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# CATALOGUE 2015/16

Electrical connection technology / tools and measuring instruments



Verbindungen mit **System**  
The **Power** of Partnership

**Klauke**<sup>®</sup>  
A Textron Company



## Expertise

**Recognised worldwide** as leading suppliers of connecting material, crimping and cutting tools for electrical, plumbing and heating systems.

## Innovation

Our Innovation and Service Center is located at our headquarters in Remscheid. This is where - **since 1879** - new solutions have emerged from the discourse between the users and our experts.

## Presence

In over 70 countries, our distributors ensure widespread, service-oriented support - **close to the customer at all times.**

## Responsibility

Certified to the international standard ISO 14001:2004, we create innovative new products with the utmost respect for conservation – **future-oriented for a better environment.**

## Quality Assurance

We offer the crafts, trade and industry perfectly coordinated products and services - **innovative and application-oriented.**



**Electrical connection system**

22

- Tubular cable lugs and connectors, blue connection® - Cu
- Copper tubular cable lugs and connectors - Cu
- Tubular cable lugs and connectors - nickel, stainless steel
- Copper compression cable lugs and connectors to DIN
- Terminals, connectors and pin terminals to DIN - Cu
- Sleeves for compacted conductors and sector-shaped conductors - Cu
- Aluminum compression cable lugs and connectors to DIN
- Aluminum/copper compression cable lugs and connectors
- Clamps and screw connectors
- Cable end-sleeves
- Cable connections, insulated and non insulated
- Assortments

- At Klauke we have always been committed to the future
- Our recipe for success: Klauke quality for global markets
- Solutions for the requirements of today and tomorrow
- Electrical conductors are the life line of the modern world
- The correct connector for every application and the matching tool for every connection
- Tools need service and users need advice – we offer both and more
- Trading partners have our full support
- Our distribution service:
- We are consistently better than the standards demand
- Environmental protection and sustainability – for us the only alternatives!
- Klauke always close by
- For reliable connections worldwide



**Crimping and cutting tools**

218

- Mechanical crimping and cutting tools
- Electric and pneumatic crimping tools
- Hand-operated hydraulic crimping and cutting tools
- Battery powered crimping and cutting tools
- Hydraulic universal tools and heads
- Hydraulic crimping and cutting heads
- Hydraulic drive units
- Hydraulic systems
- Accessories for hydraulic tools
- Force and pressure gauge systems



**Crimping dies**

410

- Series 50
- Series 4
- Series 5
- Series 18
- Series 22
- Series 13
- Series 25
- Series 45



**Hand tools**

456

- VDE tools
- Standard tools
- Wire stripping tools
- Stripping tools
- Stripping tools for communication technology



**Holemaking tools**

526

- Round and special shape punches
- Punching tools and sets
- Hole saws
- Bits and step bits



**Processing tools**

582

- Special cutting tools
- Machining tools for bus bars
- Pumps and pump accessories



**Cable pulling technology**

594

- Fish tapes/pulling rods
- Cable pulling systems
- Cable puller
- Pulling grips
- Accessories



**Testing and measuring instruments**

614

- Voltage testers
- Digital multimeter
- Clamp meters
- VDE Testing instruments
- Temperature gauges
- Cable and conductor identifiers
- Network, measuring devices and testers



**Technical Appendix**

i-1

- Notes on the various crimping profiles
- Legend of pictograms used
- Conversion charts
- Standards, changes, improvements
- Service check list as master copy
- Order form as master copy
- Alphabetical Index
- Alphanumerical Index



## *At Klauke we have **always** been committed to the **future**.*

Success needs a vision. This is ours: pioneering solutions for trade and industry as well as a close partnership with our distribution channels. At Klauke we live this vision day after day.

In 1879 Gustav Klauke founded our company. Over time the markets changed, new technologies were developed and later replaced. Klauke constantly evolved and grew with innovative solutions that reflected the new demands of our customers.

### **10,000 solutions for the trade user**

All over the world, Klauke is renowned for its high-quality electrical connection systems and tools for crimping, cutting and punching. By offering special solutions for the connection systems and the tools industry we meet the requirements in the most diverse industries. In total our product range comprises more than 10,000 products for trade, industry and also the growth markets of renewable energies and modern infrastructure.

Since 1996 Klauke belongs to the Greenlee Division of the Textron Group. With the focus on hole punching and cable pulling technology, Greenlee perfectly complements our own areas of competence.

### **Medium-sized German business meets global player**

The close cooperation with a Group of 32,000 employees has generated important development impetus for both our customers and ourselves. As an example, we combine the virtues of a German medium-sized company with the strengths and global presence of a large corporation. This enables us to continuously optimise our processes and product quality, to remain a technological leader and to operate in future markets. Developing the future has always been our primary objective.





### ***Our recipe for success:***

*Klauke quality for global markets.*

For more than 130 years now, "Made in Germany" has been a certificate of origin, a claim to quality and the key to the success of our products. Klauke's long and successful history began with pliers production at our headquarters in Remscheid. From that acorn we have continued to grow. We are now an international organisation. All over the world, "Made by Klauke" is synonymous with outstanding quality products. Of that we are proud.

### **Worldwide presence with local solutions**

Currently, more than 800 employees develop, produce and distribute the Klauke range from ten locations in Europe and Asia-Pacific and via Greenlee in North and South America. Backed by a global distribution network and Authorised Service Centers in over 50 countries, we are close to our customers and their needs throughout the world. Allowing us to create local solutions for regional markets and their special requirements.

*“Made by Klauke stands for quality and proximity to local markets worldwide.”*

Jörg Sokat  
Marketing Manager





*Solutions for the requirements of **today and tomorrow***

## Expertise

### Electrical Distribution

The Klauke and Greenlee brands stand for innovation, safety and cost-effectiveness in installation technology - unconditionally and uncompromisingly. Both in electrical connection systems as well as in the case of tools and measuring devices, professional users all over the world trust in our products and application-orientated solutions.

**Klauke:** Electrical connection systems, crimping, cutting and hand tools

**Greenlee:** Holmaking tools, cable pulling technology, test and measurement instruments



## Innovation

### Automotive Connector Solutions

Klauke develops and produces electrical connection systems and special tools for the automotive industry, certified according to ISO/TS 164494:2009. Our solutions are used, for example, in vehicle electrical systems, engine and electro mobility concepts. Based on knowledge and experience attained over decades we incorporate the latest manufacturing processes to produce special tools.



### Assembly Solutions

Industrial products often call for customer-specific punched parts, connecting materials, connectors and pre-assembled cables. Assembly Solutions from Klauke offer specific and highly-flexible solutions. Due to our in-house design and manufacturing expertise in electrical connection systems, we can also undertake unconventional requirements and small production runs quickly, reliably and economically.



## Requirement

### Customized Tools

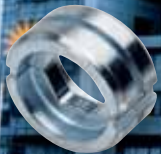
Our battery hydraulic crimping tools are market leaders for solder free connections solutions. Furthermore Klauke's professional crimping and cutting tools provide the technological basis for customer specific solutions in many fields. In close collaboration with our customers, our tool experts develop innovative prototypes that eventually lead to production stage and then manufacturing.

***Electrical conductors are the life line of the modern world.***

Reliable connections in energy and data networks are crucial to the supply systems and creature comforts of our society. Therefore, we develop and produce electrical connection systems and tools for energy generation, transport and distribution that meet the highest requirements.

**Innovation for practical applications**

Our focus is very much on day-to-day implementation practice. This is the basis upon which we have continued to develop the Klauke range over decades. Today, we have a complete range of mutually compatible cable lugs and connectors for low and medium voltage applications.







All Klauke solutions combine innovative capacity, technological expertise and close dialogue with users. They keep us in touch with the latest trends and our markets. Here are a few examples:

- ▶ The new blue connection system makes the connection of compacted conductors simpler, safer and more efficient than ever before. The special cable lugs and precisely-matching crimping dies for Klauke tools pay testimony to our system expertise.
- ▶ We rely on technologies that make our tools especially user-friendly, powerful and safe. For example, our tools feature ARS, the automatic retract stop, Li-Ion high-performance batteries and a lightweight, resilient steel/aluminum hybrid construction.
- ▶ We developed the LS 50-L Flex as a battery powered hydraulic punching tool specifically for working in constricted spaces. It combines an aluminum head that rotates through 360° with an especially narrow and compact design. Weighing just two kilos, it is also one of the lightest battery powered hydraulic tools around. The Li-Ion technology, which is compatible with all Klauke tools, provides the energy source. The LS 50-L Flex shows what we value most: Innovations for the user made in Germany, made by Klauke.



**blue connection**<sup>®</sup>  
Simple. Safe. Efficient.





***The correct connector for every application and the matching tool for every connection.***

The system concept is paramount. The Klauke range has the right processing tool for every cable lug. The result is mutually compatible tubular cable lugs, crimping dies and mechanical and hydraulic crimping tools – quite simply the Klauke system.

**From the requirement to the product**

The system development starts by exchanging information with the users. Our engineers use their requirements and needs to create new, future-facing products and solutions. They make day-to-day activities simpler, safer and more efficient, exceeding expectations for performance, convenience and cost-effectiveness.



**AHP 700-L: Systematic innovation**

One example par excellence of system integration is the AHP 700-L, the new battery powered hydraulic drive unit for crimping, cutting and punching. This unit is compatible with all Klauke crimping and cutting heads, as well as with Greenlee punch retainers and the bus bar machining centre. It is also based on the same 18V Li-Ion technology as the Safety Plus generation of battery powered hydraulic tools.

The integrated pressure sensor determines the oil pressure required for each crimping operation. The Intelligent Pressing System - IPS for short - reports any deviations to the user immediately via optical and acoustic signals.

The identical batteries, the optional NG2 power supply and the diagnostics facility via USB adapter and i-press analysis software increase flexibility in practical use. The cross-model use of important technologies is part of Klauke's system concept: Everything matches, for improved safety and efficiency in day-to-day use.





Tools need **service** and users need **advice** – we offer both and more.

In workaday life, Klauke crimping and cutting tools are exposed to hot and cold temperatures and fouling from the harsh conditions prevailing on construction sites. Sometimes it rains, sometimes the sun burns down and dust is often widespread - a durability test for our tools. As with all high-tech solutions, they must therefore be inspected on a regular basis and serviced from time to time.

### Worldwide service you can rely on

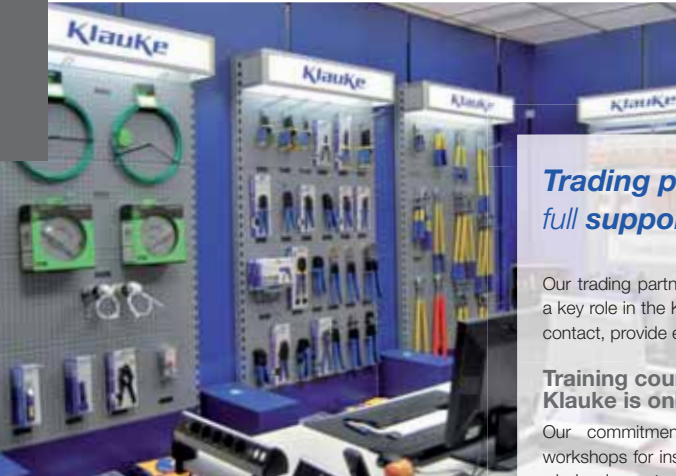
With an unbeatable technical maintenance and repair service, our company Service Centers along with Authorised Service Centers (ASC) ensure that Klauke tools retain their full functionality and guarantee reliable connections. Services range from regular tool inspection to service and repair work through to the free tool Hotline and an equipment hire facility.

Furthermore: Our mobile service van can be deployed for site operations upon request!



- ▶ Worldwide repair and maintenance service through over 50 authorised Service Centers (Klauke ASC).
- ▶ Complete maintenance service with annual inspection and work at fixed prices.
- ▶ Free Hotline for all questions about the tool service in Germany.
- ▶ Fast, uncomplicated equipment hire service for all standard tools.
- ▶ Mobile service van for site operations.





## Trading partners have our full support.

Our trading partners - as the link to the customer - play a key role in the Klauke success story. We maintain close contact, provide expert advice and on-site support.

## Training courses and trade fairs - Klauke is onboard

Our commitment starts with training courses and workshops for installation engineers, employees from the wholesale sector and distributors. Our partners receive intense support at all important national and international trade fairs. This is the ideal platform for presenting new products and sharing experiences. And of course, we support our distributors as experts with comprehensive information and advice.

## Klauke demonstration van: Tools you can touch

The best arguments for Klauke tools are quality, performance and their proverbial suitability for daily use. We visit our distributors and users throughout Europe with a practical roadshow. The Klauke demonstration van carries electrical connection technology and tools from both Klauke and Greenlee that you can touch. Customer presentations, open-house events and internal training courses are enriched by hands-on experience.

## Close cooperation for improving safety and enhancing expertise

Klauke is a strong brand worldwide. We stand for values such as innovation, quality, safety and sustainable economies. The trades and the users can rely on this brand promise at all times. With our cooperation partners of electrical brand initiatives, we commit to strengthening the brands and their worth. As an E-Check partner, we stand for tested safety in the electrical trade. Because for us there is no compromise when it comes to the safety of our products.





### Our *distribution service:*

- ▶ Product presentations and expert advice on-site by our field service team.
- ▶ The Klauke demonstration van - on the road for our customers.
- ▶ Internal and external training courses and workshops for users.
- ▶ Information and advice at all important national and international trade fairs.
- ▶ Swift technical support from our experts for special applications.
- ▶ Upon request, we test your electrical connections and compile test reports.

### We are *consistently better* than the standards demand.

Klauke products are used in environments that have to meet tough safety requirements. That's why their reliability and quality is of the utmost importance. For us, simply meeting the requirements of a standard is not enough. In terms of safety, ease-of-use and robustness, all Klauke products comply with the highest specifications and perform in excess of the standards required.

#### Quality starts with the process

Our internal processes provide the foundation required. Our focus on lean management principles increases efficiency, responsibility and personal commitment - from management to development to production and sales.

Klauke undergoes regular internal and external audits in order to safeguard the quality of our products and processes.

#### Our certifications

In terms of quality management, we are certified to ISO 9001:2008 and specifically for the automotive industry to ISO/TS 16949:2009. Klauke's environmental management system complies with the requirements of ISO 14001:2004.

These certifications guarantee that our customers can rely on their Klauke products and services at all times.



# *Environmental protection and sustainability – for us **the only alternative!***

Environmental issues are extremely important to us. And a question of entrepreneurial responsibility. That's why Klauke is involved in the "Ökoprofit" (Ecoprofit) project of the Bergisch City Triangle, and is today certified to ISO 14001:2004.

## **Our goal: Continuous improvement**

This international standard defines world-recognised standards for environmental management systems. It focuses on a continuous improvement process for environmental performance.

The result for us is clearly defined goals: Avoiding waste and errors, enhancing efficiency and minimising energy consumption in every production phase. Because we want to keep raw materials, fossil fuels and our environment for the next generations.

## **Employing resources correctly**

Resource management is of course also important: In the procurement of material and components, we attach importance to top quality materials and components. To guarantee this, we work only with certified suppliers. This, coupled with our strict quality management principle, ensures our procurement, production and service standards are sustainably maintained.



### **Avoiding harmful substances**

Ecologically harmless products are essential to our understanding of sustainable economic activity. Starting with the supplier chain, we make sure that all components and materials remain within environmental limits and we satisfy the requirements of directives such as REACH and RoHS. On principle, harmful substances such as lead and mercury, polycyclic aromatic hydrocarbons (PAH) are not used in Klauke products. Moreover, we use the most environmentally-compatible materials, resources and equipment possible, biodegradable hydraulic fluids for example. And so our products combine user orientation with environmental responsibility.

### **Increasing tool life**

Our comprehensive range of services contributes to maintaining the performance of our tools over the long term. This is good for the environment, saves resources and increases the economic benefits for our customers.

### **Encouraging recycling**

By the time a tool finally reaches the end of its useful life, the course for reuse has long been set. Even during the tool development phase, we plan and design our products and components for a high reuse and recycling quota. By taking back used devices free-of-charge within Germany, we support our customers, ensure professional recycling and satisfy the requirements of the WEEE Directive.

### **Taking responsibility, seizing opportunities**

Environmental and resource management at all company levels is extremely important to Klauke. We perceive improving to become more and more innovative as an opportunity. And we take on this responsibility - for our customers, our employees and our children.

*Klauke always close by...*



- Northern region
- Central region
- Southern region
- Austria

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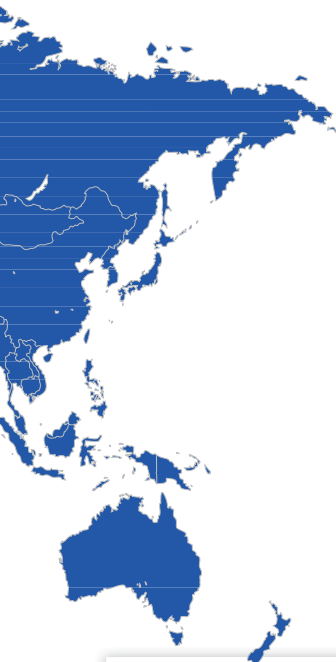
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<b>Tubular cable lugs and connectors blue connection® - Cu</b>	<b>24</b>
Tubular cable lugs	26
Butt connectors	28
Tool application chart	29
<b>Copper tubular cable lugs and connectors - Cu</b>	<b>30</b>
Tubular cable lugs	32
Angle tubular cable lugs	36
Connectors	40
Insulated tubular cable lugs and connectors	44
Tubular cable lugs and connectors for fine stranded conductors	47
Tubular cable lugs and compression joints for solid conductors	51
Tubular cable lugs for switchgear connections	54
Tool application chart	55
<b>Tubular cable lugs and connectors - nickel, stainless steel</b>	<b>62</b>
Stainless steel tubular cable lugs and connectors	64
Tubular cable lugs and connectors - nickel	66
Tool application chart	68
<b>Copper compression cable lugs and connectors to DIN</b>	<b>70</b>
Compression cable lugs acc. to DIN 46235	72
Angle compression cable lugs	74
Compression cable lugs, special type	77
Compression joints acc. to DIN 46267, part 1 and similar versions	79
Tool application chart	84
<b>Terminals, connectors and pin terminals to DIN - Cu</b>	<b>86</b>
Solderless terminals acc. to DIN 46234	88
Insulated solderless terminals	90
Solderless terminals, fork and pin type	92
Insulated solderless terminals for meter connections	94
Solderless connectors acc. to DIN 46341	95
Tool application chart	97
<b>Sleeves for compacted conductors and sector-shaped conductors - Cu</b>	<b>100</b>
<b>Aluminum compression cable lugs and connectors to DIN</b>	<b>106</b>
Compression cable lugs acc. to DIN 46329 and similar versions - Al	108
Compression joints acc. to DIN 46267, part 2 and similar versions - Al	110
Reduction compression joints – Al	112
Compression joints, full tension – Al	115
Compression cable lugs and connectors for Al/St cables DIN EN 50182 - Al	116
Tool application chart	118
<b>Aluminum/copper compression cable lugs and connectors</b>	<b>122</b>
Compression cable lugs - Al/Cu	124
Compression joints - Al/Cu	126
Bi-metallic washer	129
Tool application chart	130



**Clamps and screw connectors 132**

Punched cable lugs - Cu	134
Screw connectors with soldering hole - CuZn	135
Parallel groove clamps for tap off connections - Cu	137
C and H-shaped clamps - Cu	139
Screw connectors for street lighting - CuZn	141
Screw connectors, high resistant aluminum alloy	142
Compact tap connectors, high resistant aluminum alloy	147
Tool application chart	150

**Cable end-sleeves 152**

Cable end-sleeves acc. to DIN 46228, part 1 and part 2	154
Insulated cable end-sleeves acc. to DIN 46228, part 4 and similar versions	157
Insulated cable end-sleeves for short circuit resistant conductors	162
Insulated twin cable end-sleeves	162
Insulated cable end-sleeves, strips and tapes	163
Tool application chart	165

**Cable connections, insulated and non insulated 172**

Insulated terminals	174
Non-insulated receptacles	184
Flexible connectors	188
Tool application chart	193

**Assortments 196**

Assortment boxes with tubular und compression cable lugs	198
Pocket boxes with cable end-sleeves	200
Pocket boxes with insulated cable end-sleeves	201
Assortment boxes with cable end-sleeves	206
Assortment boxes with insulated cable end-sleeves	206
Assortment boxes with insulated terminals	209



*Build on our experience:  
No matter what the application,  
we guarantee safe electrical connections.“*



Torsten Selbach,  
Technical Support

# blue connection®

Simple. Safe. Efficient.

## blue connection® – because modern cables have narrower diameters

Modern compacted multi-stranded conductors are up to 15 percent thinner than comparable predecessors. At the same time, savings are often made on sheathing and insulation. Here, conventional tubular cable lugs and connectors usually have too much play - a considerable safety risk which has to date necessitated additional sleeves for compacted conductors.

Klaue has developed blue connection®, a special connection system for compacted multi-stranded conductors to VDE 0295 Class 2. Its copper tubular cable lugs and connectors are an exact fit for the new, thinner generation of conductors without any additional sleeves whatsoever. In combination with custom-made blue connection® crimping dies for Klaue's established tools, compacted conductors will in future also be crimped extremely simply, safely and efficiently.

### Conventional, uncompacted multi-stranded conductor

- Large cable diameters dictated by conductor construction
- Round single wires

### Compacted multi-stranded conductors to VDE 0295 Class 2

- Narrower cable diameter with the same conductor cross-section thanks to compacted single wires

### Compacted conductors with space-saving single wires



Uncompacted conductors with round single wires

Comparison between conventional cables and the new cable generation with up to 15% narrower conductor diameter



# Only blue fits exactly!



Cable lug



Crimping die



Tool

Cable lug with blue crimp info + blue crimping die + blue crimping tool = blue connection®

## Simply assign and crimp.

- ▶ Perfect fit on compacted conductors to VDE 0295 Class 2.
- ▶ Simple assignment of crimping tool/crimping die through colour-coding system.
- ▶ Existing tools with replaceable crimping dies can continue to be used with blue connection® products.

### Benefits:

- ▶ Crimping of compacted conductors without additional sleeves.
- ▶ No investment in new tools, only the crimping dies are replaced.



## New designation – Safely connected.

- ▶ Designated by manufacturer's designation, nominal cross-section and hole dimension.
- ▶ Crimping direction and number of crimps.
- ▶ Compact design with form radius.
- ▶ Tested to IEC 61238, part 1.

### Benefits:

- ▶ All information available at a glance.
- ▶ Bad crimps are avoided.
- ▶ Highly-stable and vibration-proof.

## Efficient: High productivity, low costs

- ▶ New crimp geometries reduce the number of crimps.
- ▶ The processing of sleeves for compacted conductors is eliminated.
- ▶ Up to 35% less material used thanks to the compact design.
- ▶ Smaller packing units.

### Benefits:

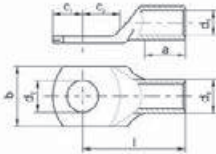
- ▶ Less time and lower cost expenditure when using the new cable lug system.
- ▶ Processing of sleeves for compacted conductors is eliminated.
- ▶ Lower material costs.
- ▶ Reducing storage costs through reduced material usage.



Tubular cable lugs, blue connection®, Cu



- ▶ For compacted multi-stranded conductors to VDE 0295 Class 2
- ▶ Accurate assignment of crimping tool/crimping die through colour-coding system
- ▶ Less crimpings due to max. crimping width
- ▶ Reduced costs due to compact dimensions



**Characteristics**

- Total cross-section: 6 - 400 mm<sup>2</sup>
- Rigid design thanks to special shaped radius
- Processing takes place without the use of additional sleeves
- Annealed material optimises material and crimping properties
- Flat contact surface and precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated

**Order info**

- Also available with inspection hole, part number appendix "ms"
- 45° angle version also available, part number appendix "45"
- 90° angle version also available, part number appendix "90"
- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	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	<b>6B5</b>	3.20	9.0	10.50	5.30	5.00	5.00	6.50	20.50	0.24	50
	M6	<b>6B6</b>	3.20	9.0	11.00	6.40	5.00	6.00	8.00	22.00	0.26	50*
	M8	<b>6B8</b>	3.20	9.0	12.50	8.40	5.00	8.00	10.00	24.00	0.29	50*
	M10	<b>6B10</b>	3.20	9.00	14.00	10.50	5.00	10.00	11.50	25.50	0.30	50
10	M5	<b>10B5</b>	4.20	9.00	11.50	5.30	6.20	5.00	6.50	21.00	0.35	50
	M6	<b>10B6</b>	4.20	9.00	12.00	6.40	6.20	6.00	8.00	22.50	0.39	50*
	M8	<b>10B8</b>	4.20	9.00	14.00	8.40	6.20	8.00	10.00	24.50	0.43	50*
16	M10	<b>10B10</b>	4.20	9.00	15.00	10.50	6.20	10.00	11.50	26.00	0.44	50
	M6	<b>16B6</b>	5.50	10.0	13.50	6.40	7.70	6.00	8.00	25.00	0.61	50*
	M8	<b>16B8</b>	5.50	10.0	15.00	8.40	7.70	8.00	10.00	27.00	0.65	50*
	M10	<b>16B10</b>	5.50	10.00	16.50	10.50	7.70	10.00	11.50	28.00	0.69	50
25	M12	<b>16B12</b>	5.50	10.00	18.50	13.00	7.70	12.00	13.00	29.50	0.72	50
	M6	<b>25B6</b>	6.60	10.0	15.00	6.40	9.00	6.00	8.00	25.50	0.81	25
	M8	<b>25B8</b>	6.60	10.0	16.00	8.40	9.00	8.00	10.00	27.50	0.88	50*
	M10	<b>25B10</b>	6.60	10.0	18.00	10.50	9.00	10.00	11.50	29.00	0.93	50*
35	M12	<b>25B12</b>	6.60	10.0	19.50	13.00	9.00	12.00	13.00	30.50	0.97	25
	M8	<b>35B8</b>	7.70	11.0	18.00	8.40	10.60	8.00	10.00	29.50	1.34	50*
	M10	<b>35B10</b>	7.70	11.0	19.50	10.50	10.60	10.00	11.50	31.00	1.42	50*
50	M12	<b>35B12</b>	7.70	11.0	21.00	13.00	10.60	12.00	13.00	32.50	1.48	25
	M8	<b>50B8</b>	9.20	11.0	19.00	8.40	12.40	8.00	10.00	31.00	1.87	25*
	M10	<b>50B10</b>	9.20	11.0	21.00	10.50	12.40	10.00	11.50	32.50	1.95	25*
	M12	<b>50B12</b>	9.20	11.0	23.00	13.00	12.40	12.00	13.00	34.00	2.05	25
70	M8	<b>70B8</b>	11.00	21.0	22.00	8.40	14.60	8.00	10.00	41.50	3.17	25
	M10	<b>70B10</b>	11.00	21.0	24.00	10.50	14.60	10.00	11.50	43.00	3.33	25*
	M12	<b>70B12</b>	11.00	21.0	25.00	13.00	14.60	12.00	13.00	44.50	3.46	25*
	M16	<b>70B16</b>	11.00	21.0	28.00	17.00	14.60	15.00	17.00	48.50	3.73	10
95	M10	<b>95B10</b>	13.00	21.0	26.00	10.50	17.00	10.00	11.50	44.50	4.55	25*
	M12	<b>95B12</b>	13.00	21.0	28.00	13.00	17.00	12.00	13.00	46.00	4.75	25*
	M16	<b>95B16</b>	13.00	21.0	30.00	17.00	17.00	15.00	17.00	50.00	5.01	10

**Tubular cable lugs, blue connection®, Cu**

Nominal cross section mm <sup>2</sup>	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	<b>120B10</b>	14.50	22.0	28.00	10.50	19.00	10.00	11.50	47.00	6.02	25*
	M12	<b>120B12</b>	14.50	22.0	29.50	13.00	19.00	12.00	13.00	48.50	6.26	25*
	M16	<b>120B16</b>	14.50	22.0	32.00	17.00	19.00	15.00	17.00	52.50	6.73	10
150	M10	<b>150B10</b>	16.20	22.0	30.00	10.50	21.00	10.00	11.50	48.50	7.41	10
	M12	<b>150B12</b>	16.20	22.0	32.00	13.00	21.00	12.00	13.00	50.00	7.71	10
	M16	<b>150B16</b>	16.20	22.0	34.00	17.00	21.00	15.00	17.00	54.00	8.25	10
	M20	<b>150B20</b>	16.20	22.0	36.50	21.00	21.00	18.50	21.00	58.00	8.84	10
185	M10	<b>185B10</b>	18.00	24.0	33.00	10.50	23.00	10.00	11.50	52.00	9.21	10
	M12	<b>185B12</b>	18.00	24.0	33.00	13.00	23.00	12.00	13.00	53.50	9.43	10
	M16	<b>185B16</b>	18.00	24.0	36.00	17.00	23.00	15.00	17.00	57.70	10.14	10
	M20	<b>185B20</b>	18.00	24.0	38.50	21.00	23.00	18.50	21.00	61.50	10.90	10
240	M12	<b>240B12</b>	20.60	24.0	38.00	13.00	26.00	12.00	13.00	56.00	12.46	10
	M16	<b>240B16</b>	20.60	24.0	38.00	17.00	26.00	15.00	17.00	60.00	13.24	10
	M20	<b>240B20</b>	20.60	24.0	41.00	21.00	26.00	18.50	21.00	64.00	14.14	10
300	M12	<b>300B12</b>	23.10	33.0	41.00	13.00	28.00	12.00	13.00	67.00	14.39	5
	M16	<b>300B16</b>	23.10	33.0	41.00	17.00	28.00	15.00	17.00	71.00	15.27	5
	M20	<b>300B20</b>	23.10	33.0	41.00	21.00	28.00	18.50	21.00	75.00	16.2	5
400	M16	<b>400B16</b>	26.10	34.0	47.00	17.00	32.00	15.00	17.00	74.50	22.16	5
	M20	<b>400B20</b>	26.10	34.0	47.00	21.00	32.00	18.50	21.00	78.50	23.36	5

- ▶ 10-300 mm<sup>2</sup> IEC tested
- ▶ \* = Also available in small handy packs
- ▶ **Tools: see chart page 29**



Butt connectors, blue connection®, Cu



- ▶ For compacted multi-stranded conductors to VDE 0295 Class 2
- ▶ Accurate assignment of crimping tool/crimping die through colour-coding system
- ▶ Less crimpings due to max. crimping width
- ▶ Reduced costs due to compact dimensions

Characteristics

- Total cross-section: 6 - 400 mm<sup>2</sup>
- Processing takes place without the use of additional sleeves
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

Material

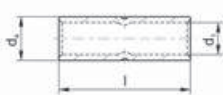
- Copper acc. to EN 13600

Surface

- Tin-plated

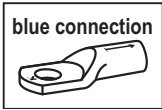
Order info

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	d4	l		
6	<b>6B</b>	3.20	5.00	25.00	0.255	50*
10	<b>10B</b>	4.20	6.20	25.00	0.360	50*
16	<b>16B</b>	5.50	7.70	27.00	0.543	50*
25	<b>25B</b>	6.60	9.00	27.00	0.699	50*
35	<b>35B</b>	7.70	10.60	28.00	1.026	50*
50	<b>50B</b>	9.20	12.40	28.00	1.334	25*
70	<b>70B</b>	11.00	14.60	48.00	3.065	25*
95	<b>95B</b>	13.00	17.00	48.00	3.987	25*
120	<b>120B</b>	14.50	19.00	50.00	5.157	25*
150	<b>150B</b>	16.20	21.00	52.00	6.379	10
185	<b>185B</b>	18.00	23.00	56.00	7.889	10
240	<b>240B</b>	20.60	26.00	58.00	10.000	10
300	<b>300B</b>	23.10	28.00	76.00	13.079	5
400	<b>400B</b>	26.10	32.00	78.00	18.453	5

- ▶ 10-300 mm<sup>2</sup> IEC tested
- ▶ \* = Also available in small handy packs
- ▶ **Tools: see chart page 29**



**■ Tool application chart**

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

Crimping range corresponds to nominal cross-section mm²	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
6-50	K05BC		•						⬡	246
6-150	K354			•					⬡	260
	EK354					•			⬡	314
	EK354L					•			⬡	316
6-240	HK60UNV	+UA5			•				⬡	354
	EK505L					•			⬡	318
	EKM60UNVL	+UA5				•			⬡	356
	EK60UNVL	+UA5				•			⬡	357
6-300	K22		•						⬡	264
	HK6022				•				⬡	288
	HK60UNV	+UA22			•				⬡	354
	EK6022L					•			⬡	324
	EKM6022L					•			⬡	322
	EKM60UNVL					•			⬡	356
	EK60UNVL					•			⬡	357
	THK22						•		⬡	364
	PK22							•	⬡	364
	PK60UNV	+UA22						•	⬡	355
10-120	K06BC		•						⬡	249
16-400	HK12030				•				⬡	292
	HK12042				•				⬡	294
	HK120U				•				⬡	296
	EK12030L					•			⬡	330
	EK12042L					•			⬡	332
	EK120UNVL					•			⬡	358
	EK120UL					•			⬡	334
	HK122EL380						•		⬡	390
	PK12042							•	⬡	368
	PK120U							•	⬡	370
25-150	K09BC		•						⬡	250

## Safe connections to Klauke standards.

### Copper tubular cable lugs and connectors for all applications.

Safe electrical connections are crucial. Power outages caused by faulty cable connections can cause severe damage. The power supply is interrupted. Production comes to a stand-still. Traffic is disrupted.

Tubular cable lugs and connectors from Klauke meet the highest quality requirements and satisfy international standards. Traditional applications are power supply, transportation, trade and industry, as well as building installation and railway technology.

We also develop and produce tailor made solutions.



- Extensive product range for low and medium-voltage applications.
- Distinct chamfer for easy entry of the conductor, burr-free edges.
- Consistent precision, high safety and rating properties thanks to high-quality pure electrolytic copper.
- Klauke coding system with manufacturer's identification, nominal cross-section and hole size.

*Klauke tubular cable lugs are suitable for practically every application that uses copper conductors.*



▶ **Make sure, when using Klauke connecting materials, that you always crimp towards the cable.**

## ■ Connections with system *for every application.*

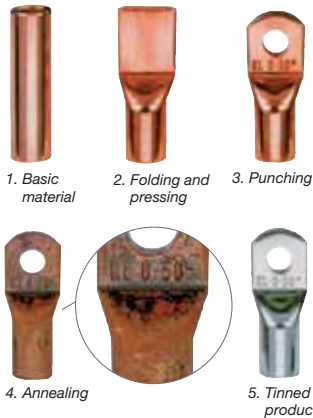


- ▶ Products to Klauke standards in various designs and shapes.
- ▶ To international standards such as IEC, UL, DNV and German Lloyd.
- ▶ Solutions for cables with compacted round conductors, cables with sector-shaped conductors and to suit individual requirements.
- ▶ Plus all corresponding manual and hydraulic crimping tools.

### Benefits:

- ▶ The right products for every installation scenario.
- ▶ **Highest flexibility for connecting cables.**
- ▶ Standards-compliance permits international application.
- ▶ **A single source for everything** – from cable lugs to tools.
- ▶ Guarantees the correct tools for professional electrical installation.

▶ *More from Page 218.*



## ■ *Pure material, special processing.*

- ▶ Klauke tubular cable lugs are made from quality E-Cu tubes. All suppliers are certified.
- ▶ Defined, unique material properties by annealing the cable lugs.

### Benefits:

- ▶ Optimised conductivity, enhanced safety and high cable lug rating thanks to high quality material.
- ▶ The **annealing of cable lugs during production** sets Klauke products apart and guarantees **outstanding installation properties**, with **minimised crimp force and less tool wear**.

## ■ *Hold even under strong and severe vibrations.*

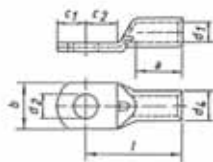
- ▶ Consistent material thickness, precise diameters and an accurate fit mean optimised processing and ultimate safety.
- ▶ Tested to DIN EN 61373 Class 1B **“Railway applications”**.

### Benefits:

- ▶ With professional installation of the correct types, optimised stability even with mechanically stressed or severely vibrating connections.
- ▶ Less repair and maintenance.
- ▶ Safe connections even under high load, e.g. in public transport services.



Tubular cable lugs, Cu, standard type



- ▶ Cable lug for fine stranded conductors to VDE 0295 Class 5
- ▶ With inspection hole for monitoring the inserted cable



Characteristics

- Total cross-section: 0.75 - 6 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Flat contact surface and precise end machining for easy cable insertion



Material

- Copper acc. to EN 13600

Surface

- Tin-plated to protect against corrosion (other surfaces available upon request)

Order info

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	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*	
2.5	M6	92R6	1.8	6	9.0	6.5	3.3	6.50	6.5	16	0.090	100	
	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	
4	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	
6	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	
6	M8	94R8	3.0	8	13.0	8.5	5.0	8.50	9.5	22	0.280	100	
	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	
6	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	

▶ \* = Also available in small handy packs

▶ Tools: see chart page 55



**Tubular cable lugs, Cu, fork type**

- ▶ For fine stranded conductors
- ▶ Fork-type version for simple and direct screw mounting
- ▶ With inspection hole for monitoring the inserted cable



**Characteristics**

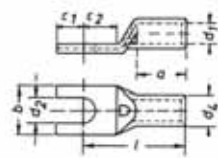
- Total cross-section: 0.75 - 16 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Flat contact surface and precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

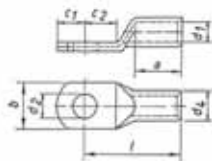
- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	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	<b>91C3</b>	1.3	6	6.0	3.2	2.8	3.25	4.0	12	0.06	100	
	M4	<b>91C4</b>	1.3	6	6.5	4.3	2.8	4.00	5.0	13	0.05	100	
	M5	<b>91C5</b>	1.3	6	7.5	5.3	2.8	4.75	5.5	14	0.06	100	
1.5	M3	<b>92C3</b>	1.8	6	6.5	3.2	3.3	3.25	4.0	12	0.07	100	
	M4	<b>92C4</b>	1.8	6	6.5	4.3	3.3	4.00	5.0	13	0.07	100	
	M5	<b>92C5</b>	1.8	6	7.5	5.3	3.3	4.75	5.5	14	0.07	100	
2.5	M6	<b>92C6</b>	1.8	6	9.0	6.5	3.3	6.50	6.5	16	0.08	100	
	M3	<b>93C3</b>	2.3	6	7.5	3.2	4.2	3.25	4.0	12	0.12	100	
	M4	<b>93C4</b>	2.3	6	7.5	4.3	4.2	4.00	5.0	13	0.11	100	
4	M5	<b>93C5</b>	2.3	6	8.5	5.3	4.2	4.75	5.5	14	0.12	100	
	M6	<b>93C6</b>	2.3	6	9.5	6.5	4.2	6.50	6.5	16	0.10	100	
	M4	<b>94C4</b>	3.0	8	8.5	4.3	5.0	4.75	5.5	17	0.19	100	
6	M5	<b>94C5</b>	3.0	8	9.0	5.3	5.0	4.75	6.0	17	0.19	100	
	M6	<b>94C6</b>	3.0	8	10.0	6.5	5.0	6.50	6.5	19	0.21	100	
	M8	<b>94C8</b>	3.0	8	13.0	8.5	5.0	8.50	9.5	22	0.24	100	
10	M4	<b>95C4</b>	4.0	9	9.5	4.3	6.0	5.00	5.5	18	0.27	100	
	M5	<b>95C5</b>	4.0	9	9.5	5.3	6.0	6.00	6.0	19	0.32	100	
	M6	<b>95C6</b>	4.0	9	10.0	6.5	6.0	7.00	6.5	19	0.27	100	
16	M8	<b>95C8</b>	4.0	9	14.0	8.5	6.0	8.50	9.0	22	0.31	100	
	M5	<b>96C5</b>	4.5	10	12.0	5.5	7.0	6.50	7.5	22	0.45	100	
	M6	<b>96C6</b>	4.5	10	12.0	6.5	7.0	6.50	7.5	22	0.41	100	
16	M8	<b>96C8</b>	4.5	10	15.0	8.5	7.0	10.00	10.0	25	0.52	100	
	M5	<b>97C5</b>	5.5	13	12.0	5.5	8.5	5.50	6.5	26	0.81	100	
	M6	<b>97C6</b>	5.5	13	12.0	6.5	8.5	6.25	7.5	27	0.81	100	
	M8	<b>97C8</b>	5.5	13	15.0	8.5	8.5	8.50	9.5	29	0.90	100	

▶ Tools: see chart page 55

Tubular cable lugs, Cu, standard type



- ▶ Ideal cable lug for panel building
- ▶ For multi-stranded round shaped conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors

**Characteristics**

- Total cross-section: 6 - 400 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Flat contact surface and precise end machining for easy cable insertion
- Item identification on cable lug
- Acc. to DIN EN 61373 class 1 B approved to vibration

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Also available with inspection hole, part number appendix "ms"
- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	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
35	M14	4R14	7.0	15	21	15.0	10.0	14.50	14.5	38	1.49	25
	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
50	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
	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

**Tubular cable lugs, Cu, standard type**

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	c2	l		
50	M14	<b>6R14</b>	10.0	19	23	15.0	14.0	14.50	14.5	45	3.32	25
	M16	<b>6R16</b>	10.0	19	28	17.0	14.0	16.00	16.0	46	3.38	25
	M20	<b>6R20</b>	10.0	19	30	21.0	14.0	19.00	19.0	48	3.46	25
70	M6	<b>7R6</b>	12.0	21	23	6.5	16.5	10.00	10.0	43	4.49	25
	M8	<b>7R8</b>	12.0	21	23	8.5	16.5	10.00	10.0	43	4.38	50
	M10	<b>7R10</b>	12.0	21	23	10.5	16.5	12.00	12.0	44	4.54	50*
	M12	<b>7R12</b>	12.0	21	23	13.0	16.5	13.00	13.0	46	4.63	50
	M14	<b>7R14</b>	12.0	21	23	15.0	16.5	14.50	14.5	48	4.76	25
	M16	<b>7R16</b>	12.0	21	28	17.0	16.5	16.00	16.0	50	4.24	25
	M20	<b>7R20</b>	12.0	21	30	21.0	16.5	19.00	19.0	53	5.09	25
95	M8	<b>8R8</b>	13.5	25	26	8.5	18.0	12.00	12.0	48	5.44	25
	M10	<b>8R10</b>	13.5	25	26	10.5	18.0	12.00	12.0	48	5.40	50*
	M12	<b>8R12</b>	13.5	25	26	13.0	18.0	13.00	13.0	49	5.56	50
	M14	<b>8R14</b>	13.5	25	26	15.0	18.0	14.50	14.5	51	5.62	25
	M16	<b>8R16</b>	13.5	25	28	17.0	18.0	16.00	16.0	54	5.82	50
	M20	<b>8R20</b>	13.5	25	36	21.0	18.0	22.00	22.0	60	6.71	25
	M8	<b>9R8</b>	15.0	26	28	8.5	19.5	14.00	14.0	51	6.72	25
120	M10	<b>9R10</b>	15.0	26	28	10.5	19.5	14.00	14.0	51	6.57	50
	M12	<b>9R12</b>	15.0	26	28	13.0	19.5	14.00	14.0	51	6.38	50*
	M14	<b>9R14</b>	15.0	26	28	15.0	19.5	15.00	15.0	52	6.45	25
	M16	<b>9R16</b>	15.0	26	30	17.0	19.5	16.00	16.0	54	6.51	50
	M20	<b>9R20</b>	15.0	26	36	21.0	19.5	22.00	22.0	63	7.74	25
150	M8	<b>10R8</b>	16.5	30	31	8.5	21.0	14.00	14.0	56	7.78	10
	M10	<b>10R10</b>	16.5	30	31	10.5	21.0	14.00	14.0	56	7.62	10
	M12	<b>10R12</b>	16.5	30	31	13.0	21.0	15.00	15.0	57	7.73	25
	M14	<b>10R14</b>	16.5	30	31	15.0	21.0	15.00	15.0	57	7.64	10
	M16	<b>10R16</b>	16.5	30	31	17.0	21.0	16.00	16.0	58	7.53	10
	M20	<b>10R20</b>	16.5	30	36	21.0	21.0	22.00	22.0	66	8.80	10
	M10	<b>11R10</b>	19.0	30	35	10.5	24.0	18.00	18.0	65	11.75	10
185	M12	<b>11R12</b>	19.0	30	35	13.0	24.0	18.00	18.0	65	11.82	10
	M14	<b>11R14</b>	19.0	30	35	15.0	24.0	18.00	18.0	65	11.39	10
	M16	<b>11R16</b>	19.0	30	35	17.0	24.0	18.00	18.0	65	11.24	25
	M20	<b>11R20</b>	19.0	30	39	21.0	24.0	22.00	22.0	69	12.00	10
240	M10	<b>12R10</b>	21.0	35	39	10.5	26.0	21.50	19.0	72	14.72	10
	M12	<b>12R12</b>	21.0	35	39	13.0	26.0	21.50	19.0	72	14.55	10
	M14	<b>12R14</b>	21.0	35	39	15.0	26.0	21.50	19.0	72	14.24	10
	M16	<b>12R16</b>	21.0	35	39	17.0	26.0	21.50	19.0	72	14.09	25
	M20	<b>12R20</b>	21.0	35	39	21.0	26.0	21.50	19.0	72	13.60	10
	M12	<b>13R12</b>	23.5	44	43	13.0	29.5	24.00	24.0	87	23.33	5
300	M14	<b>13R14</b>	23.5	44	43	15.0	29.5	24.00	24.0	87	23.14	5
	M16	<b>13R16</b>	23.5	44	43	17.0	29.5	24.00	24.0	87	22.74	5
	M20	<b>13R20</b>	23.5	44	43	21.0	29.5	24.00	24.0	87	22.19	5
400	M12	<b>14R12</b>	27.0	44	49	13.0	34.0	24.00	24.0	90	32.41	5
	M14	<b>14R14</b>	27.0	44	49	15.0	34.0	24.00	24.0	90	32.24	5
	M16	<b>14R16</b>	27.0	44	49	17.0	34.0	24.00	24.0	90	31.98	5
	M20	<b>14R20</b>	27.0	44	49	21.0	34.0	24.00	24.0	90	31.41	5

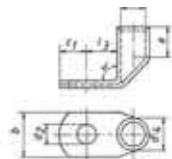
▶ 10-400 mm<sup>2</sup> IEC tested

▶ \* = Also available in small handy packs

● Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ Tools: see chart page 55

**Angle tubular cable lugs, copper, 90° angled, standard type**



- ▶ For multi-stranded round shaped conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Flat contact surface by special angle punching technology

**Characteristics**

- Total cross-section: 6 - 400 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Also available with inspection hole, part number appendix "ms"

Nominal cross section mm <sup>2</sup>	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
35	M14	44R14	7.0	15	21	15.0	10.0	14.5	20	1.55	25
	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
50	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
	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

**Angle tubular cable lugs, copper, 90° angled, standard type**

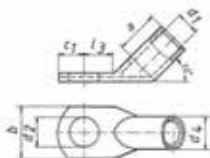
Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/ pcs	
			d1	a	b	d2	d4	c1	l3			
70	M6	<b>47R6</b>	12.0	21	23	6.5	16.5	10.0	13	4.90	25	
	M8	<b>47R8</b>	12.0	21	23	8.5	16.5	10.0	14	4.80	25	
	M10	<b>47R10</b>	12.0	21	23	10.5	16.5	12.0	16	4.88	25	
	M12	<b>47R12</b>	12.0	21	23	13.0	16.5	13.0	18	4.99	25	
	M14	<b>47R14</b>	12.0	21	23	15.0	16.5	14.5	20	5.38	25	
	M16	<b>47R16</b>	12.0	21	28	17.0	16.5	16.0	22	5.35	25	
95	M20	<b>47R20</b>	12.0	21	30	21.0	16.5	19.0	24	5.30	25	
	M8	<b>48R8</b>	13.5	25	26	8.5	18.0	12.0	14	5.89	25	
	M10	<b>48R10</b>	13.5	25	26	10.5	18.0	12.0	17	5.88	25	
	M12	<b>48R12</b>	13.5	25	26	13.0	18.0	13.0	18	5.93	25	
	M14	<b>48R14</b>	13.5	25	26	15.0	18.0	14.5	20	6.03	25	
	M16	<b>48R16</b>	13.5	25	28	17.0	18.0	16.0	22	6.17	25	
120	M20	<b>48R20</b>	13.5	25	36	21.0	18.0	22.0	24	6.42	25	
	M8	<b>49R8</b>	15.0	26	28	8.5	19.5	14.0	16	7.26	10	
	M10	<b>49R10</b>	15.0	26	28	10.5	19.5	14.0	17	7.30	10	
	M12	<b>49R12</b>	15.0	26	28	13.0	19.5	14.0	18	7.19	10	
	M14	<b>49R14</b>	15.0	26	28	15.0	19.5	15.0	20	7.30	10	
	M16	<b>49R16</b>	15.0	26	30	17.0	19.5	16.0	22	7.35	10	
150	M20	<b>49R20</b>	15.0	26	36	21.0	19.5	22.0	24	7.60	10	
	M8	<b>50R8</b>	16.5	30	31	8.5	21.0	14.0	16	8.41	10	
	M10	<b>50R10</b>	16.5	30	31	10.5	21.0	14.0	17	8.27	10	
	M12	<b>50R12</b>	16.5	30	31	13.0	21.0	15.0	18	8.34	10	
	M14	<b>50R14</b>	16.5	30	31	15.0	21.0	15.0	20	8.52	10	
	M16	<b>50R16</b>	16.5	30	31	17.0	21.0	16.0	22	8.62	10	
185	M20	<b>50R20</b>	16.5	30	36	21.0	21.0	22.0	24	9.10	10	
	M10	<b>51R10</b>	19.0	30	35	10.5	24.0	18.0	22	12.17	10	
	M12	<b>51R12</b>	19.0	30	35	13.0	24.0	18.0	22	11.97	10	
	M14	<b>51R14</b>	19.0	30	35	15.0	24.0	18.0	22	11.77	10	
	M16	<b>51R16</b>	19.0	30	35	17.0	24.0	18.0	22	11.53	10	
	M20	<b>51R20</b>	19.0	30	39	21.0	24.0	22.0	24	12.00	10	
240	M10	<b>52R10</b>	21.0	35	39	10.5	26.0	21.5	22	15.60	10	
	M12	<b>52R12</b>	21.0	35	39	13.0	26.0	21.5	22	15.60	10	
	M14	<b>52R14</b>	21.0	35	39	15.0	26.0	21.5	22	15.41	10	
	M16	<b>52R16</b>	21.0	35	39	17.0	26.0	21.5	22	15.18	10	
	M20	<b>52R20</b>	21.0	35	39	21.0	26.0	21.5	24	14.80	10	
	300	M12	<b>53R12</b>	23.5	44	43	13.0	29.5	24.0	24	23.60	5
M14		<b>53R14</b>	23.5	44	43	15.0	29.5	24.0	24	23.40	5	
M16		<b>53R16</b>	23.5	44	43	17.0	29.5	24.0	24	20.99	5	
M20		<b>53R20</b>	23.5	44	43	21.0	29.5	24.0	24	22.70	5	
400		M12	<b>54R12</b>	27.0	44	49	13.0	34.0	24.0	24	32.53	5
		M14	<b>54R14</b>	27.0	44	49	15.0	34.0	24.0	24	33.40	5
	M16	<b>54R16</b>	27.0	44	49	17.0	34.0	24.0	24	32.60	5	
	M20	<b>54R20</b>	27.0	44	49	21.0	34.0	24.0	24	31.80	5	

▶ 10-400 mm<sup>2</sup> IEC tested

🔸 Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ **Tools: see chart page 55**

Angle tubular cable lugs, copper, 45° angled, standard type



- ▶ For multi-stranded round shaped conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Flat contact surface by special angle punching technology



**Characteristics**

- Total cross-section: 6 - 400 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion



**Material**

- Copper acc. to EN 13600



**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Also available with inspection hole, part number appendix "ms"

Nominal cross section mm <sup>2</sup>	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
35	M14	44R1445	7.0	15	21	15.0	10.0	14.5	20	1.55	25
	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
50	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
	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
50	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

**Angle tubular cable lugs, copper, 45° angled, standard type**

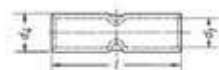
Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	l3		
50	M20	<b>46R2045</b>	10.0	19	30	21.0	14.0	19.0	24	3.30	25
	M6	<b>47R645</b>	12.0	21	23	6.5	16.5	10.0	13	5.06	25
	M8	<b>47R845</b>	12.0	21	23	8.5	16.5	10.0	14	5.06	25
70	M10	<b>47R1045</b>	12.0	21	23	10.5	16.5	12.0	16	5.25	25
	M12	<b>47R1245</b>	12.0	21	23	13.0	16.5	13.0	18	5.30	25
	M14	<b>47R1445</b>	12.0	21	23	15.0	16.5	14.5	20	5.60	25
	M16	<b>47R1645</b>	12.0	21	28	17.0	16.5	16.0	22	5.61	25
	M20	<b>47R2045</b>	12.0	21	30	21.0	16.5	19.0	24	5.60	25
95	M8	<b>48R845</b>	13.5	25	26	8.5	18.0	12.0	14	6.19	25
	M10	<b>48R1045</b>	13.5	25	26	10.5	18.0	12.0	17	5.70	25
	M12	<b>48R1245</b>	13.5	25	26	13.0	18.0	13.0	18	6.67	25
	M14	<b>48R1445</b>	13.5	25	26	15.0	18.0	14.5	20	6.60	25
	M16	<b>48R1645</b>	13.5	25	28	17.0	18.0	16.0	22	6.78	25
	M20	<b>48R2045</b>	13.5	25	36	21.0	18.0	22.0	24	6.80	25
120	M8	<b>49R845</b>	15.0	26	28	8.5	19.5	14.0	16	7.92	10
	M10	<b>49R1045</b>	15.0	26	28	10.5	19.5	14.0	17	7.99	10
	M12	<b>49R1245</b>	15.0	26	28	13.0	19.5	14.0	18	7.96	10
	M14	<b>49R1445</b>	15.0	26	28	15.0	19.5	15.0	20	7.94	10
	M16	<b>49R1645</b>	15.0	26	30	17.0	19.5	16.0	22	8.26	10
	M20	<b>49R2045</b>	15.0	26	36	21.0	19.5	22.0	24	8.20	10
150	M8	<b>50R845</b>	16.5	30	31	8.5	21.0	14.0	16	9.00	10
	M10	<b>50R1045</b>	16.5	30	31	10.5	21.0	14.0	17	9.15	10
	M12	<b>50R1245</b>	16.5	30	31	13.0	21.0	15.0	18	8.75	10
	M14	<b>50R1445</b>	16.5	30	31	15.0	21.0	15.0	20	9.20	10
	M16	<b>50R1645</b>	16.5	30	31	17.0	21.0	16.0	22	9.22	10
	M20	<b>50R2045</b>	16.5	30	36	21.0	21.0	22.0	24	9.26	10
185	M10	<b>51R1045</b>	19.0	30	35	10.5	24.0	18.0	22	13.30	10
	M12	<b>51R1245</b>	19.0	30	35	13.0	24.0	18.0	22	13.32	10
	M14	<b>51R1445</b>	19.0	30	35	15.0	24.0	18.0	22	13.40	10
	M16	<b>51R1645</b>	19.0	30	35	17.0	24.0	18.0	22	12.80	10
	M20	<b>51R2045</b>	19.0	30	39	21.0	24.0	22.0	24	13.10	10
240	M10	<b>52R1045</b>	21.0	35	39	10.5	26.0	21.5	22	16.28	10
	M12	<b>52R1245</b>	21.0	35	39	13.0	26.0	21.5	22	16.80	10
	M14	<b>52R1445</b>	21.0	35	39	15.0	26.0	21.5	22	16.40	10
	M16	<b>52R1645</b>	21.0	35	39	17.0	26.0	21.5	22	16.10	10
	M20	<b>52R2045</b>	21.0	35	39	21.0	26.0	21.5	24	16.10	10
300	M12	<b>53R1245</b>	23.5	44	43	13.0	29.5	24.0	24	24.08	5
	M14	<b>53R1445</b>	23.5	44	43	15.0	29.5	24.0	24	24.20	5
	M16	<b>53R1645</b>	23.5	44	43	17.0	29.5	24.0	24	23.23	5
	M20	<b>53R2045</b>	23.5	44	43	21.0	29.5	24.0	24	23.50	5
400	M12	<b>54R1245</b>	27.0	44	49	13.0	34.0	24.0	24	34.00	5
	M14	<b>54R1445</b>	27.0	44	49	15.0	34.0	24.0	24	33.40	5
	M16	<b>54R1645</b>	27.0	44	49	17.0	34.0	24.0	24	34.28	5
	M20	<b>54R2045</b>	27.0	44	49	21.0	34.0	24.0	24	31.80	5

▶ 10-400 mm<sup>2</sup> IEC tested

▶ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ Tools: see chart page 55

Butt connectors, Cu, standard type



- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Precise end machining for easy cable insertion

**Characteristics**

- Total cross-section: 0.75 - 400 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Also available without buttmarks, part number appendix "om"
- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	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

▶ 10-400 mm<sup>2</sup> IEC tested

▶ \* = Also available in small handy packs

🔗 Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ **Tools: see chart page 55**



**Parallel connectors, Cu, standard type**

- ▶ Ideal for connecting differing cable cross-sections
- ▶ Precise end machining for easy cable insertion



**Characteristics**

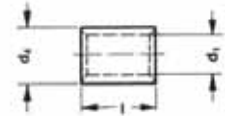
- Total cross-section: 1.5 - 300 mm<sup>2</sup>
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

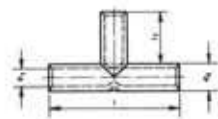


Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	d4	l		
1.5	148R	1.8	3.3	5	0.03	100
2.5	149R	2.3	4.2	5	0.04	100
4	150R	3.0	5.0	7	0.08	100
6	151R	4.0	6.0	7	0.09	100
10	152R	4.5	7.0	9	0.17	100
16	153R	5.5	8.5	10	0.28	100
25	154R	7.0	10.0	13	0.44	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

▶ The specified nominal cross section is in accordance with the total cross section of the cable.

▶ **Tools: see chart page 55**

T-connectors, Cu, standard type



- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Special version for cable tap conductors

**Characteristics**

- Total cross-section: 1.5 - 240 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	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

ⓘ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ **Tools: see chart page 55**

**Cross-connectors, Cu, standard type**

- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Version for double cable tap conductors



**Characteristics**

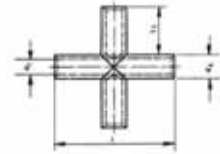
- Total cross-section: 1.5 - 240 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm				Weight/100 pcs. ~ kg	Packing unit/pcs
		d1	d4	l	l1		
1.5	<b>KV15</b>	1.8	3.3	30	12	0.320	25
2.5	<b>KV2.5</b>	2.3	4.2	30	12	0.490	25
4	<b>KV4</b>	3.0	5.0	30	12	0.650	25
6	<b>KV6</b>	4.0	6.0	35	14	0.950	25
10	<b>KV10</b>	4.5	7.0	35	14	1.350	25
16	<b>KV16</b>	5.5	8.5	50	21	2.950	25
25	<b>KV25</b>	7.0	10.0	55	23	4.000	15
35	<b>KV35</b>	8.5	12.0	70	30	6.900	15
50	<b>KV50</b>	10.0	14.0	80	34	10.400	15
70	<b>KV70</b>	12.0	16.5	85	35	14.600	15
95	<b>KV95</b>	13.5	18.0	90	36	17.100	15
120	<b>KV120</b>	15.0	19.5	95	38	19.400	5
150	<b>KV150</b>	16.5	21.0	110	44	24.100	5
185	<b>KV185</b>	19.0	24.0	115	45	32.100	5
240	<b>KV240</b>	21.0	26.0	130	52	41.100	5

ⓘ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ **Tools: see chart page 55**

Insulated tubular cable lugs, Cu, standard type



- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ No additional insulation of the crimped connection required

Characteristics

- Total cross-section: 10 - 150 mm²
- Is directly crimped with the insulation
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion
- Heat resistant to 105° C

Material

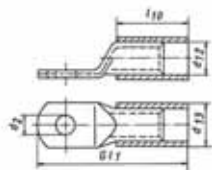
- Cable lug: Copper acc. to EN 13600
- Insulation sleeve: PA, halogen-free

Surface

- Tin-plated

Order info

- Also available with inspection hole, part number appendix "ms"



Nominal cross section mm²	Size of bolt dia.	Part No.	Colour	Dimension mm						Weight 100 pcs. ~kg		Packing unit/ pcs
				d12	d13	d2	G11	l10	Cu	Total		
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	
35	M14	604R14	Yellow	10.0	12.0	15.0	61.5	24.0	1.49	1.582	25	
	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	
50	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	
	M6	606R6	Blue	14.0	16.5	6.5	59.0	32.0	3.00	3.220	25	
	M8	606R8	Blue	14.0	16.5	8.5	59.0	32.0	2.93	3.150	25	
	M10	606R10	Blue	14.0	16.5	10.5	63.0	32.0	3.08	3.300	25	
	M12	606R12	Blue	14.0	16.5	13.0	68.0	32.0	3.23	3.450	25	
	M14	606R14	Blue	14.0	16.5	15.0	71.5	32.0	3.32	3.540	25	
	M16	606R16	Blue	14.0	16.5	17.0	77.0	32.0	3.38	3.600	25	
	M20	606R20	Blue	14.0	16.5	21.0	83.5	32.0	3.46	3.680	25	

**Insulated tubular cable lugs, Cu, standard type**

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Colour	Dimension mm					Weight 100 pcs. ~kg		Packing unit/ pcs
				d12	d13	d2	G1	I10	Cu	Total	
70	M6	607R6	Yellow	16.4	18.9	6.5	65.5	33.5	4.49	4.760	25
	M8	607R8	Yellow	16.4	18.9	8.5	65.5	33.5	4.38	4.650	25
	M10	607R10	Yellow	16.4	18.9	10.5	66.5	33.5	4.54	4.810	25
	M12	607R12	Yellow	16.4	18.9	13.0	70.5	33.5	4.63	4.900	25
	M14	607R14	Yellow	16.4	18.9	15.0	73.5	33.5	4.76	5.030	25
	M16	607R16	Yellow	16.4	18.9	17.0	78.5	33.5	4.24	4.510	25
95	M20	607R20	Yellow	16.4	18.9	21.0	84.5	33.5	5.09	5.360	25
	M8	608R8	Red	17.8	20.8	8.5	74.0	40.0	5.44	5.85	25
	M10	608R10	Red	17.8	20.8	10.5	74.0	40.0	5.40	5.81	25
	M12	608R12	Red	17.8	20.8	13.0	76.0	40.0	5.56	5.97	25
	M14	608R14	Red	17.8	20.8	15.0	79.5	40.0	5.62	6.03	25
	M16	608R16	Red	17.8	20.8	17.0	84.0	40.0	5.82	6.23	25
120	M20	608R20	Red	17.8	20.8	21.0	96.0	40.0	6.71	7.12	25
	M8	609R8	Blue	19.3	22.3	8.5	80.5	41.5	6.72	7.18	10
	M10	609R10	Blue	19.3	22.3	10.5	80.5	41.5	6.57	7.03	10
	M12	609R12	Blue	19.3	22.3	13.0	80.5	41.5	6.38	6.84	10
	M14	609R14	Blue	19.3	22.3	15.0	82.5	41.5	6.45	6.91	10
	M16	609R16	Blue	19.3	22.3	17.0	85.5	41.5	6.51	6.97	10
150	M20	609R20	Blue	19.3	22.3	21.0	100.5	41.5	7.74	8.20	10
	M8	610R8	Yellow	20.8	23.8	8.5	88.0	48.0	7.78	8.36	10
	M10	610R10	Yellow	20.8	23.8	10.5	88.0	48.0	7.62	8.20	10
	M12	610R12	Yellow	20.8	23.8	13.0	89.0	48.0	7.73	8.31	10
	M14	610R14	Yellow	20.8	23.8	15.0	90.0	48.0	7.64	8.22	10
	M16	610R16	Yellow	20.8	23.8	17.0	92.0	48.0	7.53	8.11	10
M20	610R20	Yellow	20.8	23.8	21.0	106.0	48.0	8.80	9.38	10	

① Dimensions of tubular cable lugs can be found on page 34 and onwards

② Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

► **Tools: see chart page 57**

Insulated butt connectors, Cu, standard type



- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ No additional insulation of the crimped connection required
- ▶ Is directly crimped with the insulation

Characteristics

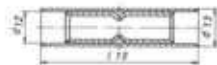
- Total cross-section: 10 - 150 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion
- Heat resistant to 105° C

Material

- Connector: copper acc. to EN 13600
- Insulation sleeve: PA, halogen-free

Surface

- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm			Weight 100 pcs. ~kg		Packing unit/pcs
			d12	d13	l10	Cu	Total	
10	622R	Red	7.0	9.0	42	0.72	0.84	25
16	623R	Blue	8.5	10.5	50	1.00	1.16	25
25	624R	Yellow	10.0	12.0	57	1.41	1.63	25
35	625R	Red	12.0	14.4	65	2.24	2.60	25
50	626R	Blue	14.0	16.4	72	3.36	3.81	25
70	627R	Yellow	16.4	19.0	80	4.87	5.46	25
95	628R	Red	17.8	20.8	87	5.91	6.74	25
120	629R	Blue	19.3	22.3	94	7.00	7.96	10
150	630R	Yellow	20.8	23.8	103	8.12	9.32	10

① Dimensions of butt connectors can be found on page 40

② Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

▶ Tools: see chart page 57

**Tubular cable lugs, Cu, F-series**

- ▶ For fine stranded conductors, DIN EN 60228 (e.g. VDE 0295 Class 5 and 6)
- ▶ Tube dimensions suitable for fine stranded conductors
- ▶ Precise end machining and easy entry for cable insertion



**Characteristics**

- Total cross-section: 10 - 300 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Acc. to DIN EN 61373 class 1 B approved to vibration

**Material**

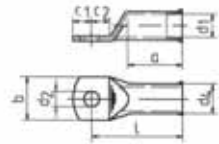
- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Also available with inspection hole, part number appendix "ms"



Nominal cross section mm <sup>2</sup>	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
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
	M8	708F8	14.5	26	28	8.5	19.0	12.00	12.0	52	6.35	25
95	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

**Tubular cable lugs, Cu, F-series**

Nominal cross section mm <sup>2</sup>	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	<b>709F10</b>	16.2	30	30	10.5	21.0	14.00	14.0	57	8.31	50
	M12	<b>709F12</b>	16.2	30	30	13.0	21.0	15.00	15.0	58	8.39	50
	M14	<b>709F14</b>	16.2	30	30	15.0	21.0	15.00	15.0	58	8.06	25
	M16	<b>709F16</b>	16.2	30	30	17.0	21.0	16.00	16.0	59	8.17	50
	M20	<b>709F20</b>	16.2	30	36	21.0	21.0	22.00	22.0	66	9.56	25
150	M10	<b>710F10</b>	18.0	32	34	10.5	23.0	15.00	16.0	64	10.91	10
	M12	<b>710F12</b>	18.0	32	34	13.0	23.0	16.00	17.0	65	10.89	25
	M14	<b>710F14</b>	18.0	32	34	15.0	23.0	18.00	19.0	67	11.42	10
	M16	<b>710F16</b>	18.0	32	34	17.0	23.0	19.00	20.0	68	11.30	10
	M20	<b>710F20</b>	18.0	32	40	21.0	23.0	21.00	22.0	70	11.36	10
185	M12	<b>711F12</b>	20.6	35	39	13.0	26.0	21.50	19.0	72	15.40	10
	M14	<b>711F14</b>	20.6	35	39	15.0	26.0	21.50	19.0	72	15.20	10
	M16	<b>711F16</b>	20.6	35	39	17.0	26.0	21.50	19.0	72	15.00	25
	M20	<b>711F20</b>	20.6	35	39	21.0	26.0	21.50	19.0	72	14.20	10
	240	M10	<b>712F10</b>	23.1	44	41	10.5	28.0	16.00	17.0	80	16.50
M12		<b>712F12</b>	23.1	44	41	13.0	28.0	16.00	17.0	80	16.30	10
M14		<b>712F14</b>	23.1	44	41	15.0	28.0	19.00	20.0	83	16.80	10
M16		<b>712F16</b>	23.1	44	41	17.0	28.0	19.00	20.0	83	16.71	25
M20		<b>712F20</b>	23.1	44	41	21.0	28.0	21.00	22.0	85	17.12	10
300	M12	<b>713F12</b>	26.1	44	47	13.0	32.0	19.00	22.0	96	25.60	5
	M14	<b>713F14</b>	26.1	44	47	15.0	32.0	19.00	22.0	96	26.56	5
	M16	<b>713F16</b>	26.1	44	47	17.0	32.0	19.00	22.0	96	25.60	5
	M20	<b>713F20</b>	26.1	44	47	21.0	32.0	22.00	22.0	96	26.24	5

► Tools: see chart page 58



**Angle tubular cable lugs, Cu, 90° angled, F-series**

- ▶ For fine stranded conductors, DIN EN 60228 (e.g. VDE 0295 Class 5 and 6)
- ▶ Precise end machining and easy entry for cable insertion
- ▶ Flat contact surface by special angle punching technology



**Characteristics**

- Total cross-section: 10 - 240 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Tube dimensions suitable for fine stranded conductors

**Material**

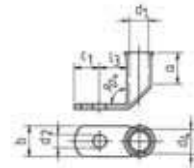
- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- 45° angle version also available, part number appendix "45"
- Also available with inspection hole, part number appendix "ms"



Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/ pcs
			d1	a	b	d2	d4	c1	min. for I3		
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
70	M16	746F16	11.0	21	28	17.0	15.0	16.00	16.0	4.35	25
	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
95	M16	747F16	13.0	25	25	17.0	17.0	16.00	16.0	6.50	25
	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

Angle tubular cable lugs, Cu, 90° angled, F-series

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/ pcs
			d1	a	b	d2	d4	c1	min. for l3		
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

► Tools: see chart page 58

Butt connectors, Cu, F-series



- For fine stranded conductors, DIN EN 60228 (e.g. VDE 0295 Class 5 and 6)
- Precise end machining and easy entry for cable insertion



Characteristics

- Total cross-section: 10 - 185 mm<sup>2</sup>
- With butmarks for precise cable insertion
- Annealed material optimises material and crimping properties
- Tube dimensions suitable for fine stranded conductors

Material

- Copper acc. to EN 13600

Surface

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	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

► Tools: see chart page 58

**Tubular cable lugs, Cu, for solid conductors**

▶ For solid conductors e.g. VDE 0295 Class 1



**Characteristics**

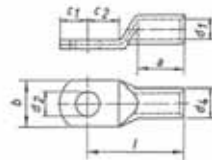
- Total cross-section: 6 - 50 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Flat contact surface by special punching technology
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Dimension mm									Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	a	b	d2	d4	c1	c2	l	d3		
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	M6	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	

▶ Tools: see chart page 60

Butt connectors, Cu, for solid conductors



- ▶ For solid conductors e.g. VDE 0295 Class 1
- ▶ Tube dimensions suitable for solid conductors

**Characteristics**

- Total cross-section: 1.5 - 50 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm				Wire dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	d4	l				
1.5-2.5	SV1525	1.9	3.9	25		1.38/1.78	0.210	100
4	SV4	2.4	4.4	25		2.25	0.240	100
6	SV6	3.0	5.0	25		2.75	0.275	100
10	SV10	4.0	6.0	25		3.55	0.350	100
16	SV16	5.0	8.0	35		4.5	0.960	100
25	SV25	6.2	10.0	40		5.65	1.700	50
35	SV35	7.0	10.0	40		6.7	1.420	50
50	SV50	8.5	12.0	70		8	3.550	50

▶ Tools: see chart page 60

T-connectors, Cu, for solid conductors



- ▶ For solid conductors e.g. VDE 0295 Class 1
- ▶ Special version for cable tap conductors

**Characteristics**

- Total cross-section: 1.5 - 50 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm				Wire dia. 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

▶ Tools: see chart page 60

**Cross connectors, Cu, for solid conductors**

- ▶ For solid conductors e.g. VDE 0295 Class 1
- ▶ Special version for double cable tap conductors



**Characteristics**

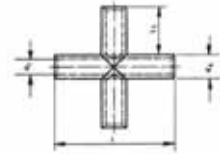
- Total cross-section: 1.5 - 50 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

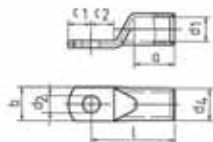
- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm					Wire Ø mm	Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	d4	l	l1				
1.5-2.5	<b>SKV1525</b>	1.9	3.9	30	12		1.38/1.78	0.47	25
4	<b>SKV4</b>	2.4	4.4	30	12		2.25	0.56	25
6	<b>SKV6</b>	3.0	5.0	30	12		2.75	0.67	25
10	<b>SKV10</b>	4.0	6.0	35	14		3.55	0.92	25
16	<b>SKV16</b>	5.0	8.0	35	14		4.5	1.86	25
25	<b>SKV25</b>	6.2	10.0	50	21		5.65	4.20	15
35	<b>SKV35</b>	7.0	10.0	55	23		6.7	3.80	15
50	<b>SKV50</b>	8.5	12.0	76	32		8	7.35	15

▶ **Tools: see chart page 60**

Tubular cable lugs for switch gear connections, standard type



- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ For assembly in switch cabinets with reduced connecting space
- ▶ Narrow version owed to new manufacturing processes without material loss



**Characteristics**

- Total cross-section: 35 - 300 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Flat contact surface by special punching technology
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

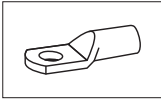
**Order info**

- Also available with inspection hole, part number appendix "ms"

Nominal cross section mm <sup>2</sup>	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	
	M6	6SG6	10.0	19	15.0	6.5	14.0	10.0	10.0	37	2.95	25	
50	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	

▶ **Tools: see chart page 55**

🔗 Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"



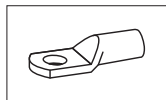
**■ Tool application chart**

**Tubular cable lugs, butt connectors, parallel connectors and T-connectors "standard type" and tubular cable lugs for switchgear connections made from Cu**

Crimping range corresponds to nominal cross-section mm²	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.5-6	K13		•							240
0.75-2.5	KP1	+KP232		•						256
	KP1L	+KP232		•						256
	EKP1	+KP232				•				312
	TEKP1	+KP232		•						281
	KPM15	+KP232		•						282
0.75-10	K50			•						259
	EK50ML			•						278
	EK1550					•				308
	EK1550G					•				310
0.75-16	K2		•						241	
1-4	K511		•						252	
4-10	KP1	+KP242		•						256
	KP1L	+KP242		•						256
	EKP1	+KP242				•				312
	TEKP1	+KP242		•						281
	KPM15	+KP242		•						282
6-50	K5		•							243
	K05		•							247
6+10	K512		•						252	
6-150	K354			•						260
	EK354					•				314
	EK354L					•				316
6-185	K18			•						262
	HK6018				•					286
	EK5018L					•				320
	PK18						•			362
	THK18						•			362
	HK60UNV	+ UA18			•					354
	EK60UNVL	+ UA18				•				357
	EKM60UNVL	+ UA18				•				356
PK60UNV	+ UA18						•		355	
6-240	EK505L					•			318	

See next page



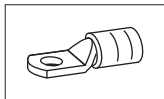


■ Tool application chart

Tubular cable lugs, butt connectors, parallel connectors and T-connectors "standard type" and tubular cable lugs for switchgear connections made from Cu

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
6-300	K22			•					⊖	264
	HK6022				•				⊖	288
	EK6022L					•			⊖	324
	EKM6022L					•			⊖	322
	PK22							•	⊖	364
	THK22						•		⊖	364
	HK60UNV	+ UA22			•				⊖	354
	EK60UNVL	+ UA22				•			⊖	357
	EKM60UNVL	+ UA22				•			⊖	356
	PK60UNV	+ UA22						•	⊖	355
10-25	K04		•						⊖	246
10-120	K06		•						⊖	249
10-240	HK60VP				•				⊖	290
	EK60VPL					•			⊖	326
	EKM60IDL					•			⊖	328
	PK60VP							•	⊖	366
16-95	K08		•						⊖	248
	K95		•						⊖	242
	TK95		•						⊖	243
16-300	HK60VPFT				•				⊖	291
	EK60VPFTL					•			⊖	327
	PK60VPFT							•	⊖	367
16-400	HK12030				•				⊖	292
	HK12042				•				⊖	294
	HK120U				•				⊖	296
	EK12030L					•			⊖	330
	EK12042L					•			⊖	332
	EK120UL					•			⊖	334
	EK120UNVL					•			⊖	358
	HK122EL380						•		⊖	390
	PK12042							•	⊖	368
	PK120U							•	⊖	370
	HK252						•		⊖	388
	HK252EL380						•		⊖	391
PK252							•	⊖	372	
25-150	K09		•						⊖	251
35-95	K8		•						⊖	245
50-120	K6		•						⊖	244
120-240	K7		•						⊖	245
185-400	K07		•						⊖	244

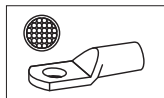




**■ Tool application chart**

**Insulated tubular cable lugs and butt connectors "standard type"**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
10-70	K354			•					○	260
	EK354					•			○	314
	EK354L					•			○	316
10-95	K18			•					○	262
	HK6018				•				○	286
	EK5018L					•			○	320
	EK505L					•			○	318
	PK18							•	○	362
	THK18						•		○	362
	HK60UNV + UA18				•				○	354
	EK60UNVL + UA18					•			○	357
	EKM60UNVL + UA18					•			○	356
	PK60UNV + UA18							•	○	355
10-150	K22			•					○	264
	HK6022				•				○	288
	EK6022L					•			○	324
	EKM6022L					•			○	322
	PK22							•	○	364
	THK22						•		○	364
	HK60UNV + UA22				•				○	354
	EK60UNVL + UA22					•			○	357
	EKM60UNVL + UA22					•			○	356
	PK60UNV + UA22							•	○	355
	HK12030				•				○	292
	HK12042				•				○	294
	HK120U				•				○	296
	EK12030L					•			○	330
	EK12042L					•			○	332
	EK120UL					•			○	334
	EK120UNVL					•			○	358
	HK122EL380						•		○	390
	PK12042							•	○	368
	PK120U							•	○	370
	HK252						•		○	388
	HK252EL380						•		○	391
	PK252							•	○	372

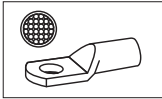


■ Tool application chart

Tubular cable lugs and butt connectors for fine stranded conductors

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
10-35	K354			•						260
10-50	EK354					•				314
	EK354L					•				316
	K5		•							243
	K18			•						262
	HK6018					•				286
	EK505L					•				318
	EK5018L					•				320
	PK18							•		362
	THK18							•		362
	HK60UNV	+ UA18				•				354
	EK60UNVL	+ UA18				•				357
	EKM60UNVL	+ UA18				•				356
PK60UNV	+ UA18						•		355	
10-70	K22			•						264
	HK6022					•				288
	EK6022L					•				324
	EKM6022L					•				322
	PK22							•		364
	THK22						•			364
	HK60UNV	+ UA22				•				354
	EK60UNVL	+ UA22				•				357
	EKM60UNVL	+ UA22				•				356
	PK60UNV	+ UA22						•		355
10-240	HK60VP					•				290
	EK60VPL					•				326
	EKM60IDL					•				328
	PK60VP							•		366
16-95	K95		•							242
	TK95		•							243
16-150	HK12030					•				292
	HK12042					•				294
	HK120U					•				296
	EK12030L					•				330
	EK12042L					•				332
	EK120UL					•				334
	EK120UNVL					•				358
	PK12042							•		368
	PK120U							•		370

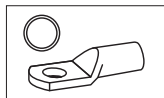
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■ **Tool application chart**

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

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
16-300	HK60VPFT				•				☺	291
	HK252						•		☺	388
	HK252EL380						•		☺	391
	EK60VPFTL					•			☹	327
	PK60VPFT							•	☹	367
	PK252							•	☺	372
35-95	K8		•						☺	245
50-120	K6		•						☺	244
120-240	K7		•						☺	245



■ Tool application chart

Tubular cable lugs and compression joints for solid conductors

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
0.75-16	K02		•						☺	241	
1.5-4	K93		•						⊖	239	
1.5-10	K50			•					⊖	259	
	EK50ML			•					⊖	278	
	EK1550					•			⊖	308	
	EK1550G					•			⊖	310	
1.5-16	K354			•					⊖	260	
	EK354					•			⊖	314	
	EK354L					•			⊖	316	
	K18			•					⊖	262	
	HK6018					•			⊖	286	
	EK5018L					•			⊖	320	
	PK18							•	⊖	362	
	THK18						•		⊖	362	
	HK60UNV + UA18					•			⊖	354	
	EK60UNVL + UA18					•			⊖	357	
	EKM60UNVL + UA18					•			⊖	356	
	PK60UNV + UA18							•	⊖	355	
	K22				•					⊖	264
	HK6022					•				⊖	288
	EK6022L						•			⊖	324
	EKM6022L						•			⊖	322
	PK22								•	⊖	364
	THK22							•		⊖	364
	HK60UNV + UA22					•				⊖	354
	EK60UNVL + UA22						•			⊖	357
EKM60UNVL + UA22						•			⊖	356	
PK60UNV + UA22								•	⊖	355	
6-10	K94		•						⊖	240	
25-50*	K05		•						⊖	247	

\*For sizes 25 + 35 mm², use the die size 25 mm².  
 For size 50 mm² use die size 35 mm².  
 We recommend 2 crimps on each side.



## Our specialists.

### Nickel and stainless steel tubular cable lugs.

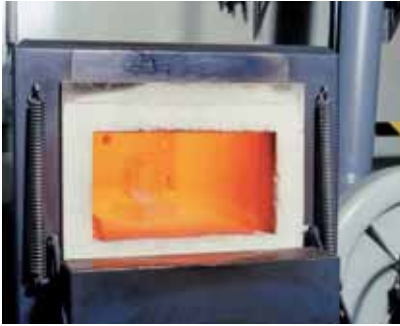
Unique situations require unique solutions. This is especially true in most of the diverse industrial sectors. For example in furnace construction or in the steel industry: Temperatures of several hundred degrees Celsius are very common here. Connections also have to meet special requirements in the chemical, food and maritime industries.

Klauke meets this demand with a host of solutions in nickel and stainless steel. These materials guarantee consistent electrical, chemical and mechanical properties at extremely high temperatures.



- Nickel tubular cable lugs and connectors, heat resistant to 650 °C.
- Acid and rust-resistant stainless steel tubular cable lugs and connectors, heat resistant to 400 °C.
- Special solutions for diverse applications.

*Nickel and stainless steel tubular cable lugs cover a diverse range of applications - such as industrial and shipbuilding.*



## ■ When it gets really hot: *Nickel.*

- ▶ Heat resistant up to 650 °C.
- ▶ Resistant to oxidation.

### Benefits:

- ▶ Nickel tubular cable lugs and butt connectors are most suitable for use in heating and annealing furnaces. They retain their conductivity and failures are excluded.
- ▶ Nickel connectors even guarantee safe electrical connections in aggressive environments.

▶ *More from Page 66.*

## ■ Oxidation-free and food-industry compliant: *Stainless steel.*

- ▶ Highly resistant to oxidation.
- ▶ Food industry-compliant.
- ▶ **Resistant to seawater, acids and solvents.**
- ▶ Heat resistant up to 400 °C.

### Benefits:

- ▶ The cable lugs are capable of meeting the most stringent hygiene requirements in food and pharmaceutical industries.
- ▶ Stainless steel cable lugs and connectors can also be used without hesitation in both the chemical and maritime industries.
- ▶ *More from Page 64.*



## ■ The adequate solutions *in nickel or stainless steel.*

- ▶ Up to 95 mm<sup>2</sup> nominal cross section in nickel and stainless steel.
- ▶ **Customised solutions upon request.**

### Benefits:

- ▶ We provide suitable cable lug in the fastest possible time for a host of applications.
- ▶ You can rely on Klauke's problem-solving skills, even when it comes to meeting the most complicated requirements.

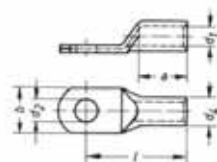


▶ *Checklist for special solutions (Page i-15)*

Tubular cable lugs, stainless steel



- ▶ Ideal for aggressive environmental conditions, acid and rust-resistant
- ▶ Heat resistant to 400 °C



**Characteristics**

- Total cross-section: 0.5 - 95 mm<sup>2</sup>
- Flat contact surface by special steel punching technology
- Precise end machining for easy cable insertion

**Material**

- V2A

**Order info**

- Also available in stainless steel (V4A)

Nominal cross section mm <sup>2</sup>	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	79V4	1.6	6	6.5	4.3	3.2	13	0.080	100
	M5	79V5	1.6	6	7.5	5.3	3.2	14	0.080	100
1.5-2.5	M4	80V4	3.0	8	9.0	4.3	5.0	17	0.260	100
	M5	80V5	3.0	8	9.0	5.5	5.0	17	0.190	100
	M6	80V6	3.0	8	9.5	6.5	5.0	19	0.215	100
4-6	M4	81V4	4.0	9	9.0	4.3	6.0	18	0.260	100
	M5	81V5	4.0	9	9.5	5.5	6.0	19	0.280	100
	M6	81V6	4.0	9	10.0	6.5	6.0	19	0.280	100
10	M5	82V5	5.0	10	12.5	5.5	8.0	22	0.710	100
	M6	82V6	5.0	10	12.5	6.5	8.0	22	0.780	100
	M8	82V8	5.0	10	15.0	8.5	8.0	25	0.780	100
16	M5	83V5	6.0	13	12.0	5.5	8.0	28	0.500	50
	M6	83V6	6.0	13	12.0	6.5	8.0	28	0.550	50
	M8	83V8	6.0	13	15.0	8.5	8.0	29	0.600	50
25	M6	84V6	7.0	15	14.0	6.5	10.0	30	1.210	50
	M8	84V8	7.0	15	16.0	8.5	10.0	32	1.850	50
35	M6	85V6	9.0	17	17.0	6.5	12.0	32	1.600	50
	M8	85V8	9.0	17	17.0	8.5	12.0	35	1.850	50
50	M6	86V6	10.0	19	20.0	6.5	14.0	37	2.800	50
	M8	86V8	10.0	19	20.0	8.5	14.0	37	2.600	50
	M10	86V10	10.0	19	20.0	10.5	14.0	39	2.800	50
	M12	86V12	10.0	19	20.0	13.0	14.0	43	2.960	50
70	M8	87V8	12.0	21	23.0	8.5	16.0	43	3.650	25
	M10	87V10	12.0	21	23.0	10.5	16.0	44	3.930	25
	M12	87V12	12.0	21	23.0	13.0	16.0	46	3.850	25
	M16	87V16	12.0	21	26.0	17.0	16.0	46	3.960	25
95	M8	88V8	14.0	25	26.0	8.5	18.0	48	4.650	25
	M10	88V10	14.0	25	26.0	10.5	18.0	48	5.610	25
	M12	88V12	14.0	25	26.0	13.0	18.0	49	5.540	25

▶ Tools: see chart page 68



**Butt connectors, stainless steel**

- ▶ Ideal for aggressive environmental conditions, acid and rust-resistant
- ▶ Heat resistant to 400 °C



**Characteristics**

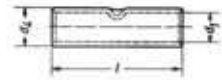
- Total cross-section: 0.5 - 95 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- Precise end machining for easy cable insertion

**Material**

- V2A

**Order info**

- Also available in stainless steel (V4A)



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	d4	l		
0.5-1	<b>79R</b>	1.6	3.2	25	0.135	50
1.5-2.5	<b>80R</b>	3.0	5.0	25	0.250	50
4-6	<b>81R</b>	4.0	6.0	25	0.325	50
10	<b>82R</b>	5.0	8.0	25	0.360	50
16	<b>83R</b>	6.0	8.0	30	0.510	50
25	<b>84R</b>	7.0	10.0	35	1.100	25
35	<b>85R</b>	9.0	12.0	40	1.560	25
50	<b>86R</b>	10.0	14.0	45	2.670	25
70	<b>87R</b>	12.0	16.0	50	3.400	25
95	<b>88R</b>	14.0	18.0	55	4.300	25

▶ **Tools: see chart page 68**

Tubular cable lugs and connectors - nickel, stainless steel

Tubular cable lug, Ni



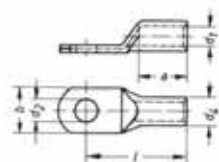
► Suitable for high temperatures to 650 °C

**Characteristics**

- Total cross-section: 0.5 - 95 mm<sup>2</sup>
- Flat contact surface by special steel punching technology
- Precise end machining for easy cable insertion

**Material**

- High-grade nickel



Nominal cross section mm <sup>2</sup>	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	<b>56N4</b>	1.6	6	6.5	4.3	3.2	13	0.080	100
	M5	<b>56N5</b>	1.6	6	7.5	5.3	3.2	14	0.080	100
1.5-2.5	M4	<b>57N4</b>	2.3	6	7.0	4.3	3.9	13	0.105	100
	M5	<b>57N5</b>	2.3	6	7.5	5.3	3.9	14	0.105	100
4-6	M6	<b>57N6</b>	2.3	6	9.5	6.5	3.9	16	0.130	100
	M4	<b>58N4</b>	3.6	9	9.5	4.3	5.6	18	0.275	100
10	M5	<b>58N5</b>	3.6	9	9.5	5.3	5.6	19	0.275	100
	M6	<b>58N6</b>	3.6	9	9.5	6.5	5.6	19	0.260	100
16	M5	<b>59N5</b>	4.5	10	12.0	5.5	6.5	21	0.340	100
	M6	<b>59N6</b>	4.5	10	12.0	6.5	6.5	22	0.360	100
25	M5	<b>60N5</b>	5.5	13	12.0	5.5	7.5	26	0.470	100
	M6	<b>60N6</b>	5.5	13	12.0	6.5	7.5	27	0.480	100
35	M8	<b>60N8</b>	5.5	13	13.5	8.5	7.5	29	0.560	100
	M6	<b>61N6</b>	7.0	15	14.0	6.5	10.0	30	1.200	50
50	M8	<b>61N8</b>	7.0	15	16.0	8.5	10.0	32	1.320	50
	M6	<b>62N6</b>	8.5	17	17.0	6.5	12.0	32	1.850	50
70	M8	<b>62N8</b>	8.5	17	17.0	8.5	12.0	34	2.000	50
	M8	<b>63N8</b>	10.0	19	20.0	8.5	14.0	37	2.900	50
95	M10	<b>63N10</b>	10.0	19	20.0	10.5	14.0	39	3.100	50
	M10	<b>64N10</b>	12.0	21	23.0	10.5	16.5	44	4.600	25
	M12	<b>64N12</b>	12.0	21	23.0	13.0	16.5	46	4.660	25
	M10	<b>65N10</b>	13.5	25	26.0	10.5	18.0	48	5.550	25
	M12	<b>65N12</b>	13.5	25	26.0	13.0	18.0	49	5.600	25

► Tools: see chart page 68

**Tubular cable lugs, Ni, fork type**

- ▶ Suitable for high temperatures to 650 °C
- ▶ Fork-type version for simple and direct screw mounting

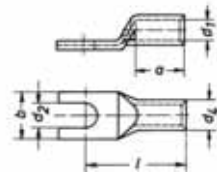


**Characteristics**

- Total cross-section: 0.5 - 16 mm<sup>2</sup>
- Flat contact surface by special steel punching technology
- Precise end machining for easy cable insertion

**Material**

- High-grade nickel



Nominal cross section mm <sup>2</sup>	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
10	M6	58C6	3.6	9	9.5	6.5	5.6	19	0.235	50
	M5	59C5	4.5	10	12.0	5.5	6.5	21	0.320	50
16	M6	59C6	4.5	10	12.0	6.5	6.5	22	0.340	50
	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

▶ Tools: see chart page 68

**Butt connectors, Ni**

- ▶ Suitable for high temperatures to 650 °C

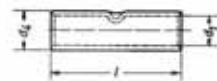


**Characteristics**

- Total cross-section: 0.5 - 16 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- Precise end machining for easy cable insertion

**Material**

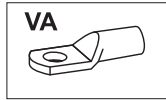
- High-grade nickel



Nominal cross section mm <sup>2</sup>	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

▶ Tools: see chart page 68

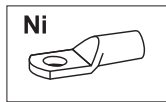
Tubular cable lugs and connectors - nickel, stainless steel



■ Tool application chart

Tubular cable lugs and butt connectors made from stainless steel

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.5-6	K25		•							242
0.5-16	K354			•						260
	EK354					•				314
	EK354L					•				316
10-50	K22			•						264
	HK6022				•					288
	EKM6022L					•				322
	EK6022L					•				324
	PK22							•		364
	THK22						•			364
	HK60UNV	+ UA22			•					354
	EK60UNVL	+ UA22				•				357
	EKM60UNVL	+ UA22				•				356
	PK60UNV	+ UA22						•		355



■ Tool application chart

Tubular cable lugs and butt connectors made from nickel

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.5-6	K25		•							242
0.5-16	K354			•						260
	EK354					•				314
	EK354L					•				316
10-50	K22			•						264
	HK6022				•					288
	EK6022L					•				324
	EKM6022L					•				322
	PK22							•		364
	THK22						•			364
	HK60UNV	+ UA22			•					354
	EK60UNVL	+ UA22				•				357
	EKM60UNVL	+ UA22				•				356
	PK60UNV	+ UA22						•		355



## **Best connections** *entirely to standard.*



### **Copper compression cable lugs and connectors to DIN.**

In project business, customers often request use of standardised materials. Utilities, for example, often specify use of compression cable lugs and connectors according to DIN standards. Klauke offers numerous standard-compliant solutions.

Contrary to popular belief, DIN cable lugs differ from tubular cable lugs not only in terms of dimensions. Markings and standardised coding specify the number of crimps.



- **Compression cable lugs to DIN 46235 up to 1000 mm<sup>2</sup>.**
- **Angled compression cable lugs to DIN dimensions.**
- **Compression joints for non-tension connections to DIN.**
- **Sleeves and reducing sleeves for compacted conductors.**

*DIN-compliant compression cable lugs with specified identification marks for crimps.*

## Always to DIN standards.

- ▶ Nominal cross sections up to 1000 mm<sup>2</sup>.
- ▶ Conforming to DIN standards, tested to IEC.
- ▶ Tin-plated or bright finish available.
- ▶ Also with barrier.

### Benefits:

- ▶ The Klauke range includes DIN compression cable lugs and connectors to suit every application.
- ▶ Bright finish versions are especially suitable for installations in overvoltage or lightning protection systems.



▶ More from Page 72.



## Simply angled, improved fit.

- ▶ Compression cable lugs angled at 45° and 90°.
- ▶ Nominal cross sections up to 240 mm<sup>2</sup>.

### Benefits:

- ▶ You will find the right solution. **Even for confined and awkward situations.**
- ▶ More from Page 74.

## Correct crimping mark by mark.

- ▶ All DIN compression cable lugs and connectors have markings for correct crimping.
- ▶ Designation for narrow and wide crimping.
- ▶ Engraved code, cross-section and hole diameter for fast assignment.
- ▶ All compression cable lugs are annealed to optimise material and crimping characteristics.
- ▶ Manufacturer's identification for simple re-ordering.

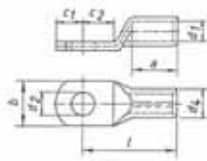
### Benefits:

- ▶ The designated crimp markings show you at a glance where and how often the connecting material has to be crimped.
- ▶ The annealed material flows more efficiently around the conductor during the crimping operation, so creating a secure connection.
- ▶ Crimping is made much easier and the tools' service life is extended due to the low mechanical strain.



- ▶ Klauke connecting materials to DIN are designated by two different crimp markings. One for narrow crimps with 6-ton tools and the other for wide crimps with 12-ton tools.

**Compression cable lugs acc. to DIN, Cu**



- ▶ Acc. to DIN 46235
- ▶ With code number for clear tool assignment
- ▶ For round conductors e.g VDE 0295 Class 1, 2, 5 and 6
- ▶ For pre-rounded multi-stranded sector shaped conductors

**Characteristics**

- Total cross-section: 6 - 1000 mm<sup>2</sup>
- With crimp markings for correct crimping
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"
- Item in barrier design upon request

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	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	
25	M 12	*103R12	8	20	18.0	5.5	13.0	8.5	13.0	13.0	36	1.27	100	
	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	
	M 6	*105R6	12	20	17.0	8.2	6.4	12.5	7.5	8.0	42	2.77	50	
35	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	
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	



**Compression cable lugs acc. to DIN, Cu**

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Code	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
				a	b	d1	d2	d4	c1	c2	l		
120	M 10	<b>109R10</b>	20	35	32.0	15.5	10.5	21.0	15.0	16.0	70	11.40	50
	M 12	<b>109R12</b>	20	35	32.0	15.5	13.0	21.0	16.0	17.0	70	11.31	50
	M 14	<b>*109R14</b>	20	35	32.0	15.5	15.0	21.0	18.0	19.0	70	11.45	25
	M 16	<b>109R16</b>	20	35	32.0	15.5	17.0	21.0	19.0	20.0	70	11.24	50
	M 20	<b>109R20</b>	20	35	38.0	15.5	21.0	21.0	21.0	22.0	70	11.03	25
150	M 10	<b>110R10</b>	22	35	34.0	17.0	10.5	23.5	15.0	16.0	78	16.38	10
	M 12	<b>110R12</b>	22	35	34.0	17.0	13.0	23.5	16.0	17.0	78	16.29	25
	M 14	<b>*110R14</b>	22	35	34.0	17.0	15.0	23.5	19.0	20.0	78	16.38	10
	M 16	<b>110R16</b>	22	35	34.0	17.0	17.0	23.5	19.0	20.0	78	16.17	10
	M 20	<b>110R20</b>	22	35	40.0	17.0	21.0	23.5	21.0	22.0	78	15.90	10
185	M 10	<b>111R10</b>	25	40	37.0	19.0	10.5	25.5	15.0	16.0	82	18.96	10
	M 12	<b>111R12</b>	25	40	37.0	19.0	13.0	25.5	16.0	17.0	82	18.11	10
	M 14	<b>*111R14</b>	25	40	37.0	19.0	15.0	25.5	19.0	20.0	82	19.21	10
	M 16	<b>111R16</b>	25	40	37.0	19.0	17.0	25.5	19.0	20.0	82	18.74	25
	M 20	<b>111R20</b>	25	40	40.0	19.0	21.0	25.5	21.0	22.0	82	18.69	10
240	M 12	<b>112R12</b>	28	40	42.0	21.5	13.0	29.0	16.0	17.0	92	27.00	10
	M 14	<b>*112R14</b>	28	40	42.0	21.5	15.0	29.0	19.0	20.0	92	27.58	10
	M 16	<b>112R16</b>	28	40	42.0	21.5	17.0	29.0	19.0	20.0	92	27.37	25
	M 20	<b>112R20</b>	28	40	45.0	21.5	21.0	29.0	21.0	22.0	92	26.88	10
	300	M 14	<b>*113R14</b>	32	50	46.0	24.5	15.0	32.0	19.0	22.0	100	33.29
M 16		<b>113R16</b>	32	50	46.0	24.5	17.0	32.0	19.0	22.0	100	32.94	5
M 20		<b>113R20</b>	32	50	46.0	24.5	21.0	32.0	22.0	22.0	100	33.24	5
M 14		<b>*114R14</b>	38	70	54.0	27.5	15.0	38.5	25.0	25.0	115	69.38	5
400	M 16	<b>114R16</b>	38	70	54.0	27.5	17.0	38.5	25.0	25.0	115	68.54	5
	M 20	<b>114R20</b>	38	70	54.0	27.5	21.0	38.5	25.0	25.0	115	65.40	5
	500	M 16	<b>*115R16</b>	42	70	60.0	31.0	17.0	42.0	25.0	25.0	125	83.31
M 20		<b>115R20</b>	42	70	60.0	31.0	21.0	42.0	25.0	25.0	125	81.58	1
625	M 16	<b>*116R16</b>	44	80	64.0	34.5	17.0	44.0	25.0	25.0	135	79.60	1
	M 20	<b>116R20</b>	44	80	64.0	34.5	21.0	44.0	25.0	25.0	135	79.69	1
800	M 16	<b>*117R16</b>	52	100	75.0	40.0	17.0	52.0	30.0	30.0	165	150.00	1
	M 20	<b>117R20</b>	52	100	75.0	40.0	21.0	52.0	30.0	30.0	165	149.00	1
1000	M 16	<b>*118R16</b>	58	100	83.0	44.0	17.0	58.0	30.0	30.0	165	199.00	1
	M 20	<b>118R20</b>	58	100	83.0	44.0	21.0	58.0	30.0	30.0	165	195.00	1

▶ \* = not standardized

▶ 10-800 mm<sup>2</sup> IEC tested

▶ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

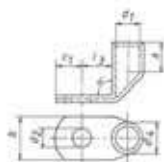
▶ **Tools: see chart page 84**



**Angle compression cable lugs, Cu, 90° angled**



- ▶ Tube dimensions according to DIN 46235
- ▶ With code number for clear tool assignment
- ▶ For round conductors e.g VDE 0295 Class 1, 2, 5 and 6
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Flat contact surface by special angle punching process



**Characteristics**

- Total cross-section: 6 - 240 mm<sup>2</sup>
- With crimp markings for correct crimping
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Code	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
				a	b	d1	d2	d4	c1	l3			
6	M 5	<b>161R5</b>	5	10	8.5	3.8	5.3	5.5	6.5	9	0.28	50	
	M 6	<b>161R6</b>	5	10	8.5	3.8	6.4	5.5	7.5	10	0.32	50	
10	M 5	<b>162R5</b>	6	10	9.0	4.5	5.3	6.0	7.0	10	0.34	50	
	M 6	<b>162R6</b>	6	10	9.0	4.5	6.4	6.0	7.5	10	0.35	50	
16	M 8	<b>162R8</b>	6	10	13.0	4.5	.0	6.0	10.0	13	0.37	50	
	M 6	<b>163R6</b>	8	20	13.0	5.5	6.4	8.5	7.5	11	1.20	50	
	M 8	<b>163R8</b>	8	20	13.0	5.5	8.4	8.5	10.0	13	1.30	50	
	M 10	<b>163R10</b>	8	20	17.0	5.5	10.5	8.5	12.0	15	1.40	50	
	M 12	<b>163R12</b>	8	20	18.0	5.5	13.0	8.5	13.0	18	1.33	50	
	M 6	<b>164R6</b>	10	20	14.0	7.0	6.4	10.0	7.5	11	1.54	25	
25	M 8	<b>164R8</b>	10	20	16.0	7.0	8.4	10.0	10.0	13	1.60	25	
	M 10	<b>164R10</b>	10	20	17.0	7.0	10.5	10.0	12.0	15	1.63	25	
35	M 12	<b>164R12</b>	10	20	19.0	7.0	13.0	10.0	13.0	18	1.70	25	
	M 8	<b>165R8</b>	12	20	17.0	8.2	8.4	12.5	10.0	13	2.72	25	
	M 10	<b>165R10</b>	12	20	19.0	8.2	10.5	12.5	12.0	15	2.76	25	
	M 12	<b>165R12</b>	12	20	21.0	8.2	13.0	12.5	13.0	18	2.85	25	
50	M 14	<b>165R14</b>	12	20	21.0	8.2	15.0	12.5	14.5	20	2.92	25	
	M 8	<b>166R8</b>	14	28	20.0	10.0	8.4	14.5	10.0	16	4.39	25	
	M 10	<b>166R10</b>	14	28	22.0	10.0	10.5	14.5	12.0	16	4.46	25	
	M 12	<b>166R12</b>	14	28	24.0	10.0	13.0	14.5	13.0	18	4.49	25	
	M 14	<b>166R14</b>	14	28	24.0	10.0	15.0	14.5	14.5	20	4.73	25	
	M 16	<b>166R16</b>	14	28	28.0	10.0	17.0	14.5	16.0	22	4.66	25	
70	M 8	<b>167R8</b>	16	28	24.0	11.5	8.4	16.5	10.0	14	5.92	25	
	M 10	<b>167R10</b>	16	28	24.0	11.5	10.5	16.5	12.0	16	6.31	25	
	M 12	<b>167R12</b>	16	28	24.0	11.5	13.0	16.5	13.0	18	6.34	25	
	M 14	<b>167R14</b>	16	28	24.0	11.5	15.0	16.5	14.5	20	6.50	25	
95	M 16	<b>167R16</b>	16	28	30.0	11.5	17.0	16.5	16.0	22	6.63	25	
	M 10	<b>168R10</b>	18	35	28.0	13.5	10.5	19.0	12.0	17	9.03	25	
	M 12	<b>168R12</b>	18	35	28.0	13.5	13.0	19.0	13.0	18	9.27	25	
	M 14	<b>168R14</b>	18	35	28.0	13.5	15.0	19.0	14.5	20	9.06	25	
	M 16	<b>168R16</b>	18	35	32.0	13.5	17.0	19.0	16.0	22	9.18	25	

**Angle compression cable lugs, Cu, 90° angled**

Nominal cross section mm²	Size of bolt dia.	Part No.	Code	Dimension mm							Weight/ 100 pcs. ~ kg	Packing unit/pcs
				a	b	d1	d2	d4	c1	l3		
120	M 10	<b>169R10</b>	20	35	32.0	15.5	10.5	21.0	15.0	17	10.41	10
	M 12	<b>169R12</b>	20	35	32.0	15.5	13.0	21.0	16.0	18	10.65	10
	M 14	<b>169R14</b>	20	35	32.0	15.5	15.0	21.0	18.0	20	10.75	10
	M 16	<b>169R16</b>	20	35	32.0	15.5	17.0	21.0	19.0	22	10.72	10
	M 20	<b>169R20</b>	20	35	38.0	15.5	21.0	21.0	21.0	24	11.00	10
150	M 10	<b>170R10</b>	22	35	34.0	17.0	10.5	23.5	15.0	17	14.18	10
	M 12	<b>170R12</b>	22	35	34.0	17.0	13.0	23.5	16.0	18	14.33	10
	M 14	<b>170R14</b>	22	35	34.0	17.0	15.0	23.5	19.0	20	15.60	10
	M 16	<b>170R16</b>	22	35	34.0	17.0	17.0	23.5	19.0	22	15.24	10
185	M 10	<b>171R10</b>	25	40	37.0	19.0	10.5	25.5	15.0	22	18.60	10
	M 12	<b>171R12</b>	25	40	37.0	19.0	13.0	25.5	16.0	22	18.69	10
	M 14	<b>171R14</b>	25	40	37.0	19.0	15.0	25.5	19.0	22	19.10	10
	M 16	<b>171R16</b>	25	40	37.0	19.0	17.0	25.5	19.0	22	19.00	10
	M 20	<b>171R20</b>	25	40	40.0	19.0	21.0	25.5	21.0	24	18.72	10
240	M 12	<b>172R12</b>	28	40	42.0	21.5	13.0	29.0	16.0	22	25.09	10
	M 14	<b>172R14</b>	28	40	42.0	21.5	15.0	29.0	19.0	22	25.70	10
	M 16	<b>172R16</b>	28	40	42.0	21.5	17.0	29.0	19.0	22	24.96	10
	M 20	<b>172R20</b>	28	40	45.0	21.5	21.0	29.0	21.0	24	25.26	10

▶ 10-240 mm² IEC tested

🔗 Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

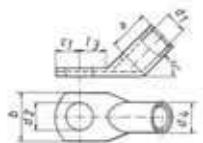
▶ **Tools: see chart page 84**



Angle compression cable lugs, Cu, 45° angled



- ▶ Tube dimensions according to DIN 46235
- ▶ With code number for clear tool assignment
- ▶ For round conductors e.g VDE 0295 Class 1, 2, 5 and 6
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Flat contact surface by special angle punching process



**Characteristics**

- Total cross-section: 6 - 240 mm<sup>2</sup>
- With crimp markings for correct crimping
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	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	
16	M 8	162R845	6	10	13.0	4.5	8.5	6.0	10.0	13	0.39	50	
	M 6	163R645	8	20	13.0	5.5	6.5	8.5	7.5	11	1.20	50	
16	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	
25	M 12	163R1245	8	20	18.0	5.5	13.0	8.5	13.0	18	1.35	50	
	M 6	164R645	10	20	14.0	7.0	6.5	10.0	7.5	11	1.49	25	
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	
35	M 12	164R1245	10	20	19.0	7.0	13.0	10.0	13.0	18	1.73	25	
	M 8	165R845	12	20	17.0	8.2	8.5	12.5	10.0	13	2.72	25	
35	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	
50	M 14	165R1445	12	20	21.0	8.2	15.0	12.5	14.5	20	3.03	25	
	M 8	166R845	14	28	20.0	10.0	8.5	14.5	10.0	13	4.63	25	
50	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	
70	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	
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	
95	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	
95	M 16	167R1645	16	28	30.0	11.5	17.0	16.5	16.0	22	6.96	25	
	M 10	168R1045	18	35	28.0	13.5	10.5	19.0	12.0	17	9.64	25	
95	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	
95	M 16	168R1645	18	35	32.0	13.5	17.0	19.0	16.0	22	9.40	25	

**Angle compression cable lugs, Cu, 45° angled**

Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Code	Dimension mm							Weight/100 pcs. ~ kg	Packing unit/pcs
				a	b	d1	d2	d4	c1	l3		
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

- ▶ 10-240 mm<sup>2</sup> IEC tested
- ▶ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"
- ▶ **Tools: see chart page 84**

**Compression cable lugs DIN special type, Cu, with 2 long holes**

- ▶ Tube dimensions according to DIN 46235
- ▶ With code number for clear tool assignment
- ▶ For round conductors e.g VDE 0295 Class 1, 2, 5 and 6
- ▶ For pre-rounded multi-stranded sector shaped conductors



**Characteristics**

- Total cross-section: 70 - 240 mm<sup>2</sup>
- With crimp markings for correct crimping
- Annealed material optimises material and crimping properties
- Flat contact surface by special pressing technique
- Precise end machining for easy cable insertion

**Material**

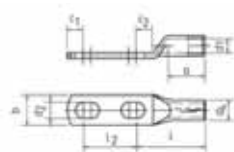
- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"



Nominal cross section mm <sup>2</sup>	Size of bolt dia.	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	

- ▶ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"
- ▶ **Tools: see chart page 84**

Copper compression cable lugs and connectors to DIN

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



► Special design for mounting of 2 multi-stranded cables according to VDE 0295 Class 2



**Characteristics**

- Total cross-section: 2 x 50 - 2 x 120 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

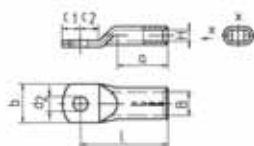
- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"



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

► Tools: see chart page 85

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



► Special design for mounting of 2 multi-stranded cables according to VDE 0295 Class 2



**Characteristics**

- Total cross-section: 2 x 50 - 2 x 120 mm<sup>2</sup>
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion
- Flat contact surface by special pressing technique

**Material**

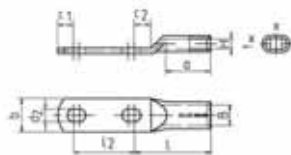
- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"



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

► Tools: see chart page 85

**Compression joints acc. to DIN, Cu**

- ▶ Acc. to DIN 46267, part 1
- ▶ With code number for clear tool assignment
- ▶ With crimp markings for correct crimping

**Characteristics**

- Total cross-section: 6 - 1000 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated

**Order info**

- Bright finish version also available, part number appendix "bk"



Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm			Weight/100 pcs. ~ kg	Packing unit/pcs
			d1	d4	l		
6	<b>121R</b>	5	3.8	5.5	30	0.31	100
10	<b>122R</b>	6	4.5	6.0	30	0.34	100
16	<b>123R</b>	8	5.5	8.5	50	1.45	100
25	<b>124R</b>	10	7.0	10.0	50	1.77	50
35	<b>125R</b>	12	8.2	12.5	50	2.89	50
50	<b>126R</b>	14	10.0	14.5	56	4.26	50
70	<b>127R</b>	16	11.5	16.5	56	5.41	50
95	<b>128R</b>	18	13.5	19.0	70	8.62	25
120	<b>129R</b>	20	15.5	21.0	70	9.66	25
150	<b>130R</b>	22	17.0	23.5	80	14.50	10
185	<b>131R</b>	25	19.0	25.5	85	17.00	10
240	<b>132R</b>	28	21.5	29.0	90	23.41	10
300	<b>133R</b>	32	24.5	32.0	100	29.23	5
400	<b>134R</b>	38	27.5	38.5	150	74.32	5
500	<b>135R</b>	42	31.0	42.0	160	89.09	1
625	<b>136R</b>	44	34.5	44.0	160	79.10	1
800	<b>137R</b>	52	40.0	52.0	200	151.00	1
1000	<b>138R</b>	58	44.0	58.0	200	198.00	1

▶ 10-800 mm<sup>2</sup> IEC tested

ⓘ Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

ⓘ Reduction sleeves to connect different cross sections can be found on page 83

▶ **Tools: see chart page 84**

Copper compression cable lugs and connectors to DIN

## Compression joints, Cu



- ▶ Barrier design with oil stop
- ▶ Tube dimension to DIN 46267 part 1
- ▶ With code number for clear tool assignment

**Characteristics**

- Total cross-section: 16 - 625 mm<sup>2</sup>
- For non-tension connections
- With crimp markings for correct crimping
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"

Nominal cross section mm <sup>2</sup>	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
625	536R	44	34.5	44.0	160	81.50	1

① Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

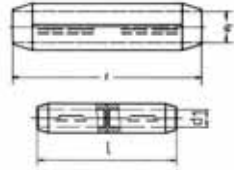
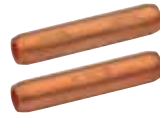
② Reduction sleeves to connect different cross sections can be found at 83

▶ **Tools: see chart page 84**



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

- ▶ Tube dimension to DIN 46267 part 1
- ▶ With code number for clear tool assignment
- ▶ For copper medium-voltage cable connections 10-30 kV
- ▶ With bevelled edges for reduced winding expenditure for the assembly



**Characteristics**

- Total cross-section: 25 - 400 mm<sup>2</sup>
- For non-tension connections
- Also available as barrier design with oil stop
- With crimp markings for correct crimping
- Annealed material optimises material and crimping properties
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

- Bright finished

**Order info**

- Tinned version also available, part number appendix "v"

Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm		Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	l	mech.	hydr.		
<b>Standard type</b>								
25	504R	12	7.5	60	2/2	1/1	4.08	10
35	505R	12	8.2	60	2/2	1/1	3.56	10
50	506R	14	10.0	65	3/3	1/1	4.90	10
70	507R	16	11.5	65	3/3	1/1	6.10	10
95	508R	18	13.5	90	4/4	2/2	10.98	10
120	509R	20	15.5	90	4/4	2/2	12.68	5
150	510R	22	17.0	105	4/4	2/2	18.09	5
185	511R	25	19.0	105	4/4	2/2	20.35	5
240	512R	28	21.5	125		2/2	31.64	5
300	513R	32	24.5	125		2/2	35.40	1
400	514R	38	27.5	160		3/3	75.42	1
<b>Barrier version</b>								
25	504RLD	12	7.5	60	2/2	1/1	4.08	25
35	505RLD	12	8.2	60	2/2	1/1	3.56	10
50	506RLD	14	10.0	65	3/3	1/1	4.90	10
70	507RLD	16	11.5	65	3/3	1/1	6.40	10
95	508RLD	18	13.5	90	4/4	2/2	10.98	10
120	509RLD	20	15.5	90	4/4	2/2	12.68	5
150	510RLD	22	17.0	105	4/4	2/2	18.84	5
185	511RLD	25	19.0	105	4/4	2/2	20.35	5
240	512RLD	28	21.5	125		2/2	31.64	5
300	513RLD	32	24.5	125		2/2	35.40	1
400	514RLD	38	27.5	160		3/3	75.42	1

ⓘ Reduction sleeves to connect different cross sections can be found at page 83

▶ Tools: see chart page 84

Copper compression cable lugs and connectors to DIN

## Compression joints acc. to DIN, Cu



- ▶ For full tension cable connections
- ▶ Acc. to DIN 48085, part 1
- ▶ With code number for clear tool assignment

## Characteristics

- Total cross-section: 6 - 300 mm<sup>2</sup>
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

## Material

- Copper acc. to EN 13600

## Surface

- Bright finished

Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm			Number of crimps		Conductor dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
			d1	d4	l	mech.	hydr.			
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		22.50	235.0	1	

▶ \* = not standardized

▶ 16-70 mm<sup>2</sup> IEC tested

▶ Tools: see chart page 84

**Reduction sleeves, Cu**

- ▶ For multi-stranded conductors e.g. VDE 0295 Class 2
- ▶ For connecting different conductor cross-sections
- ▶ For use in DIN compression joints and connectors, standard type

**Characteristics**

- Total cross-section: 25 - 400 mm<sup>2</sup>
- For non-tension connections
- Precise end machining for easy cable insertion

**Material**

- Copper acc. to EN 13600

**Surface**

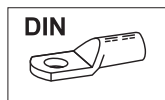
- Bright finished



Part No.	Nominal cross section mm <sup>2</sup>		Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
	from	to	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

⚠ Please observe instructions in technical appendix / notes for fitting of connecting materials on page i-7

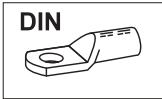
Copper compression cable lugs and connectors to DIN



■ Tool application chart

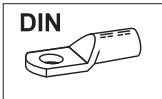
Compression cable lugs and compression joints

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
6-50	K05D		•						⊗	247
6-120	K354			•					⊗	260
	EK354					•			⊗	314
	EK354L					•			⊗	316
6-185	K18			•					⊗	262
	HK6018				•				⊗	286
	EK505L					•			⊗	318
	EK5018L					•			⊗	320
	PK18							•	⊗	362
	THK18						•		⊗	362
	HK60UNV	+ UA18			•				⊗	354
	EK60UNVL	+ UA18				•			⊗	357
	EKM60UNVL	+ UA18				•			⊗	356
PK60UNV	+ UA18						•	⊗	355	
6-240	K22			•					⊗	264
	HK6022				•				⊗	288
	EK6022L					•			⊗	324
	EKM6022L					•			⊗	322
	PK22							•	⊗	364
	THK22						•		⊗	364
	HK60UNV	+ UA22			•				⊗	354
	EK60UNVL	+ UA22				•			⊗	357
	EKM60UNVL	+ UA22				•			⊗	356
	PK60UNV	+ UA22						•	⊗	355
	HK12030				•				⊗	292
	HK12042				•				⊗	294
	HK120U				•				⊗	296
	EK12030L					•			⊗	330
	EK12042L					•			⊗	332
	EK120UL					•			⊗	334
	HK122EL380						•		⊗	390
PK12042							•	⊗	368	
PK120U							•	⊗	370	
10-120	K06D		•						⊗	250
16-95	K08D		•						⊗	248
16-300	EK120UNVL					•			⊗	358
	HK252						•		⊗	388
16-625	HK252EL380						•		⊗	391
	PK252							•	⊗	372



■ **Tool application chart**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
25-150	K09D		•						⬡	251
120-1000	HK45				•				⬡	389
	PK45							•	⬡	374



■ **Tool application chart**

**Double compression cable lugs**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
2x50-2x70	K22			•					⊖	264	
	HK6022					•			⊖	288	
	EK6022L						•		⊖	324	
	EKM6022L						•		⊖	322	
	PK22							•	⊖	364	
	THK22							•	⊖	364	
	HK60UNV	+ UA22				•			⊖	354	
	EK60UNVL	+ UA22					•		⊖	357	
	EKM60UNVL	+ UA22					•		⊖	356	
	PK60UNV	+ UA22						•	⊖	355	
2x50-2x95	HK12030				•				⊖	292	
	HK12042					•			⊖	294	
	HK120U					•			⊖	296	
	EK12030L						•		⊖	330	
	EK12042L						•		⊖	332	
	EK120UL						•		⊖	334	
	EK120UNVL						•		⊖	358	
	HK122EL380							•	⊖	390	
	PK12042							•	⊖	368	
	PK120U							•	⊖	370	
	2x50-2x120	HK252						•		⊖	388
		HK252EL380						•		⊖	391
		PK252							•	⊖	372

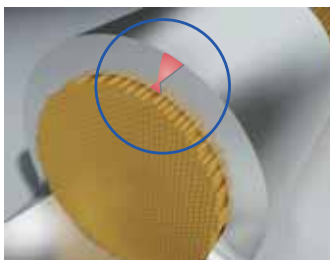
## One design, a host of quality features.



### Solderless terminals to DIN 46234 and pin terminals to DIN 46230.

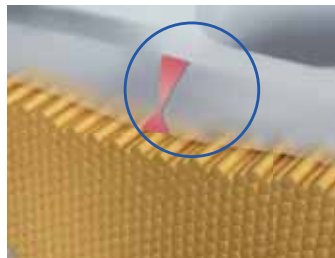
Klauke solderless terminals to DIN 46234 are the ideal solution for processing multi-stranded, fine stranded and superfine stranded conductors. Depending on the application, Klauke pin terminals to DIN 46230 are also the ideal solution for multi-stranded and fine stranded conductors. Special fork-type versions are also available.

All cable lugs are punched from highly conductive copper plate, hard soldered in the crimping area and equipped with a special grooved profile. The tin-plated finish ensures optimised protection against oxidation. The material is designed for continuous operation up to 120 °C.



*The hard-soldered crimping area guarantees optimised stability. The soldering shows no signs of cracking, even after the crimping operation and the corresponding mechanical strain.*

- Hard-soldered solderless terminals and pin terminals with a grooved profile in the crimping area.
- Versions with halogen-free polyamide insulation.
- Special design for meter connections.
- Special connectors to DIN 46341 Form A and B.



## Quality in detail.

- ▶ With grooved profile on the inside.
- ▶ **Hard-soldered in the crimping area.**
- ▶ Solderless terminals with nominal cross sections from 0.5 mm<sup>2</sup> to 240 mm<sup>2</sup>.
- ▶ Pin terminals with nominal cross sections from 0.5 mm<sup>2</sup> to 95 mm<sup>2</sup>.

### Benefits:

- ▶ Higher tensile strength due to internal grooved profile.
- ▶ No splitting of terminals during indent crimping on the soldered seam.
- ▶ Multi-stranded, fine stranded and superfine stranded conductors allow quick and trouble-free assembly.
- ▶ This comparatively short design is the ideal solution for control cabinet connections.



## A host of advantages with polyamide insulation.



- ▶ More from Page 90.

- ▶ Cable lugs with halogen-free insulating sleeve.
- ▶ No abutting edge for “easy-entry”.
- ▶ Burr-free edges.
- ▶ Entire surface tin-plated.

### Benefits:

- ▶ No hydrochloric acid-containing vapours in case of fire.
- ▶ **Fine stranded conductors can be inserted quickly** without individual wires being bent back.
- ▶ No reduction of cross section by bent wires.
- ▶ No insulation damage during crimping.
- ▶ The connecting materials do not break even when crimping on the soldered seam.

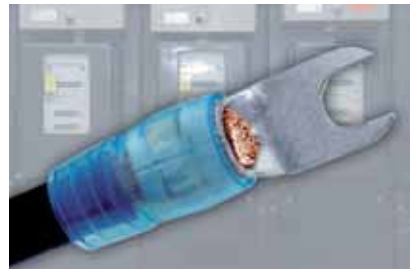
## Meters to be connected better.

- ▶ Special designs for meter connection.

### Benefits:

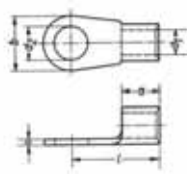
- ▶ The fork-type cable lugs can be connected to meters **quickly and simply**, even in tight areas.

- ▶ More on Page 94.



- ▶ *We highly recommend indent crimping for solderless terminals and pin terminals to guarantee optimal hold. Specific information can be found in the cross references on the product pages.*

Solderless terminals acc. to DIN - Cu



- ▶ Acc. to DIN 46234
- ▶ For conductors e.g. to VDE 0295 Class 2, 5 and 6
- ▶ Hard soldered in crimping area

**Characteristics**

- Total cross-section: 0.5 - 240 mm<sup>2</sup>
- With grooved profile for improved contact characteristics

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	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
	3 - 2.5	16303	5	6	2.3	3.2	11	0.8	0.065	100
	3.5 - 2.5	163035	5	6	2.3	3.7	11	0.8	0.065	100
1.5 - 2.5	4 - 2.5	16304	5	8	2.3	4.3	12	0.8	0.080	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	15	2.3	10.5	17	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	0.240	100
	8 - 10	16528	8	14	4.5	8.4	20	1.1	0.290	100**
	10 - 10	165210	8	18	4.5	10.5	21	1.1	0.340	100
16	12 - 10	165212	8	22	4.5	13.0	23	1.1	0.420	100
	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	0.430	100**
	10 - 16	165310	10	18	5.8	10.5	24	1.2	0.500	100
	12 - 16	165312	10	22	5.8	13.0	26	1.2	0.580	100



**Solderless terminals acc. to DIN - Cu**

Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Dimension mm						Weight/ 100 pcs. ~ kg	Packing unit/ pcs
			a	b	d1	d2	l	s		
25	5 - 25	<b>16545</b>	11	12	7.5	5.3	25	1.5	0.750	100
	6 - 25	<b>16546</b>	11	12	7.5	6.5	25	1.5	0.690	100
	8 - 25	<b>16548</b>	11	16	7.5	8.4	25	1.5	0.750	100**
	10 - 25	<b>165410</b>	11	18	7.5	10.5	26	1.5	0.760	100
	12 - 25	<b>165412</b>	11	22	7.5	13.0	31	1.5	0.920	100
	16 - 25	<b>165416</b>	11	28	7.5	17.0	35	1.5	1.320	100
35	6 - 35	<b>16556</b>	12	15	9.0	6.5	26	1.6	1.010	100
	8 - 35	<b>16558</b>	12	16	9.0	8.4	26	1.6	0.980	100**
	10 - 35	<b>165510</b>	12	18	9.0	10.5	27	1.6	1.000	100
	12 - 35	<b>165512</b>	12	22	9.0	13.0	31	1.6	1.260	100
	16 - 35	<b>165516</b>	12	28	9.0	17.0	36	1.6	1.550	100
50	6 - 50	<b>16566</b>	16	18	11.0	6.5	34	1.8	1.650	100
	8 - 50	<b>16568</b>	16	18	11.0	8.4	34	1.8	1.650	100**
	10 - 50	<b>165610</b>	16	18	11.0	10.5	34	1.8	1.600	100
	12 - 50	<b>165612</b>	16	22	11.0	13.0	36	1.8	1.800	100
	16 - 50	<b>165616</b>	16	28	11.0	17.0	40	1.8	2.100	100
70	6 - 70	<b>16576</b>	18	22	13.0	6.5	38	2.0	2.600	50
	8 - 70	<b>16578</b>	18	22	13.0	8.4	38	2.0	2.500	50
	10 - 70	<b>165710</b>	18	22	13.0	10.5	38	2.0	2.500	50
	12 - 70	<b>165712</b>	18	22	13.0	13.0	38	2.0	2.400	50
	16 - 70	<b>165716</b>	18	28	13.0	17.0	42	2.0	2.700	50
95	8 - 95	<b>16588</b>	20	24	15.0	8.4	42	2.5	4.300	50
	10 - 95	<b>165810</b>	20	24	15.0	10.5	42	2.5	4.100	50
	12 - 95	<b>165812</b>	20	24	15.0	13.0	42	2.5	3.900	50
	16 - 95	<b>165816</b>	20	28	15.0	17.0	44	2.5	4.100	50
120	8 - 120	<b>16598</b>	22	24	17.0	8.4	44	3.0	5.601	50
	10 - 120	<b>165910</b>	22	24	17.0	10.5	44	3.0	5.600	50
	12 - 120	<b>165912</b>	22	24	17.0	13.0	44	3.0	5.400	50
	16 - 120	<b>165916</b>	22	28	17.0	17.0	48	3.0	5.800	50
150	10 - 150	<b>166010</b>	24	30	19.0	10.5	50	3.2	7.600	50
	12 - 150	<b>166012</b>	24	30	19.0	13.0	50	3.2	7.600	50
	16 - 150	<b>166016</b>	24	30	19.0	17.0	50	3.2	7.500	50
185	12 - 185	<b>166112</b>	28	36	21.0	13.0	50	3.5	11.300	50
	16 - 185	<b>166116</b>	28	36	21.0	17.0	50	3.5	11.300	50
240	12 - 240	<b>166212</b>	32	38	23.5	13.0	56	4.0	15.900	25
	16 - 240	<b>166216</b>	32	38	23.5	17.0	56	4.0	15.900	25

- ▶ \* = not standardized
- ▶ \*\* = Also available in small handy packs
- ▶ 0.5 - 6 mm<sup>2</sup> not UL certified
- ▶ **Tools: see chart page 97**

**Insulated solderless terminals, Cu, Easy entry**



- ▶ For conductors e.g. to VDE 0295 Class 2, 5 and 6
- ▶ High-quality brazing process in the crimp area

**Characteristics**

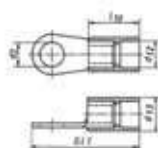
- Total cross-section: 10 - 150 mm<sup>2</sup>
- Insulation sleeve PA, halogen-free with easy-entry cable insertion
- Dimensions in tube according to DIN 46234
- With grooved profile for improved contact characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm					weight 100 pcs. ~kg		Packing unit/ pcs
			d12	d13	d2	G1	l10	Cu	Total	
10	6525	Red	6.7	8.6	5.3	34.0	19.0	0.27	0.27	100
	6526	Red	6.7	8.6	6.5	34.0	19.0	0.24	0.28	100
	6528	Red	6.7	8.6	8.4	37.5	19.0	0.29	0.33	100
	65210	Red	6.7	8.6	10.5	41.5	19.0	0.34	0.38	100
	65212	Red	6.7	8.6	13.0	45.5	19.0	0.42	0.46	100
16	6535	Blue	7.7	9.6	5.3	39.5	20.5	0.39	0.44	100
	6536	Blue	7.7	9.6	6.5	39.5	20.5	0.38	0.43	100
	6538	Blue	7.7	9.6	8.4	41.5	20.5	0.43	0.48	100
	65310	Blue	7.7	9.6	10.5	43.5	20.5	0.50	0.55	100
	65312	Blue	7.7	9.6	13.0	50.5	20.5	0.58	0.63	100
25	6545	Yellow	11.0	13.0	5.3	40.0	20.0	0.75	0.84	50
	6546	Yellow	11.0	13.0	6.5	42.5	20.0	0.69	0.78	50
	6548	Yellow	11.0	13.0	8.4	43.0	20.0	0.75	0.84	50
	65410	Yellow	11.0	13.0	10.5	45.0	20.0	0.80	0.89	50
	65412	Yellow	11.0	13.0	13.0	51.0	20.0	0.92	1.00	50
35	65416	Yellow	11.0	13.0	17.0	59.0	20.0	1.32	1.40	50
	6556	Red	12.7	15.0	6.5	44.0	22.5	1.01	1.14	50
	6558	Red	12.7	15.0	8.4	44.5	22.5	0.98	1.10	50
	65510	Red	12.7	15.0	10.5	46.5	22.5	1.00	1.12	50
	65512	Red	12.7	15.0	13.0	52.5	22.5	1.26	1.38	50
50	65516	Red	12.7	15.0	17.0	54.5	22.5	1.55	1.67	50
	6566	Blue	15.4	18.0	6.5	54.5	27.5	1.65	1.90	50
	6568	Blue	15.4	18.0	8.4	60.5	27.5	1.65	1.90	50
	65610	Blue	15.4	18.0	10.5	60.5	27.5	1.60	1.85	50
	65612	Blue	15.4	18.0	13.0	60.5	27.5	1.80	2.05	50
70	65616	Blue	15.4	18.0	17.0	67.5	27.5	2.10	2.35	50
	6576	Yellow	17.4	20.0	6.5	61.5	30.5	2.60	2.90	50
	6578	Yellow	17.4	20.0	8.4	61.5	30.5	2.50	2.80	50
	65710	Yellow	17.4	20.0	10.5	66.5	30.5	2.50	2.80	50
	65712	Yellow	17.4	20.0	13.0	66.5	30.5	2.40	2.70	50
95	65716	Yellow	17.4	20.0	17.0	70.5	30.5	2.70	3.00	50
	65810	Red	20.5	23.5	10.5	70.0	34.0	4.10	4.50	25
	65812	Red	20.5	23.5	13.0	70.0	34.0	3.90	4.40	25
	65816	Red	20.5	23.5	17.0	76.0	34.0	4.10	4.50	25

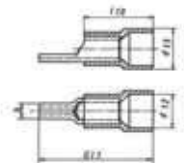
**Insulated solderless terminals, Cu, Easy entry**

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm					weight 100 pcs. ~kg		Packing unit/ pcs
			d12	d13	d2	G11	I10	Cu	Total	
120	65910	■	23.5	26.7	10.5	79.0	36.0	5.60	6.10	25
	65912	■	23.5	26.7	13.0	82.0	36.0	5.40	5.90	25
	65916	■	23.5	26.7	17.0	90.0	36.0	5.80	6.30	25
150	66010	■	26.0	29.2	10.5	80.0	39.0	7.60	8.40	25
	66012	■	26.0	29.2	13.0	83.0	39.0	7.60	8.40	25
	66016	■	26.0	29.2	17.0	83.0	39.0	7.50	8.30	25

► Tools: see chart page 99

**Insulated pin terminals, Cu, Easy entry**

- For conductors e.g. VDE 0295 Class 2
- High-quality brazing process in the crimp area



**Characteristics**

- Total cross-section: 10 - 95 mm<sup>2</sup>
- Insulation sleeve PA, halogen-free with easy-entry cable insertion
- With grooved profile for improved contact characteristics
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- Cu-ETP

**Surface**

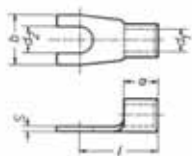
- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm					Weight 100 pcs. ~kg		Packing unit/ pcs
			b	d12	d13	G11	I10	Cu	Total	
10	ST1716IS	■	4.3	7.4	9.4	33.0	19.0	0.27	0.31	100
16	ST1717IS	■	5.5	8.6	10.6	38.0	20.0	0.39	0.44	100
25	ST1718IS	■	6.8	12.5	14.5	43.5	23.5	0.63	0.73	50
35	ST1719IS	■	8.0	14.0	16.4	51.5	27.5	1.17	1.34	50
50	ST1720IS	■	9.5	15.5	18.0	59.0	33.0	1.79	2.10	50
70	ST1721IS	■	11.0	18.0	20.5	69.0	38.0	2.92	3.20	50
95	ST1722IS	■	12.5	20.7	23.5	71.0	40.0	4.30	4.70	25

► Tools: see chart page 99

Terminals, connectors and pin terminals to DIN - Cu

## Solderless terminals Cu, fork type



- ▶ Dimensions in tube to 6 mm<sup>2</sup> to DIN 46234
- ▶ Fork-type version for simple and direct screw mounting
- ▶ High-quality brazing process in the crimp area

**Characteristics**

- Total cross-section: 0.5 - 16 mm<sup>2</sup>
- With grooved profile for improved contact characteristics

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	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	5.4	6.4	24.0	1.0	0.350	100
	8 - 16	1653C8	11.5	15.0	5.4	8.4	27.0	1.0	0.420	100

 ▶ 0.5 - 6 mm<sup>2</sup> not UL certified

▶ Tools: see chart page 97

**Pin terminals acc. to DIN, Cu**

- ▶ Nominal cross-sections 0.5 - 6 mm<sup>2</sup> to DIN 46230
- ▶ For conductors e.g. VDE 0295 Class 2
- ▶ High-quality brazing process in the crimp area



**Characteristics**

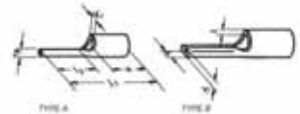
- Total cross-section: 0.5 - 95 mm<sup>2</sup>
- With grooved profile for improved contact characteristics

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Typ	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
				a	b	d1	d2	l1	l2	s	h		
0.5 - 1	1	<b>ST1705</b>	A	5.0	--	1.8	1.9	17.0	10	0.8	--	0.060	100
1.5 - 2.5	2.5	<b>ST1710</b>	A	5.0	--	2.3	1.9	17.0	10	0.8	--	0.072	100
4 - 6	6	<b>ST1715</b>	A	6.0	--	3.6	2.7	20.0	11	1.0	--	0.160	100
10	--	<b>*ST1716</b>	B	10.0	4.3	4.3	--	24.5	11	1.0	2.0	0.270	100
16		<b>*ST1717</b>	B	11.5	5.8	5.4	--	29.5	15	1.0	2.0	0.390	100
25		<b>*ST1718</b>	B	13.5	6.8	6.7	--	33.5	15	1.2	2.4	0.630	100
35		<b>*ST1719</b>	B	16.0	8.0	8.2	--	40.5	20	1.5	3.2	1.170	50
50		<b>*ST1720</b>	B	19.0	9.5	9.5	--	45.0	20	1.8	3.6	1.790	50
70		<b>*ST1721</b>	B	24.0	11.0	11.2	--	55.0	23	2.0	4.0	2.920	50
95	<b>*ST1722</b>	B	24.0	12.5	13.5	--	55.0	23	2.5	5.0	4.300	50	

- ▶ \* = not standardized
- ▶ 0.5 - 6 mm<sup>2</sup> not UL certified
- ▶ **Tools: see chart page 97**

Terminals, connectors and pin terminals to DIN - Cu

Insulated terminals for meter connections, Cu, fork type



- ▶ Special design for meter connection
- ▶ Fork-type version for simple and direct screw mounting
- ▶ High-quality brazing process in the crimp area

**Characteristics**

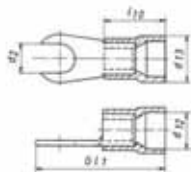
- Total cross-section: 10 - 16 mm<sup>2</sup>
- No additional insulation of the crimped connection required
- With grooved profile for improved contact characteristics
- Insulation sleeve PA, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion



Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm						Weight 100 pcs. ~kg		Packing unit/ pcs
			d12	d13	d2	l10	G11	l10	Cu	Total	
10	652C5	Red	7.0	9.6	5.3	33.5	19.0	0.24	0.28	100	
	652C6	Red	7.0	9.6	6.4	33.5	19.0	0.26	0.30	100	
16	653C6	Blue	8.6	10.6	6.4	37.5	20.5	0.35	0.40	100	

▶ Tools: see chart page 99

**Solderless connectors acc. to DIN, Cu, short type**

- ▶ Acc. to DIN 46341 part 1, form A
- ▶ For conductors e.g. VDE 0295 Class 2, 5 and 6
- ▶ Ideal for connecting differing conductor cross-sections



**Characteristics**

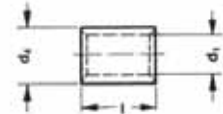
- Total cross-section: 0.5 - 150 mm<sup>2</sup>
- Precise end machining for easy cable insertion
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	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
1.5 - 2.5	2.5	1630K	2.3	3.9	8	0.055	100
4 - 6	6	1650K	3.6	5.6	9	0.090	100
10	10	1652K	4.5	6.7	10	0.170	100
16	16	1653K	5.8	8.2	11	0.260	100
25	25	1654K	7.5	10.5	14	0.510	100
35	35	1655K	9.0	12.2	16	0.730	100
50	50	1656K	11.0	14.6	19	1.200	100
70	70	1657K	13.0	17.0	19	1.530	50
95	95	1658K	15.0	20.0	20	2.370	50
120	120	1659K	16.5	22.5	22	3.450	50
150	150	1660K	19.0	25.4	26	5.060	50

▶ **Tools: see chart page 97**

Solderless connectors acc. to DIN, Cu, long type



- ▶ Acc. to DIN 46341 part 1, form B
- ▶ For conductors e.g. VDE 0295 Class 2, 5 and 6

**Characteristics**

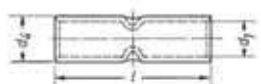
- Total cross-section: 0.5 - 150 mm<sup>2</sup>
- With butmarks for precise cable insertion
- Precise end machining for easy cable insertion
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

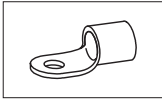
- Tin-plated to protect against corrosion (other surfaces available upon request)



Nominal cross section mm <sup>2</sup>	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

▶ Tools: see chart page 97



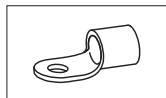


**■ Tool application chart**

**Solderless terminals to DIN 46234,  
pin terminals to DIN 46230,  
solderless connectors to DIN 46341, part 1**

Crimping range corresponds to nominal cross-section mm²	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.5-6	K13		•						☺	240
0.5-10	K50			•					☺	259
	EK50ML			•					☺	278
	EK1550					•			☺	308
	EK1550G					•			☺	310
0.5-16	K25		•						☺	242
0.75-2.5	KP1	+KP232		•					☺	256
	KP1L	+KP232		•					☺	256
	EKP1	+KP232				•			☺	312
	TEKP1	+KP232		•					☺	281
	KPM15	+KP232		•					☺	282
4-10	KP1	+KP242		•					☺	256
	KP1L	+KP242		•					☺	256
	EKP1	+KP242				•			☺	312
	TEKP1	+KP242		•					☺	281
	KPM15	+KP242		•					☺	282
10-35	K354			•					☺	260
	EK354					•			☺	314
	EK354L					•			☺	316
10-50	EK505L					•			☺	318
10-70	K18			•					☺	262
	HK6018					•			☺	286
	EK5018L						•		☺	320
	PK18							•	☺	362
	THK18						•		☺	362
	HK60UNV	+ UA18				•			☺	354
	EK60UNVL	+ UA18					•		☺	357
	EKM60UNVL	+ UA18					•		☺	356
	PK60UNV	+ UA18						•	☺	355
	K22			•					☺	264
	HK6022					•			☺	288
	EK6022L						•		☺	324
	EKM6022L						•		☺	322
	PK22							•	☺	364
	THK22							•	☺	364
HK60UNV	+ UA22				•			☺	354	
EK60UNVL	+ UA22					•		☺	357	
EKM60UNVL	+ UA22					•		☺	356	
PK60UNV	+ UA22						•	☺	355	
10-240	EKM60IDL					•			☺	328

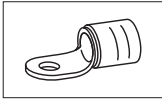
Terminals, connectors and pin terminals to DIN - Cu



### ■ Tool application chart

**Solderless terminals to DIN 46234,  
pin terminals to DIN 46230,  
solderless connectors to DIN 46341, part 1**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
16-95	K95		•						☺	242	
	TK95		•						☺	243	
16-150	HK12030				•				☺	292	
	HK12042				•				☺	294	
	HK120U				•				☺	296	
	EK12030L					•			☺	330	
	EK12042L					•			☺	332	
	EK120UL					•			☺	334	
	EK120UNVL					•			☺	358	
	HK122EL380						•		☺	390	
	PK12042								•	☺	368
	PK120U								•	☺	370
16-240	HK252						•		☺	388	
	HK252EL380						•		☺	391	
	PK252							•	☺	372	



**■ Tool application chart**

**Insulated solderless terminals  
Insulated pin terminals**

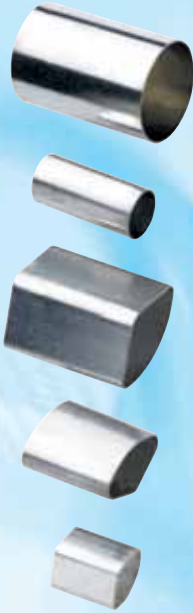
Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
10-16	K16		•						○	234
	K50			•					○	259
	EK50ML			•					○	278
	K354			•					○	260
	EK1550						•		○	308
	EK1550G						•		○	310
	EK354						•		☾	314
	EK354L						•		☾	316
10-50	K18			•					☾	262
	HK6018					•			☾	286
	EK5018L						•		☾	320
	PK18							•	☾	362
	THK18							•	☾	362
	HK60UNV	+ UA18				•			☾	354
	EK60UNVL	+ UA18					•		☾	357
	EKM60UNVL	+ UA18					•		☾	356
	PK60UNV	+ UA18						•	☾	355
10-70	K22			•					☾	264
	HK6022					•			☾	288
	EK6022L						•		☾	324
	EKM6022L						•		☾	322
	PK22							•	☾	364
	THK22							•	☾	364
	HK60UNV	+ UA22				•			☾	354
	EK60UNVL	+ UA22					•		☾	357
	EKM60UNVL	+ UA22					•		☾	356
	PK60UNV	+ UA22						•	☾	355
10-95	HK12030					•			☾	292
	HK12042					•			☾	294
	HK120U					•			☾	296
	EK12030L						•		☾	330
	EK12042L						•		☾	332
	EK120UL						•		☾	334
	EK120UNVL						•		☾	358
	PK12042							•	☾	368
	PK120U							•	☾	370
10-150	HK252						•		☾	388
	PK252							•	☾	372

## Brings compacted conductors to volume.

### Sleeves for copper compacted round conductors and sector-shaped conductors.

With the same nominal cross-section, the diameters of compacted round conductors are narrower than those of uncompacted round conductors. This causes problems with cable assembly, since the corresponding cable lug or connector cannot be fitted as specified in the standards.

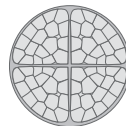
Problems occur with sector shaped conductors when round connecting material is applied to sector shaped conductors. Often, both cable lugs and connectors are damaged - or the conductors break. The conductors can be crimped round using sleeves for sector-shaped conductors, making them easier to process.



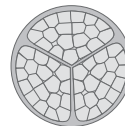
Round-crimping sector sleeves in three steps.

- For cables with compacted round conductors.
- For 3 core sector-shaped cables (120° angle).
- For 4 core sector-shaped cables (90° angle).

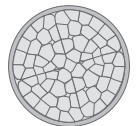
The appropriate cable types for our sleeves in cross section:



4 core sector-shaped cables



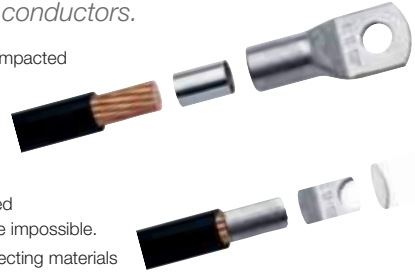
3 core sector-shaped cables



compacted round conductors

## ■ A nice piece of work *for compacted conductors.*

- ▶ **Sleeves for cross section compensation** on cables with compacted conductors with nominal cross sections up to 400 mm<sup>2</sup>.
- ▶ For copper tubular and compression cable lugs and connectors.



### **Benefits:**

- ▶ Connecting materials can be efficiently crimped onto compacted conductors using Klauke crimping tools - faulty connections are impossible.
- ▶ Existing crimping tools can be used. Storing of additional connecting materials or expensive special solutions is not necessary.

## ■ *Bringing sector-shaped conductors* **into the right form.**



- ▶ Sleeves for sector-shaped conductors with nominal cross sections up to 240 mm<sup>2</sup>.
- ▶ For 3 and 4 sector-shaped conductors with angles of 120° and 90° respectively.

### **Benefits:**

- ▶ 3 and 4 sector-shaped conductors with nominal cross sections up to 240 mm<sup>2</sup> can be crimped round without breaking and then processed using standard connecting materials.
- ▶ No special cable lugs or special tools are required.

▶ *More from Page 104.*



- ▶ *To guarantee optimum hold of sleeves for compacted or sector-shaped conductors and connecting materials, the sleeves must be crimped onto the conductors using pre-rounding dies.*

*The connecting material can then be crimped in the usual manner.*

- ▶ *As well as the sleeve applications for tubular cable lugs in the standard version as shown, we also offer a new series of cable lugs called "blue connection"® without the use of sleeves.*
- ▶ *More from Page 24.*

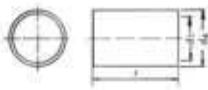
***blue connection***®

Sleeves for compacted conductors and sector-shaped conductors - Cu

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



- ▶ For multi-stranded, compacted conductors e.g. VDE 0295 Class 2
- ▶ Allows the use of Klauke tubular cable lugs and connectors, standard type for compacted conductors

**Characteristics**

- Total cross-section: 16 - 400 mm<sup>2</sup>
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	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

ⓘ Please observe instructions in technical appendix on page i-7

**Sleeves for compacted conductors, for tubular compression cable lugs and connectors DIN type**

- ▶ For multi-stranded, compacted conductors e.g. VDE 0295 Class 2
- ▶ Allows the use of Klauke DIN compression cable lugs and connectors for compacted conductors



**Characteristics**

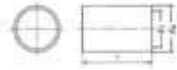
- Total cross-section: 16 - 400 mm<sup>2</sup>
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion



Nominal cross section mm <sup>2</sup>	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

ⓘ Please observe instructions in technical appendix on page I-7

Sleeves for compacted conductors and sector-shaped conductors - Cu

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



- ▶ For tubular cable lugs and connectors, standard version and DIN compression cable lugs and connectors
- ▶ To simplify pre-rounding of 3-conductor cables (120° angle)
- ▶ Prevents sector shaped conductors from splicing during pre-rounding

**Characteristics**

- Total cross-section: 35 - 240 mm<sup>2</sup>
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
		l			
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

ⓘ Pre-rounding dies see chapter "Crimping dies"

ⓘ Please observe instructions in technical appendix on page i-7



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

- ▶ For tubular cable lugs and connectors, standard version and DIN compression cable lugs and connectors
- ▶ To simplify pre-rounding of 4-conductor cables (90° angle)
- ▶ Prevents sector shaped conductors from splicing during pre-rounding



**Characteristics**

- Total cross-section: 35 - 240 mm<sup>2</sup>
- Annealed material optimises material and crimping properties

**Material**

- Copper acc. to EN 13600

**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
		l			
<b>Standard type</b>					
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
<b>DIN version</b>					
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

ⓘ Please observe instructions in technical appendix on page i-7

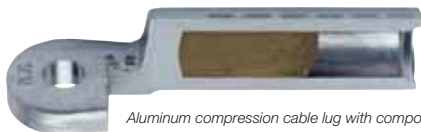
ⓘ Pre-rounding dies see chapter "Crimping dies"

## Aluminum *Optimised connections.*

### Aluminum compression cable lugs and connectors to DIN.

Due to their significantly lower weight, aluminum conductors are becoming increasingly popular in power distribution applications.

The material structure is very different to copper. That's why appropriate cable lugs and connectors are required. Connecting material for aluminum comes with a special compound. During crimping this compound destroys the non-conductive oxide layer of aluminum in the crimping area, allowing a perfect electrical connection.



*Aluminum compression cable lug with compound in the contact area.*

- Aluminum cable lugs with DIN dimensions up to 500 mm<sup>2</sup>.
- Compression cable lugs with barrier to DIN 46239.
- Compression joints to DIN 46267, Part 2.
- Compression joints for medium-voltage applications up to 30 kV.
- Tin-plated version for connecting to copper rails.



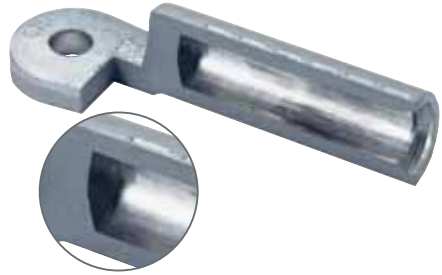
*Aluminum compression cable lugs are frequently used in power distribution.*

## ■ *The right product for every* **aluminum conductor.**

- ▶ Nominal cross sections up to 500 mm<sup>2</sup>.
- ▶ **Barrier type with oil stop.**
- ▶ Tin-plated designs with 20 µm layer thickness.

### **Benefits:**

- ▶ The Klauke range offers aluminum DIN compression cable lugs to suit every application.
- ▶ The quality tin plating ensures connections to copper in a dry environment.



## ■ *A quality range.*



- ▶ Defined, **unique material properties** to Klauke standards.
- ▶ DIN-compliant dimensions.
- ▶ Consistent material thickness, precise diameters and an accurate fit mean optimised processing and ultimate safety.

### **Benefits:**

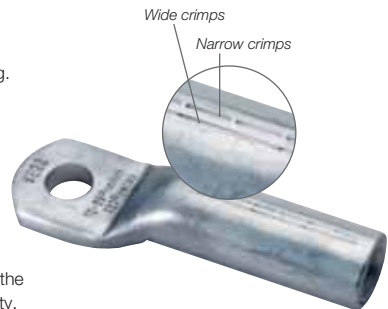
- ▶ When professionally installed, the connecting material ensures optimised stability even with mechanically stressed or severely vibrating connections.
- ▶ Less repair and maintenance thanks to safe connections.
- ▶ More applications, e.g. power distribution.

## ■ *With markings for the crimping operation.*

- ▶ All DIN compression cable lugs have markings for correct crimping.
- ▶ Markings **for narrow and wide crimps.**
- ▶ All crimping dies designed for aluminum with larger contact areas than dies for copper connecting materials.

### **Benefits:**

- ▶ You identify at a glance where and how often the connecting material has to be crimped. Errors are practically impossible.
- ▶ Dies with larger crimping width crimp wider areas of cable lugs to the conductor, thereby compensating for aluminum's lower conductivity.



- ▶ *The compound in aluminum compression cable lugs improves the contact properties by piercing the non-conductive oxide layer. The compound also prevents oxygen penetrating the contact points, avoiding re-oxidation.*

Compression cable lugs acc. to DIN - AI



- ▶ Acc. to DIN 46329
- ▶ For non-tension connections of Al cables to DIN 48201, part 5 and aluminum cables to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics

**Characteristics**

- Total cross-section: 16 - 500 mm<sup>2</sup>
- Barrier design with oil stop
- Optional tin-plated (20 µm) version to connect dusty interior copper bus bars
- Precise end machining for easy cable insertion

**Material**

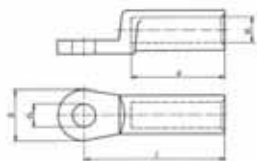
- E-Al

**Surface**

- Bright finished

**Order info**

- part number appendix for tinned version "v"



Nominal cross section mm <sup>2</sup>	Size of bolt dia.		Part No.	Code	Dimension mm					Number of crimps		Weight/100 pcs. ~ kg	Packing unit/pcs
	rm/sm	se			a	b	d1	d2	l	mech.	hydr.		
16	25	M 8	*263R8	12	30	20	5.8	8.4	50	4	2	1.20	4
	25	M 10	*263R10	12	30	20	5.8	10.5	50	4	2	1.20	4
25	35	M 8	264R8	12	30	25	6.8	8.4	50	4	2	1.30	4
	35	M 10	264R10	12	30	25	6.8	10.5	50	4	2	1.24	4
35	50	M 8	265R8	14	42	25	8.0	8.4	62	5	2	2.50	4
	50	M 10	265R10	14	42	25	8.0	10.5	62	5	2	1.98	4
50	70	M 8	266R8	16	42	25	9.8	8.4	62	5	2	2.75	4
	70	M 10	266R10	16	42	25	9.8	10.5	62	5	2	2.70	4
70	95	M 8	267R8	18	52	25	11.2	8.4	72	6	3	3.45	4
	95	M 10	267R10	18	52	25	11.2	10.5	72	6	3	3.80	4
95	120	M 10	268R10	22	56	25	13.2	10.5	75	6	3	6.90	4
	120	M 12	268R12	22	56	25	13.2	13.0	75	6	3	4.92	4
120	150	M 10	269R10	22	56	30	14.7	10.5	80	6	3	5.95	4
	150	M 12	269R12	22	56	30	14.7	13.0	80	6	3	5.84	4
150	185	M 10	270R10	25	60	30	16.3	10.5	90	6	3	8.50	4
	185	M 12	270R12	25	60	30	16.3	13.0	90	6	3	7.73	4
185	240	M 10	271R10	28	60	30	18.3	10.5	91	6	3	11.00	4
	240	M 12	271R12	28	60	30	18.3	13.0	91	6	3	9.88	4
240	300	M 10	*272R10	32	70	38	21.0	10.5	103	8	3	15.50	4
	300	M 12	272R12	32	70	38	21.0	13.0	103	8	3	13.80	4
240	300	M 16	272R16	32	70	38	21.0	17.0	103	8	3	13.48	4
	300	M 20	272R20	32	70	38	21.0	21.0	103	8	3	15.00	4

**Compression cable lugs acc. to DIN - AI**

Nominal cross section mm <sup>2</sup>	rm/sm	se	Size of bolt dia.	Part No.	Code	Dimension mm				Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/pcs
						a	b	d1	d2	l	mech.		
300	--	M 12	<b>273R12</b>	34	70	38	23.3	13.0	103	8	3	17.60	1
	--	M 16	<b>273R16</b>	34	70	38	23.3	17.0	103	8	3	17.28	1
	--	M 20	<b>273R20</b>	34	70	38	23.3	21.0	103	8	3	17.40	1
400	--	M 12	<b>274R12</b>	38	73	38	26.0	13.0	116	--	4	38.00	1
	--	M 16	<b>274R16</b>	38	73	38	26.0	17.0	116	--	4	37.40	1
	--	M 20	<b>274R20</b>	38	73	38	26.0	21.0	116	--	4	40.20	1
500	--	M 12	<b>275R12</b>	44	79	44	29.0	13.0	122	--	4	43.70	1
	--	M 16	<b>275R16</b>	44	79	44	29.0	17.0	122	--	4	43.30	1
	--	M 20	<b>275R20</b>	44	79	44	29.0	21.0	122	--	4	43.00	1

- ▶ \* = not standardized
- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded
- ▶ se = sector solid

▶ **Tools: see chart page 118**

**Compression cable lugs, AI**

- ▶ Tube dimension to DIN 46329
- ▶ Also for non-tension connections of AI cables to DIN 48201, part 5 and aluminum cables to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics



**Characteristics**

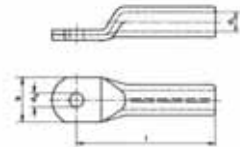
- Total cross-section: 10 - 400 mm<sup>2</sup>
- For pre-rounded sm/se sector shaped conductors
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-AI

**Surface**

- Bright finished



Nominal cross section mm <sup>2</sup>	rm/sm	se	Size of bolt dia.	Part No.	Code	Dimension mm			Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/pcs
						b	d1	d2	l	mech.		
10	--	M 6	<b>202R6</b>	10	16	5.0	6.5	52	4	2	0.86	25
	--	M 8	<b>202R8</b>	10	18	5.0	8.5	52	4	2	0.88	25
16	25	M 8	<b>203R8</b>	12	18	5.8	8.5	52	4	2	1.37	10
	25	M 10	<b>203R10</b>	12	18	5.8	10.5	52	4	2	1.39	10
25	35	M 8	<b>204R8</b>	12	18	6.8	8.5	60	4	2	1.41	10
	35	M 10	<b>204R10</b>	12	18	6.8	10.5	60	4	2	1.46	10
35	50	M 10	<b>205R10</b>	14	21	8.0	10.5	67	5	2	2.08	10
	50	M 12	<b>205R12</b>	14	21	8.0	13.0	67	5	2	2.05	10
50	70	M 10	<b>206R10</b>	16	25	9.8	10.5	72	5	2	2.68	10
	70	M 12	<b>206R12</b>	16	25	9.8	13.0	72	5	2	2.73	10
70	95	M 10	<b>207R10</b>	18	28	11.2	10.5	86	6	3	4.42	10
	95	M 12	<b>207R12</b>	18	28	11.2	13.0	86	6	3	4.27	10
95	120	M 10	<b>208R10</b>	22	32	13.2	10.5	90	6	3	7.40	4
	120	M 12	<b>208R12</b>	22	32	13.2	13.0	90	6	3	7.50	4
	120	M 16	<b>208R16</b>	22	34	13.2	17.0	90	6	3	7.30	4

Compression cable lugs, AI

Nominal cross section mm <sup>2</sup>		Size of bolt dia.	Part No.	Code	Dimension mm			Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/pcs	
rm/sm	se				d1	d2	l	mech.	hydr.			
120	150	M 12	<b>209R12</b>	22	32	14.7	13.0	91	6	3	6.68	4
	150	M 16	<b>209R16</b>	22	34	14.7	17.0	91	6	3	6.41	4
	185	M 12	<b>210R12</b>	25	35	16.3	13.0	103	6	3	9.64	4
150	185	M 16	<b>210R16</b>	25	35	16.3	17.0	103	6	3	9.24	4
	185	M 20	<b>210R20</b>	25	41	16.3	21.0	103	6	3	9.40	4
185	240	M 12	<b>211R12</b>	28	40	18.3	13.0	106	6	3	12.61	1
	240	M 16	<b>211R16</b>	28	40	18.3	17.0	106	6	3	11.92	1
	240	M 20	<b>211R20</b>	28	40	18.3	21.0	106	6	3	13.10	1
240	300	M 12	<b>212R12</b>	32	45	21.0	13.0	116	8	3	18.30	1
	300	M 16	<b>212R16</b>	32	45	21.0	17.0	116	8	3	17.60	1
	300	M 20	<b>212R20</b>	32	45	21.0	21.0	116	8	3	17.30	1
300	--	M 16	<b>213R16</b>	34	49	23.3	17.0	124	8	3	17.50	1
	--	M 20	<b>213R20</b>	34	49	23.3	21.0	124	8	3	17.30	1
400	--	M 16	<b>214R16</b>	38	58	26.0	17.0	165	--	4	32.20	1
	--	M 20	<b>214R20</b>	38	58	26.0	21.0	165	--	4	31.90	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded
- ▶ se = sector solid
- ▶ 16-400 mm<sup>2</sup> IEC tested

▶ **Tools: see chart page 118**

Compression joints acc. to DIN, AI



- ▶ Acc. to DIN 46267, part 2
- ▶ Also for non-tension connections of aluminum conductors DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics

**Characteristics**

- Total cross-section: 10 - 500 mm<sup>2</sup>
- For pre-rounded sm/se sector shaped conductors
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al

**Surface**

- Bright finished

Nominal cross section mm <sup>2</sup>		Part No.	Code	Dimension mm		Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/pcs
rm/sm	se			d1	l	mech.	hydr.		
10	--	<b>*222R</b>	10	5.0	55	3/3	--	0.95	10
16	25	<b>*223R</b>	12	5.8	55	3/3	--	1.40	10
25	35	<b>224R</b>	12	6.8	70	4/4	2/2	1.60	10
35	50	<b>225R</b>	14	8.0	85	5/5	2/2	2.60	10
50	70	<b>226R</b>	16	9.8	85	5/5	2/2	3.20	10
70	95	<b>227R</b>	18	11.2	105	6/6	3/3	5.30	10
95	120	<b>228R</b>	22	13.2	105	6/6	3/3	7.60	10
120	150	<b>229R</b>	22	14.7	105	6/6	3/3	7.80	10
150	185	<b>230R</b>	25	16.3	125	6/6	3/3	10.70	10
185	240	<b>231R</b>	28	18.3	125	6/6	3/3	14.30	5
240	300	<b>232R</b>	32	21.0	145	8/8	3/3	20.30	5

**Compression joints acc. to DIN, Al**

Nominal cross section mm <sup>2</sup>		Part No.	Code	Dimension mm		Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/pcs
rm/sm	se			d1	l	mech.	hydr.		
300	--	<b>233R</b>	34	23.3	145	8/8	3/3	22.20	1
400	--	<b>234R</b>	38	26.0	210	--	5/5	40.80	1
500	--	<b>235R</b>	44	29.0	210	--	5/5	56.00	1

- ▶ \* = not standardized
- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded

- ▶ se = sector solid
- ▶ 16-500 mm<sup>2</sup> IEC tested
- ▶ **Tools: see chart page 118**

**Compression joints, Al**

- ▶ Tube dimension to DIN 46267, part 2
- ▶ For non-tension connections of medium-voltage aluminum cable 10-30 kV
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics



**Characteristics**

- Total cross-section: 35 - 400 mm<sup>2</sup>
- Also available as barrier design with oil stop
- With bevelled edges for reduced winding expenditure for the assembly
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al

**Surface**

- Bright finished

Nominal cross section mm <sup>2</sup>		Part No.	Code	Dimension mm		Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/ pcs
rm/sm	se			d1	l	mech.	hydr.		
<b>Standard version</b>									
35	50	<b>405R</b>	14	8.20	90	4/4	2/2	2.7	10
50	70	<b>406R</b>	16	10.00	90	4/4	2/2	3.4	10
70	95	<b>407R</b>	18	11.50	95	4/4	2/2	4.6	10
95	120	<b>408R</b>	22	13.50	100	4/4	2/2	6.8	10
120	150	<b>409R</b>	22	15.00	105	4/4	2/2	7.4	10
150	185	<b>410R</b>	25	16.50	105	4/4	2/2	8.7	10
185	240	<b>411R</b>	28	18.50	125	5/5	2/2	13.4	5
240	300	<b>412R</b>	32	21.30	125	5/5	2/2	15.7	5
300	--	<b>413R</b>	34	23.60	125	5/5	2/2	16.3	1
400	--	<b>414R</b>	38	26.25	150	--	3/3	25.8	1
<b>Barrier version</b>									
35	50	<b>415R</b>	14	8.0	95	4/4	2/2	3.1	5
50	70	<b>416R</b>	16	9.8	95	4/4	2/2	5.6	5
70	95	<b>417R</b>	18	11.2	100	4/4	2/2	6.1	5
95	120	<b>418R</b>	22	13.2	105	4/4	2/2	9.2	5
120	150	<b>419R</b>	22	14.7	110	4/4	2/2	10.3	5
150	185	<b>420R</b>	25	16.3	110	4/4	2/2	12.0	5
185	240	<b>421R</b>	28	18.3	130	5/5	2/2	15.6	5
240	300	<b>422R</b>	32	21.0	130	5/5	2/2	19.1	5
300	--	<b>423R</b>	34	23.3	135	5/5	2/2	30.7	1
400	--	<b>424R</b>	38	26.0	165	--	3/3	30.0	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded

- ▶ se = sector solid
- ▶ **Tools: see chart page 118**

**Reduction compression joints, Al, barrier design**



- ▶ In nominal cross-section area tube dimension to DIN 46267, part 2
- ▶ For non-tension connections of medium-voltage aluminum cable 10-30 kV
- ▶ Ideal for connecting differing conductor cross-sections
- ▶ Filled with contact grease for optimum crimp characteristics
- ▶ With bevelled edges for reduced winding expenditure for the assembly



**Characteristics**

- Total cross-section: 35 - 400 mm<sup>2</sup>
- Barrier design with oil stop
- With code number for clear tool assignment
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al

**Surface**

- Bright finished

Nominal cross section mm <sup>2</sup> /sm		Part No.	Code	Dimension mm			Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/ pcs
from	to			d1	d2	l	mech.	hydr.		
35	25	425R25	14	8.0	6.8	95	4/4	2/2	2.800	5
50	25	426R25	16	9.8	6.8	95	4/4	2/2	3.630	5
	35	426R35	16	9.8	8.0	95	4/4	2/2	3.450	5
70	25	427R25	18	11.2	6.8	100	4/4	2/2	4.975	5
	35	427R35	18	11.2	8.0	100	4/4	2/2	4.790	5
	50	427R50	18	11.2	9.8	100	4/4	2/2	4.420	5
95	25	428R25	22	13.2	6.8	105	4/4	2/2	8.200	5
	35	428R35	22	13.2	8.0	105	4/4	2/2	8.000	5
	50	428R50	22	13.2	9.8	105	4/4	2/2	7.600	5
	70	428R70	22	13.2	11.2	105	4/4	2/2	7.350	5
120	25	429R25	22	14.7	6.8	110	4/4	2/2	8.000	5
	35	429R35	22	14.7	8.0	110	4/4	2/2	7.800	5
	50	429R50	22	14.7	9.8	110	4/4	2/2	7.380	5
	70	429R70	22	14.7	11.2	110	4/4	2/2	7.100	5
	95	429R95	22	14.7	13.2	110	4/4	2/2	6.550	5
150	25	430R25	25	16.3	6.8	110	4/4	2/2	10.700	5
	35	430R35	25	16.3	8.0	110	4/4	2/2	10.500	5
	50	430R50	25	16.3	9.8	110	4/4	2/2	10.100	5
	70	430R70	25	16.3	11.2	110	4/4	2/2	9.800	5
	95	430R95	25	16.3	13.2	110	4/4	2/2	9.500	5
	120	430R120	25	16.3	14.7	110	4/4	2/2	8.650	5
185	25	431R25	28	18.3	6.8	130	--	2/2	16.120	5
	35	431R35	28	18.3	8.0	130	--	2/2	15.875	5
	50	431R50	28	18.3	9.8	130	--	2/2	15.400	5
	70	431R70	28	18.3	11.2	130	--	2/2	15.050	5
	95	431R95	28	18.3	13.2	130	--	2/2	14.400	5
	120	431R120	28	18.3	14.7	130	5/5	2/2	13.700	5
	150	431R150	28	18.3	16.3	130	5/5	2/2	13.050	5



**Reduction compression joints, Al, barrier design**

Nominal cross section rm/sm		Part No.	Code	Dimension mm			Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/ pcs
from	to			d1	d2	l	mech.	hydr.		
240	25	<b>432R25</b>	32	21.0	6.8	130	--	2/2	21.200	5
	35	<b>432R35</b>	32	21.0	8.0	130	--	2/2	20.950	5
	50	<b>432R50</b>	32	21.0	9.8	130	--	2/2	20.470	5
	70	<b>432R70</b>	32	21.0	11.2	130	--	2/2	20.120	5
	95	<b>432R95</b>	32	21.0	13.2	130	--	2/2	19.460	5
	120	<b>432R120</b>	32	21.0	14.7	130	--	2/2	18.800	5
	150	<b>432R150</b>	32	21.0	16.3	130	5/5	2/2	18.125	5
	185	<b>432R185</b>	32	21.0	18.3	130	5/5	2/2	17.275	5
300	150	<b>433R150</b>	34	23.3	16.3	135	5/5	2/2	21.100	1
	185	<b>433R185</b>	34	23.3	18.3	135	5/5	2/2	20.120	1
	240	<b>433R240</b>	34	23.3	21.0	135	5/5	2/2	18.730	1
400	185	<b>434R185</b>	38	26.0	18.3	165	--	3/3	34.700	1
	240	<b>434R240</b>	38	26.0	21.0	165	--	3/3	32.900	1
	300	<b>434R300</b>	38	26.0	23.3	165	--	3/3	31.200	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded
- ▶ se = sector solid

▶ **Tools: see chart page 118**



Reduction compression joints, Al



- ▶ In nominal cross-section area tube dimension to DIN 46267, part 2
- ▶ For non-tension connections of aluminum conductors to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp results



Characteristics

- Total cross-section: 16 - 240 mm<sup>2</sup>
- For connecting different conductor cross-sections
- Also for pre-rounded sector shaped conductors
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

Material

- E-Al

Surface

- Bright finished

Nominal cross section mm <sup>2</sup> /sm		Part No.	Code	Dimension mm			Number of crimps		Weight/ 100 pcs. ~ kg	Packing unit/ pcs
from	to			d1	d2	l	mech.	hydr.		
25	16	284R16	12	7.0	5.8	75	4/4	2/2	1.53	10
35	25	285R25	14	8.2	6.8	90	5/5	2/2	2.50	10
50	25	286R25	16	10.0	6.8	90	5/5	2/2	3.24	10
50	35	286R35	16	10.0	8.0	90	5/5	2/2	3.09	10
70	25	287R25	18	11.5	6.8	110	6/6	3/3	5.50	10
70	35	287R35	18	11.5	8.0	110	6/6	3/3	5.35	10
70	50	287R50	18	11.5	9.8	110	6/6	3/3	4.96	10
95	25	288R25	22	13.5	6.8	110	6/6	3/3	9.10	10
95	35	288R35	22	13.5	8.0	110	6/6	3/3	8.90	10
95	50	288R50	22	13.5	9.8	110	6/6	3/3	8.51	10
95	70	288R70	22	13.5	11.2	110	6/6	3/3	8.15	10
120	25	289R25	22	15.0	6.8	110	6/6	3/3	8.62	10
120	35	289R35	22	15.0	8.0	110	6/6	3/3	8.43	10
120	50	289R50	22	15.0	9.8	110	6/6	3/3	8.04	10
120	70	289R70	22	15.0	11.2	110	6/6	3/3	7.66	10
120	95	289R95	22	15.0	13.2	110	6/6	3/3	7.14	10
150	35	290R35	25	16.5	8.0	130	6/6	3/3	12.59	10
150	50	290R50	25	16.5	9.8	130	6/6	3/3	12.12	10
150	70	290R70	25	16.5	11.2	130	6/6	3/3	11.70	10
150	95	290R95	25	16.5	13.2	130	6/6	3/3	11.05	10
150	120	290R120	25	16.5	14.7	130	6/6	3/3	10.49	10
185	120	291R120	28	18.5	14.7	130	6/6	3/3	13.80	5
185	150	291R150	28	18.5	16.3	130	6/6	3/3	13.19	5
240	95	292R95	32	21.3	13.2	150	--	3/3	22.24	5
240	120	292R120	32	21.3	14.7	150	--	3/3	21.59	5
240	150	292R150	32	21.3	16.3	150	--	3/3	20.87	5

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded
- ▶ se = sector solid

▶ Tools: see chart page 118

**Compression joints acc. to DIN, Al, full tension**

- ▶ Acc. to DIN 48085, part 2
- ▶ For full tension connections of aluminum conductors to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp results



**Characteristics**

- Total cross-section: 16 - 300 mm<sup>2</sup>
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al to 95 mm<sup>2</sup>
- AlMgSi 1w from 120 mm<sup>2</sup>

**Surface**

- Bright finished



Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm			Number of crimps		Conductor dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
			d1	d4	l	mech.	hydr.			
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

▶ \* = not standardized

▶ **Tools: see chart page 118**

**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**

- Total cross-section: 25 - 95 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- Tube dimensions matched to aluminum steel cables
- With crimp markings for correct crimping

**Material**

- AlMgSi F20

**Surface**

- Bright finished



Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm		Number of crimps		Conductor dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
			d1	l	mech.	hydr.			
25	294AD	12	6.8	140	8/8	--	6.3	3.4	5
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
95	298AD	20	13.5	165	10/10	5/5	12.5	10.2	5

▶ **Tools: see chart page 120**

**Compression cable lugs, Al/St, full tension**



- ▶ Tube dimension matched to aluminum steel cables
- ▶ 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**

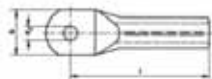
- Total cross-section: 4 - 120 mm<sup>2</sup>
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al

**Surface**

- Bright finished



Nominal cross section mm <sup>2</sup>	Size of bolt dia.	Part No.	Code	Dimension mm				Conductor dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
				b	d1	d2	l			
25 - 4	M 8	254R8	12	19	7.6	8.5	60	6.8	1.5	5
	M 10	254R10	12	19	7.6	10.5	60	6.8	1.5	5
	M 12	254R12	12	23	7.6	13.0	60	6.8	1.6	5
35 - 6	M 10	255R10	14	21	9.0	10.5	67	8.1	2.0	5
	M 12	255R12	14	21	9.0	13.0	67	8.1	2.2	5
50 - 8	M 10	256R10	16	22	10.8	10.5	72	9.6	2.5	5
	M 12	256R12	16	24	10.8	13.0	72	9.6	2.6	5
	M 16	256R16	16	26	10.8	17.0	72	9.6	2.7	5
70 - 12	M 10	257R10	18	26	12.5	10.5	86	11.7	4.1	5
	M 12	257R12	18	26	12.5	13.0	86	11.7	4.3	5
	M 16	257R16	18	32	12.5	17.0	86	11.7	4.4	5
95 - 15	M 12	258R12	22	31	14.8	13.0	91	13.6	7.8	5
	M 16	258R16	22	33	14.8	17.0	91	13.6	6.6	5
120 - 20	M 12	259R12	25	37	16.5	13.0	103	15.5	9.8	5
	M 16	259R16	25	37	16.5	17.0	103	15.5	10.0	5
	M 20	259R20	25	41	16.5	21.0	103	15.5	10.1	5

▶ **Tools:** see chart page 120

**Compression joints, Al/St, for non-tension connections**

- ▶ For non-tension connections of Al/St cables to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp results



**Characteristics**

- Total cross-section: 4 - 120 mm<sup>2</sup>
- With buttmarks for precise cable insertion
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al

**Surface**

- Bright finished



Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm				Number of crimps		Conductor dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	l	mech.	hydr.					
25 - 4	444R	12	7.6	70	4/4	2/2	6.8	1.65	5		
35 - 6	445R	14	9.0	85	5/5	2/2	8.1	2.75	5		
50 - 8	446R	16	10.8	85	5/5	2/2	9.6	3.70	5		
70 - 12	447R	18	12.5	105	6/6	3/3	11.7	5.20	5		
95 - 15	448R	22	14.8	105	6/6	3/3	13.6	8.60	5		
120 - 20	449R	25	16.5	125	6/6	3/3	15.5	12.20	5		

▶ Tools: see chart page 121

**Compression joints acc. to DIN, Al/St**

- ▶ Acc. to DIN 48085, part 3
- ▶ For full tension connections of Al/St conductors to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp results



**Characteristics**

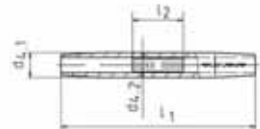
- Total cross-section: 4 - 120 mm<sup>2</sup>
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- Al sleeve: E-Al
- St sleeve: St 52

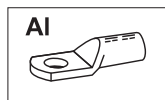
**Surface**

- Al sleeve: bright
- St sleeve: hot galvanized



Nominal cross section mm <sup>2</sup>	Part No.	Code	Dimension mm				Code Al	Number of crimps Steel		Number of crimps Al		Conductor dia. mm	Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d4.1	d4.2	l1	l2		mech.	hydr.	mech.	hydr.			
25 - 4	454R	6	12.0	6.3	200	65	12	4/4	--	7/7	--	6.8	5	5
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

▶ Tools: see chart page 121



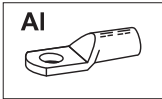
■ Tool application chart

Compression cable lugs and connectors made from E-Al

Compression joints for full-tension connections from Al conductors DIN EN 50182, 16-95 mm<sup>2</sup>

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
10-70	K354			•					○	260
	EK354					•			○	314
	EK354L					•			○	316
10-150	EK505L					•			○	318
10-185	K18			•					○	262
	HK6018				•				○	286
	EK5018L					•			○	320
	PK18							•	○	362
	THK18						•		○	362
	HK60UNV	+ UA18			•				○	354
	EK60UNVL	+ UA18				•			○	357
	EKM60UNVL	+ UA18				•			○	356
	PK60UNV	+ UA18						•	○	355
10-240	K22			•					○	264
	HK6022				•				○	288
	EK6022L					•			○	324
	EKM6022L					•			○	322
	EKM60IDL					•			☺	328
	PK22							•	○	364
	THK22						•		○	364
	HK60UNV	+ UA22			•				○	354
	EK60UNVL	+ UA22				•			○	357
	EKM60UNVL	+ UA22				•			○	356
	PK60UNV	+ UA22						•	○	355
	HK12030				•				○	292
	HK12042				•				○	294
	HK120U				•				○	296
	EK120UNVL					•			○	358
	EK12030L					•			○	330
	EK12042L					•			○	332
	EK120UL					•			○	334
	HK122EL380						•		○	390
	PK12042							•	○	368
PK120U							•	○	370	

See next page



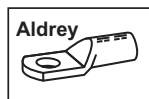
■ **Tool application chart**

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

**Compression joints for full-tension connections from Al conductors DIN EN 50182, 16-95 mm<sup>2</sup>**

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
10-500	HK252						•		⬡	388
	HK252EL380						•		⬡	391
	PK252							•	⬡	372
150-500	HK45				•				⬡	389
	PK45							•	⬡	374



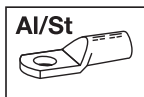


■ Tool application chart

Compression joints for full-tension connections from Aldrey conductors to DIN EN 50182 and Al conductors to DIN EN 50182, 120-300 mm<sup>2</sup>

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
25-50	K354			•					○	260
	EK354					•			○	314
	EK354L					•			○	316
25-95	K18			•					○	262
	HK6018				•				○	286
	EK505L					•			○	318
	EK5018L					•			○	320
	PK18							•	○	362
	THK18						•		○	362
	HK60UNV	+ UA18			•				○	354
	EK60UNVL	+ UA18				•			○	357
	EKM60UNVL	+ UA18				•			○	356
	PK60UNV	+ UA18						•	○	355
25-185	K22			•					○	264
	HK6022				•				○	288
	EK6022L					•			○	324
	EKM6022L					•			○	322
	PK22							•	○	364
	THK22						•		○	364
	HK60UNV	+ UA22			•				○	354
	EK60UNVL	+ UA22				•			○	357
	EKM60UNVL	+ UA22				•			○	356
	PK60UNV	+ UA22						•	○	355
	HK12030				•				○	292
	HK12042				•				○	294
	HK120U				•				○	296
	EK12030L					•			○	330
	EK12042L					•			○	332
	EK120UL					•			○	334
	EK120UNVL					•			○	358
	HK122EL380						•		○	390
PK12042							•	○	368	
PK120U							•	○	370	
25-300	HK252						•		○	388
	HK252EL380						•		○	391
	PK252							•	○	372
150-300	HK45				•				○	389
	PK45							•	○	374





**■ Tool application chart**

**Compression joints for full-tension connections from Al/St. cables to DIN EN 50182**

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

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
25/4-120/20	K22			•					⬡	264	
	HK6022				•				⬡	288	
	EK6022L					•			⬡	324	
	EKM6022L					•			⬡	322	
	PK22							•	⬡	364	
	THK22						•		⬡	364	
	HK60UNV	+ UA22				•			⬡	354	
	EK60UNVL	+ UA22					•		⬡	357	
	EKM60UNVL	+ UA22					•		⬡	356	
	PK60UNV	+ UA22						•	⬡	355	
	HK12030					•			⬡	292	
	HK12042					•			⬡	294	
	HK120U					•			⬡	296	
	EK12030L						•		⬡	330	
	EK12042L						•		⬡	332	
	EK120UL						•		⬡	334	
	HK122EL380							•	⬡	390	
	PK12042								•	⬡	368
	PK120U								•	⬡	370
	HK252							•	⬡	388	
	HK252EL380							•	⬡	391	
PK252								•	⬡	372	

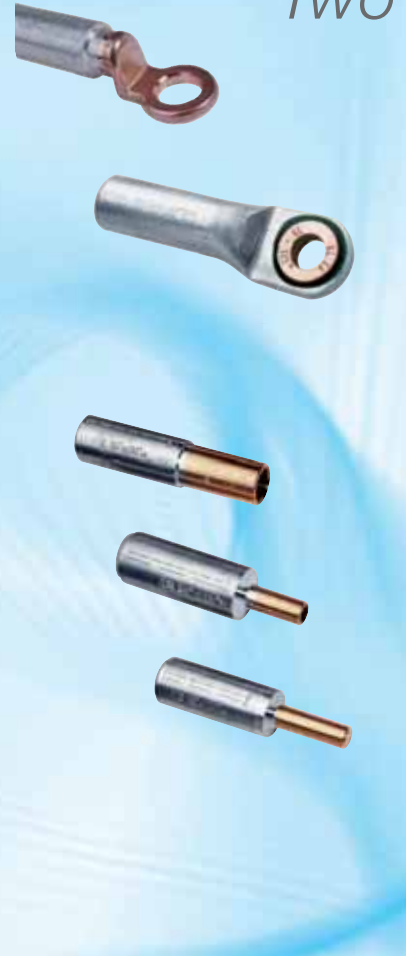
## Two materials

***simply connected.***

### **Compression cable lugs and connectors for aluminum-copper connections.**

Copper's electrical properties still make it the best material for conductors and electrical connections. There are, however, also good reasons for using aluminum. The need to connect these two materials together is therefore becoming more frequent.

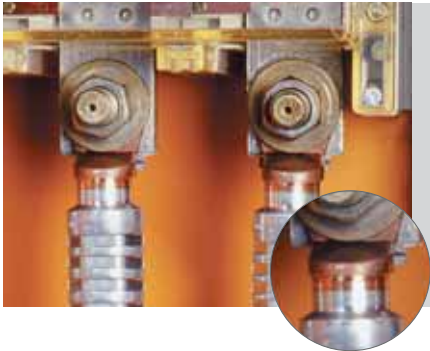
But because it's not that simple to join aluminum and copper and because they have a tendency to self-passivate through fast oxidation, special aluminum/copper cable lugs and connectors are required - for connecting to distributor networks or transformer stations and also for network reconstruction, for example.



*The perfect solution for transitions from aluminum to copper conductors and vice versa.*

- **Aluminum/copper compression cable lugs to DIN dimensions with copper palm or copper eye to 400 mm<sup>2</sup>.**
- **Compression joints with copper connecting bolt.**
- **Reduction compression joints to DIN from 10 mm<sup>2</sup> to 300 mm<sup>2</sup>.**

## ■ Connecting aluminum and copper correctly.



- ▶ Aluminum/copper compression cable lugs for aluminum conductors to DIN 48201 and pre-rounded sector-shaped conductors with a nominal cross section up to 400 mm<sup>2</sup>.
- ▶ With copper palm or copper eye.
- ▶ Aluminum/copper compression joints with nominal cross sections of 10 mm<sup>2</sup> to 300 mm<sup>2</sup>.

### Benefits:

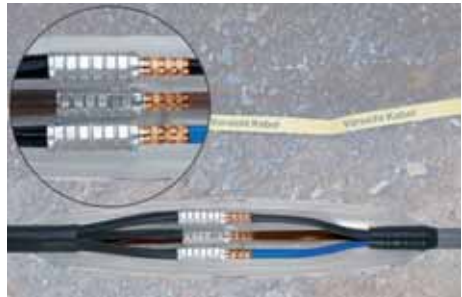
- ▶ Aluminum and copper conductors can be connected in a dry environment, **without destructive oxidation occurring between the two materials.**

## ■ Reduction compression joints as a solution for different diameters.

- ▶ With nominal cross sections from 10 mm<sup>2</sup> to 300 mm<sup>2</sup>.
- ▶ For round or sector-shaped, multi-stranded and also sector-shaped solid conductors.
- ▶ For non-tension connections.

### Benefits:

- ▶ Numerous compression joints are available for connecting copper and aluminum conductors, allowing optimised compression of these conductors.
- ▶ **Different materials can be safely connected regardless of their particular dimensions.**
- ▶ No matter which cable type is discovered in network reconstruction, Klauke offers a suitable connection solution.



- ▶ *More from Page 126.*

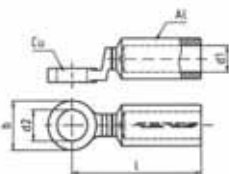


- ▶ *For underground connections, we recommend protection against moisture - using cast resin sleeves for example.*

Compression cable lugs, Al/Cu



- ▶ Tube dimension to DIN 46329
- ▶ For non-tension connections of Al cables to DIN 48201, part 5 and aluminum cables to DIN EN 50182
- ▶ For screwing aluminum connections using copper washers in humid areas
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics



**Characteristics**

- Total cross-section: 16 - 300 mm<sup>2</sup> rm/sm
- Barrier design with oil stop and with solid copper screw-on palm
- For pre-rounded sector shaped conductors
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

**Material**

- E-Al
- Copper acc. to EN 13600

**Surface**

- Bright finished

Nominal cross section mm <sup>2</sup> rm/sm	se	Size of bolt dia.	Part No.	Code	Dimension mm				Number of crimps		Weight 100 pcs. -kg		Packing unit/pcs
					b	d1	d2	l	mech.	hydr.	Cu	Total	
16	25	M 8	363R8	12	25	6.0	8.5	67.5	4	2	4.4	5.9	10
	25	M 10	363R10	12	25	6.0	10.5	67.5	4	2	4.2	5.7	10
25	35	M 8	364R8	12	25	6.8	8.5	67.5	4	2	4.4	5.8	10
	35	M 10	364R10	12	25	6.8	10.5	67.5	4	2	4.2	5.6	10
	35	M 12	364R12	12	25	6.8	13.0	67.5	4	2	3.9	5.3	10
35	50	M 8	365R8	14	25	8.0	8.5	76.5	5	2	4.4	6.3	10
	50	M 10	365R10	14	25	8.0	10.5	76.5	5	2	4.2	6.1	10
	50	M 12	365R12	14	25	8.0	13.0	76.5	5	2	3.8	5.8	10
50	70	M 8	366R8	16	25	9.8	8.5	76.5	5	2	4.4	6.4	10
	70	M 10	366R10	16	25	9.8	10.5	76.5	5	2	4.2	6.2	10
	70	M 12	366R12	16	25	9.8	13.0	76.5	5	2	3.9	5.9	10
70	95	M 10	367R10	18	25	11.2	10.5	84.5	6	3	4.2	7.4	10
	95	M 12	367R12	18	25	11.2	13.0	84.5	6	3	3.9	7.1	10
	120	M 10	368R10	22	30	13.2	10.5	90.5	6	3	7.4	11.4	10
95	120	M 12	368R12	22	30	13.2	13.0	90.5	6	3	6.8	10.8	10
	120	M 16	368R16	22	30	13.2	17.0	90.5	6	3	6.4	10.4	10
	150	M 12	369R12	22	30	14.7	13.0	92.0	6	3	6.8	11.4	5
120	150	M 16	369R16	22	30	14.7	17.0	92.0	6	3	6.4	10.8	5
	185	M 12	370R12	25	30	16.3	13.0	104.0	6	3	6.8	13.1	5
	185	M 16	370R16	25	30	16.3	17.0	104.0	6	3	6.4	12.7	5
150	185	M 20	370R20	25	35	16.3	21.0	107.5	6	3	10.1	16.4	5
	240	M 10	371R10	28	30	18.3	10.5	105.0	6	3	10.3	18.6	5
	240	M 12	371R12	28	30	18.3	13.0	105.0	6	3	10.1	18.4	5
	240	M 16	371R16	28	30	18.3	17.0	105.0	6	3	9.3	17.6	5
185	240	M 20	371R20	28	35	18.3	21.0	107.5	6	3	10.1	18.4	5
	300	M 10	372R10	32	35	21.0	10.5	118.5	8	3	12.1	22.5	5
	300	M 12	372R12	32	35	21.0	13.0	118.5	8	3	11.8	22.2	5
240	300	M 16	372R16	32	35	21.0	17.0	118.5	8	3	11.0	21.4	5
	300	M 20	372R20	32	35	21.0	21.0	118.5	8	3	10.1	20.5	5

Nominal cross section mm <sup>2</sup>		Size of bolt dia.	Part No.	Code	Dimension mm				Number of crimps		Weight 100 pcs. ~kg		Packing unit/pcs
rm/sm	se				b	d1	d2	l	mech.	hydr.	Cu	Total	
300	--	M 12	<b>373R12</b>	34	36	23.3	13.0	123.5	8	3	17.7	33.7	1
	--	M 16	<b>373R16</b>	34	36	23.3	17.0	123.5	8	3	16.9	32.9	1
	--	M 20	<b>373R20</b>	34	36	23.3	21.0	123.5	8	3	16.0	32.0	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded
- ▶ se = sector solid

▶ **Tools: see chart page 130**

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

- ▶ Tube dimension to DIN 46329
- ▶ For non-tension connections of Al cables to DIN 48201, part 5 and aluminum cables to DIN EN 50182
- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics



#### Characteristics

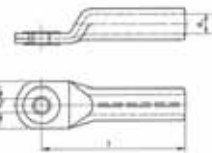
- Total cross-section: 10 - 400 mm<sup>2</sup> rm/sm
- For screwing non-tension aluminum connections using copper washers in humid areas
- For pre-rounded sector shaped conductors
- With copper eye in screw-on area
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

#### Material

- E-Al
- Copper acc. to EN 13600

#### Surface

- Bright finished



Nominal cross section mm <sup>2</sup>		Size of bolt dia.	Part No.	Code	Dimension mm				Number of crimps		Weight 100 pcs. ~kg		Packing unit/pcs
rm/sm	se				b	d1	d2	l	mech.	hydr.	Cu	Total	
10	--	M 6	<b>302R6</b>	10	18	5.0	6.5	52	4	2	0.260	1.20	10
	--	M 8	<b>302R8</b>	10	22	5.0	8.5	52	4	2	0.580	1.50	10
16	25	M 8	<b>302R8</b>	12	22	5.8	8.5	52	4	2	0.600	1.95	10
	25	M 10	<b>303R10</b>	12	25	5.8	10.5	52	4	2	0.600	2.00	10
25	35	M 8	<b>304R8</b>	12	22	6.8	8.5	60	4	2	0.625	2.00	10
	35	M 10	<b>304R10</b>	12	25	6.8	10.5	60	4	2	0.900	2.10	10
35	50	M 10	<b>305R10</b>	14	26	8.0	10.5	67	5	2	0.800	3.00	10
	50	M 12	<b>305R12</b>	14	30	8.0	13.0	67	5	2	1.120	3.10	10
50	70	M 10	<b>306R10</b>	16	27	9.8	10.5	72	5	2	0.900	3.60	10
	70	M 12	<b>306R12</b>	16	30	9.8	13.0	72	5	2	1.120	3.80	10
70	95	M 10	<b>307R10</b>	18	29	11.2	10.5	86	6	3	1.075	5.60	10
	95	M 12	<b>307R12</b>	18	32	11.2	13.0	86	6	3	1.300	5.70	10
95	120	M 10	<b>308R10</b>	22	32	13.2	10.5	90	6	3	1.435	10.00	5
	120	M 12	<b>308R12</b>	22	35	13.2	13.0	90	6	3	1.735	9.50	5
	120	M 16	<b>308R16</b>	22	38	13.2	17.0	90	6	3	2.655	10.00	5

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

Nominal cross section mm <sup>2</sup>	rm/sm	se	Size of bolt dia.	Part No.	Code	Dimension mm				Number of crimps		Weight 100 pcs. ~kg		Packing unit/pcs
						b	d1	d2	l	mech.	hydr.	Cu	Total	
120	150	M 12	<b>309R12</b>	22	35	14.7	13.0	91	6	3	1.810	8.70	5	
	150	M 16	<b>309R16</b>	22	38	14.7	17.0	91	6	3	2.230	8.80	5	
150	185	M 12	<b>310R12</b>	25	35	16.3	13.0	103	6	3	2.025	12.20	5	
	185	M 16	<b>310R16</b>	25	41	16.3	17.0	103	6	3	2.655	12.30	5	
	185	M 20	<b>310R20</b>	25	44	16.3	21.0	103	6	3	3.620	12.80	5	
185	240	M 12	<b>311R12</b>	28	40	18.3	13.0	106	6	3	2.320	15.00	5	
	240	M 16	<b>311R16</b>	28	42	18.3	17.0	106	6	3	4.975	15.50	5	
	240	M 20	<b>311R20</b>	28	46	18.3	21.0	106	6	3	4.610	15.50	5	
240	300	M 12	<b>312R12</b>	32	45	21.0	13.0	116	8	3	2.750	20.00	5	
	300	M 16	<b>312R16</b>	32	45	21.0	17.0	116	8	3	3.400	21.00	5	
300	300	M 20	<b>312R20</b>	32	49	21.0	21.0	116	8	3	4.600	22.00	5	
	--	M 16	<b>313R16</b>	34	51	23.3	17.0	124	8	3	3.980	21.60	1	
400	--	M 20	<b>313R20</b>	34	51	23.3	21.0	124	8	3	5.510	22.20	1	
	--	M 16	<b>314R16</b>	38	58	26.0	17.0	165	--	4	4.200	35.00	1	
400	--	M 20	<b>314R20</b>	38	58	26.0	21.0	165	--	4	5.950	35.00	1	

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ sm = sector stranded
- ▶ rm = round multi-stranded
- ▶ se = sector solid

▶ **Tools: see chart page 130**

### Compression joints, Al/Cu



- ▶ Tube dimensions to DIN 46267 part 1 and 2
- ▶ For non-tension connections of Al cables to DIN 48201, part 5 and aluminum cables to DIN EN 50182
- ▶ With code number for clear tool assignment



#### Characteristics

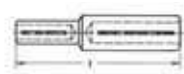
- Total cross-section: 10 - 300 mm<sup>2</sup>
- For connecting non-tension aluminum and copper connections
- With crimp markings for correct crimping
- Precise end machining for easy cable insertion

#### Material

- E-Al
- Copper acc. to EN 13600

#### Surface

- Bright finished



Nominal cross section mm <sup>2</sup>			Part No.	Code		Dimension mm			Weight 100 pcs. ~kg		Packing unit/pcs
	Al rm/sm	Al se		Cu rm/sm	Al	Cu	l	Al	Cu	Cu	
10	16	10	<b>322R10</b>	10	6	55.0	5.0	4.5	0.212	1.100	4
	16	16	<b>322R16</b>	10	8	61.0	5.0	5.4	0.714	1.550	4
16	25	10	<b>323R10</b>	12	6	55.0	6.0	4.5	0.212	1.500	4
	25	16	<b>323R16</b>	12	8	61.0	6.0	5.4	0.714	1.750	4
25	35	10	<b>324R10</b>	12	6	55.0	6.8	4.5	0.212	1.400	4
	35	16	<b>324R16</b>	12	8	61.0	6.8	5.5	0.714	1.650	4
	35	25	<b>324R25</b>	12	10	61.0	6.8	7.0	0.892	1.900	4
25	35	35	<b>324R35</b>	12	12	61.0	6.8	8.2	1.624	2.000	4
	35	50	<b>324R50</b>	12	14	72.0	6.8	10.0	2.362	3.500	4
25/4	35	16	<b>324R416</b>	12	8	61.0	7.6	5.5	0.714	1.600	4
	35	25	<b>324R425</b>	12	10	61.0	7.6	7.0	0.892	1.850	4

**Compression joints, Al/Cu**

Nominal cross section mm <sup>2</sup>				Code		Dimension mm			Weight 100 pcs. ~kg		Packing unit/ pcs
Al mm/sm	Al se	Cu mm/sm	Part No.	Al	Cu	l	Al	Cu	Cu	Total	
35	50	16	<b>325R16</b>	14	8	71.0	8.0	5.5	0.714	2.500	4
	50	25	<b>325R25</b>	14	10	71.0	8.0	7.0	0.892	2.650	4
	50	35	<b>325R35</b>	14	12	71.0	8.0	8.2	1.519	3.300	4
	50	50	<b>325R50</b>	14	14	77.0	8.0	10.0	2.362	3.530	4
35/6	50	16	<b>325R616</b>	14	8	71.0	9.0	5.5	0.714	2.450	4
	50	25	<b>325R625</b>	14	10	71.0	9.0	7.0	0.892	2.600	4
	50	35	<b>325R635</b>	14	12	71.0	9.0	8.2	1.624	3.250	4
50	70	16	<b>326R16</b>	16	8	71.5	9.8	5.5	0.714	2.850	4
	70	25	<b>326R25</b>	16	10	71.5	9.8	7.0	0.892	3.200	4
	70	35	<b>326R35</b>	71.5	9.8	8.2	16	12	1.624	3.800	4
	70	50	<b>326R50</b>	77.5	9.8	10.0	16	14	2.362	4.550	4
	95	16	<b>327R16</b>	79.0	11.2	5.5	18	8	0.714	4.100	4
70	95	25	<b>327R25</b>	79.0	11.2	7.0	18	10	0.892	3.950	4
	95	35	<b>327R35</b>	79.0	11.2	8.2	18	12	1.624	4.900	4
	95	50	<b>327R50</b>	85.0	11.2	10.0	18	14	2.362	5.700	4
	95	70	<b>327R70</b>	86.0	11.2	11.5	18	16	2.921	7.250	4
	95	95	<b>327R95</b>	95.0	11.2	13.5	18	18	4.957	9.360	4
	95	120	<b>327R120</b>	99.0	11.2	15.5	18	20	5.640	10.540	4
	120	16	<b>328R16</b>	79.0	13.2	5.5	22	8	0.714	6.150	4
95	120	25	<b>328R25</b>	79.0	13.2	7.0	22	10	0.892	6.300	4
	120	35	<b>328R35</b>	79.0	13.2	8.2	22	12	1.519	6.800	4
	120	50	<b>328R50</b>	85.0	13.2	10.0	22	14	2.362	8.050	4
	120	70	<b>328R70</b>	87.0	13.2	11.5	22	16	3.105	8.200	4
	120	95	<b>328R95</b>	95.0	13.2	13.5	22	18	4.957	10.350	4
	120	120	<b>328R120</b>	95.0	13.2	15.5	22	20	5.640	11.550	4
120	150	35	<b>329R35</b>	81.0	14.7	8.2	22	12	1.519	7.600	4
	150	50	<b>329R50</b>	87.0	14.7	10.0	22	14	2.362	7.900	4
	150	70	<b>329R70</b>	89.0	14.7	11.5	22	16	3.105	8.500	4
	150	95	<b>329R95</b>	97.0	14.7	13.5	22	18	4.857	11.000	4
	150	120	<b>329R120</b>	97.0	14.7	15.5	22	20	5.640	10.280	4
150	185	16	<b>330R16</b>	91.5	16.3	5.4	25	8	0.714	7.800	4
	185	25	<b>330R25</b>	91.5	16.3	6.8	25	10	0.892	8.000	4
	185	35	<b>330R35</b>	91.5	16.3	8.2	25	12	1.624	8.400	4
	185	50	<b>330R50</b>	98.5	16.3	10.0	25	14	2.362	10.200	4
	185	70	<b>330R70</b>	99.5	16.3	11.5	25	16	3.105	10.350	4
	185	95	<b>330R95</b>	107.5	16.3	13.5	25	18	4.957	12.650	4
	185	120	<b>330R120</b>	107.5	16.3	15.5	25	20	5.640	13.900	4
185	185	150	<b>330R150</b>	124.0	16.3	17.0	25	22	8.231	16.700	4
	240	50	<b>331R50</b>	99.0	18.3	10.0	28	14	2.362	12.100	1
	240	70	<b>331R70</b>	100.0	18.3	11.5	28	16	3.105	13.000	1
	240	95	<b>331R95</b>	108.0	18.3	13.5	28	18	4.957	14.450	1
	240	120	<b>331R120</b>	108.0	18.3	15.5	28	20	5.640	13.720	1
240	240	150	<b>331R150</b>	113.0	18.3	17.0	28	22	8.231	19.550	1
	240	185	<b>331R185</b>	116.0	18.3	19.0	28	25	9.621	21.000	1
	300	50	<b>332R50</b>	110.0	21.0	10.0	32	14	2.362	16.500	1
	300	70	<b>332R70</b>	111.0	21.0	11.5	32	16	3.105	18.000	1
	300	95	<b>332R95</b>	119.0	21.0	13.5	32	18	4.957	19.000	1
	300	120	<b>332R120</b>	119.0	21.0	15.5	32	20	5.640	20.500	1
	300	150	<b>332R150</b>	124.0	21.0	17.0	32	22	8.231	23.300	1
	300	185	<b>332R185</b>	127.0	21.0	19.0	32	25	9.621	25.500	1
300	240	<b>332R240</b>	128.0	21.0	21.5	32	28	12.705	30.100	1	

Compression joints, Al/Cu

Nominal cross section mm²			Part No.	Code		Dimension mm				Weight 100 pcs. ~kg		Packing unit/ pcs
Al mm/sm	Al se	Cu mm/sm		Al	Cu	l	Al	Cu	Cu	Total		
300	--	120	333R120	119.0	23.5	15.5	34	20	5.640	27.800	1	
	--	150	333R150	124.0	23.5	17.0	34	22	8.234	31.100	1	
	--	185	333R185	127.0	23.5	19.0	34	25	9.621	32.700	1	
	--	240	333R240	128.0	23.5	21.5	34	28	12.705	37.500	1	
	--	300	333R300	134.0	23.5	24.5	34	32	16.099	41.700	1	

▶ sm/se - conductor needs to be pre-rounded

▶ sm = sector stranded

▶ rm = round multi-stranded

▶ se = sector solid

🔗 Use for the copper side of the article DIN sleeve for compacted conductors.

🔗 Sleeves for compacted conductors and sleeves for 3- and 4-core conductors see chapter "Sleeves for compacted and sector shaped conductors-Cu"

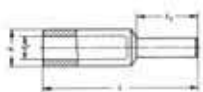
🔗 Reduction sleeves to connect different cross sections can be found at 83

▶ Tools: see chart page 130

Compression joints with copper connecting bolt, Al



- ▶ Tube dimensions to DIN 46267 part 1 and 2
- ▶ For non-tension connections of Al cables to DIN 48201, part 5 and aluminum cables to DIN EN 50182
- ▶ With code number for clear tool assignment



Characteristics

- Total cross-section: 25 - 300 mm²
- For screwing non-tension Al connections in Cu clamps
- With crimp markings for correct crimping
- Also for pre-rounded sector shaped conductors
- Precise end machining for easy cable insertion

Material

- E-Al
- Copper acc. to EN 13600

Surface

- Bright finished

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

▶ sm/se - conductor needs to be pre-rounded

▶ sm = sector stranded

▶ rm = round multi-stranded

▶ se = sector solid

▶ Tools: see chart page 130



**Bi-metallic washer**

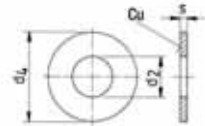
▶ Flat washer for processing aluminum and copper cable lugs

**Characteristics**

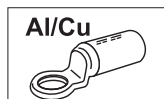
- Galvanic separation between copper and aluminum
- Only for use in dry areas

**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 8	<b>CS818</b>	8.5	18	1	0.09	10
M 10	<b>CS1022</b>	11.0	22	2	0.26	10
M 12	<b>CS1228</b>	13.0	28	2	0.44	10
M 14	<b>CS1428</b>	15.0	28	2	0.40	10
M 16	<b>CS1635</b>	17.0	35	2	0.66	10



## ■ Tool application chart

### Compression cable lugs and connectors made from Al/Cu

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
10-70	K354			•					○	260
	EK354					•			○	314
	EK354L					•			○	316
10-185	K18			•					○	262
	HK6018				•				○	286
	EK5018L					•			○	320
	PK18							•	○	362
	THK18						•		○	362
	HK60UNV	+ UA18			•				○	354
	EK60UNVL	+ UA18				•			○	357
	EKM60UNVL	+ UA18				•			○	356
	PK60UNV	+ UA18						•	○	355
10-240	K22			•					○	264
	HK6022				•				○	288
	EK6022L					•			○	324
	EKM6022L					•			○	322
	PK22							•	○	364
	THK22						•		○	364
	HK60UNV	+ UA22			•				○	354
	EK60UNVL	+ UA22				•			○	357
	EKM60UNVL	+ UA22				•			○	356
	PK60UNV	+ UA22						•	○	355
	HK12030				•				○	292
	HK12042				•				○	294
	HK120U				•				○	296
	EK12030L					•			○	330
	EK12042L					•			○	332
	EK120UL					•			○	334
	EK120UNVL					•			○	358
	HK122EL380						•		○	390
	PK12042							•	○	368
PK120U							•	○	370	
10-500	HK252						•		○	388
	HK252EL380						•		○	391
	PK252							•	○	372
150-500	HK45				•				○	389
	PK45							•	○	374



## Simply branch and connect.

### Clamps and screw connectors.

C and H-shaped clamps as well as parallel groove clamps are used wherever power lines are branched. Screw connectors are a practical alternative for service and maintenance since they can be used across the entire cross-section spectrum. Just a few variants cover all possible connections. Screw connectors can be used on aluminum cables without compound as the special grooved profile pierces the oxide layer during the screwing operation.

The key benefit of compact tap connectors is that, provided the specified safety precautions are taken, they can also be installed while live.



The H-clamps in our range are lightning current tested to EN 50164-1 Class H (100 kA 10/350  $\mu$ s).

- C and H-shaped clamps.
- Parallel groove clamps.
- Screw connectors, also barrier types, for aluminum/copper connections.
- Compact tap connectors for 3 and 4 core sector-shaped cables.



## ■ Branching without splitting the conductor.

- ▶ C and H-shaped clamps with nominal cross sections from 2.5 mm<sup>2</sup> to 185 mm<sup>2</sup>.
- ▶ Parallel groove clamps from 2.5 mm<sup>2</sup> to 150 mm<sup>2</sup>.
- ▶ Either with or without thrust plate.

### Benefits:

- ▶ Cables can be branched into various nominal cross-sections without having to cut the main conductor.
- ▶ Thrust plates on parallel groove clamps guarantee optimal hold of the branch connection as pressure is being distributed symmetrically.
- ▶ *More from Page 137.*



## ■ Simply screw – and the connection is made.



- ▶ For aluminum and copper conductors.
- ▶ With nominal cross sections from 2.5 mm<sup>2</sup> to 185 mm<sup>2</sup>.
- ▶ With or without shear heads.
- ▶ Special grooved profile on the inside.

### Benefits:

- ▶ Suitable screw connectors for diverse applications such as street lighting or using copper sheathed wires and plastic-insulated conductors.
- ▶ No torque wrench required to install screw connectors with shear heads, since the screw shears off on reaching the required torque.
- ▶ During screwing the grooved profile pierces the oxide layer on the conductor guaranteeing always a perfect contact.

▶ *More from Page 141.*

## ■ Installation without downtimes.

- ▶ Compact tap connectors with nominal cross sections up to 185 mm<sup>2</sup>.
- ▶ For 3 and 4 sector-shaped conductors with angles of 120° and 90° respectively.
- ▶ For aluminum and copper conductors.
- ▶ With or without shear heads for the main conductor.
- ▶ Can be installed live to VDE specifications using the correct Klauke tools (more from Page 476).



▶ *More from Page 147.*

### Benefits:

- ▶ The range includes proper solutions for practically every application.
- ▶ You can install tap conductors **without disconnecting the power supply**. No interruption of production sequences, operation can be maintained.
- ▶ Multi-phase tap conductors can be installed without disrupting the main conductor, even in tight spaces.



- ▶ *Screw connectors and compact tap connectors should be protected against moisture because of varying material properties after processing.*

## Punched cable lugs, Cu



► For screwing conductors to VDE 0295 Class 1 and 2, for example in lightning protection areas

**Characteristics**

- Total cross-section: 6 - 300 mm<sup>2</sup>
- Also for outdoor assembly
- Available with 2 or 4 screws

**Material**

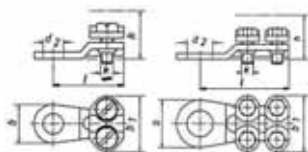
- Cu-ETP
- Screws: DIN 84 / DIN 933 bronze, F 60

**Surface**

- Tin-plated

**Order info**

- Bright finish version also available, part number appendix "bk"



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm						Number of screws	Weight/100 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	1.30	50
10 - 16	573R6	15.0	20.5	6.5	M5	14	27.0	2	1.30	50
	573R8	15.0	20.5	8.5	M5	14	27.0	2	1.30	50
16 - 25	574R8	15.0	25.0	8.5	M5	16	30.0	2	2.75	50
	584R8	18.5	22.5	8.5	M5	16	36.0	4	3.70	25
25 - 35	584R10	19.5	22.5	10.5	M5	16	37.0	4	3.75	25
	575R8	18.5	24.0	8.5	M5	16	25.5	2	2.50	50
35 - 50	585R8	18.5	24.0	8.5	M5	16	38.5	4	4.30	25
	585R10	21.5	24.0	10.5	M5	16	42.0	4	4.65	25
50 - 70	585R12	21.5	24.0	13.0	M5	16	42.0	4	4.50	25
	586R10	19.0	28.0	10.5	M6	19	46.0	4	6.75	25
70 - 95	586R12	21.0	28.0	13.0	M6	19	47.0	4	6.70	25
	587R10	23.5	31.0	10.5	M6	19	51.0	4	9.35	10
95 - 150	587R12	23.5	31.0	13.0	M6	19	51.0	4	9.30	10
	588R10	24.0	34.0	10.5	M6	25	57.0	4	12.00	10
150 - 240	588R12	24.0	34.0	13.0	M6	25	57.0	4	11.85	10
	589R10	30.0	42.0	10.5	M8	32	61.0	4	20.15	10
185 - 300	589R12	30.0	42.0	13.0	M8	32	61.0	4	20.20	10
	589R16	30.0	42.0	17.0	M8	32	61.5	4	20.10	10
150 - 240	590R10	34.0	48.5	10.5	M8	32	68.5	4	24.40	5
	590R12	34.0	48.5	13.0	M8	32	68.5	4	24.35	5
150 - 240	590R16	34.0	48.5	17.0	M8	32	68.5	4	24.30	5
	590R20	36.0	48.5	21.0	M8	32	70.5	4	24.25	5
185 - 300	592R12	32.0	50.0	13.0	M8	37	68.5	4	27.95	5
	592R16	32.0	50.0	17.0	M8	37	68.5	4	28.00	5
	592R20	34.5	50.5	21.0	M8	37	70.0	4	27.95	5

**Tube screw connectors, CuZn**

**Characteristics**

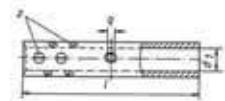
- Total cross-section: 6 - 300 mm<sup>2</sup>
- A connection needs to be soldered
- With soldering hole and fixing screws for easy processing

**Material**

- CuZn 40 Pb 2
- Screws: DIN 551 steel

**Surface**

- Tin-plated



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm				z*	Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	l	dia. q				
6	<b>551R</b>	3.5	25	3.3		2	0.60	10
10	<b>552R</b>	4.5	30	3.3		2	1.20	10
16	<b>553R</b>	5.5	40	4.2		4	1.90	10
25	<b>554R</b>	7.0	45	4.2		4	2.85	10
35	<b>555R</b>	8.5	45	5.0		4	3.00	10
50	<b>556R</b>	10.0	48	5.0		4	4.00	10
70	<b>557R</b>	12.0	52	6.8		4	6.30	10
95	<b>558R</b>	13.5	55	6.8		4	8.05	10
120	<b>559R</b>	15.0	60	6.8		4	9.90	10
150	<b>560R</b>	17.0	64	6.8		4	11.80	5
185	<b>561R</b>	19.0	70	6.8		10	14.30	5
240	<b>562R</b>	21.0	70	6.8		10	15.50	5
300	<b>563R</b>	24.0	75	6.8		10	19.30	1

► z = number of set screws



## Screw T-connectors, CuZn



## Characteristics

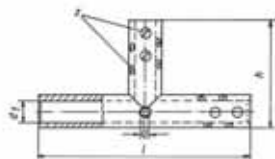
- Total cross-section: 4 - 95 mm<sup>2</sup>
- A connection needs to be soldered
- With soldering hole and fixing screws for easy processing

## Material

- CuZn 40 Pb 2
- Screws: DIN 551 steel

## Surface

- Tin-plated



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm					Weight/ 100 pcs. ~ kg	Packing unit/pcs
		d1	h	l	dia. q	z*		
4 - 6	TAS6	3.0	18	30	2.5	3	1.05	10
10	TAS10	4.5	25	40	3.5	3	2.15	10
16	TAS16	5.5	27	42	3.5	6	2.50	10
25	TAS25	7.0	29	45	4.5	6	3.70	10
35	TAS35	8.5	32	52	4.5	6	4.30	10
50	TAS50	10.0	34	56	6.0	9	7.40	10
70	TAS70	12.0	41	62	6.5	9	9.80	5
95	TAS95	13.5	44	68	7.0	9	12.80	5

▶ z = number of set screws



**Parallel groove clamps, Cu, 1 screw**

► For screwing conductors to VDE 0295 Class 1 and 2, for example in lightning protection areas

**Characteristics**

- Total cross-section: 2.5 - 95 mm<sup>2</sup>
- Also for outdoor assembly
- Version with 1 screw
- Available either with or without thrust plate
- With thrust plate for equal pressure distribution with differing cross-section pairings

**Material**

- Cu-ETP
- Screws: high-tensile copper alloy F 60
- Nut: copper

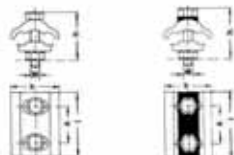
**Surface**

- Bright



Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm				M	Md Nm	Weight/ 100 pcs. ~ kg	Packing unit/pcs
		b	h	l	M				
<b>Without thrust plate</b>									
2.5 - 16	<b>SAK10</b>	19.5	16	16	M5	6	2.10	10	
2.5 - 25	<b>SAK12</b>	25.0	21	18	M6	8	4.10	10	
	<b>SAK14</b>	25.0	22	20	M7	14	3.95	10	
6 - 35	<b>SAK16</b>	28.0	23	20	M7	14	6.0	10	
6 - 50	<b>SAK18</b>	32.5	26	24	M7	14	8.0	10	
	<b>SAK20</b>	33.5	27	22	M8	20	8.6	10	
6 - 70	<b>SAK22</b>	37.5	29	24	M8	20	11.1	5	
10 - 95	<b>SAK24</b>	41.0	36	28	M8	20	15.6	5	
<b>With thrust plate</b>									
2.5 - 16	<b>SAK11</b>	19.5	16	16	M5	6	2.6	10	
2.5 - 25	<b>SAK13</b>	25.0	21	18	M6	8	4.30	10	
	<b>SAK15</b>	25.0	22	18	M7	14	4.6	10	
6 - 35	<b>SAK17</b>	28.0	23	20	M7	14	6.3	10	
6 - 50	<b>SAK19</b>	32.5	26	20	M7	14	7.9	10	
	<b>SAK21</b>	33.5	27	22	M8	20	9.1	10	
6 - 70	<b>SAK23</b>	37.5	29	24	M8	20	11.6	5	
10 - 95	<b>SAK25</b>	45.0	36	31	M10	39	19.60	5	

## Parallel groove clamps, Cu, 2 screws



► For screwing conductors to VDE 0295 Class 1 and 2, for example in lightning protection areas

**Characteristics**

- Total cross-section: 2.5 - 150 mm<sup>2</sup>
- Also for outdoor assembly
- Version with 2 screws
- Available either with or without thrust plate
- With thrust plate for equal pressure distribution with differing cross-section pairings

**Material**

- Cu-ETP
- Screws: high-tensile copper alloy F 60
- Nut: copper

**Surface**

- Bright finished

Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm					Md Nm	Weight/ 100 pcs. ~ kg	Packing unit/pcs
		b	h	l	A	M			
<b>Without thrust plate</b>									
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
10 - 95	SAK44	45.0	36	46	25.5	M10	39	28.7	5
16 - 150	SAK46	52.5	40	52	26.0	M10	39	37.4	5
<b>With thrust plate</b>									
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
10 - 50	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	43	20.0	M8	20	25.0	5
16 - 150	SAK47	52.5	40	52	26.0	M10	39	39.0	5

**C-Clamps, Cu**

- ▶ Ideal for clamping identical conductor cross-sections e.g. to VDE 0295 classes 1 and 2
- ▶ The split of the main conductor is omitted



**Characteristics**

- Total cross-section: 16 - 95 mm<sup>2</sup>
- Optimum conducting characteristics in combination with compound

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

**Order info**

- Bright finish version also available, part number appendix "bk"



Part No.	Conductor size rm/re		Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
	Main Conductor	Junction	b	l		
<b>CK16</b>	16/25	16/25	16.0	15	0.94	25
<b>CK25</b>	25/35	25/35	20.0	16	1.68	25
<b>CK35</b>	35/50	35/50	25.7	22	3.42	25
<b>CK50</b>	50/-	50/-	28.0	23	4.88	25
<b>CK70</b>	70/-	70/-	34.0	28	9.69	10
<b>CK95</b>	95/-	95/-	35.0	28	7.30	10

- ▶ rm = round multi-stranded
- ▶ re = round solid

▶ **Tools: see chart page 150**

**C-Clamps, Cu, Multi purpose clamps**

- ▶ Ideal for clamping non-identical conductor cross-sections e.g. to VDE 0295 classes 1 and 2
- ▶ The split of the main conductor is omitted



**Characteristics**

- Total cross-section: 2.5 - 185 mm<sup>2</sup>
- Optimum conducting characteristics in combination with compound

**Material**

- Cu-ETP

**Surface**

- Tin-plated to protect against corrosion

**Order info**

- Bright finish version also available, part number appendix "bk"



Part No.	Conductor size rm/re		Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
	Main conductor	Junction	b	l		
<b>MCK44</b>	2.5 - 4/2.5 - 4	2.5 - 4/2.5 - 4	9.8	8	0.185	25
<b>MCK1010</b>	6 - 10/10	4 - 6/4 - 10	12.0	12	0.460	25
<b>MCK1016</b>	10 - 16/16	4 - 10/4 - 10	19.0	17	1.900	25
<b>MCK1025</b>	16 - 25/25	4 - 10/4 - 10	19.0	17	1.900	25
<b>MCK3535</b>	16 - 25/25 - 35	16 - 25/16 - 35	20.0	17	1.750	25
<b>MCK2550</b>	35/50	4 - 25/4 - 25	24.8	23	4.400	25

### C-Clamps, Cu, Multi purpose clamps

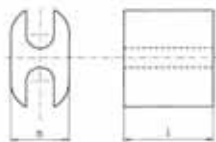
Part No.	Conductor size rm/re		Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
	Main conductor	Junction	b	l		
MCK5050	35/50	16 - 35/25 - 50	26.5	23	4.200	25
MCK3570	50 - 70/-	4 - 35/4 - 35	33.8	28	10.700	10
MCK3595	95/-	16 - 35	41.0	30	15.000	10
MCK7095	95/-	35 - 70	41.0	30	14.000	10
MCK120120	120/-	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

- ▶ rm = round multi-stranded
- ▶ re = round solid
- ▶ **Tools: see chart page 150**

### H-Clamps, Cu



- ▶ Ideal for clamping identical conductor cross-sections e.g. to VDE 0295 class 2
- ▶ Acc. to EN 50164-1 lightning protection certified
- ▶ The split of the main conductor is omitted



#### Characteristics

- Total cross-section: 70 - 120 mm<sup>2</sup>
- H-shape allows simple processing
- Optimum conducting characteristics in combination with compound

#### Material

- Cu-ETP

#### Surface

- Tin-plated to protect against corrosion

#### Order info

- Bright finish version also available, part number appendix "bk"

Part No.	Conductor size rm		Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
	Main conductor	Junction	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

- ▶ rm = round multi-stranded
- ▶ \* = According to EN 50164-1 lightning protection certified
- ▶ **Tools: see chart page 151**

### Compound for clamps



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

#### Characteristics

- Water-resistant, with corundum for destroying the oxidation layer on contact surfaces
- Contents/can: 0.125 kg

Part No.
<b>KF125</b>

**Screw connectors for shielded copper wires**

- ▶ Suitable cross-section range, for example shielded copper wires
- ▶ Ideal for connecting identical and different conductor cross-sections

**Characteristics**

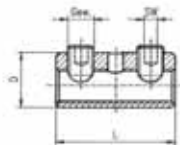
- Special grooved profile inside for removing the oxidation layer when screwing
- With inspection hole for monitoring cable entry

**Material**

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

**Surface**

- Tin-plated



Part No.	Nominal cross section mm <sup>2</sup>		Dimension mm		Number of screws	bolt data			Weight/ 100 pcs. ~ kg	Packing unit/ pcs
	rm	re	D	L		AF	Thread	Md Nm		
<b>SV100</b>	6 - 25	6 - 35	14	40	2	4	M8x1	10	3.9	4

▶ rm = round multi-stranded

▶ re = round solid

⚠ Please observe instructions at "Technical appendix" on page i-9

**Screw connectors for street lighting**

- ▶ Suitable cross-section range for street lighting
- ▶ Ideal for connecting identical and different conductor cross-sections

**Characteristics**

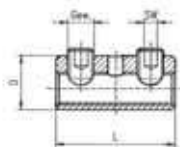
- Special grooved profile inside for removing the oxidation layer when screwing
- With inspection hole for monitoring cable entry

**Material**

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

**Surface**

- Tin-plated, bright finished version available (part number appendix "BK")



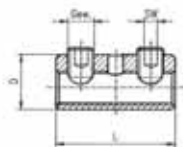
Part No.	Nominal cross section mm <sup>2</sup>		Dimension mm		Number of screws	bolt data			Weight/ 100 pcs. ~ kg	Packing unit/ pcs
	rm	re	D	L		AF	Thread	Md Nm		
<b>SV200</b>	2.5 - 10	2.5 - 16	10	30	2	2.5	M5x1.5	1.35	4	
<b>SV200BK</b>	2.5 - 10	2.5 - 16	10	30	2	2.5	M5x1.5	1.35	4	

▶ rm = round multi-stranded

▶ re = round solid

⚠ Please observe instructions at "Technical appendix" on page i-9

## Screw connector with 2 screws



- ▶ Ideal for connecting identical and different conductor cross-sections
- ▶ For connecting different conductor types and materials, e.g. to VDE 0295 Class 1 and 2 and Al conductors to DIN 48201 part 5
- ▶ With inspection hole for monitoring cable entry (dissimilar materials must not come into contact)

**Characteristics**

- Total cross-section: 2.5 - 185 mm<sup>2</sup>
- Special grooved profile inside for removing the oxidation layer when screwing
- Either with or without shear head, shear head partly fixed
- Version with 2 screws

**Material**

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

**Surface**

- Bright finished or tin-plated

**Order info**

- \* = fixed version, part number appendix "NL"
- \*\* = Version with fixed countersink shear head, part number appendix "VK"

Nominal cross section mm <sup>2</sup>		Part No.	Dimension mm		bolt data			Weight/ 100 pcs. ~ kg	Packing unit/ pcs
rm/sm	rm(v)/re/se		D	L	AF	Thread	Md Nm		
Without shear head, bright finished									
6 - 25	6 - 35	SV303	14	40	4	M8x1	8	1.5	4
6 - 35	6 - 50	SV300	16	40	4	M10x2	8	1.7	4
16 - 95	16 - 95	SV301	25	55	5	M12x16	20	6.6	4
--	35 - 150	SV308	28	70	6	M18x1.5	25	11.3	4
35 - 185	35 - 185	SV302	32	80	6	M18x1.5	25	16	4
Without shear head, tin-plated									
6 - 25	6 - 35	SV303V	14	40	4	M8x1	8	1.5	4
Cu 2.5/Al 6 - 35	Cu 2.5/Al 6 - 50	SV300V	16	40	4	M10x2	8	1.7	4
16 - 35	16 - 50	SV307V	22	57	5	M10x1.5	15	4.7	4
16 - 95	16 - 95	SV301V	25	55	5	M12x16	20	6.6	4
35 - 185	35 - 185	SV302V	32	80	6	M18x1.5	25	16	4
With shear head, bright finished									
6 - 25	6 - 35	*SV303AK	14	40	4	M8x1	8	1.5	1
6 - 35	--	SV304AKNL	16	40	4	M10x1	8	1.7	4
16 - 35	16 - 50	SV307AKNL	22	57	5	M10x1.5	15	4.7	4
16 - 95	16 - 95	SV301AK	25	55	5	M12x16	20	6.6	4
35 - 185	35 - 185	SV302AK	32	80	6	M18x1.5	25	16	4
With shear head, tin-plated									
Cu 2.5/Al 6 - 35	Cu 2.5/Al 6 - 50	SV304AKNLV	16	40	4	M10x1	8	1.7	4
16 - 95	16 - 95	**SV301AKV	55	55	5	M12x16	20	6.6	4
35 - 185	35 - 185	SV302AKV	32	80	6	M18x1.5	25	16	4

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid

ⓘ Please observe instructions at "Technical appendix" on page i-9

**Screw connectors with barrier**

- ▶ Ideal for connecting identical and different conductor cross-sections
- ▶ For connecting different conductor types and materials, e.g. to VDE 0295 Class 1 and 2 and Al conductors to DIN 48201 part 5

**Characteristics**

- Total cross-section: 2.5 - 185 mm<sup>2</sup>
- Special grooved profile inside for removing the oxidation layer when screwing
- Either with or without shear head, shear head partly fixed
- Version with 2 screws and barrier

**Material**

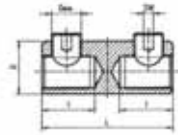
- Insulated body: high-tensile aluminum alloy
- Screws: copper alloy, tin-plated

**Surface**

- Bright finished or tin-plated

**Order info**

- \* = Version with fixed countersink shear head, part number appendix "VK"

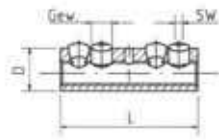


Nominal cross section mm <sup>2</sup>		Part No.	Dimension mm			bolt data			Weight/ 100 pcs. ~ kg	Packing unit/ pcs
rm/sm	rm(v)/re/se		D	l	L	AF	Thread	Md Nm		
Without shear head, bright finished										
2.5 - 35	2.5 - 50	SV315	16	17.5	40	4	M10x1	9	1.7	4
16 - 95	16 - 95	SV309	25	22	55	5	M12x1	20	6.6	4
--	35 - 150	SV320	28	31	70	6	M18x1.5	25	11.3	4
35 - 185	35 - 185	SV310	32	32	80	6	M18x1.5	25	16	4
Without shear head, tin-plated										
Cu 2.5/ Al 6 - 35	Cu 2.5/Al 6 - 50	SV315V	16	17.5	40	4	M10x1	9	1.7	4
16 - 95	16 - 95	SV309V	25	22	55	5	M12x1	20	6.6	4
--	35 - 150	SV320V	28	31	70	6	M18x1.5	25	11.3	4
35 - 185	35 - 185	SV310V	32	32	80	6	M18x1.5	25	16	4
With shear head, bright finished										
6 - 25	6 - 35	SV311AKNL	14	17.5	40	4	M8x1	8	1.5	4
6 - 35	--	SV312AKNL	16	17.5	40	4	M10x1	8	1.7	4
16 - 95	16 - 95	SV309AK	25	22	55	5	M12x1	20	6.6	4
35 - 185	35 - 185	SV310AK	32	32	80	6	M18x1.5	25	16	4
With shear head, tin-plated										
Cu 2.5/ Al 6-35	Cu 2.5/Al 6-50	SV312AKNLV	16	17.5	40	4	M10x1	8	1.7	4
16 - 35	16 - 50	SV319AKNLV	22	24	57	4	M12x1	15	7.6	4
16 - 95	16 - 95	*SV309AKV	25	22	55	5	M12x1	20	6.6	4
35 - 185	35 - 185	*SV310AKV	32	32	80	6	M18x1.5	25	16	4

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid

⚠ Please observe instructions at "Technical appendix" on page i-9

## Screw connectors with 4 screws



- ▶ Ideal for connecting identical and different conductor cross-sections
- ▶ For connecting different conductor types and materials, e.g. to VDE 0295 Class 1 and 2 and Al conductors to DIN 48201 part 5
- ▶ With inspection hole for monitoring cable entry (dissimilar materials must not come into contact)

**Characteristics**

- Total cross-section: 25 - 185 mm<sup>2</sup>
- Special grooved profile inside for removing the oxidation layer when screwing
- Either with or without shear head
- Version with 4 screws

**Material**

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

**Surface**

- Bright finished or tin-plated

Nominal cross section mm <sup>2</sup>		Part No.	Dimension mm		bolt data			Weight/ 100 pcs. ~ kg	Packing unit/pcs
rm/sm	rm(v)/re/se		D	L	AF	Thread	Md Nm		
Without shear head, bright finished									
25 - 95	25 - 95	SV305	25	92	5	M12x1	20	12	4
35 - 185	35 - 185	SV306	32	108	6	M18x1.5	25	25	4
Without shear head, tin-plated									
25 - 95	25 - 95	SV305V	25	92	5	M12x1	20	12	4
35 - 185	35 - 185	SV306V	32	108	6	M18x1.5	25	25	4
With shear head, bright finished									
25 - 95	25 - 95	SV305AK	25	92	5	M12x1	20	12	4
35 - 185	35 - 185	SV306AK	32	108	6	M18x1.5	25	25	4
With shear head, tin-plated									
25 - 95	25 - 95	SV305AKV	25	92	5	M12x1	20	12	4
35 - 185	35 - 185	SV306AKV	32	108	6	M18x1.5	25	25	4

▶ sm/se - conductor needs to be pre-rounded

▶ rm = round multi-stranded

▶ rm (v) = round multi-stranded compacted

▶ sm = sector stranded

▶ re = round solid

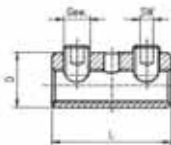
▶ se = sector solid

🔗 Please observe instructions at "Technical appendix" on page i-9



**Insulated screw connectors**

- ▶ Ideal for connecting identical and different conductor cross-sections
- ▶ For connecting different conductor types and materials, e.g. to VDE 0295 Class 1 and 2 and Al conductors to DIN 48201 part 5
- ▶ With inspection hole for monitoring cable entry (dissimilar materials must not come into contact)



**Characteristics**

- Total cross-section: 6 - 185 mm<sup>2</sup>
- Special grooved profile inside for removing the oxidation layer when screwing
- Insulated body
- Version with 2 screws, without barrier
- Either with or without shear head

**Material**

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

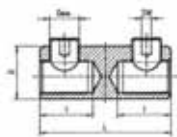
**Surface**

- Bright finished or tin-plated

Nominal cross section mm <sup>2</sup>		Part No.	Dimension mm		AF	bolt data		Weight/ 100 pcs. ~ kg	Packing unit/pcs
rm/sm	rm(v)/re/se		D	L		Thread	Md Nm		
<b>Without shear head, bright finished</b>									
6 - 25	6 - 35	<b>SV400</b>	14	40	4	M8x1	8	1.7	4
25 - 95	25 - 95	<b>SV410</b>	25	55	5	M12x1	20	6	4
35 - 185	35 - 185	<b>SV420</b>	32	80	6	M18x1.5	25	14.5	4
<b>Without shear head, tin-plated</b>									
16 - 35	16 - 50	<b>SV405V</b>	22	57	5	M10x1.5	15	5	4
35 - 185	35 - 185	<b>SV420V</b>	32	80	6	M18x1.5	25	14.5	4
<b>With shear head, bright finished</b>									
25 - 95	25 - 95	<b>SV410AK</b>	25	55	5	M12x1	20	6	4
35 - 185	35 - 185	<b>SV420AK</b>	32	80	6	M18x1.5	25	14.5	4

- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid
- ▶ sm/se - conductor needs to be pre-rounded
- ⚠ Please observe instructions at "Technical appendix" on page i-9

Insulated screw connectors with barrier



- ▶ Ideal for connecting identical and different conductor cross-sections
- ▶ For connecting different conductor types and materials, e.g. to VDE 0295 Class 1 and 2 and Al conductors to DIN 48201 part 5

**Characteristics**

- Total cross-section: 25 - 185 mm<sup>2</sup>
- Special grooved profile inside for removing the oxidation layer when screwing
- Insulated body
- Version with 2 screws
- Either with or without shear head

**Material**

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

**Surface**

- Bright finished

**Order info**

- \*\* = Version with fixed countersink shear head, part number appendix "VK"

Nominal cross section mm <sup>2</sup>		Part No.	Dimension mm			bolt data			Weight/ 100 pcs. ~ kg	Packing unit/ pcs
rm/sm	rm(v)/re/se		D	I	L	AF	Thread	Md Nm		
Without shear head										
25 - 95	25 - 95	SV430	25	22	55	5	M12x1	20	6.6	4
35 - 185	35 - 185	SV440	32	32	80	6	M18x1.5	25	16.0	4
With shear head										
25 - 95	25 - 95	SV430AK	25	22	55	5	M12x1	20	6.6	4
35 - 185	35 - 185	**SV440AK	32	32	80	6	M 18 x 1.5	25	16.0	4

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid

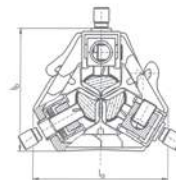
ⓘ Please observe instructions at "Technical appendix" on page i-9

Compact tap connectors with shear head, for three conductor cable

- ▶ Suitable for main and branch conductors made from Al and Cu
- ▶ The split of the main conductor is omitted
- ▶ For use e.g. with energy suppliers

Characteristics

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



Nominal cross section mm <sup>2</sup> Main conductor				Tap conductor		Part No.	Clamp data Dimension mm			Circle dia.	Bolts		Weight/ pcs. ~kg	Packing unit/pcs
Cu rm/ sm	Cu rm(v) / re/se	Al rm/sm	Al rm(v) / re/se	rm/sm	rm(v)/ re/se		la	lb	Width		AF	Thread		
70 - 150	70 - 150	70 - 150	70 - 150	6 - 70	6 - 95	<b>KSK1503</b>	84	76	45	90	5	M10x1/ M10	0.35	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid

ⓘ Please observe instructions at the Technical Appendix" on page i-10 and the corresponding assembly tools on page 476

Compact tap connectors with shear head, for four conductor cable



- ▶ Suitable for main and branch conductors made from Al and Cu
- ▶ The split of the main conductor is omitted
- ▶ For use e.g. with energy suppliers

Characteristics

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

Nominal cross section mm <sup>2</sup> Main conductor				Tap conductor		Part No.	Clamp data Dimension mm			Bolt data			Weight/ pcs. ~kg	Packing unit/pcs
Cu rm/sm	Cu rm(v) / re/se	Al rm/sm	Al rm(v) / re/se	rm/sm	rm(v)/ re/se		la	lb	Width	Circle dia.	AF	Thread		
70 - 150	70 - 150	70 - 150	70 - 150	6 - 70	6 - 95	<b>KSK1504</b>	107	90	46	110	5	M10x1/ M10	0.63	1
70 - 150	70 - 150	70 - 150	70 - 185	6 - 35	6 - 50	<b>KSK1854</b>	107	90	52	106	5	M10x1/ M10	0.58	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid

ⓘ Please observe instructions at the "Technical Appendix" on page i-10 and the corresponding assembly tools at page 476

Compact tap connector, for four conductor cable, for main conductor 25-50 mm<sup>2</sup> Cu rm/sm



- ▶ Suitable for main and branch conductors made from Al and Cu
- ▶ The split of the main conductor is omitted
- ▶ For use e.g. with energy suppliers

Characteristics

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

Nominal cross section mm <sup>2</sup> Main conductor				Tap conductor		Part No.	Dimension mm			Bolt data			Weight/ pcs. ~kg	Packing unit/pcs
Cu rm/sm	Cu rm(v) / re/se	Al rm/sm	Al rm(v) / re/se	rm/sm	rm(v)/ re/se		la	lb	Width	Circle dia.	AF	Thread		
25 - 50	25 - 50	25 - 50	35 - 70	6 - 35	6 - 50	<b>KSK504</b>	88	75	50	91	5	M10x1/ M10	0.46	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid
- ▶ se = sector solid

ⓘ Please observe instructions at the Technical Appendix" on page i-11 and the corresponding assembly tools on page 476

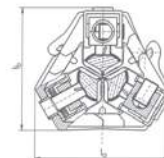
**Compact tap connectors, for three conductor cable**

- ▶ Suitable for main and branch conductors made from Al and Cu
- ▶ The split of the main conductor is omitted
- ▶ For use e.g. with energy suppliers



**Characteristics**

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



Nominal cross section mm <sup>2</sup> Main conductor				Tap conductor		Part No.	Dimension mm			Bolt data			Weight/ pcs. ~kg	Packing unit/pcs
Cu rm/sm	Cu rm(v) / re/se	Al rm/sm	Al rm(v) / re/se	rm/sm	rm(v)/ re/se		la	lb	Width	Circle dia.	AF	Thread		
70 - 150	70 - 150	70 - 150	70 - 150	6 - 70	6 - 95	<b>SKR1503</b>	84	76	45	90	5	M10x1/ M10	0.38	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid

- ▶ se = sector solid
- ⓘ Please observe instructions at the Technical Appendix\* on page i-10 and the corresponding assembly tools at page 476

**Compact tap connectors, for four conductor cables, for main conductor 70 - 150 mm<sup>2</sup> Cu rm/sm**

- ▶ Suitable for main and branch conductors made from Al and Cu
- ▶ The split of the main conductor is omitted
- ▶ For use e.g. with energy suppliers



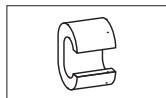
**Characteristics**

- To VDE, can be installed under voltage with corresponding fully insulated assembly tools
- Suitable for main and branch conductors made from Al and Cu

Nominal cross section mm <sup>2</sup> Main conductor				Tap conductor		Part No.	Dimension mm			Bolt data			Weight/ pcs. ~kg	Packing unit/pcs
Cu rm/sm	Cu rm(v) / re/se	Al rm/sm	Al rm(v) / re/se	rm/sm	rm(v)/ re/se		la	lb	Width	Circle dia.	AF	Thread		
70 - 95	70 - 95	70 - 95	70 - 120	6 - 35	6 - 50	<b>SKR1204</b>	90	77	50	93	5	M10x1/ M10	0.46	1
70 - 120	70 - 120	70 - 120	70 - 150	6 - 35	6 - 50	<b>SKR150504</b>	93	80	50	62	5	M10x1/ M10	0.46	1
70 - 120	70 - 120	70 - 150	70 - 150	6 - 70	6 - 95	<b>SKR1504</b>	107	90	46	110	5	M10x1/ M10	0.62	1
95 - 150	95 - 150	95 - 150	95 - 150	16 - 120	16 - 150	<b>SKR1501504</b>	118	118	93	120	5	M12x1/ M12	1.34	1
95 - 150	95 - 150	95 - 150	95 - 185	6 - 70	6 - 95	<b>SKR1854</b>	107	96	46	114	5	M10x1/ M10	0.58	1

- ▶ sm/se - conductor needs to be pre-rounded
- ▶ rm = round multi-stranded
- ▶ rm (v) = round multi-stranded compacted
- ▶ sm = sector stranded
- ▶ re = round solid

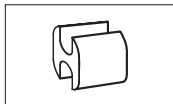
- ▶ se = sector solid
- ⓘ Please observe instructions at the Technical Appendix\* on page i-10 and the corresponding assembly tools at page 476



## ■ Tool application chart

## C-Clamps

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)		
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads				
4-35	K354			•					○	260		
	EK354					•			○	314		
	EK354L					•			○	316		
4-50	K18			•					○	262		
	HK6018					•			○	286		
	EK5018L						•		○	320		
	PK18							•	○	362		
	THK18						•		○	362		
	HK60UNV + UA18					•			○	354		
	EK60UNVL + UA18						•		○	357		
	EKM60UNVL + UA18						•		○	356		
	PK60UNV + UA18								•	○	355	
	K22				•					○	264	
	HK6022						•			○	288	
	EK6022L							•		○	324	
	EKM6022L								•	○	322	
	PK22									•	○	364
	THK22							•		○	364	
HK60UNV + UA22						•			○	354		
EK60UNVL + UA22							•		○	357		
EKM60UNVL + UA22								•	○	356		
PK60UNV + UA22									•	○	355	
10-70	HK12030					•			○	292		
	HK12042						•		○	294		
	HK120U							•	○	296		
	EK12030L							•	○	330		
	EK12042L								•	○	332	
	EK120UL								•	○	334	
	EK120UNVL								•	○	358	
	HK122EL380						•		○	390		
	PK12042									•	○	368
	PK120U									•	○	370
10-185	HK252							•	○	388		
	HK252EL380							•	○	391		
	PK252								•	○	372	



**■ Tool application chart**

**H-Clamps**

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
70	K22			•					○	264
	HK6022				•				○	288
	EK6022L					•			○	324
	EKM6022L					•			○	322
	EK60UNVL	+ UA22				•			○	357
	THK22						•		○	364
	PK22							•	○	364
70-120	HK12030				•				○	292
	HK12042				•				○	294
	HK120U				•				○	296
	EK12030L					•			○	330
	EK12042L					•			○	332
	EK120UL					•			○	334
	EK120UNVL					•			○	358
	HK122EL380						•		○	390
	PK12042							•	○	368
	PK120U							•	○	370
	HK252						•		○	388
	HK252EL380						•		○	391
	PK252							•	○	372

## No more spliced conductors.

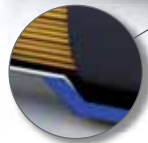
### Non-insulated and insulated cable end-sleeves.

Crimped cable end-sleeves avoid splicing of individual wires of fine and superfine stranded copper conductors. In addition, cables can be inserted into connecting terminals much more easily, effective electrical connections in the terminals being guaranteed.

Cable end-sleeves are made from high quality electrolytic copper and are tin or silver-plated to prevent oxidation.



- Non-insulated cable end-sleeves to DIN 46228, Part 1.
- Insulated cable end-sleeves to DIN 46228, Part 4, with CSA testing.
- Insulated twin cable end sleeves for conductor loops.
- Insulated cable end-sleeves for short circuit-resistant conductors.



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





## ■ *Non-insulated cable end-sleeves* in all sizes and lengths.

- ▶ With nominal cross sections from 0.25 mm<sup>2</sup> to 240 mm<sup>2</sup>.
- ▶ Also silver plated design.

### Benefits:

- ▶ Fine and superfine stranded conductors up to a nominal cross section of 240 mm<sup>2</sup> can be crimped to the standardized chamber dimension without splicing and within the DIN range.
- ▶ The silver plated design provides excellent conductivity and outstanding contact properties and are the ideal solution for applications in aggressive environments.
- ▶ Klauke crimping profiles, such as the special trapezoid crimp, enable crimping of thinned, compacted or fine stranded conductors.



## ■ *Polypropylene* makes the difference.



- ▶ Insulated cable end-sleeves with nominal cross-sections from 0.14 mm<sup>2</sup> to 150 mm<sup>2</sup>.
- ▶ Calibrated cable end-sleeves **can be used in fully-automated cable harness processing.**
- ▶ Designs to DIN 46228, Part 4, and two further colour codes.
- ▶ In different lengths.
- ▶ With easy-entry polypropylene insulation for continuous load to 105 °C.
- ▶ Halogen-free
- ▶ CSA-tested designs.
- ▶ With nominal cross-sections from 1.5 mm<sup>2</sup> to 16 mm<sup>2</sup> for short circuit-resistant conductors.

### Benefits:

- ▶ The conductors can be **connected to the clamps better and faster** after crimping.
- ▶ Calibrated precision.
- ▶ Easy-entry polypropylene insulation for simple conductor insertion.
- ▶ Halogen-free insulation prevents hydrochloric acid-containing vapours from developing in case of fire.
- ▶ Permanently safe installation with heat and age-resistant plastic collars.

## ■ *Simple, multiple population.*

- ▶ Twin cable end-sleeves with nominal cross sections from 0.25 mm<sup>2</sup> to 16 mm<sup>2</sup>.
- ▶ In different lengths.
- ▶ DIN colour code.
- ▶ Halogen-free polypropylene insulation.
- ▶ CSA-tested.

### Benefits:

- ▶ In tight areas, twin cable end-sleeves are often the only alternative for conductor loops.
- ▶ **The solution for multiple configuration of clamps.**



## Cable end-sleeves, acc. to DIN, copper



- ▶ For fine and superfine stranded conductors, e.g. VDE 0295 Class 5 and 6
- ▶ Burr-free, with expansion for easy cable insertion
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps

**Characteristics**

- Total cross-section: 0.25 - 240 mm<sup>2</sup>
- Acc. to DIN 46228 part 1 and similar versions

**Material**

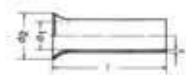
- Copper acc. to EN 13600

**Surface**

- Tin-plated

**Order info**

- Silver plated version also available, without part number appendix "V", exception: part number 705V silver plated = part number 7050



Nominal cross section mm <sup>2</sup>	Part No.	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	*718V	1.00	2.1	6	0.15	0.03	1000
	*7186V	1.00	2.1	8	0.15	0.04	1000
	*71810V	1.00	2.1	10	0.15	0.05	1000
	*718V	1.20	2.3	6	0.15	0.04	1000
0.75	*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
	*72S6V	1.40	2.5	6	0.15	0.04	1000
1	*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
	*726V	1.70	2.8	6	0.15	0.05	1000
	*727V	1.70	2.8	7	0.15	0.06	1000
1.5	*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
	*737V	2.20	3.4	7	0.15	0.08	1000
	*738V	2.20	3.4	8	0.15	0.09	1000
2.5	*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

**Cable end-sleeves, acc. to DIN, Cu**

Nominal cross section mm <sup>2</sup>	Part No.	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	
	*7610V	4.5	5.8	10	0.2	0.27	100	
10	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	
50	7932V	8.3	11.0	32	0.2	2.35	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	
	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	



## Cable end-sleeves, acc. to DIN, Cu

Nominal cross section mm <sup>2</sup>	Part No.	Dimension mm				Weight/ 1000 pcs.~ kg	Packing unit/pcs
		d1	d2	l	s		
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
	*8330V	16.7	19.0	30	0.5	7.35	25
120	*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
	*8432V	18.7	21.0	32	0.5	8.75	25
150	*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
	*8532V	20.2	23.5	32	0.6	11.38	25
185	*8540V	20.2	23.5	40	0.6	14.17	25
	*8634V	23.0	24.0	34	0.5	11.25	25
240	*8640V	23.0	24.0	40	0.5	13.23	25

▶ \* = not standardized

▶ Tools: see chart page 165

## Cable end -sleeves, acc. to DIN, brass



- ▶ For fine and superfine stranded conductors, e.g. VDE 0295 Class 5 and 6
- ▶ Crimped cable end-sleeves for splice-free mounting to cable clamps

**Characteristics**

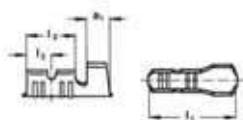
- Total cross-section: 0.5 - 2.5 mm<sup>2</sup>
- Acc. to DIN 46228, part 2

**Material**

- Brass (CuZn)

**Surface**

- Tin-plated to protect against corrosion

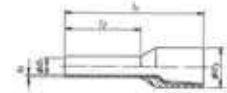


Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Dimension mm					Weight/ 1000 pcs.~ kg	Packing unit/pcs
			a1	l1	l2	l3	s		
0.5-1	B 1 - 7	SHZ71	2.5	11	3.5	7	0.3	0.20	100
1.5	B 1.5 - 7	SHZ72	2.5	11	3.5	7	0.3	0.23	100
2.5	B 2.5 - 7	SHZ73	2.5	11	3.5	7	0.3	0.32	100

▶ Tools: see chart page 167

**Insulated cable end-sleeves, acc. to DIN, Easy Entry**

- ▶ For fine and superfine stranded conductors
- ▶ Easy-Entry insulation for easy cable insertion
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps



**Characteristics**

- Total cross-section: 0.5 - 150 mm<sup>2</sup>
- Colour-coding and tube dimension to DIN 46228, part 4 (0.5 - 50 mm<sup>2</sup>)
- Halide free
- Heat resistant to 105° C

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion

**Order info**

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	Part No.	Colour	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
1	47012	■	1.2	3.3	18	12	0.15	0.105	1000
	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 ***
1.5	47110	■	1.4	3.5	16	10	0.15	0.120	1000
	47112	■	1.4	3.5	18	12	0.15	0.125	1000
	4726	■	1.7	4.0	12	6	0.15	0.105	1000
	4728	■	1.7	4.0	14	8	0.15	0.110	1000**
2.5	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
4	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
6	47318	■	2.2	4.7	24	18	0.15	0.250	1000
	47410	■	2.8	5.4	17	10	0.20	0.210	100**
	47412	■	2.8	5.4	20	12	0.20	0.250	100
10	47418	■	2.8	5.4	26	18	0.20	0.320	100
	47512	■	3.5	6.9	20	12	0.20	0.350	100**
	47518	■	3.5	6.9	26	18	0.20	0.460	100
16	47612	■	4.5	8.4	22	12	0.20	0.450	100**
	47618	■	4.5	8.4	28	18	0.20	0.650	100
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

## Insulated cable end-sleeves, acc. to DIN, Easy Entry

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm					Weight/ 1000 pcs.– kg	Packing unit/pcs
			d1	d3	l1	l2	s1		
25	47816	Yellow	7.3	12.0	30	16	0.20	1.600	50
	47818	Yellow	7.3	12.0	32	18	0.20	1.700	50
	47822	Yellow	7.3	12.0	36	22	0.20	2.000	50
35	47916	Red	8.3	13.5	30	16	0.20	1.900	50
	47918	Red	8.3	13.5	32	18	0.20	2.100	50
	47925	Red	8.3	13.5	39	25	0.20	2.500	50
50	48020	Blue	10.3	16.0	36	20	0.30	3.300	50
	48025	Blue	10.3	16.0	40	25	0.30	3.600	50
70	*48121	Yellow	13.5	17.2	37	21	0.40	4.620	25
95	*48225	Red	14.7	19.2	44	25	0.40	6.000	25
120	*48327	Blue	16.7	21.4	48	27	0.45	7.850	25
150	*48432	Yellow	19.5	25.0	58	32	0.50	12.330	25

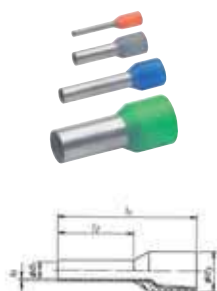
▶ \* = not standardized

▶ \*\* = Also available in small handy packs

▶ \*\*\* = Quantity per bag

▶ Tools: see chart page 168

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



- ▶ For fine and superfine stranded conductors
- ▶ Easy-Entry insulation for easy cable insertion
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps

**Characteristics**

- Total cross-section: 0.14 - 50 mm<sup>2</sup>
- Acc. to DIN 46228, part 4 (0.5 - 50 mm<sup>2</sup>)
- Halide free
- Heat resistant to 105° C

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm					Weight/ 1000 pcs.– kg	Packing unit/ pcs
			d1	d3	l1	l2	s1		
0.14	*166GR	Grey	0.7	2.3	10.4	6	0.12	0.035	1000
	*166GRL	Grey	0.7	2.3	12.4	8	0.12	0.040	1000
0.25	*167H	Light Blue	0.8	2.3	10.4	6	0.15	0.045	1000
	*167HL	Light Blue	0.8	2.3	12.4	8	0.15	0.050	1000
0.34	*168T	Teal	0.8	2.5	10.4	6	0.15	0.045	1000
	*168TL	Teal	0.8	2.5	12.4	8	0.15	0.050	1000
0.5	1690K	Orange	1.0	3.0	12.0	6	0.15	0.070	1000
	1690	Orange	1.0	3.0	14.0	8	0.15	0.070	1000
	GR1690	Orange	1.0	3.0	14.0	8	0.15	0.070	500 **
	1690H	Orange	1.0	3.0	16.0	10	0.15	0.085	1000

**Insulated cable end-sleeves, acc. to DIN, Easy Entry, colour code 1**

Nominal cross section mm²	Part No.	Colour	Dimension mm					Weight/ 1000 pcs.~ kg	Packing unit/ pcs
			d1	d3	l1	l2	s1		
0.75	170WK	□	1.2	3.2	12.4	6	0.15	0.080	1000
	170W	□	1.2	3.2	14.6	8	0.15	0.080	1000
	GR170W	□	1.2	3.2	14.6	8	0.15	0.080	500 **
	170WH	□	1.2	3.2	16.4	10	0.15	0.100	1000
	170WL	□	1.2	3.2	18.4	12	0.15	0.105	1000
1	171GK	■	1.4	3.5	12.4	6	0.15	0.090	1000
	171G	■	1.4	3.5	14.6	8	0.15	0.100	1000
	GR171G	■	1.4	3.5	14.6	8	0.15	0.100	500 **
	171GH	■	1.4	3.5	16.4	10	0.15	0.120	1000
	171GL	■	1.4	3.5	18.4	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	14.6	8	0.15	0.110	1000
	GR172RO	■	1.7	4.0	14.6	8	0.15	0.110	500 **
	172RH	■	1.7	4.0	16.4	10	0.15	0.130	1000
	172RM	■	1.7	4.0	18.4	12	0.15	0.140	1000
2.5	172RL	■	1.7	4.0	24.4	18	0.15	0.190	1000
	173B	■	2.3	4.9	15.2	8	0.15	0.150	1000
	GR173B	■	2.3	4.9	15.2	8	0.15	0.150	500 **
	173BH	■	2.3	4.9	19.0	12	0.15	0.200	1000
	173BL	■	2.3	4.9	25.0	18	0.15	0.250	1000
4	174GR	■	2.9	5.5	16.5	10	0.15	0.210	100
	174GRH	■	2.9	5.5	19.5	12	0.15	0.250	100
	174GRL	■	2.9	5.5	25.5	18	0.15	0.320	100
6	175S	■	3.5	6.3	20.0	12	0.20	0.350	100
	175SL	■	3.5	6.3	26.0	18	0.20	0.460	100
10	176E	■	4.5	8.0	21.5	12	0.20	0.450	100
	176EL	■	4.5	8.0	27.5	18	0.20	0.650	100
16	177GR	■	5.8	9.6	22.2	12	0.20	0.650	100
	177GRL	■	5.8	9.6	28.2	18	0.20	0.800	100
25	178BR	■	7.3	12.1	29.0	16	0.20	1.600	50
	178BRL	■	7.3	12.1	35.0	22	0.20	2.000	50
35	179B	■	8.3	13.6	30.0	16	0.20	1.900	50
	179BL	■	8.3	13.6	39.0	25	0.20	2.500	50
50	180O	■	10.3	16.4	36.4	20	0.35	3.300	50
	180OL	■	10.3	16.4	41.4	25	0.35	4.000	50

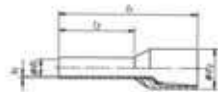
▶ \* = not standardized

▶ \*\* = Quantity per bag

▶ **Tools: see chart page 168**



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



- ▶ For fine and superfine stranded conductors
- ▶ Easy-Entry insulation for easy cable insertion
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps

**Characteristics**

- Total cross-section: 0.14 - 25 mm<sup>2</sup>
- Acc. to DIN 46228, part 4 (0.5 - 25 mm<sup>2</sup>)
- Halide free
- Heat resistant to 105° C

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm					Weight/ 1000 pcs.~ kg	Packing unit/ pcs
			d1	d3	l1	l2	s1		
0.14	*1666	■	0.7	2.4	10.4	6	0.12	0.035	1000
	*1668	■	0.7	2.4	12.4	8	0.12	0.040	1000
0.25	*1676	■	0.8	2.5	11.0	6	0.15	0.045	1000
	*1678	■	0.8	2.5	13.0	8	0.15	0.050	1000
0.34	*1686	■	0.8	2.5	11.0	6	0.15	0.045	1000
	*1688	■	0.8	2.5	13.0	8	0.15	0.050	1000
0.5	1696	□	1.0	3.1	11.0	6	0.15	0.070	1000
	1698	□	1.0	3.1	13.0	8	0.15	0.080	1000
	GR1698	□	1.0	3.1	13.0	8	0.15	0.080	500**
0.75	1706	■	1.2	3.2	11.5	6	0.15	0.080	1000
	1708	■	1.2	3.2	13.5	8	0.15	0.095	1000
	GR1708	■	1.2	3.2	13.5	8	0.15	0.095	500**
1	1716	■	1.4	3.4	11.5	6	0.15	0.085	1000
	1718	■	1.4	3.4	13.5	8	0.15	0.100	1000
	GR1718	■	1.4	3.4	13.5	8	0.15	0.100	500**
1.5	1726	■	1.7	3.9	11.5	6	0.15	0.100	1000
	1728	■	1.7	3.9	13.5	8	0.15	0.120	1000
	GR1728	■	1.7	3.9	13.5	8	0.15	0.120	500**
	17210	■	1.7	3.9	16.4	10	0.15	0.130	1000
	17212	■	1.7	3.9	18.4	12	0.15	0.140	1000
	17218	■	1.7	3.9	22.8	18	0.15	0.220	1000
2.5	1738	■	2.2	4.7	14.5	8	0.15	0.140	1000
	GR1738	■	2.2	4.7	14.5	8	0.15	0.140	500**
	17312	■	2.2	4.7	19.0	12	0.15	0.200	1000
4	17318	■	2.2	4.7	24.0	18	0.15	0.280	1000
	17410	■	2.8	5.5	16.5	10	0.20	0.260	100
	17412	■	2.8	5.5	20.0	12	0.20	0.300	100
6	17418	■	2.8	5.5	25.5	18	0.20	0.390	100
	17512	■	3.5	7.0	20.0	12	0.20	0.410	100
	17518	■	3.5	7.0	26.0	18	0.20	0.530	100
10	17612	■	4.5	8.4	21.5	12	0.20	0.550	100
	17618	■	4.5	8.4	27.0	18	0.20	0.710	100
16	17712	□	5.8	9.8	23.5	12	0.20	0.660	100
	17718	□	5.8	9.8	29.0	18	0.20	0.850	100



**Insulated cable end-sleeves acc. to DIN, Easy Entry, colour code 2**

Nominal cross section mm²	Part No.	Colour	Dimension mm					Weight/ 1000 pcs.~ kg	Packing unit/ pcs
			d1	d3	l1	l2	s1		
25	17816	■	7.3	12.0	28.0	16	0.20	1.500	50
	17818	■	7.3	12.0	30.0	18	0.20	1.550	50
	17822	■	7.3	12.0	34.0	22	0.20	2.000	50

▶ \* = not standardized

▶ \*\* = Quantity per bag

▶ **Tools: see chart page 168**

**Insulated cable end-sleeves with lug**

- ▶ For fine and superfine stranded conductors
- ▶ With identification system for max. 6 identification rings



**Characteristics**

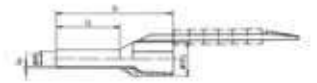
- Total cross-section: 0.5 - 2.5 mm²
- Dimensions acc. to DIN 46228 part 4
- Insulated, halogen-free
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion

**Material**

- Copper acc. to EN 13600
- 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
			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

▶ **Tools: see chart page 168**

**Identification rings and insert fork**

- ▶ For identifying insulated cable end-sleeves with lugs

**Characteristics**

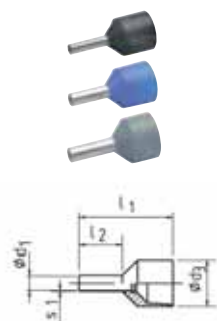
- Differing numbers / letters in the identification rings
- Packaging unit in booklet format, 200 of each symbol
- Insert fork A300 for inserting the identification rings on the insulated cable end-sleeves



Part No.	Colour	Packing unit/pcs
<b>Identification rings</b>		
380/-	■	1
380/+	■	1
380/0 bis 9	■	1
380/A bis Z*	■	1
<b>Insert fork</b>		
A300		1

▶ \* = without letters "I" and "O"

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



- ▶ For short circuit resistant conductors (e.g. NSGAFOU)
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps

**Characteristics**

- Total cross-section: 1.5 - 16 mm<sup>2</sup>
- Insulated, halogen-free
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion
- Colour-coded cross-section assignment

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

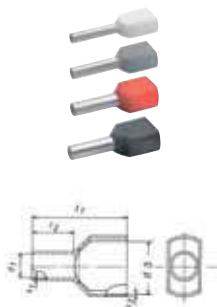
**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm						Weight/ 1000 pcs.~ kg	Packing unit/pcs
			d1	d3	l1	l2	s1	s2		
1.5	4328	■	1.8	8.1	17.5	8	0.15	0.22	100	
	43210	■	1.8	8.1	19.5	10	0.15	0.27	100	
2.5	4338	■	2.3	8.6	17.5	8	0.15	0.24	100	
	43312	■	2.3	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	■	3.6	11.0	23.0	12	0.20	0.49	100	
10	43612	■	4.6	11.7	24.0	12	0.20	0.65	100	
16	43712	■	6.0	14.4	25.5	12	0.20	0.93	100	

▶ Tools: see chart page 168

### Insulated twin cable end-sleeves



- ▶ For fine and superfine stranded conductors
- ▶ For multi purpose use of clamps
- ▶ Colour-coding following DIN 46228 part 4 (0.5 - 16 mm<sup>2</sup>)
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps

**Characteristics**

- Total cross-section: 2 x 0.25 - 2 x 16 mm<sup>2</sup>
- Insulated, halogen-free
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion (other surfaces available upon request)

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm						Weight/ 1000 pcs.~ kg	Packing unit/ pcs
			d1	d3	l1	l2	s1	s2		
2 x 0.25	8678	■	1.15	1.8/3.4	15.0	8	0.15	0.25	0.110	1000
2 x 0.34	8688	■	1.15	1.8/3.4	15.0	8	0.15	0.25	0.110	1000
2 x 0.5	8698	■	1.50	2.5/4.7	15.0	8	0.15	0.25	0.110	1000
2 x 0.75	8708	■	1.80	2.8/5.0	15.0	8	0.15	0.25	0.130	1000
2 x 0.75	87010	■	1.80	2.8/5.0	17.0	10	0.15	0.25	0.150	1000

**Insulated twin cable end-sleeves**

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm						Weight/ 1000 pcs.~ kg	Packing unit/ pcs
			d1	d3	l1	l2	s1	s2		
2 x 1	8718	■	2.05	3.4/5.4	15.0	8	0.15	0.30	0.170	1000
	87110	■	2.05	3.4/5.4	17.0	10	0.15	0.30	0.170	1000
2 x 1.5	8728	■	2.30	3.6/6.6	16.0	8	0.15	0.30	0.183	1000
	87212	■	2.30	3.6/6.6	20.0	12	0.15	0.30	0.237	1000
2 x 2.5	87310	■	2.90	4.2/7.8	18.5	10	0.20	0.30	0.312	100
	87313	■	2.90	4.2/7.8	21.5	13	0.20	0.30	0.340	100
2 x 4	87412	■	3.80	4.9/8.8	23.0	12	0.20	0.30	0.467	100
2 x 6	87514	■	4.90	6.9/10.0	26.0	14	0.20	0.40	0.730	100
2 x 10	87614	■	6.50	7.2/13.0	26.0	14	0.20	0.40	0.884	100
2 x 16	87714	■	8.30	9.6/18.4	30.0	14	0.20	0.40	1.273	100

► Tools: see chart page 171

**Insulated cable end-sleeves, strips**

- For fine and superfine stranded conductors
- Crimped cable end-sleeves for easy mounting to cable clamps



**Characteristics**

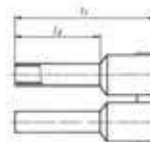
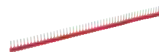
- Total cross-section: 0.5 - 2.5 mm<sup>2</sup>
- Colour-coding and tube dimension to DIN 46228, part 4
- Insulated, halogen-free
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion



Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm		Weight/ 1000 pcs.~ kg	Packing unit/pcs
			l1	l2		
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
- ▶ Easy-Entry insulation for easy cable insertion
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps
- ▶ Coiled insulated cable-end sleeves for machine processing

**Characteristics**

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

**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm		Weight/ 1000 pcs.~ kg	Packing unit/pcs
			I1	I2		
0.5	<b>BAK9698</b>	□	14	8	0.136	1100
0.75	<b>BAK9708</b>	■	14	8	0.154	1100
1	<b>BAK9718</b>	■	14	8	0.187	800
1.5	<b>BAK9728</b>	■	14	8	0.200	800
2.5	<b>BAK9738</b>	■	14	8	0.300	500

## Insulated cable end-sleeves, large coil



- ▶ For fine and superfine stranded conductors
- ▶ Easy-Entry insulation for easy cable insertion
- ▶ Crimped cable end-sleeves for easy mounting to cable clamps
- ▶ Coiled insulated cable-end sleeves for machine processing

**Characteristics**

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

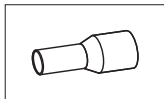
**Material**

- Copper acc. to EN 13600
- Synthetic material: polypropylene

**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm		Weight/ 1000 pcs.~ kg	Packing unit/pcs
			I1	I2		
0.5	<b>BAG9698</b>	□	14	8	0.120	10000
0.75	<b>BAG9708</b>	■	14	8	0.130	10000
1	<b>BAG9718</b>	■	14	8	0.160	7500
1.5	<b>BAG9728</b>	■	14	8	0.173	7500
2.5	<b>BAG9738</b>	■	14	8	0.230	5000

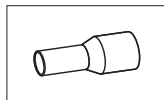


**■ Tool application chart**

**Cable end-sleeves  
acc. to DIN 46228, part 1**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0,14-2,5	K1		•						□	224
	K48		•						□	224
0,14-6	K32		•						□	225
	K37		•						□	226
	KP1	+KP312		•					□	256
	KP1L	+KP312		•					□	256
	EKP1	+KP312				•			□	312
	TEKP1	+KP312		•					□	281
	KPM15	+KP312		•					□	282
	0,14-10	K303		•						◇
KP1		+KP303		•					◇	256
KP1L		+KP303		•					◇	256
EKP1		+KP303				•			◇	312
TEKP1		+KP303		•					◇	281
KPM15		+KP303		•					◇	282
0,14-50	K50			•					□	259
	EK50ML			•					□	278
	EK1550					•			□	308
	EK1550G					•			□	310
0,25-6	K38ERGO		•					◇	228	
0,5-2,5	K4		•					☺	222	
0,5-6	K36		•						□	225
	K382		•						◇	227
0,5-16	K3		•					☺	223	
1,5-6	K46		•						☺	222
	KP1	+KP351		•					○	256
	KP1L	+KP351		•					○	256
	EKP1	+KP351				•			○	312
	TEKP1	+KP351		•					○	281
	KPM15	+KP351		•					○	282
6-16	K34		•					□	226	
10-16	KP1	+KP304		•					◇	256
	KP1L	+KP304		•					◇	256
	EKP1	+KP304				•			◇	312
	TEKP1	+KP304		•					◇	281
	KPM15	+KP304		•					◇	282

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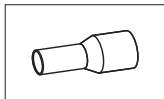


■ Tool application chart

Cable end-sleeves  
acc. to DIN 46228, part 1

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
10-16	KP1	+KP352		•					○	256	
	KP1L	+KP352		•					○	256	
	EKP1	+KP352				•			○	312	
	TEKP1	+KP352		•					○	281	
	KPM15	+KP352		•					○	282	
10-25	K39		•						□	227	
10-35	K35		•						☺	223	
10-50	K271		•						☹	230	
	K28		•						□	231	
	EK354					•			□	314	
	K354			•					□	260	
	EK354L					•			□	316	
	EK505L					•			□	318	
10-95	K18			•					□	☹	262
	HK6018					•			□	☹	286
	EK5018L					•			□	☹	320
	PK18							•	□	☹	362
	THK18						•		□	☹	362
	HK60UNV + UA18					•			□	☹	354
	EK60UNVL + UA18						•		□	☹	357
	EKM60UNVL + UA18						•		□	☹	356
	PK60UNV + UA18							•	□	☹	355
10-150	THK22						•		□	☹	364
10-240	K22			•					□	☹	264
	HK6022					•			□	☹	288
	EK6022L						•		□	☹	324
	EKM6022L						•		□	☹	322
	PK22							•	□	☹	364
	HK60UNV + UA22					•			□	☹	354
	EK60UNVL + UA22						•		□	☹	357
	EKM60UNVL + UA22						•		□	☹	356
	PK60UNV + UA22							•	□	☹	355

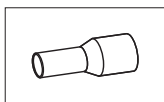
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■ **Tool application chart**

**Cable end-sleeves  
acc. to DIN 46228, part 1**

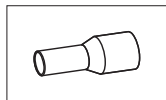
Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
25-240	HK12030				•				☐ ☐	292
	HK12042				•				☐ ☐	294
	PK12042							•	☐ ☐	368
	PK120U							•	☐ ☐	370
	HK252						•		☐ ☐	388
	PK252							•	☐ ☐	372
	HK120U					•			☐ ☐	296
	EK12030L						•		☐ ☐	330
	EK12042L						•		☐ ☐	332
	EK120UL						•		☐ ☐	334
EK120UNVL						•		☐ ☐	358	
50-95	K272		•						☐ ☐	230
	K29		•						☐ ☐	231



■ **Tool application chart**

**Cable end-sleeves  
acc. to DIN 46228, part 2**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.5x2.5	KP1	+KP66		•					☐ ☐	256
	KP1L	+KP66		•					☐ ☐	256
	EKP1	+KP66				•			☐ ☐	312
	TEKP1	+KP66		•					☐ ☐	281
	KPM15	+KP66		•					☐ ☐	282

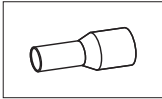


## ■ Tool application chart

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

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.14-2.5	K1		•							224
	K48		•							224
0.14-6	K32		•							225
	K37		•							226
	KP1	+KP312		•						256
	KP1L	+KP312		•						256
	EKP1	+KP312				•				312
	TEKP1	+KP312		•						281
	KPM15	+KP312		•						282
	K303		•							229
0.14-10	KP1	+KP303		•						256
	KP1L	+KP303		•						256
	EKP1	+KP303				•				312
	TEKP1	+KP303		•						281
	KPM15	+KP303		•						282
0.14-50	K50			•						259
	EK50ML			•						278
	EK1550					•				308
	EK1550G					•				310
0.25-6	K38ERGO		•						228	
0,5-2,5	K4		•						222	
0,5-6	K36		•							225
	K382		•							227
0,5-16	K3		•						223	
1.5-6	K46		•							222
	KP1	+KP351		•						256
	KP1L	+KP351		•						256
	EKP1	+KP351				•				312
	TEKP1	+KP351		•						281
	KPM15	+KP351		•						282
6-16	K34		•						226	
10-16	KP1	+KP304		•						256
	KP1L	+KP304		•						256
	EKP1	+KP304				•				312
	TEKP1	+KP304		•						281
	KPM15	+KP304		•						282
	KP1	+KP352		•						256
	KP1L	+KP352		•						256
	EKP1	+KP352				•				312





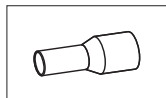
**■ Tool application chart**

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

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
10-16	TEKP1	+KP352		•					○	281	
	KPM15	+KP352		•					○	282	
10-25	K39		•						□	227	
10-35	K35		•						☺	223	
10-50	K271		•						☺	230	
	K28		•						□	231	
	K354			•					□	260	
	EK354					•			□	314	
	EK354L					•			□	316	
10-95	K18			•					□	☺	262
	HK6018				•				□	☺	286
	EK5018L					•			□	☺	320
	PK18							•	□	☺	362
	THK18						•		□	☺	362
	HK60UNV	+ UA18			•				□	☺	354
	EK60UNVL	+ UA18				•			□	☺	357
	EKM60UNVL	+ UA18				•			□	☺	356
	PK60UNV	+ UA18						•	□	☺	355
10-150	K22			•					□	☺	264
	HK6022				•				□	☺	288
	EK6022L					•			□	☺	324
	EKM6022L					•			□	☺	322
	PK22							•	□	☺	364
	THK22						•		□	☺	364
	HK60UNV	+ UA22			•				□	☺	354
	EK60UNVL	+ UA22				•			□	☺	357
	EKM60UNVL	+ UA22				•			□	☺	356
	PK60UNV	+ UA22						•	□	☺	355
25-150	HK12030				•				□	☺	292
	HK12042				•				□	☺	294
	HK120U				•				□	☺	296
	EK12030L					•			□	☺	330
	EK12042L					•			□	☺	332
	EK120UL					•			□	☺	334
	HK122EL380						•		□	☺	390
	PK12042							•	□	☺	368
	PK120U							•	□	☺	370



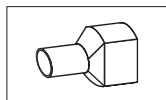
Cable end-sleeves



■ Tool application chart

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

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
25-150	HK252						•		□	☞	388
	HK252EL380						•		□	☞	391
	PK252							•	□	☞	372
50-95	K272		•							☞	230
	K29		•							□	231

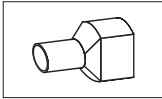


■ Tool application chart

**Insulated twin cable end-sleeves**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)	
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads			
2x0,5-2x2,5	K32		•							□	225
	K382		•							□	227
	K38ERGO		•							◇	228
	KP1	+KP312		•						□	256
	KP1L	+KP312		•						□	256
	EKP1	+KP312				•				□	312
	TEKP1	+KP312		•						□	281
	KPM15	+KP312		•						□	282
2x0,5-2x4	K303		•							◇	229
	K36		•							□	225
	KP1	+KP303		•						◇	256
	KP1L	+KP303		•						◇	256
	EKP1	+KP303				•				◇	312
	TEKP1	+KP303		•						◇	281
	KPM15	+KP303		•						◇	282
2x4-2x6	K34		•							□	226
	KP1									◇	256
	EKP1	+KP304				•				◇	312
	TEKP1	+KP304		•						◇	281

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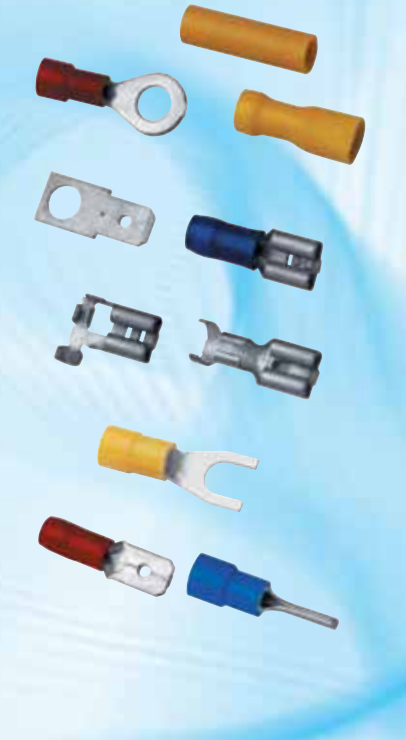


■ **Tool application chart**

**Insulated  
twin cable end-sleeves**

Crimping range corresponds to nominal cross-section mm²	Crimping tools		Tool type						Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
2x4-2x16	K271		•							230
	K28		•							231
	K354			•						260
	EK354						•			314
	EK354L						•			316
	K18			•						262
	HK6018					•				286
	EK505L						•			318
	EK5018L						•			320
	PK18							•		362
	THK18							•		362
	HK60UNV	+ UA18				•				354
	EK60UNVL	+ UA18					•			357
	EKM60UNVL	+ UA18					•			356
	PK60UNV	+ UA18						•		355
	THK22							•		364
	K22			•						264
	HK6022					•				288
	EK6022L						•			324
	EKM6022L						•			322
	PK22							•		364
	HK60UNV	+ UA22				•				354
	EK60UNVL	+ UA22					•			357
	EKM60UNVL	+ UA22					•			356
	PK60UNV	+ UA22						•		355

**Small parts,**  
*big impact.*



## Insulated and non-insulated cable connections.

To guarantee ultimate safety at all times, specific quality and installation requirements exist for insulated and non-insulated connections. We often hear about technical failures being caused by faulty connections. That's why quality is so important. Because when it comes to electrical connections, minor causes can have major, expensive consequences.

For optimum processing of Klauke connecting materials, we therefore recommend the use of Klauke tools. A harmonised system for professional users in trade and industry.



*The Klauke range carries various designs of both insulated and non-insulated cable connections for diverse applications.*

- Insulated and non-insulated cable connections for professional users.
- Halogen-free insulation.
- Insulated connectors, heat resistant to 105 °C.
- Hard-soldered in the crimping area.

## ■ Heat resistant insulation to 105 °C.

- ▶ Cable connections with nominal cross-sections from 0.1 mm<sup>2</sup> to 6 mm<sup>2</sup>.
- ▶ Halogen-free and heat resistant to 105 °C.
- ▶ Simple processing thanks to easy-entry insulation.
- ▶ **Hard-soldered in the crimping area.**
- ▶ Grooved profile on the inside.

### Benefits:

- ▶ The use of these optimised quality materials guarantees reliable electrical connections.
- ▶ Electrical conductivity is maintained, even at higher temperatures.
- ▶ Halogen-free, flame-retardant polyamide insulation releases no toxic vapours in case of fire.
- ▶ Easy-entry polyamide insulation for simple conductor insertion.
- ▶ High-tensile strength thanks to grooved profile in the crimping area permits higher mechanical continuous stress.



## ■ Receptacles with strain relief.



▶ More from Page 179.

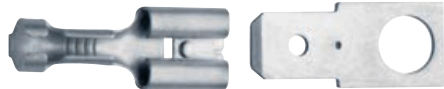
- ▶ Standardised connectors with 2.8; 4.8; 6.3 and 9.5 mm tab width.
- ▶ With grooved profile and additional copper ring in the insulation area.
- ▶ Receptacles, multiple type.
- ▶ Fully-insulated receptacles.

### Benefits:

- ▶ Standardised tabs enable use for a broad range of applications, including control installations and machine wiring.
- ▶ **The grooved profile increases the hold in the crimping area.**
- ▶ The connections relieved by copper rings in the crimping area better withstand stresses and vibrations.

## ■ With indent point for defined pulling forces.

- ▶ Receptacle with indent point.
- ▶ For harmonised, flexible cables.
- ▶ Receptacles also available in bronze.



### Benefits:

- ▶ The additional indent point increases the mechanical rating and **guarantees that the connections will withstand the defined pulling forces even after repeated pulling actions.**
- ▶ Thanks to the material's improved spring characteristics, connectors with bronze receptacles have a higher contact strength and are able to better withstand mechanical stresses, especially at high temperatures.

▶ More from Page 179.

Insulated solderless terminals



- ▶ Acc. to DIN 46237 with flared insulation sleeve
- ▶ For fine and superfine stranded conductors
- ▶ High-quality brazing process in the crimp area

Characteristics

- Total cross-section: 0.1 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion
- Cross-section-dependent colour-coding

Material

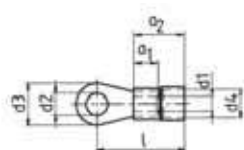
- Cu-ETP
- Insulation sleeve: PA

Surface

- Tin-plated

Order info

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

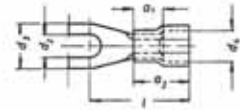


Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Colour	Dimension mm								Weight/100 pcs. - kg	Packing unit/pcs
				a1	a2	d1	d2	d3	d4	l	s		
0.1-0.4	--	*6192	Yellow	--	--	1.0	2.3	5.0	2.2	14.0	0.5	0.020	100
		*61925	Yellow	--	--	1.0	2.6	5.0	2.2	14.0	0.5	0.020	100
		*6193	Yellow	--	--	1.0	3.3	5.0	2.2	14.0	0.5	0.020	100
		*61935	Yellow	--	--	1.0	3.8	6.5	2.2	16.0	0.5	0.025	100
		*6194	Yellow	--	--	1.0	4.4	7.0	2.2	16.0	0.5	0.025	100
		*6195	Yellow	--	--	1.0	5.4	8.0	2.2	15.0	0.5	0.025	100
0.5-1	2.5-1	62025	Red	5	10.5	1.6	2.8	6.0	4.5	16.5	0.8	0.060	100
	3.0-1	6203	Red	5	10.5	1.6	3.2	6.0	4.5	16.5	0.8	0.060	100
	3.5-1	62035	Red	5	10.5	1.6	3.7	6.0	4.5	16.5	0.8	0.550	100
	4.0-1	6204	Red	5	10.5	1.6	4.3	8.0	4.5	17.5	0.8	0.070	100**
	5.0-1	6205	Red	5	10.5	1.6	5.3	10.0	4.5	18.5	0.8	0.090	100
	--	*6206	Red	5	10.5	1.6	6.5	11.0	4.5	20.5	0.8	0.080	100
1.5-2.5	--	*6208	Red	5	10.5	1.6	8.4	14.0	4.5	22.5	0.8	0.130	100
	--	*62010	Red	5	10.5	1.6	10.5	18.0	4.5	24.5	0.8	0.130	100
	3.0-2.5	6303	Blue	5	11.5	2.3	3.2	6.0	5.1	17.5	0.8	0.065	100
	3.5-2.5	63035	Blue	5	11.5	2.3	3.7	6.0	5.1	17.5	0.8	0.065	100
	4.0-2.5	6304	Blue	5	11.5	2.3	4.3	8.0	5.1	18.5	0.8	0.080	100**
	5.0-2.5	6305	Blue	5	11.5	2.3	5.3	10.0	5.1	20.5	0.8	0.090	100**
4-6	6.0-2.5	6306	Blue	5	11.5	2.3	6.5	11.0	5.1	22.5	0.8	0.110	100
	8.0-2.5	6308	Blue	5	11.5	2.3	8.4	14.0	5.1	23.5	0.8	0.130	100
	--	*63010	Blue	5	11.5	2.3	10.5	18.0	5.1	25.5	0.8	0.160	100
	4.0-6	6504	Yellow	6	12.5	3.6	4.3	8.0	6.5	20.5	1.0	0.140	100
	5.0-6	6505	Yellow	6	12.5	3.6	5.3	10.0	6.5	21.5	1.0	0.160	100
	6.0-6	6506	Yellow	6	12.5	3.6	6.5	11.0	6.5	22.5	1.0	0.170	100**
10.0-6	8.0-6	6508	Yellow	6	12.5	3.6	8.4	14.0	6.5	25.5	1.0	0.220	100
	10.0-6	65010	Yellow	6	12.5	3.6	10.5	18.0	6.5	27.5	1.0	0.290	100

- ▶ \* = not standardized
- ▶ \*\* = Also available in small handy packs
- ▶ 0.1 - 0.4 mm<sup>2</sup> not CSA tested
- ▶ Tools: see chart page 193

**Insulated solderless terminals, fork type**

- ▶ Acc. to DIN 46237 with flared insulation sleeve
- ▶ For fine and superfine stranded conductors
- ▶ High-quality brazing process in the crimp area
- ▶ Fork-type version for simple and direct screw mounting



**Characteristics**

- Total cross-section: 0.1 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion
- Cross-section-dependent colour-coding

**Material**

- Cu-ETP
- Insulation sleeve: PA

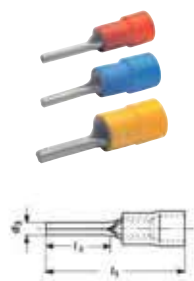
**Surface**

- Tin-plated

Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Colour	Dimension mm										Weight/ 100 pcs. ~ kg	Packing unit/pcs
				a1	a2	d1	d2	d3	d4	l	s				
0.1-0.4	--	*619C3	Yellow	--	--	--	3.2	5.0	--	14.0	0.5	0.020	100		
	3.0-1	620C3	Red	5	10.5	1.6	3.2	6.0	4.5	16.5	0.8	0.060	100		
	3.5-1	620C35	Red	5	10.5	1.6	3.7	6.8	4.5	17.5	0.8	0.060	100		
0.5-1	4.0-1	620C4	Red	5	10.5	1.6	4.3	6.8	4.5	17.5	0.8	0.070	100		
	5.0-1	620C5	Red	5	10.5	1.6	5.3	10.0	4.5	18.5	0.8	0.090	100		
	--	*620C6	Red	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	Blue	5	11.5	2.3	3.2	6.0	5.1	17.5	0.8	0.060	100		
	3.5-2.5	630C35	Blue	5	11.5	2.3	3.7	6.8	5.1	18.5	0.8	0.065	100		
	4.0-2.5	630C4	Blue	5	11.5	2.3	4.3	6.8	5.1	18.5	0.8	0.080	100		
	5.0-2.5	630C5	Blue	5	11.5	2.3	5.3	10.0	5.1	20.5	0.8	0.090	100		
	6.0-2.5	630C6	Blue	5	11.5	2.3	6.5	11.0	5.1	22.5	0.8	0.110	100		
4-6	4.0-6	650C4	Yellow	6	12.5	3.6	4.3	8.0	6.5	20.5	1.0	0.140	100		
	5.0-6	650C5	Yellow	6	12.5	3.6	5.3	10.0	6.5	21.5	1.0	0.160	100		
	6.0-6	650C6	Yellow	6	12.5	3.6	6.5	11.0	6.5	22.5	1.0	0.170	100		
	8.0-6	650C8	Yellow	6	12.5	3.6	8.4	14.0	6.5	25.5	1.0	0.220	100		
	10.0-6	650C10	Yellow	6	12.5	3.6	10.5	18.0	6.5	27.5	1.0	0.280	100		

- ▶ \* = not standardized
- ▶ 0.1 - 0.4 mm<sup>2</sup> not CSA tested
- ▶ **Tools: see chart page 193**

## Insulated pin terminals



- ▶ Acc. to DIN 46231 with flared insulation sleeve
- ▶ For fine and superfine stranded conductors
- ▶ High-quality brazing process in the crimp area

### Characteristics

- Total cross-section: 0.1 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C
- Easy-Entry insulation for easy cable insertion

### Material

- Cu-ETP
- Insulation sleeve: PA

### Surface

- Tin-plated

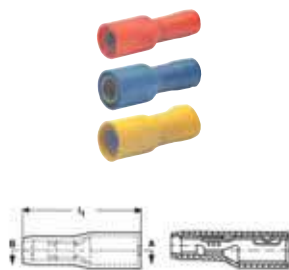
Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Colour	Dimension mm								Weight/ 100 pcs. ~ kg	Packing unit/pcs
				a1	a2	d3	d4	l1	l2	s			
0.1-0.4	--	*704	Yellow	--	--	1.4	--	18.0	9.0	0.5	0.020	100	
0.5-1	1	705	Red	5	10.5	1.9	4.5	22.0	10.0	0.8	0.065	100	
		*705K	Red	5	10.5	1.9	4.5	18.0	6.0	0.8	0.060	100	
1.5-2.5	2.5	710	Blue	5	11.5	1.9	5.1	23.0	10.0	0.8	0.065	100	
		*710K	Blue	5	11.5	1.9	5.1	19.5	6.5	0.8	0.060	100	
		*710L	Blue	5	11.5	1.9	5.1	27.5	16.0	0.8	0.100	100	
4-6	6	715	Yellow	6	12.5	2.7	6.5	26.0	11.0	1.0	0.160	100	

▶ \* = not standardized

▶ 0.1 - 0.4 mm<sup>2</sup> not CSA tested

▶ Tools: see chart page 193

## Insulated pin receptacles



- ▶ For fine and superfine stranded conductors
- ▶ High quality bronze material provides optimum spring characteristic and improved contact strength

### Characteristics

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

### Material

- CuSnZn (bronze)
- Insulation sleeve: PVC

### Surface

- Tin-plated

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Tab dia	Dimension mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
				l1	s		
0.5-1	920	Red	4	22	0.35	0.060	100
1.5-2.5	930	Blue	5	22	0.38	0.120	100
4-6	950	Yellow	5	22	0.38	0.125	100

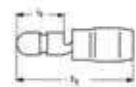
▶ 1.5 - 2.5 mm<sup>2</sup> and 4 - 6 mm<sup>2</sup> not CSA tested

▶ Tools: see chart page 193



**Insulated pin connectors**

▶ For fine and superfine stranded conductors



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

**Material**

- CuZn (brass)
- Insulation sleeve: PVC

**Surface**

- Tin-plated to protect against corrosion

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm				Weight/ 100 pcs. ~ kg	Packing unit/pcs
			Tab dia.	l1	l2	s		
0.5-1	1020	Red	4	22	9	0.38	0.060	100
1.5-2.5	1030	Blue	5	22	9	0.38	0.075	100
4-6	1050	Yellow	5	22	9	0.40	0.110	100

▶ 1.5 - 2.5 mm<sup>2</sup> and 4 - 6 mm<sup>2</sup> not CSA tested

▶ **Tools: see chart page 193**

**Insulated pin receptacles, fully insulated**

▶ For fine and superfine stranded conductors  
 ▶ High quality bronze material provides optimum spring characteristic and improved contact strength



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- CuSnZn (bronze)
- Insulation sleeve: PA

**Surface**

- Tin-plated

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
			Tab dia.	l1	s		
0.5-1	920V	Red	4	24	0.38	0.065	100
4-6	950V	Yellow	5	27	0.40	0.150	100

▶ 4 - 6 mm<sup>2</sup> not CSA tested

▶ **Tools: see chart page 193**

Cable connections, insulated and non insulated

## Insulated pin connectors, fully insulated



- ▶ For fine and superfine stranded conductors
- ▶ High quality bronze material provides optimum spring characteristic and improved contact strength

**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- CuSnZn (bronze)
- Insulation sleeve: PA

**Surface**

- Tin-plated

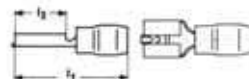
Nominal cross section mm <sup>2</sup>	Part No.	Colour	Tab dia.	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
				l1	l2	s		
0.5-1	1020V	■	4	25	11	0.38	0.065	100
1.5-2.5	1030V	■	5	25	11	0.38	0.080	100
4-6	1050V	■	5	27	13	0.40	0.120	100

▶ 1.5 - 2.5 mm<sup>2</sup> and 4 - 6 mm<sup>2</sup> not CSA tested

▶ Tools: see chart page 193

**Insulated receptacles, brass - tin plated**

► For fine and superfine stranded conductors



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Acc. to DIN 46245 part 1 - 3 and similar versions
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant: PVC to 70° C, PA to 105° C

**Material**

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

**Surface**

- Tin-plated

**Order info**

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Colour	Tab thickn.	Tab width	Dimension mm			Insulation material	Weight/ 100 pcs. ~ kg	Packing unit/ pcs		
						l1	l2	s					
0.5-1		8201	■	0.5	2.8	17.5	8.0	0.30	PVC	0.035	100		
		8201A	■	0.8	2.8	17.5	8.0	0.30	PVC	0.045	100		
	4.8 - 1	8202	■	0.5	4.8	18.0	6.0	0.35	PVC	0.065	100		
		8203	■	0.8	4.8	18.0	6.0	0.35	PVC	0.065	100		
		720	■	0.8	6.3	22.0	7.5	0.45	PVC	0.090	100*		
1.5-2.5		7208	■	0.8	7.7	25.0	9.5	0.40	PVC	0.110	100		
		8301	■	0.5	2.8	18.0	8.0	0.35	PA	0.050	100		
	4.8 - 2.5	8301A	■	0.8	2.8	18.0	8.0	0.35	PA	0.060	100		
		8302	■	0.5	4.8	18.0	6.0	0.35	PVC	0.070	100		
		8303	■	0.8	4.8	18.0	6.0	0.35	PVC	0.070	100		
		6.3 - 2.5	730	■	0.8	6.3	21.0	7.4	0.45	PVC	0.090	100*	
			7308	■	0.8	7.7	25.0	9.5	0.45	PVC	0.115	100	
		4-6	6.3 - 6	8503	■	0.8	4.8	23.0	7.5	0.45	PA	0.138	100
				750	■	0.8	6.3	21.0	7.5	0.45	PVC	0.100	100*
				7509	■	1.2	9.5	26.5	12.0	0.45	PVC	0.150	100

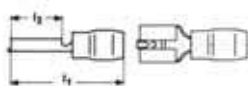
► Tools: see chart page 193

Cable connections, insulated and non insulated

### Insulated receptacles, bronze - tin plated



- ▶ For fine and superfine stranded conductors
- ▶ High quality bronze material provides optimum spring characteristic and improved contact strength



#### Characteristics

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Acc. to DIN 46245, part 3
- Cross-section-dependent colour-coding
- Heat resistant to 70° C

#### Material

- CuSnZn (bronze)
- Insulation sleeve: PVC

#### Surface

- Tin-plated

Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Colour	Tab thickn.	Tab width	Dimension mm			Insulation material	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
						l1	l2	s			
0,5-1	6,3 - 1	720BZ	■	0,8	6,3	22	7,5	0,45	PVC	0,09	100
1,5-2,5	6,3 - 2,5	730BZ	■	0,8	6,3	21	7,4	0,45	PVC	0,09	100
4-6	6,3 - 6	750BZ	■	0,8	6,3	21	7,5	0,45	PVC	0,10	100

▶ Tools: see chart page 193

### Insulated receptacles, multiple type



- ▶ For fine and superfine stranded conductors

#### Characteristics

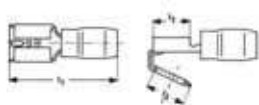
- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Cross-section-dependent colour-coding
- Heat resistant: PVC to 70° C

#### Material

- CuZn (brass)
- Insulation sleeve: PVC

#### Surface

- Tin-plated

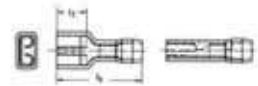


Nominal cross section mm <sup>2</sup>	Part No.	Colour	Tab thickn.	Tab width	Dimension mm				Insulation material	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
					l1	l2	l3	s			
0.5-1	720AZ	■	0.8	6.3	22	7.5	8	0.4	PVC	0.11	100
1.5-2.5	730AZ	■	0.8	6.3	22	7.5	8	0.4	PVC	0.11	100
4-6	750AZ	■	0.8	6.3	25	8.0	8	0.4	PVC	0.18	100

▶ Tools: see chart page 193

**Insulated receptacles, fully insulated**

► For fine and superfine stranded conductors



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant: PVC to 70° C, PA to 105° C

**Material**

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

**Surface**

- Tin-plated

**Order info**

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Tab thckn.	Tab width	Dimension mm			Insulation material	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
					l1	l2	s			
0.5-1	8201V	■	0.5	2.8	19.0	5.5	0.25	PA	0.07	100
	8201AV	■	0.8	2.8	19.0	5.5	0.25	PA	0.07	100
	8202V	■	0.5	4.8	20.0	7.0	0.30	PVC	0.10	100
	8203V	■	0.8	4.8	20.0	7.0	0.30	PVC	0.10	100
	720V	■	0.8	6.3	21.0	7.5	0.45	PVC	0.08	100*
1.5-2.5	8301V	■	0.5	2.8	20.0	8.0	0.35	PVC	0.14	100
	8301AV	■	0.8	2.8	20.0	8.0	0.35	PVC	0.14	100
	8302V	■	0.5	4.8	20.5	7.0	0.30	PVC	0.11	100
	8303V	■	0.8	4.8	20.5	7.0	0.30	PVC	0.11	100
	730V	■	0.8	6.3	21.0	7.5	0.45	PVC	0.15	100*
4-6	8502V	■	0.5	4.8	20.5	9.5	0.40	PVC	0.15	100
	8503V	■	0.8	4.8	20.5	9.5	0.40	PVC	0.15	100
	750V	■	0.8	6.3	25.5	11.5	0.45	PVC	0.16	100

► \* = Also available in small handy packs

► **Tools: see chart page 193**

Insulated tabs



▶ For fine and superfine stranded conductors



Characteristics

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant: PVC to 70° C, PA to 105° C

Material

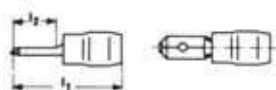
- CuZn (brass)
- Insulation sleeve: PVC/PA

Surface

- Tin-plated

Order info

- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"



Nominal cross section mm <sup>2</sup>	Part No.	Colour	Tab thicken.	Tab width	Dimension mm			Insulation material	Weight/ 100 pcs. ~ kg	Packing unit/ pcs
					l1	l2	s			
0.5-1	8201C	■	0.5	2.8	22.0	11.5	0.4	PA	0.040	100
	8201B	■	0.8	2.8	14.6	5.5	0.4	PVC	0.060	100
	8202B	■	0.5	4.8	22.0	11.5	0.5	PA	0.070	100
	8203B	■	0.8	4.8	22.0	11.5	0.4	PA	0.070	100
	820	■	0.8	6.3	22.0	8.0	0.4	PVC	0.060	100*
1.5-2.5	8302B	■	0.5	4.8	22.0	11.5	0.5	PA	0.070	100
	8303B	■	0.8	4.8	22.0	11.5	0.4	PA	0.070	100
	830	■	0.8	6.3	22.0	8.0	0.4	PVC	0.065	100*
4-6	8502B	■	0.5	4.8	24.5	10.5	0.4	PA	0.120	100
	8503B	■	0.8	4.8	24.5	10.5	0.4	PA	0.120	100
	850	■	0.8	6.3	22.0	8.0	0.4	PVC	0.110	100*

▶ \* = Also available in small handy packs

▶ Tools: see chart page 193

Insulated closed end-splices



▶ For fine and superfine stranded conductors



Characteristics

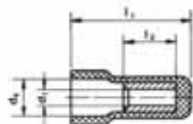
- Total cross-section: 1.5 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

Material

- Cu-ETP
- Insulation sleeve: PA

Surface

- Tin-plated

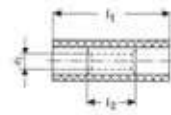


Nominal cross section mm <sup>2</sup>	Part No.	Colour	d1	d2	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
					l1	l2	s		
1.5-2.5	1130	■	2.3	5.2	16	7	0.8	0.05	100
4-6	1150	■	3.6	7.0	18	7	1.0	0.14	100

▶ Tools: see chart page 193

**Insulated butt connectors**

- ▶ For fine and superfine stranded conductors
- ▶ With buttmarks for precise cable insertion



**Characteristics**

- Total cross-section: 0.1 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- Cu-ETP
- Insulation sleeve: PA

**Surface**

- Tin-plated

**Order info**

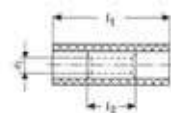
- Now also available in handy plastic boxes for smaller requirements, part number appendix "SB"

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm			Weight/100 pcs. ~ kg	Packing unit/pcs
			d1	l1	l2		
0.1-0.4	669	Yellow	1.2	20	12	0.030	100
0.5-1	670	Red	1.6	25	15	0.090	100*
1.5-2.5	680	Blue	2.3	25	15	0.115	100*
4-6	700	Yellow	3.6	27	15	0.250	100*

- ▶ \* = Also available in small handy packs
- ▶ 0.1 - 0.4 mm<sup>2</sup> not CSA tested
- ▶ **Tools: see chart page 193**

**Insulated butt connectors, with heat shrink insulation**

- ▶ For fine and superfine stranded conductors
- ▶ With buttmarks for precise cable insertion
- ▶ With waterproof heat shrink insulation



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Special crimping tool required
- Heat resistant to 105° C

**Material**

- Cu-ETP
- Insulation sleeve: PE

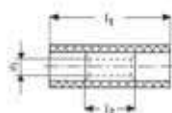
**Surface**

- Tin-plated

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm			Weight/100 pcs. ~ kg	Packing unit/pcs
			d1	l1	l2		
0.5-1	670WS	Red	1.6	36	15	0.12	100
1.5-2.5	680WS	Blue	2.3	36	15	0.15	100
4-6	700WS	Yellow	3.4	41	15	0.25	100

- ▶ **Tools: see chart page 193**

### Insulated parallel compression joints



► For fine and superfine stranded conductors



**Characteristics**

- Total cross-section: 0,1 - 6 mm<sup>2</sup>
- Insulated, halogen-free
- Cross-section-dependent colour-coding
- Heat resistant to 105° C

**Material**

- Cu-ETP
- Insulation sleeve: PA

**Surface**

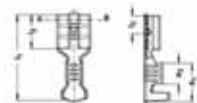
- Tin-plated

Nominal cross section mm <sup>2</sup>	Part No.	Colour	Dimension mm			Weight/ 100 pcs. ~ kg	Packing unit/pcs
			d1	l1	l2		
0.1-0.4	769	Yellow	1.2	13	5	0.020	100
0.5-1	770	Red	1.6	17	7	0.030	100
1.5-2.5	780	Blue	2.3	17	7	0.035	100
4-6	790	Yellow	3.6	21	7	0.105	100

► 0.1 - 0.4 mm<sup>2</sup> not CSA tested

► Tools: see chart page 193

### Non-insulated receptacles



► For fine and superfine stranded conductors



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Acc. to DIN 46247 part 1 - 3 and similar versions
- With grooved profile for improved contact characteristics

**Material**

- CuZn (brass)

**Surface**

- Tin-plated

**Order info**

- \* = This part is available in nickel-plated steel; part number appendix "ST"

Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Tab thckn.	Tab width	Dimension mm						Weight/ 100 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	0.25	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

► Tools: see chart page 194



**Non-insulated receptacles, multiple type**

► For fine and superfine stranded conductors



**Characteristics**

- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Acc. to DIN 46247 part 1 - 3 and similar versions
- With grooved profile for improved contact characteristics

**Material**

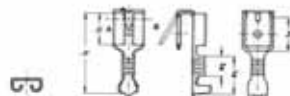
- CuZn (brass)

**Surface**

- Tin-plated

**Order info**

- \* = Nickel-plated steel version also available, part number appendix "ST"



Nominal cross section mm <sup>2</sup>	Part No.	Tab thckn.	Tab width	Dimension mm						Weight/ 100 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
	18303AZ	0.8	4.8	6.0	3.4	15.6	7	6.0	0.38	0.09	100
1.5-2.5	1730AZ	0.8	*6.3	8.5	4.5	19.2	8	7.5	0.38	0.13	100

► \* = according to DIN 46345, also available in nickel-plated steel

► Tools: see chart page 194

**Non-insulated receptacles with latch**

► For fine and superfine stranded conductors



**Characteristics**

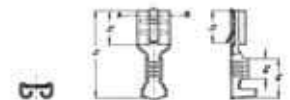
- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- Acc. to DIN 46340, sheet 3
- With latch to engage in housings
- With grooved profile for improved contact characteristics

**Material**

- CuZn (brass)

**Surface**

- Tin-plated



Nominal cross section mm <sup>2</sup>	Part No.	Tab thckn.	Tab width	Dimension mm						Weight/ 100 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

► Tools: see chart page 194

Cable connections, insulated and non insulated

### Non-insulated receptacles with lateral conductor connector



► For fine and superfine stranded conductors



**Characteristics**

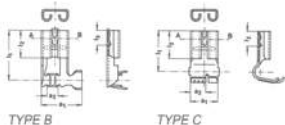
- Total cross-section: 0.5 - 2.5 mm<sup>2</sup>
- With grooved profile for improved contact characteristics

**Material**

- CuZn (brass)

**Surface**

- Tin-plated



Nominal cross section mm <sup>2</sup>	Part No.	Tab thickn.	Tab width	Typ	Dimension mm								Weight/100 pcs. ~ kg	Packing unit/pcs
					a1	a2	l1	l2	l3	l4	s			
0.5-1	3720	0.8	6.3	B	11.0	3.0	12.5	7.4	4.0	7.2	0.38	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	0.45	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	0.38	0.085	100	

► Tools: see chart page 194

### Non-insulated tabs



► For fine and superfine stranded conductors



**Characteristics**

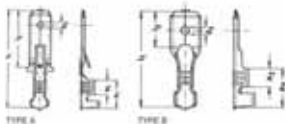
- Total cross-section: 0.5 - 6 mm<sup>2</sup>
- With grooved profile for improved contact characteristics

**Material**

- CuZn (Messing)

**Surface**

- Tin-plated



Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Tab thickn.	Tab width	Typ	Dimension mm						Weight/100 pcs. ~ kg	Packing unit/pcs
						a1	a2	d2	l1	l2			
0.5-1	46343 B6.3 - 1	*2235	0.8	2.8	A	6.0	3.2	1.30	22.5	12.7	0.045	100	
	46248 A6.3 - 2.5	2220	0.8	6.3	A	8.2	4.0	1.65	28.0	16.0	0.085	100	
1.5-2.5	46343 B6.3 - 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	

► \* = Dimensions in plug sector acc. to DIN 46244

► Tools: see chart page 194

**Insulation sleeves**

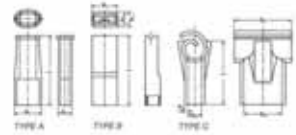
▶ For non-insulated tabs

**Characteristics**

- For cross-sections from 0.5 - 6 mm<sup>2</sup>
- For post-insulation of crimped non-insulated receptacles

**Material**

- see table



Nominal cross section mm <sup>2</sup>	Nominal size to DIN	Part No.	Colour	Typ	Dimension mm			Insulation material	for part no.	Weight/100 pcs. ~ kg	Packing unit/pcs
					b1	l	h1				
0.5-1	2.8	2755	□	A	6.5	20.0	4.0	PE	1825,18251,18251A,18201,18201A	0.015	100
0.5-1.5	4.8	2760	□	A	7.0	20.0	5.0	PE	18202,18203	0.015	100
1.5-2.5	4.8	2765	■	A	9.5	20.0	5.5	PE	18302,18303	0.025	100
0.5-2.5	6.3	2770	□	A	12.5	23.0	8.5	PE	1720,1730	0.035	100
0.5-2.5	6.3	2775	□	A	9.5	25.0	5.0	PE	1820,1830	0.030	100
0.5-4	6.3	2780	□	A	9.5	25.0	6.0	PE	1720,1730,1820,1830	0.030	100
0.5-6	6.3	2785	□	B	9.2	24.5	5.6	PA	1720,1730,1750,2720,2730,2750	0.055	100
0.5-6	6.3	2790	□	C	13.5	15.0	3.1	PVC	3720, 3725, 3735	0.060	100

Non-insulated tabs, angled type



Characteristics

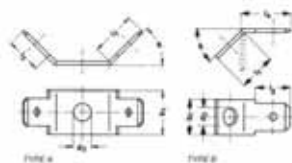
- Acc. to DIN 46342 part 1 and similar versions
- Dimensions in the plug sector to DIN 46244

Material

- CuZn (brass)

Surface

- Tin-plated



Nominal size to DIN	Part No.	Tab thickn.	Tab width	Typ	Dimension mm						Weight/ 100 pcs. ~ kg	Packing unit/ pcs
					a1	a2	l1	l2	l3	s		
--	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 type



Characteristics

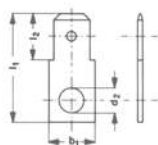
- Acc. to DIN 46342 part 1 and similar versions
- Dimensions in the plug sector to DIN 46244

Material

- CuZn (brass)

Surface

- Tin-plated



TYPE A

Nominal size to DIN	Part No.	Tab thickn.	Tab width	Typ	Dimension mm					Weight/ 100 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 applications**

**Characteristics**

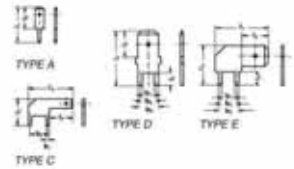
- Dimensions in the plug sector to DIN 46244
- For soldering in printed circuits

**Material**

- CuZn (brass)

**Surface**

- Tin-plated



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

- CuZn (brass)

**Surface**

- Tin-plated



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

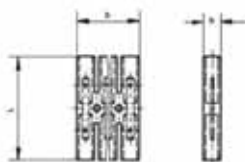
Cable connections, insulated and non insulated

Flexible connectors, tab width 2.8 mm



Characteristics

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



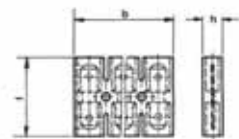
Part No.	Tab thickn.	Tab width	Poles	Dimension mm				Insulation material	Bolt size in mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
				b	l	h	s		distance	dia.		
8101	0.8	2.8	1	7.5	35	5.5	0.8	PVC	--	--	0.2	100
8102	0.8	2.8	2	15.0	35	5.5	0.8	PVC	--	2.7	0.3	50
81012	0.8	2.8	12	88.0	35	5.5	0.8	PVC	75	2.7	1.6	10

Flexible connectors, tab width 4.8 mm



Characteristics

- With tabs 4.8 x 0.8 mm
- 1, 2 and 12-poles
- Further poles on request

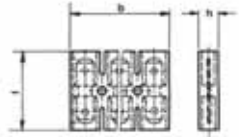


Part No.	Tab thickn.	Tab width	Poles	Dimension mm				Insulation material	Bolt size in mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
				b	l	h	s		distance	dia.		
8051	0.8	4.8	1	12.5	28	6.6	0.8	PVC	--	--	0.25	100
8052	0.8	4.8	2	25.0	28	6.6	0.8	PVC	--	3.2	0.50	50
80512	0.8	4.8	12	142.0	28	6.6	0.8	PVC	120	3.2	2.80	10

**Flexible connectors, tab width 6.3 mm**

**Characteristics**

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

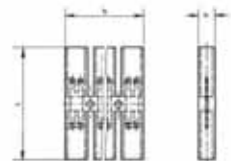


Part No.	Tab thickn.	Tab width	Poles	Dimension mm				Insulation material	Bolt size in mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
				b	l	h	s		distance	dia.		
<b>8001</b>	0.8	6.3	1	12.5	28	6.6	0.8	PVC	--	--	0.30	100
<b>8002</b>	0.8	6.3	2	25.0	28	6.6	0.8	PVC	--	3.7	0.55	50
<b>80012</b>	0.8	6.3	12	142.0	28	6.6	0.8	PVC	120	3.7	3.20	10

**Polyamide connectors, tab width 2.8 and 6.3 mm**

**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 in mm		Weight/ 100 pcs. ~ kg	Packing unit/pcs
				b	l	h	s		distance	dia.		
<b>8011</b>	0.8	6.3 and 2 x 2.8	1	10.0	50	7.5	0.8	Polyamid	--	--	0.25	100
<b>8012</b>	0.8	6.3 and 2 x 2.8	2	22.5	50	7.5	0.8	Polyamid	--	3.1	0.50	50
<b>80112</b>	0.8	6.3 and 2 x 2.8	12	147.5	50	7.5	0.8	Polyamid	125	3.1	3.10	10

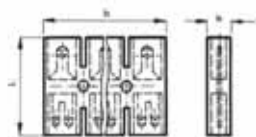
Cable connections, insulated and non insulated

Flexible circuit distributors, tab width 2.8 mm



Characteristics

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



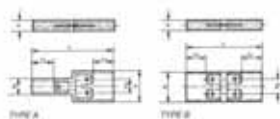
Part No.	Tab thickn.	Tab width	Poles	Dimension mm				Insulation material	Bolt size in mm		Weight/100 pcs. ~ kg	Packing unit/pcs
				b	l	h	s		distance	dia.		
8151	0,8	2,8	1	12,5	28	7	0,8	PVC	--	--	0,25	100
8152	0,8	2,8	12	147,0	28	7	0,8	PVC	123	3,2	2,80	10

Flexible circuit distributors, tab width 6.3 mm



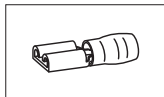
Characteristics

- With tabs 6.3 x 0.8 mm



Part No.	Tab thickn.	Tab width	Typ	Dimension mm						Insulation material	Weight/100 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

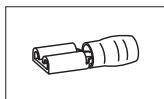




**■ Tool application chart**

**Insulated cable connections**

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.1-1	K80		•						○	233
	KP1	+KP80		•					○	256
	KP1L	+KP80		•					○	256
	EKP1	+KP80				•			○	312
	TEKP1	+KP80		•					○	281
	KPM15	+KP80		•					○	282
0.5-2.5	K81		•						○	233
	KP1	+KP81		•					○	256
	KP1L	+KP81		•					○	256
	EKP1	+KP81				•			○	312
	TEKP1	+KP81		•					○	281
	KPM15	+KP81		•					○	282
0.5-6	K10		•						○	232
	K14		•						○	232
	K50			•					○	259
	EK50ML			•					○	278
	EK1550					•			○	308
	EK1550G					•			○	310
	K82		•						○	234
4-6	KP1	+KP83		•					○	256
	KP1L	+KP83		•					○	256
	EKP1	+KP83				•			○	312
	TEKP1	+KP83		•					○	281
	KPM15	+KP83		•					○	282

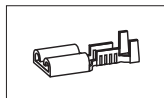


**■ Tool application chart**

**Butt connectors with heat shrink insulation**

Crimping range corresponds to nominal cross-section mm <sup>2</sup>	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.5-6	K50			•					○	259
	EK50ML			•					○	278
	EK1550					•			○	308
	EK1550G					•			○	310

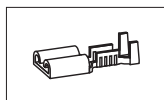
Cable connections, insulated and non insulated



■ Tool application chart

Non-insulated receptacles,  
straight type

Crimping range corresponds to nominal cross-section mm²	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
0.1-1	K572		•						☺	235
	K67		•						☺	237
0.1-6	K50			•					☺	259
	EK50ML			•					☺	278
	EK1550					•			☺	308
	EK1550G					•			☺	310
0.5-2.5	K582		•						☺	236
	K65		•						☺	237
	K68		•						☺	239
0.5-6	K592		•						☺	236
	K60		•						☺	235



■ Tool application chart

Non-insulated receptacles,  
with lateral conductor connector

Part No.	Crimping tools			Tool type					Crimp profile	Page (Tool)
	Tools	Crimping head/ Adapter	Mechanical crimping tools	mechanical, electrical, pneumatic, crimping tools with interchangeable dies/heads	Hand hydraulic crimping tools	Battery powered crimping tools	Hydraulic crimping systems	Hydraulic crimping heads		
3720 3735	K50			•					☺	259
	EK50ML			•					☺	278
	EK1550					•			☺	308
	EK1550G					•			☺	310
	K63		•						☺	238
	SKP6			•					☺	258
3725	K50			•					☺	259
	EK50ML			•					☺	278
	EK1550					•			☺	308
	EK1550G					•			☺	310
	K64		•						☺	238
	SKP6			•					☺	258



# Klauke®

## Everything in its place.

### Pocket boxes and assortment boxes.

Connecting materials and crimping tools immediately at hand, assorted and safely stored. Klauke assortment boxes offer you these benefits. The pocket boxes made from impact-resistant plastic are designed so that the connecting material remains in the pockets, even after an impact or strong vibrations. You save time, stay calm and don't lose any material.

Needless to say, the assortment boxes are also available empty. You can then use them for your own particular range of Klauke connecting materials.



- Pocket boxes from impact-resistant plastic with cable end-sleeves.
- Assortment boxes with tubular and compression cable lugs, cable end-sleeves and insulated cable connections with appropriate stripping and crimping tool.



*The Klauke assortment boxes are available either full or empty for individual contents (special-purpose filling on request).*



## ■ Cable end-sleeves assorted in pocket boxes.



- ▶ For cable end-sleeves with or without insulation.
- ▶ Rotating chute with zero positioning and indent.
- ▶ **From impact-resistant plastic.**
- ▶ Pocket boxes with raised edge.

### Benefits:

- ▶ The cable end-sleeves are assorted for direct use. No need to search and quick progressing.
- ▶ Thanks to the practical opening, the required number is always taken.
- ▶ The pocket boxes are the ideal solution for rough site operation.
- ▶ The raised edge makes it easier to top up the pocket boxes. The boxes can also be stacked.

## ■ Practical assortments of connecting materials and tools.

- ▶ Matched to the most frequent applications.
- ▶ Sorting pockets close flush with the lid.
- ▶ **From impact-resistant, high-quality plastic.**
- ▶ Sturdy designs for use on construction sites.
- ▶ Now also for integration into TÜV-tested vehicle equipment systems from SORTIMO.

### Benefits:

- ▶ You get a perfectly matched assortment of tools and connecting materials.
- ▶ Users always have the right materials at hand.
- ▶ The materials remain in the correct pocket during transportation, even in the event of a crash or strong vibrations.



▶ All assortment boxes are also available empty for individual filling.



## SK 65 B Metal assortment box with tubular cable lugs and crimping tool



▶ Hammer-tone finished assortment box

#### Characteristics

- Sturdy steel carrying case with lock and handle
- Dimensions: 400x250x50 mm

Item		Part No.	
Assortment box with tubular cable lugs "standard type" and crimping tool K05		<b>SK65B</b>	
Scope of supply	Description	Quantity	Page
SK65L	Steel carrying case	1	215
K05	Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm <sup>2</sup>	1	247
1R6	Tubular cable lug without inspection hole, 6 mm <sup>2</sup> , M6, Cu tinned	25	34
1R8	Tubular cable lug without inspection hole, 6 mm <sup>2</sup> , M8, Cu tinned	25	34
2R6	Tubular cable lug without inspection hole, 10 mm <sup>2</sup> , M6, Cu tinned	25	34
2R8	Tubular cable lug without inspection hole, 10 mm <sup>2</sup> , M8, Cu tinned	25	34
3R8	Tubular cable lug without inspection hole, 16 mm <sup>2</sup> , M8, Cu tinned	25	34
3R10	Tubular cable lug without inspection hole, 16 mm <sup>2</sup> , M10, Cu tinned	25	34
4R8	Tubular cable lug without inspection hole, 25 mm <sup>2</sup> , M8, Cu tinned	25	34
4R10	Tubular cable lug without inspection hole, 25 mm <sup>2</sup> , M10, Cu tinned	25	34
5R8	Tubular cable lug without inspection hole, 35 mm <sup>2</sup> , M8, Cu tinned	20	34
5R10	Tubular cable lug without inspection hole, 35 mm <sup>2</sup> , M10, Cu tinned	20	34
6R10	Tubular cable lug without inspection hole, 50 mm <sup>2</sup> , M10, Cu tinned	20	34
6R12	Tubular cable lug without inspection hole, 50 mm <sup>2</sup> , M12, Cu tinned	20	34

## SK 50 B Metal assortment box with DIN compression cable lugs and crimping tool



▶ Hammer-tone finished assortment box

#### Characteristics

- Sturdy steel carrying case with lock and handle
- Dimensions: 400x250x50 mm

Item		Part No.	
Assortment box from steel with DIN compression cable lugs and crimping tool		<b>SK50B</b>	
Scope of supply	Description	Quantity	Page
SK65L	Steel carrying case	1	215
K05D	Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 6 - 50 mm <sup>2</sup>	1	247
101R5	Compression cable lug, DIN 46235, 6 mm <sup>2</sup> , M5, Cu tinned	50	72
101R6	Compression cable lug, DIN 46235, 6 mm <sup>2</sup> , M6, Cu tinned	50	72
102R5	Compression cable lug, DIN 46235, 10 mm <sup>2</sup> , M5, Cu tinned	50	72
102R6	Compression cable lug, DIN 46235, 10 mm <sup>2</sup> , M6, Cu tinned	50	72
103R8	Compression cable lug, DIN 46235, 16 mm <sup>2</sup> , M8, Cu tinned	25	72
103R10	Compression cable lug, DIN 46235, 16 mm <sup>2</sup> , M10, Cu tinned	25	72
104R8	Compression cable lug, DIN 46235, 25 mm <sup>2</sup> , M8, Cu tinned	25	72
104R10	Compression cable lug, DIN 46235, 25 mm <sup>2</sup> , M10, Cu tinned	25	72
105R8	Compression cable lug, DIN 46235, 35 mm <sup>2</sup> , M8, Cu tinned	20	72
105R10	Compression cable lug, DIN 46235, 35 mm <sup>2</sup> , M10, Cu tinned	20	72
106R10	Compression cable lug, DIN 46235, 50 mm <sup>2</sup> , M10, Cu tinned	15	72
106R12	Compression cable lug, DIN 46235, 50 mm <sup>2</sup> , M12, Cu tinned	15	72

**L-BOXX 65BCB - plastic - with blue connection® equipment**

► Extensive equipment based on the blue connection® product line, including crimping tool, cutting tool and electrician's knife

**Characteristics**

- Manufactured from shock and impact resistant ABS plastic, very robust, loadable to 100 kg
- Stackable using an Easy-Click system which allows an easy opening and closing
- Dimensions: 442x357x117 mm (W/D/H)



Item		Part No.	
L-BOXX from plastic with blue connection® equipment		<b>LBOXX65BCB</b>	
Scope of supply	Description	Quantity	Page
K05BC	Crimping tool for tubular cable lugs and connectors, blue connection® 6 - 50 mm²	1	246
K100	Hand-operated cutting tool for Cu and Al cables to 14 mm dia.	1	268
KL740416	Electrician's knife, without blade 4 - 16 mm dia.	1	520
6B6	Rohrkabelschuhe, blue connection®, 6 mm², M6, Cu	25	26
6B8	Tubular cable lugs, blue connection®, 6 mm², M8, Cu	25	26
10B6	Rohrkabelschuhe, blue connection®, 10 mm², M6, Cu	25	26
10B8	Rohrkabelschuhe, blue connection®, 10 mm², M8, Cu	25	26
16B10	Tubular cable lugs, blue connection®, 16 mm², M10, Cu	25	26
25B8	Tubular cable lugs, blue connection®, 25 mm², M8, Cu	20	26
25B10	Tubular cable lugs, blue connection®, 25 mm², M10, Cu	20	26
35B8	Tubular cable lugs, blue connection®, 35 mm², M8, Cu	20	26
35B10	Tubular cable lugs, blue connection®, 35 mm², M10, Cu	20	26
50B10	Tubular cable lugs, blue connection®, 50 mm², M10, Cu	20	26
LBOXX102LFG	L-BOXX with front handle (W/D/H: 442 x 357 x 117 mm)	1	

**L-BOXX 65B - plastic - with standard equipment for electrical installation**

**Characteristics**

- Manufactured from shock and impact resistant ABS plastic, very robust, loadable to 100 kg
- Stackable using an Easy-Click system which allows an easy opening and closing
- Dimensions: 442x357x117 mm (W/D/H)



Item		Part No.	
L-BOXX from plastic with standard equipment for electrical installation		<b>LBOXX65B</b>	
Scope of supply	Description	Quantity	Page
K05	Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm²	1	247
K100	Hand-operated cutting tool for Cu and Al cables to 14 mm dia.	1	268
KL740416	Electrician's knife, without blade 4 - 16 mm dia.	1	520
1R6	Tubular cable lug without inspection hole, 6 mm², M6, Cu tinned	25	34
1R8	Tubular cable lug without inspection hole, 6 mm², M8, Cu tinned	25	34
2R6	Tubular cable lug without inspection hole, 10 mm², M6, Cu tinned	25	34
2R8	Tubular cable lug without inspection hole, 10 mm², M8, Cu tinned	25	34
3R10	Tubular cable lug without inspection hole, 16 mm², M10, Cu tinned	25	34
4R8	Tubular cable lug without inspection hole, 25 mm², M8, Cu tinned	20	34
4R10	Tubular cable lug without inspection hole, 25 mm², M10, Cu tinned	20	34
5R8	Tubular cable lug without inspection hole, 35 mm², M8, Cu tinned	20	34
5R10	Tubular cable lug without inspection hole, 35 mm², M10, Cu tinned	20	34
6R10	Tubular cable lug without inspection hole, 50 mm², M10, Cu tinned	15	34
LBOXX102LFG	L-BOXX with front handle (W/D/H: 442 x 357 x 117 mm)	1	

ST 23 B Pocket box with cable end-sleeves 0.25 - 1 mm<sup>2</sup>

▶ Pocket box made from impact-resistant plastic

## Characteristics

- Stackable and resealable
- \* = not standardized

Item	Part No.		
Pocket box with cable end-sleeves 0.25 - 1 mm <sup>2</sup> to DIN 46228 part 1	<b>ST23B</b>		
Scope of supply	Description	Quantity	Page
ST23L	Pocket box	1	
*695V	Cable end-sleeve, 0.25 mm <sup>2</sup> , 5mm long, Cu tinned	1000	154
*705V	Cable end-sleeve, 0.34 mm <sup>2</sup> , 5mm long, Cu tinned	1000	154
716V	Cable end-sleeve DIN 46228 part 1, 0.75 mm <sup>2</sup> , 6mm long, Cu tinned	1000	154
71S6V	Cable end-sleeve DIN 46228 part 1, 0.5 mm <sup>2</sup> , 6mm long, Cu tinned	500	154
72S6V	Cable end-sleeve DIN 46228 part 1, 1.0 mm <sup>2</sup> , 6mm long, Cu tinned	500	154

ST 21 B Pocket box with cable end-sleeves 0.5 - 2.5 mm<sup>2</sup>

▶ Pocket box made from impact-resistant plastic

## Characteristics

- Stackable and resealable

Item	Part No.		
Pocket box with cable end-sleeves 0.5 - 2.5 mm <sup>2</sup> to DIN 46228 part 1	<b>ST21B</b>		
Scope of supply	Description	Quantity	Page
ST21L	Pocket box	1	
71S6V	Cable end-sleeve DIN 46228 part 1, 0.5 mm <sup>2</sup> , 6mm long, Cu tinned	1000	154
716V	Cable end-sleeve DIN 46228 part 1, 0.75 mm <sup>2</sup> , 6mm long, Cu tinned	500	154
72S6V	Cable end-sleeve DIN 46228 part 1, 1.0 mm <sup>2</sup> , 6mm long, Cu tinned	500	154
727V	Cable end-sleeve DIN 46228 part 1, 1.5 mm <sup>2</sup> , 7mm long, Cu tinned	500	154
737V	Cable end-sleeve DIN 46228 part 1, 2.5 mm <sup>2</sup> , 7mm long, Cu tinned	500	154

ST 22 B Pocket box with cable end-sleeves 4 - 16 mm<sup>2</sup>

▶ Pocket box made from impact-resistant plastic

## Characteristics

- Stackable and resealable

Item	Part No.		
Pocket box with cable end-sleeves 4 - 16 mm <sup>2</sup> to DIN 46228 part 1	<b>ST22B</b>		
Scope of supply	Description	Quantity	Page
ST22L	Pocket box	1	
749V	Cable end-sleeve DIN 46228 part 1, 4 mm <sup>2</sup> , 9mm long, Cu tinned	200	155
7512V	Cable end-sleeve DIN 46228 part 1, 6 mm <sup>2</sup> , 12mm long, Cu tinned	100	155
7612V	Cable end-sleeve DIN 46228 part 1, 10 mm <sup>2</sup> , 12mm long, Cu tinned	70	155
7712V	Cable end-sleeve DIN 46228 part 1, 16 mm <sup>2</sup> , 12mm long, Cu tinned	70	155



**ST 15 B Pocket box with insulated twin cable end-sleeves 2 x 0.75 - 2 x 2.5 mm<sup>2</sup>**

▶ 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 mm <sup>2</sup>		<b>ST15B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST15L		Pocket box	1	
8708		Ins. twin cable end-sleeve, 2 x 0.75 mm <sup>2</sup>	50	162
8718		Ins. twin cable end-sleeve, 2 x 1 mm <sup>2</sup>	50	162
8728		Ins. twin cable end-sleeve, 2 x 1.5 mm <sup>2</sup>	50	162
87310		Ins. twin cable end-sleeve, 2 x 2.5 mm <sup>2</sup>	50	162

**ST 1 B Pocket box with ins. cable end-sleeves 0.5 - 2.5 mm<sup>2</sup>, DIN 46228 p. 4, colour code 1**

▶ Pocket box made from impact-resistant plastic



**Characteristics**

- Stackable and resealable

Item		Part No.		
Pocket box with insulated cable end-sleeves 0.5 - 2.5 mm <sup>2</sup>		<b>ST1B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST1L		Pocket box	1	
1690		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	50	158
170W		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14.6mm long	100	159
171G		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14.6mm long	100	159
172R0		Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14.6mm long	100	159
173B		Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 15.2mm long	50	159

**ST 11 B Pocket box with insulated cable end-sleeves 0.5 - 2.5 mm<sup>2</sup>, DIN 46228 part 4**

▶ Pocket box made from impact-resistant plastic



**Characteristics**

- Stackable and resealable

Item		Part No.		
Pocket box with insulated cable end-sleeves 0.5 - 2.5 mm <sup>2</sup>		<b>ST11B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST11L		Pocket box	1	
4698		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	50	157
4708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	100	157
4718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	100	157
4728		Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	100	157
4738		Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	50	157

ST 31 B Pocket box with ins. cable end-sleeves 0.5 - 2.5 mm<sup>2</sup>, DIN 46228 p. 4, colour code 2

▶ Pocket box made from impact-resistant plastic

#### Characteristics

- Stackable and resealable

Item		Part No.		
Pocket box with insulated cable end-sleeves 0.5 - 2.5 mm <sup>2</sup>		<b>ST31B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST31L		Pocket box	1	
1698	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 13mm long	50	160
1708	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 13.5mm long	100	160
1718	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 13.5mm long	100	160
1728	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 13.5mm long	100	160
1738	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14.5mm long	50	160

ST 12 B Pocket box with insulated cable end-sleeves 4 - 16 mm<sup>2</sup>, DIN 46228 part 4

▶ Pocket box made from impact-resistant plastic

#### Characteristics

- Stackable and resealable

Item		Part No.		
Pocket box with insulated cable end-sleeves 4 - 16 mm <sup>2</sup> to DIN 46228 part 4		<b>ST12B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST12L		Pocket box	1	
47410	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 17mm long	50	157
47512	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	20	157
47612	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 22mm long	20	157
47712	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 16 mm <sup>2</sup> , 24mm long	10	157

ST 2 B Pocket box with cable end-sleeves 4 - 16 mm<sup>2</sup>, DIN 46228 part 4, colour code 1

▶ Pocket box made from impact-resistant plastic

#### Characteristics

- Stackable and resealable





Item		Part No.		
Pocket box with insulated cable end-sleeves 4 - 16 mm <sup>2</sup>		<b>ST2B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST2L		Pocket box	1	
174GR	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 16.5mm long	50	159
175S	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	20	159
176E	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 21.5mm long	20	159
177GR	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 16 mm <sup>2</sup> , 22.2mm long	10	159

**ST 32 B Pocket box with ins. cable end-sleeves 4 - 16 mm<sup>2</sup>, DIN 46228 p. 4, colour code 2**

▶ Pocket box made from impact-resistant plastic

**Characteristics**

- Stackable and resealable

Item		Part No.		
Pocket box with insulated cable end-sleeves 4 - 16 mm <sup>2</sup>		<b>ST32B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST32L		Pocket box	1	
17410		Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 16.5mm long	50	160
17512		Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	20	160
17612		Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 21.5mm long	20	160
17712		Ins. cable end-sleeve DIN 46228 part 4, 16 mm <sup>2</sup> , 23.5mm long	10	160








**ST 3 B Pocket box with ins. cable end-sleeves 0.25 - 1 mm<sup>2</sup>, DIN 46228 p. 4, colour code 1**

▶ Pocket box made from impact-resistant plastic

**Characteristics**

- Stackable and resealable
- \* = Part No. 167H and 168T are not standardized

Item		Part No.		
Pocket box with insulated twin cable end-sleeves 0.25-1 mm <sup>2</sup>		<b>ST3B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST3L		Pocket box	1	
*167H		Ins. cable end-sleeve, 0.25 mm <sup>2</sup> , 10.4mm long	30	158
*168T		Ins. cable end-sleeve, 0.34 mm <sup>2</sup> , 10.4mm long	30	158
1690		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	30	158
170W		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14.6mm long	30	159
171G		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14.6mm long	30	159








**ST 13 B Pocket box with ins. cable end-sleeves 0.25 - 1 mm<sup>2</sup>, DIN 46228 p. 4 and similar, colour code 1**

▶ Pocket box made from impact-resistant plastic

**Characteristics**

- Stackable and resealable
- \* = Part No. 167H and 168T are not standardized

Item		Part No.		
Pocket box with insulated cable end-sleeves 0.25 - 1 mm <sup>2</sup> to DIN 46228 part 4		<b>ST13B</b>		
Scope of supply	Colour	Description	Quantity	Page
ST13L		Pocket box	1	
*167H		Ins. cable end-sleeve, 0.25 mm <sup>2</sup> , 10.4mm long	30	158
*168T		Ins. cable end-sleeve, 0.34 mm <sup>2</sup> , 10.4mm long	30	158
4698		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	30	157
4708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	30	157
4718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	30	157








ST 33 B Pocket box with ins. cable end-sleeves 0.25 - 1 mm<sup>2</sup>, DIN46228 p.4 and similar, colour code 2

▶ Pocket box made from impact-resistant plastic

#### Characteristics

- Stackable and resealable
- \* = not standardized


Item			Part No.	
Pocket box with insulated cable end-sleeves 0.25 - 1 mm <sup>2</sup>			<b>ST33B</b>	
Scope of supply	Colour	Description	Quantity	Page
ST33L		Pocket box	1	
*1676		Ins. cable end-sleeve, 0.25 mm <sup>2</sup> , 11 mm long	30	160
*1686		Ins. cable end-sleeve, 0.34 mm <sup>2</sup> , 11 mm long	30	160
1698		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 13 mm long	30	160
1708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 13.5 mm long	30	160
1718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 13.5 mm long	30	160

GR 4698 DO Pocket box with insulated cable end-sleeves 0.5 mm<sup>2</sup>

▶ Pocket box made from impact-resistant plastic

#### Characteristics

- Stackable and resealable


Item			Part No.	
Pocket box with insulated cable end-sleeves 0.5 mm <sup>2</sup> to DIN 46228 part 4			<b>GR4698DO</b>	
Scope of supply	Colour	Description	Quantity	Page
4698		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14 mm long	1000	157

GR 4708 DO Pocket box with insulated cable end-sleeves 0.75 mm<sup>2</sup>

▶ Pocket box made from impact-resistant plastic

#### Characteristics

- Stackable and resealable


Item			Part No.	
Pocket box with insulated cable end-sleeves 0.75 mm <sup>2</sup> DIN 46228 part 4			<b>GR4708DO</b>	
Scope of supply	Colour	Description	Quantity	Page
4708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14 mm long	1000	157

**GR 4718 DO Pocket box with insulated cable end-sleeves 1 mm<sup>2</sup>**

▶ Pocket box made from impact-resistant plastic

**Characteristics**

- Stackable and resealable

Item			Part No.	
Pocket box with insulated cable end-sleeves 1 mm <sup>2</sup> DIN 46228 part 4			<b>GR4718DO</b>	
Scope of supply	Colour	Description	Quantity	Page
4718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	1000	157




**GR 4728 DO Pocket box with insulated cable end-sleeves 1.5 mm<sup>2</sup>**

▶ Pocket box made from impact-resistant plastic

**Characteristics**

- Stackable and resealable

Item			Part No.	
Pocket box with insulated cable end-sleeves 1.5 mm <sup>2</sup> DIN 46228 part 4			<b>GR4728DO</b>	
Scope of supply	Colour	Description	Quantity	Page
4728		Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	1000	157




**GR 4738 DO Pocket box with insulated cable end-sleeves 2.5 mm<sup>2</sup>**

▶ Pocket box made from impact-resistant plastic

**Characteristics**

- Stackable and resealable

Item			Part No.	
Pocket box with insulated cable end-sleeves 2.5 mm <sup>2</sup> DIN 46228 part 4			<b>GR4738DO</b>	
Scope of supply	Colour	Description	Quantity	Page
4738		Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	1000	157



**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	<b>ST5L</b>



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



▶ Hammer-tone finished assortment box

## Characteristics

- Dimensions: 200x140x40 mm

Item		Part No.	
Assortment box from steel with cable end-sleeves and crimping tool		<b>SK30B</b>	
Scope of supply	Description	Quantity	Page
SK30L	Steel carrying case	1	213
K48	Crimping tool for cable end-sleeves 0.14 - 2.5 mm <sup>2</sup>	1	224
716V	Cable end-sleeve DIN 46228 part 1, 0.75 mm <sup>2</sup> , 6mm long, Cu tinned	1000	154
72S6V	Cable end-sleeve DIN 46228 part 1, 1.0 mm <sup>2</sup> , 6mm long, Cu tinned	1000	154
727V	Cable end-sleeve DIN 46228 part 1, 1.5 mm <sup>2</sup> , 7mm long, Cu tinned	1000	154
737V	Cable end-sleeve DIN 46228 part 1, 2.5 mm <sup>2</sup> , 7mm long, Cu tinned	1000	154

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



▶ Broad cable end-sleeve range with single-acting crimping tool  
▶ Hammer-tone finished assortment box

## Characteristics

- Dimensions: 285x155x45 mm

Item		Part No.	
Assortment box from steel with cable end-sleeves and crimping tool		<b>SK32B</b>	
Scope of supply	Description	Quantity	Page
SK32L	Steel carrying case	1	213
K3	Crimping tool for cable end-sleeves 0.5 - 16 mm <sup>2</sup>	1	223
716V	Cable end-sleeve DIN 46228 part 1, 0.75 mm <sup>2</sup> , 6mm long, Cu tinned	1000	154
72S6V	Cable end-sleeve DIN 46228 part 1, 1.0 mm <sup>2</sup> , 6mm long, Cu tinned	1000	154
727V	Cable end-sleeve DIN 46228 part 1, 1.5 mm <sup>2</sup> , 7mm long, Cu tinned	1000	154
737V	Cable end-sleeve DIN 46228 part 1, 2.5 mm <sup>2</sup> , 7mm long, Cu tinned	500	154
749V	Cable end-sleeve DIN 46228 part 1, 4 mm <sup>2</sup> , 9mm long, Cu tinned	500	155
7510V	Cable end-sleeve DIN 46228 part 1, 6 mm <sup>2</sup> , 10mm long, Cu tinned	500	155
7618V	Cable end-sleeve DIN 46228 part 1, 10 mm <sup>2</sup> , 18mm long, Cu tinned	250	155
7718V	Cable end-sleeve DIN 46228 part 1, 16 mm <sup>2</sup> , 18mm long, Cu tinned	150	155

**SK 45 B Metal assortment box with insulated cable end-sleeves and crimping tool**

- ▶ Four of the most important insulated cable end-sleeves in a steel carrying case including single-acting crimping tool
- ▶ Hammer-tone finished assortment box

**Characteristics**

- Dimensions: 200x140x40 mm



Item		Part No.		
Assortment box from steel with Ins. cable end-sleeves and crimping tool		<b>SK45B</b>		
Scope of supply	Colour	Description	Quantity	Page
SK30L		Steel carrying case	1	213
K48		Crimping tool for cable end-sleeves 0.14 - 2.5 mm <sup>2</sup>	1	224
4708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	300	157
4718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	300	157
4728		Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	300	157
4738		Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	200	157

**SK 47 B Metal assortment box with insulated cable end-sleeves and crimping tool**

- ▶ Hammer-tone finished assortment box

**Characteristics**

- Dimensions: 285x155x45 mm



Item		Part No.		
Assortment box from steel with Ins. cable end-sleeves and crimping tool		<b>SK47B</b>		
Scope of supply	Colour	Description	Quantity	Page
SK32L		Steel carrying case	1	213
K3		Crimping tool for cable end-sleeves 0.5 - 16 mm <sup>2</sup>	1	223
4708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	200	157
4718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	200	157
4728		Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	200	157
4738		Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	200	157
47410		Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 17mm long	100	157
47512		Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	100	157
47618		Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 28mm long	100	157
47718		Ins. cable end-sleeve DIN 46228 part 4, 16 mm <sup>2</sup> , 28mm long	50	157

## SK 30/3 P Plastic assortment box with insulated cable end-sleeves and tools



## Characteristics

- Dimensions: 395x295x106 mm

Item				Part No.	
Assortment box from plastic with Ins. cable end-sleeves and tools				SK303P	
Scope of supply	Colour	Description	Quantity	Page	
K432		Automatic wire stripping tool K43/2 0.02 - 10 mm <sup>2</sup>	1	516	
K303		Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm <sup>2</sup>	1	229	
4698	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	400	157	
4708	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	400	157	
4718	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	400	157	
4728	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	400	157	
4738	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	200	157	
47410	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 17mm long	200	157	
47512	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	100	157	
47612	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 22mm long	100	157	

## SK 30/3 S Plastic assortment box with insulated cable end-sleeves and crimping tool



## Characteristics

- Dimensions: 275x230x83 mm

Item				Part No.	
Assortment box from plastic with Ins. cable end-sleeves and crimping tool				SK303S	
Scope of supply	Colour	Description	Quantity	Page	
K303		Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm <sup>2</sup>	1	229	
4698	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	100	157	
4708	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	100	157	
4718	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	100	157	
4728	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	100	157	
4738	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	50	157	
47410	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 17mm long	50	157	
47512	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	30	157	
47612	<input type="checkbox"/>	Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 22mm long	30	157	



**SK 43 NB Metal assortment box with insulated cable end-sleeves and tools**

▶ High-performance 4-edge crimping tool including wire stripping tool

**Characteristics**

- Dimensions: 370x210x40 mm



Item		Part No.		
Assortment box from steel with Ins. cable end-sleeves and tools		<b>SK43NB</b>		
Scope of supply	Colour	Description	Quantity	Page
SK43L		Steel carrying case	1	213
K432		Automatic wire stripping tool K43/2 0.02 - 10 mm <sup>2</sup>	1	516
K303		Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm <sup>2</sup>	1	229
4698		Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long	500	157
4708		Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	500	157
4718		Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	400	157
4728		Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	400	157
4738		Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	300	157
47410		Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 17mm long	100	157
47512		Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	100	157
47612		Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 22mm long	100	157

**MK 210 B Metal assortment box with insulated terminals and crimping tool**

▶ Hammer-tone finished assortment box

**Characteristics**

- Dimensions: 250x155x40 mm



Item		Part No.		
Assortment box from steel with Ins. cable connections and crimping tool		<b>MK210B</b>		
Scope of supply	Colour	Description	Quantity	Page
MK210L		Steel carrying case	1	214
K10		Crimping tool for insulated cable connections 0.5 - 6 mm <sup>2</sup>	1	232
620C4		Ins. solderless terminal M4 DIN 46237, 0.5-1 mm <sup>2</sup> , fork-type	50	175
6305		Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 1.5-2.5 mm <sup>2</sup>	50	174
710		Ins. pin terminal DIN 46231, 1.5-2.5 mm <sup>2</sup> , 23mm long	50	176
6505		Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	25	174

## MK 220 B Metal assortment box with insulated terminals and crimping tool



▶ Hammer-tone finished assortment box

#### Characteristics

- Dimensions: 370x160x40 mm

Item			Part No.	
Assortment box from steel with Ins. cable connections and crimping tool			<b>MK220B</b>	
Scope of supply	Colour	Description	Quantity	Page
MK220L		Steel carrying case	1	214
K10		Crimping tool for insulated cable connections 0.5 - 6 mm <sup>2</sup>	1	232
6205	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 0.5-1 mm <sup>2</sup>	50	174
6305	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 1.5-2.5 mm <sup>2</sup>	50	174
620C4	■	Ins. solderless terminal M4 DIN 46237, 0.5-1 mm <sup>2</sup> , fork-type	50	175
630C4	■	Ins. solderless terminal M4 DIN 46237, 1.5-2.5 mm <sup>2</sup> , fork-type	50	175
705	■	Ins. pin terminal DIN 46231, 0.5-1 mm <sup>2</sup> , 22mm long	50	176
710	■	Ins. pin terminal DIN 46231, 1.5-2.5 mm <sup>2</sup> , 23mm long	50	176
6505	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	25	174
715	■	Ins. pin terminal DIN 46231, 0.1-0.4 mm <sup>2</sup> , 26mm long	25	176

## MK 230 B 507 Metal assortment box with insulated terminals and crimping tool



▶ Hammer-tone finished assortment box

#### Characteristics

- Dimensions: 366x230x51 mm
- \* = not standardized

Item			Part No.	
Assortment box from steel with Ins. cable connections and crimping tool			<b>MK230B507</b>	
Scope of supply	Colour	Description	Quantity	Page
MK230L		Steel carrying case	1	214
K507		Crimping tool with interchangeable dies	1	258
6204	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 0.5-1 mm <sup>2</sup>	50	174
6205	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 0.5-1 mm <sup>2</sup>	50	174
*6206	■	Ins. solderless terminal M6, PA insulated sleeve, 0.5-1 mm <sup>2</sup>	50	174
6304	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 1.5-2.5 mm <sup>2</sup>	50	174
6305	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 1.5-2.5 mm <sup>2</sup>	50	174
6306	■	Ins. solderless terminal M6 DIN 46237, PA insulated sleeve, 1.5-2.5 mm <sup>2</sup>	50	174
670	■	Ins. butt connector, 0.5-1 mm <sup>2</sup>	50	183
680	■	Ins. butt connector, 1.5-2.5 mm <sup>2</sup>	50	183
705	■	Ins. pin terminal DIN 46231, 0.5-1 mm <sup>2</sup> , 22mm long	50	176
710	■	Ins. pin terminal DIN 46231, 1.5-2.5 mm <sup>2</sup> , 23mm long	50	176
730	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 1.5-2.5 mm <sup>2</sup>	50	179
830	■	Ins. tab 6.3x0.8 mm, 1.5-2.5 mm <sup>2</sup>	50	182
620C4	■	Ins. solderless terminal M4 DIN 46237, 0.5-1 mm <sup>2</sup> , fork-type	50	175
630C4	■	Ins. solderless terminal M4 DIN 46237, 1.5-2.5 mm <sup>2</sup> , fork-type	50	175
715	■	Ins. pin terminal DIN 46231, 0.1-0.4 mm <sup>2</sup> , 26mm long	25	176
700	■	Ins. butt connector, 4-6 mm <sup>2</sup>	25	183
6505	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	25	174
6506	■	Ins. solderless terminal M6 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	25	174
650C6	■	Ins. solderless terminal M6 DIN 46237, 4-6 mm <sup>2</sup> , fork-type	25	175

**LBOXX 230 B - plastic - with standard equipment for electrical installation**

**Characteristics**

- Dimensions: 442x357x117 mm (W/D/H)



Item		Part No.		
L-BOXX from plastic with standard equipment for electrical installation.		<b>LBOXX230B</b>		
Scope of supply	Colour	Description	Quantity	Page
K432		Automatic wire stripping tool K43/2 0.02 - 10 mm <sup>2</sup>	1	516
K507		Crimping tool with interchangeable dies	1	258
720	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 0.5-1 mm <sup>2</sup>	50	179
730	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 1.5-2.5 mm <sup>2</sup>	50	179
820	■	Ins. tab 6.3x0.8 mm, 0.5-1 mm <sup>2</sup>	50	182
830	■	Ins. tab 6.3x0.8 mm, 1.5-2.5 mm <sup>2</sup>	50	182
6204	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 0.5-1 mm <sup>2</sup>	50	174
6305	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 1.5-2.5 mm <sup>2</sup>	50	174
6506	■	Ins. solderless terminal M6 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	50	174
670	■	Ins. butt connector, 0.5-1 mm <sup>2</sup>	50	183
680	■	Ins. butt connector, 1.5-2.5 mm <sup>2</sup>	50	183
700	■	Ins. butt connector, 4-6 mm <sup>2</sup>	25	183
16505		Solderless terminals DIN 46234, 4-6 mm <sup>2</sup> , M5, Cu tinned	50	88
16506		Solderless terminals, DIN 46234, 4-6 mm <sup>2</sup> , M6, Cu tinned	50	88
1652C5		Solderless terminals, fork-type, 10 mm <sup>2</sup> , M5, Cu-ETP tinned	50	92
1652C6		Solderless terminals, fork-type, 10 mm <sup>2</sup> , M6, Cu-ETP tinned	50	92
4708	■	Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long	400	157
4718	■	Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long	400	157
4728	■	Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long	400	157
4738	■	Ins. cable end-sleeve DIN 46228 part 4, 2.5 mm <sup>2</sup> , 14mm long	200	157
47410	■	Ins. cable end-sleeve DIN 46228 part 4, 4 mm <sup>2</sup> , 17mm long	100	157
47512	■	Ins. cable end-sleeve DIN 46228 part 4, 6 mm <sup>2</sup> , 20mm long	100	157
47612	■	Ins. cable end-sleeve DIN 46228 part 4, 10 mm <sup>2</sup> , 22mm long	100	157
LBOXX102LFG		L-BOXX with front handle (W/D/H: 442 x 357 x 117 mm)	1	

## SK 82 P Plastic assortment box with insulated terminals and tools



## Characteristics

- Dimensions: 395x295x106 mm

Item		Part No.		
Assortment box from plastic with insulated terminals and tools		<b>SK82P</b>		
Scope of supply	Colour	Description	Quantity	Page
K432		Automatic wire stripping tool K43/2 0.02 - 10 mm <sup>2</sup>	1	516
K82A		Crimping tool for insulated cable connections 0,5 - 6 mm <sup>2</sup>	1	234
6204	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 0,5-1 mm <sup>2</sup>	50	174
6205	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 0,5-1 mm <sup>2</sup>	50	174
670	■	Ins. butt connector, 0,5-1 mm <sup>2</sup>	50	183
720	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 0,5-1 mm <sup>2</sup>	50	179
6304	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 1,5-2,5 mm <sup>2</sup>	50	174
6305	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 1,5-2,5 mm <sup>2</sup>	50	174
680	■	Ins. butt connector, 1,5-2,5 mm <sup>2</sup>	50	183
730	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 1,5-2,5 mm <sup>2</sup>	50	179
6505	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	20	174
6506	■	Ins. solderless terminal M6 DIN 46237, PA insulated sleeve, 4-6 mm <sup>2</sup>	20	174
700	■	Ins. butt connector, 4-6 mm <sup>2</sup>	20	183
715	■	Ins. pin terminal DIN 46231, 0.1-0.4 mm <sup>2</sup> , 26mm long	20	176
620C4	■	Ins. solderless terminal M4 DIN 46237, 0,5-1 mm <sup>2</sup> , fork-type	20	175
630C4	■	Ins. solderless terminal M4 DIN 46237, 1,5-2,5 mm <sup>2</sup> , fork-type	20	175
705	■	Ins. pin terminal DIN 46231, 0,5-1 mm <sup>2</sup> , 22mm long	20	176
710	■	Ins. pin terminal DIN 46231, 1,5-2,5 mm <sup>2</sup> , 23mm long	20	176

## SK 82 S Plastic assortment box with insulated terminals and tools



Item		Part No.		
Assortment box from plastic with insulated terminals and tools		<b>SK82S</b>		
Scope of supply	Colour	Description	Quantity	Page
K82A		Crimping tool for insulated cable connections 0,5 - 6 mm <sup>2</sup>	1	234
6204	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 0,5-1 mm <sup>2</sup>	20	174
6205	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 0,5-1 mm <sup>2</sup>	20	174
670	■	Ins. butt connector, 0,5-1 mm <sup>2</sup>	20	183
720	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 0,5-1 mm <sup>2</sup>	20	179
6304	■	Ins. solderless terminal M4 DIN 46237, PA insulated sleeve, 1,5-2,5 mm <sup>2</sup>	20	174
680	■	Ins. butt connector, 1,5-2,5 mm <sup>2</sup>	20	183
730	■	Ins. receptacle 6.3x0.8 mm DIN 46245 part 3, 1,5-2,5 mm <sup>2</sup>	20	179
6305	■	Ins. solderless terminal M5 DIN 46237, PA insulated sleeve, 1,5-2,5 mm <sup>2</sup>	20	174

**SK 30 L Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 4 small and 1 large additional compartments with lock
- For optional storage of crimping tools type K1, K4, K46 and K48
- Dimensions: 200x140x40 mm
- Weight: 1.2 kg



Item	Part No.
Steel carrying case	<b>SK30L</b>

**SK 32 L Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 8 small and 1 large additional compartments with lock
- For optional storage of crimping tools type K3 and K35
- Dimensions: 285x155x45 mm
- Weight: 1.3 kg



Item	Part No.
Steel carrying case	<b>SK32L</b>

**SK 4 L Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 6 small and 1 large additional compartments with lock
- For optional storage of crimping tools type K02, K2, K16, K25, K28 and K29
- Dimensions: 370x160x40 mm
- Weight: 1.4 kg



Item	Part No.
Steel carrying case	<b>SK4L</b>

**SK 43 L Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 8 small and 2 large additional compartments with lock
- For storage of crimping tool K 32 and wire stripper K 41
- Dimensions: 370x210x40 mm
- Weight: 1.9 kg



Item	Part No.
Steel carrying case	<b>SK43L</b>



## MK 55 Steel carrying case



## ▶ Hammer-tone finished assortment box

**Characteristics**

- 8 small and 1 large additional compartments with lock
- For storage of 8 pairs of dies and crimping tool K50
- Dimensions: 245x130x37 mm
- Weight: 0.7 kg

Item	Part No.
Steel carrying case	<b>MK55</b>

## MK 210 L Steel carrying case



## ▶ Hammer-tone finished assortment box

**Characteristics**

- 4 small and 1 large additional compartments with lock
- For storage of crimping tools K 10 or K 82
- Dimensions: 250x155x40 mm
- Weight: 1.0 kg

Item	Part No.
Steel carrying case	<b>MK210L</b>

## MK 220 L Steel carrying case



## ▶ Hammer-tone finished assortment box

**Characteristics**

- 8 small and 1 large additional compartments with lock
- For storage of crimping tools K 10 or K 82
- Dimensions: 370x160x40 mm
- Weight: 1.4 kg

Item	Part No.
Steel carrying case	<b>MK220L</b>

## MK 230 L Steel carrying case



## ▶ Hammer-tone finished assortment box

**Characteristics**

- 19 small and 1 large additional compartments with lock and handle
- For storage of crimping tools K 10 or K 82
- Dimensions: 366x230x51 mm
- Weight: 2.4 kg

Item	Part No.
Steel carrying case	<b>MK230L</b>

**SK 65 L Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 12 small and 1 large additional compartments with lock and handle
- For optional storage of crimping tools type K 05, K 05 BC, K 35/4
- Dimensions: 400x250x50 mm
- Weight: 2.3 kg



Item	Part No.
Steel carrying case	<b>SK65L</b>

**SK 120 L Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 8 small and 1 large additional compartments with lock and handle
- For optional storage of crimping tools type K 06, K 06 BC, K 08, K 09 and K 09 BC or cable cutters K 105/1
- Dimensions: 680x265x65 mm
- Weight: 4.7 kg



Item	Part No.
Steel carrying case	<b>SK120L</b>

**MK 18 Steel carrying case**

▶ Hammer-tone finished assortment box

**Characteristics**

- 34 small and 1 large additional compartments with lock and handle
- For storage of 34 pairs of dies and crimping tool K 18
- Dimensions: 605x300x50 mm
- Weight: 4.6 kg



Item	Part No.
Steel carrying case	<b>MK18</b>

## MK 22 Steel carrying case



▶ Hammer-tone finished assortment box

**Characteristics**

- 17 small and 1 large additional compartments with lock and handle
- For storage of 17 pairs of dies and crimping tool K 22
- Dimensions: 600x220x65 mm
- Weight: 3.5 kg

Item	Part No.
Steel carrying case	<b>MK22</b>

## KKPE Plastic case

**Characteristics**

- For storing complete crimping die sets
- With lock and handle

Item	Part No.
Plastic case for crimping dies of series 22	<b>KKPE</b>
Plastic case for crimping dies of series 4	<b>KKPEH25</b>

## MK/KP 1 Plastic case

**Characteristics**

- For storage of crimping tools KP1 and KP1L and 10 crimping heads of the Klauke Pro Series
- With lock and handle
- Dimensions: 395x295x106 mm
- Weight: 1.0 kg

Item	Part No.
Plastic case	<b>MK/KP1</b>

## MKU Steel carrying case with wheels



▶ Hammer-tone finished assortment box

**Characteristics**

- With additional compartment for dies with lock and handle
- For storage of hydraulic crimping tools HK12/2, HK25/2 or HK45
- Dimensions: 810x310x210 mm
- Weight: 10.0 kg

Item	Part No.
Steel carrying case	<b>MKU</b>



**TT2 Carrying bag**

**Characteristics**

- For storage of all crimping and cutting heads (except SDK 105, SDK 120 and PK1000)
- Weight: 0.48 kg

Item	Part No.
Carrying bag	TT2



**TT4 Carrying bag**

**Characteristics**

- For storage of cutting heads SDK 105 and SDK 120
- Weight: 0.73 kg

Item	Part No.
Carrying bag	TT4



” *High-performance at the touch of a button, where conventional hand tools fail. For this reason we developed battery powered tools with intelligent crimping, cutting and punching functions.“*



Sonja Abele,  
Development

<b>Mechanical crimping and cutting tools</b>	<b>220</b>
Mechanical crimping tools	220
Mechanical crimping tools for the photovoltaic	253
Mechanical crimping tools with interchangeable dies	256
Mechanical cutting tools	266
<b>Electric and pneumatic crimping tools</b>	<b>276</b>
Electromechanical crimping tool Klauke micro	276
Electric and pneumatic crimping tools	280
<b>Hand-operated hydraulic crimping and cutting tools</b>	<b>284</b>
Hand-operated hydraulic crimping tools	284
Hand-operated hydraulic cutting tools	298
<b>Battery-powered crimping and cutting tools</b>	<b>304</b>
Battery-powered crimping tools	306
Battery-powered cutting tools	336
<b>Hydraulic universal tools and heads</b>	<b>353</b>
<b>Hydraulic crimping and cutting heads</b>	<b>360</b>
<b>Hydraulic drive units</b>	<b>380</b>
<b>Hydraulic systems</b>	<b>386</b>
Hydraulic crimping systems	388
Hydraulic cutting systems	392
Safety cutting units	394
<b>Accessories for hydraulic tools</b>	<b>396</b>
Batteries and mains sets	397
Battery chargers	399
<b>Force and pressure gauge systems</b>	<b>405</b>



## Powerful crimping by hand.

### Mechanical tools for crimping.

We all have overwhelming power - as long we have the right tool to hand.

The diversity of conductor types and connecting materials calls for numerous different standards for crimping tools. Klauke offers the right solution for all applications. All mechanical crimping tools are made from the highest quality materials, are rust-proof and surface-finished. The products are set apart by their extremely long service life. Unique precision and high quality material guarantee safe and, most important, long-lasting electrical connections. The tools' ergonomic handles and perfected drives optimise transmission of the hand force.



- Crimping tools for Klauke connecting material with nominal cross sections from 0.08 to 400 mm<sup>2</sup>.
- Optimised profile forms for all applications.
- Precise drives for exact crimping results.
- Clear designation of the crimping profiles.



## Precise crimping for all cross-sections.






- ▶ The use of high-grade steels and the annealing process that follows guarantee a long service life for the mechanical crimping tools.
- ▶ Power-optimized drive with integrated ratchet and pre-tension setting.
- ▶ Ergonomic handles, low weight, clear designation of the crimping profiles and telescopic handles for two-handed operation.



### Benefits:

- ▶ Many years of low wear use.
- ▶ The integrated ratchet with pre-tension setting guarantees process safety and complete crimping results.
- ▶ Materials processed quickly and effortlessly.

## Tools for cable end-sleeves: Which tool for which cable end-sleeve?

Cross-section max. mm <sup>2</sup>	Tool	Crimping profile					Design		Drive	
							Front crimping	Side crimping	10.68 mm	Force-supported
2.5	K4	✓						✓	✓	
	K1		✓					✓	✓	
	K48		✓					✓	✓	
6	K46	✓						✓	✓	
	K36		✓				✓		✓	
	K32		✓				✓			✓
	K37		✓					✓		✓
	K38/2				✓		✓			✓
	KP31/2*		✓					✓		✓
	K38Ergo				✓		✓			✓
	K50 <sup>1)</sup>		✓					✓		✓
	KP35/1					✓				✓
	10	K30/3				✓			✓	
KP30/3					✓			✓		✓
K507			✓					✓		✓
16	K3	✓						✓		✓
	K34		✓				✓			✓
	KP30/4				✓			✓		✓
	KP35/2					✓		✓		✓
25	K39		✓						✓	
35	K35	✓						✓		✓
	K27/1			✓				✓		✓
50	K28		✓					✓		✓
	K35/4 <sup>1)</sup>		✓					✓		✓
	K27/2			✓				✓		✓
95	K29		✓					✓		✓
	K18 <sup>1)</sup>		✓	✓				✓		✓
240	K22 <sup>1)</sup>		✓	✓				✓		✓

K = Crimping tool

KP = Pro series crimping head

<sup>1)</sup> Interchangeable dies

\*Also available as Pro series

K 4 Crimping tool for cable end-sleeves 0.5 - 2.5 mm<sup>2</sup>

- ▶ Indent crimping for round clamp opening
- ▶ Spring-supported tool opening

**Characteristics**

- One crimp profile per cross-section
- Lateral insertion
- Exact cross-section assignment
- Ergonomic handles

Technical data	
Crimping range	0.5 - 2.5 mm <sup>2</sup>
Length	150 mm
Weight	0.16 kg

Item	Part No.
Crimping tool for cable end-sleeves 0.5 - 2.5 mm <sup>2</sup>	<b>K4</b>

Accessories	Part No.	Page
Steel carrying case	SK30L	213

K 46 Crimping tool for cable end-sleeves 1.5 - 6 mm<sup>2</sup>

- ▶ Indent crimping for round clamp opening
- ▶ Spring-supported tool opening

**Characteristics**

- One crimp profile per cross-section
- Lateral insertion
- Exact cross-section assignment
- Ergonomic handles

Technical data	
Crimping range	1.5 - 6 mm <sup>2</sup>
Length	150 mm
Weight	0.16 kg

Item	Part No.
Crimping tool for cable end-sleeves 1.5 - 6 mm <sup>2</sup>	<b>K46</b>

Accessories	Part No.	Page
Steel carrying case	SK30L	213

**K 3 Crimping tool for cable end-sleeves 0.5 - 16 mm<sup>2</sup>**

- ▶ Indent crimping for round clamp opening
- ▶ With wire cutter

**Characteristics**

- One crimp profile per cross-section
- Lateral insertion
- Exact cross-section assignment
- Ergonomic handles

Technical data	
Crimping range	0.5 - 16 mm <sup>2</sup>
Length	230 mm
Weight	0.24 kg

Item	Part No.
Crimping tool for cable end-sleeves 0.5 - 16 mm <sup>2</sup>	<b>K3</b>

Accessories	Part No.	Page
Steel carrying case	SK32L	213



**K 35 Crimping tool for cable end-sleeves 10 - 35 mm<sup>2</sup>**

- ▶ Indent crimping for round clamp opening
- ▶ For large cross-sections to 35 mm<sup>2</sup>

**Characteristics**

- One crimp profile per cross-section
- Lateral insertion
- Exact cross-section assignment
- Ergonomic handles

Technical data	
Crimping range	10 - 35 mm <sup>2</sup>
Length	230 mm
Weight	0.24 kg

Item	Part No.
Crimping tool for cable end-sleeves 10 - 35 mm <sup>2</sup>	<b>K35</b>

Accessories	Part No.	Page
Steel carrying case	SK32L	213



K 1 Crimping tool for cable end-sleeves 0.14 - 2.5 mm<sup>2</sup>

- ▶ Trapezoid crimping suitable for box terminals
- ▶ Spring-supported tool opening
- ▶ With wire stripper and cutter

**Characteristics**

- One crimp profile per cross-section
- Lateral insertion
- Exact cross-section assignment
- Ergonomic handles
- Interchangeable stripping blades

Technical data		
Crimping range	0.14 - 2.5 mm <sup>2</sup>	
Length	175 mm	
Weight	0.19 kg	
Item	Part No.	
Crimping tool for cable end-sleeves 0.14 - 2.5 mm <sup>2</sup>	K1	
Accessories	Part No.	Page
Steel carrying case	SK30L	213

K 48 Crimping tool for cable end-sleeves 0.14 - 2.5 mm<sup>2</sup>

- ▶ Trapezoid crimping suitable for box terminals
- ▶ Spring-supported tool opening

**Characteristics**

- One crimp profile per cross-section
- Lateral insertion
- Exact cross-section assignment
- Ergonomic handles

Technical data		
Crimping range	0.14 - 2.5 mm <sup>2</sup>	
Length	150 mm	
Weight	0.16 kg	
Item	Part No.	
Crimping tool for cable end-sleeves 0.14 - 2.5 mm <sup>2</sup>	K48	
Accessories	Part No.	Page
Steel carrying case	SK30L	213



**K 36 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm<sup>2</sup>**

- ▶ Two crimping profiles with the cross-section areas 0.5 - 2.5 mm<sup>2</sup> and 4 - 6 mm<sup>2</sup>
- ▶ Spring-supported tool opening

**Characteristics**

- Front insertion (front crimping)
- Ergonomic non-slip handles

Technical data	
Crimping range total	0.5 - 6 mm <sup>2</sup>
Cable end-sleeves	0.5 - 2.5 and 4 - 6 mm <sup>2</sup>
Twin cable end-sleeves	2x0.5 - 2x1.5 and 2x2.5 - 2x4 mm <sup>2</sup>
Length	200 mm
Weight	0.22 kg
Item	Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm <sup>2</sup>	<b>K36</b>

Accessories	Part No.	Page
Steel carrying case	SK32L	213



**K 32 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 6 mm<sup>2</sup>**

- ▶ One crimping profile for cross-sections from 0.14 - 6 mm<sup>2</sup> due to automatic cross-section adjustment
- ▶ Trapezoid crimping suitable for box terminals
- ▶ Spring-supported tool opening

**Characteristics**

- With ratchet for consistent crimp results
- Front insertion (front crimping)
- Ergonomic handles
- Non-slip handles

Technical data	
Crimping range total	0.14 - 6 mm <sup>2</sup>
Cable end-sleeves	0.14 - 6 mm <sup>2</sup>
Twin cable end-sleeves	2 x 0.5 - 2 x 2.5 mm <sup>2</sup>
Length	210 mm
Weight	0.35 kg
Item	Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 6 mm <sup>2</sup>	<b>K32</b>

Accessories	Part No.	Page
Steel carrying case	SK43L	213



K 34 Crimping tool for cable end-sleeves and twin cable end-sleeves 6 - 16 mm<sup>2</sup>

- ▶ Trapezoid crimping suitable for box terminals
- ▶ Spring-supported tool opening
- ▶ One crimping profile for cross-sections from 6 - 16 mm<sup>2</sup> due to automatic cross-section adjustment

**Characteristics**

- With ratchet for consistent crimp results
- Front insertion (front crimping)
- Non-slip handles

Technical data		
Crimping range total	6 - 16 mm <sup>2</sup>	
cable end-sleeves	6 - 16 mm <sup>2</sup>	
Twincable end-sleeves	2 x 4 - 2 x 6 mm <sup>2</sup>	
Length	210 mm	
Weight	0.5 kg	
Item	Part No.	
Crimping tool for cable end-sleeves and twin cable end-sleeves 6 - 16 mm <sup>2</sup>	<b>K34</b>	
Accessories	Part No.	Page
Steel carrying case	SK43L	213

K 37 Crimping tool for cable end-sleeves 0.14 - 6 mm<sup>2</sup>

- ▶ Trapezoid crimping suitable for box terminals
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- An adjusting disc balances the wear of the crimping tool
- One crimp profile per cross-section
- With ratchet for consistent crimp results
- Lateral insertion
- Exact cross-section assignment

Technical data		
Crimping range	0.14 - 6 mm <sup>2</sup>	
Length	200 mm	
Weight	0.36 kg	
Item	Part No.	
Crimping tool for cable end-sleeves 0.14 - 6 mm <sup>2</sup>	<b>K37</b>	
Accessories	Part No.	Page
Steel carrying case	SK43L	213

**K 39 Crimping tool for cable end-sleeves 10 - 25 mm<sup>2</sup>**

- ▶ Trapezoid crimping suitable for box terminals
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- An adjusting disc balances the wear of the crimping tool
- One crimp profile per cross-section
- With ratchet for consistent crimp results
- Lateral insertion
- Exact cross-section assignment

Technical data	
Crimping range	10 - 25 mm <sup>2</sup>
Length	200 mm
Weight	0.36 kg
Item	Part No.
Crimping tool for cable end-sleeves 10 - 25 mm <sup>2</sup>	<b>K39</b>

Accessories	Part No.	Page
Steel carrying case	SK43L	213



**K 38/2 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm<sup>2</sup>**

- ▶ Square crimping suitable for box terminals and spring clamp technology
- ▶ An adjusting disc balances the wear of the crimping tool
- ▶ One crimping profile for cross-sections from 0.5 - 6 mm<sup>2</sup> due to automatic cross-section adjustment

**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Front insertion (front crimping)

Technical data	
Crimping range total	0.5 - 6 mm <sup>2</sup>
Cable end-sleeves	0.5 - 6 mm <sup>2</sup>
Twin cable end-sleeves	2 x 0.5 - 2 x 2.5 mm <sup>2</sup>
Length	190 mm
Weight	0.3 kg
Item	Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm <sup>2</sup>	<b>K382</b>

Accessories	Part No.	Page
Steel carrying case	SK43L	213



K 38 ERGO Crimping tool for cable end-sleeves and twin cable end-sleeves 0.25 - 6 mm<sup>2</sup>

- ▶ Square crimping suitable for box terminals and spring clamp technology
- ▶ Ergonomic design
- ▶ Low hand crimping force

**Characteristics**

- Precise drive with ratchet for consistent crimp results
- Front insertion (front crimping)
- Reduced space requirement for processing
- Automatic cross-section range adjustment from 0.25 - 6 mm<sup>2</sup>
- Max. length of cable end-sleeves to be crimped 18 mm, from 12 mm in two steps

Technical data	
Crimping range total	0.25 - 6 mm <sup>2</sup>
Cable end-sleeves	0.25 - 6 mm <sup>2</sup>
Twin cable end-sleeves	2 x 0.5 - 2 x 2.5 mm <sup>2</sup>
Length	160 mm
Weight	0.4 kg
Item	Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.25 - 6 mm <sup>2</sup>	<b>K38ERGO</b>

**K 38 ERGO SET Plastic case with cable end-sleeves, twin cable end-sleeves and crimping tool**





- ▶ Square crimping suitable for box terminals and spring clamp technology
- ▶ Ergonomic design
- ▶ Low hand crimping force
- ▶ Plastic tool case

**Characteristics**

- Accurate drive with ratchet
- Front insertion (front crimping)
- Reduced space requirement for processing
- Automatic cross-section range adjustment from 0.25 - 6 mm<sup>2</sup>
- Max. length of cable end-sleeves to be crimped 18 mm, from 12 mm in two steps

Technical data	
Crimping range total	0.25 - 6 mm <sup>2</sup>
Cable end-sleeves	0.25 - 6 mm <sup>2</sup>
Twin cable end-sleeves	2 x 0.5 – 2 x 2.5 mm <sup>2</sup>
Dimensions	235 x 180 x 50 mm
Length	160 mm
Weight	0.740 kg

Item	Part No.
Plastic case with cable end-sleeves, twin cable end-sleeves and crimping tool	<b>K38ERGOSET</b>

Scope of supply	Colour	Part No.	Quantity	Page
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.25 - 6 mm <sup>2</sup>		K38ERGO	1	228
Ins. cable end-sleeve DIN 46228 part 4, 0.5 mm <sup>2</sup> , 14mm long		4698	100	157
Ins. cable end-sleeve DIN 46228 part 4, 0.75 mm <sup>2</sup> , 14mm long		4708	100	157
Ins. cable end-sleeve DIN 46228 part 4, 1 mm <sup>2</sup> , 14mm long		4718	100	157
Ins. cable end-sleeve DIN 46228 part 4, 1.5 mm <sup>2</sup> , 14mm long		4728	100	157



**K 30/3 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm<sup>2</sup>**

- ▶ Square crimping suitable for box terminals and spring clamp technology

**Characteristics**

- One crimping profile for cross-sections from 0.08 - 10 mm<sup>2</sup> due to automatic cross-section adjustment
- With ratchet for consistent crimp results
- Lateral insertion
- Non-slip handles

Technical data	
Crimping range total	0.08 - 10 mm <sup>2</sup>
Cable end-sleeves	0.08 - 10 mm <sup>2</sup>
Twin cable end-sleeves	2 x 0.5 - 2 x 4 mm <sup>2</sup>
Length	190 mm
Weight	0.3 kg

Item	Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm <sup>2</sup>	<b>K303</b>

Accessories	Part No.	Page
Steel carrying case	SK30L	213



K 27/1 Crimping tool for cable end-sleeves and twin cable end-sleeves 4 - 50 mm<sup>2</sup>

- ▶ 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 consistent crimp results
- Lateral insertion
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- Non-slip handles

Technical data	
Crimping range total	2 x 4 - 50 mm <sup>2</sup>
Cable end-sleeves	10 - 50 mm <sup>2</sup>
Twin cable end-sleeves	2 x 4 - 2 x 16 mm <sup>2</sup>
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 mm <sup>2</sup>	<b>K271</b>

Accessories	Part No.	Page
Steel carrying case	SK4L	213

K 27/2 Crimping tool for cable end-sleeves 50 - 95 mm<sup>2</sup>

- ▶ Special trapezoid crimping suitable for box terminals
- ▶ Special type, especially suitable for fine stranded conductors
- ▶ For large cross-sections to 95 mm<sup>2</sup>

**Characteristics**

- One crimp profile per cross-section
- With ratchet for consistent crimp results
- Lateral insertion
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- Non-slip handles

Technical data	
Crimping range	50 - 95 mm <sup>2</sup>
Length	335 mm
Weight	0.8 kg
Item	Part No.
Crimping tool for cable end-sleeves 50 - 95 mm <sup>2</sup>	<b>K272</b>

Accessories	Part No.	Page
Steel carrying case	SK4L	213

**K 28 Crimping tool for cable end-sleeves and twin cable end-sleeves 4 - 50 mm<sup>2</sup>**

▶ Trapezoid crimping suitable for box terminals

**Characteristics**

- One crimp profile per cross-section
- With ratchet for consistent crimp results
- Lateral insertion
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- Non-slip handles

Technical data	
Crimping range total	4-50 mm <sup>2</sup>
Cable end-sleeves	10-50 mm <sup>2</sup>
Twin cable end-sleeves	2 x 4-2 x 16 mm <sup>2</sup>
Length	335 mm
Weight	0.8 kg

Item	Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 4 - 50 mm <sup>2</sup>	<b>K28</b>

Accessories	Part No.	Page
Steel carrying case	SK4L	213



**K 29 Crimping tool for cable end-sleeves 50 - 95 mm<sup>2</sup>**

▶ Trapezoid crimping suitable for box terminals  
 ▶ For large cross-sections to 95 mm<sup>2</sup>

**Characteristics**

- One crimp profile per cross-section
- With ratchet for consistent crimp results
- Lateral insertion
- Non-slip handles

Technical data	
Crimping range	50 - 95 mm <sup>2</sup>
Length	335 mm
Weight	0.8 kg

Item	Part No.
Crimping tool for cable end-sleeves 50 - 95 mm <sup>2</sup>	<b>K29</b>

Accessories	Part No.	Page
Steel carrying case	SK4L	213



K 10 Crimping tool for insulated cable connections 0.5 - 6 mm<sup>2</sup>

- ▶ Oval crimping
- ▶ To shorten screws M2.6 - M6
- ▶ With wire stripper and cutter

**Characteristics**

- Stripping and crimping is done in two operations
- Wire stripping tool for cross-sections 0.5 - 6 mm<sup>2</sup>
- Colour-coded cross-section assignment

Technical data	
Crimping range total	0.5 - 6 mm <sup>2</sup>
Red insulation sleeve	0.5 - 1.0 mm <sup>2</sup>
Blue insulation sleeve	1.5 - 2.5 mm <sup>2</sup>
Yellow insulation sleeve	4.0 - 6.0 mm <sup>2</sup>
Length	210 mm
Weight	0.19 kg
Item	Part No.
Crimping tool for insulated cable connections 0.5 - 6 mm <sup>2</sup>	<b>K10</b>

Accessories	Part No.	Page
Steel carrying case	MK210L	214

K 14 Crimping tool for insulated cable connections 0.5 - 6 mm<sup>2</sup>

- ▶ Oval crimping
- ▶ Spring-supported tool opening
- ▶ With wire stripper and cutter

**Characteristics**

- Additional three-stage positioning
- Colour-coded cross-section assignment
- Adjustable tool pre-tensioning

Technical data	
Crimping range total	0.5 - 6 mm <sup>2</sup>
Red insulation sleeve	0.5 - 1.0 mm <sup>2</sup>
Blue insulation sleeve	1.5 - 2.5 mm <sup>2</sup>
Yellow insulation sleeve	4.0 - 6.0 mm <sup>2</sup>
Length	215 mm
Weight	0.5 kg
Item	Part No.
Crimping tool for insulated cable connections 0.5 - 6 mm <sup>2</sup>	<b>K14</b>

Accessories	Part No.	Page
Steel carrying case	MK210L	214



**K 80 Presswerkzeug für isolierte Kabelverbindungen 0,1 - 1 mm<sup>2</sup>**

- ▶ Crimping of conductor and insulation in one step
- ▶ An adjusting disc balances the wear of the crimping tool

**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Colour-coded cross-section assignment
- Non-slip handles

Technical data	
Crimping range total	0.1 - 1 mm <sup>2</sup>
Red insulation sleeve	0.5 - 1.0 mm <sup>2</sup>
Yellow insulation sleeve	0.1 - 0.4 mm <sup>2</sup>
Length	195 mm
Weight	0.38 kg

Item	Part No.
Crimping tool for insulated cable connections 0.1 - 1 mm <sup>2</sup>	<b>K80</b>

Accessories	Part No.	Page
Steel carrying case	SK43L	213



**K 81 Crimping tool for insulated cable connections 0.5 - 2.5 mm<sup>2</sup>**

- ▶ Crimping of conductor and insulation in one step
- ▶ An adjusting disc balances the wear of the crimping tool

**Characteristics**

- Double crimping, oval shape
- Accurate drive
- With ratchet for consistent crimp results
- Colour-coded cross-section assignment

Technical data	
Crimping range total	0.5 - 2.5 mm <sup>2</sup>
Red insulation sleeve	0.5 - 1.0 mm <sup>2</sup>
Blue insulation sleeve	1.5 - 2.5 mm <sup>2</sup>
Length	195 mm
Weight	0.38 kg

Item	Part No.
Crimping tool for insulated cable connections 0.5 - 2.5 mm <sup>2</sup>	<b>K81</b>

Accessories	Part No.	Page
Steel carrying case	SK43L	213



K 82 Crimping tool for insulated cable connections 0.5 - 6 mm<sup>2</sup>

- ▶ 33% less effort
- ▶ 3-component handle
- ▶ Highest material quality for a long service life
- ▶ Precise pre-tension setting for the maintenance of a constant crimping performance

**Characteristics**

- Less effort required due to a new mechanical lever system
- 3-component handles. Yellow: a hard core for perfect power transmission. Blue: soft ergonomic handle surface. Grey: super soft non-slip handles.
- Easy handling due to the reduced opening width of the tool, optimal ergonomic due to the position of the palms and fingers, which is gentle to the joints.
- Crimping of conductor and insulation in one step

Technical data	
Crimping range total	0.5 - 6.0 mm <sup>2</sup>
Red insulation sleeve	0.5 - 1.0 mm <sup>2</sup>
Blue insulation sleeve	1.5 - 2.5 mm <sup>2</sup>
Yellow insulation sleeve	4.0 - 6.0 mm <sup>2</sup>
Length	225 mm
Weight	0.53 kg
Item	Part No.
Crimping tool for insulated cable connections 0.5 - 6 mm <sup>2</sup>	<b>K82A</b>

Accessories	Part No.	Page
Steel carrying case	MK230L	214

K 16 Crimping tool for insulated solderless terminals 10 + 16 mm<sup>2</sup>

- ▶ Oval crimping
- ▶ Crimping tool even for meter connections

**Characteristics**

- With ratchet for consistent crimp results
- Colour-coded cross-section assignment

Technical data	
Crimping range total	10 + 16 mm <sup>2</sup>
Red insulation sleeve	10 mm <sup>2</sup>
Blue insulation sleeve	16 mm <sup>2</sup>
Length	305 mm
Weight	0.61 kg
Item	Part No.
Crimping tool for insulated solderless terminals 10 + 16 mm <sup>2</sup>	<b>K16</b>

Accessories	Part No.	Page
Steel carrying case	SK4L	213

**K 60 Crimping tool for non-insulated tabs and receptacles 0.5 - 6 mm<sup>2</sup>**

- ▶ Roll-crimping
- ▶ To shorten screws M2.5 - M6

**Characteristics**

- Crimping of conductor and insulation in two steps
- With wire stripper and cutter for cross-sections 0.75 - 6 mm<sup>2</sup>
- For 2.8 and 4.8 and 6.3 mm tab widths

Technical data	
Crimping range	0.5 - 6 mm <sup>2</sup>
Length	225 mm
Weight	0.2 kg
Item	Part No.
Crimping tool for non-insulated tabs and receptacles 0.5 - 6 mm <sup>2</sup>	<b>K60</b>

Accessories	Part No.	Page
Steel carrying case	MK210L	214



**K 57/2 Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm<sup>2</sup>**

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Spring-supported tool opening
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- An adjusting disc balances the wear of the crimping tool
- For tabs and receptacles, tab width 2.8 mm

Technical data	
Crimping range	0.1-1 mm <sup>2</sup>
Length	220 mm
Weight	0.55 kg
Item	Part No.
Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm <sup>2</sup>	<b>K572</b>



K 58/2 Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm<sup>2</sup>

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- Spring-supported tool opening
- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- An adjusting disc balances the wear of the crimping tool
- For tabs and receptacles, tab width 4.8 mm

Technical data	
Crimping range	0.5 - 2.5 mm <sup>2</sup>
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 mm <sup>2</sup>	<b>K582</b>

K 59/2 Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 6 mm<sup>2</sup>

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- Spring-supported tool opening
- An adjusting disc balances the wear of the crimping tool
- For tabs and receptacles, tab width 6.3 mm

Technical data	
Crimping range	0.5 - 6 mm <sup>2</sup>
Length	220 mm
Weight	0.51 kg
Item	Part No.
Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 6 mm <sup>2</sup>	<b>K592</b>

**K 67 Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm<sup>2</sup>**

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Spring-supported tool opening

**Characteristics**

- With ratchet for consistent crimp results
- Parallel guided crimping jaws
- For tabs and receptacles, tab width 2.8 mm

Technical data	
Crimping range	0.1 - 1 mm <sup>2</sup>
Length	210 mm
Weight	0.5 kg

Item	Part No.
Crimping tool for non-insulated tabs and receptacles 2.8 mm; 0.1 - 1 mm <sup>2</sup>	<b>K67</b>

Accessories	Part No.	Page
Steel carrying case	MK210L	214



**K 65 Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm<sup>2</sup>**

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Spring-supported tool opening

**Characteristics**

- With ratchet for consistent crimp results
- Parallel guided crimping jaws
- For tabs and receptacles, tab width 4.8 mm

Technical data	
Crimping range	0.5 - 2.5 mm <sup>2</sup>
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 mm <sup>2</sup>	<b>K65</b>

Accessories	Part No.	Page
Steel carrying case	MK210L	214



K 63 Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 2.5 mm<sup>2</sup> with lateral conductor connector

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step

**Characteristics**

- With ratchet for consistent crimp results
- Excellent leverage
- Parallel guided crimping jaws
- For tabs and receptacles, tab width 6.3 mm

Technical data	
Crimping range	0.5 - 2.5 mm <sup>2</sup>
Length	265 mm
Weight	0.6 kg
Item	Part No.
Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 2.5 mm <sup>2</sup> with lateral conductor connector	<b>K63</b>

K 64 Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 1.5 mm<sup>2</sup> with lateral conductor connector

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step

**Characteristics**

- With ratchet for consistent crimp results
- Excellent leverage
- Parallel guided crimping jaws
- For tabs and receptacles, tab width 6.3 mm

Technical data	
Crimping range	0.5 - 1.5 mm <sup>2</sup>
Length	265 mm
Weight	0.6 kg
Item	Part No.
Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 1.5 mm <sup>2</sup> with lateral conductor connector	<b>K64</b>

**K 68 Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 2.5 mm<sup>2</sup>**

- ▶ Roll-crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Spring-supported tool opening

**Characteristics**

- With ratchet for consistent crimp results
- Parallel guided crimping jaws
- For tabs and receptacles, tab width 6.3 mm

Technical data	
Crimping range	0.5 - 2.5 mm <sup>2</sup>
Length	265 mm
Weight	0.6 kg
Item	Part No.
Crimping tool for non-insulated tabs and receptacles 6.3 mm tab width 0.5 - 2.5 mm <sup>2</sup>	<b>K68</b>



**K 93 Crimping tool for connectors for solid conductors 1.5 - 4 mm<sup>2</sup>**

- ▶ Hexagonal crimping
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- Non-slip handles
- An adjusting disc balances the wear of the crimping tool

Technical data	
Crimping range	1.5 - 4 mm <sup>2</sup>
Length	220 mm
Weight	0.56 kg
Item	Part No.
Crimping tool for connectors for solid conductors 1.5 - 4 mm <sup>2</sup>	<b>K93</b>



K 94 Crimping tool for tubular cable lugs and connectors for solid conductors 6 - 10 mm<sup>2</sup>

- ▶ Hexagonal crimping
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- Non-slip handles
- An adjusting disc balances the wear of the crimping tool

Technical data	
Crimping range	6 - 10 mm <sup>2</sup>
Length	220 mm
Weight	0.56 kg
Item	Part No.
Crimping tool for tubular cable lugs and connectors for solid conductors 6 - 10 mm <sup>2</sup>	<b>K94</b>

K 13 Crimping tool 0.5 - 6 mm<sup>2</sup>

- ▶ Indent crimping
- ▶ To shorten screws M2.6 - M6
- ▶ With wire stripper and cutter

**Characteristics**

- For tubular cable lugs and connectors standard type, as well as solderless terminals DIN 46234 and pin terminals DIN 46230

Technical data		
Crimping range	0.5 - 6 mm <sup>2</sup>	
Length	210 mm	
Weight	0.23 kg	
Item	Part No.	
Crimping tool 0.5 - 6 mm <sup>2</sup>	<b>K13</b>	
Accessories	Part No.	Page
Steel carrying case	MK210L	214



**K 2 Crimping tool for tubular cable lugs and connectors, standard type, 0.75 - 16 mm<sup>2</sup>**

- ▶ Indent crimping
- ▶ Ideal crimping tool with spring supported tool opening

**Characteristics**

- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool

Technical data		
Crimping range	0.75 - 16 mm <sup>2</sup>	
Length	325 mm	
Weight	0.6 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors, standard type 0.75 - 16 mm <sup>2</sup>	<b>K2</b>	
Accessories	Part No.	Page
Steel carrying case	SK4L	213



**K 02 Crimping tool for tubular cable lugs and connectors for solid conductors 0.75 - 16 mm<sup>2</sup>**

- ▶ Indent crimping
- ▶ Ideal crimping tool with spring supported tool opening
- ▶ For tubular cable lugs and connectors for solid conductors

**Characteristics**

- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool

Technical data		
Crimping range	0.75 - 16 mm <sup>2</sup>	
Length	325 mm	
Weight	0.6 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors for solid conductors 0.75 - 16 mm <sup>2</sup>	<b>K02</b>	
Accessories	Part No.	Page
Steel carrying case	SK4L	213



K 25 Crimping tool 0.5 - 16 mm<sup>2</sup>

- ▶ Indent crimping
- ▶ Ideal crimping tool with spring supported tool opening
- ▶ For solderless terminals DIN 46234, pin terminals DIN 46230
- ▶ For nickel and stainless steel tubular cable lugs and connectors to 6 mm<sup>2</sup>

## Characteristics

- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool

Technical data	
Crimping range	0.5 - 16 mm <sup>2</sup>
Length	325 mm
Weight	0.6 kg
Item	Part No.
Crimping tool 0.5 - 16 mm <sup>2</sup>	<b>K25</b>

Accessories	Part No.	Page
Steel carrying case	SK4L	213

K 95 Crimping tool 16 - 95 mm<sup>2</sup>

- ▶ Indent crimping

## Characteristics

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- For solderless terminals DIN 46234, pin terminals DIN 46230
- With revolving dies
- Excellent leverage

Technical data	
Crimping range	16 - 95 mm <sup>2</sup>
Length	630 mm
Weight	3.6 kg
Item	Part No.
Crimping tool 16 - 95 mm <sup>2</sup>	<b>K95</b>

**TK 95 Crimping tool 16 - 95 mm<sup>2</sup> for workbench mounting**

- ▶ Indent crimping
- ▶ Ideal tool for work bench mounting

**Characteristics**

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- For solderless terminals DIN 46234, pin terminals DIN 46230
- With revolving dies
- Excellent leverage

Technical data	
Crimping range	16 - 95 mm <sup>2</sup>
Length	700 mm
Weight	3.9 kg
Item	Part No.
Crimping tool 16 - 95 mm <sup>2</sup> for workbench mounting	<b>TK95</b>



**K 5 / K 5 SP Crimping tools 6 - 50 mm<sup>2</sup>**

- ▶ Indent crimping
- ▶ Version with ratchet for consistent crimp results
- ▶ Low maintenance mechanical drive

**Characteristics**

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- With revolving dies
- Exact cross-section designation on the dies

Technical data	
Crimping range	6 - 50 mm <sup>2</sup>
Length	600 mm
Weight	2.4 kg
Item	Part No.
Crimping tool 6 - 50 mm <sup>2</sup>	<b>K5</b>
Crimping tool with ratchet 6 - 50 mm <sup>2</sup>	<b>K5SP</b>



K 6 / K 6 SP Crimping tools 50 - 120 mm<sup>2</sup>

- ▶ Indent crimping
- ▶ Version with ratchet for consistent crimp results
- ▶ Low maintenance mechanical drive

**Characteristics**

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- With revolving dies
- Exact cross-section designation on the dies
- Telescopic lever handles

Technical data	
Crimping range	50 - 120 mm <sup>2</sup>
Length	970 mm
Weight	4.4 kg
Item	Part No.
Crimping tool 50 - 120 mm <sup>2</sup>	<b>K6</b>
Crimping tool with ratchet 50 - 120 mm <sup>2</sup>	<b>K6SP</b>

K 07 / K 07 SP Crimping tools 185 - 400 mm<sup>2</sup>

- ▶ Indent crimping
- ▶ Extremely wide cross section range up to 400 mm<sup>2</sup>
- ▶ Version with ratchet for consistent crimp results
- ▶ Low maintenance mechanical drive

**Characteristics**

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- With revolving dies
- Exact cross-section designation on the dies
- Telescopic lever handles

Technical data	
Crimping range	185 - 400 mm <sup>2</sup>
Length	975 mm
Weight	4.7 kg
Item	Part No.
Crimping tool 185 - 400 mm <sup>2</sup>	<b>K07</b>
Crimping tool with ratchet 185 - 400 mm <sup>2</sup>	<b>K07SP</b>

**K 7 / K 7 SP Crimping tools 120 - 240 mm<sup>2</sup>**

- ▶ Indent crimping
- ▶ Large cross section range up to 240 mm<sup>2</sup>
- ▶ Version with ratchet for consistent crimp results
- ▶ Low maintenance mechanical drive

**Characteristics**

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- With revolving dies
- Exact cross-section designation on the dies
- Telescopic lever handles

Technical data	
Crimping range	120 - 240 mm <sup>2</sup>
Length	975 mm
Weight	4.6 kg
Item	Part No.
Crimping tool 120 - 240 mm <sup>2</sup>	<b>K7</b>
Crimping tool 120 - 240 mm <sup>2</sup> , with ratchet	<b>K7SP</b>



**K 8 / K 8 SP Crimping tools 35 - 95 mm<sup>2</sup>**

- ▶ Indent crimping
- ▶ Version with ratchet for consistent crimp results
- ▶ Low maintenance mechanical drive

**Characteristics**

- For tubular cable lugs and connectors, standard type
- For tubular cable lugs and connectors for fine stranded conductors
- With revolving dies
- Exact cross-section designation on the dies
- Telescopic lever handles

Technical data	
Crimping range	35 - 95 mm <sup>2</sup>
Length	970 mm
Weight	4.4 kg
Item	Part No.
Crimping tool 35 - 95 mm <sup>2</sup>	<b>K8</b>
Crimping tool with ratchet 35 - 95 mm <sup>2</sup>	<b>K8SP</b>



K 04 Crimping tool for tubular cable lugs and connectors, standard type, 10 - 25 mm<sup>2</sup>

- ▶ Hexagonal crimping
- ▶ Tool pre-tensioning adjustable
- ▶ Large cross-section range up to 25 mm<sup>2</sup>

**Characteristics**

- Energy-efficient ergonomic drive
- With ratchet for consistent crimp results
- Exact cross-section assignment thanks to permanent marking on the crimping tool
- An adjusting disc balances the wear of the crimping tool

Technical data	
Crimping range	10 - 25 mm <sup>2</sup>
Length	260 mm
Weight	0.56 kg
Item	Part No.
Crimping tool for tubular cable lugs and connectors, standard type 10 - 25 mm <sup>2</sup>	<b>K04</b>

K 05 BC Crimping tool for tubular cable lugs and connectors blue connection® 6 - 50 mm<sup>2</sup>

- ▶ Accurate assignment of crimping tool/crimping die through colour-coding system
- ▶ For compacted conductors to VDE 0295 class 2
- ▶ Effort-saving and low maintenance mechanical drive

**Characteristics**

- Hexagonal crimping
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	6 - 50 mm <sup>2</sup>	
Length	390 mm	
Weight	1.1 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors, blue connection® 6 - 50 mm <sup>2</sup>	<b>K05BC</b>	
Accessories	Part No.	Page
Steel carrying case	SK65L	215

**K 05 / K 05 SP Crimping tools for tubular cable lugs and connectors, standard type, 6 - 50 mm<sup>2</sup>**

- ▶ Hexagonal crimping
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data	
Crimping range	6 - 50 mm <sup>2</sup>
Length	390 mm
Weight	1.1 kg

Item	Part No.
Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm <sup>2</sup>	<b>K05</b>
Crimping tool with ratchet for tubular cable lugs and connectors, standard type 6-50 mm <sup>2</sup>	<b>K05SP</b>

Accessories	Part No.	Page
Steel carrying case	SK65L	215



**K 05 D / K 05 D SP Crimping tools for DIN compression cable lugs and connectors 6 - 50 mm<sup>2</sup>**

- ▶ Hexagonal crimping
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data	
Crimping range	6 - 50 mm <sup>2</sup>
Length	390 mm
Weight	1.1 kg

Item	Part No.
Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 6 - 50 mm <sup>2</sup>	<b>K05D</b>
Crimping tool with ratchet for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 6-50 mm <sup>2</sup>	<b>K05DSP</b>

Accessories	Part No.	Page
Steel carrying case	SK65L	215



K 08 / K 08 SP Crimping tools for tubular cable lugs and connectors, standard type, 16 - 95 mm<sup>2</sup>

- ▶ Hexagonal crimping
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	16 - 95 mm <sup>2</sup>	
Length	530 mm	
Weight	1.8 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors, standard type 16 - 95 mm <sup>2</sup>	<b>K08</b>	
Crimping tool with ratchet for tubular cable lugs and connectors, standard type 16-95 mm <sup>2</sup>	<b>K08SP</b>	
Accessories	Part No.	Page
Steel carrying case	SK120L	215

K 08 D / K 08 D SP Crimping tools for DIN compression cable lugs and connectors 16 - 95 mm<sup>2</sup>

- ▶ Hexagonal crimping
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	16 - 95 mm <sup>2</sup>	
Length	530 mm	
Weight	1.8 kg	
Item	Part No.	
Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 16 - 95 mm <sup>2</sup>	<b>K08D</b>	
Crimping tool with ratchet for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 16 - 95 mm <sup>2</sup>	<b>K08DSP</b>	
Accessories	Part No.	Page
Steel carrying case	SK120L	215



**K 06 BC Crimping tool for tubular cable lugs and connectors blue connection® 10 - 120 mm<sup>2</sup>**

- ▶ Accurate assignment of crimping tool/crimping die through colour-coding system
- ▶ For compacted conductors to VDE 0295 class 2
- ▶ Effort-saving and low maintenance mechanical drive

Max connection



**Characteristics**

- Hexagonal crimping
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	10 - 120 mm <sup>2</sup>	
Length	650 mm	
Weight	2.9 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors, blue connection® 10 - 120 mm <sup>2</sup>	<b>K06BC</b>	
Accessories	Part No.	Page
Steel carrying case	SK120L	215

**K 06 / K 06 SP Crimping tools for tubular cable lugs and connectors, standard type, 10 - 120 mm<sup>2</sup>**

- ▶ Hexagonal crimping
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

Max connection



**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	10 - 120 mm <sup>2</sup>	
Length	650 mm	
Weight	2.9 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors, standard type 10-120 mm <sup>2</sup>	<b>K06</b>	
Crimping tool with ratchet for tubular cable lugs and connectors, standard type 10-120 mm <sup>2</sup>	<b>K06SP</b>	
Accessories	Part No.	Page
Steel carrying case	SK120L	215

K 06 D / K 06 D SP Crimping tools for DIN compression cable lugs and connectors 10 - 120 mm<sup>2</sup>

- ▶ Hexagonal crimping
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	10 - 120 mm <sup>2</sup>	
Length	650 mm	
Weight	2.9 kg	
Item	Part No.	
Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 10 - 120 mm <sup>2</sup>	<b>K06D</b>	
Crimping tool with ratchet for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 10-120 mm <sup>2</sup>	<b>K06DSP</b>	
Accessories	Part No.	Page
Steel carrying case	SK120L	215

K 09 BC Crimping tool for tubular cable lugs and connectors blue connection® 25 - 150 mm<sup>2</sup>

- ▶ Accurate assignment of crimping tool/crimping die through colour-coding system
- ▶ Large cross section range up to 150 mm<sup>2</sup>
- ▶ For compacted conductors to VDE 0295 class 2
- ▶ Effort-saving and low maintenance mechanical drive

**Characteristics**

- Hexagonal crimping
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data		
Crimping range	25 - 150 mm <sup>2</sup>	
Length	650 mm	
Weight	2.9 kg	
Item	Part No.	
Crimping tool for tubular cable lugs and connectors, blue connection® 25-150 mm <sup>2</sup>	<b>K09BC</b>	
Accessories	Part No.	Page
Steel carrying case	SK120L	215

**K 09 / K 09 SP Crimping tools for tubular cable lugs and connectors, standard type, 25 - 150 mm<sup>2</sup>**

- ▶ Hexagonal crimping
- ▶ Large cross section range up to 150 mm<sup>2</sup>
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data	
Crimping range	25 - 150 mm <sup>2</sup>
Length	650 mm
Weight	2.9 kg
Item	Part No.
Crimping tool for tubular cable lugs and connectors, standard type 25-150 mm <sup>2</sup>	<b>K09</b>
Crimping tool with ratchet for tubular cable lugs and connectors, standard type 25-150 mm <sup>2</sup>	<b>K09SP</b>

Accessories	Part No.	Page
Steel carrying case	SK120L	215



**K 09 D / K 09 D SP Crimping tools for DIN compression cable lugs and connectors 25 - 150 mm<sup>2</sup>**

- ▶ Hexagonal crimping
- ▶ Large cross section range up to 150 mm<sup>2</sup>
- ▶ Effort-saving and low maintenance mechanical drive
- ▶ Version with ratchet for consistent crimp results

**Characteristics**

- With revolving dies
- Exact cross-section assignment thanks to permanent marking on the dies

Technical data	
Crimping range	25 - 150 mm <sup>2</sup>
Length	650 mm
Weight	2.9 kg
Item	Part No.
Crimping tool for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 25 - 150 mm <sup>2</sup>	<b>K09D</b>
Crimping tool with ratchet for compression cable lugs and connectors (DIN 46235 / DIN 46267 part 1) 25-150 mm <sup>2</sup>	<b>K09DSP</b>

Accessories	Part No.	Page
Steel carrying case	SK120L	215



## K 511 / K 512 Crimping tools for gas-tight connections



- ▶ Parallel guided crimping jaws
- ▶ Suitable for gas-tight connections

**Characteristics**

- Non-insulated tubular cable lugs, ring and fork type
- Parallel and butt connectors
- Optimised force transmission
- With ratchet for consistent crimp results
- Non-slip handles

Technical data		
Length	270 mm	
Weight	0.7 kg	
Item	Crimping range mm <sup>2</sup>	Part No.
Mechanical crimping tool 1 - 4 mm <sup>2</sup>	1-4	<b>K511</b>
Mechanical crimping tool 6 + 10 mm <sup>2</sup>	6+10	<b>K512</b>

## DN-K 74/2 Mechanical crimping tool for BNC connectors and coax cables



- ▶ Hexagonal crimping
- ▶ Tool pre-tensioning adjustable

**Characteristics**

- With ratchet for consistent crimp results
- An adjusting disc balances the wear of the crimping tool
- Suitable for: Coax cable RG 58, RG 59, RG 62 and RG 71

Technical data	
Length	220 mm
Weight	0.560 kg
Item	Part No.
Mechanical crimping tool for BNC connector, coax cable RG 58, RG 59, RG 62 and RG 71	<b>DNK742</b>

**K 90 MC3 2 Crimping tool for multi-contact plug connectors MC3, 2.5 - 6 mm<sup>2</sup>**

- ▶ Parallel guided crimping jaws
- ▶ Includes positioning facility to protect against incorrect crimps



**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Optimised force transmission
- Non-slip handles

Technical data	
Crimping range	2.5 - 6 mm <sup>2</sup>
Length	270 mm
Weight	0.735 kg
Item	Part No.
Mechanical crimping tool for Multi-Contact-Plug-in system MC3, 2.5 - 6 mm <sup>2</sup>	<b>K90MC32</b>



**K90 MC4 1 Crimping tool for multi-contact plug connectors MC4, 1.5 - 4 mm<sup>2</sup>**

- ▶ Parallel guided crimping jaws
- ▶ Includes positioning facility to protect against incorrect crimps



**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Optimised force transmission
- Non-slip handles

Technical data	
Crimping range	1.5 - 4 mm <sup>2</sup>
Length	270 mm
Weight	0.735 kg
Item	Part No.
Mechanical crimping tool for Multi-Contact-Plug-in system MC4, 1.5 - 4 mm <sup>2</sup>	<b>K90MC41</b>



K90 MC4 2 Crimping tool for multi-contact plug connectors MC4, 2.5 - 6 mm<sup>2</sup>

- ▶ Parallel guided crimping jaws
- ▶ Includes positioning facility to protect against incorrect crimps

**Characteristics**

- Accurate drive
- With ratchet for consistent crimp results
- Optimised force transmission
- Non-slip handles

**Technical data**

Crimping range	2.5 - 6 mm <sup>2</sup>
Length	270 mm
Weight	0.735 kg

Item	Part No.
Mechanical crimping tool for Multi-Contact-Plug-in system MC4, 2.5 - 6 mm <sup>2</sup>	<b>K90MC42</b>

**K907 MC SET Case with crimping tool for multi-contact plug connectors and photovoltaic stripper**

- ▶ Roll-crimping
- ▶ Spring supported tool opening
- ▶ Adjustable tool pretension
- ▶ An adjusting disc balances the wear of the crimping tool

**Characteristics**

- Includes positioning facility to protect against incorrect crimps
- Precise drive with ratchet for consistent crimp results
- Complete set in plastic case
- Optimised force transmission
- Precise and simple stripping options
- Crimping dies with easy-to-replace fixing pins

Technical data	
Crimping range	1.5-6 mm <sup>2</sup>
Multi-contact-Plug-in system:	MC4: 1.5 - 6 mm <sup>2</sup>
Dimensions	235 x 180 x 50 mm
Total weight	900 g

Item	Part No.	
Case with crimping tool for multi-contact plug connectors and photovoltaic stripper	<b>K907MCSET</b>	
Scope of supply	Part No.	Page
Mechanical crimping tool for Multi-Contact-Plug-in system MC4, 1.5 - 6 mm <sup>2</sup>		
Crimping dies MC4 1.5, 2.5 mm <sup>2</sup>		
Crimping dies MC4 4, 6 mm <sup>2</sup>		
Positionier MC4 contacts		
Photovoltaic stripper	KL735PV	521



## KP 1 / KP 1 L Mechanical basic tools of the Klauke Pro-Series































- ▶ Easy change of crimping head without tools
- ▶ Compatible with all crimping heads of the Klauke Pro-Series

**Characteristics**













- Standardised mounting of crimping heads
- With ratchet for consistent crimp results

Item	Weight kg	Part No.
Basic tool from the Klauke Pro-Series, length 151 mm	0.2	<b>KP1</b>
Basic tool from the Klauke Pro-Series, length 207 mm	0.3	<b>KP1L</b>

Accessories	Part No.	Page
Plastic case	MKCP1	216

Suitable for	Crimping range mm <sup>2</sup>	Crimp profile	Part No.
<b>Crimping heads for cable end-sleeves</b>			
 Cable end-sleeves, trapezoid crimping	0.14 - 6		<b>KP 312</b>
 Cable end-sleeves, square pressing	0.08 - 10		<b>KP 303</b>
 Cable end-sleeves, square pressing	10 - 16		<b>KP 304</b>
 Cable end-sleeves, round pressing	0.14 - 2.5		<b>KP 350</b>
 Cable end-sleeves, round pressing for narrow chamber sizes	1.5 - 6		<b>KP 351</b>
 Cable end-sleeves, round pressing for narrow chamber sizes	10 - 16		<b>KP 352</b>
 Cable end-sleeves DIN 46228, part 2, roll-crimping	0.5 - 2.5		<b>KP 66</b>
<b>Crimping heads for insulated cable connections</b>			
 Insulated cable connections (yellow and red)	0.1 - 1		<b>KP 80</b>
 Insulated cable connections (red and blue)	0.5 - 2.5		<b>KP 81</b>
 Insulated cable connections (red, yellow, blue)	0.5 - 6		<b>KP 82</b>
 Insulated cable connections (yellow)	4 - 6		<b>KP 83</b>
<b>Crimping heads for tubular cable lugs and solderless terminals</b>			
 Tubular cable lugs and solderless terminals	0.5 - 6		<b>KP 232</b>
 Tubular cable lugs and solderless terminals	4 - 10		<b>KP 242</b>
<b>Crimping heads for photovoltaic</b>			
 Connector for photovoltaics 3 mm dia.	2.5 - 4		<b>KP 90 MC31</b>



Suitable for	Crimping range mm <sup>2</sup>	Crimp profile	Part No.
<b>Crimping heads for receptacles</b>			
 Part No. 3720. Receptacles 6.3 x 0.8 mm with lateral conductor connector	0.5 - 1		<b>KP 631</b>
 Part No. 3725, receptacles 6.3 x 0.8 mm with lateral conductor connector	0.5 - 1.5		<b>KP 64</b>
 Part No. 3735, receptacles 6.3 x 0.8 mm with lateral conductor connector	1.5 - 2.5		<b>KP 632</b>
 For receptacles 2.8 mm tab width	0.1 - 1		<b>KP 67</b>
 For receptacles 4.8 mm tab width	0.5 - 2.5		<b>KP 65</b>
 For receptacles 6.3 mm tab width	0.5 - 2.5		<b>KP 68</b>

**SKP 1 Crimping head set of the Klauke Pro-Series**

- ▶ Easy change of crimping head without tools
- ▶ Crimping of conductor and insulation in one step
- ▶ Spring supported tool opening

**Characteristics**

- Parallel guided crimping heads
- With ratchet for consistent 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-Series	<b>SKP1</b>	
Scope of supply	Part No.	Page
Basic tool from the Klauke Pro-Series, length 151 mm	KP1	256
Crimping head for insulated cable connections 0.5 - 2.5 mm <sup>2</sup> (red, blue)	KP81	
Crimping head for cable end-sleeves, square pressing, 0.08 - 10 mm <sup>2</sup>	KP303	
Crimping head for non-insulated tubular cable lugs and solderless terminals 0.5 - 6 mm <sup>2</sup>	KP232	

## SKP 6 Crimping heads set of the Klauke Pro-Series



- ▶ Easy change of crimping head without tools
- ▶ Crimping of conductor and insulation in one step
- ▶ Parallel guided crimping heads
- ▶ Spring supported tool opening

**Characteristics**

- Roll-crimping
- For crimping of non-insulated receptacles with lateral conductor connector
- With ratchet for consistent 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-Series	<b>SKP6</b>	
Scope of supply	Part No.	Page
Basic tool from the Klauke Pro-Series, length 151 mm	KP1	256
Crimping head for receptacles 6.3 x 0.8 mm with lateral conductor connector, 0.5 - 1 mm <sup>2</sup> , for Item 3720	KP631	
Crimping head for receptacles 6.3 x 0.8 mm with lateral conductor connector, 1.5 - 2.5 mm <sup>2</sup> , for Item 3735	KP632	
Crimping head for receptacles 6.3 x 0.8 mm with lateral conductor connector, 0.5 - 1.5 mm <sup>2</sup> , 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 consistent crimp results
- An adjusting disc balances the wear of the crimping tool

Technical data		
Length	220 mm	
Weight	0.6 kg	
Item	Part No.	
Crimping tool with interchangeable dies	<b>K507</b>	
Scope of supply	Part No.	Page
Crimping die for insl. connector 0.5 - 6 mm <sup>2</sup>	IS5071	
Crimping dies AE 50, 0.14 - 10 mm <sup>2</sup>	AE501	414
Crimping die for insulated connectors 0.5 - 6 mm <sup>2</sup>	Q5071	

**K 50 Crimping tool for interchangeable dies**

- ▶ Parallel guided crimping jaws
- ▶ Fast change of crimping die without readjustment by special fixing system

**Characteristics**

- Optimised force transmission
- With ratchet
- Non-slip handles

Technical data		
Length	220 mm	
Weight	0.6 kg	
Item	Part No.	
Crimping tool for interchangeable dies 0.1 - 50 mm <sup>2</sup>	<b>K50</b>	
Accessories	Part No.	Page
Steel carrying case	MK55	214



**Available dies for Series 50 for K 50**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, Cu, standard type		0.75 - 10		414
Tubular cable lugs and connectors for solid conductors, Cu		1.5 - 10		414
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		0.5 - 10		414
<b>Cable end-sleeves</b>				
Cable end-sleeves		0.14 - 50		414
<b>Cable connections, insulated and non-insulated</b>				
Non insulated receptacles		0.25 - 6		415
for pin and shielded receptacles, BNC connectors for coax cables RG 58,59,60 and 71				415
Turned pin connectors, pin receptacles		0.1 - 4		415
Insulated cable connections, double crimping		0.1 - 6		415
Insulated cable connections, single crimping		0.5 - 16		415

K 35/4 Crimping tool for interchangeable dies 6 - 150 mm<sup>2</sup>

- ▶ Change of crimping dies without tools
- ▶ Optimised for cable glands and panel building
- ▶ Effort-saving and low maintenance mechanical drive







































**Characteristics**

- Narrow crimping
- With telescopic handles
- Crimping 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 mm <sup>2</sup>	<b>K354</b>	
Accessories	Part No.	Page
Steel carrying case	SK65L	215



**Available dies for Series 4 for K 35/4**

Suitable for	Connecting material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection® for compacted conductors acc. to VDE 0295, class 2		6 - 150		416
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 150		417
Insulated tubular cable lugs and connectors, standard type, insulated pin terminals		10 - 70		417
Tubular cable lugs and connectors for fine stranded conductors		10 - 35		418
Tubular cable lugs and compression joints for solid conductors		1.5 - 16		418
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		418
Tubular cable lugs and connectors, Ni		0.5 - 16		418
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 120		418
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) - Cu		10 - 35		419
Insulated solderless terminals and connectors		10 - 16		419
<b>Sleeves for compacted conductors and sector shaped conductors</b>				
Pre-rounding dies for sector shaped Al and Cu conductors		10sm - 150se / 120sm		419
<b>Aluminum compression cable lugs and connectors to DIN</b>				
Aluminum compression cable lugs and connectors to DIN		10 - 70		420
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 50		420
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 70		420
<b>Clamps and screw connectors</b>				
Clamps, C-type		4 - 35		420
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 50		420
Twin cable end-sleeves		2 x 4 - 2 x 16		421
Twin cable end-sleeves for fine stranded conductors		2 x 4 - 2 x 16		421
Cable end-sleeves for fine stranded conductors		10 - 50		421

Please observe the restrictions in the technical index when crimping connectors!



**K 18 Crimping tool for interchangeable dies acc. to DIN 48083, part 1, 6 - 185 mm<sup>2</sup>**

- ▶ Change of crimping dies without tools
- ▶ Optimised for cable glands and panel building
- ▶ Effort-saving and low maintenance mechanical drive

**Characteristics**

- Narrow crimping
- With telescopic handles
- C-head rotates 360°
- Fast change of crimping die without readjustment by special fixing system

**Technical data**

Length	Stepless 580 - 830 mm
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

















Weight	2.5 kg
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Item	Part No.
Crimping tool for interchangeable dies acc. to DIN 48083, sheet 1, 6 - 185 mm <sup>2</sup>	<b>K18</b>

Accessories	Part No.	Page
Steel carrying case	MK18	215

**18**

**Available dies for Series 18 for K 18**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 185		427
Connectors, Standard type		6 - 95		427
Insulated tubular cable lugs and compression joints standard type, insulated pin terminals		10 - 95		427
Tubular cable lugs and connectors for fine stranded conductors		10 - 50		428
Tubular cable lugs and connectors for solid conductors		1.5 - 16		428
<b>Copper compression cable lugs and connectors acc. to DIN</b>				
Copper compression cable lugs (DIN 46235) and compression joints acc. to DIN		6 - 185		428
Connectors DIN 46267		6 - 70		428
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230)		10 - 70		429
Insulated solderless terminals		10 - 50		429
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding dies for sector-shaped Al and Cu conductors		10 sm - 240 se / 185 sm		429
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs acc. to DIN - Al		10 - 185		430
Aluminum connectors		10 - 70		430
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 95		430
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 185		430
<b>Clamps and screw connectors</b>				
Clamps, C-type		4 - 50		430
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 95		431
Twin cable end-sleeves		2 x 4 - 2 x 16		431
Cable end-sleeves for fine stranded conductors		10 - 95		431
Twin cable end-sleeves for fine stranded conductors		2 x 4 - 2 x 16		432
<b>Cutting die</b>				
Cutting die 18 mm		18 mm dia.		432

Please observe the restrictions in the technical index when crimping connectors!



K 22 Crimping tool for interchangeable dies 6 - 300 mm<sup>2</sup>
**22**  
 KLAUKE


- ▶ Change of crimping dies without tools
- ▶ Optimised for cable glands and panel building
- ▶ Effort-saving and low maintenance mechanical drive

**Characteristics**

- Narrow crimping
- Large cross section by half shell dies
- With telescopic handles
- Crimping head rotates 360°, flip flop style
- 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 mm <sup>2</sup>	<b>K22</b>

Accessories	Part No.	Page
Steel carrying case	MK22	216



**Available dies for Series 22 for K 22**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 300		433
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 300		434
Insulated tubular cable lugs and compression joints, standard type, insulated pin terminals		10 - 150		434
Tubular cable lugs and connectors for fine stranded conductors		10 - 70		435
Tubular cable lugs and connectors for solid conductors		1.5 - 16		435
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		435
Tubular cable lugs and connectors, Ni		10 - 50		435
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 300		436
Double compression cable lugs		2 x 50 - 2 x 70		436
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234), connectors (DIN 46267, part 1) acc. to DIN		10 - 70		437
Insulated solderless terminals		10 - 70		437
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding dies for sector shaped Al and Cu conductors		10 sm - 300 se / 240 sm		437
<b>Aluminum compression cable lugs and connectors to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN - Al		10 - 300		438
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		438
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25 / 4 - 120 / 20		439
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		439
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 300		438
<b>Clamps and screw connectors</b>				
C-clamps		4 - 50		439
H-clamps		70		439
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 240		440
Twin cable end-sleeves		2 x 4 - 2 x 16		440
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 240		440
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		441

Please observe the restrictions in the technical index when crimping connectors!

## Precise cutting by hand.

### Mechanical tools for cutting.

Precise cuts are no longer rocket science - as long as you have the right tool to hand.

The potential for cutting is endless. That's why Klauke places so much importance on the quality of its cutting tools. They are all made from high-quality materials, are rust-proof and surface-finished. This symbiosis of quality and longevity expand the product features and make them unique. The cutting tools are accurately finished and are set apart by high material quality and precision. Because precision plays a key role, Klauke's cutting tools have ergonomically-designed handles and are perfectly matched to the drive, thereby maximising hand force transmission.



- Cutting tools for aluminum and copper cables up to 100 mm dia.
- Fully-insulated cutting tools up to 1000 V to DIN EN 60900.
- Lever mechanism for optimized force exertion.
- High-grade cutting blades for precise cuts.



## Precise cutting results.

- ▶ The use of high-grade steels and the annealing process guarantee a long service life for the manual cutting tools.
- ▶ A special lever mechanism allows low-force, effortless operations.
- ▶ Small handy tools offering great benefits.

### Benefits:

- ▶ Many years of low wear use.
- ▶ Effortless operations.
- ▶ Fit into any toolbox and is to hand at all times.



## Which cutting tool for which application?

Type	max. mm dia. <sup>1)</sup>	Application			Design		Drive	
		Copper/aluminum stranded	Copper, fine	VDE, insulated	Open head	Closed head	Single-acting drive	Force-supported drive
K118	12	✓	✓		✓		✓	
K100	14	✓	✓		✓		✓	
K102	20	✓	✓		✓		✓	
K130	30	✓	✓		✓		✓	
K150	50	✓	✓		✓		✓	
K230 <sup>2)</sup>	39	✓	✓	✓	✓		✓	
K250 <sup>2)</sup>	50	✓	✓	✓	✓		✓	
K101/1	26	✓	✓		✓			✓
K105/1	26	✓	✓		✓			✓
K201/1 <sup>2)</sup>	26	✓	✓	✓	✓			✓
K101/2	38	✓	✓		✓			✓
K18 (S18)	18	✓			✓			✓
K106/1	32	✓				✓		✓
K106/2	52	✓				✓		✓
K103/1	60	✓				✓		✓
K104/1	100	✓				✓		✓

<sup>1)</sup> The exact cutting capacity depends on the type of cable or rope.

<sup>2)</sup> With fully-insulated levers to IEC 60900.



## K 118 Hand-operated cutting tool for Cu and Al cables up to 12 mm dia.



Cu
Al

- ▶ Handy design with high performance
- ▶ Cutting tool for solid, stranded, fine stranded and super fine stranded conductors, e.g. VDE 0295 class 1, 2, 5 and 6
- ▶ High cutting performance by specially designed cutting blades
- ▶ Two cutting blades for small and large cable dimensions for high user comfort

**Characteristics**

- One hand operation
- For solid conductors class 1 up to 10 mm<sup>2</sup> (max. 4 mm dia.)
- For copper stranded conductors class 2 up to 16 mm<sup>2</sup> (max. 5 mm dia.)
- For aluminum stranded conductors class 2 up to 25 mm<sup>2</sup> (max. 10 mm dia.)
- For copper fine and super fine stranded conductors class 5 and 6 up to 50 mm<sup>2</sup> (max. 12 mm dia.)

Technical data	
Cutting range	max. 12 mm dia., e.g. 1 x 50 mm <sup>2</sup> H07VK
Length	165 mm
Weight	0.17 kg
Item	Part No.
Hand-operated cutting tool to 12 mm dia.	<b>K118</b>

## K 100 Hand-operated cutting tool for Al and Cu cables up to 14 mm dia.



Cu
Al

- ▶ Outstanding cutting tool for fine and multi-stranded cables

**Characteristics**

- Short design
- Two-hand operation

Technical data	
Cutting range	max. 14 mm dia., e.g. 1 x 50 mm <sup>2</sup> H07VK
Length	280 mm
Weight	0.55 kg
Item	Part No.
Hand-operated cutting tool for Cu and Al cables to 14 mm	<b>K100</b>

**K 102 Hand-operated cutting tool up to 20 mm dia.**

- ▶ Outstanding cutting tool for fine and superfine stranded copper cables acc. to VDE 0295 class 5 and 6

**Characteristics**

- Non-slip handles

Technical data	
Cutting range	max. 20 mm dia., e.g. 1 x 95 mm <sup>2</sup> H07V-K
Length	225 mm
Weight	0.35 kg
Item	Part No.
Hand-operated cutting tool to 20 mm dia.	<b>K102</b>



Cu

**K 106/1 Hand-operated cutting tool for Al and Cu cables up to 32 mm dia.**

- ▶ For earth, plastic and rubber cables
- ▶ Lightweight design with great cutting performance

**Characteristics**

- One-hand operation
- Effort-saving 2-stage ratchet system
- Not suitable for cutting steel or steel wire
- Non-slip handles

Technical data	
Cutting range	max. 32 mm dia., e.g. 4 x 35 mm <sup>2</sup> NYY
Length	250 mm
Weight	0.55 kg
Item	Part No.
Hand-operated cutting tool for Cu and Al cables to 32 mm dia.	<b>K1061</b>



Cu  
Al

## K 106/2 Hand-operated cutting tool for Al and Cu cables up to 50 mm dia.



Cu
Al

- ▶ For earth, plastic and rubber cables
- ▶ Lightweight design with great cutting performance

**Characteristics**

- One-hand operation
- Effort-saving 2-stage ratchet system
- Not suitable for cutting steel or steel wire
- Non-slip handles

Technical data	
Cutting range	e.g. 4 x 120 mm <sup>2</sup> NYV, max. 50 mm dia.
Length	280 mm
Weight	0.74 kg
Item	Part No.
Hand-operated cutting tool for Cu and Al cables to 50 mm dia.	<b>K1062</b>

## K 103/1 Hand-operated cutting tool for Al and Cu cables up to 60 mm dia.



Cu
Al

- ▶ For earth, plastic and rubber cables
- ▶ Cutting range up to 60 mm diameter

**Characteristics**

- Two-hand operation
- Effort-saving 2-stage ratchet system
- Not suitable for cutting steel or steel wire

Technical data	
Cutting range	e.g. 4 x 240 mm <sup>2</sup> NAVY, 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.	<b>K1031</b>

**K 104/1 Hand-operated cutting tool for Al and Cu cables up to 100 mm dia.**

- ▶ For earth, plastic and rubber cables
- ▶ Very wide cutting range up to 100 mm dia.

**Characteristics**

- Two-hand operation
- Effort-saving 2-stage ratchet system
- Not suitable for cutting steel or steel wire

Technical data	
Cutting range	e.g. 4 x 400 mm <sup>2</sup> 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.	<b>K1041</b>



**Cu**  
**Al**

**K 130 Hand-operated cutting tool for Al and Cu cables up to 30 mm dia.**

- ▶ High performance because of specially designed flat cutting blades
- ▶ Also for fine stranded conductors

**Characteristics**

- Two-hand operation
- Large cutting range
- Not suitable for cutting steel or steel wire
- Roughened handles for safe working

Technical data	
Cutting range	e.g. 4 x 35 mm <sup>2</sup> NYN, 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.	<b>K130</b>



**Cu**  
**Al**

## K 230 Hand-operated cutting tool for Al and Cu cables up to 30 mm dia.



1000V  
IEC 60900

Cu  
Al

- ▶ High performance because of specially designed flat cutting blades
- ▶ 1000 V fully insulated to IEC 60900
- ▶ Also for fine stranded conductors

### Characteristics

- Two-hand operation
- Not suitable for cutting steel or steel wire

Technical data		Part No.
Cutting range	max. 30 mm dia., e.g. 4 x 35 mm <sup>2</sup> NYY	K230
Length	570 mm	
Weight	2.1 kg	
Item	Hand-operated cutting tool for Cu and Al cables to 30 mm dia.	

## K 150 Hand-operated cutting tool for Al and Cu cables up to 50 mm dia.



Cu  
Al

- ▶ High performance because of specially designed flat cutting blades
- ▶ Also for fine stranded conductors
- ▶ Roughened handles for safe working

### Characteristics

- Two-hand operation
- Large cutting range
- Not suitable for cutting steel or steel wire

Technical data		Part No.
Cutting range	max. 50 mm dia., e.g. 4 x 120 mm <sup>2</sup> NYY	K150
Length	710 mm	
Weight	3 kg	
Item	Hand-operated cutting tool for Cu and Al cables to 50 mm dia.	



**K 250 Hand-operated cutting tool for Al and Cu cables up to 50 mm dia.**

- ▶ High performance because of specially designed flat cutting blades
- ▶ 1000 V fully insulated to IEC 60900
- ▶ Also for fine stranded conductors e.g. VDE 0295 Class 5

**Characteristics**

- Two-hand operation
- Large cutting range
- Not suitable for cutting steel or steel wire

Technical data	
Cutting range	e.g. 4 x 120 mm <sup>2</sup> 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.	<b>K250</b>



1000V  
IEC 60900

**Cu**  
**Al**

**K 101/1 Hand-operated cutting tool for Al and Cu cables up to 26 mm dia.**

- ▶ Cutting head exchangeable at site
- ▶ Also for fine stranded conductors

**Characteristics**

- Two-hand operation
- Excellent leverage
- Not suitable for cutting steel or steel wire
- Roughened handles for safe working

Technical data		
Cutting range	e.g. 4 x 25 mm <sup>2</sup> 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.	<b>K1011</b>	
Accessories	Part No.	Page
Replacement cutting head	K1011E	



**Cu**  
**Al**



**K1011E**

## K 105/1 Hand-operated cutting tool for Al and Cu cables up to 26 mm dia., with telescopic handles



Cu
Al



K1011E

- ▶ Tool with extendable telescopic handles
- ▶ Excellent leverage
- ▶ Also for fine stranded conductors e.g. VDE 0295 Class 5

## Characteristics

- Two-hand operation
- Cutting head exchangeable at site
- Roughened handles for safe working
- Not suitable for cutting steel or steel wire

Technical data	
Cutting range	e.g. 4 x 25 mm <sup>2</sup> 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	<b>K1051</b>

Accessories	Part No.	Page
Replacement cutting head	K1011E	
Steel carrying case	SK120L	215

## K 201/1 Hand-operated cutting tool for Al and Cu cables up to 26 mm dia., length 570mm



1000V IEC 60900
--------------------

Cu
Al



K1011E

- ▶ 1000 V fully insulated to IEC 60900
- ▶ Excellent leverage
- ▶ Also for fine stranded conductors e.g. VDE 0295 Class 5

## Characteristics

- Two-hand operation
- Cutting head exchangeable at site
- Not suitable for cutting steel or steel wire

Technical data	
Cutting range	max. 26 mm dia., e.g. 4 x 95 mm <sup>2</sup> 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	<b>K2011</b>

Accessories	Part No.	Page
Replacement cutting head	K1011E	

**K 101/2 Hand-operated cutting tool for Cu and Al cables up to 38 mm dia.**

- ▶ Cutting head exchangeable at site
- ▶ Also for fine stranded conductors e.g. VDE 0295 Class 5
- ▶ Excellent leverage
- ▶ Extended lever handles

**Characteristics**

- Two-hand operation
- Large cutting range
- Not suitable for cutting steel or steel wire
- Roughened handles for safe working

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.	<b>K1012</b>	
Accessories	Part No.	Page
Replacement cutting head	K1012E	



# The world's first electro-mechanical crimping tool with PowerSense technology



## 1. Manual pre-clamping

Operating the lever closes the crimping jaws without any exertion on the part of the user and fixes the connecting material. In this "pre-clamped" state it is still possible to adjust the position and the alignment.



## 2. Motorized crimping

Further actuation or "depression of" the lever starts the crimping process - fully automatically using the power of the integrated motor.



## ... and done

The retraction to the starting position is also fully automatic. During the entire crimping cycle the process can be interrupted by actuating the lever in the opposite direction.



## Versatile

for convenient crimping of cable connections, cable end-sleeves and cable lugs



## Innovative

with the unique, intuitive operating concept and PowerSense technology



## Optimum view

thanks to LED illumination of the crimping jaws and working area



## Durable

thanks to the powerful lithium-ion battery with charge status display

## The new Klauke micro combines the benefits of manual crimping pliers with the convenience of battery powered hydraulic crimping tools

- ▶ High speed (crimping time < 1.5 sec.)
- ▶ Very low weight (< 1 kg)
- ▶ Very easy handling thanks to PowerSense technology
- ▶ Electronic control with blocking function and motor stall protection
- ▶ Ergonomic two-component housing in Klauke "In-line Design"
- ▶ Powerful drive technology for effortless operations
- ▶ 10.8V Lithium-ion battery with charge level indicator
- ▶ Excellent crimping results with minimum effort
- ▶ Interchangeable Klauke 50-series crimping dies (for all common applications up to 50mm<sup>2</sup>)
- ▶ Long service life (service intervals of 35,000 crimping cycles)
- ▶ Superlative value-for-money



## Klauke® *micro*

**Fast, light, efficient.**  
**Klauke micro – the way you crimp today.**

Until now, you could choose from three types of Klauke crimping tools for crimping in a cross-sectional range to 50 mm<sup>2</sup>: mechanical crimping pliers, pneumatic and hydraulic crimping tools. The various tool concepts offer their own particular benefits, depending on location and application requirement.

The tool program is now being expanded by a new form of crimping – as easy and fast as mechanical crimping pliers, as powerful and durable as a hydraulically-powered crimping tool.

**Klauke micro – the world's first electromechanical crimping tool with PowerSense technology. Manual pre-clamping. Motorized crimping.**

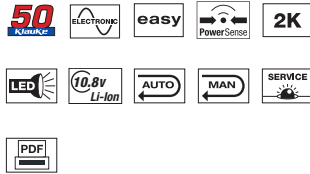


### More performance, more efficiency – and takes up less space

The new Klauke micro is ideally suited for applications where connecting material has to be crimped quickly and in a high volume but also wherever a compact and mobile tool is required, e.g. for switch cabinet construction and numerous other installation applications in trade and industry.



## EK 50 ML Electromechanical crimping tool 0.14 - 50 mm<sup>2</sup>



- ▶ The Klauke micro with intuitive PowerSense function combines the advantages of manual crimping tools with the convenience of battery-powered hydraulic crimping tools
- ▶ Excellent crimping results for minimum effort

### Characteristics

- For interchangeable dies, series 50
- One-lever operation for controlling all tool functions
- Electronic control with lock function monitors complete closing of the dies
- Automatic retraction when crimping is complete
- Manual retraction in case of need thanks to opposed lever actuation
- Motor stall protection in case of faulty operation
- Ergonomic 2-component housing in Klauke "In-line design"
- Mounting lugs for use with balancer or as fall protection when used outdoors
- Very low weight and high speed for maximum efficiency
- Powerful drive technology for effortless operations
- Li-Ion battery with charge status display
- LED light for illuminating crimping point and work area
- Multifunction LED for maintenance display and data transfer via optional interface and USB adapter
- Project-relevant recording with Klauke i-press software package

















Technical data	
Crimping force	max. 15 kN
Crimping range	0.14 - 50 mm <sup>2</sup>
Crimping cycle	< 1,5 s (depending on connecting material)
Number of crimps	approx. 300 at 10 mm <sup>2</sup> 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 to +40 °C

Item	Part No.	
Electromechanical crimping tool 0.14 - 50 mm <sup>2</sup>	<b>EK50ML</b>	
Scope of supply	Part No.	Page
Battery 10,8 V / 1,5 Ah, Li-Ion (16,2 Wh)	RAML1	
Charger for 10,8 V Li-Ion Akkus, 230V	LGML1	
Crimping die for insl. connector 0.5 - 6 mm <sup>2</sup>	ISS071	
Plastic case 450 x 370 x 105 mm	KKEK50ML	

Accessories	Part No.	Page
USB adapter	PGA1	408

Variants	Part No.	Page
Electromechanical crimping tool 0.14 - 50 mm <sup>2</sup> with RAML1 battery, without charger, crimping die, case	EK50ML-L	

**Available dies of Series 50 for**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Copper tubular cable lugs and connectors</b>				
Tubular cable lugs and connectors, standard type		0,75 - 10		414
Tubular cable lugs and connectors for solid conductors		1,5 - 10		414
<b>Terminals, connectors and pin terminals acc. to DIN, copper</b>				
Solderless terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230)		0,5 - 10		414
<b>Cable end-sleeves</b>				
Cable end-sleeves		0,14 - 50		414
<b>Cable connections, insulated and non-insulated</b>				
Insulated cable connections, double crimping		0,1 - 6		415
Insulated cable connections, single crimping		0,5 - 16		415
Non-insulated receptacles		0,25 - 6		415
BNC connectors for coax cables RG 58,59,60 and 71				415
Turned pin connectors and receptacles		0,1 - 4		415

Please observe the restrictions in the technical index when crimping connectors!



## Special drives for even greater speed.

### Electric and pneumatic crimping tools.

In addition to various hydraulic tools, the Klauke range also includes electromechanical and pneumatic tools. The tools are compatible with **Klauke<sup>pro</sup>** series heads and are therefore extremely versatile.

The high crimping speed of the KPM15 pneumatic crimping tool makes it suitable for the standard production of individual contacts and also for use in control cabinets.

The optional foot switch allows stationary applications as a bench-mounted tool.



- Electric bench crimping tool compatible with **Klauke<sup>pro</sup>** series heads and 50-series dies.
- Pneumatic crimping tool compatible with **Klauke<sup>pro</sup>** series heads.
- Especially suitable for cable harness assembly.



**TEKP1 Stationary basic tool - Klauke Pro-Series**

- ▶ Compatible with all crimping heads of the Klauke Pro-Series
- ▶ Suitable for continuous operation
- ▶ Easy change of crimping head without tools

**Characteristics**

- Transportable worktop crimping device
- Safety foot switch
- Two-stage system with tooling and crimping function
- With adapter TEKP 1A50 compatible to all crimping dies of series 50

**Klauke<sup>pro</sup>**



Technical data	
Crimping cycle	approx. 1 s (depending on cross-section)
Dimension	approx. 280 x 230 x 410 mm
Mains voltage	220 - 240 V
Weight	13.0 kg

Item	Part No.
Stationary basic tool including foot switch and mains cable	<b>TEKP1</b>

Accessories	Part No.	Page
Adapter for crimping dies of Series 50	TEKP1A50	

	Suitable for	Crimping range mm <sup>2</sup>	Crimp profile	Part No.
<b>Crimping heads for cable end-sleeves</b>				
	Cable end-sleeves, trapezoid crimping	0.14 - 6		KP312
	Cable end-sleeves, square pressing	0.14 - 10		KP303
	Cable end-sleeves, square pressing	10 - 16		KP304
	Cable end-sleeves, round pressing	0.14 - 2.5		KP350
	Cable end-sleeves, round pressing for narrow chamber sizes	1.5 - 6		KP351
	Cable end-sleeves, round pressing for narrow chamber sizes	10 - 16		KP352
	Cable end-sleeves, DIN 46228, part 2, roll-crimping	0.5 - 2.5		KP66
<b>Crimping heads for insulated cable connections</b>				
	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
<b>Crimping heads for tubular cable lugs and terminals</b>				
	Tubular cable lugs and solderless terminals	0.5 - 6		KP232
	Tubular cable lugs and solderless terminals	4 - 10		KP242
<b>Crimping heads for photovoltaic</b>				
	Connector for photovoltaics 3 mm dia.	2.5 - 4		KP90MC31
<b>Crimping heads for receptacles</b>				
	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

## KPM 15 Pneumatic basic tool - Klauke Pro Series



- ▶ Compatible with all crimping heads of the Klauke Pro-Series (with Klauke KPM 15 PRO adapter)
- ▶ Easy change of crimping head without tools

## Characteristics

- Crimping head rotates 360°
- Integrated, disengageable ratchet
- Optional worktop stand, including foot switch

Technical data		
Crimping cycle	max. 1 s, depending on set pressure	
Ambient temperature	-20°C to +40 °C	
Permissible pressure range	6-8 bar	
Air consumption/cycle at 6 bar	0.32 l	
Diameter	65 mm	
Length	280 mm	
Weight	1.5 kg	
Item	Part No.	
Pneumatic basic tool of the Klauke Pro-Series	<b>KPM15</b>	
Accessories		
Item	Part No.	Page
Adapter for crimping heads from the Klauke Pro-Series	KPM15PRO	282
Worktop stand, including foot switch	KPM15TH	282

## KPM 15 TH Worktop stand including foot switch



- ▶ Adjustable worktop with ball-point mounting system

## Characteristics

- For mounting the pneumatic basic tool KPM 15

Item	Part No.	
Worktop stand, including foot switch	<b>KPM15TH</b>	









































## KPM 15 PRO Adapter for crimping heads - Klauke Pro-Series



## Characteristics

- Compatible with all crimping heads of the Klauke Pro-Series

Item	Part No.	
Adapter for crimping heads from the Klauke Pro-Series	<b>KPM15PRO</b>	

Suitable for	Crimping range mm <sup>2</sup>	Crimp profile	Part No.
<b>Crimping heads for cable end-sleeves</b>			
 Cable end-sleeves, trapezoid crimping	0.14 - 6		KP312
 Cable end-sleeves, square pressing	0.14 - 10		KP303
 Cable end-sleeves, square pressing	10 - 16		KP304
 Cable end-sleeves, round pressing	0.14 - 2.5		KP350
 Cable end-sleeves, round pressing for narrow chamber sizes	1.5 - 6		KP351
 Cable end-sleeves, round pressing for narrow chamber sizes	10 - 16		KP352
 Cable end sleeves, DIN 46228, part 2, roll-crimping	0.5 - 2.5		KP66
<b>Crimping heads for insulated cable connections</b>			
 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
<b>Crimping heads for tubular cable lugs and terminals</b>			
 Tubular cable lugs and solderless terminals	0.5 - 6		KP232
 Tubular cable lugs and solderless terminals	4 - 10		KP242
<b>Crimping heads for photovoltaic</b>			
 Connector for photovoltaics 3 mm dia.	2.5 - 4		KP90MC31
<b>Crimping heads for receptacles</b>			
 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



## Increased force for fast *crimping.*

### Hand-operated hydraulic crimping tools.

Klauke hand-operated hydraulic tools are the most convenient and safest types to generate precise and high operating forces by hand. The ergonomic design and lightweight aluminum handles permit frequent fatigue proof operations.

All tools feature a two-stage hydraulic system with fast feed and power stroke upon reaching counter pressure. Once the crimping operation is complete, the crimping jaws open automatically and retract to the original position - another plus for safety and comfort.

#### ■ Hand-operated hydraulic crimping tools: compact, innovative and safe.

- ▶ 2-stage hydraulics with fast feed and power stroke during operation, and **automatic retraction** on completion of the crimp.
- ▶ Ergonomic design and lightweight.
- ▶ **Rotating heads.**

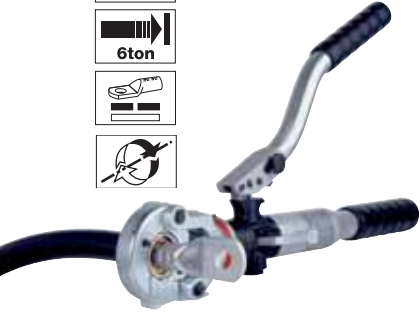
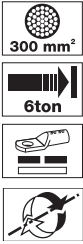


- Ergonomic design and lightweight.
- Automatic retraction on completion of the crimping operation.
- Crimping tools from 55 kN to 120 kN crimping force.
- Nominal cross sections up to 400 mm<sup>2</sup>.

#### Benefits:

- ▶ Poor crimps are avoided, more safety and shorter intervals between crimping operations thanks to the automatic retraction function.
- ▶ Design and weight facilitate effortless operations.
- ▶ **Safe to work in confined space conditions thanks to the rotating heads.**
- ▶ Faster crimping with less force with the innovative 2-stage hydraulic function.

## ■ Optimised handling with 6-ton crimping tools.



- ▶ Aluminum pump lever and housing result in low weight.
- ▶ Compact design.
- ▶ Designed for nominal cross sections up to 300 mm<sup>2</sup>.
- ▶ For Klauke 18 and 22 dies series.

### Benefits:

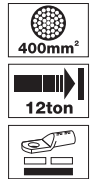
- ▶ **Extremely easy to handle**, even with frequent operations in tight areas - installing underground cable joints or processing switch gears.
- ▶ Versatile applications with the broad range in Klauke's DIN-compliant 18 and 22 series.

## ■ 12 tons for increased productivity.

- ▶ Very large crimping area up to 400 mm<sup>2</sup>.
- ▶ For wide crimps with dies from the Klauke 13 series.

### Benefits:

- ▶ **Considerably higher productivity and time saved thanks to wide crimps.**
- ▶ Typical applications include power technology and cable assembly.
- ▶ *More on Page 292.*



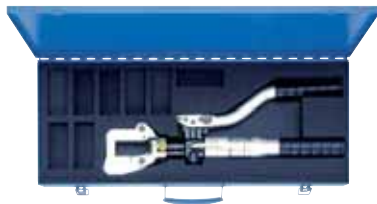
## ■ Quad-point indent crimping - centring guaranteed.



- ▶ Ideal for crimping tubular cable lugs on fine and superfine stranded conductors with nominal cross sections up to 300 mm<sup>2</sup>.
- ▶ No dies required.
- ▶ The tools with quad-point indent crimping feature a patented Klauke centring system.
- ▶ Tools with open and flip-top crimping head.

### Benefits:

- ▶ Safe, convenient processing of standard fine and superfine stranded conductors.
- ▶ Quad-point indent crimping tools **with no die change** are suitable for various cable types and sizes for numerous cable lugs and connectors.
- ▶ Optimised user safety and avoidance of poor crimps thanks to centring of conductors and connecting material.

HK 60/18 Hand-operated hydraulic crimping tool 6 - 185 mm<sup>2</sup>

































- ▶ For dies acc. to DIN 48083, page 1
- ▶ Crimping dies are connected by spring - cannot get lost
- ▶ Lightweight for effortless operations

## Characteristics

- For interchangeable dies, series 18, narrow crimping
- Closed crimping head, flip top style, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data		
Crimping force	60 kN	
Stroke	14 mm	
Crimping range	6-185 mm <sup>2</sup>	
Length	470 mm	
Weight	3.0 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Hand-operated hydraulic crimping tool 6 - 185 mm <sup>2</sup>	<b>HK6018</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 60/18 with space for 8 crimping dies	MKG018	
Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 18	MA18	406
Force sensor, 70 kN	TF70L	406

**Available dies for Series 18 for HK 60/18**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 185		427
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 95		427
Tubular cable lugs and connectors for fine stranded conductors		10 - 50		428
Tubular cable lugs and connectors for solid conductors		1.5 - 16		428
<b>Copper compression cable lugs and connectors acc. to DIN</b>				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 185		428
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230), connectors (DIN 46341)		10 - 70		429
Insulated solderless terminals		10 - 50		429
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 240 se / 185 sm		429
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 185		430
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 95		430
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 185		430
<b>Clamps</b>				
Clamps, C-type		4 - 50		430
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 95		431
Twin cable end-sleeves		2 x 4 - 2 x 16		431
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 95		431
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		432
<b>Cutting die</b>				
Cutting range		18 mm dia.		432

Please observe the restrictions in the technical index when crimping connectors!



HK 60/22 Hand-operated hydraulic crimping tool 6 - 300 mm<sup>2</sup>

- ▶ Large crimping range up to 300 mm<sup>2</sup>
- ▶ Slim crimping head - ideal when space is critical

**Characteristics**

- For interchangeable dies, series 22, narrow crimping
- Closed crimping head, flip top style, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable















































**Order info**

- Also available for "W" crimping dies (UL certified), part number appendix "W"

Technical data		
Crimping force	60 kN	
Stroke	17 mm	
Crimping range	6 - 300 mm <sup>2</sup>	
Length	460 mm	
Weight	3.3 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Hand-operated hydraulic crimping tool 6 - 300 mm <sup>2</sup>	<b>HK6022</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 60/22 or HK 60/22 W with space for 17 pairs of crimping dies	MK6022	
Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 22	MA22	406
Force sensor, 70 kN	TF70L	406
Variants	Part No.	Page
HK 60/22 with crimping die set R 22 from 16 - 240 mm <sup>2</sup>	HK6022SETR	
HK 60/22 with crimping die set D 22 from 16 - 240 mm <sup>2</sup>	HK6022SETD	

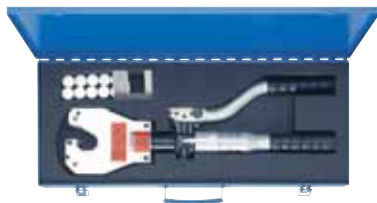


**Available dies for Series 22 for HK 60/22**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 300		433
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 300		434
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		434
Tubular cable lugs and connectors for fine stranded conductors		10 - 70		435
Tubular cable lugs and connectors for solid conductors		1.5 - 16		435
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Stainless steel tubular cable lugs and connectors		0.5 - 16		435
Nickel tubular cable lugs and connectors		10 - 50		435
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 300		436
Double compression cable lugs		2 x 50 - 2 x 70		436
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) connectors (DIN 46230) Cu, and pin terminals (DIN 46341) Cu		10 - 70		437
Insulated solderless terminals		10 - 70		437
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 300		438
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding dies for Al and Cu sector shaped conductors		10 sm - 300 se / 240 sm		437
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 300		438
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		438
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25 / 4 - 120 / 20		439
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25 / 4 - 120 / 20		439
<b>Clamps</b>				
Clamps, C-type		4 - 50		439
Clamps, H-Type		70		439
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 240		440
Twin cable end-sleeves		2 x 4 - 2 x 16		440
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 240		440
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		441

Please observe the restrictions in the technical index when crimping connectors!

### HK 60 VP Hand-operated hydraulic crimping tool 10 - 240 mm<sup>2</sup>



- ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 240 mm<sup>2</sup>
- ▶ The patented centring system guarantees every time optimum crimping results

#### Characteristics

- Quad-point indent crimping feature with patented centring system, no dies required
- Open crimping head, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	55 kN
Crimping range	10 - 240 mm <sup>2</sup>
Length	525 mm
Weight	4,1 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	
Hand-operated hydraulic crimping tool 10 - 240 mm <sup>2</sup>	<b>HK60VP</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 60 VP or HK 60 VP/FT	MK60VP	
Gauge and 10 test cylinder	TS10B	

Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter VP	MAVP	406
Force sensor, 70 kN	TF70L	406
Gauge and 10 test cylinder	TS10B	

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
Tubular cable lugs standard type and tubular cable lugs for switchgear connections		10 - 240	
Connectors, Standard type		10 - 120	
Tubular cable lugs for fine stranded conductors		10 - 240	
Connector for fine stranded conductors		10 - 95	

**HK 60 VP/FT Hand-operated hydraulic crimping tool 16 - 300 mm<sup>2</sup>**

- ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 300 mm<sup>2</sup>
- ▶ The patented centring system guarantees every time optimum crimping results
- ▶ Closed crimping head - ideal for utility lines construction





**Characteristics**

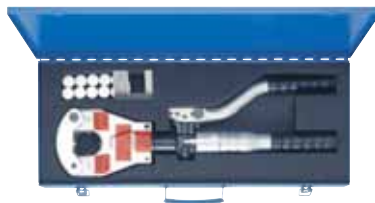
- Quad-point indent crimping feature with patented centring system, no dies required
- Closed crimping head with bolt interlock, rotatable, flip top style
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	55 kN
Crimping range	16 - 300 mm <sup>2</sup>
Length	535 mm
Weight	4.1 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	
Hand-operated hydraulic crimping tool 16 - 300 mm <sup>2</sup>	<b>HK60VPFT</b>	
Scope of supply	Part No. Page	
Steel carrying case for HK 60 VP or HK 60 VP/FT	MK60VP	
Gauge and 10 test cylinder	TS10B	

Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter VP	MAVP	406
Force sensor, 70 kN	TF70L	406
Gauge and 10 test cylinder	TS10B	

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
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	



HK 120/30 Hand-operated hydraulic crimping tool 16 - 400 mm<sup>2</sup>











































- ▶ Very large crimping range to 400 mm<sup>2</sup>
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics

- For interchangeable dies, series 13, wide crimping
- Open C-crimping head, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data		
Crimping force	120 kN	
Stroke	30 mm	
Crimping range	16 - 400 mm <sup>2</sup>	
Length	510 mm	
Weight	5.4 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Hand-operated hydraulic crimping tool 10 - 400 mm <sup>2</sup>	<b>HK12030</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 120/42 with space for 15 pairs of crimping dies	MK12042	
Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 13	MA120	406
Force sensor, 130 kN	TF130L	406

**Available dies for Series 13 for HK 120/30**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Butt connectors, standard type		16 - 185		443
Insulated tubular cable lugs and compression joints, standard type		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Copper compression cable lugs (DIN 46235) and connectors		16 - 300		444
Compression joints DIN 46267, part 1		16 - 150		444
Double compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) connectors (DIN 46230) and pin terminals acc. to DIN		16 - 150		445
Insulated solderless terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors		10 - 240		446
Aluminum connectors		10 - 120		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 240		446
<b>Clamps</b>				
Clamps, C-type		10 - 70		447
Clamps, H-type		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!

HK 120/42 Hand-operated hydraulic crimping tool 16 - 400 mm<sup>2</sup>

13

12 ton

42mm



- ▶ Very large crimping range to 400 mm<sup>2</sup>
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools
- ▶ C-head with large 42 mm opening width

## Characteristics

- For interchangeable dies, series 13, wide crimping
- Open C-crimping head, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable





































## Technical data

Crimping force	120 kN
Stroke	42 mm
Crimping range	16 - 400 mm <sup>2</sup>
Length	560 mm
Weight	5.9 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	
Hand-operated hydraulic crimping tool 16 - 400 mm <sup>2</sup>	<b>HK12042</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 120/42 with space for 15 pairs of crimping dies	MK12042	

Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 13	MA120	406
Force sensor, 130 kN	TF130L	406

**Available dies for Series 13 for HK 120/42**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Double compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230), (DIN 46341)		16 - 150		445
Insulated solderless terminals		10 - 95		445
<b>Pre-rounding crimping dies</b>				
Pre-rounding dies for Al and Cu sector shaped conductors		10 sm - 300se / 300 sm		445
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 240		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 240		446
<b>Clamps</b>				
Clamps, C-type		10 - 70		447
Clamps, H-type		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



HK 120 U Hand-operated hydraulic crimping tool 16 - 400 mm<sup>2</sup>13  
Klauke

12 ton



- ▶ H-head for deep groove crimping
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics

- For interchangeable dies, series 13, wide crimping
- Closed H-crimping head, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

## Technical data





































Crimping force	120 kN
Stroke	20 mm
Crimping range	16 - 400 mm <sup>2</sup>
Length	540 mm
Weight	5.2 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	Page
Hand-operated hydraulic crimping tool 16 - 400 mm <sup>2</sup>	<b>HK120U</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 120 U with space for 11 pairs of crimping dies	MK120U	

Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 13	MA120	406
Force sensor, 130 kN	TF130L	406



**Available dies for Series 13 for HK 120 U**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Insulated cable lugs and compression joints, standard type		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Double compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230) acc. to DIN, solderless connectors (DIN 46341) Cu		16 - 150		445
Insulated solderless terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 240		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 240		446
<b>Clamps</b>				
Clamps, C-type		10 - 70		447
Clamps, H-type		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



# Klauke®

## High cutting performance, less force.

### Hand-operated hydraulic cutting tools:

Hand-operated Klauke cutting tools process flexible, multi-stranded, armoured and solid Cu and Al cables, as well as Al/St ropes quickly, conveniently and safely. The ergonomic design and low weight of these tools mean the user needs less effort and staying power.

The 2-stage hydraulics combine a fast feed, power stroke upon reaching counter pressure and automatic retraction function. When the cutting operation is complete, the cutting blades open and move to their original position.



- Ergonomic design and lightweight.
- Automatic retraction on completion of the cutting operation.
- Cutting tools to 85 mm dia.
- Type-dependent cutting force to 120 kN.



*Two-stage hydraulic system  
and ergonomic design for  
enhanced efficiency.*

## ■ Hand-operated hydraulic cutting tools: **compact, innovative and safe.**

- ▶ 2-stage hydraulics with fast feed and power stroke during operation and **automatic retraction** when the crimp is complete or the cable has been cut.
- ▶ Ergonomic design and lightweight.
- ▶ Rotating heads.

### Benefits:

- ▶ More safety and shorter intervals between crimping operations thanks to the automatic retraction function.
- ▶ Design and weight facilitate effortless operations.
- ▶ Safe to work under difficult spatial conditions thanks to the **rotating heads**.
- ▶ Faster cutting with less force with the innovative 2-stage hydraulic function.



## ■ Fast and safe cutting of **Al/St ropes: HSG 45 and HSG 55**



- ▶ Optimised cutting performance.
- ▶ Suitable for cables up to 45 mm dia. and/or 55 mm dia.
- ▶ **For armoured Cu and Al cables and for Al/St ropes.**
- ▶ Extremely sturdy cutting heads.

### Benefits:

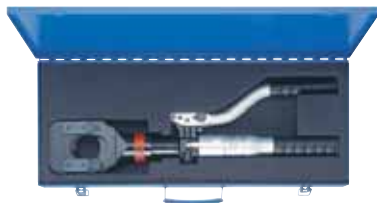
- ▶ One tool for diverse applications.
- ▶ This cutting head is set apart by its high stability even under extreme load.
- ▶ The tools are suitable as an universal cutting tool for practically every cable up to 55 mm dia.

## ■ All hand-operated hydraulic cutting tools at a glance.

Tool	Design		Cutting range mm dia.	Cutting force kN	Application				Features
	Open head	Closed head			Cu, Al <sup>1)</sup>	Al / St (ACSR)	Cu / Al, solid	Steel, solid	
HSG45		✓	45	60	✓	✓	✓	✓	Suitable for all standard cables to 45 mm dia. - steel armoured.
HSG50		✓	48	60	✓				Compact and lightweight cutting tool.
HSG55		✓	55	120	✓	✓	✓	✓	With 120 kN cutting force for ACSR ropes to 55 mm dia.
HSG85/2		✓	85	60	✓				Extremely wide cutting range.

<sup>1)</sup> This column also includes Cu / Al multi-stranded and Cu / Al with sheet metal and wire armouring.

### HSG 45 Hand-operated hydraulic cutting tool 45 mm dia.



ESG45EF



ESG45ES1

- ▶ Cuts armoured copper and aluminum cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and Steel
- ▶ Extremely sturdy design

#### Characteristics

- Closed cutting head with bolt interlock, rotatable, flip top style
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when cut is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data		
Cutting range	max. 45 mm dia.	
Cutting force	60 kN	
Length	560 mm	
Weight	4.9 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Hand-operated hydraulic cutting tool 45 mm dia.	<b>HSG45</b>	
Scope of supply	Part No.	Page
Steel carrying case for HSG 45 or HSG 50	MK50	
Accessories	Part No.	Page
Outer fixed blade	ESG45EF	
Inner moving blade	ESG45ES1	

**HSG 50 Hand-operated hydraulic cutting tool 48 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Lightweight for effortless operations

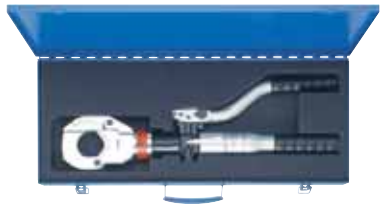
**Characteristics**

- Closed cutting head, flip top style, rotatable
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when cut is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Cutting range	max. 48 mm dia.
Cutting force	60 kN
Length	540 mm
Weight	3.5 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	
Hand-operated hydraulic cutting tool 48 mm dia.	<b>HSG50</b>	
Scope of supply	Part No.	Page
Steel carrying case for HSG 45 or HSG 50	MK50	

Accessories	Part No.	Page
Inner moving blade	ESG50ES	
Outer fixed blade	ESG50EF1	



## HSG 55 Hand-operated hydraulic cutting tool 55 mm dia.



ESG55EF



ESG55ES

- ▶ Cuts armoured copper and aluminum 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 cutting head with bolt interlock, rotatable, flip top style
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when cut is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data		
Cutting range	max. 55 mm dia.	
Cutting force	120 kN	
Length	approx. 605 mm	
Weight	7.3 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Hand-operated hydraulic cutting tool 55 mm dia.	<b>HSG55</b>	
Scope of supply	Part No.	Page
Steel carrying case for HSG 55	MKHSG55	
Accessories	Part No.	Page
Inner moving blade	ESG55ES	
Outer fixed blade	ESG55EF	

**HSG 85/2 Hand-operated hydraulic cutting tool 85 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Large cutting range
- ▶ High user safety through cutting head with bolt interlock

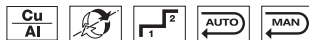
**Characteristics**

- Closed cutting head with bolt interlock, rotatable, flip top style
- Light weight due to high quality aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when cut is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Cutting range	max. 85 mm dia.
Cutting force	60 kN
Length	approx. 677 mm
Weight	5.9 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	Page
Hand-operated hydraulic cutting tool 85 mm dia.	<b>HSG852</b>	
Scope of supply	Part No.	Page
Steel carrying case for HSG 85	MK852	

Accessories	Part No.	Page
Outer fixed blade	ESG85EF1	
Inner moving blade	ESG85ES1	



ESG85EF1



ESG85ES1



*More intelligence. More performance.  
And more ergonomic.*

## Generation Safety Plus.

Battery powered hydraulic crimping and cutting tools are the most convenient solution for crimping and cutting applications. The required force is generated at the touch of a button. The tools require only one-hand operation.

The tools in the Ultra and Ultra+ series feature a two-stage hydraulic system that automatically switches to power stroke after a fast feed. With all Klauke tools, the automatic retract function starts automatically after successful crimping or cutting, and can be stopped again by pressing the switch (MRS).

The automatic retract stop function (ARS) is especially convenient, for quickly making multiple crimps for full tension connections, for instance.

- ▶ Thanks to the new 2-component housing, the tools sit even better in the hand - pressure points and tool slippage are practically impossible.



**2K**



- **The latest tool generation with Intelligent Pressing System IPS.**
- **Convenient one-button operating concept.**
- **High-performance 18 Volt Li-ion batteries with extremely short charging time.**



The new generation of our battery powered hydraulic tools features an integrated pressure sensor determining the pressure reached during each crimping operation. This **Intelligent Pressing System** - IPS for short - indicates deviations immediately by optical and acoustic signals. Making your work with Klauke tools even safer.



The hydraulic oil in our tools is considered to be environmentally-friendly and quickly biodegradable.



## ■ At a glance: Battery powered hydraulic tools made by Klauke.

With the 3 series of the Safety Plus generation and the established Klauke® mini, Klauke's product range is the most extensive on the market!

### **Klauke®mini**



- ▶ NiMH batteries
- ▶ Low weight
- ▶ Fast crimping cycles
- ▶ Automatic retraction

### **Klauke®ultra**



- ▶ Intelligent (IPS)
- ▶ With crimping tools: Automatic retract stop (ARS)
- ▶ For cutting tools with manual retract stop (MRS)
- ▶ 2-stage hydraulics

### **Klauke®mini+**



- ▶ 18 V - Li-ion technology
- ▶ Intelligent Pressing System (IPS)
- ▶ Large crimping and cutting range with low weight

### **Klauke®ultra+**



- ▶ For crimping tools that make up to 60% fewer crimps thanks to wide crimping
- ▶ Ergonomic design with 2-component handle area and optimum centre of gravity for effortless operations

## ■ High-performance: 18 Volt Li-ion technology.

- ▶ Powerful 18 V Li-ion batteries with high capacity.
- ▶ Extremely **short charging time** with innovative charging technology.
- ▶ Batteries have very low self-discharging effect.
- ▶ Powerful motors for maximum performance.

### **Benefits:**

- ▶ The high energy density of the Li-ion batteries allows more operations per charge than with conventional batteries.
- ▶ The extremely short charging time of 15 min (RAL1) or 22 min (RAL2) minimise waiting time.
- ▶ The low self-discharge means practically continuous tool availability.
- ▶ The powerful motors permit even faster operations - a benefit that should not be underestimated.
- ▶ All Mini tools have a sound pressure level of 70.6 dB(A), all Safety Plus generation tools are less than 70 dB(A), measured at a distance of 1 m. The vibrations on the tools much lower than 2.5m/s<sup>2</sup>.



**18V**  
Li-ion



LED

## ■ Spot on: see more with work area illumination.

- ▶ Integrated high-performance LED for work area illumination.
- ▶ Optimised, balanced tool housing.

### **Benefits:**

- ▶ The integrated high-power LED provides optimum illumination in all working areas and ensures additional safety and comfort.
- ▶ The balanced tool housing makes handling much easier - effortless work is guaranteed.

## At the touch of a button: Full force ahead!

### Battery powered hydraulic crimping tools.

Battery powered Klauke crimping tools effortlessly make safe electrical connections. And thanks to their powerful 18 V Li-ion batteries and ergonomic product design, long periods of operation do not present a problem.

Klauke offers the right battery powered solution for the most diverse fields of application. For example, the Klauke® ultra+ is able to crimp conductors with cross-sections to 400 mm<sup>2</sup> at 120 kN. The Klauke mini+ is especially slim, and excels even in tight spaces.



- Intelligent Pressing System (IPS).
- Automatic retract stop (ARS).
- Crimping tools from 10 kN to 120 kN crimping force.
- Nominal cross sections up to 400 mm<sup>2</sup>.



#### Interface to the PC



**i-press®**

The separate USB adapter PGA1 enables the data of all crimping operations to be readout for quality control via the optical interface and output as a PDF document on the laptop or PC.

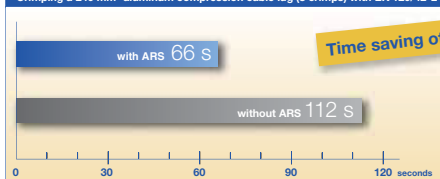
### Save time and energy – with the retract stop function.

- ▶ The retract stop function stops the automatic retraction on completion of a crimping operation - fully-automatic (ARS) for all crimping tools with 60 kN and 120 kN crimping force.

#### Benefits:

- ▶ For multiple applications, the ARS function allows the crimping tools to open automatically as far as needed for the next crimping operation to be started - with no time loss.

Crimping a 240 mm<sup>2</sup> aluminum compression cable lug (8 crimps) with EK 120/42-L



## ■ Mini with added value: *Klauke mini+, the new generation.*



- ▶ All benefits of the established Klauke® mini design - now available as 4, 5 or 6-ton tool.
- ▶ Wide crimping range to 300 mm<sup>2</sup> (EKM 60/22-L).
- ▶ Additional technical features: integrated pressure measurement, 2-component housing, work area illumination, 18 V Li-ion technology, 18 V mains adapter NG 2/230 (accessories).

### Benefits:

- ▶ The Klauke® mini+ combines a host of established benefits with the technical features of the new Safety Plus generation - making work even in the tightest spaces even more efficient and, thanks to **Intelligent Pressing System (IPS)**, safer too.
- ▶ At 300 mm<sup>2</sup>, the Klauke® mini+ has the widest crimping range for rod-shaped crimping tools, thereby guaranteeing optimised productivity.



## ■ KLAUKE® ultra - *ultra safe, ultra efficient.*



- ▶ 6-ton tools in the Klauke® ultra series for 22-series dies and for dieless quad-point indent crimping with nominal cross-sections of up to 300 mm<sup>2</sup>.
- ▶ All tools with Intelligent Pressing System (IPS).
- ▶ 4-point indent crimping with **Klauke's patented centring system** and automatic retract stop (ARS) - the ideal solution for crimping tubular cable lugs on fine and superfine stranded conductors.



▶ More from Page 324.

### Benefits:

- ▶ The 6-ton tools are comparatively lightweight and hence easy to handle.
- ▶ The guide system guarantees highest user safety since conductor and connecting material remain centred during crimping operation and bad crimps are practically excluded.
- ▶ ARS saves you time and energy as the piston stroke is reduced to a minimum during subsequent crimping operations.



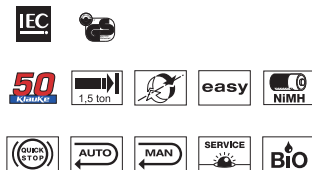
## ■ KLAUKE® ultra+: *the Power-Plus packages.*

- ▶ 12-ton tools in the Klauke® ultra+ series for 13-series dies, for deep groove crimps and dieless indent crimps.
- ▶ **Wide crimping** with dies from the Klauke 13-series.
- ▶ With IPS, ARS, more powerful motors and balanced housing for more intelligence, more power and more comfort.

### Benefits:

- ▶ The wide crimping profiles of the 13-series dies require up to 60% fewer crimps than the narrow crimping profiles of 6-ton tools.
- ▶ The new features and characteristics make the use of our crimping tools much simpler and, thanks to IPS, safer too.



EK 15/50 Battery powered crimping tool 0.14 - 50 mm<sup>2</sup>

- ▶ Steel head for extreme long life time
- ▶ Optimum crimping due to parallel guided crimping dies



















## Characteristics

- For interchangeable dies, series 50
- Open crimping head, rotatable
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Powerful NiMH battery technology
- Fast crimping cycles for efficient operations
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

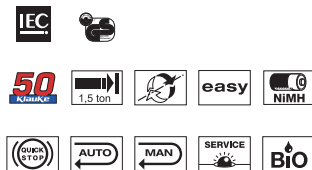
Technical data		
Crimping force	13 kN	
Stroke / opening width	9 mm	
Crimping range	0.75 - 10 mm <sup>2</sup>	
Crimping cycle	approx. 2 s	
Number of crimps	approx. 220 at 10 mm <sup>2</sup> Cu	
Battery voltage	9.6 V	
Battery capacity	2.0 Ah, NiMH	
Charging time	With fast charger 15 min., otherwise 40 min.	
Weight incl. battery	1.6 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Battery powered hydraulic crimping tool 0.14 - 16 mm <sup>2</sup>	<b>EK1550</b>	
Scope of supply	Part No.	Page
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KK35B2	

Accessories	Part No.	Page
Battery 9.6 V / 3.0 Ah, NiMH (28.8 Wh)	RAM3	397
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 50	MA50	406
Force sensor, 70 kN	TF70L	406
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399

**Available dies for Series 50 for EK 15/50**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, Cu, standard type		0.75 - 10		414
Tubular cable lugs and connectors for solid conductors, Cu		1.5 - 10		414
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) and pin terminals (DIN 46230) connectors (DIN 46341)		0.5 - 10		414
Insulated solderless terminals, insulated pin terminals		0.1 - 16		415
<b>Cable end-sleeves</b>				
Cable end-sleeves		0.14 - 50		414
<b>Cable connections, insulated and non-insulated</b>				
Insulated cable connections, double crimping		0.1 - 6		415
Insulated cable connections, single crimping		0.5 - 16		415
Non insulated receptacles		0.25 - 6		415
for pin and shielded receptacles, BNC connectors for coax cables RG 58,59,60 and 71				415
Turned pin connectors, pin receptacles		0.1 - 4		415
Please observe the restrictions in the technical index when crimping connectors!				



EK 15/50 G Battery powered crimping tool 0.14 - 50 mm<sup>2</sup>

► Slim crimping head - ideal when space is critical

#### Characteristics



















- For interchangeable dies, series 50
- Open crimping head, rotatable
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Powerful NiMH battery technology
- Fast crimping cycles for efficient operations
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	13 kN
Stroke / opening width	9 mm
Crimping range	0.14 - 50 mm <sup>2</sup>
Crimping cycle	approx. 2 s
Number of crimps	approx. 220 at 10 mm <sup>2</sup> Cu
Battery voltage	9.6 V
Battery capacity	2.0 Ah, NiMH
Charging time	With fast charger 15 min., otherwise 40 min.
Weight incl. battery	1.6 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.	
Battery powered hydraulic crimping tool 0.14 - 16 mm <sup>2</sup>	<b>EK1550G</b>	
Scope of supply		
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KK35B2	

Accessories	Part No.	Page
Battery 9.6 V / 3.0 Ah, NiMH (28.8 Wh)	RAM3	397
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 50	MA50	406
Force sensor, 70 kN	TF70L	406
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399

**Available dies for Series 50 for EK 15/50 G**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, Cu, standard type		0.75 - 10		414
Tubular cable lugs and connectors for solid conductors, Cu		1.5 - 10		414
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) and pin terminals (DIN 46230) Cu, connectors (DIN 46341) Cu		0.5 - 10		414
Insulated solderless terminals, insulated pin terminals		0.1 - 16		415
<b>Cable end-sleeves</b>				
Cable end-sleeves		0.14 - 50		414
<b>Cable connections, insulated and non-insulated</b>				
Insulated cable connections, double crimping		0.1 - 6		415
Insulated cable connections, single crimping		0.5 - 16		415
Non insulated receptacles		0.25 - 6		415
for pin and BNC connectors for coax cables RG 58, 59, 62 and 71				415
Turned pin connectors, pin receptacles		0.1 - 4		415

Please observe the restrictions in the technical index when crimping connectors!



EKP 1 Battery powered crimping tool 0.14 - 16 mm<sup>2</sup>

- ▶ Basic tool, Klauke Pro-Series
- ▶ Easy change of crimping heads without tools









































## Characteristics

- Compatible with all crimping heads of the Klauke Pro-Series
- Crimping heads rotatable
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Powerful NiMH battery technology
- Fast crimping cycles for efficient operations
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data		
Crimping force	10 kN	
Stroke / opening width	9 mm	
Crimping range	0.5 - 10 mm <sup>2</sup>	
Crimping cycle	approx. 2 s	
Number of crimps	approx. 220 at 10 mm <sup>2</sup> Cu	
Battery voltage	9.6 V	
Battery capacity	2.0 Ah, NiMH	
Charging time	With fast charger 15 min., otherwise 40 min.	
Weight incl. battery	1.3 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Battery powered hydraulic crimping tool 0.14 - 16 mm <sup>2</sup>	<b>EKP1</b>	
Scope of supply	Part No.	Page
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KKEKP1B	
Accessories	Part No.	Page
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399
Battery 9.6 V / 3.0 Ah, NiMH (28.8 Wh)	RAM3	397
USB adapter	PGA1	408



Suitable for	Crimping range mm <sup>2</sup>	Crimp profile	Part No.
<b>Crimping heads for cable end-sleeves</b>			
 Cable end-sleeves, trapezoid crimping	0.14 - 6		<b>KP312</b>
 Cable end-sleeves, square crimping	0.14 - 10		<b>KP303</b>
 Cable end-sleeves, square crimping	10 - 16		<b>KP304</b>
 Cable end-sleeves, round crimping	0.14 - 2.5		<b>KP350</b>
 Cable end-sleeves, round crimping for narrow chamber sizes	1.5 - 6		<b>KP351</b>
 Cable end-sleeves, round crimping for narrow chamber sizes	10 - 16		<b>KP352</b>
 Cable end-sleeves DIN 46228, part 2, roll-crimping	0.5 - 2.5		<b>KP66</b>
<b>Crimping heads for insulated cable connections</b>			
 Insulated cable connections (yellow and red)	0.1 - 1		<b>KP80</b>
 Insulated cable connections (red and blue)	0.5 - 2.5		<b>KP81</b>
 Insulated cable connections (red, yellow, blue)	0.5 - 6		<b>KP82</b>
 Insulated cable connections (yellow)	4 - 6		<b>KP83</b>
<b>Crimping heads for tubular cable lugs and terminals</b>			
 Tubular cable lugs and solderless terminals	0.5 - 6		<b>KP232</b>
 Tubular cable lugs and solderless terminals	4 - 10		<b>KP242</b>
<b>Crimping heads for photovoltaic</b>			
 Connector for photovoltaics 3 mm dia.	2.5 - 4		<b>KP90MC31</b>
<b>Crimping heads for receptacles</b>			
 Part No. 3720. Receptacles 6.3 x 0.8 mm with lateral conductor connector	0.5 - 1		<b>KP631</b>
 Part No. 3725, receptacles 6.3 x 0.8 mm with lateral conductor connector	0.5 - 1.5		<b>KP64</b>
 Part No. 3735, receptacles 6.3 x 0.8 mm with lateral conductor connector	1.5 - 2.5		<b>KP632</b>
 For receptacles 2.8 mm tab width	0.1 - 1		<b>KP67</b>
 For receptacles 4.8 mm tab width	0.5 - 2.5		<b>KP65</b>
 For receptacles 6.3 mm tab width	0.5 - 2.5		<b>KP68</b>



EK 35/4 Battery powered crimping tool 6 - 150 mm<sup>2</sup>

- ▶ Large cross section range up to 150 mm<sup>2</sup>
- ▶ Slim crimping head - ideal when space is critical

## Characteristics







































- For interchangeable dies, series 4, narrow crimping
- Closed crimping head, flip top style, rotatable
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Powerful NiMH battery technology
- Fast crimping cycles for efficient operations
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data		
Crimping force	35 kN	
Stroke / opening width	9 mm	
Crimping range	6 - 150 mm <sup>2</sup>	
Crimping cycle	3 s to 4 s (depending on cross-section)	
Number of crimps	approx. 140 at 120 mm <sup>2</sup> Cu	
Battery voltage	9.6 V	
Battery capacity	2.0 Ah, NiMH	
Charging time	With fast charger 15 min., otherwise 40 min.	
Weight incl. battery	1.7 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Battery powered hydraulic crimping tool 6 - 150 mm <sup>2</sup>	<b>EK354</b>	
Scope of supply	Part No.	Page
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KK35B2	

Accessories	Part No.	Page
Digital meter for force and pressure measurement	TC1U	406
Battery 9.6 V / 3.0 Ah, NiMH (28.8 Wh)	RAM3	397
USB adapter	PGA1	408
Measuring adapter, series 4	MA4	406
Force sensor, 70 kN	TF70L	406
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399

Variants	Part No.	Page
EK 35/4 with crimping die set HR 4 from 6 - 150 mm <sup>2</sup>	EK354SETHR	
EK 35/4 with crimping die set HD 4 from 6 - 120 mm <sup>2</sup>	EK354SETHD	

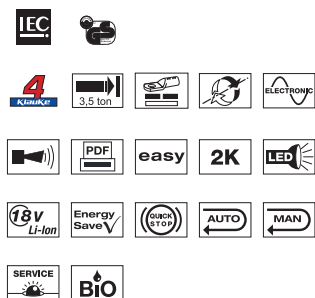
**Available dies for Series 4 for EK 35/4**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 150		416
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 150		417
Insulated tubular cable lugs and compression joints, standard type, insulated pin terminals		10 - 70		417
Tubular cable lugs and connectors for fine stranded conductors		10 - 35		418
Tubular cable lugs and compression joints for solid conductors		1.5 - 16		418
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		418
Tubular cable lugs and connectors, Ni		0.5 - 16		418
<b>Copper compression cable lugs and connectors acc. to DIN</b>				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 120		418
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) and pin terminals (DIN 46230) Cu, connectors (DIN 46341)		10 - 35		419
Insulated solderless terminals and pin terminals		10 - 16		419
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 150 se /120 sm		419
<b>Aluminum Compression cable lugs and connectors acc. to DIN</b>				
Aluminum Compression cable lugs and connectors acc. to DIN		10 - 70		420
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 50		420
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 70		420
<b>Clamps</b>				
Clamps, C-type		4 - 35		420
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 50		420
Twin cable end-sleeves		2 x 4 - 2 x 16		421
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 50		421
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		421

Please observe the restrictions in the technical index when crimping connectors!



### EK 35/4-L Battery powered crimping tool 6 - 150 mm<sup>2</sup>



- ▶ Large cross section range up to 150 mm<sup>2</sup>
- ▶ Slim crimping head - ideal when space is critical
- ▶ High-performance 18V Lithium-ion battery with high capacity and extremely short charging time
- ▶ Equally efficient and safe working due to the benefits of Generation Safety Plus

#### Characteristics

- For interchangeable dies, series 4, narrow crimping
- Closed crimping head, flip top style, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Lightweight for effortless operations
- LED for workplace illumination
- High-performance motors for fast crimping cycles and efficient operations
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	35 kN
Stroke	9 mm
Crimping range	6 - 150 mm <sup>2</sup>
Crimping cycle	3 s to 4 s (depending on cross-section)
Number of crimps	approx. 140 at 120 mm <sup>2</sup> Cu
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	2.5 kg
Ambient temperature	-10°C to +40 °C







































Item	Part No.	
Battery powered hydraulic crimping tool 6 - 150 mm <sup>2</sup>	<b>EK354L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK50L	

Accessories	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 4	MA4	406
Force sensor, 70 kN	TF70L	406
18 V mains adapter for 240 V Voltage	NG2230	399

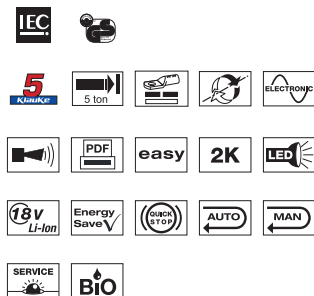
Variants	Part No.	Page
L-BOXX with battery powered hydraulic crimping tool EK354L, 0.5 - 150 mm <sup>2</sup>	LBOXXEK354L	



**Available dies for Series 4 for EK 35/4-L**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 150		416
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 150		417
Insulated tubular cable lugs and compression joints, standard type, insulated pin terminals		10 - 70		417
Tubular cable lugs and connectors for fine stranded conductors		10 - 35		418
Tubular cable lugs and compression joints for solid conductors		1.5 - 16		418
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		418
Tubular cable lugs and connectors, Ni		0.5 - 16		418
<b>Copper compression cable lugs and connectors acc. to DIN</b>				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 120		418
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) and pin terminals (DIN 46230) Cu, connectors (DIN 46341) Cu		10 - 35		419
Insulated solderless terminals and pin terminals		10 - 16		419
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 150 se / 120 sm		419
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 70		420
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 50		420
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 70		420
<b>Clamps</b>				
Clamps, C-type		4 - 35		420
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 50		420
Twin cable end-sleeves		2 x 4 - 2 x 16		421
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 50		421
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		421

Please observe the restrictions in the technical index when crimping connectors!

EK 50/5-L Battery powered crimping tool 6 - 240 mm<sup>2</sup>

- ▶ High-performance crimping tool of the Klauke mini+ series - very large crimp range up to 240 mm<sup>2</sup> (tubular cable lugs only)
- ▶ Increased safety, performance and comfort through "Intelligent Pressing System" (IPS)
- ▶ Up to 95 mm<sup>2</sup> just one die for processing of 2 cross sections - only for tubular and compression cable lugs and connectors

## Characteristics

- For interchangeable dies, series 5, narrow crimping
- Closed crimping head, flip top style, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Lightweight for effortless operations
- LED for workplace illumination
- High-performance 18V Li-ion battery with high capacity
- High-performance motors for fast crimping cycles and efficient operations
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	50 kN
Stroke / opening width	12 mm
Crimping range	6 - 240 mm <sup>2</sup>
Crimping cycle	4 s to 5 s (depending on cross-section)
Number of crimps	approx. 300 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	480 x 500 x 360 min.
Weight incl. battery	2.4 kg
Ambient temperature	-10°C to +40 °C





























Item	Part No.	
Battery powered hydraulic crimping tool 6 - 240 mm <sup>2</sup>	<b>EK505L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK50L	

Accessories	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 5	MA5	406
Force sensor, 70 kN	TF70L	406

Variants	Part No.	Page
EK 50/5-L with crimping die set HR 5 from 6 - 240 mm <sup>2</sup>	EK505LSETHR	
EK 50/5-L with crimping die set HD 5 from 6 - 185 mm <sup>2</sup>	EK505LSETHD	
L-BOXX with battery powered hydraulic crimping tool EK505L, 6 - 240 mm <sup>2</sup>	LBOXXEK505L	



**Available dies for Series 5 for EK 50/5-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 185		422
Tubular cable lugs and connectors, Cu, standard type		6 - 240		422
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 95		423
Tubular cable lugs and connectors for fine stranded conductors		10 - 50		423
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 185		423
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) and pin terminals (DIN 46230)		10 - 50		424
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 240 sm		424
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 150		425
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 95		425
<b>Clamps</b>				
Clamps, C-type		16 - 35		425
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 95		425
Twin cable end-sleeves		2 x 4 - 2 x 16		426
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 95		426
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		426

Please observe the restrictions in the technical index when crimping connectors!



EK 50/18-L Battery powered crimping tool 6 - 185 mm<sup>2</sup>

- ▶ For dies acc. to DIN 48083, page 1
- ▶ Increased safety, performance and comfort through "Intelligent Pressing System" (IPS)
- ▶ With automatic retract stop (ARS) for fast crimping cycles

## Characteristics

- For interchangeable dies, series 18, narrow crimping
- Open C-crimping head, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Lightweight for effortless operations
- LED for workplace illumination
- High-performance 18V Li-ion battery with high capacity
- High-performance motors for fast crimping cycles and efficient operations
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

































Technical data	
Crimping force	50 kN
Stroke / opening width	17 mm
Crimping range	6 - 185 mm <sup>2</sup>
Crimping cycle	5 s to 6 s (depending on cross-section)
Number of crimps	approx. 160 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	2.8 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.
Battery powered hydraulic crimping tool 6 - 185 mm <sup>2</sup>	<b>EK5018L</b>
Scope of supply	Part No.
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1
Plastic case	KK50L

Accessories	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 18	MA18	406
Force sensor, 70 kN	TF70L	406



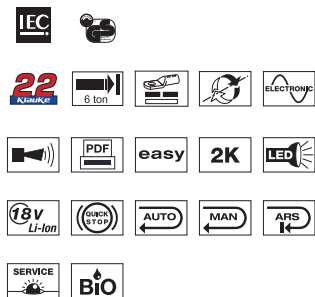
**Available dies for Series 18 for EK 50/18-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 185		427
Insulated tubular cable lugs and compression joints, insulated pin terminals		10 - 95		427
Tubular cable lugs and connectors for fine stranded conductors		10 - 50		428
Tubular cable lugs and connectors for solid conductors		1.5 - 16		428
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Copper compression cable lugs (DIN 46235) and compression joints (DIN 46267, part 1)		6 - 185		428
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Solderless terminals (DIN 46234) and pin terminals (DIN 46230), solderless connectors (DIN 46341) Cu		10 - 70		429
Insulated solderless terminals and pin terminals		10 - 50		429
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 240 se / 185 sm		429
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 185		430
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 95		430
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 185		430
<b>Clamps</b>				
Clamps, C-type		4 - 50		430
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 95		431
Twin cable end-sleeves		2 x 4 - 2 x 16		431
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 95		431
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		432
<b>Cutting die</b>				
Cutting range 18 mm		18 mm dia.		432

Please observe the restrictions in the technical index when crimping connectors!



### EKM 60/22-L Battery powered crimping tool 6 - 300 mm<sup>2</sup>



- ▶ Large crimping range up to 300 mm<sup>2</sup>
- ▶ Slim crimping head - ideal when space is critical
- ▶ Automatic retract stop (ARS) for positioning control in case of multiple crimpings

#### Characteristics

- For interchangeable dies, series 22, narrow crimping
- Closed crimping head, flip top style, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Lithium-ion battery with high capacity and extremely short charging time
- High-performance motors for maximum operating speed
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	60 kN
Stroke	17.5 mm
Crimping range	6 - 300 mm <sup>2</sup>
Crimping cycle	2 s (for ARS) to 5 s (depending on cross-section)
Number of crimps	approx. 150 - 200 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	3.0 kg
Ambient temperature	-10°C to +40 °C















































Item	Part No.
Battery powered hydraulic crimping tool 6 - 300 mm <sup>2</sup>	<b>EKM6022L</b>
Scope of supply	
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1 398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1 400
Plastic case	KK50L

Accessories	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 22	MA22	406
Force sensor, 70 kN	TF70L	406

Variants	Part No.	Page
L-BOXX with battery powered hydraulic crimping tool EKM6022L, 6 - 300 mm <sup>2</sup>	LBOXXEKM6022L	



**Available dies for Series 22 for EKM 60/22-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 300		433
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 300		434
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		434
Tubular cable lugs and connectors for fine stranded conductors		10 - 70		435
Tubular cable lugs and connectors for solid conductors		1.5 - 16		435
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		435
Tubular cable lugs and connectors, Ni		10 - 50		435
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 300		436
Double compression cable lugs		2 x 50 - 2 x 70		436
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		10 - 70		437
Insulated terminals and pin terminals		10 - 70		437
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 240 sm		437
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 300		438
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		438
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		439
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		439
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 300		438
<b>Clamps</b>				
Clamps, C-type		4 - 50		439
Clamps, H-type		70		439
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 240		440
Twin cable end-sleeves		2 x 4 - 2 x 16		440
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 240		440
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		441

Please observe the restrictions in the technical index when crimping connectors!

EK 60/22-L Battery powered crimping tool 6 - 300 mm<sup>2</sup>

- ▶ Superior performance by special strong motor, 2-stage hydraulic system and 18V / 3.0 Ah Li-Ion battery
- ▶ Large crimping range up to 300 mm<sup>2</sup>
- ▶ Slim crimping head - ideal when space is critical

## Characteristics

- For interchangeable dies, series 22, narrow crimping
- Closed crimping head, flip top style, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable















































Technical data	
Crimping force	60 kN
Stroke / opening width	17 mm
Crimping range	6 - 300 mm <sup>2</sup>
Crimping cycle	3 s to 5 s (depending on cross-section)
Number of crimps	approx. 300 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	4.2 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic crimping tool 6 - 300 mm <sup>2</sup>	<b>EK6022L</b>
Scope of supply	Part No.
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	NG2230
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1
Plastic case	KK120L

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 22	MA22	406
Force sensor, 70 kN	TF70L	406

Variants	Part No.	Page
EK 60/22-L with crimping die set R 22 from 16 - 240 mm <sup>2</sup>	EK6022LSETR	
EK 60/22-L with crimping die set D 22 from 16 - 240 mm <sup>2</sup>	EK6022LSETD	

**Available dies for Series 22 for EK 60/22-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 300		433
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 300		434
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		434
Tubular cable lugs and connectors for fine stranded conductors		10 - 70		435
Tubular cable lugs and connectors for solid conductors		1.5 - 16		435
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		435
Tubular cable lugs and connectors, Ni		10 - 50		435
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 300		436
Double crimping compression cable lugs		2 x 50 - 2 x 70		436
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		10 - 70		437
Insulated terminals and pin terminals		10 - 70		437
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 240sm		437
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 300		438
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		438
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		439
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		439
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 300		438
<b>Clamps</b>				
Clamps, C-type		4 - 50		439
Clamps, H-type		70		439
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 240		440
Twin cable end-sleeves		2 x 4 - 2 x 16		440
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 240		440
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		441

Please observe the restrictions in the technical index when crimping connectors!

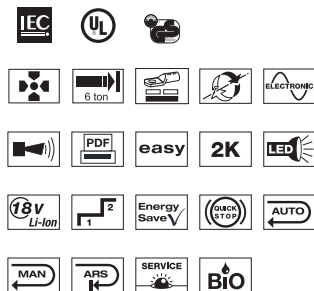
### EK 60 VP-L Battery powered crimping tool 10 - 240 mm<sup>2</sup>



▶ The patented centring system guarantees every time optimum crimping results  
 ▶ With automatic retract stop (ARS) for fast crimping cycles  
 ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 240 mm<sup>2</sup>

#### Characteristics

- Quad-point indent crimping feature with patented centring system, no dies required
- Open crimping head, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Crimping force	55 kN
Crimping range	10 - 240 mm <sup>2</sup>
Crimping cycle	3 s to 6 s (depending on cross-section)
Number of crimps	approx. 300 at 150 mm <sup>2</sup> Cu
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	4.8 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic crimping tool 10 - 240 mm <sup>2</sup>	<b>EK60VPL</b>
<b>Scope of supply</b>	
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2 316
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1 400
Plastic case	KK120L

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
Tubular cable lugs standard type and tubular cable lugs for switchgear connections		10 - 240	
Connectors, Standard type		10 - 120	
Tubular cable lugs for fine stranded conductors		10 - 240	
Connector for fine stranded conductors		10 - 95	

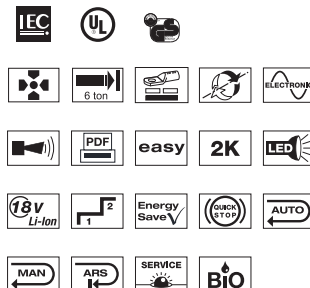
Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter VP	MAVP	406
Force sensor, 70 kN	TF70L	406
Gauge and 10 test cylinder	TS10B	

**EK 60 VP/FT-L Battery powered crimping tool 16 - 300 mm<sup>2</sup>**

- ▶ The patented centring system guarantees every time optimum crimping results
- ▶ Closed crimping head - ideal for utility lines construction
- ▶ With automatic retract stop (ARS) for fast crimping cycles
- ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 300 mm<sup>2</sup>

**Characteristics**

- Quad-point indent crimping feature with patented centring system, no dies required
- Closed crimping head with bolt interlock, rotatable, flip top style
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Crimping force	55 kN
Crimping range	16 - 300 mm <sup>2</sup>
Crimping cycle	3 s to 6 s (depending on cross-section)
Number of crimps	approx. 300 at 150 mm <sup>2</sup> Cu
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	4.9 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic crimping tool 16 - 300 mm <sup>2</sup>	<b>EK60VPFTL</b>

Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter VP	MAVP	406
Force sensor, 70 kN	TF70L	406
Gauge and 10 test cylinder	TS10B	



Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
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-L Battery powered crimping tool 10 - 240 mm<sup>2</sup>



- ▶ Extra large crimping area due to innovative 2-stage telescopic cylinders (patent pending)
- ▶ Indent crimping - no die changing required
- ▶ Specially developed for fine stranded conductors to VDE 0295 Class 5
- ▶ Compact dimensions with an extraordinary low weight

#### Characteristics

- With innovative 2-stage telescopic cylinder
- Indent crimping - no dies required
- Closed crimping head, flip top style, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- High-performance motors for maximum operating speed
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Manual retract stop with "teach-in" (MRS+) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
Tubular cable lugs standard type and tubular cable lugs for switchgear connections		16 - 240	
Tubular cable lugs and connectors for fine stranded conductors		10 - 240	
Terminals (DIN 46234), connectors (DIN 46341) and pin terminals (DIN 46230) - Cu		10 - 240	
Aluminum compression cable lugs and connectors acc. to DIN	Al	50 - 240	
Aluminum compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>	Al	50 - 185	
Aluminum compression joints acc. to DIN 48085, part 2 for Al cables acc. to DIN EN 50182	Al	50 - 240	
Aluminum/copper compression cable lugs and connectors	Al/Cu	50 - 240	

Technical data	
Crimping force	30 - 60 kN
Stroke / opening width	35.5 mm
Crimping range	R-Line: Cu 16 - 240 mm <sup>2</sup> / Al 50 - 240 mm <sup>2</sup> Q and F-Line: Cu 10 - 240
Crimping cycle	2 s (for ARS) to 7 s (depending on cross-section)
Number of crimps	approx. 100 - 300
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	2.5 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.	
Battery powered hydraulic crimping tool 10 - 240 mm <sup>2</sup>	<b>EKM60IDL</b>	
Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
L-BOXX with front handle (W/D/H: 442 x 357 x 151 mm)	LBOXX136LFG	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
USB adapter	PGA1	408

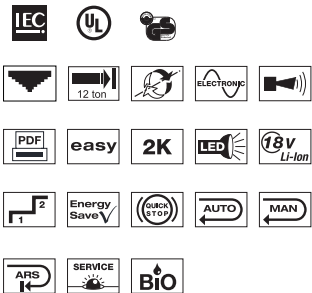


**EK 120 ID-L Battery powered crimping tool 35 - 500 mm<sup>2</sup>**

- ▶ Indent crimping for superfine stranded conductors up to 500 mm<sup>2</sup>
- ▶ No dies required, multi purpose application

**Characteristics**

- Indent crimping - no dies required
- Closed crimping head, flip top style, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB-Adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Li-ion battery with high capacity
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Crimping force	108 kN
Stroke / opening width	52 mm
Crimping range	35 - 500 mm <sup>2</sup>
Crimping cycle	10 s to 11 s (depending on cross section)
Number of crimps	approx. 115 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	6.8 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	
Akkuhydraulisches Presswerkzeug 35 - 500 mm <sup>2</sup>	<b>EK120IDL</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Force sensor, 130 kN	TF130L	406



EK 120/30-L Battery powered crimping tool 16 - 400 mm<sup>2</sup>

- ▶ Exceptionally easy handling of a 12 ton tool thanks to optimised weight distribution
- ▶ Very large crimping range to 400 mm<sup>2</sup>
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics











































- For interchangeable dies, series 13, wide crimping
- Open C-crimping head, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	120 kN
Stroke / opening width	30 mm
Crimping range	16 - 400 mm <sup>2</sup>
Crimping cycle	7 s to 8 s (depending on cross-section)
Number of crimps	approx. 115 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	6.6 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	
Battery powered hydraulic crimping tool 16 - 400 mm <sup>2</sup>	EK12030L	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 13	MA120	406
Force sensor, 130 kN	TF130L	406

**Available dies for Series 13 for EK 120/30-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Butt connectors, standard type		16 - 185		443
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Compression joints DIN 46267 part 1		16 - 150		444
Double compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150		445
Insulated terminals and pin terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 240		446
Aluminum connectors		10 - 120		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		24/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 240		446
<b>Clamps</b>				
Clamps, C-type		10 - 70		447
Clamps, H-type		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



EK 120/42-L Battery powered crimping tool 16 - 400 mm<sup>2</sup>

- ▶ C-Head with 42 mm opening width and very wide crimping range to 400 mm<sup>2</sup>
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools
- ▶ Easy handling by optimum weight distribution

## Characteristics





































- For interchangeable dies, series 13, wide crimping
- Open C-crimping head, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-ion battery with high capacity
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data	
Crimping force	120 kN
Stroke / opening width	42 mm
Crimping range	16 - 400 mm <sup>2</sup>
Crimping cycle	8 s to 9 s (depending on cross-section)
Number of crimps	approx. 115 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	6.8 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic crimping tool 16 - 400 mm <sup>2</sup>	<b>EK12042L</b>
Scope of supply	Part No.
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1 400
Plastic case	KK120L

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 13	MA120	406
Force sensor, 130 kN	TF130L	406

**Available dies for Series 13 for EK 120/42-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Double compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150		445
Insulated terminals and pin terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Aluminum compression cable lugs and connectors acc. to DIN</b>				
Aluminum compression cable lugs and connectors acc. to DIN		10 - 240		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 240		446
<b>Clamps</b>				
Clamps, C-type		10 - 70		447
Clamps, H-type		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



EK 120 U-L Battery powered crimping tool 16 - 400 mm<sup>2</sup>

- ▶ H-head for deep groove crimping
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics

- For interchangeable dies, series 13, wide crimping
- Closed H-crimping head, rotatable
- Electronic control and monitoring of crimping operation
- Integrated pressure measurement with visual and audible signals in case of failure
- Evaluation function using optical interface and USB adapter
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Lithium-ion battery with high capacity and extremely short charging time
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful crimping process
- Quick motor stop for high user safety
- Automatic retraction when crimping is complete
- Manual retract in case of need
- Automatic retract stop (ARS) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable





































## Technical data

Crimping force	120 kN
Stroke / opening width	20 mm
Crimping range	16 - 400 mm <sup>2</sup>
Crimping cycle	7 s to 8 s (depending on cross-section)
Number of crimps	approx. 115 at 150 mm <sup>2</sup> Cu DIN
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	6.0 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	
Battery powered hydraulic crimping tool 16 - 400 mm <sup>2</sup>	<b>EK120UL</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Measuring adapter, series 13	MA120	406
Force sensor, 130 kN	TF130L	406

**Available dies for Series 13 for EK 120 U-L**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Insulated tubular cable lugs and compression joints		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Double compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150		445
Insulated terminals and pin terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Compression cable lugs and connectors acc. to DIN - Al		10 - 240		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 240		446
<b>Clamps and screw connectors</b>				
C-clamps		10 - 70		447
H-clamps		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



## Strong cables simply cut.

### Battery powered hydraulic cutting tools.

Klauke cutting tools combine 2 essential forces: the force of the innovative battery powered systems and the force of the cutting heads - in a compact lightweight design. Cables with or without armouring up to 105 mm diameter, as well as Al/St ropes, are cut quickly, accurately and effortlessly at the touch of a button. The astonishingly low weight of the tools and cutting heads helps the user and permits prolonged periods of operation at full performance.

High cutting performance is not everything. The Klauke® mini+ reliably cuts cables at the touch of a button, even in tight spaces such as control cabinets.

### ■ Save time and energy – *with the retract stop function.*



- ▶ This new tool generation has the manual retract stop function - MRS.
- ▶ The retract stop stops the automatic retraction on completion of a cut.

#### Benefits:

- ▶ The MRS function enables cables to be cut faster, since the blades open only as far as needed to perform the next cut.
- ▶ **Reducing the required stroke per cutting operation to a minimum permits more cuts per battery charge for the same low effort.**

- **Manual retract stop - MRS.**
- **Cutting tools with 15 kN to 120 kN cutting force.**
- **Cutting tools to 105 mm dia., also for armoured cables.**
- **Incredibly lightweight for the performance class.**



## Powerful tools for cables up to 105 mm dia.

- ▶ High cutting capacities up to 105 mm dia.
- ▶ Remarkably lightweight for tools in this performance and size class.

### Benefits:

- ▶ Despite their relatively low weight, the high stability of the cutting heads mean they perform well even under extreme load.



## Small design, huge performance: Klauke® mini and Klauke® mini+

- ▶ Ergonomic design for convenient one-hand operation.
- ▶ Lightweight, from 1.3 kg including battery.



### Benefits:

- ▶ The Klauke® mini+ combines a host of established benefits with the technical features of the new Safety Plus generation - making work even in the tightest spaces even more efficient and safer.
- ▶ The design and low weight permit use even in tight areas, for example in control cabinets.

## Improved cutting using the right tools.

System	Tool	Design		Cutting range mm dia.	Cutting force kN <sup>2)</sup>	Application				Features
		Open head	Closed head			Cu / Al <sup>1)</sup>	Al / St (ACSR)	Cu / Al, solid	Steel, solid	
Klauke® mini	EBS8	✓		8	15				✓	For cutting wire basket tray and steel bolts.
	EBS12	✓		12	35				✓	
	ES20	✓		20	23	✓	✓			Suitable for Al/St ropes.
	ES32	✓		32	15	✓				For Al and Cu cables to 32 mm dia.
	ES32F	✓		32	15	✓				Ideal solution for superfine stranded conductors.
Klauke® mini+	EBS8L	✓		8	15				✓	For cutting wire basket tray and steel bolts.
	EBS12L	✓		12	35				✓	
	ES20L	✓		20	23	✓	✓			Suitable for Al/St ropes.
	ESG25L			25	60	✓	✓	✓	✓	The "universal cutter" to 25 mm dia.
	ES32L	✓		32	15	✓				For Al and Cu cables to 32 mm dia.
	ES32FL	✓		32	15	✓				Ideal solution for superfine stranded conductors.
Klauke® mini+	ESG45L		✓	45	60	✓	✓	✓	✓	Especially for Al/St ropes to 45 mm dia.
	ESG50L		✓	48	60	✓				Compact and lightweight cutting tool.
	ES65L	✓		65	40	✓				Ideal for cutting earth cables to 65 mm dia.
Klauke® mini+	ESG55L		✓	55	120	✓	✓	✓	✓	With 120 kN cutting force for all cables and Al/St ropes up to 55 mm dia.
	ESG85L		✓	85	60	✓				For cutting copper and aluminum cables to 85 mm dia.
	ES85L	✓		85	30	✓				For cutting telecommunication and earth cables to 85 mm dia.
	ESG105L		✓	105	120	✓		✓		Very wide cutting range to 105 mm dia. - also for armoured cables.
	ES105L	✓		105	74	✓				Also for fine stranded cables to 105 mm dia.

<sup>1)</sup> This column also includes Cu / Al multi-stranded and Cu / Al with sheet metal and wire armouring.

<sup>2)</sup> The exact cutting capacity depends on the type of cable or rope.

## EBS 8 / EBS 12 Battery powered bolt cutting tool 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

## Characteristics

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Powerful NiMH battery technology
- Quick motor stop for high user safety
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Automatic retraction when cut is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data		
Cutting range	EBS8: max. 8 mm dia., EBS12: max. 12 mm dia.	
Cutting force	EBS8: 15 kN, EBS12: 45 kN	
Cutting time	EBS8: 2 s, EBS12: 4 s (depending on material thickness)	
Number of cuts	approx. 300 for bolts 5 mm dia.	
Battery voltage	9.6 V	
Battery capacity	2.0 Ah, NiMH	
Charging time	With fast charger 15 min., otherwise 40 min.	
Weight incl. battery	EBS8: 1.3 kg, EBS12: 1.9 kg	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Battery powered hydraulic bolt cutting tool 8 mm dia.	<b>EBS8</b>	
Battery powered hydraulic bolt cutting tool 12 mm dia.	<b>EBS12</b>	
Scope of supply	Part No.	Page
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KK35B2	
Accessories	Part No.	Page
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399
USB adapter	PGA1	408

**EBS 8-L / EBS 12-L Battery powered bolt cutting tool 8 mm dia. / 12 mm dia.**

- ▶ For cutting cable channels, bolts and medium-hard steel wire (e.g. mild steel)
- ▶ Slim cutting head - ideal when space is critical
- ▶ Powerful 18V Lithium-Ion batteries

**Characteristics**

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18 V Lithium-ions batteries with high capacity and extremely short charging time
- High-performance motors for maximum operating speed
- Energy saving function by stopping motor after successful cutting operation
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Multifunction LED for maintenance control and charging display of the battery
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Cutting range	EBS8L: max. 8 mm dia., EBS12L: max. 12 mm dia.
Cutting force	EBS8L: 15 kN, EBS12L: approx. 45 kN
Cutting time	EBS8L: approx. 1 s, EBS12L: approx. 2 s (depending on material thickness)
Number of cuts	approx. 300 for bolts 5 mm dia.
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	EBS8L: 1.55 kg, EBS12L: approx. 2 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.
Battery powered hydraulic bolt cutting tool 8 mm dia.	<b>EBS8L</b>
Battery powered hydraulic bolt cutting tool 12 mm dia.	<b>EBS12L</b>

Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK50L	

Accessories	Part No.	Page
USB adapter	PGA1	408
18 V mains adapter for 240 V Voltage	NG2230	399
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398



## ES 20 Battery powered cutting tool 20 mm dia.



- ▶ For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to VDE 0295, Class 1 and laminated copper bus bars
- ▶ Extremely robust design and lightweight

## Characteristics

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Powerful NiMH battery technology
- Quick motor stop for high user safety
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Automatic retraction when cut is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable



ES20E

Technical data		
Cutting range	Multi-stranded max. 20 mm dia. (depending on cable type)	
Cutting time	4 s to 6 s (depending on material thickness)	
Number of cuts	approx. 180 for ACSR cable 120/20	
Battery voltage	9.6 V	
Battery capacity	2.0 Ah, NiMH	
Charging time	With fast charger 15 min., otherwise 40 min.	
Ambient temperature	-20°C to +40 °C	
Item	Part No.	
Battery powered hydraulic cutting tool 20 mm dia.	<b>ES20</b>	
Scope of supply	Part No.	Page
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KK35B2	
Accessories	Part No.	Page
Replacement blade set for ES20	ES20E	
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399
USB adapter	PGA1	408

**ES 20-L Battery powered cutting tool 20 mm dia.**

- ▶ For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to VDE 0295, Class 1 and laminated copper bus bars
- ▶ Extremely robust design and lightweight
- ▶ Slim cutting head - ideal when space is critical
- ▶ High-performance 18 V Li-Ion battery

**Characteristics**

- Open cutting head, rotatable
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18 V Lithium-ion battery with high capacity and extremely short charging time
- High-performance motors for maximum operating speed
- Energy saving function by stopping motor after successful cutting operation
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Klauke® mini+

Technical data	
Cutting range	max. 20 mm dia.
Cutting force	23 kN
Cutting time	2 s to 4 s (depending on cable type)
Number of cuts	approx. 160 cuts (ACSR cable 120/20)
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	2.13 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.	
Battery powered hydraulic cutting tool 32 mm dia.	<b>ES20L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK50L	

Accessories	Part No.	Page
Replacement blade set for ES20	ES20E	
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408



ES20E

## ESG 25-L Battery powered cutting tool 25 mm dia.



Klauke® mini+



- ▶ 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

## Characteristics

- Closed cutting head, flip top style, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18 V Li-Ion battery
- Quick motor stop for high user safety
- High-performance motors for maximum operating speed
- Energy saving function by stopping motor after successful cutting operation
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

Cu  
Al

Al/St



ELECTRONIC



easy

2K

18V  
Li-IonEnergy  
Save

AUTO

MAN

MRS



BiO



ESG25EF



ESG25ES

Technical data	
Cutting range	max. 25 mm dia.
Cutting force	60 kN
Cutting time	Depending on material
Number of cuts	Depending on material
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	650 x 180 x 150 min.
Weight incl. battery	2.1 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.
Battery powered hydraulic cutting tool 25 mm dia.	<b>ESG25L</b>

Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK50L	

Accessories	Part No.	Page
Outer fixed blade	ESG25EF	
Inner moving blade	ESG25ES	
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

**ES 32 / ES 32 F Battery powered cutting tool 32 mm dia.**

- ▶ Cuts multi-stranded copper and aluminum cables (ES 32)
- ▶ Cuts fine and superfine stranded copper cables (ES 32 F)
- ▶ Slim cutting head - ideal when space is critical

**Characteristics**

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Automatic retraction when cut is complete
- Powerful NIMH battery technology
- Quick motor stop for high user safety
- Manual retract in case of need
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable

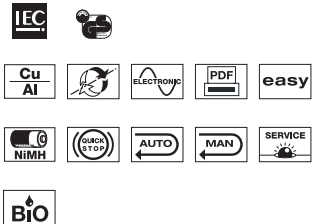
Technical data	
Cutting range	max. 32 mm dia.
Cutting force	15 kN
Cutting time	8 s to 10 s (depending on material thickness)
Number of cuts	approx. 90 cuts at H07V-K; 1 x 240 mm <sup>2</sup>
Battery voltage	9.6 V
Battery capacity	2.0 Ah, NIMH
Charging time	With fast charger 15 min., otherwise 40 min.
Weight incl. battery	1.9 kg
Ambient temperature	-20°C to +40 °C

Item	Part No.
Battery powered hydraulic cutting tool 32 mm dia.	<b>ES32</b>
Battery powered hydraulic cutting tool 32 mm dia., superfine stranded	<b>ES32F</b>

Scope of supply	Part No.	Page
Battery 9.6 V / 2.0 Ah, NIMH (19.6 Wh)	RAM2	397
Charger for NiCd and NiMH batteries	LG4F	399
Plastic case 450 x 370 x 105 mm	KK35B2	

Accessories	Part No.	Page
Replacement blade set for ES 32 and ES 32-L	ES32E	
Replacement blade set for ES 32 F and ES 32 F-L	ES32FE	
Quick charger for NiCd and NiMH batteries, 230 V mains power	LG5	399
USB adapter	PGA1	408



ES32E

ES32FE



### ES 32-L / ES 32 F-L Battery powered cutting tool 32 mm dia.

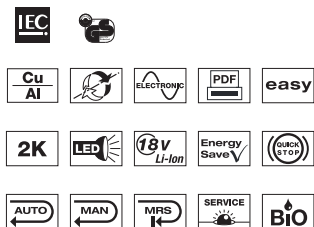


Klauke mini+

- ▶ Cuts multi-stranded copper and aluminum cables (ES 32-L)
- ▶ Cuts fine and superfine stranded copper cables (ES 32 F-L)
- ▶ Slim cutting head - ideal when space is critical

#### Characteristics

- Open cutting head, rotatable
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-ion battery with high capacity
- High-performance motors for maximum operating speed
- Automatic retraction when cut is complete
- Energy saving function by stopping motor after successful cutting operation
- Quick motor stop for high user safety
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



ES32E

ES32FE



Technical data	
Cutting range	max. 32 mm dia.
Cutting force	15 kN
Cutting time	2 s to 4 s (depending on cable type)
Number of cuts	approx. 150 cuts at H07V-R; 1 x 240 mm <sup>2</sup> , approx. 60 cuts for H07V-K 1 x 240 mm <sup>2</sup>
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight incl. battery	2.0 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.
Battery powered hydraulic cutting tool 32 mm dia.	<b>ES32L</b>
Battery powered hydraulic cutting tool 32 mm dia., superfine stranded	<b>ES32FL</b>

Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK50L	

Accessories	Part No.	Page
Replacement blade set for ES 32 and ES 32-L	ES32E	343
Replacement blade set for ES 32 F and ES 32 F-L	ES32FE	343
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

Variants	Part No.	Page
L-BOXX with cutting tool ES 32-L	LBOXXES32L	



**ESG 45-L Battery powered cutting tool 45 mm dia.**

- ▶ High cutting force cuts armoured copper and aluminum cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and Steel
- ▶ Extremely robust design and lightweight

**Characteristics**

- Closed cutting head with bolt interlock, rotatable, flip top style
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery
- Energy saving function by stopping motor after successful cutting operation
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data		
Cutting range	max. 45 mm dia.	
Cutting force	60 kN	
Cutting time	8 s to 18 s (depending on material)	
Number of cuts	approx. 150 cuts at Al/St cable 570/40	
Battery voltage	18 V	
Battery capacity	3.0 Ah, Li-Ion	
Charging time	22 min.	
Weight incl. battery	5.7 kg	
Ambient temperature	-12°C to +40 °C	
Item	Part No.	
Battery powered hydraulic cutting tool 45 mm dia.	<b>ESG45L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
Outer fixed blade	ESG45EF	
Inner moving blade	ESG45ES1	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408



ESG45EF



ESG45ES1

## ESG 50-L Battery powered cutting tool 48 mm dia.



- ▶ Cuts copper and aluminum cables with light weight steel armoring (depending on cable type)
- ▶ Lightweight for effortless operations

## Characteristics

- Closed cutting head, flip top style, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Lithium-ion battery with high capacity and extremely short charging time
- Energy saving function by stopping motor after successful cutting operation
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



ESG50EF1



ESG50ES

Technical data	
Cutting range	max. 48 mm dia.
Cutting force	60 kN
Cutting time	8 s to 20 s (depending on material thickness)
Number of cuts	approx. 140 cuts at 4 x 120 mm <sup>2</sup> NYT
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	4.7 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic cutting tool 48 mm dia.	<b>ESG50L</b>
Scope of supply	
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2 398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1 400
Plastic case	KK120L

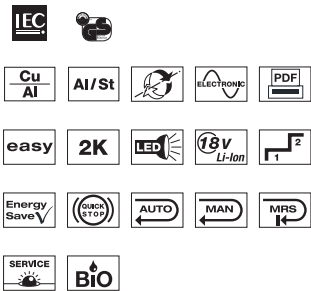
Accessories	Part No.	Page
Outer fixed blade	ESG50EF1	
Inner moving blade	ESG50ES	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

**ESG 55-L Battery powered cutting tool 55 mm dia.**

- ▶ High cutting force cuts armoured copper and aluminum cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and Steel
- ▶ 120 kN cutting force for maximum output
- ▶ Robust design and lightweight

**Characteristics**

- Closed cutting head with bolt interlock, rotatable, flip top style
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- High-performance motors for maximum operating speed
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful cutting operation
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Cutting range	max. 55 mm dia.
Cutting force	120 kN
Cutting time	10 s to 19 s (depending on material thickness)
Number of cuts	Depending on cable type
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	8.0 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	
Battery powered hydraulic cutting tool 55 mm dia.	<b>ESG55L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
Outer fixed blade	ESG55EF	
Inner moving blade	ESG55ES	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408



ESG55EF



ESG55ES

## ES 65-L Battery powered cutting tool 65 mm dia.



- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Also suitable for fine stranded cable
- ▶ Extremely robust design and lightweight
- ▶ Large cutting range

## Characteristics

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Lithium-ion battery with high capacity and extremely short charging time
- Energy saving function by stopping motor after successful cutting operation
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



ES65E

Technical data	
Cutting range	max. 65 mm dia.
Cutting force	40 kN
Cutting time	Depending on material thickness
Number of cuts	Depending on material thickness
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	6.3 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	
Battery powered hydraulic cutting tool 65 mm dia.	<b>ES65L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
Replacement blade	ES65E	
USB adapter	PGA1	408

**ESG 85-L Battery powered cutting tool 85 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armoring (depending on cable type)
- ▶ Large cutting area, optimum force transmission due to closed head shape
- ▶ High user safety through cutting head with bolt interlock

**Characteristics**

- Closed cutting head with bolt interlock, rotatable, flip top style
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- 2-stage hydraulic system with fast feed and power stroke
- High-performance 18V Li-Ion battery
- High-performance motors for maximum operating speed
- Energy saving function by stopping motor after successful cutting operation
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Cutting range	max. 85 mm dia.
Cutting force	60 kN
Cutting time	Depending on material thickness
Number of cuts	Depending on material thickness
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	6.6 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic cutting tool 85 mm dia.	<b>ESG85L</b>
Scope of supply	
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2 398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1 400
Plastic case	KK120L

Accessories	Part No.	Page
Outer fixed blade	ESG85EF1	
Inner moving blade	ESG85ES1	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408



ESG85EF1



ESG85ES1

## ES 85-L Battery powered cutting tool 85 mm dia.



- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Large cutting range
- ▶ Suitable for fine stranded cable and telecommunication cable

## Characteristics

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings for comfortable and safe one-hand operation
- Balanced centre of gravity for easy handling and effortless operations
- LED for workplace illumination
- High-performance 18V Lithium-ion battery with high capacity and extremely short charging time
- Energy saving function by stopping motor after successful cutting operation
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable
- Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- Suitable for fine stranded cable and telecommunication cable



ES85E

Technical data	
Cutting range	max. 85 mm dia.
Cutting force	30 kN
Cutting time	Depending on material thickness
Number of cuts	Depending on material thickness
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	7.0 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	
Battery powered hydraulic cutting tool 85 mm dia.	<b>ES85L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KK120L	

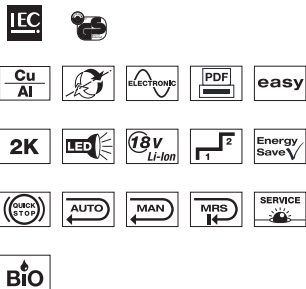
Accessories	Part No.	Page
Replacement blade	ES85E	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

**ESG 105-L Battery powered cutting tool 105 mm dia.**

- ▶ Cuts copper and aluminum cables (for armoured cables)
- ▶ 120 kN cutting force for extremely wide cutting range up to 105 mm dia.
- ▶ Remarkably lightweight for tools in this performance class

**Characteristics**

- Closed cutting head with bolt interlock, rotatable, flip top style
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery with high capacity
- Energy saving function by stopping motor after successful cutting operation
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Cutting range	max. 105 mm dia.
Cutting force	120 kN
Cutting time	Depending on cable type
Number of cuts	Depending on cable type
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight incl. battery	10.3 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic cutting tool 105 mm dia.	<b>ESG105L</b>

Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Steel carrying case	MK105L	

Accessories	Part No.	Page
Outer fixed blade	ESG105EF	
Inner moving blade	ESG105ES	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408



## ES 105-L Battery powered cutting tool 105 mm dia.



- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type), and fine stranded conductors
- ▶ Extremely large cutting range to 105 mm dia.
- ▶ Remarkably lightweight for tools in this performance class

## Characteristics

- Open cutting head, rotatable
- Electronic control and monitoring of cutting operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- 2-stage hydraulic system with fast feed and power stroke
- High-performance 18V Li-Ion battery
- High-performance motors for maximum operating speed
- Energy saving function by stopping motor after successful cutting operation
- Quick motor stop for high user safety
- Automatic retraction when cut is complete
- Manual retract in case of need
- Manual retract stop (MRS) for efficient operations
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



ES105E

Technical data		
Cutting range	max. 105 mm dia.	
Cutting force	74 kN	
Cutting time	Depending on cable type	
Number of cuts	Depending on cable type	
Battery voltage	18 V	
Battery capacity	3.0 Ah, Li-Ion	
Charging time	22 min.	
Weight incl. battery	9.4 kg	
Ambient temperature	-12°C to +40 °C	
Item	Part No.	
Battery powered hydraulic cutting tool 105 mm dia.	<b>ES105L</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Steel carrying case	MK105L	
Accessories	Part No.	Page
Replacement blade	ES105E	
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408



## The *all-rounder.*

### Klauke® multi universal tools

When it comes to operations that require different applications all at the same time, Klauke® multi universal tools are the answer. They have interchangeable adapters and dies for crimping, cutting or punching. All standard operations can be flexibly accomplished using just one tool, ideal for service and repair teams for example.

The Klauke® multi comes as a hand-operated and battery powered hydraulic tool, as well as a universal head in combination with a Klauke system pump.

#### ■ The all-rounder:

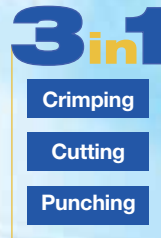
- ▶ One head for crimping, cutting and punching.
- ▶ Crimping adapters for Klauke dies of most Klauke ranges.
- ▶ Various cutting dies for aluminum and copper conductors with and without armouring, as well as rail catenary wires.
- ▶ Special dies for cutting threaded rods and DIN rails.
- ▶ Punching adapter for Greenlee punching tools.
- ▶ Used to punch holes in DIN rails and cut copper rails.

#### Benefits:

- ▶ **All standard operations can be accomplished with just one tool.**

This creates a weight advantage especially for repair and service teams.

- ▶ The 6 ton design is set apart by its low weight and extremely easy handling.
- ▶ Thanks to its design, the 6 ton mini+ version can be used even in tight spaces.
- ▶ The 12 ton tool offers wider crimping ranges and higher punching capacities.
- ▶ Only dies and/or adapters need to be changed for the various applications. A crimping tool can be turned into a cutting or punching tool within seconds.
- ▶ This boosts efficiency especially when it comes to assembly applications.
- ▶ All adapters and dies are compatible with all tools in the Klauke® multi range.



- **One tool - 3 functions.**
- **Interchangeable adapters for crimping, cutting and punching.**
- **Available as hand-operated, battery powered and hydraulic universal heads in combination with a Klauke system pump.**



### HK 60 UNV Hand-operated hydraulic universal tool



▶ One head for crimping, cutting and punching - one tool for all  
 ▶ Ideal for field operations where all common jobs can be carried out with just one tool

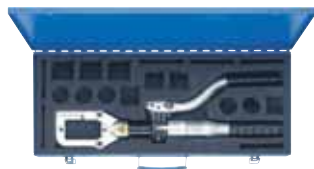
#### Characteristics

- Universal head flip-top style, rotatable
- Adapter for crimping dies of the Klauke Series 5, 18 and 22
- Various cutting dies for aluminum 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 aluminum housing
- 2-stage hydraulic system with fast feed and power stroke
- Automatic retraction when operation is complete
- Manual retract in case of need
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data		
Crimping force	60 kN	
Stroke	42 mm	
Crimping range	6 - 300 mm <sup>2</sup>	
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	<b>HK60UNV</b>	
Scope of supply	Part No.	Page
Steel carrying case for HK 60 UNV with space for adapters and dies	MK60UNV	

Please observe adapters on page 359



**PK 60 UNV Hydraulic universal head**

- ▶ One head for crimping, cutting and punching - one tool for all
- ▶ Ideal for field operations where all common jobs can be carried out with just 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, under no pressure, rotates 360°, flip top style
- Various cutting dies for aluminum 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 data	
Crimping force	60 kN
Stroke	42 mm
Crimping cycle	3 s to 5 s (depending on cross-section)
Number of crimps	approx. 300 at 150 mm <sup>2</sup> Cu DIN
Cutting range	max. 40 mm dia.
Number of cuts	approx. 110 at 4 x 70 mm <sup>2</sup> 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	<b>PK60UNV</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

Please observe adapters on page 359



### EKM 60 UNV-L Battery powered universal tool 6 - 300 mm<sup>2</sup>



Klauke<sup>®</sup> multi



- ▶ One head for crimping, cutting and punching - one tool for all
- ▶ Ideal for field operations where all common jobs can be carried out with just one tool
- ▶ Small and slim, perfect for operations in critical areas

#### Characteristics

- Universal head flip-top style, rotatable
- Electronic control and monitoring of operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery
- High-performance motors for maximum operating speed
- Energy saving function by stopping motor after successful operation
- Quick motor stop for high user safety
- Automatic retraction when operation is complete
- Manual retract in case of need
- Manual retract stop with "teach-in" (MRS+) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter



Technical data	
Crimping force	60 kN
Stroke	27 mm
Crimping range	6 - 300 mm <sup>2</sup>
Crimping cycle	7 s to 9 s (depending on cross-section)
Number of crimps	approx. 200 at 150 mm <sup>2</sup> Cu DIN
Cutting range	max. 25 mm dia.
Number of cuts	approx. 165 - 300
Punching capacity	approx. 170 for 60 mm round, 3 mm mild steel; approx. 230 for 22.5 mm round, 3 mm mild steel
Battery voltage	18 V
Battery capacity	1.3 Ah, Li-Ion
Charging time	15 min.
Weight	3.0 kg
Ambient temperature	-10°C to +40 °C

Item	Part No.	
Battery powered hydraulic universal tool 6 - 300 mm <sup>2</sup>	<b>EKM60UNVL</b>	
Scope of supply	Part No.	Page
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	RAL1	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Plastic case	KKMUNVL	
Adapter for crimping dies of Series 22	UA22	
Adapter 15 mm for cutting dies	UAM	

Accessories	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

Variants	Part No.	Page
L-BOXX with universal crimping tool EKM60UNVL, 6 - 300 mm <sup>2</sup>	LBOXXEKM60UNVL	

Please observe adapters on page 359

**EK 60 UNV-L Battery powered universal tool 6 - 300 mm<sup>2</sup>**

- ▶ One head for crimping, cutting and punching - one tool for all
- ▶ Ideal for field operations where all common jobs can be carried out with just one tool
- ▶ Fast working due to 2-stage hydraulics

**Characteristics**

- Universal head flip-top style, rotatable
- Electronic control and monitoring of operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful operation
- Quick motor stop for high user safety
- Automatic retraction when operation is complete
- Manual retract in case of need
- Manual retract stop with "teach-in" (MRS+) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable



Technical data	
Crimping force	60 kN
Crimping range	6 - 300 mm <sup>2</sup>
Crimping cycle	3 s to 5 s (depending on cross-section)
Number of crimps	approx. 300 at 150 mm <sup>2</sup> Cu DIN
Cutting range	max. 40 mm dia.
Number of cuts	approx. 110 at 4 x 70 mm <sup>2</sup> NYY
Punching capacity	up to 64 mm dia. round
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight	4.6 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.
Battery powered hydraulic universal tool 6 - 300 mm <sup>2</sup>	<b>EK60UNVL</b>
Scope of supply	Part No. Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2 398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1 400
Plastic case	KK120UNVL
Adapter for crimping dies of Series 22	UA22

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

Variants	Part No.	Page
EK60UNVL with crimping die set R22, 16 - 240 mm <sup>2</sup> and adapter UA22 and cutting inserts to max. 40 mm Ø (UCACSR/UC40)	EK60UNVLSETR	

Please observe adapters on page 359



EK 120 UNV-L Battery powered universal tool 10 - 400 mm<sup>2</sup>

- ▶ One head for crimping, cutting and punching - one tool for all
- ▶ Ideal for field operations where all common jobs can be carried out with just one tool
- ▶ Fast working due to 2-stage hydraulics
- ▶ Very large crimping range

## Characteristics


























- Universal head flip-top style, rotatable
- Electronic control and monitoring of operation
- One-button operating concept for controlling all tooling functions
- Ergonomic 2-component plastic housing with soft linings
- Balanced centre of gravity for easy handling
- LED for workplace illumination
- High-performance 18V Li-Ion battery
- High-performance motors for maximum operating speed
- 2-stage hydraulic system with fast feed and power stroke
- Energy saving function by stopping motor after successful operation
- Quick motor stop for high user safety
- Automatic retraction when operation is complete
- Manual retract in case of need
- Manual retract stop with "teach-in" (MRS+) for positioning control in case of multiple crimpings
- Multi-function LED for maintenance control, charge level indicator of the battery and for data transmission via USB adapter

Technical data	
Crimping force	108 kN
Stroke	42 mm
Crimping range	10 - 400 mm <sup>2</sup>
Crimping cycle	Depending on cable type
Number of crimps	approx. 110 at 150 mm <sup>2</sup> Cu DIN
Cutting range	max. 40 mm dia.
Number of cuts	Depending on cable type
Punching capacity	up to 144 mm dia. round, up to 138 x 138 mm square
Battery voltage	18 V
Battery capacity	3.0 Ah, Li-Ion
Charging time	22 min.
Weight	6.3 kg
Ambient temperature	-12°C to +40 °C

Item	Part No.	Page
Battery powered hydraulic universal tool 10 - 400 mm <sup>2</sup>	<b>EK120UNVL</b>	
Scope of supply	Part No.	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	400
Adapter for crimping dies	UA12T	
Plastic case	KK120UNVL	

Accessories	Part No.	Page
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408

Please observe adapters on page 359

Item	Part No.	tools	
		6 ton	12 ton
<b>Crimping</b>			
 Adapter for crimping dies series 5	<b>UA5</b>	■	
 Adapter for crimping dies series 13	<b>UA12TKL</b>		■
 Adapter for crimping dies series 18	<b>UA18</b>	■	
 Adapter for crimping dies series 22	<b>UA22</b>	■	
<b>Cutting</b>			
 Adapter 15 mm for cutting dies	<b>UAM**</b>	■	
 Cutting die for Al/Cu conductors to max. 40 mm dia.	<b>UCACSR*</b>	■	■
 Cutting die to max. 26 mm dia.	<b>UC26*</b>	■	■
 Cutting die to max. 40 mm dia.	<b>UC40*</b>	■	■
 Cutting die for threaded rods M5 metric	<b>UCM5</b>	■	■
 Cutting die for threaded rods M6 metric	<b>UCM6</b>	■	■
 Cutting die for threaded rods M8 metric	<b>UCM8</b>	■	■
 Cutting die for threaded rods M10 metric	<b>UCM10</b>	■	■
 Cutting die for threaded rods M12 metric	<b>UCM12</b>	■	■
 Cutting die for threaded rods 1/4"	<b>UCUNC14</b>	■	■
 Cutting die for threaded rods 3/8"	<b>UCUNC38</b>	■	■
 Cutting die for threaded rods 1/2"	<b>UCUNC12</b>	■	■
 Cutting die for profile conductors 35 x 15	<b>UCD3515</b>	■	■
 Cutting die for profile conductors 32 x 15 x 9	<b>UCD3215</b>	■	■
 Cutting die for profile conductors 35 x 7.5	<b>UCD3575</b>	■	■
 Cutting die for profile conductors 2980	<b>UCN2980</b>	■	■
 Cutting die for laminated Cu bus bars, max. width 37.5 mm	<b>UCF</b>	■	■
 Schneideinsatz zum Fahrdrachtschneiden im Eisenbahnbau 107 mm², Typ AC	<b>UCAC107</b>	■	■
 Cutting die 85 mm² type BC for catenary wires in railway construction	<b>UCBC85</b>	■	■
 Cutting die 110 mm² type BC for catenary wires in railway construction	<b>UCBC110</b>	■	■
 Cutting die 120 mm² type BC for catenary wires in railway construction	<b>UCBC120</b>	■	■
Cutting die 150 mm² type BC for catenary wires in railway construction	<b>UCBC150</b>	■	■
<b>Punching</b>			
Punching adapter for holes 64 mm dia., 92 x 92 mm and 46 x 92 mm	<b>UA6P</b>	■	
Hole punch adapter to 144 mm dia., 138 x 138 mm and 68 x 138 mm	<b>UA12P</b>		■
Die for punching DIN rails 35x15; 32x15x9; 35x7.5	<b>UPD6</b>	■	■

\* In conjunction with EKM 60 UNV-L the cutting range is max. 25 mm dia

\*\* Can be used only with EKM60UNVL



## Many heads, even more potential.

### Crimping and cutting heads for modular systems.

Klauke crimping and cutting heads can be individually configured with Klauke system pumps for special applications. We offer an extensive range as well as crimping tools for workbench mounting.

Typical applications for workbench-mounted tools include cable harness assembly and assembly preparations.





- Crimping heads with crimping forces of 55 kN to 1000 kN.
- Cutting heads up to 120 mm dia.
- Individually configurable with drive units at 700 bar operating pressure.
- Hydraulic crimping tools for workbench mounting for Klauke 18, 22 and 13 die series.



## The correct crimping head for every application.

Tool	Crimping force	Crimping range	Series	Features
PK 18	60 kN	6 - 185 mm <sup>2</sup>	<b>18</b> Klauke	For standardised crimping dies to DIN 48083, sheet 1.
PK 22	60 kN	6 - 300 mm <sup>2</sup>	<b>22</b> Klauke	Slim crimping head - ideal when space is critical.
PK 60 VP	55 kN	10 - 240 mm <sup>2</sup>		"The patented centring system guarantees every time optimum crimping results".
PK 60 VP/FT	55 kN	16 - 300 mm <sup>2</sup>		Closed crimping head - ideal for utility lines construction.
PK 120/42	120 kN	10 - 400 mm <sup>2</sup>	<b>13</b> Klauke	42 mm opening width.
PK 120 U	120 kN	10 - 400 mm <sup>2</sup>	<b>13</b> Klauke	H-head for deep groove crimping.
PK 25/2	250 kN	16 - 625 mm <sup>2</sup>	<b>25</b> Klauke	For standardised crimping dies to DIN 48083, sheet 3.
PK 45	450 kN	120 - 1000 mm <sup>2</sup>	<b>45</b> Klauke	Sturdy construction.
PK 1000	1000 kN	To 1600 mm <sup>2</sup>	<b>100</b> Klauke	100 t crimping head in compact design, single-acting.
THK 18	60 kN	6 - 185 mm <sup>2</sup>	<b>18</b> Klauke	For workbench mounting, BG-compliant design.
THK 22	60 kN	6 - 300 mm <sup>2</sup>	<b>22</b> Klauke	
THK 120	120 kN	10 - 400 mm <sup>2</sup>	<b>13</b> Klauke	

## Improved cutting using the correct cutting heads.

Tool	Design		Cutting range mm dia.	Cutting force kN <sup>2)</sup>	Application				Features
	Open head	Closed head			Cu / Al <sup>1)</sup>	Al / St (ACSR)	Cu / Al, solid	Steel, solid	
SDG 45		✓	45	60	✓	✓	✓	✓	Especially for Al/St ropes to 45 mm dia. and St, solid.
SDG 50		✓	48	60	✓				For multi-stranded Al and Cu cables.
SDG 55		✓	55	120	✓	✓	✓	✓	With 120 kN cutting force for all cables and Al/St ropes to 55 mm dia.
SDK 65		✓	65	42	✓				Ideal for cutting earth cables to 65 mm dia.
SDG 85/2		✓	85	60	✓				For cutting copper and aluminum cables to 85 mm dia.
SDK 85		✓	85	30	✓				For cutting telecommunication and earth cables to 85 mm dia.
SDG 105		✓	105	120	✓		✓		Very wide cutting range to 105 mm dia. - also for armoured cables.
SDK 105		✓	105	74	✓				Also for fine stranded cables to 105 mm dia.
SDK 120		✓	120	55	✓				Extremely large cutting range to 120 mm dia.

<sup>1)</sup> This column also includes Cu / Al multi-stranded and Cu / Al with sheet metal and wire armouring.

<sup>2)</sup> The exact cutting capacity depends on the type of cable or rope.



### PK 18 Hydraulic crimping head 6 - 185 mm<sup>2</sup>



- ▶ For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results
- ▶ Crimping dies are connected by spring - cannot get lost

#### Characteristics

- For interchangeable dies, series 18, narrow crimping
- Open crimping head with quick coupling, under no pressure, rotates 360°
- For dies acc. to DIN 48083, page 1

Technical data		
Crimping force	60 kN	
Stroke / opening width	17 mm	
Crimping range	6 - 185 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Weight	3.2 kg	
Item	Part No.	
Hydraulic crimping head 6 - 185 mm <sup>2</sup>	<b>PK18</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217



**18**  
KLAUKE



### THK 18 Hydraulic crimping tool for workbench mounting 6 - 185 mm<sup>2</sup>



- ▶ BG-compliant version
- ▶ For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

#### Characteristics

































- For interchangeable dies, series 18, narrow crimping
- Quick coupling
- For dies acc. to DIN 48083, page 1
- For workbench mounting

Technical data	
Crimping force	60 kN
Crimping range	6 - 185 mm <sup>2</sup>
Operating pressure	max. 700 bar
Weight	8.2 kg
Dimensions	H x W x D: 220 x 160 x 120 mm
Item	Part No.
Hydraulic crimping tool for work bench mounting 6 - 185 mm <sup>2</sup>	<b>THK18</b>

**18**  
KLAUKE



**Available dies for Series 18 for PK 18 and THK 18**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 185		427
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 95		427
Tubular cable lugs and connectors for fine stranded conductors		10 - 50		428
Tubular cable lugs and connectors for solid conductors		1.5 - 16		428
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 185		428
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		10 - 70		429
Insulated terminals and pin terminals		10 - 50		429
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		10 sm - 240 se / 185 sm		429
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Compression cable lugs and connectors acc. to DIN - Al		10 - 185		430
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182		25 - 95		430
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 185		430
<b>Clamps and screw connectors</b>				
C-clamps		4 - 50		430
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 95		431
Twin cable end-sleeves		2 x 4 - 2 x 16		431
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 95		431
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		432
<b>Cutting die</b>				
Cutting range		18 mm dia.		432

Please observe the restrictions in the technical index when crimping connectors!



PK 22 Hydraulic crimping head 6 - 300 mm<sup>2</sup>22  
Klauke

- ▶ Large crimping range up to 300 mm<sup>2</sup>
- ▶ Slim crimping head - ideal when space is critical

**Characteristics**

- For interchangeable dies, series 22, narrow crimping
- Closed crimping head with quick coupling, flip top style, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

**Order info**

- Also available for "W" crimping dies (UL certified), part number appendix "W"

Technical data		
Crimping force	60 kN	
Stroke / opening width	17 mm	
Crimping range	6 - 300 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Weight	3.0 kg	
Item	Part No.	
Hydraulic crimping head 6 - 300 mm <sup>2</sup>	<b>PK22</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

THK 22 Hydraulisches Presswerkzeug zur Tischmontage 6 - 300 mm<sup>2</sup>22  
Klauke















































- ▶ Large crimping range up to 300 mm<sup>2</sup>
- ▶ For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

**Characteristics**

- For interchangeable dies, series 22, narrow crimping
- Quick coupling
- For workbench mounting
- BG-compliant version

Technical data	
Crimping force	60 kN
Crimping range	6 - 300 mm <sup>2</sup>
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 work bench mounting 6 - 300 mm <sup>2</sup>	<b>THK22</b>

**Available dies for Series 22 for PK 22 and THK 22**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		6 - 300		433
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		6 - 300		434
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		434
Tubular cable lugs and connectors for fine stranded conductors		10 - 70		435
Tubular cable lugs and connectors for solid conductors		1.5 - 16		435
<b>Tubular cable lugs and connectors, Ni, stainless steel</b>				
Tubular cable lugs and connectors, stainless steel		0.5 - 16		435
Tubular cable lugs and connectors, Ni		10 - 50		435
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		6 - 300		436
Double crimping compression cable lugs		2 x 50 - 2 x 70		436
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		10 - 70		437
Insulated terminals and pin terminals		10 - 70		437
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		10 sm - 300 se / 240 sm		437
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Compression cable lugs and connectors acc. to DIN - Al		10 - 300		438
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm²		25 - 185		438
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		439
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		439
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 300		438
<b>Clamps and screw connectors</b>				
C-clamps		4 - 50		439
H-clamps		70		439
<b>Cable end-sleeves</b>				
Cable end-sleeves		10 - 240		440
Twin cable end-sleeves		2 x 4 - 2 x 16		440
Cable end-sleeves, trapezoidal, for fine stranded conductors		10 - 240		440
Twin cable end-sleeves, trapezoidal, for fine stranded conductors		2 x 4 - 2 x 16		441

Please observe the restrictions in the technical index when crimping connectors!

PK 60 VP Hydraulic crimping head 10 - 240 mm<sup>2</sup>

- ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 240 mm<sup>2</sup>
- ▶ The patented centring system guarantees every time optimum crimping results
- ▶ No additional dies required

**Characteristics**

- Quad-point indent crimping
- Wide crimping
- Open crimping head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

Technical data	
Crimping force	55 kN
Crimping range	10 - 240 mm <sup>2</sup>
Operating pressure	max. 700 bar
Weight	2.8 kg









  

Item	Part No.
Hydraulic crimping head 10 - 240 mm <sup>2</sup>	<b>PK60VP</b>

Scope of supply	Part No.	Page
Carrying bag	TT2	217



Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
Tubular cable lugs standard type and tubular cable lugs for switchgear connections		10 - 240	
Connectors, Standard type		10 - 120	
Tubular cable lugs for fine stranded conductors		10 - 240	
Connector for fine stranded conductors		10 - 95	

**PK 60 VP/FT Hydraulic crimping head 16 - 300 mm<sup>2</sup>**

- ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 300 mm<sup>2</sup>
- ▶ The patented centring system guarantees every time optimum crimping results
- ▶ Closed crimping head - ideal for utility lines construction

**Characteristics**

- Quad-point indent crimping
- Wide crimping
- Closed crimping head with quick coupling, flip top style, under no pressure, rotates 360°
- For connecting to hydraulic drive units with 700 bar operating pressure for best possible crimping results



Technical data	
Crimping force	55 kN
Crimping range	16 - 300 mm <sup>2</sup>
Operating pressure	max. 700 bar
Length	315 mm
Weight	2.8 kg

Item	Part No.	
Hydraulic crimping head 16 - 300 mm <sup>2</sup>	<b>PK60VPFT</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217



Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile
Tubular cable lugs standard type and tubular cable lugs for switchgear connections		16 - 300	
Tubular cable lugs and connectors for fine stranded conductors		16 - 300	

PK 120/42 Hydraulic crimping head 10 - 400 mm<sup>2</sup>

- ▶ Large crimping range up to 400 mm<sup>2</sup>
- ▶ C-head with large 42 mm opening width
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics

- For interchangeable dies, series 13, wide crimping
- Crimping head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

Technical data		
Crimping force	130 kN	
Stroke / opening width	42 mm	
Crimping range	10 - 400 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Weight	4.5 kg	
Item	Part No.	
Hydraulic crimping head 10 - 400 mm <sup>2</sup>	PK12042	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

13  
KLAUKETHK 120 Hydraulic crimping tool for workbench mounting 10 - 400 mm<sup>2</sup>

- ▶ Large crimping range up to 400 mm<sup>2</sup>
- ▶ For workbench mounting
- ▶ BG-compliant version
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics





































- For interchangeable dies, series 13, wide crimping
- Quick coupling
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

Technical data		
Crimping force	120 kN	
Crimping range	10 - 400 mm <sup>2</sup>	
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 work bench mounting 10 - 400 mm <sup>2</sup>	THK120	

13  
KLAUKE



**Available dies for Series 13 for PK 120/42 and THK 120**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Double crimping compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150		445
Insulated terminals and pin terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Compression cable lugs and connectors acc. to DIN - Al		10 - 240		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 240		446
<b>Clamps and screw connectors</b>				
C-clamps		10 - 70		447
H-clamps		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



PK 120 U Hydraulic crimping head 10 - 400 mm<sup>2</sup>

- ▶ H-head for deep groove crimping
- ▶ Up to 60% less crimping operations due to wide crimping compared with 6 t tools

## Characteristics

- For interchangeable dies, series 13, wide crimping
- H-Form crimping head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

Technical data		
Crimping force	120 kN	
Stroke / opening width	20 mm	
Crimping range	10 - 400 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Length	320 mm	
Weight	3.7 kg	
Item	Part No.	
Hydraulic crimping head 10 - 400 mm <sup>2</sup>	<b>PK120U</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

13





































KLAUKE



12 ton



**Available dies for Series 13 for PK 120 U**

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors blue connection for compacted conductors acc. to VDE 0295, class 2		16 - 400		442
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		443
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		443
Tubular cable lugs and connectors for fine stranded conductors		16 - 150		444
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 300		444
Double crimping compression cable lugs		2 x 50 - 2 x 95		444
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150		445
Insulated terminals and pin terminals		10 - 95		445
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		10 sm - 300 se / 300 sm		445
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Compression cable lugs and connectors acc. to DIN - Al		10 - 240		446
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 185 mm <sup>2</sup>		25 - 185		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		446
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		447
<b>Compression cable lugs and connectors - Al/Cu</b>				
Compression cable lugs and connectors - Al/Cu		10 - 240		430
<b>Clamps and screw connectors</b>				
C-clamps		10 - 70		447
H-clamps		70 - 120		447
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		448
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		448

Please observe the restrictions in the technical index when crimping connectors!



PK 25/2 Hydraulic crimping head 16 - 625 mm<sup>2</sup>

- ▶ For dies acc. to DIN 48083, page 3
- ▶ Very large crimping range to 625 mm<sup>2</sup>
- ▶ For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results



































## Characteristics

- For interchangeable dies, series 25, wide crimping
- Crimping head with quick coupling, under no pressure, rotates 360°

Technical data		
Crimping force	250 kN	
Stroke / opening width	20 mm	
Crimping range	16 - 625 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Length	335 mm	
Weight	5.3 kg	
Item	Part No.	
Hydraulic crimping head 16 - 625 mm <sup>2</sup>	<b>PK252</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217


**25**  
Klauke


**Available dies for Series 25 for PK 25/2**

Suitable for	Connection material	Crimping range mm²	Crimp profile	Page
<b>Tubular cable lugs and connectors, Cu</b>				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		449
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		449
Tubular cable lugs and connectors for fine stranded conductors		16 - 300		450
<b>Compression cable lugs and connectors acc. to DIN - Cu</b>				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		16 - 625		450
Double crimping compression cable lugs		2 x 50 - 2 x 120		450
<b>Terminals, connectors and pin terminals acc. to DIN - Cu</b>				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 240		451
Insulated terminals and pin terminals		10 - 150		451
<b>Sleeves for compacted conductors and sector shaped conductors, Cu</b>				
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		10 sm - 300 se / 300 sm		451
<b>Compression cable lugs and connectors acc. to DIN - Al</b>				
Compression cable lugs and connectors acc. to DIN - Al		10 - 500		452
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 120 - 300 mm²		25 - 300		452
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, aluminum crimping		25/4 - 120/20		452
Compression joints acc. to DIN 48085, part 3 for Al-steel cables acc. to DIN EN 50182, steel crimping		25/4 - 120/20		453
<b>Aluminum/copper compression cable lugs and connectors</b>				
Aluminum/copper compression cable lugs and connectors		10 - 500		452
<b>Clamps and screw connectors</b>				
C-clamps		10 - 185		453
H-clamps		70 - 120		453
<b>Cable end-sleeves</b>				
Cable end-sleeves		25 - 240		454
Cable end-sleeves, trapezoidal, for fine stranded conductors		25 - 240		454

Please observe the restrictions in the technical index when crimping connectors!



PK 45 Hydraulic crimping head 120 - 1000 mm<sup>2</sup>45  
Klauke







- ▶ Very large crimping range to 1000 mm<sup>2</sup>
- ▶ Sturdy construction for safe working
- ▶ For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping results

## Characteristics

- For interchangeable dies, series 45, wide crimping
- Crimping head with quick coupling, under no pressure, rotates 360°

Technical data		
Crimping force	450 kN	
Crimping range	120 - 1000 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Weight	10.3 kg	
Height	265 mm	
Item	Part No.	
Hydraulic crimping head 120 - 1000 mm <sup>2</sup>	PK45	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

## Available dies for Series 45 for PK 45

Suitable for	Connection material	Crimping range mm <sup>2</sup>	Crimp profile	Page
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu		120 - 1000		455
Compression cable lugs and connectors acc. to DIN - Al				
Compression cable lugs and connectors acc. to DIN - Al		150 - 500		455
Compression joints for full tension connections of Aldrey cables acc. to DIN EN 50182, Al conductors DIN EN 50182, 150 - 300 mm <sup>2</sup>				
		150 - 300		455

PK 1000 Hydraulic crimping head, 100 t, up to 1600 mm<sup>2</sup>100  
Klauke

- ▶ Single-acting crimping head for connecting to hydraulic pumps with 700 bar operating pressure
- ▶ Compact, simple design
- ▶ Extremely high crimping force

## Characteristics

- For interchangeable dies (outer: to IZUMI standard EP-100W, inside: DIN standard or customer request)
- Nickel-plated version
- Quick coupling

## Order info

- Also available in country-specific version, part number appendix "C"

Technical data	
Crimping force	1000 kN
Stroke	25 mm
Crimping range	up to 1600 mm <sup>2</sup>
Operating pressure	max. 700 bar
Weight	without dies: 27 kg
Height	Incl. handles: 365 mm
Dimensions	Outer diameter: 195 mm
Item	Part No.
Hydraulic 100 t crimping head with Cejn coupling	PK1000

**SDG 45 Hydraulic cutting head 45 mm dia.**

- ▶ High cutting force cuts armoured copper and aluminum cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and Steel
- ▶ Extremely robust design and lightweight

**Characteristics**

- Closed head with bolt interlock, flip open jaws
- Cutting head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible cutting 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.	<b>SDG45</b>

Scope of supply	Part No.	Page
Carrying bag	TT2	217

Accessories	Part No.	Page
Outer fixed blade	ESG45EF	
Inner moving blade	ESG45ES1	



ESG45EF



ESG45ES1

**SDG 50 Hydraulic cutting head 48 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Low weight

**Characteristics**

- Closed crimping head, flip top style
- Cutting head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible cutting results

Technical data	
Cutting range	max. 48 mm dia.
Cutting force	60 kN
Operating pressure	max. 700 bar
Length	330 mm
Weight	2.5 kg

Item	Part No.
Hydraulic cutting head 48 mm dia.	<b>SDG50</b>

Scope of supply	Part No.	Page
Carrying bag	TT2	217

Accessories	Part No.	Page
Inner moving blade	ESG50ES	
Outer fixed blade	ESG50EF1	



ESG50EF1



ESG50ES

## SDG 55 Hydraulic cutting head 55 mm dia.



ESG55EF



ESG55ES

- ▶ High cutting force cuts armoured copper and aluminum 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 cutting head with bolt interlock, flip top style, under no pressure, rotates 360°, with quick coupling
- For connecting to hydraulic pumps with 700 bar operating pressure
- Ergonomic handling through handle

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.	<b>SDG55</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

Accessories	Part No.	Page
Outer fixed blade	ESG55EF	
Inner moving blade	ESG55ES	

## SDG 65 Hydraulic cutting head 65 mm dia.



ES65E

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Also suitable for fine stranded cable
- ▶ Safe working due to high ground stability by double stops

## Characteristics

- Open cutting head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure

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.	<b>SDK65</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217

Accessories	Part No.	Page
Replacement blade	ES65E	



**SDG 85/2 Hydraulic cutting head 85 mm dia.**

- ▶ High user safety through cutting head with bolt interlock
- ▶ Exceptionally light and compact design
- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)

**Characteristics**

- Closed cutting head with bolt interlock, flip top style, under no pressure, rotates 360°, with quick coupling
- For connecting to hydraulic drive units with 700 bar operating pressure for the best possible cutting results
- Handle enables easy 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.	<b>SDG852</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217
Accessories	Part No.	Page
Outer fixed blade	ESG85EF1	
Inner moving blade	ESG85ES1	



ESG85EF1



ESG85ES1

**SDG 85 Hydraulic cutting head 85 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Suitable for fine stranded cable and telecommunication cable
- ▶ Exceptionally light and compact design
- ▶ Safe working due to high ground stability by double stops

**Characteristics**

- Open cutting head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible cutting 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.	<b>SDK85</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217
Accessories	Part No.	Page
Replacement blade	ES85E	



ES85E



## SDG 105 Hydraulic cutting head 105 mm dia.



ESG105EF



ESG105ES

- ▶ Cuts copper and aluminum cables (for armoured cables)
- ▶ 120 kN cutting force for extremely wide cutting range up to 105 mm dia.
- ▶ Exceptionally light and compact design

## Characteristics

- Closed cutting head with bolt interlock, under no pressure, rotates 360°, with quick coupling
- Compact design permits cutting also in constricted places
- Handle enables easy handling
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible cutting 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.	<b>SDG105</b>	
Scope of supply	Part No.	Page
Carrying bag	TT2	217
Accessories	Part No.	Page
Inner moving blade	ESG105ES	
Outer fixed blade	ESG105EF	

## SDK 105 Hydraulic cutting head 105 mm dia.



ES105E

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Extremely wide cutting range up to 105 mm dia. – also for fine stranded cables
- ▶ Exceptionally light and compact design
- ▶ Safe working due to high ground stability by double stops

## Characteristics

- Open cutting head with quick coupling, under no pressure, rotates 360°
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible cutting results
- High ground stability by double stops

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.	<b>SDK105</b>	
Scope of supply	Part No.	Page
Carrying bag	TT4	217
Accessories	Part No.	Page
Replacement blade	ES105E	

**SDK 120 Hydraulic cutting head 120 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Extremely wide cutting range up to 120 mm dia. – also for fine stranded cables
- ▶ Exceptionally light and compact design
- ▶ Safe working due to high ground stability by double stops

**Characteristics**

- Open cutting head with quick coupling, under no pressure, rotates 360°
- High ground stability by double stops
- For connecting to hydraulic drive units with 700 bar operating pressure for the best possible cutting 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.	<b>SDK120</b>

Scope of supply	Part No.	Page
Carrying bag	TT4	217

Accessories	Part No.	Page
Replacement blade	ES120E	



**ES120E**

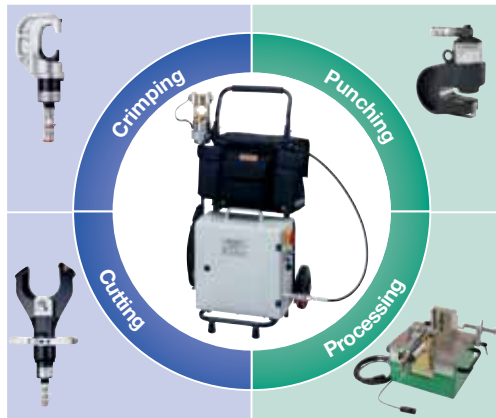


## Drive with a system.

### Hydraulic drive units for Klauke tools.

Klauke stands for connections with system. This applies for both tool and connecting material combinations as well as for individual components within hydraulic tools and systems. All system pumps are capable of driving all Klauke crimping, cutting and universal heads. In addition, individual types with appropriate functions can also be connected to the Bus Bar Tool centre.

All system pumps are precisely matched to Klauke tools and generate 700 bar pressure.



- **System pumps with 700 bar pressure:**
  - Foot pumps
  - Electric pumps for 115 V to 400 V
  - 18 V battery powered hydraulic pump, with Li-ion technology.
- **For driving:**
  - Crimping heads and crimping tools for workbench mounting
  - Cutting heads
  - Bus bar processing centres.

Currently the only electro-hydraulic drive unit on the market, the **EHP 4** offers the option of regulating the piston feed speed. This means the optimum speed can be selected for every application.

**FHP 2 Foot pump 700 bar**

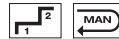
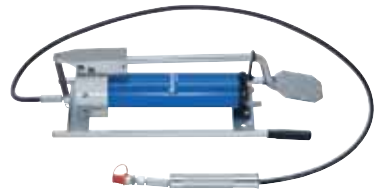
- ▶ Two-stage hydraulics
- ▶ Manual retraction in case of need and at high pressure end
- ▶ Sturdy design

**Characteristics**

- For the operation of hydraulic crimping and cutting heads
- Automatic pressure switch off

Technical data		
Operating pressure	max. 700 bar	
Weight	12 kg	
Item	Part No.	
Foot pump 700 bar	<b>FHP2</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406



**PHD 2 Pneumatic hydraulic booster, 700 bar**

- ▶ Manual retraction in case of need and at high pressure end

**Characteristics**

- 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	<b>PHD2</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406



## EHP 2 Electro hydraulic drive unit 400 V, 700 bar



► Compact dimensions and low weight combined with high conveying capacity

#### Characteristics

- With three-phase motor
- For the operation of hydraulic crimping and cutting heads
- Hydraulic hose, 2 m
- Connecting cable, 4 m
- Three-stage safety foot switch
- Electronic control
- 70% power-on time

#### 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, 700 bar	<b>EHP2380</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Foot switch for electro-hydraul. pumps EHP 2 to EHP 4 and HK 12/2 EL	FTA1	402

Accessories	Part No.	Page
Transport trolley for electro-hydraulic pump EHP 2	TW50	401
Two-hand safety controller for pumps EHP 2 to EHP 4	ZST3	402
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406
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 three-phase motor
- For the operation of hydraulic crimping and cutting heads
- Hydraulic hose, 2 m
- Connecting cable, 4 m
- Three-stage safety foot switch
- Electronic control

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, 700 bar	<b>EHP3</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Foot switch for electro-hydraul. pumps EHP 2 to EHP 4 and HK 12/2 EL	FTA1	402

Accessories	Part No.	Page
Two-hand safety controller for pumps EHP 2 to EHP 4	ZST3	402
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406
Transport trolley for electro-hydraulic pump EHP 3	TWEHP3	401
Adapter Klauke sleeve to Greenlee plug	CMGSK	



**400V**



## EHP 4 Electro hydraulic drive unit, 700 bar



- ▶ Manually adjustable piston stroke speed / volume of the pump
- ▶ Closed, compact and lockable housing (IP54 or higher) to protect against humidity, dust and unauthorised manipulation
- ▶ High capacity

#### Characteristics

- Compatibility with hydraulic crimping and cutting heads of Klauke
- To connect bus bar tool centre with adapter CMGSK
- For use in conjunction with the LSK 120 with adapter CMGSK for punching bus bars
- Compatibility with Greenlee punching tools (round and special shape punches) with adapter CMGSK
- Manually adjustable piston stroke speed / volume of the pump

#### Order info

- The hydraulic pumps can be individually configured as customer-specific system.

Technical data	
Version	AC
Rated output	0.75 kW
Motor voltage	EHP4115: 115V/50 Hz, EHP4230: 230V/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	<b>EHP4115</b>	
Electro-hydraulic pump, 230 V	<b>EHP4230</b>	
Scope of supply		Page
Hydraulic hose, 3m	HS23	402
Foot switch for electro-hydraul. pumps EHP 2 to EHP 4 and HK 12/2 EL	FTA1	402

Accessories	Part No.	Page
Two-hand safety controller for pumps EHP 2 to EHP 4	ZST3	402
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406
Transport trolley for electro-hydraulic pump EHP 4	TW150	401
Adapter Klauke sleeve to Greenlee plug	CMGSK	



**AHP 700-L Battery powered hydraulic pump, 700 bar**

- ▶ Compact and lightweight for mobile use
- ▶ High capacity
- ▶ Suitable for operating all single-acting Klauke crimping, cutting and punching tools with 700 bar operating pressure

**Characteristics**

- Programme-switching between 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
- High-performance motor for maximum operating speed
- Automatic retraction
- Manual retract in case of need
- Manual retract interrupt with "teach in" (MRS+)
- Remote control with cable for easy operation of the battery-operated pump
- Integrated storage compartment for storing the remote control
- Multifunction LED for maintenance control, charge level indicator of the batteries and for data transmission to PC via USB adapter
- Environmentally-friendly hydraulic oil, quickly biodegradable
- All high-pressure hoses have coupling plug and coupling sleeve, oil filled
- Shoulder strap with padding for high wearing comfort

**Order info**

- Also available in country-specific version, part number appendix „C“



Technical data	
Battery voltage	18 V
Battery capacity	2 x 3.0 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	H x W x D: 330 x 160 x 280 mm

Item	Part No.		
Battery powered hydraulic pump, 700 bar	<b>AHP700L</b>		
Scope of supply	Part No.	Quantity	Page
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	RAL2	2	398
Quick-charger for 18V Li-Ion batteries, 230 V	LGL1	1	400
Hydraulic hose, 2m, oil filled	HSOEL2	1	403
Carrying strap with shoulder padding	TG3	1	
Carrying bag	TT2	1	217
Remote control with 1.5 m cable	HTA4	1	404

Accessories	Part No.	Page
Hydraulic hose, 3m, oil filled	HSOEL3	403
Hydraulic hose, 4m, oil filled	HSOEL4	403
Hydraulic hose, 5m, oil filled	HSOEL5	403
Hydraulic hose, 6m, oil filled	HSOEL6	403
Hydraulic hose, 8m, oil filled	HSOEL8	403
Hydraulic hose, 10m, oil filled	HSOEL10	403
18 V mains adapter for 240 V Voltage	NG2230	399
USB adapter	PGA1	408
Digital meter for force and pressure measurement	TC1U	406
Two-hand safety control for battery powered hydraulic pump AHP 700-L	ZST4	402
Foot switch for battery powered hydraulic pump AHP 700-L	FTA4	402
Pressure sensor 1000 bar	TP1000	406



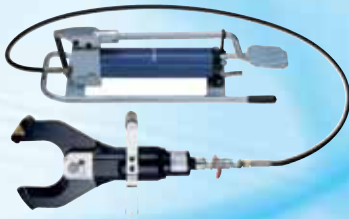
## System solutions

### for special requirements.

#### Hydraulic systems for crimping, cutting, bending and punching.

Hydraulic systems offer a host of applications: crimping especially large connecting materials, cutting cables with large diameters or cutting potentially live cables. The scope of supply includes drive units, tools, high-pressure hoses and transport aids such as boxes or trolleys.

Thanks to the various drive types, for instance with foot pump, hydraulic pumps without an external energy supply or driven by electric motors, there's a solution for every application.



- Hydraulic crimping system to 450 kN.
- Hydraulic cutting systems to 120 mm dia.
- GS-tested safety cutting tools.



## ■ *Ideal for large cross sections and diameters.*

- ▶ Crimping systems with 1000 kN crimping force for nominal cross sections up to 1600 mm<sup>2</sup>.
- ▶ Hydraulic cutting systems for copper and aluminum cables without armouring up to 120 mm dia.
- ▶ Extremely sturdy crimping and cutting heads.
- ▶ **Systems can be configured** with various hose lengths from 2 m to 10 m.
- ▶ Drive via foot or 230 V and 400 V electric pumps.



### **Benefits:**

- ▶ Perfectly matched crimping and cutting systems are available for frequent applications.
- ▶ Systems with foot pumps work without an external power supply and are ideal for mobile use.
- ▶ Crimping and cutting systems with electric pumps offer increased comfort.
- ▶ The various hose lengths allow optimised adjustment to individual working situations.

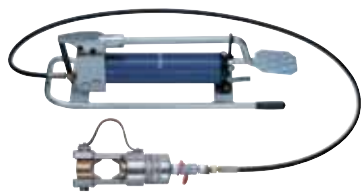
## ■ *Safe cutting operations even on live cables.*

- ▶ Tested safety cutting devices for cutting live cables.
- ▶ Tested tools certified to GS.
- ▶ With electro-hydraulic drive or with foot pump.

### **Benefits:**

- ▶ Increased safety **since live cables can be cut without risk.**
- ▶ These cutting tools, tested by the government safety organisation, offer the highest possible level of safety for the user.
- ▶ Thanks to its compact design, the battery powered hydraulic version is much lighter than alternative systems.



HK 25/2 Hydraulic crimping tool with foot pump 16 - 625 mm<sup>2</sup>


- ▶ Extremely wide cross section range up to 625 mm<sup>2</sup>
- ▶ Hydraulic system with 250 kN crimping force
- ▶ Foot pump with two-stage hydraulics

## Characteristics

- For interchangeable dies, series 25, wide crimping
- H-Form crimping head with quick coupling, under no pressure, rotates 360°
- Manual retraction in case of need and at high pressure end

## Order info

- The wide choice of available crimping dies can be found in the catalogue, chapter "Crimping dies" under Series 25.

Technical data		
Crimping force	250 kN	
Crimping range	16 - 625 mm <sup>2</sup>	
Operating pressure	max. 700 bar	
Weight	17.6 kg	
Item	Part No.	
Hydraulic crimping tool with foot pump 16 - 625 mm <sup>2</sup>	<b>HK252</b>	
Scope of supply		Page
Hydraulic hose, 2m	HS22	402
Steel carrying case	MKU	216
Accessories		Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406

**HK 45 Hydraulic crimping tool with foot pump 120 - 1,000 mm<sup>2</sup>**

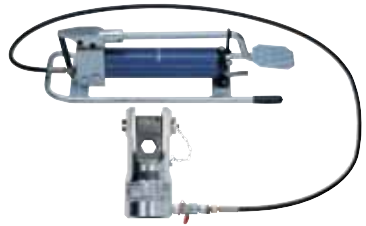
- ▶ Extremely large cross section range to 1000 mm<sup>2</sup>
- ▶ Hydraulic system with 450 kN crimping force
- ▶ Foot pump with two-stage hydraulics

**Characteristics**

- For interchangeable dies, series 45, wide crimping
- Crimping head, H-shape with quick coupling
- Manual retraction in case of need and at high pressure end
- High-pressure hose, 2 m

**Order info**

- The wide choice of available crimping dies can be found in the catalogue, chapter "Crimping dies" under Series 45.



Technical data	
Crimping force	450 kN
Crimping range	120 - 1,000 mm <sup>2</sup>
Operating pressure	max. 700 bar
Weight	23 kg

Item	Part No.
Hydraulic crimping tool with foot pump 120 - 1000 mm <sup>2</sup>	<b>HK45</b>

Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Steel carrying case	MKU	216

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406

HK 12/2 EL/380 Hydraulic crimping tool with pump 400V, 16 - 400 mm<sup>2</sup>

13

12 ton



400V

- ▶ Large cross section range up to 400 mm<sup>2</sup>
- ▶ C-head with 42 mm opening width
- ▶ For mobile use due to transport trolley and long cable

## Characteristics

- For interchangeable dies, series 13, wide crimping
- C-Form crimping head with quick coupling, under no pressure, rotates 360°
- Electronic control with three-phase motor

## Order info

- The wide choice of available crimping dies can be found in the catalogue, chapter "Crimping dies" under Series 13.

Technical data	
Crimping force	120 kN
Crimping range	16 - 400 mm <sup>2</sup>
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 mm <sup>2</sup> , 400 V	<b>HK122EL380</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Foot switch for electro-hydraul. pumps EHP 2 to EHP 4 and HK 12/2 EL	FTA1	402
Transport trolley for electro-hydraulic pump EHP 2	TW50	401

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Two-hand safety controller for pumps EHP 2 to EHP 4	ZST3	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406

**HK 25/2 EL/380 Hydraulic crimping tool with pump 400 V, 16 - 625 mm<sup>2</sup>**

- ▶ Extremely wide cross section range up to 625 mm<sup>2</sup>
- ▶ Crimping head, H-shape
- ▶ For mobile use due to transport trolley and long cable

**Characteristics**

- For interchangeable dies, series 25, wide crimping
- H-Form crimping head with quick coupling, under no pressure, rotates 360°
- Electronic control with three-phase motor

**Order info**

- The wide choice of available crimping dies can be found in the catalogue, chapter "Crimping dies" under Series 25.

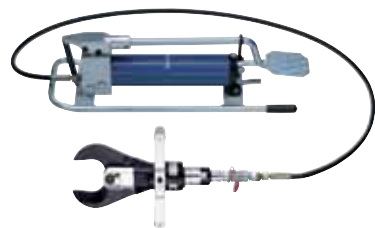
Technical data	
Crimping force	250 kN
Crimping range	16 - 625 mm <sup>2</sup>
Version	Three-phase motor 400 V
Rated output	0.55 kW
Motor voltage	360 V - 440 V / 50 Hz
Capacity	0.82 l / min.
Operating pressure	max. 700 bar
Weight	45.9 kg

Item	Part No.	
Crimping tool with pump, 16 - 625 mm <sup>2</sup> , 400 V	<b>HK252EL380</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Foot switch for electro-hydraul. pumps EHP 2 to EHP 4 and HK 12/2 EL	FTA1	402
Transport trolley for electro-hydraulic pump EHP 2	TW50	401

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Two-hand safety controller for pumps EHP 2 to EHP 4	ZST3	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406



## AS 65 FHP Hydraulic cutting tool with foot pump, 65 mm dia.



- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Also suitable for fine stranded cable
- ▶ Safe working due to high ground stability by double stops
- ▶ Foot pump with two-stage hydraulics

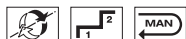
**Characteristics**

- Open cutting head with quick coupling, under no pressure, rotates 360°
- Manual retraction in case of need and at high pressure end
- 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.	<b>AS65FHP</b>

Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Steel carrying case	MKU	216



ES65E

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406
Replacement blade	ES65E	



**AS 105 FHP / AS 120 FHP Hydraulic cutting tools with foot pump, 105 and 120 mm dia.**

- ▶ Cuts copper and aluminum cables with light weight steel armouring (depending on cable type)
- ▶ Suitable for fine stranded cable and telecommunication cable
- ▶ Safe working due to high ground stability by double stops
- ▶ Extremely wide cutting range up to 120 mm dia., also for fine stranded cables

**Characteristics**

- Foot pump with two-stage hydraulics
- Open cutting head with quick coupling, under no pressure, rotates 360°
- Manual retraction in case of need and at high pressure end
- 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.	<b>AS105FHP</b>	
Hydraulic cutting tool with foot pump 120 mm dia.	<b>AS120FHP</b>	
Scope of supply	Part No.	Page
Hydraulic hose, 2m	HS22	402
Steel carrying case	MKU	216

Accessories	Part No.	Page
Hydraulic hose, 3m	HS23	402
Hydraulic hose, 4m	HS24	402
Hydraulic hose, 5m	HS25	402
Hydraulic hose, 6m	HS26	402
Hydraulic hose, 8m	HS28	402
Hydraulic hose, 10m	HS210	402
Digital meter for force and pressure measurement	TC1U	406
Pressure sensor 1000 bar	TP1000	406
Replacement blade	ES105E	
Replacement blade	ES120E	



ES105E



ES120E

## SSG Hydraulic safety cutting unit with foot pump up to max. 105 mm dia.



Klauke® safety cutter

- ▶ BG-tested safety cutting unit guarantees safe cuts of live copper and aluminum cables without steel armouring up to a rated voltage of 60 kV
- ▶ Single-conductor live cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz

## Characteristics

- Cutting head with quick coupling, 360° rotatable
- Two-stage hydraulics
- Manual retraction in case of need and at high pressure end
- Safety high-pressure hose, 10 m

Technical data	SSG65	SSGG85	SSG105	SSGG105
Head type	open (SSK65)	closed (SSK85)	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	16.0 kg	16.0 kg	19.0 kg	19.0 kg
Ambient temperature	-20°C to +40 °C	-20°C to +40 °C	-20°C to +40 °C	-20°C to +40 °C



SSK65



SSK85



SSK105



SSKG105

Item	Part No.
Hydraulic safety cutting unit with foot pump max. 65 mm dia.	<b>SSG65</b>
Hydraulic safety cutting unit with foot pump max. 85 mm dia.	<b>SSGG85</b>
Hydraulic safety cutting unit with foot pump max. 105 mm dia.	<b>SSG105</b>
Hydraulic safety cutting unit with foot pump max. 105 mm dia.	<b>SSGG105</b>

Scope of supply	Part No.	Page
Safety/hydraulic hose, 10 m		
Earthing kit	EG1	
Steel carrying case	MKSSG	

Accessories	Part No.	Page
Heat protection cover 1.80 m x 1.80 m	<b>HSD1</b>	
Heat protection cover 1.20 m x 0.90 m	<b>HSD2</b>	
Heat protection cover 0.45 m x 0.60 m	<b>HSD3</b>	

Replacement blade for	SSG65	SSGG85	SSG105	SSGG105
ES65E	•			
ES105E			•	
ESG85EF1		•		
ESG85ES1		•		
ESG105EF				•
ESG105ES				•

**ESSG Battery powered hydraulic safety cutting units up to max. 105 mm dia.**

- ▶ BG-tested safety cutting unit guarantees safe cuts of live copper and aluminum cables without steel armouring up to a rated voltage of 60 kV
- ▶ Single-conductor lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz
- ▶ Powerful 3.3 Ah Li-Ion battery

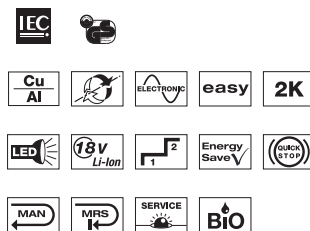
**Characteristics**

- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Electronic control
- Multifunction LED for maintenance control and charging display of the battery
- LED display for service interval after 250 cuts
- 10 m non-conducting high-pressure hose with a coupling to connect to pump ESSG-L



**Klauke® safety cutter**

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 s 40 s	approx. 21s 40 (depending on cable sizes)
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 to +40 °C	-20°C to +40 °C	-20°C to +40 °C



Item	Part No.
Battery powered hydraulic safety cutting unit, max. Ø 65 mm	<b>ESSG65L</b>
Battery powered hydraulic safety cutting unit, max. Ø 85 mm	<b>ESSGG85L</b>
Battery powered hydraulic safety cutting unit, max. Ø 105 mm	<b>ESSG105L</b>

Scope of supply	Part No.	Page
Battery 18 V / 3.3 Ah, Li-Ion (54 Wh)	RAL3	398
Charger for 18 V Li-Ion batteries	LGL3	401
Plastic case for ESSG65L and ESSG105L	KKESSGL	
Plastic case for ESSGG85L	KKESSGG85L	
Earthing kit	EG1	

Accessories	Part No.	Page
Heat protection cover 1.80 m x 1.80 m	<b>HSD1</b>	394
Heat protection cover 1.20 m x 0.90 m	<b>HSD2</b>	394
Heat protection cover 0.45 m x 0.60 m	<b>HSD3</b>	394
USB adapter	<b>PGA1</b>	408

Replacement blade for	ESSG65L	ESSGG85L	ESSG105L
ES65E	•		
ES105E			•
ESG85EF1		•	
ESG85ES1		•	



**SSK65**



**SSKG85**



**SSK105**

## Power packs, hoses and more for your tools.

### Accessories for hydraulic tools.

The accessories for our hydraulic tools give you greater flexibility when using Klauke tools. Additional operating components, as well as high-pressure hoses in various lengths, permit individual system solutions. The NG2 power supply unit turns every 18 V tool into a mains-powered tool in no time.

The new generation of batteries for our tools offers a great number of benefits. At 18 V rated voltage and a capacity of 3.0 Ah, these batteries offer 50% more energy than predecessor models for even more crimping and cutting operations. They are also much lighter, and thanks to Li-ion technology, there's no memory effect during charging and discharging. Due to a minimum self-discharge of the batteries, the tools are practically always ready for use.



*The power packs in NG2/230 and NG2/115 are capable of operating all tools in the Klauke® mini+, Klauke® ultra, Klauke® ultra+ and Klauke® multi series.*

- Batteries and chargers for Klauke hydraulic tools.
- Power packs for 115 V and 230 V.
- Hand and foot control units.
- Hoses, sleeves, connectors and nipples.

**RAM 2 Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)**

**Characteristics**

- For battery operated hydraulic tools of Klauke-Mini Series
- Environmentally friendly by NiMH technology

Technical data	
Battery voltage	9.6 V
Battery capacity	2.0 Ah, NiMH
Charging time	With LG4F: 40 min., with LG5: 15 min.
Cell technology	NiMH
Weight	0.4 kg
Item	Part No.
Battery 9.6 V / 2.0 Ah, NiMH (19.6 Wh)	<b>RAM2</b>



**RAM 3 Battery 9.6 V / 3.0 Ah, NiMH (28.8 Wh)**

**Characteristics**

- For battery operated hydraulic tools of Klauke-Mini Series
- Environmentally friendly by NiMH technology
- High battery capacity

Technical data	
Battery voltage	9.6 V
Battery capacity	3.0 Ah
Charging time	With LG4F: 40 min., with LG5: 15 min.
Cell technology	NiMH
Weight	0.5 kg
Item	Part No.
Battery 9.6 V / 3.0 Ah, NiMH (28.8 Wh)	<b>RAM3</b>



**RA 5 Battery 12 V / 3.0 Ah, NiMH (36 Wh)**

**Characteristics**

- Compatible with all Klauke 12 V battery powered hydraulic tools
- Environmentally friendly by NiMH technology
- High battery capacity

Technical data	
Battery voltage	12 V
Battery capacity	3.0 Ah
Charging time	With LG4F: 40 min., with LG5: 15 min.
Ambient temperature	-20°C to +40 °C
Cell technology	NiMH
Weight	0.6 kg
Item	Part No.
Battery 12 V / 3.0 Ah, NiMH (36 Wh)	<b>RA5</b>



## RAL 1 Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)



## Characteristics

- For battery powered hydraulic tools of Klauke-Mini+ Series
- No memory effect
- Extremely low self-discharge
- Light weight (40% lighter than comparable NiMH batteries)

Technical data	
Battery voltage	18 V
Battery capacity	1.3 Ah
Charging time	With LGL1: 15 min.
Cell technology	Li-Ion
Weight	0.4 kg
Item	Part No.
Battery 18 V / 1.3 Ah, Li-Ion (23.4 Wh)	<b>RAL1</b>

## RAL 2 Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)



## Characteristics

- For battery powered hydraulic tools of Klauke-Mini+, Klauke Ultra, Klauke Ultra+ and Klauke Multi Series
- No memory effect
- Extremely low self-discharge
- Light weight (40% lighter than comparable NiMH batteries)

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.
Battery 18 V / 3.0 Ah, Li-Ion (54 Wh)	<b>RAL2</b>

## RAL 3 Battery 18 V / 3.3 Ah, Li-Ion (54 Wh)



## Characteristics

- For safety cutting units
- No memory effect
- Extremely low self-discharge
- Light weight (40% lighter than comparable NiMH batteries)

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)	<b>RAL3</b>

**NG2 Mains adapter 18 V for 120 V resp. 230 V mains voltage**

**Suitable for**

- All Klauke tools with 18 V all-mains sets

**Characteristics**

- Temperature protection
- Current limiter
- Overload protection 250 V
- Cable lengths: 5 m



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	<b>NG2115</b>
18 V mains adapter for 230 V Voltage	<b>NG2230</b>

**LG 4 F Charger for NiCd and NiMH batteries**

**Characteristics**

- For all Klauke 9.6 V and 12 V batteries

Technical data	
Charging time	40-60 min.
Ambient temperature	-20°C to +40 °C
Mains supply	AC: 230 V
Voltage range	7.2V / 9.6V / 12V / 14.4V DC
Weight	0.5 kg
Item	Part No.
Charger for NiCd and NiMH batteries	<b>LG4F</b>



**LG 5 Quick charger for NiCd and NiMH batteries**

**Characteristics**

- For all Klauke 9.6 V and 12 V batteries

Technical data	
Charging time	NiCd: 10 - 60 min, NiMH: 20 - 30 min.
Mains supply	AC: 230 V
Voltage range	7.2V / 9.6V / 12V / 14.4V DC
Weight	1.3 kg
Item	Part No.
Quick charger for NiCd and NiMH batteries, 230 V mains power	<b>LG5</b>



## LG 6 Car charger 12 V for NiCd and NiMH batteries



### Characteristics

- For all Klauke 9.6 V and 12 V batteries
- Connection to car cigarette lighter

Technical data	
Charging time	NiCd: 45 - 70 min, NiMH: 45 - 75 min.
Mains supply	AC: 12 V
Voltage range	7.2V / 9.6V / 12V / 14.4V DC
Weight	0.6 kg
Item	Part No.
12V car charger for NiCd and NiMH batteries	<b>LG6</b>

## LGL 1 Quick charger for 18V Li-Ion-Batteries



### Characteristics

- For all Klauke Li-Ion Batteries with 18 V

Technical data	
Charging time	With RAL1: 15 min., with RAL2: 22 min.
Mains supply	230 V AC
Voltage range	18 V
Weight	1.0 kg
Item	Part No.
Quick-charger for 18V Li-Ion batteries, 230 V	<b>LGL1</b>

## LGL 2 Car charger 12 V for 18 V Li-Ion batteries



### Characteristics

- For all Klauke Li-Ion Batteries with 18 V
- Connection to car cigarette lighter

Technical data	
Charging time	With RAL1: 15 min., with RAL2: 22 min.
Mains supply	12 V
Voltage range	18 V
Weight	1.0 kg
Item	Part No.
12V car charger for 18V Li-Ion batteries	<b>LGL2</b>



**LGL 3 Charger for 18 V Li-Ion batteries**

**Characteristics**

- For 18 V / 3.3 Ah Li-Ion batteries
- Charger for safety cutting unit batteries

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	<b>LGL3</b>



**TW 50 / TW EHP 3 Transport trolley for electro-hydraulic pumps**

**Characteristics**

- For electro hydraulic pumps EHP2 and EHP3
- Weight: TW50 - 11.1 kg / TWEHP3 - 12 kg

Item	Part No.
Transport trolley for electro-hydraulic pump EHP 2	<b>TW50</b>
Transport trolley for electro-hydraulic pump EHP 3	<b>TWEHP3</b>



**TW 150 Transport trolley for electro-hydraulic pump EHP 4**

**Characteristics**

- Weight: 8.7 kg

Item	Part No.
Transport trolley for electro-hydraulic pump EHP 4	<b>TW150</b>



## FTA 3 / FTA 4 Two-hand safety control for hydraulic pumps



## Characteristics

- For pumps: EHP 2, EHP 3, EHP 4 and AHP 700-L
- Connecting cable, 10 m

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 switch for pumps



## Characteristics

- For pumps: EHP 2, EHP 3, EHP 4, HK 12/2 EL, AHP 700-L
- Connecting cable FTA 1: 10 m, FTA 4: 5 m

Item	Part No.
Foot switch for electro-hydraul. pumps EHP 2 to 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

- For all hydraulic pumps, exception: safety cutting units
- Environmentally-friendly hydraulic oil, quickly biodegradable
- 5 l canister

Item	Part No.
Special hydraulic oil	T15

## HS 2 Hydraulic hoses



## Suitable for

- 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, 2m	HS22
Hydraulic hose, 3m	HS23
Hydraulic hose, 4m	HS24
Hydraulic hose, 5m	HS25
Hydraulic hose, 6m	HS26
Hydraulic hose, 8m	HS28
Hydraulic hose, 10m	HS210

**HS OEL Hydraulic hoses, oil filled**

**Characteristics**

- For battery powered hydraulic pump AHP 700-L

**Order info**

- Also available in country-specific version, part number appendix "C"

Item	Part No.
Hydraulic hose, 2m, oil filled	<b>HSOEL2</b>
Hydraulic hose, 3m, oil filled	<b>HSOEL3</b>
Hydraulic hose, 4m, oil filled	<b>HSOEL4</b>
Hydraulic hose, 5m, oil filled	<b>HSOEL5</b>
Hydraulic hose, 6m, oil filled	<b>HSOEL6</b>
Hydraulic hose, 8m, oil filled	<b>HSOEL8</b>
Hydraulic hose, 10m, oil filled	<b>HSOEL10</b>



**KST 2 Coupler plug**

**Characteristics**

- For hydraulic crimping and cutting systems and pumps
- Including adapter
- Suitable for connecting to hydraulic hoses HS2

Item	Part No.
Coupler plug	<b>KST2</b>



**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	<b>KMF1</b>



**DNP 2 Barrel nipple**

**Characteristics**

- To connect and to extend hydraulic hoses HS 2

Item	Part No.
Barrel nipple	<b>DNP2</b>



## HTA 4 Remote control for hydraulic pump

**Characteristics**

- For battery powered pump AHP 700-L

Item	Part No.
Remote control with 1.5 m cable	HTA4

## Guarantee quality, by tool check.

### Force and pressure measuring systems for hydraulic crimping tools.

Klauke hydraulic tools meet the highest quality standards. To maintain this guarantee, frequently used tools and drive units in particular must be inspected on a regular basis. With its various sensors and adapters, the TC 1U is a powerful system for measuring force and pressure.

In enterprises that have a distinct quality management system, in the engineering technology sector for example, customers often expect proof of the tools' actual crimping forces. This Klauke measuring system offers the facility of measuring and documenting the required values on-site.



- Measuring systems for inspecting hydraulic tools and drive units.
- For inspection and documentation under the quality management system.



## TC 1 U Digital meter for force and pressure measurement



### Characteristics

- Optional: Measuring adapter for measuring the crimping force
- Illuminated LCD display
- Memory for 1 mil. measured values
- USB interface

Item	Part No.	
Digital meter for force and pressure measurement	<b>TC1U</b>	
Scope of supply	Part No.	Page
Switched-mode power supply with international plug adapter EU, UK, US, AUS from 115 V to 230 V	TCCUNI	
Plastic case	KKTC1B	

Measuring Adapter	Tool Series	Required sensor	Part No.	Page
	Measuring adapter, series 50	TF70L	MA50	
	Measuring adapter, series 4	TF70L	MA4	
	Measuring adapter, series 5	TF70L	MA5	
	Measuring adapter, series 18	TF70L	MA18	
	Measuring adapter, series 22	TF70L	MA22	
	Measuring adapter VP	TF70L	MAVP	
	Measuring adapter, series 13	TF130L	MA120	

## TF force sensors for measuring the crimping force



### Characteristics

- For connecting to TC 1 U with appropriate measuring adapter

Item	Part No.
Force sensor, 70 kN	<b>TF70L</b>
Force sensor, 130 kN	<b>TF130L</b>

## TP 1000 / TPC 15 Pressure sensor and connecting cable for measuring oil pressure up to 1000 bar



### Characteristics

- For connecting to TC 1 U

Item	Part No.
Pressure sensor 1000 bar	<b>TP1000</b>
Connection cable for pressure sensor TP 1000	<b>TPC15</b>

## Intelligent recording - *i-press*®

### quality control via software.



Our "Safety Plus" battery powered hydraulic crimping tools are set apart mainly by their intelligent additional functions. The technical highlight is the "Intelligent Pressing System" with integrated pressure sensor which permanently monitors the hydraulic crimp force of every crimping operation. The tools signal deviations from the specified crimping pressure or operating faults with a warning beep and flashing LEDs. For the user this means maximum safety at every single crimping operation. The PGA1 USB Adapter and i-press evaluation software make the "Safety Plus" model series even more intelligent and working with these tools even safer.

The PGA1 USB Adapter and i-press evaluation software allow you to read data from the tools and transmit it to a computer. The i-press software checks the quality of each and every crimping option and provides proof of such quality

to the customer. It is also possible to request further performance parameters, such as the number of crimps, the current consumption in Ah or the operating time.

The i-press software is available in German, English, French and Spanish and can be downloaded from our website free of charge.

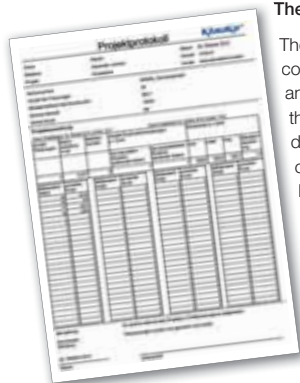
All Safety Plus tools are factory-fitted as standard with an optical interface which enables the crimping operation to be read out from a PC or laptop.



#### The operating mode is very simple:

The recording head is linked to a computer via a USB port. All crimping and machine data are transferred from the tool to the computer and the test certificate indicating date and time is displayed as a pdf document. This is how you record the trouble-free function of the tool. User errors, such as premature stopping and retraction of the hydraulics or other faults that could prevent correct crimps are displayed. You can then print out the test report. Because the system uses the realtime clock of the connected computer, the test reports are recognised by QA systems.

There is also the option of programming individual projects into the tool and creating project-related reports.



## PGA 1 USB Adapter



- ▶ Easy connection to PC via USB interface
- ▶ Free download of "ipress" software via [www.klauke.com](http://www.klauke.com)
- ▶ Statistical evaluation of average crimping process of battery powered hydraulic crimping tools

#### Characteristics

- Documentation of trouble-free function of battery powered hydraulic crimping tools using "Intelligent Pressing System" - IPS
- Statistical evaluation of crimping process
- Suitable to read data from Klauke product line "Generation Safety Plus" and the previous models with multifunction LED
- Transmission of crimping and machine data of tool on the computer
- Test certificate as PDF document with display of date and time

#### Technical data

System requirements	From Windows XP
Version	USB 2.0
Length	1.80 m (USB-Kabel)
Weight	315 g
Item	Part No.
USB adapter	<b>PGA1</b>







“ We came up with plenty of ideas for your crimping results. For example, the correct crimping profile for every connecting material.”



Emira Karajkovic,  
Supply Chain



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