 | 20.5 | 69.0 | 38.0 | 2.92 | 3.20 | 50 |
| 95 | **ST1722IS** | | 12.5 | 13.5 | 20.7 | 23.5 | 71.0 | 40.0 | 4.30 | 4.70 | 25 |

## Solderless terminals, Cu, fork type
















- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- Dimensions in tube to 6 mm² to DIN 46234
- Simple fork-type mounting
- High-quality brazing process in the crimp area

### Characteristics
- Improved contact properties due to grooved profile

### Material
- Copper (ETP)

### Surface
- Tin-plated to protect against corrosion

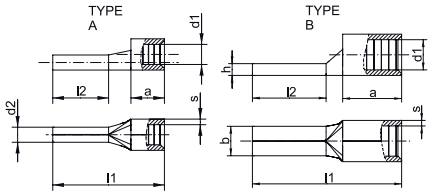
### Technical instructions
- Tool: see page 82

### Additional information
- 0.5 - 6 mm² not UL-certified

| Nominal cross section mm² | Nominal size to DIN | Part No. | Dimension mm | | | | | | Weight 100 pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | a | b | d1 | d2 | l | s | | |
| 0.5 - 1 | 3 - 1 | **1620C3** | 5.0 | 6.0 | 1.6 | 3.2 | 11.0 | 0.8 | 0.060 | 100 |
| | 3.5 - 1 | **1620C35** | 5.0 | 6.0 | 1.6 | 3.7 | 11.0 | 0.8 | 0.060 | 100 |
| | 4 - 1 | **1620C4** | 5.0 | 6.8 | 1.6 | 4.3 | 12.0 | 0.8 | 0.070 | 100 |
| | 5 - 1 | **1620C5** | 5.0 | 10.0 | 1.6 | 5.3 | 13.0 | 0.8 | 0.090 | 100 |
| | 6 - 1 | **1620C6** | 5.0 | 11.0 | 1.6 | 6.5 | 15.0 | 0.8 | 0.080 | 100 |
| 1.5 - 2.5 | 3 - 2.5 | **1630C3** | 5.0 | 5.5 | 2.3 | 3.2 | 13.8 | 0.8 | 0.065 | 100 |
| | 3.5 - 2.5 | **1630C35** | 5.0 | 6.0 | 2.3 | 3.7 | 11.0 | 0.8 | 0.065 | 100 |
| | 4 - 2.5 | **1630C4** | 5.0 | 6.8 | 2.3 | 4.3 | 12.0 | 0.8 | 0.080 | 100 |
| | 5 - 2.5 | **1630C5** | 5.0 | 10.0 | 2.3 | 5.3 | 14.0 | 0.8 | 0.090 | 100 |
| | 6 - 2.5 | **1630C6** | 5.0 | 11.0 | 2.3 | 6.5 | 16.0 | 0.8 | 0.110 | 100 |
| 4 - 6 | 4 - 6 | **1650C4** | 6.0 | 8.0 | 3.6 | 4.3 | 14.0 | 1.0 | 0.140 | 100 |
| | 5 - 6 | **1650C5** | 6.0 | 10.0 | 3.6 | 5.3 | 15.0 | 1.0 | 0.160 | 100 |
| | 6 - 6 | **1650C6** | 6.0 | 11.0 | 3.6 | 6.5 | 16.0 | 1.0 | 0.170 | 100 |
| | 8 - 6 | **1650C8** | 6.0 | 14.0 | 3.6 | 8.4 | 19.0 | 1.0 | 0.220 | 100 |
| 10 | 5 - 10 | **1652C5** | 10.0 | 10.0 | 4.3 | 5.3 | 19.0 | 1.0 | 0.240 | 100 |
| | 6 - 10 | **1652C6** | 10.0 | 11.0 | 4.3 | 6.4 | 21.0 | 1.0 | 0.260 | 100 |
| 16 | 6 - 16 | **1653C6** | 11.5 | 11.0 | 5.8 | 6.4 | 24.0 | 1.0 | 0.350 | 100 |

# Pin terminals to DIN, Cu












- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- Nominal cross-sections 0.5 - 6 mm² to DIN 46230
- High-quality brazing process in the crimp area

### Characteristics
- Improved contact properties due to grooved profile

### Material
- Copper (ETP)

### Surface
- Tin-plated to protect against corrosion

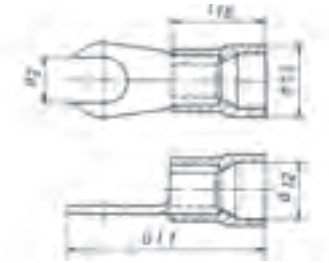
### Technical instructions
- Tool: see page 82

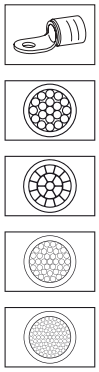
### Additional information
- * = not standardised
- 0.5 - 6 mm² not UL-tested

| Nominal cross section mm² | Nominal size to DIN | Part No. | Typ | Hint | Dimension mm | | | | | | | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a | b | d1 | d2 | l1 | l2 | s | h | | |
| 0.5 - 1 | 1 | **ST1705** | A | | 5.0 | -- | 1.8 | 1.9 | 17.0 | 10 | 0.8 | -- | 0.060 | 100 |
| 1.5 - 2.5 | 2.5 | **ST1710** | A | | 5.0 | -- | 2.3 | 1.9 | 17.0 | 10 | 0.8 | -- | 0.072 | 100 |
| 4 - 6 | 6 | **ST1715** | A | | 6.0 | -- | 3.6 | 2.7 | 20.0 | 11 | 1.0 | -- | 0.160 | 100 |
| 10 | -- | **ST1716** | B | * | 10.0 | 4.3 | 4.3 | -- | 24.5 | 11 | 1.0 | 2.0 | 0.270 | 100 |
| 16 | -- | **ST1717** | B | * | 11.5 | 5.8 | 5.4 | -- | 29.5 | 15 | 1.0 | 2.0 | 0.390 | 100 |
| 25 | -- | **ST1718** | B | * | 13.5 | 6.8 | 6.7 | -- | 33.5 | 15 | 1.2 | 2.4 | 0.630 | 100 |
| 35 | -- | **ST1719** | B | * | 16.0 | 8.0 | 8.2 | -- | 40.5 | 20 | 1.5 | 3.2 | 1.170 | 50 |
| 50 | -- | **ST1720** | B | * | 19.0 | 9.5 | 9.5 | -- | 45.0 | 20 | 1.8 | 3.6 | 1.790 | 50 |
| 70 | -- | **ST1721** | B | * | 24.0 | 11.0 | 11.2 | -- | 55.0 | 23 | 2.0 | 4.0 | 2.920 | 50 |
| 95 | -- | **ST1722** | B | * | 24.0 | 12.5 | 13.5 | -- | 55.0 | 23 | 2.5 | 5.0 | 4.300 | 50 |

## Insulated solderless terminals for meter connections, Cu, fork type







- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- Special design for meter connection
- High-quality brazing process in the crimp area
- Fast preparation as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

### Characteristics
- Improved contact properties due to grooved profile
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material
- Copper (ETP)
- Insulation sleeve: PA

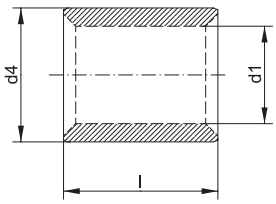
### Surface
- Tin-plated to protect against corrosion

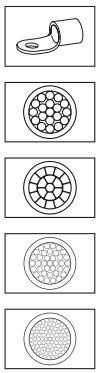
### Technical instructions
- Tool: see page 84

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | Gewicht 100 St. ~kg Cu | Gewicht 100 St. ~kg Ges. | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | d12 | d13 | d2 | Gl1 | l10 | | | |
| 10 | **652C5** | | 7.0 | 9.6 | 5.3 | 33.5 | 19.0 | 0.24 | 0.28 | 100 |
| | **652C6** | | 7.0 | 9.6 | 6.4 | 33.5 | 19.0 | 0.26 | 0.30 | 100 |
| 16 | **653C6** | | 8.6 | 10.6 | 6.4 | 37.5 | 20.5 | 0.35 | 0.40 | 100 |

## Solderless connectors to DIN, Cu, short type





- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- To DIN 46341, Part 1, Form A
- Ideal for connecting differing conductor cross-sections

### Characteristics
- Simple cable entry due to internal chamfer
- Annealed material optimises material and crimping properties

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

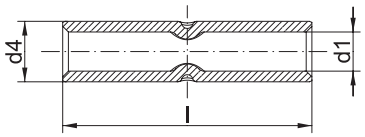
### Technical instructions
- Tool: see page 82

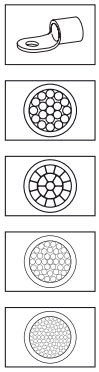
### Additional information
- The sum of the single conductor cross sections must be within the specified cross section range.

| Nominal cross section mm² | Nominal size to DIN | Part No. | Dimension mm | | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | d4 | l | | |
| 0.5 - 1 | 1 | **1620K** | 1.6 | 3.2 | 8 | 0.045 | 100 |
| 1 - 2.5 | 2.5 | **1630K** | 2.3 | 3.9 | 8 | 0.055 | 100 |
| 2.5 - 6 | 6 | **1650K** | 3.6 | 5.6 | 9 | 0.090 | 100 |
| 6 - 10 | 10 | **1652K** | 4.5 | 6.7 | 10 | 0.170 | 100 |
| 10 - 16 | 16 | **1653K** | 5.8 | 8.2 | 11 | 0.260 | 100 |
| 16 - 25 | 25 | **1654K** | 7.5 | 10.5 | 14 | 0.510 | 100 |
| 25 - 35 | 35 | **1655K** | 9.0 | 12.2 | 16 | 0.730 | 100 |
| 35 - 50 | 50 | **1656K** | 11.0 | 14.6 | 19 | 1.200 | 100 |
| 50 - 70 | 70 | **1657K** | 13.0 | 17.0 | 19 | 1.530 | 50 |
| 70 - 95 | 95 | **1658K** | 15.0 | 20.0 | 20 | 2.370 | 50 |
| 95 - 120 | 120 | **1659K** | 16.5 | 22.5 | 22 | 3.450 | 50 |
| 120 - 150 | 150 | **1660K** | 19.0 | 25.4 | 26 | 5.060 | 50 |

## Solderless connectors to DIN, Cu, long type





- For round conductors, e.g. to DIN EN 60228 Cl. 2, 5 and 6
- To DIN 46341, Part 1, Form B
- Simple and safe processing due to butt mark

### Characteristics

- Simple cable entry due to internal chamfer
- Annealed material optimises material and crimping properties

### Material

- Copper (EN13600)

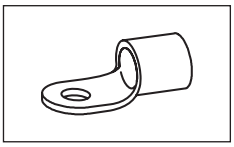
### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 82

| Nominal cross section mm² | Nominal size to DIN | Part No. | Dimension mm | | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | d4 | l | | |
| 0.5 - 1 | 1 | **1620L** | 1.6 | 3.2 | 15 | 0.08 | 100 |
| 1.5 - 2.5 | 2.5 | **1630L** | 2.3 | 3.9 | 15 | 0.10 | 100 |
| 4 - 6 | 6 | **1650L** | 3.6 | 5.6 | 15 | 0.19 | 100 |
| 10 | 10 | **1652L** | 4.5 | 6.7 | 21 | 0.36 | 100 |
| 16 | 16 | **1653L** | 5.8 | 8.2 | 26 | 0.62 | 100 |
| 25 | 25 | **1654L** | 7.5 | 10.5 | 29 | 1.11 | 100 |
| 35 | 35 | **1655L** | 9.0 | 12.2 | 32 | 1.50 | 100 |
| 50 | 50 | **1656L** | 11.0 | 14.6 | 38 | 2.44 | 100 |
| 70 | 70 | **1657L** | 13.0 | 17.0 | 42 | 3.54 | 50 |
| 95 | 95 | **1658L** | 15.0 | 20.0 | 48 | 5.87 | 50 |
| 120 | 120 | **1659L** | 16.5 | 22.5 | 52 | 8.46 | 50 |
| 150 | 150 | **1660L** | 19.0 | 25.4 | 56 | 10.86 | 50 |

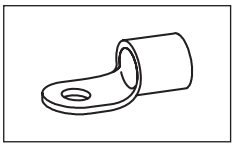


## Tool application chart

**Solderless terminals to DIN 46234, pin terminals to DIN 46230, solderless connectors to DIN 46341**
**Part 1 of 2**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.5 - 16 | K25 | | 230 | | |
| | 16 - 95 | K95 | | 230 | | |
| | | TK95 | | 231 | | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 0.5 - 10 | K50 | | 244 | 326 | |
| | | EK50ML | | 254 | 326 | |
| | | K507 | | 243 | | |
| | 0.75 - 2.5 | KP1 | +KP232 | 240 | | |
| | | KP1L | +KP232 | 240 | | |
| | 4 - 10 | KP1 | +KP242 | 240 | | |
| | | KP1L | +KP242 | 240 | | |
| | 6 - 35 | K354 | | 246 | 330 | |
| | 10 - 70 | K18 | | 248 | 338 | |
| | | K22 | | 250 | 343 | |
| Hand hydraulic crimping tools | 10 - 70 | HK6018 | | 292 | 338 | |
| | | HK60UNV | +UA18 | 473 | 338 | |
| | | HK6022 | | 294 | 343 | |
| | | HK60UNV | +UA22 | 473 | 343 | |
| | 16 - 150 | HK12030 | | 298 | 349 | |
| | | HK12042 | | 300 | 349 | |
| | | HK120U | | 302 | 349 | |
| Battery powered crimping tools | 0.5 - 10 | EK1550ML | | 258 | 326 | |
| | 6 - 35 | EK354ML | | 262 | 330 | |
| | | EK354 | | 266 | 330 | |
| | 10 - 50 | EK505 | | 268 | 334 | |
| | 10 - 70 | EK5018 | | 270 | 338 | |
| | | EK60UNV | +UA18 | 476 | 338 | |
| | | EKM60UNV | +UA18 | 475 | 338 | |
| | | EK6022 | | 247 | 343 | |
| | | EKM6022 | | 272 | 343 | |
| | | EK60UNV | +UA22 | 476 | 343 | |
| | | EKM60UNV | +UA22 | 475 | 343 | |
| | 10 - 240 | EKM60ID | | 278 | | |
| | 16 - 150 | EK12032 | | 280 | 349 | |
| | | EK12042 | | 282 | 349 | |
| | | EK120U | | 284 | 349 | |
| | | EK135FT | +UA15T | 286 | 349 | |
| | | EK120UNV | +UA12T | 477 | 349 | |
| | 35 - 240 | EK120ID | | 279 | | |

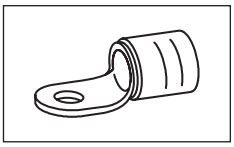
see next page



## Tool application chart

**Solderless terminals to DIN 46234, pin terminals to DIN 46230, solderless connectors to DIN 46341**
Part 2 of 2

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| **Hydraulic crimping systems** | **10 - 70** | THK18 | | 306 | 338 | ⌓ |
| | | THK22 | | 308 | 343 | ⌓ |
| | **16 - 150** | HK122EL380 | | 322 | 349 | ⌓ |
| | **16 - 240** | HK252 | | 320 | 354 | ⌓ |
| | | HK252EL380 | | 323 | 354 | ⌓ |
| **Hydraulic crimping heads** | **10 - 70** | PK18 | | 306 | 338 | ⌓ |
| | | PK60UNV | +UA18 | 474 | 338 | ⌓ |
| | | PK22 | | 308 | 343 | ⌓ |
| | | PK60UNV | +UA22 | 474 | 343 | ⌓ |
| | **10 - 240** | PK60ID | | 311 | | ⌓ |
| | **16 - 150** | PK12042 | | 312 | 349 | ⌓ |
| | | PK120U | | 314 | 349 | ⌓ |
| | **16 - 240** | PK252 | | 316 | 354 | ⌓ |



## Tool application chart

**Isolierte Quetschkabelschuhe**
**Isolierte Stiftkabelschuhe**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 10 - 16 | K16 | | 223 | | ⬭ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads | 10 - 16 | K50 | | 244 | 327 | ⬭ |
| | | EK50ML | | 254 | 327 | ⬭ |
| | | K354 | | 246 | 327 | ⬭ |
| | 10 - 50 | K18 | | 248 | 338 | ◡ |
| | 10 - 70 | K22 | | 250 | 343 | ◡ |
| Hand hydraulic crimping tools | 10 - 50 | HK6018 | | 292 | 338 | ◡ |
| | | HK60UNV | +UA18 | 473 | 338 | ◡ |
| | 10 - 70 | HK6022 | | 294 | 343 | ◡ |
| | | HK60UNV | +UA22 | 473 | 343 | ◡ |
| | 10 - 95 | HK12030 | | 298 | 349 | ◡ |
| | | HK12042 | | 300 | 349 | ◡ |
| | | HK120U | | 302 | 349 | ◡ |
| Battery powered crimping tools | 10 - 16 | EK1550ML | | 258 | 327 | ⬭ |
| | | EK354ML | | 262 | 330 | ◡ |
| | | EK354 | | 266 | 330 | ◡ |
| | 10 - 50 | EK5018 | | 270 | 338 | ◡ |
| | | EK60UNV | +UA18 | 476 | 338 | ◡ |
| | | EKM60UNV | +UA18 | 475 | 338 | ◡ |
| | 10 - 70 | EK6022 | | 274 | 343 | ◡ |
| | | EKM6022 | | 272 | 343 | ◡ |
| | | EK60UNV | +UA22 | 476 | 343 | ◡ |
| | | EKM60UNV | +UA22 | 475 | 343 | ◡ |
| | 10 - 95 | EK12032 | | 280 | 349 | ◡ |
| | | EK12042 | | 282 | 349 | ◡ |
| | | EK120U | | 284 | 349 | ◡ |
| | | EK135FT | +UA15T | 286 | 349 | ◡ |
| | | EK120UNV | +UA12T | 477 | 349 | ◡ |
| Hydraulic crimping systems | 10 - 50 | THK18 | | 306 | 338 | ◡ |
| | 10 - 70 | THK22 | | 308 | 343 | ◡ |
| | 10 - 150 | HK252 | | 320 | 355 | ◡ |
| Hydraulic crimping heads | 10 - 50 | PK18 | | 306 | 338 | ◡ |
| | | PK60UNV | +UA18 | 474 | 338 | ◡ |
| | 10 - 70 | PK22 | | 308 | 343 | ◡ |
| | | PK60UNV | +UA22 | 474 | 343 | ◡ |
| | 10 - 95 | PK12042 | | 312 | 349 | ◡ |
| | | PK120U | | 314 | 349 | ◡ |
| | 10 - 150 | PK252 | | 316 | 355 | ◡ |

# COMPENSATING - SLEEVES FOR COPPER SECTOR-SHAPED AND COMPACTED CONDUCTORS

With the right sleeve, copper sector-shaped conductors are easy to crimp all the way round and can then be conveniently inserted into the cable lug. Klauke sleeves for compacted conductors compensate the difference between the compacted conductor and cable lug - ensuring reliable connections.



**In brief**

- For round crimping sector-shaped conductors
- Brings compacted conductors to the required volume
- Good conductivity due to high-quality copper
- Available for DIN and tubular cable lugs

**Note:** The sleeves for sector-shaped conductors must be crimped with pre-rounding dies.

## Filled in two steps

Making it easy for you: Use the Klauke sleeves to bring compacted conductors to the required volume in just two work steps: Simply attach the sleeve to the stripped conductor and insert it into the appropriate cable lug - done.

No additional tools and no special solutions required.

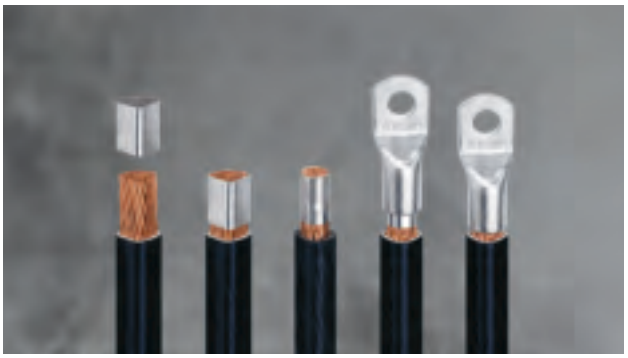
- Simple filling of compacted conductors
- For nominal cross-sections of up to 400 mm²
- High-quality material reduces contact resistance
- No special solutions required: existing tool can be used for reliable crimping

## Pre-rounded sector-shaped conductors

Pre-rounds 3 and 4-sector-shaped conductors without special cable lugs - using Klauke sleeves.

- For pre-rounding of sector-shaped conductors
- Suitable for 3- and 4-sector-shaped conductors at angles of 120° and 90°
- Nominal cross-section up to 240 mm²
- No splicing of conductors
- No special cable lugs required
- Lower storage costs





## The right sleeve for every cable lug

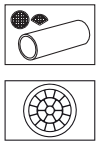
With Klauke, everything fits together. The diameter and length of the sleeve are adapted to the required cable lug to ensure optimum crimping.

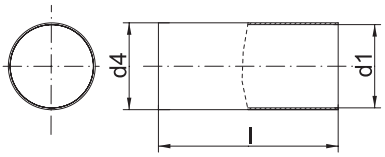
- Reliable crimping in a just a few steps
- Sleeves accurately matched to the Klauke system



## Sleeves for compacted conductors, for tubular cable lugs and connector standard type








- For multi-stranded, compacted conductors e.g. to DIN EN 60228 Cl. 2
- Allows the use of Klauke tubular cable lugs and connectors, standard type, on compacted conductors

### Characteristics

- Annealed material optimises material and crimping properties

### Material

- Copper (HCP)

### Surface

- Tin-plated to protect against corrosion

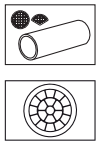
### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-7

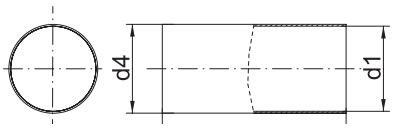
| Nominal cross section mm² | Part No. | Dimension mm | | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 16 | **VHR16** | 5.0 | 5.3 | 11 | 0.024 | 100 |
| 25 | **VHR25** | 6.4 | 6.7 | 14 | 0.038 | 100 |
| 35 | **VHR35** | 7.7 | 8.2 | 15 | 0.083 | 100 |
| 50 | **VHR50** | 9.0 | 9.5 | 18 | 0.118 | 50 |
| 70 | **VHR70** | 10.6 | 11.2 | 19 | 0.173 | 50 |
| 95 | **VHR95** | 12.4 | 13.0 | 21 | 0.223 | 50 |
| 120 | **VHR120** | 13.9 | 14.5 | 22 | 0.261 | 50 |
| 150 | **VHR150** | 15.4 | 16.0 | 26 | 0.342 | 25 |
| 185 | **VHR185** | 17.6 | 18.2 | 26 | 0.396 | 25 |
| 240 | **VHR240** | 19.9 | 20.5 | 30 | 0.508 | 25 |
| 300 | **VHR300** | 22.4 | 23.0 | 38 | 0.723 | 10 |
| 400 | **VHR400** | 25.4 | 26.2 | 38 | 1.108 | 10 |

## Sleeves for compacted conductors, for tubular cable lugs and connector DIN type





- For multi-stranded, compacted conductors e.g. to DIN EN 60228 Cl. 2
- Allows the use of Klauke DIN compression cable lugs and connectors for compacted conductors




### Characteristics

- Annealed material optimises material and crimping properties

### Material

- Copper (HCP)

### Surface

- Tin-plated to protect against corrosion

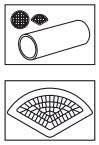
### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-7

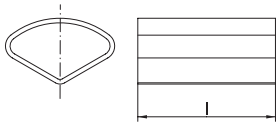
| Nominal cross section mm² | Part No. | Dimension mm | | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d1 | d4 | l | | |
| 16 | **VHD16** | 5.0 | 5.3 | 16 | 0.035 | 100 |
| 25 | **VHD25** | 6.4 | 6.7 | 16 | 0.043 | 100 |
| 35 | **VHD35** | 7.7 | 8.2 | 17 | 0.094 | 100 |
| 50 | **VHD50** | 9.0 | 9.5 | 23 | 0.151 | 50 |
| 70 | **VHD70** | 10.6 | 11.2 | 24 | 0.219 | 50 |
| 95 | **VHD95** | 12.4 | 13.0 | 28 | 0.298 | 50 |
| 120 | **VHD120** | 13.9 | 14.5 | 30 | 0.357 | 50 |
| 150 | **VHD150** | 15.4 | 16.0 | 30 | 0.395 | 25 |
| 185 | **VHD185** | 17.6 | 18.2 | 38 | 0.579 | 25 |
| 240 | **VHD240** | 19.9 | 20.5 | 38 | 0.645 | 25 |
| 300 | **VHD300** | 22.4 | 23.0 | 48 | 0.913 | 5 |
| 400 | **VHD400** | 25.4 | 26.2 | 58 | 1.692 | 5 |

## Sleeves for sector shaped conductors, 3-core cable





- For multi-stranded, sector shaped conductors, e.g. to DIN EN 60228
- For tubular cable lugs and connectors, standard version and DIN compression cable lugs and connectors
- To simplify pre-rounding of 3-core cables (120° angle)
- Prevents sector shaped conductors from de-stranding during pre-rounding




### Characteristics

- Annealed material optimises material and crimping properties

### Material

- Copper (HCP)

### Surface

- Tin-plated to protect against corrosion

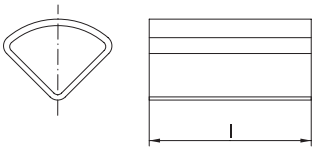
### Technical instructions

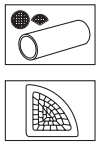
- For round crimping dies, see „Crimping dies“
- Refer to the installation instructions in the technical appendix on page i-7

| Nominal cross section mm² | Part No. | Dimension mm für l | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|
| Standard type | | | | |
| 35 | **VHR353** | 14 | 0.08 | 100 |
| 50 | **VHR503** | 17 | 0.17 | 50 |
| 70 | **VHR703** | 18 | 0.29 | 50 |
| 95 | **VHR953** | 22 | 0.45 | 50 |
| 120 | **VHR1203** | 23 | 0.49 | 50 |
| 150 | **VHR1503** | 25 | 0.58 | 25 |
| 185 | **VHR1853** | 25 | 0.80 | 25 |
| 240 | **VHR2403** | 30 | 1.04 | 25 |
| DIN version | | | | |
| 35 | **VHD353** | 17,5 | 0.11 | 100 |
| 50 | **VHD503** | 25,0 | 0.26 | 50 |
| 70 | **VHD703** | 25,0 | 0.39 | 50 |
| 95 | **VHD953** | 32,0 | 0.66 | 50 |
| 120 | **VHD1203** | 32,0 | 0.68 | 50 |
| 150 | **VHD1503** | 32,0 | 0.74 | 25 |
| 185 | **VHD1853** | 35,0 | 1.13 | 25 |
| 240 | **VHD2403** | 35,0 | 1.22 | 25 |

## Sleeves for sector shaped conductors, 4-core cable





- For multi-stranded, sector shaped conductors, e.g. to DIN EN 60228
- For tubular cable lugs and connectors, standard version and DIN compression cable lugs and connectors
- To simplify pre-rounding of 4-core cables (90° angle)
- Prevents sector shaped conductors from de-stranding during pre-rounding

### Characteristics

- Annealed material optimises material and crimping properties

### Material

- Copper (HCP)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-7
- For round crimping dies, see „Crimping dies“

| Nominal cross section mm² | Part No. | Dimension mm für l | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|
| Standard type | | | | |
| 35 | **VHR354** | 14 | 0.13 | 100 |
| 50 | **VHR504** | 17 | 0.17 | 50 |
| 70 | **VHR704** | 18 | 0.28 | 50 |
| 95 | **VHR954** | 22 | 0.40 | 50 |
| 120 | **VHR1204** | 23 | 0.51 | 50 |
| 150 | **VHR1504** | 25 | 0.57 | 25 |
| 185 | **VHR1854** | 25 | 0.78 | 25 |
| 240 | **VHR2404** | 30 | 0.85 | 25 |
| DIN version | | | | |
| 35 | **VHD354** | 17.5 | 0.11 | 100 |
| 50 | **VHD504** | 25.0 | 0.25 | 50 |
| 70 | **VHD704** | 25.0 | 0.38 | 50 |
| 95 | **VHD954** | 32.0 | 0.63 | 50 |
| 120 | **VHD1204** | 32.0 | 0.71 | 50 |
| 150 | **VHD1504** | 32.0 | 0.73 | 25 |
| 185 | **VHD1854** | 35.0 | 1.09 | 25 |
| 240 | **VHD2404** | 35.0 | 1.13 | 25 |

# RELIABLE - ALUMINIUM COMPRESSION CABLE LUGS AND CONNECTORS TO DIN

Light and extremely reliable: Klauke aluminium compression cable lugs are both. Contact grease breaks down the oxidation layer, high-quality tinning facilitates the contact with copper in dry environments. For the toughest demands, all cable lugs and most connectors are IEC-tested for safety. We offer a solution for practically every problem.



**In brief**

- Aluminium cable lugs and connectors according to and based on DIN standards
- Tested to the stringent IEC 61238-1
- Appropriate solutions to 30 kV
- Also for power lines and conductor wires
- Tinned and non-tinned versions available

## Deep drawn

Deep-drawn connectors are produced with barrier and precisely to DIN 46329. Thanks to the special production method, there is absolutely no ingress or escaping of liquids through the cable lug flange.

- Barrier design with oil stop
- Filled with contact grease as standard
- In the tinned version, also suitable for connecting to copper in dry environments
- For moist environments, we recommend Klauke connectors made from aluminium/copper

## Same excellent quality

Because we at Klauke have our own manufacturing facilities, our products are always the same consistently high quality. No matter which cable lug or connector you need, the Klauke system guarantees you the best results.

- Constant qualities in many forms
- Connections according to or based on DIN standards
- Simple processing with DIN hexagonal crimping or optionally EKM60ID
- Guaranteed safety through IEC 61238-1 tests

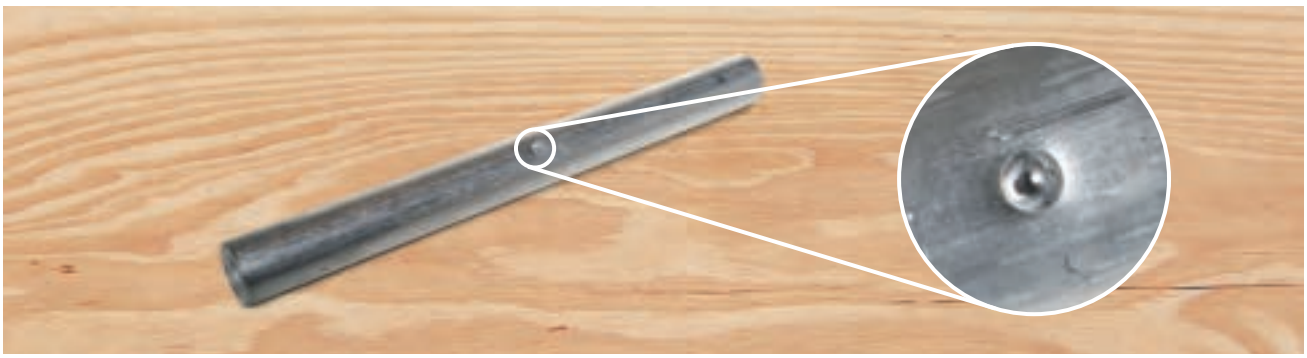





## Flexibility in power line construction

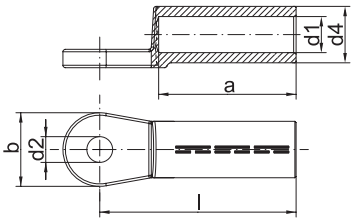
In power line construction too, Klauke products provide the flexible and reliable solution.

For special solutions, contact us directly. We can make them for you.



## Compression cable lugs to DIN, Al






- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- For pre-rounded sector shaped conductors
- To DIN 46329
- With code number for clear tool assignment for clear tool assignment
- Filled with contact grease for optimum crimp characteristics

### Characteristics

- Barrier design with oil stop
- Optional tin-plated (20 µm) version to connect copper bus bars in dry indoor areas
- Simple and safe connection due to flat contact surfaces and internal chamfer
- Unique tool assignment due to DIN die coding

### Material

- E-aluminium

### Surface

- Bright

### Technical instructions

- Tool: see page 103

### Additional information

- Part Number appendix for tinned version „V“
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded
- 70 - 240 mm² UL-tested
- * = not standardised

| Size of bolt dia. | Part No. | Nominal cross section mm² | | Hint | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | rm/sm | re/se | | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | |
| M 8 | **263R8** | 16 | 25 | * | 12 | 30 | 20 | 5.8 | 8.4 | 12 | 50 | 4 | 2 | 1.20 | 4 |
| M 10 | **263R10** | 16 | 25 | * | 12 | 30 | 20 | 5.8 | 10.5 | 12 | 50 | 4 | 2 | 1.20 | 4 |
| M 8 | **264R8** | 25 | 35 | | 12 | 30 | 25 | 6.8 | 8.4 | 12 | 50 | 4 | 2 | 1.30 | 4 |
| M 10 | **264R10** | 25 | 35 | | 12 | 30 | 25 | 6.8 | 10.5 | 12 | 50 | 4 | 2 | 1.24 | 4 |
| M 12 | **264R12** | 25 | 35 | | 12 | 30 | 25 | 6.8 | 13.0 | 12 | 50 | 4 | 2 | 1.22 | 4 |
| M 8 | **265R8** | 35 | 50 | | 14 | 42 | 25 | 8.0 | 8.4 | 14 | 62 | 5 | 2 | 2.50 | 4 |
| M 10 | **265R10** | 35 | 50 | | 14 | 42 | 25 | 8.0 | 10.5 | 14 | 62 | 5 | 2 | 1.98 | 4 |
| M 12 | **265R12** | 35 | 50 | | 14 | 42 | 25 | 8.0 | 13.0 | 14 | 62 | 5 | 2 | 2.50 | 4 |
| M 8 | **266R8** | 50 | 70 | | 16 | 42 | 25 | 9.8 | 8.4 | 16 | 62 | 5 | 2 | 2.75 | 4 |
| M 10 | **266R10** | 50 | 70 | | 16 | 42 | 25 | 9.8 | 10.5 | 16 | 62 | 5 | 2 | 2.70 | 4 |
| M 12 | **266R12** | 50 | 70 | | 16 | 42 | 25 | 9.8 | 13.0 | 16 | 62 | 5 | 2 | 2.65 | 4 |
| M 8 | **267R8** | 70 | 95 | | 18 | 52 | 25 | 11.2 | 8.4 | 18.5 | 72 | 6 | 3 | 3.45 | 4 |
| M 10 | **267R10** | 70 | 95 | | 18 | 52 | 25 | 11.2 | 10.5 | 18.5 | 72 | 6 | 3 | 3.80 | 4 |
| M 12 | **267R12** | 70 | 95 | | 18 | 52 | 25 | 11.2 | 13.0 | 18.5 | 72 | 6 | 3 | 3.35 | 4 |
| M 10 | **268R10** | 95 | 120 | | 22 | 56 | 25 | 13.2 | 10.5 | 22 | 75 | 6 | 3 | 6.90 | 4 |
| M 12 | **268R12** | 95 | 120 | | 22 | 56 | 25 | 13.2 | 13.0 | 22 | 75 | 6 | 3 | 4.92 | 4 |
| M 16 | **268R16** | 95 | 120 | * | 22 | 56 | 25 | 13.2 | 17.0 | 22 | 75 | 6 | 3 | 6.00 | 4 |
| M 10 | **269R10** | 120 | 150 | | 22 | 56 | 30 | 14.7 | 10.5 | 23 | 80 | 6 | 3 | 5.95 | 4 |
| M 12 | **269R12** | 120 | 150 | | 22 | 56 | 30 | 14.7 | 13.0 | 23 | 80 | 6 | 3 | 5.84 | 4 |
| M 16 | **269R16** | 120 | 150 | | 22 | 56 | 30 | 14.7 | 17.0 | 23 | 80 | 6 | 3 | 6.60 | 4 |
| M 10 | **270R10** | 150 | 185 | | 25 | 60 | 30 | 16.3 | 10.5 | 25 | 90 | 6 | 3 | 8.50 | 4 |

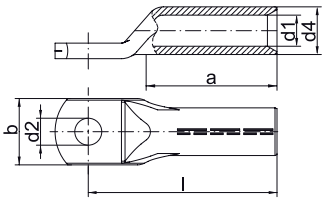
See next page

## Compression cable lugs to DIN, Al

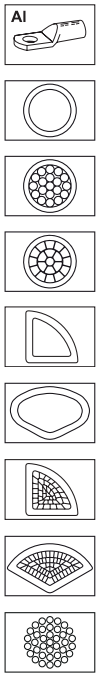
| Size of bolt dia. | Part No. | Nominal cross section mm² | | Hint | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | rm/sm | re/se | | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | |
| M 12 | **270R12** | 150 | 185 | | 25 | 60 | 30 | 16.3 | 13.0 | 25 | 90 | 6 | 3 | 7.73 | 4 |
| M 16 | **270R16** | 150 | 185 | | 25 | 60 | 30 | 16.3 | 17.0 | 25 | 90 | 6 | 3 | 7.60 | 4 |
| M 20 | **270R20** | 150 | 185 | * | 25 | 60 | 30 | 16.3 | 21.0 | 25 | 90 | 6 | 3 | 8.20 | 4 |
| M 10 | **271R10** | 185 | 240 | | 28 | 60 | 30 | 18.3 | 10.5 | 28.5 | 91 | 6 | 3 | 11.00 | 4 |
| M 12 | **271R12** | 185 | 240 | | 28 | 60 | 30 | 18.3 | 13.0 | 28.5 | 91 | 6 | 3 | 9.88 | 4 |
| M 16 | **271R16** | 185 | 240 | | 28 | 60 | 30 | 18.3 | 17.0 | 28.5 | 91 | 6 | 3 | 10.10 | 4 |
| M 20 | **271R20** | 185 | 240 | * | 28 | 60 | 30 | 18.3 | 21.0 | 28.5 | 91 | 6 | 3 | 10.00 | 4 |
| M 10 | **272R10** | 240 | 300 | * | 32 | 70 | 38 | 21.0 | 10.5 | 32 | 103 | 8 | 3 | 15.50 | 4 |
| M 12 | **272R12** | 240 | 300 | | 32 | 70 | 38 | 21.0 | 13.0 | 32 | 103 | 8 | 3 | 13.80 | 4 |
| M 16 | **272R16** | 240 | 300 | | 32 | 70 | 38 | 21.0 | 17.0 | 32 | 103 | 8 | 3 | 13.48 | 4 |
| M 20 | **272R20** | 240 | 300 | | 32 | 70 | 38 | 21.0 | 21.0 | 32 | 103 | 8 | 3 | 15.00 | 4 |
| M 12 | **273R12** | 300 | -- | | 34 | 70 | 38 | 23.3 | 13.0 | 34 | 103 | 8 | 3 | 17.60 | 1 |
| M 16 | **273R16** | 300 | -- | | 34 | 70 | 38 | 23.3 | 17.0 | 34 | 103 | 8 | 3 | 17.28 | 1 |
| M 20 | **273R20** | 300 | -- | | 34 | 70 | 38 | 23.3 | 21.0 | 34 | 103 | 8 | 3 | 17.40 | 1 |
| M 12 | **274R12** | 400 | -- | | 38 | 73 | 38 | 26.0 | 13.0 | 38.5 | 116 | -- | 4 | 38.00 | 1 |
| M 16 | **274R16** | 400 | -- | | 38 | 73 | 38 | 26.0 | 17.0 | 38.5 | 116 | -- | 4 | 37.40 | 1 |
| M 20 | **274R20** | 400 | -- | | 38 | 73 | 38 | 26.0 | 21.0 | 38.5 | 116 | -- | 4 | 40.20 | 1 |
| M 12 | **275R12** | 500 | -- | | 44 | 79 | 44 | 29.0 | 13.0 | 44 | 122 | -- | 4 | 43.70 | 1 |
| M 16 | **275R16** | 500 | -- | | 44 | 79 | 44 | 29.0 | 17.0 | 44 | 122 | -- | 4 | 43.30 | 1 |
| M 20 | **275R20** | 500 | -- | | 44 | 79 | 44 | 29.0 | 21.0 | 44 | 122 | -- | 4 | 43.00 | 1 |

## Compression cable lugs, Al






IEC




- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- For pre-rounded sector shaped conductors
- Tube dimension to DIN 46329
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp characteristics

### Characteristics

- Easy to process due to crimp markings
- Simple and safe connection due to flat contact surfaces and internal chamfer

### Material

- E-aluminium

### Surface

- Bright

### Technical instructions

- Tool: see page 103

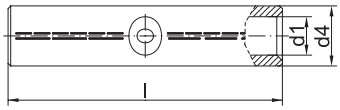
### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded
- 16 - 400 mm² IEC-tested

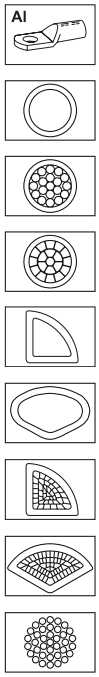
| Size of bolt dia. | Part No. | Nominal cross section mm² | | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | rm/sm | re/se | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | |
| M 6 | **202R6** | 10 | 25 | 10 | 32 | 16 | 5.0 | 6.5 | 10 | 52 | 4 | 2 | 0.86 | 25 |
| M 8 | **202R8** | 10 | 25 | 10 | 32 | 18 | 5.0 | 8.5 | 10 | 52 | 4 | 2 | 0.88 | 25 |
| | **203R8** | 16 | 25 | 12 | 32 | 18 | 5.8 | 8.5 | 12 | 52 | 4 | 2 | 1.37 | 10 |
| M 10 | **203R10** | 16 | 25 | 12 | 32 | 18 | 5.8 | 10.5 | 12 | 52 | 4 | 2 | 1.39 | 10 |
| M 8 | **204R8** | 25 | 35 | 12 | 38 | 18 | 6.8 | 8.5 | 12 | 60 | 4 | 2 | 1.41 | 10 |
| M 10 | **204R10** | 25 | 35 | 12 | 38 | 18 | 6.8 | 10.5 | 12 | 60 | 4 | 2 | 1.46 | 10 |
| | **205R10** | 35 | 50 | 14 | 42 | 21 | 8.0 | 10.5 | 14 | 67 | 5 | 2 | 2.08 | 10 |
| M 12 | **205R12** | 35 | 50 | 14 | 42 | 21 | 8.0 | 13.0 | 14 | 67 | 5 | 2 | 2.05 | 10 |
| M 10 | **206R10** | 50 | 70 | 16 | 45 | 25 | 9.8 | 10.5 | 16 | 72 | 5 | 2 | 2.68 | 10 |
| M 12 | **206R12** | 50 | 70 | 16 | 45 | 25 | 9.8 | 13.0 | 16 | 72 | 5 | 2 | 2.73 | 10 |
| M 10 | **207R10** | 70 | 95 | 18 | 55 | 28 | 11.2 | 10.5 | 18.5 | 86 | 6 | 3 | 4.42 | 10 |
| M 12 | **207R12** | 70 | 95 | 18 | 55 | 28 | 11.2 | 13.0 | 18.5 | 86 | 6 | 3 | 4.27 | 10 |
| M 10 | **208R10** | 95 | 120 | 22 | 55 | 32 | 13.2 | 10.5 | 22 | 90 | 6 | 3 | 7.40 | 4 |
| M 12 | **208R12** | 95 | 120 | 22 | 55 | 32 | 13.2 | 13.0 | 22 | 90 | 6 | 3 | 7.50 | 4 |
| M 16 | **208R16** | 95 | 120 | 22 | 55 | 34 | 13.2 | 17.0 | 22 | 90 | 6 | 3 | 7.30 | 4 |
| M 12 | **209R12** | 120 | 150 | 22 | 55 | 32 | 14.7 | 13.0 | 23 | 91 | 6 | 3 | 6.68 | 4 |
| M 16 | **209R16** | 120 | 150 | 22 | 55 | 34 | 14.7 | 17.0 | 23 | 91 | 6 | 3 | 6.41 | 4 |
| M 12 | **210R12** | 150 | 185 | 25 | 63 | 35 | 16.3 | 13.0 | 25 | 103 | 6 | 3 | 9.64 | 4 |
| M 16 | **210R16** | 150 | 185 | 25 | 63 | 35 | 16.3 | 17.0 | 25 | 103 | 6 | 3 | 9.24 | 4 |
| M 20 | **210R20** | 150 | 185 | 25 | 63 | 41 | 16.3 | 21.0 | 25 | 103 | 6 | 3 | 9.40 | 4 |
| M 12 | **211R12** | 185 | 240 | 28 | 65 | 40 | 18.3 | 13.0 | 28 | 106 | 6 | 3 | 12.61 | 1 |
| M 16 | **211R16** | 185 | 240 | 28 | 65 | 40 | 18.3 | 17.0 | 28 | 106 | 6 | 3 | 11.92 | 1 |
| M 20 | **211R20** | 185 | 240 | 28 | 65 | 40 | 18.3 | 21.0 | 28 | 106 | 6 | 3 | 13.10 | 1 |
| M 12 | **212R12** | 240 | 300 | 32 | 70 | 45 | 21.0 | 13.0 | 32 | 116 | 8 | 3 | 18.30 | 1 |
| M 16 | **212R16** | 240 | 300 | 32 | 70 | 45 | 21.0 | 17.0 | 32 | 116 | 8 | 3 | 17.60 | 1 |
| M 20 | **212R20** | 240 | 300 | 32 | 70 | 45 | 21.0 | 21.0 | 32 | 116 | 8 | 3 | 17.30 | 1 |
| M 16 | **213R16** | 300 | -- | 34 | 75 | 49 | 23.3 | 17.0 | 34 | 124 | 8 | 3 | 17.50 | 1 |
| M 20 | **213R20** | 300 | -- | 34 | 75 | 49 | 23.3 | 21.0 | 34 | 124 | 8 | 3 | 17.30 | 1 |
| M 16 | **214R16** | 400 | -- | 38 | 95 | 58 | 26.0 | 17.0 | 38.5 | 165 | -- | 4 | 32.20 | 1 |
| M 20 | **214R20** | 400 | -- | 38 | 95 | 58 | 26.0 | 21.0 | 38.5 | 165 | -- | 4 | 31.90 | 1 |

## Compression joint to DIN, Al






IEC




- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- To DIN 46267, Part 2
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp characteristics
- For pre-rounded sector shaped conductors

### Characteristics

- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer
- Simple and safe processing due to butt mark

### Material

- E-aluminium

### Surface

- Bright

### Technical instructions

- Tool: see page 103

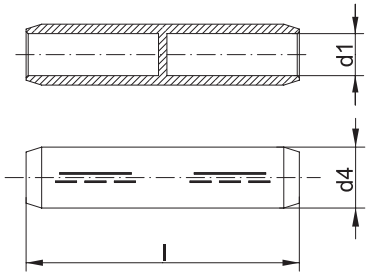
### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded
- 16 - 500 mm² IEC-tested
- * = not standardised

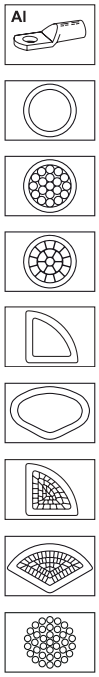
| Part No. | Nominal cross section mm² | | Hint | Code | Dimension mm | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | rm/sm | re/se | | | d1 | d4 | l | Al (7 mm) | Al (wide) | | |
| **222R** | 10 | 16 | * | 10 | 5.0 | 10 | 55 | 3/3 | -- | 0.95 | 10 |
| **223R** | 16 | 25 | * | 12 | 5.8 | 12 | 55 | 3/3 | -- | 1.40 | 10 |
| **224R** | 25 | 35 | | 12 | 6.8 | 12 | 70 | 4/4 | 2/2 | 1.60 | 10 |
| **225R** | 35 | 50 | | 14 | 8.0 | 14 | 85 | 5/5 | 2/2 | 2.60 | 10 |
| **226R** | 50 | 70 | | 16 | 9.8 | 16 | 85 | 5/5 | 2/2 | 3.20 | 10 |
| **227R** | 70 | 95 | | 18 | 11.2 | 18.5 | 105 | 6/6 | 3/3 | 5.30 | 10 |
| **228R** | 95 | 120 | | 22 | 13.2 | 22 | 105 | 6/6 | 3/3 | 7.60 | 10 |
| **229R** | 120 | 150 | | 22 | 14.7 | 23 | 105 | 6/6 | 3/3 | 7.80 | 10 |
| **230R** | 150 | 185 | | 25 | 16.3 | 25 | 125 | 6/6 | 3/3 | 10.70 | 10 |
| **231R** | 185 | 240 | | 28 | 18.3 | 28.5 | 125 | 6/6 | 3/3 | 14.30 | 5 |
| **232R** | 240 | 300 | | 32 | 21.0 | 32 | 145 | 8/8 | 3/3 | 20.30 | 5 |
| **233R** | 300 | -- | | 34 | 23.3 | 34 | 145 | 8/8 | 3/3 | 22.20 | 1 |
| **234R** | 400 | -- | | 38 | 26.0 | 38 | 210 | -- | 5/5 | 40.80 | 1 |
| **235R** | 500 | -- | | 44 | 29.0 | 44 | 210 | -- | 5/5 | 56.00 | 1 |

## Compression joints, Al






IEC




- For non-tension connections of medium-voltage aluminium cable 10-30 kV
- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182 and pre-rounded sector shaped conductors
- Tube dimension to DIN 46267, Part 2
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp characteristics

### Characteristics

- Also available as barrier design with oil stop
- With chamfered edges for reduced wrapping during assembly
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

### Material

- E-aluminium

### Surface

- Bright

### Technical instructions

- Tool: see page 103

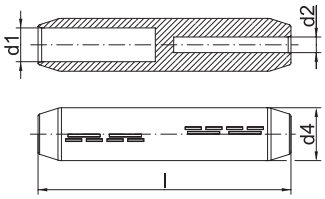
### Additional information

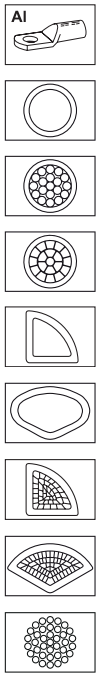
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Part No. | Nominal cross section mm² | | Code | Dimension mm | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | rm/sm | re/se | | d1 | d4 | l | Al (7 mm) | Al (wide) | | |
| Standard type | | | | | | | | | | |
| **405R** | 35 | 50 | 14 | 8.2 | 14 | 90 | 4/4 | 2/2 | 2.7 | 10 |
| **406R** | 50 | 70 | 16 | 10.0 | 16 | 90 | 4/4 | 2/2 | 3.4 | 10 |
| **407R** | 70 | 95 | 18 | 11.5 | 18.5 | 95 | 4/4 | 2/2 | 4.6 | 10 |
| **408R** | 95 | 120 | 22 | 13.5 | 22 | 100 | 4/4 | 2/2 | 6.8 | 10 |
| **409R** | 120 | 150 | 22 | 15.0 | 23 | 105 | 4/4 | 2/2 | 7.4 | 10 |
| **410R** | 150 | 185 | 25 | 16.5 | 25 | 105 | 4/4 | 2/2 | 8.7 | 10 |
| **411R** | 185 | 240 | 28 | 18.5 | 28.5 | 125 | 5/5 | 2/2 | 13.4 | 5 |
| **412R** | 240 | 300 | 32 | 21.3 | 32 | 125 | 5/5 | 2/2 | 15.7 | 5 |
| **413R** | 300 | -- | 34 | 23.6 | 34 | 125 | 5/5 | 2/2 | 16.3 | 1 |
| **414R** | 400 | -- | 38 | 26.25 | 38 | 150 | -- | 3/3 | 25.8 | 1 |
| Barrier version | | | | | | | | | | |
| **415R** | 35 | 50 | 14 | 8.0 | 14 | 95 | 4/4 | 2/2 | 3.1 | 5 |
| **416R** | 50 | 70 | 16 | 9.8 | 16 | 95 | 4/4 | 2/2 | 5.6 | 5 |
| **417R** | 70 | 95 | 18 | 11.2 | 18.5 | 100 | 4/4 | 2/2 | 6.1 | 5 |
| **418R** | 95 | 120 | 22 | 13.2 | 22 | 105 | 4/4 | 2/2 | 9.2 | 5 |
| **419R** | 120 | 150 | 22 | 14.7 | 23 | 110 | 4/4 | 2/2 | 10.3 | 5 |
| **420R** | 150 | 185 | 25 | 16.3 | 25 | 110 | 4/4 | 2/2 | 12.0 | 5 |
| **421R** | 185 | 240 | 28 | 18.3 | 28.5 | 130 | 5/5 | 2/2 | 15.6 | 5 |
| **422R** | 240 | 300 | 32 | 21.0 | 32 | 130 | 5/5 | 2/2 | 19.1 | 5 |
| **423R** | 300 | -- | 34 | 23.3 | 34 | 135 | 5/5 | 2/2 | 30.7 | 1 |
| **424R** | 400 | -- | 38 | 26.0 | 38 | 165 | -- | 3/3 | 30.0 | 1 |

# Reduction compression joints, Al, barrier type






- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- In nominal cross-section area tube dimension to DIN 46267, part 2
- For pre-rounded sector shaped conductors
- Ideal for connecting differing conductor cross-sections
- Filled with contact grease for optimum crimp characteristics

## Characteristics

- Barrier design with oil stop
- Unique tool assignment due to DIN die coding
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

## Material

- E-aluminium

## Surface

- Bright

## Technical instructions

- Tools: see chart page 103

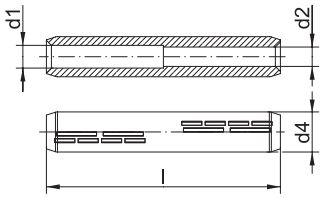
## Additional information

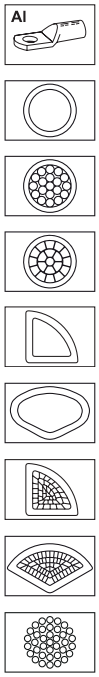
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Part No. | Nominal cross section mm² | | | | Code | Dimension mm | | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | re/se from | rm/sm from | re/se to | rm/sm to | | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | |
| **425R25** | 50 | 35 | 35 | 25 | 14 | 8.0 | 6.8 | 14 | 95 | 4/4 | 2/2 | 2.8 | 5 |
| **426R35** | 70 | 50 | 50 | 35 | 16 | 9.8 | 8.0 | 16 | 95 | 4/4 | 2/2 | 3.45 | 5 |
| **427R35** | 95 | 70 | 50 | 35 | 18 | 11.2 | 8.0 | 18.5 | 100 | 4/4 | 2/2 | 4.79 | 5 |
| **427R50** | 95 | 70 | 70 | 50 | 18 | 11.2 | 9.8 | 18.5 | 100 | 4/4 | 2/2 | 4.42 | 5 |
| **428R50** | 120 | 95 | 70 | 50 | 22 | 13.2 | 9.8 | 22 | 105 | 4/4 | 2/2 | 7.60 | 5 |
| **428R70** | 120 | 95 | 95 | 70 | 22 | 13.2 | 11.2 | 22 | 105 | 4/4 | 2/2 | 7.35 | 5 |
| **429R70** | 150 | 120 | 95 | 70 | 22 | 14.7 | 11.2 | 23 | 110 | 4/4 | 2/2 | 7.10 | 5 |
| **429R95** | 150 | 120 | 120 | 95 | 22 | 14.7 | 13.2 | 23 | 110 | 4/4 | 2/2 | 6.55 | 5 |
| **430R70** | 185 | 150 | 95 | 70 | 25 | 16.3 | 11.2 | 25 | 110 | 4/4 | 2/2 | 9.80 | 5 |
| **430R95** | 185 | 150 | 120 | 95 | 25 | 16.3 | 13.2 | 25 | 110 | 4/4 | 2/2 | 9.50 | 5 |
| **430R120** | 185 | 150 | 150 | 120 | 25 | 16.3 | 14.7 | 25 | 110 | 4/4 | 2/2 | 8.65 | 5 |
| **431R70** | 240 | 185 | 95 | 70 | 28 | 18.3 | 11.2 | 28.5 | 130 | -- | 2/2 | 15.05 | 5 |
| **431R95** | 240 | 185 | 120 | 95 | 28 | 18.3 | 13.2 | 28.5 | 130 | -- | 2/2 | 14.40 | 5 |
| **431R120** | 240 | 185 | 150 | 120 | 28 | 18.3 | 14.7 | 28.5 | 130 | 5/5 | 2/2 | 13.70 | 5 |
| **431R150** | 240 | 185 | 185 | 150 | 28 | 18.3 | 16.3 | 28.5 | 130 | 5/5 | 2/2 | 13.05 | 5 |
| **432R120** | 300 | 240 | 150 | 120 | 32 | 21.0 | 14.7 | 32 | 130 | -- | 2/2 | 18.80 | 5 |
| **432R150** | 300 | 240 | 185 | 150 | 32 | 21.0 | 16.3 | 32 | 130 | 5/5 | 2/2 | 18.125 | 5 |
| **432R185** | 300 | 240 | 240 | 185 | 32 | 21.0 | 18.3 | 32 | 130 | 5/5 | 2/2 | 17.275 | 5 |
| **433R150** | - | 300 | 185 | 150 | 34 | 23.3 | 16.3 | 34 | 135 | 5/5 | 2/2 | 21.10 | 1 |
| **433R185** | - | 300 | 240 | 185 | 34 | 23.3 | 18.3 | 34 | 135 | 5/5 | 2/2 | 20.12 | 1 |
| **433R240** | - | 300 | 300 | 240 | 34 | 23.3 | 21.0 | 34 | 135 | 5/5 | 2/2 | 18.73 | 1 |
| **434R300** | - | 400 | - | 300 | 38 | 26.0 | 23.3 | 34 | 165 | -- | 3/3 | 31.20 | 1 |

## Reduction-compression joints, Al






- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- For pre-rounded sector shaped conductors
- In nominal cross-section area tube dimension to DIN 46267, part 2
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp characteristics

### Characteristics

- For connecting different conductor cross-sections
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

### Material

- E-aluminium

### Surface

- Bright

### Technical instructions

- Tool: see page 103

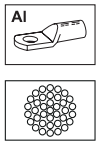
### Additional information

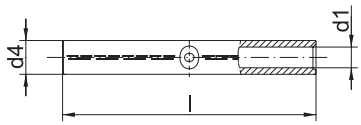
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Part No. | Nominal cross section mm² | | | | Code | Dimension mm | | | | Number of crimps | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | re/se from | rm/sm from | re/se to | rm/sm to | | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | |
| **284R16** | 35 | 25 | 25 | 16 | 12 | 7.0 | 5.8 | 12 | 75 | 4/4 | 2/2 | 1.53 | 10 |
| **285R25** | 50 | 35 | 35 | 25 | 14 | 8.2 | 6.8 | 14 | 90 | 5/5 | 2/2 | 2.50 | 10 |
| **286R25** | 70 | 50 | 35 | 25 | 16 | 10.0 | 6.8 | 16 | 90 | 5/5 | 2/2 | 3.24 | 10 |
| **286R35** | 70 | 50 | 50 | 35 | 16 | 10.0 | 8.0 | 16 | 90 | 5/5 | 2/2 | 3.09 | 10 |
| **287R25** | 95 | 70 | 35 | 25 | 18 | 11.5 | 6.8 | 18.5 | 110 | 6/6 | 3/3 | 5.50 | 10 |
| **287R35** | 95 | 70 | 50 | 35 | 18 | 11.5 | 8.0 | 18.5 | 110 | 6/6 | 3/3 | 5.35 | 10 |
| **287R50** | 95 | 70 | 70 | 50 | 18 | 11.5 | 9.8 | 18.5 | 110 | 6/6 | 3/3 | 4.96 | 10 |
| **288R25** | 120 | 95 | 35 | 25 | 22 | 13.5 | 6.8 | 22 | 110 | 6/6 | 3/3 | 9.10 | 10 |
| **288R35** | 120 | 95 | 50 | 35 | 22 | 13.5 | 8.0 | 22 | 110 | 6/6 | 3/3 | 8.90 | 10 |
| **288R50** | 120 | 95 | 70 | 50 | 22 | 13.5 | 9.8 | 22 | 110 | 6/6 | 3/3 | 8.51 | 10 |
| **288R70** | 120 | 95 | 95 | 70 | 22 | 13.5 | 11.2 | 22 | 110 | 6/6 | 3/3 | 8.15 | 10 |
| **289R50** | 150 | 120 | 70 | 50 | 22 | 15.0 | 9.8 | 23 | 110 | 6/6 | 3/3 | 8.04 | 10 |
| **289R70** | 150 | 120 | 95 | 70 | 22 | 15.0 | 11.2 | 23 | 110 | 6/6 | 3/3 | 7.66 | 10 |
| **289R95** | 150 | 120 | 120 | 95 | 22 | 15.0 | 13.2 | 23 | 110 | 6/6 | 3/3 | 7.14 | 10 |
| **290R70** | 185 | 150 | 95 | 70 | 25 | 16.5 | 11.2 | 25 | 130 | 6/6 | 3/3 | 11.70 | 10 |
| **290R95** | 185 | 150 | 120 | 95 | 25 | 16.5 | 13.2 | 25 | 130 | 6/6 | 3/3 | 11.05 | 10 |
| **290R120** | 185 | 150 | 150 | 120 | 25 | 16.5 | 14.7 | 25 | 130 | 6/6 | 3/3 | 10.49 | 10 |
| **291R120** | 240 | 185 | 150 | 120 | 28 | 18.5 | 14.7 | 28.5 | 130 | 6/6 | 3/3 | 13.80 | 5 |
| **291R150** | 240 | 185 | 185 | 150 | 28 | 18.5 | 16.3 | 28.5 | 130 | 6/6 | 3/3 | 13.19 | 5 |
| **292R95** | 300 | 240 | 120 | 95 | 32 | 21.3 | 13.2 | 32 | 150 | -- | 3/3 | 22.24 | 5 |
| **292R120** | 300 | 240 | 150 | 120 | 32 | 21.3 | 14.7 | 32 | 150 | -- | 3/3 | 21.59 | 5 |
| **292R150** | 300 | 240 | 185 | 150 | 32 | 21.3 | 16.3 | 32 | 150 | -- | 3/3 | 20.87 | 5 |

# Compression joint to DIN, Al, full tension






- For full tension connections of aluminium cables to DIN EN 50182
- To DIN 48085, Part 2
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp characteristics

## Characteristics

- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

## Material

- E-aluminium to 95 mm²
- AlMgSi from 120 mm²

## Surface

- Bright

## Technical instructions

- Tool: see page 103

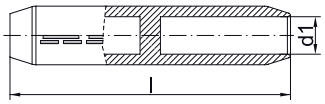
## Additional information

- * = not standardised

| Nominal cross section mm² | Part No. | Hint | Code | Dimension mm | | | Number of crimps | | Conductor mm dia. | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d4 | l | Al (7 mm) | Al (wide) | | | |
| 16 | **243R** | * | 12 | 5.8 | 12.0 | 140 | 8/8 | 4/4 | 5.1 | 3.4 | 10 |
| 25 | **244R** | | 12 | 6.8 | 12.0 | 140 | 8/8 | 4/4 | 6.3 | 2.9 | 10 |
| 35 | **245R** | | 14 | 8.0 | 14.0 | 140 | 8/8 | 4/4 | 7.5 | 3.9 | 10 |
| 50 | **246R** | | 16 | 10.0 | 16.0 | 155 | 8/8 | 4/4 | 9.0 | 5.2 | 10 |
| 70 | **247R** | | 18 | 11.5 | 18.5 | 165 | 8/8 | 4/4 | 10.5 | 7.4 | 10 |
| 95 | **248R** | | 22 | 13.5 | 22.0 | 165 | 8/8 | 4/4 | 12.5 | 12.2 | 10 |
| 120 | **249R** | | 25 | 15.5 | 25.5 | 250 | 12/12 | 6/6 | 14.0 | 21.8 | 10 |
| 150 | **250R** | | 28 | 16.5 | 28.5 | 300 | -- | 7/7 | 15.7 | 34.4 | 10 |
| 185 | **251R** | | 28 | 18.5 | 28.5 | 330 | -- | 7/7 | 17.5 | 33.0 | 5 |
| 240 | **252R** | | 34 | 21.5 | 34.5 | 350 | -- | 7/7 | 20.2 | 54.0 | 5 |
| 300 | **253R** | | 38 | 23.5 | 38.5 | 400 | -- | 8/8 | 22.5 | 79.0 | 1 |

## Compression joints, Al, full tension











- For full tension connections of Aldrey cables according to DIN EN 50182
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp characteristics

### Characteristics
- Tube diameters adjusted to Aldrey cables
- Easy to process due to crimp markings

### Material
- AlMgSi F20

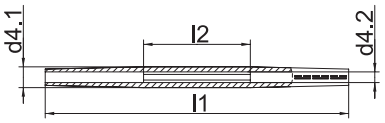
### Surface
- Bright

### Technical instructions
- Tool: see page 104

| Nominal cross section mm² | Part No. | Code | Dimension mm | | Number of crimps | | Conductor mm dia. | Weight 100 pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | l | Aldrey (7 mm) | Aldrey (wide) | | | |
| 35 | **295AD** | 14 | 8.0 | 140 | 8/8 | -- | 7.5 | 4.7 | 5 |
| 50 | **296AD** | 16 | 10.0 | 155 | 8/8 | -- | 9.0 | 5.9 | 5 |
| 70 | **297AD** | 18 | 11.5 | 165 | 8/8 | -- | 10.5 | 9.0 | 5 |

## Compression joint to DIN, Al/St











- For full tension connections of Al/St conductors to DIN EN 50182
- To DIN 48085, Part 3
- Unique tool assignment due to coding
- Filled with contact grease for optimum crimp characteristics

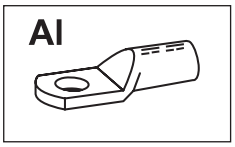
### Characteristics
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

### Material
- Sleeve: E-aluminium
- Sleeve: Steel (St 52)

### Surface
- Al sleeve: bright
- St sleeve: hot zinc galvanised

### Technical instructions
- Tool: see page 105

| Nominal cross section mm² | Part No. | Code | Dimension mm | | | | Code Al | Number of crimps | | | | Conductor mm dia. | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d41 | d42 | l1 | l2 | | Stahl (5 mm) | Stahl (wide) | Al (7 mm) | Al (wide) | | | |
| 35 - 6 | **455R** | 6 | 14.0 | 6.3 | 235 | 75 | 14 | 5/5 | -- | 8/8 | -- | 8.1 | 7 | 5 |
| 50 - 8 | **456R** | 7 | 16.0 | 7.5 | 270 | 95 | 16 | 6/6 | -- | 9/9 | -- | 9.6 | 11 | 5 |
| 70 - 12 | **457R** | 9 | 18.5 | 9.5 | 270 | 95 | 18 | 6/6 | -- | 9/9 | -- | 11.7 | 15 | 5 |
| 95 - 15 | **458R** | 9 | 22.5 | 9.6 | 310 | 95 | 22 | 6/6 | -- | 11/11 | -- | 13.6 | 23 | 5 |
| 120 - 20 | **459R** | 13 | 25.0 | 13.0 | 380 | 110 | 25 | 7/7 | 4/4 | 13/13 | 6/6 | 15.5 | 36 | 5 |



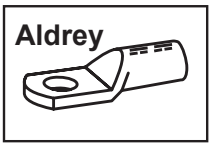

## Tool application chart

**Compression cable lugs and connectors made from E-Al**

**Compression cable lugs for full-tension connections from Al conductors DIN EN 50182, 16 - 95 mm²**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 10 - 70 | K354 | | 246 | 331 | ⬡ |
| | 10 - 185 | K18 | | 248 | 339 | ⬡ |
| | 10 - 240 | K22 | | 250 | 344 | ⬡ |
| Hand hydraulic crimping tools | 10 - 185 | HK6018 | | 292 | 339 | ⬡ |
| | | HK60UNV | +UA18 | 473 | 339 | ⬡ |
| | 10 - 300 | HK6022 | | 294 | 344 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 344 | ⬡ |
| | | HK12030 | | 298 | 350 | ⬡ |
| | | HK12042 | | 300 | 350 | ⬡ |
| | | HK120U | | 302 | 350 | ⬡ |
| | 150 - 500 | HK45 | | 321 | 358 | ⬡ |
| Battery powered crimping tools | 10 - 70 | EK354ML | | 262 | 331 | ⬡ |
| | | EK354 | | 266 | 331 | ⬡ |
| | 10 - 150 | EK505 | | 268 | 335 | ⬡ |
| | 10 - 185 | EK5018 | | 270 | 339 | ⬡ |
| | | EK60UNV | +UA18 | 476 | 339 | ⬡ |
| | | EKM60UNV | +UA18 | 475 | 339 | ⬡ |
| | 10 - 300 | EK6022 | | 274 | 344 | ⬡ |
| | | EKM6022 | | 272 | 344 | ⬡ |
| | 50 - 240 | EKM60ID* | | 278 | | ⌓ |
| | | EK60UNV | +UA22 | 476 | 344 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 344 | ⬡ |
| | | EK120UNV | | 477 | 350 | ⬡ |
| | | EK12032 | | 280 | 350 | ⬡ |
| | | EK12042 | | 282 | 350 | ⬡ |
| | | EK120U | +UA15T | 284 | 350 | ⬡ |
| | | EK135FT | +UA12T | 286 | 350 | ⬡ |
| Hydraulic crimping systems | 10 - 185 | THK18 | | 306 | 339 | ⬡ |
| | 10 - 300 | THK22 | | 308 | 344 | ⬡ |
| | | HK122EL380 | | 322 | 350 | ⬡ |
| | 10 - 500 | HK252 | | 320 | 355 | ⬡ |
| | | HK252EL380 | | 323 | 355 | ⬡ |
| Hydraulic crimping heads | 10 - 185 | PK18 | | 306 | 339 | ⬡ |
| | | PK60UNV | +UA18 | 474 | 339 | ⬡ |
| | 10 - 300 | PK22 | | 308 | 344 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 344 | ⬡ |
| | | PK12042 | | 312 | 350 | ⬡ |
| | | PK120U | | 314 | 350 | ⬡ |
| | 10 - 500 | PK252 | | 316 | 355 | ⬡ |
| | 50 - 240 | PK60ID* | | 311 | | ⌓ |
| | 150 - 500 | PK45 | | 318 | 358 | ⬡ |

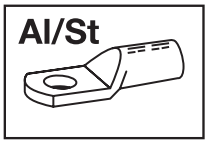
* Not suitable for full-tension connections




## Tool application chart

**Compression joints for full-tension connections from Aldrey conductors to DIN EN 50182 and Al conductors to DIN EN 50182, 120-300 mm²**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 6 - 25 | EK50ML | | 254 | 326 | ⬡ |
| | | K50 | | 244 | 326 | ⬡ |
| | 25 - 50 | K354 | | 246 | 331 | ⬡ |
| | 25 - 95 | K18 | | 248 | 339 | ⬡ |
| | 25 - 185 | K22 | | 250 | 344 | ⬡ |
| Hand hydraulic crimping tools | 25 - 95 | HK6018 | | 292 | 339 | ⬡ |
| | | HK60UNV | +UA18 | 473 | 339 | ⬡ |
| | 25 - 185 | HK6022 | | 294 | 344 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 344 | ⬡ |
| | | HK12030 | | 298 | 350 | ⬡ |
| | | HK12042 | | 300 | 350 | ⬡ |
| | | HK120U | | 302 | 350 | ⬡ |
| | 150 - 300 | HK45 | | 321 | 358 | ⬡ |
| Battery powered crimping tools | 6 - 25 | EK1550ML | | 258 | 326 | ⬡ |
| | 25 - 50 | EK354ML | | 262 | 331 | ⬡ |
| | | EK354 | | 266 | 331 | ⬡ |
| | 25 - 95 | EK505 | | 268 | 335 | ⬡ |
| | | EK5018 | | 270 | 339 | ⬡ |
| | | EK60UNV | +UA18 | 476 | 339 | ⬡ |
| | | EKM60UNV | +UA18 | 475 | 339 | ⬡ |
| | 25 - 185 | EK6022 | | 274 | 344 | ⬡ |
| | | EKM6022 | | 272 | 344 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 344 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 344 | ⬡ |
| | | EK12032 | | 280 | 350 | ⬡ |
| | | EK12042 | | 282 | 350 | ⬡ |
| | | EK120U | | 284 | 350 | ⬡ |
| | | EK135FT | +UA15T | 286 | 350 | ⬡ |
| | | EK120UNV | +UA12T | 477 | 350 | ⬡ |
| Hydraulic crimping systems | 25 - 95 | THK18 | | 306 | 339 | ⬡ |
| | 25 - 185 | THK22 | | 308 | 344 | ⬡ |
| | | HK122EL380 | | 322 | 350 | ⬡ |
| | 25 - 300 | HK252 | | 320 | 355 | ⬡ |
| | | HK252EL380 | | 323 | 355 | ⬡ |
| Hydraulic crimping heads | 25 - 95 | PK18 | | 306 | 339 | ⬡ |
| | | PK60UNV | +UA18 | 474 | 339 | ⬡ |
| | 25 - 185 | PK22 | | 308 | 344 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 344 | ⬡ |
| | | PK12042 | | 312 | 350 | ⬡ |
| | | PK120U | | 314 | 350 | ⬡ |
| | 25 - 300 | PK252 | | 316 | 355 | ⬡ |
| | 150 - 300 | PK45 | | 318 | 358 | ⬡ |




## Tool application chart

**Compression joints for non-tension connections from Al/St. cables and full-tension connections to DIN 48085, part 3 for Al/St. cables to DIN EN 50182**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| **Mechanical, electrical, pneumatic crimping tools with interchangeable die / head** | **25/4 - 120/20** | K22 | | 250 | 345 | ⬡ |
| **Hand hydraulic crimping tools** | **25/4 - 120/20** | HK6022 | | 294 | 345 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 345 | ⬡ |
| | | HK12030 | | 298 | 350 | ⬡ |
| | | HK12042 | | 300 | 350 | ⬡ |
| | | HK120U | | 302 | 350 | ⬡ |
| **Battery powered crimping tools** | **25/4 - 120/20** | EK6022 | | 274 | 345 | ⬡ |
| | | EKM6022 | | 272 | 345 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 345 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 345 | ⬡ |
| | | EK12032 | | 280 | 350 | ⬡ |
| | | EK12042 | | 282 | 350 | ⬡ |
| | | EK120U | | 284 | 350 | ⬡ |
| | | EK135FT | +UA15T | 286 | 350 | ⬡ |
| | | EK120UNV | +UA12T | 477 | 350 | ⬡ |
| **Hydraulic crimping systems** | **25/4 - 120/20** | THK22 | | 308 | 345 | ⬡ |
| | | HK122EL380 | | 322 | 350 | ⬡ |
| | | HK252 | | 320 | 356 | ⬡ |
| | | HK252EL380 | | 323 | 356 | ⬡ |
| **Hydraulic crimping heads** | **25/4 - 120/20** | PK22 | | 308 | 345 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 345 | ⬡ |
| | | PK12042 | | 312 | 350 | ⬡ |
| | | PK120U | | 314 | 350 | ⬡ |
| | | PK252 | | 316 | 356 | ⬡ |

# CONNECTED - COMPRESSION CABLE LUGS MADE FROM ALUMINIUM AND COPPER

Two components reliably connected. Copper and aluminium have different material properties. That's not always a good thing. Our compression cable lugs and connectors made from aluminium and copper are intricately produced by special processes and join together what belongs together. No matter which material you use: Your contacts are reliable with Klauke.



**In brief**

- Simple processing based on DIN standards
- Reliable connection of copper and aluminium, even in contact with water
- Special manufacturing methods ensure high quality
- Also suitable for sector shaped conductors and wires

## As good as always

Cable lugs and connectors made from aluminium and copper can be processed in exactly the same way as DIN standard aluminium cable lugs. No special tools are required, you simply use the right Klauke dies. And so the result is as good as always.

- For round and sector shaped conductors to DIN EN 60228 and aluminium wires to DIN 50182
- No additional costs for new crimping dies
- Reliable connection by preventing contact corrosion

## Numerous versions available

The great thing about the broad Klauke range is: You can select the suitable cable lug for your project and optimally process your choice using the Klauke tools. Everything fitting together.

- Processing as usual with standard aluminium cable lugs
- Different versions available, for instance, as a cable lug with a copper eye or Cupal washers or as a rotational friction welded cable lug

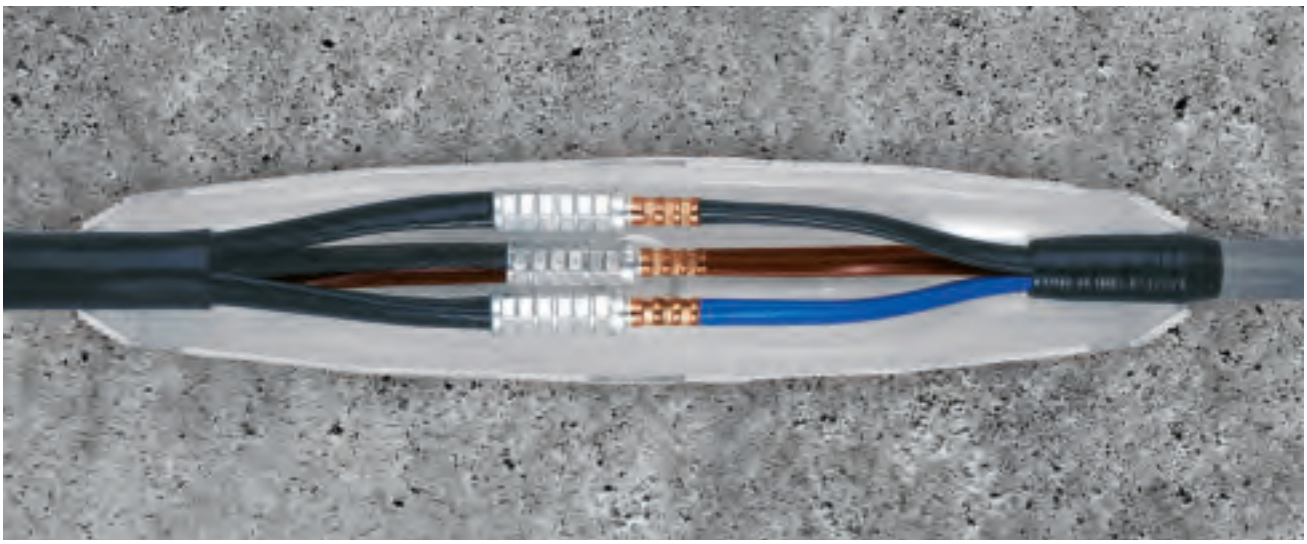





## Well connected in every situation

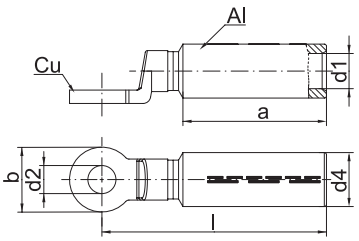
Reduction compression joints enable aluminium conductors to be integrated into copper-containing systems. They connect the two different materials regardless of the physical cable dimensions.

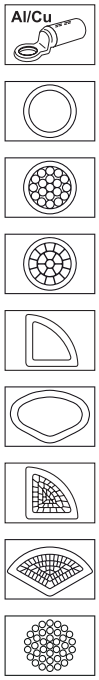
- Suitable for round or sector shaped conductors
- Suitable for multi-stranded and single-stranded sector shaped conductors



## Compression cable lugs, Al/Cu






- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium open wires to DIN EN 50182 and pre-rounded sector shaped conductors
- Tube dimension to DIN 46329
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp results

### Characteristics

- For connecting non-tensioned aluminium conductors to copper connections in humid environments and outdoors
- Barrier design with oil stop and solid copper palm
- Internal chamfer for simple cable insertion

### Material

- E-aluminium
- Copper (EN13600)

### Surface

- Bright

### Technical instructions

- Tool: see page 115

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Size of bolt dia. | Part No. | Nominal cross section mm² | | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | re/se | re/se | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | | |
| M 8 | **363R8** | 16 | 25 | 12 | 30 | 24 | 6.0 | 8.5 | 12 | 68 | 4 | 2 | 4.4 | 5.9 | 10 |
| M 10 | **363R10** | 16 | 25 | 12 | 30 | 24 | 6.0 | 10.5 | 12 | 68 | 4 | 2 | 4.2 | 5.7 | 10 |
| M 8 | **364R8** | 25 | 35 | 12 | 30 | 24 | 6.8 | 8.5 | 12 | 68 | 4 | 2 | 4.4 | 5.8 | 10 |
| M 10 | **364R10** | 25 | 35 | 12 | 30 | 24 | 6.8 | 10.5 | 12 | 68 | 4 | 2 | 4.2 | 5.6 | 10 |
| M 12 | **364R12** | 25 | 35 | 12 | 30 | 24 | 6.8 | 13.0 | 12 | 68 | 4 | 2 | 3.9 | 5.3 | 10 |
| M 8 | **365R8** | 35 | 50 | 14 | 42 | 24 | 8.0 | 8.5 | 14 | 77 | 5 | 2 | 4.4 | 6.3 | 10 |
| M 10 | **365R10** | 35 | 50 | 14 | 42 | 24 | 8.0 | 10.5 | 14 | 77 | 5 | 2 | 4.2 | 6.1 | 10 |
| M 12 | **365R12** | 35 | 50 | 14 | 42 | 24 | 8.0 | 13.0 | 14 | 77 | 5 | 2 | 3.8 | 5.8 | 10 |
| M 8 | **366R8** | 50 | 70 | 16 | 42 | 25 | 9.8 | 8.5 | 16 | 77 | 5 | 2 | 4.4 | 6.4 | 10 |
| M 10 | **366R10** | 50 | 70 | 16 | 42 | 25 | 9.8 | 10.5 | 16 | 77 | 5 | 2 | 4.2 | 6.2 | 10 |
| M 12 | **366R12** | 50 | 70 | 16 | 42 | 25 | 9.8 | 13.0 | 16 | 77 | 5 | 2 | 3.9 | 5.9 | 10 |
| M 10 | **367R10** | 70 | 95 | 18 | 52 | 25 | 11.2 | 10.5 | 18.5 | 84.5 | 6 | 3 | 4.2 | 7.4 | 10 |
| M 12 | **367R12** | 70 | 95 | 18 | 52 | 25 | 11.2 | 13.0 | 18.5 | 84.5 | 6 | 3 | 3.9 | 7.1 | 10 |
| M 10 | **368R10** | 95 | 120 | 22 | 56 | 30 | 13.2 | 10.5 | 22 | 90.5 | 6 | 3 | 7.4 | 11.4 | 10 |
| M 12 | **368R12** | 95 | 120 | 22 | 56 | 30 | 13.2 | 13.0 | 22 | 90.5 | 6 | 3 | 6.8 | 10.8 | 10 |
| M 16 | **368R16** | 95 | 120 | 22 | 56 | 30 | 13.2 | 17.0 | 22 | 90.5 | 6 | 3 | 6.4 | 10.4 | 10 |
| M 12 | **369R12** | 120 | 150 | 22 | 56 | 30 | 14.7 | 13.0 | 23 | 92.0 | 6 | 3 | 6.8 | 11.4 | 5 |
| M 16 | **369R16** | 120 | 150 | 22 | 56 | 30 | 14.7 | 17.0 | 23 | 92.0 | 6 | 3 | 6.4 | 10.8 | 5 |
| M 12 | **370R12** | 150 | 185 | 25 | 60 | 30 | 16.3 | 13.0 | 25 | 104.0 | 6 | 3 | 6.8 | 13.1 | 5 |
| M 16 | **370R16** | 150 | 185 | 25 | 60 | 30 | 16.3 | 17.0 | 25 | 104.0 | 6 | 3 | 6.4 | 12.7 | 5 |
| M 20 | **370R20** | 150 | 185 | 25 | 60 | 35 | 16.3 | 21.0 | 25 | 107.5 | 6 | 3 | 10.1 | 16.4 | 5 |
| M 10 | **371R10** | 185 | 240 | 28 | 60 | 30 | 18.3 | 10.5 | 28.5 | 105.0 | 6 | 3 | 10.3 | 18.6 | 5 |
| M 12 | **371R12** | 185 | 240 | 28 | 60 | 35 | 18.3 | 13.0 | 28.5 | 105.0 | 6 | 3 | 10.1 | 18.4 | 5 |
| M 16 | **371R16** | 185 | 240 | 28 | 60 | 35 | 18.3 | 17.0 | 28.5 | 105.0 | 6 | 3 | 9.3 | 17.6 | 5 |

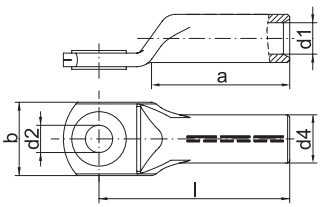
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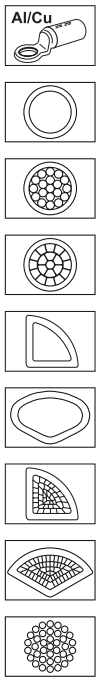
## Compression cable lugs, Al/Cu

| Size of bolt dia. | Part No. | Nominal cross section mm² | | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | rm/sm | re/se | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | | |
| M 20 | **371R20** | 185 | 240 | 28 | 60 | 35 | 18.3 | 21.0 | 28.5 | 107.5 | 6 | 3 | 10.1 | 18.4 | 5 |
| M 10 | **372R10** | 240 | 300 | 32 | 70 | 35 | 21.0 | 10.5 | 32 | 118.5 | 8 | 3 | 12.1 | 22.5 | 5 |
| M 12 | **372R12** | 240 | 300 | 32 | 70 | 35 | 21.0 | 13.0 | 32 | 118.5 | 8 | 3 | 11.8 | 22.2 | 5 |
| M 16 | **372R16** | 240 | 300 | 32 | 70 | 35 | 21.0 | 17.0 | 32 | 118.5 | 8 | 3 | 11.0 | 21.4 | 5 |
| M 20 | **372R20** | 240 | 300 | 32 | 70 | 35 | 21.0 | 21.0 | 32 | 118.5 | 8 | 3 | 10.1 | 20.5 | 5 |
| M 12 | **373R12** | 300 | -- | 34 | 70 | 36 | 23.3 | 13.0 | 34 | 123.5 | 8 | 3 | 17.7 | 33.7 | 2 |
| M 16 | **373R16** | 300 | -- | 34 | 70 | 36 | 23.3 | 17.0 | 34 | 123.5 | 8 | 3 | 16.9 | 32.9 | 2 |
| M 20 | **373R20** | 300 | -- | 34 | 70 | 40 | 23.3 | 21.0 | 34 | 123.5 | 8 | 3 | 16.0 | 32.0 | 1 |
| M 12 | **374R12** | 400 | -- | 38 | 73 | 40 | 26.0 | 13.0 | 38.5 | 150.5 | -- | 4 | 25.6 | 37.4 | 1 |

## Compression cable lugs, Al/Cu with Cu eye






- **For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182**
- **Tube dimension to DIN 46329**
- **For pre-rounded sector shaped conductors**
- **Unique tool assignment due to coding**
- **Filled with contact grease for optimum crimp characteristics**

### Characteristics

- For connecting non-tension aluminium connections using Cu-washers in humid areas
- With Cu eyelet in screw-on area
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

### Material

- E-aluminium
- Copper (EN13600)

### Surface

- Bright

### Technical instructions

- Tool: see page 115

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Size of bolt dia. | Part No. | Nominal cross section mm² | | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | rm/sm | re/se | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | | |
| M 6 | **302R6** | 10 | 16 | 10 | 32 | 18 | 5,0 | 6,5 | 10 | 52 | 4 | 2 | 0,260 | 1,20 | 10 |
| M 8 | **302R8** | 10 | 16 | 10 | 32 | 22 | 5,0 | 8,5 | 10 | 52 | 4 | 2 | 0,580 | 1,50 | 10 |
| | **303R8** | 16 | 25 | 12 | 32 | 22 | 5,8 | 8,5 | 12 | 52 | 4 | 2 | 0,600 | 1,95 | 10 |
| M 10 | **303R10** | 16 | 25 | 12 | 32 | 25 | 5,8 | 10,5 | 12 | 52 | 4 | 2 | 0,600 | 2,00 | 10 |
| M 8 | **304R8** | 25 | 35 | 12 | 38 | 22 | 6,8 | 8,5 | 12 | 60 | 4 | 2 | 0,625 | 2,00 | 10 |
| M 10 | **304R10** | 25 | 35 | 12 | 38 | 25 | 6,8 | 10,5 | 12 | 60 | 4 | 2 | 0,900 | 2,10 | 10 |
| | **305R10** | 35 | 50 | 14 | 42 | 26 | 8,0 | 10,5 | 14 | 67 | 5 | 2 | 0,800 | 3,00 | 10 |
| M 12 | **305R12** | 35 | 50 | 14 | 42 | 30 | 8,0 | 13,0 | 14 | 67 | 5 | 2 | 1,120 | 3,10 | 10 |
| M 10 | **306R10** | 50 | 70 | 16 | 45 | 27 | 9,8 | 10,5 | 16 | 72 | 5 | 2 | 0,900 | 3,60 | 10 |
| M 12 | **306R12** | 50 | 70 | 16 | 45 | 30 | 9,8 | 13,0 | 16 | 72 | 5 | 2 | 1,120 | 3,80 | 10 |
| M 10 | **307R10** | 70 | 95 | 18 | 55 | 29 | 11,2 | 10,5 | 18,5 | 86 | 6 | 3 | 1,075 | 5,60 | 10 |

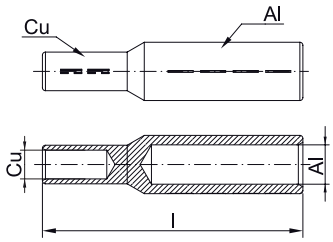
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## Compression cable lugs, Al/Cu with Cu eye

| Size of bolt dia. | Part No. | Nominal cross section mm² | | Code | Dimension mm | | | | | | Number of crimps | | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | rm/sm | re/se | | a | b | d1 | d2 | d4 | l | Al (7 mm) | Al (wide) | | | |
| M 12 | **307R12** | 70 | 95 | 18 | 55 | 32 | 11,2 | 13,0 | 18,5 | 86 | 6 | 3 | 1,300 | 5,70 | 10 |
| M 10 | **308R10** | 95 | 120 | 22 | 55 | 32 | 13,2 | 10,5 | 22 | 90 | 6 | 3 | 1,435 | 10,00 | 5 |
| M 12 | **308R12** | 95 | 120 | 22 | 55 | 35 | 13,2 | 13,0 | 22 | 90 | 6 | 3 | 1,735 | 9,50 | 5 |
| M 16 | **308R16** | 95 | 120 | 22 | 55 | 38 | 13,2 | 17,0 | 22 | 90 | 6 | 3 | 2,655 | 10,00 | 5 |
| M 12 | **309R12** | 120 | 150 | 22 | 55 | 35 | 14,7 | 13,0 | 23 | 91 | 6 | 3 | 1,810 | 8,70 | 5 |
| M 16 | **309R16** | 120 | 150 | 22 | 55 | 38 | 14,7 | 17,0 | 23 | 91 | 6 | 3 | 2,230 | 8,80 | 5 |
| M 12 | **310R12** | 150 | 185 | 25 | 63 | 35 | 16,3 | 13,0 | 25 | 103 | 6 | 3 | 2,025 | 12,20 | 5 |
| M 16 | **310R16** | 150 | 185 | 25 | 63 | 41 | 16,3 | 17,0 | 25 | 103 | 6 | 3 | 2,655 | 12,30 | 5 |
| M 20 | **310R20** | 150 | 185 | 25 | 63 | 44 | 16,3 | 21,0 | 25 | 103 | 6 | 3 | 3,620 | 12,80 | 5 |
| M 12 | **311R12** | 185 | 240 | 28 | 65 | 40 | 18,3 | 13,0 | 28 | 106 | 6 | 3 | 2,320 | 15,00 | 5 |
| M 16 | **311R16** | 185 | 240 | 28 | 65 | 42 | 18,3 | 17,0 | 28 | 106 | 6 | 3 | 4,975 | 15,50 | 5 |
| M 20 | **311R20** | 185 | 240 | 28 | 65 | 46 | 18,3 | 21,0 | 28 | 106 | 6 | 3 | 4,610 | 15,50 | 5 |
| M 12 | **312R12** | 240 | 300 | 32 | 70 | 45 | 21,0 | 13,0 | 32 | 116 | 8 | 3 | 2,750 | 20,00 | 5 |
| M 16 | **312R16** | 240 | 300 | 32 | 70 | 45 | 21,0 | 17,0 | 32 | 116 | 8 | 3 | 3,400 | 21,00 | 5 |
| M 20 | **312R20** | 240 | 300 | 32 | 70 | 49 | 21,0 | 21,0 | 32 | 116 | 8 | 3 | 4,600 | 22,00 | 5 |
| M 16 | **313R16** | 300 | -- | 34 | 75 | 51 | 23,3 | 17,0 | 34 | 124 | 8 | 3 | 3,980 | 21,60 | 1 |
| M 20 | **313R20** | 300 | -- | 34 | 75 | 51 | 23,3 | 21,0 | 34 | 124 | 8 | 3 | 5,510 | 22,20 | 1 |
| M 16 | **314R16** | 400 | -- | 38 | 95 | 58 | 26,0 | 17,0 | 38,5 | 165 | -- | 4 | 4,200 | 35,00 | 1 |
| M 20 | **314R20** | 400 | -- | 38 | 95 | 58 | 26,0 | 21,0 | 38,5 | 165 | -- | 4 | 5,950 | 35,00 | 1 |

# Compression joints, Al/Cu





























- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- For Cu round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6
- For non-tension copper cables, e.g. to DIN 48201-1
- For pre-rounded sector shaped conductors
- Tube dimension to DIN 46235 part 1 and 2
- With code number for clear tool assignment

## Characteristics

- For connecting non-tension aluminium and copper conductors
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

## Material

- E-aluminium
- Copper (EN13600)

## Surface

- Bright

## Technical instructions

- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter „Sleeves for compacted conductors and sector shaped conductors - Cu“
- Reduction sleeves for connecting unequal cross-sections can be found on page 68
- Tool: see page 115

## Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Part No. | Nominal cross section mm² | | | Dimension mm | | | Code | | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Al rm/sm | Al re/se | Cu re/rm/se/sm | l | Inner dia. Al | Inner dia. Cu | Al | Cu | | | |
| **322R10** | 10 | | 10 | 55.0 | 5.0 | 4.5 | 10 | 6 | 0.212 | 1.100 | 4 |
| **322R16** | 10 | | 16 | 61.0 | 5.0 | 5.4 | 10 | 8 | 0.714 | 1.550 | 4 |
| **323R10** | 16 | | 10 | 55.0 | 6.0 | 4.5 | 12 | 6 | 0.212 | 1.500 | 4 |
| **323R16** | 16 | | 16 | 61.0 | 6.0 | 5.4 | 12 | 8 | 0.714 | 1.750 | 4 |
| **324R10** | 25 | 35 | 10 | 55.0 | 6.8 | 4.5 | 12 | 6 | 0.212 | 1.400 | 4 |
| **324R16** | 25 | 35 | 16 | 61.0 | 6.8 | 5.5 | 12 | 8 | 0.714 | 1.650 | 4 |
| **324R25** | 25 | 35 | 25 | 61.0 | 6.8 | 7.0 | 12 | 10 | 0.892 | 1.900 | 4 |
| **324R35** | 25 | 35 | 35 | 61.0 | 6.8 | 8.2 | 12 | 12 | 1.624 | 2.000 | 4 |
| **324R50** | 25 | 35 | 50 | 72.0 | 6.8 | 10.0 | 12 | 14 | 2.362 | 3.500 | 4 |
| **324R416** | 25/4 | 35 | 16 | 61.0 | 7.6 | 5.5 | 12 | 8 | 0.714 | 1.600 | 4 |
| **324R425** | 25/4 | 35 | 25 | 61.0 | 7.6 | 7.0 | 12 | 10 | 0.892 | 1.850 | 4 |
| **325R16** | 35 | 50 | 16 | 71.0 | 8.0 | 5.5 | 14 | 8 | 0.714 | 2.500 | 4 |
| **325R25** | 35 | 50 | 25 | 71.0 | 8.0 | 7.0 | 14 | 10 | 0.892 | 2.650 | 4 |
| **325R35** | 35 | 50 | 35 | 71.0 | 8.0 | 8.2 | 14 | 12 | 1.519 | 3.300 | 4 |
| **325R50** | 35 | 50 | 50 | 77.0 | 8.0 | 10.0 | 14 | 14 | 2.362 | 3.530 | 4 |
| **325R616** | 35/6 | 50 | 16 | 71.0 | 9.0 | 5.5 | 14 | 8 | 0.714 | 2.450 | 4 |
| **325R625** | 35/6 | 50 | 25 | 71.0 | 9.0 | 7.0 | 14 | 10 | 0.892 | 2.600 | 4 |
| **325R635** | 35/6 | 50 | 35 | 71.0 | 9.0 | 8.2 | 14 | 12 | 1.624 | 3.250 | 4 |
| **326R16** | 50 | 70 | 16 | 71.5 | 9.8 | 5.5 | 16 | 8 | 0.714 | 2.850 | 4 |
| **326R25** | 50 | 70 | 25 | 71.5 | 9.8 | 7.0 | 16 | 10 | 0.892 | 3.200 | 4 |
| **326R35** | 50 | 70 | 35 | 71.5 | 9.8 | 8.2 | 16 | 12 | 1.624 | 3.800 | 4 |
| **326R50** | 50 | 70 | 50 | 77.5 | 9.8 | 10.0 | 16 | 14 | 2.362 | 4.550 | 4 |
| **327R16** | 70 | 95 | 16 | 79.0 | 11.2 | 5.5 | 18 | 8 | 0.714 | 4.100 | 4 |

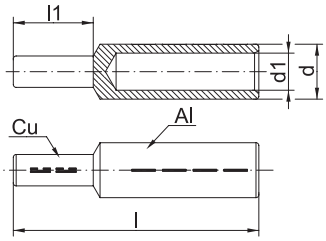
see next page

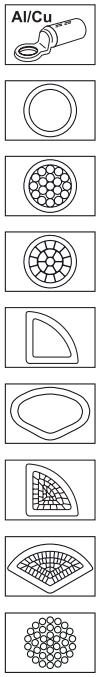
## Compression joints, Al/Cu

| Part No. | Nominal cross section mm² | | | Dimension mm | | | Code | | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Al rm/sm | Al re/se | Cu re/rm/se/sm | l | Inner dia. Al | Inner dia. Cu | Al | Cu | | | |
| **327R25** | 70 | 95 | 25 | 79.0 | 11.2 | 7.0 | 18 | 10 | 0.892 | 3.950 | 4 |
| **327R35** | 70 | 95 | 35 | 79.0 | 11.2 | 8.2 | 18 | 12 | 1.624 | 4.900 | 4 |
| **327R50** | 70 | 95 | 50 | 85.0 | 11.2 | 10.0 | 18 | 14 | 2.362 | 5.700 | 4 |
| **327R70** | 70 | 95 | 70 | 86.0 | 11.2 | 11.5 | 18 | 16 | 2.921 | 7.250 | 4 |
| **327R95** | 70 | 95 | 95 | 95.0 | 11.2 | 13.5 | 18 | 18 | 4.957 | 9.360 | 4 |
| **327R120** | 70 | 95 | 120 | 99.0 | 11.2 | 15.5 | 18 | 20 | 5.640 | 10.540 | 4 |
| **328R16** | 95 | 120 | 16 | 79.0 | 13.2 | 5.5 | 22 | 8 | 0.714 | 6.150 | 4 |
| **328R25** | 95 | 120 | 25 | 79.0 | 13.2 | 7.0 | 22 | 10 | 0.892 | 6.300 | 4 |
| **328R35** | 95 | 120 | 35 | 79.0 | 13.2 | 8.2 | 22 | 12 | 1.519 | 6.800 | 4 |
| **328R50** | 95 | 120 | 50 | 85.0 | 13.2 | 10.0 | 22 | 14 | 2.362 | 8.050 | 4 |
| **328R70** | 95 | 120 | 70 | 87.0 | 13.2 | 11.5 | 22 | 16 | 3.105 | 8.200 | 4 |
| **328R95** | 95 | 120 | 95 | 95.0 | 13.2 | 13.5 | 22 | 18 | 4.957 | 10.350 | 4 |
| **328R120** | 95 | 120 | 120 | 95.0 | 13.2 | 15.5 | 22 | 20 | 5.640 | 11.550 | 4 |
| **329R35** | 120 | 150 | 35 | 81.0 | 14.7 | 8.2 | 22 | 12 | 1.519 | 7.600 | 4 |
| **329R50** | 120 | 150 | 50 | 87.0 | 14.7 | 10.0 | 22 | 14 | 2.362 | 7.900 | 4 |
| **329R70** | 120 | 150 | 70 | 89.0 | 14.7 | 11.5 | 22 | 16 | 3.105 | 8.500 | 4 |
| **329R95** | 120 | 150 | 95 | 97.0 | 14.7 | 13.5 | 22 | 18 | 4.857 | 11.000 | 4 |
| **329R120** | 120 | 150 | 120 | 97.0 | 14.7 | 15.5 | 22 | 20 | 5.640 | 10.280 | 4 |
| **330R16** | 150 | 185 | 16 | 91.5 | 16.3 | 5.4 | 25 | 8 | 0.714 | 7.800 | 4 |
| **330R25** | 150 | 185 | 25 | 91.5 | 16.3 | 6.8 | 25 | 10 | 0.892 | 8.000 | 4 |
| **330R35** | 150 | 185 | 35 | 91.5 | 16.3 | 8.2 | 25 | 12 | 1.624 | 8.400 | 4 |
| **330R50** | 150 | 185 | 50 | 98.5 | 16.3 | 10.0 | 25 | 14 | 2.362 | 10.200 | 4 |
| **330R70** | 150 | 185 | 70 | 99.5 | 16.3 | 11.5 | 25 | 16 | 3.105 | 10.350 | 4 |
| **330R95** | 150 | 185 | 95 | 107.5 | 16.3 | 13.5 | 25 | 18 | 4.957 | 12.650 | 4 |
| **330R120** | 150 | 185 | 120 | 107.5 | 16.3 | 15.5 | 25 | 20 | 5.640 | 13.900 | 4 |
| **330R150** | 150 | 185 | 150 | 124.0 | 16.3 | 17.0 | 25 | 22 | 8.231 | 16.700 | 4 |
| **331R50** | 185 | 240 | 50 | 99.0 | 18.3 | 10.0 | 28 | 14 | 2.362 | 12.100 | 1 |
| **331R70** | 185 | 240 | 70 | 100.0 | 18.3 | 11.5 | 28 | 16 | 3.105 | 13.000 | 1 |
| **331R95** | 185 | 240 | 95 | 108.0 | 18.3 | 13.5 | 28 | 18 | 4.957 | 14.450 | 1 |
| **331R120** | 185 | 240 | 120 | 108.0 | 18.3 | 15.5 | 28 | 20 | 5.640 | 13.720 | 1 |
| **331R150** | 185 | 240 | 150 | 113.0 | 18.3 | 17.0 | 28 | 22 | 8.231 | 19.550 | 1 |
| **331R185** | 185 | 240 | 185 | 116.0 | 18.3 | 19.0 | 28 | 25 | 9.621 | 21.000 | 1 |
| **332R50** | 240 | 300 | 50 | 110.0 | 21.0 | 10.0 | 32 | 14 | 2.362 | 16.500 | 1 |
| **332R70** | 240 | 300 | 70 | 111.0 | 21.0 | 11.5 | 32 | 16 | 3.105 | 18.000 | 1 |
| **332R95** | 240 | 300 | 95 | 119.0 | 21.0 | 13.5 | 32 | 18 | 4.957 | 19.000 | 1 |
| **332R120** | 240 | 300 | 120 | 119.0 | 21.0 | 15.5 | 32 | 20 | 5.640 | 20.500 | 1 |
| **332R150** | 240 | 300 | 150 | 124.0 | 21.0 | 17.0 | 32 | 22 | 8.231 | 23.300 | 1 |
| **332R185** | 240 | 300 | 185 | 127.0 | 21.0 | 19.0 | 32 | 25 | 9.621 | 25.500 | 1 |
| **332R240** | 240 | 300 | 240 | 128.0 | 21.0 | 21.5 | 32 | 28 | 12.705 | 30.100 | 1 |
| **333R120** | 300 | -- | 120 | 119.0 | 23.5 | 15.5 | 34 | 20 | 5.640 | 27.800 | 1 |
| **333R150** | 300 | -- | 150 | 124.0 | 23.5 | 17.0 | 34 | 22 | 8.234 | 31.100 | 1 |
| **333R185** | 300 | -- | 185 | 127.0 | 23.5 | 19.0 | 34 | 25 | 9.621 | 32.700 | 1 |
| **333R240** | 300 | -- | 240 | 128.0 | 23.5 | 21.5 | 34 | 28 | 12.705 | 37.500 | 1 |
| **333R300** | 300 | -- | 300 | 134.0 | 23.5 | 24.5 | 34 | 32 | 16.099 | 41.700 | 1 |

## Compression joints with Cu bolts, Al






- For non-tension connections of aluminium conductors to DIN EN 60228 and aluminium cables to DIN EN 50182
- For pre-rounded sector shaped conductors
- Tube dimension to DIN 46267, part 2
- Unique tool assignment due to coding

### Characteristics

- For screwing non-tension aluminium conductors into copper terminals
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer

### Material

- E-aluminium
- Copper (EN13600)

### Surface

- Bright

### Technical instructions

- Tool: see page 115

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded

| Part No. | Nominal cross section mm² | | Code | Dimension mm | | | | Bolt mm dia. | Conductor mm dia. | Weight 100 St. ~kg Cu | Weight 100 St. ~kg total | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | rm/sm | re/se | | d Ø | d1 | l | l1 | | | | | |
| **344R** | 25 | 35 | 12 | 12.0 | 6.8 | 58 | 20 | 6 | 6.3 | 0.462 | 1.6 | 10 |
| **345R** | 35 | 50 | 14 | 14.0 | 8.0 | 71 | 22 | 7 | 7.5 | 0.695 | 2.5 | 10 |
| **346R** | 50 | 70 | 16 | 16.0 | 10.0 | 74 | 25 | 8 | 9.0 | 1.037 | 3.3 | 10 |
| **347R** | 70 | 95 | 18 | 18.5 | 11.5 | 87 | 30 | 10 | 10.5 | 1.958 | 5.4 | 10 |
| **348R** | 95 | 120 | 22 | 23.0 | 13.2 | 91 | 33 | 12 | 12.5 | 3.112 | 8.7 | 10 |
| **349R** | 120 | 150 | 22 | 23.0 | 15.0 | 97 | 38 | 12 | 14.0 | 3.598 | 9.0 | 10 |
| **350R** | 150 | 185 | 25 | 25.5 | 16.5 | 108 | 38 | 12 | 15.8 | 3.598 | 10.9 | 10 |
| **351R** | 185 | 240 | 28 | 28.5 | 18.5 | 116 | 44 | 14 | 17.5 | 3.692 | 15.7 | 5 |
| **352R** | 240 | 300 | 32 | 32.5 | 21.5 | 128 | 44 | 16 | 20.3 | 7.435 | 21.8 | 5 |
| **353R** | 300 | -- | 34 | 34.5 | 23.5 | 131 | 46 | 18 | 22.5 | 9.410 | 26.7 | 1 |

## Cupal washers

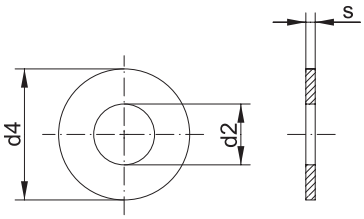


### Characteristics

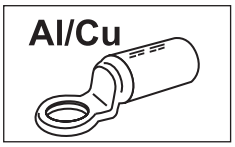
- Flat washer for processing aluminium and copper cable lugs
- For connecting copper conductors to aluminium in dry environments
- For connecting aluminium conductors to copper in dry environments
- Can also be used for connecting tinned aluminium cable lugs in humid environments

### Material

- E-Al, one side copper plated




| Size of bolt dia. | Part No. | Dimension mm | | | Weight 100 pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | d2 | d4 | s | | |
| M 6 | **CS615** | 6.5 | 15 | 2 | 0.06 | 10 |
| M 8 | **CS818** | 8.5 | 18 | 2 | 0.09 | 10 |
| M 10 | **CS1022** | 11.0 | 22 | 2 | 0.26 | 10 |
| M 12 | **CS1228** | 13.0 | 28 | 2 | 0.44 | 10 |
| M 14 | **CS1428** | 15.0 | 28 | 2 | 0.40 | 10 |
| M 16 | **CS1635** | 17.0 | 35 | 2 | 0.66 | 10 |




## Tool application chart

**Compression cable lugs and connectors made from Al/Cu**
**The tools of the copper side of our Al/Cu compression joints you will find in the tool application chart of copper compression cable lugs and connectors acc. to DIN**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 10-70 | K354 | | 246 | 331 | ⬡ |
| | 10-185 | K18 | | 248 | 339 | ⬡ |
| | 10-240 | K22 | | 250 | 344 | ⬡ |
| Hand hydraulic crimping tools | 10-185 | HK6018 | | 292 | 339 | ⬡ |
| | | HK60UNV | +UA18 | 473 | 339 | ⬡ |
| | 10-300 | HK6022 | | 294 | 344 | ⬡ |
| | | HK60UNV | +UA22 | 473 | 344 | ⬡ |
| | | HK12030 | | 298 | 350 | ⬡ |
| | | HK12042 | | 300 | 350 | ⬡ |
| | | HK120U | | 302 | 350 | ⬡ |
| | 150-500 | HK45 | | 321 | 358 | ⬡ |
| Battery powered crimping tools | 10-7 | EK354ML | | 262 | 331 | ⬡ |
| | | EK354 | | 266 | 331 | ⬡ |
| | 10-185 | EK5018 | | 270 | 339 | ⬡ |
| | | EK60UNV | +UA18 | 476 | 339 | ⬡ |
| | | EKM60UNV | +UA18 | 475 | 339 | ⬡ |
| | 10-300 | EK6022 | | 274 | 344 | ⬡ |
| | | EKM6022 | | 272 | 344 | ⬡ |
| | | EK60UNV | +UA22 | 476 | 344 | ⬡ |
| | | EKM60UNV | +UA22 | 475 | 344 | ⬡ |
| | | EK12032 | | 280 | 350 | ⬡ |
| | | EK12042 | | 282 | 350 | ⬡ |
| | | EK120U | | 284 | 350 | ⬡ |
| | | EK135FT | +UA15T | 286 | 350 | ⬡ |
| | | EK120UNV | +UA12T | 477 | 350 | ⬡ |
| | 50-240 | EKM60ID | | 278 | | ◡ |
| Hydraulic crimping systems | 10-185 | THK18 | | 306 | 339 | ⬡ |
| | 10-300 | THK22 | | 308 | 344 | ⬡ |
| | | HK122EL380 | | 322 | 350 | ⬡ |
| | 10-500 | HK252 | | 320 | 355 | ⬡ |
| | | HK252EL380 | | 323 | 355 | ⬡ |
| Hydraulic crimping heads | 10-185 | PK18 | | 306 | 339 | ⬡ |
| | | PK60UNV | +UA18 | 474 | 339 | ⬡ |
| | 10-300 | PK22 | | 308 | 344 | ⬡ |
| | | PK60UNV | +UA22 | 474 | 344 | ⬡ |
| | | PK12042 | | 312 | 350 | ⬡ |
| | | PK120U | | 314 | 350 | ⬡ |
| | 10-500 | PK252 | | 316 | 355 | ⬡ |
| | 150-500 | PK45 | | 318 | 358 | ⬡ |

# UNCOMPLICATED – CLAMPS AND SCREW CONNECTORS

Simple connecting of dissimilar materials and cross-sections. Made possible by Klauke clamps and screw connectors: They suit all standard sizes and materials. In compliance with the specified safety measures, compact tab connectors, for instance, can be installed even when live. All very straightforward.



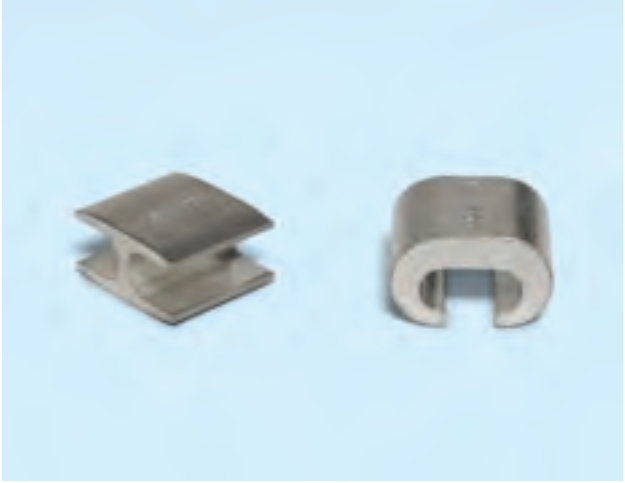
**In brief**

- Simple branching without having to cut the main conductor with Klauke H and C clamps
- H clamps to DIN EN 50164-1 short-circuit current tested
- Also available in a barrier version for Al/Cu connections

## Continuously connected

Save yourself the trouble, the conductor does not need to be cut. Various nominal cross-sections can be clamped with multi-purpose clamps.

- Flexible due to the large cross-sectional range, C-clamps from 2.5 mm² to 185 mm² nominal cross-sections, H-clamps from 70 mm² nominal cross-section
- Efficient connections, without having to cut the main conductor.
- Straightforward connection of various cross-sections.





## Screwing instead of crimping

Connect the conductors using screws. Why? Because no special tools are needed. Screws are available for every application. To make sure they last, all our screw connectors are produced from high-quality materials. Simply an efficient solution!

- Connections from 2.5 mm² to 185 mm² nominal cross-section
- No special tool required
- The right screw solution to suit a host of requirements
- For aluminium and copper conductors
- For round and sector shaped conductors
- For conductors and wires

## Clamps for continuous supply

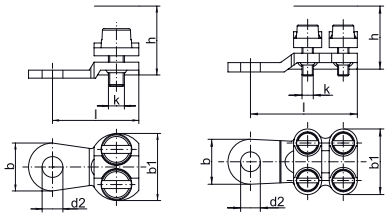
We don't abandon your supply. With Klauke clamps, your operation can continue without outage, you carry out the installation even while live. No standstill, the operation continues.

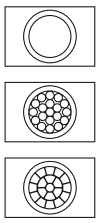
- Especially suitable for the energy supply industry
- Can be installed while live
- Main conductor remains intact
- Different versions available for 3 and 4 core cables



## Punched cable lugs, Cu





▸ **For connecting of round conductors to DIN EN 60228 Cl. 1 and 2, for example in lightning protection areas**

### Characteristics
- Also for outdoor assembly
- Available with 2 or 4 screws

### Material
- Copper (ETP)
- Screws: DIN 84 / DIN 933 bronze, F 60

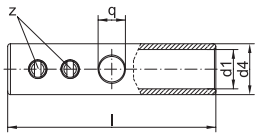
### Surface
- Tin-plated to protect against corrosion

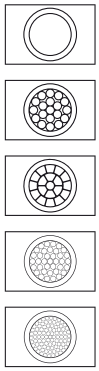
### Additional information
- Part Number appendix for bright version „BK“

| Nominal cross section mm² | Part No. | Dimension mm | | | | | | Number of screws | Torque Nm | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | b | b1 | d2 | k | h | l | | | | |
| 6 - 10 | **572R6** | 15.0 | 18.0 | 6.5 | M4 | 10 | 23.0 | 2 | 4 | 1.30 | 50 |
| 10 - 16 | **573R6** | 15.0 | 20.5 | 6.5 | M5 | 14 | 27.0 | 2 | 6 | 1.30 | 50 |
| | **573R8** | 15.0 | 20.5 | 8.5 | M5 | 14 | 27.0 | 2 | 6 | 1.30 | 50 |
| 16 - 25 | **574R8** | 15.0 | 25.0 | 8.5 | M5 | 16 | 30.0 | 2 | 6 | 2.75 | 50 |
| | **584R8** | 18.5 | 22.5 | 8.5 | M5 | 16 | 36.0 | 4 | 6 | 3.70 | 25 |
| | **584R10** | 19.5 | 22.5 | 10.5 | M5 | 16 | 37.0 | 4 | 6 | 3.75 | 25 |
| 25 - 35 | **575R8** | 18.5 | 24.0 | 8.5 | M5 | 16 | 25.5 | 2 | 6 | 2.50 | 50 |
| | **585R8** | 18.5 | 24.0 | 8.5 | M5 | 16 | 38.5 | 4 | 6 | 4.30 | 25 |
| | **585R10** | 21.5 | 24.0 | 10.5 | M5 | 16 | 42.0 | 4 | 6 | 4.65 | 25 |
| | **585R12** | 21.5 | 24.0 | 13.0 | M5 | 16 | 42.0 | 4 | 6 | 4.50 | 25 |
| 35 - 50 | **586R10** | 19.0 | 28.0 | 10.5 | M6 | 19 | 46.0 | 4 | 8 | 6.75 | 25 |
| | **586R12** | 21.0 | 28.0 | 13.0 | M6 | 19 | 47.0 | 4 | 8 | 6.70 | 25 |
| 50 - 70 | **587R10** | 23.5 | 31.0 | 10.5 | M6 | 19 | 51.0 | 4 | 8 | 9.35 | 10 |
| | **587R12** | 23.5 | 31.0 | 13.0 | M6 | 19 | 51.0 | 4 | 8 | 9.30 | 10 |
| 70 - 95 | **588R10** | 24.0 | 34.0 | 10.5 | M6 | 25 | 57.0 | 4 | 8 | 12.00 | 10 |
| | **588R12** | 24.0 | 34.0 | 13.0 | M6 | 25 | 57.0 | 4 | 8 | 11.85 | 10 |
| 95 - 150 | **589R10** | 30.0 | 42.0 | 10.5 | M8 | 32 | 61.0 | 4 | 20 | 20.15 | 10 |
| | **589R12** | 30.0 | 42.0 | 13.0 | M8 | 32 | 61.0 | 4 | 20 | 20.20 | 10 |
| | **589R16** | 30.0 | 42.0 | 17.0 | M8 | 32 | 61.5 | 4 | 20 | 20.10 | 10 |
| 150 - 240 | **590R10** | 34.0 | 48.5 | 10.5 | M8 | 32 | 68.5 | 4 | 20 | 24.40 | 5 |
| | **590R12** | 34.0 | 48.5 | 13.0 | M8 | 32 | 68.5 | 4 | 20 | 24.35 | 5 |
| | **590R16** | 34.0 | 48.5 | 17.0 | M8 | 32 | 68.5 | 4 | 20 | 24.30 | 5 |
| | **590R20** | 36.0 | 48.5 | 21.0 | M8 | 32 | 70.5 | 4 | 20 | 24.25 | 5 |
| 185 - 300 | **592R12** | 32.0 | 50.0 | 13.0 | M8 | 37 | 68.5 | 4 | 20 | 27.95 | 5 |
| | **592R16** | 32.0 | 50.0 | 17.0 | M8 | 37 | 68.5 | 4 | 20 | 28.00 | 5 |
| | **592R20** | 34.5 | 50.5 | 21.0 | M8 | 37 | 70.0 | 4 | 20 | 27.95 | 5 |

## Tubular soldering sleeves, CuZn





- For round conductors, e.g. to DIN EN 60228 Cl. 1, 2, 5 and 6
- Processed without using a crimping tool

### Characteristics

- Simple processing due to fixed screws and solder hole

### Material

- CuZn 40 Pb 2
- Screws: Steel to DIN 551

### Surface

- Tin-plated to protect against corrosion

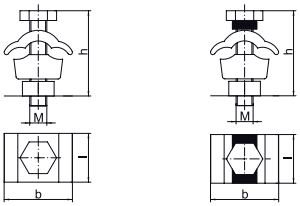
### Technical instructions

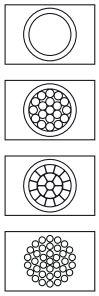
- A connection needs to be soldered

| Nominal cross section mm² | Part No. | Dimension mm | | | | Number of set screws z | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | d1 | d4 | l | Diameter q | | | |
| 6 | **551R** | 3.5 | 7 | 25 | 3.3 | 2 | 0.60 | 10 |
| 10 | **552R** | 4.5 | 6 | 30 | 3.3 | 2 | 1.20 | 10 |
| 16 | **553R** | 5.5 | 10 | 40 | 4.2 | 4 | 1.90 | 10 |
| 25 | **554R** | 7.0 | 12 | 45 | 4.2 | 4 | 2.85 | 10 |
| 35 | **555R** | 8.5 | 13 | 45 | 5.0 | 4 | 3.00 | 10 |
| 50 | **556R** | 10.0 | 15 | 48 | 5.0 | 4 | 4.00 | 10 |
| 70 | **557R** | 12.0 | 18 | 52 | 6.8 | 4 | 6.30 | 10 |
| 95 | **558R** | 13.5 | 20 | 55 | 6.8 | 4 | 8.05 | 10 |
| 120 | **559R** | 15.0 | 22 | 60 | 6.8 | 4 | 9.90 | 10 |
| 150 | **560R** | 17.0 | 24,5 | 64 | 6.8 | 4 | 11.80 | 5 |
| 185 | **561R** | 19.0 | 26 | 70 | 6.8 | 10 | 14.30 | 5 |
| 240 | **562R** | 21.0 | 28 | 70 | 6.8 | 10 | 15.50 | 5 |
| 300 | **563R** | 24.0 | 32 | 75 | 6.8 | 10 | 19.30 | 1 |

## Parallel groove clamps, Cu, 1 screw





- For non-tension copper cables acc. to DIN 48201 part 1
- For screwing conductors acc. to DIN EN 60228 Class 1 and 2

### Characteristics

- Also for outdoor assembly
- Version with 1 screw
- Optionally available with thrust plate for equal pressure distribution

### Material

- Copper (ETP)
- Screws:Bronze F 60
- Nut: copper

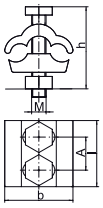
### Surface

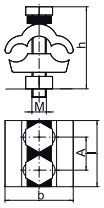
- Bright

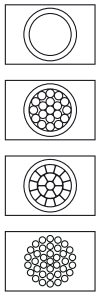
| Nominal cross section mm² | Part No. | Dimension mm | | | M | Torque Nm | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | b | h | l | | | | |
| Without thrust plate | | | | | | | | |
| 2.5 - 16 | **SAK10** | 19.5 | 16 | 16 | M5 | 6 | 2.10 | 10 |
| 2.5 - 25 | **SAK12** | 25.0 | 21 | 18 | M6 | 8 | 4.10 | 10 |
| | **SAK14** | 25.0 | 22 | 20 | M7 | 14 | 3.95 | 10 |
| 6 - 35 | **SAK16** | 28.0 | 23 | 20 | M7 | 14 | 6.0 | 10 |
| 6 - 50 | **SAK18** | 32.5 | 26 | 24 | M7 | 14 | 8.0 | 10 |
| | **SAK20** | 33.5 | 27 | 22 | M8 | 20 | 8.6 | 10 |
| 6 - 70 | **SAK22** | 37.5 | 29 | 24 | M8 | 20 | 11.1 | 5 |
| 10 - 95 | **SAK24** | 41.0 | 36 | 28 | M8 | 20 | 15.6 | 5 |
| With thrust plate | | | | | | | | |
| 2.5 - 16 | **SAK11** | 19.5 | 16 | 16 | M5 | 6 | 2.6 | 10 |
| 2.5 - 25 | **SAK13** | 25.0 | 21 | 18 | M6 | 8 | 4.30 | 10 |
| | **SAK15** | 25.0 | 22 | 18 | M7 | 14 | 4.6 | 10 |
| 6 - 35 | **SAK17** | 28.0 | 23 | 20 | M7 | 14 | 6.3 | 10 |
| 6 - 50 | **SAK19** | 32.5 | 26 | 20 | M7 | 14 | 7.9 | 10 |
| | **SAK21** | 33.5 | 27 | 22 | M8 | 20 | 9.1 | 10 |
| 6 - 70 | **SAK23** | 37 | 29 | 24 | M8 | 20 | 11.6 | 5 |
| 10 - 95 | **SAK25** | 45.0 | 36 | 31 | M10 | 39 | 19.60 | 5 |

## Parallel groove clamps, Cu, 2 screws





- For non-tension copper cables acc. to DIN 48201 part 1
- For screwing conductorsacc. to DIN EN 60228 Cl. 1 and 2

### Characteristics

- Also for outdoor assembly
- Version with 2 screws
- Optionally available with thrust plate for equal pressure distribution

### Material

- Copper (ETP)
- Screws:Bronze F 60
- Nut: copper

### Surface

- Bright

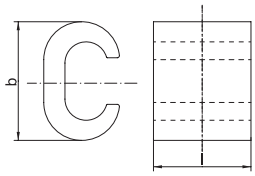
### Technical instructions

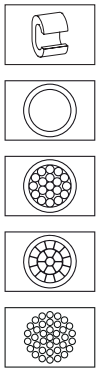
- When connecting cross sections 95, 120 and 150 mm² two power branch clamps are to be used due to the current carrying capacity.

| Nominal cross section mm² | Part No. | Dimension mm | | | A | M | Torque Nm | Weight/pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | b | h | l | | | | | |
| Without thrust plate | | | | | | | | | |
| 2.5 - 16 | **SAK30** | 20.5 | 16.0 | 24 | 13.0 | M5 | 6 | 3.7 | 10 |
| 2.5 - 25 | **SAK32** | 25.5 | 21 | 27 | 13.5 | M6 | 8 | 6.4 | 10 |
| | **SAK34** | 25.0 | 22 | 30 | 15.0 | M7 | 14 | 7.7 | 10 |
| 6 - 35 | **SAK36** | 30.0 | 23 | 30 | 15 | M7 | 14 | 8.5 | 10 |
| 6 - 50 | **SAK38** | 33.0 | 26 | 32 | 16.0 | M7 | 14 | 12.3 | 10 |
| 10 - 50 | **SAK40** | 32.5 | 27 | 36 | 18.0 | M8 | 20 | 12.9 | 10 |
| 16 - 150 | **SAK46** | 52.5 | 40 | 52 | 26.0 | M10 | 39 | 37.4 | 5 |
| With thrust plate | | | | | | | | | |
| 2.5 - 16 | **SAK31** | 19.5 | 16 | 24 | 13.0 | M5 | 6 | 4.1 | 10 |
| 2.5 - 25 | **SAK33** | 25.5 | 21 | 27 | 14.0 | M6 | 8 | 7.0 | 10 |
| | **SAK35** | 25.0 | 22 | 30 | 15.0 | M7 | 14 | 7.9 | 10 |
| 6 - 35 | **SAK37** | 28.0 | 23 | 32 | 16.0 | M7 | 14 | 10.2 | 10 |
| 6 - 50 | **SAK39** | 33.0 | 26 | 32 | 17.0 | M7 | 14 | 12.8 | 10 |
| | **SAK41** | 32.5 | 27 | 34.5 | 18.0 | M8 | 20 | 14.7 | 10 |
| 6 - 70 | **SAK43** | 37.0 | 29 | 38.5 | 19.0 | M8 | 20 | 19.1 | 5 |
| 10 - 95 | **SAK45** | 41.0 | 36 | 42 | 20.0 | M8 | 20 | 25.0 | 5 |
| 16 - 150 | **SAK47** | 52.5 | 40 | 52 | 26.0 | M10 | 39 | 39.0 | 5 |

## Branch clamps in C-type, Cu





- For non-tension copper cables, e.g. to DIN 48201-1
- Ideal for clamping identical conductor cross-sections e.g. to VDE 60228 Cl. 1 and 2
- No need to cut the main conductor

**Material**
- Copper (ETP)

**Surface**
- Tin-plated to protect against corrosion

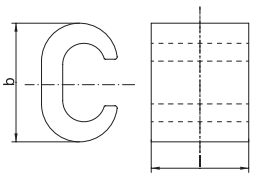
**Technical instructions**
- Optimum conducting characteristics in combination with compound
- Tool: see page 133

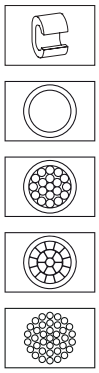
**Additional information**
- Part Number appendix for bright version „BK“
- rm = round multi-stranded; re = round single solid
- * = Also suitable for 25 mm² round solid

| Part No. | Hint | Cross section main conductor mm² rm/re | | Hint | Dimension mm | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | Main conductor | Tab conductor | | b | l | | |
| **CK16** | | 16/25 | 16/25 | | 16.0 | 15 | 0.94 | 25 |
| **CK25** | * | 25/35 | 25/35 | * | 20.0 | 16 | 1.68 | 25 |
| **CK35** | | 35/50 | 35/50 | | 25.7 | 22 | 3.42 | 25 |
| **CK50** | | 50/- | 50/- | | 28.0 | 23 | 4.88 | 25 |
| **CK70** | | 70/- | 70/- | | 34.0 | 28 | 9.69 | 10 |
| **CK95** | | 95/- | 95/- | | 35.0 | 28 | 7.30 | 10 |

## Branch clamps in C-type, Cu, multi-purpose clamps





- For non-tension copper cables, e.g. to DIN 48201-1
- Ideal for clamping non-identical conductor cross-sections e.g. to VDE 60228 Cl. 1 and 2
- No need to cut the main conductor

**Material**
- Copper (ETP)

**Surface**
- Tin-plated to protect against corrosion

**Technical instructions**
- Optimum conducting characteristics in combination with compound
- Tool: see page 133

**Additional information**
- Part Number appendix for bright version „BK“
- rm = round multi-stranded; re = round single solid

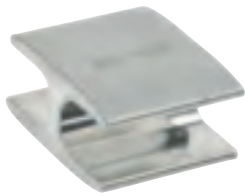
| Part No. | Cross section main conductor mm² rm/re | | Dimension mm | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | Main conductor | Tab conductor | b | l | | |
| **MCK1010** | 6 - 10/10 | 4 - 6/4 - 10 | 12.0 | 12 | 0.460 | 25 |
| **MCK1016** | 10 - 16/16 | 4 - 10/4 - 10 | 19.0 | 17 | 1.900 | 25 |
| **MCK1025** | 16 - 25/25 | 4 - 10/4 - 10 | 19.0 | 17 | 1.900 | 25 |
| **MCK3535** | 16 - 25/25 - 35 | 16 - 25/16 - 35 | 20.0 | 17 | 1.750 | 25 |
| **MCK2550** | 35/50 | 4 - 25/4 - 25 | 24.8 | 23 | 4.400 | 25 |
| **MCK5050** | 35/50 | 16 - 35/25 - 50 | 26.5 | 23 | 4.200 | 25 |
| **MCK3570** | 50 - 70/- | 4 - 35/4 - 35 | 33.8 | 28 | 10.700 | 10 |

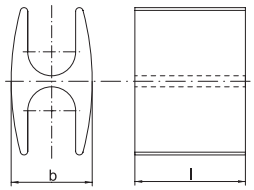
See next page

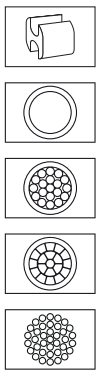
## Branch clamps in C-type, Cu, multi-purpose clamps

| Part No. | Cross section main conductor mm² rm/re | | Dimension mm | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | Main conductor | Tab conductor | b | l | | |
| **MCK3595** | 95/- | 16 - 35 | 41.0 | 30 | 15.000 | 10 |
| **MCK7095** | 95/- | 35 - 70 | 41.0 | 30 | 14.000 | 10 |
| **MCK120120** | 120/- | 35 - 120 | 45.0 | 30 | 16.550 | 10 |
| **MCK150150** | 150/- | 70 - 150 | 53.0 | 35 | 23.000 | 5 |
| **MCK185185** | 185/- | 95 - 185 | 60.0 | 40 | 33.000 | 5 |

## Branch clamps in H-type, Cu





- For non-tension copper cables, e.g. to DIN 48201-1
- Ideal for clamping identical conductor cross-sect. e.g. to DIN EN 60228 Cl. 1 and 2
- Lightning protection tested to EN 50164-1
- No need to cut the main conductor

### Characteristics

- H-shape allows simple processing
- Optimum conducting characteristics when used with compound

### Material

- Copper (ETP)

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 134

### Additional information

- Part Number appendix for bright version „BK“
- * = To EN 50164-1 lightning current tested

| Part No. | Cross section main conductor mm² rm/re | | Hint | Dimension mm | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | Main conductor | Tab conductor | | b | l | | |
| **AH7070** | 70 | 70 | * | 17.0 | 28.0 | 6.5 | 25 |
| **AH9595** | 95 | 95 | | 22.0 | 30.0 | 10.0 | 25 |
| **AH120120** | 120 | 120 | | 24.0 | 25.0 | 9.8 | 25 |

## Compound for branch clamps



- Optimum conductivity properties for processing aluminium cable lugs and connectors and branch clamps (C and H-type)

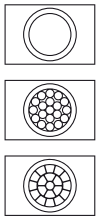
### Characteristics

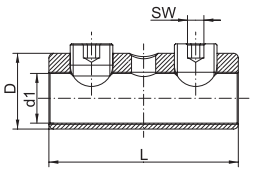
- Water-resistant, with corundum for destroying the oxidation layer
- Content/tin: 0.125 kg

| Part No. |
|---|
| **KF125** |

## Screw connectors for shielded copper wires








- For connecting different conductor types and materials, e.g. to DIN EN 60228 Class 1 and 2
- Ideal for connecting identical and different conductor cross-sections
- Suitable cross-section range for example shielded copper wires

### Characteristics
- Special groove profile inside to destroy the oxidation layer when crimping
- With inspection hole for monitoring full cable insertion

### Material
- Insulated body: brass (CuZn)
- Screws: stainless steel, tin-plated

### Surface
- Tin-plated to protect against corrosion

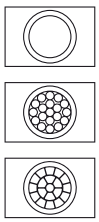
### Technical instructions
- Refer to the installation instructions in the technical appendix on page i-8

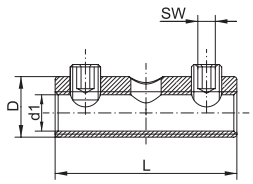
### Additional information
- rm = round multi-stranded; re = round single solid

| Part No. | Nominal cross section mm² | | Dimension mm | | | | Torque Nm | Weight/pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|
| | re | rm | D | d1 | L | AF | | | |
| **SV100** | 6 - 35 | 6 - 25 | 14 | 7.2 | 40 | 4 | 10 | 3.9 | 4 |

## Screw connectors for street lighting








- For connecting different conductor types and materials, e.g. to DIN EN 60228 Class 1 and 2
- Ideal for connecting identical and different conductor cross-sections
- Suitable cross-section range for street lighting

### Characteristics
- Special groove profile inside to destroy the oxidation layer when crimping
- With inspection hole for monitoring full cable insertion

### Material
- Insulated body: brass (CuZn)
- Screws: stainless steel, tin-plated

### Surface
- Either bright or tin-plated

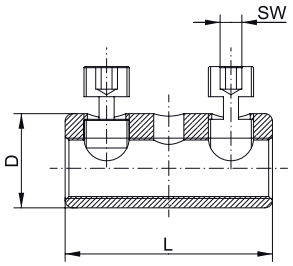
### Technical instructions
- Refer to the installation instructions in the technical appendix on page i-8

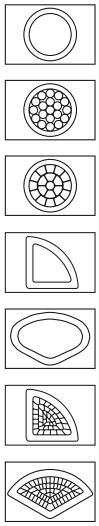
### Additional information
- rm = round multi-stranded; re = round single solid

| Part No. | Nominal cross section mm² | | Dimension mm | | | | Torque Nm | Weight/pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|
| | re | rm | D | d1 | L | AF | | | |
| With threaded pin, tin-plated | | | | | | | | | |
| **SV200** | 1.5 - 16 | 1.5 - 16 | 10 | 5.5 | 30 | 2.5 | 4 | 1.35 | 4 |
| With threaded pin, bright finished | | | | | | | | | |
| **SV200BK** | 1.5 - 16 | 1.5 - 16 | 10 | 5.5 | 30 | 2.5 | 4 | 1.35 | 4 |

## Screw connector with 2 screws





- For connecting various conductor types and materials, e.g. to DIN EN 60228 Cl. 1 and 2
- Ideal for connecting identical and different conductor cross-sections
- Reliable processing due to cable insertion control (dissimilar materials must not come into contact)

### Characteristics

- Special groove profile inside to destroy the oxidation layer when crimping
- Either with threaded pin or shear head, shear head partly fixed
- Version with 2 screws

### Material

- Insulated body: high-tensile aluminium alloy
- Screws: copper alloy, tin-plated

### Surface

- Either bright or tin-plated

### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-8

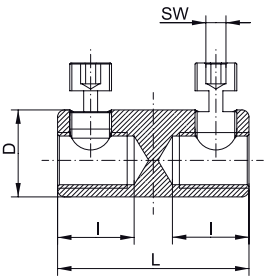
### Additional information

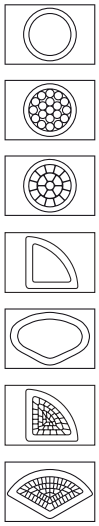
- * = fixed version, Part Number appendix „NL“
- **= version with fixed countersink shear head, Part Number appendix „VK“
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, (r) = pre-rounded, (v) = compacted

| Part No. | Nominal cross section mm² | | | | Hint | Dimension mm | | | Torque Nm | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | re | rm | se | sm | | D | L | AF | | | |
| With threaded pin, bright finished | | | | | | | | | | | |
| **SV303** | 6 - 35 | 6 - 25, Cu 2.5 - 50 (v) | -- | Cu 2.5 - 35 | | 14 | 40 | 4 | 8 | 1.5 | 4 |
| **SV300** | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 35 Al 10 - 35 | Cu 2.5 - 35 Al 10 - 35 | | 16.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV301** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | | 25 | 55 | 5 | 20 | 6.6 | 4 |
| **SV308** | 25 - 150 | 25 - 150 | 50 - 150 (90°), 50 - 150 (120°) | -- | | 28 | 70 | 6 | 25 | 11.3 | 4 |
| **SV302** | 35 - 50 | 95 - 185 | 50 - 185 (90°) | 35 - 150 | | 32 | 80 | 6 | 25 | 16 | 4 |
| Without threaded pin, bright finished | | | | | | | | | | | |
| **SV303V** | 6 - 35 | 6 - 25, Cu 2.5 - 50 (v) | -- | Cu 2.5 - 35 | | 14 | 40 | 4 | 8 | 1.5 | 4 |
| **SV300V** | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 35 Al 10 - 35 | Cu 2.5 - 35 Al 10 - 35 | | 16.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV307V** | 50 - 70 | 10 - 70 | 50 - 70 | 35 - 70, 35 - 70 | | 22 | 57 | 5 | 15 | 4.7 | 4 |
| **SV301V** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | | 25 | 55 | 5 | 20 | 6.6 | 4 |
| **SV302V** | 35 - 50 | 35*185 | 50 - 185 (90°) | 35 - 150 | | 32 | 80 | 6 | 25 | 16 | 4 |
| With shear head, bright finished | | | | | | | | | | | |
| **SV303AK** | 6 - 35 | 6 - 25 | -- | -- | * | 14 | 40 | 4 | 8 | 1.5 | 4 |
| **SV303AKNL** | 6 - 35 | 6 - 25, Cu 2.5 - 50 (v) | -- | Cu 2.5 - 35 | * | 14 | 40 | 4 | 8 | 1.5 | 4 |
| **SV304AKNL** | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 35 Al 10 - 35 | Cu 2.5 - 35 Al 10 - 35 | | 16.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV307AKNL** | 10 - 70 | 10 - 70 | 50 - 70 | 35 - 70, 35 - 70 | | 22 | 57 | 5 | 15 | 4.7 | 4 |
| **SV301AK** | 16 - 95 | 16 - 95 | 50 - 95, 50 - 150 (120°) | 35 - 95 (r), 35 - 150 | | 25 | 55 | 5 | 20 | 6.6 | 4 |
| **SV302AK** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | | 32 | 80 | 6 | 25 | 16 | 4 |
| With shear head, tin - plated | | | | | | | | | | | |
| **SV304AKNLV** | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 50 Al 10 - 50 | Cu 2.5 - 35 Al 10 - 35 | Cu 2.5 - 35 Al 10 - 35 | | 16.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV301AKV** | 16 - 95 | 16 - 95 | 50 - 95 | 35 - 70, 35 - 95 (r) | ** | 25 | 55 | 5 | 20 | 6.6 | 4 |
| **SV302AKV** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150 | | 32 | 80 | 6 | 25 | 16 | 4 |

## Screw connector with barrier





- For connecting various conductor types and materials, e.g. to DIN EN 60228 Cl. 1 and 2
- Ideal for connecting identical and different conductor cross-sections

### Characteristics

- Special groove profile inside to destroy the oxidation layer when crimping
- Either with threaded pin or shear head, shear head partly fixed
- Version with 2 screws and barrier

### Material

- Insulated body: high-tensile aluminium alloy
- Screws: copper alloy, tin-plated

### Surface

- Either bright or tin-plated

### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-8

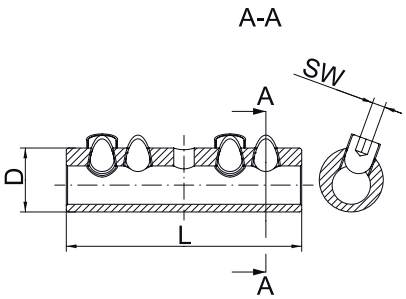
### Additional information

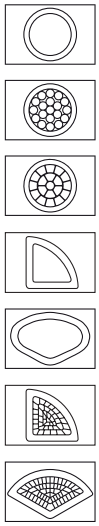
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, (r) = pre-rounded, (v) = compacted

| Part No. | Nominal cross section mm² | | | | Hint | Dimension mm | | | | Torque Nm | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | re | rm | se | sm | | D | l | L | AF | | | |
| With threaded pin, bright finished | | | | | | | | | | | | |
| **SV315** | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 35<br>Al 10 - 35 | Cu 2.5 - 35<br>Al 10 - 35 | | 16 | 17.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV309** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | | 25 | 22 | 55 | 5 | 20 | 6.6 | 4 |
| **SV320** | 25 - 150 | 25 - 150 | 50 - 150 (90°),<br>50 - 150 (120°) | 35 - 150 | | 28 | 31 | 70 | 6 | 25 | 11.3 | 4 |
| **SV310** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | | 32 | 32 | 80 | 6 | 25 | 16 | 4 |
| With threaded pin, tin-plated | | | | | | | | | | | | |
| **SV315V** | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 35<br>Al 10 - 35 | Cu 2.5 - 35<br>Al 10 - 35 | | 16 | 17.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV309V** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | | 25 | 22 | 55 | 5 | 20 | 6.6 | 4 |
| **SV320V** | 25 - 150 | 25 - 150 | 50 - 150 (90°),<br>50 - 150 (120°) | -- | | 28 | 31 | 70 | 6 | 25 | 11.3 | 4 |
| **SV310V** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | | 32 | 32.5 | 80 | 6 | 25 | 16 | 4 |
| With shear head, bright finished | | | | | | | | | | | | |
| **SV311AKNL** | 6 - 35 | 6 - 25,<br>Cu 2.5 - 50 (v) | -- | Cu 2.5 - 35 | | 14 | 17.5 | 40 | 4 | 8 | 1.5 | 4 |
| **SV312AKNL** | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 35<br>Al 10 - 35 | Cu 2.5 - 35<br>Al 10 - 35 | | 16 | 17.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV309AK** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | | 25 | 22 | 55 | 5 | 20 | 6.6 | 4 |
| **SV310AK** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | | 32 | 32.5 | 80 | 6 | 25 | 16 | 4 |
| With shear head, tin-plated | | | | | | | | | | | | |
| **SV312AKNLV** | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 50<br>Al 10 - 50 | Cu 2.5 - 35<br>Al 10 - 35 | Cu 2.5 - 35<br>Al 10 - 35 | | 16 | 17.5 | 40 | 4 | 9 | 1.7 | 4 |
| **SV319AKNLV** | 10 - 70 | 10 - 70 | 50 - 70 | 35 - 70 | | 22 | 24 | 57 | 5 | 15 | 7.6 | 4 |
| **SV309AKV** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | * | 25 | 22 | 55 | 5 | 20 | 6.6 | 4 |
| **SV310AKV** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | * | 32 | 32.5 | 80 | 6 | 25 | 16 | 4 |

## Screw connector with 4 screws





- For connecting various conductor types and materials, e.g. to DIN EN 60228 Cl. 1 and 2
- Ideal for connecting identical and different conductor cross-sections
- Reliable processing due to cable insertion control (dissimilar materials must not come into contact)

### Characteristics

- Special groove profile inside to destroy the oxidation layer when crimping
- Available with threaded pin or shear head
- Version with 4 screws

### Material

- Insulated body: high-tensile aluminium alloy
- Screws: copper alloy, tin-plated

### Surface

- Either bright or tin-plated

### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-8

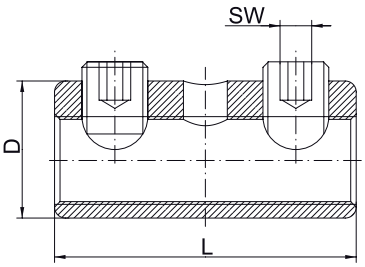
### Additional information

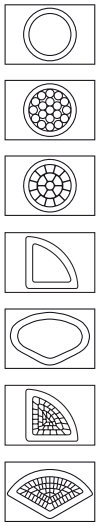
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded

| Part No. | Nominal cross section mm² | | | | Dimension mm | | | Torque Nm | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | re | rm | se | sm | D | L | AF | | | |
| With threaded pin, bright finished | | | | | | | | | | |
| **SV305** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | 25 | 92 | 5 | 20 | 12 | 4 |
| **SV306** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 185 (r) | 32 | 108 | 6 | 25 | 25 | 4 |
| With threaded pin, tin-plated | | | | | | | | | | |
| **SV305V** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | 25 | 92 | 5 | 20 | 12 | 4 |
| **SV306V** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150, 35 - 185 (r) | 32 | 108 | 6 | 25 | 25 | 4 |
| With shear head, bright finished | | | | | | | | | | |
| **SV305AK** | 16 - 95 | 16 - 95 | 50 - 95 | 35 - 70, 35 - 70 (r) | 25 | 92 | 5 | 20 | 12 | 4 |
| **SV306AK** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150, 35 - 185 (r) | 32 | 108 | 6 | 25 | 25 | 4 |
| With shear head, tin-plated | | | | | | | | | | |
| **SV305AKV** | 16 - 95 | 16 - 95 | 50 - 95 | 35-95 (r), 35-70 | 25 | 92 | 5 | 20 | 12 | 4 |
| **SV306AKV** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150, 35 - 185 (r) | 32 | 108 | 6 | 25 | 25 | 4 |

## Insulated screw connector





- For connecting various conductor types and materials, e.g. to DIN EN 60228 Cl. 1 and 2
- Ideal for connecting identical and different conductor cross-sections
- Reliable processing due to cable insertion control (dissimilar materials must not come into contact)

### Characteristics

- Special groove profile inside to destroy the oxidation layer when crimping
- Insulated body
- Version with 2 screws, without barrier
- Available with threaded pin or shear head

### Material

- Insulated body: high-tensile aluminium alloy
- Screws: copper alloy, tin-plated

### Surface

- Either bright or tin-plated

### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-8

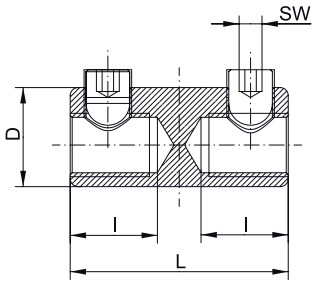
### Additional information

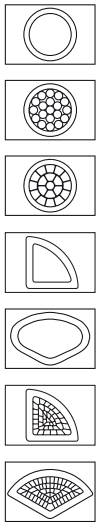
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded

| Part No. | Nominal cross section mm² | | | | Dimension mm | | | Torque Nm | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | re | rm | se | sm | D | L | AF | | | |
| With threaded pin, bright finished | | | | | | | | | | |
| **SV400** | 6 - 35 | 6 - 25 | 50 - 70 (120°) | 35 - 70 | 14 | 60 | 4 | 8 | 1.7 | 4 |
| **SV410** | 16-95 | 16-95 | 50-95 | 35-95 (r), 35-70 | 28.2 | 58.2 | 5 | 20 | 6 | 4 |
| **SV420** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | 36 | 84 | 6 | 25 | 14.5 | 4 |
| With threaded pin, tin-plated | | | | | | | | | | |
| **SV405V** | 10 - 70 | 10 - 70 | 50 - 70, 50 - 150 (120°) | 35 - 70, 35 - 150 | 25 | 87 | 5 | 15 | 5 | 4 |
| **SV420V** | 35 - 50 | 35 - 185 | 50 - 185 (90°) | 35 - 185 (r) | 36 | 84 | 6 | 25 | 14.5 | 4 |
| With shear head, bright finished | | | | | | | | | | |
| **SV410AK** | 16-95 | 16-95 | 50-95 | 35-95 (r), 35-70 | 28.2 | 58.2 | 5 | 20 | 6 | 4 |
| **SV420AK** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150, 35 - 185 (r) | 36 | 84 | 6 | 25 | 14.5 | 4 |

## Screw connector with barrier





- For connecting various conductor types and materials, e.g. to DIN EN 60228 Cl. 1 and 2
- Ideal for connecting identical and different conductor cross-sections

### Characteristics

- Special groove profile inside to destroy the oxidation layer when crimping
- Either with threaded pin or shear head, shear head partly fixed
- Version with 2 screws and barrier

### Material

- Insulated body: high-tensile aluminium alloy
- Screws: copper alloy, tin-plated

### Surface

- Either bright or tin-plated

### Technical instructions

- Refer to the installation instructions in the technical appendix on page i-8

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, (r) = pre-rounded, (v) = compacted

| Part No. | Nominal cross section mm² | | | | Hint | Dimension mm | | | | Torque Nm | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | re | rm | se | sm | | D | l | L | AF | | | |
| With threaded pin, bright | | | | | | | | | | | | |
| **SV430** | 16-50 | 16-95 | 50 - 70 (120°), 50 - 95 (90°) | 35 - 70, 35 - 95 (r) | | 28.2 | 23.6 | 58.2 | 5 | 20 | 6.6 | 4 |
| **SV440** | 35-50 | 35-185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150, 35 - 185 (r) | | 36 | 34.5 | 84 | 6 | 25 | 16.0 | 4 |
| With shear head, bright | | | | | | | | | | | | |
| **SV430AK** | 16 - 50 | 16 - 95 | 50 - 70 (120°), 50 - 95 (90°) | 35 - 70, 35 - 95 (r) | | 28.2 | 23.6 | 58.2 | 5 | 20 | 6.6 | 4 |
| **SV440AK** | 35 - 50 | 35 - 185 | 50 - 150 (120°), 50 - 185 (90°) | 35 - 150, 35 - 185 (r) | ** | 36 | 34.5 | 84 | 6 | 25 | 16.0 | 4 |

## Compact tap connectors with shear heads, three conductor cables















- Suitable for main and branch conductors made from Al and Cu
- No need to cut the main conductor
- For use e.g. with energy suppliers

### Characteristics

- VDE: can be installed under voltage with corresponding fully insulated assembly tools
- With shear heads for the main conductor, fixed

### Technical instructions

- A mounting instruction is included with every clamp

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded
- Creepage and elongation processes are compensated for by spring washers
- Sequence of contacting can be freely determined

| Part No. | Main conductor | | Tap conductor | | Dimension mm | | | | Torque Nm | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | se | sm | se | sm | la | lb | Width | AF | | | |
| **KSK1503** | 70 - 150 | 150 | 95 (r) | 6 - 70 (r) | 84 | 76 | 45 | 5 | 20 | 0.35 | 1 |

## Compact tap connectors with shear heads, four conductor cables













- Suitable for main and branch conductors made from Al and Cu
- No need to cut the main conductor
- For use e.g. with energy suppliers

### Characteristics

- VDE: can be installed under voltage with corresponding fully insulated assembly tools
- With shear heads for the main conductor, fixed

### Technical instructions

- A mounting instruction is included with every clamp

### Additional information

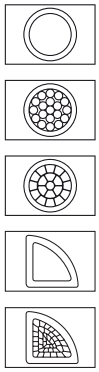
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded
- Creepage and elongation processes are compensated for by spring washers
- Sequence of contacting can be freely determined

| Part No. | Main conductor | | Tap conductor | | Dimension mm | | | | Torque Nm | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | se | sm | se | sm | la | lb | Width | AF | | | |
| **KSK1504** | 70 - 150 | 150 | 95 (r) | 6-70 (r) | 107 | 90 | 50 | 20 | 20 | 0.63 | 1 |
| **KSK1854** | 185 | 70-150 | 50 | 6-35 | 107 | 90 | 52 | 20 | 20 | 0.58 | 1 |

## Compact tap connectors, four conductor cables, for main conductor 25 - 50 mm²







- Suitable for main and branch conductors made from Al and Cu
- No need to cut the main conductor
- For use e.g. with energy suppliers

### Characteristics

- VDE: can be installed under voltage with corresponding fully insulated assembly tools

### Technical instructions

- A mounting instruction is included with every clamp

### Additional information

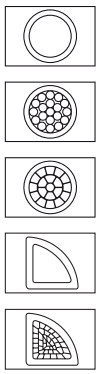
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded
- Creepage and elongation processes are compensated for by spring washers
- Sequence of contacting can be freely determined

| Part No. | Main conductor | | | Tap conductor | | Dimension mm | | | | Torque Nm | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | se | sm | rm | se | sm | la | lb | Width | AF | | | |
| **KSK504** | Cu 25 - 50, Al 35 - 50 | Cu 25 - 50 | Cu 25 - 50 | 50 | 6-35 | 88 | 75 | 50 | 5 | 15 | 0.46 | 1 |

## Compact tap connectors, four conductor cables, for main conductor 70 - 185 mm²







- Suitable for main and branch conductors made from Al and Cu
- No need to cut the main conductor
- For use e.g. with energy suppliers

### Characteristics

- VDE: can be installed under voltage with corresponding fully insulated assembly tools
- With threaded pins for the main conductor

### Technical instructions

- A mounting instruction is included with every clamp

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded
- Creepage and elongation processes are compensated for by spring washers
- Sequence of contacting can be freely determined

| Part No. | Main conductor | | | Tap conductor | | | Dimension mm | | | | Torque Nm | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | se | sm | re | se | sm | rm | la | lb | Width | AF | | | |
| **SKR1204** | 120 | 70 - 95 | | 50 (r) | 6 - 35 (r) | | 90 | 77 | 50 | 5 | 20 | 0.46 | 1 |
| **SKR150504** | 150 | 70 - 150 | 50 | 50 | 6 - 35 | | 93 | 80 | 50 | 5 | 20 | 0.46 | 1 |
| **SKR1504** | 70 - 150 | 150 | | 95 (r) | 6 - 70 (r) | | 107 | 90 | 46 | 5 | 20 | 0.62 | 1 |
| **SKR1501504** | 95 - 150 | 150 | | 150 | 16 - 120 | 16 - 120 | 118 | 118 | 93 | 5 | 20 | 1.34 | 1 |
| **SKR1854** | 185 | 95 - 150 | | 95 (r) | 6 - 70 | | 107 | 96 | 46 | 5 | 20 | 0.58 | 1 |

## Compact tap connectors, three conductor cables















- Suitable for main and branch conductors made from Al and Cu
- No need to cut the main conductor
- For use e.g. with energy suppliers

### Characteristics

- VDE: can be installed under voltage with corresponding fully insulated assembly tools
- With threaded pins for the main conductor

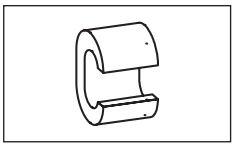
### Technical instructions

- A mounting instruction is included with every clamp

### Additional information

- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded

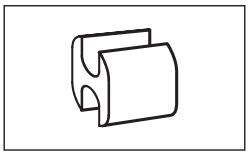
| Part No. | Main conductor | | | | Tap conductor | | Dimension mm | | | | | Thread DIN 13 | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | se | sm | rm | re | se | sm | la | lb | Width | Bolts Circle dia. | AF | | | |
| **SKR1503** | 70 - 150 | 70 - 150 | 70 - 150 | 70 - 150 | 6 - 70 | 6 - 95 | 84 | 76 | 45 | 90 | 5 | M10x1/ M10 | 0.38 | 1 |



## Tool application chart

### C-Clamps

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | | Crimp profile |
|---|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 4 - 35 | K354 | | 246 | 331 | 331 | ⬭ |
| | 4 - 50 | K18 | | 248 | 339 | 339 | ⬭ |
| | | K22 | | 250 | 345 | 345 | ⬭ |
| Hand hydraulic crimping tools | 4 - 50 | HK6018 | | 292 | 339 | 339 | ⬭ |
| | | HK60UNV | +UA18 | 473 | 339 | 339 | ⬭ |
| | | HK6022 | | 294 | 345 | 345 | ⬭ |
| | | HK60UNV | +UA22 | 473 | 345 | 345 | ⬭ |
| | 10 - 70 | HK12030 | | 298 | 351 | 351 | ⬭ |
| | | HK12042 | | 300 | 351 | 351 | ⬭ |
| | | HK120U | | 302 | 351 | 351 | ⬭ |
| Battery powered crimping tools | 4 - 35 | EK354ML | | 262 | 331 | 331 | ⬭ |
| | | EK354 | | 266 | 331 | 331 | ⬭ |
| | | EK505 | | 268 | 335 | 335 | ⬭ |
| | 4 - 50 | EK5018 | | 270 | 339 | 339 | ⬭ |
| | | EK60UNV | +UA18 | 476 | 339 | 339 | ⬭ |
| | | EKM60UNV | +UA18 | 475 | 339 | 339 | ⬭ |
| | | EK6022 | | 274 | 345 | 345 | ⬭ |
| | | EKM6022 | | 272 | 345 | 345 | ⬭ |
| | | EK60UNV | +UA22 | 476 | 345 | 345 | ⬭ |
| | | EKM60UNV | +UA22 | 475 | 345 | 345 | ⬭ |
| | 10 - 70 | EK12032 | | 280 | 351 | 351 | ⬭ |
| | | EK12042 | | 282 | 351 | 351 | ⬭ |
| | | EK120U | | 284 | 351 | 351 | ⬭ |
| | | EK135FT | +UA15T | 286 | 351 | 351 | ⬭ |
| | | EK120UNV | +UA12T | 477 | 351 | 351 | ⬭ |
| Hydraulic crimping systems | 4 - 50 | THK18 | | 306 | 339 | 339 | ⬭ |
| | | THK22 | | 308 | 345 | 345 | ⬭ |
| | 10 - 70 | HK122EL380 | | 322 | 351 | 351 | ⬭ |
| | 10 - 185 | HK252 | | 320 | 356 | 356 | ⬭ |
| | | HK252EL380 | | 323 | 356 | 356 | ⬭ |
| Hydraulic crimping heads | 4 - 50 | PK18 | | 306 | 339 | 339 | ⬭ |
| | | PK60UNV | +UA18 | 474 | 339 | 339 | ⬭ |
| | | PK22 | | 308 | 345 | 345 | ⬭ |
| | | PK60UNV | +UA22 | 474 | 345 | 345 | ⬭ |
| | 10 - 70 | PK12042 | | 312 | 351 | 351 | ⬭ |
| | | PK120U | | 314 | 351 | 351 | ⬭ |
| | 10 - 185 | PK252 | | 316 | 356 | 356 | ⬭ |



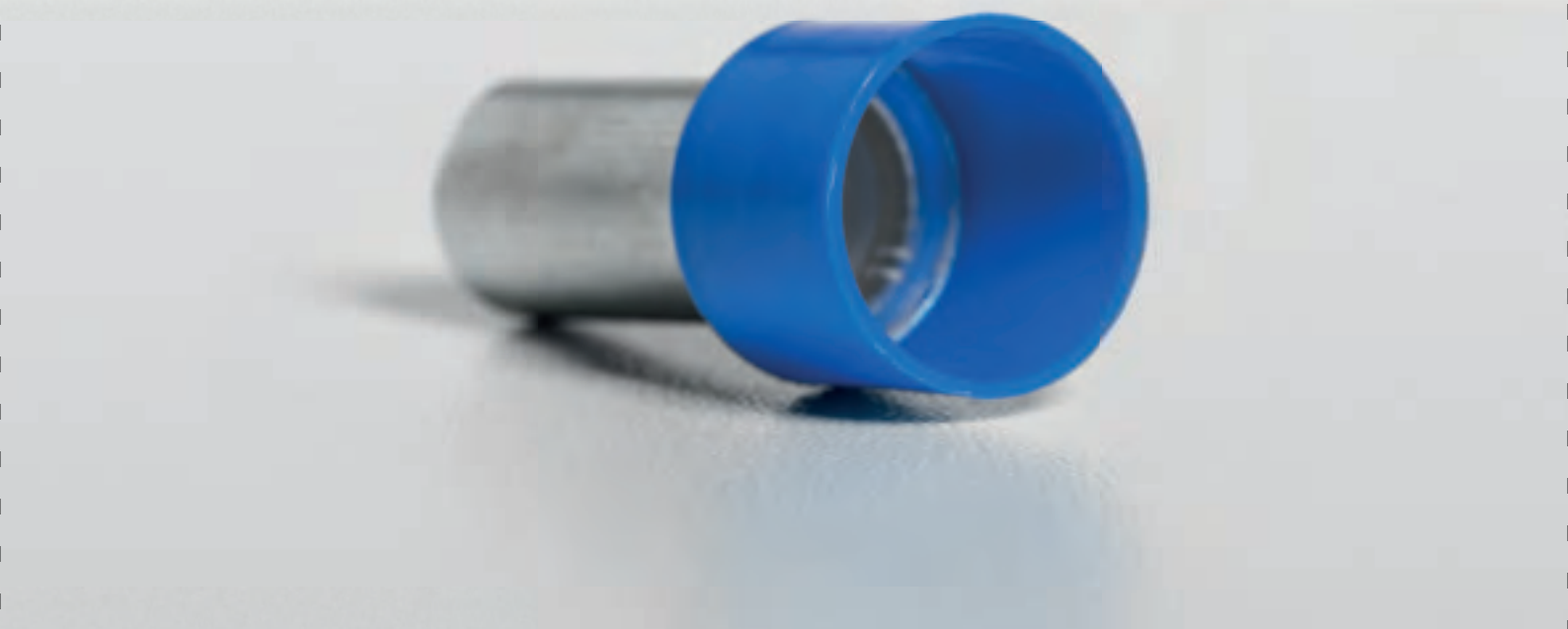
## Tool application chart

### H-Clamps

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 70 | K22 | | 250 | 345 | ⬭ |
| Hand hydraulic crimping tools | 70 | HK6022 | | 294 | 345 | ⬭ |
| | 70 - 120 | HK12030 | | 298 | 351 | ⬭ |
| | | HK12042 | | 300 | 351 | ⬭ |
| | | HK120U | | 302 | 351 | ⬭ |
| Battery powered crimping tools | 70 | EK6022 | | 274 | 345 | ⬭ |
| | | EKM6022 | | 272 | 345 | ⬭ |
| | | EK60UNV | +UA22 | 476 | 345 | ⬭ |
| | 70 - 120 | EK12032 | | 280 | 351 | ⬭ |
| | | EK12042 | | 282 | 351 | ⬭ |
| | | EK120U | | 284 | 351 | ⬭ |
| | | EK135FT | +UA15T | 286 | 351 | ⬭ |
| | | EK120UNV | +UA12T | 477 | 351 | ⬭ |
| Hydraulic crimping systems | 70 | THK22 | | 308 | 345 | ⬭ |
| | 70 - 120 | HK122EL380 | | 322 | 351 | ⬭ |
| | | HK252 | | 320 | 356 | ⬭ |
| | | HK252EL380 | | 323 | 356 | ⬭ |
| Hydraulic crimping heads | 70 | PK22 | | 308 | 345 | ⬭ |
| | 70 - 120 | PK12042 | | 312 | 351 | ⬭ |
| | | PK120U | | 314 | 351 | ⬭ |
| | | PK252 | | 316 | 356 | ⬭ |

# PROTECTION - CABLE END-SLEEVES, INSULATED AND NON-INSULATED

Klauke joins together what belongs together. Cable end-sleeves prevent the conductors splicing before they are connected in clamps. All wires remain together. Easy-Entry insulation speeds up the insertion of wires into the sleeve. Fine-stranded conductors in particular benefit from a special trapezoidal crimp. No splicing, no time wasted. Your conductors are protected and can be cleanly processed



**In brief**

- Stops conductors splicing
- Improved contact
- No risk of short-circuit due to bent strands
- Produced from high-quality copper
- Surface treatment with tin or in special versions with silver

## Simple diversity

We have to admit: Cable end-sleeves are a simple product. Due to the differing crimp shapes in the range and the high-quality materials used in production, the sleeves are just incredibly good.

- Broad range: To DIN standards, for short circuit-resistant conductors, in various lengths, with and without insulating collars
- Marked to DIN colour code
- Twin cable end-sleeves for connecting in confined areas
- High-quality material for optimum conducting properties
- CSA-approved



## Always the right crimp shape

We give every cable end-sleeve its perfect crimp shape. No matter where the conductor is to be laid later, we have a solution for you.

- The correct crimp shape for every connecting terminal
- Crimp shapes matched to the DIN dimensions
- For compacted conductors
- Connect without risk of short-circuit



## Easy-Entry insulation

The special Easy-Entry insulation makes it easier to insert the conductor into the sleeves. In addition, the insulation is highly-resistant, to temperatures of up to 105 °C for example.

- Easy-Entry insulation for convenient insertion of the conductor
- Temperature-resistant to 105 °C
- No toxic vapours in case of fire
- Ageing-resistant plastic collars



The easy-entry insulation enables fast insertion of conductors with no splicing.

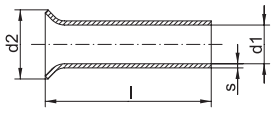
## Cable end-sleeves to DIN, Cu












- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Optimal cable entry due to widened sleeve

### Characteristics
- To DIN 46228, part 1 and similar

### Material
- Copper (EN13600)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 150

### Additional information
- Silvered version also available, without Part Number appendix “V“, exception: Part Number 705V in silvered version = Part No. 7050
- * = not standardised

| Nominal cross section mm² | Part No. | Hint | Dimension mm | | | | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | | d1 | d2 | l | s | | |
| 0.25 | **695V** | * | 0.75 | 1.7 | 5 | 0.15 | 0.02 | 1000 |
| | **697V** | * | 0.75 | 1.7 | 7 | 0.15 | 0.03 | 1000 |
| 0.34 | **705V** | * | 0.85 | 1.8 | 5 | 0.15 | 0.02 | 1000 |
| | **707V** | * | 0.85 | 1.8 | 7 | 0.15 | 0.03 | 1000 |
| 0.5 | **71S6V** | | 1.00 | 2.1 | 6 | 0.15 | 0.03 | 1000 |
| | **71S8V** | * | 1.00 | 2.1 | 8 | 0.15 | 0.04 | 1000 |
| | **71S10V** | | 1.00 | 2.1 | 10 | 0.15 | 0.05 | 1000 |
| 0.75 | **716V** | | 1.20 | 2.3 | 6 | 0.15 | 0.04 | 1000 |
| | **718V** | * | 1.20 | 2.3 | 8 | 0.15 | 0.05 | 1000 |
| | **7110V** | | 1.20 | 2.3 | 10 | 0.15 | 0.06 | 1000 |
| | **7112V** | * | 1.20 | 2.3 | 12 | 0.15 | 0.08 | 1000 |
| | **7115V** | * | 1.20 | 2.3 | 15 | 0.15 | 0.09 | 1000 |
| 1 | **72S6V** | | 1.40 | 2.5 | 6 | 0.15 | 0.04 | 1000 |
| | **72S8V** | * | 1.40 | 2.5 | 8 | 0.15 | 0.06 | 1000 |
| | **72S10V** | | 1.40 | 2.5 | 10 | 0.15 | 0.07 | 1000 |
| | **72S12V** | * | 1.40 | 2.5 | 12 | 0.15 | 0.08 | 1000 |
| | **72S15V** | * | 1.40 | 2.5 | 15 | 0.15 | 0.10 | 1000 |
| 1.5 | **726V** | * | 1.70 | 2.8 | 6 | 0.15 | 0.05 | 1000 |
| | **727V** | | 1.70 | 2.8 | 7 | 0.15 | 0.06 | 1000 |
| | **728V** | * | 1.70 | 2.8 | 8 | 0.15 | 0.07 | 1000 |
| | **7210V** | | 1.70 | 2.8 | 10 | 0.15 | 0.09 | 1000 |
| | **7212V** | | 1.70 | 2.8 | 12 | 0.15 | 0.10 | 1000 |
| | **7215V** | * | 1.70 | 2.8 | 15 | 0.15 | 0.13 | 1000 |
| | **7218V** | | 1.70 | 2.8 | 18 | 0.15 | 0.15 | 1000 |
| | **7220V** | * | 1.70 | 2.8 | 20 | 0.15 | 0.17 | 1000 |
| 2.5 | **737V** | | 2.20 | 3.4 | 7 | 0.15 | 0.08 | 1000 |
| | **738V** | * | 2.20 | 3.4 | 8 | 0.15 | 0.09 | 1000 |
| | **7310V** | | 2.20 | 3.4 | 10 | 0.15 | 0.11 | 1000 |
| | **7312V** | | 2.20 | 3.4 | 12 | 0.15 | 0.13 | 1000 |
| | **7315V** | * | 2.20 | 3.4 | 15 | 0.15 | 0.17 | 1000 |
| | **7318V** | | 2.20 | 3.4 | 18 | 0.15 | 0.20 | 1000 |
| | **7320V** | * | 2.20 | 3.4 | 20 | 0.15 | 0.22 | 1000 |

See next page

## Cable end-sleeves nach DIN, Cu

| Nominal cross section mm² | Part No. | Hint | Dimension mm | | | | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | | d1 | d2 | l | s | | |
| 4 | **748V** | * | 2.80 | 4.0 | 8 | 0.20 | 0.14 | 1000 |
| | **749V** | | 2.80 | 4.0 | 9 | 0.20 | 0.16 | 1000 |
| | **7410V** | * | 2.80 | 4.0 | 10 | 0.20 | 0.17 | 1000 |
| | **7412V** | | 2.80 | 4.0 | 12 | 0.20 | 0.20 | 1000 |
| | **7415V** | | 2.80 | 4.0 | 15 | 0.20 | 0.27 | 1000 |
| | **7418V** | | 2.80 | 4.0 | 18 | 0.20 | 0.32 | 1000 |
| | **7420V** | * | 2.80 | 4.0 | 20 | 0.20 | 0.35 | 1000 |
| 6 | **7510V** | | 3.50 | 4.7 | 10 | 0.20 | 0.23 | 100 |
| | **7512V** | | 3.50 | 4.7 | 12 | 0.20 | 0.27 | 100 |
| | **7515V** | | 3.50 | 4.7 | 15 | 0.20 | 0.34 | 100 |
| | **7518V** | | 3.50 | 4.7 | 18 | 0.20 | 0.40 | 100 |
| | **7520V** | * | 3.50 | 4.7 | 20 | 0.20 | 0.45 | 100 |
| | **7525V** | * | 3.50 | 4.7 | 25 | 0.20 | 0.56 | 100 |
| 10 | **7610V** | * | 4.5 | 5.8 | 10 | 0.2 | 0.27 | 100 |
| | **7612V** | | 4.5 | 5.8 | 12 | 0.2 | 0.33 | 100 |
| | **7615V** | | 4.5 | 5.8 | 15 | 0.2 | 0.41 | 100 |
| | **7618V** | | 4.5 | 5.8 | 18 | 0.2 | 0.49 | 100 |
| | **7620V** | * | 4.5 | 5.8 | 20 | 0.2 | 0.55 | 100 |
| | **7625V** | * | 4.5 | 5.8 | 25 | 0.2 | 0.68 | 100 |
| 16 | **7712V** | | 5.8 | 7.5 | 12 | 0.2 | 0.43 | 100 |
| | **7715V** | | 5.8 | 7.5 | 15 | 0.2 | 0.53 | 100 |
| | **7718V** | | 5.8 | 7.5 | 18 | 0.2 | 0.60 | 100 |
| | **7720V** | * | 5.8 | 7.5 | 20 | 0.2 | 0.70 | 100 |
| | **7725V** | | 5.8 | 7.5 | 25 | 0.2 | 0.87 | 100 |
| | **7732V** | | 5.8 | 7.5 | 32 | 0.2 | 1.11 | 100 |
| 25 | **7812V** | * | 7.3 | 9.5 | 12 | 0.2 | 0.80 | 50 |
| | **7815V** | | 7.3 | 9.5 | 15 | 0.2 | 0.99 | 50 |
| | **7818V** | | 7.3 | 9.5 | 18 | 0.2 | 1.18 | 50 |
| | **7820V** | * | 7.3 | 9.5 | 20 | 0.2 | 1.31 | 50 |
| | **7825V** | | 7.3 | 9.5 | 25 | 0.2 | 1.63 | 50 |
| | **7828V** | * | 7.3 | 9.5 | 28 | 0.2 | 1.82 | 50 |
| | **7832V** | | 7.3 | 9.5 | 32 | 0.2 | 2.07 | 50 |
| 35 | **7912V** | * | 8.3 | 11.0 | 12 | 0.2 | 0.90 | 50 |
| | **7915V** | * | 8.3 | 11.0 | 15 | 0.2 | 1.12 | 50 |
| | **7918V** | | 8.3 | 11.0 | 18 | 0.2 | 1.34 | 50 |
| | **7920V** | * | 8.3 | 11.0 | 20 | 0.2 | 1.48 | 50 |
| | **7922V** | * | 8.3 | 11.0 | 22 | 0.2 | 1.63 | 50 |
| | **7925V** | | 8.3 | 11.0 | 25 | 0.2 | 1.80 | 50 |
| | **7930V** | * | 8.3 | 11.0 | 30 | 0.2 | 2.20 | 50 |
| | **7932V** | | 8.3 | 11.0 | 32 | 0.2 | 2.35 | 50 |
| 50 | **8018V** | | 10.5 | 13.0 | 18 | 0.3 | 1.69 | 50 |
| | **8022V** | * | 10.5 | 13.0 | 22 | 0.3 | 2.05 | 50 |
| | **8025V** | | 10.5 | 13.0 | 25 | 0.3 | 2.32 | 50 |
| | **8030V** | * | 10.5 | 13.0 | 30 | 0.3 | 2.77 | 50 |
| | **8032V** | | 10.5 | 13.0 | 32 | 0.3 | 2.95 | 50 |

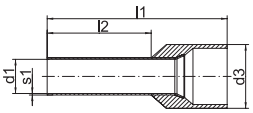
See next page

## Cable end-sleeves nach DIN, Cu

| Nominal cross section mm² | Part No. | Hint | Dimension mm | | | | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | | d1 | d2 | l | s | | |
| 70 | **8122V** | * | 12.7 | 15.0 | 22 | 0.4 | 3.31 | 25 |
| | **8125V** | * | 12.7 | 15.0 | 25 | 0.4 | 3.75 | 25 |
| | **8130V** | * | 12.7 | 15.0 | 30 | 0.4 | 4.48 | 25 |
| | **8132V** | * | 12.7 | 15.0 | 32 | 0.4 | 4.78 | 25 |
| 95 | **8225V** | * | 14.7 | 17.0 | 25 | 0.4 | 4.32 | 25 |
| | **8230V** | * | 14.7 | 17.0 | 30 | 0.4 | 5.17 | 25 |
| | **8232V** | * | 14.7 | 17.0 | 32 | 0.4 | 5.17 | 25 |
| | **8234V** | * | 14.7 | 17.0 | 34 | 0.4 | 5.84 | 25 |
| 120 | **8330V** | * | 16.7 | 19.0 | 30 | 0.5 | 7.35 | 25 |
| | **8332V** | * | 16.7 | 19.0 | 32 | 0.5 | 7.83 | 25 |
| | **8334V** | * | 16.7 | 19.0 | 34 | 0.5 | 8.31 | 25 |
| | **8338V** | * | 16.7 | 19.0 | 38 | 0.5 | 9.28 | 25 |
| | **8340V** | * | 16.7 | 19.0 | 40 | 0.5 | 9.76 | 25 |
| 150 | **8432V** | * | 18.7 | 21.0 | 32 | 0.5 | 8.75 | 25 |
| | **8434V** | * | 18.7 | 21.0 | 34 | 0.5 | 9.28 | 25 |
| | **8438V** | * | 18.7 | 21.0 | 38 | 0.5 | 10.36 | 25 |
| | **8440V** | * | 18.7 | 21.0 | 40 | 0.5 | 10.89 | 25 |
| 185 | **8532V** | * | 20.2 | 23.5 | 32 | 0.6 | 11.38 | 25 |
| | **8540V** | * | 20.2 | 23.5 | 40 | 0.6 | 14.17 | 25 |
| 240 | **8634V** | * | 23.0 | 26.0 | 34 | 0.5 | 11.25 | 25 |
| | **8640V** | * | 23.0 | 26.0 | 40 | 0.5 | 13.23 | 25 |

# Insulated cable end-sleeves to DIN, with Easy-Entry






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Easy-Entry insulation for splice-free cable insertion
- Halogen-free

## Characteristics

- Colour-coding and tube dimension to DIN 46228, part 4
- Heat resistant to 105° C

## Material

- Copper (EN13600)
- Synthetic material: polypropylene

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 150

## Additional information

- * = not standardised
- *** = quantities in one bag

| Nominal cross section mm² | Part No. | Colour | Hint | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d3 | l1 | l2 | s1 | | |
| 0.5 | **4696** | | | 1.0 | 3.1 | 12 | 6 | 0.15 | 0.070 | 1000 |
| | **4698** | | | 1.0 | 3.1 | 14 | 8 | 0.15 | 0.070 | 1000 |
| | **GR4698** | | *** | 1.0 | 3.1 | 14 | 8 | 0.15 | 0.070 | 500 |
| | **46910** | | | 1.0 | 3.1 | 16 | 10 | 0.15 | 0.085 | 1000 |
| 0.75 | **4706** | | | 1.2 | 3.3 | 12 | 6 | 0.15 | 0.080 | 1000 |
| | **4708** | | | 1.2 | 3.3 | 14 | 8 | 0.15 | 0.080 | 1000 |
| | **GR4708** | | *** | 1.2 | 3.3 | 14 | 8 | 0.15 | 0.080 | 500 |
| | **47010** | | | 1.2 | 3.3 | 16 | 10 | 0.15 | 0.100 | 1000 |
| | **47012** | | | 1.2 | 3.3 | 18 | 12 | 0.15 | 0.105 | 1000 |
| 1 | **4716** | | | 1.4 | 3.5 | 12 | 6 | 0.15 | 0.090 | 1000 |
| | **4718** | | | 1.4 | 3.5 | 14 | 8 | 0.15 | 0.100 | 1000 |
| | **GR4718** | | *** | 1.4 | 3.5 | 14 | 8 | 0.15 | 0.100 | 500 |
| | **47110** | | | 1.4 | 3.5 | 16 | 10 | 0.15 | 0.120 | 1000 |
| | **47112** | | | 1.4 | 3.5 | 18 | 12 | 0.15 | 0.125 | 1000 |
| 1.5 | **4726** | | * | 1.7 | 4.0 | 12 | 6 | 0.15 | 0.105 | 1000 |
| | **4728** | | | 1.7 | 4.0 | 14 | 8 | 0.15 | 0.110 | 1000 |
| | **GR4728** | | *** | 1.7 | 4.0 | 14 | 8 | 0.15 | 0.110 | 500 |
| | **47210** | | | 1.7 | 4.0 | 16 | 10 | 0.15 | 0.130 | 1000 |
| | **47212** | | | 1.7 | 4.0 | 18 | 12 | 0.15 | 0.150 | 1000 |
| | **47218** | | | 1.7 | 4.0 | 24 | 18 | 0.15 | 0.190 | 1000 |
| 2.5 | **4738** | | | 2.2 | 4.7 | 14 | 8 | 0.15 | 0.150 | 1000 |
| | **GR4738** | | *** | 2.2 | 4.7 | 14 | 8 | 0.15 | 0.150 | 500 |
| | **47312** | | | 2.2 | 4.7 | 18 | 12 | 0.15 | 0.200 | 1000 |
| | **47318** | | | 2.2 | 4.7 | 24 | 18 | 0.15 | 0.250 | 1000 |
| 4 | **47410** | | | 2.8 | 5.4 | 17 | 10 | 0.20 | 0.210 | 100 |
| | **47412** | | | 2.8 | 5.4 | 20 | 12 | 0.20 | 0.250 | 100 |
| | **47418** | | | 2.8 | 5.4 | 26 | 18 | 0.20 | 0.320 | 100 |
| 6 | **47512** | | | 3.5 | 6.9 | 20 | 12 | 0.20 | 0.350 | 100 |
| | **47518** | | | 3.5 | 6.9 | 26 | 18 | 0.20 | 0.460 | 100 |
| 10 | **47612** | | | 4.5 | 8.4 | 22 | 12 | 0.20 | 0.450 | 100 |
| | **47618** | | | 4.5 | 8.4 | 28 | 18 | 0.20 | 0.650 | 100 |

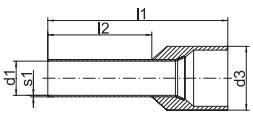
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## Insulated cable end-sleeves to DIN, with Easy-Entry

| Nominal cross section mm² | Part No. | Colour | Hint | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d3 | l1 | l2 | s1 | | |
| 16 | **47712** | | | 5.8 | 9.6 | 24 | 12 | 0.20 | 0.650 | 100 |
| | **47718** | | | 5.8 | 9.6 | 28 | 18 | 0.20 | 0.800 | 100 |
| 25 | **47816** | | | 7.3 | 12.0 | 30 | 16 | 0.20 | 1.600 | 50 |
| | **47818** | | | 7.3 | 12.0 | 30 | 18 | 0.20 | 1.700 | 50 |
| | **47822** | | | 7.3 | 12.0 | 36 | 22 | 0.20 | 2.000 | 50 |
| 35 | **47916** | | | 8.3 | 13.5 | 30 | 16 | 0.20 | 1.900 | 50 |
| | **47918** | | | 8.3 | 13.5 | 30 | 18 | 0.20 | 2.100 | 50 |
| | **47925** | | | 8.3 | 13.5 | 39 | 25 | 0.20 | 2.500 | 50 |
| 50 | **48020** | | | 10.3 | 16.0 | 36 | 20 | 0.30 | 3.300 | 50 |
| | **48025** | | | 10.3 | 16.0 | 40 | 25 | 0.30 | 3.600 | 50 |
| 70 | **48121** | | * | 13.5 | 17.2 | 37 | 21 | 0.40 | 4.620 | 25 |
| 95 | **48225** | | * | 14.5 | 19.2 | 44 | 25 | 0.40 | 6.000 | 25 |
| 120 | **48327** | | * | 16.7 | 21.4 | 48 | 27 | 0.45 | 7.850 | 25 |
| 150 | **48432** | | * | 19.5 | 25.0 | 58 | 32 | 0.50 | 12.330 | 25 |

## Insulated cable end-sleeves to DIN with Easy-Entry, colour code 1






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Easy-Entry insulation for splice-free cable insertion
- Halogen-free

### Characteristics
- To DIN 46228, part 4, (0.5 - 50 mm²)
- Heat resistant to 105° C

### Material
- Copper (EN13600)
- Synthetic material: polypropylene

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 150

### Additional information
- * = not standardised
- ** = quantities in one bag

| Nominal cross section mm² | Part No. | Colour | Hint | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d3 | l1 | l2 | s1 | | |
| 0.14 | **166GR** | | * | 0.7 | 2.1 | 10.0 | 6 | 0.15 | 0.035 | 1000 |
| | **166GRL** | | * | 0.7 | 2.1 | 12.0 | 8 | 0.15 | 0.040 | 1000 |
| 0.25 | **167H** | | * | 0.8 | 2.3 | 10.0 | 6 | 0.15 | 0.045 | 1000 |
| | **167HL** | | * | 0.8 | 2.3 | 12.0 | 8 | 0.15 | 0.050 | 1000 |
| 0.34 | **168T** | | * | 0.8 | 2.5 | 10.0 | 6 | 0.15 | 0.045 | 1000 |
| | **168TL** | | * | 0.8 | 2.5 | 12.0 | 8 | 0.15 | 0.050 | 1000 |
| 0.5 | **1690K** | | | 1.0 | 3.1 | 12.0 | 6 | 0.15 | 0.070 | 1000 |
| | **1690** | | | 1.0 | 3.1 | 14.0 | 8 | 0.15 | 0.070 | 1000 |
| | **GR1690** | | ** | 1.0 | 3.1 | 14.0 | 8 | 0.15 | 0.070 | 500 |
| | **1690H** | | | 1.0 | 3.1 | 16.0 | 10 | 0.15 | 0.085 | 1000 |

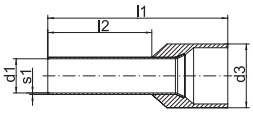
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## Insulated cable end-sleeves to DIN with Easy-Entry, colour code 1

| Nominal cross section mm² | Part No. | Colour | Hint | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d3 | l1 | l2 | s1 | | |
| 0.75 | **170WK** | | | 1.2 | 3.3 | 12.0 | 6 | 0.15 | 0.080 | 1000 |
| | **170W** | | | 1.2 | 3.3 | 14.0 | 8 | 0.15 | 0.080 | 1000 |
| | **GR170W** | | ** | 1.2 | 3.3 | 14.0 | 8 | 0.15 | 0.080 | 500 |
| | **170WH** | | | 1.2 | 3.3 | 16.0 | 10 | 0.15 | 0.100 | 1000 |
| | **170WL** | | | 1.2 | 3.3 | 18.0 | 12 | 0.15 | 0.105 | 1000 |
| 1 | **171GK** | | | 1.4 | 3.5 | 12.0 | 6 | 0.15 | 0.090 | 1000 |
| | **171G** | | | 1.4 | 3.5 | 14.0 | 8 | 0.15 | 0.100 | 1000 |
| | **GR171G** | | ** | 1.4 | 3.5 | 14.0 | 8 | 0.15 | 0.100 | 500 |
| | **171GH** | | | 1.4 | 3.5 | 16.0 | 10 | 0.15 | 0.120 | 1000 |
| | **171GL** | | | 1.4 | 3.5 | 18.0 | 12 | 0.15 | 0.125 | 1000 |
| 1.5 | **172RK** | | | 1.7 | 4.0 | 12.0 | 6 | 0.15 | 0.105 | 1000 |
| | **172RO** | | | 1.7 | 4.0 | 14.0 | 8 | 0.15 | 0.110 | 1000 |
| | **GR172RO** | | ** | 1.7 | 4.0 | 14.0 | 8 | 0.15 | 0.110 | 500 |
| | **172RH** | | | 1.7 | 4.0 | 16.0 | 10 | 0.15 | 0.130 | 1000 |
| | **172RM** | | | 1.7 | 4.0 | 18.0 | 12 | 0.15 | 0.140 | 1000 |
| | **172RL** | | | 1.7 | 4.0 | 24.0 | 18 | 0.15 | 0.190 | 1000 |
| 2.5 | **173B** | | | 2.2 | 4.7 | 14.0 | 8 | 0.15 | 0.150 | 1000 |
| | **GR173B** | | ** | 2.2 | 4.7 | 14.0 | 8 | 0.15 | 0.150 | 500 |
| | **173BH** | | | 2.2 | 4.7 | 18.0 | 12 | 0.15 | 0.200 | 1000 |
| | **173BL** | | | 2.2 | 4.7 | 24.0 | 18 | 0.15 | 0.250 | 1000 |
| 4 | **174GR** | | | 2.8 | 5.4 | 17.0 | 10 | 0.20 | 0.210 | 100 |
| | **174GRH** | | | 2.8 | 5.4 | 20.0 | 12 | 0.20 | 0.250 | 100 |
| | **174GRL** | | | 2.8 | 5.4 | 26.0 | 18 | 0.20 | 0.320 | 100 |
| 6 | **175S** | | | 3.5 | 6.9 | 20.0 | 12 | 0.20 | 0.350 | 100 |
| | **175SL** | | | 3.5 | 6.9 | 26.0 | 18 | 0.20 | 0.460 | 100 |
| 10 | **176E** | | | 4.5 | 8.4 | 22.0 | 12 | 0.20 | 0.450 | 100 |
| | **176EL** | | | 4.5 | 8.4 | 28.0 | 18 | 0.20 | 0.650 | 100 |
| 16 | **177GR** | | | 5.8 | 9.6 | 24.0 | 12 | 0.20 | 0.650 | 100 |
| | **177GRL** | | | 5.8 | 9.6 | 28.0 | 18 | 0.20 | 0.800 | 100 |
| 25 | **178BR** | | | 7.3 | 12.0 | 30.0 | 16 | 0.20 | 1.600 | 50 |
| | **178BRL** | | | 7.3 | 12.0 | 36.0 | 22 | 0.20 | 2.000 | 50 |
| 35 | **179B** | | | 8.3 | 13.5 | 30.0 | 16 | 0.20 | 1.900 | 50 |
| | **179BL** | | | 8.3 | 13.5 | 39.0 | 25 | 0.20 | 2.500 | 50 |
| 50 | **180O** | | | 10.3 | 16.0 | 36.0 | 20 | 0.30 | 3.300 | 50 |
| | **180OL** | | | 10.3 | 16.0 | 40.0 | 25 | 0.30 | 4.000 | 50 |

## Insulated cable end-sleeves to DIN with Easy-Entry, colour code 2






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Easy-Entry insulation for splice-free cable insertion
- Halogen-free

### Characteristics
- To DIN 46228, part 4, (0.5 - 25 mm²)
- Heat resistant to 105° C

### Material
- Copper (EN13600)
- Synthetic material: polypropylene

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 150

### Additional information
- * = not standardised
- ** = quantities in one bag

| Nominal cross section mm² | Part No. | Colour | Hint | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d3 | l1 | l2 | s1 | | |
| 0.14 | **1666** | | * | 0.7 | 2.1 | 10.0 | 6 | 0.15 | 0.035 | 1000 |
| | **1668** | | * | 0.7 | 2.1 | 12.0 | 8 | 0.15 | 0.040 | 1000 |
| 0.25 | **1676** | | * | 0.8 | 2.3 | 10.0 | 6 | 0.15 | 0.045 | 1000 |
| | **1678** | | * | 0.8 | 2.3 | 12.0 | 8 | 0.15 | 0.050 | 1000 |
| 0.34 | **1686** | | * | 0.8 | 2.5 | 10.0 | 6 | 0.15 | 0.045 | 1000 |
| | **1688** | | * | 0.8 | 2.5 | 12.0 | 8 | 0.15 | 0.050 | 1000 |
| 0.5 | **1696** | | | 1.0 | 3.1 | 12.0 | 6 | 0.15 | 0.070 | 1000 |
| | **1698** | | | 1.0 | 3.1 | 14.0 | 8 | 0.15 | 0.080 | 1000 |
| | **GR1698** | | ** | 1.0 | 3.1 | 14.0 | 8 | 0.15 | 0.080 | 500 |
| 0.75 | **1706** | | | 1.2 | 3.3 | 12.0 | 6 | 0.15 | 0.080 | 1000 |
| | **1708** | | | 1.2 | 3.3 | 14.0 | 8 | 0.15 | 0.095 | 1000 |
| | **GR1708** | | ** | 1.2 | 3.3 | 14.0 | 8 | 0.15 | 0.095 | 500 |
| 1 | **1716** | | | 1.4 | 3.5 | 12.0 | 6 | 0.15 | 0.085 | 1000 |
| | **1718** | | | 1.4 | 3.5 | 14.0 | 8 | 0.15 | 0.100 | 1000 |
| | **GR1718** | | ** | 1.4 | 3.5 | 14.0 | 8 | 0.15 | 0.100 | 500 |
| 1.5 | **1726** | | | 1.7 | 4.0 | 12.0 | 6 | 0.15 | 0.100 | 1000 |
| | **1728** | | | 1.7 | 4.0 | 14.0 | 8 | 0.15 | 0.120 | 1000 |
| | **GR1728** | | ** | 1.7 | 4.0 | 14.0 | 8 | 0.15 | 0.120 | 500 |
| | **17210** | | | 1.7 | 4.0 | 16.0 | 10 | 0.15 | 0.130 | 1000 |
| | **17212** | | | 1.7 | 4.0 | 18.0 | 12 | 0.15 | 0.140 | 1000 |
| | **17218** | | | 1.7 | 4.0 | 24.0 | 18 | 0.15 | 0.220 | 1000 |
| 2.5 | **1738** | | | 2.2 | 4.7 | 14.0 | 8 | 0.15 | 0.140 | 1000 |
| | **GR1738** | | ** | 2.2 | 4.7 | 14.0 | 8 | 0.15 | 0.140 | 500 |
| | **17312** | | | 2.2 | 4.7 | 18.0 | 12 | 0.15 | 0.200 | 1000 |
| | **17318** | | | 2.2 | 4.7 | 24.0 | 18 | 0.15 | 0.280 | 1000 |
| 4 | **17410** | | | 2.8 | 5.4 | 17.0 | 10 | 0.20 | 0.260 | 100 |
| | **17412** | | | 2.8 | 5.4 | 20.0 | 12 | 0.20 | 0.300 | 100 |
| | **17418** | | | 2.8 | 5.4 | 26.0 | 18 | 0.20 | 0.390 | 100 |
| 6 | **17512** | | | 3.5 | 6.9 | 20.0 | 12 | 0.20 | 0.410 | 100 |
| | **17518** | | | 3.5 | 6.9 | 26.0 | 18 | 0.20 | 0.530 | 100 |

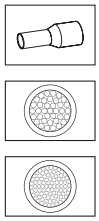
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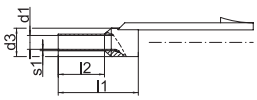
## Insulated cable end-sleeves to DIN with Easy-Entry, colour code 2

| Nominal cross section mm² | Part No. | Colour | Hint | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | d1 | d3 | l1 | l2 | s1 | | |
| 10 | **17612** | | | 4.5 | 8.4 | 22.0 | 12 | 0.20 | 0.550 | 100 |
| | **17618** | | | 4.5 | 8.4 | 28.0 | 18 | 0.20 | 0.710 | 100 |
| 16 | **17712** | | | 5.8 | 9.6 | 24.0 | 12 | 0.20 | 0.660 | 100 |
| | **17718** | | | 5.8 | 9.6 | 28.0 | 18 | 0.20 | 0.850 | 100 |
| 25 | **17816** | | | 7.3 | 12.0 | 30.0 | 16 | 0.20 | 1.500 | 50 |
| | **17818** | | | 7.3 | 12.0 | 30.0 | 18 | 0.20 | 1.550 | 50 |
| | **17822** | | | 7.3 | 12.0 | 36.0 | 22 | 0.20 | 2.000 | 50 |

## Insulated cable end-sleeves with lug








- **For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6**
- **With identification system for max. 6 identification rings**
- **Halogen-free**

### Characteristics

- Dimensions to DIN 46228, part 4
- Heat resistant to 105° C

### Material

- Copper (EN13600)
- Synthetic material: polypropylene

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 150

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | d3 | l1 | l2 | s1 | | |
| 0.5 | **3698** | | 1.0 | 3.1 | 13.0 | 8 | 0.15 | 0.16 | 1000 |
| 0.75 | **3708** | | 1.2 | 3.2 | 13.5 | 8 | 0.15 | 0.16 | 1000 |
| 1 | **3718** | | 1.4 | 3.4 | 13.5 | 8 | 0.15 | 0.18 | 1000 |
| 1.5 | **3728** | | 1.7 | 3.9 | 13.5 | 8 | 0.15 | 0.20 | 1000 |
| 2.5 | **3738** | | 2.2 | 4.7 | 14.5 | 8 | 0.15 | 0.22 | 1000 |

## Designation ring and insert fork



- For identifying the insulated cable end-sleeves with lugs

### Characteristics

- Differing numbers / letters in the designation rings
- Packaging unit in booklet format, 200 of each symbol
- Insert fork A300 for inserting in the designation ring on the insulated cable end-sleeves with tabs

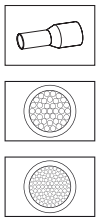
### Additional information

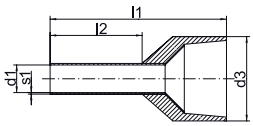
- * = without letters “I“ and “O“

| Part No. | Colour | Hint | Packing unit/pcs |
|---|---|---|---|
| Designation rings | | | |
| **380/-** | | | 1 booklet |
| **380/+** | | | 1 booklet |
| **380/0 to 9** | | | 1 booklet |
| **380/A to Z** | | * | 1 booklet |
| Insert fork | | | |
| **A300** | | | 1 |

## Insulated cable end-sleeves for short circuit resistant conductors








- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- For short circuit resistant conductors (e.g. NSGAFÖU)
- Halogen-free

### Characteristics

- Heat resistant to 105° C
- Easy-Entry insulation for simple cable insertion
- Colour-coded cross-section assignment

### Material

- Copper (EN13600)
- Synthetic material: polypropylene

### Surface

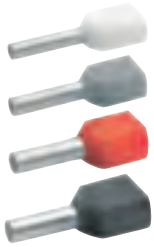
- Tin-plated to protect against corrosion

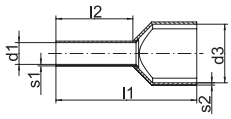
### Technical instructions

- Tool: see page 150

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | d3 | l1 | l2 | s1 | | |
| 1.5 | **4328** | | 1.7 | 8.1 | 17.5 | 8 | 0.15 | 0.22 | 100 |
| | **43210** | | 1.7 | 8.1 | 19.5 | 10 | 0.15 | 0.27 | 100 |
| 2.5 | **4338** | | 2.2 | 8.6 | 17.5 | 8 | 0.15 | 0.24 | 100 |
| | **43312** | | 2.2 | 8.6 | 21.5 | 12 | 0.15 | 0.36 | 100 |
| 4 | **43410** | | 2.9 | 10.5 | 19.5 | 10 | 0.20 | 0.36 | 100 |
| 6 | **43512** | | 3.5 | 11.0 | 23.0 | 12 | 0.20 | 0.49 | 100 |
| 10 | **43612** | | 4.5 | 12.5 | 24.0 | 12 | 0.20 | 0.65 | 100 |
| 16 | **43712** | | 5.8 | 14.5 | 25.5 | 12 | 0.20 | 0.93 | 100 |

## Insulated twin cable end-sleeves






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- For looping of clamps
- Colour-coding following DIN 46228 part 4 (0.5 - 16 mm²)
- Halogen-free

### Characteristics
- Heat resistant to 105° C

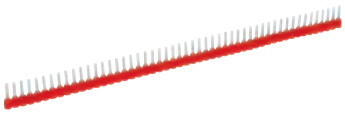
### Material
- Copper (EN13600)
- Synthetic material: polypropylene

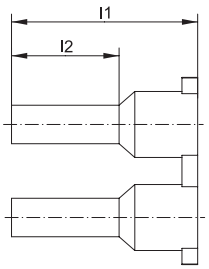
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 153

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | | | Weight/ 1000 pcs. ~ kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | d1 | d3 | l1 | l2 | s1 | s2 | | |
| 2 x 0.25 | **8678** | | 1.20 | 2.3/3.9 | 15.0 | 8 | 0.15 | 0.25 | 0.110 | 1000 |
| 2 x 0.34 | **8688** | | 1.20 | 2.3/3.9 | 15.0 | 8 | 0.15 | 0.25 | 0.110 | 1000 |
| 2 x 0.5 | **8698** | | 1.40 | 3.0/5.2 | 15.0 | 8 | 0.15 | 0.25 | 0.110 | 1000 |
| 2 x 0.75 | **8708** | | 1.70 | 3.3/5.5 | 15.0 | 8 | 0.15 | 0.25 | 0.130 | 1000 |
| | **87010** | | 1.70 | 3.3/5.5 | 17.0 | 10 | 0.15 | 0.25 | 0.150 | 1000 |
| 2 x 1 | **8718** | | 2.00 | 4.0/6.0 | 15.0 | 8 | 0.15 | 0.30 | 0.170 | 1000 |
| | **87110** | | 2.00 | 4.0/6.0 | 17.0 | 10 | 0.15 | 0.30 | 0.170 | 1000 |
| 2 x 1.5 | **8728** | | 2.20 | 4.2/7.2 | 16.0 | 8 | 0.15 | 0.30 | 0.183 | 1000 |
| | **87212** | | 2.20 | 4.2/7.2 | 20.0 | 12 | 0.15 | 0.30 | 0.237 | 1000 |
| 2 x 2.5 | **87310** | | 2.80 | 4.8/8.4 | 18.5 | 10 | 0.20 | 0.30 | 0.312 | 100 |
| | **87313** | | 2.80 | 4.8/8.4 | 21.5 | 13 | 0.20 | 0.30 | 0.340 | 100 |
| 2 x 4 | **87412** | | 3.70 | 5.7/9.6 | 23.0 | 12 | 0.20 | 0.40 | 0.467 | 100 |
| 2 x 6 | **87514** | | 4.80 | 7.7/10.8 | 26.0 | 14 | 0.20 | 0.40 | 0.730 | 100 |
| 2 x 10 | **87614** | | 6.40 | 8.0/13.8 | 26.0 | 14 | 0.20 | 0.40 | 0.884 | 100 |
| 2 x 16 | **87714** | | 8.20 | 10.4/19.2 | 30.0 | 14 | 0.20 | 0.40 | 1.273 | 100 |

## Insulated cable end-sleeves, strip form












- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Crimped cable end-sleeves for simple mounting to cable clamps
- Halogen-free

### Characteristics

- Colour-coding and tube dimension to DIN 46228, part 4
- Heat resistant to 105° C

### Material

- Copper (EN13600)
- Synthetic material: polypropylene

### Surface

- Tin-plated to protect against corrosion

| Nominal cross section mm² | Part No. | Colour | Dimension mm l1 | Dimension mm l2 | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| 0.5 | **ST9698** | | 14 | 8 | 0.100 | 500 |
| 0.75 | **ST9708** | | 14 | 8 | 0.100 | 500 |
| 1 | **ST9718** | | 14 | 8 | 0.100 | 500 |
| 1.5 | **ST9728** | | 14 | 8 | 0.100 | 500 |
| 2.5 | **ST9738** | | 14 | 8 | 0.100 | 500 |

## Insulated cable end-sleeves, small coil









- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Easy-Entry insulation for optimal cable insertion
- Automatic processing due to coil shape
- Halogen-free

### Characteristics

- Colour-coding and tube dimension to DIN 46228, part 4
- Heat resistant to 105° C

### Material

- Copper (EN13600)
- Synthetic material: polypropylene

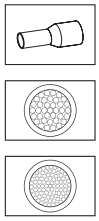
### Surface

- Tin-plated to protect against corrosion

| Nominal cross section mm² | Part No. | Colour | Dimension mm l1 | Dimension mm l2 | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| 0.5 | **BAK9698** | | 14 | 8 | 0.136 | 1100 |
| 0.75 | **BAK9708** | | 14 | 8 | 0.154 | 1100 |
| 1 | **BAK9718** | | 14 | 8 | 0.187 | 800 |
| 1.5 | **BAK9728** | | 14 | 8 | 0.200 | 800 |
| 2.5 | **BAK9738** | | 14 | 8 | 0.300 | 500 |

## Insulated cable end-sleeves, large coil





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Easy-Entry insulation for splice-free cable insertion
- Automatic processing due to coil shape
- Halogen-free

### Characteristics

- Colour-coding and tube dimension to DIN 46228, part 4
- Heat resistant to 105° C

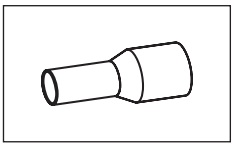
### Material

- Copper (EN13600)
- Synthetic material: polypropylene

### Surface

- Tin-plated to protect against corrosion

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | Weight/ 1000 pcs. ~ kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | | l1 | l2 | | |
| 0.5 | **BAG9698** | | 14 | 8 | 0.120 | 10000 |
| 0.75 | **BAG9708** | | 14 | 8 | 0.130 | 10000 |
| 1 | **BAG9718** | | 14 | 8 | 0.160 | 7500 |
| 1.5 | **BAG9728** | | 14 | 8 | 0.173 | 7500 |
| 2.5 | **BAG9738** | | 14 | 8 | 0.230 | 5000 |

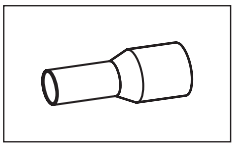


## Tool application chart

**Cable end-sleeves to DIN 46228, part 1 and DIN 46228, part 4**
**Insulated cable end-sleeves for short circuit resistant conductors**

**Part 1 of 2**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.08 - 10 | K303 | | 217 | | ◇ |
| | 0.08 - 16 | K304K | | 217 | | ◇ |
| | | K306K | | 217 | | ⬡ |
| | 0.14 - 2.5 | K1 | | 212 | | ▱ |
| | | K48 | | 212 | | ▱ |
| | 0.14 - 6 | K32 | | 213 | | ▱ |
| | | K37 | | 214 | | ▱ |
| | 0.14 - 10 | K3014K | | 218 | | ◇ |
| | 0.5 - 2.5 | K4 | | 210 | | ⌒ |
| | 0.5 - 6 | K36 | | 213 | | ▱ |
| | | K382 | | 215 | | ◇ |
| | 0.5 - 16 | K3 | | 211 | | ⌒ |
| | 1.5 - 6 | K46 | | 210 | | ⌒ |
| | 6 - 16 | K34 | | 214 | | ▱ |
| | 10 - 25 | K39 | | 215 | | ▱ |
| | 10 - 35 | K35 | | 211 | | ⌒ |
| | 10 - 50 | K271 | | 218 | | ⌓ |
| | | K28 | | 219 | | ▱ |
| | 50 - 95 | K272 | | 219 | | ⌓ |
| | | K29 | | 220 | | ▱ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 0.14 - 10 | K507 | | 243 | | ▱ |
| | | KP1 | +KP303 | 240 | | ◇ |
| | | KP1L | +KP303 | 240 | | ◇ |
| | 0.14 - 50 | K50 | | 244 | 326 | ▱ |
| | | EK50ML | | 254 | 326 | ▱ |
| | 1.5 - 6 | KP1 | +KP351 | 240 | | ○ |
| | | KP1L | +KP351 | 240 | | ○ |
| | 2.5 - 16 | KP1 | +KP304 | 240 | | ◇ |
| | | KP1L | +KP304 | 240 | | ◇ |
| | 10 - 16 | KP1 | +KP352 | 240 | | ○ |
| | | KP1L | +KP352 | 240 | | ○ |
| | 10 - 50 | K354 | | 246 | 332 | ▱ |
| | 10 - 95 | K18 | | 248 | 340 | ▱ ⌓ |
| | 10 - 240 | K22 | | 250 | 346 | ▱ ⌓ |

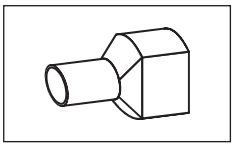


## Tool application chart

**Cable end-sleeves to DIN 46228, part 1 and DIN 46228, part 4**
**Insulated cable end-sleeves for short circuit resistant conductors**

Part 2 of 2

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Hand hydraulic crimping tools | 10 - 95 | HK6018 | | 292 | 340 | |
| | | HK60UNV | +UA18 | 473 | 340 | |
| | 10 - 240 | HK6022 | | 294 | 346 | |
| | | HK60UNV | +UA22 | 473 | 351 | |
| | 25 - 240 | HK12030 | | 298 | 351 | |
| | | HK12042 | | 300 | 351 | |
| | | HK120U | | 302 | | |
| Battery powered crimping tools | 0.14 - 50 | EK1550ML | | 258 | | |
| | 10 - 50 | EK354ML | | 262 | 332 | |
| | | EK354 | | 266 | 332 | |
| | | EK505 | | 268 | 326 | |
| | 10 - 95 | EK5018 | | 270 | 340 | |
| | | EK60UNV | +UA18 | 476 | 340 | |
| | | EKM60UNV | +UA18 | 475 | 340 | |
| | 10 - 240 | EK6022 | | 274 | 346 | |
| | | EKM6022 | | 272 | 346 | |
| | | EK60UNV | +UA22 | 476 | 346 | |
| | | EKM60UNV | +UA22 | 475 | 346 | |
| | 25 - 240 | EK12032 | | 280 | 351 | |
| | | EK12042 | | 282 | 351 | |
| | | EK120U | | 284 | 351 | |
| | | EK135FT | +UA15T | 286 | 351 | |
| | | EK120UNV | +UA12T | 284 | 351 | |
| Hydraulic crimping systems | 10 - 95 | THK18 | | 306 | 340 | |
| | 10 - 150 | THK22 | | 308 | 346 | |
| | 25 - 240 | HK252 | | 320 | 357 | |
| Hydraulic crimping heads | 10 - 95 | PK18 | | 306 | 340 | |
| | | PK60UNV | +UA18 | 474 | 340 | |
| | 10 - 240 | PK22 | | 308 | 346 | |
| | | PK60UNV | +UA22 | 474 | 346 | |
| | 25 - 240 | PK12042 | | 312 | 351 | |
| | | PK120U | | 314 | 351 | |
| | | PK252 | | 316 | 357 | |



## Tool application chart

**Insulated twin cable end-sleeves**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 2x0.5 - 2x2.5 | K32 | | 213 | | |
| | | K382 | | 215 | | |
| | 2x0.5 - 2x4 | K303 | | 217 | | |
| | | K36 | | 213 | | |
| | 2x0.5 - 2x6 | K306K | | 217 | | |
| | | K304K | | 217 | | |
| | | K3014K | | 218 | | |
| | 2x4 - 2x6 | K34 | | 214 | | |
| | 2x4 - 2x16 | K271 | | 218 | | |
| | | K28 | | 219 | | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 2x0.5 - 2x4 | KP1 | +KP303 | 240 | | |
| | | KP1L | +KP303 | 240 | | |
| | 2x4 - 2x6 | KP1 | | 240 | | |
| | 2x4 - 2x16 | K354 | | 246 | 332 | |
| | | K18 | | 248 | 340 | |
| | | K22 | | 250 | 346 | |
| Hand hydraulic crimping tools | 2x4 - 2x16 | HK6018 | | 292 | 340 | |
| | | HK60UNV | +UA18 | 473 | 340 | |
| | | HK6022 | | 294 | 346 | |
| | | HK60UNV | +UA22 | 473 | 346 | |
| Battery powered crimping tools | 2x4 - 2x16 | EK354ML | | 262 | 346 | |
| | | EK354 | | 266 | 346 | |
| | | EK505 | | 268 | 336 | |
| | | EK5018 | | 270 | 340 | |
| | | EK60UNV | +UA18 | 476 | 340 | |
| | | EKM60UNV | +UA18 | 475 | 340 | |
| | | EK6022 | | 274 | 346 | |
| | | EKM6022 | | 272 | 346 | |
| | | EK60UNV | +UA22 | 476 | 346 | |
| | | EKM60UNV | +UA22 | 475 | 346 | |
| Hydraulic crimping systems | 2x4-2x16 | THK18 | | 306 | 340 | |
| | | THK22 | | 308 | 346 | |
| Hydraulic crimping heads | 2x4-2x16 | PK18 | | 306 | 340 | |
| | | PK60UNV | +UA18 | 474 | 340 | |
| | | PK22 | | 308 | 346 | |
| | | PK60UNV | + UA22 | 474 | 346 | |

# PRECISION – CABLE CONNECTIONS, INSULATED AND NON-INSULATED

Electrical power is the product of voltage and current strength. An optimum connection guarantees to transfer this power without thermal losses. This requires materials, design and tool to be correctly processed and matched to one another. If you want optimum power at all times, you can rely on Klauke's best work.



**In brief**

- High requirements in detail
- Solutions available for small cross-sections
- Broad range of versions
- Optimum connection without thermal loss
- Grooved profile for improved conductor hold

## Easy insulation

All insulation is produced in the Easy-Entry version, for simple cable insertion without splicing. For small ranges with big effect.

- Cable connections with nominal cross-sections from 0.1 $mm^2$ to 6 $mm^2$
- Resistant to temperatures of up to 105 °C
- Flame retardant polyamide insulation: No toxic vapours in case of fire
- Halogen-free
- Insensitive to corrosion due to tinning ander the insulation
- Simple processing thanks to Easy-Entry
- Grooved profile on the inside for improved contacting

## More hold with grooved profile

The detail is key. Not only are there numerous models of Klauke tabs and receptacles, they are also equipped with special features. No matter whether as a standardised connector or with grooved profile for improved contacting - Klauke will always provide the right feature for your requirements.

- Broad range of models
- All-purpose
- Also as standardised connectors with various tab widths
- Available with strain relief
- Fully-insulated receptacles
- Grooved profile and additional copper ring in the insulation area for higher stresses





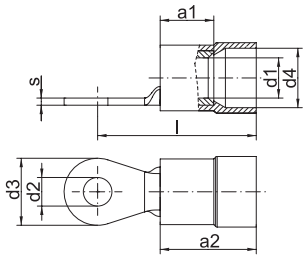
## Quality in detail

In a machine, everything has to pull together. For the machine to run, every component has to function. Even when it comes to small parts, better to go for high quality products with a high capacity, for our receptacles with snap-in point for example. The snap-in point guarantees a reliable connection even after repeated insertions.

- High conductivity and reliable insulation thanks to high-quality materials
- Improved spring properties by the use of bronze

## Insulated solderless terminals






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- To DIN 46237
- High-quality brazing process in the crimp area
- Insulation sleeve halogen-free

### Characteristics
- Heat resistant to 105° C
- Easy-Entry insulation for simple cable insertion
- Cross-section-dependent colour-coding

### Material
- Copper (ETP)
- Insulation sleeve: PA

### Surface
- Tin-plated to protect against corrosion

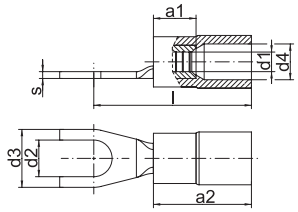
### Technical instructions
- Tool: see page 175

### Additional information
- * = not standardised
- 0.1 - 0.4 mm² not CSA-tested

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Hint | Dimension mm | | | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a1 | a2 | d1 | d2 | d3 | d4 | l | s | | |
| 0.1 - 0.4 | -- | **6192** | | * | -- | -- | 1.0 | 2.3 | 5.0 | 2.2 | 14.0 | 0.5 | 0.020 | 100 |
| | -- | **61925** | | * | -- | -- | 1.0 | 2.6 | 5.0 | 2.2 | 14.0 | 0.5 | 0.020 | 100 |
| | -- | **6193** | | * | -- | -- | 1.0 | 3.3 | 5.0 | 2.2 | 14.0 | 0.5 | 0.020 | 100 |
| | -- | **61935** | | * | -- | -- | 1.0 | 3.8 | 6.5 | 2.2 | 16.0 | 0.5 | 0.025 | 100 |
| | -- | **6194** | | * | -- | -- | 1.0 | 4.4 | 7.0 | 2.2 | 16.0 | 0.5 | 0.025 | 100 |
| | -- | **6195** | | * | -- | -- | 1.0 | 5.4 | 8.0 | 2.2 | 15.0 | 0.5 | 0.025 | 100 |
| 0.5 - 1 | 2.5 - 1 | **62025** | | | 5 | 10.5 | 1.6 | 2.8 | 6.0 | 4.5 | 16.5 | 0.8 | 0.060 | 100 |
| | 3.0 - 1 | **6203** | | | 5 | 10.5 | 1.6 | 3.2 | 6.0 | 4.5 | 16.5 | 0.8 | 0.060 | 100 |
| | 3.5 - 1 | **62035** | | | 5 | 10.5 | 1.6 | 3.7 | 6.0 | 4.5 | 16.5 | 0.8 | 0.550 | 100 |
| | 4.0 - 1 | **6204** | | | 5 | 10.5 | 1.6 | 4.3 | 8.0 | 4.5 | 17.5 | 0.8 | 0.070 | 100 |
| | 5.0 - 1 | **6205** | | | 5 | 10.5 | 1.6 | 5.3 | 10.0 | 4.5 | 18.5 | 0.8 | 0.090 | 100 |
| | -- | **6206** | | * | 5 | 10.5 | 1.6 | 6.5 | 11.0 | 4.5 | 20.5 | 0.8 | 0.080 | 100 |
| | -- | **6208** | | * | 5 | 10.5 | 1.6 | 8.4 | 14.0 | 4.5 | 22.5 | 0.8 | 0.130 | 100 |
| | -- | **62010** | | * | 5 | 10.5 | 1.6 | 10.5 | 18.0 | 4.5 | 24.5 | 0.8 | 0.130 | 100 |
| 1.5 - 2.5 | 3.0 - 2.5 | **6303** | | | 5 | 11.5 | 2.3 | 3.2 | 6.0 | 5.1 | 17.5 | 0.8 | 0.065 | 100 |
| | 3.5 - 2.5 | **63035** | | | 5 | 11.5 | 2.3 | 3.7 | 6.0 | 5.1 | 17.5 | 0.8 | 0.065 | 100 |
| | 4.0 - 2.5 | **6304** | | | 5 | 11.5 | 2.3 | 4.3 | 8.0 | 5.1 | 18.5 | 0.8 | 0.080 | 100 |
| | 5.0 - 2.5 | **6305** | | | 5 | 11.5 | 2.3 | 5.3 | 10.0 | 5.1 | 20.5 | 0.8 | 0.090 | 100 |
| | 6.0 - 2.5 | **6306** | | | 5 | 11.5 | 2.3 | 6.5 | 11.0 | 5.1 | 22.5 | 0.8 | 0.110 | 100 |
| | 8.0 - 2.5 | **6308** | | | 5 | 11.5 | 2.3 | 8.4 | 14.0 | 5.1 | 23.5 | 0.8 | 0.130 | 100 |
| | -- | **63010** | | * | 5 | 11.5 | 2.3 | 10.5 | 18.0 | 5.1 | 25.5 | 0.8 | 0.160 | 100 |
| 4 - 6 | 4.0 - 6 | **6504** | | | 6 | 12.5 | 3.6 | 4.3 | 8.0 | 6.5 | 20.5 | 1.0 | 0.140 | 100 |
| | 5.0 - 6 | **6505** | | | 6 | 12.5 | 3.6 | 5.3 | 10.0 | 6.5 | 21.5 | 1.0 | 0.160 | 100 |
| | 6.0 - 6 | **6506** | | | 6 | 12.5 | 3.6 | 6.5 | 11.0 | 6.5 | 22.5 | 1.0 | 0.170 | 100 |
| | 8.0 - 6 | **6508** | | | 6 | 12.5 | 3.6 | 8.4 | 14.0 | 6.5 | 25.5 | 1.0 | 0.220 | 100 |
| | 10.0 - 6 | **65010** | | | 6 | 12.5 | 3.6 | 10.5 | 18.0 | 6.5 | 27.5 | 1.0 | 0.290 | 100 |

# Insulated solderless terminals, fork type






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Dimensions in the crimp area to DIN 46237
- High-quality brazing process in the crimp area
- Simple fork-type mounting
- Insulation sleeve halogen-free

## Characteristics

- Heat resistant to 105° C
- Easy-Entry insulation for simple cable insertion
- Cross-section-dependent colour-coding

## Material

- Copper (ETP)
- Insulation sleeve: PA

## Surface

- Tin-plated to protect against corrosion

## Technical instructions

- Tool: see page 175

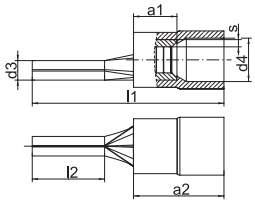
## Additional information

- 0.1 - 0.4 mm² not CSA-tested
- * = not standardised

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Hint | Dimension mm | | | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a1 | a2 | d1 | d2 | d3 | d4 | l | s | | |
| 0.1 - 0.4 | -- | **619C3** | | * | -- | -- | -- | 3.2 | 5.0 | -- | 14.0 | 0.5 | 0.020 | 100 |
| 0.5 - 1 | 3.0 - 1 | **620C3** | | | 5 | 10.5 | 1.6 | 3.2 | 6.0 | 4.5 | 16.5 | 0.8 | 0.060 | 100 |
| | 3.5 - 1 | **620C35** | | | 5 | 10.5 | 1.6 | 3.7 | 6.8 | 4.5 | 17.5 | 0.8 | 0.060 | 100 |
| | 4.0 - 1 | **620C4** | | | 5 | 10.5 | 1.6 | 4.3 | 6.8 | 4.5 | 17.5 | 0.8 | 0.070 | 100 |
| | 5.0 - 1 | **620C5** | | | 5 | 10.5 | 1.6 | 5.3 | 10.0 | 4.5 | 18.5 | 0.8 | 0.090 | 100 |
| | -- | **620C6** | | * | 5 | 10.5 | 1.6 | 6.5 | 11.0 | 4.5 | 20.5 | 0.8 | 0.080 | 100 |
| 1.5 - 2.5 | 3.0 - 2.5 | **630C3** | | | 5 | 11.5 | 2.3 | 3.2 | 6.0 | 5.1 | 17.5 | 0.8 | 0.060 | 100 |
| | 3.5 - 2.5 | **630C35** | | | 5 | 11.5 | 2.3 | 3.7 | 6.8 | 5.1 | 18.5 | 0.8 | 0.065 | 100 |
| | 4.0 - 2.5 | **630C4** | | | 5 | 11.5 | 2.3 | 4.3 | 6.8 | 5.1 | 18.5 | 0.8 | 0.080 | 100 |
| | 5.0 - 2.5 | **630C5** | | | 5 | 11.5 | 2.3 | 5.3 | 10.0 | 5.1 | 20.5 | 0.8 | 0.090 | 100 |
| | 6.0 - 2.5 | **630C6** | | | 5 | 11.5 | 2.3 | 6.5 | 11.0 | 5.1 | 22.5 | 0.8 | 0.110 | 100 |
| 4 - 6 | 4.0 - 6 | **650C4** | | | 6 | 12.5 | 3.6 | 4.3 | 8.0 | 6.5 | 20.5 | 1.0 | 0.140 | 100 |
| | 5.0 - 6 | **650C5** | | | 6 | 12.5 | 3.6 | 5.3 | 10.0 | 6.5 | 21.5 | 1.0 | 0.160 | 100 |
| | 6.0 - 6 | **650C6** | | | 6 | 12.5 | 3.6 | 6.5 | 11.0 | 6.5 | 22.5 | 1.0 | 0.170 | 100 |
| | 8.0 - 6 | **650C8** | | | 6 | 12.5 | 3.6 | 8.4 | 14.0 | 6.5 | 25.5 | 1.0 | 0.220 | 100 |
| | 10.0 - 6 | **650C10** | | | 6 | 12.5 | 3.6 | 10.5 | 18.0 | 6.5 | 27.5 | 1.0 | 0.280 | 100 |

## Insulated pin terminals






- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- To DIN 46231
- High-quality brazing process in the crimp area
- Insulation sleeve halogen-free

### Characteristics

- Cross-section-dependent colour-coding
- Heat resistant to 105° C
- Easy-Entry insulation for simple cable insertion

### Material

- Copper (ETP)
- Insulation sleeve: PA

### Surface

- Tin-plated to protect against corrosion

### Technical instructions

- Tool: see page 175

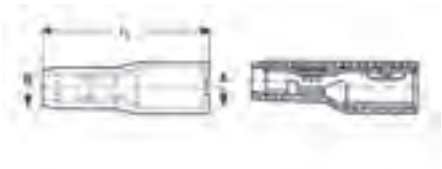
### Additional information

- 0.1 - 0.4 mm² not CSA-tested
- * = not standardised

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Hint | Dimension mm | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a1 | a2 | d3 | d4 | l1 | l2 | | |
| 0.1 - 0.4 | -- | **704** | | * | -- | -- | 1.4 | -- | 18.0 | 9.0 | 0.020 | 100 |
| 0.5 - 1 | 1 | **705** | | | 5 | 10.5 | 1.9 | 4.5 | 22.0 | 10.0 | 0.065 | 100 |
| | | **705K** | | * | 5 | 10.5 | 1.9 | 4.5 | 18.0 | 6.0 | 0.060 | 100 |
| 1.5 - 2.5 | 2.5 | **710** | | | 5 | 11.5 | 1.9 | 5.1 | 23.0 | 10.0 | 0.065 | 100 |
| | | **710K** | | * | 5 | 11.5 | 1.9 | 5.1 | 19.5 | 6.5 | 0.060 | 100 |
| | | **710L** | | * | 5 | 11.5 | 1.9 | 5.1 | 27.5 | 16.0 | 0.100 | 100 |
| 4 - 6 | 6 | **715** | | | 6 | 12.5 | 2.7 | 6.5 | 26.0 | 11.0 | 0.160 | 100 |

## Insulated pin receptacles





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- High quality bronze material provides optimum spring characteristic and improved contact strength

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

### Material
- Bronze (CuSnZn)
- Insulation sleeve: PVC

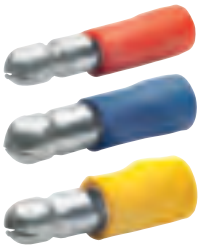
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

### Additional information
- 1.5 - 2.5 mm² and 4 - 6 mm² not CSA-tested

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|
| | | | Pin dia. | l1 | | |
| 0.5 - 1 | **920** | | 4 | 22 | 0.060 | 100 |
| 1.5 - 2.5 | **930** | | 5 | 22 | 0.120 | 100 |
| 4 - 6 | **950** | | 5 | 22 | 0.125 | 100 |

## Insulated pin receptacles





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

### Material
- Brass (CuZn)
- Insulation sleeve: PVC

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

### Additional information
- 1.5 - 2.5 mm² and 4 - 6 mm² not CSA-tested

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | Pin dia. | l1 | l2 | | |
| 0.5 - 1 | **1020** | | 4 | 22 | 9 | 0.060 | 100 |
| 1.5 - 2.5 | **1030** | | 5 | 22 | 9 | 0.075 | 100 |
| 4 - 6 | **1050** | | 5 | 22 | 9 | 0.110 | 100 |

## Insulated pin receptacles, fully insulated



- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- High quality bronze material provides optimum spring characteristic and improved contact strength
- Fast processing as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material
- Bronze (CuSnZn)
- Insulation sleeve: PA

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

### Additional information
- 4 - 6 mm² not CSA-tested

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | Pin dia. | l1 | s | | |
| 0.5 - 1 | **920V** | | 4 | 24 | 0.38 | 0.065 | 100 |
| 4 - 6 | **950V** | | 5 | 27 | 0.40 | 0.150 | 100 |

## Insulated pin receptacles, fully insulated



- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- High quality bronze material provides optimum spring characteristic and improved contact strength
- Fast processing as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material
- Bronze (CuSnZn)
- Insulation sleeve: PA

### Surface
- Tin-plated to protect against corrosion

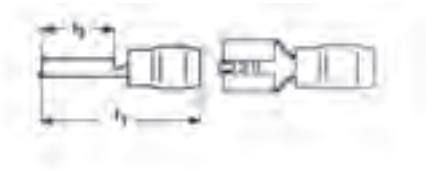
### Technical instructions
- Tool: see page 175

### Additional information
- 1.5 - 2.5 mm² and 4 - 6 mm² not CSA-tested

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | Pin dia. | l1 | l2 | | |
| 0.5 - 1 | **1020V** | | 4 | 25 | 11 | 0.065 | 100 |
| 1.5 - 2.5 | **1030V** | | 5 | 25 | 11 | 0.080 | 100 |
| 4 - 6 | **1050V** | | 5 | 27 | 13 | 0.120 | 100 |

## Insulated receptacles, tinned brass













▸ **For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6**

### Characteristics

- To DIN 46245, part 1 – 3 and similar versions
- Cross-section-dependent colour-coding
- Temperature resistance: PVC to 70° C, PA to 105° C

### Material

- Brass (CuZn)
- Insulation sleeve: PVC/PA

### Surface

- Tin-plated to protect against corrosion

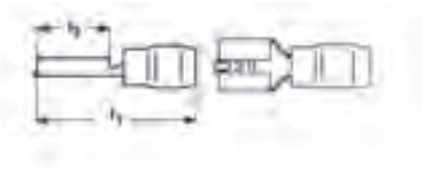
### Technical instructions

- Tool: see page 175

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Tab Thickn. | Tab Width | Dimension mm | | Insulation material | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | l1 | l2 | | | |
| 0.5 - 1 | | **8201** | red | 0.5 | 2.8 | 17.5 | 8.0 | PVC | 0.035 | 100 |
| | | **8201A** | red | 0.8 | 2.8 | 17.5 | 8.0 | PVC | 0.045 | 100 |
| | | **8202** | red | 0.5 | 4.8 | 18.0 | 6.0 | PVC | 0.065 | 100 |
| | 4.8 - 1 | **8203** | red | 0.8 | 4.8 | 18.0 | 6.0 | PVC | 0.065 | 100 |
| | 6.3 - 1 | **720** | red | 0.8 | 6.3 | 22.0 | 7.5 | PVC | 0.090 | 100 |
| | | **7208** | red | 0.8 | 7.7 | 25.0 | 9.5 | PVC | 0.110 | 100 |
| 1.5 - 2.5 | | **8301** | blue | 0.5 | 2.8 | 18.0 | 8.0 | PA | 0.050 | 100 |
| | | **8301A** | blue | 0.8 | 2.8 | 18.0 | 8.0 | PA | 0.060 | 100 |
| | | **8302** | blue | 0.5 | 4.8 | 18.0 | 6.0 | PVC | 0.070 | 100 |
| | 4.8 - 2.5 | **8303** | blue | 0.8 | 4.8 | 18.0 | 6.0 | PVC | 0.070 | 100 |
| | 6.3 - 2.5 | **730** | blue | 0.8 | 6.3 | 21.0 | 7.4 | PVC | 0.090 | 100 |
| | | **7308** | blue | 0.8 | 7.7 | 25.0 | 9.5 | PVC | 0.115 | 100 |
| 4 - 6 | | **8503** | yellow | 0.8 | 4.8 | 23.0 | 7.5 | PA | 0.138 | 100 |
| | 6.3 - 6 | **750** | yellow | 0.8 | 6.3 | 21.0 | 7.5 | PVC | 0.100 | 100 |
| | | **7509** | yellow | 1.2 | 9.5 | 26.5 | 12.0 | PVC | 0.150 | 100 |

## Insulated receptacles, tinned bronze





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- High quality bronze material provides optimum spring characteristic and improved contact strength

### Characteristics
- To DIN 46245, part 3
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

### Material
- Bronze (CuSnZn)
- Insulation sleeve: PVC

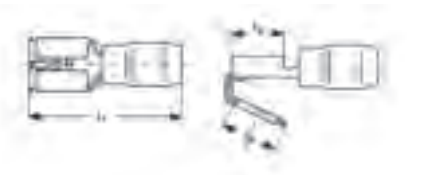
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Tab Thickn. | Tab Width | Dimension mm | | Insulation material | Weight/pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | l1 | l2 | | | |
| 0.5 - 1 | 6.3 - 1 | **720BZ** | | 0.8 | 6.3 | 22 | 7.5 | PVC | 0.09 | 100 |
| 1.5 - 2.5 | 6.3 - 2.5 | **730BZ** | | 0.8 | 6.3 | 21 | 7.4 | PVC | 0.09 | 100 |
| 4 - 6 | 6.3 - 6 | **750BZ** | | 0.8 | 6.3 | 21 | 7.5 | PVC | 0.10 | 100 |

## Insulated receptacles, multiple type





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

### Material
- Brass (CuZn)
- Insulation sleeve: PVC

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

| Nominal cross section mm² | Part No. | Colour | Tab Thickn. | Tab Width | Dimension mm | | | Insulation material | Weight/pcs. ~kg | Packing unit/ pcs |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | l1 | l2 | l3 | | | |
| 0.5 - 1 | **720AZ** | | 0.8 | 6.3 | 22 | 7.5 | 8 | PVC | 0.11 | 100 |
| 1.5 - 2.5 | **730AZ** | | 0.8 | 6.3 | 22 | 7.5 | 8 | PVC | 0.11 | 100 |
| 4 - 6 | **750AZ** | | 0.8 | 6.3 | 25 | 8.0 | 8 | PVC | 0.18 | 100 |

## Insulated receptacles, fully insulated











- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Fast processing as no additional insulation of the crimped connection is required

### Characteristics

- Cross-section-dependent colour-coding
- Temperature resistance: PVC to 70° C, PA to 105° C

### Material

- Brass (CuZn)
- Insulation sleeve: PVC/PA

### Surface

- Tin-plated to protect against corrosion

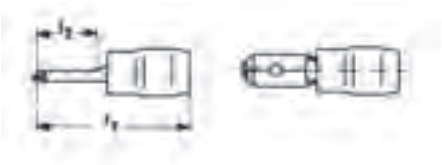
### Technical instructions

- Tool: see page 175

| Nominal cross section mm² | Part No. | Colour | Tab Thickn. | Tab Width | Dimension mm | | Insulation material | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | l1 | l2 | | | |
| 0.5 - 1 | **8201V** | red | 0.5 | 2.8 | 19.0 | 5.5 | PA | 0.07 | 100 |
| | **8201AV** | red | 0.8 | 2.8 | 19.0 | 5.5 | PA | 0.07 | 100 |
| | **8202V** | red | 0.5 | 4.8 | 20.0 | 7.0 | PVC | 0.10 | 100 |
| | **8203V** | red | 0.8 | 4.8 | 20.0 | 7.0 | PVC | 0.10 | 100 |
| | **720V** | red | 0.8 | 6.3 | 21.0 | 7.5 | PVC | 0.08 | 100 |
| 1.5 - 2.5 | **8301V** | blue | 0.5 | 2.8 | 20.0 | 8.0 | PVC | 0.14 | 100 |
| | **8301AV** | blue | 0.8 | 2.8 | 20.0 | 8.0 | PVC | 0.14 | 100 |
| | **8302V** | blue | 0.5 | 4.8 | 20.5 | 7.0 | PVC | 0.11 | 100 |
| | **8303V** | blue | 0.8 | 4.8 | 20.5 | 7.0 | PVC | 0.11 | 100 |
| | **730V** | blue | 0.8 | 6.3 | 21.0 | 7.5 | PVC | 0.15 | 100 |
| 4 - 6 | **8502V** | yellow | 0.5 | 4.8 | 20.5 | 9.5 | PVC | 0.15 | 100 |
| | **8503V** | yellow | 0.8 | 4.8 | 20.5 | 9.5 | PVC | 0.15 | 100 |
| | **750V** | yellow | 0.8 | 6.3 | 25.5 | 11.5 | PVC | 0.16 | 100 |

## Insulated tabs





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6

### Characteristics
- Cross-section-dependent colour-coding
- Temperature resistance: PVC to 70° C, PA to 105° C

### Material
- Brass (CuZn)
- Insulation sleeve: PVC/PA

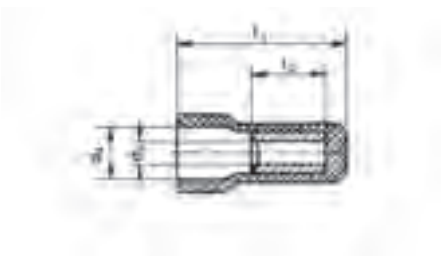
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

| Nominal cross section mm² | Part No. | Colour | Tab Thickn. | Tab Width | Dimension mm | | Insulation material | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | l1 | l2 | | | |
| 0.5 - 1 | **8201C** | red | 0.5 | 2.8 | 22.0 | 11.5 | PA | 0.040 | 100 |
| | **8201B** | red | 0.8 | 2.8 | 14.6 | 5.5 | PVC | 0.060 | 100 |
| | **8202B** | red | 0.5 | 4.8 | 22.0 | 11.5 | PA | 0.070 | 100 |
| | **8203B** | red | 0.8 | 4.8 | 22.0 | 11.5 | PA | 0.070 | 100 |
| | **820** | red | 0.8 | 6.3 | 22.0 | 8.0 | PVC | 0.060 | 100 |
| 1.5 - 2.5 | **8302B** | blue | 0.5 | 4.8 | 22.0 | 11.5 | PA | 0.070 | 100 |
| | **8303B** | blue | 0.8 | 4.8 | 22.0 | 11.5 | PA | 0.070 | 100 |
| | **830** | blue | 0.8 | 6.3 | 22.0 | 8.0 | PVC | 0.065 | 100 |
| 4 - 6 | **8502B** | yellow | 0.5 | 4.8 | 24.5 | 10.5 | PA | 0.120 | 100 |
| | **8503B** | yellow | 0.8 | 4.8 | 24.5 | 10.5 | PA | 0.120 | 100 |
| | **850** | yellow | 0.8 | 6.3 | 22.0 | 8.0 | PVC | 0.110 | 100 |

## Insulated end-splices





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Safe sealing of open conductors
- Insulation sleeve halogen-free

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material
- Copper (ETP)
- Insulation sleeve: PA

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|
| | | | d1 | d2 | l1 | l2 | | |
| 1.5 - 2.5 | **1130** | blue | 2.3 | 5.2 | 16 | 7 | 0.05 | 100 |
| 4 - 6 | **1150** | yellow | 3.6 | 7.0 | 18 | 7 | 0.14 | 100 |

## Insulated butt connectors





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Simple and safe connecting owed to butt mark
- Fast processing as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material
- Copper (ETP)
- Insulation sleeve: PA

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

### Additional information
- 0.1 - 0.4 mm² not CSA-tested

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | l1 | l2 | | |
| 0.1 - 0.4 | **669** | | 1.2 | 20 | 12 | 0.030 | 100 |
| 0.5 - 1 | **670** | | 1.6 | 25 | 15 | 0.090 | 100 |
| 1.5 - 2.5 | **680** | | 2.3 | 25 | 15 | 0.115 | 100 |
| 4 - 6 | **700** | | 3.6 | 27 | 15 | 0.250 | 100 |

## Insulated butt connectors with heat shrink insulation





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Simple and safe processing due to butt mark
- Fast processing as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

### Characteristics
- Cross-section-dependent colour-coding
- Special crimping tool required
- Heat resistant to 105° C

### Material
- Copper (ETP)
- Insulation sleeve: PE

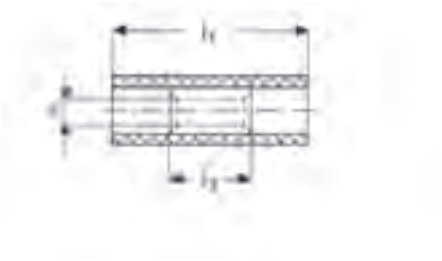
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | l1 | l2 | | |
| 0.5 - 1 | **670WS** | | 1.6 | 36 | 15 | 0.12 | 100 |
| 1.5 - 2.5 | **680WS** | | 2.3 | 36 | 15 | 0.15 | 100 |
| 4 - 6 | **700WS** | | 3.4 | 41 | 15 | 0.25 | 100 |

## Insulated parallel connectors





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Fast processing as no additional insulation of the crimped connection is requiredInsulation sleeve halogen-free
- Insulation sleeve halogen-free

### Characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

### Material
- Copper (ETP)
- Insulation sleeve: PA

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 175

### Additional information
- 0.1 - 0.4 mm² not CSA-tested

| Nominal cross section mm² | Part No. | Colour | Dimension mm | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|
| | | | d1 | l1 | l2 | | |
| 0.1 - 0.4 | **769** | | 1.2 | 13 | 5 | 0.020 | 100 |
| 0.5 - 1 | **770** | | 1.6 | 17 | 7 | 0.030 | 100 |
| 1.5 - 2.5 | **780** | | 2.3 | 17 | 7 | 0.035 | 100 |
| 4 - 6 | **790** | | 3.6 | 21 | 7 | 0.105 | 100 |

## Non-insulated receptacles





For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6

### Characteristics
- To DIN 46247, part 1 – 3 and similar versions
- Improved contact properties due to grooved profile

### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

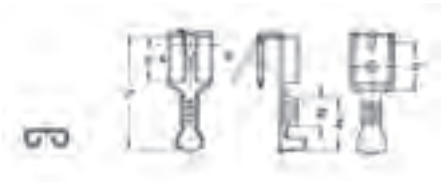
### Technical instructions
- Tool: see page 176

### Additional information
- * = nickel-plated steel version also available, Part Number appendix “ST“

| Nominal cross section mm² | Nominal size to DIN | Part No. | Tab Thickn. | Tab Width | Dimension mm | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a1 | a2 | l1 | l2 | l3 | s | | |
| 0.5 - 1 | -- | **18251** | 0.5 | 2.8 | 5.0 | 2.8 | 12.5 | 5.0 | 3.3 | 0.30 | 0.025 | 100 |
| | | **18251A** | 0.8 | 2.8 | 5.5 | 2.5 | 12.5 | 5.0 | 3.3 | 0.30 | 0.025 | 100 |
| | B 2.8 - 1 | **18201A** | 0.8 | 2.8 | 5.5 | 2.5 | 14.0 | 6.3 | 3.3 | 0,35 | 0.025 | 100 |
| | -- | **18202** | 0.5 | 4.8 | 6.0 | 3.4 | 15.6 | 6.0 | 3.8 | 0.35 | 0.050 | 100 |
| | 4.8 - 1 | **18203** | 0.8 | 4.8 | 6.0 | 3.4 | 15.6 | 6.0 | 3.8 | 0.35 | 0.050 | 100 |
| | 6.3 - 1 | **1720** | 0.8 | 6.3 | 8.5 | 4.5 | 19.0 | 7.4 | 4.0 | 0.45 | 0.085 | 100 |
| 1.5 - 2.5 | 4.8 - 2.5 | **18303** | 0.8 | 4.8 | 6.0 | 3.4 | 15.6 | 6.0 | 3.8 | 0.35 | 0.055 | 100 |
| | 6.3 - 2.5 | ***1730** | 0.8 | 6.3 | 8.5 | 4.5 | 19.0 | 7.4 | 4.0 | 0.45 | 0.082 | 100 |
| 4 - 6 | 6.3 - 6 | ***1750** | 0.8 | 6.3 | 8.5 | 4.5 | 19.0 | 7.4 | 4.0 | 0.45 | 0.100 | 100 |

## Non-insulated receptacles, multiple type





For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6

### Characteristics
- To DIN 46247, part 1 – 3 and similar versions
- Improved contact properties due to grooved profile

### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 176

### Additional information
- * = corresponds to DIN 46345

| Nominal cross section mm² | Part No. | Tab Thickn. | Tab Width | Hint | Dimension mm | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a1 | a2 | l1 | l2 | l3 | s | | |
| 0.5 - 1 | **18203AZ** | 0.8 | 4.8 | | 6.0 | 3.4 | 15.6 | 7 | 6.0 | 0.38 | 0.09 | 100 |
| 1.5 - 2.5 | **18303AZ** | 0.8 | 4.8 | | 6.0 | 3.4 | 15.6 | 7 | 6.0 | 0.38 | 0.09 | 100 |
| | **1730AZ** | 0.8 | 6.3 | * | 8.5 | 4.5 | 19.2 | 8 | 7.5 | 0.38 | 0.13 | 100 |

## Non-insulated receptacles with locking latch













- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6

### Characteristics
- To DIN 46340, sheet 3
- With latch to engage in housing
- Improved contact properties due to grooved profile

### Material
- Brass (CuZn)

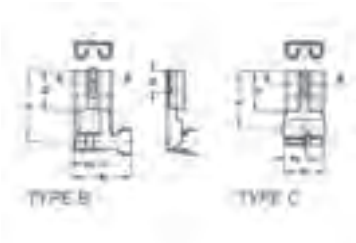
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 176

| Nominal cross section mm² | Part No. | Tab Thickn. | Tab Width | Dimension mm | | | | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a1 | a2 | l1 | l2 | l3 | s | | |
| 0.5 - 1 | **2720** | 0.8 | 6.3 | 8.5 | 4.5 | 19.2 | 7.4 | 7 | 0.38 | 0.070 | 100 |
| 1.5 - 2.5 | **2730** | 0.8 | 6.3 | 8.5 | 4.5 | 19.2 | 7.4 | 7 | 0.38 | 0.075 | 100 |
| 4 - 6 | **2750** | 0.8 | 6.3 | 8.5 | 4.5 | 19.2 | 7.4 | 7 | 0.38 | 0.090 | 100 |

## Non-insulated receptacles with lateral conductor connector














- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Improved contact properties due to grooved profile

### Material
- Brass (CuZn)

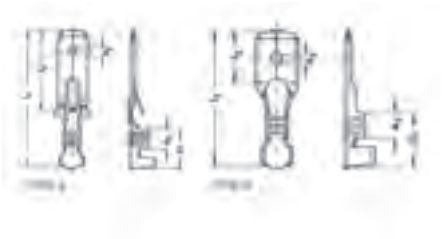
### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 176

| Nominal cross section mm² | Part No. | Tab Thickn. | Tab Width | Typ | Dimension mm | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | a1 | a2 | l1 | l2 | l3 | l4 | | |
| 0.5 - 1 | **3720** | 0.8 | 6.3 | B | 11.0 | 3.0 | 12.5 | 7.4 | 4.0 | 7.2 | 0.080 | 100 |
| 0.5 - 1.5 | **3725** | 0.8 | 6.3 | C | 7.5 | 4.0 | 11.00 | 7.4 | 4.0 | 7.2 | 0.085 | 100 |
| 1.5 - 2.5 | **3735** | 0.8 | 6.3 | B | 11.0 | 3.0 | 13.5 | 7.0 | 4.0 | 7.2 | 0.085 | 100 |

## Non-insulated tabs





- For fine and superfine stranded conductors, e.g. to DIN EN 60228 Cl. 5 and 6
- Improved contact properties due to grooved profile

### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

### Technical instructions
- Tool: see page 176

### Additional information
- * = dimensions in the plug sector to DIN 46244

| Nominal cross section mm² | Nominal size to DIN | Part No. | Tab Thickn. | Tab Width | Typ | Hint | Dimension mm a1 | a2 | d2 | l1 | l2 | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5 - 1 | | **2235** | 0.8 | 2.8 | A | * | 6.0 | 3.2 | 1.30 | 22.5 | 12.7 | 0.045 | 100 |
| | 46343 B6.3 - 1 | **2220** | 0.8 | 6.3 | A | | 8.2 | 4.0 | 1.65 | 28.0 | 16.0 | 0.085 | 100 |
| 1.5 - 2.5 | 46248 A6.3 - 2.5 | **1830** | 0.8 | 6.3 | B | | 9.0 | 4.5 | 1.65 | 20.0 | 8.0 | 0.065 | 100 |
| | 46343 B6.3 - 2.5 | **2230** | 0.8 | 6.3 | A | | 8.2 | 4.0 | 1.65 | 28.0 | 16.0 | 0.090 | 100 |
| 4 - 6 | 46343 B6.3 - 6 | **2250** | 0.8 | 6.3 | A | | 8.2 | 4.0 | 1.65 | 28.0 | 16.0 | 0.100 | 100 |

## Insulation sleeves





- For non-insulated tabs
- Perfectly-matched to the different versions

### Characteristics
- For post-insulation of crimped non-insulated receptacles

### Material
- PA / PE / PVC

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Typ | Dimension mm b1 | l | h1 | Insulation material | for item | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.5 - 1 | 2.8 | **2755** | ☐ | A | 6.5 | 20.0 | 4.0 | PE | 18251,18251A, 18201A | 0.015 | 100 |
| 0.5 - 1.5 | 4.8 | **2760** | ☐ | A | 7.0 | 20.0 | 5.0 | PE | 18202,18203 | 0.015 | 100 |

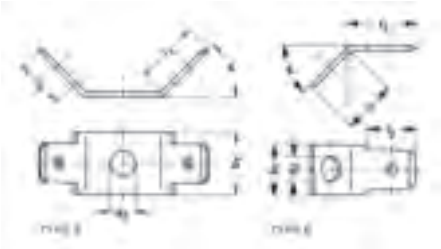
see next page

## Insulation sleeves

| Nominal cross section mm² | Nominal size to DIN | Part No. | Colour | Typ | Dimension mm | | | Insulation material | for item | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | b1 | l | h1 | | | | |
| 0.5 - 2.5 | 6.3 | **2770** | ☐ | A | 12.5 | 23.0 | 8.5 | PE | 1720,1730 | 0.035 | 100 |
| | | **2775** | ☐ | A | 9.5 | 25.0 | 5.0 | PE | 1820,1830 | 0.030 | 100 |
| 0.5 - 4 | | **2780** | ☐ | A | 9.5 | 25.0 | 6.0 | PE | 1720,1730, 1820,1830 | 0.030 | 100 |
| 0.5 - 6 | | **2785** | ☐ | B | 9.2 | 24.5 | 5.6 | PA | 1720,1730,1750, 2720,2730,2750 | 0.055 | 100 |
| | | **2790** | ☐ | C | 13.5 | 15.0 | 3.1 | PVC | 3720,3725, 3735 | 0.060 | 100 |

## Non-insulated tabs, angled version





### Characteristics
- To DIN 46342, part 1 and similar versions
- Dimensions in the plug sector to DIN 46244

### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

| Nominal size to DIN | Part No. | Tab Thickn. | Tab Width | Typ | Dimension mm | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | b1 | d2 | l2 | l3 | l4 | w | | |
| -- | **2040** | 0.8 | 2.8 | A | 5.0 | 3.2 | 5.5 | 6.5 | -- | 60° | 0.040 | 100 |
| | **2045** | 0.8 | 6.3 | A | 10.0 | 4.3 | 8.0 | 10.0 | -- | 45° | 0.160 | 100 |
| | **2060** | 0.8 | 6.3 | B | 8.0 | 4.3 | 8.0 | 8.0 | 10.7 | 30° | 0.085 | 100 |
| | **2070** | 0.8 | 6.3 | B | 8.0 | 3.2 | 8.0 | 8.0 | 10.7 | 45° | 0.085 | 100 |
| | **2075** | 0.8 | 6.3 | B | 8.0 | 4.1 | 8.0 | 8.0 | 10.7 | 45° | 0.085 | 100 |
| B 6.3 - 0.8 | **2080** | 0.8 | 6.3 | B | 8.0 | 4.3 | 8.0 | 8.5 | 10.7 | 45° | 0.085 | 100 |
| -- | **2083** | 0.8 | 6.3 | B | 8.0 | 5.3 | 8.0 | 8.5 | 10.7 | 45° | 0.080 | 100 |
| | **2090** | 0.8 | 6.3 | B | 8.0 | 5.3 | 8.0 | 8.0 | 10.7 | 45° | 0.080 | 100 |
| | **2100** | 0.8 | 6.3 | B | 7.5 | 2.5 | 8.0 | 5.7 | 11.5 | 90° | 0.075 | 100 |
| | **2105** | 0.8 | 6.3 | B | 8.0 | 3.2 | 8.0 | 8.0 | 11.5 | 90° | 0.085 | 100 |
| C 6.3 - 0.8 | **2115** | 0.8 | 6.3 | B | 8.0 | 4.3 | 8.0 | 8.5 | 11.5 | 90° | 0.090 | 100 |

## Non-insulated tabs, straight version





### Characteristics
- To DIN 46342, part 1 and similar versions
- Dimensions in the plug sector to DIN 46244

### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

| Nominal size to DIN | Part No. | Tab Thickn. | Tab Width | Typ | Dimension mm | | | | | Weight/pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | b1 | d2 | l1 | l2 | s | | |
| -- | **2123** | 0.8 | 2.8 | A | 4.5 | 3.1 | 13.0 | 5.5 | 0.8 | 0.028 | 100 |
| A 6.3 - 0.8 | **2140** | 0.8 | 6.3 | A | 8.0 | 4.3 | 19.0 | 8.0 | 0.8 | 0.086 | 100 |
| -- | **2145** | 0.8 | 6.3 | A | 8.0 | 5.3 | 19.0 | 8.0 | 0.8 | 0.080 | 100 |

## Non-insulated tabs for soldering



**Material used offers very good soldering characteristics**

### Characteristics
- Dimensions in the plug sector to DIN 46244
- For soldering in printed circuits

### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

| Part No. | Tab Thickn. | Tab Width | Typ | Dimension mm | | | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | b1 | b2 | b3 | l1 | l2 | l3 | l4 | s | | |
| **2010** | 0.8 | 2.8 | A | -- | -- | -- | 10.5 | 6.5 | -- | -- | 0.8 | 0.015 | 100 |
| **2020** | 0.5 | 2.8 | C | 1.0 | 5 | -- | -- | 7.1 | 8 | 13.4 | 0.5 | 0.025 | 100 |
| **2025** | 0.8 | 2.8 | C | 1.0 | 5 | -- | -- | 7.1 | 8 | 13.4 | 0.8 | 0.040 | 100 |
| **2030** | 0.8 | 6.3 | D | 3.5 | 5 | 6.4 | 16.0 | 8.0 | 4 | 12.0 | 0.8 | 0.065 | 100 |
| **2035** | 0.8 | 6.3 | E | 3.8 | 5 | 6.2 | 16.0 | 8.0 | 3 | 12.0 | 0.8 | 0.085 | 100 |

## Non-insulated multiple tabs





### Characteristics
- Dimensions in the plug sector to DIN 46244

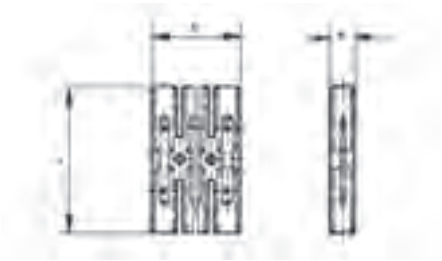
### Material
- Brass (CuZn)

### Surface
- Tin-plated to protect against corrosion

| Part No. | Tab Thickn. | Tab Width | Typ | Dimension mm | | | | | | | | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | a1 | b2 | b3 | l1 | l2 | l3 | h | w | s | | |
| **735** | 0.8 | 2.8 | A | 5 | 3.2 | 3.1 | 16.0 | 6.7 | -- | -- | -- | 0.38 | 0.060 | 100 |
| **755** | 0.8 | 4.8 | C | -- | 4.4 | -- | 20.0 | 7.0 | 7.0 | 8.0 | -- | 0.38 | 0.155 | 100 |
| **725** | 0.8 | 6.3 | D | -- | -- | -- | -- | 8 | 7.5 | -- | 15° | 0.38 | 0.115 | 100 |
| **775** | 0.8 | 6.3 | C | -- | -- | -- | 20.5 | 12 | 7.5 | 9.6 | -- | 0.38 | 0.200 | 100 |

## Flexible connector, tab width 2.8 mm, 4.8 mm and 6.3 mm





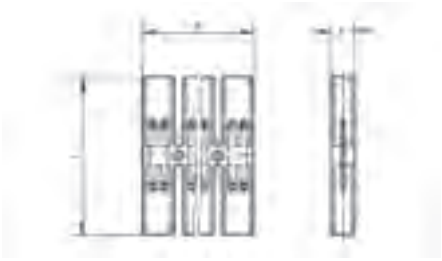
**No additional insulation required**

### Characteristics
- With tabs 2.8, 4.8 or 6.3 x 0.8 mm
- 1, 2 and 12-poles
- Further poles on request

| Part No. | Tab Thickn. | Tab Width | Poles | Dimension mm | | | | Insulation material | Bolt size mm | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | b | l | h | s | | Distance | Diameter | | |
| Tab Width 2.8 mm | | | | | | | | | | | | |
| **8101** | 0.8 | 2.8 | 1 | 7.5 | 35 | 5.5 | 0.8 | PVC | -- | -- | 0.2 | 100 |
| **8102** | 0.8 | 2.8 | 2 | 15.0 | 35 | 5.5 | 0.8 | PVC | -- | 2.7 | 0.3 | 50 |
| **81012** | 0.8 | 2.8 | 12 | 88.0 | 35 | 5.5 | 0.8 | PVC | 75 | 2.7 | 1.6 | 10 |
| Tab Width 4.8 mm | | | | | | | | | | | | |
| **8051** | 0.8 | 4.8 | 1 | 12.5 | 28 | 6.6 | 0.8 | PVC | -- | -- | 0.25 | 100 |
| **8052** | 0.8 | 4.8 | 2 | 25.0 | 28 | 6.6 | 0.8 | PVC | -- | 3.2 | 0.50 | 50 |
| **80512** | 0.8 | 4.8 | 12 | 142.0 | 28 | 6.6 | 0.8 | PVC | 120 | 3.2 | 2.80 | 10 |
| Tab Width 6.3 mm | | | | | | | | | | | | |
| **8001** | 0.8 | 6.3 | 1 | 12.5 | 28 | 6.6 | 0.8 | PVC | -- | -- | 0.30 | 100 |
| **8002** | 0.8 | 6.3 | 2 | 25.0 | 28 | 6.6 | 0.8 | PVC | -- | 3.7 | 0.55 | 50 |
| **80012** | 0.8 | 6.3 | 12 | 142.0 | 28 | 6.6 | 0.8 | PVC | 120 | 3.7 | 3.20 | 10 |

## Polyamide connector, tab width 2.8 and 6.3 mm





▸ No additional insulation required

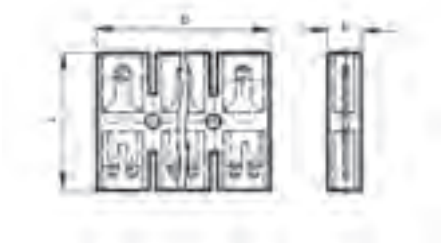
### Characteristics

- With tabs 2.8 x 0.8 mm and 6.3 x 0.8 mm
- 1, 2 and 12-poles
- Further poles on request

| Part No. | Tab Thickn. | Tab Width | Poles | Dimension mm | | | | Insulation material | Bolt size mm | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | b | l | h | s | | Distance | Diameter | | |
| **8011** | 0.8 | 6.3 and 2 x 2.8 | 1 | 10.0 | 50 | 7.5 | 0.8 | PA | -- | -- | 0.25 | 100 |
| **8012** | 0.8 | 6.3 and 2 x 2.8 | 2 | 22.5 | 50 | 7.5 | 0.8 | PA | -- | 3.1 | 0.50 | 50 |
| **80112** | 0.8 | 6.3 and 2 x 2.8 | 12 | 147.5 | 50 | 7.5 | 0.8 | PA | 125 | 3.1 | 3.10 | 10 |

## Flexible circuit distributor, tab width 2.8 mm





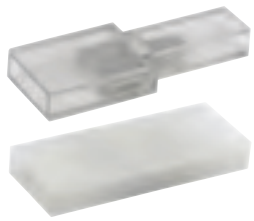
▸ No additional insulation required

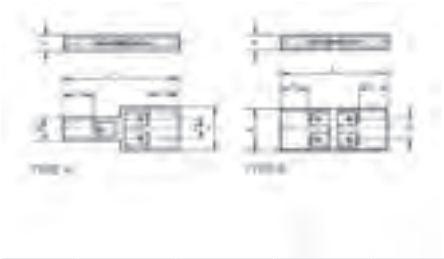
### Characteristics

- With tabs 2.8 x 0.8 mm
- 1 and 12-poles
- Further poles on request

| Part No. | Tab Thickn. | Tab Width | Poles | Dimension mm | | | | Insulation material | Bolt size mm | | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | b | l | h | s | | Distance | Diameter | | |
| **8151** | 0.8 | 2.8 | 1 | 12.5 | 28 | 7 | 0.8 | PVC | -- | -- | 0.25 | 100 |
| **81512** | 0.8 | 2.8 | 12 | 147.0 | 28 | 7 | 0.8 | PVC | 123 | 3.2 | 2.80 | 10 |

## Flexible circuit distributor, tab width 6.3 mm



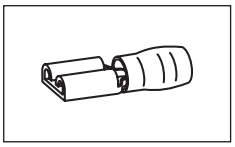


▸ **No additional insulation required**

### Characteristics

- With tabs 6.3 x 0.8 mm

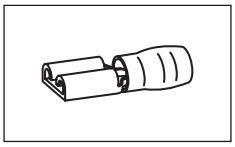
| Part No. | Tab Thickn. | Tab Width | Typ | Dimension mm | | | | | | | Insulation material | Weight/ pcs. ~kg | Packing unit/pcs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | b | b1 | b2 | l | l1 | h | s | | | |
| **816** | 0.8 | 6.3 | A | 21 | 11.3 | 9 | 53 | 15 | 7.5 | 0.8 | PVC | 0.60 | 10 |
| **817** | 0.8 | 6.3 | B | 20 | 11.3 | 9 | 51 | 13 | 7.0 | 0.8 | PVC | 0.65 | 10 |



## Tool application chart

**Insulated cable connections**

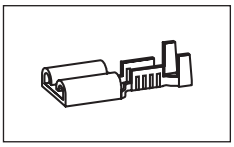
| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.1 - 1 | K80 | | 220 | | ⬭ |
| | 0.5 - 6 | K82 | | 221 | | ⬭ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 0.1 - 1 | KP1 | +KP80 | 240 | | ⬭ |
| | | KP1L | +KP80 | 240 | | ⬭ |
| | 0.5 - 2.5 | KP1 | +KP81 | 240 | | ⬭ |
| | | KP1L | +KP81 | 240 | | ⬭ |
| | 0.5 - 6 | K50 | | 244 | 327 | ⬭ |
| | | EK50ML | | 254 | 327 | ⬭ |
| | 4 - 6 | KP1 | +KP83 | 240 | | ⬭ |
| | | KP1L | +KP83 | 240 | | ⬭ |
| Battery powered crimping tools | 0.5 - 6 | EK1550ML | | 258 | 327 | ⬭ |



## Tool application chart

**Butt connectors with heat shrink insulation**

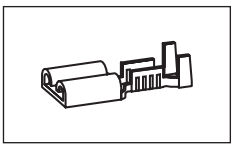
| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 0.5 - 6 | K50 | | 244 | 327 | ⬭ |
| | | EK50ML | | 254 | 327 | ⬭ |
| Battery powered crimping tools | 0.5 - 6 | EK1550ML | | 258 | 327 | ⬭ |



## Tool application chart

**Non-insulated receptacles, straight type**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical crimping tools | 0.1 - 1 | K572 | | 224 | | ♡ |
| | | K67 | | 225 | | ♡ |
| | 0.5 - 2.5 | K582 | | 224 | | ♡ |
| | | K65 | | 226 | | ♡ |
| | 0.5 - 6 | K592 | | 225 | | ♡ |
| | | K60 | | 223 | | ♡ |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 0.25 - 6 | K50 | | 244 | 327 | ♡ |
| | | EK50ML | | 254 | 327 | ♡ |
| Battery powered crimping tools | 0.25 - 6 | EK1550ML | | 258 | 327 | ♡ |



## Tool application chart

**Non-insulated receptacles, with lateral conductor connector**

| Tool type | Crimping range corresponds to nominal cross-section mm² | Crimping Tool | | Catalogue page | | Crimp profile |
|---|---|---|---|---|---|---|
| | | Part No. | Crimping head / adapter | Crimping Tool | Crimping die | |
| Mechanical, electrical, pneumatic crimping tools with interchangeable die / head | 3720, 3735 | K50 | | 244 | 327 | ♡ |
| | | EK50ML | | 254 | 327 | ♡ |
| | | SKP6 | | 242 | | ♡ |
| | 3725 | K50 | | 244 | 327 | ♡ |
| | | EK50ML | | 254 | 327 | ♡ |
| | | SKP6 | | 242 | | ♡ |
| Battery powered crimping tools | 3720, 3735 | EK1550ML | | 258 | 327 | ♡ |
| | 3725 | EK1550ML | | 258 | 327 | ♡ |

# PRACTICAL - POCKET BOXES AND ASSORTMENT BOXES

A good professional is always well sorted. The most important thing is the availability of tool and connector material. In Klauke assortment boxes from robust metal, the tools are supplied with matching cable lugs and connectors. Everything matches. Materials and tools have their own space - clearly arranged and immediately to hand. The boxes equip you for every application. On request, we can also stock them to suit your individual needs.



**In brief**

- Brings order to the workplace due to clearly arranged design
- Everything to hand in one box
- Stocked to suit your needs and numerous versions available

## Practical and always to hand

With the practical pocket boxes, everything has its place and is always to hand, on the go and in the workshop. Chute openings for stackable pocket boxes simplify the removal of cable end-sleeves.

- Cable-end sleeves with and without insulation always to hand
- Practical chute opening for easy removal
- Stackable box
- Tough and impact-proof plastic



## Our range, your order

We have already compiled an assortment for you.
We offer pre-filled boxes for various applications.
You can also fill the robust box yourself if you want.

- High-quality boxes made from plastic or metal
- Contains tool and connectors matched to one other
- Even if exposed to severe vibrations or dropped, everything remains in the right compartment
- Boxes also available empty or custom-filled



## ST 23 B Pocket box with cable end-sleeves 0.25 - 1 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | Part No. |
|---|---|---|---|
| Pocket box with cable end-sleeves 0.25 - 1 mm² to DIN 46228 part 1 | | | **ST23B** |
| Scope of supply | Description | Quantity | Page |
| ST23L | Pocket box | 1 | |
| 695V | Cable end-sleeve, 0.25 mm², 5 mm | 1000 | 138 |
| 705V | Cable end-sleeve, 0.34 mm², 5 mm, Cu tinned | 1000 | 138 |
| 716V | Cable end-sleeve, 0.75 mm², 6 mm | 1000 | 138 |
| 71S6V | Cable end-sleeve, 0.5 mm², 6 mm, Cu tinned | 500 | 138 |
| 72S6V | Cable end-sleeve, 1.0 mm², 6 mm | 500 | 138 |

## ST 21 B Pocket box with cable end-sleeves 0.5 - 2.5 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | Part No. |
|---|---|---|---|
| Pocket box with cable end-sleeves 0.5 - 2.5 mm² to DIN 46228 part 1 | | | **ST21B** |
| Scope of supply | Description | Quantity | Page |
| ST21L | Pocket box | 1 | |
| 71S6V | Cable end-sleeve, 0.5 mm², 6 mm, Cu tinned | 1000 | 138 |
| 716V | Cable end-sleeve, 0.75 mm², 6 mm | 500 | 138 |
| 72S6V | Cable end-sleeve, 1.0 mm², 6 mm | 500 | 138 |
| 727V | Cable end-sleeve, 1.5 mm², 7 mm | 500 | 138 |
| 737V | Cable end-sleeve, 2.5 mm², 7 mm | 500 | 138 |

## ST 22 B Pocket box with cable end-sleeves 4 - 16 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | Part No. |
|---|---|---|---|
| Pocket box with cable end-sleeves 4 - 16 mm² to DIN 46228 part 1 | | | **ST22B** |
| Scope of supply | Description | Quantity | Page |
| ST22L | Pocket box | 1 | |
| 749V | Cable end-sleeve, 4 mm², 9 mm | 200 | 139 |
| 7512V | Cable end-sleeve, 6 mm², 12 mm, Cu tinned | 100 | 139 |
| 7612V | Cable end-sleeve, 10 mm², 12 mm, Cu tinned | 70 | 139 |
| 7712V | Cable end-sleeve, 16 mm², 12 mm, Cu tinned | 70 | 139 |

## ST 15 B Pocket box with insulated twin cable end-sleeves 2 x 0.75 - 2 x 2.5 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with twin cable end-sleeves 2 x 0.75 - 2 x 2.5 mm² | | | | **ST15B** |
| Scope of supply | Colour | Description | Quantity | Page |
| ST15L | | Pocket box | 1 | |
| 8708 | | Insl. twin cable end-sleeve, 2 x 0.75 mm² | 50 | 147 |
| 8718 | | Insl. twin cable end-sleeve, 2 x 1 mm² | 50 | 147 |
| 8728 | | Insl. twin cable end-sleeve, 2 x 1.5 mm² | 50 | 147 |
| 87310 | | Insl. twin cable end-sleeve, 2 x 2.5 mm² | 50 | 147 |

## ST 1 B pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4, colour code 1 | | | | **ST1B** |
| Scope of supply | Colour | Description | Quantity | Page |
| ST1L | | Pocket box | 1 | |
| 1690 | | Insl. cable end-sleeve, 0.5 mm², 14 mm | 50 | 142 |
| 170W | | Insl. cable end-sleeve, 0.75 mm², 14.6 mm | 100 | 143 |
| 171G | | Insl. cable end-sleeve, 1 mm², 14.6 mm | 100 | 143 |
| 172RO | | Insl. cable end-sleeve, 1.5 mm², 14.6 mm | 100 | 143 |
| 173B | | Insl. cable end-sleeve, 2.5 mm², 15.2 mm | 50 | 143 |

## ST 11 B pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4 | | | | **ST11B** |
| Scope of supply | Colour | Description | Quantity | Page |
| ST11L | | Pocket box | 1 | |
| 4698 | | Insl. Cable end-sleeve, 0.5 mm², 14 mm | 50 | 141 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 100 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 100 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 100 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 50 | 141 |

## ST 31 B pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4, colour code 2



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4, colour code 2 | **ST31B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| ST31L | | Pocket box | 1 | |
| 1698 | | Insl. cable end-sleeve, 0.5 mm², 13 mm | 50 | 144 |
| 1708 | | Insl. cable end-sleeve, 0.75 mm², 13.5 mm | 100 | 144 |
| 1718 | | Insl. cable end-sleeve, 1 mm², 13.5 mm | 100 | 144 |
| 1728 | | Insl. cable end-sleeve, 1.5 mm², 13.5 mm | 100 | 144 |
| 1738 | | Insl. cable end-sleeve, 2.5 mm², 14.5 mm | 50 | 144 |

## ST 12 B pocket box with insl. cable end-sleeves 4 - 16 mm², DIN 46228 Part 4



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insl. cable end-sleeves 4 - 16 mm², DIN 46228 Part 4 | **ST12B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| ST12L | | Pocket box | 1 | |
| 47410 | | Insl. cable end-sleeve, 4 mm², 17 mm | 50 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 20 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 20 | 141 |
| 47712 | | Insl. cable end-sleeve, 16 mm², 24 mm | 10 | 142 |

## ST 2 B pocket box with insl. cable end-sleeves 4 - 16 mm², DIN 46228 Part 4, colour code 1



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insl. cable end-sleeves 4 - 16 mm², DIN 46228 Part 4, colour code 1 | **ST2B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| ST2L | | Pocket box | 1 | |
| 174GR | | Insl. cable end-sleeve, 4 mm², 16.5 mm | 50 | 143 |
| 175S | | Insl. cable end-sleeve, 6 mm², 20 mm | 20 | 143 |
| 176E | | Insl. cable end-sleeve, 10 mm², 21.5 mm | 20 | 143 |
| 177GR | | Insl. cable end-sleeve, 16 mm², 22.2 mm | 10 | 143 |

## ST 32 B pocket box with insl. cable end-sleeves 4 - 16 mm², DIN 46228 Part 4, colour code 2



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insl. cable end-sleeves 4 - 16 mm², DIN 46228 Part 4, colour code 2 | | | | **ST32B** |
| Scope of supply | Colour | Description | Quantity | Page |
| ST32L | | Pocket box | 1 | |
| 17410 | | Insl. cable end-sleeve, 4 mm², 16.5 mm | 50 | 144 |
| 17512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 20 | 144 |
| 17612 | | Insl. cable end-sleeve, 10 mm², 21.5 mm | 20 | 145 |
| 17712 | | Insl. cable end-sleeve, 16 mm², 23.5 mm | 10 | 145 |

## ST 3 B pocket box with insl. cable end-sleeves 0.25 - 1 mm², DIN 46228 Part 4, colour code 1



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insl. cable end-sleeves 0.25 - 1 mm², DIN 46228 Part 4, colour code 1 | | | | **ST3B** |
| Scope of supply | Colour | Description | Quantity | Page |
| ST3L | | Pocket box | 1 | |
| 167H | | Insl. cable end-sleeve, 0.25 mm², 10.4 mm | 30 | 142 |
| 168T | | Insl. cable end-sleeve, 0.34 mm², 10.4 mm | 30 | 142 |
| 169O | | Insl. cable end-sleeve, 0.5 mm², 14 mm | 30 | 142 |
| 170W | | Insl. cable end-sleeve, 0.75 mm², 14.6 mm | 30 | 143 |
| 171G | | Insl. cable end-sleeve, 1 mm², 14.6 mm | 30 | 143 |

## ST 13 B pocket box with insl. cable end-sleeves 0.25 - 1 mm², DIN 46228 Part 4 & similar, colour code 1



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insl. cable end-sleeves 0.25 - 1 mm², DIN 46228 Part 4 & similar, colour code 1 | | | | **ST13B** |
| Scope of supply | Colour | Description | Quantity | Page |
| ST13L | | Pocket box | 1 | |
| 167H | | Insl. cable end-sleeve, 0.25 mm², 10.4 mm | 30 | 142 |
| 168T | | Insl. cable end-sleeve, 0.34 mm², 10.4 mm | 30 | 142 |
| 4698 | | Insl. Cable end-sleeve, 0.5 mm², 14 mm | 30 | 141 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 30 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 30 | 141 |

## ST 33 B pocket box with insl. cable end-sleeves 0.25-1 mm², DIN 46228 Part 4 & similar, colour code 2




▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insl. cable end-sleeves 0.25 - 1 mm², DIN 46228 Part 4 & similar, colour code 2 | **ST33B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| ST33L | | Pocket box | 1 | |
| 1676 | | Insl. cable end-sleeve, 0.25 mm², 11 mm | 30 | 144 |
| 1686 | | Insl. cable end-sleeve, 0.34 mm², 11 mm | 30 | 144 |
| 1698 | | Insl. cable end-sleeve, 0.5 mm², 13 mm | 30 | 144 |
| 1708 | | Insl. cable end-sleeve, 0.75 mm², 13.5 mm | 30 | 144 |
| 1718 | | Insl. cable end-sleeve, 1 mm², 13.5 mm | 30 | 144 |

## GR 4698 DO Pocket box with insulated cable end-sleeves 0.5 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insulated cable end-sleeves 0.5 mm² to DIN 46228 part 4 | **GR4698DO** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| 4698 | | Insl. Cable end-sleeve, 0.5 mm², 14 mm | 1000 | 141 |

## GR 4708 DO Pocket box with insulated cable end-sleeves 0.75 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insulated cable end-sleeves 0.75 mm² DIN 46228 part 4 | **GR4708DO** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 1000 | 141 |

## GR 4718 DO Pocket box with insulated cable end-sleeves 1 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Pocket box with insulated cable end-sleeves 1 mm² DIN 46228 part 4 | **GR4718DO** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 1000 | 141 |

## GR 4728 DO Pocket box with insulated cable end-sleeves 1.5 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insulated cable end-sleeves 1.5 mm² DIN 46228 part 4 | | | | **GR4728DO** |
| Scope of supply | Colour | Description | Quantity | Page |
| 4728 | ■ | Insl. cable end-sleeve, 1.5 mm², 14 mm | 1000 | 141 |

## GR 4738 DO Pocket box with insulated cable end-sleeves 2.5 mm²



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | | | | Part No. |
|---|---|---|---|---|
| Pocket box with insulated cable end-sleeves 2.5 mm² DIN 46228 part 4 | | | | **GR4738DO** |
| Scope of supply | Colour | Description | Quantity | Page |
| 4738 | ■ | Insl. cable end-sleeve, 2.5 mm², 14 mm | 1000 | 141 |

## ST 5 L assortment of empty pocket boxes



▸ Pocket box made from impact-resistant plastic

### Characteristics

- Stackable and resealable

| Item | Part No. |
|---|---|
| Assortment of pocket boxes | **ST5L** |

## SK 30 B Steel assortment box with cable end-sleeves and crimping tool



▸ Hammer-tone finished assortment box
▸ Ideal for workshop equipment

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with cable end-sleeves and crimping tool | 200 x 140 x 40 | **SK30B** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| SK30L | Steel carrying case | 1 | 193 |
| K48 | Crimping tool for cable end-sleeves 0.14 - 2.5 mm² | 1 | 212 |
| 716V | Cable end-sleeve, 0.75 mm², 6 mm | 1000 | 138 |
| 72S6V | Cable end-sleeve, 1.0 mm², 6 mm | 1000 | 138 |
| 727V | Cable end-sleeve, 1.5 mm², 7 mm | 1000 | 138 |
| 737V | Cable end-sleeve, 2.5 mm², 7 mm | 1000 | 138 |

## SK 32 B Steel assortment box with cable end-sleeves and crimping tool



- Broad cable end-sleeve assortment appropriate crimping tool
- Hammer-tone finished assortment box
- Ideal for workshop equipment

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with cable end-sleeves and crimping tool | 285 x 155 x 45 | **SK32B** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| SK32L | Steel carrying case | 1 | 193 |
| K3 | Crimping tool for cable end-sleeves 0.5 - 16 mm² | 1 | 211 |
| 716V | Cable end-sleeve, 0.75 mm², 6 mm | 1000 | 138 |
| 72S6V | Cable end-sleeve, 1.0 mm², 6 mm | 1000 | 138 |
| 727V | Cable end-sleeve, 1.5 mm², 7 mm | 1000 | 138 |
| 737V | Cable end-sleeve, 2.5 mm², 7 mm | 500 | 138 |
| 749V | Cable end-sleeve, 4 mm², 9 mm | 500 | 139 |
| 7510V | Cable end-sleeve, 6 mm², 10 mm | 500 | 139 |
| 7618V | Cable end-sleeve, 10 mm², 18 mm | 250 | 139 |
| 7718V | Cable end-sleeve, 16 mm², 18 mm | 150 | 139 |

## SK 45 B Steel assortment box with insl. cable end-sleeves and crimping tool



- Four of the most important insulated cable end-sleeve types in a steel carrying case including an appropriate crimping tool
- Hammer-tone finished assortment box
- Ideal for workshop equipment

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with insl. cable end-sleeves and crimping tool | 200 x 140 x 40 | **SK45B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| SK30L | | Steel carrying case | 1 | 193 |
| K48 | | Crimping tool for cable end-sleeves 0.14 - 2.5 mm² | 1 | 212 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 300 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 300 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 300 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 200 | 141 |

## SK 47 B Steel assortment box with insl. cable end-sleeves and crimping tool



- Flexible use due to large cross-sectional range
- Hammer-tone finished assortment box
- Ideal for workshop equipment

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with insl. cable end-sleeves and crimping tool | 285 x 155 x 45 | **SK47B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| SK32L | | Steel carrying case | 1 | 193 |
| K3 | | Crimping tool for cable end-sleeves 0.5 - 16 mm² | 1 | 211 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 200 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 200 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 200 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 200 | 141 |
| 47410 | | Insl. cable end-sleeve, 4 mm², 17 mm | 100 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 100 | 141 |
| 47618 | | Insl. cable end-sleeve, 10 mm², 28 mm | 100 | 141 |
| 47718 | | Insl. cable end-sleeve, 16 mm², 28 mm | 50 | 142 |

## SK 30/3 P Assortment box from plastic with insl. cable end-sleeves and tools



- With everything needed for conductor preparation
- The exact-shaped foam inlays of the case prevent the contents slipping even with severe impacts

| Item | Dimension mm | Part No. |
|---|---|---|
| Plastic assortment box with insl. cable end-sleeves and tools | 395 x 295 x 106 | **SK303P** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| K432 | | Automatic wire stripper K43/2 0.02 - 10 mm² | 1 | 549 |
| K303 | | Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm² | 1 | 217 |
| 4698 | | Insl. Cable end-sleeve, 0.5 mm², 14 mm | 400 | 141 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 400 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 400 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 400 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 200 | 141 |
| 47410 | | Insl. cable end-sleeve, 4 mm², 17 mm | 200 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 100 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 100 | 141 |

## SK 30/3 S Assortment box from plastic with insl. cable end-sleeves and crimping tool



- With everything needed for conductor preparation
- The exact-shaped foam inlays of the case prevent the contents slipping even with severe impacts

| Item | Dimension mm | Part No. |
|---|---|---|
| Plastic assortment box with insl. cable end-sleeves and crimping tool | 275 x 230 x 83 | **SK303S** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| K303 | | Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm² | 1 | 217 |
| 4698 | | Insl. Cable end-sleeve, 0.5 mm², 14 mm | 100 | 141 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 100 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 100 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 100 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 50 | 141 |
| 47410 | | Insl. cable end-sleeve, 4 mm², 17 mm | 50 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 30 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 30 | 141 |

## SK 43 NB Assortment box from plastic with insl. cable end-sleeves and tools

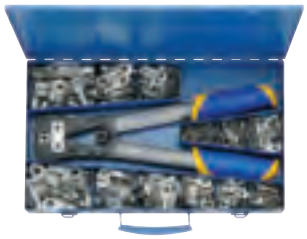


- With everything needed for conductor preparation
- Ideal for workshop equipment

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with insl. cable end-sleeves and tools | 370 x 210 x 40 | **SK43NB** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| SK43L | | Steel carrying case | 1 | 193 |
| K432 | | Automatic wire stripper K43/2 0.02 - 10 mm² | 1 | 549 |
| K303 | | Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm² | 1 | 217 |
| 4698 | | Insl. Cable end-sleeve, 0.5 mm², 14 mm | 500 | 141 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 500 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 400 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 400 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 300 | 141 |
| 47410 | | Insl. cable end-sleeve, 4 mm², 17 mm | 100 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 100 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 100 | 141 |

## SK 65 B Assortment box from steel with tubular cable lugs and crimping tool



- Hammer-tone finished assortment box
- Ideal for workshop equipment

### Characteristics

- Sturdy steel carrying case with lock and handle

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with tubular cable lugs "standard type" and crimping tool K05 | 400 x 250 x 50 | **SK65B** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| SK65L | Steel carrying case | 1 | 195 |
| K05 | Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm² | 1 | 235 |
| 1R6 | Tubular cable lug without inspection hole, 6 mm², M6, Cu tinned | 25 | 14 |
| 1R8 | Tubular cable lug without inspection hole, 6 mm², M8, Cu tinned | 25 | 14 |
| 2R6 | Tubular cable lug without inspection hole, 10 mm², M6, Cu tinned | 25 | 14 |
| 2R8 | Tubular cable lug without inspection hole, 10 mm², M8, Cu tinned | 25 | 14 |
| 3R8 | Tubular cable lug without inspection hole, 16 mm², M8, Cu tinned | 25 | 14 |
| 3R10 | Tubular cable lug without inspection hole, 16 mm², M10, Cu tinned | 25 | 14 |
| 4R8 | Tubular cable lug without inspection hole, 25 mm², M8, Cu tinned | 25 | 14 |
| 4R10 | Tubular cable lug without inspection hole, 25 mm², M10, Cu tinned | 25 | 14 |
| 5R8 | Tubular cable lug without inspection hole, 35 mm², M8, Cu tinned | 20 | 14 |
| 5R10 | Tubular cable lug without inspection hole, 35 mm², M10, Cu tinned | 20 | 14 |
| 6R10 | Tubular cable lug without inspection hole, 50 mm², M10, Cu tinned | 20 | 15 |
| 6R12 | Tubular cable lug without inspection hole, 50 mm², M12, Cu tinned | 20 | 15 |

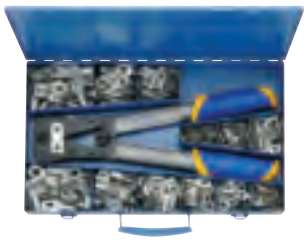
## EVERYTHING UNDER CONTROL!

A selection of the most commonly used tubular cable lugs, including crimping tool arranged in an assortment box. There are also other packages in an L-BOXX. (see page 200, for example)

The perfectly coordinated L-BOXXes stand for intelligent mobility and are used for storage and for transport from the workshop to the construction site.



## SK 50 B Steel assortment box with DIN compressed cable lugs and crimping tool



- Hammer-tone finished assortment box
- Ideal for workshop equipment

### Characteristics

- Sturdy steel carrying case with lock and handle

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with DIN compression cable lugs and crimping tool | 400 x 250 x 50 | **SK50B** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| SK65L | Steel carrying case | 1 | 195 |
| K05D | Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267, Part 1) 6 - 50 mm² | 1 | 235 |
| 101R5 | Compression cable lug, DIN 46235, 6 mm², M5, Cu tinned | 50 | 56 |
| 101R6 | Compression cable lug, DIN 46235, 6 mm², M6, Cu tinned | 50 | 56 |
| 102R5 | Compression cable lug, DIN 46235, 10 mm², M5, Cu tinned | 50 | 56 |
| 102R6 | Compression cable lug, DIN 46235, 10 mm², M6, Cu tinned | 50 | 56 |
| 103R8 | Compression cable lug, DIN 46235, 16 mm², M8, Cu tinned | 25 | 56 |
| 103R10 | Compression cable lug, DIN 46235, 16 mm², M10, Cu tinned | 25 | 56 |
| 104R8 | Compression cable lug, DIN 46235, 25 mm², M8, Cu tinned | 25 | 56 |
| 104R10 | Compression cable lug, DIN 46235, 25 mm², M10, Cu tinned | 25 | 56 |
| 105R8 | Compression cable lug, DIN 46235, 35 mm², M8, Cu tinned | 20 | 56 |
| 105R10 | Compression cable lug, DIN 46235, 35 mm², M10, Cu tinned | 20 | 56 |
| 106R10 | Compression cable lug, DIN 46235, 50 mm², M10, Cu tinned | 15 | 57 |
| 106R12 | Compression cable lug, DIN 46235, 50 mm², M12, Cu tinned | 15 | 57 |

# MK 230 B 507 Steel assortment box with insl. cable connections and crimping tool



- Hammer-tone finished assortment box
- Ideal for workshop equipment

| Item | Dimension mm | Part No. |
|---|---|---|
| Steel assortment box with insl. cable connections and crimping tool | 366 x 230 x 51 | **MK230B507** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| MK230L | | Steel carrying case | 1 | 194 |
| K507 | | Crimping tool with replaceable dies | 1 | 243 |
| 6204 | | Insl. solderless terminal M4, 0.5 - 1 mm² | 50 | 156 |
| 6205 | | Insl. solderless terminal M5, 0.5 - 1 mm² | 50 | 156 |
| 6206 | | Insl. solderless terminal M6, 0.5 - 1 mm² | 50 | 156 |
| 6304 | | Insl. solderless terminal M4, 1.5 - 2.5 mm² | 50 | 156 |
| 6305 | | Insl. solderless terminal M5, 1.5 - 2.5 mm² | 50 | 156 |
| 6306 | | Insl. solderless terminal M6, 1.5 - 2.5 mm² | 50 | 156 |
| 670 | | Insl. butt connector, 0.5 - 1 mm² | 50 | 165 |
| 680 | | Insl. butt connector, 1.5 - 2.5 mm² | 50 | 165 |
| 705 | | Insl. pin terminal, 0.5 - 1 mm², 22 mm | 50 | 158 |
| 710 | | Insl. pin terminal, 1.5 - 2.5 mm², 23 mm | 50 | 158 |
| 730 | | Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.5 mm² | 50 | 161 |
| 830 | | Insl. tab 6.3 x 0.8 mm, 1.5 - 2.5 mm² | 50 | 164 |
| 620C4 | | Insl. solderless terminal M4, 0.5 - 1 mm² | 50 | 157 |
| 630C4 | | Insl. solderless terminal M4, 1.5 - 2.5 mm² | 50 | 157 |
| 715 | | Insl. pin terminal, 0.1 - 0.4 mm², 26 mm | 25 | 158 |
| 700 | | Insl. butt connector, 4 - 6 mm² | 25 | 165 |
| 6505 | | Insl. solderless terminal M5, 4 - 6 mm² | 25 | 156 |
| 6506 | | Insl. solderless terminal M6, 4 - 6 mm² | 25 | 156 |
| 650C6 | | Insl. solderless terminal M6, 4 - 6 mm² | 25 | 157 |

## SK 82 P Assortment box from plastic with insl. cable connections and tools



- With everything needed for conductor preparation
- The exact-shaped foam inlays of the case prevent the contents slipping even with severe impacts

| Item | Dimension mm | Part No. |
|---|---|---|
| Plastic assortment box with insl. cable connections and tools | 395 x 295 x 106 | **SK82P** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| K432 | | Automatic wire stripper K43/2 0.02 - 10 mm² | 1 | 549 |
| K82A | | Crimping tool for insulated cable connections 0.5 - 6 mm² | 1 | 222 |
| 6204 | | Insl. solderless terminal M4, 0.5 - 1 mm² | 50 | 156 |
| 6205 | | Insl. solderless terminal M5, 0.5 - 1 mm² | 50 | 156 |
| 670 | | Insl. butt connector, 0.5 - 1 mm² | 50 | 165 |
| 720 | | Insl. receptacle 6.3 x 0.8 mm, 0.5 - 1 mm² | 50 | 161 |
| 6304 | | Insl. solderless terminal M4, 1.5 - 2.5 mm² | 50 | 156 |
| 6305 | | Insl. solderless terminal M5, 1.5 - 2.5 mm² | 50 | 156 |
| 680 | | Insl. butt connector, 1.5 - 2.5 mm² | 50 | 165 |
| 730 | | Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.5 mm² | 50 | 161 |
| 6505 | | Insl. solderless terminal M5, 4 - 6 mm² | 20 | 156 |
| 6506 | | Insl. solderless terminal M6, 4 - 6 mm² | 20 | 156 |
| 700 | | Insl. butt connector, 4 - 6 mm² | 20 | 165 |
| 715 | | Insl. pin terminal, 0.1 - 0.4 mm², 26 mm | 20 | 158 |
| 620C4 | | Insl. solderless terminal M4, 0.5 - 1 mm² | 20 | 157 |
| 630C4 | | Insl. solderless terminal M4, 1.5 - 2.5 mm² | 20 | 157 |
| 705 | | Insl. pin terminal, 0.5 - 1 mm², 22 mm | 20 | 158 |
| 710 | | Insl. pin terminal, 1.5 - 2.5 mm², 23 mm | 20 | 158 |

## SK 82 S Assortment box from plastic with insl. cable connections and crimping tool



- The exact-shaped foam inlays of the case prevent the contents slipping even with severe impacts

| Item | Part No. |
|---|---|
| Plastic assortment box with insl. cable connections and crimping tool | **SK82S** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| K82A | | Crimping tool for insulated cable connections 0.5 - 6 mm² | 1 | 222 |
| 6204 | | Insl. solderless terminal M4, 0.5 - 1 mm² | 20 | 156 |
| 6205 | | Insl. solderless terminal M5, 0.5 - 1 mm² | 20 | 156 |
| 670 | | Insl. butt connector, 0.5 - 1 mm² | 20 | 165 |
| 720 | | Insl. receptacle 6.3 x 0.8 mm, 0.5 - 1 mm² | 20 | 161 |
| 6304 | | Insl. solderless terminal M4, 1.5 - 2.5 mm² | 20 | 156 |
| 680 | | Insl. butt connector, 1.5 - 2.5 mm² | 20 | 165 |
| 730 | | Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.5 mm² | 20 | 161 |
| 6305 | | Insl. solderless terminal M5, 1.5 - 2.5 mm² | 20 | 156 |

## SK 30 L Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics
- 4 small and 1 large additional compartments with lock

### Suitable for
- For optional storage of crimping tools type K1, K4, K46 and K48

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 200 x 140 x 40 | 1.2 | **SK30L** |

## SK 32 L Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics
- 8 small and 1 large additional compartments with lock

### Suitable for
- For optional storage of crimping tools type K3 and K35

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 285 x 155 x 45 | 1.3 | **SK32L** |

## SK 4 L Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics
- 6 small and 1 large additional compartments with lock

### Suitable for
- For optional storage of crimping tools type K02, K2, K16, K25, K28 and K29

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 370 x 160 x 40 | 1.4 | **SK4L** |

## SK 43 L Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics
- 8 small and 2 large additional compartments with lock

### Suitable for
- For storage of crimping tool K 32 and wire stripper K 41

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 370 x 210 x 40 | 1.9 | **SK43L** |

## MK 55 Steel carrying case



▸ Hammer-tone finished assortment box

**Characteristics**
- 8 small and 1 large additional compartments with lock

**Suitable for**
- For storage of 8 pairs of dies and crimping tool K50

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 245 x 130 x 37 | 0.7 | **MK55** |

## MK 210 L Steel carrying case



▸ Hammer-tone finished assortment box

**Characteristics**
- 4 small and 1 large additional compartments with lock

**Suitable for**
- For storage of crimping tools K 10 or K 82

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 250 x 155 x 40 | 1.0 | **MK210L** |

## MK 220 L Steel carrying case



▸ Hammer-tone finished assortment box

**Characteristics**
- 8 small and 1 large additional compartments with lock

**Suitable for**
- For storage of crimping tools K 10 or K 82

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 370 x 160 x 40 | 1.4 | **MK220L** |

## MK 230 L Steel carrying case



▸ Hammer-tone finished assortment box

**Characteristics**
- 19 small and 1 large additional compartments with lock and handle

**Suitable for**
- For storage of crimping tools K 10 or K 82

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 366 x 230 x 51 | 2.4 | **MK230L** |

## SK 65 L Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics

- 12 small and 1 large additional compartments with lock and handle

### Suitable for

- For storage of crimping tools type K 05, K 05 BC, K 35/4

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 400 x 250 x 50 | 2.3 | **SK65L** |

## MK 18 Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics

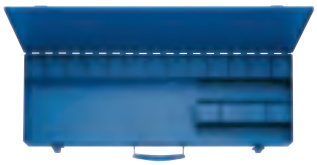
- 34 small and 1 large additional compartments with lock and handle

### Suitable for

- For storage of 34 pairs of dies and crimping tool K 18

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 605 x 300 x 50 | 4.6 | **MK18** |

## MK 22 Steel carrying case



▸ Hammer-tone finished assortment box

### Characteristics

- 17 small and 1 large additional compartments with lock and handle

### Suitable for

- For storage of 17 pairs of dies and crimping tool K 22

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 600 x 220 x 65 | 3.5 | **MK22** |

## KKPE Plastic case



### Characteristics

- With lock and handle

### Suitable for

- For storing complete crimping die sets

| Item | Part No. |
|---|---|
| Plastic case | **KKPE** |
| Plastic case | **KKPEH25** |
| Plastic case for crimping dies of series 13 | **KKPE13** |

## MK/KP 1 Plastic case



### Characteristics
- With lock and handle

### Suitable for
- For storage of crimping tools KP1 and KP1L and 10 crimping heads of the Klauke Pro Series

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Plastic case | 395 x 295 x 106 | 1.0 | **MKKP1** |

## MKU Steel carrying case with wheels



**Hammer-tone finished assortment box**

### Characteristics
- With additional compartment for dies with lock and handle

### Suitable for
- For storage of hydraulic crimping tools HK12/2, HK25/2 or HK45

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Steel carrying case | 810 x 310 x 210 | 10.0 | **MKU** |

## TT2 Carrying case



### Suitable for
- For storing all crimping and cutting heads (excluding SDK 105, SDK 120 and PK1000)

| Item | Weight kg | Part No. |
|---|---|---|
| Carrying bag | 0.48 | **TT2** |

## TT4 Carrying case



### Suitable for
- For storage of cutting heads SDK 105 and SDK 120

| Item | Weight kg | Part No. |
|---|---|---|
| Carrying bag | 0.73 | **TT4** |

# SYSTEMATIC ORDER - L-BOXX FROM BS SYSTEMS

We must have order, especially when on the go. L-Boxx from BS Systems is a well thought out arrangement system for safely transporting your Klauke tool and connectors no matter what. Klauke products are safely stowed in the L-Boxx - matched to your individual equipment. Keep the overview!




**In brief**

- Available in various sizes
- Maximum protection due to shock and impact resistant materials
- Easy to transport with practical handle on the cover and the sides
- Simple stacking of several boxes thanks to click system

## Large or small?

The L-Boxx provides the right tool every time. Select what you need from the broad range of sizes. The boxes are always shock and impact resistant and and can be stacked without risk of slipping due to a click system.

- Available in various sizes
- Shock and impact resistant
- Easy to transport with practical handles on the cover and on the sides
- Safe transportation and storage due to click system






## Everything practically packed

The L-Box doesn't just stow your tools - they also assign them exactly the right storage location. Trust in our Klauke system of pre-stocked boxes for various applications.

- Pre-stocked boxes equipped to your needs
- Choice for differing areas of applications
- Everything to hand in one box

## Sorted on the go

Do you need your toolboxes on the go? With the TÜV-tested Sortimo vehicle equipment, all Klauke tools and ranges can be systematically and safely transported in L-Boxxes.

- Quickly located thanks to the Sortimo system overview
- Avoid injury by securing the boxes against accidents and braking actions
- Short searching time for efficient operations



## L-BOXX 65B from plastic with standard equipment for electrical installations



**Comprehensive equipment for conductor preparation, comprising cable cutter, cable knife, crimping tool and connectors**

### Characteristics

- Manufactured from shock and impact resistant ABS plastic, very robust, 100 kg capacity
- Stackable using an Easy-Click system, which allows easy opening and closing

| Item | Dimension mm | Part No. |
|---|---|---|
| L-BOXX from plastic with standard equipment for electrical installations | 442 x 357 x 117 | **LBOXX65B** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| K05 | Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm² | 1 | 235 |
| K100 | Hand-operated cutting tool for Cu and Al cables to 14 mm dia. | 1 | 364 |
| KL740416 | Cable knife, without blade 4 - 16 mm dia. | 1 | 552 |
| 1R6 | Tubular cable lug without inspection hole, 6 mm², M6, Cu tinned | 25 | 14 |
| 1R8 | Tubular cable lug without inspection hole, 6 mm², M8, Cu tinned | 25 | 14 |
| 2R6 | Tubular cable lug without inspection hole, 10 mm², M6, Cu tinned | 25 | 14 |
| 2R8 | Tubular cable lug without inspection hole, 10 mm², M8, Cu tinned | 25 | 14 |
| 3R10 | Tubular cable lug without inspection hole, 16 mm², M10, Cu tinned | 25 | 14 |
| 4R8 | Tubular cable lug without inspection hole, 25 mm², M8, Cu tinned | 20 | 14 |
| 4R10 | Tubular cable lug without inspection hole, 25 mm², M10, Cu tinned | 20 | 14 |
| 5R8 | Tubular cable lug without inspection hole, 35 mm², M8, Cu tinned | 20 | 14 |
| 5R10 | Tubular cable lug without inspection hole, 35 mm², M10, Cu tinned | 20 | 14 |
| 6R10 | Tubular cable lug without inspection hole, 50 mm², M10, Cu tinned | 15 | 15 |
| LBOXX102LFG | L-BOXX with front handle | 1 | |

## L-BOXX with electromechanical crimping tool EK 50 ML 0.14 to 50 mm² and extensive additional equipment



| Item | Dimension mm | Part No. |
|---|---|---|
| L-BOXX with electromechanical crimping tool EK 50 ML 0.14 - 50 mm² and extensive additional equipment | 442 x 357 x 151 | **LBOXXEK50ML** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| RAML1 | Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | 1 | 493 |
| LGML1 | Charger for 10.8 V Li-Ion batteries, 230 V | 1 | 495 |
| K118 | Hand-operated cutting tool for Cu and Al cables to 12 mm dia. | 1 | 364 |
| KL645GSK | Cable knife with blade protection, 1,000 V | 1 | 520 |
| AE502 | Crimping dies AE 50, 10 - 25 mm² | 1 | 326 |
| 47612 | Insl. cable end-sleeve, 10 mm², 22 mm | 50 | 141 |
| 47712 | Insl. cable end-sleeve, 16 mm², 24 mm | 50 | 142 |
| 47818 | Insl. cable end-sleeve DIN 46228 part 4, 25 mm² | 25 | 142 |
| R505 | Crimping dies R 50, 16 - 25 mm² | 1 | 326 |
| 3R8 | Tubular cable lug without inspection hole, 16 mm², M8, Cu tinned | 25 | 14 |
| 4R8 | Tubular cable lug without inspection hole, 25 mm², M8, Cu tinned | 25 | 14 |
| AE503 | Crimping dies AE 50, 35 - 50 mm² | 1 | 326 |
| 47918 | Insl. cable end-sleeve DIN 46228 part 4, 35 mm² | 25 | 142 |
| 48025 | Insl. cable end-sleeve DIN 46228 part 4, 50 mm², 40 mm long | 20 | 142 |
| IS5072 | Crimping dies IS 50, single crimping, 10 - 16 mm² | 1 | 327 |
| 652C6 | Insl. solderless terminal M6, 10 mm², fork-type | 50 | 80 |
| LBOXX136LFG | L-BOXX with front handle (W/D/H: 442 x 357 x 151 mm) | 1 | |

# L-BOXX 50B from plastic with standard equipment for electrical installations



**Comprehensive equipment for conductor preparation, comprising cable cutter, cable knife, crimping tool and connectors**

## Characteristics

- Manufactured from shock and impact resistant ABS plastic, very robust, 100 kg capacity
- Stackable using an Easy-Click system, which allows easy opening and closing

| Item | Dimension mm | Part No. |
|---|---|---|
| L-BOXX from plastic with standard equipment for electrical installations | 442 x 357 x 117 | **LBOXX65B** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| K05D | Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267, Part 1) 6 - 50 mm² | 1 | 235 |
| K100 | Hand-operated cutting tool for Cu and Al cables to 14 mm dia. | 1 | 364 |
| KL740416 | Cable knife, without blade 4 - 16 mm dia. | 1 | 552 |
| 101R6 | Compression cable lug, DIN 46235, 6 mm², M6, Cu tinned | 25 | 56 |
| 101R8 | Compression cable lug, 6 mm², M8, Cu tinned | 25 | 56 |
| 102R6 | Compression cable lug, DIN 46235, 10 mm², M6, Cu tinned | 25 | 56 |
| 102R8 | Compression cable lug, 10 mm², M8, Cu tinned | 25 | 56 |
| 103R10 | Compression cable lug, DIN 46235, 16 mm², M10, Cu tinned | 25 | 56 |
| 104R8 | Compression cable lug, DIN 46235, 25 mm², M8, Cu tinned | 20 | 56 |
| 104R10 | Compression cable lug, DIN 46235, 25 mm², M10, Cu tinned | 20 | 56 |
| 105R8 | Compression cable lug, DIN 46235, 35 mm², M8, Cu tinned | 15 | 56 |
| 106R8 | Compression cable lug, DIN 46235, 50 mm², M8, Cu tinned | 10 | 56 |
| 106R10 | Compression cable lug, DIN 46235, 50 mm², M10, Cu tinned | 10 | 57 |
| LBOXX102LFG | L-BOXX with front handle | 1 | |

## L-BOXX 65BCB from plastic with blue connection® - equipment



**Extensive equipment based on the blue connection® product line, including crimping tool, cutting tool and cable knife**

### Characteristics

- Manufactured from shock and impact resistant ABS plastic, very robust, 100 kg capacity
- Stackable using an Easy-Click system, which allows easy opening and closing

| Item | Dimension mm | Part No. |
|---|---|---|
| L-BOXX from plastic with blue connection® equipment | 442 x 357 x 117 | **LBOXX65BCB** |

| Scope of supply | Description | Quantity | Page |
|---|---|---|---|
| K05BC | Crimping tool for tubular cable lugs and connectors, blue connection® 6 - 50 mm² | 1 | 234 |
| K100 | Hand-operated cutting tool for Cu and Al cables to 14 mm dia. | 1 | 364 |
| KL740416 | Cable knife, without blade 4 - 16 mm dia. | 1 | 552 |
| 6B6 | Tubular cable lugs, blue connection®, 6 mm², M6, Cu | 25 | 28 |
| 6B8 | Tubular cable lugs, blue connection®, 6 mm², M8, Cu | 25 | 28 |
| 10B6 | Tubular cable lugs, blue connection®, 10 mm², M6, Cu | 25 | 28 |
| 10B8 | Tubular cable lugs, blue connection®, 10 mm², M8, Cu | 25 | 28 |
| 16B10 | Tubular cable lugs, blue connection®, 16 mm², M10, Cu | 25 | 28 |
| 25B8 | Tubular cable lugs, blue connection®, 25 mm², M8, Cu | 20 | 28 |
| 25B10 | Tubular cable lugs, blue connection®, 25 mm², M10, Cu | 20 | 28 |
| 35B8 | Tubular cable lugs, blue connection®, 35 mm², M8, Cu | 20 | 28 |
| 35B10 | Tubular cable lugs, blue connection®, 35 mm², M10, Cu | 20 | 28 |
| 50B10 | Tubular cable lugs, blue connection®, 50 mm², M10, Cu | 20 | 28 |
| LBOXX102LFG | L-BOXX with front handle | 1 | |

## L-BOXX 230 B from plastic with standard equipment for electrical installations



| Item | Dimension mm | Part No. |
|---|---|---|
| L-BOXX from plastic with standard equipment for electrical installations | 442 x 357 x 117 | **LBOXX230B** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| K432 | | Automatic wire stripper K43/2 0.02 - 10 mm² | 1 | 549 |
| K507 | | Crimping tool with replaceable dies | 1 | 243 |
| 720 | | Insl. receptacle 6.3 x 0.8 mm, 0.5 - 1 mm² | 50 | 161 |
| 730 | | Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.5 mm² | 50 | 161 |
| 820 | | Insl. tab 6.3 x 0.8 mm, 0.5 - 1 mm² | 50 | 164 |
| 830 | | Insl. tab 6.3 x 0.8 mm, 1.5 - 2.5 mm² | 50 | 164 |
| 6204 | | Insl. solderless terminal M4, 0.5 - 1 mm² | 50 | 156 |
| 6305 | | Insl. solderless terminal M5, 1.5 - 2.5 mm² | 50 | 156 |
| 6506 | | Insl. solderless terminal M6, 4 - 6 mm² | 50 | 156 |
| 670 | | Insl. butt connector, 0.5 - 1 mm² | 50 | 165 |
| 680 | | Insl. butt connector, 1.5 - 2.5 mm² | 50 | 165 |
| 700 | | Insl. butt connector, 4 - 6 mm² | 25 | 165 |
| 1652C5 | | Solderless terminals fork type 10 mm², M5 | 50 | 78 |
| 1652C6 | | Solderless terminals fork type 10 mm², M6 | 50 | 78 |
| 16505 | | Solderless terminals DIN 46234, 4 - 6 mm², M5, Cu tinned | 50 | 74 |
| 16506 | | Solderless terminals DIN 46234, 4 - 6 mm², M6, Cu tinned | 50 | 74 |
| 4708 | | Insl. cable end-sleeve, 0.75 mm², 14 mm | 400 | 141 |
| 4718 | | Insl. cable end-sleeve, 1 mm², 14 mm | 400 | 141 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 400 | 141 |
| 4738 | | Insl. cable end-sleeve, 2.5 mm², 14 mm | 200 | 141 |
| 47410 | | Insl. cable end-sleeve, 4 mm², 17 mm | 100 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 100 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 100 | 141 |
| LBOXX102LFG | | L-BOXX with front handle | 1 | |

## L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 0.5 - 16 mm² NEW



| Item | Part No. |
|---|---|
| L-BOXX from plastic with crimping tool and cable end-sleeves 0.5 - 16 mm² | **LBOXXMINIK3** |

| Scope of supply | Colour | Description | Quantity | Page |
|---|---|---|---|---|
| K3 | | Crimping tool for cable end-sleeves 0.5 - 16 mm² | 1 | 211 |
| K118 | | Hand-operated cutting tool for Cu and Al cables to 12 mm dia. | 1 | 364 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 100 | 141 |
| 47312 | | Insl. cable end-sleeve, 2.5 mm², 18 mm | 100 | 141 |
| 47412 | | Insl. cable end-sleeve, 4 mm², 20 mm | 50 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 50 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 30 | 141 |
| LBOXXMINIL | | L-BOXX “Mini“ | 1 | |

## L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm²

NEW



| Item | | | Part No. | |
|---|---|---|---|---|
| L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm² | | | **LBOXXMINIK306K** | |
| Scope of supply | Colour | Description | Quantity | Page |
| K306K | | Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm² | 1 | 217 |
| K118 | | Hand-operated cutting tool for Cu and Al cables to 12 mm dia. | 1 | 364 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 100 | 141 |
| 47312 | | Insl. cable end-sleeve, 2.5 mm², 18 mm | 100 | 141 |
| 47412 | | Insl. cable end-sleeve, 4 mm², 20 mm | 50 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 50 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 30 | 141 |
| LBOXXMINIL | | L-BOXX “Mini“ | 1 | |

## L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm²

NEW



| Item | | | Part No. | |
|---|---|---|---|---|
| L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm² | | | **LBOXXMINIK304K** | |
| Scope of supply | Colour | Description | Quantity | Page |
| K304K | | K 30/4 K crimping tool for cable end-sleeves 0.08 to 16 mm² and twin cable end-sleeves 2 x 0,5 - 2 x 6 mm² | 1 | 217 |
| K118 | | Hand-operated cutting tool for Cu and Al cables to 12 mm dia. | 1 | 364 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 100 | 141 |
| 47312 | | Insl. cable end-sleeve, 2.5 mm², 18 mm | 100 | 141 |
| 47412 | | Insl. cable end-sleeve, 4 mm², 20 mm | 50 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 50 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 30 | 141 |
| LBOXXMINIL | | L-BOXX “Mini“ | 1 | |

## L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm²

NEW



| Item | | | Part No. | |
|---|---|---|---|---|
| L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm² | | | **LBOXXMINIK3014K** | |
| Scope of supply | Colour | Description | Quantity | Page |
| K3014K | | Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm² | 1 | 218 |
| K118 | | Hand-operated cutting tool for Cu and Al cables to 12 mm dia. | 1 | 364 |
| 4728 | | Insl. cable end-sleeve, 1.5 mm², 14 mm | 100 | 141 |
| 47312 | | Insl. cable end-sleeve, 2.5 mm², 18 mm | 100 | 141 |
| 47412 | | Insl. cable end-sleeve, 4 mm², 20 mm | 50 | 141 |
| 47512 | | Insl. cable end-sleeve, 6 mm², 20 mm | 50 | 141 |
| 47612 | | Insl. cable end-sleeve, 10 mm², 22 mm | 30 | 141 |
| LBOXXMINIL | | L-BOXX “Mini“ | 1 | |

## L-BOXXes with the new battery powered tools of the NEXT GENERATION

NEXT GENERATION



NEW

This is just a small extract of our range. If you need a different combination, contact us.

**Bosch battery**

| Tool | Crimping | Cutting | Punching | Part No. |
|---|---|---|---|---|
| EK 35/4 | 6 - 150 mm² | | | **LBOXXEK354CFB** |
| EK 50/5 | 6 - 240 mm² | | | **LBOXXEK505CFB** |
| EK 50/18 | 6 - 240 mm² | | | **LBOXXEK5018CFB** |
| EKM 60/22 | 6 - 300 mm² | | | **LBOXXEKM6022CFB** |
| EKM 60 ID | 10 - 240 mm² | | | **LBOXXEKM60IDCFB** |
| ES 20 | | max. 20 mm dia. | | **LBOXXES20CFB** |
| ES 32 F | | max. 32 mm dia. | | **LBOXXES32FCFB** |
| ES 32 | | max. 32 mm dia. | | **LBOXXES32CFB** |
| EKM 60 UNV | 6 - 300 mm² | max. 25 mm dia. | round/shape | **LBOXXEKM60UNVCFB** |
| LS 50 FLEX | | | round/shape | **LBOXXLS50FLEXCFB** |

**Makita battery**

| Tool | Crimping | Cutting | Punching | Part No. |
|---|---|---|---|---|
| EK 35/4 | 6 - 150 mm² | | | **LBOXXEK354CFM** |
| EK 50/5 | 6 - 240 mm² | | | **LBOXXEK505CFM** |
| EK 50/18 | 6 - 240 mm² | | | **LBOXXEK5018CFM** |
| EKM 60/22 | 6 - 300 mm² | | | **LBOXXEKM6022CFM** |
| EKM 60 ID | 10 - 240 mm² | | | **LBOXXEKM60IDCFM** |
| ES 20 | | max. 20 mm dia. | | **LBOXXES20CFM** |
| ES 32 F | | max. 32 mm dia. | | **LBOXXES32FCFM** |
| ES 32 | | max. 32 mm dia. | | **LBOXXES32CFM** |
| EKM 60 UNV | 6 - 300 mm² | max. 25 mm dia. | round/shape | **LBOXXEKM60UNVCFM** |
| LS 50 FLEX | | | round/shape | **LBOXXLS50FLEXCFM** |

## Crimping & cutting

(shown is the scope of supply with Bosch battery)



| Part No. | Scope of supply | LBOXX- EK354 | EK505 | EK5018 | EKM6022 | EKM60ID | ES20 | ES32 | ES32F | EKM60UNV |
|---|---|---|---|---|---|---|---|---|---|---|
| RALB1EU | Bosch battery 18 V / 2.0 Ah, Li-Ion | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| LGLB1EU | Bosch charger for 18 V Li-Ion batteries | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| UA22 | Adapter for crimping dies | | | | | | | | | ● |
| LBOXX136LFG | L-BOXX (W/D/H: 442 x 357 x 151 mm) | ● | ● | ● | ● | ● | ● | ● | ● | ● |

## Punching

(shown is the scope of supply with Bosch battery)



| | LBOXXLS50FLEX | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Part No. | RALB2EU | LGLB1EU | 50318721 | 50032488 | 52049371 | 51300430 | 50339672 | LBOXX136GL |
| Scope of supply | Bosch battery 18 V / 5.0 Ah, Li-Ion | Bosch charger for 18 V Li-Ion batteries | Draw stud for hydraulic operation 19 x 105 mm | Spacer, short | Kwik Stepper™ step bit with ROTASTOP® shaft 6-21 mm | Draw stud for punch with hydraulic operation 9.5 x 71 mm | Adapter 19 x 48 mm with internal thread 9.5 mm | L-BOXX (W/D/H: 442 x 357 x 151 mm) |

# THE TOOL RANGE FOR MAXIMUM SAFETY

Integrated Voltage Protection up to 1,000 V

VDE
REG F647

1000V





# Orange Line

NEW


**VDE-battery powered crimping and cutting tools Orange Line** **205-3**
VDE-battery powered crimping tools Orange Line **205-5**
VDE-battery powered cutting tools Orange Line **205-8**

# VDE TESTED AND CERTIFIED UP TO 1,000 V

## Globally Unique

Our Orange Line series of battery powered hydraulic cutting and crimping tools are the world's first tools of their kind offering protection from electric shocks up to 1,000 V. The insulation barrier, which was developed in-house, prevents voltage discharging between tool head and tool body.
Every single tool is tested for compliance with the high requirements of IEC 60900 in our production process.
This guarantees voltage protection up to 1,000 V.




VDE
REG F647

1000V

VDE tested and certified to 1,000 V in accordance to the electrical requirements of IEC 60900 and fully certified to IEC 62841-1

**In brief**

- **Applied voltage at the tool head does not disrupt to tool body**
- **Integrated slip-off protection prevents unintentional contact with live parts**
- **Housing in signal orange for simple differentiation from standard tools**

## Much safer operations

Working on live parts in low-voltage areas up to 1,000 V is often a part of every day work in certain sectors. Until now, such tasks have required the use of insulated hand tools. Our new Orange Line series offers now for the first time battery-powered cutting and crimping tools which significantly increase user safety.

In addition, our insulated tools are much safer to use in all applications involving potentially live parts. Working on supposedly de-energized parts always carried a residual risk in the past, but electrical accidents in the low voltage area up to 1,000 V can now be actively prevented.




Accidental touching of live parts is prevented by standard-conforming slip-off protection

## Safe and convenient

Electrical system cannot be de-energized or disconnected in many cases, so working on live cables cannot be avoided. Our Oranges Line of battery powered crimping and cutting tools increase operating comfort and safety significantly in these cases. They are suitable for all applications in the low-voltage area up to 1,000 V: from the installation of cable joints and working on overhead transmission lines to mounting and repairing street lighting or meter systems.



The tried and proven functions of our Next Generation remain in place. Hence you can see all information at a glance, thanks to the integrated display. Orange Line tools also have a continuously rotating tool head.

## EKM 60/22 IS VDE-battery powered hydraulic crimping tool 6 - 300 mm²



- **Housing in signal orange for simple differentiation from standard tools**
- **Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts**
- **Large crimping range up to 300 mm²**
- **All tool data in view thanks to the built-in display**

### Characteristics

- Closed head with bolt interlock, rotatable, flip top style
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 22-series interchangeable crimping dies, narrow crimping

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Hub | 17.5 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 2 s (for ARS) to 5 s (depending on cross-section) |
| Charging time | 15 min. |
| Weight incl. battery | 3.1 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| VDE-battery powered hydraulic crimping tool 6 - 300 mm² | **EKM6022ISM** |
| **Scope of supply** | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 |
| Plastic case | KK50IS |
| **Accessories** | |
| Makita battery 18 V / 4.0 Ah, Li-Ion | RAL40 |

## Available dies for Series 22 for EKM 60/22 IS

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 300 |  | 342 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 300 |  | 341 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 341 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 70 |  | 342 |
| Tubular cable lugs and connectors for solid conductors |  | 10 - 50 |  | 342 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| Nickel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 300 |  | 343 |
| Double compression cable lugs |  | 2 x 50 - 2 x 70 |  | 343 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 70 |  | 343 |
| Insulated solderless terminals |  | 10 - 70 |  | 343 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 344 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 300 |  | 344 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 344 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25/4 - 120/20 |  | 345 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 345 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 |  | 10 - 300 |  | 344 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 70 |  | 345 |
| Clamps, H-type |  | 70 |  | 345 |
| **Cable end-sleeves** | | | | |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 346 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 240 |  | 346 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 346 |

## EKM 60 ID IS VDE-battery powered hydraulic crimping tool 10 - 240 mm²

NEW



- Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- Extra large crimping area due to innovative 2-stage telescopic cylinders (patent pending)
- Indent crimping - no crimping dies required
- All tool data in view thanks to the built-in display

### Characteristics

- With innovative 2-stage telescopic cylinder
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Very well suited for compacted conductors
- Especially for fine strand conductors to DIN VDE 60228

| Technical data | |
|---|---|
| Crimping force | 30 - 60 kN |
| Stroke / opening width | 35.5 mm |
| Crimping range Cu | 10 - 240 mm² |
| Crimping range Al | 50 - 240 mm² |
| Crimping cycle | 2 s (MRS+) to 7 s (depending on cross-section) |
| Charging time | 15 min. |
| Weight incl. battery | 2.6 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| VDE-battery powered hydraulic crimping tool 10 - 240 mm² | **EKM60IDISM** |
| **Scope of supply** | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 |
| Plastic case | KK50IS |
| **Accessories** | |
| Makita battery 18 V / 4.0 Ah, Li-Ion | RAL40 |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | |
| Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections |  | 10 - 240 |  |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 240 |  |
| **Terminals, connectors and pin terminals acc. to DIN** | | | |
| Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341) |  | 10 - 240 |  |
| **Aluminum compression cable lugs and connectors** | | | |
| Aluminum compression cable lugs and connectors acc. to DIN |   | 50 - 240 |  |
| Compression joints acc. to DIN 48085, part 3 for Al/St-cable acc. to DIN EN 50182 |   | 50 - 240 |  |
| **Aluminum/copper compression cable lugs and connectors** | | | |
| Aluminum/copper compression cable lugs and connectors |   | 50 - 240 |  |

## ESM 50 ISM VDE-battery powered hydraulic cutting tool 50 mm dia. for copper and aluminium cable

NEW



VDE REG F647 1000V

- Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- High cutting force cuts copper and aluminium cables (also fine stranded)
- Saves time thanks to innovative opening mechanism
- All tool data in view thanks to the built-in display

### Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Cu and Al cables (multi and fine stranded) even armoured cable

| Technical data | |
|---|---|
| Head type | cutter open |
| Cutting range | max. 50 mm dia. |
| Cutting force | 38 kN |
| Cutting cycle | 8 s to 10 s (depending on material thickness) |
| Charging time | 15 min. |
| Weight incl. battery | 3.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| VDE Battery powered hydraulic cutting tool 50 mm dia. with Makita battery | **ESM50ISM** |
| **Scope of supply** | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 |
| Plastic case | KK50IS |
| **Accessories** | |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | RAL2 |

## ES 20 ISM VDE-battery powered hydraulic cutting tool 20 mm dia.

NEW



- Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars
- Extremely robust design and lightweight
- Slim cutting head - ideal when space is critical
- All tool data in view thanks to the built-in display

### Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Al/St-wire (ACSR)

| Technical data | |
|---|---|
| Cutting range | max. 18 mm dia. (depending on cable type) |
| Cutting force | 23 kN |
| Cutting cycle | 2 s up to 4 s (depending on cable type) |
| Charging time | 15 min. |
| Weight incl. battery | 2.1 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| VDE Battery powered hydraulic cutting tool 20 mm dia. with Makita battery | **ES20ISM** |
| **Scope of supply** | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 |
| Plastic case | KK50IS |
| **Accessories** | |
| Makita battery 18 V / 3.0 Ah, Li-Ion | RAL2 |
| Replacement blade | ES20E |

# ES 32 ISM VDE-battery powered hydraulic cutting tool 32 mm dia.

NEW



- Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- Slim cutting head - ideal when space is critical
- All tool data in view thanks to the built-in display

## Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Stranded Cu and Al cables

| Technical data | | |
|---|---|---|
| Head type | cutter open | |
| Cutting range | max. 32 mm dia. | |
| Cutting force | 15 kN | |
| Cutting cycle | 8 s up to 10 s (depending on cable type) | |
| Charging time | 15 min. | |
| Weight incl. battery | 2.1 kg | |
| Ambient temperature | -10 °C up to +40 °C | |
| **Item** | | **Part No.** |
| VDE Battery powered hydraulic cutting tool 32 mm dia. with Makita battery | | **ES32ISM** |
| Scope of supply | | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 |
| Plastic case | | KK50IS |
| Accessories | | |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 |
| Replacement blade set | | ES32E |

# ESM 35 ISM VDE-battery powered hydraulic cutting tool 35 mm dia. for copper and aluminium cable

NEW



VDE REG F647 1000 V

- Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- High cutting force cuts copper and aluminium cables (also fine stranded)
- All tool data in view thanks to the built-in display

## Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Cu and Al cables (multi and fine stranded) even armoured cable

| Technical data | |
|---|---|
| Head type | cutter open |
| Cutting range | max. 35 mm dia. |
| Cutting force | 25 kN |
| Cutting cycle | 4 s up to 6 s (depending on material thickness) |
| Charging time | 15 min. |
| Weight incl. battery | 2.9 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| VDE Battery powered hydraulic cutting tool 35 mm dia. with Makita battery | **ESM35ISM** |
| **Scope of supply** | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 |
| Plastic case | KK50IS |
| **Accessories** | |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | RAL2 |

# ESM 25 IS VDE-battery powered hydraulic cutting tool 25 mm dia.

NEW



- Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- For cutting Al/St cables (ACSR), round materials (Cu, Al, St) as well as armoured cables, steel rods and stay wire
- Extremely robust design and lightweight
- All tool data in view thanks to the built-in display

## Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Open wires (ACSR, Aldrey), stay wire and high-tensile stay wire

| Technical data | |
|---|---|
| Head type | cutter open |
| Cutting range | Open wire (ACSR, Aldrey) up to dia. 25 mm, stay wire up to dia. 16 mm, hightensile stay wire up to dia. 12 mm |
| Cutting force | 67 kN |
| Cutting cycle | depending on material thickness |
| Charging time | 15 min. |
| Weight incl. battery | 2.9 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| VDE Battery powered hydraulic cutting tool 25 mm dia. with Makita battery | **ESM25ISM** |
| Scope of supply | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 |
| Plastic case | KK50IS |
| Accessories | |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | RAL2 |

# PERFECT CRIMPED CONNECTIONS FOR SURE.

Klauke crimping tools give you peace of mind for optimum processing. The right crimping tool achieves connections that satisfy even the toughest requirements.







# Crimping


**Mechanical crimping tools** **208**
Mechanical crimping tools 210
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**Hand-operated hydraulic crimping tools** **291**

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Series 15 352
Series 25 353
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# FULL FORCE TRANSMISSION - MECHANICAL CRIMPING TOOLS

Less force is more. Klauke crimping tools were developed specifically to make your work faster, more precise and simpler. Ergonomic handles ensure the right grip, improved lever effects provide a manual actuation that transmits your force exactly where it's needed: With 33 % less effort.




**In brief**

- Effortless operation due to a third less force
- Exact crimping with precise actuation
- Reliable assignment through clear marking of the crimping profiles
- Durable material
- Individually selectable crimping profiles from 0.08 mm² to 400 mm²

## Developed for a broad range of applications

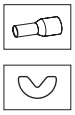
To ensure efficient crimps, a good tool needs optimum force transmission and high-quality materials. So we developed our mechanical series to make your work easier. These function make the difference especially with frequent use.

- Crimping profiles with nominal cross-sections from 0.08 mm² to 400 mm²
- High-quality steel for long service life
- Best possible force transmission: Up to 33 % less effort
- Optimum crimp results with integrated ratchet
- Ergonomic design for fast and effortless operations



## K 4 Crimping tool for cable end-sleeves 0.5 - 2.5 mm²





- **Indent crimping for round clamp opening**
- **Simple and quick due to spring-actuated tool opening**

### Characteristics

- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

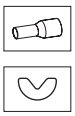
| Technical data | |
|---|---|
| Crimping range | 0.5 - 2.5 mm² |
| Length | 150 mm |
| Weight | 0.16 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.5 - 2.5 mm² | **K4** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

## K 46 Crimping tool for cable end-sleeves 1.5 - 6 mm²





- **Indent crimping for round clamp opening**
- **Simple and quick due to spring-actuated tool opening**

### Characteristics

- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

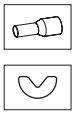
| Technical data | |
|---|---|
| Crimping range | 1.5 - 6 mm² |
| Length | 150 mm |
| Weight | 0.16 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 1.5 - 6 mm² | **K46** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

## K 3 Crimping tool for cable end-sleeves 0.5 - 16 mm²





- Indent crimping for round clamp opening
- With wire cutter

### Characteristics

- Optimum handling due to ergonomically-shaped handle
- Optimised crimp range (up to 3-times wider than before)
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Integrated cable stripper

| Technical data | |
|---|---|
| Crimping range | 0.5 - 16 mm² |
| Length | 230 mm |
| Weight | 0.35 kg |

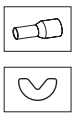
| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.5 - 16 mm² | **K3** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK32L | 193 |

| Variants | Part No. | Page |
|---|---|---|
| Steel assortment box with cable end-sleeves and crimping tool | SK32B | 186 |
| Steel assortment box with insl. cable end-sleeves and crimping tool | SK47B | 187 |
| L-BOXX from plastic with crimping tool and cable end-sleeves 0.5 - 16 mm² | LBOXXMINIK3 | 203 |

## K 35 Crimping tool for cable end-sleeves 10 - 35 mm²





- Indent crimping for round clamp opening
- For large cross-sections to 35 mm²

### Characteristics

- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

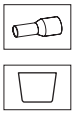
| Technical data | |
|---|---|
| Crimping range | 10 - 35 mm² |
| Length | 230 mm |
| Weight | 0.24 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 10 - 35 mm² | **K35** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK32L | 193 |

## K 1 Crimping tool for cable end-sleeves 0.14 - 2.5 mm²





- Trapezoid crimping suitable for box terminals
- Quick repetition of work steps due to spring-actuated tool opening
- With wire stripping and cutting tool

### Characteristics

- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle
- Interchangeable stripping blades

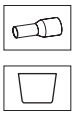
| Technical data | |
|---|---|
| Crimping range | 0.14 - 2.5 mm² |
| Length | 175 mm |
| Weight | 0.19 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.14 - 2.5 mm² | **K1** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

## K 48 Crimping tool for cable end-sleeves 0.14 - 2.5 mm²





- Trapezoid crimping suitable for box terminals
- Quick repetition of work steps due to spring-actuated tool opening

### Characteristics

- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

| Technical data | |
|---|---|
| Crimping range | 0.14 - 2.5 mm² |
| Length | 150 mm |
| Weight | 0.16 kg |

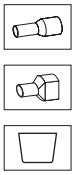
| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.14 - 2.5 mm² | **K48** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

| Variants | Part No. | Page |
|---|---|---|
| Steel assortment box with cable end-sleeves and crimping tool | SK30B | 185 |
| Steel assortment box with insl. cable end-sleeves and crimping tool | SK45B | 186 |

## K 36 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm²





- Two crimping profiles with the cross-section areas 0.5 - 2.5 mm² and 4 - 6 mm²
- Quick repetition of work steps due to spring-actuated tool opening

### Characteristics

- Front sleeve insertion (front crimping)
- Ergonomically-designed handle with slip guard

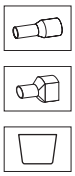
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.5 - 2.5 and 4 - 6 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.25 - 2 x 1.5 and 2 x 2.5 - 2x4 mm² |
| Length | 200 mm |
| Weight | 0.22 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.5 - 6 mm² and twin cable end-sleeves 2 x 0.25 - 2 x 1.5 and 2 x 2.5 - 2 x 4 mm² | **K36** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK32L | 193 |

## K 32 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 6 mm²





- Trapezoid crimping suitable for box terminals
- One crimping profile for cross-sections from 0.14 - 6 mm² due to automatic cross-section adjustment
- Quick repetition of work steps due to spring-actuated tool opening

### Characteristics

- With ratchet for consistently-controlled crimp results
- Front sleeve insertion (front crimping)
- Optimum handling due to ergonomically-shaped handle
- Handle with slip guard and inscription panel

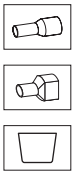
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.14 - 6 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.25 - 2 x 2.5 mm² |
| Length | 210 mm |
| Weight | 0.35 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.14 - 6 mm² and twin cable end-sleeves 2 x 0.5 - 2 x 2.5 mm² | **K32** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK43L | 193 |

## K 34 Crimping tool for cable end-sleeves and twin cable end-sleeves 6 - 16 mm²





- Trapezoid crimping suitable for box terminals
- Quick repetition of work steps due to spring-actuated tool opening
- One crimping profile for cross-sections from 6 - 16 mm² due to automatic cross-section adjustment

### Characteristics

- With ratchet for consistently-controlled crimp results
- Front sleeve insertion (front crimping)
- Handle with slip guard and inscription panel

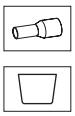
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 6 - 16 mm² |
| Crimping range twin cable end-sleeves | 2 x 4 - 2 x 6 mm² |
| Length | 210 mm |
| Weight | 0.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 6 - 16 mm² and twin cable end-sleeves 2 x 4 - 2 x 6 mm² | **K34** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK43L | 193 |

## K 37 Crimping tool for cable end-sleeves 0.14 - 6 mm²





- Trapezoid crimping suitable for box terminals
- Tool pre-tensioning adjustable

### Characteristics

- Adjusting disc for compensating for the natural tool wear
- One crimp profile per cross-section
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

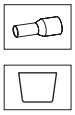
| Technical data | |
|---|---|
| Crimping range | 0.14 - 6 mm² |
| Length | 200 mm |
| Weight | 0.36 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 0.14 - 6 mm² | **K37** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK43L | 193 |

## K 39 Crimping tool for cable end-sleeves 10 - 25 mm²





- Trapezoid crimping suitable for box terminals
- Sustainable crimps due to adjustable tool pre-tensioning

### Characteristics

- Adjusting disc for compensating for the natural tool wear
- One crimp profile per cross-section
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

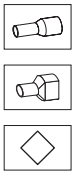
| Technical data | |
|---|---|
| Crimping range | 10 - 25 mm² |
| Length | 200 mm |
| Weight | 0.36 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 10 - 25 mm² | **K39** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK43L | 193 |

## K 38/2 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm²





- Square crimping suitable for box terminals and spring clamp technology
- Adjusting disc to compensate for the natural tool wear
- One crimping profile for cross-sections from 0.5 - 6 mm² due to automatic cross-section adjustment

### Characteristics

- Accurate drive
- With ratchet for consistently-controlled crimp results
- Front sleeve insertion (front crimping)

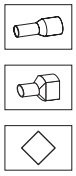
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.5 - 6 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.25 - 2 x 2.5 mm² |
| Length | 190 mm |
| Weight | 0.3 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm² | **K382** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK43L | 193 |

## K 30/3 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm²





▸ Square crimping suitable for box terminals and spring clamp technology

### Characteristics

- One crimping profile for cross-sections from 0.08-10 mm² due to automatic cross-section adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.08 - 10 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.25 - 2 x 4 mm² |
| Length | 190 mm |
| Weight | 0.3 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm² | **K303** |

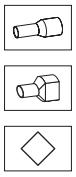
| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

| Variants | Part No. | Page |
|---|---|---|
| Plastic assortment box with insl. cable end-sleeves and tools | SK303P | 187 |
| Plastic assortment box with insl. cable end-sleeves and crimping tool | SK303S | 188 |
| Steel assortment box with insl. cable end-sleeves and tools | SK43NB | 188 |

## K 30/4 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm²

NEW





▸ Square crimping K 30/4 K

### Characteristics

- One crimping profile for cross-sections from 0.08-16 mm² due to automatic cross-section adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Positioner for small cable end-sleeves
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.08 - 16 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.5 - 2 x 6 mm² |
| Length | 215 mm |
| Weight | 0.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm², square crimping | **K304K** |

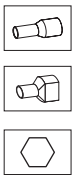
| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

| Variants | Part No. | Page |
|---|---|---|
| L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm² | LBOXXMINIK304K | 204 |

## K 30/6 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm²

NEW





▸ **Hexagonal crimping K 30/6 K**

### Characteristics

- One crimping profile for cross-sections from 0.08-16 mm² due to automatic cross-section adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Positioner for small cable end-sleeves
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.08 - 16 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.5 - 2 x 10 mm² |
| Length | 215 mm |
| Weight | 0.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm², hexagonal crimping | **K306K** |

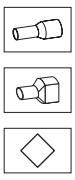
| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK30L | 193 |

| Variants | Part No. | Page |
|---|---|---|
| L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm² | LBOXXMINIK306K | 204 |

## K 301/4 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm²

NEW





▸ **Square crimping**
▸ **Very light and ergonomic**

### Characteristics

- One crimping profile for all cross-sections due to automatic cross-section adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel
- Safety pad in handle for slip-free working

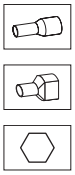
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.14 - 10 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.25 - 2 x 4 mm² |
| Length | 175 mm |
| Weight | 0.35 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm² | **K3014K** |

| Variants | Part No. | Page |
|---|---|---|
| L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm² | LBOXXMINIK3014K | 204 |

## K 301/6 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm²





▸ **Very light and ergonomic**

### Characteristics

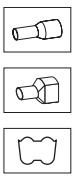
- One crimping profile for all cross-sections due to automatic cross-section adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel
- Safety pad in handle for slip-free working

| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 0.14 - 10 mm² |
| Crimping range twin cable end-sleeves | 2 x 0.25 - 2 x 4 mm² |
| Length | 175 mm |
| Weight | 0.35 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm² | **K3016K** |

## K 27/1 Crimping tool for cable end-sleeves and twin cable end-sleeves 2 x 4 - 50 mm²





▸ **Special trapezoid crimping suitable for box terminals**
▸ **Special type, especially suitable for fine-stranded conductors**

### Characteristics

- One crimp profile per cross-section
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel

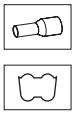
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 10 - 50 mm² |
| Crimping range twin cable end-sleeves | 2 x 4 - 2 x 16 mm² |
| Length | 335 mm |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 2 x 4 - 50 mm² | **K271** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 27/2 Crimping tool for cable end-sleeves 50 - 95 mm²





- Special trapezoid crimping suitable for box terminals
- Special type, especially suitable for fine-stranded conductors
- For large cross-sections to 95 mm²

### Characteristics

- One crimp profile per cross-section
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel

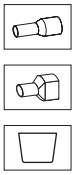
| Technical data | |
|---|---|
| Crimping range | 50 - 95 mm² |
| Length | 335 mm |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 50 - 95 mm² | **K272** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 28 Crimping tool for cable end-sleeves and twin cable end-sleeves 2 x 4 - 50 mm²





- Trapezoid crimping suitable for box terminals

### Characteristics

- One crimp profile per cross-section
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel

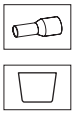
| Technical data | |
|---|---|
| Crimping range cable end-sleeves | 10 - 50 mm² |
| Crimping range twin cable end-sleeves | 2 x 4 - 2 x 16 mm² |
| Length | 335 mm |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves and twin cable end-sleeves 2 x 4 - 50 mm² | **K28** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 29 Crimping tool for cable end-sleeves 50 - 95 mm²





- Trapezoid crimping suitable for box terminals
- For large cross-sections to 95 mm²

### Characteristics

- One crimp profile per cross-section
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel

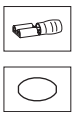
| Technical data | |
|---|---|
| Crimping range | 50 - 95 mm² |
| Length | 335 mm |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| Crimping tool for cable end-sleeves 50 - 95 mm² | **K29** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 80 Crimping tool for insulated cable connections 0.1 - 1 mm²





- Crimping of conductor and insulation in one step
- Adjusting disc to compensate for the natural tool wear

### Characteristics

- Accurate drive
- With ratchet for consistently-controlled crimp results
- Colour-coded cross-section assignment
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Crimping range red insulation sleeve | 0.5 - 1.0 mm² |
| Crimping range yellow insulation sleeve | 0.1 - 0.4 mm² |
| Length | 195 mm |
| Weight | 0.38 kg |

| Item | Part No. |
|---|---|
| Crimping tool for insulated cable connections 0.1 - 1 mm² | **K80** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK43L | 193 |

# K 82 Crimping tool for insulated cable connections 0.5 - 6 mm²



- With additional locator to ensure a precise crimp connection
- 33 % less effort
- 3-Component handle grip
- Optimised material quality for a long service life
- Precise pre-tension setting maintains constant crimp performance

## Characteristics

- Less effort required due to new mechanical lever system
- 3C handle: YELLOW: hard core for force transmission, BLUE: soft ergonomic grip area, GREY: soft slip protection
- Easy handling thanks to reduced tool opening width, optimum ergonomics due to the position of the palms and fingers, which is gentle on the joints
- Crimping of conductor and insulation in one step

| Technical data | |
|---|---|
| Crimping range red insulation sleeve | 0.5 - 1.0 mm² |
| Crimping range blue insulation sleeve | 1.5 - 2.5 mm² |
| Crimping range yellow insulation sleeve | 4.0 - 6.0 mm² |
| Length | 225 mm |
| Weight | 0.53 kg |

| Item | Part No. |
|---|---|
| Crimping tool for insulated cable connections 0.5 - 6 mm² | **K82A** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK230L | 194 |

| Variants | Part No. | Page |
|---|---|---|
| Plastic assortment box with insl. cable connections and crimping tool | SK82S | 192 |
| Plastic assortment box with insl. cable connections and tools | SK82P | 192 |

## K 82 T Crimping tool for insulated cable connections 0.5 - 6 mm²



- With additional locator to ensure a precise crimp connection
- Also suitable for the processing of insulated connectors with vibration protection
- 33 % less effort
- 3-Component handle grip
- Optimised material quality for a long service life
- Precise pre-tension setting maintains constant crimp performance

### Characteristics

- Less effort required due to new mechanical lever system
- 3C handle: YELLOW: hard core for force transmission, BLUE: soft ergonomic grip area, GREY: soft slip protection
- Easy handling thanks to reduced tool opening width, optimum ergonomics due to the position of the palms and fingers, which is gentle on the joints
- Crimping of conductor and insulation in one step
- Extremely high voltage protection due to special crimping of the cable insulation (diamond crimp)

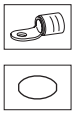
| Technical data | |
|---|---|
| Crimping range red insulation sleeve | 0.5 - 1.0 mm² |
| Crimping range blue insulation sleeve | 1.5 - 2.5 mm² |
| Crimping range yellow insulation sleeve | 4.0 - 6.0 mm² |
| Length | 225 mm |
| Weight | 0.53 kg |

| Item | Part No. |
|---|---|
| Crimping tool for insulated cable connections 0.5 - 6 mm² | **K82T** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK230L | 194 |

## K 16 Crimping tool for insulated solderless terminals 10 + 16 mm²





- Oval crimping
- Crimping tool also for meter connections

### Characteristics

- With ratchet for consistently-controlled crimp results
- Colour-coded cross-section assignment

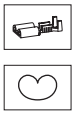
| Technical data | |
|---|---|
| Crimping range red insulation sleeve | 10 mm² |
| Crimping range blue insulation sleeve | 16 mm² |
| Length | 305 mm |
| Weight | 0.61 kg |

| Item | Part No. |
|---|---|
| Crimping tool for insulated solderless terminals 10 + 16 mm² | **K16** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 60 crimping tool for non-insulated tabs and receptacles 0.5 - 6 mm²





- Roll crimping
- To shorten screws M2.5 - M6

### Characteristics

- Crimping of conductor and insulation in two steps
- With wire stripping and cutting tool for cross-sections 0.75 – 6 mm²

### Suitable for

- Tabs with 2.8 / 4.8 and 6.3 mm tab width

| Technical data | |
|---|---|
| Crimping range | 0.5 - 6 mm² |
| Length | 225 mm |
| Weight | 0.2 kg |

| Item | Part No. |
|---|---|
| Crimping tool for non-insulated tabs and receptacles 0.5 - 6 mm² | **K60** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK210L | 194 |

## K 57/2 Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm²



- Roll crimping
- Crimping of conductor and insulation in one step
- Spring-actuated tool opening
- Tool pre-tensioning adjustable

### Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Adjusting disc for compensating for the natural tool wear

### Suitable for

- Tabs with 2.8 mm tab width

| Technical data | |
|---|---|
| Crimping range | 0.1-1 mm² |
| Length | 220 mm |
| Weight | 0.55 kg |

| Item | Part No. |
|---|---|
| Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1-1 mm² | **K572** |

## K 58/2 Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm²



- Roll crimping
- Crimping of conductor and insulation in one step
- Tool pre-tensioning adjustable

### Characteristics

- Simple and quick due to spring-actuated tool opening
- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Adjusting disc for compensating for the natural tool wear

### Suitable for

- Tabs with 4.8 mm tab width

| Technical data | |
|---|---|
| Crimping range | 0.5 - 2.5 mm² |
| Length | 220 mm |
| Weight | 0.55 kg |

| Item | Part No. |
|---|---|
| Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm² | **K582** |

# K 59/2 Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 6 mm²



- Roll crimping
- Crimping of conductor and insulation in one step
- Tool pre-tensioning adjustable

## Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Simple and quick due to spring-actuated tool opening
- Adjusting disc for compensating for the natural tool wear

## Suitable for

- Tabs with 6.3 mm tab width

| Technical data | |
|---|---|
| Crimping range | 0.5 - 6 mm² |
| Length | 220 mm |
| Weight | 0.51 kg |

| Item | Part No. |
|---|---|
| Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 6 mm² | **K592** |

## K 67 Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm²



- Roll crimping
- Crimping of conductor and insulation in one step
- Spring-actuated tool opening

### Characteristics

- With ratchet for consistently-controlled crimp results
- Parallel guided crimping jaws

### Suitable for

- Tabs with 2.8 mm tab width

| Technical data | |
|---|---|
| Crimping range | 0.1 - 1 mm² |
| Length | 210 mm |
| Weight | 0.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm² | **K67** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK210L | 194 |

# K 65 Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm²



- Roll crimping
- Crimping of conductor and insulation in one step
- Spring-actuated tool opening

## Characteristics

- With ratchet for consistently-controlled crimp results
- Parallel guided crimping jaws

## Suitable for

- Tabs with 4.8 mm tab width

| Technical data | |
|---|---|
| Crimping range | 0.5 - 2.5 mm² |
| Length | 265 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm² | **K65** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK210L | 194 |

## K 93 Crimping tool for connectors for solid conductors 1.5 - 4 mm²



- Hexagonal crimping
- Tool pre-tensioning adjustable

### Characteristics

- Accurate drive
- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel
- Adjusting disc for compensating for the natural tool wear

| Technical data | |
|---|---|
| Crimping range | 1.5 - 4 mm² |
| Length | 220 mm |
| Weight | 0.56 kg |

| Item | Part No. |
|---|---|
| Crimping tool for connectors for solid conductors 1.5 - 4 mm² | **K93** |

## K 94 Crimping tool for tubular cable lugs and connectors for solid conductors 6 - 10 mm²



- Hexagonal crimping
- Tool pre-tensioning adjustable

### Characteristics

- Accurate drive
- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel
- Adjusting disc for compensating for the natural tool wear

| Technical data | |
|---|---|
| Crimping range | 6 - 10 mm² |
| Length | 220 mm |
| Weight | 0.56 kg |

| Item | Part No. |
|---|---|
| Crimping tool for tubular cable lugs and connectors for solid conductors 6 - 10 mm² | **K94** |

## K 2 Crimping tool for tubular cable lugs and connectors, standard type 0.75 - 16 mm²



- Indent crimping
- Ideal crimping tool with spring-actuated tool opening

### Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

| Technical data | |
|---|---|
| Crimping range | 0.75 - 16 mm² |
| Length | 325 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool for tubular cable lugs and connectors, standard type 0.75 - 16 mm² | **K2** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 02 Crimping tool for tubular cable lugs and connectors for solid conductors 0.75 - 16 mm²



- Indent crimping
- Ideal crimping tool with spring-actuated tool opening
- For tubular cable lugs and connectors for solid conductors

### Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

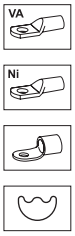
| Technical data | |
|---|---|
| Crimping range | 0.75 - 16 mm² |
| Length | 325 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool for tubular cable lugs and connectors for solid conductors 0.75 - 16 mm² | **K02** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 25 Crimping tool 0.5 - 16 mm²






- Indent crimping
- Ideal crimping tool with spring-actuated tool opening
- For solderless terminals to DIN 46234, pin terminals to DIN 46230
- For nickel and stainless steel tubular cable lugs and connector to 6 mm²

### Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

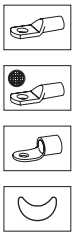
| Technical data | |
|---|---|
| Crimping range | 0.5 - 16 mm² |
| Length | 325 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool 0.5 - 16 mm² | **K25** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK4L | 193 |

## K 95 Crimping tool 16 - 95 mm²





- Indent crimping

### Characteristics

- For smaller copper conductors
- Optimised force transmission

### Suitable for

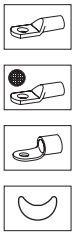
- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors
- Solderless terminals DIN 46234, pin terminals DIN 46230

| Technical data | |
|---|---|
| Crimping range | 16 - 95 mm² |
| Length | 630 mm |
| Weight | 3.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool 16 - 95 mm² | **K95** |

## TK 95 Crimping tool 16 - 95 mm² for workbench mounting





- Indent crimping
- Ideal tool for workbench assembly

### Characteristics

- For smaller copper conductors
- Optimised force transmission

### Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors
- Solderless terminals DIN 46234, pin terminals DIN 46230

| Technical data | |
|---|---|
| Crimping range | 16 - 95 mm² |
| Length | 700 mm |
| Weight | 3.9 kg |

| Item | Part No. |
|---|---|
| Crimping tool 16 - 95 mm² for workbench mounting | **TK95** |

## K 5 / K 5 SP Crimping tools 6 - 50 mm²





- Indent crimping
- Version with ratchet for consistent checking of crimp results
- Low-maintenance mechanical drive

### Characteristics

- For smaller copper conductors
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the dies

### Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors

| Technical data | |
|---|---|
| Crimping range | 6 - 50 mm² |
| Length | 600 mm |
| Weight | 2.4 kg |

| Item | Part No. |
|---|---|
| Crimping tool 6 - 50 mm² | **K5** |
| Crimping tool with ratchet, 6 - 50 mm² | **K5SP** |

## K 6 / K 6 SP Crimping tools 50 - 120 mm²





- Indent crimping
- Version with ratchet for consistent checking of crimp results
- Low-maintenance mechanical drive

### Characteristics

- For smaller copper conductors
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the dies
- Telescopic handles

### Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors

| Technical data | |
|---|---|
| Crimping range | 50 - 120 mm² |
| Length | 970 mm |
| Weight | 4.4 kg |

| Item | Part No. |
|---|---|
| Crimping tool 50 - 120 mm² | **K6** |
| Crimping tool with ratchet 50 - 120 mm² | **K6SP** |

## K 07 / K 07 SP Crimping tools 185 - 400 mm²





- Indent crimping
- Extremely wide cross section range up to 400 mm²
- Version with ratchet for consistent checking of crimp results
- Low-maintenance mechanical drive

### Characteristics

- Simple and safe: Exact cross-section assignment thanks to permanent marking on the dies
- Telescopic handles

### Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors

| Technical data | |
|---|---|
| Crimping range | 185 - 400 mm² |
| Length | 975 mm |
| Weight | 4.7 kg |

| Item | Part No. |
|---|---|
| Crimping tool 185 - 400 mm² | **K07** |
| Crimping tool with ratchet 185 - 400 mm² | **K07SP** |

## K 7 / K 7 SP Crimping tools 120 - 240 mm²





- Indent crimping
- Large cross section range up to 240 mm²
- Version with ratchet for consistent checking of crimp results
- Low-maintenance mechanical drive

### Characteristics

- Simple and safe: Exact cross-section assignment thanks to permanent marking on the dies
- Telescopic handles

### Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors

| Technical data | |
|---|---|
| Crimping range | 120 - 240 mm² |
| Length | 975 mm |
| Weight | 4.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool 120 - 240 mm² | **K7** |
| Crimping tool 120 - 240 mm² with ratchet | **K7SP** |

## K 8 / K 8 SP Crimping tools 35 - 95 mm²





- Indent crimping
- Version with ratchet for consistent checking of crimp results
- Low-maintenance mechanical drive

### Characteristics

- For smaller copper conductors
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the dies
- Telescopic handles

### Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors

| Technical data | |
|---|---|
| Crimping range | 35 - 95 mm² |
| Length | 970 mm |
| Weight | 4.4 kg |

| Item | Part No. |
|---|---|
| Crimping tool 35 - 95 mm² | **K8** |
| Crimping tool with ratchet 35 - 95 mm² | **K8SP** |

## K 04 Crimping tool for tubular cable lugs and connectors, standard type 10 - 25 mm²



- Hexagonal crimping
- Tool pre-tensioning adjustable
- Large cross section range up to 25 mm²

### Characteristics

- Energy-efficient ergonomic drive
- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Adjusting disc for compensating for the natural tool wear

| Technical data | |
|---|---|
| Crimping range | 10 - 25 mm² |
| Length | 260 mm |
| Weight | 0.56 kg |

| Item | Part No. |
|---|---|
| Crimping tools for tubular cable lugs and connectors, standard type 10 - 25 mm² | **K04** |

## K 05 BC Syncro Crimping tools for tubular cable lugs and connectors blue connection® 6 - 50 mm²



- Accurate assignment of crimping tool/crimping die through colour-coding system
- Hexagonal crimping
- Synchronised die selection when in the open position
- Cross-section display on marked adjusting wheel
- For compacted conductors to DIN EN 60228

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 6 - 50 mm² |
| Length | 390 mm |
| Weight | 1.1 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool for tubular cable lugs and connectors, blue connection® 6 - 50 mm² | **K05BC** |

| Variants | Part No. | Page |
|---|---|---|
| L-BOXX from plastic with blue connection® - equipment | LBOXX65BCB | 202 |

## K 05 / K 05 SP Syncro Crimping tools for tubular cable lugs and connectors, standard type 6 - 50 mm²



- Synchronised die selection when in the open position
- Cross-section display on marked adjusting wheel
- Version with ratchet for consistent crimp results

### Characteristics

- Hexagonal crimping
- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes
- Ergonomic 2-component handle with two-sided slip guard
- Smooth-running, durable and effortless tool mechanism

| Technical data | |
|---|---|
| Crimping range | 6 - 50 mm² |
| Length | 390 mm |
| Weight | 1.1 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm² | **K05** |
| Syncro Crimping tool with ratchet for tubular cable lugs and connectors, standard type 6 - 50 mm² | **K05SP** |

| Variants | Part No. | Page |
|---|---|---|
| Steel assortment box with tubular cable lugs 6 - 50 mm² and crimping tool K05 | SK65B | 189 |
| L-BOXX from plastic with standard equipment for electrical installations | LBOXX65B | 200 |

## K 05 D / K 05 D SP Syncro Crimping tools for DIN compression cable lugs and connectors 6 - 50 mm²



- Synchronised die selection when in the open position
- Cross-section display on marked adjusting wheel
- Version with ratchet for consistent crimp results

### Characteristics

- Hexagonal crimping
- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes
- Ergonomic 2-component handle with two-sided slip guard
- Smooth-running, durable and effortless tool mechanism

| Technical data | |
|---|---|
| Crimping range | 6 - 50 mm² |
| Length | 390 mm |
| Weight | 1.1 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267, Part 1) 6 - 50 mm² | **K05D** |
| Syncro Crimping tool with ratchet for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 6 - 50 mm² | **K05DSP** |

| Variants | Part No. | Page |
|---|---|---|
| Steel assortment box with DIN compression cable lugs and crimping tool | SK50B | 190 |
| L-BOXX from plastic with standard equipment for electrical installations | LBOXX50B | 201 |

## K 06 BC Syncro Crimping tools for tubular cable lugs and connectors blue connection® 6 - 120 mm²








- Accurate assignment of crimping tool/crimping die through colour-coding system
- Unique with extra large crimping range
- Hexagonal crimping
- Synchronised die selection when in the open position
- Cross-section display on marked adjusting wheel
- For compacted conductors to DIN EN 60228

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 6 - 120 mm² |
| Length | 600 - 750 mm |
| Weight | 2.6 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool for tubular cable lugs and connectors, blue connection® 10 - 120 mm² | **K06BC** |

## K 06 Syncro Crimping tools for tubular cable lugs and connectors, standard type 6 - 120 mm²







- Unique with extra large crimping range
- Hexagonal crimping
- Faster, safer and synchronous cross-section adjustment
- Ergonomic design
- Extremely light and rigid

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 6 - 120 mm² |
| Length | 600 - 750 mm |
| Weight | 2.6 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tools with ratchet for tubular cable lugs and connectors, standard type 10 - 120 mm² | **K06** |

## K 06 D Syncro Crimping tools for DIN compr. cable lugs and connectors 6 - 120 mm²



- Unique with extra large crimping range
- Hexagonal crimping
- Faster, safer and synchronous cross-section adjustment
- Ergonomic design
- Extremely light and rigid

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 6 - 120 mm² |
| Length | 600 - 750 mm |
| Weight | 2.6 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267, Part 1) 6 - 120 mm² | **K06D** |

## K 09 BC Syncro Crimping tools for tubular cable lugs and connectors blue connection® 25 - 150 mm²



- Accurate assignment of crimping tool/crimping die through colour-coding system
- Unique with extra large crimping range
- Hexagonal crimping
- Synchronised die selection when in the open position
- Cross-section display on marked adjusting wheel
- For compacted conductors to DIN EN 60228

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 25 - 150 mm² |
| Length | 600 - 750 mm |
| Weight | 2.9 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool for tubular cable lugs and connectors, blue connection® 25 - 150 mm² | **K09BC** |

## K 09 Syncro Crimping tools
## for tubular cable lugs and connectors, standard type 25 - 150 mm²



- Unique with extra large crimping range
- Hexagonal crimping
- Faster, safer and synchronous cross-section adjustment
- Ergonomic design
- Extremely light and rigid

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 25 - 150 mm² |
| Length | 600 - 750 mm |
| Weight | 2.9 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tools for tubular cable lugs and connectors, standard type 25 - 150 mm² | **K09** |

## K 09 D Syncro Crimping tools
## for DIN compression cable lugs and connectors, 25 - 150 mm²



- Unique with extra large crimping range
- Hexagonal crimping
- Faster, safer and synchronous cross-section adjustment
- Ergonomic design
- Extremely light and rigid

### Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

| Technical data | |
|---|---|
| Crimping range | 25 - 150 mm² |
| Length | 600 - 750 mm |
| Weight | 2.9 kg |

| Item | Part No. |
|---|---|
| Syncro Crimping tool with ratchet for compression cable lugs and connectors (DIN 46235 / DIN 46267, Part 1) 25 - 150 mm² | **K09DSP** |

## K 511 / K 512 Crimping tools for gas-tight connections



- Parallel guided crimping jaws
- Suitable for gas-tight crimps in environments extremely harmful to crimps (e.g. ammonia gas)

### Characteristics

- Optimised force transmission
- With ratchet for consistently-controlled crimp results
- Handle with slip guard and inscription panel

### Suitable for

- Non-insulated tubular cable lugs, ring and fork type
- Parallel and butt connectors

| Technical data | |
|---|---|
| Length | 270 mm |
| Weight | 0.7 kg |

| Item | Crimping range mm² | Part No. |
|---|---|---|
| Mechanical crimping tool 1 - 4 mm² | 1-4 | **K511** |
| Mechanical crimping tool 6 + 10 mm² | 6+10 | **K512** |

## DN-K 74/2 Crimping tool for BNC connectors and coax cable



- Hexagonal crimping
- Tool pre-tensioning adjustable

### Characteristics

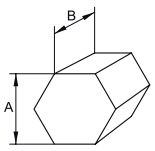
- With ratchet for consistently-controlled crimp results
- Adjusting disc for compensating for the natural tool wear

### Suitable for

- Coax cable RG 58, RG 59, RG 62 and RG 71

| Technical data | |
|---|---|
| Length | 220 mm |
| Weight | 0.560 kg |
| Crimping dimension 1 | A: 6.48 mm, B: 10 mm |
| Crimping dimension 2 | A: 5.4 mm, B: 10 mm |
| Crimping dimension 3 | A: 1.72 mm, B: 2.3 mm |

| Item | Part No. |
|---|---|
| Mechanical crimping tool for BNC connector, coax cable RG 58, RG 59, RG 62 and RG 71 | **DNK742** |



## KP 1 / KP 1 L basic tool from the Klauke Pro series



- **Compatible with all crimping heads of the Klauke Pro range**
- **Easy change of crimping head without tools**

### Characteristics

- Standardised mounting of crimping heads
- With ratchet for consistently-controlled crimp results

| Item | Weight kg | Part No. |
|---|---|---|
| Basic tool from the Klauke Pro range, length 151 mm | 0.2 | **KP1** |
| Basic tool from the Klauke Pro range, length 207 mm | 0.3 | **KP1L** |

| Accessories | Part No. | Page |
|---|---|---|
| Plastic case | MKKP1 | 196 |

| | Suitable for | Crimping range mm² | Crimp profile | Part No. |
|---|---|---|---|---|
| **Crimping heads for cable end-sleeves** | | | | |
|  | Cable end-sleeves, square crimping | 0,08 -10 |  | **KP303** |
|  | Cable end-sleeves, square crimping | 2,5 - 16 |  | **KP304** |
|  | Cable end-sleeves, round crimping for narrow chamber sizes | 0,14 - 2,5 |  | **KP350** |
|  | Cable end-sleeves, round crimping for narrow chamber sizes | 1,5 - 6 |  | **KP351** |
|  | Cable end-sleeves, round crimping for narrow chamber sizes | 10 - 16 |  | **KP352** |
| **Crimping heads for insulated cable connections** | | | | |
|  | Insulated cable connections (yellow and red) | 0,1 - 1 |  | **KP80** |
|  | Insulated cable connections (red and blue) | 0,5 - 2,5 |  | **KP81** |
|  | Insulated cable connections (red, yellow, blue) | 0,5 - 6 |  | **KP82** |
|  | Insulated cable connections (yellow) | 4 - 6 |  | **KP83** |
| **Crimping heads for tubular cable lugs and solderless terminals** | | | | |
|  | Tubular cable lugs and solderless terminals | 0,5 - 6 |  | **KP232** |
|  | Tubular cable lugs and solderless terminals | 4 - 10 |  | **KP242** |
| **Crimping heads for photovoltaic** | | | | |
|  | Connector for photovoltaics 3 mm dia. | 2,5 - 4 |  | **KP90MC31** |
| **Crimping heads for receptacles** | | | | |
|  | Part No. 3720, receptacles 6.3 x 0.8 mm with lateral conductor connector | 0,5 - 1 |  | **KP631** |
|  | Part No. 3725, receptacles 6.3 x 0.8 mm with lateral conductor connector | 0,5 - 1,5 |  | **KP64** |
|  | Part No. 3735, receptacles 6.3 x 0.8 mm with lateral conductor connector | 1,5 - 2,5 |  | **KP632** |
|  | For receptacles 2.8 mm tab width | 0,1 - 1 |  | **KP67** |
|  | For receptacles 4.8 mm tab width | 0,5 - 2,5 |  | **KP65** |
|  | For receptacles 6.3 mm tab width | 0,5 - 2,5 |  | **KP68** |

## SKP 1 Crimping head assortment from the Klauke Pro series



- Easy change of crimping head without tools
- Crimping of conductor and insulation in one step
- Spring-actuated tool opening

### Characteristics

- Parallel guided crimping heads
- With ratchet for consistently-controlled crimp results

| Technical data | |
|---|---|
| Dimension | 250 x 115 x 40 mm |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| Crimping head set of the Klauke Pro range | **SKP1** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Basic tool from the Klauke Pro range, length 151 mm | KP1 | 240 |
| Crimping head for insulated cable connections 0.5 - 2.5 mm² (red, blue) | KP81 | |
| Crimping head for cable end-sleeves, square crimping, 0.08 - 10 mm² | KP303 | |
| Crimping head for non-insulated tubular cable lugs and solderless terminals 0.5 - 6 mm² | KP232 | |

## SKP 6 Crimping head assortment from the Klauke Pro series



- Easy change of crimping head without tools
- Crimping of conductor and insulation in one step
- Parallel guided crimping heads
- Spring-actuated tool opening

### Characteristics

- Roll crimping
- For crimping of non-insulated receptacles with lateral conductor connector
- With ratchet for consistently-controlled crimp results

| Technical data | |
|---|---|
| Dimension | 250 x 115 x 40 mm |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| Crimping head set of the Klauke Pro range | **SKP6** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Basic tool from the Klauke Pro range, length 151 mm | KP1 | 240 |
| Crimping head for receptacles 6.3 x 0.8 mm with lateral conductor connector, 0.5 - 1 mm², for Item 3720 | KP631 | |
| Crimping head for receptacles 6.3 x 0.8 mm with lateral conductor connector, 1.5 - 2.5 mm², for Item 3735 | KP632 | |
| Crimping head for receptacles 6.3 x 0.8 mm with lateral conductor connector, 0.5 - 1.5 mm², for Item 3725 | KP64 | |

## K 507 Crimping tool with interchangeable dies





- **Fast change of crimping die, no tools required, without readjustment by special fixing system**
- **Additional crimping dies integrated in the handle**

### Characteristics

- With ratchet for consistently-controlled crimp results
- Adjusting disc for compensating for the natural tool wear

| Technical data | |
|---|---|
| Length | 220 mm |
| Weight | 0.635 kg |

| Item | Part No. |
|---|---|
| Crimping tool with interchangeable dies | **K507** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Crimping die for insulated connectors, 0.5 - 6 mm² | IS5071 | |
| Crimping dies AE 50, 0.14 - 10 mm² | AE501 | 326 |
| Crimping die for insulated connectors 0.5 - 6 mm² | Q5071 | |

| Variants | Art.-Nr. | Seite |
|---|---|---|
| Steel assortment box with insl. cable connections and crimping tool | MK230B507 | 191 |
| L-BOXX from plastic with standard equipment for electrical installations | LBOXX230B | 203 |

## FROM PRACTICE FOR PRACTICE!

**The 3 in 1 crimping tool K507 - The K507 has a lot to offer!**

3 integrated crimping dies for processing insulated cable lugs, cable end-sleeves and solderless cable lugs. Magazines in the handles are designed to stow two crimping dies, so they are to hand at all times.





## K 50 Crimping tool for interchangeable dies



- Parallel guided crimping jaws
- Fast change of crimping die without readjustment by special fixing system
- Exact positioning of the crimping dies due to die locating pins

### Characteristics

- Optimised force transmission
- With ratchet for consistently-controlled crimp results
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Length | 220 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Crimping tool for interchangeable dies 0.1 - 50 mm² | **K50** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK55 | 194 |

K50 SERIE

## Available dies for Series 50 for K 50

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Tubular cable lugs and connectors, Cu | | | | |
| Tubular cable lugs and connectors, Cu, standard type |  | 0.75 - 10 |  | 326 |
| Tubular cable lugs and connectors, Cu, standard type |  | 16 - 25 |  | 326 |
| Tubular cable lugs and connectors for solid conductors, Cu |  | 1.5 - 10 |  | 326 |
| Compression cable lugs and connectors acc. to DIN - Cu | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) |   | 6 - 25 |  | 326 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 0.5 - 10 |  | 326 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 0.14 - 50 |  | 326 |
| Cable connections, insulated and non-insulated | | | | |
| Non insulated receptacles |  | 0.25 - 6 |  | 327 |
| for pin and shielded receptacles, BNC connectors for coax cables RG 58, 59, 60 and 71 | | |  | 327 |
| Turned pin connectors, pin receptacles | | 0.1 - 4 |  | 327 |
| Insulated cable connections, double crimping |  | 0.1 - 6 |  | 327 |
| Insulated cable connections, single crimping |  | 0.5 - 16 |  | 327 |

## K 35/4 Crimping tool for interchangeable dies 6 - 150 mm²



- Very comfortable: Tool-less crimping die change
- Optimised for cable glands and control cabinet construction
- Energy-efficient and low-maintenance mechanical drive

### Characteristics

- Narrow crimping
- Less effort due to extendible telescopic handle
- Flexible use: Head rotates 360°
- Fast, change of crimping die without readjustment by special fixing system

| Technical data | |
|---|---|
| Length | Stepless 420-590 mm |
| Weight | 1.9 kg |

| Item | Part No. |
|---|---|
| Crimping tool for interchangeable dies 6 - 150 mm² | **K354** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | SK65L | 195 |

K4 SERIE

## Available dies for Series 4 for K 35/4

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Copper tubular cable lugs and connectors | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 150 |  | 329 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 150 |  | 328 |
| Insulated cable lugs and compression joints, standard type, insulated pin terminals |  | 10 - 70 |  | 328 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 35 |  | 329 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 329 |
| Tubular cable lugs and connectors, Ni, VA | | | | |
| Stainless steel tubular cable lugs and connectors |  | 0.5 - 16 |  | 329 |
| Nickel tubular cable lugs and connectors |  | 0.5 - 16 |  | 329 |
| Copper compression cable lugs and connectors to DIN | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 120 |  | 330 |
| Terminals, connectors and pin terminals acc. to DIN, copper | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 6 - 35 |  | 330 |
| Insulated solderless terminals and connectors |  | 10 - 16 |  | 330 |
| Sleeves for compacted conductors and sector-shaped conductors, copper | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10sm - 150se / 120sm |  | 331 |
| Aluminium compression cable lugs and connectors acc. to DIN | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 70 |  | 331 |
| Compression joints for full-tension connections of Aldrey-conductors DIN EN 50182 |  | 25 - 50 |  | 331 |
| Aluminium/copper compression cable lugs and connectorsl | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA4, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD4 |  | 10 - 70 |  | 331 |
| Clamps | | | | |
| Clamps, C-type |  | 4 - 35 |  | 331 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 10 - 50 |  | 332 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 332 |
| Twin cable end-sleeves for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 332 |
| Cable end-sleeves for fine stranded conductors |  | 10 - 50 |  | 332 |

## K 18 Crimping tool for interchangeable dies to DIN 48083, Part 1, 6 - 240 mm²



- Change of crimping dies without tools
- Optimised for cable glands and control cabinet construction
- Energy-efficient and low-maintenance mechanical drive

### Characteristics

- Narrow crimping
- Less effort due to extendible telescopic handle
- Flexible use: Head rotates 360°
- Fast, change of crimping die without readjustment by special fixing system

| Technical data | |
|---|---|
| Length | Stepless 580-830 mm |
| Weight | 2.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool for interchangeable dies acc. to DIN 48083, sheet 1, 6 - 240 mm² | **K18** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK18 | 195 |

K18 SERIE

## Available dies for Series 18 for K 18

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 240 |  | 337 |
| Connectors, standard type |  | 6 - 95 |  | 337 |
| Insulated tubular cable lugs and connectors, standard type, insulated pin terminals |  | 10 - 95 |  | 337 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 50 |  | 337 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 338 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Compression cable lugs (DIN 46235) |   | 6 - 185 |  | 338 |
| Connectors DIN 46267 |   | 6 - 70 |  | 338 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 70 |  | 338 |
| Insulated solderless terminals and connectors |  | 10 - 50 |  | 338 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 339 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |   | 10 - 185 |  | 339 |
| Aluminium connectors |   | 10 - 70 |  | 339 |
| Compression joints for full-tension connections of Aldrey-conductors DIN EN 50182 |   | 25 - 95 |  | 339 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D |   | 10 - 185 |  | 339 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 50 |  | 339 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 10 - 95 |  | 340 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 340 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 95 |  | 340 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 340 |
| **Cutting die** | | | | |
| for cutting area | | 18 mm dia. | | 412 |

## K 22 Crimping tool for interchangeable dies 6 - 300 mm²



- Change of crimping dies without tools
- Optimised for cable glands and control cabinet construction
- Energy-efficient and low-maintenance mechanical drive

### Characteristics

- Narrow crimping
- Large cross section by half shell dies
- Less effort due to extendible telescopic handle
- Flip top style head rotates 360°
- Fast, change of crimping die without readjustment by special fixing system

| Technical data | |
|---|---|
| Length | Stepless 560-860 mm |
| Weight | 2.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool for interchangeable dies 6 - 300 mm² | **K22** |

| Accessories | Part No. | Page |
|---|---|---|
| Steel carrying case | MK22 | 195 |

K22 SERIE

## Available dies for Series 22 for K 22

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 300 |  | 341 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 300 |  | 341 |
| Insulated cable lugs and compression joints, standard type, insulated pin terminals |  | 10 - 150 |  | 341 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 70 |  | 342 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 342 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| Nickel tubular cable lugs and connectors |  | 10 - 50 |  | 329 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 300 |  | 343 |
| Double compression cable lugs |  | 2 x 50 - 2 x 70 |  | 343 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 70 |  | 343 |
| Insulated solderless terminals and connectors |  | 10 - 70 |  | 343 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 344 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 300 |  | 344 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 344 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25 / 4 - 120 / 20 |  | 345 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 345 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 |  | 10 - 300 |  | 331 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 70 |  | 345 |
| Clamps, H-type |  | 70 |  | 345 |

see next page

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Cable end-sleeves | | | | |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 346 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 240 |  | 346 |
| Twin cable end-sleeves for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 346 |

# SO FAST IN SERIES PRODUCTION - THE KLAUKE MICRO

The Klauke Micro is as convenient and quick as a mechanical tool, and just as powerful and easy to handle as a battery-powered hydraulic tool. Compact and portable in one device! Thanks to the innovative PowerSense technology. This tool simplifies your work like never before.




KlauKe® micro

**Manual pre-clamping - motorized crimping**

- Flexible to use with interchangeable crimping dies
- Broad application range of up to 50 mm²
- With LED illumination of the crimp position and the work area
- Low weight ( < 1 kg )
- Intuitive operation thanks to PowerSense function
- Electronic control with ratchet function and motor stall protection
- Automatic retraction
- Long service life with servicing intervals of 35,000 cycles
- 3 year warranty on tool registration

**Link to tool registration:**
www.klauke.com/en/werkzeugregistrierung/login-tool-registration/

## EK 50 ML Electromechanical crimping tool 0.14 - 50 mm²



- **The Klauke micro with intuitive PowerSense function combines the benefits of manual crimping tools with the convenience of battery powered hydraulic crimping tools**
- **Excellent crimps with minimum effort**

### Characteristics

- Simple and safe: One-button operating concept for controlling all tool functions
- Electronic control with locking function monitors full closing of the dies
- Simple and safe: Automatic retraction when operation is complete
- Manual retract as required
- Motor stall protection
- Ergonomic 2C housing in the Klauke "In-line Design"
- Tool fixing point for use with balancer aid or lanyard
- Very low weight and high speed for maximum efficiency
- Powerful drive technology for effortless operations
- Powerful 10.8 V Li-Ion battery with charge status display
- LED for work area illumination
- Maintenance display via LED

### Suitable for

- 50-series interchangeable dies

| Technical data | |
|---|---|
| Crimping force | max. 15 kN |
| Crimping range | 0.14 - 50 mm² |
| Number of crimps | approx. 300 at 10 mm² Cu DIN 46234 / per battery charge |
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah, Li-Ion |
| Charging time | approx. 40 min. |
| Weight incl. battery | 0.96 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. | |
|---|---|---|
| Electromechanical crimping tool 0.14 - 50 mm² | **EK50ML** | |
| **Scope of supply** | **Part No.** | **Page** |
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | RAML1 | 493 |
| Charger for 10.8 V Li-Ion batteries, 230V | LGML1 | 495 |
| Crimping dies IS 50, double crimping, 0.5 - 6 mm² | IS501 | |
| Plastic case 450 x 370 x 105 mm | KKEK50ML | |
| **Variants** | **Part No.** | **Page** |
| Electromechanical crimping tool 0.14 - 50 mm² with RAML1 battery, no crimping die, case, charge | EK50ML-L | |
| L-BOXX with electro-mechanical crimping tool EK 50 ML 0.14 to 50 mm² and extensive additional equipment | LBOXXEK50ML | |



## Available dies of series 50 for EK 50 ML

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Copper tubular cable lugs and connectors | | | | |
| Tubular cable lugs and connectors, standard type |  | 0.75 - 10 |  | 326 |
| Tubular cable lugs and connectors, standard type |  | 6 - 25 |  | 326 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 10 |  | 326 |
| Copper compression cable lugs and connectors acc. to DIN | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) |   | 6 - 25 |  | 326 |
| Terminals, connectors and pin terminals acc. to DIN, copper | | | | |
| Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) |  | 0.5 - 10 |  | 326 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 0.14 - 50 |  | 326 |
| Cable connections, insulated and non-insulated | | | | |
| Insulated cable connections, double crimping |  | 0.1 - 6 |  | 327 |
| Insulated cable connections, single crimping |  | 0.5 - 16 |  | 327 |
| Non-insulated receptacles |  | 0.25 - 6 |  | 327 |
| BNC connectors for coax cables RG 58, 59, 60 and 71 | | |  | 327 |
| Turned pin connectors and receptacles | | 0.1 - 4 |  | 327 |


## THINK OF YOUR HEALTH!

Frequent manual crimping eventually leads to over-strain in the wrist and lower arm. To crimp with the EK 50 ML, you only need around 10% of the manual force required by a mechanical hand tool. Motorised crimping with the EK50ML is an investment that pays off!



# THE LITTLE CRIMPING EXPERT - BATTERY-POWERED HYDRAULIC CRIMPING TOOL (10.8 V)

We have made performance easy: The Klauke mini is lightweight yet powerful. The Klauke mini's practical dimensions make it the ideal solution for confined areas, in panel building for instance. A convenient expert for crimp to 150 mm² nominal cross-section.



Klauke® mini

### Pure performance without frills

The Klauke mini concentrates on its core task: reliable crimping. Even without pressure sensor and display, the little expert does its job well - no fuss or quibble.

### Usage time at a glance

Read the charge level at any time from the powerful 10.8 V battery.

### All-round crimping

How can confined areas be easily reached? With crimping heads rotating through 360°.

## EK 15/50 ML Battery powered hydraulic crimping tool 0.14 - 50 mm²



- Long service life thanks to robust head
- Optimum crimping due to parallel guided crimping dies
- Effortless operations thanks to low weight
- Powerful 10.8 V Li-Ion battery technology with battery charge indicator

### Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft lining
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

### Suitable for

- 50-series interchangeable dies

| Technical data | |
|---|---|
| Crimping force | 13 kN |
| Stroke / opening width | 9 mm |
| Crimping range | 0.14 - 50 mm² |
| Crimping cycle | approx. 2 s |
| Number of crimps | approx. 230 at 10 mm² Cu |
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah, Li-Ion |
| Charging time | approx. 40 min. |
| Weight incl. battery | 1.5 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic crimping tool 0.14 - 50 mm² | **EK1550ML** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | RAML1 | 493 |
| Charger for 10.8 V Li-Ion batteries, 230V | LGML1 | 495 |
| Plastic case | KKML | |

## Available dies for Series 50 for EK 15/50 ML

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Copper tubular cable lugs and connectors | | | | |
| Copper tubular cable lugs and connectors, standard type |  | 0.75 - 10 |  | 326 |
| Copper tubular cable lugs and connectors, standard type |  | 16 - 25 |  | 326 |
| Copper tubular cable lugs and connectors for solid conductors |  | 1.5 - 10 |  | 326 |
| Copper compression cable lugs and connectors acc. to DIN | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) |   | 6 - 25 |  | 326 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Solderless terminals (DIN 46234) and pin terminals (DIN 46230) Cu, connectors (DIN 46341) |  | 0.5 - 10 |  | 326 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 0.14 - 50 |  | 326 |
| Cable connections, insulated and non-insulated | | | | |
| Insulated cable connections, single crimping |  | 0.5 - 16 |  | 327 |
| Insulated cable connections, double crimping |  | 0.5 - 16 |  | 327 |
| Non-insulated receptacles |  | 0.25 - 6 |  | 327 |
| For pin and shielded receptacles, BNC connectors for coax-cables RG 58, 59, 60 and 71 | | |  | 327 |
| Turned pin connectors, pin receptacles | | 0.1 - 4 |  | 327 |

## EK 35/4 ML Battery powered hydraulic crimping tool 6 - 150 mm²



- Large cross section range up to 150 mm²
- Slim crimping head - ideal when space is critical
- Powerful 10.8 V Li-Ion battery technology with battery charge indicator

### Characteristics

- Closed head, flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

### Suitable for

- 4-series interchangeable dies, narrow crimping

| Technical data | |
|---|---|
| Crimping force | 35 kN |
| Stroke / opening width | 9 mm |
| Crimping range | 6 - 150 mm² |
| Crimping cycle | 3 s to 4 s (depending on crimp cross-section) |
| Number of crimps | approx. 145 at 120 mm² Cu |
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah, Li-Ion |
| Charging time | approx. 40 min. |
| Weight incl. battery | 1.6 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic crimping tool 6 - 150 mm² | **EK354ML** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | RAML1 | 493 |
| Charger for 10.8 V Li-Ion batteries, 230 V | LGML1 | 495 |
| Plastic case | KKML | |

| Variants | Part No. | Page |
|---|---|---|
| EK 35/4 ML with crimping die set HR 4 from 6 - 150 mm² | EK354MLSETHR | |
| EK 35/4 ML with crimping die set HD 4 from 6 - 120 mm² | EK354MLSETHD | |

## Available dies for Series 4 for EK 35/4 ML

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 150 |  | 329 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 150 |  | 328 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 70 |  | 328 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 35 |  | 329 |
| Tubular cable lugs and compression joints for solid conductors |  | 1.5 - 16 |  | 329 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 0.5 - 16 |  | 329 |
| Nickel tubular cable lugs and connectors |  | 0.5 - 16 |  | 329 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 120 |  | 330 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) |  | 6 - 35 |  | 330 |
| Insulated solderless terminals and connectors |  | 10 - 16 |  | 330 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 150 se /120 sm |  | 331 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 70 |  | 331 |
| Compression joints for full-tension connections of Aldrey-conductors DIN EN 50182 |  | 25 - 50 |  | 331 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminium/copper compression cable lugs and connectors |  | 10 - 70 |  | 331 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 35 |  | 331 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 10 - 50 |  | 332 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 332 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 50 |  | 332 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 332 |

# THE NEW STANDARD - KLAUKE NEXT GENERATION CRIMPING TOOLS

To guarantee the quality, you can check the tool data from the display or via i-press® app at any time. You can easily make this information available to your customers as project documentation at the touch of a button. The balanced design ensures effortless and continuously high-quality operations up to the end of each working day.

**NEXT GENERATION**




**In brief**

- Freely-selectable battery platform: with Bosch or Makita
- Proof of quality can be created via Bluetooth
- Ensure tool availability: Read the tool properties from the display or via the app
- Effortless operations thanks to modern, ergonomic design

Interested in Klauke Next Generation tools? Then take a look at our Multi universal tool on Page 472 >>

## Making work easier

Klauke tools guarantee effortless operations: The “mini” impresses through its low weight and the pistol shape thanks to the balanced centre of gravity

- Our compact “mini” is just perfect for confined areas
- The 2-stage hydraulic system ensures fast operations with fast feed and power stroke (pistol shape)
- Especially impressive and reliable: The one-button control concept for all tools with automatic retraction
- The ARS function (Automatic Retraction Stop) stops the automatic retraction when a crimp is complete through a fully-automated process

## Guarantees quality

- All relevant tool data immediately in view on the integrated display
- In case of a fault, you are warned by a visual and audible signal from the tool
- Provide written proof of the quality of your work with i-press® - now simply and conveniently connect the tool to the computer via Bluetooth.



## i-press® software

Show your customers how well you work. Klauke Next Generation records your operations, and these can then be transmitted by Bluetooth. The free i-press® software uses these data to create for you, if you want, a project report - the proof of quality for your correct operations. You have control over your quality.

## i-press® app

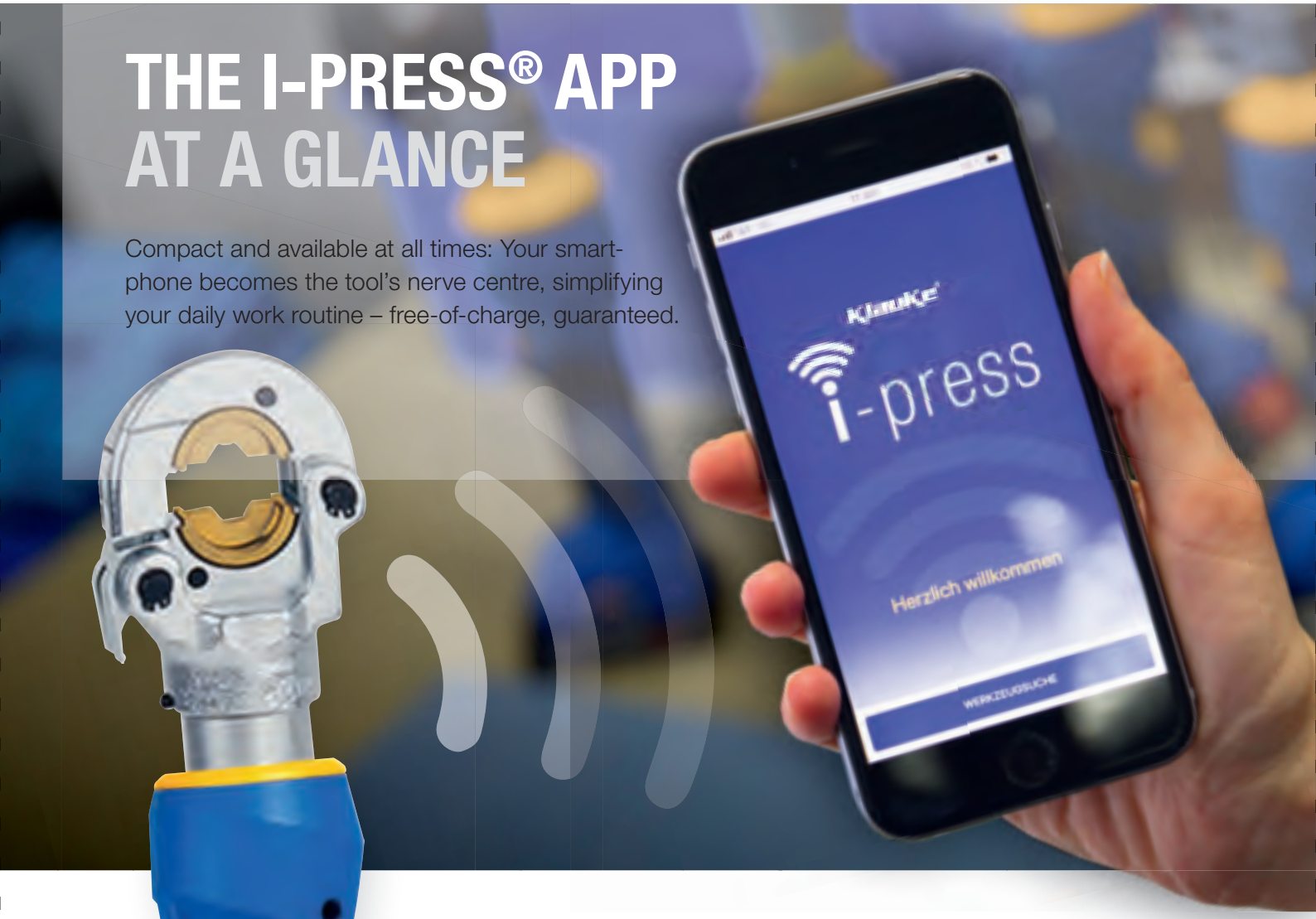
Use the i-press® app to check and control your tool data on the go. Individual tool settings, such as the number of warning tones for an incorrect crimp or the double-click function for increased user safety, help make your day-to-day work simpler and more reliable - just as you need it.

**The i-press® app can be found at:**
www.klauke.com/en/service/downloads/connectivity-software/



# THE I-PRESS® APP AT A GLANCE

Compact and available at all times: Your smart-phone becomes the tool's nerve centre, simplifying your daily work routine – free-of-charge, guaranteed.





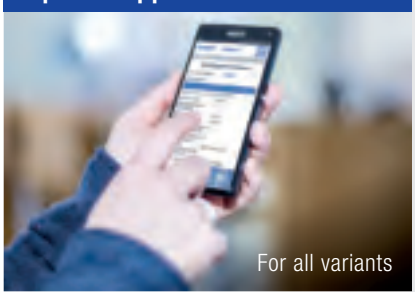


Made easy: Your Next Generation tool connects to the i-press® app via Bluetooth - you can now use the comprehensive range of functions.

Read the important tool information from the display and start new projects. All the information about your crimping operations is saved from now on. When the project is complete, an overview can be printed out, saved or submitted in the form of a report.

**TIP: When you register as a user, subscribe to the Klauke Newsletter – that way, you will always be up-to-date.**

**i-press® app**




Keep an overview of all your tools even while on the go.
and personalise your tool settings via the app.

### EASY TO OPERATE

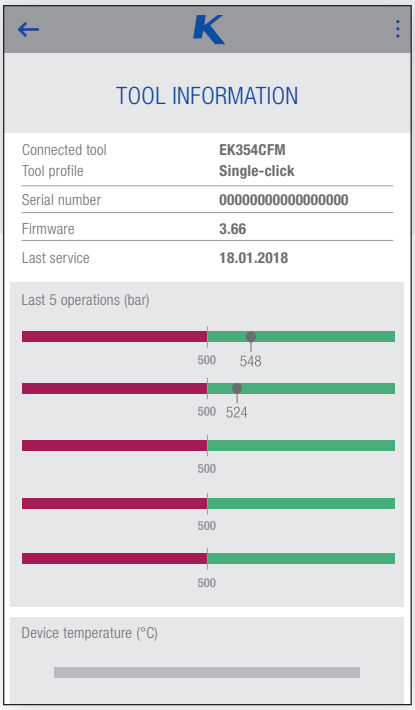
Menu guidance function is easy and quick to understand thanks to the cascade function. You can start immediately, personalise your tool and use all the other functions.

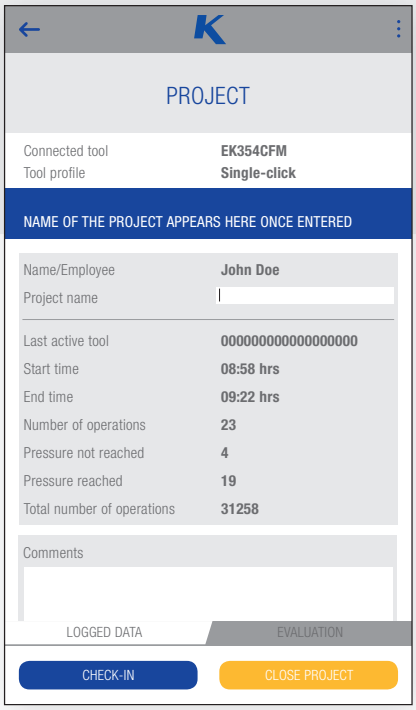
### CREATING AND TRACKING PROJECTS

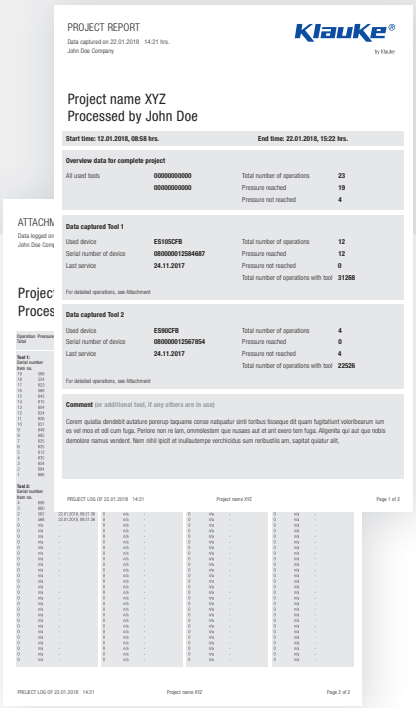
The last 5 pressure values, the device temperature or the remaining operations – all important information can be easily read off.

### DOCUMENTING AND ARCHIVING

When a project is closed, an overview containing all the pressure values is generated. You can use this as documentary proof and for archiving purposes.




## Make the most of it – make your day-to-day operations more effective, more ergonomic and more innovative

- Get an overview of your tool data
- Plan your maintenance schedule
- Minimise your downtimes
- Increase availability and service life with regular maintenance and inspections
- Helps you organise your work
- Create projects based on installation and building plans
- Document and archive every single crimp in one report
- Proof of your daily activitiesen

**i-press® software**




Reads out all tool data, so you can check the tool status. i-press® also gives you proof of quality assessment in the form of a project report. i-press® is a Desktop application which you can download free-of-charge from the Klauke website.

**The new *i-press*® software can be found at www.klauke.com/de/support/download/connectivity-werkzeugdaten-auslesen/**

## EK 35/4 Battery powered hydraulic crimping tool 6 - 150 mm²

NEXT GENERATION



- Large cross section range up to 150 mm²
- Slim crimping head - ideal when space is critical
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Simple and safe: Automatic retraction when operation is complete
- Effortless working thanks to low weight
- LED for work area illumination
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 4-series interchangeable dies, narrow crimping

| Technical data | |
|---|---|
| Crimping force | 35 kN |
| Stroke / opening width | 9 mm |
| Crimping range | 6 - 150 mm² |
| Crimping cycle | 3 s to 4 s (depending on crimp cross-section) |
| Charging time | 15 min. |
| Weight incl. battery | 2.4 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 6 - 150 mm² | **EK354CFB** | **EK354CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK50NG | KK50NG | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| **Variants** | | | **Page** |
| L-BOXX with battery powered crimping tool EK354CFB, 6 - 150 mm² | LBOXXEK354CFB | | 205 |
| L-BOXX with battery powered crimping tool EK354CFM, 6 - 150 mm² | | LBOXXEK354CFM | 205 |

## Available dies for Series 4 for EK 35/4

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Copper tubular cable lugs and connectors | | | | |
| Tubular cable lugs and connectors blue connection® for compacted conductors acc. to DIN EN 60228 |  | 6 - 150 |  | 329 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 150 |  | 328 |
| Insulated tubular cable lugs and compression joints, standard type, insulated pin terminals |  | 10 - 70 |  | 328 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 35 |  | 329 |
| Tubular cable lugs and compression joints for solid conductors |  | 1.5 - 16 |  | 329 |
| Tubular cable lugs and connectors, Ni, stainless steel | | | | |
| Tubular cable lugs and connectors, stainless steel |  | 0.5 - 16 |  | 329 |
| Tubular cable lugs and connectors, Ni |  | 0.5 - 16 |  | 329 |
| Copper compression cable lugs and connectors acc. to DIN | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) |  | 6 - 120 |  | 330 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Solderless terminals (DIN 46234) and pin terminals (DIN 46230) Cu, connectors (DIN 46341) |  | 6 - 35 |  | 330 |
| Insulated solderless terminals and pin terminals |  | 10 - 16 |  | 330 |
| Sleeves for compacted conductors and sector shaped conductors, Cu | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors |  | 10 sm - 150 se / 120 sm |  | 331 |
| Aluminum compression cable lugs and connectors acc. to DIN | | | | |
| Aluminum compression cable lugs and connectors acc. to DIN |  | 10 - 70 |  | 331 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182 |  | 25 - 50 |  | 331 |
| Aluminium/copper compression cable lugs and connectors | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA4, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD4 |  | 10 - 70 |  | 331 |
| Clamps | | | | |
| Clamps, C-type |  | 4 - 35 |  | 331 |
| Cable end-sleeves | | | | |
| Cable end-sleeve |  | 10 - 50 |  | 332 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 332 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 50 |  | 332 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 332 |

## EK 50/5 Battery powered hydraulic crimping tool 6 - 240 mm²

NEXT GENERATION



- Very large crimping range to 240 mm² (tubular cable lugs only)
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working thanks to low weight
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 5-series interchangeable dies, narrow crimping

| Technical data | | | |
|---|---|---|---|
| Crimping force | 50 kN | | |
| Stroke / opening width | 12 mm | | |
| Crimping range | 6 - 240 mm² | | |
| Crimping cycle | 4 s to 5 s (depending on crimp cross-section) | | |
| Charging time | 15 min. | | |
| Weight incl. battery | 2.4 kg | | |
| Ambient temperature | -10 °C up to +40 °C | | |
| Item | Part No. **Bosch** | Part No. **Makita** | |
| Battery powered hydraulic crimping tool 6 - 240 mm² | **EK505CFB** | **EK505CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK50NG | KK50NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered crimping tool EK505CFB, 6-240 mm² | LBOXXEK505CFB | | 205 |
| L-BOXX with battery powered crimping tool EK505CFM, 6-240 mm² | | LBOXXEK505CFM | 205 |

## Available dies for Series 5 for EK 50/5

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Tubular cable lugs and connectors, Cu | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 185 |  | 333 |
| Tubular cable lugs and connectors, Cu, standard type |  | 6 - 240 |  | 333 |
| Insulated tubular cable lugs and connectors, insulated pin terminals |  | 10 - 95 |  | 333 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 50 |  | 334 |
| Compression cable lugs and connectors acc. to DIN - Cu | | | | |
| Cooper compression cable lugs (DIN 46235) and connectors (DIN 46267), part 1) Cu |  | 6 - 185 |  | 334 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Solderless terminals (DIN 46234) and pin terminals (DIN 46230) |  | 10 - 50 |  | 334 |
| Sleeves for compacted conductors and sector shaped conductors, Cu | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors |  | 10 sm - 300 se / 240 sm |  | 335 |
| Aluminum compression cable lugs and connectors acc. to DIN | | | | |
| Aluminum compression cable lugs and connectors acc. to DIN |  | 10 - 150 |  | 335 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182 |  | 25 - 95 |  | 335 |
| Aluminum/copper compression cable lugs and connectors | | | | |
| Aluminum/copper compression cable lugs and connectors |  | 10 - 150 |  | 335 |
| Clamps | | | | |
| Clamps, C-type |  | 4 - 35 |  | 335 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 10 - 95 |  | 336 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 336 |
| Cable end-sleeves, trapezoidal, for fine stranded conductors |  | 10 - 95 |  | 336 |
| Twin cable end-sleeves, trapezoidal, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 336 |

## EK 50/18 Battery powered hydraulic crimping tool 6 - 240 mm²

NEXT GENERATION



- For dies acc. to DIN 48083, sheet 1
- Fast crimp cycles due to Automatic Retraction Stop (ARS)
- All tool data in view thanks to display and i-press® app

### Characteristics

- All data can be easily read via Bluetooth
- Choose your battery system: Bosch or Makita
- Open head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working thanks to low weight
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 18-series interchangeable dies, narrow crimping

IEC

K18 SERIE

| Technical data | | | |
|---|---|---|---|
| Crimping force | 50 kN | | |
| Stroke / opening width | 17 mm | | |
| Crimping range | 6 - 240 mm² | | |
| Crimping cycle | 5 s to 6 s (depending on cross-section) | | |
| Charging time | 15 min. | | |
| Weight incl. battery | 2.8 kg | | |
| Ambient temperature | -10 °C up to +40 °C | | |
| Item | Part No. **Bosch** | Part No. **Makita** | |
| Battery powered hydraulic crimping tool 6 - 240 mm² | **EK5018CFB** | **EK5018CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK50NG | KK50NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered crimping tool EK5018CFB, 6 - 185 mm² | LBOXXEK5018CFB | | 205 |
| L-BOXX with battery powered crimping tool EK5018CFM, 6 - 185 mm² | | LBOXXEK5018CFM | 205 |

## Available dies for Series 18 for EK 50/18

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Tubular cable lugs and connectors, Cu** | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 6 - 240 |  | 337 |
| Insulated tubular cable lugs and compression joints, insulated pin terminals |  | 10 - 95 |  | 337 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 50 |  | 337 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 338 |
| **Compression cable lugs and connectors acc. to DIN - Cu** | | | | |
| Copper compression cable lugs (DIN46235) and compression joints (DIN 46267, part 1) |   | 6 - 185 |  | 338 |
| **Terminals, connectors and pin terminals acc. to DIN - Cu** | | | | |
| Solderless terminals (DIN 46234) an pin terminals (DIN 46230), solderless connectors (DIN 46341) Cu |  | 10 - 70 |  | 338 |
| Insulated solderless terminals and pin terminals |  | 10 - 50 |  | 338 |
| **Sleeves for compacted conductors and sector shaped conductors, Cu** | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors |  | 10 sm - 300 se / 240 sm |  | 339 |
| **Aluminum compression cable lugs and connectors acc. to DIN - Al** | | | | |
| Aluminum compression cable lugs and connectors acc. to DIN - Al |   | 10 - 185 |  | 339 |
| **Aluminum compression cable lugs and connectors acc. to DIN** | | | | |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182 |   | 25 - 95 |  | 339 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 50 |  | 339 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 4 - 95 |  | 340 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 340 |
| Cable end-sleeves, trapezoidal, for fine stranded conductors |  | 10 - 95 |  | 340 |
| Twin cable end-sleeves, trapezoidal, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 340 |

## EKM 60/22 Battery powered hydraulic crimping tool 6 - 300 mm²

NEXT GENERATION



- Large crimping range up to 300 mm²
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 22-series interchangeable dies, narrow crimping

| Technical data | | | |
|---|---|---|---|
| Crimping force | 60 kN | | |
| Hub | 17.5 mm | | |
| Crimping range | 6 - 300 mm² | | |
| Crimping cycle | 2 s (bei ARS) und 5 s (depending on crimp cross-section) | | |
| Charging time | 15 min. | | |
| Weight incl. battery | 3.0 kg | | |
| Ambient temperature | -10 °C up to +40 °C | | |
| Item | Part No. **Bosch** | Part No. **Makita** | |
| Battery powered hydraulic crimping tool 6 - 300 mm² | **EKM6022CFB** | **EKM6022CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Plastic case | KK50NG | | |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | | KK50L | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Variants | | | Page |
| L-BOXX with battery powered crimping tool EKM6022CFB, 6 - 300 mm² | LB0XXEKM6022CFB | | 205 |
| L-BOXX with battery powered crimping tool EKM6022CFM, 6 - 300 mm² | | LB0XXEKM6022CFM | 205 |

## Available dies for Series 22 for EKM 60/22

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 300 |  | 342 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 300 |  | 341 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 341 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 70 |  | 342 |
| Tubular cable lugs and connectors for solid conductors |  | 10 - 50 |  | 342 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| Nickel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 300 |  | 343 |
| Double compression cable lugs |  | 2 x 50 - 2 x 70 |  | 343 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 70 |  | 343 |
| Insulated solderless terminals |  | 10 - 70 |  | 343 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 344 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 300 |  | 344 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 344 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25/4 - 120/20 |  | 345 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 345 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 |  | 10 - 300 |  | 344 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 70 |  | 345 |
| Clamps, H-type |  | 70 |  | 345 |
| **Cable end-sleeves** | | | | |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 346 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 240 |  | 346 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 346 |

## EK 60/22 Battery powered hydraulic crimping tool 6 - 300 mm²

NEXT GENERATION



- Large crimping range up to 300 mm²
- Fast crimp cycles due to Automatic Retraction Stop (ARS)
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 22-series interchangeable dies, narrow crimping

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Hub | 17 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 3 s to 5 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 4.4 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 6 - 300 mm² | **EK6022CFB** | **EK6022CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |

| Accessories | | | Page |
|---|---|---|---|
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

| Item | Part No. | Page |
|---|---|---|
| EK 60/22 with crimping die set D 22 from 16 - 240 mm² | EK6022CFMSETD | |
| EK 60/22 with crimping die set R 22 from 16 - 240 mm² | EK6022CFMSETR | |

## Available dies for Series 22 for EK 60/22

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 300 |  | 342 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 300 |  | 341 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 341 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 70 |  | 342 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 342 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| Nickel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 300 |  | 343 |
| Double compression cable lugs |  | 2 x 50 - 2 x 70 |  | 343 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 70 |  | 343 |
| Insulated solderless terminals |  | 10 - 70 |  | 343 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 344 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 300 |  | 344 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 344 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25/4 - 120/20 |  | 345 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 345 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 |  | 10 - 300 |  | 344 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 70 |  | 345 |
| Clamps, H-type |  | 70 |  | 345 |
| **Cable end-sleeves** | | | | |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 346 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 240 |  | 346 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 346 |

## EK 60 VP Battery powered hydraulic crimping tool 10 - 240 mm²

NEXT GENERATION



- **Crimps optimised at all times due to the patented centring system**
- **Fast crimp cycles due to Automatic Retraction Stop (ARS)**
- **All tool data in view thanks to display and i-press® app**

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Quad-point indent crimping feature with patented centring system, no dies required
- Open head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Always ready-to-use thanks to battery charge and service display

| Technical data | |
|---|---|
| Crimping force | 55 kN |
| Crimping range | 10 - 240 mm² |
| Crimping cycle | 3 s to 6 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 5.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 10 - 240 mm² | **EK60VPCFB** | **EK60VPCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| Accessories | | | Page |
| Gauge and 10 Test cylinder | TS10B | TS10B | |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| Copper tubular cable lugs and connectors | | | |
| Tubular cable lugs, standard type, tubular cable lugs for switchgear connections |  | 10-240 |  |
| Connectors, standard type |  | 10-120 |  |
| Tubular cable lugs for fine stranded conductors |  | 10-240 |  |
| Connectors for fine stranded conductors |  | 10-95 |  |

# EK 60 VP/FT Battery powered hydraulic crimping tool 16 - 300 mm²

NEXT GENERATION



- Suitable for crimping tubular cable lugs and connectors „standard type“ and fine and superfine stranded conductors to 300 mm²
- Fast crimp cycles due to Automatic Retraction Stop (ARS)
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Quad-point indent crimping feature with patented centring system, no dies required
- Closed head with bolt interlock, rotatable, flip top style
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

| Technical data | |
|---|---|
| Crimping force | 55 kN |
| Crimping range | 16 - 300 mm² |
| Crimping cycle | 3 s to 6 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 5.1 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 16 - 300 mm² | **EK60VPFTCFB** | **EK60VPFTCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| Tubular cable lugs and connectors - Cu | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 16-300 |  |
| Tubular cable lugs and connectors for fine stranded conductors |  | 16-300 |  |

## EKM 60 ID Battery powered hydraulic crimping tool 10 - 240 mm²

NEXT GENERATION



- Extra large crimping area due to innovative 2-stage telescopic cylinder
- Indent crimping - no changing of dies required
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- With innovative 2-stage telescopic cylinder
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Very well suited for compacted conductors
- Especially for fine strand conductors to DIN VDE 60228

| Technical data | |
|---|---|
| Crimping force | 30 - 60 kN |
| Stroke / opening width | 35.5 mm |
| Crimping range Cu | 10 - 240 mm² |
| Crimping range Al | 50 - 240 mm² |
| Crimping cycle | 2 s (for ARS) to 7 s (depending on cross-section) |
| Charging time | 15 min. |
| Weight incl. battery | 2.5 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 10 - 240 mm² | **EKM60IDCFB** | **EKM60IDCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK50NG | KK50NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Variants | | | Page |
| L-BOXX with battery powered crimping tool EKM60IDCFB, 10 - 240 mm² | LB0XXEKM60IDCFB | | 205 |
| L-BOXX with battery powered crimping tool EKM60IDCFM, 10 - 240 mm² | | LB0XXEKM60IDCFM | 205 |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | |
| Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections | | 10 - 240 | |
| Tubular cable lugs and connectors for fine stranded conductors | | 10 - 240 | |
| **Terminals, connectors and pin terminals acc. to DIN** | | | |
| Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341) | | 10 - 240 | |
| **Aluminum compression cable lugs and connectors** | | | |
| Aluminum compression cable lugs and connectors acc. to DIN | Al | 50 - 240 | |
| Compression joints acc. to DIN 48085, part 3 for Al/St-cable acc. to DIN EN 50182 | Al/St | 50 - 240 | |
| **Aluminum/copper compression cable lugs and connectors** | | | |
| Aluminum/copper compression cable lugs and connectors | Al/Cu | 50 - 240 | |

# EK 120 ID Battery powered hydraulic crimping tool 35 - 500 mm²

NEXT GENERATION



- For superfine-stranded conductors to 500 mm²
- Indent crimping, no dies required
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

| Technical data | |
|---|---|
| Crimping force | 108 kN |
| Stroke / opening width | 52 mm |
| Crimping range | 35 - 500 mm² |
| Crimping cycle | 10 s to 11 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 7.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 35 - 500 mm² | **EK120IDCFB** | **EK120IDCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## EK 120/32 Battery powered hydraulic crimping tool 16 - 400 mm²

NEXT GENERATION



- Very large crimping range up to 400 mm²
- Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke / opening width | 32 mm |
| Crimping range | 16 - 400 mm² |
| Crimping cycle | 7 s to 8 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 6.8 kg |
| Ambient temperature | -10° C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 16 - 400 mm² | **EK12032CFB** | **EK12032CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## Available dies for Series 13 for EK 120/32

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Tubular cable lugs and connectors, Cu** | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Butt connectors, standard type |  | 16 - 185 |  | 347 |
| Insulated tubular cable lugs and connectors, insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Compression cable lugs and connectors acc. to DIN - Cu** | | | | |
| Compression cable lugs (DIN46230) and connectors (DIN 46267, part 1) Cu |  | 10 - 300 |  | 348 |
| Compression joints DIN 46267 part 1 |  | 10 - 150 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals acc. to DIN - Cu** | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 10 - 150 |  | 349 |
| Insulated terminals and pin terminals |  | 10 - 95 |  | 349 |
| **Sleeves for compacted conductors and sector shaped conductors, Cu** | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| **Aluminum compression cable lugs and connectors acc. to DIN** | | | | |
| Aluminum compression cable lugs and connectors acc. to DIN |  | 10 - 240 |  | 350 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 350 |
| Compression joints acc. to DIN 45085, part 3 for Al-steel cable acc. to DIN EN 50182, aluminum crimping |  | 24/4 - 120/20 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 350 |
| **Aluminum/copper compression cable lugs and connectors** | | | | |
| Aluminum/copper compression cable lugs and connectors |  | 10 - 240 |  | 350 |
| **Clamps** | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezoidal, for fine stranded conductors |  | 25 - 240 |  | 351 |

## EK 120/42 Battery powered hydraulic crimping tool 16 - 400 mm²

NEXT GENERATION



- C-head with very wide crimping range to 400 mm²
- Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- Easy handling by optimum weight distribution
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke / opening width | 42 mm |
| Crimping range | 16 - 400 mm² |
| Crimping cycle | 8 s to 9 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 7.1 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 16 - 400 mm² | **EK12042CFB** | **EK12042CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## Available dies for Series 13 for EK 120/42

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Tubular cable lugs and connectors, Cu | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Insulated tubular cable lugs and connectors, insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| Compression cable lugs and connectors acc. to DIN - Cu | | | | |
| Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu |   | 10 - 300 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 10 - 150 |  | 349 |
| Insulated terminals and pin terminals |  | 10 - 95 |  | 349 |
| Sleeves for compacted conductors and sector shaped conductors, Cu | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| Aluminum compression cable lugs and connectors acc. to DIN | | | | |
| Aluminum compression cable lugs and connectors acc. to DIN |   | 10 - 240 |  | 350 |
| Compression points for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm² |   | 25 - 185 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping |   | 25/4 - 120/20 |  | 350 |
| Compression joints acc. to DIN 45085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping |   | 25/4 - 120/20 |  | 350 |
| Aluminum/copper compression cable lugs and connectors | | | | |
| Aluminum/copper compression cable lugs and connectors |   | 10 - 240 |  | 350 |
| Clamps | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezoidal, for fine stranded conductors |  | 25 - 240 |  | 351 |

## EK 120 U Battery powered hydraulic crimping tool 16 - 400 mm²

NEXT GENERATION



- H-head for deep groove crimps
- Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 13-series interchangeable dies, wide crimping

K13 SERIE

IEC

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke / opening width | 20 mm |
| Crimping range | 16 - 400 mm² |
| Crimping cycle | 7 s to 8 s (depending on crimp cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 6.2 kg |
| Ambient temperature | -10° C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 16 - 400 mm² | **EK120UCFB** | **EK120UCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## Available dies for Series 13 for EK 120 U

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Tubular cable lugs and connectors, Cu | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connectors |  | 16 - 400 |  | 347 |
| Insulated tubular cable lug and compression joints |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connection for fine stranded conductors |  | 10 - 150 |  | 348 |
| Compression cable lugs and connectors acc. to DIN - Cu | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu |   | 10 - 300 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 10 - 150 |  | 349 |
| Insulated terminals and pin terminals |  | 10 - 95 |  | 349 |
| Sleeves for compacted conductors and sector shaped conductors, Cu | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| Compression cable lugs and connectors acc. To DIN-Al | | | | |
| Compression cable lugs and connectors acc. To DIN-Al |   | 10 - 240 |  | 350 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm² |   | 25 - 185 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping |   | 25/4 - 120/20 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al-Steel cables acc. to DIN EN 50182, steel crimping |   | 25/4 - 120/20 |  | 350 |
| Aluminum/copper compression cable lugs and connectors | | | | |
| Aluminum/copper compression cable lugs and connectors |   | 10 - 240 |  | 350 |
| Clamps and screw connectors | | | | |
| C-clamps |  | 10 - 70 |  | 351 |
| H-clamps |  | 70 - 120 |  | 351 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezoidal, for fine stranded conductors |  | 25 - 240 |  | 351 |

## EK 135 FT Battery powered hydraulic crimping tool 10 - 630 mm²

NEXT GENERATION



- Very large crimping range to 630 mm²
- Very powerful with a crimping force of 13.5 t
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- 13-series interchangeable dies, wide crimping
- 15-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 135 kN |
| Stroke / opening width | 50.8 mm |
| Crimping range | 10 - 630 mm² |
| Crimping cycle | ca. 10 s to 11 s (depending on cross-section) |
| Charging time | 45 min. |
| Weight incl. battery | 10.2 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic crimping tool 10 - 630 mm² | **EK135FTCFB** | **EK135FTCFM** | |
| Scope of supply | | | Page |
| Adapter for crimping dies series 13 | UA15T | UA15T | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK135FTNG | KK135FTNG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## Available dies for Series 13 and 15 for EK 135 FT

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 16 - 630 |  | 347 |
| Insulated terminals and connectors, Insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 348 |
| Nickel tubular cable lugs and connectors |  | 70 - 95 |  | 348 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 10 - 625 |  | 348, 352 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals to DIN - Cu** | | | | |
| Copper solderless terminals (DIN 46234) and pin terminals (DIN 46230) acc. to DIN, copper solderless connectors (DIN 46341) acc. to DIN |  | 10 - 150 |  | 349 |
| Insulated solderless terminals and pin terminals |  | 10 - 95 |  | 349 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors, 3- and 4-core sector-shaped conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| **Aluminum compression cable lugs and connectors to DIN** | | | | |
| Aluminum compression cable lugs and connectors to DIN |  | 10 - 500 |  | 350, 352 |
| Compression joints for full tension connections of Aldrey conductors acc. to DIN EN 50182, Al-conductor acc. to DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al/St-cable acc. to DIN EN 50182, Aluminum crimping |  | 25/4 - 120/20 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al/St-cables acc. to DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 350 |
| **Aluminum/copper compression cable lugs and connectors** | | | | |
| Aluminum/copper compression cable lugs and connectors acc. to DIN |  | 10 - 500 |  | 350, 352 |
| **Clamps** | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, special trapezoid crimp for fine stranded conductors |  | 25 - 240 |  | 351 |

## EKM 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press® app
- Small and slim, perfect for cramped conditions

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 7 s up to 9 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round, up to 92 x 92 mm square |
| Charging time | 15 min. |
| Weight | 3.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EKM60UNVCFB** | **EKM60UNVCFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Adapter for crimping dies of Series 22 | UA22 | UA22 | 478 |
| Plastic case 450 x 370 x 105 mm | KKMUNVNG | KKMUNVNG | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| **Variants** | | | **Page** |
| L-BOXX with battery powered universal tool EKM60UNVCFB | LBOXXEKM60UNVCFB | | 205 |
| L-BOXX with battery powered universal tool EKM60UNVCFM | | LBOXXEKM60UNVCFM | 205 |

# EK 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- Fast working due to 2-stage hydraulics
- All tool data on view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

## Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 3 s to 5 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round |
| Charging time | 45 min. |
| Weight | 4.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EK60UNVCFB** | **EK60UNVCFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | UA22 | UA22 | 478 |
| Adapter for crimping dies of Series 22 | KK120UNVNG | KK120UNVNG | |

## EK 120 UNV Battery-powered hydraulic universal tool 10 - 400 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 108 kN |
| Stroke | 42 mm |
| Crimping range | 10 - 400 mm² |
| Crimping cycle | Depending on cable type |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 144 mm dia. round, up to 138 x 138 mm square |
| Charging time | 45 min. |
| Weight | 6.5 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 10 - 400 mm² | **EK120UNVCFB** | **EK120UNVCFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120UNVNG | KK120UNVNG | |
| Adapter for crimping dies | UA12TKL | UA12TKL | 478 |

# EASY TO HANDLE - HAND-OPERATED HYDRAULIC CRIMPING TOOLS

Klauke tools work for you. The 2-stage hydraulic system ensures automatic retraction after crimping. Rotating heads come into their own even in confined areas and support you up to a cross-sectional range of 400 mm². Aluminium makes the tool lighter and the work easier. The bolt interlock makes the device safe when not in use. You save energy and time. All you need to do yourself is crimp.



## Convenient to use

Several crimps in succession are tiring. And so for our hand-operated hydraulic tools, we produced the housing and pump lever from aluminium to achieve a low weight. The pump lever is in exactly the correct position, and so the pump movement requires only a small space. Work better with the convenience of Klauke.

- Large crimping range up to 400 mm²
- Ergonomic design for effortless operations
- 2-stage hydraulic system with fast feed and power stroke
- Simple and reliable due to automatic retraction after every crimping operation
- Low weight thanks to the aluminium pump lever and housing

## Adapts

All hand-operated hydraulic crimping tools have crimping heads that rotate through 360°. You can work even in confined areas with flexible settings.

- 360° rotating crimping heads for safe operations in confined spaces
- Well suited for installing cable joints underground or in panel building

## Save yourself the return stroke

Your effort goes only into the crimping process. When the crimping process is complete, the crimping jaws retract into the home position via the automatic retraction function.

## HK 60/18 Hand-operated hydraulic crimping tool 6 - 240 mm²



K18 SERIE

- For standardised crimping dies to DIN 48083
- Effortless operations thanks to low weight

### Characteristics

- Closed head, flip top style, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

### Suitable for

- 18-series interchangeable dies, narrow crimping

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 14 mm |
| Crimping range | 6 -240 mm² |
| Length | 470 mm |
| Weight | 3.0 kg |
| Ambient temperature | -20 up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic crimping tool 6 - 240 mm² | **HK6018** |

| Scope of supply | Part No. |
|---|---|
| Steel carrying case | MK6018 |

## Available dies for Series 18 for HK 60/18

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 240 |  | 337 |
| Insulated cable lugs and compression joints, standard type, insulated pin terminals |  | 10 - 95 |  | 337 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 50 |  | 337 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 338 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and compression joints acc. to DIN |   | 6 - 185 |  | 338 |
| **Terminals, connectors and pin terminals acc. to DIN - copper** | | | | |
| Solderless terminals (DIN 46234) and pin terminals (DIN 46230), solderless connectors (DIN 46341) |  | 10 - 70 |  | 338 |
| Insulated solderless terminals |  | 10 - 50 |  | 338 |
| **Sleeves for compacted conductors and sector shaped conductors, copper** | | | | |
| Pre-rounding dies for sector shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 339 |
| **Aluminium compression cable lugs and connectors acc. to DIN** | | | | |
| Aluminium compression cable lugs and connectors |   | 10 - 185 |  | 339 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182 |   | 25 - 95 |  | 339 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D |   | 10 - 185 |  | 339 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 50 |  | 339 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 10 - 95 |  | 340 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 340 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 95 |  | 340 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 340 |
| **Cutting die** | | | | |
| Cutting die | | 18 mm dia. | | 412 |

## HK 60/22 Hand-operated hydraulic crimping tool 6 - 300 mm²



K22 SERIE

- **Large crimping range up to 300 mm²**
- **Slim crimping head - ideal when space is critical**

### Characteristics

- Closed head, flip top style, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

### Suitable for

- 22-series interchangeable dies, narrow crimping

### Additional information

- Part Number appendix for W crimping dies (UL-tested) “W“

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 17 mm |
| Crimping range | 6 - 300 mm² |
| Length | 460 mm |
| Weight | 3.3 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic crimping tool 6 - 300 mm² | **HK6022** |

| Scope of supply | Part No. |
|---|---|
| Steel carrying case | MK6022 |

| Variants | Part No. |
|---|---|
| HK 60/22 with crimping die set R 22 from 16 - 240 mm² | HK6022SETR |
| HK 60/22 with crimping die set D 22 from 16 - 240 mm² | HK6022SETD |

# Available dies for Series 22 for HK 60/22

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Tubular cable lugs and connectors, Cu** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 300 |  | 342 |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 6 - 300 |  | 341 |
| Insulated tubular cable lugs and connectors, insulated pin terminals |  | 10 - 150 |  | 341 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 70 |  | 342 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 342 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| Nickel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| **Copper compression cable lugs and connectors acc. to DIN - Cu** | | | | |
| Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu |  | 6 - 300 |  | 343 |
| Double crimping compression cable lugs |  | 2 x 50 - 2 x 70 |  | 343 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 10 - 70 |  | 343 |
| Insulated terminals and pin terminals |  | 10 - 70 |  | 343 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 344 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 300 |  | 344 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 344 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25 / 4 - 120 / 20 |  | 345 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25 / 4 - 120 / 20 |  | 345 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 |  | 10 - 300 |  | 334 |
| **Clamps** | | | | |
| Clamps, H-type |  | 70 |  | 345 |
| Clamps, C-type |  | 4 - 70 |  | 345 |
| **Cable end-sleeves** | | | | |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 346 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 240 |  | 346 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 346 |

## HK 60 VP Hand-operated hydraulic crimping head 10 - 240 mm²



- **Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors up to 240 mm²**
- **The patented centring system guarantees optimum crimps every time**

### Characteristics

- Quad-point indent crimping feature with patented centring system, no dies required
- Open head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

| Technical data | |
|---|---|
| Crimping force | 55 kN |
| Crimping range | 10 - 240 mm² |
| Length | 525 mm |
| Weight | 4.1 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic crimping tool 10 - 240 mm² | **HK60VP** |

| Scope of supply | Part No. |
|---|---|
| Steel carrying case | MK60VP |
| Gauge and 10 test cylinder | TS10B |

| Accessories | Part No. |
|---|---|
| Gauge and 10 test cylinder | TS10B |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| Copper tubular cable lugs and connectors | | | |
| Tubular cable lugs, standard type, tubular cable lugs for switchgear connections |  | 10 - 240 |  |
| Tubular cable lugs for fine stranded conductors |  | 10 - 240 |  |
| Connectors for fine stranded conductors |  | 10 - 95 |  |
| Connectors, standard type |  | 10 - 120 |  |

# HK 60 VP/FT Hand-operated hydraulic crimping head 16 - 300 mm²



- **Suitable for crimping tubular cable lugs and connectors “standard type" and fine and superfine stranded conductors to 300 mm²**
- **The patented centring system guarantees optimum crimps every time**
- **Closed crimping head - ideal for utility lines construction**

## Characteristics

- Quad-point indent crimping feature with patented centring system, no dies required
- Closed head with bolt interlock, rotatable, flip top style
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

| Technical data | |
|---|---|
| Crimping force | 55 kN |
| Crimping range | 16 - 300 mm² |
| Length | 535 mm |
| Weight | 4.1 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part-No. |
|---|---|
| Hand-operated hydraulic crimping tool 16 - 300 mm² | **HK60VPFT** |

| Scope of supply | Part-No. |
|---|---|
| Steel carrying case | MK60VP |
| Gauge and 10 test cylinder | TS10B |

| Accessories | Part.-No. |
|---|---|
| Gauge and 10 test cylinder | TS10B |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| Copper tubular cable lugs and connectors | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 16 - 300 |  |
| Tubular cable lugs and compression joints for fine stranded conductors |  | 16 - 300 |  |

## HK 120/30 Hand-operated hydraulic crimping tool 16 - 400 mm²



- Very large crimping range to 400 mm²
- Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools

### Characteristics

- Open head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke | 30 mm |
| Crimping range | 16 - 400 mm² |
| Length | 510 mm |
| Weight | 5.4 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic crimping tool 10 - 400 mm² | **HK12030** |

| Scope of supply | Part No. |
|---|---|
| Steel carrying case | MK12042 |

## Available dies for Series 13 for HK 120/30

| Refer to the limitations when crimping connectors in the technical appendix. | | | | |
|---|---|---|---|---|
| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Butt connectors, standard type |  | 16 - 185 |  | 347 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs and connectors to DIN |   | 10 - 300 |  | 348 |
| Compression joints DIN 46267, part 1 |   | 10 - 150 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 150 |  | 349 |
| Insulated solderless terminals |  | 10 - 95 |  | 349 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium connectors |   | 10 - 120 |  | 350 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |   | 25 - 185 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |   | 25/4 - 120/20 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |   | 25/4 - 120/20 |  | 350 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A13, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D13 |   | 10 - 240 |  | 350 |
| **Clamps** | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 25 - 240 |  | 351 |

## HK 120/42 Hand-operated hydraulic crimping tool 16 - 400 mm²



- Very large crimping range up to 400 mm²
- Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- C-head with larger 42 mm jaw opening

### Characteristics

- Open head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke | 42 mm |
| Crimping range | 16 - 400 mm² |
| Length | 560 mm |
| Weight | 5.9 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic crimping tool 16 - 400 mm² | **HK12042** |

| Scope of supply | Part No. |
|---|---|
| Steel carrying case | MK12042 |

## Available dies for Series 13 for HK 120/42

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Tubular cable lugs and connectors, Cu** | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Insulated tubular cable lugs and connectors, insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Compression cable lugs and connectors acc. to DIN - Cu** | | | | |
| Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu |  | 10 - 300 |  | 348 |
| Double crimping compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals acc. to DIN - Cu** | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 10 - 150 |  | 349 |
| Insulated terminals and pin terminals |  | 10 - 95 |  | 349 |
| **Pre-rounding crimping dies** | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors |  | 10 sm - 300se / 300 sm |  | 349 |
| **Compression cable lugs and connectors acc. to DIN - Al** | | | | |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminium crimping |  | 25/4 - 120/20 |  | 350 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 350 |
| **Aluminum/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA13, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD13 |  | 10 - 240 |  | 350 |
| **Clamps and screw connectors** | | | | |
| C-clamps |  | 10 - 70 |  | 351 |
| H-clamps |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 25 - 240 |  | 351 |

## HK 120 U Hand-operated hydraulic crimping tool 16 - 400 mm²



K13 SERIE

- **H-head for deep groove crimps**
- **Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools**

### Characteristics

- Closed head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke | 20 mm |
| Crimping range | 16 - 400 mm² |
| Length | 540 mm |
| Weight | 5.2 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic crimping tool 16 - 400 mm² | **HK120U** |

| Scope of supply | Part No. |
|---|---|
| Steel carrying case | MK120U |

## Available dies for Series 13 for HK 120 U

| Refer to the limitations when crimping connectors in the technical appendix. | | | | |
|---|---|---|---|---|
| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Insulated cable lugs and compression joints, standard type |  | 10 - 150 |  | 347 |
| Tubular cable lugs and compression joints for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs and connectors to DIN |  | 10 - 300 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN |  | 10 - 150 |  | 349 |
| Insulated solderless terminals |  | 10 - 95 |  | 349 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25/4 - 120/20 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 350 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA13, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD13 |  | 10 - 240 |  | 350 |
| **Clamps** | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 25 - 240 |  | 351 |

# FLEXIBLE HEADS - HYDRAULIC CRIMPING HEADS AND CRIMPING TOOL SYSTEMS

No matter whether continuous operation in the workshop or portable use in the field - Klauke crimping heads and systems provide the right solution each and every time.




## The Klauke system

Full flexibility with the Klauke system - all hydraulic heads and pumps are mutually compatible and your 13, 18 and 22 series crimping dies can also be used in the hydraulic crimping heads.

- Crimping heads for the 13, 18 and 22 series, also for workbench mounting
- Crimping heads with a crimping force of 55 kN to 1000 kN
- Workbench tools BG-tested

## High crimping force for greater width

The crimping heads achieve a crimping force of 55 kN to 1000 kN. Allowing you to process cable lugs of up to 1600 $mm^2$.

- Compact design
- Easy handling
- Versatile
- Broadest range of applications

## PK 18 Hydraulic crimping head 6 - 185 mm²



- For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results
- Crimping dies are spring-secured

### Characteristics

- Open head with quick coupling, 360° rotation when not pressurised

### Suitable for

- 18-series interchangeable dies, narrow crimping
- Standardised dies to DIN 48083, sheet 1

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Crimping range | 6 - 185 mm² |
| Operating pressure | max. 700 bar |
| Length | 310 mm |
| Weight | 3.2 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 6 - 185 mm² | **PK18** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

## THK 18 Hydraulic crimping tool for workbench mounting 6 - 185 mm²



- BG-compliant version
- For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results

### Characteristics

- Quick coupling
- For workbench mounting

### Suitable for

- 18-series interchangeable dies, narrow crimping
- Standardised dies to DIN 48083, sheet 1

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Crimping range | 6 - 185 mm² |
| Operating pressure | max. 700 bar |
| Weight | 8.6 kg |
| Dimensions | H x W x D: 220 x 160 x 120 mm |

| Item | Part No. |
|---|---|
| Hydraulic crimping tool for workbench mounting 6 - 185 mm² | **THK18** |

## Available dies for Series 18 for PK 18

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 185 |  | 337 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 95 |  | 337 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 50 |  | 337 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 338 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |   | 6 - 185 |  | 338 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) |  | 10 - 70 |  | 338 |
| Insulated solderless terminals and connectors |  | 10 - 50 |  | 338 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 240 sm |  | 339 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |   | 10 - 185 |  | 339 |
| Compression joints for full-tension connections of Aldrey-conductors DIN EN 50182 |   | 25 - 95 |  | 339 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D |   | 10 - 185 |  | 339 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 50 |  | 339 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 4 - 95 |  | 340 |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 340 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 95 |  | 340 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 340 |
| **Cutting die** | | | | |
| Cutting die | | 18 mm dia. | | 412 |

## PK 22 Hydraulic crimping heads 6 - 300 mm²



- **Large crimping range up to 300 mm²**
- **Slim crimping head - ideal when space is critical**

### Characteristics

- Closed head, flip top style, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

### Suitable for

- 22-series interchangeable dies, narrow crimping

### Additional information

- Part Number appendix for W crimping dies (UL-tested) "W"

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke / opening width | 17 mm |
| Crimping range | 6 - 300 mm² |
| Operating pressure | max. 700 bar |
| Length | 305 mm |
| Weight | 3.0 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 6 - 300 mm² | **PK22** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

## THK 22 Hydraulic crimping tool for workbench mounting 6 - 300 mm²



- **Large crimping range up to 300 mm²**
- **For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results**

### Characteristics

- Quick coupling
- For workbench mounting
- BG-conformity version

### Suitable for

- 22-series interchangeable dies, narrow crimping

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Crimping range | 6 - 300 mm² |
| Operating pressure | max. 700 bar |
| Weight | 8.8 kg |
| Dimensions | H x W x D: 220 x 160 x 120 mm |

| Item | Part No. |
|---|---|
| Hydraulic crimping tool for workbench mounting 6 - 300 mm² | **THK22** |

# Available dies for Series 22 for PK 22 and THK 22

Refer to the limitations when crimping connectors in the technical appendix.

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors blue connection for compacted conductors acc. to Tubular cable lugs and connectors blue connection for compacted conductors acc. to DIN EN 60228 |  | 6 - 300 |  | 342 |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 6 - 300 |  | 341 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 341 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 70 |  | 342 |
| Tubular cable lugs and connectors for solid conductors |  | 1.5 - 16 |  | 342 |
| **Tubular cable lugs and connectors, Ni, VA** | | | | |
| Stainless steel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| Nickel tubular cable lugs and connectors |  | 10 - 50 |  | 342 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |  | 6 - 300 |  | 343 |
| Double compression cable lugs |  | 2 x 50 - 2 x 70 |  | 343 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) |  | 10 - 70 |  | 343 |
| Insulated solderless terminals and connectors |  | 10 - 70 |  | 343 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se/ 240 sm |  | 344 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Aluminium compression cable lugs and connectors to DIN |  | 10 - 300 |  | 344 |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |  | 25 - 185 |  | 344 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |  | 25/4 - 120/20 |  | 345 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |  | 25/4 - 120/20 |  | 345 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 |  | 10 - 300 |  | 344 |
| **Clamps** | | | | |
| Clamps, C-type |  | 4 - 70 |  | 345 |
| Clamps, H-type |  | 70 |  | 345 |
| **Cable end-sleeves** | | | | |
| Twin cable end-sleeves |  | 2 x 4 - 2 x 16 |  | 346 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 10 - 240 |  | 346 |
| Twin cable end-sleeves, trapezodial, for fine stranded conductors |  | 2 x 4 - 2 x 16 |  | 346 |

## PK 60 VP Hydraulic crimping head 10 - 240 mm²



- Suitable for crimping tubular cable lugs and connectors “standard type“ and fine and superfine stranded conductors up to 240 mm²
- The patented centring system guarantees optimum crimps every time
- No additional dies required

### Characteristics

- Quad-point indent crimping and wide crimping
- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

| Technical data | |
|---|---|
| Crimping force | 55 kN |
| Crimping range | 10 - 240 mm² |
| Operating pressure | max. 700 bar |
| Length | 305 mm |
| Weight | 2.8 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 10 - 240 mm² | **PK60VP** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | |
| Tubular cable lugs, standard type, tubular cable lugs for switchgear connections | | 10 - 240 | |
| Connectors, standard type | | 10 - 120 | |
| Tubular cable lugs for fine stranded conductors | | 10 - 240 | |
| Connectors for fine stranded conductors | | 10 - 95 | |

## PK 60 VP/FT Hydraulic crimping head 16 - 300 mm²



- Suitable for crimping tubular cable lugs and connectors “standard type“ and fine and superfine stranded conductors to 300 mm²
- The patented centring system guarantees optimum crimps every time
- Closed crimping head - ideal for utility lines construction, for example

### Characteristics

- Quad-point indent crimping and wide crimping
- Closed head, flip top style, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

| Technical data | |
|---|---|
| Crimping force | 55 kN |
| Crimping range | 16 - 300 mm² |
| Operating pressure | max. 700 bar |
| Length | 315 mm |
| Weight | 2.8 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 16 - 300 mm² | **PK60VPFT** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections | | 16 - 300 | |
| Tubular cable lugs and connectors for fine stranded conductors | | 16 - 300 | |

# PK 60 ID Hydraulic crimping head 10 - 240 mm²

NEW



- **Extra large crimping area due to innovative 2-stage telescopic cylinders (patent pending)**
- **Indent crimping - no changing of dies required**

## Characteristics

- Closed head, flip top style, rotatable
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

| Technical data | |
|---|---|
| Crimping force | 30 - 60 kN |
| Stroke / opening width | 35.5 mm |
| Crimping range copper | 10 - 240 mm² |
| Crimping range aluminum | 50 - 240 mm² |
| Operating pressure | max. 700 bar |
| Length | 249.5 mm |
| Weight | approx. 2.5 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 10 - 240 mm² | **PK60ID** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Suitable for | Connection material | Crimping range mm² | Crimp profile |
|---|---|---|---|
| **Copper tubular cable lugs and connectors** | | | |
| Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections |  | 10 - 240 |  |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 240 |  |
| **Terminals, connectors and pin terminals acc. to DIN** | | | |
| Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341) |  | 10 - 240 |  |
| **Aluminum compression cable lugs and connectors** | | | |
| Aluminum compression cable lugs and connectors acc. to DIN |  | 50 - 240 |  |
| Compression joints acc. to DIN 48085, part 3 for Al/St-cable acc. to DIN EN 50182 |  | 50 - 240 |  |
| Compression joints for full tension connections of Aldrey conductors acc. to DIN EN 50182, Al-conductor acc. to DIN EN 50182, 120 - 185 mm² |  | 50 - 185 |  |
| **Aluminum/copper compression cable lugs and connectors** | | | |
| Aluminum/copper compression cable lugs and connectors |  | 50 - 240 |  |

## PK 120/42 Hydraulic crimping head 10 - 400 mm²



- Large crimping range up to 400 mm²
- C-head with larger 42 mm jaw opening
- Up to 60% fewer crimps thanks to wide crimping in comparison to narrow crimping

### Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke / opening width | 42 mm |
| Crimping range | 10 - 400 mm² |
| Operating pressure | max. 700 bar |
| Length | 335 mm |
| Weight | 4.5 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 10 - 400 mm² | **PK12042** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

## THK 120 Hydraulic crimping tool for workbench mounting 10 - 400 mm²



- Large crimping range up to 400 mm²
- For workbench mounting
- BG-compliant version
- Up to 60% fewer crimps thanks to wide crimping in comparison to narrow crimping

### Characteristics

- Quick coupling
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Crimping range | 10 - 400 mm² |
| Operating pressure | max. 700 bar |
| Weight | 12 kg |
| Dimensions | H x W x D: 285 x 160 x 110 mm |

| Item | Part No. |
|---|---|
| Hydraulic crimping tool for workbench mounting 10 - 400 mm² | **THK120** |

## Available dies for Series 13 for PK 120/42 and THK 120

| Refer to the limitations when crimping connectors in the technical appendix. | | | | |
|---|---|---|---|---|
| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN |   | 10 - 300 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Terminals, connectors andSolderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) |  | 10 - 150 |  | 349 |
| Insulated solderless terminals and connectorsinals |  | 10 - 95 |  | 349 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |   | 25 - 185 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |   | 25/4 - 120/20 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |   | 25/4 - 120/20 |  | 350 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminium/copper compression cable lugs and connectors |   | 10 - 240 |  | 350 |
| **Clamps** | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 25 - 240 |  | 351 |

## PK 120 U Hydraulic crimping head 10 - 400 mm²



K13 SERIE

- **H-head for deep groove crimps**
- **Up to 60% fewer crimps thanks to wide crimping in comparison to narrow crimping**

### Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

### Suitable for

- 13-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Stroke / opening width | 20 mm |
| Crimping range | 10 - 400 mm² |
| Operating pressure | max. 700 bar |
| Length | 320 mm |
| Weight | 3.7 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 10 - 400 mm² | **PK120U** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

## Available dies for Series 13 for PK 120 U

| Refer to the limitations when crimping connectors in the technical appendix. | | | | |
|---|---|---|---|---|
| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
| **Copper tubular cable lugs and connectors** | | | | |
| Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections |  | 16 - 400 |  | 347 |
| Insulated cable lugs and compression joints, standard type, Insulated pin terminals |  | 10 - 150 |  | 347 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 10 - 150 |  | 348 |
| **Copper compression cable lugs and connectors to DIN** | | | | |
| Copper compression cable lugs and connectors to DIN |   | 10 - 300 |  | 348 |
| Double compression cable lugs |  | 2 x 50 - 2 x 120 |  | 348 |
| **Terminals, connectors and pin terminals acc. to DIN, copper** | | | | |
| Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) |  | 10 - 150 |  | 349 |
| Insulated solderless terminals and connectors |  | 10 - 95 |  | 349 |
| **Sleeves for compacted conductors and sector-shaped conductors, copper** | | | | |
| Pre-rounding dies for sector-shaped Al and Cu conductors |  | 10 sm - 300 se / 300 sm |  | 349 |
| **Aluminium compression cable lugs and connectors to DIN** | | | | |
| Compression joints connections for Aldrey-conductors DIN EN 50182, Al-conductors DIN EN 50182, 120 - 185 mm² |   | 25 - 185 |  | 350 |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, aluminium crimping |   | 25/4 - 120/20 |  | 350 |
| **Aluminium compression cable lugs and connectors to DIN DIN - Al** | | | | |
| Compression joints DIN 48085, part 3 for aluminium/steel conductors DIN EN 50182, steel crimping |   | 25/4 - 120/20 |  | 350 |
| **Aluminium/copper compression cable lugs and connectors** | | | | |
| Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA13, copper side of aluminum/ copper compression cable lugs and connectors: crimping dies HD13 |   | 10 - 240 |  | 350 |
| **Clamps** | | | | |
| Clamps, C-type |  | 10 - 70 |  | 351 |
| Clamps, H-type |  | 70 - 120 |  | 351 |
| **Cable end-sleeves** | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 351 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 25 - 240 |  | 351 |

## PK 25/2 Hydraulic crimping head 16 - 625 mm²



- For dies acc. to DIN 48083, sheet 3
- Very large crimping range up to 625 mm²
- For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results

### Characteristics

- Head with quick coupling, 360° rotation when not pressurised

### Suitable for

- 25-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 250 kN |
| Stroke / opening width | 20 mm |
| Crimping range | 16 - 625 mm² |
| Operating pressure | max. 700 bar |
| Length | 335 mm |
| Weight | 5.3 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 16 - 625 mm² | **PK252** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

## Available dies for Series 25 for PK 25/2

| Refer to the limitations when crimping connectors in the technical appendix. | | | | |
|---|---|---|---|---|
| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
| Tubular cable lugs and connectors, Cu | | | | |
| Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections |  | 16 - 500 |  | 353 |
| Insulated tubular cable lugs and connectors, insulated pin terminals |  | 10 - 150 |  | 353 |
| Tubular cable lugs and connectors for fine stranded conductors |  | 16 - 300 |  | 354 |
| Compression cable lugs and connectors acc. to DIN - Cu | | | | |
| Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu |   | 16 - 625 |  | 354 |
| Double crimping compression cable lugs |   | 2 x 50 - 2 x 120 |  | 354 |
| Terminals, connectors and pin terminals acc. to DIN - Cu | | | | |
| Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu |  | 16 - 240 |  | 354 |
| Insulated terminals and pin terminals |  | 10 - 150 |  | 355 |
| Sleeves for compacted conductors and sector shaped conductors, Cu | | | | |
| Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors |  | 10 sm - 300 se / 300 sm |  | 355 |
| Compression cable lugs and connectors acc. to DIN - Al | | | | |
| Compression cable lugs and connectors acc. to DIN - Al |   | 10 - 500 |  | 355 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 300 mmÂ² |   | 25 - 300 |  | 355 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminium crimping |   | 25/4 - 120/20 |  | 356 |
| Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping |   | 25/4 - 120/20 |  | 356 |
| Aluminium/copper compression cable lugs and connectors | | | | |
| Aluminum side of aluminium/copper compression cable lugs and connectors: crimping dies HA13, copper side of aluminium/copper compression cable lugs and connectors: crimping dies HD13 |   | 10 - 500 |  | 355 |
| Clamps and screw connectors | | | | |
| C-clamps |  | 10 - 185 |  | 356 |
| H-clamps |  | 70 - 120 |  | 356 |
| Cable end-sleeves | | | | |
| Cable end-sleeves |  | 25 - 240 |  | 357 |
| Cable end-sleeves, trapezodial, for fine stranded conductors |  | 25 - 240 |  | 357 |

## PK 45 Hydraulic crimping head 120 - 1000 mm²




- Very large crimping range to 1000 mm²
- Good sturdy construction for safe operations
- For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results

### Characteristics

- Head with quick coupling, 360° rotation when not pressurised

### Suitable for

- 45-series interchangeable dies, wide crimping

| Technical data | |
|---|---|
| Crimping force | 450 kN |
| Crimping range | 120 - 1000 mm² |
| Operating pressure | max. 700 bar |
| Weight | 10.3 kg |
| Height | 265 mm |

| Item | Part No. |
|---|---|
| Hydraulic crimping head 120 - 1000 mm² | **PK45** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

## Available dies for Series 45 for PK 45

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Compression cable lugs and connectors acc. to DIN - Cu | | | | |
| Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu | DIN | 120 - 1000 | ⬡ | 358 |
| Compression cable lugs and connectors acc. to DIN - Al | | | | |
| Compression cable lugs and connectors acc. to DIN - Al | Al | 150 - 500 | ⬡ | 358 |
| Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 150 - 300 mm² | Aldrey | 150 - 300 | ⬡ | 358 |
| Aluminium/copper compression cable lugs and connectors | | | | |
| Aluminium side of aluminium/copper compression cable lugs and connectors: crimping dies HA45, copper side of aluminium/copper compression cable lugs and connectors: crimping dies HD45 | Al/Cu | 150 - 500 | ⬡ | 358 |

## PK 1000 Hydraulic 100 t crimping heads up to 1000 mm²



- **Single-acting crimping head for connecting to hydraulic pumps with 700 bar operating pressure**
- **Compact, simple design**
- **Extremely high crimping force**

### Characteristics

- Nickel-plated version
- Quick coupling

### Suitable for

- Interchangeable dies (outer: to IZUMI standard EP-100W, inside: DIN standard or customer request)

### Additional information

- Also available in country-specific variants, Part Number appendix “C“

K100 SERIE

| Technical data | |
|---|---|
| Crimping force | 1000 kN |
| Stroke | 25 mm |
| Crimping range | up to 1000 mm² |
| Operating pressure | max. 700 bar |
| Weight | Without dies: 27 kg |
| Height | Incl. handles: 365 mm |
| Dimensions | External diameter: 195 mm |

| Item | Part No. |
|---|---|
| Hydraulic 100 t crimping head with Cejn coupling | **PK1000** |

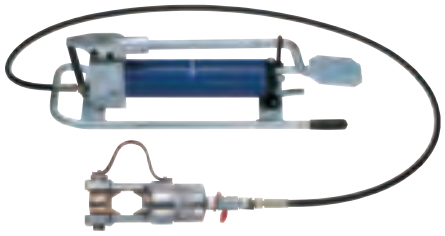
## Available dies for Series 100 for PK 1000

| Suitable for | Connection material | Crimping range mm² | Crimp profile | Page |
|---|---|---|---|---|
| Copper compression cable lugs and connectors acc. to DIN | | | | |
| Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) | DIN | 625 - 1000 | | 359 |

# TO CROSS-SECTION 1000 MM²

The hydraulic crimping head PK 1000 is suitable for crimping connectors and cables to DIN up to a cross-section of 1000 mm². The crimping dies conform to DIN 48083 Part 3 in terms of their outer dimensions.

## HK 25/2 Hydraulic crimping tool with foot pump 16 - 625 mm²



K25 SERIE

- **Extremely wide cross section range up to 625 mm²**
- **Hydraulic system with 250 kN crimping force**
- **Foot pump with two-stage hydraulics**

### Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- Manual retract as required

### Suitable for

- 25-series interchangeable dies, wide crimping

### Additional information

- The wide choice of available crimping dies can be found in chapter “Crimping dies“ under Series 25.

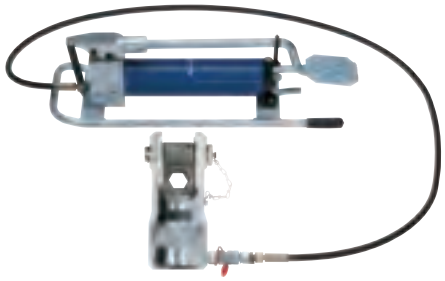
| Technical data | |
|---|---|
| Crimping force | 250 kN |
| Crimping range | 16 - 625 mm² |
| Operating pressure | max. 700 bar |
| Weight | 17.6 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping tool with foot pump 16 - 625 mm² | **HK252** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Steel carrying case | MKU | 196 |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |

# HK 45 Hydraulic crimping tool with foot pump 120 - 1000 mm²



- Extremely large cross section range up to 1000 mm²
- Hydraulic system with 450 kN crimping force
- Foot pump with two-stage hydraulics

## Characteristics

- Head with quick coupling
- Manual retract as required
- Hydraulic hose, 2 m

## Suitable for

- 45-series interchangeable dies, wide crimping

## Additional information

- The wide choice of available crimping dies can be found in chapter “Crimping dies“ under Series 45.

| Technical data | |
|---|---|
| Crimping force | 450 kN |
| Crimping range | 120 - 1.000 mm² |
| Operating pressure | max. 700 bar |
| Weight | 23 kg |

| Item | Part No. |
|---|---|
| Hydraulic crimping tool with foot pump 120 - 1000 mm² | **HK45** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Steel carrying case | MKU | 196 |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |

## HK 12/2 EL/380 Hydraulic crimping tool with pump, 16 - 400 mm², 400 V



K13 SERIE

- Large cross section range up to 400 mm²
- C-head with 42 mm jaw opening
- Suitable for portable use thanks to transport trolley and extremely long cable

### Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- Electronic control with AC motor

### Suitable for

- 13-series interchangeable dies, wide crimping

### Additional information

- The wide choice of available crimping dies can be found in chapter “Crimping dies“ under Series 13.

| Technical data | |
|---|---|
| Crimping force | 120 kN |
| Crimping range | 16 - 400 mm² |
| Version | Three-phase motor 400 V |
| Rated output | 0.55 kW |
| Motor voltage | 360 V - 440 V / 50 Hz |
| Capacity | 0.82 l / min. |
| Operating pressure | max. 700 bar |
| Weight | 44.5 kg |

| Item | Part No. |
|---|---|
| Crimping tool with pump, 16 - 400 mm², 400 V | **HK122EL380** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL | FTA1 | 496 |
| Transport trolley for electro-hydraulic pump EHP 2 | TW50 | |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |
| Two-hand safety controller for pumps EHP 2 to EHP 4 | ZST3 | 496 |

# HK 25/2 EL/380 Hydraulic crimping tool with pump, 16 - 625 mm², 400 V



K25 SERIE

- **Extremely wide cross section range up to 625 mm²**
- **Crimping head, H-shape**
- **Suitable for portable use thanks to transport trolley and extremely long cable**

## Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- Electronic control with AC motor

## Suitable for

- 25-series interchangeable dies, wide crimping

## Additional information

- The wide choice of available crimping dies can be found in chapter “Crimping dies“ under Series 25.

| Technical data | |
|---|---|
| Crimping force | 250 kN |
| Crimping range | 16 - 625 mm² |
| Version | Three-phase motor 400 V |
| Rated output | 0.55 kW |
| Motor voltage | 360 V - 440 V / 50 Hz |
| Capacity | 0.82 l / min. |
| Operating pressure | max. 700 bar |
| Weight | 45.9 kg |

| Item | Part No. |
|---|---|
| Crimping tool with pump, 16 - 625 mm², 400 V | **HK252EL380** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL | FTA1 | 496 |
| Transport trolley for electro-hydraulic pump EHP 2 | TW50 | |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |
| Two-hand safety controller for pumps EHP 2 to EHP 4 | ZST3 | 496 |

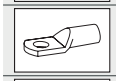
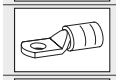
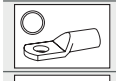
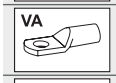
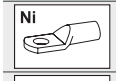
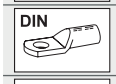
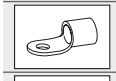
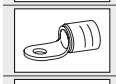
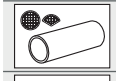
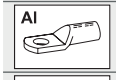
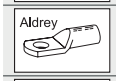
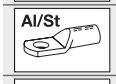
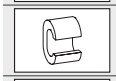
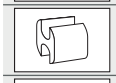
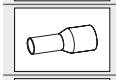
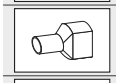
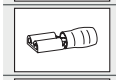
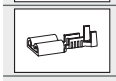
# TEN SERIES IN USE - CRIMPING DIES

The Klauke range of crimping dies is unbeatable. We have developed a total of 10 series to suit your requirements. All are set apart by their high durability and highest precision. For optimum crimping results, the crimping surface of the dies are polished. You can count on that: Tools, crimping dies and connection materials from Klauke deliver the perfect electrical connection every time.



**In brief**

- Broad range with 10 different crimping dies series
- Solutions for every material
- Polished crimping surfaces for optimum crimping results
- Quickly find the correct die through coloured coatings

| Connection material | K50 SERIE  | K4 SERIE  | K5 SERIE  | K18 SERIE  | K22 SERIE  | K13 SERIE  | K15 SERIE  | K25 SERIE  | K45 SERIE  | K100 SERIE  |
|---|---|---|---|---|---|---|---|---|---|---|
|  blue connection | – | 6-150 mm² | 6-185 mm² | – | 6-300 mm² | 16-300 mm² | – | – | – | – |
|  | 0.75-25 mm² | 6-150 mm² | 6-240 mm² | 6 -185 mm² | 6-300 mm² | 16-400 mm² | 500-630 mm² | 16-500 mm² | – | – |
|  | – | 10-70 mm² | 10-95 mm² | 10-95 mm² | 10-150 mm² | 10-150 mm² | – | 10-150 mm² | – | – |
|  | – | 10-50 mm² | 10-50 mm² | 10-50 mm² | 10-70 mm² | 10-150 mm² | – | 16-300 mm² | – | – |
|  | 1.5-16 mm² | 1.5-16 mm² | – | 1.5-16 mm² | 1.5-16 mm² | – | – | – | – | – |
|  VA | – | 0.5-16 mm² | – | – | 10-50 mm² | 10-95 mm² | – | – | – | – |
|  Ni | – | 0.5-16 mm² | – | – | 10-50 mm² | 10-95 mm² | – | – | – | – |
|  DIN | 6-25 mm² | 6-120 mm² | 6-185 mm² | 6-185 mm² | 6-300 mm² | 10-300 mm² | 300-625 mm² | 16-625 mm² | 120-1000 mm² | 625-1000 mm² |
|  | 0.5-10 mm² | 6-35 mm² | 10-50 mm² | 10-70 mm² | 10-70 mm² | 10-150 mm² | – | 16-240 mm² | – | – |
|  | 10-16 mm² | 10-16 mm² | – | 10-50 mm² | 10-70 mm² | 10-95 mm² | – | 10-150 mm² | – | – |
|  | – | 10 sm*-150 se**/120 sm* | 10 sm*-300 se**/240 sm* | 10 sm*-300 se**/240 sm* | 10 sm*-300 se**/240 sm* | 10 sm*-300 sm* | – | 10 sm*-300 sm* | – | – |
|  Al | – | 10-70 mm² | 10-150 mm² | 10-185 mm² | 10-300 mm² | 10-300 mm² | 400-500 mm² | 10-500 mm² | 150-500 mm² | Upon request |
|  Aldrey | – | 25-50 mm² | 25-95 mm² | 25-95 mm² | 25-185 mm² | 25-185 mm² | – | 25-300 mm² | 150-300 mm² | Upon request |
|  Al/St | – | – | – | – | 4-20 (St) 25-120 (Al) | 4 (St)-120 (Al) | – | 4 (St)-120 (Al) | – | Upon request |
|  Al/Cu | – | 10-70 mm² | 10-150 mm² | 10-185 mm² | 10-300 mm² | 10-300 mm² | 400-500 mm² | 10-500 mm² | 150-500 mm² | Upon request |
|  | – | 4-35 mm² | 4-35 mm² | 4-50 mm² | 4-70 mm² | 10-70 mm² | – | 10-185 mm² | – | – |
|  | – | – | – | 70 mm² | 70 mm² | 70-120 mm² | – | 70-120 mm² | – | – |
|  | 0.14-50 mm² | 10-50 mm² | 10-95 mm² | 4-95 mm² | 10-240 mm² | 25-240 mm² | – | 25-240 mm² | – | – |
|  | – | 2x4-2x16 mm² | 2x4-2x16 mm² | 2x4-2x16 mm² | 2x4-2x16 mm² | – | – | – | – | – |
|  | 0.1-16 mm² | – | – | – | – | – | – | – | – | – |
|  | 0.25-6 mm² | – | – | – | – | – | – | – | – | – |
| BNC plug | RG 58, RG 59, RG 62, RG 71 | – | – | – | – | – | – | – | – | – |
| Turned pin receptacle and pin connectors | 0.1-4 mm² | – | – | – | – | – | – | – | – | – |

* Sector multi-stranded ** Sector single-stranded

# K50 SERIE


K 50


EK 50 ML


EK 15/50 ML

## Crimping dies R 50, indent crimping



**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type

| Cross section mm² | For item | Part No. |
|---|---|---|
| 0.75 - 2.5 | 91R, 92R, 93R | **R501** |
| 4 - 10 | 94R, 95R, 2R | **R502** |

## Crimping dies D 50



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. |
|---|---|
| 6 - 16 | **D504** |
| 16 - 25 | **D505** |

## Crimping dies R 50, hexagonal crimping



**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type

| Cross section mm² | Part No. |
|---|---|
| 6 - 16 | **R504** |
| 16 - 25 | **R505** |

## Crimping dies Q 50



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 - Cu

| Cross section mm² | Part No. |
|---|---|
| 0.5 - 10 | **Q501** |

## Crimping dies M 50



**Suitable for**

- Tubular cable lugs and connectors for solid conductors

| Cross section mm² | Part No. |
|---|---|
| 1.5 - 4 | **M50154** |
| 6 - 10 | **M50610** |

## Crimping dies AE 50



**Suitable for**

- Cable end-sleeves

| Cross section mm² | Part No. |
|---|---|
| 0.14 - 10 | **AE501** |
| 10 - 25 | **AE502** |
| 35 - 50 | **AE503** |

## Crimping dies IS 50, single crimping



**Suitable for**

- Insulated cable connections, single crimping

| Cross section mm² | Part No. | for item |
|---|---|---|
| 10 - 16 | **IS5072** | ST1716IS, ST1717IS, 652C5, 652C6, 653C6 |
| 0.5 - 2.5 | **IS504** | 670 WS, 680 WS |
| 4 - 6 | **IS505** | 700 WS |

## Crimping dies IS 50, double crimping



**Suitable for**

- Insulated cable connections, double crimping

| Cross section mm² | Part No. | for item |
|---|---|---|
| 0.5 - 6 | **IS501** | |
| 0.1 - 1 | **IS503** | 8201-8201B |

## Crimping dies CR 50



**Suitable for**

- Non-insulated receptacles

| Cross section mm² | Part No. | for item | Tab Width |
|---|---|---|---|
| 0.25 - 6 | **CR501** | | 2.8 / 6.3 |
| 0.5 - 2.5 | **CR502** | | 4.8 |
| 0.5 - 1 | **CR503** | 38201, 38201A | 2.8 |
| 0.5 - 2.5 | **CR504** | 3720, 3735 | 6.3 |
| 0.5 - 1.5 | **CR505** | 3725 | 6.3 |

## Crimping dies BNC 50



**Suitable for**

- Stud and shielded sleeves
- BNC plugs for coax cable RG 58, 59, 62 and 71

| Part No. |
|---|
| **BNC501** |

## Crimping dies SB 50



**Suitable for**

- Turned pin receptacles
- Pin connectors

| Cross section mm² | Part No. |
|---|---|
| 0.1 - 1; 1.5 - 2.5; 4 | **SB501** |

K4 SERIE

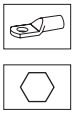

K 35/4


EK 35/4 ML


EK 35/4

## Crimping dies HR 4





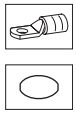
**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 6 | **HR46** | 5 |
| 10 | **HR410** | 5 |
| 16 | **HR416** | 5 |
| 25 | **HR425** | 5 |
| 35 | **HR435** | 5 |
| 50 | **HR450** | 5 |
| 70 | **HR470** | 5 |
| 95 | **HR495** | 5 |
| 120 | **HR4120** | 5 |
| 150 | **HR4150** | 5 |

## Crimping dies HIS 4





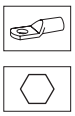
**Suitable for**

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HIS410** | 5 |
| 16 | **HIS416** | 5 |
| 25 | **HIS425** | 5 |
| 35 | **HIS435** | 5 |
| 50 | **HIS450** | 5 |
| 70 | **HIS470** | 5 |

## Crimping die set, 6 - 150 mm² HR 4 in plastic case, 11-pce.





**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

| Part No. |
|---|
| **HR4SET** |

## Crimping dies blue connection® HB 4



▸ **Accurate assignment of crimping tool/crimping die through colour-coding system**

**Suitable for**

- Tubular cable lugs and connectors, blue connection® for compacted conductors acc. to DIN EN 60228 Class 2

| Cross section mm² | Part No. | Crimp width mm | Number of crimps |
|---|---|---|---|
| 6 | **HB46** | 9 | 1 |
| 10 | **hb410** | 9 | 1 |
| 16 | **hb416** | 9 | 1 |
| 25 | **hb425** | 9 | 1 |
| 35 | **HB435** | 9 | 1 |
| 50 | **HB450** | 9 | 1 |
| 70 | **hb470** | 5 | 2 |
| 95 | **hb495** | 5 | 2 |
| 120 | **hb4120** | 5 | 2 |
| 150 | **hb4150** | 5 | 2 |

## Crimping die set 6 - 150 mm² blue connection® HB 4 in plastic case, 11-pce.



**Suitable for**

- Tubular cable lugs and connectors, blue connection® for compacted conductors acc. to DIN EN 60228 Class 2

| Part No. |
|---|
| **HB4SET** |

## Crimping dies HN 4, Double indent crimping



**Suitable for**

- Tubular cable lugs and connectors - Ni
- Tubular cable lugs and connectors - stainless steel

| Cross section mm² | Part No. |
|---|---|
| 4 - 6 | **HN446** |
| 10 | **HN410** |
| 16 | **HN416** |

## Crimping dies HF 4



**Suitable for**

- Tubular cable lugs and connectors for fine stranded conductors

| Cross section mm² | Part No. |
|---|---|
| 10 | **HF410** |
| 16 | **HF416** |
| 25 | **HF425** |
| 35 | **HF435** |
| 50 | **HF450** |

## Crimping dies HM 4



**Suitable for**

- Tubular cable lugs and connectors for solid conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 1.5 - 2.5; 4 | **HM4154** | 5 |
| 6 - 10 | **HM4610** | 5 |
| 16 | **HM416** | 5 |

## Crimping dies HN 4, Indent crimping



**Suitable for**

- Tubular cable lugs and connectors - Ni
- Tubular cable lugs and connectors - stainless steel

| Cross section mm² | Part No. |
|---|---|
| 0.5 - 1.0 | **HN4051** |
| 1.5 - 2.5 | **HN41525** |

## Crimping dies HD 4



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 6 | **HD46** | 5 | 5 |
| 10 | **HD410** | 6 | 5 |
| 16 | **HD416** | 8 | 5 |
| 25 | **HD425** | 10 | 5 |
| 35 | **HD435** | 12 | 5 |
| 50 | **HD450** | 14 | 5 |
| 70 | **HD470** | 16 | 5 |
| 95 | **HD495** | 18 | 5 |
| 120 | **HD4120** | 20 | 5 |

## Crimping die set, 6 - 120 mm² HD 4 in plastic case, 10-pce.



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Part No. |
|---|
| **HD4SET** |

## Crimping dies HQ 4



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 - Cu

| Cross section mm² | Part No. |
|---|---|
| 6 | **HQ46** |
| 10 | **HQ410** |
| 16 | **HQ416** |
| 25 | **HQ425** |
| 35 | **HQ435** |

## Crimping dies HISQ 4



**Suitable for**

- Insulated solderless terminals and pin terminals

| Cross section mm² | Part No. |
|---|---|
| 10 | **HISQ410** |
| 16 | **HISQ416** |

## Crimping dies HRU 4



**Suitable for**

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

| Nominal cross section mm² se | Nominal cross section mm² sm | Part No. | Conductor dia. mm | Pre-rounding width mm |
|---|---|---|---|---|
| | 10 | **HRU410** | 4.1 | 9 |
| | 16 | **HRU416** | 5.1 | 9 |
| 35 | 25 | **HRU43525** | 6.3 | 9 |
| 50 | 35 | **HRU45035** | 7.5 | 9 |
| 70 | 50 | **HRU47050** | 9.0 | 9 |
| 95 | 70 | **HRU49570** | 10.5 | 9 |
| 120 | 95 | **HRU412095** | 12.5 | 9 |
| 150 | 120 | **HRU4150120** | 14.0 | 9 |

## Crimping dies HA 4



**Suitable for**

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **HA410** | 10 | 7 |
| 16 - 25 | **HA41625** | 12 | 7 |
| 35 | **HA435** | 14 | 7 |
| 50 | **HA450** | 16 | 7 |
| 70 | **HA470** | 18 | 7 |

## Crimping dies HAD 4



**Suitable for**

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 | **HAD425** | 12 | 7 |
| 35 | **HAD435** | 14 | 7 |
| 50 | **HAD450** | 16 | 7 |

## Crimping dies HC 4 / HMC 4



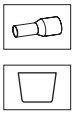
**Suitable for**

- C-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **HC416** | 5 |
| 25 | **HC425** | 5 |
| 4 - 4 | **HMC44** | 5 |
| 10 - 10 | **HMC410** | 5 |
| 10 - 16<br>10 - 25<br>35 - 35 | **HMC435** | 5 |

## Crimping dies HAE 4





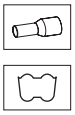
**Suitable for**

- Cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HAE410** | 10 |
| 16 | **HAE416** | 10 |
| 25 | **HAE425** | 10 |
| 35 | **HAE435** | 10 |
| 50 | **HAE450** | 10 |

## Crimping dies HAES 4





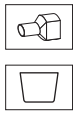
**Suitable for**

- Cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HAES410** | 10 |
| 16 | **HAES416** | 10 |
| 25 | **HAES425** | 10 |
| 35 | **HAES435** | 10 |
| 50 | **HAES450** | 10 |

## Crimping dies HZAE 4





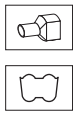
**Suitable for**

- Twin-cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **HZAE44** | 10 |
| 2 x 6 | **HZAE46** | 10 |
| 2 x 10 | **HZAE410** | 10 |
| 2 x 16 | **HZAE416** | 10 |

## Crimping dies HZAES 4





**Suitable for**

- Twin-cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **HZAES44** | 10 |
| 2 x 6 | **HZAES46** | 10 |
| 2 x 10 | **HZAES410** | 10 |
| 2 x 16 | **HZAES416** | 10 |


HK 60 UNV + UA5


EK 50/5


EKM 60 UNV + UA5


EK 60 UNV + UA5


PK 60 UNV + UA5

K5 SERIE



## Crimping dies HR 5



### Suitable for

- Tubular cable lugs and connectors - Cu, standard type

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 6 + 35 | **HR5635** | 5 |
| 10 + 50 | **HR51050** | 5 |
| 16 + 70 | **HR51670** | 5 |
| 25 + 95 | **HR52595** | 5 |
| 120 | **HR5120** | 5 |
| 150 | **HR5150** | 5 |
| 185 | **HR5185** | 5 |
| 240 | **HR5240** | 5 |

## Crimping die set, 6 - 240 mm² HR 5 in plastic case, 9-pce.



### Suitable for

- Tubular cable lugs and connectors - Cu, standard type

| Part No. |
|---|
| **HR5SET** |

## Crimping dies HIS 5



### Suitable for

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HIS510** | 5 |
| 16 | **HIS516** | 5 |
| 25 | **HIS525** | 5 |
| 35 | **HIS535** | 5 |
| 50 | **HIS550** | 5 |
| 70 | **HIS570** | 5 |
| 95 | **HIS595** | 5 |

## Crimping dies blue connection® HB 5



Accurate assignment of crimping tool/crimping die through colour-coding system

### Suitable for

- Tubular cable lugs and connectors, blue connection® for compacted conductors acc. to DIN EN 60228 Class 2

| Cross section mm² | Part No. | Crimp width mm | Number of crimps |
|---|---|---|---|
| 6 + 35 | **HB5635** | 9 | 1 |
| 10 + 50 | **HB51050** | 9 | 1 |
| 16 + 70 | **HB51670** | 9 | 1 |
| 25 + 95 | **HB52595** | 9 | 1 |
| 120 | **HB5120** | 5 | 2 |
| 150 | **HB5150** | 5 | 2 |
| 185 | **HB5185** | 5 | 2 |

## Crimping die set, 6 - 185 mm² blue connection® HB 5 in plastic case, 8-pce.



**Suitable for**

- Tubular cable lugs and connectors, blue connection® for compacted conductors acc. to DIN EN 60228 Class 2

| Part No. |
|---|
| **HB5SET** |

## Crimping dies HF 5



**Suitable for**

- Tubular cable lugs and connectors for fine stranded conductors

| Cross section mm² | Part No. |
|---|---|
| 10 | **HF510** |
| 16 | **HF516** |
| 25 | **HF525** |
| 35 | **HF535** |
| 50 | **HF550** |

## Crimping dies HD 5



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 6 + 35 | **HD5635** | 5 + 12 | 5 |
| 10 + 50 | **HD51050** | 6 + 14 | 5 |
| 16 + 70 | **HD51670** | 8 + 16 | 5 |
| 25 + 95 | **HD52595** | 10 + 18 | 5 |
| 120 | **HD5120** | 20 | 5 |
| 150 | **HD5150** | 22 | 5 |
| 185 | **HD5185** | 25 | 5 |

## Crimping die set, 6 - 185 mm² HD 5 in plastic case, 8-pce.



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Part No. |
|---|
| **HD5SET** |

## Crimping dies HQ 5



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu

| Cross section mm² | Part No. |
|---|---|
| 10 | **HQ510** |
| 16 | **HQ516** |
| 25 | **HQ525** |
| 35 | **HQ535** |
| 50 | **HQ550** |

## Crimping dies HRU 5



**Suitable for**

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

| Nominal cross section mm² se | Nominal cross section mm² sm | Part No. | Conductor dia. mm | Pre-rounding width mm |
|---|---|---|---|---|
| | 10 | **HRU510** | 4.1 | 12 |
| | 16 | **HRU516** | 5.1 | 12 |
| 35 | 25 | **HRU53525** | 6.3 | 12 |
| 50 | 35 | **HRU55035** | 7.5 | 12 |
| 70 | 50 | **HRU57050** | 9 | 12 |
| 95 | 70 | **HRU59570** | 10.5 | 12 |
| 120 | 95 | **HRU512095** | 12.5 | 12 |
| 150 | 120 | **HRU5150120** | 14 | 12 |
| 185 | 150 | **HRU5185150** | 15.7 | 12 |
| 240 | 185 | **HRU5240185** | 17.5 | 12 |
| 300 | 240 | **HRU5300240** | 20.3 | 12 |

## Crimping dies HA 5



**Suitable for**

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **HA510** | 10 | 7 |
| 16 - 25 | **HA51625** | 12 | 7 |
| 35 | **HA535** | 14 | 7 |
| 50 | **HA550** | 16 | 7 |
| 70 | **HA570** | 18 | 7 |
| 95 - 120 | **HA595120** | 22 | 7 |
| 150 | **HA5150** | 25 | 7 |

## Crimping dies HAD 5



**Suitable for**

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 | **HAD525** | 12 | 7 |
| 35 | **HAD535** | 14 | 7 |
| 50 | **HAD550** | 16 | 7 |
| 70 | **HAD570** | 18 | 7 |
| 95 | **HAD595** | 20 | 7 |

## Crimping dies HC 5 / HMC 5



**Suitable for**

- C-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **HC516** | 5 |
| 25 | **HC525** | 5 |
| 35 | **HC535** | 5 |
| 4 | **HMC54** | 5 |
| 10 | **HMC510** | 5 |
| 35 | **HMC535** | 5 |

## Crimping dies HAE 5



**Suitable for**

- Cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HAE510** | 20 |
| 16 | **HAE516** | 20 |
| 25 | **HAE525** | 20 |
| 35 | **HAE535** | 20 |
| 50 | **HAE550** | 20 |
| 70 | **HAE570** | 20 |
| 95 | **HAE595** | 20 |

## Crimping dies HAES 5



**Suitable for**

- Cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HAES510** | 20 |
| 16 | **HAES516** | 20 |
| 25 | **HAES525** | 20 |
| 35 | **HAES535** | 20 |
| 50 | **HAES550** | 20 |
| 70 | **HAES570** | 20 |
| 95 | **HAES595** | 20 |

## Crimping dies HZAE 5



**Suitable for**

- Twin-cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **HZAE54** | 20 |
| 2 x 6 | **HZAE56** | 20 |
| 2 x 10 | **HZAE510** | 20 |
| 2 x 16 | **HZAE516** | 20 |

## Crimping dies HZAES 5



**Suitable for**

- Twin-cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **HZAES54** | 20 |
| 2 x 6 | **HZAES56** | 20 |
| 2 x 10 | **HZAES510** | 20 |
| 2 x 16 | **HZAES516** | 20 |




**K18 SERIE**



## Crimping dies R



### Suitable for

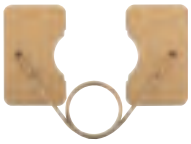
- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 6 | **R6** | 5 |
| 10 | **R10** | 5 |
| 16 | **R16** | 5 |
| 25 | **R25** | 5 |
| 35 | **R35** | 5 |
| 50 | **R50** | 5 |
| 70 | **R70** | 5 |
| 95 | **R95** | 5 |
| 120 | **R120** | 5 |
| 150 | **R150** | 5 |
| 185 | **R185** | 5 |
| 240 | **R240** | 5 |

## Crimping dies IS



### Suitable for

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **IS10** | 5 |
| 16 | **IS16** | 5 |
| 25 | **IS25** | 5 |
| 35 | **IS35** | 5 |
| 50 | **IS50** | 5 |
| 70 | **IS70** | 5 |
| 95 | **IS95** | 5 |

## Crimping dies F

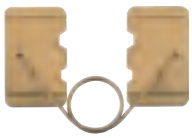


### Suitable for

- Tubular cable lugs and connectors for fine stranded conductors

| Cross section mm² | Part No. |
|---|---|
| 10 | **F10** |
| 16 | **F16** |
| 25 | **F25** |
| 35 | **F35** |
| 50 | **F50** |

## Crimping dies M



**Suitable for**

- Tubular cable lugs and connectors for solid conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 1.5 - 4 | **M154** | 5 |
| 6 - 10 | **M610** | 5 |
| 16 | **M16** | 5 |

## Crimping dies D



**Suitable for**

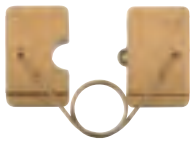
- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

**Technical instructions**

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 6 | **D6** | 5 | 5 |
| 10 | **D10** | 6 | 5 |
| 16 | **D16** | 8 | 5 |
| 25 | **D25** | 10 | 5 |
| 35 | **D35** | 12 | 5 |
| 50 | **D50** | 14 | 5 |
| 70 | **D70** | 16 | 5 |
| 95 | **D95** | 18 | 5 |
| 120 | **D120** | 20 | 5 |
| 150 | **D150** | 22 | 5 |
| 185 | **D185** | 25 | 5 |

## Crimping dies Q



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 - Cu

| Cross section mm² | Part No. |
|---|---|
| 10 | **Q10** |
| 16 | **Q16** |
| 25 | **Q25** |
| 35 | **Q35** |
| 50 | **Q50** |
| 70 | **Q70** |

## Crimping dies ISQ

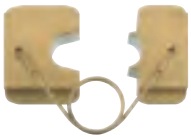


**Suitable for**

- Insulated solderless terminals and pin terminals

| Cross section mm² | Part No. |
|---|---|
| 10 | **ISQ10** |
| 16 | **ISQ16** |
| 25 | **ISQ25** |
| 35 | **ISQ35** |
| 50 | **ISQ50** |

## Crimping dies RU



### Suitable for

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

| Nominal cross section mm² se | Nominal cross section mm² sm | Part No. | Conductor dia. mm | Pre-rounding width mm |
|---|---|---|---|---|
| | 10 | **RU10** | 4.1 | 19.5 |
| | 16 | **RU16** | 5.1 | 19.5 |
| 35 | 25 | **RU3525** | 6.3 | 19.5 |
| 50 | 35 | **RU5035** | 7.5 | 19.5 |
| 70 | 50 | **RU7050** | 9.0 | 19.5 |
| 95 | 70 | **RU9570** | 10.5 | 19.5 |
| 120 | 95 | **RU12095** | 12.5 | 19.5 |
| 150 | 120 | **RU150120** | 14.0 | 19.5 |
| 185 | 150 | **RU185150** | 15.8 | 19.5 |
| 240 | 185 | **RU240185** | 17.5 | 19.5 |
| 300 | 240 | **RU300240** | 20.3 | 19.5 |

## Crimping dies A



### Suitable for

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **A10** | 10 | 7 |
| 16 - 25 | **A1625** | 12 | 7 |
| 35 | **A35** | 14 | 7 |
| 50 | **A50** | 16 | 7 |
| 70 | **A70** | 18 | 7 |
| 95 - 120 | **A95120** | 22 | 7 |
| 150 | **A150** | 25 | 7 |
| 185 | **A185** | 28 | 7 |

## Crimping dies AD



### Suitable for

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182

### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 | **AD25** | 12 | 7 |
| 35 | **AD35** | 14 | 7 |
| 50 | **AD50** | 16 | 7 |
| 70 | **AD70** | 18 | 7 |
| 95 | **AD95** | 20 | 7 |

## Crimping dies C / MC

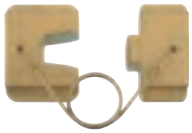


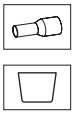
### Suitable for

- C-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **C16** | 5 |
| 25 | **C25** | 5 |
| 35 | **C35** | 5 |
| 50 | **C50** | 5 |
| 4 - 4 | **MC4** | 5 |
| 10 - 10 | **MC10** | 5 |
| 10 - 16<br>10 - 25<br>10 - 35 | **MC35** | 5 |

## Crimping dies AE



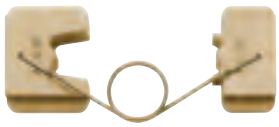


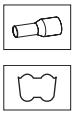
**Suitable for**

- Cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 4 | **AE4** | 20 |
| 6 | **AE6** | 20 |
| 10 | **AE10** | 20 |
| 16 | **AE16** | 20 |
| 25 | **AE25** | 20 |
| 35 | **AE35** | 20 |
| 50 | **AE50** | 20 |
| 70 | **AE70** | 20 |
| 95 | **AE95** | 20 |

## Crimping dies AES



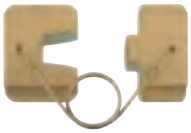


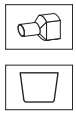
**Suitable for**

- Cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **AES10** | 20 |
| 16 | **AES16** | 20 |
| 25 | **AES25** | 20 |
| 35 | **AES35** | 20 |
| 50 | **AES50** | 20 |
| 70 | **AES70** | 20 |
| 95 | **AES95** | 20 |
| 4 | **AE4** | 20 |
| 6 | **AE6** | 20 |

## Crimping dies ZAE





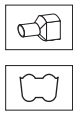
**Suitable for**

- Twin-cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **ZAE4** | 20 |
| 2 x 6 | **ZAE6** | 20 |
| 2 x 10 | **ZAE10** | 20 |
| 2 x 16 | **ZAE16** | 20 |

## Crimping dies ZAES





**Suitable for**

- Twin-cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 4 | **ZAES4** | 20 |
| 6 | **ZAES6** | 20 |
| 10 | **ZAES10** | 20 |
| 16 | **ZAES16** | 20 |




K22 SERIE



## Crimping dies R 22



**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 6 | **R226** | 5 |
| 10 | **R2210** | 5 |
| 16 | **R2216** | 5 |
| 25 | **R2225** | 5 |
| 35 | **R2235** | 5 |
| 50 | **R2250** | 5 |
| 70 | **R2270** | 5 |
| 95 | **R2295** | 5 |
| 120 | **R22120** | 5 |
| 150 | **R22150** | 5 |
| 185 | **R22185** | 5 |
| 240 | **R22240** | 5 |
| 300 | **R22300** | 5 |

## Crimping die set, 6 - 300 mm² R 22 in plastic case, 14-pce.



**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

| Part No. |
|---|
| **R22SET** |

## Crimping dies IS 22



**Suitable for**

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **IS2210** | 5 |
| 16 | **IS2216** | 5 |
| 25 | **IS2225** | 5 |
| 35 | **IS2235** | 5 |
| 50 | **IS2250** | 5 |
| 70 | **IS2270** | 5 |
| 95 | **IS2295** | 5 |
| 120 | **IS22120** | 5 |
| 150 | **IS22150** | 5 |

## Crimping dies, blue connection® B 22



- Accurate assignment of crimping tool/crimping die through colour-coding system

**Suitable for**

- Tubular cable lugs and connectors, blue connection® for compacted conductors acc. to DIN EN 60228 Class 2

| Cross section mm² | Part No. | Crimp width mm | Number of crimps |
|---|---|---|---|
| 6 | **B226** | 9 | 1 |
| 10 | **B2210** | 9 | 1 |
| 16 | **B2216** | 9 | 1 |
| 25 | **B2225** | 9 | 1 |
| 35 | **B2235** | 9 | 1 |
| 50 | **B2250** | 9 | 1 |
| 70 | **B2270** | 9 | 1 |
| 95 | **B2295** | 9 | 1 |
| 120 | **B22120** | 9 | 1 |
| 150 | **B22150** | 9 | 1 |
| 185 | **B22185** | 5 | 2 |
| 240 | **B22240** | 5 | 2 |
| 300 | **B22300** | 5 | 3 |

## Crimping die set 6 - 300 mm², blue connection® B22 in plastic case, 14-pce.



**Suitable for**

- Tubular cable lugs and connectors, blue connection® for compacted conductors acc. to DIN EN 60228 Class 2

| Part No. |
|---|
| **B22SET** |

## Crimping dies F 22



**Suitable for**

- Tubular cable lugs and connectors for fine stranded conductors

| Cross section mm² | Part No. |
|---|---|
| 10 | **F2210** |
| 16 | **F2216** |
| 25 | **F2225** |
| 35 | **F2235** |
| 50 | **F2250** |
| 70 | **F2270** |

## Crimping dies M 22



**Suitable for**

- Tubular cable lugs and connectors for solid conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 1.5 - 4 | **M22154** | 5 |
| 6 - 10 | **M22610** | 5 |
| 16 | **M2216** | 5 |

## Crimping dies N 22



**Suitable for**

- Tubular cable lugs and connectors - Ni
- Tubular cable lugs and connectors - stainless steel

| Cross section mm² | Part No. |
|---|---|
| 10 | **N2210** |
| 16 | **N2216** |
| 25 | **N2225** |
| 35 | **N2235** |
| 50 | **N2250** |

## Crimping dies D 22



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 6 | **D226** | 5 | 5 |
| 10 | **D2210** | 6 | 5 |
| 16 | **D2216** | 8 | 5 |
| 25 | **D2225** | 10 | 5 |
| 35 | **D2235** | 12 | 5 |
| 50 | **D2250** | 14 | 5 |
| 70 | **D2270** | 16 | 5 |
| 95 | **D2295** | 18 | 5 |
| 120 | **D22120** | 20 | 5 |
| 150 | **D22150** | 22 | 5 |
| 185 | **D22185** | 25 | 5 |
| 240 | **D22240** | 28 | 5 |
| 300 | **D22300** | 32 | 5 |

## Crimping die set, 6-300 mm² D 22 in plastic case, 14-pce.



**Suitable for**

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

| Part No. |
|---|
| **D22SET** |

## Crimping dies DP 22



**Suitable for**

- Double compression cable lugs

| Cross section mm² | Part No. | Code |
|---|---|---|
| 2 x 50 | **DP2250** | 22 DP |
| 2 x 70 | **DP2270** | 24 DP |

## Crimping dies Q 22



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 - Cu

| Cross section mm² | Part No. |
|---|---|
| 10 | **Q2210** |
| 16 | **Q2216** |
| 25 | **Q2225** |
| 35 | **Q2235** |
| 50 | **Q2250** |
| 70 | **Q2270** |

## Crimping dies ISQ 22



**Suitable for**

- Insulated solderless terminals and pin terminals

| Cross section mm² | Part No. |
|---|---|
| 10 | **ISQ2210** |
| 16 | **ISQ2216** |
| 25 | **ISQ2225** |
| 35 | **ISQ2235** |
| 50 | **ISQ2250** |
| 70 | **ISQ2270** |

## Crimping dies RU 22



**Suitable for**

- Pre-rounding of sector-shaped Al- and Cu-conductors
- 3- and 4-core sector-shaped conductors

| Nominal cross section mm² se | Nominal cross section mm² sm | Part No. | Conductor dia. mm | Pre-rounding width mm |
|---|---|---|---|---|
| | 10 | **RU2210** | 4.1 | 19.5 |
| | 16 | **RU2216** | 5.1 | 19.5 |
| 35 | 25 | **RU223525** | 6.3 | 19.5 |
| 50 | 35 | **RU225035** | 7.5 | 19.5 |
| 70 | 50 | **RU227050** | 9.0 | 19.5 |
| 95 | 70 | **RU229570** | 10.5 | 19.5 |
| 120 | 95 | **RU2212095** | 12.5 | 19.5 |
| 150 | 120 | **RU22150120** | 14.0 | 19.5 |
| 185 | 150 | **RU22185150** | 15.8 | 19.5 |
| 240 | 185 | **RU22240185** | 17.5 | 19.5 |
| 300 | 240 | **RU22300240** | 20.3 | 19.5 |

## Crimping dies A 22



**Suitable for**

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **A2210** | 10 | 7 |
| 16 - 25 | **A221625** | 12 | 7 |
| 35 | **A2235** | 14 | 7 |
| 50 | **A2250** | 16 | 7 |
| 70 | **A2270** | 18 | 7 |
| 95 - 120 | **A2295120** | 22 | 7 |
| 150 | **A22150** | 25 | 7 |
| 185 | **A22185** | 28 | 7 |
| 240 | **A22240** | 32 | 5 |
| 300 | **A22300** | 34 | 5 |

## Crimping die set, 10-300 mm² A 22 in plastic case, 11-pce.



**Suitable for**

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Part No. |
|---|
| **A22SET** |

## Crimping dies AD 22



**Suitable for**

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182
- Al-conductor acc. to DIN EN 50182, 120 - 185 mm²

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 | **AD2225** | 12 | 7 |
| 35 | **AD2235** | 14 | 7 |
| 50 | **AD2250** | 16 | 7 |
| 70 | **AD2270** | 18 | 7 |
| 95 | **AD2295** | 20 | 7 |
| 120 | **AD22120** | 25 | 7 |
| 150 - 185 | **AD22150185** | 28 | 7 |

## Crimping dies AST 22



**Suitable for**

- Compression joints acc. to DIN 48085, part 3 for Al-/St-cable acc. to DIN EN 50182
- Aluminium crimping

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 - 4 | **AST2225** | 12 | 7 |
| 35 - 6 | **AST2235** | 14 | 7 |
| 50 - 8 | **AST2250** | 16 | 7 |
| 70 - 12 | **AST2270** | 18 | 7 |
| 95 - 15 | **AST2295** | 22 | 7 |
| 120 - 20 | **AST22120** | 25 | 7 |

## Crimping dies ST 22



**Suitable for**

- Compression joints acc. to DIN 48085, part 3 for Al-/St-cable acc. to DIN EN 50182
- Steel crimping

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 - 4<br>35 - 6 | **ST2246** | 6 | 5 |
| 50 - 8 | **ST228** | 7 | 5 |
| 70 - 12<br>95 - 15 | **ST221215** | 9 | 5 |
| 120 - 20 | **ST2220** | 13 | 5 |

## Crimping dies C 22 / MC 22



**Suitable for**

- C-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **C2216** | 5 |
| 25 | **C2225** | 5 |
| 35 | **C2235** | 5 |
| 50 | **C2250** | 5 |
| 70 | **C2270** | 5 |
| 4 - 4 | **MC224** | 5 |
| 10 - 10 | **MC2210** | 5 |
| 10 - 1<br>10 - 25<br>35 - 35 | **MC2235** | 5 |
| 50 | **MC2250** | 5 |

## Crimping dies H 22



**Suitable for**

- H-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 70 | **H2270** | 5 |

## Crimping dies AES 22



### Suitable for

- Cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

### Additional information

- * = Not suitable for THK 22 due to opening width

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **AES2210S** | 21 |
| 16 | **AES2216S** | 21 |
| 25 | **AES2225S** | 21 |
| 35 | **AES2235S** | 21 |
| 50 | **AES2250S** | 21 |
| 70 | **AES2270S** | 21 |
| 95 | **AES2295S** | 21 |
| 120 | **AES22120S** | 21 |
| 150 | **AES22150S** | 21 |
| 185 * | **AES22185S** | 21 |
| 240 * | **AES22240S** | 21 |

## Crimping dies ZAE 22



### Suitable for

- Twin-cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **ZAE224** | 21 |
| 2 x 6 | **ZAE226** | 21 |
| 2 x 10 | **ZAE2210** | 21 |
| 2 x 16 | **ZAE2216** | 21 |

## Crimping dies ZAES 22



### Suitable for

- Twin-cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 2 x 4 | **ZAES224** | 21 |
| 2 x 6 | **ZAES226** | 21 |
| 2 x 10 | **ZAES2210** | 21 |
| 2 x 16 | **ZAES2216** | 21 |


HK 120/30


HK 120/42


HK 120 U


EK 120/32


EK 120/42

**K13 SERIE**




EK 120 UNV


EK 120 U


EK 135 FT


THK 120


HK 12/2 EL/380


PK 120/42


PK 120 U

## Crimping dies HR 13



### Suitable for

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

### Additional information

- * = Narrow crimping (crimp 5 x)

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **HR1316** | 10 |
| 25 | **HR1325** | 10 |
| 35 | **HR1335** | 10 |
| 50 | **HR1350** | 13 |
| 70 | **HR1370** | 13 |
| 95 | **HR1395** | 14 |
| 120 | **HR13120** | 14 |
| 150 | **HR13150** | 14 |
| 185 | **HR13185** | 11 |
| 240 | **HR13240** | 11 |
| 300 | **HR13300** | 11 |
| 400 * | **HR13400** | 5 |

## Crimping dies HIS 13



### Suitable for

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HIS1310** | 5 |
| 16 | **HIS1316** | 5 |
| 25 | **HIS1325** | 5 |
| 35 | **HIS1335** | 5 |
| 50 | **HIS1350** | 5 |
| 70 | **HIS1370** | 5 |
| 95 | **HIS1395** | 5 |
| 120 | **HIS13120** | 5 |
| 150 | **HIS13150** | 5 |

## Crimping dies HF 13



### Suitable for

- Tubular cable lugs and connectors for fine stranded conductors

| Cross section mm² | Part No. |
|---|---|
| 10 | **HF1310** |
| 16 | **HF1316** |
| 25 | **HF1325** |
| 35 | **HF1335** |
| 50 | **HF1350** |
| 70 | **HF1370** |
| 95 | **HF1395** |
| 120 | **HF13120** |
| 150 | **HF13150** |

## Crimping dies HN 13, Double indent crimping

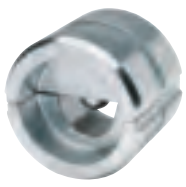


### Suitable for

- Tubular cable lugs and connectors - Ni
- Tubular cable lugs and connectors - stainless steel

| Cross section mm² | Part No. |
|---|---|
| 10 | **HN1310** |
| 16 | **HN1316** |
| 25 | **HN1325** |
| 35 | **HN1335** |
| 50 | **HN1350** |

## Crimping dies HN 13, Indent crimping



### Suitable for

- Tubular cable lugs and connectors - Ni
- Tubular cable lugs and connectors - stainless steel

| Cross section mm² | Part No. |
|---|---|
| 70 | **HN1370** |
| 95 | **HN1395** |

## Crmping dies HD 13



### Suitable for

- Compression cable lugs to DIN 46235 - Cu
- Compression joints to DIN 46267, part 1 - Cu

### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

### Additional information

- * = Narrow crimping (crimp 5 x)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **HD1310** | 6 | 10 |
| 16 | **HD1316** | 8 | 10 |
| 25 | **HD1325** | 10 | 10 |
| 35 | **HD1335** | 12 | 10 |
| 50 | **HD1350** | 14 | 13 |
| 70 | **HD1370** | 16 | 13 |
| 95 | **HD1395** | 18 | 14 |
| 120 | **HD13120** | 20 | 14 |
| 150 | **HD13150** | 22 | 10 |
| 185 | **HD13185** | 25 | 10 |
| 240 | **HD13240** | 28 | 10 |
| 300 * | **HD13300** | 32 | 7 |

## Crimping dies HDP 13



### Suitable for

- Double compression cable lugs

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 2 x 50 | **HDP1350** | 22 DP | 12 |
| 2 x 70 | **HDP1370** | 24 DP | 12 |
| 2 x 95 | **HDP1395** | 29 DP | 12 |
| 2 x 120 | **HDP13120** | 32 DP | 12 |

## Crimping dies HQ 13



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 - Cu

| Cross section mm² | Part No. |
|---|---|
| 10 | **HQ1310** |
| 16 | **HQ1316** |
| 25 | **HQ1325** |
| 35 | **HQ1335** |
| 50 | **HQ1350** |
| 70 | **HQ1370** |
| 95 | **HQ1395** |
| 120 | **HQ13120** |
| 150 | **HQ13150** |

## Crimping dies HISQ 13



**Suitable for**

- Insulated solderless terminals and pin terminals

| Cross section mm² | Part No. |
|---|---|
| 10 | **HISQ1310** |
| 16 | **HISQ1316** |
| 25 | **HISQ1325** |
| 35 | **HISQ1335** |
| 50 | **HISQ1350** |
| 70 | **HISQ1370** |
| 95 | **HISQ1395** |

## Crimping dies HRU 13



**Suitable for**

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

| Nominal cross section mm² se | Nominal cross section mm² sm | Part No. | Conductor dia. mm | Pre-rounding width mm |
|---|---|---|---|---|
| | 10 | **HRU1310** | 4.1 | 35 |
| | 16 | **HRU1316** | 5.1 | 35 |
| 35 | 25 | **HRU133525** | 6.3 | 35 |
| 50 | 35 | **HRU135035** | 7.5 | 35 |
| 70 | 50 | **HRU137050** | 9.0 | 35 |
| 95 | 70 | **HRU139570** | 10.5 | 35 |
| 120 | 95 | **HRU1312095** | 12.5 | 35 |
| 150 | 120 | **HRU13150120** | 14.0 | 35 |
| 185 | 150 | **HRU13185150** | 15.8 | 35 |
| 240 | 185 | **HRU13240185** | 17.5 | 35 |
| 300 | 240 | **HRU13300240** | 20.3 | 35 |
| | 300 | **HRU13300SM** | 22.5 | 35 |

## Crimping dies HA 13






### Suitable for

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

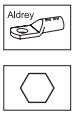
### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **HA1310** | 10 | 12 |
| 16 - 25 | **HA131625** | 12 | 12 |
| 35 | **HA1335** | 14 | 12 |
| 50 | **HA1350** | 16 | 12 |
| 70 | **HA1370** | 18 | 12 |
| 95 - 120 | **HA1395120** | 22 | 14 |
| 150 | **HA13150** | 25 | 14 |
| 185 | **HA13185** | 28 | 14 |
| 240 | **HA13240** | 32 | 17 |
| 300 | **HA13300** | 34 | 17 |

## Crimping dies HAD 13






### Suitable for

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182
- Al-conductor acc. to DIN EN 50182, 120 - 185 mm²

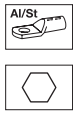
### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 | **HAD1325** | 12 | 12 |
| 35 | **HAD1335** | 14 | 12 |
| 50 | **HAD1350** | 16 | 12 |
| 70 | **HAD1370** | 18 | 12 |
| 95 | **HAD1395** | 20 | 14 |
| 120 | **HAD13120** | 25 | 14 |
| 150 - 185 | **HAD13150185** | 28 | 14 |

## Crimping dies HAST 13






### Suitable for

- Compression joints acc. to DIN 48085, part 3 for Al-/St-cable acc. to DIN EN 50182
- Aluminium crimping

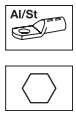
### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 - 4 | **HAST1325** | 12 | 12 |
| 35 - 6 | **HAST1335** | 14 | 12 |
| 50 - 8 | **HAST1350** | 16 | 12 |
| 70 - 12 | **HAST1370** | 18 | 12 |
| 95 - 15 | **HAST1395** | 22 | 14 |
| 120 - 20 | **HAST13120** | 25 | 14 |

## Crimping dies HST 13






### Suitable for

- Compression joints acc. to DIN 48085, part 3 for Al-/St-cable acc. to DIN EN 50182
- Steel crimping

### Technical instructions

- For connectors, refer to the installation instructions in the technical appendix, page i-8

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 - 4<br>35 - 6 | **HST1346** | 6 | 12 |
| 50 - 8 | **HST138** | 7 | 12 |
| 70 - 12<br>95 - 15 | **HST131215** | 9 | 12 |
| 120 - 20 | **HST1320** | 13 | 12 |

## Crimping dies HC 13 / HMC 13



**Suitable for**

- C-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **HC1316** | 16 |
| 25 | **HC1325** | 17 |
| 35 | **HC1335** | 20 |
| 50 | **HC1350** | 20 |
| 70 | **HC1370** | 20 |
| 10 - 10 | **HMC1310** | 13 |
| 10 - 16<br>10 - 25<br>35 - 35 | **HMC1335** | 18 |
| 25 - 50<br>50 - 50 | **HMC1350** | 20 |
| 35 - 70 | **HMC1370** | 20 |

## Crimping dies HAH 13



**Suitable for**

- H-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 70 | **HAH1370** | 30 |
| 95 | **HAH1395** | 30 |
| 120 | **HAH13120** | 20 |

## Crimping dies HAE 13



**Suitable for**

- Cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 25 | **HAE1325** | 20 |
| 35 | **HAE1335** | 20 |
| 50 | **HAE1350** | 26 |
| 70 | **HAE1370** | 26 |
| 95 | **HAE1395** | 26 |
| 120 | **HAE13120** | 26 |
| 150 | **HAE13150** | 26 |
| 185 | **HAE13185** | 26 |
| 240 | **HAE13240** | 35 |

## Crimping dies HAES 13



**Suitable for**

- Cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 25 | **HAES1325** | 20 |
| 35 | **HAES1335** | 20 |
| 50 | **HAES1350** | 20 |
| 70 | **HAES1370** | 20 |
| 95 | **HAES1395** | 20 |
| 120 | **HAES13120** | 20 |
| 150 | **HAES13150** | 35 |
| 185 | **HAES13185** | 35 |
| 240 | **HAES13240** | 35 |

# K15 SERIE



EK 135 FT

## Crimping dies HR 15

NEW



### Suitable for

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

### Additional information

- * = Narrow crimping (crimp 5 x)
  ** = Narrow crimping (crimp 6 x)

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 500 * | **HL15500** | 10 |
| 630 ** | **HL15630** | 8 |

## Crimping dies HD 15

NEW



### Suitable for

- Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

### Additional information

- * = Narrow crimping (crimp 7 x)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 400 * | **HD15400** | 38 | 7 |
| 500 * | **HD15500** | 42 | 7 |
| 625 * | **HD15625** | 44 | 7 |

## Crimping dies HA 15

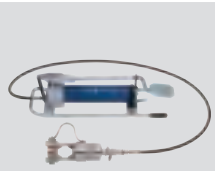
NEW



### Suitable for

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 400 | **HA15400** | 38 | 15 |
| 500 | **HA15500** | 44 | 15 |



HK 25/2



HK 25/2 EL/380



PK 25/2

K25 SERIE



## Crimping dies HR 25



**Suitable for**

- Tubular cable lugs and connectors - Cu, standard type
- Tubular cable lugs for switchgear connections

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **HR2516** | 10 |
| 25 | **HR2525** | 10 |
| 35 | **HR2535** | 10 |
| 50 | **HR2550** | 13 |
| 70 | **HR2570** | 13 |
| 95 | **HR2595** | 15 |
| 120 | **HR25120** | 15 |
| 150 | **HR25150** | 20 |
| 185 | **HR25185** | 20 |
| 240 | **HR25240** | 20 |
| 300 | **HR25300** | 20 |
| 400 | **HR25400** | 20 |
| 500 | **HR25500** | 20 |

## Crimping dies HIS 25



**Suitable for**

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 10 | **HIS2510** | 7 |
| 16 | **HIS2516** | 7 |
| 25 | **HIS2525** | 8 |
| 35 | **HIS2535** | 8 |
| 50 | **HIS2550** | 10 |
| 70 | **HIS2570** | 12 |
| 95 | **HIS2595** | 14 |
| 120 | **HIS25120** | 14 |
| 150 | **HIS25150** | 16 |

## Crimping dies HF 25



**Suitable for**

- Tubular cable lugs and connectors for fine stranded conductors

| Cross section mm² | Part No. |
|---|---|
| 16 | **HF2516** |
| 25 | **HF2525** |
| 35 | **HF2535** |
| 50 | **HF2550** |
| 70 | **HF2570** |
| 95 | **HF2595** |
| 120 | **HF25120** |
| 150 | **HF25150** |
| 185 | **HF25185** |
| 240 | **HF25240** |
| 300 | **HF25300** |

## Crimping dies HD 25



**Suitable for**

- Compression cable lugs to DIN 46235 - Cu
- Compression joints to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 16 | **HD2516** | 8 | 10 |
| 25 | **HD2525** | 10 | 10 |
| 35 | **HD2535** | 12 | 10 |
| 50 | **HD2550** | 14 | 13 |
| 70 | **HD2570** | 16 | 13 |
| 95 | **HD2595** | 18 | 14 |
| 120 | **HD25120** | 20 | 14 |
| 150 | **HD25150** | 22 | 15 |
| 185 | **HD25185** | 25 | 15 |
| 240 | **HD25240** | 28 | 15 |
| 300 | **HD25300** | 32 | 17 |
| 400 | **HD25400** | 38 | 17 |
| 500 | **HD25500** | 42 | 17 |
| 625 | **HD25625** | 44 | 15 |

## Crimping dies HDP 25



**Suitable for**

- Double compression cable lugs

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 2 x 50 | **HDP2550** | 22 DP | 15 |
| 2 x 70 | **HDP2570** | 24 DP | 15 |
| 2 x 95 | **HDP2595** | 29 DP | 15 |
| 2 x 120 | **HDP25120** | 32 DP | 15 |

## Crimping dies HQ 25



**Suitable for**

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 - Cu

| Cross section mm² | Part No. |
|---|---|
| 16 | **HQ2516** |
| 25 | **HQ2525** |
| 35 | **HQ2535** |
| 50 | **HQ2550** |
| 70 | **HQ2570** |
| 95 | **HQ2595** |
| 120 | **HQ25120** |
| 150 | **HQ25150** |
| 185 | **HQ25185** |
| 240 | **HQ25240** |

## Crimping dies HISQ 25



**Suitable for**

- Insulated solderless terminals and pin terminals

| Cross section mm² | Part No. |
|---|---|
| 10 | **HISQ2510** |
| 16 | **HISQ2516** |
| 25 | **HISQ2525** |
| 35 | **HISQ2535** |
| 50 | **HISQ2550** |
| 70 | **HISQ2570** |
| 95 | **HISQ2595** |
| 120 | **HISQ25120** |
| 150 | **HISQ25150** |

## Crimping dies HRU 25



**Suitable for**

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

| Nominal cross section mm² se | Nominal cross section mm² sm | Part No. | Conductor dia. mm | Pre-rounding width mm |
|---|---|---|---|---|
| | 10 | **HRU2510** | 4.1 | 40 |
| | 16 | **HRU2516** | 5.1 | 40 |
| 35 | 25 | **HRU253525** | 6.3 | 40 |
| 50 | 35 | **HRU255035** | 7.5 | 40 |
| 70 | 50 | **HRU257050** | 9.0 | 40 |
| 95 | 70 | **HRU259570** | 10.5 | 40 |
| 120 | 95 | **HRU2512095** | 12.5 | 40 |
| 150 | 120 | **HRU25150120** | 14.0 | 40 |
| 185 | 150 | **HRU25185150** | 15.8 | 40 |
| 240 | 185 | **HRU25240185** | 17.5 | 40 |
| 300 | 240 | **HRU25300240** | 20.3 | 40 |
| | 300 | **HRU25300SM** | 22.5 | 40 |

## Crimping dies HA 25



**Suitable for**

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 10 | **HA2510** | 10 | 12 |
| 16 - 25 | **HA251625** | 12 | 12 |
| 35 | **HA2535** | 14 | 12 |
| 50 | **HA2550** | 16 | 12 |
| 70 | **HA2570** | 18 | 12 |
| 95 - 120 | **HA2595120** | 22 | 14 |
| 150 | **HA25150** | 25 | 14 |
| 185 | **HA25185** | 28 | 14 |
| 240 | **HA25240** | 32 | 17 |
| 300 | **HA25300** | 34 | 17 |
| 400 | **HA25400** | 38 | 17 |
| 500 | **HA25500** | 44 | 15 |

## Crimping dies HAD 25



**Suitable for**

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182
- Al-conductor acc. to DIN EN 50182, 120 - 300 mm²

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 | **HAD2525** | 12 | 12 |
| 35 | **HAD2535** | 14 | 12 |
| 50 | **HAD2550** | 16 | 12 |
| 70 | **HAD2570** | 18 | 12 |
| 95 | **HAD2595** | 20 | 14 |
| 120 | **HAD25120** | 25 | 14 |
| 150 - 185 | **HAD25150185** | 28 | 14 |
| 240 | **HAD25240** | 34 | 17 |
| 300 | **HAD25300** | 38 | 17 |

## Crimping dies HAST 25



**Suitable for**

- Compression joints acc. to DIN 48085, part 3 for Al-/St-cable acc. to DIN EN 50182
- Aluminium crimping

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 - 4 | **HAST2525** | 12 | 12 |
| 35 - 6 | **HAST2535** | 14 | 12 |
| 50 - 8 | **HAST2550** | 16 | 12 |
| 70 - 12 | **HAST2570** | 18 | 12 |
| 95 - 15 | **HAST2595** | 22 | 14 |
| 120 - 20 | **HAST25120** | 25 | 14 |

## Crimping dies HST 25



**Suitable for**

- Compression joints acc. to DIN 48085, part 3 for Al-/St-cable acc. to DIN EN 50182
- Steel crimping

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 25 - 4; 35 - 6 | **HST2546** | 6 | 14 |
| 50 - 8 | **HST258** | 7 | 14 |
| 70 - 12; 95 - 15 | **HST251215** | 9 | 14 |
| 120 - 20 | **HST2520** | 13 | 14 |

## Crimping dies HC 25 / HMC 25



**Suitable for**

- C-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 16 | **HC2516** | 16 |
| 25 | **HC2525** | 17 |
| 35 | **HC2535** | 20 |
| 50 | **HC2550** | 20 |
| 70 | **HC2570** | 20 |
| 95 | **HC2595** | 20 |
| 10 - 16; 10 - 25; 35 - 35 | **HMC2535** | 18 |
| 25 - 50; 50 - 50 | **HMC2550** | 20 |
| 35 - 70 | **HMC2570** | 20 |
| 35 - 95; 70 - 95 | **HMC2595** | 20 |
| 120 - 120 | **HMC25120** | 20 |
| 150 - 150 | **HMC25150** | 20 |
| 185 - 185 | **HMC25185** | 20 |

## Crimping dies HAH 25



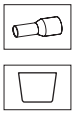
**Suitable for**

- H-clamps

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 70 | **HAH2570** | 20 |
| 95 | **HAH2595** | 20 |
| 120 | **HAH25120** | 30 |

## Crimping dies HAE 25





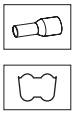
**Suitable for**

- Cable end-sleeves

| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 25 | **HAE2525** | 20 |
| 35 | **HAE2535** | 20 |
| 50 | **HAE2550** | 26 |
| 70 | **HAE2570** | 26 |
| 95 | **HAE2595** | 26 |
| 120 | **HAE25120** | 26 |
| 150 | **HAE25150** | 26 |
| 185 | **HAE25185** | 26 |
| 240 | **HAE25240** | 26 |

## Crimping dies HAES 25



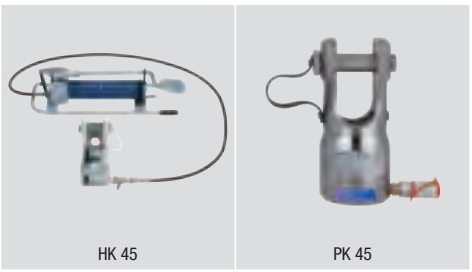


**Suitable for**

- Cable end-sleeves
- Special trapezoid crimp for fine stranded conductors

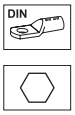
| Cross section mm² | Part No. | Crimp width mm |
|---|---|---|
| 25 | **HAES2525** | 20 |
| 35 | **HAES2535** | 20 |
| 50 | **HAES2550** | 26 |
| 70 | **HAES2570** | 26 |
| 95 | **HAES2595** | 26 |
| 120 | **HAES25120** | 26 |
| 150 | **HAES25150** | 26 |
| 185 | **HAES25185** | 26 |
| 240 | **HAES25240** | 26 |

# K45 SERIE




## Crimping dies HD 45






**Suitable for**

- Compression cable lugs to DIN 46235 - Cu
- Compression joints to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 120 | **HD45120** | 20 | 15 |
| 150 | **HD45150** | 22 | 15 |
| 185 | **HD45185** | 25 | 15 |
| 240 | **HD45240** | 28 | 15 |
| 300 | **HD45300** | 32 | 17 |
| 400 | **HD45400** | 38 | 17 |
| 500 | **HD45500** | 42 | 17 |
| 625 | **HD45625** | 44 | 17 |
| 800 | **HD45800** | 52 | 20 |
| 1000 | **HD451000** | 58 | 20 |

## Crimping dies HA 45





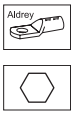

**Suitable for**

- Compression cable lugs and connectors to DIN - Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 150 | **HA45150** | 25 | 15 |
| 185 | **HA45185** | 28 | 15 |
| 240 | **HA45240** | 32 | 17 |
| 300 | **HA45300** | 34 | 20 |
| 400 | **HA45400** | 38 | 20 |
| 500 | **HA45500** | 44 | 20 |

## Crimping dies HAD 45






**Suitable for**

- Compression joints for full tension connections of Aldrey conductors according to DIN EN 50182
- Al-conductor acc. to DIN EN 50182, 150 - 300 mm²

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 150 - 185 | **HAD45150185** | 28 | 20 |
| 240 | **HAD45240** | 34 | 20 |
| 300 | **HAD45300** | 38 | 20 |


PK 1000

K100 SERIE



## Crimping dies HD 100

NEW

DIN



**Suitable for**

- Compression cable lugs to DIN 46235 - Cu
- Compression joints to DIN 46267, part 1 - Cu

| Cross section mm² | Part No. | Code | Crimp width mm |
|---|---|---|---|
| 625 | **HD100625** | 44 | 60 |
| 800 | **HD100800** | 52 | 75 |
| 1000 | **HD1001000** | 58 | 40 |

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# Cutting

4


| | |
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| **Safety cutting tools** | **406** |
| **Special cutting tools** | **410** |
| DIN rail cutting tools | 411 |
| Wiring duct cutter | 412 |
| Cutting dies | 412 |

# PERFECT CUTTING - MECHANICAL CUTTING TOOLS

In use, every cut must sit straight away. Our mechanical cutting tools are prepared for your work. The ergonomic handle is there to assist you, because the first moment, the typical Klauke lever technology optimally transfers your force. Your cuts are precise, the tools are easy to use and durable thanks to high material quality. Good first impression.




**In brief**

- Cutting tools for aluminium and copper cables up to 100 mm diameter
- Simple working due to optimised force transmission
- Precise cuts with high-quality cutting blades
- Effortless operations thanks to ergonomic shape

## For everyday use

Klauke cutting tools are made from high-quality materials: “Made in Germany”. Highly durable and are therefore best suited for daily use in workshops or on the construction site.

- Cutting tools for aluminium and copper cables up to 100 mm diameter
- Also available as fully-insulated tool to 1000 V to DIN EN 60900
- Re-adjustable cutters
- Effortless operations due to low weight
- Processing of high-quality materials



## Powerful in every situation

- Compact and convenient size
- Practical single-handed operation with low effort
- Effective cutting performance up to Cu 12 mm dia.
- Reduced effort required due to different cutting profiles for large and small diameters

## Flexible in use

- Stepless telescopic handles permit optimum lever adjustment
- Cutting head can be replaced
- Well suited for fine-stranded conductors



## K 118 Hand-operated cutting tool for Al and Cu cables to 12 mm dia.



- Perfect in confined areas
- Handy shape with high cutting performance
- Exceptional cutting tool for solid, multi, fine and superfine stranded cables e.g. to DIN EN 60228, Class 1, 2, 5 and 6
- Increased user convenience thanks to two cutting profiles for small and large cable dimensions

### Characteristics

- One-hand operation

### Suitable for

- For solid conductors, class 1, to 10 mm² (max. 4 mm dia.)
- Copper stranded conductors, class 2, to 16 mm² (max. 5 mm dia.)
- Aluminium stranded conductors, class 2, to 25 mm² (max. 10 mm dia.)
- Copper fine and superfine stranded conductors, class 5 and 6, to 50 mm² (max. 12 mm dia.)

| Technical data | |
|---|---|
| Cutting range | max. 12 mm dia., e.g. 1 x 50 mm² H07VK |
| Length | 165 mm |
| Weight | 0.17 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for to 12 mm dia. | **K118** |

## K 100 Hand-operated cutting tool for Al and Cu cables to 14 mm dia.



- Optimised cutting tool for fine and multi-stranded cables

### Characteristics

- Compact design permits cutting in confined areas
- Two-hand operation

| Technical data | |
|---|---|
| Cutting range | max. 14 mm dia., e.g. 1 x 50 mm² H07VK |
| Length | 280 mm |
| Weight | 0.55 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 14 mm dia. | **K100** |

## K 102 Hand-operated cutting tool for to 25 mm dia.



- Optimised cutting tool for fine and superfine stranded Cu cables to DIN EN 60228, Cl. 5+6
- Adjustable pivot point

### Characteristics

- Handle with slip guard and inscription panel
- Two-handed locking

| Technical data | |
|---|---|
| Cutting range | max. 25 mm dia., e.g. 1 x 95 mm² H07V-K |
| Length | 210 mm |
| Weight | 0.38 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for to 25 mm dia. | **K102** |

## K 106/1 Hand-operated cutting tool for Al and Cu cables, class 2 to Ø 34 mm

NEW



- Effortless operations thanks to energy-saving 2-stage ratchet system
- Lightweight design with great cutting performance

### Characteristics

- One-hand operation
- Not suitable for cutting steel or steel wire
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Cutting range | max. 34 mm dia., e.g. 4 x 35 mm² NYY |
| Length | 260 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 34 mm dia. | **K1061** |

## K 106/2 Hand-operated cutting tool for Al and Cu cables, class 2 to Ø 62 mm

NEW



- Effortless operations thanks to energy-saving 2-stage ratchet system
- Lightweight design with great cutting performance
- Cutting range to 62 mm

### Characteristics

- One-hand operation
- Not suitable for cutting steel or steel wire
- Handle with slip guard and inscription panel

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 120 mm² NYY, max. 62 mm dia. |
| Length | 260 mm |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 62 mm dia. | **K1062** |

## K 103/1 Hand-operated cutting tool for Al and Cu cables to 60 mm dia.



- Energy-efficient 2-stage ratchet system
- For earth, plastic and rubber cables

### Characteristics

- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 240 mm² NAYY, max. 60 mm dia. |
| Length | 720 mm |
| Weight | 4.5 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 60 mm dia. | **K1031** |

## K 104/1 Hand-operated cutting tool for Al and Cu cables to 100 mm dia.



- Energy-efficient 2-stage ratchet system
- For earth, plastic and rubber cables
- Very wide cutting range up to 100 mm diameter

### Characteristics

- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 400 mm² NAYY, max. 100 mm dia. |
| Length | 870 mm |
| Weight | 5.7 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 100 mm dia. | **K1041** |

## K 130 Hand-operated cutting tool for Al and Cu cables to 30 mm dia.



- Exceptional cutting performance even with fine-stranded conductors thanks to specially designed, extremely sharp cutting blades
- Large cutting range

### Characteristics

- Safe working thanks to roughened handle
- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 35 mm² NYY, max. 30 mm dia. |
| Length | 570 mm |
| Weight | 1.7 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 30 mm dia. | **K130** |

## K 230 Hand-operated cutting tool for Al and Cu cables to 30 mm dia.



- Exceptional cutting performance even with fine-stranded conductors thanks to specially designed, extremely sharp cutting blades
- Secure grip due to roughened handle
- 1000 V fully insulated to IEC 60900

### Characteristics

- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | max. 30 mm dia., e.g. 4 x 35 mm² NYY |
| Length | 570 mm |
| Weight | 2.1 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 30 mm dia. | **K230** |

1000 V IEC 60900

## K 250 Hand-operated cutting tool for Al and Cu cables to 50 mm dia.



1000 V IEC 60900

- Exceptional cutting performance even with fine-stranded conductors thanks to specially designed, extremely sharp cutting blades
- 1000 V fully insulated to IEC 60900

### Characteristics

- Two-hand operation
- Large cutting range
- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 120 mm² NYY, max. 50 mm dia. |
| Length | 710 mm |
| Weight | 3.7 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 50 mm dia. | **K250** |

## K 150 Hand-operated cutting tool for Al and Cu cables to 50 mm dia.



- Exceptional cutting performance even with fine-stranded conductors thanks to specially designed, extremely sharp cutting blades
- Secure grip due to roughened handle

### Characteristics

- Large cutting range
- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | max. 50 mm dia., e.g. 4 x 120 mm² NYY |
| Length | 710 mm |
| Weight | 3 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 50 mm dia. | **K150** |

## K 101/1 Hand-operated cutting tool for Al and Cu cables to 26 mm dia.



- Can be maintained on-site thanks to replaceable cutting heads
- Exceptional cutting performance even with fine-stranded conductors

### Characteristics

- Two-hand operation
- Excellent leverage
- Not suitable for cutting steel or steel wire
- Safe working thanks to roughened handle

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 25 mm² NYY, max. 26 mm dia. |
| Length | 570 mm |
| Weight | 1.8 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 26 mm dia. | **K1011** |
| **Accessories** | **Part No.** |
| Replacement cutting head | K1011E |

## K 105/1 Hand-operated cutting tool for Al and Cu cables to 26 mm with telescopic handles dia.



- **Compact dimensions with extending telescopic handles for easier carrying**
- **High cutting performance**
- **Also for fine-stranded conductors e.g. to DIN EN 60228 Cl. 5**

### Characteristics

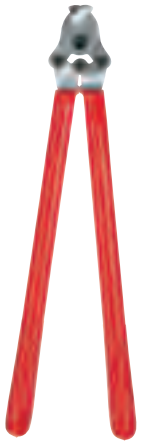
- Two-hand operation
- Maintenance on-site due to replacement of cutting heads
- Safe working thanks to roughened handle
- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | e.g. 4 x 25 mm² NYY, max. 26 mm dia. |
| Length | Stepless 350 - 520 mm |
| Weight | 1.4 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Al and Cu cables to 26 mm dia., length 350 - 520 mm continuous | **K1051** |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement cutting head | K1011E | |

## K 201/1 Hand-operated cutting tool for Al and Cu cables to 26 mm dia., length 570 mm



1000 V IEC 60900

- **1000 V fully insulated to IEC 60900**
- **High cutting performance**
- **Also for fine-stranded conductors e.g. to DIN EN 60228 Cl. 5**

### Characteristics

- Two-hand operation
- Maintenance on-site due to replacement of cutting heads
- Not suitable for cutting steel or steel wire

| Technical data | |
|---|---|
| Cutting range | max. 26 mm dia., e.g. 4 x 95 mm² NYY |
| Length | 570 mm |
| Weight | 2 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Al and Cu cables to 26 mm dia., length 570 mm | **K2011** |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement cutting head | K1011E | |

## K 101/2 Hand-operated cutting tool for Al and Cu cables to 38 mm dia.



- Large cutting range
- Telescopic handles
- Also for fine-stranded conductors e.g. to DIN EN 60228 Cl. 5
- Can be maintained on-site thanks to replaceable cutting heads

### Characteristics

- Not suitable for cutting steel or steel wire
- Safe working thanks to roughened handle

| Technical data | |
|---|---|
| Cutting range | max. 38 mm dia. |
| Length | 930 mm |
| Weight | 4.2 kg |

| Item | Part No. |
|---|---|
| Hand-operated cutting tool for Cu and Al cables to 38 mm dia. | **K1012** |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement cutting head | K1012E | |

# THE LITTLE CUTTING EXPERT - BATTERY-POWERED HYDRAULIC CUTTING TOOL (10.8 V)

The Klauke mini is lightweight yet powerful. The high-quality shears cut with an opening width of 32 mm, the bolt cutters with a 12 mm opening width. Its practical dimensions make it especially suitable for confined areas.



Klauke® mini

### Pure performance without frills

The Klauke mini concentrates on its core task: reliable cutting. Even without pressure sensor and display, the little expert does its job well - no fuss or quibble.

### Usage time at a glance

Read the charge level at any time directly from the powerful 10.8 V battery.

### All-round cutting

Cutting in confined areas? No problem with these cutting heads, which rotate through 360°.

# EBS 8 ML / EBS 12 ML Battery powered hydraulic bolt cutter 8 mm dia. / 12 mm dia.



- **For cutting cable channels, bolts and steel wire, medium-hard (e.g. ST 37)**
- **Slim cutting head - ideal when space is critical**
- **Powerful 10.8 V Li-Ion battery with charge status display**

## Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

| Technical data | |
|---|---|
| Cutting range | EBS8ML: max. 8 mm dia., EBS12ML: max. 12 mm dia. |
| Cutting force | EBS8ML: 15 kN, EBS12ML: 45 kN |
| Cutting time | EBS8ML: 2 s, EBS12ML: 4 s (depending on material thickness) |
| Number of cuts | ES8ML: 80 at silver steel 6 mm,<br>EBS12ML: 105 at mild steel 10 mm |
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah, Li-Ion |
| Charging time | approx. 40 min. |
| Weight incl. battery | EBS8ML: 1.2 kg, EBS12ML: 1.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic bolt cutting tool 8 mm dia. | **EBS8ML** |
| Battery powered hydraulic bolt cutting tool 12 mm dia. | **EBS12ML** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | RAML1 | 493 |
| Charger for 10.8 V Li-Ion batteries, 230 V | LGML1 | 495 |
| Plastic case | KKML | |

## ES 20 ML Battery powered hydraulic cutting tool 20 mm dia.



- **For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars**
- **Extremely robust design and lightweight**
- **Powerful 10.8 V Li-Ion battery technology with battery charge indicator**

### Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

| Technical data | |
|---|---|
| Cutting range | Multi-stranded max. 20 mm dia. (depending on cable type) |
| Cutting force | 23 kN |
| Cutting time | 4 s to 6 s (depending on material thickness) |
| Number of cuts | approx.160 for steel cable 8 mm |
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah, Li-Ion |
| Charging time | approx. 40 min. |
| Weight incl. battery | 1.6 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic cutting tool 20 mm dia. | **ES20ML** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | RAML1 | 493 |
| Charger for 10.8 V Li-Ion batteries, 230 V | LGML1 | 495 |
| Plastic case | KKML | |

| Accessories | Part No. |
|---|---|
| Replacement blade | **ES20E** |

# ES 32 ML / ES 32 F ML Battery powered hydraulic cutting tools 32 mm dia.



- Cuts multi-stranded copper and aluminium cables (ES 32 ML)
- Cuts fine and superfine stranded copper cables (ES 32 F ML)
- Slim cutting head - ideal when space is critical
- Powerful 10.8 V Li-Ion battery technology with battery charge indicator

## Characteristics

- Open head, rotatable
- Electronic control and monitoring of operation
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

| Technical data | |
|---|---|
| Cutting range | max. 32 mm dia. |
| Cutting force | 15 kN |
| Cutting time | 8 s to 10 s (depending on material thickness) |
| Number of cuts | ES32ML: approx. 90 at 150 mm² NYY,<br>ES32FML: approx. 120 at H07V-K 185 mm² |
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah, Li-Ion |
| Charging time | approx. 40 min. |
| Weight incl. battery | 1.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic cutting tool 32 mm dia. | **ES32ML** |
| Battery powered hydraulic cutting tool 32 mm dia., superfine-stranded | **ES32FML** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | RAML1 | 493 |
| Charger for 10.8 V Li-Ion batteries, 230 V | LGML1 | 495 |
| Plastic case | KKML | |

| Accessories | Part No. |
|---|---|
| Replacement blade set | **ES32E** |
| Replacement blade set for fine and superfine stranded copper cables | **ES32FE** |

# THE NEW STANDARD - KLAUKE NEXT GENERATION CUTTING TOOLS

Aspire to the new standard: Battery-powered hydraulic cutting tools from Klauke offer impressive power and durability. The tools effortlessly cut cross-sections up to 105mm, with open cutting head for better accessibility or closed cutting head for improved force transmission. Improved ergonomics with optimised centre of gravity makes work more convenient and faster. Also through the time-saving opening mechanism.




**In brief**

- Freely-selectable battery platform: with Bosch or Makita
- Proof of quality can be created via Bluetooth
- Ensure tool availability: Read the tool properties from the display or via the app
- Effortless operations thanks to modern, ergonomic design

Interested in Klauke Next Generation tools? Then take a look at our Multi universal tool on Page 472 >>

## Making work easier

Klauke cutting tools guarantee effortless operations: The “mini” impresses through its low weight and the pistol shape ensures a balanced centre of gravity

- Our compact “mini” is just perfect for confined areas
- The 2-stage hydraulic system allows you to work quickly thanks to fast feed and power stroke
- Save time with the innovative opening mechanism of the cutters. They open immediately after every cut.
- Extremely impressive and reliable: The one-button control concept for all tools





## Latest developments for your everyday work

Mini design - Pure cutting force: The ESGM45 and the ESM50 impress all along the line and for every application

- Cutting made simple thanks to a new, improved cutter geometry
- Burr-free cutting of wire mesh cable trays without any rework whatsoever thanks to the new wire mesh cable tray cutter

## i-press® app

Use the i-press® app to check and control your tool data on the go. Individual tool settings, such as the double-click function for increased user safety, help make your day-to-day work simpler and more reliable - just as you need it.

**The i-press® app can be found at:**
www.klauke.com/en/service/downloads/connectivity-software/



## EBS 6 L GKS Battery powered hydraulic cable tray cutter 6 mm dia.

NEW



- No follow-up work required thanks to burr-free cutting
- Fast and efficient operations: The cut is made in less than 1 second
- Maintenance required only after 20.000 cuts (renew hydraulic shock absorber system)
- Always cut ready due to autonomous replaceable blades

### Characteristics

- Open head, rotatable
- Electronic control and monitoring of operation
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Balanced centre of gravity for easy handling and effortless operations
- LED for work area illumination
- Powerful 18 V Li-Ion battery - high capacity, short charging time
- High-performance motor for maximum operating speed
- Energy saving function with motor cut-out after successful operation
- Quick motor stop for high user safety
- Simple and safe: Automatic retraction when operation is complete
- Manual retract as required
- Multifunction LED for maintenance display and charge status display of the battery
- Environmentally-friendly hydraulic oil, quickly biodegradable

| Technical data | |
|---|---|
| Cutting range | max. 6 mm (VA) |
| Cutting force | 24 kN |
| Cutting time | < 1 s |
| Number of cuts | approx. 300 at 6 mm VA, 360 at grid channel 5 mm |
| Battery voltage | 18 V |
| Battery capacity | 1.5 Ah |
| Charging time | 15 min. |
| Weight incl. battery | 1.9 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic cable tray cutter 6 mm dia. | **EBS6LGKS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Makita battery 18 V / 1.5 Ah, Li-Ion | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 | 494 |
| Plastic case | KK50L | |

| Accessories | Part No. | Page |
|---|---|---|
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | RAL2 | 491 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | RAL40 | 492 |
| 18 V mains adapter for 230 V Voltage | NG2230 | 493 |

# EBS 8 Battery powered hydraulic bolt cutter 8 mm dia.

NEXT GENERATION



- For cutting cable trays, bolts and medium-hard steel wire (e.g. ST 37)
- Narrow crimping head - Ideal in confined areas
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- LED display for showing tool data
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Cable trays, bolts, medium-hard steel wire

| Technical data | |
|---|---|
| Cutting range | max. 8 mm dia. |
| Cutting force | 15 kN |
| Cutting time | 1 s (depending on material thickness) |
| Charging time | 15 min. |
| Weight incl. battery | 1.65 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part-No. **Bosch** | Part-No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic bolt cutting tool 8 mm dia. | **EBS8CFB** | **EBS8CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |

## EBS 12 Battery powered hydraulic bolt cutter 12 mm dia.

NEXT GENERATION



- For cutting cable trays, bolts and medium-hard steel wire (e.g. ST 37)
- Slim cutting head - ideal when space is critical
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- LED display for showing tool data
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Cable trays, bolts, medium-hard steel wire

| Technical data | |
|---|---|
| Cutting range | max. 12 mm dia. |
| Cutting force | 45 kN |
| Cutting time | 2 s (depending on cable size) |
| Charging time | 15 min. |
| Weight incl. battery | 2.1 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic bolt cutting tool 12 mm dia. | **EBS12CFB** | **EBS12CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |

# ES 20 Battery powered hydraulic cutting tool 20 mm dia.

NEXT GENERATION



- For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars
- Extremely robust design and lightweight
- Slim cutting head - ideal when space is critical
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Al/St wire (ACSR)

| Technical data | | | |
|---|---|---|---|
| Cutting range | max. 18 mm dia. (depending on cable type) | | |
| Cutting force | 23 kN | | |
| Cutting time | 2 s to 4 s (depending on cable type) | | |
| Charging time | 15 min. | | |
| Weight incl. battery | 2.0 kg | | |
| Ambient temperature | -10 °C up to +40 °C | | |
| Item | Part No. **Bosch** | Part No. **Makita** | |
| Battery powered hydraulic cutting tool 20 mm dia. | **ES20CFB** | **ES20CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |
| Accessories | | | Page |
| Replacement blade | ES20E | ES20E | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered cutting tool ES20CFB | LBOXXES20CFB | | 205 |
| L-BOXX with battery powered cutting tool ES20CFM | | LBOXXES20CFM | 205 |

## ES 20 RMC / ES 32 RMC Battery powered hydraulic cutting tool 20 mm or 32 mm dia.

NEXT GENERATION




ES 20 RMC ES 32 RMC

- Tool with remote control, e.g. for telescopic rods
- ES20RMC: For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars
- ES32RMC: Cuts multi-stranded Al/Cu cables Class 2
- Extremely robust design and lightweight
- Slim cutting head - ideal when space is critical
- All tool data in view thanks to display and i-press® app
- Powerful 18 V Li-Ion battery - high capacity, short charging time
- Can also be used as a normal cable cutter when the Hotstick holder is not attached

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless operations due to balanced centre of gravity, even when used with a telescopic rod
- LED for work area illumination
- Quick motor stop for high user safety
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Energy saving: Motor stops when the operation is complete
- Always ready-to-use thanks to battery charge and service display
- Simple one-hand operation via remote control

### ES 20 RMC suitable for

- Al/St wire (ACSR)
- Solid Al/Cu cables to DIN EN 60228 Class 1
- Laminated Cu bus-bars

### ES 32 RMC suitable for

- Multi-stranded Al/Cu cable Class 2

### Additional information

- Part number suffix for tools without battery and charger „0000“



Scope of supply for ES 20 RMC

| Technical data | |
|---|---|
| Head type | Cutter open |
| Cutting range | max. Ø 20 mm / max. Ø 32 mm |
| Cutting time | 2 s to 8 s (depending on material thickness) |
| Charging time | 15 min. |
| Weight incl. battery | 2.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 20 mm dia. | **ES20RMCCFB** | | |
| Battery powered hydraulic cutting tool 20 mm dia. | | **ES20RMCCFM** | |
| Battery powered hydraulic cutting tool 32 mm dia. | **ES32RMCCFB** | | |
| Battery powered hydraulic cutting tool 32 mm dia. | | **ES32RMCCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Bluetooth remote control | BTC2 | BTC2 | |
| Accessories | | | Page |
| Bosch battery 18 V / 4.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Replacement blade set for **ES 20 RMC** | ES20E | ES20E | |
| Replacement blade set for **ES 32 RMC** | ES32E | ES32E | |

# ESG 25 Battery powered hydraulic cutting tool 25 mm dia.

NEXT GENERATION



- For cutting Al/St cables (ACSR), round materials (Cu, Al, St) as well as armoured cables, solid structural steel and fine-stranded copper cables
- High-performance cutting characteristics for highly-flexible conductors and wire cables
- Extremely robust design and lightweight
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Al/St wire (ACSR), Cu, Al, St and armoured cables, construction steel, fine-stranded copper cable

| Technical data | |
|---|---|
| Head type | Guillotine closed |
| Cutting range | max. 25 mm dia. |
| Cutting force | 60 kN |
| Cutting time | Depending on material |
| Charging time | 15 min. |
| Weight incl. battery | 2.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 25 mm dia. | **ESG25CFB** | **ESG25CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |
| Accessories | | | Page |
| Inner moving blade | ESG25ES | | |
| Outer fixed blade | ESG25EF | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |

## ES 32 Battery powered hydraulic cutting tool 32 mm dia.

NEXT GENERATION



- Slim cutting head - ideal when space is critical
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Stranded Cu and Al cables

| Technical data | |
|---|---|
| Head type | Cutter open |
| Cutting range | max. 32 mm dia. |
| Cutting force | 15 kN |
| Cutting time | 8 s to 10 s (depending on cable type) |
| Charging time | 15 min. |
| Weight incl. battery | 2.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** |
|---|---|---|
| Battery powered hydraulic cutting tool 32 mm dia. | **ES32CFB** | **ES32CFM** |

| Scope of supply | | | Page |
|---|---|---|---|
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |

| Accessories | | | Page |
|---|---|---|---|
| Replacement blade set | ES32E | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |

| Variants | | | Page |
|---|---|---|---|
| L-BOXX with battery powered cutting tool ES32CFB | LBOXXES32CFB | | 205 |
| L-BOXX with battery powered cutting tool ES32CFM | | LBOXXES32CFM | 205 |

# ES 32 F Battery powered hydraulic cutting tool 32 mm dia. for fine and superfine stranded copper cable

NEXT GENERATION



- Cuts fine and superfine stranded copper cables
- Slim cutting head - ideal when space is critical
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Fine and superfine stranded copper cables

| Technical data | | | |
|---|---|---|---|
| Head type | Cutter open | | |
| Cutting range | max. 32 mm dia. | | |
| Cutting force | 15 kN | | |
| Cutting time | 8 s to 10 s (depending on material thickness) | | |
| Charging time | 15 min. | | |
| Weight incl. battery | 2.0 kg | | |
| Ambient temperature | -10 °C up to +40 °C | | |
| Item | Part No. **Bosch** | Part No. **Makita** | |
| Battery powered hydraulic cutting tool 32 mm dia., superfine-stranded | **ES32FCFB** | **ES32FCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |
| Accessories | | | Page |
| Replacement blade set for fine and superfine stranded copper cables | ES32FE | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered cutting tool ES32FCFB | LB0XXES32FCFB | | 205 |
| L-BOXX with battery powered cutting tool ES32FCFM | | LB0XXES32FCFM | 205 |

## ESGM 45 Battery powered hydraulic cutting tool 45 mm dia.

NEXT GENERATION



- For cutting Al/St cables (ACSR), round materials (Cu, Al, St) as well as armoured cables, solid structural steel and fine-stranded copper cables
- High-performance cutting characteristics for highly-flexible conductors and wire cables
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations

### Suitable for

- Cu and Al cables, Al/St wires (ACSR)

| Technical data | |
|---|---|
| Head type | Guillotine closed |
| Cutting range | max. 45 mm dia. |
| Cutting force | 70 kN |
| Cutting time | 8 s to 10 s (depending on material thickness) |
| Charging time | 15 min. |
| Weight incl. battery | 4.6 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 45 mm dia. | **ESGM45CFB** | **ESGM45CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KKESGM45NG | KKESGM45NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |

## SPECIALIST FOR ARMOURED CABLE + CONSTRUCTION STEEL

Thanks to its closed and rotating head, the ESGM45 is the specialist for cutting ACSR ropes, round materials (Cu, Al, St), and also armoured cable and solid construction steel, for instance. Even fine-stranded and highly-flexible conductors and wire ropes up to 45 mm can be precisely cut. As a special highlight, the tool has the innovative opening mechanism, which facilitates safe and fast operations.If an unwelcome object happens to be located between the cutters, all you need to do is release the control button. The two cutting blades then move apart straight away. This mechanism also makes sure that the tool is quickly ready to use again after a completed cut.

# ESG 45 Battery powered hydraulic cutting tool 45 mm dia.

NEXT GENERATION



- High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)
- Also suitable for round material made of Al, Cu and steel
- Extremely robust design and lightweight
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Armoured Cu and Al cables, Al/St wires

| Technical data | |
|---|---|
| Head type | Guillotine closed |
| Cutting range | max. 45 mm dia. |
| Cutting force | 70 kN |
| Cutting time | 8 s to 18 s (depending on material) |
| Charging time | 45 min. |
| Weight incl. battery | 5.9 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 45 mm dia. | **ESG45CFB** | **ESG45CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120NG | KK120NG | |
| Accessories | | | Page |
| Inner moving blade | ESG45ES1 | | |
| Outer fixed blade | ESG45EF | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## ESM 50 Battery powered hydraulic cutting tool 50 mm dia. for copper and aluminium cable

NEXT GENERATION



- For cutting copper and aluminium cables (fine-stranded also)
- Very high cutting capacity thanks to innovative cutting geometry
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Cu and Al cables (multi and fine stranded) even armoured cable

| Technical data | |
|---|---|
| Head type | Cutter open |
| Cutting range | max. 50 mm dia. |
| Cutting force | 38 kN |
| Cutting time | 8 s up to 10 s (depending on material thickness) |
| Charging time | 15 min. |
| Weight incl. battery | 3.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 50 mm dia. | **ESM50CFB** | **ESM50CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK50NG | KK50NG | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |

## A GENUINE ALL-ROUNDER!

One tool for (almost) all situations! Both multi-stranded and fine-stranded (including armoured) cables are reliably cut. So you need only require one tool for a range of applications. Thanks to new cutting geometry, the annoying jamming of strands in the cutting blades is also a thing of the past.

# ESG 55 Battery powered hydraulic cutting tool 55 mm dia.

NEXT GENERATION



- **High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)**
- **Also suitable for round material made of Al, Cu and steel**
- **120 kN cutting force for maximum output**
- **Saves time with multiple cuts thanks to innovative opening mechanism**

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- Armoured Cu and Al cables, Al/St wires

| Technical data | |
|---|---|
| Head type | Guillotine closed |
| Cutting range | max. 55 mm dia. |
| Cutting force | 120 kN |
| Cutting time | 10 s to 19 s (depending on material thickness) |
| Charging time | 45 min. |
| Weight incl. battery | 8.2 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 55 mm dia. | **ESG55CFB** | **ESG55CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120NG | KK120NG | |
| **Accessories** | | | **Page** |
| Inner moving blade | ESG55ES | | |
| Outer fixed blade | ESG55EF | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## ES 65 Battery powered hydraulic cutting tool 65 mm dia.

NEXT GENERATION



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Also suitable for fine-stranded cables (depending on cable type)
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and i-press® app

### Characteristics

- All data can be easily read via Bluetooth
- Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Cu/Al cable

| Technical data | |
|---|---|
| Head type | Cutter open |
| Cutting range | max. 65 mm dia. |
| Cutting force | 40 kN |
| Cutting time | Depending on material thickness |
| Charging time | 45 min. |
| Weight incl. battery | 6.3 kg |
| Ambient temperature | -12 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 65 mm dia. | **ES65CFB** | **ES65CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120NG | KK120NG | |
| **Accessories** | | | **Page** |
| Replacement blade | ES65E | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

# ESG 85 Battery powered hydraulic cutting tool 85 mm dia.

NEXT GENERATION



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Larger cutting area, optimum force transmission due to closed head shape
- Simple and safe: One-button operating concept for controlling all tool functions
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- lightly armoured Cu and Al cables

| Technical data | |
|---|---|
| Head type | Guillotine closed |
| Cutting range | max. 85 mm dia. |
| Cutting force | 60 kN |
| Cutting time | Depending on material thickness |
| Charging time | 45 min. |
| Weight incl. battery | 6.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 85 mm dia. | **ESG85CFB** | **ESG85CFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120NG | KK120NG | |
| **Accessories** | | | **Page** |
| Inner moving blade | ESG85ES1 | | |
| Outer fixed blade | ESG85EF1 | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## ES 85 Battery powered hydraulic cutting tool 85 mm dia.

NEXT GENERATION



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Also suitable for fine-stranded cables (depending on cable type)
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Cu and Al cable

| Technical data | |
|---|---|
| Head type | Cutter open |
| Cutting range | max. 85 mm dia. |
| Cutting force | 30 kN |
| Cutting time | Depending on material thickness |
| Charging time | 45 min. |
| Weight incl. battery | 7.2 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 85 mm dia. | **ES85CFB** | **ES85CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120NG | KK120NG | |
| Accessories | | | Page |
| Replacement blade | ES85E | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

# ESG 105 Battery powered hydraulic cutting tool 105 mm dia.

NEXT GENERATION



- Cuts copper and aluminium cables with armouring
- 120 kN cutting force for extremely wide cutting range up to 105 mm dia.
- Remarkably lightweight for tools in this performance class
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- lightly armoured Cu and Al cables

| Technical data | |
|---|---|
| Head type | Guillotine closed |
| Cutting range | max. 105 mm dia. |
| Cutting force | 120 kN |
| Cutting time | Depending on cable type |
| Charging time | 45 min. |
| Weight incl. battery | 10.7 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 105 mm dia. | **ESG105CFB** | **ESG105CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita quick-charger for 18 V Li-Ion battery | | RAL40 | 492 |
| Plastic case 450 x 370 x 105 mm | | LGL1 | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | MK105NG | MK105NG | |
| Accessories | | | Page |
| Inner moving blade | ESG105ES | | |
| Outer fixed blade | ESG105EF | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## ES 105 Battery powered hydraulic cutting tool 105 mm dia.

NEXT GENERATION



- Cuts copper and aluminium cables with lightweight steel armouring and fine-stranded conductors (depending on cable type)
- Extremely large cutting area to 105 mm dia.
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

### Suitable for

- Cu and Al cable

| Technical data | |
|---|---|
| Head type | Cutter open |
| Cutting range | max. 105 mm dia. |
| Cutting force | 74 kN |
| Cutting time | Depending on cable type |
| Charging time | 45 min. |
| Weight incl. battery | 9.6 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery powered hydraulic cutting tool 105 mm dia. | **ES105CFB** | **ES105CFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | MK105NG | MK105NG | |
| Accessories | | | Page |
| Replacement blade | ES105E | | |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

# EKM 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press® app
- Small and slim, perfect for cramped conditions

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

## Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

IEC

K22 SERIE K18 SERIE K5 SERIE

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 7 s up to 9 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round, up to 92 x 92 mm square |
| Charging time | 15 min. |
| Weight | 3.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EKM60UNVCFB** | **EKM60UNVCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Adapter for crimping dies of Series 22 | UA22 | UA22 | 478 |
| Plastic case 450 x 370 x 105 mm | KKMUNVNG | KKMUNVNG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered universal tool EKM60UNVCFB | LBOXXEKM60UNVCFB | | 205 |
| L-BOXX with battery powered universal tool EKM60UNVCFM | | LBOXXEKM60UNVCFM | 205 |

## EK 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- Fast working due to 2-stage hydraulics
- All tool data on view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 3 s to 5 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round |
| Charging time | 45 min. |
| Weight | 4.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EK60UNVCFB** | **EK60UNVCFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | UA22 | UA22 | 478 |
| Adapter for crimping dies of Series 22 | KK120UNVNG | KK120UNVNG | |

# EK 120 UNV Battery-powered hydraulic universal tool 10 - 400 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

## Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 108 kN |
| Stroke | 42 mm |
| Crimping range | 10 - 400 mm² |
| Crimping cycle | Depending on cable type |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 144 mm dia. round, up to 138 x 138 mm square |
| Charging time | 45 min. |
| Weight | 6.5 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 10 - 400 mm² | **EK120UNVCFB** | **EK120UNVCFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120UNVNG | KK120UNVNG | |
| Adapter for crimping dies | UA12TKL | UA12TKL | 478 |

# ALWAYS IN POSITION - 2 STAGES FOR MORE POWER

We promise you: Our cutting tools are powerful. The 2-stage hydraulic system uses its power to the full, the automatic retraction returns the cutter to the original position once the cut is made. Made from aluminium, it feels light in the hand.
As we said: a powerful tool!



## Comfortable all day long

Numerous cuts in succession are tiring. With the hand-operated hydraulic cutting tools, the housing and pump lever are therefore made from aluminium. The pump lever is in exactly the correct position, and so the pump movement requires only a small space - compared to a mechanical tool. Work better with the convenience of Klauke.

- Effortless operations due to the ergonomic design and low weight
- Work faster with the innovative 2-stage hydraulic system for fast feed and power stroke with counter pressure

## Adapts

All hand-operated hydraulic cutting tools have press heads that rotate through 360°. So you can work even in confined areas with flexible settings.

- Rotating heads for work in confined areas
- Extremely robust cutting heads

## Save yourself the return stroke

Your force acts in just one direction: Forwards. When the cutting process is complete, the cutting blades retract into the home position via the automatic retraction function. You save on the return path.

- Automatic retraction returns the cutting blades to the home position after the cut is made
- More reliability and shorter intervals between cutting processes
- Can be used up to a diameter of 85 mm
- Cutting force up to 120 kN
- Bolt locking of cutting blade

# HSG 45 Hand-operated hydraulic cutting tool 45 mm dia.



- Cuts armoured copper and aluminium cables and Al/St cables (ACSR)
- Also suitable for round material made of Al, Cu and steel
- Extremely sturdy design

## Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

| Technical data | |
|---|---|
| Cutting range | max. 45 mm dia. |
| Cutting force | 60 kN |
| Length | 560 mm |
| Weight | 4.9 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic cutting tool 45 mm dia. | **HSG45** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Steel carrying case for HSG 45 or HSG 50 | MK50 | |

| Accessories | | Page |
|---|---|---|
| Outer fixed blade | ESG45EF | |
| Inner moving blade | ESG45ES1 | |

## HSG 55 Hand-operated hydraulic cutting tool 55 mm dia.



- **Cuts armoured copper and aluminium cables and Al/St cables (ACSR)**
- **Also suitable for round material made of Al, Cu and steel**
- **Maximum performance thanks to 120 kN cutting force**

### Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

| Technical data | |
|---|---|
| Cutting range | max. 55 mm dia. |
| Cutting force | 120 kN |
| Length | approx. 605 mm |
| Weight | 7.3 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic cutting tool 55 mm dia. | **HSG55** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Steel carrying case for HSG 55 | MKHSG55 | |

| Accessories | | Page |
|---|---|---|
| Outer fixed blade | ESG55EF | |
| Inner moving blade | ESG55ES | |

## HSG 85/2 Hand-operated hydraulic cutting tool 85 mm dia.



- **Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)**
- **Large cutting range**
- **High user safety owed to cutting head with bolt interlock**

### Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

| Technical data | |
|---|---|
| Cutting range | max. 85 mm dia. |
| Cutting force | 60 kN |
| Length | approx. 677 mm |
| Weight | 5.9 kg |
| Ambient temperature | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic cutting tool 85 mm dia. | **HSG852** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Steel carrying case for HSG 85 | MK852 | |

| Accessories | | Page |
|---|---|---|
| Outer fixed blade | ESG85EF1 | |
| Inner moving blade | ESG85ES1 | |

# EXPAND YOUR APPLICATIONS

The correct cutting head creates a host of potentials. Get your pump ready for every application. Klauke cutting heads can be flexibly combined with Klauke system pumps (see page 484) to offer you an individual solution for every challenge.



**Improved cutting using the right cutting heads.**

| Tool | | Design | | Opening width | Cutting force kN | Application | | | | Feature |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Open head | Closed head | | | Cu / Al* | Al / St (ACSR) | Cu / Al, solid | Steel, solid | |
| SDG 45 |  | | ✔ | 45 | 60 | ✔ | ✔ | ✔ | ✔ | Especially for Al/St wires to 45 mm dia. and St, solid. |
| SDG 55 |  | | ✔ | 55 | 120 | ✔ | ✔ | ✔ | ✔ | With 120 kN cutting force, for all cables and Al/St ropes up to 55 mm diameter. |
| SDK 65 |  | ✔ | | 65 | 42 | ✔ | | | | Ideal for cutting earth cables up to 65 mm diameter. |
| SDG 85/2 |  | | ✔ | 85 | 60 | ✔ | | | | For cutting copper and aluminium cables up to 85 mm diameter. |
| SDK 85 |  | ✔ | | 85 | 30 | ✔ | | | | For cutting telecommunication and earth cables up to 85 mm diameter. |
| SDG 105 |  | | ✔ | 105 | 120 | ✔ | | ✔ | | Very wide cutting range up to 105 mm - also for armoured cables diameter. |
| SDK 105 |  | ✔ | | 105 | 74 | ✔ | | | | Also for fine stranded cables up to 105 mm diameter. |
| SDK 120 |  | ✔ | | 120 | 55 | ✔ | | | | Extremely broad cutting range up to 120 mm diameter. |

* This column also includes Cu / Al multi-stranded and Cu / Al with sheet metal and wire armouring.
** The exact cutting performance depends on the type of cable or wire.

## SDG 45 Hydraulic cutting head 45 mm dia.



- **High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)**
- **Also suitable for round material made of Al, Cu and steel**

### Characteristics

- Closed head with bolt interlock, flip open jaws
- Head with quick coupling, 360° rotatable
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

| Technical data | |
|---|---|
| Cutting range | max. 45 mm dia. |
| Cutting force | 60 kN |
| Operating pressure | max. 700 bar |
| Length | 340 mm |
| Weight | 3.8 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting head 45 mm dia. | **SDG45** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Accessories | | Page |
|---|---|---|
| Inner fixed blade | ESG45ES1 | |
| Outer moving blade | ESG45EF | |

## SDG 55 Hydraulic cutting head 55 mm dia.



- **High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)**
- **Also suitable for round material made of Al, Cu and steel**
- **120 kN cutting force for maximum output**

### Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- Ergonomic handling through grip

| Technical data | |
|---|---|
| Cutting range | max. 55 mm dia. |
| Cutting force | 120 kN |
| Operating pressure | max. 700 bar |
| Length | 380 mm |
| Weight | 5.6 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting head 55 mm dia. | **SDG55** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Accessories | | Page |
|---|---|---|
| Inner moving blade | ESG55ES | |
| Outer fixed blade | ESG55EF | |

## SDK 65 Hydraulic cutting head 65 mm dia.



- **Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)**
- **Also suitable for fine-stranded cables (depending on cable type)**
- **Safe operations due to high ground stability by double handles**
- **Improved cutting characteristics due to new cutting geometry**

### Characteristics

- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

| Technical data | |
|---|---|
| Cutting range | max. 65 mm dia. |
| Cutting force | 42 kN |
| Operating pressure | max. 700 bar |
| Length | 425 mm |
| Weight | 4.7 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting head 65 mm dia. | **SDK65** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Accessories | | Page |
|---|---|---|
| Replacement blade | ES65E | |

## SDG 85/2 Hydraulic cutting head 85 mm dia.



- High user safety owed to cutting head with bolt interlock
- Exceptionally light and compact design
- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)

### Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- Simple handling

| Technical data | |
|---|---|
| Cutting range | max. 85 mm dia. |
| Cutting force | 60 kN |
| Operating pressure | max. 700 bar |
| Length | 445 mm |
| Weight | 4.3 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting head 85 mm dia. | **SDG852** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Accessories | | Page |
|---|---|---|
| Inner moving blade | ESG85ES1 | |
| Outer fixed blade | ESG85EF1 | |

## SDK 85 Hydraulic cutting head 85 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Suitable for fine-stranded cable and telecommunication cable (depending on cable type)
- Safe operations due to high ground stability by double handles
- Improved cutting characteristics due to new cutting geometry

### Characteristics

- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- Uniform cut by knife guide

| Technical data | |
|---|---|
| Cutting range | max. 85 mm dia. |
| Cutting force | 30 kN |
| Operating pressure | max. 700 bar |
| Length | 450 mm |
| Weight | 5.2 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting head 85 mm dia. | **SDK85** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 196 |

| Accessories | | Page |
|---|---|---|
| Replacement blade | ES85E | |

## SDG 105 Hydraulic cutting head 105 mm dia.



- **Cuts copper and aluminium cables with armouring**
- **120 kN cutting force for extremely wide cutting range up to 105 mm dia.**

### Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- Compact design permits cutting in confined areas
- Simple handling
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

| Technical data | |
|---|---|
| Cutting range | max. 105 mm dia. |
| Cutting force | 120 kN |
| Operating pressure | max. 700 bar |
| Length | 432 mm |
| Weight | 7.7 kg |

| Item | Part No. | |
|---|---|---|
| Hydraulic cutting head 105 mm dia. | **SDG105** | |
| **Scope of supply** | **Part No.** | **Page** |
| Carrying bag | TT2 | 196 |
| **Accessories** | | **Page** |
| Inner moving blade | ESG105ES | |
| Outer fixed blade | ESG105EF | |

## SDK 105 Hydraulic cutting head 105 mm dia.



- **Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)**
- **Extremely wide cutting range up to 105 mm dia., also for fine-stranded cables (depending on cable type)**
- **Safe operations due to high ground stability by double handles**

### Characteristics

- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- High stability due to double grip

| Technical data | |
|---|---|
| Cutting range | max. 105 mm dia. |
| Cutting force | 74 kN |
| Operating pressure | max. 700 bar |
| Length | 510 mm |
| Weight | 7.7 kg |

| Item | Part No. | |
|---|---|---|
| Hydraulic cutting head 105 mm dia. | **SDK105** | |
| **Scope of supply** | **Part No.** | **Page** |
| Carrying bag | TT4 | 196 |
| **Accessories** | | **Page** |
| Replacement blade | ES105E | |

## SDK 120 Hydraulic cutting head 120 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Extremely wide cutting range up to 120 mm dia., also for fine-stranded cables (depending on cable type)
- Exceptionally light and compact design
- Safe operations due to high ground stability by double handles

### Characteristics

- Open head with quick coupling, 360° rotation when not pressurised
- High stability due to double grip
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

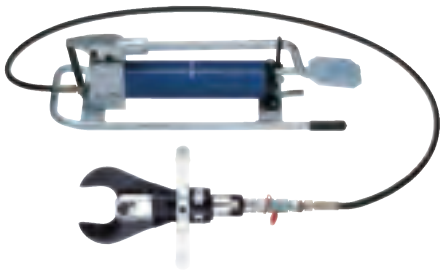
| Technical data | |
|---|---|
| Cutting range | max. 120 mm dia. |
| Cutting force | 55 kN |
| Operating pressure | max. 700 bar |
| Length | 538 mm |
| Weight | 8.7 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting head 120 mm dia. | **SDK120** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT4 | 196 |

| Accessories | | Page |
|---|---|---|
| Replacement blade | ES120E | |

## AS 65 FHP Hydraulic cutting tool with foot pump 65 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Also suitable for fine-stranded cable
- Safe operations due to high ground stability by double handles
- Foot pump with two-stage hydraulics
- Improved cutting characteristics thanks to new cutting geometry

### Characteristics

- Open head with quick coupling, 360° rotation when not pressurised
- Manual retract as required
- Hydraulic hose, 2 m

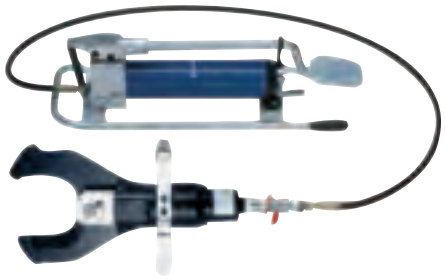
| Technical data | |
|---|---|
| Cutting range | max. 65 mm dia. |
| Operating pressure | max. 700 bar |
| Weight | 16.7 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting tool with foot pump 65 mm dia. | **AS65FHP** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Steel carrying case | MKU | 196 |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement blade | ES65E | |
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |

# AS 105 FHP / AS 120 FHP Hydraulic cutting tools for foot pump 105 and 120 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Suitable for fine-stranded cable and telecommunication cable
- Safe operations due to high ground stability by double handles
- Wide cutting range also for fine-stranded cables

## Characteristics

- Foot pump with two-stage hydraulics
- Open head with quick coupling, 360° rotation when not pressurised
- Manual retract as required
- Hydraulic hose, 2 m

| Technical data | |
|---|---|
| Cutting range | AS 105 FHP: max. 105 mm dia., AS120FHP: max. 120 mm dia. |
| Cutting force | AS105FHP: 74 kN, AS120FHP: 55 kN |
| Operating pressure | max. 700 bar |
| Weight | AS105FHP: 19.7 kg, AS120FHP: 20.7 kg |

| Item | Part No. |
|---|---|
| Hydraulic cutting tool with foot pump 105 mm dia. | **AS105FHP** |
| Hydraulic cutting tool with foot pump 120 mm dia. | **AS120FHP** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Steel carrying case | MKU | 196 |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement blade | ES105E | |
| Replacement blade | ES120E | |
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |

# OUR COMMITMENT TO YOUR SAFETY - SAFETY CUTTERS

Klauke safety cutters cut reliably with BG-tested safety. 10 m hydraulic safety hose creates adequate distance to possible hazard sources. Non-conductive hydraulic oil ensures the highest level of safety. Our cutters protect you up to a rated voltage of 60 kV.



## Safe in any application

Choose the device - foot pump, battery-powered hydraulics or portable pump unit - that suits your work. Safety in every situation.

- BG-tested safety up to 60 kV rated voltage for CU/AL cables without steel armouring
- The right safety cutters for application
- 10 m hydraulic hose for adequate distance to the hazard source

## Free head selection

Klauke safety cutters are available with various open and closed heads. Choose the right head for your application.

- The right head for every application
- Opening width up to 120 mm
- All heads rotate through 360°

# SSG Hydraulic safety cutter with foot pump to max. 105 mm dia.



- **Safety cutter for safe cutting of live Cu/Al cables without steel armouring which, in case of a failure, may carry voltages of up to 60 kV**
- **Single-core lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz**

## Characteristics

- Two-stage hydraulics
- Manual retract as required
- The cutting head is generally delivered including safety hydraulic hose (10 m)

| Technical data | SSG65 | SSGG85 | SSG105 | SSGG105 |
|---|---|---|---|---|
| Head type | open (SSK65) | closed (SSKG85) | open (SSK105) | closed (SSGG105) |
| Cutting range | max. 65 mm dia. (depending on cable type) | max. 85 mm dia. (depending on cable type) | max. 105 mm dia. (depending on cable type) | max.105 mm dia. (depending on cable type) |
| Operating pressure | 625 bar | 625 bar | 625 bar | 625 bar |
| Hydraulic oil | Special oil Rivolta S.B.H.11 | Special oil Rivolta S.B.H.11 | Special oil Rivolta S.B.H.11 | Special oil Rivolta S.B.H.11 |
| Weight | 16 kg | 16 kg | 19 kg | 19 kg |
| Ambient temperature | -20 °C up to +40 °C | -20 °C up to +40 °C | -20 °C up to +40 °C | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Hydraulic safety cutting unit with foot pump max. 65 mm dia. | **SSG65** |
| Hydraulic safety cutting unit with foot pump max. 85 mm dia. | **SSGG85** |
| Hydraulic safety cutting unit with foot pump max. 105 mm dia. | **SSG105** |
| Hydraulic safety cutting unit with foot pump max. 105 mm dia. | **SSGG105** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Earthing kit | EG1 | |
| Steel carrying case | MKSSG | |

| Accessories | Part No. | Page |
|---|---|---|
| Heat protection cover 1.8 m x 1.8 m | **HSD1** | |
| Heat protection cover 1.2 m x 0.9 m | **HSD2** | |
| Heat protection cover 0.45 m x 0.6 m | **HSD3** | |

| Replacement blade for | SSG65 | SSGG85 | SSG105 | SSGG105 |
|---|---|---|---|---|
| ES65E | • | | | |
| ES105E | | | • | |
| ESG85EF1 | | • | | |
| ESG85ES1 | | • | | |
| ESG105EF | | | | • |
| ESG105ES | | | | • |

| Replacement cutting head | SSG65 | SSGG85 | SSG105 | SSGG105 |
|---|---|---|---|---|
| SSK65 | • | | | |
| SSGG85 | | • | | |
| SSG105 | | | • | |
| SSGG105 | | | | • |

## ESSG Battery powered hydraulic safety cutter to max. 105 mm dia.



- Safety cutter for cutting live Cu/Al cables without steel armouring which, in case of a failure, may carry voltages of up to 60 kV
- Single-core lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz
- Powerful 3.3 Ah Li-Ion battery

### Characteristics

- 2-stage hydraulic system with fast feed and power stroke
- Electronic control
- Multifunction LED for maintenance display and charge status display of the battery
- LED display for service interval after 250 cuts
- The cutting head is generally delivered including safety hydraulic hose (10 m)

| Technical data | ESSG65I | ESSGG85L | ESSG105L |
|---|---|---|---|
| Head type | open (SSK65) | closed (SSKG85) | open (SSK105) |
| Cutting range | max. 65 mm dia. (depending on cable type) | max. 85 mm dia. (depending on cable type) | max. 105 mm dia. (depending on cable type) |
| Cutting force | 35 kN | 60 kN | 80 kN |
| Cutting time | approx. 21 s 40 s | approx. 21 - 40 s | approx. 21 - 40 s |
| Operating pressure | 625 bar | 625 bar | 625 bar |
| Battery voltage | 18 V | 18 V | 18 V |
| Battery capacity | 3.3 Ah, Li-Ion | 3.3 Ah, Li-Ion | 3.3 Ah, Li-Ion |
| Charging time | 60 min. | 60 min. | 60 min. |
| Hydraulic oil | Special oil Rivolta S.B.H.11 | Special oil Rivolta S.B.H.11 | Special oil Rivolta S.B.H.11 |
| Weight | 10.12 kg | 9.98 kg | 13.13 kg |
| Ambient temperature | -20 °C up to +40 °C | -20 °C up to +40 °C | -20 °C up to +40 °C |

| Item | Part No. |
|---|---|
| Battery powered hydraulic safety cutter, max. 65 mm dia. | **ESSG65I** |
| Battery powered hydraulic safety cutter, max. 85 mm dia. | **ESSGG85L** |
| Battery powered hydraulic safety cutter, max. 105 mm dia. | **ESSG105L** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 18 V / 3.3 Ah, Li-Ion (54 Wh) | RAL3 | 491 |
| Charger for 18 V Li-Ion batteries | LGL3 | 494 |
| Plastic case for ESSG65L and ESSG105L | KKESSGL | |
| Plastic case for ESSGG85L | KKESSGG85L | |
| Earthing kit | EG1 | |

| Accessories | Part No. | Page |
|---|---|---|
| Heat protection cover 1.8 m x 1.8 m | **HSD1** | |
| Heat protection cover 1.2 m x 0.9 m | **HSD2** | |
| Heat protection cover 0.45 m x 0.6 m | **HSD3** | |

| Replacement blade for | ESSG65L | ESSGG85L | ESSG105L |
|---|---|---|---|
| ES65E | • | | |
| ES105E | | | • |
| ESG85EF1 | | • | |
| ESG85ES1 | | • | |

| Replacement cutting head | SSG65 | SSGG85 | SSG105 | SSGG105 |
|---|---|---|---|---|
| SSK65 | • | | | |
| SSGG85 | | • | | |
| SSG105 | | | • | |
| SSGG105 | | | | • |

# ASSG Battery powered hydraulic safety cutter to max. 120 mm dia.

NEW



- DGUV-approved safety cutter for cutting live Cu/Al cables without steel armouring which, in case of a failure, may carry voltages of up to 60 kV
- Single-core lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz
- Very wide opening width to 120 mm
- Safe and fast operations by using remote control and 10 m long safety hydraulic hose

## Characteristics

- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Electronic control
- DGUV-tested
- 360° rotating connection as with the cutting head
- Battery-powered pump filled with non-conductive oil
- Remote control for increased comfort and safety
- Two powerful 5 Ah, 18 V Lithium-Ion batteries (one battery is always there as a replacement)
- Sturdy housing from impact-resistant, fibreglass reinforced polyamide
- The cutting head is generally delivered including safety hydraulic hose (10 m)
- Multi-function display for pressure testing, power consumption and service interval

## Additional information

- Complete system, different variants available depending on cutting head

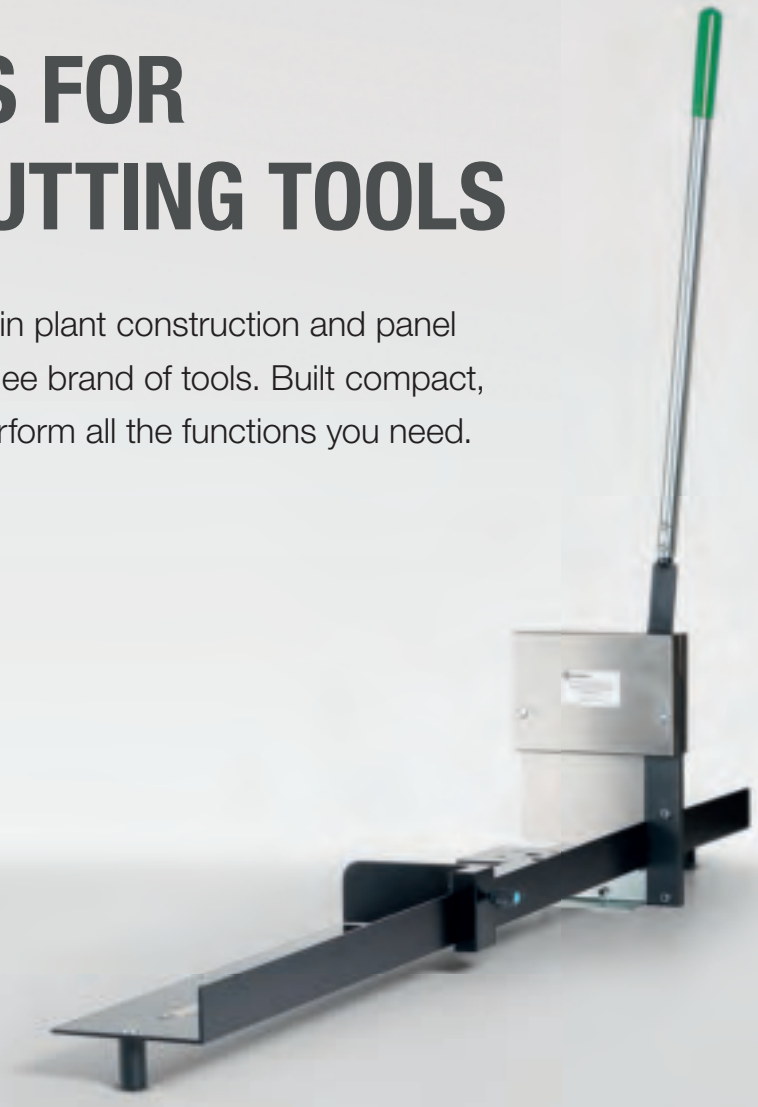
| Technical data | ASSG65L | ASSGG85L | ASSG105L | ASSGG105L | ASSG120SL |
|---|---|---|---|---|---|
| Head type | open | closed | open | closed | open |
| Cutting range | max. 65 mm dia. | max. 85 mm dia. | max. 105 mm dia. | max. 105 mm dia. | max. 120 mm dia. |
| Operating pressure | max. 630 bar | max. 630 bar | max. 630 bar | max. 630 bar | max. 630 bar |
| Battery voltage | 18 V | 18 V | 18 V | 18 V | 18 V |
| Battery capacity | 2 x 5 Ah Li-Ion | 2 x 5 Ah Li-Ion | 2 x 5 Ah Li-Ion | 2 x 5 Ah Li-Ion | 2 x 5 Ah Li-Ion |
| Charging time | 45 min. | 45 min. | 45 min. | 45 min. | 45 min. |
| Max. oil volume | approx. 750 ml | approx. 750 ml | approx. 750 ml | approx. 750 ml | approx. 750 ml |
| Hydraulic oil | Shell Naturelle HF-E 15 | Shell Naturelle HF-E 15 | Shell Naturelle HF-E 15 | Shell Naturelle HF-E 15 | Shell Naturelle HF-E 15 |
| Weight incl. battery | 2 batteries approx. 6.4 kg | 2 batteries approx. 6.4 kg | 2 batteries approx. 6.4 kg | 2 batteries approx. 6.4 kg | 2 batteries approx. 6.4 kg |
| Ambient temperature | -20 °C up to +40 °C | -20 °C up to +40 °C | -20 °C up to +40 °C | -20 °C up to +40 °C | -20 °C up to +40 °C |
| Dimension | 330 x 160 x 280 mm | 330 x 160 x 280 mm | 330 x 160 x 280 mm | 330 x 160 x 280 mm | 330 x 160 x 280 mm |

| Item | Part No. |
|---|---|
| Battery powered hydraulic safety cutter, max. 65 mm dia. | **ASSG65L** |
| Battery powered hydraulic safety cutter, max. 85 mm dia. | **ASSGG85L** |
| Battery powered hydraulic safety cutter, max. 105 mm dia. | **ASSG105L** |
| Battery powered hydraulic safety cutter, max. 105 mm dia. | **ASSGG105L** |
| Battery powered hydraulic safety cutter, max. 120 mm dia. | **ASSG120SL** |

| Scope of supply | Part No. | Quantity | Page |
|---|---|---|---|
| Makita battery 18 V / 5.0 Ah, Li-Ion (90 Wh) | | 2 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 | 1 | 494 |
| Earthing kit | EG1 | 1 | |
| Carrying strap with shoulder padding | TG3 | 1 | 495 |
| Remote control with 1.5 m cable | HTA4 | 1 | 499 |
| Plastic case | KKASSGL | 1 | |
| Plastic case for ASSG105L and ASSG120SL | KKSSK120S | 1 | |

# 5 PROFILES FOR SPECIAL CUTTING TOOLS

For challenging operations in plant construction and panel building, we use the Greenlee brand of tools. Built compact, the high-quality devices perform all the functions you need.



## DIN profile rails

So you retain the profile as you cut:
DIN profile rail cutter from Greenlee.

- Burr-free cutting to length and punching of all common DIN profiles
- Hand lever with optimum force transmission
- High-quality cutting blades with hardly any wear
- Integrated locating holes simplifies mounting on the workbench
- Easily replaceable cutting plate cassette

## Cutting values

Work precisely with our wiring conduit cutter.

- For halogen-free cable conduit up to 125 mm wide
- Maintenance-free mechanism
- Measuring rule enables precise cutting to length
- High level of operator safety while working due to fully-covered cutting blades

## Always on the right track: Wiring conduit cutter

Everything fits well, from the very first setting. The measuring cutter simplifies precision cutting to length. The cutting blades are covered for safety. They cut halogen-free cable conduit up to 125 mm wide as accurately as you want. High-quality materials and optimised processing ensure safety and reliability: The cutting blades are practically wear-free, the cutting mechanism is entirely maintenance-free. No worries about these tools. You concentrate fully on the task.

## DIN profile conductor cutting and punching tool



- For burr-free cutting and punching
- Less effort needed
- Includes die plate holder with 5 profiles

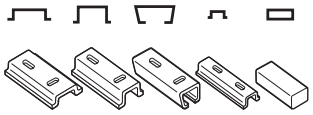
### Suitable for

- Punches vertical and horizontal mounting holes 6.4 x 12.0 mm
- With holes for workbench assembly

| Item | Part No. |
|---|---|
| DIN profile conductor cutting and punching tool | **50115413** |




A - 35,0 mm B - 27,0 mm C - 7,5 mm D - 1,0 mm | A - 35,0 mm B - 27,0 mm C - 15,0 mm D - 1,5 mm | A - 34,0 mm C - 15,0 mm | A - 15,0 mm B - 10,5 mm C - 5,5 mm D - 1,0 mm | A - 10,0 mm C - 3,0 mm



## Profile conductor cutter Compact

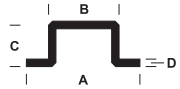


- For burr-free cutting to length
- Less effort needed
- Includes die plank holder with 2 profiles

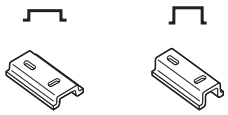
### Suitable for

- With holes for workbench assembly
- Manual operation

| Item | Length of rail guide mm | Length of hand lever mm | Part No. |
|---|---|---|---|
| Profile conductor cutter Compact | 1000 | 850 | **52055684** |




A - 35,0 mm B - 27,0 mm C - 7,5 mm D - 1,0 mm | A - 35,0 mm B - 27,0 mm C - 15,0 mm D - 1,5 mm



## Wiring conduit cutter



- Burr-free cutting even with halogen-free cable ducts
- 90° angle cutting
- Protects from injury when not in use

### Characteristics

- Simple workbench mounting
- Maintenance free
- Cutting mechanism completely protected

### Suitable for

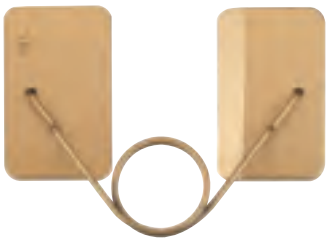
- Standard and halogen-free plastic profile with 2.5 mm wall thickness and up to 125 mm width

| Technical data | |
|---|---|
| Cutting width | 125 mm |
| Dimension | 1460 x 250 x 990 mm |
| Weight | 10.5 kg |
| Length of rail guide | 1000 mm |
| Length of hand lever | 600 mm |
| Wiring duct (wall thickness) | 2.5 mm |

| Item | Part No. |
|---|---|
| Wiring conduit cutter | **50125700** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hand lever | | |
| Fixing device | 50115537 | |
| Measurement scale | | |

## Cutting die



K18 SERIE

- For multi-stranded Al and Cu cables without armouring

| Item | Cutting range | Part No. |
|---|---|---|
| Cutting die, 18 mm | 18 mm | **S18** |

# QUICK AND CLEAN.

Greenlee tools for punching - exactly the right solution for accurate operations. Extreme reliability quickly achieves a burr-free result.





# Punching


**Round and special shape punches** **416**
Standard punch systems 418
Slug Buster® punch systems 420
Slug-Splitter® punch system for stainless steel 421
Speed-Punch™ punch system 422
Special shape punches 425

**Punching tools and sets** **434**
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Mechanical and hydraulic punching tools 436
Battery powered punching tool LS 60-L 438
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**Bits and step bits** **464**

# PATENTED CLEAN SOLUTION - ROUND AND SPECIAL SHAPE PUNCH

Speed and innovation set our Greenlee products apart. With Speed Punch and Slug Splitter, you can work quickly and precisely in any application.
Our commitment to your work.



**In brief**

- Long service life
- For aluminium and steel to 3.5 mm thick
- Threadless profile for quick replacement
- No jamming of the slug
- Threads require no maintenance

## Quick punching with Speed Punch

We make you faster. Time-saving operations are really easy with the Speed Punch profile. The threadless stamp profile is quickly changed via clamp technology - no more screwing the counter nut off and on! Which also means: Threads are care and maintenance-free. Punching is up to three-times quicker than before.

- Quick punching system: Punching up to 3 x quicker
- For aluminium and steel up to 3.5 mm thick
- Innovative clamp technology
- No more screwing the counter nut off and on
- Threads are now care and maintenance-free

**Speed Punch video:**
youtube.com/watch?v=0LJ7mHEgeow

## Slug Splitter: Automatic clean punching

We make it easy for you. The Slug Splitter separates punched slug remnants. You can fully concentrate on punching stainless steel, without delays due to time-consuming removal of punched slug remnants.

- Splits the punches into two parts for direct removal of punch slug remnants
- Longest service life due to high-quality stainless steel
- Slug-Splitter: Suitable for use with all Greenlee punching hydraulics

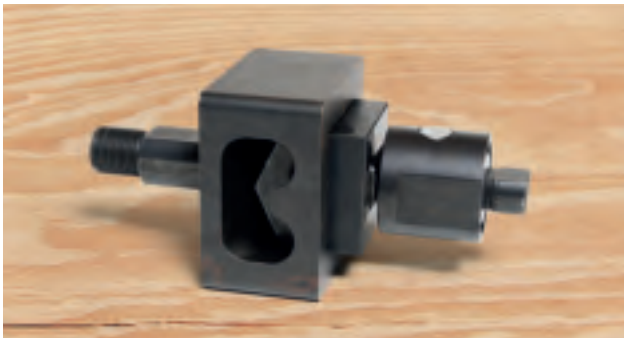




## Square punch: Special-shaped punches

Displays and panels require appropriate square-shaped punching. The special punching stamp from Greenlee punches stainless steel and mild steel without leaving burrs. High-quality tool steel meets your requirements - in proven Greenlee quality.

- For mild steel (St37), plastic and aluminium to 3.0 mm thick and V2A stainless steel up to 1.5 mm
- Burr-free punching of display panels
- High-quality tool steel



## Standard punch systems



**Ball bearing draw stud reduces operating force**

### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Manual / hydraulic

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm diameter 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm diameter 50344030

### Scope of supply
- Complete system including punch, die and draw stud for manual operation

### Additional information
- *50042181 Draw stud without ball-bearing

| Punch size | | | Max. Material thick-ness | Individual parts for manual operation | | | | | Draw studs + Accessories for hydraulic units | | | | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Draw studs | | | Accessories | |
| True dimen-sion | Standard size | | |  |  |  |  |  |  |  |  |  |  |
| mm | Pg | ISO | mm (St37) | Punch | Die | Draw stud with ball bearing | Ball bearing nut | Spacer | Hand hydraulic 7804E, 7904E | Battery powered punch LS 50 FLEX LS 60 L | Hydr. pump 50159062 50250973 | Adapter sleeves 19,0 / 28,6 | Part No. |
| 12.7 | PG 7 | | 1.5 | 50069969 | 50042351 | 50042181 | | | | | | | **50024086** |
| 14.3 | | | 1.5 | 50042300 | 50042297 | 50042181 | | | | | | | **50024337** |
| 15.2 | Pg 9 | | 2.0 | 50213164 | 50320025 | 50000420 | | | | | | | **50211153** |
| 15.9 | | | 1.5 | 50042238 | 50042246 | 50042181 | | | | | | 50339672 | **50024094** |
| 16.2 | | ISO 16 | 2.0 | 50351931 | 50351621 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50351923** |
| 18.6 | | | 2.0 | 50177001 | 50320033 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50188860** |
| 19.1 | | | 2.0 | | | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50206672** |
| 20.4 | Pg 13 | ISO 20 | 2.0 | 50176978 | 50320041 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50188879** |
| 20.6 | | | 2.0 | 50042262 | 50042254 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50206680** |
| 22.5 | Pg 16 | | 3.5 | 51040060 | 51147220 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50225634** |
| 23.8 | | | 2.0 | 50042386 | 50042378 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50253417** |
| 25.4 | | ISO 25 | 2.0 | 50039865 | 50351648 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50206702** |
| 27.0 | | | 2.0 | 50042408 | 50042424 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50253425** |
| 28.3 | Pg 21 | | 3.5 | 51040080 | 51069720 | 50040405 | | | 51300430 | | 51300430 | 50339672 | **50225642** |
| 28.3 | Pg 21 | | 2.0 | 50368826 | 50320068 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50369105** |
| 28.6 | | | 2.0 | 50039903 | 50039911 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50206710** |
| 30.5 | | | 1.5 | 50362828 | 50362798 | 50000420 | | | 51300430 | | 51300430 | 50339672 | **50365061** |
| 31.8 | | | 1.5 | 50040022 | | 50000420 | | | 51300430 | | 51300430 | | **50206737** |
| 32.5 | Pg 32 | | 3.5 | 50244590 | 50351680 | 50040405 | | | 50318721 | | 50318721 | | **50244760** |
| 33.4 | | | 1.5 | 50065874 | 50065866 | 50000420 | | | 50318721 | | 50318721 | | **50253441** |
| 34.6 | | | 3.5 | 50040103 | 50040111 | 50040405 | | | 50318721 | | 50318721 | | **50225650** |
| 34.9 | | | 3.5 | 50047345 | 50047353 | 50040405 | | | 50318721 | | 50318721 | | **50254278** |
| 37.0 | Pg 29 | | 3.5 | 50183311 | 50320084 | 50040405 | | | 50318721 | | 50318721 | | **50188909** |
| 38.1 | | | 3.5 | 50047361 | 50070444 | 50040405 | | | 50318721 | | 50381721 | | **50254286** |
| 40.5 | | ISO 40 | 3.5 | 50244620 | 50351591 | 50040405 | | | 50318721 | | 50381721 | | **50244779** |

| Punch size | | | Max. Material thick-ness mm | Individual parts for manual operation | | | | | Draw studs + Accessories for hydraulic units | | | | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Draw studs | | | Accessories | |
| True dimen-sion | Standard size | | |  |  |  |  |  |  |  |  |  |  |
| mm | Pg | ISO | mm (St37) | Punch | Die | Draw stud with ball bearing | Ball bearing nut | Spacer | Hand hydraulic 7804E, 7904E | Battery powered punch LS 50 FLEX LS 60 L | Hydr. pump 50159062 50250973 | Adapter sleeves 19,0 / 28,6 | Part No. |
| 41.3 | | | 3.5 | 50042513 | 50042505 | 50040405 | | | 50318721 | | 50381721 | | **50253492** |
| 43.2 | | | 3.5 | 51069740 | 50040138 | 50040405 | | | 50318721 | | 50318721 | | **50225669** |
| 44.5 | | | 3.5 | 50042572 | 50042564 | 50040405 | | | 50318721 | | 50318721 | | **50253506** |
| 47.0 | | | 3.5 | 50176870 | 51320090 | 50040421 | | | 50318721 | | 50318721 | | **50188917** |
| 47.6 | | | 3.5 | 50042483 | 50042491 | 50040421 | | | 50318721 | | 50318721 | | **50253514** |
| 49.6 | | | 3.5 | 50069780 | 50040618 | 50040421 | | | 50318721 | | 80318721 | | **50225677** |
| 50.8 | | ISO 50 | 3.5 | 50042327 | 50351613 | 50040421 | | | 50318721 | | 50318721 | | **50206761** |
| 54.0 | Pg 42 | | 3.5 | 50042459 | 50361732 | 50040421 | | | 50318721 | | 50318721 | | **50206788** |
| 57.2 | | | 3.5 | 50040588 | 50040596 | 50040421 | | | 50318721 | | 50318721 | | **50253603** |
| 60.0 | Pg 48 | | 3.5 | 50176900 | 50320114 | 50040421 | | | 50318721 | | 50318721 | | **50188925** |
| 61.5 | | | 3.5 | 50040626 | 50040634 | 50040421 | | | 50318721 | | 50318721 | | **50225685** |
| 63.5 | | ISO 63 | 3.5 | 50042343 | 50042335 | 50041886 | | | 50318721 | | 50318721 | | **50206796** |
| 66.7 | | | 3.5 | 50042521 | 50069977 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50212141** |
| 69.9 | | | 3.5 | 50042475 | 50042467 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50253611** |
| 70.6 | | | 3.5 | 50024450 | 50024434 | 50040421 | 50041878 | | | 52045040 | 52045040 | | **50253832** |
| 74.0 | | | 3.5 | 50041754 | 50041770 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50199757** |
| 76.2 | | | 3.5 | 50042599 | 50042580 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50253727** |
| 79.4 | | | 3.5 | 50063634 | 50063626 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50254030** |
| 82.0 | | | 3.5 | 50189050 | 50189069 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50186353** |
| 89.8 | | | 3.5 | 50041800 | 50041835 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50199765** |
| 95.3 | | | 3.5 | 50052659 | 50052667 | 50041886 | 50041878 | | | 52045040 | 52045040 | | **50212168** |
| 102.7 | | | 3.5 | 50046535 | 50046527 | 50046799 | 50046853 | 50046861 | | 52045040 | 52045040 | 50031708 | **50199773** |
| 115.4 | | | 3.5 | 50046551 | 50046543 | 50046799 | 50046853 | 50046861 | | 52045040 | 52045040 | 50031708 | **50199781** |
| 120.0 | | | 3.5 | 50214896 | 50214918 | 50046799 | 50046853 | 50046861 | | 52045040 | 52045040 | 50031708 | **50215191** |
| 143.7 | | | 3.5 | 50054473 | 50054481 | 50046799 | 50046853 | 50046861 | | 52045040 | 52045040 | 50031708 | **50199803** |

## Slug Buster® punch system



- For quick, clean, effortless and burr-free holes
- Split slugs fall free and can be removed easily

### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Manual / hydraulic

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm diameter 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm diameter 50344030

### Scope of supply
- Complete system including punch, die and draw stud for manual operation

### Additional information
- 50042181 Draw stud without ball-bearing

| Punch size | | | Max. Material thickness | Individual parts for manual operation | | | Draw studs + Accessories for hydraulic units | | Complete unit |
|---|---|---|---|---|---|---|---|---|---|
| | | | |  |  |  |  |  |  |
| True dimension | Standard size | | | | | | | | |
| mm | Pg | ISO | mm (St37) | Punch | Die | Draw stud with ball bearing | Hand hydraulic 7804E 7904E | Battery powered punch LS 50 FLEX LS60 L | Part No. |
| 12.5 | Pg 7 | ISO 12 | 1.5 | 50067281 | 50067290 | 50042181 | | | **50067273** |
| 15.2 | Pg 9 | | 2.0 | 50319698 | 50320025 | 50000420 | 51300430 | 51300430 | **50319892** |
| 16.2 | | ISO 16 | 2.0 | 50351630 | 50351621 | 50000420 | 51300430 | 51300430 | **50351770** |
| 18.6 | Pg 11 | | 2.0 | 50319701 | 50320033 | 50000420 | 51300430 | 51300430 | **50319906** |
| 20.4 | Pg 13 | ISO 20 | 2.0 | 50319710 | 50320041 | 50000420 | 51300430 | 51300430 | **50319914** |
| 22.5 | Pg 16 | | 2.0 | 50317563 | 51147220 | 50000420 | 51300430 | 51300430 | **50319620** |
| 25.4 | | ISO 25 | 2.0 | 50351656 | 50351648 | 50000420 | 51300430 | 51300430 | **50351788** |
| 28.3 | Pg 21 | | 3.0 | 50317571 | 51069720 | 50040405 | 50318721 | 52045040 | **50319639** |
| 28.3 | Pg 21 | | 2.0 | 50319736 | 50320068 | 50000420 | 51300430 | 51300430 | **50319930** |
| 30.5 | | | 2.0 | 50362844 | 50362798 | 50000420 | 51300430 | 51300430 | **50365088** |
| 30.5 | | | 3.5 | 50602373 | 50362780 | 50040405 | 50318721 | 52045040 | **50602462** |
| 32.5 | | ISO 32 | 3.5 | 50351699 | 50351680 | 50040405 | 50318721 | 52045040 | **50351796** |
| 34.6 | | | 3.5 | 50317580 | 50040111 | 50040405 | 50318721 | 52045040 | **50319647** |
| 37.0 | Pg 29 | | 3.5 | 50319752 | 50320084 | 50040405 | 50318721 | 52045040 | **50319957** |
| 40.5 | | ISO 40 | 3.5 | 50351583 | 50351591 | 50040405 | 50318721 | 52045040 | **50351800** |
| 43.2 | | | 3.5 | 50317598 | 50040138 | 50040405 | 50318721 | 52045040 | **50319655** |
| 47.0 | Pg 36 | | 3.5 | 51319760 | 51320090 | 50040421 | 50318721 | 52045040 | **50319965** |
| 49.6 | | | 3.5 | 50317601 | 50040618 | 50040421 | 50318721 | 52045040 | **50319663** |
| 50.8 | | ISO 50 | 3.5 | 50351605 | 50351613 | 50040421 | 50318721 | 52045040 | **50351818** |
| 54.0 | Pg 42 | | 3.5 | 50361724 | 50361732 | 50040421 | 50318721 | 52045040 | **50361716** |
| 60.0 | Pg 48 | | 3.5 | 50319787 | 50320114 | 50040421 | 50318721 | 52045040 | **50319981** |
| 61.5 | | | 3.5 | 50317610 | 50040634 | 50040421 | 50318721 | 52045040 | **50319671** |
| 64.0 | | ISO 63 | 3.5 | | 50351664 | 50040421 | 50318721 | 52045040 | **50351826** |

## SLUG SPLITTER® punch system (stainless steel)



- Special alloy for maximum service life
- Split slugs fall free and can be disposed of easily

### Suitable for

- Stainless steel (V2A), mild steel (St37), plastic and aluminium up to 3.5 mm thick

### Operation

- Hydraulic

### Predrilling

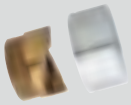
- Draw stud 11.1 mm dia., pilot drill 12.7 mm diameter 50344102
  draw stud 19.0 mm dia., pilot drill 20.5 mm diameter 50344030

### Scope of supply

- Complete system including punch and die

### Additional information

- * = Slug Splitter SC® - self-centring

| Punch size | | | Max. Material thickness | Individual parts for manual operation | | Draw studs | Complete unit |
|---|---|---|---|---|---|---|---|
| True dimension | Standard size | | |  |  |  |  |
| mm | Pg | ISO | mm (V2A) | Punch | Die | Pump, hand and battery powered | Part No. |
| 15.2 | Pg 9 | | 2.5 | 50311174 | 50311263 | 50294512 | **50069519** |
| 16.2 | | ISO 16 | 2.5 | 50045997 | 50045989 | 50294512 | **50069527** |
| 18.6 | Pg 11 | | 2.5 | 50311190 | 50311280 | 50294512 | **50069535** |
| 20.4 | Pg 13 | ISO 20 | 2.5 | 50311204 | 50311298 | 50294512 | **50069543** |
| 22.5 | Pg 16 | | 3.5 | 50281542 | 50281550 | 50294512 | **50069551** |
| 25.4 | | ISO 25 | 3.5 | 50046020 | 50046012 | 50294512 | **50069560** |
| 28.3 | Pg 21 | | 3.5 | 50281569 | 50281577 | 50294520 | **50069578** |
| 30.5 | | | 3.5 | 50364901 | 50364898 | 50294520 | **50069586** |
| 32.5 | | ISO 32 | 3.5 | 50046055 | 50046039 | 50294520 | **50069594** |
| 34.6 | | | 3.5 | 50281585 | 50281593 | 59294520 | |
| 37.0 | Pg 29 | | 3.5 | 50311220 | 50311352 | 50294520 | **50069608** |
| 40.5 | | ISO 40 | 3.5 | 50046080 | 50046071 | 50294520 | **50069616** |
| 43.2 | | | 3.5 | 50281607 | 50281615 | 50294520 | |
| 47.0 | Pg 36 | | 3.5 | 50311239 | 50311310 | 50294520 | **50069624** |
| 49.6 | | | 3.5 | 50281623 | 50281631 | 50294520 | |
| 50.8 | | ISO 50 | 3.5 | 50046110 | 50046098 | 50294520 | **50069632** |
| 54.0 | Pg 42 | | 3.5 | 50311247 | 50311328 | 50294520 | **50069640** |
| 60.0 | Pg 48 | | 3.5 | 50311255 | 50311336 | 50294520 | **50069659** |
| 61.5 | | | 3.5 | 50281658 | 50281666 | 50294520 | |
| 64.0 | | ISO 63 | 3.5 | 50046144 | 50046136 | 50294520 | **50069667** |

## GREAT COLLABORATION!

Use our Kwik Stepper™ step bits for pre-drilling (page 466). They are matched to all our draw studs.



## Speed Punch™ punch system



- Innovative threadless punch profile
- Easy and quick handling as the screwing and unscrewing of the counter nut is not required

### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Hydraulic

### Predrilling
- Draw stud 9.5 mm dia.; pilot drill 9.7 mm dia.
  draw stud 19.0 mm dia.; pilot drill 20.5 mm dia.

### Scope of supply
- Complete system including punch and die

### Additional information
- Counter nuts and draw studs must be ordered separately, they are not included in scope of supply

| Punch size | | | Max. Material thickness | Individual parts | | Draw studs | Speed lock | Complete unit |
|---|---|---|---|---|---|---|---|---|
| | | | |  |  |  |  |  |
| True dimension | Standard size | | | | | | | |
| mm | PG | ISO | mm (St37) | Punch | Die | (not included) | (not included) | Part No. |
| 16.2 | | ISO 16 | 3.5 | 52066021 | 52066022 | 52066001 | 52066002 | **52055431** |
| 20.4 | PG 13 | ISO 20 | 3.5 | 52066023 | 52066024 | 52066001 | 52066002 | **52055432** |
| 22.5 | PG 16 | | 3.5 | 52065998 | 52065999 | 52066001 | 52066002 | **52055433** |
| 25.4 | | ISO 25 | 3.5 | 52066025 | 52066026 | 52066001 | 52066002 | **52055434** |
| 32.5 | | ISO 32 | 3.5 | 52066027 | 52066028 | 52047818 | 52047817 | **52055435** |
| 40.5 | | ISO 40 | 3.5 | 52066029 | 52066030 | 52047818 | 52047817 | **52055436** |
| 50.8 | | ISO 50 | 3.5 | 52066031 | 52066032 | 52047818 | 52047817 | **52055437** |
| 64.0 | | ISO 63 | 3.5 | 52066033 | 52066034 | 52047818 | 52047817 | **52055438** |

| Accessories | Part No. | Page |
|---|---|---|
| Speed Punch™ Speed lock and draw stud 9.5 mm for ISO 16/20/25 and PG 16 | 52055439 | |
| Speed Punch™ Speed lock and draw stud 19.0 mm for ISO 32/40/50/63 | 52055440 | |

# Draw studs with manual drivers



## High wear resistance

### Order info

- To increase the service life, we recommend greasing the draw studs with Greenlee installation paste no. 50115472
- Sizes given are diameter x length
- Subject to tolerance deviations

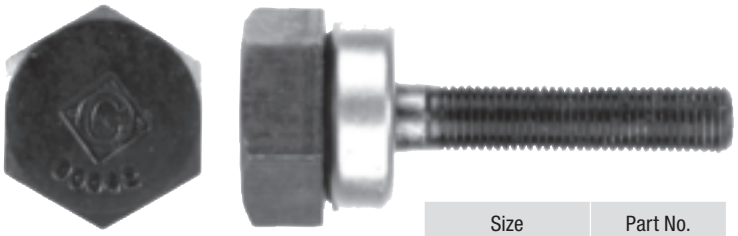




| Size | Part No. |
|---|---|
| 28.6 x 190 mm | **50046799** |



| Size | Part No. |
|---|---|
| 19 x 140 mm | **50041886** |



| Size | Part No. |
|---|---|
| 9.5 x 40 mm | **50000420** |



| Size | Part No. |
|---|---|
| 6.5 x 35 mm | **50042181** |



| Size | Part No. |
|---|---|
| 19 x 75 mm | **50040421** |

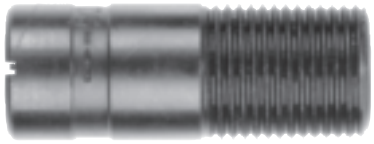


| Size | Part No. |
|---|---|
| 19 x 55 mm | **50040405** |

## Draw studs for hydraulic drivers

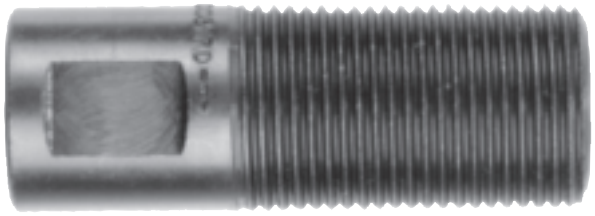
### Order info

- To increase the service life, we recommend greasing the draw studs with Greenlee installation paste no. 50115472
- Sizes given are diameter x length
- Subject to tolerance deviations



Adapter

| Size | Part No. |
|---|---|
| 19 x 48 mm (Innen 9.5 mm) | **50339672** |
| 19 x 48 mm (Innen 6.3 mm) | **50601148** |
| 19 x 48 mm (Innen 12.7 mm) | **50601679** |



| Size | Part No. |
|---|---|
| 28.6 x 76 mm | **50031708** |



| Size | Part No. |
|---|---|
| 9.5 x 71 mm | **51300430** |



| Size | Part No. |
|---|---|
| 19 x 105 mm | **50318721** |



| Size | Part No. |
|---|---|
| 19 x 140 mm for Slug Splitter® | **50294520** |



| Size | Part No. |
|---|---|
| 11.1 x 108 mm for Slug Splitter® | **50294512** |



| Size | Part No. |
|---|---|
| 9.5 mm to 19 mm, 122 mm | **52042827** |

## Rectangular punch



### Suitable for

- Mild steel (St37), plastic and aluminium to 3.0 mm and V2A 1.5 mm
- Punching of burr-free openings

### Operation

- Manual / hydraulic

### Predrilling

- 9.7 mm dia. pilot drill 50360183
  12.7 mm dia. pilot drill 50344102
  15.9 mm dia. pilot drill 50344030
  30.2 mm dia. 50364146

### Scope of supply

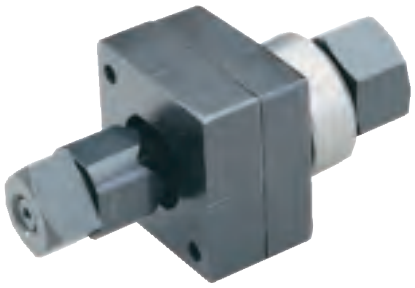
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

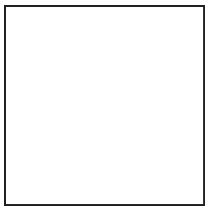
### Additional information

- * = only for use with hydraulic punch drivers 50159062, 50250973, LS60L and LS50FLEX
- ** = only for use with hydraulic punch drivers 50159062, 50250973 and LS50FLEX

| Punch size A x B | Max. Material thickness | | Individual parts f. manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 11.1 x 22.2 | 1.5 | Hand/hydr. | 50600265 | 50600273 | 50601156 | 50601202 | 50052446 | 50601148 | 9.7 | **50600257** |
| 17.0 x 19.0 | 2.0 | Hand/hydr. | | 50600303 | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610281** |
| 19.1 x 29.0 | 2.0 | Hand/hydr. | 50600320 | 50600338 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600311** |
| 19.1 x 33.3 | 2.0 | Hand/hydr. | 50600354 | 50600362 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600346** |
| 21.9 x 25.9 | 2.0 | Hand/hydr. | 50600389 | 50600397 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600370** |
| 22.0 x 30.0 | 2.0 | Hand/hydr. | 50600419 | 50600427 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600400** |
| 22.0 x 42.0 | 2.0 | Hand/hydr. | 50600451 | 50600460 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600435** |
| 25.1 x 29.0 | 2.0 | Hand/hydr. | 50600486 | 50600494 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600478** |
| 31.8 x 35.1 | 2.0 | Hand/hydr. | 50600516 | 50600524 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600508** |
| 29.0 x 71.0 | 3.0 | Hydr. | | | 52045298 | | 52045300 | | 28.6 | **52045296** |
| 30.0 x 90.0 | 3.0 | Hydr. | | | 52045298 | | 52045300 | | 28.6 | **52045297** |
| 33.3 x 66.7 | 3.0 | Hydr. | 50600540 | 50600559 | 50601180 | | 50602357 | | 30.2 | **50600532** |
| 35.0 x 52.0 | 3.0 | Hydr. | 50600575 | 50600583 | 50601180 | | 50602357 | | 30.2 | **50600567** |
| 35.0 x 65.0 | 3.0 | Hydr. | 50600605 | 50600613 | 50601180 | | 50602357 | | 30.2 | **50600591** |
| 35.0 x 82.0 | 2.0 | Hydr.* | 50600630 | 50600648 | 50601180 | | 50602357 | | 30.2 | **50600621** |
| 35.0 x 112.0 | 2.0 | Hydr.* | 50600664 | 50600672 | 50601180 | | 50602357 | | 30.2 | **50600656** |
| 46.0 x 92.0 | 3.0 | Hydr.* | 50600699 | 50600702 | 50601180 | | 50602357 | | 30.2 | **50600680** |
| 57.2 x 88.9 | 3.0 | Hydr.* | 50600729 | 50600737 | 50601180 | | 50602357 | | 30.2 | **50600710** |
| 68.0x138.0 | 2.0 | Hydr.** | 50600753 | 50600761 | 50601180 | | 50602357 | | 30.2 | **50600745** |

## Square punch





### Suitable for

- Mild steel (St37), plastic and aluminium to 3.0 mm and V2A 1.5 mm
- Punching of burr-free openings

### Operation

- Manual / hydraulic

### Predrilling

- 9.7 mm dia. pilot drill 50360183
  12.7 mm dia. pilot drill 50344102
  15.9 mm dia. pilot drill 50344030
  30.2 mm dia. 50364146

### Scope of supply

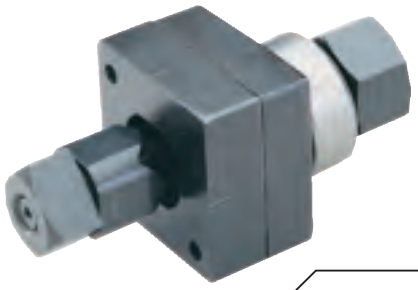
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

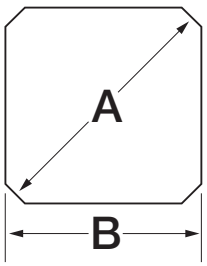
### Additional information

- * = only for use with hydraulic punch drivers 50159062, 50250973, LS60L and LS50FLEX
- ** = only for use with hydraulic punch drivers 50159062 and 50250973

| Punch size A x B | Max. Material thickness | | Individual parts for manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 12.7 x 12.7 | 1.5 | Hand/hydr. | 50600028 | 50600036 | 50601156 | 50601202 | 50052446 | 50601148 | 9.5 | **50600010** |
| 15.9 x 15.9 | 2.0 | Hand/hydr. | | | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610045** |
| 19.1 x 19.1 | 2.0 | Hand/hydr. | 50600087 | 50600095 | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610076** |
| 22.4 x 22.4 | 2.0 | Hand/hydr. | | | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610106** |
| 24.0 x 24.0 | 2.0 | Hand/hydr. | 50600141 | 50600150 | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610137** |
| 25.4 x 25.4 | 2.0 | Hand/hydr. | 50600176 | 50600184 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50600168** |
| 45,0 x 45,0 | 3.0 | Hydr. | 50767640 | 50767657 | 52046100 | | 52046101 | | 30.2 | **50115723** |
| 46.0 x 46.0 | 3.0 | Hydr. | | 50600214 | 50601180 | | 50602357 | | 30.2 | **50600192** |
| 50.8 x 50.8 | 3.0 | Hydr. | 50601695 | | 50601180 | | 50602357 | | 30.2 | **50601687** |
| 68.0 x 68.0 | 3.0 | Hydr. | 52055423 | 50601733 | 50601180 | | 50602357 | | 30.2 | **50601717** |
| 92.0 x 92.0 | 3.0 | Hydr.* | | 50601768 | 50601180 | | 50602357 | | 30.2 | **50601741** |
| 104.8 x 104.8 | 2.0 | Hydr.* | 50601784 | 50601792 | 50601180 | | 50602357 | | 30.2 | **50601776** |
| 138.0 x 138.0 | 2.0 | Hydr.** | 50600230 | 50600249 | 50601180 | | 50602357 | | 30.2 | **50602349** |

## Special square punch with flattened corners






**Suitable for**
- Mild steel (St37), plastic and aluminium to 2.0 mm
- Punching of burr-free openings

**Operation**
- Manual / hydraulic

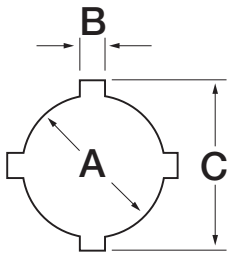
**Predrilling**
- 12.7 mm dia pilot drill 50344102

**Scope of supply**
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

| Punch size A x B | Max. Material thickness | | Individual parts for manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 22.5 x 20.1 | 2.0 | Hand/hydr. | 50611264 | 50601271 | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50611257** |

## Round punch with four anti-rotation tabs






**Suitable for**
- Mild steel (St37), plastic and aluminium to 3.0 mm

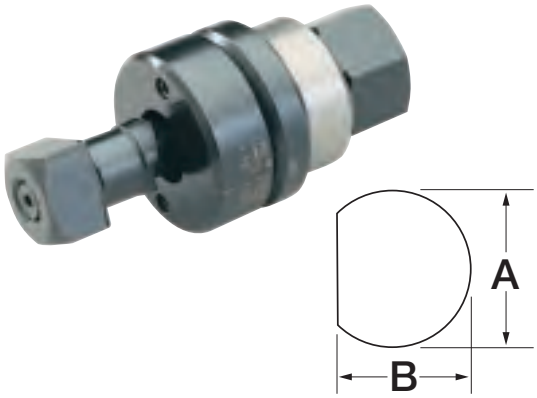
**Operation**
- Manual / hydraulic

**Predrilling**
- 15.9 mm dia. pilot drill 50344030

**Scope of supply**
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

| Punch size A x B x C | Max. Material thickness | | Individual parts for manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 22.5 x 3.2 x 25.4 | 2.0 | Hand/hydr. | 50602390 | | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50602381** |
| 30.5 x 4.8 x 36.0 | 3.0 | Hand/hydr. | 50602438 | 50602497 | 50601172 | 50601652 | 50602586 | 50601679 | 15.9 | **50602420** |

## „D“ shaped punch




**Suitable for**
- Mild steel (St37), plastic and aluminium to 2.0 mm

**Operation**
- Manual / hydraulic

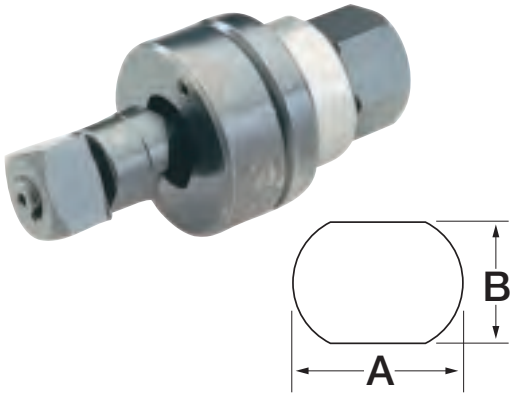
**Predrilling**
- 12.7 dia. mm pilot drill 50344102

**Scope of supply**
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

**Additional information**
- * 50610809 and 50610830 available only as punch unit

| Punch size A x B | Max. Material thickness | | Individual parts for manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 12.7 x 11.9 | 2.0 | Hand/hydr. | 50600788 | 51600790 | 50601156 | 50601202 | 50052446 | 50601148 | 9.5 | **50600770** |
| 15.9 x 15.1 | 2.0 | Hand/hydr. | | | 50344218 | 50347330 | 50046381 | 50339672 | 12.7 | **50610809** |
| 19.1 x 17.9 | 2.0 | Hand/hydr. | | | 50344218 | 50347330 | 50046381 | 50339672 | 12.7 | **50610830** |

## Double „D“ shaped punch




**Suitable for**
- Mild steel (St37), plastic and aluminium to 2.0 mm

**Operation**
- Manual / hydraulic

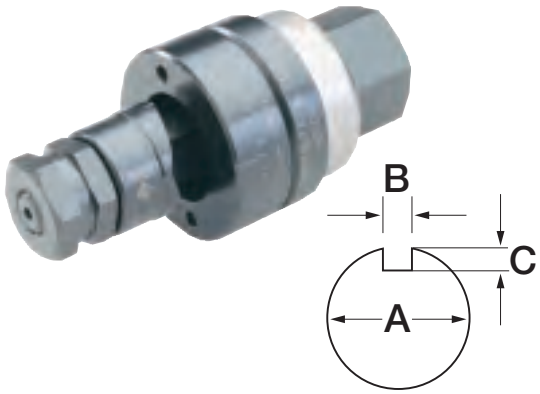
**Predrilling**
- 15.9 mm dia. pilot drill 50344030

**Scope of supply**
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

**Additional information**
- All punches available only as punch unit

| Punch size A x B | Max. Material thickness | | Individual parts for manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 19.5 x 16.3 | 2.0 | Hand/hydr. | | | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610861** |
| 20.2 x 17.6 | 2.0 | Hand/hydr. | | | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610892** |
| 23.2 x 19.2 | 2.0 | Hand/hydr. | | | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610922** |
| 23.2 x 20.2 | 2.0 | Hand/hydr. | | | 52020113 | 50347330 | 50046381 | 50339672 | 12.7 | **50610953** |
| 34.9 x 28.6 | 2.0 | Hand/hydr. | | | 50601660 | 50601652 | 50602586 | 50601679 | 23.8 | **50600982** |

## Keyway punch




**Suitable for**
- Mild steel (St37), plastic and aluminium to 2.0 mm

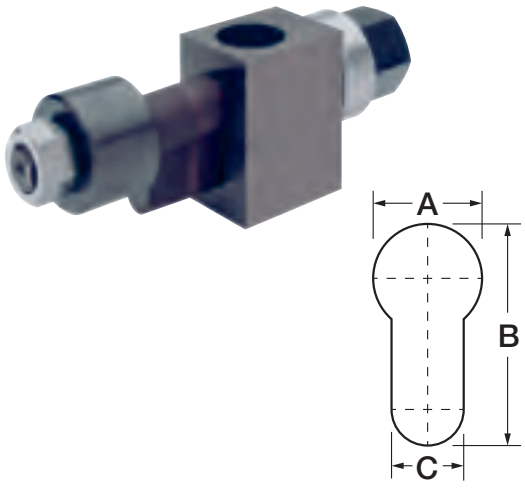
**Operation**
- Manual / hydraulic

**Predrilling**
- 23.8 mm dia. pilot drill 50300083

**Scope of supply**
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

| Punch size A x B x C | Max. Material thickness | | Individual parts for manual operation | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Part No. | mm | Part No. |
| 12.2 x 1.4 x 0.8 | 1.5 | Hand/hydr. | 51601020 | 51601030 | 50601156 | 50601202 | 50052446 | 50601148 | 9.5 | **50601016** |
| 29.7 x 3.1x 2.5 | 2.0 | Hand/hydr. | 51601050 | 51601060 | 50601660 | 50601652 | 50602586 | 50601679 | 23.8 | **50601040** |
| 32.1 x 4.0 x 2.5 | 2.0 | Hand/hydr. | 51601080 | 51601090 | 50601660 | 50601652 | 50602586 | 50601679 | 23.8 | **50601075** |
| 33.7 x 2.6 x 2.5 | 2.0 | Hand/hydr. | 51601110 | 50601121 | 50601660 | 50601652 | 50602586 | 50601679 | 23.8 | **50601105** |

## Profile cylinder punch




**Suitable for**
- Mild steel (St37) up to 2.0 mm and aluminium up to 3.5 mm thick

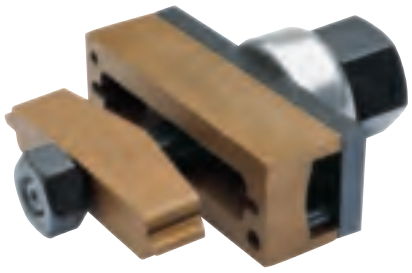
**Operation**
- Manual / hydraulic

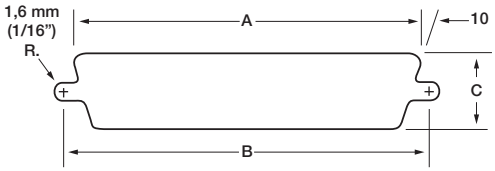
**Predrilling**
- 12.7 mm dia. pilot drill 50344102

**Scope of supply**
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

| Punch size A x B x C | Max. Material thickness | | Individual parts for manual operation | | | | | | Adapter for hydr. punch driver | Mounting hole-dia. mm | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | |  |  |  |  |  | | | |  |
| mm | mm (St37) | Operating mode | Punch | Die | Draw studs | Ball bearing nut | Counter nut | Spacer bushing | Part No. | mm | Part No. |
| 17.0 x 33.3 x 10.5 | 2.0 | Hand/hydr. | 50053027 | 50053035 | 50053043 | 50347330 | 90500113 | 50053051 | 50339672 | 12.7 | **50053078** |

## Sub-Min „D“ punch






### Suitable for

- Mild steel (St37) up to 2.0 mm and aluminium up to 3.5 mm thick
- Front or rear mounting

### Operation

- Manual / hydraulic

### Predrilling

- 12.7 mm dia. pilot drill 50344102

### Scope of supply

- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

| Standard | Number Pole | | Dimension | | | Individual parts for manual operation | | | Adapter for hydr. punch driver | Complete unit |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | |  |  |  | |  |
| | | Operating mode | A mm | B mm | C mm | Draw studs | Ball bearing nut | Counter nut | Part No. | Part No. |
| 229 | 9 | Hand/hydr. | 20.0 | 24.9 | 11.9 | 52020113 | 50347330 | 50046381 | 50339672 | **50344366** |
| 231 | 15 | Hand/hydr. | 28.6 | 33.3 | 11.9 | 52020113 | 50347330 | 50046381 | 50339672 | **50344374** |
| RS232 | 25 | Hand/hydr. | 42.0 | 47.1 | 11.9 | 52020113 | 50347330 | 50046381 | 50339672 | **50344200** |
| 234 | 37 | Hand/hydr. | 58.3 | 63.4 | 11.9 | 52020113 | 50347330 | 50046381 | 50339672 | **50344293** |
| 238 | 50 | Hand/hydr. | 55.9 | 61.0 | 14.7 | 52020113 | 50347330 | 50046381 | 50339672 | **50344447** |

## Special shape punch for heavy duty connectors with 4 centre mark points



### Characteristics

- Rectangular punches for heavy duty connectors feature a drilling jig built into the die, for drilling the 4 locating holes.

### Suitable for

- Mild steel (St37) to 3.0 mm thick and aluminium to 3.5 mm

### Operation

- Hydraulic

### Predrilling

- 30.2 mm dia. pilot drill 50364146

### Scope of supply

- Punch unit including punch, die, draw stud and counter nut



| | Punch size A x B | Max. Material thickness | | Individual parts for manual operation | | Mounting hole-dia. | Complete unit |
|---|---|---|---|---|---|---|---|
| | | | |  |  | |  |
| Item | mm | mm | Operating mode | Draw studs | Counter nut | mm | Part No. |
| Special shaped punch for heavy duty connectors, 6-pin, 36 x 52 mm | 36.0 x 52.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033816** |
| Special shaped punch for heavy duty connectors, 10-pin, 36 x 65 mm | 36.0 x 65.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033817** |
| Special shaped punch for heavy duty connectors, 16-pin, 36 x 86 mm | 36.0 x 86.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033818** |
| Special shaped punch for heavy duty connectors, 24-pin, 36 x 91 mm | 36.0 x 91.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033819** |
| Special shaped punch for heavy duty connectors 36 x 112 mm | 36.0 x 112.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033820** |
| Special shaped punch for heavy duty connectors 46 x 86 mm | 46.0 x 86.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033831** |
| Special shaped punch for heavy duty connectors 46 x 112 mm | 46.0 x 112.0 | 3.0 | Hydraulic | 52046100 | 52046101 | 30.2 | **52033832** |
| Special shaped punch HAN Yellock® 30 with 4 centre mark points 47.2 x 56.4 mm | 47.2 x 56.4 | 3.0 / 3.0 VA | Hydraulic | 52046100 | 52046101 | 30.2 | **52058591** |
| Special shaped punch HAN Yellock® 30 with 4 centre mark points 47.2 x 85.5 mm | 47.2 x 85.5 | 3.0 / 3.0 VA | Hydraulic | 52046100 | 52046101 | 30.2 | **52058592** |

## A PRACTICAL TIP!

Spirit level or depth gauge not to hand? Simply mark the position for punching in the shape of a cross and use the markings of the special-shaped punch for a perfect punching result.

## Draw studs for shaped punch

**Order info**

- To increase the service life, we recommend greasing the draw studs with Greenlee installation paste no. 50115472
- Sizes given are diameter x length
- Subject to tolerance deviations



| Size | Part No. |
|---|---|
| 12.7 x 117 mm | **50601660** |



| Size | Part No. |
|---|---|
| 12.7 x 117 mm | **50601172** |




| Size | Part No. |
|---|---|
| 19 x 171 mm | **50601180** |



| Size | Part No. |
|---|---|
| 9.5 x 135 mm | **50053043** |



| Size | Part No. |
|---|---|
| 9.5 x 88 mm | **52020113** |



| Size | Part No. |
|---|---|
| 6.3 x 87 mm | **50601156** |

# SAVE TIME AND MONEY - WITH EVERY PUNCH!

From the leaders in knockout technology comes the new SPEED PUNCH™ System. The patent pending “no-thread” design eliminates cross-threading, while the innovative SPEED LOCK mechanism quickly secures the punch in place. This means longer tool life and faster punches, saving you time and money on the job. SPEED PUNCH™ is available in ISO 16 to ISO 63 and PG 16 metric sizes and two kit configurations.



UP TO 3X FASTER

SPEED PUNCH™

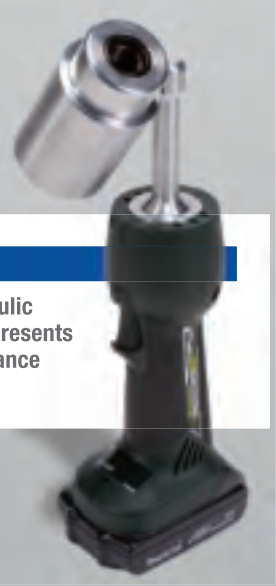


## Speed Punch - saves time and money

- SPEED LOCK mechanism quickly secures the entire system in place: Punch more holes in less time.
- “No-thread” punch design quickly and easily slides on/off draw stud.
- The fastest punch system on the market today.
- Matched die heights eliminate need for additional spacers.
- Fewer extra parts to lose on the job site.
- No more thread damage and costly down time.

## Simplified punching processes

- Standard draw stud end
- Works with your existing hydraulic and battery-operated punch drivers.



### LS50 FLEX

- **In combination with the hydraulic punching tool LS 50 Flex it represents the state of the art in performance and speed.**

# THE ADVANTAGE IN PUNCHING - PUNCHING TOOLS AND SETS

Greenlee punching tools are quick. No matter whether for straight punchings in steel (St37) and stainless steel or confined areas with swivelling head: Greenlee equips you with the right set for every situation. Combined with the Speed Punch, the quickest and most-efficient punching system in our range puts you in pole position. Take the lead in punching!




**In brief**

- Always ready for use due to short battery-charging times
- Heads rotatable through 360° for optimised work ergonomics
- No fatigue due to low weight
- 3x quicker punching with the Speed Punch system

## The fast one: LS 50 FLEX

The LS 50 FLEX is not just fast. It is integrally designed and produced. It is fully re-charged and ready for use in just 22 minutes. Ergonomic design and a balanced centre of gravity support you when working over long periods of time. The head rotates through 360° and reliably punches in confined areas. Combine the LS 50 FLEX with the Speed Punch system for even faster operations. There's no faster punching than this.

- Can be used for steel (St37) and stainless steel
- Ergonomic design for effortless operations
- Automatic final switch-off for even longer service life of the hole punch
- 22 min. to recharge the battery
- Integrated LED illuminates the work position
- Head rotates through 360°
- Can be combined with Speed Punch punch system for maximum punch speed



**Speed Punch video:**
youtube.com/watch?v=0LJ7mHEgeow



## Speed Punch set

Punching is up to three times quicker with the Speed Punch. The threadless stamp profile can be quickly replaced via a clamp technology - no more screwing the counter nut on and off. The set contains everything you need for the Speed Punch.

- Speed Punch set ISO 16 - 63, including accessories for hydraulic activation
- For all standard steel sheet
- High-quality plastic transport case for optimum product protection

## Slug Buster® set ISO 16 - 40

The Slug Buster from Greenlee separates the punch remnants automatically so that they fall from the die by themselves. No jamming or time-consuming removal of the punch remnants. The set comprises all components of the punching system.

- Slug Buster system including accessories
- Including ratchet wrench for manual activation
- Pilot drill included
- High-quality plastic transport case for optimum product protection

## Speed Nut complete set



- **Up to 3-times faster than conventional punching tools**

### Characteristics

- Compatible with all Greenlee hand-operated and battery powered hydraulic punches
- Easy and quick handling as the screwing up and screwing down of the counter nut is not required

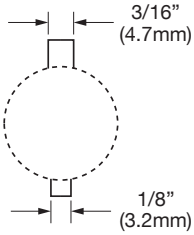
### Suitable for

- Square punches from 46 x 46 mm and rectangular punches from 33.3 x 66.7 mm

| Item | Part No. | |
|---|---|---|
| Speed Nut complete set | **SLSN34** | |
| **Scope of supply** | **Part No.** | **Page** |
| Speed Nut draw stud | SLSNDS34 | |
| Quick-action bayonet coupling | SLSNN34 | |

## Keyway punch






- **Time-saving punching of slots for anti-twist protected parts**
- **Long service life**

### Suitable for

- Mild steel (St37) to 3 mm thick
- Manual operation

| Item | Part No. | |
|---|---|---|
| Keyway punch | **50265342** | |
| **Accessories** | **Part No.** | **Page** |
| Spare punch for keyway punch | 50265369 | |
| Spare die for keyway punch | 50265385 | |

## Hydraulic punch driver Quick Draw™ 7804E



- **Ideal for fast, straight-on front panel punching**
- **Compact design**
- **Very robust**

### Characteristics

- Hand hydraulic punch driver with straight head

### Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

### Additional information

- Accompanying draw studs to 64 mm ST37 are suitable

| Technical data | | |
|---|---|---|
| Dimension | 321 x 110 x 70 mm | |
| Punching force | 80 kN | |
| Weight | 2.5 kg | |
| **Item** | **Part No.** | |
| Quick Draw™ 7804E | **50342916** | |
| **Scope of supply** | **Part No.** | **Page** |
| Hand hydraulic punch 7804E | 50342886 | |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9.5 mm | 50339672 | 426 |
| Plastic case | 50352024 | |

## Hydraulic punch Quick Draw 90™ 7904E



- Ideal for fast, straight-on front panel punching
- Head rotates 180° for maximum flexibility
- Very robust

### Characteristics

- Compact design
- Hand hydraulic punch driver with 90° head

### Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

### Additional information

- Accompanying draw studs to 64 mm ST37 are suitable

| Technical data | |
|---|---|
| Dimension | 312 x 110 x 65 mm |
| Punching force | 80 kN |
| Weight | 3.4 kg |

| Item | Part No. |
|---|---|
| Quick Draw 90™ 7904E | **50342991** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hand hydraulic punch 7904E | 50337866 | |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 426 |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9.5 mm | 50339672 | 426 |
| Plastic case | 50352024 | |

## Manual hydraulic punch



- Flexible head for multi-purpose use even in confined areas

### Characteristics

- Rotatable/Swivel

### Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

### Additional information

- Hand-operated hydraulic punch incl. draw stud, pilot drill and spacer in plastic case
- Without hole
- Accompanying draw studs to 64 mm ST37 are suitable

| Technical data | |
|---|---|
| Dimension | 340 x 150 x 85 mm |
| Punching force | 80 kN |
| Weight | 2.2 kg |
| Revolving/rotatable | 360° |

| Item | Part No. |
|---|---|
| Manual hydraulic punch | **52033843** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Draw stud for hydraulic operation 9.5 mm to 19 mm, 122 mm | 52042827 | |
| HSS Co5 step bit | 52049371 | |
| Spacer, short | 50032488 | |
| Plastic case | | |

## LS 60-L Battery powered hydraulic punching tool



- **High flexibility using rotating head**
- **Automatic stop makes the punching tools last longer**
- **Lithium-ion technology allows long operating times and short recharging times**

### Characteristics

- Electronic control and monitoring of operation
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Balanced centre of gravity for easy handling and effortless operations
- LED for work area illumination
- Powerful 18 V Li-Ion battery - high capacity, short charging time
- Energy saving function with motor cut-out after successful operation
- Manual retract as required
- Multifunction LED for maintenance display and charge status display of the battery
- Environmentally-friendly hydraulic oil, quickly biodegradable

### Suitable for

- A punch size from 104.8 x 104.8 mm
- Round punch up to 95.3 mm

| Technical data | |
|---|---|
| Punching force | 60 kN |
| Weight | 4.0 kg |
| Battery capacity | RAL2 / BL1830: 3 Ah |
| Charging time | RAL2 / BL1830: 22 min. |
| Punching time | 5 s at 22.5 mm dia., 3 mm mild steel<br>12 s at 61.5 mm dia., 3 mm mild steel |
| Ambient temperature | -15 °C up to +40 °C |
| Head outside diameter | 73 mm |
| Dimensions | 325 x 285 x 80 mm |
| Punching capacity | 90 punches/battery at 22.5 mm dia. and 3.5 mm mild steel<br>170 punches/battery at 2.,5 mm dia. and 3.5 mm mild steel<br>250 punches/battery at 22.5 mm dia. and 2.5 mm mild steel |

| Item | Part No. | |
|---|---|---|
| LS 60-L Battery powered hydraulic punching tool | **LS60L** | |
| **Scope of supply** | **Part No.** | **Page** |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 426 |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9.5 mm | 50339672 | 426 |
| HSS Co5 step bit | 52049371 | |
| KKLS60LGL Plastic case | KKLS60LGL | |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 | 494 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | RAL2 | 491 |
| **Accessories** | **Part No.** | **Page** |
| 18 V mains adapter for 230 V Voltage | NG2230 | 376 |

# LS 50 FLEX battery powered hydraulic punching tool

NEXT GENERATION



- **High flexibility using 360° rotating head**
- **An integrated pressure sensor increases the service life of the hole punch**
- **Automatic stop makes the punching tools last longer**

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Balanced centre of gravity for easy handling and effortless operations
- LED for work area illumination
- Energy saving function with motor cut-out after successful operation
- Manual retract as required
- Always ready-to-use thanks to battery charge and service display

## Suitable for

- A punch size from 104.8 x 104.8 mm
- Round punch up to 144.1 mm
- Square punch up to 138 x 138 mm

IEC

| Technical data | |
|---|---|
| Punching force | 60 kN |
| Weight | 2.1 kg |
| Charging time | 15 min. |
| Punching time | 5 s at 22.5 mm dia., 3 mm mild steel<br>6 s at 63.5 mm dia., 3 mm mild steel |
| Ambient temperature | -15 °C up to +40 °C |
| Dimensions | 340 x 115 x 80 mm |
| Punching capacity | 120 punch operations at 22.5 mm dia., 3.4 mm mild steel<br>190 punch operations at 22.5 mm dia., 3 mm mild steel<br>280 punch operations at 22.5 mm dia., 2.5 mm mild steel |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| LS 50 FLEX battery powered hydraulic punching tool | **LS50FLEXCFB** | **LS50FLEXCFM** | |
| **Lieferumfang** | | | **Page** |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 50318721 | 426 |
| Spacer 22 mm, short | 50032488 | 50032488 | |
| HSS Co5 step bit | 52049371 | 52049371 | |
| Adapter 19.0 x 48 mm with internal thread 9.5 mm | 50339672 | 50339672 | 426 |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | 51300430 | |
| Plastic case | KK50LFLEX | KK50LFLEX | |
| **Accessories** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 495 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| **Variants** | | | **Page** |
| L-BOXX with flexible battery powered hydraulic punch LS50FLEXCFB | LBOXXLS50FLEXCFB | | 205 |
| L-BOXX with flexible battery powered hydraulic punch LS50FLEXCFM | | LBOXXLS50FLEXCFM | 205 |

## EKM 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press® app
- Small and slim, perfect for cramped conditions

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 7 s up to 9 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round, up to 92 x 92 mm square |
| Charging time | 15 min. |
| Weight | 3.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EKM60UNVCFB** | **EKM60UNVCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Adapter for crimping dies of Series 22 | UA22 | UA22 | 478 |
| Plastic case 450 x 370 x 105 mm | KKMUNVNG | KKMUNVNG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered universal tool EKM60UNVCFB | LBOXXEKM60UNVCFB | | 205 |
| L-BOXX with battery powered universal tool EKM60UNVCFM | | LBOXXEKM60UNVCFM | 205 |

# EK 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- Fast working due to 2-stage hydraulics
- All tool data on view thanks to display and i-press® app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

## Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 3 s to 5 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round |
| Charging time | 45 min. |
| Weight | 4.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EK60UNVCFB** | **EK60UNVCFM** | |
| **Scope of supply** | | | **Page** |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | UA22 | UA22 | 478 |
| Adapter for crimping dies of Series 22 | KK120UNVNG | KK120UNVNG | |

## EK 120 UNV Battery-powered hydraulic universal tool 10 - 400 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press® app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 108 kN |
| Stroke | 42 mm |
| Crimping range | 10 - 400 mm² |
| Crimping cycle | Depending on cable type |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 144 mm dia. round, up to 138 x 138 mm square |
| Charging time | 45 min. |
| Weight | 6.5 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 10 - 400 mm² | **EK120UNVCFB** | **EK120UNVCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | KK120UNVNG | KK120UNVNG | |
| Adapter for crimping dies | UA12TKL | UA12TKL | 478 |

# Hydraulic punch with hand pump



## Compact design

### Characteristics

- With hand pump, hose and cylinder

### Suitable for

- All punches up to 144.1 mm round and 138 x 138 mm square
- St37 up to 3.5 mm and 3.5 mm V2A (depending on punch size)

### Operation

- Hydraulic

### Additional information

- When used with Speed Punch use the following draw studs: 52066000 (to ISO 25), 50032488, 52058897 (from ISO 25)

| Technical data | |
|---|---|
| Punching force | 110 kN |
| Weight | 8.3 kg |

| Item | Part No. |
|---|---|
| Hydraulic punch with hand pump | **50159062** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic cylinder | 50170910 | |
| Draw stud for hydraulic operation 9.5 mm to 19 mm, 122 mm | 52042827 | |
| Spacer, short | 50032488 | |
| Spacer bush, medium | 51032490 | |
| Spacer bush 38 mm, long | 50069047 | |
| Kwik Stepper™ step bit 12.7 mm | 50344102 | 466 |
| 767 Hydraulic hand pump | 50132849 | 490 |
| Hydraulic hose 6.4 mm dia. x 0.9 m | 50383167 | 498 |
| Draw stud for hydraulic operation 19.0 x 137 mm | 52045040 | |

## Hydraulic punch with foot pump



### Characteristics
- With foot pump, hose and cylinder

### Suitable for
- Up to 144.1 mm round and 138 x 138 mm square
- St37 up to 3.5 mm and 3.5 mm V2A (depending on punch size)

### Operation
- Hydraulic

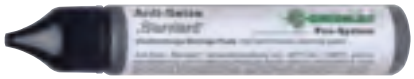
### Additional information
- When used with Speed Punch use the following draw studs: 52066000 (to ISO 25), 50032488, 52058897 (from ISO 25)

| Technical data | |
|---|---|
| Punching force | 110 kN |
| Weight | 15.2 kg |

| Item | Part No. |
|---|---|
| Hydraulic punch with foot pump | **50250973** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic cylinder | 50170910 | |
| Spacer, short | 50032488 | |
| Spacer bush, medium | 51032490 | |
| Spacer bush 38 mm, long | 50069047 | |
| Kwik Stepper™ step bit 12.7 mm | 50344102 | 466 |
| 1725 Hydraulic foot pump | 50313533 | 490 |
| Hydraulic hose 6.4 mm dia. x 3 m | 50377299 | 498 |
| Draw stud for hydraulic operation 9.5 mm to 19 mm, 122 mm | 52042827 | |
| Draw stud for hydraulic operation 19.0 x 137 mm | 52045040 | |

## Thread grease



- **Increases the service life**
- **Prevents "seizing"**
- **Screw and nut threads resistant to wear**

### Suitable for
- Statically and dynamically high stressed thread connections

| Item | Part No. |
|---|---|
| Draw stud thread grease, 30 g | **50115472** |

# Portable C-frame punch driver, 15.2 - 34.6 mm



**Fast, one shot punching - no pre-drilling of pilot holes required**

## Additional information

- For actuation we recommend hydraulic foot pump 1725, Part No. 50313533, hand pump 767, Part No. 50132849 or pumps EHP4 and AHP700L
- When using the AHP700L adapter CMGSK is required

| Technical data | |
|---|---|
| Throat | 200 mm |
| Weight | 6.8 kg |
| Punching capacity | up to 3 mm St37 |
| Punching range | 15.2 - 34.6 mm |

| Item | Part No. |
|---|---|
| Portable C-frame punch driver 1731 | **50159119** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Punch adapter 9.5 mm | 50132768 | |
| Punch adapter 19 mm | 50132776 | |
| Punch Pg 16 | 51040060 | |
| Punch Pg 21 | 51040080 | |
| Punch 34.6 mm | 50040103 | |
| Die Pg 16 (22.5 mm) | 50120875 | |
| Die Pg 21 (28.3 mm) | 50120867 | |
| Die 34.6 mm | 50120859 | |
| Metal case | 50166344 | |

| Accessories | Part No. | Page |
|---|---|---|
| Punch Pg 9 (15.2 mm) | 50213164 | |
| Die Pg 9 (15.2mm) | 50185578 | |
| Punch Pg 11 (18.6 mm) | 50177001 | |
| Die Pg 11 (18.6 mm) | 50185586 | |
| Punch Pg 13 (20.4 mm) | 50176978 | |
| Die Pg 13 (20.4 mm) | 50185594 | |
| Punch 30.5 mm (oil-tight) | 50362828 | |
| Die ISO 16 | 50766421 | |
| Die ISO 20 | 50766438 | |
| Die ISO 25 | 50766445 | |
| Die ISO 32 | 50766452 | |
| Punch ISO 25 | 50039865 | |
| Punch ISO 32 | 50244590 | |

## Portable C-frame punch driver, 15.2 - 115.4 mm



### Suitable for

- For use with standard punches and dies, punching range 15.2 to 115.4 mm

### Additional information

- For actuation we recommend hydraulic hand pump 755, Part No. 50156772 or pumps EHP4 and AHP700L
- When using the AHP700L adapter CMGSK is required

| Technical data | |
|---|---|
| Throat | 200 mm |
| Weight | 27 kg |
| Punching capacity | up to 3 mm St37 |
| Punching range | 15.2 to 115.4 mm |

| Item | Part No. |
|---|---|
| Portable C-frame punch driver 1732 | **50273612** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Die adapter 9.5 mm | 50117912 | |
| Die adapter 19 mm | 50117904 | |
| Die adapter 28.6 mm | 50117890 | |
| Die adapter 9.5 mm | 50132660 | |
| Die adapter 19 mm | 50132679 | |
| Die adapter 28.6 mm | 50132687 | |
| Hexagonal nut | 90542657 | |
| Metal case | 50273353 | |

| Accessories | Part No. | Page |
|---|---|---|
| Punch Pg 9 (15.2 mm) | 50213164 | |
| Die Pg 9 (15.2mm) | 50185578 | |
| Punch Pg 11 (18.6 mm) | 50177001 | |
| Die Pg 11 (18.6 mm) | 50185586 | |
| Punch Pg 13 (20.4 mm) | 50176978 | |
| Die Pg 13 (20.4 mm) | 50185594 | |
| Punch 30.5 mm (oil-tight) | 50362828 | |
| Die ISO 16 | 50766421 | |
| Die ISO 20 | 50766438 | |
| Die ISO 25 | 50766445 | |
| Die ISO 32 | 50766452 | |
| Punch ISO 25 | 50039865 | |
| Punch ISO 32 | 50244590 | |

## LSK 120 Hydraulic hole punching head - basic tool



- Fast and precise cutting
- Punching in just a few seconds
- Compact design permits working in tight areas

### Suitable for

- Aluminium, copper and steel with a tensile strength to 470 N/mm² to 10 mm thick
- Hole diameters: 6.5 - 17 mm
- Centric punching: 120 mm max. material width
- Drive with EHP 4 and AHP 700-L

### Additional information

- Drive with EHP 4 and AHP 700-L available; adapter CMGSK required

| Technical data | |
|---|---|
| Max. operating pressure | max. 700 bar |
| Max. compressive force | 160 kN |
| Dimension | 234 x 174 x 88 mm |
| Weight | 9.5 kg |

| Item | Part No. |
|---|---|
| Hydraulic hole punching head LSK 120 | **50052110** |

| Accessories | Part No. | Page |
|---|---|---|
| Perforated die 6.5 mm dia. | 50052276 | 480 |
| Punch and die 8.5 mm dia. | 50052284 | 480 |
| Punch and die 11 mm dia. | 50052292 | 480 |
| Punch and die 13 mm dia. | 50052306 | 480 |
| Punch and die 15 mm dia. | 50052314 | 480 |
| Punch and die 17 mm dia. | 50052322 | 480 |

## Slug Buster® punch set for all applications from ISO 16 - 40



### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation

- Manual

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. |
|---|---|
| Slug Buster® punch set ISO 16 to 40 | **50366920** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Slug Buster® punch set ISO 16/20/25/32/40 | 50356178SET | 454 |
| Draw studs for manual operation 9.5 x 40 mm | 50000420 | 423 |
| Draw studs for manual operation 19.0 x 55 mm | 50040405 | 423 |
| Ratchet | 50349414 | |
| Kwik Stepper™ step bit 9.7 mm | 50360183 | 466 |
| Plastic case | 50366858 | |

## Slug Buster® punch set for all applications from PG 9 to PG 21 and 30.5 mm



### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Manual

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. | |
|---|---|---|
| Slug Buster® punch set PG 9 to PG 21 and 30.5 mm | **50366904** | |
| **Scope of supply** | **Part No.** | **Page** |
| Slug Buster® punch set PG 9 - 21, 30.5 mm | 50323989SET | 455 |
| Draw studs for manual operation 9.5 x 40 mm | 50000420 | 423 |
| Ratchet | 50349414 | |
| Kwik Stepper™ step bit 9.7 mm | 50360183 | 466 |
| Plastic case | 50366858 | |

## Slug Buster® punch set for ISO 16 - 63



### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Manual

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. | |
|---|---|---|
| Slug Buster® punch set ISO 16 to 63 | **50366939** | |
| **Scope of supply** | **Part No.** | **Page** |
| Slug Buster® punch set ISO 16 - 63 | 50068920SET | 454 |
| Draw studs for manual operation 9.5 x 40 mm | 50000420 | 423 |
| Draw studs for manual operation 19.0 mm x 75 mm | 50040421 | 423 |
| Ratchet | 50349414 | |
| Kwik Stepper™ step bit 9.7 mm | 50360183 | 466 |
| Plastic case | 50366858 | |

## Slug Buster® punch set for all applications from PG 9 - 48 and 30.5 mm



### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Manual

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. | |
|---|---|---|
| Slug Buster® punch set PG 9 to PG 48 and 30.5 mm | **50366912** | |
| **Scope of supply** | **Part No.** | **Page** |
| Draw studs for manual operation 9.5 x 40 mm | 50000420 | 423 |
| Draw studs for manual operation 19.0 x 55 mm | 50040405 | 423 |
| Ratchet | 50349414 | |
| Slug Buster® punch set PG 9 - 48, 30.5 mm | 50328034SET | 455 |
| Plastic case | 50366858 | |

## Speed Punch™ Set ISO 16 – 40



- **Up to 3-times faster than conventional punching tools**
- **Easy and quick handling as the screwing and unscrewing of the counter nut is not required**
- **Compatible with all Greenlee hand-operated and battery powered hydraulic tools**
- **No greasing of the draw stud required**

### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Hydraulic

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

### Scope of supply
- Complete system including draw stud, cramp, punch and die incl. plastic case

| Item | Part No. | |
|---|---|---|
| Speed Punch™ punch set ISO 16/20/25/32/40 | **52055439SET** | |
| **Scope of supply** | **Part No.** | **Page** |
| Punch and die ISO 16 (16.2 mm) | 52055431 | 422 |
| Punch and die ISO 20 (20.4 mm) | 52055432 | 422 |
| Punch and die ISO 25 (25.4 mm) | 52055434 | 422 |
| Punch and die ISO 32 (32.5 mm) | 52055435 | 422 |
| Punch and die ISO 40 (40.5 mm) | 52055436 | 422 |
| Speed Lock and draw stud 9.5 mm for ISO 16/20/25 and PG 16 | 52055439 | 422 |
| Speed Lock and draw stud 19.0 mm for ISO 32/40/50/63 | 52055440 | 422 |
| Plastic case | KKSPISO16B63 | |
| **Accessories** | **Part No.** | **Page** |
| Plastic case | KKSPISO16B63 | |

## Speed Punch™ Set ISO 16 – 63



- Up to 3-times faster than conventional punching tools
- Easy and quick handling as the screwing and unscrewing of the counter nut is not required
- Compatible with all Greenlee hand-operated and battery powered hydraulic tools
- No greasing of the draw stud required

### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation

- Hydraulic

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

### Scope of supply

- Complete system including draw stud, cramp, punch and die incl. plastic case

| Item | Part No. | |
|---|---|---|
| Speed Punch™ Set ISO 16 – 63 | **52055440SET** | |
| **Scope of supply** | **Part No.** | **Page** |
| Punch and die ISO 16 (16.2 mm) | 52055431 | 422 |
| Punch and die ISO 20 (20.4 mm) | 52055432 | 422 |
| Punch and die ISO 25 (25.4 mm) | 52055434 | 422 |
| Punch and die ISO 32 (32.5 mm) | 52055435 | 422 |
| Punch and die ISO 40 (40.5 mm) | 52055436 | 422 |
| Punch and die ISO 50 (50.8 mm) | 52055437 | 422 |
| Punch and die ISO 63 (64.0 mm) | 52055438 | 422 |
| Speed Lock and draw stud 9.5 mm for ISO 16/20/25 and PG 16 | 52055439 | 422 |
| Speed Lock and draw stud 19.0 mm for ISO 32/40/50/63 | 52055440 | 422 |
| Plastic case | KKSPISO16B63 | |
| **Accessories** | **Part No.** | **Page** |
| Plastic case | KKSPISO16B63 | |

## Slug-Splitter® punch set (stainless steel) ISO 16 - 40



- Unique punch profile
- Split slugs fall free and can be removed easily

### Suitable for

- Stainless steel (V2A), mild steel (St37), plastic and aluminium up to 3.5 mm thick

### Operation

- Hydraulic

### Predrilling

- Draw stud 19 mm dia., pilot drill 20.5 mm dia. 50344030
  draw stud 11.1 mm dia., pilot drill 12.7 mm dia. 50344102

| Item | Part No. | |
|---|---|---|
| Slug-Splitter® punch set (stainless steel) ISO 16/20/25/32/40 | **50766803** | |
| **Scope of supply** | **Part No.** | **Page** |
| Slug-Splitter® punch (stainless steel) 16.2 mm | 50069527 | 421 |
| Slug-Splitter® punch (stainless steel) 20.4 mm | 50069543 | 421 |
| Slug-Splitter® punch (stainless steel) 25.4 mm | 50069560 | 421 |
| Slug-Splitter® punch (stainless steel) 32.5 mm | 50069594 | 421 |
| Slug-Splitter® punch (stainless steel) 40.5 mm | 50069616 | 421 |
| Draw stud for hydraulic operation 11.1 mm to 19 mm, 108 mm | 50294512 | 424 |
| Draw stud for hydraulic operation 19 x 140 mm | 50294520 | 424 |
| Plastic case | KKSSISO16B63 | |

## Slug-Splitter® punch set (stainless steel) ISO 16 - 63



- Unique punch profile
- Split slugs fall free and can be removed easily

### Suitable for

- Stainless steel (V2A), mild steel (St37), plastic and aluminium up to 3.5 mm thick

### Operation

- Hydraulic

### Predrilling

- Draw stud 19 mm dia., pilot drill 20.5 mm dia. 50344030
  draw stud 11.1 mm dia., pilot drill 12.7 mm dia. 50344102

| Item | Part No. | |
|---|---|---|
| Slug-Splitter® punch set (stainless steel) ISO 16/20/25/32/40/50/63 | **50766797** | |
| **Scope of supply** | **Part No.** | **Page** |
| Slug-Splitter® punch (stainless steel) 16.2 mm | 50069527 | 421 |
| Slug-Splitter® punch (stainless steel) 20.4 mm | 50069543 | 421 |
| Slug-Splitter® punch (stainless steel) 25.4 mm | 50069560 | 421 |
| Slug-Splitter® punch (stainless steel) 32.5 mm | 50069594 | 421 |
| Slug-Splitter® punch (stainless steel) 40.5 mm | 50069616 | 421 |
| Slug-Splitter® punch (stainless steel) 50.8 mm | 50069632 | 421 |
| Slug-Splitter® punch (stainless steel) 64 mm | 50069667 | 421 |
| Draw stud for hydraulic operation 11.1 mm to 19 mm, 108 mm | 50294512 | 424 |
| Draw stud for hydraulic operation 19 x 140 mm | 50294520 | 424 |
| Plastic case | KKSSISO16B63 | |

## Slug Buster® hand hydraulic punch driver set PG 9 - PG 21, 30.5 mm



### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation
- Hydraulic

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. |
|---|---|
| Slug Buster® hand hydraulic punch driver set PG 9 to PG 21 and 30.5 mm | **50356119SET** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hand hydraulic punch 7804E | 50342886 | |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 424 |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9,5 mm | 50339672 | 426 |
| Slug Buster® punch set PG 9 - 21, 30.5 mm | 50323989SET | 455 |
| Plastic case | 50352024 | |

## Slug Buster® hand hydraulic 90° punch driver set PG 9 - PG 21, 30.5 mm



### Suitable for
- Mild steel (St37), plastic and aluminium up to 3.5 mm thick

### Operation
- Hydraulic

### Predrilling
- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. |
|---|---|
| Slug Buster® hand hydraulic punch driver set PG 9 to PG 21 and 30.5 mm | **50356151SET** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hand hydraulic punch 7904E | 50337866 | |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 424 |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9,5 mm | 50339672 | 426 |
| Slug Buster® punch set PG 9 - 21, 30.5 mm | 50323989SET | 455 |
| Plastic case | 50352024 | |

## Slug Buster® hand hydraulic punch driver set ISO 16 - 40



### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm thick

### Operation

- Hydraulic

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. | |
|---|---|---|
| Slug Buster® hand hydraulic punch driver set ISO 16 to 40 | **50356143SET** | |
| **Scope of supply** | **Part No.** | **Page** |
| Hand hydraulic punch 7804E | 50342886 | |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 424 |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9,5 mm | 50339672 | 426 |
| Slug Buster® punch set ISO 16/20/25/32/40 | 50356178SET | 454 |
| Plastic case | 50352024 | |

## Slug Buster® hand hydraulic 90° punch driver set ISO 16 - 40



### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm thick

### Operation

- Hydraulic

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

| Item | Part No. | |
|---|---|---|
| Slug Buster® hand hydraulic punch driver set ISO 16 to 40 | **50356160SET** | |
| **Scope of supply** | **Part No.** | **Page** |
| Hand hydraulic punch 7904E | 50337866 | |
| Draw stud for punch with hydraulic operation 9.5 x 71 mm | 51300430 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 426 |
| Spacer, short | 50032488 | |
| Adapter 19.0 x 48 mm with internal thread 9,5 mm | 50339672 | 426 |
| Slug Buster® punch set ISO 16/20/25/32/40 | 50356178SET | 454 |
| Plastic case | 50352024 | |

## Hand hydraulic punching set 90° ISO 16 - 40



- **Flexible head for multi-purpose use even in confined areas**

### Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

| Item | Part No. | |
|---|---|---|
| Hand hydraulic punching set ISO 16 - 40 | **52034233** | |
| **Scope of supply** | **Part No.** | **Page** |
| Slug Buster® punch set ISO 16/20/25/32/40 | 50356178SET | 454 |
| Draw stud for hydraulic operation 9.5 mm to 19 mm, 122 mm | 52042827 | |
| Draw stud for hydraulic operation 19.0 x 105 mm | 50318721 | 426 |
| Spacer, short | 50032488 | |
| HSS Co5 step bit | 52049371 | |
| Plastic case | | |

## Slug Buster® punch set ISO 16 – 40



- **For quick, clean, effortless and burr-free holes**
- **Split slugs fall free and can be removed easily**

### Suitable for

- Mild steel (St37), plastic and aluminium to 3.0 mm

### Operation

- Manual

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

### Scope of supply

- Complete system including punch and die incl. plastic case

| Item | Part No. | |
|---|---|---|
| Slug Buster® punch set ISO 16/20/25/32/40 | **50356178SET** | |
| **Accessories** | **Part No.** | **Page** |
| Plastic case | KKISO16B63 | |

## Slug Buster® punch set ISO 16 – 63



- **Long product life**
- **Very easy to use**

### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation

- Manual

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

### Scope of supply

- Complete system including punch and die incl. plastic case

| Item | Part No. | |
|---|---|---|
| Slug Buster® punch set ISO 16/20/25/32/40/50/63 | **50068920SET** | |
| **Accessories** | **Part No.** | **Page** |
| Plastic case | KKISO16B63 | |

## Slug Buster® punch set PG 9 - 21, 30.5 mm



- Unique punch profile
- Split slugs fall free and can be removed easily

### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation

- Manual

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

### Scope of supply

- Complete system including punch and die incl. plastic case

| Item | Part No. |
|---|---|
| Slug Buster® punch set PG 9/11/13/16/21 and 30.5 mm | **50323989SET** |

| Accessories | Part No. | Page |
|---|---|---|
| Plastic case | KKPG9B48 | |



## Slug Buster® punch set PG 9 - PG 48, 30.5 mm



- Unique punch profile
- Split slugs fall free and can be removed easily

### Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm

### Operation

- Manual

### Predrilling

- Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183
  draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

### Scope of supply

- Complete system including punch and die incl. plastic case

| Item | Part No. |
|---|---|
| Slug Buster® punch set PG 9/11/13/16/21/29/36/48 and 30.5 mm | **50328034SET** |

| Accessories | Part No. | Page |
|---|---|---|
| Plastic case | KKPG9B48 | |

# FOR DEEP INCISIONS - HOLE SAWS

Clear the way for cables and electrical connections. Our Greenlee hole saws offer a long-term precise solution. Reinforced back plate reduces vibrations. Saving you effort and ensuring precise concentricity. HSS bi-metal hole saws are suitable for processing steel sheet, cast iron, brass and other materials.



**In brief**

- Reduced vibrations thanks to reinforced back plate
- Long service life due to high-performance steel
- Suitable for numerous materials
- For multi-functional use, please note our universal tools

## HSS bi-metal hole saws

No material is safe from the HSS bi-metal hole saws. Very hard high-performance steel (M 42) for clean and reliable prolonged operation.

- Precise cut with positive pitch
- Reinforced back plate reduces vibrations
- High true running accuracy
- Cooling slots for low heat build-up
- Saws up to a cut depth of of 41.3 mm
- Improved service life due to tooth hardness Rc65-68
- Suitable for steel sheet, cast iron, brass, fibreglass, wood and plastic



## Set of hole saws: HSS bi-metal hole saw set

The hole saw set gives you all standard sizes tidily combined. Well sorted and perfectly protected.

- All standard sizes of hole saws
- Manufactured from M42 high-performance steel
- Including accessories
- Securely stowed in a robust case



## HSS Bi-metal hole saws





- Vibration-reduction and high true running accuracy due to thick back section
- High-quality serration easily assured, precise cut
- Cooling slots ensure low heat build-up
- No canting when sawing

### Characteristics

- High-quality, rake variable pitch design provides faster, easier cutting
- High true running accuracy
- Max. cutting depth 41.3 mm
- Tooth hardness Rc 65 - 68

### Suitable for

- Mild steel, cast iron, brass, aluminium, fibreglass, wood and plastic

### Additional information

- Arbors have to be ordered separately, not included in scope of supply

| Punch size mm | Standard size Pg | Standard size ISO | Weight g | Recommended cutting speed r.p.m. for | | | | | | Part No. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | steel sheet | tool and stainless steel | cast iron | non-ferrous metal | aluminium | wood | |
| 14 | | | 46 | 580 | 300 | 400 | 790 | 900 | 800 | **50191314** |
| 15 | | | 46 | 580 | 300 | 400 | 790 | 900 | 800 | **52057722** |
| 16 | Pg 9 | ISO 16 | 46 | 550 | 275 | 365 | 730 | 825 | 760 | **52057723** |
| 17 | | | 46 | 500 | 250 | 330 | 665 | 750 | 720 | **52057724** |
| 18 | | | 46 | 500 | 250 | 330 | 665 | 750 | 720 | **52057725** |
| 19 | Pg 11 | | 46 | 460 | 230 | 300 | 600 | 690 | 680 | **52057726** |
| 20 | | ISO 20 | 46 | 445 | 220 | 290 | 580 | 660 | 640 | **52057727** |
| 21 | Pg 13 | | 46 | 425 | 195 | 280 | 560 | 635 | 580 | **52057728** |
| 22 | Pg 16 | | 46 | 390 | 195 | 260 | 520 | 585 | 560 | **52057729** |
| 23 | | | 46 | 380 | 190 | 250 | 510 | 570 | 540 | **52057730** |
| 24 | | | 46 | 370 | 185 | 245 | 494 | 555 | 520 | **52057731** |
| 25 | | ISO 25 | 46 | 350 | 175 | 235 | 470 | 525 | 500 | **52057732** |
| 26 | | | 46 | 325 | 160 | 215 | 435 | 480 | 500 | **52057733** |
| 27 | | | 46 | 300 | 150 | 200 | 400 | 450 | 450 | **52057734** |
| 28 | | | 46 | 300 | 150 | 200 | 400 | 450 | 450 | **52057735** |
| 29 | Pg 21 | | 91 | 285 | 145 | 190 | 380 | 425 | 430 | **52057736** |
| 30 | | | 91 | 270 | 140 | 180 | 360 | 410 | 410 | **52057737** |
| 32 | | ISO 32 | 91 | 270 | 140 | 180 | 360 | 410 | 410 | **52057738** |
| 33 | | | 46 | 250 | 125 | 165 | 330 | 375 | 370 | **52057739** |
| 35 | | | 46 | 240 | 120 | 160 | 315 | 360 | 30 | **52057740** |
| 36 | | | 91 | 240 | 120 | 160 | 315 | 360 | 30 | **52057741** |
| 37 | Pg 29 | | 91 | 230 | 115 | 150 | 300 | 345 | 330 | **52057742** |
| 38 | | | 91 | 220 | 110 | 145 | 290 | 330 | 310 | **52057743** |
| 40 | | ISO 40 | 91 | 210 | 110 | 140 | 280 | 315 | 290 | **52057744** |
| 41 | | | 91 | 205 | 105 | 135 | 270 | 305 | 270 | **52057745** |
| 42 | | | 137 | 205 | 105 | 135 | 270 | 305 | 270 | **52057746** |
| 43 | | | 91 | 195 | 100 | 130 | 260 | 295 | 250 | **52057747** |
| 44 | | | 91 | 190 | 95 | 125 | 250 | 285 | 230 | **52057748** |
| 45 | | | 91 | 190 | 95 | 125 | 250 | 285 | 230 | **52057749** |
| 46 | | | 137 | 180 | 90 | 120 | 240 | 270 | 210 | **52057750** |
| 48 | Pg 36 | | 91 | 180 | 90 | 120 | 240 | 270 | 210 | **52057751** |
| 50 | | ISO 50 | 91 | 170 | 85 | 115 | 230 | 255 | 200 | **52057752** |
| 51 | | | 137 | 165 | 80 | 110 | 220 | 245 | 200 | **52057753** |

| Punch size mm | Standard size Pg | Standard size ISO | Weight g | Recommended cutting speed r.p.m. for | | | | | | Part No. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | steel sheet | tool and stainless steel | cast iron | non-ferrous metal | aluminium | wood | |
| 53 | | | 137 | 160 | 80 | 105 | 210 | 240 | 190 | **52057755** |
| 54 | Pg 42 | | 137 | 160 | 80 | 105 | 210 | 240 | 190 | **52057756** |
| 55 | | | 137 | 150 | 75 | 100 | 200 | 225 | 185 | **52057757** |
| 57 | | | 227 | 150 | 75 | 100 | 195 | 225 | 185 | **52057758** |
| 59 | | | 137 | 140 | 70 | 95 | 190 | 220 | 180 | **52057760** |
| 60 | Pg 48 | | 137 | 135 | 70 | 90 | 180 | 205 | 180 | **52057761** |
| 63 | | ISO 63 | 182 | 130 | 65 | 85 | 175 | 200 | 175 | **52057762** |
| 64 | | | 182 | 130 | 65 | 85 | 175 | 200 | 175 | **52057801** |
| 65 | | | 182 | 130 | 65 | 85 | 170 | 195 | 170 | **52057763** |
| 67 | | | 182 | 125 | 60 | 80 | 160 | 185 | 165 | **52057764** |
| 68 | | | 182 | 125 | 60 | 80 | 160 | 185 | 160 | **52057765** |
| 70 | | | 182 | 120 | 55 | 80 | 160 | 180 | 160 | **52057766** |
| 73 | | | 182 | 115 | 55 | 75 | 150 | 170 | 150 | **52057767** |
| 74 | | | 182 | 115 | 55 | 75 | 150 | 170 | 150 | **52057768** |
| 75 | | | 227 | 115 | 55 | 75 | 150 | 170 | 150 | **52057769** |
| 76 | | | 227 | 110 | 55 | 70 | 140 | 165 | 145 | **52057770** |
| 79 | | | 227 | 120 | 55 | 70 | 140 | 165 | 165 | **52057802** |
| 80 | | | 227 | 110 | 55 | 70 | 140 | 165 | 145 | **52057771** |
| 83 | | | 273 | 105 | 50 | 70 | 140 | 155 | 140 | **52057773** |
| 86 | | | 273 | 100 | 50 | 65 | 130 | 150 | 135 | **52057774** |
| 89 | | | 273 | 95 | 45 | 65 | 130 | 145 | 130 | **52057775** |
| 92 | | | 273 | 95 | 45 | 60 | 120 | 130 | 120 | **52057776** |
| 95 | | | 318 | 95 | 45 | 60 | 120 | 135 | 110 | **52057777** |
| 98 | | | 318 | 90 | 40 | 60 | 120 | 135 | 110 | **52057778** |
| 102 | | | 318 | 85 | 10 | 55 | 110 | 130 | 100 | **52057779** |
| 105 | | | 363 | 80 | 40 | 55 | 110 | 120 | 110 | **50191772** |
| 108 | | | 363 | 80 | 40 | 55 | 110 | 120 | 110 | **50191780** |
| 111 | | | 363 | 80 | 40 | 50 | 100 | 120 | 110 | **50191799** |
| 114 | | | 409 | 75 | 40 | 50 | 100 | 105 | 100 | **50191802** |
| 121 | | | 499 | 75 | 35 | 50 | 95 | 95 | 100 | **50191810** |
| 127 | | | 545 | 65 | 35 | 45 | 90 | 90 | 100 | **50191829** |
| 140 | | | 545 | 60 | 35 | 35 | 85 | 85 | 100 | **50191837** |
| 152 | | | 636 | 55 | 35 | 35 | 75 | 75 | 100 | **50191845** |
| 168 | | | 701 | 55 | 35 | 35 | 68 | 65 | 100 | **52057803** |
| 177 | | | 728 | 55 | 35 | 35 | 65 | 65 | 100 | **52057804** |
| 210 | | | 820 | 55 | 35 | 25 | 55 | 55 | 100 | **52057805** |

## HSS Bi-metal hole saw set



- Saves time thanks to low vibration and heat development
- Variable pitch for an uniform cut
- Requires minimal effort when drilling

### Characteristics

- High true running accuracy
- Less effort when cutting

### Suitable for

- Metal, brass, fibreglass, non-ferrous metal, cast iron, aluminium, wood and plastics, stainless steel sheet

| Item | Part No. |
|---|---|
| HSS bi-metall hole saw set Elektro II | **52059292SET** |
| HSS bi-metal universal hole saw set | **52059293SET** |
| HSS bi-metal hole saw set ISO 16 to 63 | **50069497SET** |
| HSS bi-metal plumbing hole saw set | **52059294SET** |
| HSS bi-metal hole saw set (830 PG) | **50292099SET** |
| HSS bi-metal electrical hole saw set | **52059295SET** |
| Electro set with countersink 35/68/75 mm | **50125630SET** |

| Description | Nominal size mm | Standard size | | Hole set | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Pg | ISO | 52059292SET Electro II | 52059293SET Universal | 50069497SET ISO 16-63 | 52059294SET Plumbing | 50292099SET 830PG | 52059295SET Standard | 50125630SET Electro |
| Bi-metal hole saw | 16 | Pg 9 | | | ● | | | ● | ● | |
| | 17 | | ISO 16 | | | ● | | | | |
| | 19 | Pg 11 | | | ● | | ● | ● | ● | |
| | 21 | Pg 13 | ISO 20 | | | ● | | ● | | |
| | 22 | Pg 16 | | ● | ● | | | ● | ● | |
| | 24 | | | | | | ● | | | |
| | 25 | | ISO 25 | | ● | ● | | | | |
| | 29 | Pg 21 | | ● | ● | | ● | ● | ● | |
| | 30 | | | | | | | ● | | |
| | 33 | | ISO 32 | | | ● | | | | |
| | 35 | | | ● | ● | | | | ● | ● |
| | 37 | Pg 29 | | | | | | ● | | |
| | 38 | | | | ● | | ● | | | |
| | 41 | | ISO 40 | | | ● | | | | |
| | 44 | | | ● | ● | | ● | | ● | |
| | 48 | Pg 36 | | | | | | ● | | |
| | 51 | | ISO 50 | ● | ● | ● | | | | |
| | 52 | | | | | | | | ● | |
| | 57 | | | | | | ● | | ● | |
| | 60 | Pg 48 | | | | | | ● | | |
| | 63 | | ISO 63 | ● | ● | ● | | | | |
| | 67 | | | | | | ● | | ● | |
| | 68 | | | ● | | | | | | ● |
| | 75 | | | | | | | | | ● |
| | 76 | | | | ● | | | | | |
| Countersink for Hole Saw 68 mm | | | | | | | | | | ● |
| Arbor 14 to 30 mm | | | | ● | ● | ● | ● | ● | ● | |
| Arbor 32 to 152 mm | | | | ● | ● | ● | ● | ● | ● | ● |
| Case | | | | ● | ● | ● | ● | ● | ● | ● |

## Electro set with countersink



### Characteristics

- Countersink with two specially-hardened cutting teeth

### Suitable for

- Steel, non-ferrous metal, aluminium, cast iron, stainless steel, wood, plastic and building materials

### Scope of supply

- Consisting of hole saws 35 mm, 68 mm, 75 mm, countersink for 68 mm hole saw, arbor with pilot drill and counter nut for hole saws 32 - 152 mm and spare HSS pilot drill 6.35 mm dia.

| Item | Part No. | |
|---|---|---|
| Electro set with countersink 35/68/75 mm | **50125630SET** | |
| **Scope of supply** | **Part No.** | **Page** |
| HSS bi-metal hole saw 35 mm | 52057740 | 458 |
| HSS bi-metal hole saw 68 mm | 52057765 | 459 |
| HSS bi-metal hole saw 75 mm | 52057769 | 459 |
| Countersink for hole saws | 52033839 | |
| Arbor for HSS bi-metal hole saws 8.6 mm | 52057781 | 462 |
| Plastic case | 52059258 | |

## Arbor for HSS bi-metal hole saws 14 - 30 mm

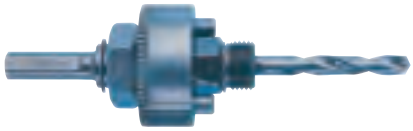


**Suitable for**

- Sizes from 14 - 30 mm

| Item | Part No. |
|---|---|
| Arbor 6.3 mm | **50371576** |
| Arbor for HSS bi-metal hole saws 7.9 mm | **50385224** |
| Arbor 8.6 mm | **52057780** |
| Arbor 11.1 mm | **50371550** |

## Arbor for HSS bi-metal hole saws 32 - 152 mm



**Suitable for**

- Sizes from 32 - 51 mm
- Sizes from 32 - 152 mm

| Item | Part No. |
|---|---|
| Arbor 7.9 mm for HSS bi-metal hole saws 32 - 51 mm | **50371541** |
| Arbor 8.6 mm for HSS bi-metal hole saws 32 - 152 mm | **52057781** |
| Arbor 11.1 mm for HSS bi-metal hole saws 32 - 152 mm | **50371568** |

## SDS arbor for HSS bi-metal hole saws



**Suitable for**

- Sizes from 32 - 152 mm
- Sizes from 14 - 30 mm

| Item | Part No. |
|---|---|
| SDS arbor for HSS bi-metal hole saws 14 - 30 mm | **50069691** |
| SDS arbor for HSS bi-metal hole saws 32 - 152 mm | **50069292** |

## Replaceable pilot drill for arbor HSS bi-metal hole saws



| Item | Part No. |
|---|---|
| Replaceable pilot drill for arbor HSS bi-metal hole saws | **52057782** |

# SIMPLE DRILLING – EVERYTHING IN ONE OPERATION

Greenlee bits are produced using the latest CNC technology. The benefit to you is clear: Clean cutting edges produce longer and better cutting operations from the very first use. That saves you effort. The two-sided deburring of the edge breaker saves you time. The Rotastop system on the shank prevents the bit from slipping through in the chuck. That's how drilling is done today.



**In brief**

- Perfect cutting performance in the first pass
- Rotastop prevents the bit slipping through
- Split point requires less effort

## Kwik Stepper with Rotastop

Years of experience and development have gone into this bit. The Kwik Stepper drills not only burr-free with optimum swarf removal, the spiral groove also reduces heat build-up during the drilling operation. This makes the Kwik Stepper especially durable. The Rotastop system holds the bit in place - without slipping through. Additionally, the split point reduces your effort during the drilling operation. Great performance from just one bit.

- All required drilling ranges in one tool
- Rotastop for maximum torque transmission
- Quick bit change
- No slipping through in the chuck
- Spiral groove for improved cutting performance
- Two-sided burr removal
- Can be used for sheet, pipes, non-ferrous metals, stainless steel and plastics

## Performance in the set: Kwik Stepper set of step bits

To keep you flexible while drilling, we have combined all standard step bits in a practical set and accommodated them in a robust plastic box. Everything to hand.

- All common step bits
- Clear assignment of the bit through laser scaling of the step bit
- Robust plastic box with integrated pop-up hinge
- Easy to transport and store



## Kwik Stepper™ step bit



- Minimum burr
- Long service life
- Good torque transmission
- Less effort when drilling

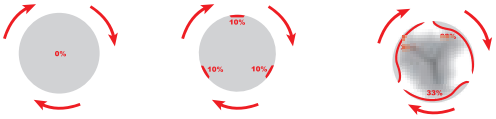
**Suitable for**

- Sheet, pipe, NF metal and plastic

| Item | Drilling range dia. mm | Step sizes dia. mm | Total length mm | Number of steps | Shank dia. mm | Part No. |
|---|---|---|---|---|---|---|
| Kwik Stepper™ step bit 3.2 - 12.7 mm | 3.2 - 12.7 | 3.2 / 4.0 / 4.8 / 5.6 / 6.4 / 7.1 / 7.9 / 8.7 / 9.5 / 10.3 / 11.1 / 11.9 / 12.7 | 80 | 13 | 634 | **50344013** |
| Kwik Stepper™ step bit 4.8 - 12.7 mm | 4.8 - 12.7 | 4.8 / 6.4 / 7.9 / 9.5 / 11.1 / 12.7 | 80 | 6 | 6.4 | **50364022** |
| Kwik Stepper™ step bit 22.2 mm | 22.2 | 22.2 | 85 | 1 | 9.5 | **50344110** |
| Kwik Stepper™ step bit 4.8 - 22.2 mm | 4.8 - 22.2 | 4.8 / 6.4 / 7.9 / 9.5 / 11.1 / 12.7 / 14.3 / 15.9 / 17.5 / 19.1 / 20.6 / 22.2 | 85 | 12 | 9.5 | **50344030** |
| Kwik Stepper™ step bit 12.7 - 28.6 mm | 12.7 - 28.6 | 12.7 / 22.2 / 28.6 | 57 | 3 | 9.5 | **50300083** |
| Kwik Stepper™ step bit 22.2 - 34.9 mm | 22.2 - 34.9 | 22.2 / 28.6 / 31.0 / 31.8 / 34.9 | 73 | 5 | 9.5 | **50364146** |
| Kwik Stepper™ step bit 9.7 mm | 9.7 | Predrilling for Greenlee-Draw stud 9.7 | 40 | 1 | 6.4 | **50360183** |
| Kwik Stepper™ step bit 12.7 mm | 12.7 | Predrilling for Greenlee-Draw stud 12.7 | 40 | 1 | 6.4 | **50344102** |
| Kwik Stepper™ step bit Pg 7 - 21 | Pg 7 - 21 | Pg7 / Pg9 / Pg11 / Pg13 / Pg16 / Pg21 | 90 | 7 | 9.5 | **50360205** |
| Kwik Stepper™ step bit ISO 16 - 32 | ISO 16 – 32 | ISO 16 / 20 / 25 / 32 | 80 | 4 | 9.5 | **50360221** |

## Kwik Stepper™ step bit with ROTASTOP® shaft






- ROTASTOP® guarantees best-possible torque transmission
- Minimal burr
- No slipping in the chuck with ROTASTOP®
- Long service life
- Requires minimum effort when drilling

**Suitable for**

- Reaming of steel sheets, pipes, non-ferrous metals and plastic

| Item | Drilling range dia. mm | Step sizes dia. mm | Total length mm | Number of steps | Shank dia. mm | Part No. |
|---|---|---|---|---|---|---|
| Kwik Stepper™ step bit with ROTASTOP® shaft 4 - 12 mm | 4 – 12 | 4.0 / 5.0 / 6.0 / 7.0 / 8.0 / 9.0 / 10.0 / 11.0 / 12.0 | 80 | 9 | 8.0 | **50069845** |
| Kwik Stepper™ step bit with ROTASTOP® shaft 4 - 20 mm | 4 – 20 | 4.0 / 6.0 / 8.0 / 10.0 / 12.0 / 14.0 / 16.0 / 18.0 / 20.0 | 67 | 9 | 8.0 | **50069853** |
| Kwik Stepper™ step bit with ROTASTOP® shaft ISO 12 - 40 mm | 6-21 | 6.0 / 8.0 / 10.0 / 11.5 / 12.5 / 14.5 / 17.0 / 21.0 | 67.5 | 8 | 8 | **52049371** |
| Kwik Stepper™ step bit with ROTASTOP® shaft 6 - 30 mm | 6 – 30 | 6.0 / 8.0 / 10.0 / 12.0 / 14.0 / 16.0 / 18.0 / 20.0 / 22.0 / 24.0 / 26.0 / 28.0 / 30.0 | 98 | 13 | 10.0 | **50069861** |
| Kwik Stepper™ step bit with ROTASTOP® shaft 6 - 36 mm | 6 – 36 | 6.0 / 9.0 / 12.0 / 15.0 / 18.0 / 21.0 / 24.0 / 27.0 / 30.0 / 33.0 / 36.0 | 85 | 11 | 12.0 | **50069870** |
| Kwik Stepper™ step bit with ROTASTOP® shaft ISO 12 - 40 mm | ISO 12 - 40 | For ISO 12 / 16 / 20 / 25 / 32 / 40 | 110 | 6 | 12.0 | **50069888** |

## Kwik Stepper™ step bit set



- ROTASTOP® guarantees best-possible torque transmission
- Hardly any burr
- No slipping in the chuck with ROTASTOP®
- Long service life
- Requires minimal effort when drilling

**Suitable for**

- Reaming of steel sheets, pipes, non-ferrous metals and plastic

| Item | Part No. | |
|---|---|---|
| Kwik Stepper™ step bit set | **50069900** | |
| **Scope of supply** | **Part No.** | **Page** |
| Kwik Stepper™ step bit with ROTASTOP® shaft 4 - 12 mm | 50069845 | 467 |
| Kwik Stepper™ step bit with ROTASTOP® shaft 4 - 20 mm | 50069853 | 467 |
| Kwik Stepper™ step bit with ROTASTOP® shaft 6 - 30 mm | 50069861 | 467 |

## Combi bit set M 3 - M 10



- Drill, tap and deburr in one operation

**Suitable for**

- For use with St37, non-ferrous metals and plastics

| Item | Part No. | |
|---|---|---|
| Combi bit set in plastic cassette M 3 - M 10 | **50121510** | |
| **Scope of supply** | **Part No.** | **Page** |
| Combi bit M3 | 50116312 | |
| Combi bit M4 | 50116320 | |
| Combi bit M5 | 50116339 | |
| Combi bit M6 | 50116347 | |
| Combi bit M8 | 50116355 | |
| Combi bit M10 | 50116363 | |
| Combi bit holder | 50116371 | |

# THE ALL-ROUNDER.

Sometimes, you need to be the jack-of-all-trades: Crimping, cutting, bending, punching and offsetting. With Klauke, you have every facility in just one tool.





# Universal tools


| | |
|---|---|
| Hand-operated hydraulic universal tool, hydraulic universal head | 472 |
| Battery powered universal tools | 475 |
| Bus bar tool centre | 479 |

# ONE TOOL FOR ALL SITUATIONS - UNIVERSAL TOOLS

Crimping, cutting or punching: Replaceable adapter and dies quickly adapt the tool to individual tasks. Low weight and powerful: Crimping up to 400 mm², cutting up to 40 mm diameter or punching up to 92 x 92 mm, no problem at all for the Klauke Multi.
The Klauke Multi: The right tool in every instance.




**NEXT GENERATION**

## Systematic crimping

All crimping dies from Klauke function with every Klauke tool. Crimp cable lugs with the Klauke series 5, 18 and 22 (6 t tools) and wide crimping with the series 13 (12 t tools). Differing crimp shapes and nominal cross-sections up to 400 mm² can be processed with just one tool.

- Can be used with dies series 5, 18 and 22 (6 t)
- Wide crimping with dies series 13 (12 t) possible
- Cross sections up to 400 mm²
- Simple adapter replacement

## All-around cutting

Stay prepared for various materials. Cables from copper and aluminium are not a problem with appropriate cutting head, likewise for DIN-profile rails, threaded bars or railway catenary wires. Klauke universal tool cuts everything up to 40 mm diameter.

- Differing materials can be cut: Aluminium and copper cables, threaded rods, profile rails, railway catenary wires
- The right cutting dies for every application
- Cutting range up to 40 mm

## The plus one: Hole punching

Retooling of hole punches is really simple with the Klauke multi. In conjunction with hole punch adapters from Greenlee, you can punch holes up to 64 mm round and max. 92 mm x 92 mm square.

## Solid in use

The Klauke universal tool can also be used for machining operations on solid bus bars and laminated bus bars up to 120 mm x 12 mm. Bending, punching, cutting and offsetting with one device that can be operated with the AHP700L and the electric pumps from Klauke.

# HK 60 UNV Hand-operated hydraulic universal tool



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool

## Characteristics

- Universal head flip top style, rotatable
- Adapter for crimping dies of the Klauke Series 5, 18 and 22
- Various cutting dies for aluminium and copper conductors with and without armouring as well as Al/St-Cables (ACSR)
- Dies for cutting threaded rods and DIN rails
- Punching adapter for Greenlee punching tools
- Dies to punch DIN rails
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when operation is complete

## Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

c UL us

K5 SERIE | K18 SERIE | K22 SERIE

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round, up to 92 x 92 mm square |
| Length | 540 mm |
| Weight | 3.5 kg |
| Ambient temperature | -20 °C to +40 °C |

| Item | Part No. |
|---|---|
| Hand-operated hydraulic universal tool | **HK60UNV** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Steel carrying case | MK60UNV | |

## PK 60 UNV Hydraulic universal head



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping, cutting and punching results

### Characteristics

- Universal head with quick coupling, 360° rotation when not pressurised, flip top style
- Various cutting dies for aluminium and copper conductors with and without armouring as well as Al/St-Cables (ACSR)
- Dies to punch DIN rails
- Adapter for crimping dies of the Klauke Series 5, 18 and 22

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping cycle | 3 s to 5 s (depending on crimping cross-section) |
| Number of crimps | approx. 300 at 150 mm² Cu DIN |
| Cutting range | max. 40 mm dia. |
| Number of cuts | approx. 110 at 4 x 70 mm² NYY |
| Punching capacity | up to 64 mm dia. round, up to 92 x 92 mm square |
| Operating pressure | max. 700 bar |
| Length | 350 mm |
| Weight | 2.4 kg |

| Item | Part No. |
|---|---|
| Hydraulic universal head | **PK60UNV** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Carrying bag | TT2 | 192 |

## EKM 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press app
- Small and slim, perfect for cramped conditions

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

IEC

K22 SERIE K18 SERIE K5 SERIE

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 7 s up to 9 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round, up to 92 x 92 mm square |
| Charging time | 15 min. |
| Weight | 3.0 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EKM60UNVCFB** | **EKM60UNVCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 2.0 Ah, Li-Ion | RALB1EU | | 492 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 1.5 Ah, Li-Ion | | RAL1 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Adapter for crimping dies of Series 22 | UA22 | UA22 | 478 |
| Plastic case 450 x 370 x 105 mm | KKMUNVNG | KKMUNVNG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | | RAL2 | 491 |
| Variants | | | Page |
| L-BOXX with battery powered universal tool EKM60UNVCFB | LBOXXEKM60UNVCFB | | 205 |
| L-BOXX with battery powered universal tool EKM60UNVCFM | | LBOXXEKM60UNVCFM | 205 |

## EK 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- Fast working due to 2-stage hydraulics
- All tool data on view thanks to display and i-press app

### Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

### Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 60 kN |
| Stroke | 42 mm |
| Crimping range | 6 - 300 mm² |
| Crimping cycle | 3 s to 5 s (depending on cross-section) |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 64 mm dia. round |
| Charging time | 45 min. |
| Weight | 4.8 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 6 - 300 mm² | **EK60UNVCFB** | **EK60UNVCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case 450 x 370 x 105 mm | UA22 | UA22 | 478 |
| Adapter for crimping dies of Series 22 | KK120UNVNG | KK120UNVNG | |

# EK 120 UNV Battery-powered hydraulic universal tool 10 - 400 mm²

NEXT GENERATION



- One head for crimping, cutting and punching - one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- All tool data on view thanks to display and i-press app

## Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

## Technical instructions

- Interchangeable adapters and dies for crimping, cutting and punching you will find on page 478

| Technical data | |
|---|---|
| Crimping force | 108 kN |
| Stroke | 42 mm |
| Crimping range | 10 - 400 mm² |
| Crimping cycle | Depending on cable type |
| Cutting range | max. 40 mm dia. |
| Punching capacity | up to 144 mm dia. round, up to 138 x 138 mm square |
| Charging time | 45 min. |
| Weight | 6.5 kg |
| Ambient temperature | -10 °C up to +40 °C |

| Item | Part No. **Bosch** | Part No. **Makita** | |
|---|---|---|---|
| Battery-powered hydraulic universal tool 10 - 400 mm² | **EK120UNVCFB** | **EK120UNVCFM** | |
| Scope of supply | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Bosch quick-charger for 18 V Li-Ion battery | LGLB1EU | | 494 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |
| Makita quick-charger for 18 V Li-Ion battery | | LGL1 | 494 |
| Plastic case | KK120NG | KK120NG | |
| Accessories | | | Page |
| Bosch battery 18 V / 5.0 Ah, Li-Ion | RALB2EU | | 493 |
| Makita battery 18 V / 4.0 Ah, Li-Ion | | RAL40 | 492 |

## Interchangeable adapters and dies for crimping, cutting or punching

| Part description | Part no. | Tools 6 ton | Tools 12 ton |
|---|---|---|---|
| **Application: crimping** | | | |
|  Adapter for crimping dies series 5 | **UA5** | ● | |
|  Adapter for crimping dies series 13 | **UA12TKL** | | ● |
|  Adapter for crimping dies series 18 | **UA18** | ● | |
|  Adapter for crimping dies series 22 | **UA22** | ● | |
| **Application: cutting** | | 6 ton | 12 ton |
|  Cutting die for Al/Cu conductors to max. 40 mm dia. | **UCACSR** | ● | ● |
|  Cutting die for Al/Cu conductors to max. 26 mm dia. (Not suitable for fine and superfine stranded conductors) | **UC26** | ● | ● |
| Cutting die for Al/Cu conductors to max. 40 mm dia. (Not suitable for fine and superfine stranded conductors) | **UC40** | ● | ● |
|  Cutting die for threaded rods M5 metric | **UCM5** | ● | ● |
| Cutting die for threaded rods M6 metric | **UCM6** | ● | ● |
| Cutting die for threaded rods M8 metric | **UCM8** | ● | ● |
| Cutting die for threaded rods M10 metric | **UCM10** | ● | ● |
| Cutting die for threaded rods M12 metric | **UCM12** | ● | ● |
| Cutting die for threaded rods 1/4“ | **UCUNC14** | ● | ● |
| Cutting die for threaded rods 3/8“ | **UCUNC38** | ● | ● |
| Cutting die for threaded rods 1/2“ | **UCUNC12** | ● | ● |
|  Cutting die for profile conductors 35 x 15 | **UCD3515** | ● | ● |
| Cutting die for profile conductors 32 x 15 x 9 | **UCD3215** | ● | ● |
| Cutting die for profile conductors 35 x 7.5 | **UCD3575** | ● | ● |
|  Cutting die for profile conductors 2980 | **UCN2980** | ● | ● |
|  Cutting die for laminated Cu bus bars, max. width 37.5 mm | **UCF** | ● | |
|  Cutting die 107 mm² type AC for catenary wires in railway construction | **UCAC107** | ● | ● |
| Cutting die 85 mm² type BC for catenary wires in railway construction | **UCBC85** | ● | ● |
| Cutting die 110 mm² type BC for catenary wires in railway construction | **UCBC110** | ● | ● |
| Cutting die 120 mm² type BC for catenary wires in railway construction | **UCBC120** | ● | ● |
| Cutting die 150 mm² type BC for catenary wires in railway construction | **UCBC150** | ● | ● |
| **Application: Punching** | | 6 ton | 12 ton |
|  Hole punch adapter for holes to 64 mm dia., 92 x 92 mm and 46 x 92 mm | **UA6P** | ● | |
| Hole punch adapter for holes to 144 mm dia., 138 x 138 mm and 68 x 138 mm | **UA12P** | | ● |
|  Die for punching DIN rails 35 x 15; 32 x 15 x 9; 35 x 7.5 | **UPD6** | ● | |

## Bus bar tool centre



- **Basic tool for bending, punching and cutting solid and laminated bus bars up to 120 x 12 mm**
- **Compact design and low weight**

### Suitable for

- Drive with EHP4 or AHP700-L

### Additional information

- For drives with EHP4 the Part Number appendix „EHP4“ is required (50052241EHP4)
  For drives with AHP700-L connector Sbz4 is required.

| Technical data | |
|---|---|
| Crimping force | 185 kN |
| Max. operating pressure | 700 bar |
| Capacity | 1.5 l / min. |
| Required oil volume | 0.15 l |
| Dimension | 480 x 500 x 360 mm |
| Weight | 51 kg |

| Item | Part No. |
|---|---|
| Bus bar tool centre for operation with AHP700-L | **50052241** |

## Bending tool



- **For Al/Cu materials to max. 120 x 12 mm**
- **Bending radius 5.00 mm**

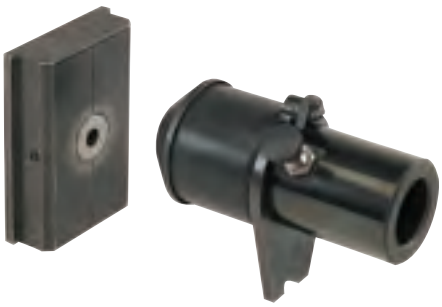
### Characteristics

- Max. bending angle 100°

| Technical data | |
|---|---|
| Weight | 7.1 kg |

| Item | Part No. |
|---|---|
| Bending tool, 5.0 mm bending radius | **50052250** |

## Punching tool I



### Characteristics

- Solid conductors from Al/Cu to max. 12 mm and steel to 10 mm thick

### Suitable for

- Hole diameters from 6.5 - 21 mm

| Technical data | |
|---|---|
| Weight | 4.5 kg |

| Item | Part No. |
|---|---|
| Punching tool I | **50052128** |

## Punching tool I

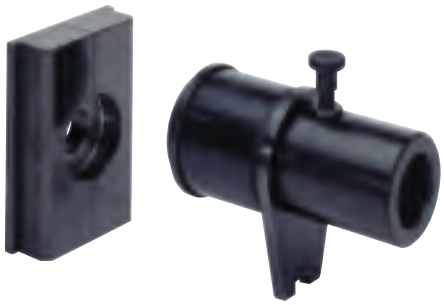


### Characteristics

- Solid conductors from Al/Cu to max. 12 mm and steel to 10 mm thick

| Item | Part No. |
|---|---|
| Punch and die 6.5 mm dia. | **50052276** |
| Punch and die 8.5 mm dia. | **50052284** |
| Punch and die 11 mm dia. | **50052292** |
| Punch and die 13 mm dia. | **50052306** |
| Punch and die 15 mm dia. | **50052314** |
| Punch and die 17 mm dia. | **50052322** |
| Punch and die 21 mm dia. | **50052330** |
| Oblong punch and die 6.5 x 13 mm | **50052349** |
| Oblong punch and die 8.5 x 16 mm | **50052357** |
| Oblong punch and die 11 x 20 mm | **50052365** |
| Oblong punch and die 13 x 20 mm | **50052373** |
| Oblong punch and die 17 x 20 mm | **50052381** |

## Punching tool III



### Characteristics

- Solid and laminated bus bars from Al/Cu to max. 12 mm and steel to 10 mm thick

### Suitable for

- Hole diameters from 6.5 - 21 mm

| Technical data | |
|---|---|
| Weight | 4.5 kg |

| Item | Part No. |
|---|---|
| Punching tool III | **50766919** |

## Punch & die for punching tool III

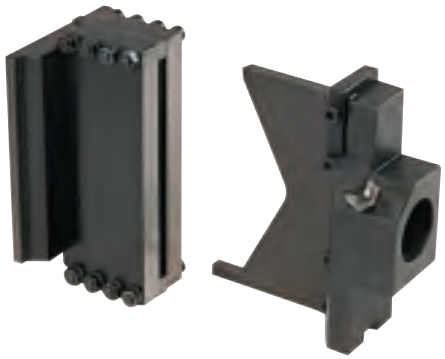


### Characteristics

- Solid and laminated bus bars from Al/Cu to max. 12 mm and steel to 10 mm thick

| Item | Part No. |
|---|---|
| Punch and die 6.5 mm dia. | **50115286** |
| Punch and die 8.5 mm dia. | **50115294** |
| Punch and die 11 mm dia. | **50115308** |
| Punch and die 13 mm dia. | **50115316** |
| Punch and die 15 mm dia. | **50115324** |
| Punch and die 17 mm dia. | **50115332** |
| Punch and die 21 mm dia. | **50115340** |
| Oblong punch and die 6.5 x 13 mm | **50115359** |
| Oblong punch and die 8.5 x 16 mm | **50115367** |
| Oblong punch and die 11 x 20 mm | **50115375** |
| Oblong punch and die 13 x 20 mm | **50115383** |
| Oblong punch and die 17 x 20 mm | **50115391** |

## Cutting tool



### Characteristics

- For Al/Cu materials to max. 120 x 12 mm

| Technical data | |
|---|---|
| Weight | 5.3 kg |

| Item | Part No. |
|---|---|
| Cutting tool | **50052144** |

## Offset tool



### Characteristics

- Workpiece offset 5, 6, 8, 10 and 12 mm by using insertion plates
- For Al/Cu materials to max. 120 x 12 mm

| Technical data | |
|---|---|
| Dimension | 175 x 90 x 135 mm |
| Weight | 10.0 kg |

| Item | Part No. |
|---|---|
| Offset tool | **50052152** |



## Aluminium accessory box for punching tools, empty



### Suitable for

- Storage of accessories

| Technical data | |
|---|---|
| Dimension | 350 x 250 x 200 mm |
| Weight | 4.3 kg |

| Item | Part No. |
|---|---|
| Tool chest alu (empty) | **50052160** |



# THE RIGHT DRIVE FOR EVERY ACTIVITY.

Even when it comes to drive units, Klauke leaves nothing to chance. No matter where, when and how: Klauke hydraulic pumps give you the power you need.




# Pumps

**Pumps** **482**
Hydraulic pumps 484
Accessories for hydraulic tools 491

7

# THE DRIVE - HYDRAULIC PUMPS AND DRIVE UNITS

With Klauke, everything fits together. Klauke hydraulic pumps provide every Klauke crimping, cutting and multi head with the required thrust. All pumps are matched to the various heads. They generate 700 bar pressure so that the tool can provide full power with every operation.



## Foot pressure actuation: Hydraulic foot pumps

Keep your hands free: With the steady hydraulic foot pumps, you can operate all crimping and cutting tools by your foot pressure. The 2-stage hydraulic system work especially efficiently.

- Foot pumps with up to 700 bar pressure
- 2-stage hydraulic system for efficient pumping effect
- Automatic pressure switch off
- Best possible convenience and good durability
- Up to 10 m hydraulic hose available

## Portable pressure: Battery-powered hydraulic pumps

Pumps wherever you want. Simply take our battery-powered hydraulic pump AHP 700-L along with shoulder strap or rucksack.

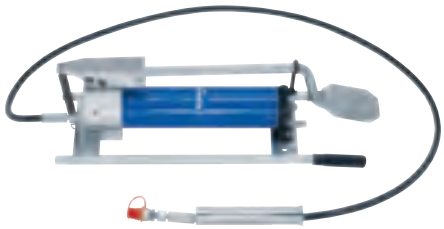
- Pumps delivering up to 700 bar pressure
- Compact dimensions for portable use
- Simple operation via hand switch with 1.5 m cable
- Display with reverse function
- Hydraulic hose up to 10 m long available

## Pressure with current: Electro-hydraulic pumps

Use the full force of your tools also with EHP 2, 3 or 4 electro-hydraulic drive.

- Power output up to 700 bar
- High capacity with compact dimensions
- Hydraulic hose up to 10 m long available

## FHP 2 Foot pump 700 bar



- Two-stage hydraulics
- Manual retraction if required, also at high pressure
- Sturdy design

### Characteristics

- Automatic pressure switch off

### Suitable for

- The operation of hydraulic crimping and cutting heads

| Technical data | |
|---|---|
| Operating pressure | max. 700 bar |
| Weight | 12 kg |

| Item | Part No. |
|---|---|
| Foot pump 700 bar | **FHP2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |

## PHD 2 Pneumatic/hydraulic pressure transmitter, 700 bar



- Manual retraction if required, also at high pressure

### Suitable for

- The operation of hydraulic crimping and cutting heads

| Technical data | |
|---|---|
| Required air pressure | max. 6 bar |
| Operating pressure | max. 700 bar |
| Weight | 6.3 kg |

| Item | Part No. |
|---|---|
| Pneumatic/hydraulic pressure transmitter | **PHD2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |

## EHP 2 Electro hydraulic drive unit 400 V, 700 bar



**Compact dimensions and low weight combined with high conveying capacity**

### Characteristics

- With AC motor
- Hydraulic hose, 2 m
- Three-stage safety foot switch
- Electronic control
- 70 % power-on time

### Suitable for

- The operation of hydraulic crimping and cutting heads

| Technical data | |
|---|---|
| Version | Three-phase motor |
| Rated output | 0.55 kW |
| Motor voltage | 360 V - 440 V / 50 Hz |
| Capacity | 0.82 l / min. |
| Operating pressure | max. 700 bar |
| Weight | 22.9 kg |
| Operating mode | 70 % power-on time |

| Item | Part No. |
|---|---|
| Electro-hydraulic pump, 400 V, 700 bar | **EHP2380** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2 m | HS22 | 497 |
| Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL | FTA1 | 496 |

| Accessories | Part No. | Page |
|---|---|---|
| Transport trolley for electro-hydraulic pump EHP 2 | TW50 | |
| Two-hand safety controller for pumps EHP 2 to EHP 4 | ZST3 | 496 |
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |
| Adapter Klauke sleeve to Greenlee plug | CMGSK | |

# EHP 3 Electro hydraulic drive unit 400 V, 700 bar



- Continuous operation
- High conveying capacities with compact dimensions

## Characteristics

- With AC motor
- Hydraulic hose, 2 m
- Three-stage safety foot switch
- Electronic control

## Suitable for

- The operation of hydraulic crimping and cutting heads

| Technical data | |
|---|---|
| Version | Three-phase motor |
| Rated output | 1.1 kW |
| Motor voltage | 360 V - 440 V / 50 - 60 Hz |
| Capacity | 0.9 l / min. |
| Operating pressure | max. 700 bar |
| Weight | 40.9 kg |
| Operating mode | 100 % power-on time |

| Item | Part No. |
|---|---|
| Electro-hydraulic pump, 400 V, 700 bar | **EHP3** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 2m | HS22 | 497 |
| Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL | FTA1 | 496 |

| Accessories | Part No. | Page |
|---|---|---|
| Transport trolley for electro-hydraulic pump EHP 3 | TWEHP3 | 496 |
| Two-hand safety controller for pumps EHP 2 to EHP 4 | ZST3 | 497 |
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | |
| Adapter Klauke sleeve to Greenlee plug | CMGSK | |

## EHP 4 Electro-hydraulic pumps, 700 bar



- **High capacity**
- **Manually adjustable piston stroke speed / delivery volume of the pump**
- **Closed, compact and lockable housing (IP54 or higher) to protect against humidity, dust and unauthorised manipulation**

### Characteristics

- Compatibility with Klauke hydraulic crimping and cutting heads
- For connecting to busbar machining centre
- For use in conjunction with the LSK 120 with adapter CMGSK for punching bus bars
- Compatible with Greenlee punching tools (round and special shape punches) with adapter CMGSK

### Additional information

- The hydraulic pumps can be individually configured as customer-specific system.

| Technical data | |
|---|---|
| Version | AC |
| Rated output | 0.75 kW |
| Motor voltage | EHP4115: 115 V/50 Hz, EHP4230: 230 V/50 Hz |
| Capacity | 0.82 l / min. |
| Operating pressure | max. 700 bar |
| Weight | 28.3 kg |
| Operating mode | 70% power-on time |

| Item | Part No. |
|---|---|
| Electro-hydraulic pump, 115 V | **EHP4115** |
| Electro-hydraulic pump, 230 V | **EHP4230** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | HS23 | 497 |
| Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL | FTA1 | 496 |

| Accessories | Part No. | Page |
|---|---|---|
| Two-hand safety controller for pumps EHP 2 to EHP 4 | ZST3 | 496 |
| Hydraulic hose, 3 m | HS23 | 497 |
| Hydraulic hose, 4 m | HS24 | 497 |
| Hydraulic hose, 5 m | HS25 | 497 |
| Hydraulic hose, 6 m | HS26 | 497 |
| Hydraulic hose, 8 m | HS28 | 497 |
| Hydraulic hose, 10 m | HS210 | 497 |
| Transport trolley for electro-hydraulic pump EHP 4 | TW150 | 495 |
| Adapter Klauke sleeve to Greenlee plug | CMGSK | |

# AHP 700-L Battery powered hydraulic pump, 700 bar



- Compact and lightweight design for mobile use
- High capacity

## Characteristics

- Select programme from crimping, cutting, and punching
- Housing from impact-resistant, fibreglass reinforced polyamide
- Large display for monitoring, diagnostics and setting the pump
- Two powerful, high-capacity Li-Ion batteries
- Automatic retraction when operation is complete
- Manual retract stop with „teach-in“ (MRS+) for positioning control for multiple crimps
- Remote control with cable for easy operation of the battery-operated pump
- Maintenance display via LED
- All hydraulic hoses have coupling plug and coupling sleeve, oil filled
- High wearing comfort with padded shoulder strap

## Suitable for

- Operates all single-acting Klauke crimping, cutting and punching tools with 700 bar operating pressure
- The connection to busbar machining centre
- The punching of busbars in conjunction with the LSK 120 with adapter CMGSK

## Additional information

- Also available in country-specific variants, Part Number appendix „C“

| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 2 x 4.0 Ah, Li-Ion |
| Charging time | 22 min. |
| Weight incl. battery | (with two batteries) approx. 6.4 kg |
| Ambient temperature | -12 °C to +40 °C |
| Operating pressure | max. 700 bar |
| Max. oil volume; | approx. 800 ml |
| Dimensions | L x W x H: 330 x 160 x 280 mm |

| Item | Part No. |
|---|---|
| Battery powered hydraulic pump, 700 bar | **AHP700L** |

| Scope of supply | Part No. | Quantity | Page |
|---|---|---|---|
| Makita battery 18 V / 4.0 Ah, Li-Ion | RAL40 | 2 | 491 |
| Makita quick-charger for 18 V Li-Ion battery | LGL1 | 1 | 494 |
| Hydraulic hose, 2 m, oil filled | HSOEL2 | 1 | 497 |
| Carrying strap with shoulder padding | TG3 | 1 | 495 |
| Carrying bag | TT2 | 1 | 196 |
| Remote control with 1.5 m cable | HTA4 | 1 | 499 |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m, oil filled | HSOEL3 | 497 |
| Hydraulic hose, 4 m, oil filled | HSOEL4 | 497 |
| Hydraulic hose, 5 m, oil filled | HSOEL5 | 497 |
| Hydraulic hose, 6 m, oil filled | HSOEL6 | 497 |
| Hydraulic hose, 8 m, oil filled | HSOEL8 | 497 |
| Hydraulic hose, 10 m, oil filled | HSOEL10 | 497 |
| 18 V mains adapter for 230 V Voltage | NG2230 | 493 |
| Two-hand safety control for battery powered hydraulic pump AHP 700-L | ZST4 | 496 |
| Foot switch for battery powered hydraulic pump | FTA4 | |
| Transport rucksack | TRAHP700L | |

| Variants | Part No. | Page |
|---|---|---|
| AHP 700-L with transport rucksack | TRAHP700LSET | |

## 767 Hydraulic hand pump



- **Lightweight, portable hand pump**
- **Robust construction**

### Characteristics

- All-purpose - works in every position
- Incl. mounting holes for work bench assembly

### Additional information

- In combination with punch cylinder 50170910 for all hole sizes

| Technical data | |
|---|---|
| Dimension | 330 x 100 x 100 mm |
| Operating pressure | max. 460 bar |
| Weight | 2.7 kg |

| Item | Part No. |
|---|---|
| Hydraulic hand pump 767 | **50132849** |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose 6.4 mm dia. x 0.9 m | 50383167 | 498 |

## 1725 Hydraulic foot pump



- **Foot operation facilitates two-handed operation of round and special shaped punches**

### Characteristics

- Lockable pedal for storage and transport
- All-purpose

### Additional information

- In combination with punch cylinder 50170910 for all hole sizes

| Technical data | |
|---|---|
| Dimension | 400 x 200 x 150 mm |
| Operating pressure | max. 460 bar |
| Weight | 5.0 kg |

| Item | Part No. |
|---|---|
| 1725 Hydraulic foot pump | **50313533** |

| Accessories | Part No. | Page |
|---|---|---|
| Hydraulic hose 6.4 mm dia. x 3 m | 50377299 | 498 |

## RAL 1 Makita battery 18 V / 1.5 Ah Li-Ion (27 Wh)



### Characteristics

- No memory effect
- Extremely low self-discharge
- Low weight

### Suitable for

- Next Generation battery-powered hydraulic tools with Makita battery mounting

| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 1.5 Ah |
| Charging time | With LGL1: 15 min. |
| Cell technology | Li-Ion |
| Weight | 0.4 kg |

| Item | Part No. |
|---|---|
| Makita battery 18 V / 1.5 Ah, Li-Ion | **RAL1** |

## RAL 2 Makita battery 18 V / 3.0 Ah Li-Ion (54 Wh)



### Characteristics

- No memory effect
- Extremely low self-discharge
- Low weight

### Suitable for

- Next Generation battery-powered hydraulic tools with Makita battery mounting

| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 3.0 Ah |
| Charging time | With LGL1: 22 min. |
| Cell technology | Li-Ion |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh) | **RAL2** |

## RAL 3 Battery 18 V / 3.3 Ah Li-Ion (54 Wh)



### Characteristics

- No memory effect
- Extremely low self-discharge
- Low weight

### Suitable for

- Klauke safety cutter

| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 3.3 Ah |
| Charging time | With LGL3: 60 min. |
| Ambient temperature | -20 °C to +40 °C |
| Cell technology | Li-Ion |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Battery 18 V / 3.3 Ah, Li-Ion (54 Wh) | **RAL3** |

## RAL 40 Makita battery 18 V / 4.0 Ah Li-Ion (72 Wh)

NEW




### Characteristics

- No memory effect
- Extremely low self-discharge
- Light - same weight as the Makita 3.0 Ah battery

### Suitable for

- Next Generation battery-powered hydraulic tools with Makita battery mounting

| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 4.0 Ah |
| Charging time | With LGL1: 36 min. |
| Ambient temperature | -20 °C to +40 °C |
| Cell technology | Li-Ion |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Makita battery 18 V / 4.0 Ah, Li-Ion | **RAL40** |

## RAL 4 Makita battery 18 V / 5.0 Ah, Li-Ion

NEW




### Characteristics

- No memory effect
- Extremely low self-discharge
- Light - same weight as the Makita 3.0 Ah battery

### Suitable for

- Next Generation battery-powered hydraulic tools with Makita battery mounting

| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 5.0 Ah, Li-Ion |
| Charging time | With LGL1: 45 min. |
| Ambient temperature | -20 °C to +40 °C |
| Cell technology | Li-Ion |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Makita battery 18 V / 5.0 Ah, Li-Ion (90 Wh) | **RAL4** |

## RAL B1 EU Bosch battery 18 V / 2.0 Ah, Li-Ion

NEW




| Technical data | |
|---|---|
| Battery capacity | 2.0 Ah |
| Charging time | With LGLB1EU: 15 min. |
| Cell technology | Li-Ion |
| Voltage range | 18 V |
| Weight | 0.4 kg |

| Item | Part No. |
|---|---|
| Bosch battery 18 V / 2.0 Ah, Li-Ion | **RALB1EU** |

## RAL B2 EU Bosch battery 18 V / 5.0 Ah, Li-Ion

NEW




| Technical data | |
|---|---|
| Battery voltage | 18 V |
| Battery capacity | 5.0 Ah, Li-Ion |
| Charging time | With LGLB1EU: 45 min. |
| Cell technology | Li-Ion |
| Weight | 0.69 kg |

| Item | Part No. |
|---|---|
| Bosch battery 18 V / 5.0 Ah, Li-Ion | **RALB2EU** |

## RAML1 battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh)



| Technical data | |
|---|---|
| Battery voltage | 10.8 V |
| Battery capacity | 1.5 Ah |
| Cell technology | Li-Ion |
| Weight | 0.3 kg |

| Item | Part No. |
|---|---|
| Battery 10.8 V / 1.5 Ah, Li-Ion (16.2 Wh) | **RAML1** |



## NG2 mains adapter 18 V for 120 V or 230 V mains voltage



### Characteristics

- Temperature protection
- Current limiter
- Overload protection 250 V
- Cable lengths: 5 m

### Suitable for

- For all Klauke tools with 18 V all-mains sets - Makita version

| Technical data | |
|---|---|
| Mains supply | 120 V / 230 V |
| Voltage range | 18 V |
| Weight | 0.8 kg |

| Item | Part No. |
|---|---|
| 18 V mains adapter for 120 V Voltage | **NG2115** |
| 18 V mains adapter for 230 V Voltage | **NG2230** |

## LGL 1 Makita quick-charger for 18 V Li-Ion batteries



### Suitable for

- Klauke Li-Ion Makita battery 18 V

| Technical data | |
|---|---|
| Charging time | With RAL1: 15 min., with RAL2: 22 min. |
| Mains supply | 230 V |
| Voltage range | 18 V |
| Weight | 1 kg |

| Item | Part No. |
|---|---|
| Makita quick-charger for 18 V Li-Ion battery | **LGL1** |

## LGL 3 Makita quick-charger for 18V Li-Ion batteries



### Suitable for

- Klauke Li-Ion Makita battery 18 V
- Connection to car cigarette lighter

| Technical data | |
|---|---|
| Charging time | 60 min. |
| Mains supply | 220 - 240 V |
| Voltage range | 18 V |
| Weight | 0.6 kg |

| Item | Part No. |
|---|---|
| Charger for 18 V Li-Ion batteries | **LGL3** |

## LGL B1 EU Bosch charger for 18 V Li-Ion batteries

NEW



### Characteristics

- Charger for safety cutting unit batteries

### Suitable for

- 18 V / 3.30 Ah Li-Ion batteries

| Technical data | |
|---|---|
| Charging time | With RALB1EU.:15 min, RALB2EU: 45 min. |
| Mains supply | 230 V |
| Voltage range | 18 V |
| Weight | 0.65 kg |

| Item | Part No. |
|---|---|
| Bosch quick-charger for 18 V Li-Ion battery | **LGLB1EU** |

## LGML 1 Charger for 10.8 V Li-Ion batteries, 230 V



**Suitable for**

- Klauke Li-Ion battery 10.80 V

| Technical data | |
|---|---|
| Cell technology | Li-Ion |
| Mains supply | 220 - 240 V |
| Voltage range | 10.8 V |
| Weight | 0.5 kg |

| Item | Part No. |
|---|---|
| Charger for 10.80 V Li-Ion batteries, 230 V | **LGML1** |

## TW 150 Transport trolley for electro-hydraulic pump EHP 4



| Item | Weight kg | Part No. |
|---|---|---|
| Transport trolley for electro-hydraulic pump EHP 4 | 8.7 | **TW150** |

## TG 3 Carrying strap with shoulder padding



**Suitable for**

- Battery powered hydraulic pump AHP 700-L

| Item | Part No. |
|---|---|
| Carrying strap with shoulder padding | **TG3** |

## FTA 3 / FTA 4 Two-hand safety controls for pumps



### Suitable for

- Pumps: EHP 4 and AHP 700-L

| Item | Part No. |
|---|---|
| Two-hand safety controller for pumps EHP 2 to EHP 4 | **ZST3** |
| Two-hand safety control for battery powered hydraulic pump AHP 700-L | **ZST4** |

## FTA 1 / FTA 4 Foot switches for pumps



### Suitable for

- Pumps: EHP 4, HK 12/2 EL, AHP 700-L

| Item | Part No. |
|---|---|
| Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL | **FTA1** |
| Foot switch for battery powered hydraulic pump AHP 700-L | **FTA4** |

## T 15 Special hydraulic oil



### Characteristics

- Environmentally-friendly hydraulic oil, quickly biodegradable
- 5 l canister

### Suitable for

- Hydraulic pumps, exception: Safety cutter

| Item | Part No. |
|---|---|
| Special hydraulic oil | **T15** |

## Hydraulic oil




### Characteristics

- Specially-developed for GREENLEE hydraulic tools

| Item | Part No. |
|---|---|
| Hydraulic oil 3.8 l | **90510593** |
| Hydraulic oil 0.95 l | **90508068** |

## HS 2 Hydraulic hoses



### Suitable for

- Hydraulic crimping and cutting systems and pumps
- For connecting to hydraulic pumps FHP 2, PHD 2, EHP 2, EHP 3, EHP 4, HK12/2 EL, HK 25/2 EL, AS 65 FHP, AS 105 FHP, HK 25/2, HK 45

| Item | Part No. |
|---|---|
| Hydraulic hose, 2 m | **HS22** |
| Hydraulic hose, 3 m | **HS23** |
| Hydraulic hose, 4 m | **HS24** |
| Hydraulic hose, 5 m | **HS25** |
| Hydraulic hose, 6 m | **HS26** |
| Hydraulic hose, 8 m | **HS28** |
| Hydraulic hose, 10 m | **HS210** |

## HS OEL hydraulic hose, oil filled



### Characteristics

- For connecting to battery-powered hydraulic pump AHP 700-L

### Additional information

- Also available in country-specific variants, Part Number appendix „C“

| Item | Part No. |
|---|---|
| Hydraulic hose, 2 m, oil filled | **HSOEL2** |
| Hydraulic hose, 3 m, oil filled | **HSOEL3** |
| Hydraulic hose, 4 m, oil filled | **HSOEL4** |
| Hydraulic hose, 5 m, oil filled | **HSOEL5** |
| Hydraulic hose, 6 m, oil filled | **HSOEL6** |
| Hydraulic hose, 8 m, oil filled | **HSOEL8** |
| Hydraulic hose, 10 m, oil filled | **HSOEL10** |

## Hydraulic hose 6.4 mm dia. x 3 m



### Characteristics
- Filled with hydraulic oil

### Suitable for
- Hydraulic foot pump 1725

| Item | Part No. |
|---|---|
| Hydraulic hose 6.4 mm dia. x 3 m | **50377299** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 3 m | 90525159 | |
| Coupler plug | 90541693 | |
| Dust cap | 90541707 | |

## Hydraulic hose 6.4 mm dia. x 0.9 m



### Characteristics
- Without hydraulic oil

### Suitable for
- Hydraulic hand pump 767

| Item | Part No. |
|---|---|
| Hydraulic hose 6.4 mm dia. x 0.9 m | **50383167** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Hydraulic hose, 0.9 m | 50063022 | |
| Coupler plug | 90541693 | |
| Dust cap | 90541707 | |

## KST 2 Coupler



### Characteristics
- Including adapter

### Suitable for
- Hydraulic crimping and cutting systems and pumps

| Item | Part No. |
|---|---|
| Coupler plug | **KST2** |

## KMF 1 Coupler for crimping and cutting heads



### Characteristics

- KMF 1: For connecting to hydraulic crimping/cutting heads: PK 18, PK 22, PK 120/42, PK 120 U, PK 25/2, PK 45, PK 60 VP, PK 60 VP/FT, PK 60 UNV, THK 18, THK 22, THK 120, SDG 45, SDG 50, SDG 55, SDG 85/2, SDG 105, SDK 65, SDK 85, SDK 105, SDK 120
- Includes barrel nipple
- With 1/4" connection (external thread)

| Item | Part No. |
|---|---|
| Coupler for crimping and cutting heads with barrel nipple | **KMF1** |

## DNP 2 Barrel nipple



### Suitable for

- To connect and to extend hydraulic hoses HS 2

| Item | Part No. |
|---|---|
| Barrel nipple | **DNP2** |

## HTA 4 remote control for hydraulic pump



### Suitable for

- Battery powered hydraulic pump AHP 700-L

| Item | Part No. |
|---|---|
| Remote control with 1.5 m cable | **HTA4** |

# EFFORTLESS OPERATIONS.

Safety, ergonomics and reliability – these quality features are a given in day-to-day work. Klauke hand tools are designed for this very purpose.






# Hand tools


| | |
|---|---|
| **VDE tools** | **502** |
| Pliers | 504 |
| Screwdrivers | 508 |
| Assortments and sets | 512 |
| Safety tools | 516 |
| Fully insulated tools | 521 |
| Tool cases | 526 |
| **Standard tools and accessory** | **527** |
| Water pump pliers, fitting pliers | 528 |
| Electronic / precision mechanic`s tools | 529 |
| Bits, holders and adapters | 530 |
| Assortments and sets | 532 |
| Measuring and marking | 535 |
| Basic tools | 537 |
| Tool cases | 541 |
| **Wire stripping tools** | **548** |
| Wire stripping tools | 549 |
| Stripping tools | 552 |
| **Stripping tools for communication technology** | **554** |

# SAFETY-TESTED RANGE – VDE TOOLS

For the safety of our customers, we also have our tools tested by independent bodies. The "VDE Tool" marking indicates that this special Klauke range conforms to the current directives of the safety testing procedure to EN/IEC 60900. All tools with the VDE name are approved to 1000 V alternating current and 1500 V direct current. Special tool steel creates additional robustness.




**In brief**

- Conforms to current directive EN/IEC 60900
- Manufactured using special tools steel
- Effortless operations due to optimal ergonomic design

## When you need to go deeper: SLIM range

SLIM range screwdrivers have a tapered blade at the front. Deeper screws, such as those in circuit breakers, can be reached with ease. No slipping and rolling due to special handle shape. With its narrow tip, the SLIM range is best suited for loosening cables in spring terminals.

- For use in confined areas due to tapered blade
- Safe operations due to rolling protection






## More than just a force: Power combi-pliers

The power combi-pliers are really multi-talented: Cutting, gripping, counter holding, inserting conductors. Hence the name combi-pliers. Four tools in one: You need fewer tools and the power assist function also helps you when working.

- Cuts cables, conductors and wires
- Grips flat and round material such as safety splints
- Simplifies the insertion of cables into the clamp or circuit breaker
- Can also be used to tighten nuts

## Everything under control: VDE cable cutters

The VDE cable cutters are hard-wearing. They withstand cold impact tests to -25 °C, tests of the adhesion of the insulating material to 500 N and individual voltage tests in a water bath with 10,000 V AC. The reward: Certification to EN/IEC 60900. Completely safe.

- Extra hand protection against flying sparks
- Safe operations due to slip-proof overlay
- Safe even under extreme conditions
- For fine and superfine stranded copper and aluminium cables



## VDE Cable cutter



1000V IEC 60900

### Characteristics

- Adjustable joint
- Cuts fine and superfine stranded copper and aluminium cable

| Part No. | KL010160IS | KL010210IS |
|---|---|---|
| Item | VDE Cable cutter 160 mm | VDE Cable cutter 210 mm |
| Dimension mm | 160 | 210 |
| Weight g | 225 | 340 |
| Cutting power up to dia. | 16 | 25 |

## VDE Power combination pliers



1000V IEC 60900

### Characteristics

- With combination spanner from 11 - 17 mm (M8 - M10)
- Holds flat and round material
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

| Part No. | KL020165IS | KL020180IS | KL020205IS |
|---|---|---|---|
| Item | VDE Power combination pliers, 165 mm | VDE Power combination pliers, 180 mm | VDE Power combination pliers, 205 mm |
| Dimension mm | 165 | 180 | 205 |
| Weight g | 200 | 255 | 280 |
| Cutting power soft wire dia. mm | 4.0 | 5.2 | 5.9 |
| Cutting power medium wire dia. mm | 3.1 | 3.4 | 3.8 |
| Cutting power hard wire dia. mm | 2.0 | 2.2 | 2.5 |

## VDE Power combination pliers, angled



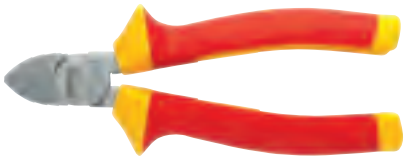
1000V IEC 60900

### Characteristics

- Comfortable working due to ergonomically optimised, 45° angled head
- With combination spanner from 11 - 17 mm (M8 - M10)
- Holds flat and round material
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

| Part No. | KL026205IS |
|---|---|
| Item | VDE Power combination pliers, offset, 205 mm |
| Dimension mm | 205 |
| Weight g | 285 |
| Cutting power soft wire dia. mm | 5.9 |
| Cutting power medium wire dia. mm | 3.8 |
| Cutting power hard wire dia. mm | 2.5 |

## VDE Side cutter



1000V IEC 60900

### Characteristics

- Improved cutting of insulated cables from slip-reducing wave profiled blades
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

| Part No. | KL040145IS | KL040160IS | KL040180IS |
|---|---|---|---|
| Item | VDE Side cutter 145 mm | VDE Side cutter 160 mm | VDE Side cutter 180 mm |
| Dimension mm | 145 | 160 | 180 |
| Weight g | 180 | 210 | 265 |
| Cutting power soft wire dia. mm | 5.0 | 6.0 | 7.0 |
| Cutting power medium wire dia. mm | 2.5 | 3.5 | 4.0 |
| Cutting power hard wire dia. mm | 1.7 | 2.0 | 2.5 |
| Cutting power up to dia. | 8.0 | 11.0 | 13.0 |

## VDE Electricians side cutter



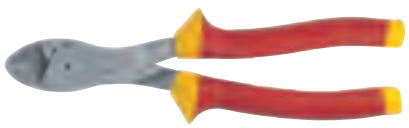
1000V IEC 60900

### Characteristics

- High cutting performance for superfine wires due to hardened precision cutters
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

| Part No. | KL042190IS |
|---|---|
| Item | VDE Electricians side cutter, 190 mm |
| Dimension mm | 190 |
| Weight g | 285 |
| Cutting power soft wire dia. mm | 2.0 |
| Cutting power medium wire dia. mm | 1.0 |
| Cutting power up to dia. | 4.0 |

## VDE Power side cutter



1000V IEC 60900

### Characteristics

- Improved cutting of insulated cables from slip-reducing wave profiled blades
- Optimum handling due to ergonomically-shaped handle
- High cutting performance on hard wires and piano wires

| Part No. | KL045180IS | KL044200IS | KL045240IS |
|---|---|---|---|
| Item | VDE Power side cutter, 180 mm | VDE Electric power side cutter, 200 mm | VDE Power side cutter, 240 mm |
| Dimension mm | 180 | 200 | 240 |
| Weight g | 285 | 280 | 420 |
| Cutting power soft wire dia. mm | 3.7 | 4.0 | 4.5 |
| Cutting power medium wire dia. mm | 2.6 | 2.8 | 3.5 |
| Cutting power hard wire dia. mm | 2.2 | | 3.0 |
| Cutting power piano wire dia. mm | | 2.5 | |

## VDE Lever power side cutter



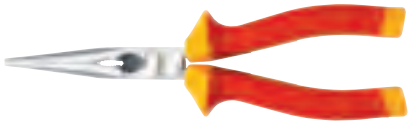
1000V IEC 60900

### Characteristics

- 40% force saving
- High cutting performance for superfine wires due to hardened precision cutters
- Special tool steel drop-forged, oil-hardened
- Cuts medium-hard wires, e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire as well as piano wire

| Part No. | KL046200IS |
|---|---|
| Item | VDE Lever power side cutter, 200 mm |
| Dimension mm | 200 |
| Cutting power medium wire dia. mm | 4.5 |
| Cutting power hard wire dia. mm | 3.5 |
| Cutting power piano wire dia. mm | 3.0 |

## VDE Telephone pliers, straight



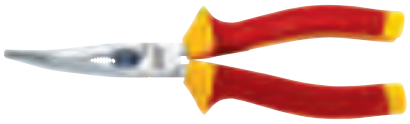
1000V IEC 60900

### Characteristics

- Long, flat/round jaws
- Optimum hold due to toothed grip area
- Cutting edge inductive hardened
- With combination spanner from 11 - 17 mm (M8 - M10)
- With wire cutter for soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

| Part No. | KL050205IS |
|---|---|
| Item | VDE long-nose pliers, straight, 205 mm |
| Dimension mm | 205 |
| Weight g | 215 |
| Cutting power soft wire dia. mm | 3.9 |
| Cutting power medium wire dia. mm | 3.2 |
| Cutting power hard wire dia. mm | 2.2 |

## VDE Telephone pliers, curved



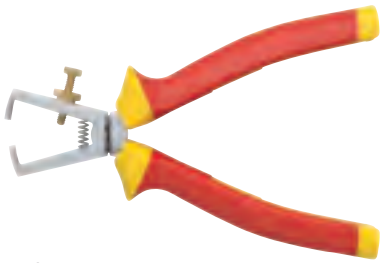
1000V IEC 60900

### Characteristics

- Long, 45° offset, flat/round jaws
- Optimum hold due to toothed grip area
- Cutting edge inductive hardened
- With combination spanner from 11 - 17 mm (M8 - M10)
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

| Part No. | KL055205IS |
|---|---|
| Item | VDE long-nose pliers, bent, 205 mm |
| Dimension mm | 205 |
| Weight g | 215 |
| Cutting power soft wire dia. mm | 3.9 |
| Cutting power medium wire dia. mm | 3.2 |
| Cutting power hard wire dia. mm | 2.2 |

## VDE Wire stripper



1000V IEC 60900

### Characteristics

- With opening spring and V-shaped cutting edges
- With setting screw for setting the cable diameter

| Part No. | KL060160IS |
|---|---|
| Item | VDE Wire stripper, 160 mm |
| Dimension mm | 160 |
| Weight g | 185 |

## VDE Water pump pliers, jaw width 50 mm



1000V IEC 60900

### Characteristics

- Jaw width 50 mm
- Safe working due to clamp protection and safety joint
- Ratchet adjustment
- Optimum hold due to toothed grip area

| Part No. | KL070250IS |
|---|---|
| Item | VDE Water pump pliers, jaw width 50 mm |
| Dimension mm | 250 |
| Weight g | 410 |

## Automatic VDE wire stripper 0.2 - 6 mm²



1000V IEC 60900

### Characteristics

- For safe working on live conductors up to 1000 V
- Adjustable length stop from 5 - 12 mm
- Locking function to protect the blades

### Suitable for

- Flexible and solid conductors from 0.2 - 6 mm²

| Part No. | KL760180IS |
|---|---|
| Item | Automatic VDE wire stripper 0.2 - 6 mm² |
| Dimension mm | 215 |
| Weight g | 130 |

## VDE Slotted screwdriver



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL1007525IS** | 75 | 67 | 18 | 22 | 1 |
| **KL10010030IS** | 100 | 67 | 18 | 28 | 1 |
| **KL10010035IS** | 100 | 67 | 18 | 30 | 1 |
| **KL10010040IS** | 100 | 79 | 23 | 44 | 1 |
| **KL10012555IS** | 125 | 89 | 27 | 70 | 1 |
| **KL10015065IS** | 150 | 89 | 27 | 86 | 1 |
| **KL10017580IS** | 175 | 98 | 32 | 135 | 1 |

## VDE Slotted screwdriver, Slim Line



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL10010035ISLIM** | 100 | 67 | 18 | 35,9 | 1 |
| **KL10010040ISLIM** | 100 | 79 | 23 | 44 | 1 |
| **KL10012555ISLIM** | 125 | 89 | 27 | 70 | 1 |
| **KL10012565ISLIM** | 125 | 89 | 27 | 86 | 1 |

## VDE Phillips screwdriver



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL110PH1IS** | 80 | 89 | 27 | 52 | 1 |
| **KL110PH2IS** | 100 | 98 | 32 | 80 | 1 |
| **KL110PH3IS** | 150 | 98 | 32 | 145 | 1 |

## VDE Phillips screwdriver, Slim Line



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL110PH1ISLIM** | 80 | 89 | 27 | 52 | 1 |
| **KL110PH2ISLIM** | 100 | 98 | 32 | 80 | 1 |

## VDE Pozidriv screwdriver



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL120PZ1IS** | 80 | 89 | 27 | 49 | 1 |
| **KL120PZ2IS** | 100 | 98 | 32 | 76 | 1 |
| **KL120PZ3IS** | 150 | 98 | 32 | 140 | 1 |

## VDE Pozidriv screwdriver, Slim Line



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL120PZ1ISLIM** | 80 | 89 | 27 | 49 | 1 |
| **KL120PZ2ISLIM** | 100 | 98 | 32 | 76 | 1 |

## VDE Plus/Minus-Pozidriv screwdriver



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL130PM1IS** | 80 | 89 | 27 | 52 | 1 |
| **KL130PM2IS** | 100 | 98 | 32 | 80 | 1 |

## VDE Plus/Minus-Pozidriv screwdriver, Slim Line



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL130PM1ISLIM** | 80 | 89 | 27 | 52 | 1 |
| **KL130PM2ISLIM** | 100 | 98 | 32 | 80 | 1 |

## VDE TORX® screwdriver



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL150TX10IS** | 100 | 79 | 23 | 45 | 1 |
| **KL150TX15IS** | 100 | 89 | 27 | 45 | 1 |
| **KL150TX20IS** | 125 | 98 | 32 | 69 | 1 |
| **KL150TX25IS** | 125 | 98 | 32 | 69 | 1 |
| **KL150TX30IS** | 150 | 98 | 32 | 96 | 1 |

## VDE TORX® screwdriver, Slim Line



1000V IEC 60900

### Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

| Part No. | Length of shaft mm | Handle length mm | Handle width mm | Weight g | Packing unit/pcs |
|---|---|---|---|---|---|
| **KL150TX15ISLIM** | 100 | 89 | 27 | 45 | 1 |
| **KL150TX20ISLIM** | 125 | 98 | 32 | 69 | 1 |
| **KL150TX25ISLIM** | 125 | 98 | 32 | 69 | 1 |

## VDE-M-TEC Screwdriver for hexagonal nuts



1000V IEC 60900

### Characteristics

- With box spanner tube - immersion depth approx. 41 mm - optimal for deep-seated screws and nuts
- With spring-loaded magnetic body

| Item | Dimension mm | For thread | Weight g | Part No. |
|---|---|---|---|---|
| VDE Screwdriver M-TEC size 5.5 | 110 x 5.5 | M3 | 100 | **KL14555IS** |
| VDE Screwdriver M-TEC size 6 | 110 x 6.0 | M3.5 | 100 | **KL14560IS** |
| VDE Screwdriver M-TEC size 7 | 110 x 7.0 | M4 | 100 | **KL14570IS** |
| VDE Screwdriver M-TEC size 8 | 110 x 8.0 | M5 | 110 | **KL14580IS** |
| VDE Screwdriver M-TEC size 10 | 125 x 10.0 | M6 | 110 | **KL145100IS** |
| VDE Screwdriver M-TEC size 13 | 110 x 13.0 | M8 | 110 | **KL145130IS** |

## Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V



### Characteristics

- Single-pole
- With heavy duty handle

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | 73 x 3.0 x 0.8 | 30 | **KL19073IS** |

# OUR HIGH-QUALITY VDE TOOLS

Pozidriv, Plus/Minus, Pozidriv and Torx - as modern screw drives are called - just like slotted and cross head (Phillips), improve the force transmission between tool and screw. For cost reasons, inexpensive cross-slotted screwdrivers are often used to tighten Pozidriv or even Plus/Minus screws. The results: unreliable connections or even destroyed screw heads, preventing them from being loosened at a later time.

On the subject of screwdrivers, it is therefore extremely important to recognise the screws to be processed, to use the right tool and to work to professional standards.



## VDE Pliers set, 3-pce.



1000V IEC 60900

| Item | Part No. |
|---|---|
| VDE Plier set, 3-pieces | **KL303IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |

## VDE Pliers set, 4-pce.

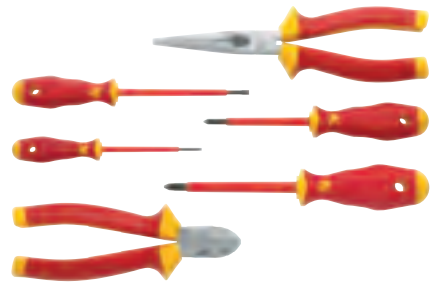


1000V IEC 60900

| Item | Part No. |
|---|---|
| VDE Plier set, 4-pieces | **KL304IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Electric power side cutter, 200 mm | KL044200IS | 505 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Wire stripper, 160 mm | KL060160IS | 507 |

## VDE Pliers/screwdriver set, 6-pce.

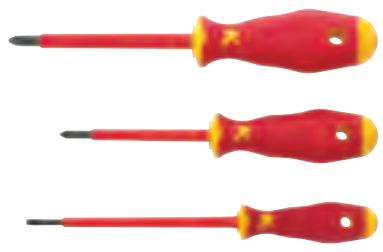


1000V IEC 60900

| Item | Part No. |
|---|---|
| Pliers/screwdriver set, 6-pce. | **KL306IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| VDE Slotted screwdriver, 2.5 x 0.4 mm | KL1007525IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |

## VDE Screwdriver set, 3-pce.

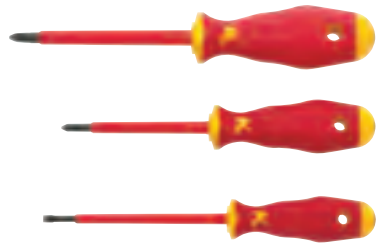


1000V IEC 60900

| Item | Part No. |
|---|---|
| VDE Screwdriver set, 3-pieces | **KL391IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| VDE Slotted screwdriver, 3.5 x 0.6 mm | KL10010035IS | 508 |

## VDE Screwdriver set, 3-pce.

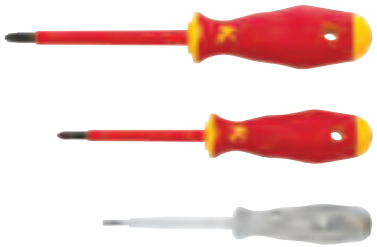


1000V IEC 60900

| Item | Part No. |
|---|---|
| VDE Screwdriver set, 3-pieces | **KL392IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Pozidriv screwdriver, PZ1 | KL120PZ1IS | 509 |
| VDE Pozidriv screwdriver, PZ2 | KL120PZ2IS | 509 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |

## VDE Screwdriver set, 3-pce.

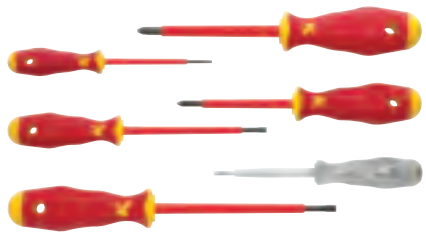


1000V IEC 60900

| Item | Part No. |
|---|---|
| VDE Screwdriver set, 3-pieces | **KL393IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |

## VDE Screwdriver set, 6-pce.

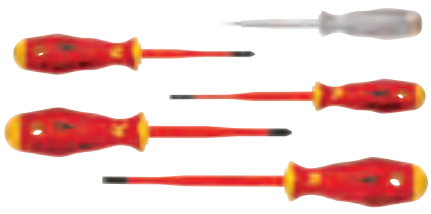


1000V IEC 60900

| Item | Part No. |
|---|---|
| VDE Screwdriver set, 6-pce. | **KL390IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| VDE Slotted screwdriver, 2.5 x 0.4 mm | KL1007525IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |

## VDE Screwdriver set Slim Line, 5-pce.



1000V IEC 60900

### Characteristics

- Reduced blade for optimum fit
- Ergonomically-shaped handle with optimum force transmission
- Anti-roll-guard

| Item | Part No. |
|---|---|
| VDE Screwdriver set Slim Line, 5-pce. | **KL390ISLIM** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Slotted screwdriver 3.5 x 0.6 x 100 Slim Line | KL10010035ISLIM | 508 |
| VDE Slotted screwdriver 5.5 x 1.0 x 125 Slim Line | KL10012555ISLIM | 508 |
| VDE Pozidriv screwdriver PZ1 Slim Line | KL120PZ1ISLIM | 509 |
| VDE Pozidriv screwdriver PZ2 Slim Line | KL120PZ2ISLIM | 509 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |

## VDE Screwdriver set Slim Line, 6-pce., case



1000 V IEC 60900

### Characteristics

- Reduced blade for optimum fit
- Ergonomically-shaped handle with optimum force transmission
- Anti-roll-guard

| Item | Part No. |
|---|---|
| VDE Screwdriver set Slim Line, 6-pce., case | **KL391ISLIM** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Slotted screwdriver 3.5 x 0.6 x 100 Slim Line | KL10010035ISLIM | 509 |
| VDE Slotted screwdriver 4.0 x 0.8 x 100 Slim Line | KL10010040ISLIM | 509 |
| VDE Slotted screwdriver 5.5 x 1.0 x 125 Slim Line | KL10012555ISLIM | 509 |
| VDE Phillips screwdriver PH2 Slim Line | KL110PH2ISLIM | 509 |
| VDE Pozidriv screwdriver PZ1 Slim Line | KL120PZ1ISLIM | 510 |
| VDE Pozidriv screwdriver PZ2 Slim Line | KL120PZ2ISLIM | 510 |

## Klauke E-smart box 13-pce.



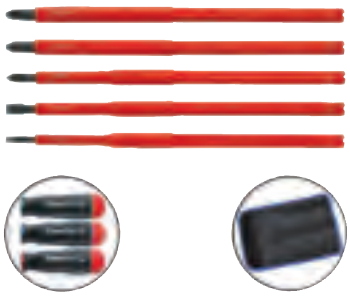
### Characteristics

- 10 IEC exchangeable blades for all applications incl. contactless voltage tester
- Secure grip of blades in the handle by automatic locking
- Snap-on rotating cap and soft coating zone for use as a precision tool
- Safety tool acc. to EN/IEC 60900
- Blades can be re-ordered individually

| Item | Part No. |
|---|---|
| Klauke E-smart box 12-pce. | **KL301IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Blade 2.5 x 0.4 mm | KLE300IS1 | |
| Blade 3.5 x 0.6 mm | KLE300IS3 | |
| Blade 4.0 x 0.8 mm | KLE300IS4 | |
| Blade 5.5 x 1.0 mm | KLE300IS5 | |
| Blade PH 1 | KLE300IS6 | |
| Blade PH 2 | KLE300IS7 | |
| Blade PZ 2 | KLE300IS8 | |
| Blade TX 20 | KLE300IS11 | |
| Blade Plus/Minus-Pozidriv Z1 | KLE300IS13 | |
| Blade Plus/Minus-Pozidriv Z 2 | KLE300IS14 | |
| Rotating cap | KLE300IS15 | |
| E-smart handle 93 x 32 mm | KLE300IS12 | |
| GT-12A Contactless voltage tester 50 - 1.000 V | 52063422 | 574 |

## VDE replaceable blades, shank 1/4"



### Characteristics

- Blades from special chrome/molybdenum/vanadium alloy
- Standard 1/4" mounting for use with torque handles
- Blade length: 170 mm

| Item | Part No. |
|---|---|
| Tool bag, equipped with 9 VDE replaceable blades | **KL390TB9** |
| VDE Slotted blade, 3.5 x 0.6 mm in blister pack | **KL400S35170ISSB** |
| VDE Slotted blade, 4.0 x 0.8 mm in blister pack | **KL400S40170ISSB** |
| VDE Slotted blade, 5.5 x 1.0 mm in blister pack | **KL400S55170ISSB** |
| VDE Philips blade, PH1 in blister pack | **KL400PH1170ISSB** |
| VDE Philips blade, PH2 in blister pack | **KL400PH2170ISSB** |
| VDE Pozidriv blade, PZ1 in blister pack | **KL400PZ1170ISSB** |
| VDE Pozidriv blade, PZ2 in blister pack | **KL400PZ2170ISSB** |
| VDE Plus/Minus-Pozidriv blade, PM1 in blister pack | **KL400PM1170ISSB** |
| VDE Plus/Minus-Pozidriv blade, PM2 in blister pack | **KL400PM2170ISSB** |

| Accessories | Part No. | Page |
|---|---|---|
| Tool bag, empty | **KL390TL** | |
| Nm handle 0.6 - 1.5 Nm | **KLE3871513** | |
| Nm handle 1.5 - 3.0 Nm | **KLE3883013** | |
| Nm handle 3.0 - 5.4 Nm | **KLE3895413** | |

## NH safety handle with guard



1000 V IEC 60900

### Characteristics

- Designation: 1000 V
- Acc. to DIN VDE 0680/4
- Made from impregnated leather
- With non-slip and cuff protection

### Suitable for

- For NH fuses sizes 00-3

| Item | Weight g | Part No. |
|---|---|---|
| NH safety handle with guard | 470 | **KL600** |

## Electricians safety helmet



1000 V IEC 60900

### Characteristics

- Designation: 1000 V
- To DIN EN 397
- 440 V AC
- Sizes adjustable

| Item | Weight g | Part No. |
|---|---|---|
| Electricians safety helmet | 370 | **KL602GELB** |

## Electricians safety visor



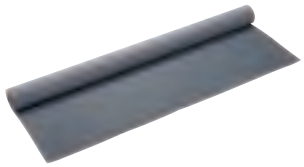
1000 V IEC 60900

### Characteristics

- Designation: 1000 V
- To VDE
- Suitable for helmet KL602GELB

| Item | Weight g | Part No. |
|---|---|---|
| Electricians safety visor | 195 | **KL603** |

## Insulated stand mat



### Characteristics

- Tested acc. to DIN 0303, part 21
- Safety mat for safe working with live parts in high voltage areas up to 1.000 Volt
- Penetration-proof to 14.4 kV/mm (>50 kV/4 mm)
- Slip proof, thereby increased sure-footedness

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Insulating floor mat | 1000 x 1000 x 4 | 5300 | **KL620S1000** |

## Rubber insulating blanket



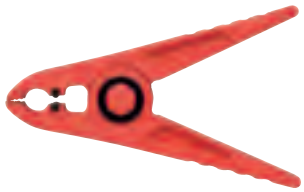
1000V IEC 60900

### Characteristics

- Tested acc. to DIN VDE 0680, part 1
- Test voltage: 5 kV/1 min.
- Insulating cover
- Penetration resistant
- Upper and lower side flat

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Rubber cover/blanket, small | 500 x 500 x 1.6 | 440 | **KL625A500** |
| Rubber cover/blanket, large | 1000 x 1000 x 1.6 | 1900 | **KL625A1000** |

## Plastic clamp



1000V IEC 60900

### Characteristics

- For securing rubber towels

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Plastic clamp for rubber cover/blanket | 150 | 70 | **KL628** |

## Protective gloves



1000V IEC 60900

### Characteristics

- To DIN EN 60903

### Suitable for

- For working in voltage ranges up to 1000 Volt

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Protective gloves, size 9 | Size 09 | 250 | **KL60509** |
| Protective gloves, size 10 | Size 10 | 250 | **KL60510** |
| Protective gloves, size 11 | Size 11 | 250 | **KL60511** |

## Cotton gloves



### Characteristics

- Inner gloves from cotton
- For use with protective gloves, Part No. KL60509 / KL60510

| Item | Weight g | Part No. |
|---|---|---|
| Cotton gloves | 50 | **KL605U** |

# SAFETY FIRST !

Think about your safety and protect yourself from overvoltages in electrical systems!

Wear safety gloves to
DIN EN 60903 and safety glasses!



## Cable knife, straight



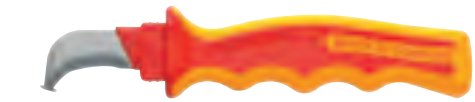


### Characteristics

- With straight blade and safety cap
- Blade length: 50 mm

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cable knife, straight | 200 | 105 | **KL640GK** |

## Cable knife with hooked blade





### Characteristics

- With hooked blade and safety cap
- Blade length: 40 mm
- Special blade tip to protect insulation of conductor

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cable knife with hooked blade | 190 | 100 | **KL642HK** |

## Cable knife with blade protection, 1000 V



| Item | Part No. |
|---|---|
| Cable knife with blade protection, 1000 V | **KL645GSK** |

## Tweezers



### Characteristics

- Straight and pointed tips
- With 2-layer safety insulation
- Non-slip protection

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Tweezers | 130 | 30 | **KL690130** |

## Cleaning brush



### Characteristics

- Brush width 45 mm
- All-plastic version

| Item | Weight g | Part No. |
|---|---|---|
| Cleaning brush | 75 | **KL698** |

## VDE Expansion wedge



| Item | Part No. |
|---|---|
| Guide wedge | **K610** |

## Fully insulated tool set, 1/2", 20-piece



1000V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- Vanadium special steel acc. to DIN 7448

### Suitable for

- For working in voltage ranges up to 1.000 Volt

| Item | Part No. |
|---|---|
| Fully insulated tool set, 1/2", 20-piece | **KL1300IS12B20** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Case KL1300L | KL1300L | |
| Ratchet 1/2" drive | KL1000IS12 | 522 |
| T-wrench 1/2" drive | KL1299IS12 | 522 |
| Extension 1/2" drive x 250 mm long | KL1290IS12250 | 523 |
| Extension 1/2" drive x 125 mm long | KL1290IS12125 | 523 |
| Socket 1/2" drive, AF 10 mm | KL1240IS1210 | 523 |
| Socket 1/2" drive, AF 11 mm | KL1240IS1211 | 523 |
| Socket 1/2" drive, AF 12 mm | KL1240IS1212 | 523 |
| Socket 1/2" drive, AF 13 mm | KL1240IS1213 | 523 |
| Socket 1/2" drive, AF 14 mm | KL1240IS1214 | 523 |
| Socket 1/2" drive, AF 17 mm | KL1240IS1217 | 523 |
| Socket 1/2" drive, AF 19 mm | KL1240IS1219 | 523 |
| Socket 1/2" drive, AF 22 mm | KL1240IS1222 | 523 |
| Socket 1/2" drive, AF 24 mm | KL1240IS1224 | 523 |
| Socket 1/2" drive for slotted screws, 5.5 mm | KL1200IS1255 | 520 |
| Socket 1/2" drive for Phillips screws, PH2 | KL1210IS12PH2 | 521 |
| Socket 1/2" drive for Plus/Minus-Pozidriv PM2 | KL1230IS12PM2 | 520 |
| Cable knife, straight | KL640GK | 519 |
| VDE Side cutter 180 mm | KL040180IS | 505 |
| VDE Slotted screwdriver, 3.5 x 0.6 mm | KL10010035IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |

## Fully insulated open-ended spanner



1000V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- DIN 7448 from vanadium special steel

### Suitable for

- Hexagonal head screws

| Item | Part No. |
|---|---|
| Fully insulated open-ended spanner 6 AF | **KL1100IS6** |
| Fully insulated open-ended spanner 7 AF | **KL1100IS7** |
| Fully insulated open-ended spanner 8 AF | **KL1100IS8** |
| Fully insulated open-ended spanner 10 AF | **KL1100IS10** |
| Fully insulated open-ended spanner 11 AF | **KL1100IS11** |
| Fully insulated open-ended spanner 12 AF | **KL1100IS12** |
| Fully insulated open-ended spanner 13 AF | **KL1100IS13** |
| Fully insulated open-ended spanner 17 AF | **KL1100IS17** |
| Fully insulated open-ended spanner 19 AF | **KL1100IS19** |
| Fully insulated open-ended spanner 22 AF | **KL1100IS22** |

## Torque wrench - Compact - 3/8" and 1/2" drive



1000V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- With automatic release
- Positive locking system on the square end with pull-off force to 50 Nm
- Set the response value using the rotary grip
- Quickly read-off the values on the scale
- +/- 4% response accuracy
- Versatile use thanks to small dimensions

| Item | Part No. |
|---|---|
| Torque wrench compact, 3/8", drive 5 - 25 Nm | **KL1000IS38NM25** |
| Torque wrench compact, 1/2", drive 5 - 25 Nm | **KL1000IS12NM25** |

## Torque wrench - 3/8" and 1/2" drive



1000V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- With automatic release
- Positive locking system on the square end with pull-off force to 50 Nm
- Set the response value using the rotary grip
- Quickly read-off the values on the scale
- +/- 4% response accuracy

| Item | Part No. |
|---|---|
| Torque wrench, 3/8", 2 - 27 Nm | **KL1000IS38NM27** |
| Torque wrench, 3/8", 5 - 50 Nm | **KL1000IS38NM50** |
| Torque wrench, 1/2", 2 - 27 Nm | **KL1000IS12NM27** |
| Torque wrench, 1/2", 5 - 50 Nm | **KL1000IS12NM50** |

## Ratchet - 3/8" and 1/2" drive



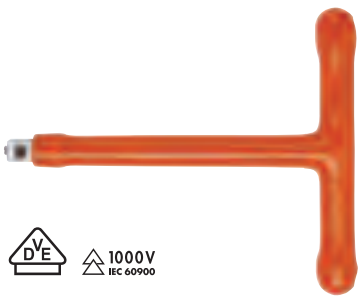
1000V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- Chrome vanadium steel
- One-hand operation

| Item | Part No. |
|---|---|
| Ratchet 3/8" drive | **KL1000IS38** |
| Ratchet 1/2" drive | **KL1000IS12** |

## T-wrench 3/8" and 1/2" drive



1000V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- Chrome vanadium steel

| Item | Part No. |
|---|---|
| T-wrench 3/8" drive | **KL1299IS38** |
| T-wrench 1/2" drive | **KL1299IS12** |

## Extension 3/8" and 1/2" drive





1000 V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- Chrome vanadium steel

| Item | Dimension mm | Part No. |
|---|---|---|
| Extension 3/8" drive, 125 mm | 125 | **KL1290IS38125** |
| Extension 3/8" drive x 250 mm long | 250 | **KL1290IS38250** |
| Extension 1/2" drive x 125 mm long | 125 | **KL1290IS12125** |
| Extension 1/2" drive x 250 mm long | 250 | **KL1290IS12250** |

## Hexagonal sockets 3/8" and 1/2" drive



1000 V IEC 60900

### Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- DIN 7448 from vanadium special steel

### Suitable for

- For hex. head screws

| Item | Part No. |
|---|---|
| Socket 3/8" drive, AF 10 mm | **KL1240IS3810** |
| Socket 3/8" drive, AF 11 mm | **KL1240IS3811** |
| Socket 3/8" drive, AF 12 mm | **KL1240IS3812** |
| Socket 3/8" drive, AF 13 mm | **KL1240IS3813** |
| Socket 3/8" drive, AF 14 mm | **KL1240IS3814** |
| Socket 3/8" drive, AF 17 mm | **KL1240IS3817** |
| Socket 3/8" drive, AF 19 mm | **KL1240IS3819** |
| Socket 1/2" drive, AF 10 mm | **KL1240IS1210** |
| Socket 1/2" drive, AF 11 mm | **KL1240IS1211** |
| Socket 1/2" drive, AF 12 mm | **KL1240IS1212** |
| Socket 1/2" drive, AF 13 mm | **KL1240IS1213** |
| Socket 1/2" drive, AF 14 mm | **KL1240IS1214** |
| Socket 1/2" drive, AF 16 mm | **KL1240IS1216** |
| Socket 1/2" drive, AF 17 mm | **KL1240IS1217** |
| Socket 1/2" drive, AF 19 mm | **KL1240IS1219** |
| Socket 1/2" drive, AF 22 mm | **KL1240IS1222** |
| Socket 1/2" drive, AF 24 mm | **KL1240IS1224** |
| Socket 1/2" drive, AF 27 mm | **KL1240IS1227** |

## Allen key sockets 3/8" and 1/2" drive



1000V IEC 60900

### Characteristics
- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- DIN 7448 from vanadium special steel

### Suitable for
- Hexagon socket

| Item | Part No. |
|---|---|
| Socket 3/8" drive for Allen key, AF 4 mm | **KL1260IS38I4** |
| Socket 3/8" drive for Allen key, AF 5 mm | **KL1260IS38I5** |
| Socket 3/8" drive for Allen key, AF 6 mm | **KL1260IS38I6** |
| Socket 3/8" drive for Allen key, AF 8 mm | **KL1260IS38I8** |
| Socket 1/2" drive for Allen key, AF 4 mm | **KL1260IS12I4** |
| Socket 1/2" drive for Allen key, AF 5 mm | **KL1260IS12I5** |
| Socket 1/2" drive for Allen key, AF 6 mm | **KL1260IS12I6** |
| Socket 1/2" drive for Allen key AF 8 mm | **KL1260IS12I8** |

## Screwdriver sockets 3/8" and 1/2" drive for Plus/Minus-Pozidriv screws



1000V IEC 60900

### Characteristics
- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- DIN 7448 from vanadium special steel

### Suitable for
- Plus/Minus-Pozidriv screws

| Item | Part No. |
|---|---|
| Socket 3/8" drive for Plus/Minus-Pozidriv PM1 | **KL1230IS38PM1** |
| Socket 3/8" drive for Plus/Minus-Pozidriv PM2 | **KL1230IS38PM2** |
| Socket 3/8" drive for Plus/Minus-Pozidriv PM3 | **KL1230IS38PM3** |
| Socket 1/2" drive for Plus/Minus-Pozidriv PM1 | **KL1230IS12PM1** |
| Socket 1/2" drive for Plus/Minus-Pozidriv PM2 | **KL1230IS12PM2** |
| Socket 1/2" drive for Plus/Minus-Pozidriv PM3 | **KL1230IS12PM3** |

## Screwdriver sockets - 3/8" and 1/2" for slotted screws



1000V IEC 60900

### Characteristics
- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- DIN 7448 from vanadium special steel

### Suitable for
- Slotted screws 5.5

| Item | Part No. |
|---|---|
| Socket 3/8" drive for slotted screws, 5.5 mm | **KL1200IS3855** |
| Socket 1/2" drive for slotted screws, 5.5 mm | **KL1200IS1255** |

# Screwdriver sockets - 3/8" and 1/2" for Philips PH 2 screws



1000 V IEC 60900

## Characteristics

- Fully insulated acc. to EN 60900
- 2-colour dipped insulation - outside orange / inside yellow
- DIN 7448 from vanadium special steel

## Suitable for

- Philips PH2 screws

| Item | Part No. |
|---|---|
| Socket 3/8" drive for Phillips screws, PH2 | **KL1210IS38PH2** |
| Socket 1/2" drive for Phillips screws, PH2 | **KL1210IS12PH2** |

## VDE Tool case, 27-piece



### Characteristics

- Hard shell, red
- Equipped with 27 mainly VDE-tested tools to DIN EN 60900

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| VDE Tool case, 27-pce. | 515 x 420 x 230 | 9800 | **KL880B26IS** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Water pump pliers, jaw width 50 mm | KL070250IS | 507 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Wire stripper, 160 mm | KL060160IS | 507 |
| VDE Cable cutter 160 mm | KL010160IS | 504 |
| VDE Slotted screwdriver, 2.5 x 0.4 mm | KL1007525IS | 508 |
| VDE Slotted screwdriver, 3.5 x 0.6 mm | KL10010035IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| VDE Pozidriv screwdriver, PZ1 | KL120PZ1IS | 509 |
| VDE Pozidriv screwdriver, PZ2 | KL120PZ2IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |
| Cable knife, straight | KL640GK | 519 |
| Rubber cover/blanket, large | KL625A1000 | 517 |
| Plastic clamp for rubber cover/blanket | KL628 | 517 |
| Protective gloves, size 10 | KL60510 | 518 |
| Cotton gloves | KL605U | 518 |
| Tweezers | KL690130 | 520 |
| Cleaning brush | KL698 | 520 |
| Control cabinet spirit level, 200 mm | KL420200 | 535 |
| Automatic VDE wire stripper 0.2 - 6 mm² | KL760180IS | 507 |
| Tool case red, empty | KL880L | 526 |
| VDE Electric power side cutter, 200 mm | KL044200IS | 505 |

## Tool case red, empty



### Characteristics

- Hard shell, red

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Tool case red, empty | 515 x 420 x 230 | 4400 | **KL880L** |

# STANDARD – KLAUKE BASIC TOOLS, SETS AND ACCESSORIES

With Klauke sets, you always have your basic equipment to hand. Whether you are an electronics technician or precision engineer - the Klauke range includes all standard versions through to pliers for water pumps and fittings. Rely on Klauke quality from the outset - even just for quick, occasional use.



## Socket wrench set KL 361

We have compiled the standard set of socket wrenches for you and made everything shockproof by storing in a high-quality plastic case. In total, the set comprises 29 pieces in ¼" sizes.

- 29 piece: 16-piece bit set, bit holder, adapter, 7-piece socket set, professional ratchet, various extensions, T-Smart grip

## The apprentice's case: KL 855 B22

The impact-resistant case made from ABS material contains everything an apprentice electrician needs, from standard tools such as cable knives and phase testers through to VDE safety tools.

Head into your apprenticeship well-prepared!

## The technician's basic equipment: KL 905 B15

The practical notebook bag holds everything you need on-site. The 15-piece set is securely stowed in the fold-out compartments.

- Technician's notebook bag made from highly durable nylon
- Tools are quickly located thanks to fold-out front pocket
- Reliably transported due to splash-proof base
- Twin fixed carrying handle
- Basic set of VDE screwdrivers
- Standard tools such as phase tester and cable knife

## Water pump pliers, jaw width 50 mm



### Characteristics

- Jaw width 50 mm
- Safe working due to clamp protection and safety joint
- Ratchet adjustment
- Optimum hold due to toothed grip area
- Plastic coated handles
- 2-component handle

| Part No. | KL070250G |
|---|---|
| Item | Water pump pliers, jaw width 50 mm |
| Dimension mm | 250 |
| Weight g | 355 |

## Water pump pliers



### Characteristics

- Jaw width up to 65 mm
- Safe working due to clamp protection and safety joint
- Push button adjustment for setting quickly and accurately
- Inverted box joint with wide guide surfaces
- Optimum hold due to toothed grip area
- High retaining force and load-bearing capacity due to inductively-hardened teeth
- Plastic coated handles
- 2-component handle

| Part No. | KL072180G | KL072250G | KL072300G |
|---|---|---|---|
| Item | Water pump pliers, jaw width 35 mm | Water pump pliers, jaw width 50 mm | Water pump pliers, jaw width 65 mm |
| Dimension mm | 180 | 250 | 300 |
| Weight g | 190 | 300 | 530 |

## Fitting pliers, jaw width 53 mm

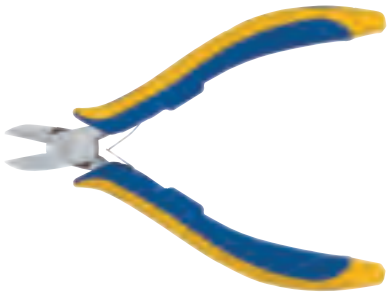


### Characteristics

- Parallel and moveable jaws for maximum force
- Large jaw opening adjustable from 0 - 53 mm
- Safe working due to clamp protection and safety joint
- Push button adjustment for setting quickly and accurately
- Box joint
- Plastic coated handles

| Part No. | KL078250G |
|---|---|
| Item | Fitting pliers, jaw width 53 mm |
| Dimension mm | 250 |
| Weight g | 375 |

## ESD Electronic side cutter



### Characteristics

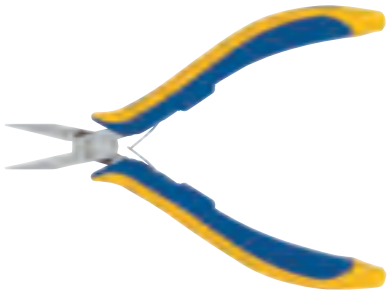
- Precision pliers for high precision work
- Double leaf spring with low friction
- High cutting force thanks to additional induction hardening
- Anti-static ergonomic non slip grips
- Surface resistance amounts to 1 to 100 MOhm

### Suitable for

- For soft wires to 1.2 mm

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Electronic side cutter, with facet | 115 | 62 | **KL040115EL** |
| Electronic side cutter, without facet/surface flush cut | 115 | 60 | **KL040115ELW** |

## ESD Electronic long-nose pliers



### Characteristics

- Smooth inside jaws, edges rounded
- Anti-static ergonomic non slip grips
- Surface resistance amounts to 1 to 100 MOhm
- Optimised for gripping fine strands of wires

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Electronic long-nose pliers | 115 | 64 | **KL050115EL** |

## Electronic side cutter



### Characteristics

- Cutter angled at 21°
- Backlash-free operation
- With opening spring
- 2-component handle

### Suitable for

- For soft wires to 1.3 mm dia.

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Electronic side cutter, without wire trapping spring | 128 | 64 | **KL040128EL** |
| Electronic side cutter, with wire trapping spring | 128 | 66 | **KL040128ELH** |

## Screwdriver with interchangeable bits



### Characteristics

- Compact, versatile, ergonomic

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Screwdriver with interchangeable bits, 8-pce. | 128 | 64 | **KL180B8** |
| Scope of supply | | | |
| Slotted screwdriver bit, 1.0 x 5.5 mm | | | |
| Philips screwdriver bit, PH 1 & PH 2 | | | |
| Pozidriv screwdriver bit, PZ 1 & PZ 2 | | | |
| TORX® screwdriver bit, Torx 15, 20, 25 | | | |
| Magnetic bit holder | | | |

## Electronic assortment, 7-pce.



### Characteristics

- 2-component handle
- Blade replacement by replacement blade holder

| Item | Weight g | Part No. |
|---|---|---|
| Electronic assortment, 7-pce. | 161 | **KL350** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Blade 1.5 x 0.25 - 3.0 x 0.5 mm | KLE3501 | |
| Blade 2.0 x 0.4 - 3.5 x 0.6 mm | KLE3502 | |
| Blade 2.5 x 0.4 - 4.0 x 0.8 mm | KLE3503 | |
| Blade PH 000 - PH 00 | KLE3504 | |
| Blade PH 0 - PH 1 | KLE3505 | |
| Blade PH 0 - PZ 1 | KLE3506 | |
| Tool holder 95 x 14 mm | KLE3507 | |

## Slotted screwdriver bit 1/4", 73 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126

| Item | Dimension mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Slotted screwdriver bit 1/4", 73 mm | 73 x 0.6 x 3.5 | 16 | 2 | **KL2007335** |
| Slotted screwdriver bit 1/4", 73 mm | 73 x 0.8 x 4.0 | 18 | 2 | **KL2007340** |
| Slotted screwdriver bit 1/4", 73 mm | 73 x 1.0 x 5.5 | 26 | 2 | **KL2007355** |
| Slotted screwdriver bit 1/4", 73 mm | 73 x 1.2 x 6.5 | 34 | 2 | **KL2007365** |

## Phillips screwdriver bit 1/4", 73 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126

| Item | Dimen-sion mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Phillips screwdriver bit 1/4", 73 mm PH1 | 73 x PH 1 | 22 | 2 | **KL21073PH1** |
| Phillips screwdriver bit 1/4", 73 mm PH2 | 73 x PH 2 | 30 | 2 | **KL21073PH2** |

## Pozidriv screwdriver bit 1/4", 73 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126

| Item | Dimen-sion mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Pozidriv screwdriver bit 1/4", 73 mm PZ1 | 73 x PZ 1 | 22 | 2 | **KL22073PZ1** |
| Pozidriv screwdriver bit 1/4", 73 mm PZ2 | 73 x PZ 2 | 30 | 2 | **KL22073PZ2** |

## Plus/Minus-Pozidriv screwdriver bit, 1/4", 73 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126

| Item | Dimension mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Plus/Minus-Pozidriv screwdriver bit, 1/4", 73 mm | 73 x Z 1 | 20 | 2 | **KL23073PM1** |
| Plus/Minus-Pozidriv screwdriver bit, 1/4", 73 mm | 73 x Z 2 | 30 | 2 | **KL23073PM2** |

## TORX® screwdriver bit, 1/4", 73 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126

| Item | Dimension mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| TORX® screwdriver bit, 1/4", 73 mm TX10 | 73 x TX 10 | 22 | 2 | **KL25073TX10** |
| TORX® screwdriver bit, 1/4", 73 mm TX15 | 73 x TX 15 | 22 | 2 | **KL25073TX15** |
| TORX® screwdriver bit, 1/4", 73 mm TX20 | 73 x TX 20 | 25 | 2 | **KL25073TX20** |
| TORX® screwdriver bit, 1/4", 73 mm TX25 | 73 x TX 25 | 25 | 2 | **KL25073TX25** |
| TORX® screwdriver bit, 1/4", 73 mm TX27 | 73 x TX 27 | 25 | 2 | **KL25073TX27** |
| TORX® Screwdriver bit, 1/4", 73 mm TX30 | 73 x TX 30 | 30 | 2 | **KL25073TX30** |
| TORX® Screwdriver bit, 1/4", 73 mm TX40 | 73 x TX 40 | 40 | 2 | **KL25073TX40** |

## Magnetic holder for screwdriver bits, 1/4", 58 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126
- Strong magnet

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Magnetic holder for screwdriver bits, 1/4", 58 mm | 58 | 32 | **KL290** |

## Bit holder with quick-change chuck E6.3 1/4"



### Characteristics

- Shank 1/4" (6.3), DIN 3126
- With quick-change chuck

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Bit holder with quick-change chuck E6.3 1/4" | 52 | 30 | **KL291** |

## Adapter, 1/4", 50 mm



▸ Shank E 6.3 and 1/4" socket wrench

**Characteristics**
- Shank 1/4" (6.3)

**Suitable for**
- Drive for 1/4" socket wrenches

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Adapter, 1/4", 50 mm | 50 | 15 | **KL295** |

## Adapter, 3/8", 50 mm



**Characteristics**
- Shank 3/8" (10), DIN 3126

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Adapter, 3/8", 50 mm | 50 | 22 | **KL296** |

## Pliers set, 3-piece



| Item | Weight g | Part No. |
|---|---|---|
| Pliers set, 3-piece | 1000 | **KL315** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Fitting pliers, jaw width 53 mm | KL078250G | 528 |
| Water pump pliers, jaw width 35 mm | KL072180G | 528 |
| Water pump pliers, jaw width 50 mm | KL072250G | 528 |

## Socket head bit set 1/4", 29-pce.

NEW



| Item | Weight g | Number parts | Part No. |
|---|---|---|---|
| Socket head bit set 1/4", 29-pce. | 1130 | 29 | **KL361** |

| Scope of supply | Part No. | Page |
|---|---|---|
| 16-pce. Bit set C6.3 1/4" | KLE3601 | |
| Bit holder with quick-change chuck E6.3 1/4" | KL291 | 531 |
| 7-pce. Socket set AF5 - AF13 1/4" | KLE3602 | |
| Adapter C6.3 (25 mm) 1/4" | KLE3603 | |
| Extension E6.3 (150 mm) 1/4" | KLE3604 | |
| Extension (75 mm) 1/4" | KLE3605 | |
| Professional ratchet 1/4" | | |
| T-Smart handle 105 x 39 mm 1/4" | KLE3607 | |

## Allen key set, 7-pce.



### Characteristics

- In practical holder

| Item | Dimen-sion mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Allen key set, 7-pce. | SW 2 - 8 | 171 | 7 | **KL370** |

## Ball-point allen key set, 9-pce.



### Characteristics

- In practical plastic holder

| Item | Dimension mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Ball-point allen key set, 9-pce. | SW 1.5 - 10 | 273 | 9 | **KL375** |

## Torque-wrench set, 0.6 - 1.5 Nm



### Characteristics

- Easy torque adjustment using an Allen key
- Precise release when reaching the set torque

| Item | Weight g | Number parts | Part No. |
|---|---|---|---|
| Torque-wrench set, 0.6 - 1.5 Nm | 1048 | 14 | **KL38715** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Nm-slotted blade 3.0 x 0.5 x 170 mm | KLE387158 | |
| Nm-slotted blade 3.5 x 0.6 x 170 mm | KLE387159 | |
| Nm-Phillips blade PH 0 x 170 mm | KLE3871510 | |
| Nm blade PZ 0 x 170 mm | KLE3871511 | |
| Nm-TORX® blade TX 6 x 170 mm | KLE387151 | |
| Nm-TORX® blade TX 7 x 170 mm | KLE387152 | |
| Nm-TORX® blade TX 8 x 170 mm | KLE387153 | |
| Nm-TORX® blade TX IP 7 x 170 mm | KLE387155 | |
| Nm-TORX® blade TX IP 8 x 170 mm | KLE387156 | |
| Nm-TORX® blade TX IP 9 x 170 mm | KLE387157 | |
| Nm blade Z1 x 170 mm | KLE3883014 | |
| Nm blade magnetic 170 mm | KLE3871512 | |
| Nm handle 0.6 - 1.5 Nm | KLE3871513 | |
| Adjusting spanner | KLE3871514 | |

## Torque-wrench set, 1.5 - 3.0 Nm



### Characteristics

- Easy torque adjustment using an Allen key
- Precise release when reaching the set torque

| Item | Weight g | Number parts | Part No. |
|---|---|---|---|
| Torque-wrench set, 1.5 - 3.0 Nm, 14 pieces | 1066 | 14 | **KL38830** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Nm-slotted blade 4.0 x 0.8 x 170 mm | KLE388301 | |
| Nm-Phillips blade PH 1 x 170 mm | KLE388302 | |
| Nm-Phillips blade PH 2 x 170 mm | KLE388303 | |
| Nm blade PZ 1 x 170 mm | KLE388304 | |
| Nm blade PZ 2 x 170 mm | KLE388305 | |
| Nm-TORX® blade TX 10 x 170 mm | KLE388307 | |
| Nm-TORX® blade TX 15 x 170 mm | KLE388308 | |
| Nm-TORX® blade TX IP 10 x 170 mm | KLE3883010 | |
| Nm-TORX® blade TX IP 15 x 170 mm | KLE3883011 | |
| Nm blade Z1 x 170 mm | KLE3883014 | |
| Nm blade Z2 x 170 mm | KLE3883015 | |
| Nm blade magnetic 170 mm | KLE3883012 | |
| Nm handle 1.5 - 3.0 Nm | KLE3883013 | |
| Adjusting spanner | KLE3871514 | |

## Torque-wrench set, 3.0 - 5.4 Nm



### Characteristics

- Easy torque adjustment using an Allen key
- Precise release when reaching the set torque

| Item | Weight g | Number parts | Part No. |
|---|---|---|---|
| Torque-wrench set, 3.0 - 5.4 Nm | 1066 | 14 | **KL38954** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Nm-slotted blade 4.0 x 0.8 x 170 mm | KLE388301 | |
| Nm-Phillips blade PH 2 x 170 mm | KLE388303 | |
| Nm-Phillips blade PH 1 x 170 mm | KLE388302 | |
| Nm blade PZ 1 x 170 mm | KLE388304 | |
| Nm blade PZ 2 x 170 mm | KLE388305 | |
| Nm-TORX® blade TX 15 x 170 mm | KLE388308 | |
| Nm-TORX® blade TX IP 10 x 170 mm | KLE3883010 | |
| Nm-TORX® blade TX IP 15 x 170 mm | KLE3883011 | |
| Nm blade Z2 x 170 mm | KLE3883015 | |
| Nm blade magnetic 170 mm | KLE3883012 | |
| Nm handle 3.0 - 5.4 Nm | KLE3895413 | |
| Adjusting spanner | KLE3871514 | |

## Bit set, 6-piece, 1/4", 73 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126
- KL330: 3.0 x 0.5 mm / 3.5 x 0.6 mm / 4.0 x 0.8 mm / 5.5 x 1.0 mm / PH 1 / PH 2
- KL331: PH 1 / PH 2 / PH 3 / PZ1 / PZ2 / PZ3
- KL335: TX10 / TX15 / TX20 / TX25 / TX30 / TX40

| Item | Blade length mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Bit assortment, 1/4", 73 mm | 73 | 120 | 6 | **KL330** |
| Bit assortment, 1/4", 73 mm | 73 | 120 | 6 | **KL331** |
| TORX® bit assortment, 1/4", 73 mm | 73 | 120 | 6 | **KL335** |

## Bit box Swift, 7-piece, 1/4", 25 mm



### Characteristics

- Shank 1/4" (6.3), DIN 3126
- In practical holder
- Incl. magnetic holder
- KL340: 1.0 x 5.5 mm / 1.2 x 6.5 mm / PZ 1 / PZ 2 / PH 1 / PH 2

| Item | Blade length mm | Weight g | Number parts | Part No. |
|---|---|---|---|---|
| Bit box Swift, 1/4", 25 mm | 25 | 75 | 7 | **KL340** |
| TORX® bit box swift, 1/4", 25 mm | 25 | 75 | 7 | **KL345** |

## Combination spanner set, 12-pce.



### Characteristics

- Material: Chrome vanadium
- Surface: chromed

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Combination spanner set, 12-pce. | SW 8 - 22 | 1055 | **KL365** |

## Control cabinet spirit level, 200 mm



### Characteristics

- With horizontal, vertical and 45° spirit level

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Control cabinet spirit level, 200 mm | 200x42x17 | 65 | **KL420200** |

## Alu spirit level



**Characteristics**
- With horizontal and vertical spirit level

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Alu spirit level, 400 mm | 400 x 40 x 15 | 210 | **KL425400** |
| Alu spirit level, 600 mm | 600 x 40 x 15 | 305 | **KL425600** |

## Wooden folding rule, 2 m



**Characteristics**
- White/yellow
- No. of links 10

| Item | Weight g | Part No. |
|---|---|---|
| Wooden folding rule, 2 m | 126 | **KL402** |

## Measuring tape, 3 m



**Characteristics**
- With 3 functions: Length, inside dimension and circles

| Item | Weight g | Part No. |
|---|---|---|
| Measuring tape, 3 m | 124 | **KL403** |

## Carpenter‘s pencil



**Characteristics**
- Oval shape
- Pointed

| Item | Weight g | Part No. |
|---|---|---|
| Carpenter‘s pencil | 10 | **KL449** |

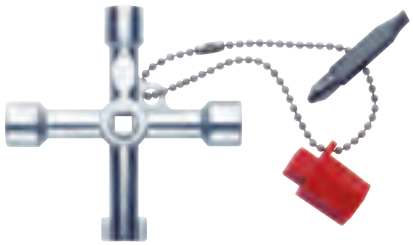
## Marking pen



**Characteristics**
- Multimark permanent marker, black
- Fine tip 0.6 mm

| Item | Weight g | Part No. |
|---|---|---|
| Marking pen | 10 | **KL440F** |

## Control cabinet key



### Characteristics

- With chain, adapter and interchangeable bit 1/4"
- Inner square 5, 6 and 7-8 mm
- Triangular 9 mm
- Double pin keys 3 - 5 mm
- Bit PH2 and slot 1.2 x 0.7 mm
- Radiator valve key closing (5 mm square) in the centre slot

| Item | Weight g | Part No. |
|---|---|---|
| Control cabinet key | 75 | **KL500** |

## Universal cabinet key, subkey Electro



### Characteristics

- 30% lighter and simpler opening mechanism
- Inner square 5, 6 and 7-8 mm
- Triangular 9 mm
- Double pin keys 3 - 5 mm
- Including 1/4" bit mounting and 2 double bits
- Radiator valve key closing (5 mm square) on the pin head
- Bit slot 1.2 x 7 mm, PH2

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Universal cabinet key, subkey Electro | 145 | 120 | **KL510** |

## Universal cabinet key, SuBMaVo



### Characteristics

- Incl. voltage field sensor to safely determine alternating current at e.g. cable connections, sockets, lamps
- Integrated magnetic field sensor for the contactless determination of magnetic fields or permanent magnets
- Twin rotating mechanism for 4 different control cabinet closures
- Square drive 6 and 7 - 8 mm
- Triangular 9 mm
- Double pin keys 3 - 5 mm
- Bit slot 1.2 x 7 mm, PH2

| Item | Weight g | Part No. |
|---|---|---|
| Universal cabinet key, SuBMaVo | 105 | **KL520** |

## Engineer‘s hammer



**Characteristics**
- Steel-forged head
- Ground finish
- With protective nylon shroud

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Engineer‘s hammer, 300 g | 370 | 300 | **KL580300** |
| Engineer‘s hammer, 500 g | 610 | 500 | **KL580500** |

## Sledge hammer



**Characteristics**
- Steel-forged head
- Ground finish
- With protective nylon shroud

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Club hammer, 1000 g | 1150 | 1000 | **KL5821000** |
| Club hammer, 1250 g | 1400 | 1250 | **KL5821250** |

## Jointing chisel



**Characteristics**
- Chrome vanadium steel
- Safety head, annealed

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Jointing chisel | 230 x 26 x 7 | 250 | **KL584230** |

## Electricians chisel



**Characteristics**
- Chrome vanadium steel
- Safety head, annealed

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Electrician‘s chisel, 200 mm | 200 | 90 | **KL585200** |
| Electrician‘s chisel, 250 mm | 250 | 120 | **KL585250** |

## Safety handle for jointing chisel



**Suitable for**
- Jointing chisel, part no. KL584230

| Item | Weight g | Part No. |
|---|---|---|
| Safety handle for jointing chisel | 110 | **KL586** |

## Cable knife



**Characteristics**

- Hinged, with plastic handle

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cable knife | 80 | 115 | **KL540** |

## Mini saw



**Characteristics**

- With fixed wooden handle

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Mini saw | 290 | 95 | **KL559** |
| Metal saw blades, 12-piece | 150 | 2 | **KL550ES** |

## Universal saw



**Characteristics**

- With fibreglass reinforced plastic handle

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Universal saw | 250 | 170 | **KL550** |
| Metal saw blades, 12-piece | 150 | 2 | **KL550ES** |

## Combination scissors



**Characteristics**

- Serrated cutting edges
- With safety lock
- Cuts e.g. round and flat material from copper, aluminium, plastic, paper, cardboard, leather

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Combination scissors | 190 | 100 | **KL545** |

## Universal knife





**Characteristics**

- With adjustable and replaceable blades

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Universal knife | | 305 | **KL542** |
| Replacement blade for universal knife | 60 x 19 x 0.5 | 8 | **KL542ES** |

## Cutter knife

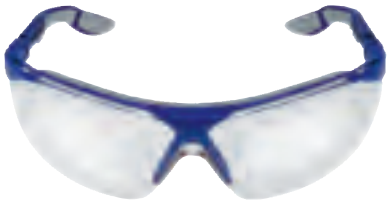


### Characteristics

- Knife with knock-off blades, all 9 mm

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cutter knife | 9 | 45 | **KL544** |
| Replacement blade for cutter knife | 9 | 5 | **KL544ES** |

## Safety glasses uvex i-vo in microfibre bag



### Characteristics

- Duo component technology with soft components for the sensitive zones (nose, forehead, ears) giving optimum and long-term wearing comfort
- Individual bar length adjustment
- Individual incline setting
- Clear lens for permanent anti-fog inside, extremely scratch-resistant outside
- Sun protection lens extremely scratch-resistant both sides
- Easy and quick replacement of the sunglasses‘ lens
- 100 % UV protection
- Elegant microfibre pouch, also suitable for cleaning the glasses

| Item | Weight g | Part No. |
|---|---|---|
| Safety glasses uvex i-vo in microfibre bag | 33 | **KL604** |
| Sun protection lens for safety glasses KL604 | 23 | **KL604S** |

## L-BOXX with basic equipment for electricians, 18-piece



### Characteristics

- L-BOXX from shock and impact resistant ABS plastic, 100 kg capacity
- Stackable L-BOXXes due to Easy-Click system

### Suitable for

- For integration in TÜV-approved in-vehicle equipment systems

| Item | Dimension mm | Part No. |
|---|---|---|
| L-BOXX with basic equipment for electricians, 18-piece | 442 x 357 x 151 | **LBOXXKLB18** |

| Scope of supply | Part No. | Page |
|---|---|---|
| L-BOXX with front handle (W/D/H: 442 x 357 x 151 mm) | LBOXX136LFG | |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE Cable cutter 160 mm | KL010160IS | 504 |
| Automatic VDE wire stripper 0.2 - 6 mm² | KL760180IS | 507 |
| VDE Water pump pliers, jaw width 50 mm | KL070250IS | 507 |
| Measuring tape, 3 m | KL403 | 536 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |
| GT-85NE Bipolar voltage tester with LCD display | 52049407 | 579 |
| Hexagonal angle screwdriver set, 7-pce. | KL370 | 533 |
| Cable knife with hooked blade | KL745HK | 553 |
| DM-200A Digital multimeter | 52047801V2 | 582 |

## Apprentice case



▸ **Tool case can be personalised with own brand logo - http://www.klauke.com/personalization**

### Characteristics

- Case shell from impact-resistant ABS
- Robust aluminium frame with abutting edges
- Two lockable clips

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Apprentice case | 500 x 470 x 210 | 6.0 | **KL855B22** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Slotted screwdriver, 3.0 x 0.5 mm | KL10010030IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| VDE Pozidriv screwdriver, PZ1 | KL120PZ1IS | 509 |
| VDE Pozidriv screwdriver, PZ2 | KL120PZ2IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |
| Wooden folding rule, 2 m | KL402 | 536 |
| Control cabinet spirit level, 200 mm | KL420200 | 535 |
| Carpenter‘s pencil | KL449 | 536 |
| Universal saw | KL550 | 539 |
| Engineer‘s hammer, 300 g | KL580300 | 538 |
| Cable knife with hooked blade | KL745HK | 553 |
| Automatic VDE wire stripper 0.2 - 6 mm² | KL760180IS | 507 |
| Water brush | | |
| Plasterer´s bowl 125 mm | | |
| Painter‘s spatula 40 mm | | |

## Professional tool case



▸ **Tool case can be personalised with own brand logo - http://www.klauke.com/personalization**

### Characteristics

- Case shell from impact-resistant ABS
- Robust aluminium frame with abutting edges
- Two lockable clips

| Item | Dimension mm | Weight kg | Part No. |
|---|---|---|---|
| Professional tool case with 19 tools | 520 x 440 x 230 | 9.15 | **KL865B19** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| Water pump pliers, jaw width 50 mm | KL072250G | 528 |
| VDE Slotted screwdriver, 3.0 x 0.5 mm | KL10010030IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| VDE Pozidriv screwdriver, PZ1 | KL120PZ1IS | 509 |
| VDE Pozidriv screwdriver, PZ2 | KL120PZ2IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| Wooden folding rule, 2 m | KL402 | 536 |
| Carpenter‘s pencil | KL449 | 536 |
| Control cabinet key | KL500 | 537 |
| Cable knife with blade protection, 1000 V | KL645GSK | 519 |
| Automatic VDE wire stripper 0.2 - 6 mm² | KL760180IS | 507 |
| GT-55NE Bipolar voltage tester with LED display | 52049408 | 579 |
| Allen key set | | 533 |
| Open-end wrench set | | 535 |

## Professional roller trolley, 88-piece



### Characteristics

- With 4-section telescopic handle, up to 1050 mm
- Smooth-running thanks to large rubber casters
- Case shell manufactured from non-breakable ABS
- Loads up to 40 kg

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Professional roller trolley, 88-piece | 470 x 210 x 355 | 15500 | **KL890TB88** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Professional roller trolley, empty | KL890TL | 546 |
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Electric power side cutter, 200 mm | KL044200IS | 505 |
| VDE Wire stripper, 160 mm | KL060160IS | 507 |
| VDE Slotted screwdriver, 2.5 x 0.4 mm | KL1007525IS | 508 |
| VDE Slotted screwdriver, 3.5 x 0.6 mm | KL10010035IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| VDE Pozidriv screwdriver, PZ1 | KL120PZ1IS | 509 |
| VDE Pozidriv screwdriver, PZ2 | KL120PZ2IS | 509 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| VDE Cable cutter 210 mm | KL010210IS | 504 |
| Bit assortment, 1/4", 73 mm | KL330 | 535 |
| Wire stripper for flexible and solid conductors | KL760180 | 550 |
| Water pump pliers, jaw width 50 mm | KL070250G | 528 |
| LED flashlight | 52041108 | |
| CM-660 Digital clamp meter | 52066379 | 590 |
| Combination spanner set, 12-pce. | KL365 | 539 |
| Socket head bit set 1/4", 29-pce. | KL361 | 532 |
| Universal cabinet key, subkey Electro | KL510 | 537 |
| Universal saw | KL550 | 539 |
| Crimping tool with interchangeable dies | K507 | 243 |
| Wooden folding rule, 2 m | KL402 | 536 |
| Carpenter‘s pencil | KL449 | 536 |
| Cable knife with hooked blade | KL745HK | 553 |
| Round cable stripper 8 - 13 mm² | KL710 | 553 |
| Allen key set, 7-pce. | KL370 | 533 |
| Engineer‘s hammer, 300 g | KL580300 | 538 |
| Safety glasses uvex i-vo in microfibre bag | KL604 | 536 |
| Marking pen | KL440F | 536 |
| GT-85NE Bipolar voltage tester with LCD display | 52049407 | 579 |
| Kwik Stepper™ step bit with ROTASTOP® shaft ISO 12 - 40 mm | 50069888 | 467 |
| NETcat® Micro NC-100 + 200EP | NC100EP | |
| NETcat® Micro NC-100 | 52024541 | |
| TC-20 Nylon carrying case for measuring instruments with carrying strap | 50075357 | 587 |

# Engineers professional case, 15-piece



## Engineers basic equipment, mainly with VDE tools

### Characteristics

- Technicians Notebook tool bag
- Material: hard-wearing nylon
- 90° folding-out front pocket
- High-quality zipper
- Spray-water protected bottom
- Each side pocket has a zipper
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Twin fixed carrying handle
- Insert for visitor cards

| Item | Part No. |
|---|---|
| Engineers professional case, 15-piece | **KL905B15** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Technicians professional case, empty | KL905L | 547 |
| VDE Phillips screwdriver, PH1 | KL110PH1IS | 508 |
| VDE Phillips screwdriver, PH2 | KL110PH2IS | 508 |
| VDE Slotted screwdriver, 2.5 x 0.4 mm | KL1007525IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 510 |
| VDE Plus/Minus-Pozidriv screwdriver, Z1 | KL130PM1IS | 509 |
| VDE Plus/Minus-Pozidriv screwdriver, Z2 | KL130PM2IS | 509 |
| Cable knife with hooked blade | KL745HK | 553 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Electric power side cutter, 200 mm | KL044200IS | 505 |
| Round cable stripper 8 - 13mm² | KL710 | 553 |
| VDE Power combination pliers, 165 mm | KL020165IS | 504 |
| Measuring tape, 3 m | KL403 | 536 |

## OEM bag, 22-piece



### Characteristics

- Equipped with 22 mainly VDE-tested tools
- Robust version with plastic slide rails and upper metal rails with sponge rubber handle
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Outdoors: 1 large lockable label pocket, 9 pockets, 2 Velcro® for fastening spirit level etc. Indoor connections: 3 compartments, 14 straps

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| OEM bag, 22-piece | 350 x 200 x 200 | 2600 | **KL920B22** |

| Scope of supply | Part No. | Page |
|---|---|---|
| VDE Power combination pliers, 180 mm | KL020180IS | 504 |
| VDE Side cutter 160 mm | KL040160IS | 505 |
| VDE long-nose pliers, straight, 205 mm | KL050205IS | 506 |
| VDE Slotted screwdriver, 3.0 x 0.5 mm | KL10010030IS | 508 |
| VDE Slotted screwdriver, 4.0 x 0.8 mm | KL10010040IS | 508 |
| VDE Slotted screwdriver, 5.5 x 1.0 mm | KL10012555IS | 508 |
| VDE Pozidriv screwdriver, PZ1 | KL120PZ1IS | 509 |
| VDE Pozidriv screwdriver, PZ2 | KL120PZ2IS | 509 |
| VDE-Plus/Minus-Pozidriv screwdriver Z1 | KL130PM1IS | 508 |
| VDE Plus/Minus-Pozidriv screwdriver Z2 | KL130PM2IS | 508 |
| Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V | KL19073IS | 509 |
| Cable knife with hooked blade | KL745HK | 548 |
| Automatic VDE wire stripper 0.2 - 6 mm² | KL760180IS | 507 |
| Wooden folding rule, 2 m | KL402 | 536 |
| Control cabinet spirit level, 200 mm | KL420200 | 535 |
| Carpenter's pencil | KL449 | 536 |
| Universal saw | KL550 | 539 |
| Engineer's hammer, 300 g | KL580300 | 538 |
| Electrician's chisel, 250 mm | KL585250 | 538 |

## Professional roller trolley, empty



### Characteristics

- With 4-section telescopic handle, up to 1050 mm
- Document compartment
- Double aluminium frame
- Smooth-running thanks to large rubber casters
- Case shell manufactured from non-breakable ABS
- 2 compartments for business cards
- Two straps for writing instruments

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Professional roller trolley, empty | 470 x 210 x 355 | 6600 | **KL890TL** |

## Professional installers case



**Characteristics**

- Robust version with plastic slide rails and upper metal rails with sponge rubber handle
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Outdoors: 1 large lockable label pocket, 9 pockets, 2 Velcro® for fastening spirit level etc. Indoor connections: 3 compartments, 14 straps

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Profi-installer‘s pocket | 350 x 200 x 200 | 2600 | **KL920L** |

## Technicians professional case, empty



**Characteristics**

- Material: highly durable nylon, splash-proof base
- 90° folding front pocket, each side pocket has a zipper
- Twin fixed carrying handle
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Protected notebook compartment
- Insert for visitor cards
- High-quality zipper

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Technicians professional case, empty | 330 x 440 x 200 | 2600 | **KL905L** |

## Tool case, empty



**Characteristics**

- Robust aluminium frame with abutting edges
- With lockable clips

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Tool case Economy | 490 x 365 x 188 | 4,5 | **KL855L** |
| Tool case, empty | 508 x 362 x 214 | 5,2 | **KL865L** |

## Tool wallet from nylon, empty



**Characteristics**

- Material: Polytex
- Accepts up to 11 tools

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Tool wallet from nylon, empty | 200 x 200 x 50 | 100 | **KL910L** |

# PREPARATION WITH PRECISION - STRIPPING TOOLS

In the world of professionals, every assignment counts. Better if you can rely on your tool. Stripping tools from Klauke remove insulation and cable sheathing quickly and precisely. All strands remain intact.



Special sheath and insulation materials call for special stripping tools! Innovative blade geometries guarantee a clean cut edge - with hard insulation such as PTFE (Teflon) through to soft/tough materials such as silicon!

**For very precise use**

- Fast and precise removal of insulation and cable sheathing
- Automatic cross-section adjustment
- Reduced effort due to optimum power transmission
- Reduced wear
- Including replacement blade

## Automatic wire stripper, 0.02 - 10 mm²



### Characteristics

- Self-setting cutting and stripping tool for commercially available flexible cables 0.02 - 10 mm² and solid conductors to 1.5 mm²
- Easily replaceable blade system
- Long service life of pliers due to precise adjustment for stripping thin insulation without damaging the conductor
- Integrated side cutter

| Item | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|
| Wire-stripping tool K43/2 | 0.02 - 10 | 140 | **K432** |
| Automatic wire stripper K43/2-90, angled at 90° | 0.02 - 10 | 140 | **K43290** |

| Accessories | Part No. | Page |
|---|---|---|
| Interchangeable cassette, black, for wire-stripping tool K432 0.02 - 10 mm² flexible conductors and to 1.5 mm² solid conductors | **K432E** | |
| Interchangeable cassette, blue, for wire-stripping tool K432 for PTFE insulated conductors 0.1 - 4 mm² | **K432E2** | |
| Interchangeable cassette, red, for wire-stripping tool K432 / 4 - 16 mm² | **K432E3** | |

## Automatic wire stripper, 0.02 - 10 mm²

NEW



**Particularly suitable for application-specific cables in the plant and machinery construction, wind energy, robotics, eMobility, marine, shipbuilding, railway and rail transport sectors**

### Characteristics

- Self-adjusting cutting and stripping tool for application-specific solid and flexible cables
- Ideal, lightweight and ergonomic tool with a long service life
- Automatic opening of the clamping jaws after the stripping process for added safety
- No splicing of single conductors - conductor enters the cable end-sleeve with greater ease
- Integrated professional, readily accessible cable cutter - accelerates working processes
- Adjustable stop with metric and imperial display for precise stripping length

| Item | Dimension mm | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|---|
| Automatic wire stripper, 4 - 16 mm² | 190 | 4 -16 | 140 | **K432U** |

| Accessories | Part No. | Page |
|---|---|---|
| Wechselkassette rot für massive u. flexible Kabel 4 - 16 mm² | K432E3 | |

## Automatic wire stripper, 0.1 - 4 mm²

NEW



**Particularly suitable for application-specific cables in the plant and machinery construction, wind energy, robotics, eMobility, marine, shipbuilding, railway and rail transport sectors**

### Characteristics

- Self-adjusting cutting and stripping tool for application-specific solid and flexible cables
- Ideal, lightweight and ergonomic tool with a long service life
- Automatic opening of the clamping jaws after the stripping process for added safety
- No splicing of single conductors - conductor enters the cable end-sleeve with greater ease
- Integrated professional, readily accessible cable cutter - accelerates working processes
- Adjustable stop with metric and imperial display for precise stripping length

| Item | Dimension mm | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|---|
| Automatic wire stripper, 0.1 - 4 mm² | 190 | 0.08 - 4 | 140 | **K432V** |

| Accessories | Part No. | Page |
|---|---|---|
| Detachable magazine, blue for solid and flexible cables from 0.1 - 4 mm² | K432E2 | |

## Wire stripper with stepless stripping range 0.03 - 16 mm²



- First wire stripper with stepless stripping range 0.03 - 16 mm²
- Perfect for damage-free stripping of solid and flexible conductors with PVC

### Characteristics

- Effortless working thanks to ergonomic styling
- Safe working thanks to integrated clamp protection
- Durable tool with easily replaceable blades
- Integrated side cutter up to max. 9 mm dia.
- High stability due to glass fiber reinforced polyamide
- Accurate and consistent stripping length thanks to adjustable stop

| Item | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|
| Wire stripper with stepless stripping range 0.03 - 16 mm² | 0.03 - 16 | 140 | **K433** |

| Accessories | Part No. | Page |
|---|---|---|
| Detachable magazine | K433E | |

## Wire stripper, 0.2 - 6 mm²



### Characteristics

- Adjustable length stop from 5 - 12 mm
- Integrated easy to reach side cutter up to max. 2 mm dia.

### Suitable for

- For all standard flexible and solid conductors from 0.2 - 6 mm²

| Item | Dimen-sion mm | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|---|
| Wire stripper for flexible and solid conductors | 180 | 0.2 - 6 | 130 | **KL760180** |

## Wire stripper for round and flat cables



### Characteristics

- Fine adjustment (5-way) on various cable types and cable diameters
- Optical length dimension 8 - 24 mm (5/16 - 1 inch)
- Integrated side cutter up to max. 3 mm dia.

### Suitable for

- Flat cable: Baring and stripping of 2-core PVC-insulated flat cables from 0.75 - 1.5 mm²
- Round cable: Baring and stripping flexible cables in the range 0.5 - 16 mm² (20-6 AWG), solid conductors 0.5 - 10 mm² (20-8 AWG)

| Item | Dimension mm | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|---|
| Wire stripper for round and flat cables | 180 | 0.5 - 16 | 205 | **KL765FR215** |

## Automatic wire stripper for round cables in the solar technology sector



### Characteristics

- Fine adjustment (5-way) on various cable types and cable diameters
- Integrated side cutter up to max. 3 mm dia.
- Optical length dimension 8 - 24 mm (5/16 - 1 inch)

### Suitable for

- Baring and stripping of all standard, flexible cables from 1.5 mm² - 6.0 mm² (15-9 AWG) in the solar technology sector.

| Item | Dimension mm | Stripping range mm² | Weight g | Part No. |
|---|---|---|---|---|
| Automatic wire-stripping tool for round cables in the solar technology sector | 180 | 1.5 - 6 | 205 | **KL765PV** |

## K 400 Professional wire stripping tool 4.5 - 40 mm



### Characteristics

- Max. cutting depth of the knife: 4.5 mm
- Max. baring diameter: 21 mm (small hook)
- Max. baring diameter: 40 mm (large hook)
- Stop hook is replaceable

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| K 400 Professional wire stripping tool 4.5 - 40 mm | 200 x 93 x 33 | 120 | **K400** |

| Accessories | Part No. | Page |
|---|---|---|
| K 400E Replacement blade for wire stripping tool K 400 | **K400E** | |

## Cable knife without blade



### Characteristics

- Precise, fast and safe stripping of all standard round cables
- No damage to inner conductor due to stepless adjustment of cutting depth
- Round and long cut due to self-rotating knife

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cable knife, without blade 4 - 16 mm dia. | 4 - 16 | 70 | **KL740416** |
| Cable knife, without blade 8 - 28 mm dia. | 8 - 28 | 70 | **KL740828** |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement blade for electricians knife with hooked blade | **KL749ES** | |

## Cable knife with straight blade



### Characteristics

- Precise, fast and safe stripping of all standard round cables
- Including protective cover for the blade
- Removable reducing adapter made from extremely abrasion-resistant plastic (POM)
- No damage to inner conductor due to stepless adjustment of cutting depth
- Round and long cut due to self-rotating knife

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cable knife with straight blade | 4 - 28 | 80 | **KL745GK** |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement blade for electricians knife with hooked blade | **KL749ES** | |

## Cable knife with hooked blade



### Characteristics

- Precise, fast and safe stripping of all standard round cables
- Including protective cover for the blade
- Removable reducing adapter made from extremely abrasion-resistant plastic (POM)
- No damage to inner conductor due to stepless adjustment of cutting depth
- Round and long cut due to self-rotating knife

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Cable knife with hooked blade | 4 - 28 | 80 | **KL745HK** |

| Accessories | Part No. | Page |
|---|---|---|
| Replacement blade for electricians knife with hooked blade | **KL749ES** | |

## Round cable stripper 8 - 13mm²



### Characteristics

- Simple stripping even in hard-to-reach areas, e.g. ceiling and walls, junction and distribution boxes, switch cabinets etc.
- Strips round and damp proof installation cables from 8 - 13 mm dia. (e.g. NYM 3 x 1.5 mm² to 5 x 2.5 mm²)
- No need to adjust the cutting depth

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Round cable stripper 8 - 13mm² | 8 - 13 | 43 | **KL710** |

## Multi-stripper



### Characteristics

- Universal stripping tool with the following functions: Baring, round cut, long cut, stripping, cutting

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Multi-stripper | 8 - 13 | 77 | **KL730** |

## Photovoltaic stripper



### Characteristics

- Replaceable blade system
- Protected blade
- Simple handling
- Fixed stripping from 8.5 mm
- Compact design

### Suitable for

- For all standard PV cables to 8.5 mm

| Item | Dimension mm | Weight g | Part No. |
|---|---|---|---|
| Photovoltaic stripper | 8.5 | 40 | **KL735PV** |

## Coax-stripper



### Characteristics

- No need to adjust the cutting depth
- Gradual stripping of all standard coaxial cables (e.g. antenna and transmission cables) 4.8 - 7.5 mm outside diameter

### Suitable for

- Flexible cables, e.g. 3 x 0.75 mm², 10 mm² and 16 mm²

| Item | Part No. |
|---|---|
| Coax-stripper | **KL720** |

## DN-AW3 wire stripping tool, 2.5 - 11 mm



### Characteristics

- For stripping signal, telephone, AV, control and data transmission cables from copper and fibreglass
- 9 adjustable cutting depths
- Cable capacity: 2.5 - 11 mm diameter
- Insulation thickness: up to 1 mm
- Interchangeable blade holder
- Including one holder with replacement blade

| Item | Part No. |
|---|---|
| DN-AW3 wire stripping tool, 2.5 - 11 mm | **DNAW3** |

| Accessories | Part No. | Page |
|---|---|---|
| Spare holder for DN-AW3 | **DNAW3M** | |

# PUTS CABLE WHERE IT NEEDS TO BE SIMPLY AND SAFELY.

Takes every corner flexibly and robustly – cable pulling technology from Greenlee is set apart by quality and the simplest operation possible for every challenge.





# Cable pulling technology


| | |
|---|---|
| **Fish tapes/pulling rods** | **560** |
| Polyester | 560 |
| Perlon | 560 |
| Nylon | 560 |
| Steel | 561 |
| Flex-O-Twist speed flex leader | 561 |
| Fibreglass cable pulling rods | 561 |
| **Cable pulling systems** | **562** |
| With Polyester tapes (Dura Spinner and Flexi Spinner) | 562 |
| With fibreglass tapes (Speedy Spinner) | 563 |
| Fish tapes in winder case | 564 |
| Smart Butler | 566 |
| **Cable puller** | **568** |
| Easy Roller (cable drum unwinder) | 568 |
| Cable puller with accessory | 568 |
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| **Accessory** | **572** |

# THE PULLING AID - CABLE PULLING TECHNOLOGY

Clean construction site - clean laying. Our cable pulling technology ensures that all cables are cleanly rolled in and out. No parts not required left lying around. No awkward handling. Greenlee pulling systems are made from high-quality ABS plastic. Making them robust and drop-proof. You are in control: Reliable laying with safe cable pulling technology.




**In brief**

- Simple pulling through of cables and conductors
- Cable puller made from polyester, perlon, nylon, steel and fibreglass
- Cable pulling rods for cavities and suspended ceilings
- Made from high-quality ABS plastic
- Solutions for light and heavy cable types, angled ducts or long straights

## The Dura Spinner

The Dura Spinner is small, but has a great effect. High-quality materials ensure robustness and the best functionality.
Its user-friendly design also permits unwinding on the floor.
The Dura Spinner is even able to hold in place cables that are laid around corners. A genuine help on the construction site.

- ABS plastic housing
- Cable puller made from virtually indestructible polyester tape
- Simple unwinding and rewinding
- Unwinding even on the floor
- User-friendly design ensures convenient and smooth operations





## Polyester fish tape green 4.5 mm dia.



- 50% less friction than nylon tapes
- Extremely flexible and almost unbreakable

### Characteristics

- High thrust due to twisted tape design
- Reduces the pulling force due to much lower friction
- Replaceable pulling eyelet and spring guide head

### Additional information

- Further detailed information can be found in the application table on page i-12

| Length | Part No. | Diameter mm |
|---|---|---|
| 10 m | **52055292** | 4.5 |
| 15 m | **52055293** | 4.5 |
| 20 m | **52055294** | 4.5 |
| 25 m | **52055295** | 4.5 |
| 30 m | **52055296** | 4.5 |

| Accessory | Part No. |
|---|---|
| 5-piece accessory set for polyester fish tapes | 52055396 |

## Perlon® fish tape 4 mm dia.



### Characteristics

- With pressed M4 front piece
- With unscrewable spring guide head and pulling eyelet

### Additional information

- Further detailed information can be found in the application table on page i-12

| Length | Part No. | Diameter mm |
|---|---|---|
| 5 m | **52055276** | 4 |
| 10 m | **52055277** | 4 |
| 15 m | **52055278** | 4 |
| 20 m | **52055279** | 4 |
| 25 m | **52055280** | 4 |
| 30 m | **52055281** | 4 |

| Accessory | Part No. |
|---|---|
| Replacement parts for Perlon fish tapes, comprising pulling eyes WW 1/2" (1) and spring guide head M4 (1) | 52055288 |

## Nylon fish tape 4 mm dia.



### Characteristics

- With pressed spring guide head and eyelet

### Additional information

- Further detailed information can be found in the application table on page i-12

| Length | Part No. | Diameter mm |
|---|---|---|
| 5 m | **52055270** | 4 |
| 10 m | **52055271** | 4 |
| 15 m | **52055272** | 4 |
| 20 m | **52055273** | 4 |
| 25 m | **52055274** | 4 |
| 30 m | **52055275** | 4 |

## Steel fish tape 4 mm dia.



### Characteristics

- With pressed spring guide head and eyelet

### Additional information

- Further detailed information can be found in the application table on page i-12

| Length | Part No. | Diameter mm |
|---|---|---|
| 5 m | **52055282** | 4 |
| 10 m | **52055283** | 4 |
| 15 m | **52055284** | 4 |
| 20 m | **52055285** | 4 |
| 25 m | **52055286** | 4 |
| 30 m | **52055287** | 4 |

## Flex-O-Twist™ speed flex leader

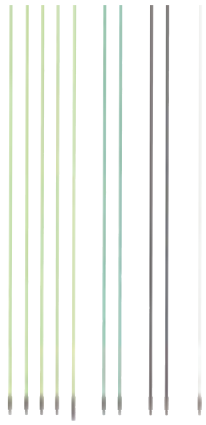


### Characteristics

- Especially suitable for sharp bends
- Flexible fish tape leader

| Length | Part No. | |
|---|---|---|
| 300 mm | **50308599** | |

## Fibreglass cable pulling rods



### Characteristics

- Almost unbreakable due to special outer jacket
- Time-saving cable laying
- Laying also under the most difficult conditions

### Suitable for

- Cable installation and laying
- Pulling or pushing

| Length | Part No. | Version |
|---|---|---|
| 10 m | **52055385** | Comprising of: 4 pce. light green fibreglass rods 5.6 mm dia. with WW connecting sleeve, 1 pce. light green fibreglass rod 5.6 mm dia. with WW connecting sleeve and universal joint, 2 pce. black fibreglass rods 6 mm dia. with WW connecting sleeve, 1 pce. white nylon rod 4 mm dia. with WW connecting sleeve, 2 pce. green fibreglass rods 4.6 mm dia. with WW connecting sleeve |
| 5 m | **52055386** | Consists of: 3 pce. light green fibreglass sticks 5.6 mm dia. with WW connecting bushing, 1 pce. black fibreglass stick 6 mm dia. with WW connecting bushing, 1 pce. white nylon stick 4 mm dia. with WW connecting bushing |

| Accessories | Part No. |
|---|---|
| Accessory set for cable pulling rods, 8-pcs. | 52055387 |
| Accessory set for cable pulling rods, 4-pcs. | 52055388 |

## Dura Spinner polyester fish tape system



### Characteristics
- Thin and extremely robust fish tape
- Uncoiling also possible on the floor
- Unique, user-friendly design
- Goes into every corner and holds every cable

### Suitable for
- The laying of additional cables

| Item | Part No. |
|---|---|
| Dura Spinner 3.8 mm dia., 20 m | **52074600** |
| Dura Spinner 3.8 mm dia., 30 m | **52074650** |
| **Scope of supply** | **Part No.** |
| Dura Spinner accessory kit, 3 pieces | 52074653 |
| **Accessories** | **Part No.** |
| Dura Spinner spare fish tape 3.8 mm dia., 20 m | 52074651 |
| Dura Spinner spare fish tape 3.8 mm dia., 30 m | 52074652 |

## Flexi Spinner polyester cable pulling system



- **Almost unbreakable**
- **Approx. 50 % less frictional resistance compared with nylon and perlon**
- **High thrust for long distances with narrow bending radius**

### Characteristics
- Highly-flexible polyester tape
- Modern design
- Robust housing

### Additional information
- Further detailed information can be found in the application table on page i-12

| Item | Length | Part No. | Diameter mm |
|---|---|---|---|
| Flexi Spinner polyester cable pulling system | 20 m | **52055389** | 4.5 |
| Flexi Spinner polyester cable pulling system | 25 m | **52055390** | 4.5 |
| Flexi Spinner polyester cable pulling system | 30 m | **52055391** | 4.5 |
| Flexi Spinner, winder case empty | | **52055392** | |

| Scope of supply | Part No. | Quantity |
|---|---|---|
| 5-piece accessory set for polyester fish tapes | 52055396 | 1 |

| Accessories | Part No. | Page |
|---|---|---|
| Polyester fish tape green 4.5 mm dia., 20 m | 52055294 | 560 |
| Polyester fish tape green 4.5 mm dia., 25 m | 52055295 | 560 |
| Polyester fish tape green 4.5 mm dia., 30 m | 52055296 | 560 |

## Speedy Spinner fibreglass cable pull-in system



- **Unique, user-friendly design**
- **Very simple and quick pulling in and out of fibreglass tapes**

### Characteristics

- One-handed operation
- Uncoiling also possible on the floor
- Flexible fibreglass spring for quick pulling in and out
- High thrust
- Accessory set supplied as standard

### Suitable for

- Tube diameter: 16 - 32 mm

### Additional information

- Further detailed information can be found in the application table on page i-12
- Always order repair adhesive separately!

| Item | Diameter mm | Length | Part No. |
|---|---|---|---|
| Speedy Spinner fibreglass cable pull-in system | 3 | 20 m | **52055298** |
| Speedy Spinner fibreglass cable pull-in system | 3 | 30 m | **52055299** |
| Speedy Spinner fibreglass cable pull-in system | 3 | 40 m | **52055300** |

| Scope of supply | Part No. | Quantity |
|---|---|---|
| Head with eye M5 | 52055304 | 3 |
| Spring guide head with eye M5 | 52055305 | 1 |
| Spring guide head with eye M5 - 10 mm | 52055306 | 1 |
| Start/bushing sleeves M5 | 52055308 | 3 |
| Connecting sleeves | 52055309 | 3 |
| Cable grip M5, 4-15 mm dia. | 52055310 | 1 |
| Pulling aid for pulling system 3 - 6 mm dia. | 52055311 | 1 |

| Accessories | Part No. |
|---|---|
| Speedy Spinner accessory, repair patch for fibreglass tape 3 mm dia. | 52055312 |
| Fibreglass replacement tape 3 mm dia., 20 m | 52055289 |
| Fibreglass replacement tape 3 mm dia., 30 m | 52055290 |
| Fibreglass replacement tape 3 mm dia., 40 m | 52055291 |
| Speedy Spinner repair set, 10-piece | 52055303 |

| Item repair set | Part No. |
|---|---|
| Speedy Spinner repair set, 10-piece | 52055303 |

| Scope of supply repair set | Part No. | Quantity |
|---|---|---|
| Head with eye M5 | 52055304 | 3 |
| Start/bushing sleeves M5 | 52055308 | 3 |
| Connecting sleeves | 52055309 | 3 |
| Pulling aid for pulling system 3 - 6 mm dia. | 52055311 | 1 |

## EASILY FORGOTTEN:

Be aware of the laying temperatures of cables and conductors!
These can be obtained from manufacturer‘s data sheets.
For a NYM conductor, for example, this temperature is +5° C.

## MagnumPRO™ oil-hardened steel fish tape



### Characteristics

- Winder case eases cable pulling
- Dirt-free tape finish
- High impact nylon winder case with large handle grip

| Item | Tape dimensions mm | Length | Part No. |
|---|---|---|---|
| MagnumPRO™ oil-hardened steel fish tape | 3.2 x 1.5 | 19.8 m | **52041709** |
| MagnumPRO™ oil-hardened steel fish tape | 6.4 x 1.5 | 30.5 m | **52041745** |
| MagnumPRO™ oil-hardened steel fish tape | 3.2 x 1.5 | 38.1 m | **52041741** |
| MagnumPRO™ oil-hardened steel fish tape | 3.2 x 1.5 | 73.2 m | **52041743** |

| Accessories | Part No. |
|---|---|
| Rotating head eye for 3 mm fish tapes | 50293672 |
| MagnumPRO™ oil-hardened steel fish tape 60 m | 52044594 |

## MagnumPRO™ stainless steel fish tape



- **Stainless, speed flex leader**
- **Slim pulling eyelet permits trouble-free pulling in long and winding conduits**

### Characteristics

- Can be used in conjunction with every steel fish tape with a tape dimension of 3.0 x 1.5 mm
- High impact nylon winder case with large handle grip

| Item | Tape dimensions mm | Length | Part No. |
|---|---|---|---|
| MagnumPRO™ stainless steel fish tape | 3.2 x 1.5 | 30.5 m | **52041746** |
| MagnumPRO™ stainless steel fish tape | 3.2 x 1.5 | 61 m | **52041747** |

| Accessory | Part No. |
|---|---|
| Speed Flex leader for fish tapes with tape dimension 3.0 x 1.5 mm | 50143921 |

## MagnumPRO™ nylon fish tape



- **Non-conductive, non-coiling nylon tape**

### Characteristics

- Diameter 4.8 mm
- High impact nylon winder case with large handle grip

| Item | Diameter mm | Length | Part No. |
|---|---|---|---|
| MagnumPRO™ nylon fish tape | 4.8 | 15.2 m | **52041750** |
| MagnumPRO™ nylon fish tape | 4.8 | 30.5 m | **52041751** |

| Accessory | Part No. |
|---|---|
| Replacement tip | 50016644 |

## MagnumPRO™ fish tape



### Characteristics

- Fish tape from multi-strand steel tape
- Flexible type
- High impact nylon winder case with large handle grip

### Suitable for

- For quick and simple application

| Item | Diameter mm | Length | Part No. |
|---|---|---|---|
| MagnumPRO™ fish tape | 4.8 | 15.2 m | **52041748** |
| MagnumPRO™ fish tape | 4.8 | 30.5 m | **52041749** |

## MagnumPRO™ fibreglass fish tape



### Characteristics

- Non-conductive fibreglass tape with low friction coating
- To fish in small and large conduits even with wire or cable in place
- High impact nylon winder case with large handle grip

### Suitable for

- Data and telecommunication industry

| Item | Diameter mm | Length | Part No. |
|---|---|---|---|
| MagnumPRO™ fibreglass fish tape | 4.3 | 15.2 m | **52041752** |
| MagnumPRO™ fibreglass fish tape | 4.3 | 30.5 m | **52041753** |
| MagnumPRO™ fibreglass fish tape | 4.8 | 61 m | **50357468** |
| MagnumPRO™ fibreglass fish tape | 4.8 | 76.2 m | **50357476** |

| Accessory | Part No. |
|---|---|
| Fibreglass fish tape accessory set | 50357506 |
| Pulling eyelet 3.0 mm | 50359193 |
| Pulling eyelet 4.8 mm | 50359304 |

## Steel fish tape EZ Reach



### Characteristics

- With hand crank
- Flat steel tape for working above suspended ceilings, under carpets and through walls

| Item | Tape dimensions mm | Length | Part No. |
|---|---|---|---|
| Steel fish tape EZ Reach | 6.4 x 0.8 | 7.6 m | **50016962** |

## Smart Butler fibreglass cable pulling-in system with steel reel basket



- Unique, user-friendly design, galvanised and sprayed
- Teflon-coated adapter for low resistance when winding and unwinding

### Characteristics

- High thrust
- Low-friction unwinding and rewinding
- Secure working thanks to operative holding brake
- Effective working with accessories mounted directly on frame
- From size 790 mm dia. steel reel basket, incl. rollers

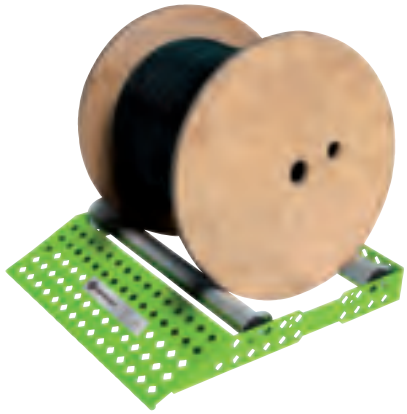
| Item | Diameter mm | steel reel basket mm | Version | Length | Weight kg | Part No. |
|---|---|---|---|---|---|---|
| Smart Butler fibreglass cable pulling-in system 4.5 mm dia. with steel reel basket 330 mm dia. 40 m | 4.5 | 330 dia. | | 40 m | 4 | **52055313** |
| Smart Butler fibreglass cable pulling-in system 330 mm dia. steel reel basket, 60 m | 4.5 | 330 dia. | | 60 m | 5 | **52055315** |
| Smart Butler fibreglass cable pulling-in system 330 mm dia. steel reel basket, 80 m | 4.5 | 330 dia. | | 80 m | 6 | **52055316** |
| Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 40 m | 6.0 | 550 dia. | | 40 m | 10 | **52055325** |
| Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 60 m | 6.0 | 550 dia. | | 60 m | 11 | **52055326** |
| Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 80 m | 6.0 | 550 dia. | | 80 m | 12 | **52055327** |
| Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 100 m | 6.0 | 550 dia. | | 100 m | 12 | **52055328** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 40 m | 7.5 | 660 dia. | | 40 m | 13 | **52055337** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 60 m | 7.5 | 660 dia. | | 60 m | 14 | **52055338** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 80 m | 7.5 | 660 dia. | | 80 m | 15 | **52055339** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 100 m | 7.5 | 660 dia. | | 100 m | 17 | **52055340** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 120 m | 7.5 | 660 dia. | | 120 m | 18 | **52055341** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 40 m | 9.0 | 660 dia. | | 40 m | 14 | **52055347** |
| Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 60 m | 9.0 | 660 dia. | | 60 m | 16 | **52055348** |
| Smart Butler fibreglass cable pulling-in system 790 mm dia. steel reel basket, 80 m | 9.0 | 790 dia. | incl. rollers | 80 m | 31 | **52055349** |
| Smart Butler fibreglass cable pulling-in system 790 mm dia. steel reel basket, 100 m | 9.0 | 790 dia. | incl. rollers | 100 m | 33 | **52055350** |
| Smart Butler fibreglass cable pulling-in system 1000 mm dia. steel reel basket, 120 m | 9.0 | 1000 dia. | incl. rollers | 120 m | 35 | **52055351** |
| Smart Butler fibreglass cable pulling-in system 1000 mm dia. steel reel basket, 150 m | 9.0 | 1000 dia. | incl. rollers | 150 m | 37 | **52055352** |
| Smart Butler fibreglass cable pulling-in system 1000 mm dia. steel reel basket, 150 m | 11.0 | 1000 dia. | incl. rollers | 150 m | 53 | **52055359** |
| Smart Butler fibreglass cable pulling-in system 1000 mm dia. steel reel basket, 200 m | 11.0 | 1000 dia. | incl. rollers | 200 m | 60 | **52055360** |
| Smart Butler fibreglass cable pulling-in system 1000 mm dia. steel reel basket, 250 m | 11.0 | 1000 dia. | incl. rollers | 250 m | 67 | **52055361** |
| Smart Butler fibreglass cable pulling-in system 1000 mm dia. steel reel basket, 300 m | 11.0 | 1000 dia. | incl. rollers | 300 m | 75 | **52055362** |

| Scope of supply |
|---|
| 4.5 / 6 mm dia.: Tension head with eyelet, pulling-in tape with pressed start/end sleeves, connecting sleeve WW 1/4"-M6, starting spinner with shackle |
| 7.5 / 9 / 11 mm dia.: Tension head with eyelet, fish tape with pressed start/end sleeves, connecting sleeve WW 1/2"-M12, starting spinner with shackle |

| Accessories | Part No. |
|---|---|
| Smart Butler fibreglass replacement tape 4.5 mm dia., 40 m | 52055317 |
| Smart Butler fibreglass replacement tape 4.5 mm dia., 60 m | 52055318 |
| Smart Butler fibreglass replacement tape 4.5 mm dia., 80 m | 52055319 |
| Smart Butler fibreglass replacement tape 6 mm dia., 40 m | 52055329 |
| Smart Butler fibreglass replacement tape 6 mm dia., 60 m | 52055330 |
| Smart Butler fibreglass replacement tape 6 mm dia., 80 m | 52055331 |
| Smart Butler fibreglass replacement tape 6 mm dia., 100 m | 52055332 |
| Smart Butler fibreglass replacement tape 7.5 mm dia., 40 m | 52055342 |
| Smart Butler fibreglass replacement tape 7.5 mm dia., 60 m | 52055343 |
| Smart Butler fibreglass replacement tape 7.5 mm dia., 80 m | 52055344 |
| Smart Butler fibreglass replacement tape 7.5 mm dia., 100 m | 52055345 |
| Smart Butler fibreglass replacement tape 7.5 mm dia., 120 m | 52055346 |
| Smart Butler fibreglass replacement tape 9 mm dia., 40 m | 52055353 |
| Smart Butler fibreglass replacement tape 9 mm dia., 60 m | 52055354 |
| Smart Butler fibreglass replacement tape 9 mm dia., 80 m | 52055355 |
| Smart Butler fibreglass replacement tape 9 mm dia., 100 m | 52055356 |
| Smart Butler fibreglass replacement tape 9 mm dia., 120 m | 52055357 |
| Smart Butler fibreglass replacement tape 9 mm dia., 150 m | 52055358 |
| Smart Butler fibreglass replacement tape 11 mm dia., 150 m | 52055363 |
| Smart Butler fibreglass replacement tape 11 mm dia., 200 m | 52055364 |
| Smart Butler fibreglass replacement tape 11 mm dia., 250 m | 52055365 |
| Smart Butler fibreglass replacement tape 11 mm dia., 300 m | 52055366 |
| Starter and end bushing WW ¼" for fish tape 4.5 mm dia. | 52055321 |
| Starter and end bushing WW ¼" for fish tape 6.0 mm dia. | 52055333 |
| Starter and end bushing WW ½" for fish tape 7.5 mm dia. | 52055369 |

| Accessory | Part No. |
|---|---|
| Starter and end bushing WW ½" for fish tape 9 mm dia. | 52055370 |
| Starter and end bushing WW ½" for fish tape 11 mm dia. | 52055371 |
| Connecting sleeve for fibreglass 4.5 mm dia. | 52055322 |
| Connecting sleeve for fibreglass 6 mm dia. | 52055334 |
| Connecting sleeves for fibreglass tape 9 mm dia. | 52055372 |
| Connecting sleeves for fibreglass tape 11 mm dia. | 52055373 |
| Connecting sleeve WW 1/2" with rotary swivel | 52055374 |
| Bulb with shackle WW ¼" for 4.5 mm dia. | 52055323 |
| Bulb with shackle WW ¼" for 6.0 mm dia. | 52055335 |
| Bulb with shackle WW ½" for 7.5 mm dia. | 52055367 |
| Bulb with castor WW ½" | 52055368 |
| Tension head with eyelet WW 1/4" for 4.5 - 6 mm dia. | 52055320 |
| Emergency repair set for fibreglass tape 4.5 mm dia. | 52055324 |
| Emergency repair set for fibreglass tape 6 mm dia. | 52055336 |
| Emergency repair set for fibreglass tape 7.5 mm dia. | 52055375 |
| Emergency repair set for fibreglass tape 9 mm dia. | 52055376 |
| Emergency repair set for fibreglass tape 11 mm dia. | 52055377 |

## Easy Roller cable drum unwinder



- Unique, user-friendly design
- 30 % less weight
- Ramp with shallow incline

### Characteristics

- Light - 30% less weight
- Easy loading and unloading of heavy cable drums thanks to the shallow inclined ramp
- Rollers with integrated side guides
- Possible to fit to the cable drum diameter

### Suitable for

- Large and small cable drums
- Width 530 mm, 200 kg carrying capacity
- Width 670 mm, 250 kg carrying capacity

| Item | Dimension mm | Width mm | Part No. |
|---|---|---|---|
| Standard | 530 x 570 x 90 | 530 | **52055383** |
| Wide | 670 x 605 x 95 | 670 | **52055384** |

## Rope for cable puller 6800-22 CE



### Characteristics

- Breaking strength approx. 14.2 t
- Rope diameter 22 mm
- Rope on rope stand

| Item | Part No. |
|---|---|
| Rope for cable puller 6800-22 CE, 91 m | **50341367** |
| Rope for cable puller 6800-22 CE, 182 m | **50341375** |
| Rope for cable puller 6800-22 CE, 365 m | **50341383** |
| Rope stand for ropes 91 m and 182 m | **50343629** |

## Tray type sheaves for cable puller 6800-22 CE



### Characteristics

- Steel frames with forged eyelet 25 mm
- Sheaves from aluminium alloy with self-lubricating bearings
- Max. rated capacity 3.6 t
- Tool support/hanging ring (Carabiner)

| External diameter mm | Internal radius mm | Width mm | Weight kg | Part No. |
|---|---|---|---|---|
| 300 | 100 | 125 | 12 | **50008722** |
| 460 | 180 | 150 | 20 | **50008730** |
| 600 | 250 | 165 | 30 | **50008749** |

## Platform-type sheave 125 mm

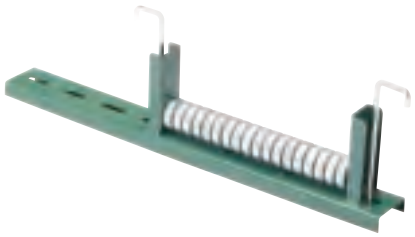


### Characteristics

- Sheaves from aluminium alloy
- Self-lubricating bearings
- Steel frames for mounting to cable ducts up to 50 mm thickness
- Extremely robust

| Length mm | Width mm | Weight kg | Part No. |
|---|---|---|---|
| 300 | 125 | 5 | **50153323** |
| 560 | 125 | 8 | **50190946** |

## Platform-type sheave



### Characteristics

- Steel ball-bearings
- Steel frames
- Mounting slots
- Universal mounting brackets

| Part No. | Version | Width of cable conduit mm | Weight kg |
|---|---|---|---|
| **50273833** | Straight | 300 - 450 | 3.6 |
| **50273841** | Straight | 500 - 600 | 4.5 |
| **50273868** | Straight | 600 - 760 | 5.9 |
| **50273884** | Radius | 300 - 450 | 5 |
| **50273892** | Radius | 500 - 600 | 5.4 |
| **50273906** | Radius | 600 - 760 | 5.9 |

## Pulling grips Junior, closed



### Characteristics

- Single weave, galvanized steel mesh with flexible pulling eyelet

### Suitable for

- The pulling-in of small diameter cables
- For manual pulling of feed lines in pipes and cable ducts

| Part No. | Length of mesh mm | Eye length mm | For cable diameter mm | Max. pulling force kN |
|---|---|---|---|---|
| **50305964** | 110 | 83 | 5 - 6 | 0.3 |
| **50305840** | 110 | 83 | 7 - 9 | 0.4 |
| **50305867** | 180 | 96 | 10 - 12 | 0.8 |
| **50305883** | 220 | 110 | 13 - 15 | 1.1 |
| **50305905** | 255 | 130 | 16 - 18 | 1.7 |
| **50305921** | 255 | 146 | 19 - 25 | 2.4 |
| **50305948** | 300 | 165 | 26 - 31 | 3.4 |

## T-Basket type pulling grips, closed



### Characteristics

- Double weave galvanized steel mesh with flexible pulling eyelet

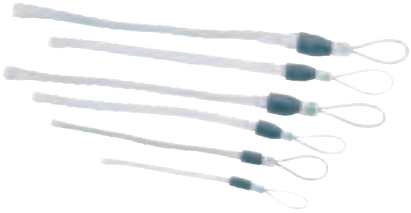
### Suitable for

- Medium-weight pulls in pipes and cable ducts

| Part No. | Length of mesh mm | Eye length mm | For cable diameter mm | Max. pulling force kN |
|---|---|---|---|---|
| **50305581** | 535 | 200 | 13 - 15 | 4.0 |
| **50305603** | 610 | 200 | 16 - 18 | 4.9 |
| **50305620** | 610 | 230 | 19 - 25 | 6.0 |
| **50305646** | 610 | 230 | 26 - 38 | 8.7 |
| **50305662** | 610 | 280 | 39 - 50 | 14.5 |
| **50305689** | 610 | 300 | 51 - 63 | 16.4 |
| **50305700** | 610 | 300 | 64 - 76 | 21.7 |
| **50305727** | 610 | 360 | 77 - 88 | 21.7 |
| **50305743** | 660 | 360 | 89 - 100 | 27.5 |
| **50305760** | 915 | 230 | 19 - 25 | 6.0 |
| **50305786** | 915 | 230 | 26 - 38 | 8.7 |
| **50310100** | 915 | 280 | 39 - 50 | 14.5 |
| **50305808** | 915 | 300 | 51 - 63 | 16.4 |
| **50310127** | 915 | 300 | 64 - 76 | 21.7 |
| **50305824** | 915 | 360 | 77 - 88 | 21.7 |
| **50310143** | 1020 | 360 | 89 - 100 | 27.5 |

Use a pulling grip so you don‘t have to strip the cable before it is pulled in! A cable grip allows you to pull with greater force. This prevents tapering of the cross-section.

## Pulling grip set, closed



### Characteristics

- Set of the most important pulling grips for the most frequently required pulling operations

| Part No. | Diameter mm |
|---|---|
| **50307584** | 7 - 31 |
| **50314823** | 19 - 50 |
| **50314831** | 51 - 76 |
| **50314840** | 19 - 76 |

## Pulling grip, open



### Characteristics

- Single weave, galvanised steel netting mesh with bar closure
- Offset flexible eyelet

### Suitable for

- Easy and straight pulls when the cable end is not available

| Part No. | Length of mesh mm | Eye length mm | For cable diameter mm | Max. pulling force kN |
|---|---|---|---|---|
| **50306588** | 150 | 175 | 13 - 15 | 1.3 |
| **50310240** | 200 | 175 | 16 - 18 | 1.6 |
| **50306600** | 250 | 175 | 19 - 25 | 1.9 |
| **50310267** | 300 | 200 | 26 - 31 | 3.0 |
| **50306626** | 350 | 200 | 32 - 38 | 4.0 |
| **50310283** | 380 | 230 | 39 - 44 | 5.1 |
| **50306642** | 400 | 250 | 45 - 50 | 6.7 |
| **50310305** | 480 | 250 | 51 - 63 | 8.0 |
| **50306669** | 500 | 250 | 64 - 76 | 9.7 |
| **50310321** | 530 | 300 | 77 - 88 | 10.6 |
| **50306685** | 600 | 300 | 89 - 100 | 10.6 |

## Cable Cream™ cable puller lubricant



### Characteristics

- Adheres well without dripping
- Easy to remove
- Won't break after exposure to heat or freezing cold
- Quality cream (yellow) for quick and easy application

| Item | Part No. |
|---|---|
| Cable Cream™ cable puller lubricant, 0.95 l | **50352075** |
| Cable Cream™ cable puller lubricant, 3.8 l | **50352083** |

## Cable installation lubricant



### Characteristics

- Reduces friction by up to 80 %
- Biodegradable
- Harmless to the user

### Suitable for

- Electric/telephone cables in pipes 16 - 25 mm dia.
- Large cable diameters

| Item | Part No. |
|---|---|
| Cable lubricant gel in tube 0.25 kg | **52055379** |
| Lubricant foam bottle 1.00 kg | **52055380** |
| Cable lubricant liquid for optical fibres and power cables, canister 5 kg | **52055381** |
| Cable lubricant liquid for optical fibres and power cables, canister 10 kg | **52055382** |

## Lubricant spray



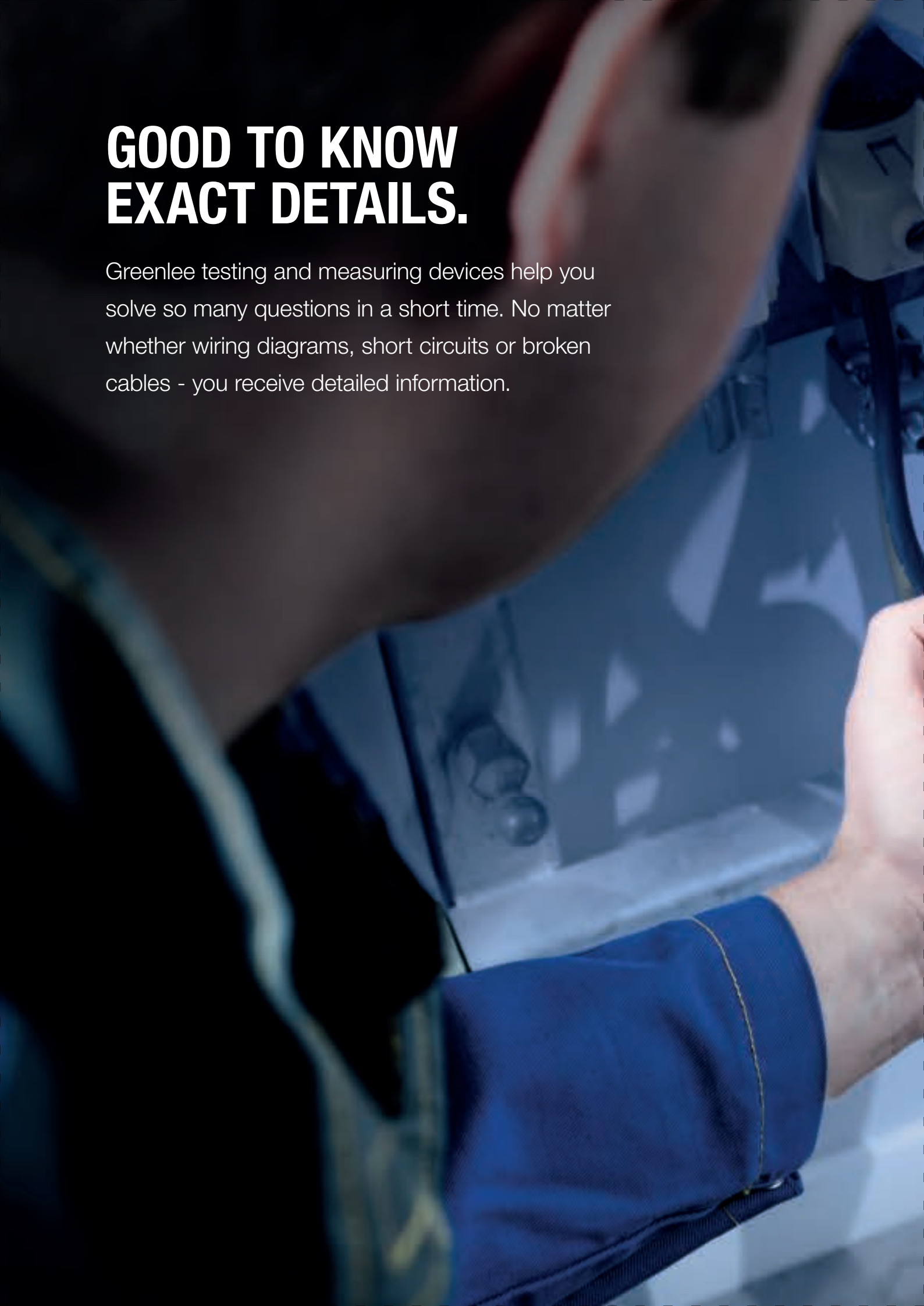
### Characteristics

- Reduces friction by up to 80 %
- Biodegradable
- Silicon-free

### Suitable for

- Electric/telephone cables in pipes 16 - 25 mm dia.

| Item | Part No. |
|---|---|
| Lubricant foam bottle 400 ml | **52055378** |



# GOOD TO KNOW EXACT DETAILS.

Greenlee testing and measuring devices help you solve so many questions in a short time. No matter whether wiring diagrams, short circuits or broken cables - you receive detailed information.



# Testing and measuring instruments


| | |
|---|---|
| Voltage testers | 576 |
| Digital multimeter | 580 |
| Digital clamp meters | 588 |
| Temperature measuring devices | 594 |

# IMMEDIATELY TO HAND – VOLTAGE TESTERS

Greenlee voltage testers - whether contactless or two-pole - are practically immediately to hand. Always to hand in pocket format, they measure voltages from 5 V to 1000 V AC and 12 V to 750 V AC/DC. If voltage is present, the tester emits an acoustic or optical signal as a warning. Ergonomically-shaped handles ensure the best grip, even when used outdoors. Stay safe with our Greenlee brand.




**In brief**

- Practical pocket format
- Automatic warning signals when voltage is present
- Also for contactless detecting
- Suitable for outdoor use

## Contactless measuring with the GT-16

The GT-16 is the practical pen-shaped voltage tester. Automatic signalling in case of voltage and an integrated self-test make the GT-16 a tester with maximum user safety.

- Readily detects broken cables
- Maximum safety through CAT IV 1000 V
- Integrated self-test for optimum safety
- Optical and acoustic signal in case of voltage
- Select from various voltage levels via adjustable sensitivity
- Ergonomic handle
- Limited Lifetime Warranty






## Two-pole measuring with the GT-85NE

The Greenlee GT-85NE is the ideal solution for voltages from 12 V to 750 V AC/DC. Able to withstand adverse operating conditions.

- Wider AC and DC voltage measurement range
- Acoustic signal with voltages maximises safety
- Automatic phase sequence indicator
- Water and dust proof
- Drop-resistant from 1 m
- Suitable for outdoor use
- Limited Lifetime Warranty

## GT-12A Contactless voltage tester 50 - 1000 V



### Characteristics

- Contactless voltage testing
- Clear LED and acoustic warning signal when the voltage has been determined
- ON/OFF switch provides longer battery service life
- Handy pen format, which fits easily into a jacket or tool pocket
- Fast, easy replacement of batteries
- Automatic self test

| Technical data | |
|---|---|
| Frequency range | 50 - 500 Hz |
| Voltage range | 50 - 1000 V AC |
| Measuring category | CAT IV 1000 V |

| Item | Part No. |
|---|---|
| GT-12A Contactless voltage tester 50 - 1000 V | **52063422** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 2 x 1.5 V AAA | | |

## GT-16 Adjustable, contactless voltage tester 5 - 1000 V



### Characteristics

- Contactless voltage testing
- Clear LED and acoustic warning signal when the voltage has been determined
- ON/OFF switch provides longer battery service life
- Handy pen format, which fits easily into a jacket or tool pocket
- Optimum handling due to ergonomically-shaped handle
- Fast, easy replacement of batteries
- Automatic self test
- Adjustable sensibility by rotary switch

| Technical data | |
|---|---|
| Frequency range | 50 - 500 Hz |
| Voltage range | 5 - 1000 V AC |
| Measuring category | CAT IV 1000 V |

| Item | Part No. |
|---|---|
| GT-16 Adjustable, contactless voltage tester 5 - 1000 V | **52033580** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 1 x 1.5 V AAA | | |

## GT-55NE Bipolar voltage tester with LED display



### Characteristics

- LED Display 12, 24, 50, 120, 230, 400, 750 V AC/DC
- Power LED for measuring point illumination
- Display of AC and DC voltage
- Bipolar rotary field testing
- Unipolar phase testing, optical and acoustic
- Continuity check, optical and acoustic
- Drop proof from 1 m
- Polarity indicator, loud beeper
- IP2X contact protection
- IP65 - splash water proof and dust tight

| Technical data | |
|---|---|
| Frequency range | 45 - 65 Hz |
| Voltage range | 12 - 750 V AC/DC |
| Measuring category | CAT III 1000 V, CAT IV 600 V |

| Item | Part No. |
|---|---|
| GT-55NE Bipolar voltage tester with LED display | **52049408** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 2 x 1.5 V AAA | | |

| Accessories | Part No. | Page |
|---|---|---|
| TC-30 Nylon carrying case for measuring instruments with belt loop | 50075365 | 593 |
| Replacement tips | 52034234 | |

## GT-85NE Bipolar voltage tester with LCD display



### Characteristics

- LC display with backlit display
- Resistance measurement to 2 KΩ
- Power LED for measuring point illumination
- Display of AC and DC voltage
- Bipolar rotary field testing
- Unipolar phase testing, optical and acoustic
- Continuity check, optical and acoustic
- Drop proof from 1 m
- Polarity indicator, loud beeper
- IP2X contact protection
- IP65 - splash water proof and dust tight

| Technical data | |
|---|---|
| Voltage range | 12 - 750 V AC/DC |
| Resistance | 0 - 2 KΩ |
| Frequencymeasurement | 30 - 999 Hz |
| Measuring category | CAT III 1000 V, CAT IV 600 V |

| Item | Part No. |
|---|---|
| GT-85NE Bipolar voltage tester with LCD display | **52049407** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 2 x 1.5 V AAA | | |

| Accessories | Part No. | Page |
|---|---|---|
| TC-30 Nylon carrying case for measuring instruments with belt loop | 50075365 | 593 |
| Replacement tips | 52034234 | |

# VERSATILE IN USE – DIGITAL MULTIMETER

Greenlee multimeters are highly versatile. The functions are geared to your tasks in low-voltage systems. The multimeters measure on phase shift controllers, test conductors for breaks and indicate results in measurement categories CAT II, III and IV. To evaluate and archive the measurements, connect the devices to your PC via a USB cable. Select one multimeter for all tasks.



**In brief**

- Can be used in low-voltage systems in measurement categories CAT II, III and IV
- Automatic warning signals
- Also for true RMS measurements
- Contactless voltage testing

## Basic: Multimeter DM-510A

The DM-510A performs all elementary functions. This is the basic meter for every qualified electrician.

- Suitable for industrial electricians and in building installations
- Integrated contactless voltage tester for locating broken cables
- Temperature measurement function via a thermocouple type K (included in the scope of supply) for checking air-conditioning systems in control cabinets or buildings
- Elementary functions for trouble shooting



## Industrial application: Multimeter DM-820A

Equipped with true RMS measurement (TRMS function), the DM-820A can also measure non-sinusoidal voltages and currents precisely and reliably. The multimeter knows immediately if measuring lines are incorrectly connected and sends a warning signal and error message on the display.

- Can be used in all low-voltage systems in measurement category CAT IV 1000 V
- Measurements on frequency converters, phase shift controls and mains units without disruptions by voltage peaks
- Integrated TRMS function for measuring non-sinusoidal voltages and currents
- Automatic “Beep Jack” warning signal and optical signal on the display when measuring lines are incorrectly connected



## For dual displays: Multimeter DM-860A

Perfect for troubleshooting in electrical systems:
The DM-860A allows you to measure and display two measurements at the same time. Saving time and providing an overview. All values are easily legibly on the large white display. The DM-860A withstands voltage peaks of up to 12,000 V.

- Extra large display for easy reading
- Dual display: Two measurements can be displayed at the same time
- Measurement category CAT IV 1000 V offers the best-possible safety
- Loop current function: Displays faults in measurement and control equipment

## PDMM-20 Pocket digital multimeter



### Characteristics

- AC/DC voltage measurement
- Resistance measurement
- Acoustic continuity check
- Contactless voltage testing

| Technical data | |
|---|---|
| Dimension | 113 x 53 x 13 mm |
| Weight | 0.08 kg |
| Display | LCD, 6000 |
| Capacitance | up to 100 µF |
| Voltage measurement | 1 mV - 450 V |
| Resistance | 0.001 kΩ - 6 MΩ |
| Frequencymeasurement | 10 Hz - 30 kHz |
| Measuring category | CAT II 450 V, CAT III 300 V |

| Item | Part No. |
|---|---|
| PDMM-20 Pocket digital multimeter | **50116894v2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Protective cover | | |
| Test leads | | |
| Battery 3V button cell | | |

## DM-200A Digital multimeter



### Characteristics

- Contactless voltage testing
- Automatic and manual range selection
- Large, background lit LC display
- Auto off
- Analogue bar chart
- Optical and acoustic warning in the event of incorrect handling

| Technical data | |
|---|---|
| Dimension | 161 x 80 x 50 mm |
| Weight | 0.34 kg |
| Display | LCD, 6000 |
| Voltage measurement | 0.01 mV - 1000 V AC/DC |
| Current measurement | 0.1 µA - 8 A AC/DC |
| Resistance | 0.1 Ω - 60 MΩ |
| Frequencymeasurement | 10 Hz - 50 kHz sinus wave;<br>5 Hz - 1 MHz square wave logic level |
| Measuring category | CAT II 1000 V, CAT III 600 V, CAT IV 300 V |
| Interface | R>S232, USB |

| Item | Part No. |
|---|---|
| DM-200A Digital multimeter | **52047801V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| Protective cover | | |
| Battery 2 x 1.5 V AAA | | |

## DM-210A Digital multimeter for temperature measurement -50 °C up to +1000 °C



### Characteristics

- Includes thermoelement
- Automatic and manual range selection
- Large, background lit LC display
- Automatic shut-off
- Analogue bar chart
- Optical and acoustic warning in the event of incorrect handling

| Technical data | |
|---|---|
| Capacitance | 60 nF - 3000 µF |
| Voltage measurement | 0.01 mV - 1000 V AC/DC |
| Current measurement | 0.1 µA - 8 A AC/DC |
| Resistance | 0.1 Ω - 60 MΩ |
| Frequencymeasurement | 10 Hz - 50 kHz sinus wave;<br>5 Hz - 1 MHz square wave logic level |
| Measuring category | CAT II 1000 V, CAT III 600 V, CAT IV 300 V |
| Temperature measurement | -50 °C up to +1000 °C |

| Item | Part No. |
|---|---|
| DM-210A Digital multimeter for temperature measurement -50 °C up to +1000 °C | **52047802V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| Protective cover | | |
| Battery 2 x 1.5 V AAA | | |

# SAFETY FIRST !

Think about your safety and protect yourself from overvoltages in electrical systems!

Wear safety gloves to DIN EN 60903 and safety glasses! (page 518)



## DM-510A Digital multimeter, True RMS



### Characteristics

- Autocheck function permits the automatic selection of AC V / DC V or resistance with low impedance for ghost-voltage removal
- Contactless voltage detection
- Frequency, temperature and capacity measurement
- Automatic and manual range selection
- Large, background lit LC display
- Max / Min value memory
- Analogue bar chart
- Optical and acoustic warning in the event of incorrect handling

| Technical data | |
|---|---|
| Frequency range | 50 Hz - 400 Hz |
| Capacitance | 60 nF - 3000 µF |
| Voltage measurement | 0.01 mV - 1000 V AC/DC |
| Current measurement | 0.1 µA - 8A AC/DC |
| Resistance | 0.1 Ω - 60 MΩ |
| Frequencymeasurement | 5 Hz - 1 MHz |
| Measuring category | CAT III 600 V; CAT II 1000 V; CAT IV 300 V |
| Temperature measurement | -50 °C up to +1000 °C |

| Item | Part No. |
|---|---|
| DM-510A Digital multimeter, True RMS | **52047803V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| Temperature sensor, bright finish | | |
| Battery 2 x 1.5 V AAA | | |

| Accessories | Part No. | Page |
|---|---|---|
| TC-20 Nylon carrying case for measuring instruments with carrying strap | 50075357 | 587 |

## DM-810A Digital multimeter, True RMS



### Characteristics

- Automatic and manual range selection
- Large, background lit LC display
- Two measured values at a glance
- TRMS AC + DC
- Optical and acoustic warning in the event of incorrect handling

| Technical data | |
|---|---|
| Capacitance | 0.01 nF - 25 mF |
| Voltage measurement | 0.01 mV - 1000 V AC/DC |
| Current measurement | 0.1 µA - 10 A AC/DC |
| Resistance | 0.1 Ω - 60 MΩ |
| Frequencymeasurement | 5 Hz - 1 MHz |
| Measuring category | CAT IV, 1000 V |

| Item | Part No. |
|---|---|
| DM-810A Digital multimeter, True RMS | **52047805V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| TC-20 Nylon carrying case for measuring instruments with carrying strap | 50075357 | 587 |
| Battery | | |

## DM-820A Digital multimeter, True RMS



### Characteristics

- Contactless voltage detection
- Recording of peak value (5 ms peak hold) max, min and max/min results
- Automatic and manual range selection
- Large, background lit LC display
- Automatic shut-off
- TRMS AC + DC
- Optical and acoustic warning in the event of incorrect handling

| Technical data | |
|---|---|
| Capacitance | 0.01 nF - 25 mF |
| Voltage measurement | 0.01 mV - 1000 V AC/DC |
| Current measurement | 0.1 µA - 10 A AC/DC |
| Resistance | 0.1 Ω - 60 MΩ |
| Frequencymeasurement | 5 Hz - 1 MHz |
| Measuring category | CAT IV, 1000 V |
| Temperature measurement | -50 °C up to +1000 °C |

| Item | Part No. |
|---|---|
| DM-820A Digital multimeter, True RMS | **52047806V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| TC-20 Nylon carrying case for measuring instruments with carrying strap | 50075357 | 587 |
| Battery | | |
| Temperature sensor, bright finish | | |

## DM-860A Industrial digital multimeter, True RMS



### Characteristics

- Capturing Max, Min and Max-Min results
- Recording of peak value (5 ms peak hold) max, min and max/min results
- Carrying out frequency, temperature and capacity measurements as well as diode tests and continuity checks
- Display of the relative measured value offset for checking the relative measured value changes
- Automatic range selection
- Analogue 41-segment bar chart
- Large, background lit LC display
- Temperature measurements to 1000 °C

| Technical data | |
|---|---|
| Capacitance | 50 nF - 9999 µF |
| Voltage measurement | 500 mV - 1000 V |
| Current measurement | 500 µA - 10 A |
| Resistance | 500 Ω - 50 MΩ |
| Frequencymeasurement | 5 Hz - 200 kHz sinus wave; 5 Hz - 2 MHz square wave logic level |
| Measuring category | CAT IV 1000 V |
| Temperature measurement | Type-K, -50 °C up to +1000 °C (-58 °F up to +1832 °F) |

| Item | Part No. |
|---|---|
| DM-860A Industrial digital multimeter, True RMS | **52056268V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| TC-20 Nylon carrying case for measuring instruments with carrying strap | 50075357 | 587 |
| Temperature sensor, bright finish | | |

## TC-20 Nylon carrying case with carrying strap for measuring instruments




### Characteristics

- With inner pocket for test leads

### Suitable for

- Series 200, Series 500 and Series 800 measuring instruments

| Item | Part No. |
|---|---|
| TC-20 Nylon carrying case for measuring instruments with carrying strap | **50075357** |

# CONTACTLESS MEASUREMENTS - DIGITAL CLAMP METERS

Quality evident in use. In practice, not every current circuit can be disconnected. Greenlee clamp meters measure currents and voltages without contact. AMP-TIP™ technology permits precise measurements even in confined areas. Numerous functions - one quality.



**In brief**

- Measure without disconnecting the cable
- Suitable for confined areas
- Easily legible display
- Contactless measurements to 600 A

## For alternating currents to 600 A

The CM-660 is a real lightweight. 185 g lies firmly in the hand thanks to a good grip. Convenient readily legible measurements.

- Contactless measurement of alternating currents up to 600 A
- Sensor for contactless voltage tests
- Lightweight construction saves weight in the tool case
- Built-in deep-pass filter for the most accurate measurements
- Hand grip guarantees very good handling





## Expanded functions

The CM-960 is the model that performs several functions. It measures alternating and direct current to 600 A, also non-sinusoidal currents and voltages thanks to the TRMS function (true root mean square).

- Contactless measurement of alternating and direct currents up to 600 A
- Detect voltages without contact
- AMP-Tip technology for precise measurements up to 16 mm² conductor cross-section
- The backlit display guarantees very good legibility

## CM-450 Digital clamp meter



### Characteristics

- Compact, ergonomic design for measuring in tight spaces
- Data hold function for recording important measurement results
- Acoustic continuity check

| Technical data | |
|---|---|
| Display | LCD |
| Current measurement | 0.01 A - 400 A AC |
| Measuring category | CAT III 600 V |
| Jaw size | 26 mm |

| Item | Part No. |
|---|---|
| CM-450 Clamp multimeter | **52033579V2** |

| Scope of supply | Part No. | Page |
|---|---|---|
| Battery 3 V button cell | | |
| Test leads | | |

## CM-660 Digital clamp meter



### Characteristics

- Contactless voltage testing
- AMP TIP™
- Data hold function for recording important measurement results
- Intelligent Automatic Power OFF (APO)
- Record mode for Max/Min/Average

| Technical data | |
|---|---|
| Display | LCD |
| Continuity test | yes |
| Voltage measurement | 0 V - 600 V AC/DC |
| Current measurement | 0.1 A - 600 A AC |
| Resistance | 0.1 Ω - 60 kΩ |
| Measuring category | CAT III 600 V, CAT IV 300 V |
| Jaw size | 30 mm |

| Item | Part No. |
|---|---|
| CM-660 Digital clamp meter | **52066379** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| Battery 2 x 1.5 V AAA | | |

## CM-860 Digital clamp meter



### Characteristics

- Particularly suitable for measurements on frequency converters
- Measurement of alternating voltage and alternating current
- Illuminated display
- Longer battery life due to intelligent automatic power-off

| Technical data | |
|---|---|
| Display | LCD |
| Voltage measurement | 0 V - 600 V AC/DC |
| Current measurement | 0.1 A - 600 A AC |
| Resistance | 0.1 - 60 kΩ |
| Measuring category | CAT III 600 V, CAT IV 300 V |
| Jaw size | 30 mm |

| Item | Part No. |
|---|---|
| CM-860 Digital clamp meter | **52066378** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| Battery 2 x 1.5 V AAA | | |

## CM-960 Digital clamp meter



### Characteristics

- Jaw opening 51 mm
- Current measurement AC/DC
- Easy-to-read backlit display for poor lighting conditions
- Peak hold and data hold function for recording measurement results
- Automatic range selection
- Relative zero point mode
- Use of bright conductor

| Technical data | |
|---|---|
| Display | LCD |
| Voltage measurement | 0 - 600 V AC/DC |
| Current measurement | 0 - 600 A AC/DC |
| Frequencymeasurement | 5 Hz - 999 Hz |
| Measuring category | CAT III 600 V, CAT IV 300 V |
| Jaw size | 35 mm |

| Item | Part No. |
|---|---|
| CM-960 Digital clamp meter | **52066376** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| Battery 2 x 1.5 V AAA | | |

## CM-1360 Digital clamp meter



### Characteristics

- True RMS actual effective value for the most precise measurements
- Illumination of the measuring point
- Easy-to-read backlit display for poor lighting conditions
- Acoustic continuity check
- Longer battery life due to intelligent automatic power-off
- Data hold function for recording measurement results

| Technical data | |
|---|---|
| Display | LCD |
| Voltage measurement | 0 - 1,000 V AC/DC |
| Current measurement | 0 - 1,000 A AC/DC |
| Resistance | 0.1 - 60 kΩ |
| Measuring category | CAT III 1,000 V, CAT IV 600 V |
| Jaw size | 51 mm |

| Item | Part No. |
|---|---|
| CM-1360 Digital clamp meter | **52066374** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TSG-3 test leads | 50120344 | |
| TC-30 Nylon carrying case for measuring instruments with belt loop | 50075365 | 593 |
| Battery 2 x 1.5 V AAA | | |

## CM-1560 Digital clamp meter



### Characteristics

- Jaw opening 51 mm
- True RMS actual effective value for the most precise measurements
- Particularly suitable for measurements on frequency converters
- Easy-to-read backlit display for poor lighting conditions
- Diode test
- Acoustic continuity check
- Illumination of the measuring point

| Technical data | |
|---|---|
| Display | LCD |
| Voltage measurement | 0 - 1,000 V AC/DC |
| Current measurement | 0 - 1,000 A AC/DC |
| Frequencymeasurement | 5 Hz - 999 Hz |
| Measuring category | CAT III 1,000 V, CAT IV 600 V |
| Jaw size | 51 mm |

| Item | Part No. |
|---|---|
| CM-1560 Digital clamp meter | **52066372** |

| Scope of supply | Part No. | Page |
|---|---|---|
| TC-30 Nylon carrying case for measuring instruments with belt loop | 50075365 | |
| TSG-3 test leads | 50120344 | 593 |
| Battery 2 x 1.5 V AAA | | |

## TC-30 Nylon carrying case for measuring instruments with belt loop




**Suitable for**

- CM-1360 / CM-1560
- Voltage tester GT-55NE / GT-85NE

| Item | Part No. |
|---|---|
| TC-30 Nylon carrying case for measuring instruments with belt loop | **50075365** |

# THERMAL MEASUREMENTS FROM A DISTANCE - TEMPERATURE GAUGES

Greenlee temperature gauges are ideal for preventive maintenance. Infra-red sensors measure without contact, even in confined areas. This allows the temperatures of motors and electrical connections to be measured and read from a safe distance. The measurements are used to identify fault sources in the electrical system.




**In brief**

- Contactless measurements, even in confined areas
- Limit values can be set
- Automatic warning signals when values deviate
- Single or dual laser to focus on the measuring range

## Accuracy counts

The TG-1000 can be used for temperatures from -60 °C to 550 °C. When the minimum and maximum values are entered, the user automatically receives an acoustic and optical warning signal if the values are overrun or underrun. Even from a distance of 1.2 m, the TG-1000 measures to an accuracy of 10 cm.

- Optimised measuring range for maintenance tasks
- Single laser for focussing on the measuring point
- Visual resolution 12:1 (measures from 1.2 m away at an accuracy of 10 cm)
- Acoustic and optical warning signal when set values for monitoring limit values are reached





## Double focus for the measuring range

The TG-2000 measures with more accuracy. It clearly marks your measuring range with the dual laser. The visual resolution of 16:1 ensures exact values. Even at a distance of 3.2 m, the temperatures of objects and conductors can be accurately measured to a range of 20 cm. As a result, the TG-2000 guarantees the optimum safe distance to the object being measured.

- Optimum measuring range for maintenance and fault analysis in electrical systems
- Dual laser for focussing on the measuring range
- Acoustic and optical warning signal when defined limit values are reached
- Connection point for thermocouple type K for temperature measurements with contact
- Emission ratio of all standard materials included in the operating instructions

## TG-1000 Infrared thermometer



### Characteristics

- Lower / upper limit values adjustable
- Display with background illumination for comfortable read-off in all work areas
- Temperature display selectable in Celsius (°C) or Fahrenheit (°F)
- Maximum/minimum temperature, difference and average measurements
- Twin laser for identification of the approximate diameters of the target measuring area
- Bush for type K thermocouple

### Suitable for

- Preventative maintenance of switching devices, motors and electrical connections

| Technical data | |
|---|---|
| Monitor | LCD |
| Optical resolution | 12:1 |
| Temperature measurement | -60 °C up to +550 °C |

| Item | Part No. |
|---|---|
| TG-1000 Infrared thermometer | **52059365** |

## TG-2000 Dual laser infrared thermometer



### Characteristics

- Lower / upper limit values adjustable
- Display with background illumination for comfortable read-off in all work areas
- Temperature display selectable in Celsius (°C) or Fahrenheit (°F)
- Maximum/minimum temperature, difference and average measurements
- Twin laser for identification of the approximate diameters of the target measuring area
- Bush for type K thermocouple

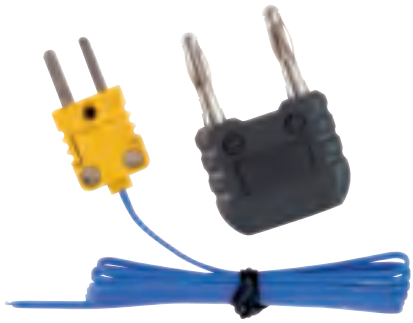
### Suitable for

- Preventative maintenance of switching devices, motors and electrical connections

| Technical data | |
|---|---|
| Monitor | LCD |
| Optical resolution | 16:1 |
| Temperature measurement | -60 °C up to +625 °C |

| Item | Part No. |
|---|---|
| TG-2000 Dual laser infrared thermometer | **52059364** |

## TPB Temperature probe for temperatures of -40 °C to +204 °C



| Technical data | |
|---|---|
| Sensor length | 1 m ±5 mm (39.4" ±0.2") |
| Temperature measurement | -40 °C up to +204 °C (-40 °F up to +399 °F) |
| Thermoelement | Thermocouple type K |

| Item | Part No. |
|---|---|
| TPB Temperature probe for temperatures of -40 °C to +204 °C | **50075926** |

# Technical Appendix


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## Technical notes on the various crimping types

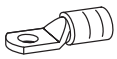
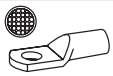
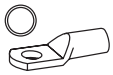
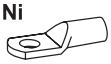
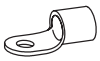
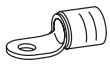
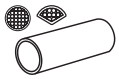
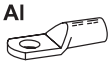
| | Crimping | Designation | Crimping range |
|---|---|---|---|
|  | Hexagonal crimping | for crimping tubular copper cable lugs and connectors “standard type”, tubular cable lugs for switchgear connections, compression cable lugs and connectors to DIN 46235/DIN 46267, aluminum cable lugs and connectors | 6 – 1000 mm² |
|  | Indent crimping | for crimping tubular copper cable lugs and connectors “standard type”, tubular cable lugs for switchgear connections, solderless terminals to DIN 46234 and pin cable lugs to DIN 46230, insulated solderless terminals, tubular cable lugs and connectors for fine stranded conductors, nickel tubular cable lugs and connectors, stainless steel tubular cable lugs and connectors | 0.75 – 400 mm² |
|  | Oval crimping | for crimping tubular double compression cable lugs, C-clamps, insulated tubular cable lugs and connectors, insulated pin cable lugs and compression joints to DIN 48217, insulated cable connectors | 0.1 – 185 mm² |
|  | Indent crimping | for crimping copper tubular cable lugs and connectors “standard type”, tubular cable lugs for switchgear connections, tubular cable lugs and connectors for fine stranded conductors | 6 – 400 mm² |
|  | Double indent crimping | for crimping copper tubular cable lugs and connectors “standard type”, tubular cable lugs for switchgear connections, nickel tubular cable lugs and connectors, stainless steel tubular cable lugs and connectors | 4 – 95 mm² |
|  | Trapezoid crimping | for crimping cable end-sleeves and twin cable end-sleeves | 0.14 – 240 mm² |
|  | Indent crimping | for crimping cable end-sleeves and twin cable end-sleeves | 0.5 – 35 mm² |
|  | Square crimping | for crimping cable end-sleeves and twin cable end-sleeves | 0.14 – 16 mm² |
|  | Roll crimping | for crimping non-insulated receptacles and cable end-sleeves DIN 46228, part 2 | 0.1 – 6 mm² |
|  | Round crimping | for crimping cable end-sleeves and twin cable end-sleeves | 0.14 – 16 mm² |
| | | of 90° and 120° sector-shaped conductors | 10 sm – 300 sm<br>35 se – 300 se |
|  | Quad-point indent crimping | for crimping copper tubular cable lugs and connectors “standard type”, tubular cable lugs for switchgear connections, tubular cable lugs and connectors for fine stranded conductors | 10 – 300 mm² |
|  | Four point crimping | for crimping turned pin receptacles and pin connectors | 0.1 – 4 mm² |
|  | Special trapezoid crimping | particularly for crimping cable end-sleeves with compacted fine stranded conductors | 10 - 240 mm² |
|  | Gas-tight oval crimping | Crimp quality according to automotive standards | |

## Legend of pictograms used for type of conductors

| | Type of cables |
|---|---|
|  | Solid conductor (class 1 according to DIN EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy |
|  | Multi-stranded conductor (class 2 according to DIN EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy |
|  | Compacted multi-stranded conductor (class 2 according to DIN EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy |
|  | Fine stranded conductor (class 5 according to DIN EN 60228) made of bright or coated soft-annealed copper |
|  | Superfine stranded conductor (class 6 according to DIN EN 60228) made of bright or coated soft-annealed copper |
|  | Solid sector shaped conductor 120 ° (class 1 according to DIN EN 60228) made of aluminium or aluminium alloy |

| | Type of cables |
|---|---|
|  | Solid sector shaped conductor 90 ° (class 1 according to DIN EN 60228) made of aluminium or aluminium alloy |
|  | Compacted multi-stranded sector shaped conductor 120 ° (class 2 according to DIN EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy |
|  | Compacted multi-stranded sector shaped conductor 90 ° (class 2 according to DIN EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy |
|  | Copper conductor for overhead lines (DIN 48201-1) and aluminium or aluminium alloy conductors (DIN EN 50182) |
|  | Conductor for overhead lines (DIN EN 50182) made of aluminium / steel |

## Legend of pictograms used for connecting materials

| | Designation |
|---|---|
|  | Copper compression cable lugs, double crimp (double cable entry) |
|  | Tubular cable lugs and connectors – Cu, standard type |
|  | Insulated cable lugs and connectors; standard type |
|  | Tubular cable lugs and connectors for fine stranded conductors |
|  | Tubular cable lugs and connectors for solid conductors |
| VA  | Tubular cable lugs and connectors – stainless steel |
| Ni  | Tubular cable lugs and connectors – Ni |
| DIN  | Compression cable lugs and connectors to DIN – Cu |
|  | Solderless terminals, connectors and pin terminals to DIN – Cu |
|  | Insulated solderless terminals |
|  | Sleeves for compacted conductors and sector-shaped conductors – Cu |
| Aldrey  | Compression cable lugs and connectors for Aldrey cables |
| Al/St  | Compression cable lugs and connectors for Al/St cables |
| Al  | Compression cable lugs and connectors to DIN – Al |
| Al/Cu  | Compression cable lugs and connectors – Al/Cu |
|  | C-clamps |
|  | H-clamps |
|  | Cable end-sleeves |
|  | Twin cable end-sleeves |
|  | Insulated cable connections |
|  | Non-insulated receptacles |

## Material properties

### Information on materials used for copper and aluminum cable lugs and connectors

- All copper tubular cable lugs, solderless terminals, pin terminals and the corresponding connectors are manufactured from Cu to DIN 13600.
- Cable end-sleeves to DIN 46228 part 1 and part 4 are manufactured from Cu to DIN EN 13600.
- Aluminum compression cable lugs and connectors are manufactured from E-Al 99.5 to DIN 1712.

## Electrical properties

- Our cable connections can be loaded with the currents defined in VDE 0298. For higher current loads, we ask for consultation. The current values of VDE 0298 can be found in the table below.

| | **Group 1** One or more single-core conductors laid in conduits | | **Group 2** Multi-core conductors, e. g. sheathed conductors, conduit wires, lead-sheathed conductors, flat webbed conductors, flexible cables | | **Group 3** Overhead single-core conductors with clearance of at least their diameter | |
|---|---|---|---|---|---|---|
| Nominal cross-section mm² | Cu (A) | Al (A) | Cu (A) | Al (A) | Cu (A) | Al (A) |
| 0.75 | – | – | 12 | – | 15 | – |
| 1 | 11 | – | 15 | – | 19 | – |
| 1.5 | 15 | – | 18 | – | 24 | – |
| 2.5 | 20 | – | 26 | – | 32 | – |
| 4 | 25 | – | 34 | – | 42 | – |
| 6 | 33 | – | 44 | – | 54 | – |
| 10 | 45 | – | 61 | 48 | 73 | 57 |
| 16 | 61 | 48 | 82 | 64 | 98 | 77 |
| 25 | 83 | 65 | 108 | 85 | 129 | 103 |
| 35 | 103 | 81 | 135 | 105 | 158 | 124 |
| 50 | 132 | 103 | 168 | 132 | 198 | 155 |
| 70 | 165 | – | 207 | 163 | 245 | 193 |
| 95 | 197 | – | 250 | 197 | 292 | 230 |
| 120 | 235 | – | 292 | 230 | 344 | 268 |
| 150 | – | – | 335 | 263 | 391 | 310 |
| 185 | – | – | 383 | 301 | 448 | 353 |
| 240 | – | – | 453 | 357 | 528 | 414 |
| 300 | – | – | 504 | 409 | 608 | 479 |
| 400 | – | – | – | – | 726 | 569 |
| 500 | – | – | – | – | 830 | 649 |

Values applicable only at an ambient temperature of 30 °C

## Mechanical properties

- The connections produced according to the assembly instructions with our tools comply with the tensile strength requirements of the standards IEC 61238-1, DIN EN 60999 and DIN EN 60352-2.

**Please note,** that crimping solderless cable connections using tools from other manufactures does not guarantee a proper connection. We recommend only the use of solderless cable connections from KLAUKE® using KLAUKE® tools.

## Assignment of cables and conductors

### a) Copper

- Our copper cable lugs and connectors are suitable for connecting copper cables according to DIN EN 60228 and copper conductors DIN 48201 part 1. Please use the table below.

### b) Aluminium

- Our aluminium cable lugs and connectors are suitable for connecting aluminium cables according to DIN EN 60228 and aluminium conductors according to DIN EN 50182. Please use the table below.

**i** Sector-shaped conductors must be rounded with pre-rounding tools before assembly.

### Cross-section compatibility chart for cable lugs and connectors for copper and aluminum conductors

- With the help of this table you can determine the cross-section of your conductor in case of doubt. The minimum diameter of the conductor is for the classes 1 and 2 (not compacted). For classes 5 and 6 are defined by the conductance rather than the minimum diameter. Therefore, no specification can be made regarding the minimum diameter.

| Nominal cross-section mm² | Type of conductor acc. to DIN EN 60228 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Copper conductors | | | | | Aluminium conductors | | | |
| | Round conductor solid, class 1 | Round conductor multi-stranded, class 2 | Round conductor multi-stranded compacted, class 2 | | Round conductor fine and superfine, class 5 and class 6 | Round conductor solid, class 1 | | Round conductor multi-stranded compacted, class 2 | |
| | Max. conductor dia. mm | Max. conductor dia. mm | Min. conductor dia. mm | Max. conductor dia. mm | Max. conductor dia. mm | Min. conductor dia. mm | Max. conductor dia. mm | Min. conductor dia. mm | Max. conductor dia. mm |
| 0.5 | 0.9 | 1.1 | – | – | 1.1 | – | – | – | – |
| 0.75 | 1 | 1.2 | – | – | 1.3 | – | – | – | – |
| 1 | 1.2 | 1.4 | – | – | 1.5 | – | – | – | – |
| 1.5 | 1.5 | 1.7 | – | – | 1.8 | – | – | – | – |
| 2.5 | 1.9 | 2.2 | – | – | 2.4 | – | – | – | – |
| 4 | 2.4 | 2.7 | – | – | 3 | – | – | – | – |
| 6 | 2.9 | 3.3 | – | – | 3.9 | – | – | – | – |
| 10 | 3.7 | 4.2 | 3.6 | 4 | 5.1 | 3.4 | 3.7 | 3.6 | 4 |
| 16 | 4.6 | 5.3 | 4.6 | 5.2 | 6.3 | 4.1 | 4.6 | 4.6 | 5.2 |
| 25 | 5.7 | 6.6 | 5.6 | 6.5 | 7.8 | 5.2 | 5.7 | 5.6 | 6.5 |
| 35 | 6.7 | 7.9 | 6.6 | 7.5 | 9.2 | 6.1 | 6.7 | 6.6 | 7.5 |
| 50 | 7.8 | 9.1 | 7.7 | 8.6 | 11 | 7.2 | 7.8 | 7.7 | 8.6 |
| 70 | 9.4 | 11 | 9.3 | 10.2 | 13.1 | 8.7 | 9.4 | 9.3 | 10.2 |
| 95 | 11 | 12.9 | 11 | 12 | 15.1 | 10.3 | 11 | 11 | 12 |
| 120 | 12.4 | 14.5 | 12.3 | 13.5 | 17 | 11.6 | 12.4 | 12.3 | 13.5 |
| 150 | 13.8 | 16.2 | 13.7 | 15 | 19 | 12.9 | 13.8 | 13.7 | 15 |
| 185 | 15.4 | 18 | 15.3 | 16.8 | 21 | 14.5 | 15.4 | 15.3 | 16.8 |
| 240 | 17.6 | 20.6 | 17.6 | 19.2 | 24 | 16.7 | 17.6 | 17.6 | 19.2 |
| 300 | 19.8 | 23.1 | 19.7 | 21.6 | 27 | 18.8 | 19.8 | 19.7 | 21.6 |
| 400 | 22.2 | 26.1 | 22.3 | 24.6 | 31 | 21.2 | 22.2 | 22.3 | 24.6 |
| 500 | – | 29.2 | 25.3 | 27.6 | 35 | 24 | 25.1 | 25.3 | 27.6 |
| 630 | – | 33.2 | 28.7 | 32.5 | 39 | 27.3 | 28.4 | 28.7 | 32.5 |
| 800 | – | 37.6 | – | – | – | 30.9 | 32.1 | – | – |
| 1000 | – | 42.2 | – | – | – | 34.8 | 36 | – | – |




## Assembly instructions for cable lugs and connectors

1. Strip conductor in line with insertion depth (+ 10 % because of length change of crimp sleeve).
2. The conductor ends must be cleaned mechanically prior to assembly.
3. Insert conductor fully into cable lug or connector.
4. Observing the crimping direction, crimp the cable lug or connector using the appropriate tools. The crimping direction for cable lug and connector is indicated in the diagram opposite.
5. Remove excess compound emerging from aluminum cable lugs and connectors.

**We recommend the following number of crimps for individual cross sections:**

| | Tubular cable lugs | | | Cable lugs DIN 46235 | | Al-Cable lugs | | |
|---|---|---|---|---|---|---|---|---|
| Cross-section in mm² | 5 mm Crimping die | width Crimping dies (quad-point indent crimping **) | EKM60ID | 5 mm Crimping die | width Crimping dies | 7 mm Crimping die | width Crimping dies | EKM60ID |
| 6 | 1 | | | 2 | | | | |
| 10 | 1 | | 1 | 2 | | | | |
| 16 | 1 | 1 | 1 | 2 | 1 | 4 | 2 | |
| 25 | 2 | 1 | 1 | 2 | 1 | 4 | 2 | |
| 35 | 2 | 1 | 1 | 2 | 1 | 5 | 2 | |
| 50 | 2 | 1 | 1 | 3 | 1 | 5 | 2 | 2 |
| 70 | 2 | 1 | 1 | 3 | 1 | 6 | 3 | 3 |
| 95 | 2 | 1 | 1 | 4 | 2 | 6 | 3 | 3 |
| 120 | 2 | 1 | 1 | 4 | 2 | 6 | 3 | 3 |
| 150 | 2 | 1 | 1 | 4 | 2 | 6 | 3 | 3 |
| 185 | 2 | 1* | 1 | 4 | 2 | 6 | 3 | 3 |
| 240 | 4 | 2 | 2 | 5 | 2 | 8 | 3 | 3 |
| 300 | 4 | 2 | | 5 | 2 | 8 | 3 | |
| 400 | 4 | 2 | | | 3 | | 4 | |
| 500 | | | | | 3 | | 4 | |
| 625 | | | | | 3 | | | |
| 800 | | | | | 3 | | | |
| 1000 | | | | | 4 (20 mm)<br>2 (40 mm) *** | | | |

* when using quad-point indent crimping (HK60VP, EK60VP/FT etc.) Number of crimping operations: 2
** Note the cross section of the tool !
*** Crimp with crimping dies of Series 100

**i** When crimping F-series cable lugs and solderless terminals according to DIN 46234 by using indent crimping dies, for each cross section only one crimp is necessary.

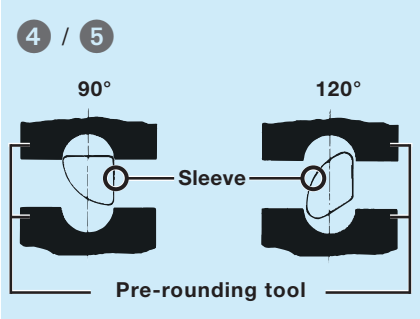
## Assembly instructions for sleeves for type VHR and VHD compacted conductors

We recommend the use of additional VHR and VHD sleeves for compacted round conductors to ensure that the tubular cable lugs and connectors fit accurately.

For sector-shaped conductors, we recommend the use of additional sector sleeves VHR 3 or VHR 4 and VHD 3 or VHD 4 with Cu cable lugs and connectors to prevent the conductor recoil. Sleeves need to be rounded with pre-rounding tools.

**Please note:**

1. Ensure that the conductor is deformed as little as possible when cutting to length.
2. Strip the conductor insulation in line with the insertion length.
3. Slip the sleeve up to the front cut edge of the conductor.
4. Place the conductor and sleeve in the pre-rounding tool as per the diagram.
5. Crimp the sleeve
   a) Crimping operation as per the diagram (1st pre-crimp)
   b) Crimp turned through 90° (2nd pre-crimp)
   c) Crimp turned through 30° (finish-crimp)
   d) Crimp turned through 30° as required (finish-crimp)



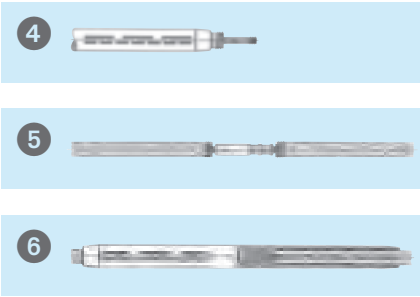

## Instructions for fitting reduction sleeves

**Only wide hydraulic crimping dies to be used when crimping more than two cross-sections.**

## Assembly instructions for full tension Al/steel connectors to DIN 48085, part 3

The connectors consist of an Al sleeve (E-Al 99.5) and a soft steel sleeve (St 52).

1. Straighten cable ends, remove dirt and any oxide layer.
2. Slip the Al-compression joint onto one of the cable ends.
3. Tie off the cable end and strip the Al cores.
4. Tie off Al and steel cores.
5. Slip on the steel sleeve and crimp through according to the crimping marks.
6. Slide the Al sleeve centrally over the crimped steel sleeve and crimp according to the crimping marks




**Caution:** Do not crimp in the centre, in the area of the steel connector. Do not crimp in the area of the cones.

7. Remove excess compound after crimping the connector.

**Warning:** The compound must not be removed, either fully or partially, prior to assembly.

The tool dies can be assigned either by colour-coding, or preferably based on the code assigned to the cross-section. The dies for the steel sleeve have a black finish, those for the Al sleeve are zinc-coated.

**General information:**
The crimping process has to be continued until the dies are completely closed, otherwise a proper crimp cannot be guaranteed.

## General notes

**Crimping dies:**

The crimping dies of the series 18 as well as the series 25 correspond in the external dimensions of DIN 48083 part 1 or part 3. For all interchangeable dies, for mechanical tools as well as hydraulic tools, the series D (= for DIN cable lugs and connectors 46235 and 46267) and the series A (aluminium cable lugs and connectors as well as aluminium/copper cable lugs and connectors) the hexagonal dimensions are of DIN 48083 part 4.

**Surfaces:**

All mentioned dies are supplied “chrome-yellow” or „blue coated“ for copper and “galvanized” for aluminum and nickel.

**Testing of our copper and aluminium connecting material was carried out with the following maximum torque on the connecting bolt.**

| Size of thread | Tightening torque (Nm) | Size of thread | Torque (Nm) |
|---|---|---|---|
| M 5 | 5 | M 12 | 75 |
| M 6 | 9 | M 14 | 120 |
| M 7 | 15 | M 16 | 190 |
| M 8 | 22 | M 20 | 380 |
| M 10 | 44 | | |

## Assembly instruction for screw connectors

Because they are detachable connecting elements, screw connectors are used preferably for heat-shrunk or cast resin joints. However, they also can be used in all other types of cable joints. Four-screw connectors are especially suitable for multi-stranded conductors, since the longer connector length increases the transverse conductance of the individual wires and the contact resistance decreases accordingly. In addition, higher pull-out values are achieved. Barrier type four-screw connector clamps are suitable for cables with mass-impregnated paper insulation.

In an electrolyte-free, e.g. dry environment, aluminum as well as copper conductors can be combined. This also applies in combination with heat-shrunk hoses. If conductors of different materials (e.g. Cu and Al cables) have to be connected, a barrier type connector is recommended.

While identical types of cables (e.g. NAYY-NAVY) can be used with non-barrier types of connectors for unequal cables (e.g. NAYY-NAKBA), plastic or earth cables, the use of connectors with barrier as an oil stop is recommended.

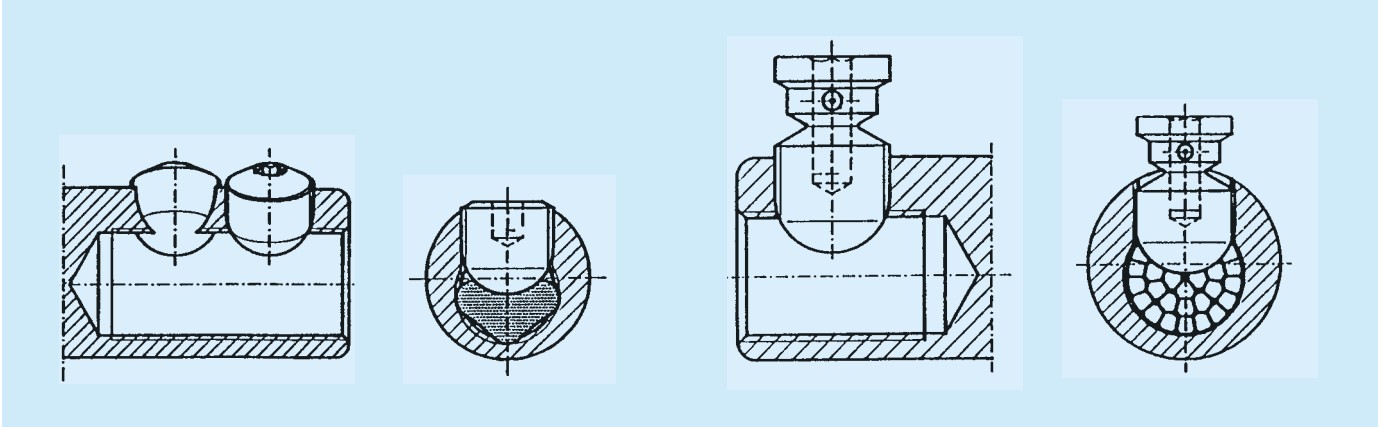
Insertion depth of conductors is controlled either by the conductor stop at the barrier, or by inspection hole on screw connectors without barrier.

In addition to the conventional screw connectors, we offer screw connectors with shear-off heads. The benefit of this design is the defined tightening torque, which is pre-determined by the maximum transferable torque at the rated breaking point. This contact force defined by the manufacturer guarantee optimum electrical and mechanical properties (DIN EN 61238). No torque wrenches are required for assembly of this connector type.

With standard screw connectors, the required contact pressures are reached at approx. 80 % of the specified torque. Over-crimping beyond the torque specified for the connector must be avoided.

The cross-grooves on the conductor channels allow high tensile forces to be transmitted. The tensile forces of our screw connectors correspond to compression joints to DIN 46267, part 2, with identical cross section.

The screws are treated with a high-gliding, molybdenum sulphide-based lubricant. This guarantees adequate contact pressure with a relatively low tightening torque.



# Check-list for custom made cable lugs and connectors

**Customer / Company:** .....

**Address:** .....

**Contact person:** .....

**Customer No.:** .....

**E-Mail:** .....

**Tel.:** .....

## Technical data

Type of conductor*: .....

Cross-section (cable)*: .....

Application / Use*: .....

Crimping tool*: .....

Similar Klauke item*: .....

### Cable lugs und Verbinder

Material*: ☐ Cu ☐ Al ☐ Ni ☐ V4A ☐ V2A

Other: .....

Surface*: ☐ tin-plated ☐ bright ☐ nickel-plated

Other: .....

* Required fields

## Commercial Data

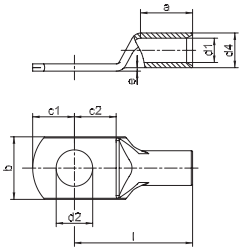
Batch size / Annual requirement*: ..... ☐ einmalig

Partial shipments*: ☐1 ☐2 ☐3 ☐ .....

Additional agreements: .....

.....

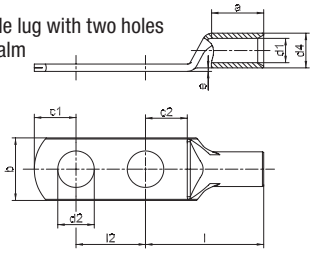
☐ Cable lug



Dimension d4 .....
Dimension d1 .....
Dimension d2 .....
Dimension a .....
Dimension l .....
Dimension b .....
Dimension c1 .....
Dimension c2 .....
Dimension e .....

Inspection hole ☐ Yes ☐ No

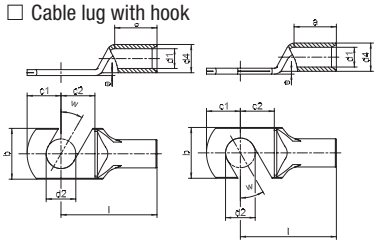
☐ Cable lug with two holes in palm



Dimension d4 .....
Dimension d1 .....
Dimension d2 .....
Dimension a .....
Dimension l .....
Dimension b .....
Dimension c1 .....
Dimension c2 .....
Dimension e .....

Inspection hole ☐ Yes ☐ No

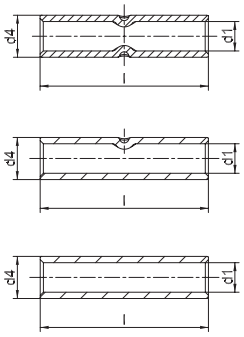
☐ Cable lug with hook



Dimension d4 .....
Dimension d1 .....
Dimension d2 .....
Dimension a .....
Dimension l .....
Dimension b .....
Dimension c1 .....
Dimension c2 .....
Dimension e .....
Angle wh .....

Inspection hole ☐ Yes ☐ No

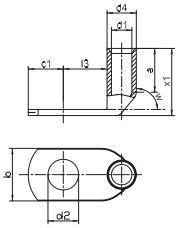
☐ Connector



Dimension d4 .....
Dimension d1 .....
Dimension l .....

Number of butt marks: 0 / 1 / 2 .....

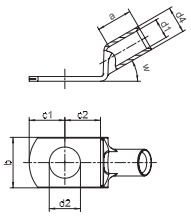
☐ Angle cable lug from 30° to 90°



Dimension d4 .....
Dimension d1 .....
Dimension d2 .....
Dimension a .....
Dimension x1 .....
Dimension b .....
Dimension c1 .....
Dimension l3 .....
Angle w1 .....

Inspection hole ☐ Yes ☐ No

☐ Angle cable lug up to 30°



Dimension d4 .....
Dimension d1 .....
Dimension d2 .....
Dimension a .....
Dimension b .....
Dimension c1 .....
Dimension c2 .....
Angle wh .....
Angle w1 .....

Inspection hole ☐ Yes ☐ No

Other types acc. to your sketches/remarks (extra sheet):

## Drawings and dimensions: Please fill in all required dimensions (see dimension chart) and necessary data.

Date: .....

**Signature (customer):** .....

VA-700/800 Index c

## Check-list for custom made crimping dies

**Customer / company:** .....
**Address:** .....
**Contact person:** .....

**Customer No.:** .....
**E-Mail:** .....
**Tel.:** .....

### Technical data

Type of conductor*: .....
Cross-section*: .....
Material*: .....
Application / use*: .....
Available crimping tool*: .....
Similar Klauke item: .....

### Commercial data

Batch size / Annual reqirement*: ..... ☐ one-off
Partial shipments*: ☐1 ☐2 ☐3 ☐ .....
Additional agreements: .....

* Required items

### Characteristics crimping dies

#### Series

☐ K 4 ☐ K 5 ☐ K 18
☐ K 22 ☐ K 13 ☐ K 25
☐ K 45 ☐ K 50 ☐ K 100

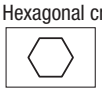
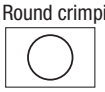
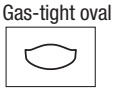
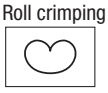
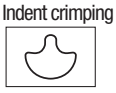
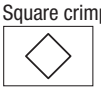
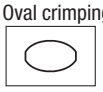
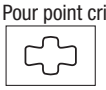
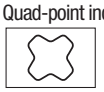
Other: .....

#### Attached

Sketch: ☐ yes ☐ no
Drawing: ☐ yes ☐ no
Sample: ☐ yes ☐ no

Other: .....

#### Crimping profile

☐ Hexagonal crimping 
☐ Round crimping 
☐ Double indent crimping 
☐ Gas-tight oval crimping 
☐ Roll crimping 
☐ Indent crimping 
☐ Special trapezoid crimping 
☐ Square crimping 
☐ Oval crimping 
☐ Pour point crimping 
☐ Trapezoid crimping 
☐ Indent crimping 
☐ Quad-point indent crimping 
☐ Indent crimping (cable end-sleeves) 

Other: .....

**Dimensions: Please fill in all data! If no information is available, the general Klauke dimensions apply.**

Date: .....
Signature (customer): .....

## Assignment of conductor cross sections (AWG or MCM sizes to mm²)

| AWG | Metric conductor cross-section mm² | Comparable conductor cross-section mm² | MCM | Metric conductor cross-section mm² | Comparable conductor cross-section mm² |
|---|---|---|---|---|---|
| 27 | 0.102 | – | 250 | 127 | 120 |
| 26 | 0.128 | 0.14 | 300 | 152 | 150 |
| 25 | 0.163 | – | 350 | 177 | 185 |
| 24 | 0.205 | 0.2 | 400 | 203 | – |
| 23 | 0.259 | 0.25 | 500 | 253 | 240 |
| 22 | 0.325 | 0.34 | 600 | 304 | 300 |
| 21 | 0.412 | – | 700 | 355 | – |
| 20 | 0.519 | 0.5 | 800 | 405 | 400 |
| 19 | 0.653 | – | 900 | 456 | – |
| 18 | 0.823 | 0.75 | 1000 | 507 | 500 |
| 17 | 1.04 | 1 | 1250 | 633 | 625 |
| 16 | 1.31 | – | 1500 | 760 | 800 |
| 15 | 1.65 | 1.5 | 1750 | 887 | – |
| 14 | 2.08 | – | 2000 | 1010 | 1000 |
| 13 | 2.63 | 2.5 | | | |
| 12 | 3.31 | – | | | |
| 11 | 4.15 | 4 | | | |
| 10 | 5.27 | 6 | | | |
| 9 | 6.62 | – | | | |
| 8 | 8.35 | – | | | |
| 7 | 10.6 | 10 | | | |
| 6 | 13.3 | – | | | |
| 5 | 16.8 | 16 | | | |
| 4 | 21.2 | – | | | |
| 3 | 26.7 | 25 | | | |
| 2 | 33.6 | 35 | | | |
| 1 | 42.4 | – | | | |
| 1/0 | 53.4 | 50 | | | |
| 2/0 | 67.5 | 70 | | | |
| 3/0 | 85 | 95 | | | |
| 4/0 | 107.2 | 120 | | | |

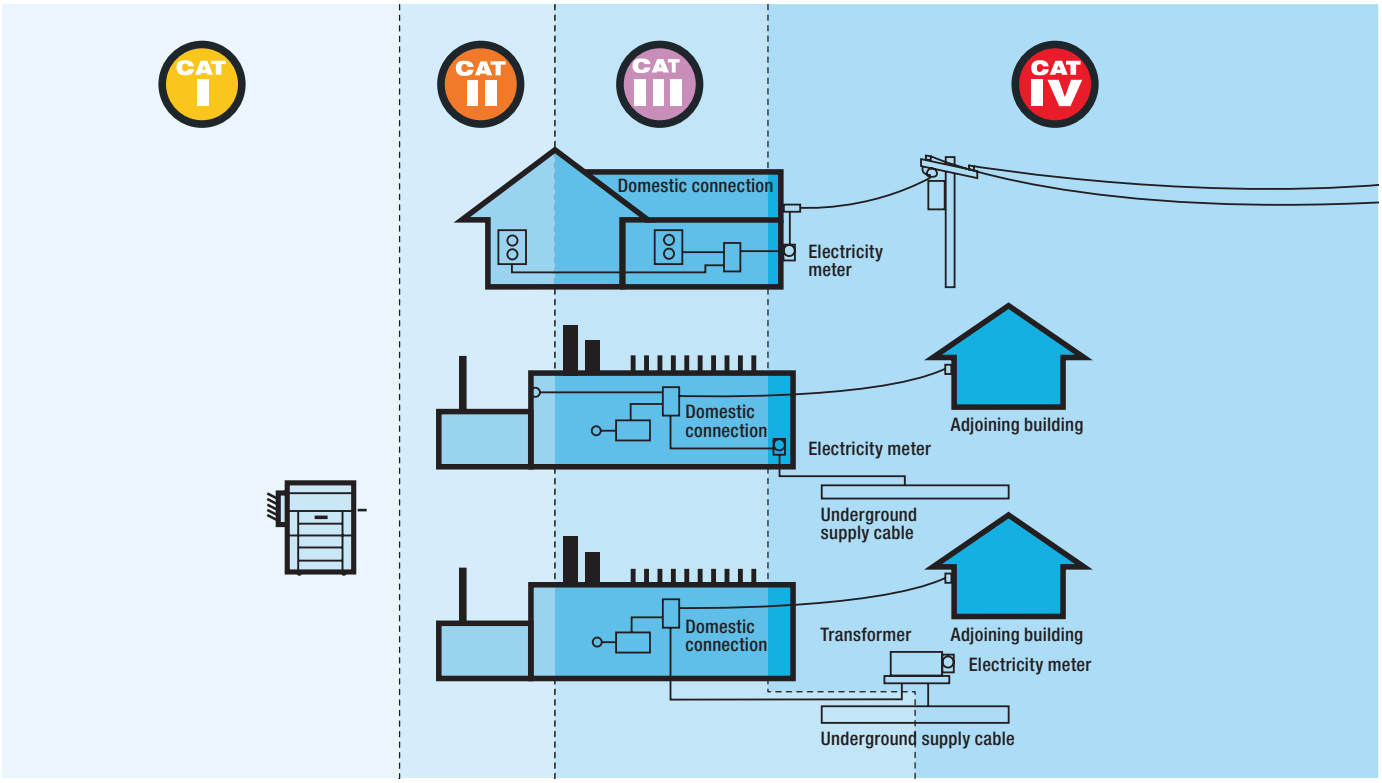
## British and American units of measurement

| Length units | | Area units | | Volume units | | Fluid volume units | | Weight | |
|---|---|---|---|---|---|---|---|---|---|
| 1 mil | 0.0254 mm | 1 sq. in. | 645.1 mm² | 1 cu. In. | 16.386 cm³ | 1 pint | 0.568 l | 1 grain | 0.059 g |
| 1 inch (Zoll) | 25.4 mm | 1 sq. ft. | 0.093 m² | 1 cu. Ft. | 0.028 m³ | 1 quart | 1.136 l | 1 ounce | 28.349 g |
| 1 foot | 0.3048 m | 1 sq. yd. | 0.836 m² | 1 cu. Yd. | 0.764 m³ | 1 engl. gallon | 4.554 l | 1 pound (lb) | 0.454 kg |
| 1 yard | 0.9140 m | | | | | 1 am gallon | 3.785 l | 1 engl. ton | 1.016 t |
| 1 mile | 1.6090 km | | | | | 1 quarter | 290.790 l | 1 am. ton | 0.907 t |
| | | | | | | 1 bushel | 36.350 l | | |

## Cable pulling technology – Typical applications

| | | Tape diameter | Tube diameter | Pressure energy | Min. curve radius | Breaking strength | Tensile force with start/ end sleeve | Recommended length |
|---|---|---|---|---|---|---|---|---|
| | | ø mm | ø mm | kg | mm | kg | kg | m |
| Type | | | | | | | | |
| | Speedy Spinner | 3 | 16 - 32 | +++ | 160 | 400 | 110 | 20-30 (+ 2-3) |
| | Dura Spinner | 3.6 | 16 - 32 | +++ | 100 | 250 | 140 | 10 - 30 |
| | Flexi Spinner | 4.5 | 16 - 32 | +++ | 100 | 250 | 140 | 10-25 |
| | Smart Butler | 4.5 | 40 - 60 | +++ | 310 | 1200 | >200 | 40-60 (+ 3-5) |
| | Smart Butler | 6 | 50 - 80 | +++ | 400 | 2000 | >300 | 40-80 (2-3) |
| | | 7.5 | 63 - 100 | +++ | 500 | 3000 | >400 | 20-30 (+ 3-5) |
| | Smart Butler | 9 | 63 - 125 | +++ | 620 | 4500 | >500 | 20-30 (+ 3-5) |
| | | 11 | 63 - 150 | +++ | 770 | 7500 | >700 | 150-250 (+ 3-5) |
| | Polyester | 4.5 | 16 - 32 | +++ | 100 | 250 | 140 | 10-25 |
| | Nylon, Perlon® | 4 | 16 - 25 | + | 80 | 280 | 120 | 10-20 |
| | Steel | 4 | 16 - 25 | + | 100 | 900 | 115 | 10-20 |

☐ for trade ☐ for industry



## Measuring categories

Protective values which greatly exceed the nominal capacity of a system are stipulated in the standards of the IEC categories. Without this additional protection, transient overvoltages which occur with increasing regularity may cause serious or fatal injuries.

## Measurement Category I

is the signal level for telecommunications and electronic equipment.

## Measurement Category II

is the local level for permanently connected devices or devices not operated by means of a fixed connection - including all types of illumination from household devices to office equipment such as copy machines. Can also be used in Category I ranges.

## Measurement Category III

is the distribution level for fixed main or bypass flow circuits. These electric circuits are usually separated by at least one level of transformer barrier of Category IV (public utility or other high-voltage power source). Can also be used in Category II and Category I ranges.

## Measurement Category IV

is the main electric supply level. Greenlee is setting new standards by offering equipment that meets the highest protective values of IEC standards and which are certified accordingly. Can be used in all category ranges.

**Greenlee equipment** – checked and certified for compliance with norms by an independent party. This catalogue states the category for many Greenlee devices, indicating that these devices comply with the various IEC categories (II, III or IV). All these references represent the categories confirmed in tests by independent testing organisations – giving you additional assurance.

**The right type of protection for the task at hand.** No matter where you may need overvoltage protection – select a device which has at least the nominal capacity suitable for the work you are carrying out.







**Elektronics**
- lectronic equipment
- Equipment with low current usage and surge voltage limit protection




**Domestic appliances, computers, televisions**
- Wall outlets and long bypass flow circuits
- All wall outlets which are distant more than 10 m from a Category III source
- All wall outlets which are distant more than 20 m from a Category VI source




**MC switch panel etc.**
- Feeds and short bypass current circuits
- Distributor panels
- Wall outlets for large devices with “short” connections to the domestic connection




**Outdoor transformers, electricity meters etc.**
- Outdoor and domestic connection
- Supply line from the utility pole to the building
- Overhead line to the free-standing building
- Underground line to well pump

## Metric cable glands for electrical installation EN 50262

The new European standard EN 50262 defines conditions for all manufacturers of electrical appliance housings and all electrical installation.

It's scope includes cables and conductors for control cabinets, distributor housings, junction boxes, domestic connections, installation boxes, equipment housings etc.

EN 50262 replaces the Pg thread (steel tank pipe thread) used for all housing designs for decades with a metric thread. Sizes Pg 7 to Pg 48 are being replaced by ISO M 6 to M75.

### Greenlee holemaking tools in ISO sizes acc. to EN 50262

| ISO sizes | mm | Slug-Buster® punch | Slug-Splitter® punch | HSS hole saws | Step bits |
|---|---|---|---|---|---|
| 12 | 12.5 | ✔ | | | |
| 16 | 16.5 | ✔ | ✔ | | ✔ |
| 20 | 20.5 | ✔ | ✔ | ✔ | ✔ |
| 25 | 25.5 | ✔ | ✔ | ✔ | ✔ |
| 32 | 32.5 | ✔ | ✔ | | ✔ |
| 40 | 40.5 | ✔ | ✔ | | ✔ |
| 50 | 50.5 | ✔ | ✔ | ✔ | |
| 63 | 63.5 | ✔ | ✔ | ✔ | |

## Holemaking systems

| Round punch | Operation | Capacity | Hole size |
|---|---|---|---|
| Slug-Buster® | Manual, Hydraulic punches | max. 3.0 mm in St 37 | 12.5 to 64.0 mm |
| Slug-Splitter® | Hydraulic punches | max. 3.5 mm in V2A | 15.2 to 64.0 mm |
| Speed Punch™ | Hydraulic punches | 3.5 mm in St 37 | 16.2 to 64.0 mm |
| Standard | Manual, Hydraulic punches | max. 3.0 mm in St 37 | 66.7 to 144.1 mm |
| Special shaped punches | Operation | Capacity | Hole size |
| Special shaped punches | Manual, Hydraulic punches | max. 3.0 mm in St 37 bzw. 1.5 mm in V2A | See data for the individual punches |

## Hydraulic punches

| | | | Description |
|---|---|---|---|
|  | LS 50 FLEX<br>Battery powered hydraulic punching tool | LS 50 FLEX | - with micro-processor control<br>- 60 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |
|  | LS 60-L<br>Battery powered hydraulic punching tool | LS60L | - with micro-processor control<br>- 60 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |
|  | Hydraulic punch<br>Quick Draw™ 7804E | 50342916 | - ideal for fast, frontal punching<br>- 80 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |
|  | Hydraulic punch<br>Quick Draw 90™ 7904E | 50342991 | - rectangular cylinder head rotatable around 180°<br>- maximum flexibility in narrow working spaces<br>- 80 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |
|  | Hydraulic punch with hand pump | 50159062 | - compact design of punch, pump and cylinder<br>- 110 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |
|  | Hydraulic punch with foot pump | 50250973 | - foot pump leaves both hands free for operating the punch<br>- 110 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |
|  | Hand hydraulic punch Flex Draw | 52033843 | - rectangular cylinder head rotatable around 180°<br>- maximum flexibility in narrow working spaces<br>- 80 kN punching force<br>- punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size |

## Standards for cabling

A number of standardisation committees that define the technical features of cabling systems have been in existence since 1993. These directives must be observed when planning and setting up networks.

Full volumes can be obtained from specialist bookshops.

## International standards

International Standards are published by the ISO (International Standards Organisation). In Europe these international directives are used for information purposes.

| | |
|---|---|
| **ISO/IEC IS 11801** | Description of the performance requirements for a general cabling system |
| **IEC 1156** | Multi-core and symmetrical conductors for digital message transmission |
| **IEC 1156-1** | Basic specification |
| **IEC 1156-2** | Framework specification for service cables IEC1156-3 Framework specification for patch and equipment connecting cables |
| **IEC 1156-4** | Framework specification for building connecting and rising cables |

## European standards

In collaboration with national standard institutes, the European Committee for Electrical Standardisation CENELEC (Comite Europeen de Normalisation Electrotechnique) has published European standards that are based on the international ISO/IEC 11801 and hence normative for Europe.

| | |
|---|---|
| **EN 50173** | Description of the performance requirements for a general cabling system (EN 50173 also refers to HD 608 and also EN 55022) |
| **608** | General specification for symmetrical conductors for digital message transmission |
| **EN 50167** | Framework specification for service cables |
| **EN 50168** | Framework specification for patch and equipment connecting cables |
| **EN 50169** | Framework specification for building connection and rising cablesl |
| **EN 55022** | Framework specification for electromagnetic compatibility (EMC). This specification contains threshold values and measuring procedures for radio interference of data processing equipment. |

## American standards

The American standards are published by the EINTIA (Electronic Industries Association / Telecommunication Industries Association) an American Joint Venture.

| | |
|---|---|
| **TSB 36** | Framework specification for symmetrical data cables (100 Ohm, unsheathed) |
| **TSB 40** | Framework specification for passive components (100 Ohm, unsheathed) |
| **EIA/TIA 568** | Framework specification for cabling systems |

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# Legend

Overview of our pictograms

## Connecting material



Tubular cable lugs and connectors blue connection – Cu



Tubular cable lugs and connectors – Ni



Compression cable lugs and connectors acc. to DIN – Al


Cable end-sleeves


Tubular cable lugs and connectors – Cu, standard type



Compression cable lugs and connectors acc. to DIN – Cu



Compression cable lugs and connectors for Aldrey cables


Twin cable end-sleeves


Insulated cable lugs and connectors; standard type


Compression cable lugs, double crimp – Cu



Compression cable lugs and connectors for Al/St cables


Insulated cable connections


Tubular cable lugs and connectors for fine stranded conductors


Solderless terminals, connectors and pin terminals acc. to DIN – Cu



Compression cable lugs and connectors – Al/Cu


Non-insulated receptacles


Tubular cable lugs and connectors for solid conductors


Insulated solderless terminals


C-clamps



Tubular cable lugs and connectors – stainless steel


Sleeves for compacted conductors and sector shaped conductors – Cu


H-clamps

## Type of cables


Solid conductor (class 1 according acc. to DIN EN 60228)


Fine stranded conductor (class 5 acc. to DIN EN 60228)


Solid sector shaped conductor 90 ° (class 1 acc. to DIN EN 60228)


Conductor for overhead lines (DIN EN 50182) made of aluminium / steel


Multi-stranded conductor (class 2 acc. to DIN EN 60228)


Superfine stranded conductor (class 6 acc. to DIN EN 60228)


Compacted multi-stranded sector shaped conductor 120 ° (class 2 acc. to DIN EN 60228)


Copper conductor for overhead lines (DIN 48201-1) and aluminium or aluminium alloy conductors (DIN EN 50182)


Compacted multi-stranded conductor (class 2 acc. to DIN EN 60228)


Solid sector shaped conductor 120 ° (class 1 acc. to DIN EN 60228)


Compacted multi-stranded sector shaped conductor 90 ° (class 2 acc. to DIN EN 60228)

## Crimping profiles


Hexagonal crimping


Roll-crimping


Oval crimping


Quad-point indent crimping


Round crimping


Indent crimping


Four point crimping


Trapezoid crimping


Double indent crimp


Special trapezoid crimping


Indent crimping cable end-sleeves


Gas-tight oval crimping


Square crimping


Indent cimping

## Crimping tools


Centering system


Indent crimping



Synchronised die selection

## Measuring instruments



Measuring Category I



Measuring Category II



Measuring Category III



MeasuringCategory IV



TRUE RMS effective value measurement


Lifetime Warranty

## Test mark


VDE


IEC


CSA


UL


DET NORSKE VERITAS + German Lloyd


Insulated acc. to IEC 60900


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GS

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