



KLAUKE CATALOGUE 2024

Electrical connection systems, Crimping and cutting tools, Hydraulic safety tools, Punching tools, Hand tools, Universal tools, Cable-pulling technology



WORLDWIDE DISTRIBUTION AND SERVICE NETWORK



Your contact to Klauke: Representatives worldwide

see from page i-34

MORE THAN 145 YEARS OF EXPERIENCE



OUR COMPANY CERTIFICATES



ISO 9001:2015

Quality management system

ISO 14001:2015

Environmental management system





Electrical connection systems



Crimping



Cutting



Hydraulic safety tools



Punching



Universal tools



Pumps



Hand tools



Cable-pulling technology

Technical Appendix
Alphabetical Index
Alpha Numerical Index

OUR FIELDS OF EXPERTISE FOUR SECTORS, ONE QUALITY

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

TRUSTED SOLUTIONS FOR SOLAR PARK INSTALLATIONS





In a solar park you will find Klauke products every time when you connect a combiner box, an inverter or a transformer.

Solar power systems are an essential green energy source for the present and future generations. But if we talk about the optimal efficiency of the solar panels, a factor that is often underestimated is the quality and reliability of the electrical connection elements.

TRUSTED SOLUTIONS FOR WIND TURBINE INSTALLATIONS





We offer exactly the right Klauke tools and associated Klauke connection material for the various electrical components in a wind turbine.

Wind turbines play a key role in generating green electricity. High safety requirements apply to the installation. It is therefore essential to comply with the relevant quality criteria for both the electrical connections and the installation tooling.

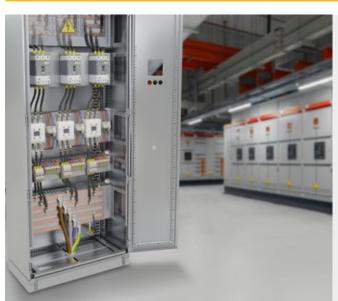




Klauke offers you - energy generators, network operators and service providers in the energy sector - an expanded product range. Alongside Klauke brand products, Greenlee brand test and measurement equipment is also offered.

The measurement and safety products are developed and produced by Greenlee itself in the USA and reflect state-of-the-art technology. All inspection, test and measuring devices conform to national and international directives and standards, thereby guaranteeing maximum safety for the user.

CONTROL CABINET CONSTRUCTION - CUTTING, STRIPPING, CRIMPING, PUNCHING - IT'S ALL IN THERE



Efficiency and safety in panel-building are now available in an all-round no-hassle package. Whether it's cutting, stripping, crimping or punching: in our power package you'll find precisely the right tool! EK30IDML and EKWF120ML: fast and safe crimping without changing inserts

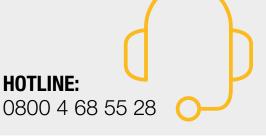
In panel-building, different conductors, cable lugs and wire end sleeves are usually used at the same time. This means that during crimping the required pressing inserts must be changed frequently. This takes time and effort. With the EK30IDML and the EKWF120ML, we now offer you ideal solutions.

4

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

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

KLAUKE HOTLINE



Your direct link to our tool service offers:

https://www.klauke.com/ee/en/inspecting-and-servicing-tools





KLAUKE SERVICE OFFERS



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

KLAUKE GUARANTEE

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









Electrical connection systems

Copper tubular cable lugs and connectors	1.4
Tubular cable lugs	1.6
Tubular cable lugs for switchgear connections	1.10
Angle tubular cable lugs	1.11
Connectors	1.15
Insulated tubular cable lugs und connectors	1.19
Tubular cable lugs and compression joints for solid conductors	1.22
Tubular cable lugs and connectors for fine stranded conductors	1.25
Tool application chart	1.30
Tubular cable lugs and connectors - nickel, stainless steel	1.36
Tubular cable lugs and connectors - stainless steel	1.38
Tubular cable lugs and connectors - nickel	1.40
Tool application chart	1.43
Copper compression cable lugs and connectors acc. to DIN	1.44
Compression cable lugs acc. to DIN 46235	1.46
Angle compression cable lugs	1.48
Compression cable lugs, special type	1.52
Compression joints acc. to DIN 46267, part 1 and similar versions	1.54
Tool application chart	1.59
Copper terminals, connectors and pin terminals acc. to DIN	1.62
Solderless terminals acc. to DIN 46234	1.64
Insulated solderless terminals	1.66
Solderless terminals, fork and pin type	1.68
Insulated solderless terminals for meter connections	1.70
Solderless connectors acc. to DIN 46341, part 1	1.70
Tool application chart	1.72
Sleeves for compacted conductors and sector-shaped	
conductors - copper	1.74
Aluminium compression cable lugs and connectors acc. to DIN	1.80
Aluminium compression cable lugs acc. to DIN 46329 and similar versions	1.82
Aluminium compression joints acc. to DIN 46267 part 2 and similar versions	1.85
Aluminium reduction compression joints	1.87
Aluminium compression joints, full tension	1.89
Tool application chart	1.90

Aluminium/copper compression cable lugs and connectors Aluminium/copper compression cable lugs	1.92 1.94
Aluminium/copper compression joints	1.97
Ri-metallic washer	1.100
ool application chart	1.101
Clamps and screw connectors	1.102
Punched cable lugs - copper	1.104
Screw connectors with soldering hole - brass	1.105
Parallel groove clamps - copper	1.106
C- and H-shaped clamps - copper	1.107
Screw connector for shielded copper wires	1.109
Screw connectors for street lighting - brass	1.109
Screw connectors, high-resistant aluminium alloy	1.110
Compact tab connectors, high resistant aluminium alloy	1.115
ool application chart	1.117
Cable end-sleeves	1.120
Cable end-sleeves DIN 46228, part 1 and part 2	1.122
nsulated cable-end sleeves acc. to DIN 46228, part 4 and similar versions	1.125
nsulated cable end-sleeves for short circuit resistant conductors	1.130
nsulated twin cable-end sleeves	1.131
nsulated cable-end sleeves, strips and tapes	1.132
ool application chart	1.134
Cable connections, insulated and non insulated	1.136
nsulated terminals	1.138
Non insulated flat connectors	1.149
Flexible connectors	1.154
ool application chart	1.157
Assortments	1.160
Pocket boxes with cable end-sleeves	1.162
Pocket boxes with insulated cable end-sleeves	1.163
Assortment boxes with cable end-sleeves	1.167
Assortment boxes with insulated cable-end sleeves	1.168
Assortment boxes with tubular and compression cable lugs	1.171
Assortment boxes with insulated terminals	1.173
Steel carrying cases / bags	1.175

THE CLASSIC COPPER TUBULAR CABLE LUGS

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



In brief

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

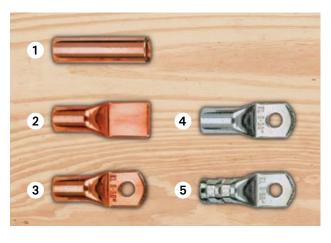


▶ The system - Klauke connectors

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

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





- 1 Source material
- 2 Folding and crimping
- 3 Punching
- 4 Tinned end product
- 5 After crimping

▶ The preparation - Traditional quality

The best material is the basis for quality products.

For our classics we use - as for all Klauke products - exclusively high-quality material from certified suppliers. You get all our cable lugs with the optimum features.

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

▶ The proof - independent quality tests

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

- IEC (International Electric Commission): The IEC is an advisory board for standards in the electrical engineering and electronics sector. The certifications encompass all areas of electrical engineering that have to meet especially high demands.
- UL (Underwriters Laboratories): UL is an independent organisation that examines and certifies products for safety. The certification is particularly important on the American market.

DNV (Det Norske Veritas) and GL (Germanischer Lloyd): DNV and GL have now merged to form the world's largest consulting company for onshore and offshore systems.



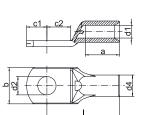




Copper tubular cable lugs and connectors

Tubular cable lugs, Cu, standard type



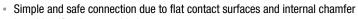


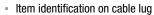


- \blacktriangleright Cable lug for fine-stranded round conductors, e.g. to EN 60228 Cl. 5
- Simple processing thanks to inspection hole for monitoring full conductor insertion



Characteristics







Material

- Copper (EN13600)

Surface

- Tin-plated to protect against corrosion

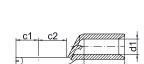
- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6

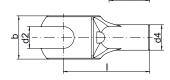
Nominal cross section	Size of	Part				Dimens	ion mm				Weight/ 100 pcs.	Packing
mm ²	bolt dia.	No.	d1	a	b	d2	d4	c1	c2	I	~ kg	unit/pcs
_	М3	91R3	1.3	6	6.0	3,2	2.8	3.25	4.0	12	0.060	100
0.75	M4	91R4	1.3	6	6.5	4,3	2.8	4.00	5.0	13	0.060	100
	M5	91R5	1.3	6	7.5	5,3	2.8	4.75	5.5	14	0.060	100
_	М3	92R3	1.8	6	6.5	3,2	3.3	3.25	4.0	12	0.080	100
1.5 -	M4	92R4	1.8	6	6.5	4,3	3.3	4.00	5.0	13	0.080	100
1.5	M5	92R5	1.8	6	7.5	5,3	3.3	4.75	5.5	14	0.080	100
	M6	92R6	1.8	6	9.0	6,4	3.3	6.50	6.5	16	0.090	100
_	М3	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
2.5	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	8,4	4.2	7.75	9.5	20	0.180	100
_	M4	94R4	3.0	8	8.5	4,3	5.0	4.75	5.5	17	0.210	100
4 -	M5	94R5	3.0	8	9.0	5,3	5.0	4.75	6.0	17	0.213	100
4 -	M6	94R6	3.0	8	10.0	6,4	5.0	6.50	6.5	19	0.220	100
	M8	94R8	3.0	8	13.0	8,4	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
6 -	M5	95R5	4.0	9	9.5	5,3	6.0	6.00	6.0	19	0.300	100
0	M6	95R6	4.0	9	10.0	6,4	6.0	7.00	6.5	19	0.300	100
	M8	95R8	4.0	9	14.0	8,5	6.0	8.50	9.5	22	0.320	100



Tubular cable lugs, Cu, fork type









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



Characteristics

- Simple and safe connection due to flat contact surfaces and internal chamfer
- Item identification on cable lug



Material

- Copper (EN13600)



Surface

Tin-plated to protect against corrosion

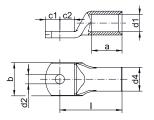
- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal	0. (Dimens	sion mm				Weight/	D 11
cross section mm ²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	c2	- 1	100 pcs. ~ kg	Packing unit/pcs
_	М3	91C3	1.3	6	6.0	3,2	2.8	3.25	4.0	12	0.06	100
0.75	M4	91C4	1.3	6	6.5	4,3	2.8	4.00	5.0	13	0.05	100
	M5	91C5	1.3	6	7.5	5,3	2.8	4.75	5.5	14	0.06	100
_	М3	92C3	1.8	6	6.5	3,2	3.3	3.25	4.0	12	0.07	100
1.5	M4	92C4	1.8	6	6.5	4,3	3.3	4.00	5.0	13,5	0.07	100
1.5	M5	92C5	1.8	6	7.5	5,3	3.3	4.75	5.5	14	0.07	100
	M6	92C6	1.8	6	9.0	6,4	3.3	6.50	6.5	16	0.08	100
	M4	93C4	2.3	6	7.5	4,3	4.2	4.00	5.0	13	0.11	100
2.5	M5	93C5	2.3	6	8.5	5,3	4.2	4.75	5.5	14	0.12	100
	M6	93C6	2.3	6	9.5	6,4	4.2	6.50	6.5	16	0.10	100
_	M4	94C4	3.0	8	8.5	4,3	5.0	4.75	5.5	17	0.19	100
4 -	M5	94C5	3.0	8	9.0	5,3	5.0	4.75	6.0	17	0.19	100
4 _	M6	94C6	3.0	8	10.0	6,4	5.0	6.50	6.5	19	0.21	100
	M8	94C8	3.0	8	13.0	8,5	5.0	8.50	9.5	22	0.24	100
_	M4	95C4	4.0	9	9.5	4,3	6.0	5.00	5.5	18	0.27	100
6 -	M5	95C5	4.0	9	9.5	5,3	6.0	6.00	6.0	19	0.32	100
-	M6	95C6	4.0	9	10.0	6,4	6.0	7.00	6.5	19	0.27	100
	M8	95C8	4.0	9	14.0	8,5	6.0	8.50	9.0	22	0.31	100
_	M5	96C5	4.5	10	12.0	5,3	7.0	6.50	7.5	22	0.45	100
10	M6	96C6	4.5	10	12.0	6,4	7.0	6.50	7.5	22	0.41	100
	M8	96C8	4.5	10	15.0	8,4	7.0	10.00	10.0	25	0.52	100
-	M5	97C5	5.5	13	12.0	5,3	8.5	5.50	6.5	26	0.81	100
16	M6	97C6	5.5	13	12.0	6,4	8.5	6.25	7.5	27	0.81	100
	M8	97C8	5.5	13	15.0	8,4	8.5	8.50	9.5	29	0.90	100

Copper tubular cable lugs and connectors

Tubular cable lugs, Cu, standard type with and without inspection hole









- ▶ Approval of the tin-plated cable lugs for use with high-temperature cables 180 °C (based on IEC 61238-1-1): The cable lugs can be used with tin-plated conductors of class 5 (fine-wire)
- ▶ For multi-stranded round conductors, e.g. to EN 60228 Cl. 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- Ideal cable lug for control cabinet construction
- ▶ In combination with EKM 60 ID and EK 30 ID suitable for fine-stranded conductors



Characteristics

- To DIN EN 61373 class 1B vibration-tested
- Simple and safe connection due to flat contact surfaces and internal chamfer





Material



- Copper (EN13600)

Surface



Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables,
 see chapter "Sleeves for compacted conductors and sector shaped conductors Cu"

Additional information

Also available as featured article with inspection hole, part number appendix "MS"

144 . 114

Nominal cross section	Size of	without insp. hole	with insp. hole	Dimension mm								Weight/ 100 pcs.	Packing
mm ²	bolt dia.	Part No.	Part No.	d1	a	b	d2	d4	c1	c2	ı	~ kg	unit/pcs
	M5	1R5	1R5MS	3,5	9	10	5,3	6,5	6,50	7,5	21	0,50	100
_	M6	1R6	1R6MS	3,5	9	12	6,4	6,5	6,50	7,5	21	0,47	100
6	M8	1R8	1R8MS	3,5	9	15	8,4	6,5	10,00	10,0	23	0,54	100
_	M10	1R10	1R10MS	3,5	9	17	10,5	6,5	12,00	12,0	25	0,59	100
	M12	1R12	1R12MS	3,5	9	19	13,0	6,5	13,00	13,0	28	0,63	100
-	M5	2R5	2R5MS	4,5	10	12	5,3	7,0	6,50	7,5	22	0,50	100
	M6	2R6	2R6MS	4,5	10	12	6,4	7,0	6,50	7,5	22	0,49	100
10	M8	2R8	2R8MS	4,5	10	15	8,4	7,0	10,00	10,0	25	0,58	100
	M10	2R10	2R10MS	4,5	10	17	10,5	7,0	12,00	12,0	27	0,62	100
	M12	2R12	2R12MS	4,5	10	19	13,0	7,0	13,00	13,0	29	0,64	100
_	M5	3R5	3R5MS	5,5	13	12	5,5	8,5	5,50	6,5	26	0,84	100
	M6	3R6	3R6MS	5,5	13	12	6,4	8,5	6,25	7,5	27	0,86	100
16	M8	3R8	3R8MS	5,5	13	15	8,3	8,5	8,50	9,5	29	0,93	100
	M10	3R10	3R10MS	5,5	13	17	10,5	8,5	10,50	11,5	31	0,99	100
	M12	3R12	3R12MS	5,5	13	19	13,0	8,5	12,00	13,0	33	1,02	100
	M5	4R5	4R5MS	7,0	15	14	5,3	10,0	7,50	7,5	30	1,22	25
	M6	4R6	4R6MS	7,0	15	14	5,3	10,0	7,50	7,5	30	1,20	100
25	M8	4R8	4R8MS	7,0	15	16	8,4	10,0	10,00	10,0	32	1,31	100
25	M10	4R10	4R10MS	7,0	15	18	10,5	10,0	12,00	12,0	34	1,57	100
_	M12	4R12	4R12MS	7,0	15	19	13,0	10,0	13,00	13,0	35	1,39	25
	M14	4R14	4R14MS	7,0	15	21	15,0	10,0	14,50	14,5	38	1,49	25
_	M6	5R6	5R6MS	8,5	17	17	6,4	12,0	7,50	7,5	32	1,85	100
	M8	5R8	5R8MS	8,5	17	17	8,4	12,0	10,00	10,0	34	2,00	100
35	M10	5R10	5R10MS	8,5	17	19	10,5	12,0	12,00	12,0	37	2,13	100
აა	M12	5R12	5R12MS	8,5	17	21	13,0	12,0	13,00	13,0	38	2,12	100
	M14	5R14	5R14MS	8,5	17	21	15,0	12,0	14,50	14,5	40	2,18	25
	M16	5R16	5R16MS	8,5	17	26	17,0	12,0	16,00	16,0	42	2,24	25



Tubular cable lugs, Cu, standard type with and without inspection hole

Nominal		without	with				Nimens	ion mm				Weight/	
cross section	Size of	insp. hole Part No.	insp. hole	41		h	d2		01	c2	1	100 pcs.	Packing
mm²	bolt dia. M6	6R6	Part No. 6R6MS	d1 10,0	a 19	b 20	6,4	d4 14,0	c1 10,00	10,0	37	~ kg 3,00	unit/pcs 25
	M8	6R8	6R8MS	10,0	19	20	8,4	14,0	10,00	10,0	37	2,93	50
	M10	6R10	6R10MS	10,0	19	20	10,5	14,0	12,00	12,0	39	3,08	50
50	M12	6R12	6R12MS	10,0	19	23	13,0	14,0	13,00	13,0	43	3,23	50
	M14	6R14	6R14MS	10,0	19	23	15,0	14,0	14,50	14,5	45	3,32	25
	M16	6R16	6R16MS	10,0	19	28	17,0	14,0	16,00	16,0	46	3,38	25
	M20	6R20	6R20MS	10,0	19	30	21,0	14,0	19,00	19,0	48	3,46	25
	M6	7R6	7R6MS	12,0	21	23	6,4	16,5	10,00	10,0	43	4,49	25
	M8	7R8	7R8MS	12,0	21	23	8,5	16,5	10,00	10,0	43	4,38	50
,	M10	7R10	7R10MS	12,0	21	23	10,5	16,5	12,00	12,0	44	4,54	50
70	M12	7R12	7R12MS	12,0	21	23	13,0	16,5	13,00	13,0	46	4,63	50
	M14	7R14	7R14MS	12,0	21	23	15,0	16,5	14,50	14,5	48	4,76	25
	M16	7R16	7R16MS	12,0	21	28	17,0	16,5	16,00	16,0	50	4,24	25
	M20	7R20	7R20MS	12,0	21	30	21,0	16,5	19,00	19,0	53	5,09	25
	M8	8R8	8R8MS	13,5	25	26	8,4	18,0	12,00	12,0	48	5,44	25
	M10	8R10	8R10MS	13,5	25	26	10,5	18,0	12,00	12,0	48	5,40	50
95	M12	8R12	8R12MS	13,5	25	26	13,0	18,0	13,00	13,0	49	5,56	50
90	M14	8R14	8R14MS	13,5	25	26	15,0	18,0	14,50	14,5	51	5,62	25
	M16	8R16	8R16MS	13,5	25	28	17,0	18,0	16,00	16,0	54	5,82	50
	M20	8R20	8R20MS	13,5	25	36	21,0	18,0	22,00	22,0	60	6,71	25
	M8	9R8	9R8MS	15,0	26	28	8,4	19,5	14,00	14,0	51	6,72	25
	M10	9R10	9R10MS	15,0	26	28	10,5	19,5	14,00	14,0	51	6,57	50
120	M12	9R12	9R12MS	15,0	26	28	13,0	19,5	14,00	14,0	51	6,38	50
120	M14	9R14	9R14MS	15,0	26	28	15,0	19,5	15,00	15,0	52	6,45	25
	M16	9R16	9R16MS	15,0	26	30	17,0	19,5	16,00	16,0	54	6,51	50
	M20	9R20	9R20MS	15,0	26	36	21,0	19,5	22,00	22,0	63	7,74	25
	M8	10R8	10R8MS	16,5	30	31	8,5	21,0	14,00	14,0	56	7,78	10
	M10	10R10	10R10MS	16,5	30	31	10,5	21,0	14,00	14,0	56	7,62	10
150	M12	10R12	10R12MS	16,5	30	31	13,0	21,0	15,00	15,0	57	7,73	25
	M14	10R14	10R14MS	16,5	30	31	15,0	21,0	15,00	15,0	57	7,64	10
	M16	10R16	10R16MS	16,5	30	31	17,0	21,0	16,00	16,0	58	7,53	10
	M20	10R20	10R20MS	16,5	30	36	21,0	21,0	22,00	22,0	66	8,80	10
	M10	11R10	11R10MS	19,0	30	35	10,5	24,0	18,00	18,0	65	11,75	10
405	M12	11R12	11R12MS	19,0	30	35	13,0	24,0	18,00	18,0	65	11,82	10
185	M14	11R14	11R14MS	19,0	30	35	15,0	24,0	18,00	18,0	65	11,39	10
	M16 M20	11R16 11R20	11R16MS 11R20MS	19,0	30	35 39	17,0	24,0	18,00	18,0 22,0	65	11,24 12,00	25 10
	M10	12R10	12R10MS	19,0 21,0	35	39	21,0 10,5	24,0	22,00 21,50	19,0	69 72	14,72	10 10
	M12	12R12	12R10MS	21,0	35	39	13,0	26,0	21,50	19,0	72	14,72	10
240	M14	12R12	12R14MS	21,0	35	39	15,0	26,0	21,50	19,0	72	14,55	10
240	M16	12R16	12R16MS	21,0	35	39	17,0	26,0	21,50	19,0	72	14,09	25
,	M20	12R20	12R20MS	21,0	35	39	21,0	26,0	21,50	19,0	72	13,60	10
	M12	13R12	13R12MS	23,5	44	43	13,0	29,5	24,00	24,0	87	23,33	5
	M14	13R14	13R14MS	23,5	44	43	15,0	29,5	24,00	24,0	87	23,14	5
300	M16	13R16	13R16MS	23,5	44	43	17,0	29,5	24,00	24,0	87	22,74	5
	M20	13R20	13R20MS	23,5	44	43	21,0	29,5	24,00	24,0	87	22,19	5
	M12	14R12	14R12MS	27,0	44	49	13,0	34,0	24,00	24,0	90	32,41	5
	M14	14R14	14R14MS	27,0	44	49	15,0	34,0	24,00	24,0	90	32,24	5
400	M16	14R16	14R16MS	27,0	44	49	17,0	34,0	24,00	24,0	90	31,98	5
	M20	14R20	14R20MS	27,0	44	49	21,0	34,0	24,00	24,0	90	31,41	5
				,-			,-	,-	,	-,-		- 3	

Copper tubular cable lugs and connectors

Tubular cable lugs for switchgear connections, standard type





- For multi-stranded, round conductors e.g. to EN 60228 Cl. 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ For connecting in switch cabinets with reduced connecting space
- Narrow palm version manufactured without material loss
- In combination with EKM 60 ID and EK 30 ID suitable for fine-stranded conductors



Characteristics

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



Material

- Copper (EN13600)



Surface

Tin-plated to protect against corrosion

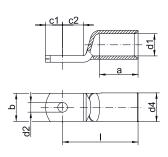


Technical instructions

- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"



Possible as a special version with inspection hole on request.
 Part Number appendix "MS"

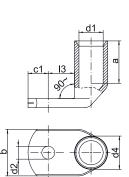


Nominal cross section	Size of					Dimens	ion mm				Weight/ 100 pcs.	Packing
mm ²	bolt dia.	Part No.	d1	a	b	d2	d4	c1	c2	1	~ kg	unit/pcs
35	M6	5SG6	8.5	17	15.0	6.4	12.0	7.5	7.5	32	1.78	25
	IVIO	6SG6	10.0	19	15.0	6.5	14.0	10.0	10.0	37	2.95	25
50	M8	6SG8	10.0	19	17.0	8.5	14.0	10.0	10.0	37	2.82	25
	M10	6SG10	10.0	19	19.0	10.5	14.0	11.5	12.0	39	3.08	25
	M6	7SG6	12.0	21	17.0	6.5	16.5	10.0	10.0	43	4.22	25
70	M8	7SG8	12.0	21	17.0	8.5	16.5	10.0	10.0	43	4.10	25
70	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
	M6	8SG6	13.5	25	19.0	6.5	18.0	11.5	12.0	48	5.49	25
95	M8	8SG8	13.5	25	19.0	8.5	18.0	11.5	12.0	48	5.46	25
90	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
	M6	9SG6	15.0	26	19.0	6.5	19.5	11.5	14.0	51	6.16	10
120	M8	9SG8	15.0	26	19.0	8.4	19.5	11.5	14.0	51	5.94	10
120	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
	M6	10SG6	16.5	30	19.0	6.5	21.0	11.5	14.0	56	6.85	10
150	M8	10SG8	16.5	30	19.0	8.5	21.0	11.5	14.0	56	6.80	10
130	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
	M10	11SG10	19.0	30	24.5	10.5	24.0	11.5	18.0	65	10.59	10
185	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
	M10	12SG10	21.0	35	31.0	10.5	26.0	11.5	19.0	72	12.70	5
240	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
	M10	13SG10	23.5	44	31.0	10.5	29,5	11.5	24.0	87	19.70	5
300	M12	13SG12	23.5	44	31.0	13.0	29,5	24.0	24.0	87	22.72	5
	M16	13SG16	23.5	44	31.0	17.0	29,5	24.0	24.0	87	22.50	5



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









- ► For multi-stranded, round conductors e.g. to EN 60228
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ► Flat contact surface by special angle pressing technology
- In combination with the EKM 60 ID and EK 30 ID suitable for fine stranded conductors



Characteristics

- Simple cable entry due to internal chamfer
- Item identification on cable lug

Material



- Copper (EN13600)

Surface



Tin-plated to protect against corrosion

Technical instructions



- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"

Additional information

 Possible as a special version with inspection hole on request. Part Number appendix "MS"

Nominal cross	Size of	Part				Dimension mm	1			Weight/ 100 pcs.	Packing
section mm ²	bolt dia.	No.	d1	a	b	d2	d4	c1	13	~ kg	unit/pcs
	M5	41R5	3.5	9	10	5.3	6.5	7.5	9	0.59	50
_	M6	41R6	3.5	9	12	6.3	6.5	7.5	10	0.58	50
6	M8	41R8	3.5	9	14	8.4	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
_	M5	42R5	4.5	10	12	5.5	7.0	6.5	10	0.57	50
	M6	42R6	4.5	10	12	6.4	7.0	6.5	10	0.57	50
10	M8	42R8	4.5	10	15	8.4	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
	M5	43R5	5.5	13	12	5.5	8.5	7.5	10	1.01	50
16	M6	43R6	5.5	13	12	6.4	8.5	7.5	11	1.01	50
	M8	43R8	5.5	13	15	8.4	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
	M5	44R5	7.0	15	14	5.5	10.0	7.5	11	1.40	25
	M6	44R6	7.0	15	14	6.4	10.0	7.5	11	1.32	25
05 -	M8	44R8	7.0	15	16	8.4	10.0	10.0	13	1.44	25
25 -	M10	44R10	7.0	15	18	10.5	10.0	12.0	15	1.49	25
	M12	44R12	7.0	15	19	13.0	10.0	13.0	18	1.44	25
	M14	44R14	7.0	15	21	15.0	10.0	14.5	20	1.55	25
	M6	45R6	8.5	17	17	6.4	12.0	7.5	11	2.05	25
	M8	45R8	8.5	17	17	8.4	12.0	10.0	13	2.20	25
25	M10	45R10	8.5	17	19	10.5	12.0	12.0	15	2.28	25
35 -	M12	45R12	8.5	17	21	13.0	12.0	13.0	18	2.38	25
_	M14	45R14	8.5	17	21	15.0	12.0	14.5	20	2.41	25
_	M16	45R16	8.5	17	26	17.0	12.0	16.0	22	2.40	25

See next page



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

Nominal						Dimension mm				Weight/	
cross section mm ²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs
	M6	46R6	10.0	19	20	6.4	14.0	10.0	13	3.34	25
-	M8	46R8	10.0	19	20	8.4	14.0	10.0	13	3.28	25
-	M10	46R10	10.0	19	20	10.5	14.0	12.0	16	3.47	25
50	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
	M6	47R6	12.0	21	23	6.4	16.5	10.0	13	4.90	25
-	M8	47R8	12.0	21	23	8.4	16.5	10.0	14	4.80	25
-	M10	47R10	12.0	21	23	10.5	16.5	12.0	16	4.88	25
70	M12	47R12	12.0	21	23	13.0	16.5	13.0	18	4.99	25
-	M14	47R14	12.0	21	23	15.0	16.5	14.5	20	5.38	25
-	M16	47R16	12.0	21	28	17.0	16.5	16.0	22	5.35	25
	M20	47R20	12.0	21	30	21.0	16.5	19.0	24	5.30	25
	M8	48R8	13.5	25	26	8.4	18.0	12.0	14	5.89	25
-	M10	48R10	13.5	25	26	10.5	18.0	12.0	17	5.88	25
-	M12	48R12	13.5	25	26	13.0	18.0	13.0	18	5.93	25
95 -	M14	48R14	13.5	25	26	15.0	18.0	14.5	20	6.03	25
-	M16	48R16	13.5	25	28	17.0	18.0	16.0	22	6.17	25
_	M20	48R20	13.5	25	36	21.0	18.0	22.0	24	6.42	25
	M8	49R8	15.0	26	28	8.4	19.5	14.0	16	7.26	10
-	M10	49R10	15.0	26	28	10.5	19.5	14.0	17	7.30	10
120 -	M12	49R12	15.0	26	28	13.0	19.5	14.0	18	7.19	10
120	M14	49R14	15.0	26	28	15.0	19.5	15.0	20	7.30	10
120 —	M16	49R16	15.0	26	30	17.0	19.5	16.0	22	7.35	10
	M20	49R20	15.0	26	36	21.0	19.5	22.0	24	7.60	10
	M8	50R8	16.5	30	31	8.4	21.0	14.0	16	8.41	10
_	M10	50R10	16.5	30	31	10.5	21.0	14.0	17	8.27	10
150	M12	50R12	16.5	30	31	13.0	21.0	15.0	18	8.34	10
150 -	M14	50R14	16.5	30	31	15.0	21.0	15.0	20	8.52	10
	M16	50R16	16.5	30	31	17.0	21.0	16.0	22	8.62	10
	M20	50R20	16.5	30	36	21.0	21.0	22.0	24	9.10	10
	M10	51R10	19.0	30	35	10.5	24.0	18.0	22	12.17	10
_	M12	51R12	19.0	30	35	13.0	24.0	18.0	22	11.97	10
185	M14	51R14	19.0	30	35	15.0	24.0	18.0	22	11.77	10
	M16	51R16	19.0	30	35	17.0	24.0	18.0	22	11.53	10
	M20	51R20	19.0	30	39	21.0	24.0	22.0	24	12.00	10
-	M10	52R10	21.0	35	39	10.5	26.0	21.5	22	15.60	10
_	M12	52R12	21.0	35	39	13.0	26.0	21.5	22	15.60	10
240	M14	52R14	21.0	35	39	15.0	26.0	21.5	22	15.41	10
-	M16	52R16	21.0	35	39	17.0	26.0	22.0	22	15.18	10
	M20	52R20	21.0	35	39	21.0	26.0	21.5	24	14.80	10
-	M12	53R12	23.5	44	43	13.0	29.5	24.0	24	23.60	5
300	M14	53R14	23.5	44	43	15.0	29.5	24.0	24	23.40	5
-	M16	53R16	23.5	44	43	17.0	29.5	24.0	24	20.99	5
	M20	53R20	23.5	44	43	21.0	29.5	24.0	24	22.70	5
_	M12	54R12	27.0	44	49	13.0	34.0	24.0	24	32.53	5
400	M14	54R14	27.0	44	49	15.0	34.0	24.0	24	33.40	5
400	M16	54R16	27.0	44	49	17.0	34.0	24.0	24	32.60	5
	M20	54R20	27.0	44	49	21.0	34.0	24.0	24	31.80	5



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





- ▶ For multi-stranded, round conductors e.g. to EN 60228
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ► Flat contact surface by special angle pressing technology
- In combination with EKM 60 ID and EK 30 ID suitable for fine-stranded conductors



Characteristics

- Simple cable entry due to internal chamfer
- Item identification on cable lug



Material

Copper (EN13600)



Surface

Tin-plated to protect against corrosion



Technical instructions





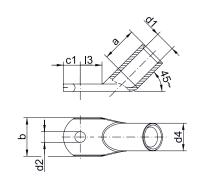
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"

Weight/



Dimension mm

Possible as a special version with inspection hole on request.
 Part Number appendix "MS"



Nominal

Cross	Size of					Diffierision filli				100 pcs.	Packing
section mm ²	bolt dia.	Part No.	d1	a	b	d2	d4	c1	13	~ kg	unit/pcs
_	M5	41R545	3.5	9	10	5.5	6.5	7.5	9	0.60	50
_	M6	41R645	3.5	9	12	6.4	6.5	7.5	10	0.58	50
6	M8	41R845	3.5	9	14	8.4	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
_	M5	42R545	4.5	10	12	5.5	7.0	6.5	10	0.57	50
	M6	42R645	4.5	10	12	6.4	7.0	6.5	10	0.57	50
10	M8	42R845	4.5	10	15	8.4	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
	M5	43R545	5.5	13	12	5.5	8.5	7.5	10	1.01	50
	M6	43R645	5.5	13	12	6.4	8.5	7.5	11	1.06	50
16	M8	43R845	5.5	13	15	8.4	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
	M5	44R545	7.0	15	14	5.5	10.0	7.5	11	1.40	25
_	M6	44R645	7.0	15	14	6.4	10.0	7.5	11	1.32	25
05 -	M8	44R845	7.0	15	16	8.4	10.0	10.0	13	1.44	25
25	M10	44R1045	7.0	15	18	10.5	10.0	12.0	15	1.49	25
	M12	44R1245	7.0	15	19	13.0	10.0	13.0	18	1.44	25
	M14	44R1445	7.0	15	21	15.0	10.0	14.5	20	1.55	25
	M6	45R645	8.5	17	17	6.4	12.0	7.5	11	2.05	25
	M8	45R845	8.5	17	17	8.4	12.0	10.0	13	2.20	25
35	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
	M16	45R1645	8.5	17	26	17.0	12.0	16.0	22	2.40	25

See next page



Copper tubular cable lugs and connectors

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

	0: (Dimension mm	ı			Weight/	D 11
Nominal cross section mm ²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs
	M6	46R645	10.0	19	20	6.4	14.0	10.0	13	3.43	25
_	M8	46R845	10.0	19	20	8.4	14.0	10.0	13	3.28	25
50	M10	46R1045	10.0	19	20	10.5	14.0	12.0	16	3.47	25
	M12	46R1245	10.0	19	23	13.0	14.0	13.0	18	3.42	25
	M16	46R1645	10.0	19	28	17.0	14.0	16.0	22	3.76	25
_	M6	47R645	12.0	21	23	6.4	16.5	10.0	13	5.06	25
_	M8	47R845	12.0	21	23	8.4	16.5	10.0	14	5.06	25
_	M10	47R1045	12.0	21	23	10.5	16.5	12.0	16	5.25	25
70	M12	47R1245	12.0	21	23	13.0	16.5	13.0	18	5.30	25
_	M14	47R1445	12.0	21	23	15.0	16.5	14.5	20	5.60	25
_	M16	47R1645	12.0	21	28	17.0	16.5	16.0	22	5.61	25
	M20	47R2045	12.0	21	30	21.0	16.5	19.0	24	5.60	25
_	M8	48R845	13.5	25	26	8.4	18.0	12.0	14	6.19	25
_	M10	48R1045	13.5	25	26	10.5	18.0	12.0	17	5.70	25
95	M12	48R1245	13.5	25	26	13.0	18.0	13.0	18	6.67	25
_	M16	48R1645	13.5	25	28	17.0	18.0	16.0	22	6.78	25
	M20	48R2045	13.5	25	36	21.0	18.0	22.0	24	6.80	25
_	M8	49R845	15.0	26	28	8.4	19.5	14.0	16	7.92	10
_	M10	49R1045	15.0	26	28	10.5	19.5	14.0	17	7.99	10
120	M12	49R1245	15.0	26	28	13.0	19.5	14.0	18	7.96	10
-	M14	49R1445	15.0	26	28	15.0	19.5	15.0	20	7.94	10
	M16	49R1645	15.0	26	30	17.0	19.5	16.0	22	8.26	10
_	M8	50R845	16.5	30	31	8.4	21.0	14.0	16	9.00	10
_	M10	50R1045	16.5	30	31	10.5	21.0	14.0	17	9.15	10
150	M12	50R1245	16.5	30	31	13.0	21.0	15.0	18	8.75	10
-	M14	50R1445	16.5	30	31	15.0	21.0	15.0	20	9.20	10
	M16	50R1645	16.5	30	31	17.0	21.0	16.0	22	9.22	10
-	M10	51R1045	19.0	30	35	10.5	24.0	18.0	22	13.30	10
-	M12	51R1245	19.0	30	35	13.0	24.0	18.0	22	13.32	10
185	M14	51R1445	19.0	30	35	15.0	24.0	18.0	22	13.40	10
-	M16	51R1645	19.0	30	35	17.0	24.0	18.0	22	12.80	10
-	M20	51R2045	19.0	30	39	21.0	24.0	22.0	24	13.10	10
-	M10	52R1045	21.0	35	39	10.5	26.0	21.5	22	16.28	10
240 -	M12	52R1245	21.0	35	39	13.0	26.0	21.5	22	16.80	10
-	M16	52R1645	21.0	35	39	17.0	26.0	21.5	22	16.10	10
	M20	52R2045	21.0	35	39	21.0	26.0	21.5	24	16.10	10
200	M12	53R1245	23.5	44	43	13.0	29.5	24.0	24	24.08	5
300	M14	53R1445	23.5	44	43	15.0	29.5	24.0	24	24.20	5
	M16	53R1645	23.5	44	43	17.0	29.5	24.0	24	23.23	5
400	M12	54R1245	27.0	44	49	13.0	34.0	24.0	24	34.00	5
400	M14	54R1445	27.0	44	49	15.0	34.0	24.0	24	33.40	5
	M16	54R1645	27.0	44	49	17.0	34.0	24.0	24	34.28	5

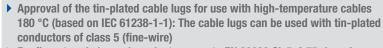


Butt connectors, Cu, standard type









- ▶ For fine-stranded round conductors, e.g. to EN 60228 Cl. 5, 0,75-4 mm²
- For multi-stranded round conductors, e.g. to EN 60228 Cl. 2, 6-400 mm²
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Simple cable entry for internal chamfer
- In combination with EKM 60 ID and EK 30 ID suitable for fine-stranded conductors
- ▶ With reducting sleeves also suitable for connecting different cross-sections





- Simple and safe processing due to butt mark
- Item identification on cable lug





Copper (EN13600)



Surface

Tin-plated to protect against corrosion

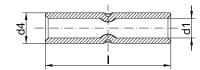
Technical instructions

- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables,
 see chapter "Sleeves for compacted conductors and sector shaped conductors Cu"
- Reduction sleeves for connecting unequal cross-sections can be found on page 1.58



Possible as a special version without butt mark on request.
 Part Number appendix "OM"

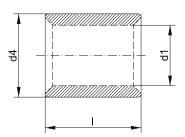
Nominal cross section			Dimension mm		Weight/	
mm ²	No.	d1	d4	1	100 pcs. ~ kg	Packing unit/pcs
0.75	17R	1.3	2.8	20	0.09	100
1.5	18R	1.8	3.3	25	0.12	100
2.5	19R	2.3	4.2	25	0.20	100
4	20R	3.0	5.0	25	0.26	100
6	21R	3.5	6.5	25	0.50	100
10	22R	4.5	7.0	30	0.72	100
16	23R	5.5	8.5	35	1.00	100
25	24R	7.0	10.0	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



Copper tubular cable lugs and connectors

Parallel connectors, Cu, standard type







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

Characteristics

Simple cable entry due to internal chamfer

Material

- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.30
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

Naminal areas asstian	Dort		Dimension mm		Weight/	
Nominal cross section mm ²	Part No.	d1	d4	1	100 pcs. ~ kg	Packing unit/pcs
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	5.10	25
300	163R	23.5	29.5	36	8.05	25



T-connectors, Cu, standard type





- ▶ For multi-stranded, round conductors e.g. to EN 60228
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Special version for cable tap conductors
- ▶ With reducting sleeves also suitable for connecting different cross-sections



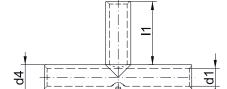
Characteristics

Simple cable entry due to internal chamfer



Material

- Copper (EN13600)





Surface

Tin-plated to protect against corrosion



Technical instructions

- Tool: see page 1.30



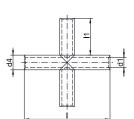
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"
- Reduction sleeves for connecting different conductor cross-sections you will find on page 1.58

Nominal cross	Part		Dimensi		Weight/		
section mm ²	No.	d1	d4	I	l1	100 pcs. ~ kg	Packing unit/pcs
1.5	TV15	1.8	3.3	30	12	0.23	50
2.5	TV2.5	2.3	4.2	30	12	0.37	50
4	TV4	3.0	5.0	30	12	0.45	50
6	TV6	4.0	6.0	35	14	0.73	50
10	TV10	4.5	7.0	35	14	1.05	50
16	TV16	5.5	8.5	50	21	2.20	50
25	TV25	7.0	10.0	55	23	2.90	25
35	TV35	8.5	12.0	70	30	5.20	25
50	TV50	10.0	14.0	80	34	7.90	25
70	TV70	12.0	16.5	85	35	11.20	10
95	TV95	13.5	18.0	90	36	13.00	10
120	TV120	15.0	19.5	95	38	14.70	10
150	TV150	16.5	21.0	110	44	18.90	10
185	TV185	19.0	24.0	115	45	25.00	5
240	TV240	21.0	26.0	130	52	31.10	5



Cross-connectors, Cu, standard type







- ▶ For multi-stranded round conductors, e.g. to EN 60228 Cl. 2
- ▶ For pre-rounded multi-stranded sector shaped conductors
- Version for double cable tap conductors
- ▶ With reducting sleeves also suitable for connecting different cross-sections



Characteristics

Simple cable entry due to internal chamfer



Materia

- Copper (EN13600)



Surface

Tin-plated to protect against corrosion



- Tool: see page 1.30
- THE POPROVED AND THE
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables,
 see chapter "Sleeves for compacted conductors and sector shaped conductors Cu"
- Reduction sleeves for connecting unequal conductor sections can be found on page 1.58

Naminal and	Dout		Dimens		Weight/		
Nominal cross section mm ²	Part No.	d1	d4	1	l1	100 pcs. ~ kg	Packing unit/pcs
2.5	KV2.5	2.3	4.2	30	12	0.490	25
4	KV4	3.0	5.0	30	12	0.650	25
6	KV6	4.0	6.0	35	14	0.950	25
10	KV10	4.5	7.0	35	14	1.350	25
16	KV16	5.5	8.5	50	21	2.950	25
35	KV35	8.5	12.0	70	30	6.900	15
50	KV50	10.0	14.0	80	34	10.400	15
70	KV70	12.0	16.5	85	35	14.600	15
95	KV95	13.5	18.0	90	36	17.100	15
120	KV120	15.0	19.5	95	38	19.400	5



Insulated tubular cable lugs, Cu, standard type





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



Characteristics

- Simple and safe connection due to flat contact surfaces and internal chamfer
- Heat resistant to 105 °C



Materia

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

Surface

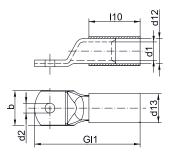
Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.32
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Dimensions of tubular cable lugs can be found from page 1.8
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"



Possible as a special version with inspection hole on request.
 Part Number appendix "MS"



Nominal cross Size of section mm ² bolt dia.					Dimension mm			weight 100 pcs.	weight 100 pcs.	Dooking unit/	
section mm ²	bolt dia.	Part No.	Colour	d12	d13	d2	GI1	l10	~kg Cu	~kg Total	Packing unit/ pcs
	M5	602R5		7.0	9.0	5.5	35.5	17.0	0.50	0.548	25
	M6	602R6		7.0	9.0	6.5	35.5	17.0	0.49	0.538	25
10	M8	602R8		7.0	9.0	8.5	42.0	17.0	0.58	0.628	25
	M10	602R10		7.0	9.0	10.5	46.0	17.0	0.62	0.668	25
	M12	602R12		7.0	9.0	13.0	49.0	17.0	0.64	0.688	25
	M5	603R5		8.5	10.5	5.5	39.5	21.0	0.84	0.907	25
	M6	603R6		8.5	10.5	6.5	41.3	21.0	0.86	0.927	25
16	M8	603R8		8.5	10.5	8.5	45.5	21.0	0.93	0.997	25
	M10	603R10		8.5	10.5	10.5	49.5	21.0	0.99	1.057	25
_	M12	603R12		8.5	10.5	13.0	54.0	21.0	1.02	1.087	25
	M5	604R5		10.0	12.0	5.5	45.0	24.0	1.22	1.312	25
	M6	604R6		10.0	12.0	6.5	46.5	24.0	1.20	1.292	25
25	M8	604R8		10.0	12.0	8.5	51.0	24.0	1.31	1.402	25
20	M10	604R10		10.0	12.0	10.5	55.0	24.0	1.57	1.662	25
	M12	604R12		10.0	12.0	13.0	57.0	24.0	1.39	1.482	25
	M14	604R14		10.0	12.0	15.0	61.5	24.0	1.49	1.582	25
	M6	605R6		12.0	14.5	6.5	49.5	27.0	1.85	2.010	25
	M8	605R8		12.0	14.5	8.5	54.0	27.0	2.00	2.160	25
	M10	605R10		12.0	14.5	10.5	59.0	27.0	2.13	2.290	25
35	M12	605R12		12.0	14.5	13.0	61.0	27.0	2.12	2.280	25
	M14	605R14		12.0	14.5	15.0	64.5	27.0	2.18	2.340	25
	M16	605R16		12.0	14.5	17.0	68.0	27.0	2.24	2.400	25

See next page



Insulated tubular cable lugs, Cu, standard type

Nominal	Cizo of					Dimension mm			Gewicht 100 St. ~kg	Gewicht 100 St. ~kg	Packing unit/
cross section mm ²	Size of bolt dia.	Part No.	Colour	d12	d13	d2	GI1	l10	Cu	Ges.	pcs
_	M8	606R8		14.0	16.5	8.5	59.0	32.0	2.93	3.150	25
_	M10	606R10		14.0	16.5	10.5	63.0	32.0	3.08	3.300	25
50 -	M12	606R12		14.0	16.5	13.0	68.0	32.0	3.23	3.450	25
əu _	M14	606R14		14.0	16.5	15.0	71.5	32.0	3.32	3.540	25
	M16	606R16		14.0	16.5	17.0	77.0	32.0	3.38	3.600	25
	M20	606R20		14.0	16.5	21.0	83.5	32.0	3.46	3.680	25
	M6	607R6		16.4	18.9	6.5	65.5	33.5	4.49	4.760	25
_	M8	607R8		16.4	18.9	8.5	65.5	33.5	4.38	4.650	25
70	M10	607R10		16.4	18.9	10.5	66.5	33.5	4.54	4.810	25
	M12	607R12		16.4	18.9	13.0	70.5	33.5	4.63	4.900	25
	M16	607R16		16.4	18.9	17.0	78.5	33.5	4.24	4.510	25
	M8	608R8		17.8	20.8	8.5	74.0	40.0	5.44	5.85	25
95	M10	608R10		17.8	20.8	10.5	74.0	40.0	5.40	5.81	25
	M12	608R12		17.8	20.8	13.0	76.0	40.0	5.56	5.97	25
100 -	M10	609R10		19.3	22.3	10.5	80.5	41.5	6.57	7.03	10
120	M12	609R12		19.3	22.3	13.0	80.5	41.5	6.38	6.84	10



Insulated butt connectors, Cu, standard type









- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ No additional insulation of the crimped connection required
- ▶ Is directly crimped with the insulation



Characteristics

- With buttmarks for precise cable insertion
- Simple cable entry due to internal chamfer
- Heat resistant to 105 °C

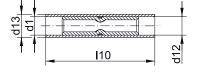


- Connector: Copper (EN 13600)
- Insulation sleeve: PA, halogen-free

Surface

Tin-plated to protect against corrosion

- Tool: see page 1.32
- You will find further information on the cable descriptions in the technical appendix, page i-6
- Dimensions of butt connectors can be found on page 1.15
- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"



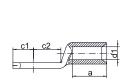
Nominal areas	Nominal cross Part			Dimensi	ion mm		Gewicht 100 St. ~kg	Gewicht 100 St. ~kg	
section mm ²	No.	Colour	d1	d12	d13	I10	Cu	Ges.	Packing unit/pcs
10	622R		4,5	7.0	9.0	42	0.72	0.84	25
16	623R		5,5	8.5	10.5	50	1.00	1.16	25
25	624R		7,0	10.0	12.0	57	1.41	1.63	25
35	625R		8,5	12.0	14.4	65	2.24	2.60	25
50	626R		10,0	14.0	16.4	72	3.36	3.81	25
70	627R		12,0	16.4	19.0	80	4.87	5.46	25
95	628R		13.5	17.8	20.8	87	5 91	6.74	25

Electrical connection systems

Copper tubular cable lugs and connectors

Tubular cable lugs, Cu, solid conductor type







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

Characteristics

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

Material

- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

- Tool: see page 1.35
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal cross section	Cizo of	ze of				Dimens	ion mm				Weight/ 100 pcs.	Doolsing
mm ²	bolt dia.	Part No.	d1	a	b	d2	d4	c1	c2	1	~ kg	Packing unit/pcs
0	M5	SR65	3.0	8	9.0	5.3	5	4.75	6.0	17.0	0.213	25
6	MC	SR66	3.0	8	10.0	6.4	5	6.50	6.5	19.0	0.220	25
10	M6	SR106	4.0	9	10.0	6.4	6	7.00	6.5	19.0	0.300	25
10	M8	SR108	4.0	9	14.0	8.4	6	8.50	9.5	22.0	0.320	25
10	M6	SR166	5.0	12	12.5	6.4	8	6.50	7.0	23.5	0.800	25
16	M8	SR168	5.0	12	15.0	8.5	8	9.00	9.0	26.0	0.900	25
05	M6	SR256	6.2	15	14.0	6.5	10	7.50	7.5	30.0	1.560	25
25	M8	SR258	6.2	15	16.0	8.5	10	10.00	10.0	32.0	1.700	25
0.5	M8	SR358	7.0	15	16.0	8.5	10	10.00	10.0	32.0	1.310	25
35	M10	SR3510	7.0	15	18.0	10.5	10	12.00	12.0	34.0	1.570	25
	M6	SR506	8.5	17	17.0	6.5	12	7.50	7.5	32.0	1.850	25
50	M8	SR508	8.5	17	17.0	8.4	12	10.00	10.0	34.0	2.000	25
	M10	SR5010	8.5	17	19.0	10.5	12	12.00	12.0	37.0	2.130	25



Butt connectors, Cu, solid conductor type









- ▶ For single-stranded round conductors, e.g. to EN 60228 Cl. 1
- ► Also pre-rounded sector shaped conductors
- ▶ Safe and secure connecting of solid conductors
- ▶ Ideal for repairing damaged NYM cables

Characteristics

- Simple cable entry due to internal chamfer

Material

- Copper (EN13600)

Surface

- Tin-plated to protect against corrosion

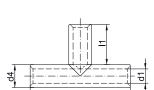
Technical instructions

- Tool: see page 1.35
- You will find further information on the cable descriptions in the technical appendix, page i-6

Newsimal areas asstices			Dimension mm		Weight/		
Nominal cross section mm ²	Part No.	d1	d4	I	100 pcs. ~ kg	Packing unit/pcs	
1.5-2.5	SV1525	2.0	3.9	25	0.210	100	
4	SV4	2.4	4.4	25	0.240	100	
6	SV6	3.0	5.0	25	0.275	100	
10	SV10	4.0	6.0	25	0.350	100	
16	SV16	5.0	8.0	35	0.960	100	
25	SV25	6.2	10.0	40	1.700	50	
35	SV35	7.0	10.0	40	1.420	50	
50	SV50	8.5	12.0	70	3.550	50	

T-connectors, Cu, solid conductor type







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

Characteristics

- Simple cable entry due to internal chamfer

Material

- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

- Tool: see page 1.35
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal cross			Dimens	ion mm			Weight/ 100 pcs.	
section mm ²	Part No.	d1	d4	1	11	Draht-Ø mm	~ kg	Packing unit/pcs
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		30	30 12		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

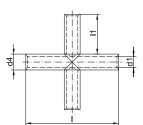
Electrical connection systems

Copper tubular cable lugs and connectors

Cross-connectors, Cu, solid conductor type









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

Characteristics

- Simple cable entry due to internal chamfer

Material

- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

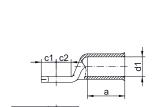
- Tool: see page 1.35
- You will find further information on the cable descriptions in the technical appendix,

Nominal cross			Dimensi	ion mm			Weight/ 100 pcs.	
section mm ²	Part No.	d1	d4	1	l1	Draht-Ø mm	~ kg	Packing unit/pcs
1.5-2.5	SKV1525	1.9	3.9	30	12	1.38/1.78	0.47	25
4	SKV4	2.4	4.4	30	12	2.25	0.56	25
6	SKV6	3.0	5.0	30	12	2.75	0.67	25
16	SKV16	5.0	8.0	35	14	4.5	1.86	25



Tubular cable lugs, Cu, F-series







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



Characteristics

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



Material

- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.33
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

- Possible as a special bright version on request. Part Number appendix "BK"
- 10 240 mm² UL-tested

Nominal	Cina of	Dowl				Dimens	ion mm				Weight/	Doolsing
cross section mm²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	c2	1	100 pcs. ~ kg	Packing unit/pcs
	M5	702F5	5.5	14	12	5.5	8.0	6.25	7.5	27	0.72	100
	М6	702F6	5.5	14	12	6.5	8.0	6.25	7.5	27	0.71	100
10	M8	702F8	5.5	14	16	8.4	8.0	9.00	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
	M5	703F5	6.6	15	13	5.5	9.5	6.25	7.5	30	1.10	100
	M6	703F6	6.6	15	13	6.4	9.5	6.25	7.5	30	1.07	100
16	M8	703F8	6.6	15	16	8.4	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
	M5	704F5	7.9	17	15.5	5.3	11.0	7.50	7.5	32	1.52	25
	M6	704F6	7.9	17	15.5	6.5	11.0	7.50	7.5	32	1.50	100
25	M8	704F8	7.9	17	17	8.4	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
	M6	705F6	9.2	19	17.5	6.4	12.4	7.50	7.5	35	1.91	100
	M8	705F8	9.2	19	18	8.4	12.4	10.00	10.0	37	2.08	100
35	M10	705F10	9.2	19	18	10.5	12.4	12.00	12.0	40	2.24	100
	M12	705F12	9.2	19	19	13.0	12.4	13.00	13.0	41	2.22	25
	M14	705F14	9.2	19	21	15.0	12.4	14.50	14.5	43	2.41	25
	M6	706F6	11.0	21	21	6.4	15.0	10.00	10.0	41	3.54	25
	M8	706F8	11.0	21	21	8.4	15.0	10.00	10.0	41	3.44	50
50	M10	706F10	11.0	21	21	10.5	15.0	12.00	12.0	43	3.64	50
JU .	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

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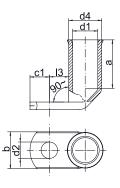
Tubular cable lugs, Cu, F-series

Nominal						Dimens	ion mm				Weight/	<u>.</u>
cross section mm²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	c2	1	100 pcs. ~ kg	Packing unit/pcs
	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
70	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	51.5	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
	M10	708F10	14.5	26	28	10.5	19.0	12.00	12.0	52	6.23	50
95	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
_	M10	709F10	16.2	30	30	10.5	21.0	14.00	14.0	57	8.31	50
_	M12	709F12	16.2	30	30	13.0	21.0	15.00	15.0	58	8.39	50
120	M14	709F14	16.2	30	30	15.0	21.0	15.00	15.0	58	8.06	25
_	M16	709F16	16.2	30	30	17.0	21.0	16.00	16.0	59	8.17	50
	M20	709F20	16.2	30	36	21.0	21.0	22.00	22.0	66	9.56	25
_	M10	710F10	18.0	32	34	10.5	23.0	15.00	16.0	64	10.91	10
150	M12	710F12	18.0	32	34	13.0	23.0	16.00	17.0	65	10.89	25
150	M14	710F14	18.0	32	34	15.0	23.0	18.00	19.0	67	11.42	10
_	M16	710F16	18.0	32	34	17.0	23.0	19.00	20.0	68	11.30	10
	M20	710F20	18.0	32	40	21.0	23.0	21.00	22.0	70	11.36	10
_	M10	711F10	20.6	35	39	10.5	26.0	21.50	19.0	72	15.60	10
_	M12	711F12	20.6	35	39	13.0	26.0	21.50	19.0	72	15.40	10
185	M14	711F14	20.6	35	39	15.0	26.0	21.50	19.0	72	15.20	10
_	M16	711F16	20.6	35	39	17.0	26.0	21.50	19.0	72	15.00	25
	M20	711F20	20.6	35	39	21.0	26.0	21.50	19.0	72	14.20	10
_	M10	712F10	23.1	44	41	10.5	28.0	16.00	17.0	80	16.50	10
_	M12	712F12	23.1	44	42	13.0	28.0	16.00	17.0	80	16.30	10
240	M14	712F14	23.1	44	41	15.0	28.0	19.00	20.0	83	16.80	10
_	M16	712F16	23.1	44	41	17.0	28.0	19.00	20.0	83	16.71	25
	M20	712F20	23.1	44	41	21.0	28.0	21.00	22.0	85	17.12	10
-	M12	713F12	26.1	44	47	13.0	32.0	19.00	22.0	96	25.60	5
300 -	M14	713F14	26.1	44	47	15.0	32.0	19.00	22.0	96	26.56	5
-	M16	713F16	26.1	44	47	17.0	32.0	19.00	22.0	96	25.60	5
	M20	713F20	26.1	44	47	21.0	32.0	22.00	22.0	96	26.24	5



Angled tubular cable lugs, Cu, 90° and 45° angled, F-series







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



Characteristics

- Tube dimensions suitable for fine stranded conductors
- Flat contact surface and internal chamfer for simple cable insertion



Material

Copper (EN13600)

Surface

- Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.33
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

- Possible as a special version with inspection hole on request.
 Part Number appendix "MS"
- Possible as a special 45° angled version on request. Part Number appendix "45"
- 90° angled version: 10 240 mm² UL-tested

Nominal cross Size of		Dort	Dimension mm							Weight/	Dooking
section mm ² bolt dia.	Part No.	d1	a	b	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs	
10	M5	742F5	5.5	14	12	5.3	8.0	6.25	10.5	0.80	50
	M6	742F6	5.5	14	12	6.4	8.0	6.25	10.5	0.78	50
	M8	742F8	5.5	14	16	8.4	8.0	9.00	12.5	0.84	50
	M10	742F10	5.5	14	16	10.5	8.0	10.50	14.5	0.88	50
	M12	742F12	5.5	14	19	13.0	8.0	12.00	16.0	0.90	50
_	M5	743F5	6.6	15	13	5.3	9.5	6.25	9.5	1.12	50
_	M6	743F6	6.6	15	13	6.4	9.5	6.25	9.5	1.12	50
16	M8	743F8	6.6	15	16	8.4	9.5	10.00	13.0	1.30	50
_	M10	743F10	6.6	15	17	10.5	9.5	12.00	15.0	1.38	50
	M12	743F12	6.6	15	19	13.0	9.5	13.00	16.0	1.34	50
_	M5	744F5	7.9	17	15	5.3	11.0	7.50	10.5	1.52	25
_	M6	744F6	7.9	17	15	6.4	11.0	7.50	10.5	1.54	25
25	M8	744F8	7.9	17	17	8.5	11.0	10.00	13.0	1.80	25
_	M10	744F10	7.9	17	17	10.5	11.0	12.00	15.0	1.79	25
	M12	744F12	7.9	17	19	13.0	11.0	13.00	16.0	1.76	25
_	M6	745F6	9.2	19	17	6.5	12.4	7.50	10.5	2.02	25
35	M8	745F8	9.2	19	18	8.5	12.4	10.00	13.0	2.18	25
- 30	M10	745F10	9.2	19	18	10.5	12.4	12.00	15.0	2.30	25
	M12	745F12	9.2	19	19	13.0	12.4	13.00	16.0	2.26	25
_	M6	746F6	11.0	21	21	6.4	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
50	M10	746F10	11.0	21	21	10.5	15.0	12.00	15.0	3.83	25
-	M12	746F12	11.0	21	21	13.0	15.0	13.00	16.0	3.74	25
	M14	746F14	11.0	21	23	15.0	15.0	14.50	17.5	4.20	25

See next page



Angled tubular cable lugs, Cu, 90° and 45° angled, F-series

Nominal						Dimension mm				Weight/	
cross section mm ²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs
70	M8	747F8	13.0	25	25	8.5	17.0	10.00	15.0	4.83	25
	M10	747F10	13.0	25	25	10.5	17.0	12.00	16.0	5.18	25
	M12	747F12	13.0	25	25	13.0	17.0	13.00	17.5	5.16	25
	M14	747F14	13.0	25	25	15.0	17.0	14.50	19.0	5.38	25
	M16	747F16	13.0	25	25	17.0	17.0	16.00	15.0	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	10.5	19.0	12.00	15.0	6.04	25
95	M12	748F12	14.5	26	28	13.0	19.0	13.00	16.0	6.58	25
_	M14	748F14	14.5	26	28	15.0	19.0	14.50	17.5	7.24	25
	M16	748F16	14.5	26	28	17.0	19.0	16.00	19.0	7.34	25
_	M10	749F10	16.2	30	30	10.5	21.0	14.00	14.0	8.76	10
120	M12	749F12	16.2	30	30	13.0	21.0	15.00	18.0	8.76	10
	M14	749F14	16.2	30	30	15.0	21.0	15.00	18.0	9.15	10
	M16	749F16	16.2	30	30	17.0	21.0	16.00	19.0	8.54	10
_	M10	750F10	18.0	32	34	10.5	23.0	15.00	19.0	11.54	10
_	M12	750F12	18.0	32	34	13.0	23.0	16.00	21.0	11.58	10
150	M14	750F14	18.0	32	34	15.0	23.0	18.00	22.0	11.90	10
-	M16	750F16	18.0	32	34	17.0	23.0	19.00	23.0	11.80	10
	M20	750F20	18.0	32	40	21.0	23.0	21.00	23.0	12.00	10
185 -	M12	751F12	20.6	35	39	13.0	26.0	21.50	22.0	16.36	10
	M14	751F14	20.6	35	39	15.0	26.0	21.50	22.0	16.20	10
105	M16	751F16	20.6	35	39	17.0	26.0	21.50	22.0	15.36	10
	M20	751F20	20.6	35	39	21.0	26.0	21.50	22.0	15.80	10
240	M16	752F16	23.1	44	41	17.0	28.0	19.00	20.0	17.80	5



Butt connectors, Cu, F-series





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



Characteristics

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



Material

- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

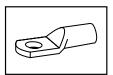
- Tool: see page 1.33
- You will find further information on the cable descriptions in the technical appendix, page i-6



Nominal cross section	Part No.		Dimension mm	Weight/ 100 pcs.		
mm ²		d1	d4	1	~ kg	Packing unit/pcs
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	13.28	10

Electrical connection systems

Copper tubular cable lugs and connectors



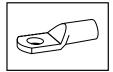
Tool application chart

Tubular cable lugs, butt connectors, parallel connectors and T-connectors "standard type" and tubular cable lugs for switchgear connections made from Cu Part 1 of 2 $\,$

	Crimping range	Cr	imping Tool	Catalogu		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	6 - 50	K5		2.18		\Diamond
crimping tools		K05		2.19		\bigcirc
	6 - 120	K06		2.19		\bigcirc
	0,75 - 16	K2		2.16		\simeq
	16 - 95	K95		2.17		$\overline{\smile}$
	25 - 150	K09		2.20		\bigcirc
Mechanical, electrical,	0,75 - 10	K50		2.23	2.82	\bigcirc
pneumatic crimping tools with interchangeable dies		EK50ML		6.6	2.82	$\overline{\smile}$
/ heads	6 - 25	K50		2.23	2.82	\bigcirc
		EK50ML		6.6	2.82	\bigcirc
	6 - 150	K354		2.24	2.84	\bigcirc
	6 - 300	K22		2.26	2.87	\bigcirc
Hand hydraulic crimping	6 - 300	HK6022		2.56	2.87	\bigcirc
tools	10 - 240	HK60VP		2.58		\square
	16 - 300	HK60VPFT		2.59		\square
	16 - 400	HK12030		2.60	2.91	\bigcirc
		HK12042		2.62	2.91	\bigcirc
		HK120U		2.64	\bigcirc	

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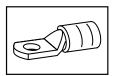
Tool application chart

Tubular cable lugs, butt connectors, parallel connectors and T-connectors "standard type" and tubular cable lugs for switchgear connections made from Cu Part 2 of 2 $\,$

	Crimping range	Cr	rimping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Battery powered	6 - 120	EK30IDML		2.30		\bigcirc
crimping tools	6 - 150	EK354ML		2.32	2.84	\bigcirc
		EK354		2.36	2.84	\bigcirc
	6 - 300	EKM6022		2.38	2.87	\bigcirc
		EK6022		2.40	2.87	\bigcirc
		EKM6022IS		4.6	2.87	\bigcirc
		EKM60UNV	+UA22	6.11	2.87	\bigcirc
		EK60UNV	+UA22	6.12	2.87	\bigcirc
	10 - 240	EK60VP		2.42		\square
		EKM60ID		2.44		\otimes
		EKM60IDIS		4.8		\otimes
	16 - 300	EK60VPFT		2.43		\square
	16 - 400	EK12032		2.46	2.91	\bigcirc
		EK12042		2.48	2.91	\bigcirc
		EK120U		2.50	2.91	\bigcirc
		EK135FT	+UA15T	2.52	2.91	\bigcirc
		EK120UNV	+UA12TKL	6.13	2.91	\bigcirc
	70 - 185	EK120ID		2.45		\bigcirc
Hydraulic crimping	6 - 300	THK22		2.68	2.87	\bigcirc
systems	16 - 400	THK120		2.72	2.91	\bigcirc
		HK252	+25A13	2.78	2.91 + 2.96	\bigcirc
Hydraulic crimping	6 - 300	PK22		2.68	2.87	\bigcirc
heads		PK60UNV	+UA22	6.10	2.87	\bigcirc
	10 - 240	PK60VP		2.70		\square
		PK60ID		2.71		\bigcirc
	16 - 300	PK60VPFT		2.70		\square
	16 - 400	PK12042		2.72	2.91	\bigcirc
		PK120U		2.74	2.91	\bigcirc
		PK252	+25A13	2.76	2.91 + 2.96	\bigcirc

Electrical connection systems

Copper tubular cable lugs and connectors

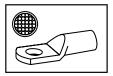


Tool application chart

Insulated tubular cable lugs and butt connectors "standard type"

	Crimping range	Cri	mping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical,	10 - 70	K354		2.24	2.84	0
pneumatic crimping tools with interchangeable dies / heads	10 - 150	K22		2.26	2.87	0
Hand hydraulic	10 - 150	HK12030		2.60	2.92	0
crimping tools		HK12042		2.62	2.92	\circ
		HK120U		2.64	2.92	0
		HK6022		2.56	2.87	0
Battery powered	10 - 70	EK354		2.36	2.84	0
crimping tools		EK354ML		2.32	2.84	0
	10 - 150	EK12032		2.46	2.92	0
		EK12042		2.48	2.92	0
		EK120U		2.50	2.92	0
		EK120UNV	+UA12TKL	6.13	2.92	0
		EK135FT	+UA15T	2.52	2.92	0
		EK6022		2.40	2.87	0
		EK60UNV	+UA22	6.12	2.87	0
		EKM6022		2.38	2.87	0
		EKM6022IS		4.6	2.87	0
		EKM60UNV	+UA22	6.11	2.87	0
Hydraulic	10 - 150	HK252	+25A13	2.78	2.92	0
crimping systems		THK120		2.72	2.92	0
		THK22		2.68	2.87	0
Hydraulic	10 - 150	PK12042		2.72	2.92	0
crimping heads		PK120U		2.74	2.92	0
		PK22		2.68	2.87	0
		PK252	+25A13	2.76	2.92	0
		PK60UNV	+UA22	6.10	2.87	0





Tool application chart

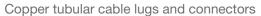
Tubular cable lugs and butt connectors for fine stranded conductors

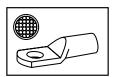
Part 1 of 2

	Crimping range	Cr	imping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	6 - 50	K5		2.18		♦
crimping tools	16 - 95	K95		2.17		\supset
Mechanical, electrical,	10 - 35	K354		2.24	2.84	\supset
pneumatic crimping tools with interchangeable dies / heads	10 - 70	K22		2.26	2.88	\bigcirc
Hand hydraulic	10 - 70	HK6022		2.56	2.88	\bigcirc
crimping tools	10 - 150	HK12030		2.60	2.92	\bigcirc
		HK12042		2.62	2.92	\bigcirc
		HK120U		2.64	2.92	\odot
	10 - 240	HK60VP		2.58		\square
	16 - 300	HK60VPFT		2.59		\square
Battery powered	6 - 120	EK30IDML		2.30		\forall
crimping tools	10 - 35	EK354ML		2.32	2.84	$\overline{\bigcirc}$
		EK354		2.36	2.84	$\overline{\bigcirc}$
	10 - 70	EKM6022		2.38	2.88	\bigcirc
		EK6022		2.40	2.88	\bigcirc
		EKM6022IS		4.6	2.88	\bigcirc
		EKM60UNV	+UA22	6.11	2.88	\bigcirc
		EK60UNV	+UA22	6.12	2.88	\bigcirc
	10 - 150	EK12032		2.46	2.92	\bigcirc
		EK12042		2.48	2.92	\bigcirc
		EK120U		2.50	2.92	\bigcirc
		EK135FT	+UA15T	2.52	2.92	\bigcirc
		EK120UNV	+UA12TKL	6.13	2.92	\bigcirc
	10 - 240	EK60VP		2.42		\square
		EKM60ID		2.44		$\overline{\bigcirc}$
		EKM60IDIS		4.8		$\overline{\bigcirc}$
	16 - 300	EK60VPFT		2.43		\square
	70 - 240	EK120ID		2.45		$\overline{\smile}$
Hydraulic	10 - 70	THK22		2.68	2.88	\odot
crimping systems	10 - 150	THK120		2.72	2.92	\bigcirc
	10 - 240	HK252	+25A13	2.78	2.92 + 2.96	\bigcirc

See next page

Electrical connection systems





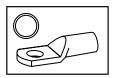
Tool application chart

Tubular cable lugs and butt connectors for fine stranded conductors

Part 2 of 2

	Crimping range	Cı	rimping Tool	Catalog	jue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Hydraulic	10 - 70	PK22		2.68	2.88	\odot
crimping heads		PK60UNV	+UA22	6.10	2.88	\bigcirc
	10 - 150	PK12042		2.72	2.92	$\overline{\hspace{1cm}}$
		PK120U		2.74	2.92	\bigcirc
	10 - 240	PK252	+25A13	2.76	2.92 + 2.96	$\overline{\hspace{1cm}}$
		PK60VP		2.70		\square
		PK60ID		2.71		\otimes
	16 - 300	PK60VPFT		2.70	\square	





Tool application chart

Tubular cable lugs and butt connectors for solid conductors

	Crimping range	Cr	rimping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	0,75 - 16	K02		2.16		\simeq
crimping tools	1,5 - 4	K93		2.15		\bigcirc
	6 - 10	K94		2.15		\bigcirc
	25 - 50*	K05		2.19		\bigcirc
Mechanical, electrical,	1,5 - 10	K50		2.23	2.82	\bigcirc
pneumatic crimping tools with interchangeable		EK50ML		6.6	2.82	\bigcirc
dies / heads	1,5 - 16	K22		2.26	2.88	\bigcirc
Hand hydraulic crimping tools	1,5 - 16	HK6022		2.56	2.88	\bigcirc
Battery powered	1,5 - 16	EKM6022		2.38	2.88	\bigcirc
crimping tools		EK6022		2.40	2.88	\bigcirc
		EKM6022IS		4.6	2.88	\bigcirc
		EKM60UNV	+UA22	6.11	2.88	\bigcirc
		EK60UNV	+UA22	6.12	2.88	\bigcirc
Hydraulic crimping systems	1,5 - 16	THK22		2.68	2.88	\bigcirc
Hydraulic	1,5 - 16	PK22		2.68	2.88	\bigcirc
crimping heads		PK60UNV	+UA22	6.10	2.88	\bigcirc

^{*}For cross-sections 25 + 35 mm² use the die size 25 mm². For cross-section 50 mm² use the die size 35 mm².



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

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



In brief

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



▶ When things get hot: Nickel cable lugs

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

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





➤ Safe in aggressive environments with stainless steel

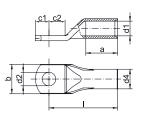
High-quality stainless steel ensures extra resilience, especially in aggressive environments. The resistance is retained.

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



Tubular cable lugs, stainless steel







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



Characteristics

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



Material

V2A (X5CrNi18-10)



Technical instructions

- Tool: see page 1.43
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

Nominal	0: 1					Dimens	ion mm				Weight/	D 1: "/
cross section mm²	Size of bolt dia.	Part No.	d1	a	b	c1	c2	d2	d4	I	100 pcs. ~ kg	Packing unit/ pcs
05.1	M4	79 V 4	1.6	6	6.5	4.5	4.5	4.3	3.2	13	0.080	100
0.5 - 1	M 5	79 V 5	1.6	6	7.5	5	5.5	5.3	3.2	14	0.080	100
	M4	80V4	3.0	8	9.0	5	5.5	4.3	5.0	17	0.260	100
1.5 - 2.5	M5	80 V 5	3.0	8	9.0	5	6	5.5	5.0	17	0.190	100
	M6	80 V 6	3.0	8	9.5	6.5	6.5	6.5	5.0	19	0.215	100
	M4	81 V 4	4.0	9	9.0	5	5.5	4.3	6.0	18	0.260	100
4 - 6	M 5	81 V 5	4.0	9	9.5	6	6	5.5	6.0	19	0.280	100
	M6	81 V 6	4.0	9	10.0	7	6.5	6.5	6.0	19	0.280	100
	M 5	82 V 5	5.0	10	12.5	6.5	7.5	5.5	8.0	22	0.710	100
10	M6	82V6	5.0	10	12.5	6.5	7.5	6.5	8.0	22	0.780	100
	M8	82V8	5.0	10	15.0	9	10	8.5	8.0	25	0.780	100
_	M5	83 V 5	6.0	13	12.0	5.5	6.5	5.5	8.0	28	0.500	50
16	M6	83 V 6	6.0	13	12.0	6	7.5	6.5	8.0	28	0.550	50
	M8	83V8	6.0	13	15.0	8.5	9.5	8.5	8.0	29	0.600	50
25 -	M6	84 V 6	7.0	15	14.0	7.5	7.5	6.5	10.0	30	1.210	50
	M8	84V8	7.0	15	16.0	9	10	8.5	10.0	32	1.850	50
35 -	M6	85 V 6	9.0	17	17.0	7.5	7.5	6.5	12.0	32	1.600	50
	M8	85 V 8	9.0	17	17.0	10	10	8.5	12.0	35	1.850	50
_	M6	86V6	10.0	19	20.0	10	10	6.5	14.0	37	2.800	50
50 -	M8	86V8	10.0	19	20.0	10	10	8.5	14.0	37	2.600	50
50	M10	86V10	10.0	19	20.0	12	12	10.5	14.0	39	2.800	50
	M12	86V12	10.0	19	20.0	13	13	13.0	14.0	43	2.960	50
_	M8	87 V 8	12.0	21	23.0	10	10	8.5	16.0	43	3.650	25
70 -	M10	87V10	12.0	21	23.0	12	12	10.5	16.0	44	3.930	25
70	M12	87V12	12.0	21	23.0	13	13	13.0	16.0	46	3.850	25
	M16	87V16	12.0	21	26.0	16	16	17.0	16.0	46	3.960	25
_	M8	88V8	14.0	25	26.0	12	12	8.5	18.0	48	4.650	25
95	M10	88V10	14.0	25	26.0	12	12	10.5	18.0	48	5.610	25
	M12	88V12	14.0	25	26.0	13	13	13.0	18.0	49	5.540	25



Butt connectors, stainless steel







- For pre-rounded stranded sector shaped conductors
- Ideal for aggressive environmental conditions, acid and rust-resistant
- ▶ Heat resistant up to 400 °C





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



- V2A (X5CrNi18-10)

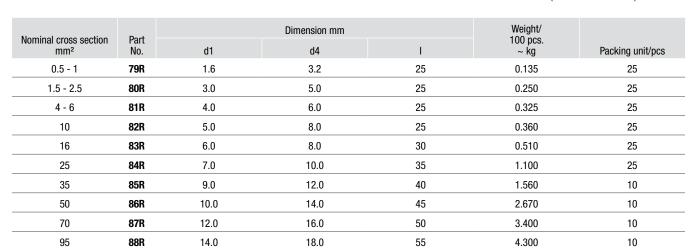


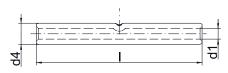
Technical instructions

- Tool: see page 1.43
- You will find further information on the cable descriptions in the technical appendix, page i-6



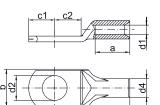
Also available as featured article in stainless steel V4A (X5CrNiMo17-12-2)





Tubular cable lug, Ni







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



Characteristics

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



Material

Nickel alloy



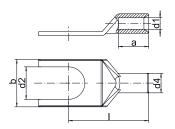
- Tool: see page 1.43
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal	0: 1					Dimens	ion mm				Weight/	D 1: "/
cross section mm ²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	c1	c2	I	100 pcs. ~ kg	Packing unit/ pcs
	М3	56N3	1.6	4	6.5	3.2	3.2	3.5	4.5	13	0.080	100
0.5 - 1	M4	56N4	1.6	6	6.5	4.3	3.2	4.5	4.5	13	0.080	100
	M5	56N5	1.6	6	7.5	5.3	3.2	5.0	5.5	14	0.080	100
	М3	57N3	2.3	6	7.0	3.2	3.9	3.5	5.0	13	0.105	100
15.05	M4	57N4	2.3	6	7.0	4.3	3.9	4.5	5.0	13	0.105	100
1.5 - 2.5	M5	57N5	2.3	6	7.5	5.3	3.9	5.0	5.5	14	0.105	100
	M6	57N6	2.3	6	9.5	6.5	3.9	6.0	6.5	16	0.130	100
	M4	58N4	3.6	9	9.5	4.3	5.6	4.5	5.0	18	0.275	100
4 - 6	M5	58N5	3.6	9	9.5	5.3	5.6	5.0	5.5	19	0.275	100
	M6	58N6	3.6	9	9.5	6.5	5.6	6.0	6.5	19	0.260	100
	M8	58N8	3.6	6	14	8.5	5.6	8.5	9.0	22	0.260	100
10 _	M5	59N5	4.5	10	12.0	5.5	6.5	5.5	6.5	21	0.340	100
	M6	59N6	4.5	10	12.0	6.5	6.5	6.5	7.5	22	0.360	100
_	M5	60N5	5.5	13	12.0	5.5	7.5	5.5	6.5	26	0.470	100
16 -	M6	60N6	5.5	13	12.0	6.5	7.5	6.5	7.5	27	0.480	100
10	M8	60N8	5.5	13	13.5	8.5	7.5	8.5	9.5	29	0.560	100
	M10	60N10	5.5	11	17	10.5	7.5	12.0	12.0	31	0.560	100
_	M6	61N6	7.0	15	14.0	6.5	10.0	7.5	7.5	30	1.200	50
25	M8	61N8	7.0	15	16.0	8.5	10.0	10.0	10.0	32	1.320	50
	M10	61N10	7.0	13	17.0	10.5	10.0	12.0	12.0	34	1.320	50
_	M6	62N6	8.5	17	17.0	6.5	12.0	7.5	7.5	32	1.850	50
35	M8	62N8	8.5	17	17.0	8.5	12.0	10.0	10.0	34	2.000	50
	M10	62N10	8.5	14.5	19.0	10.5	12.0	12.0	12.0	36	2.000	50
50 -	M8	63N8	10.0	19	20.0	8.5	14.0	10.0	10.0	37	2.900	50
	M10	63N10	10.0	19	20.0	10.5	14.0	12.0	12.0	39	3.100	50
70 -	M10	64N10	12.0	21	23.0	10.5	16.5	12.0	12.0	44	4.600	25
	M12	64N12	12.0	21	23.0	13.0	16.5	13.0	13.0	46	4.660	25
95 -	M10	65N10	13.5	25	26.0	10.5	18.0	12.0	12.0	48	5.550	25
	M12	65N12	13.5	25	26.0	13.0	18.0	13.0	13.0	49	5.600	25



Tubular cable lugs, Cu, fork type







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

Cu

Characteristics

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



Material

Nickel alloy



- Tool: see page 1.43
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal	0			Weight/	Packing unit/					
cross section mm ²	Size of bolt dia.	Part No.	d1	a	b	d2	d4	1	100 pcs. ~ kg	Packing unit/ pcs
05 1 -	M4	56C4	1.6	5	6.5	4.3	3.2	13	0.070	50
0.5 - 1	M5	56C5	1.6	6	7.5	5.3	3.2	14	0.075	50
	M4	57C4	2.3	6	7.0	4.3	3.9	13	0.095	50
1.5 - 2.5	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
	M4	58C4	3.6	9	9.5	4.3	5.6	18	0.250	50
4 - 6	M5	58C5	3.6	9	9.5	5.3	5.6	19	0.255	50
	M6	58C6	3.6	9	9.5	6.5	5.6	19	0.235	50
10	M5	59C5	4.5	10	12.0	5.5	6.5	21	0.320	50
10	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
16	M6	60C6	5.5	13	12.0	6.5	7.5	27	0.450	50
	M8	6008	5.5	13	13.5	8.5	7.5	29	0.520	50

Electrical connection systems

Tubular cable lugs and connectors, nickel or stainless steel

Butt connectors, Ni

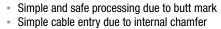




- ▶ For multi-stranded round conductors, e.g. to EN 60228 Cl. 2
- **▶** For pre-rounded stranded sector shaped conductors
- ▶ Suitable for high temperatures to 650 °C



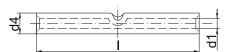
Characteristics





Material

Nickel alloy

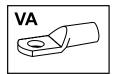


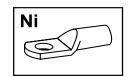


- Tool: see page 1.43
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal cross section	Part		Dimension mm		Weight/ 100 pcs.	
mm ²	No.	d1	d4	1	~ kg	Packing unit/pcs
0.5 - 1	62R	1.6	3.2	25	0.135	50
1.5 - 2.5	63R	2.3	3.9	25	0.170	50
4 - 6	64R	3.6	5.6	25	0.325	50
10	65R	4.5	6.5	25	0.360	50
16	66R	5.5	7.5	30	0.510	50







Tool application chart

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

	Crimping range	Cr	imping Tool	Catalogi	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical crimping tools	0,5 - 16	K25		2.17		\simeq
Mechanical, electrical,	1,5 - 16	K354		2.24	2.85	₩ + ₩
pneumatic crimping tools with interchangeable dies / heads	10 - 50	K22		2.26	2.88	$\stackrel{\smile}{\sim}$
Hand hydraulic	10 - 50	HK6022		2.56	2.88	\simeq
crimping tools	16 - 95	HK12030		2.60	2.92	₩ + ₩
		HK12042		2.62	2.92	₩ + ₩
		HK120U		2.64	2.92	∀ + ♥
Battery powered	1,5 - 16	EK354ML		2.32	2.85	∀ + ♥
crimping tools		EK354		2.36	2.85	₩ + ₩
	10 - 50	EKM6022		2.38	2.88	\simeq
		EK6022		2.40	2.88	\simeq
		EKM6022IS		4.6	2.88	\simeq
		EKM60UNV	+UA22	6.11	2.88	\simeq
		EK60UNV	+UA22	6.12	2.88	\simeq
	10 - 95	EK12032		2.46	2.92	₩ + ₩
		EK12042		2.48	2.92	₩ + ₩
		EK120U		2.50	2.92	₩ + ₩
		EK135FT	+UA15T	2.52	2.92	₩ + ₩
		EK120UNV	+UA12TKL	6.13	2.92	₩ + ₩
Hydraulic	10 - 50	THK22		2.68	2.88	\simeq
crimping systems	16 - 95	THK120		2.72	2.92	∀ + ∀
		HK252	+25A13	2.78	2.92	∀ + ∀
Hydraulic	10 - 50	PK22		2.68	2.88	\odot
crimping heads		PK60UNV	+UA22	6.10	2.88	\simeq
	16 - 95	PK12042		2.72	2.92	₩ + ₩
		PK120U		2.74	2.92	₩ + ₩
		PK252	+25A13	2.76	2.92	₩ + ₩



CONFORMITY - COPPER COMPRESSION CABLE LUGS AND CONNECTORS TO DIN

Klauke products conform not only to its own standards. But also to DIN standards with strict standardised dimensions. Our compression cable lugs and connectors range to 1000 mm² nominal cross-section, with standardised designations and markings. We have the quality certified by the IEC test, including our special versions.



In brief

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



▶ Tested and certified for safety

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

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



▶ Every version standardised

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

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

▶ Clear markings

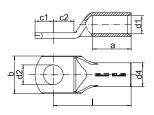
Where simplicity and safety are key: Every cable lug to DIN comes with the appropriate crimping instruction. Readily visible markings indicate the crimping location required to work in compliance with the standard. Code numbers on the dies and cable lugs show the correct crimp at a glance.



Manufacturer's mark

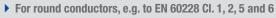
Compression cable lugs to DIN, Cu











- ► For non-tension copper cables, e.g. to DIN 48201-1
- ► For pre-rounded multi-stranded sector shaped conductors
- ▶ With code number for clear tool assignment
- ▶ To DIN 46235



Characteristics

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





- Copper (EN13600)

Surface



Tin-plated to protect against corrosion

Technical instructions



Tool: see page 1.59You will find further information on the cable descriptions in the technical appendix,



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

Additional information

- Possible as a special bright version on request. Part Number appendix "BK"
- Possible as a special version with barrier on request
- 10 800 mm² IEC-tested
- * = Bore not standardised

Nominal cross	Size of							Dimens	ion mm				Weight/	
section mm²	bolt diameter	Part No.	Hint	Code	a	b	d1	d2	d4	c1	c2	I	100 pcs. ~ kg	Packing unit/pcs
	M 5	101R5		5	10.5	8.5	3.8	5.3	5.5	6.5	7.5	25	0.24	100
6	M 6	101R6		5	10.5	8.5	3.8	6.4	5.5	8.0	8.5	25	0.30	100
	M 8	101R8	*	5	10.5	13.0	3.8	8.4	5.5	10.0	10.0	25	0.34	100
	M 5	102R5		6	10.5	9.0	4.5	5.3	6.0	6.5	9.0	28	0.37	100
10	M 6	102R6		6	10.5	9.0	4.5	6.4	6.0	8.0	9.0	28	0.36	100
	M 8	102R8	*	6	13.0	13.0	4.5	8.4	6.0	10.0	10.5	28	0.38	100
	M 6	103R6		8	20.5	13.0	5.5	6.4	8.5	8.0	9.0	37	1.19	100
40	M 8	103R8		8	20.5	13.0	5.5	8.4	8.5	10.5	11.0	37	1.22	100
16	M 10	103R10		8	20.5	17.0	5.5	10.5	8.5	12.5	12.5	37	1.30	100
	M 12	103R12	*	8	20.5	18.5	5.5	13.0	8.5	13.0	13.0	38	1.27	100
	M 6	104R6		10	20.5	14.0	7.0	6.4	10.0	8.0	9.0	39	1.51	50
0.5	M 8	104R8		10	20.5	16.0	7.0	8.4	10.0	10.5	11.0	39	1.54	50
25	M 10	104R10		10	20.5	17.0	7.0	10.5	10.0	12.5	13.0	39	1.62	50
	M 12	104R12		10	20.5	19.0	7.0	13.0	10.0	13.5	13.5	39	1.66	25
	M 6	105R6	*	12	20.5	17.0	8.2	6.4	12.5	8.0	8.5	43	2.77	50
	M 8	105R8		12	20.5	17.0	8.2	8.4	12.5	10.5	10.5	43	2.85	50
35	M 10	105R10		12	20.5	19.0	8.2	10.5	12.5	12.5	12.5	43	2.84	50
	M 12	105R12		12	20.5	21.0	8.2	13.0	12.5	13.5	13.5	43	2.79	50
	M 14	105R14	*	12	20.5	21.0	8.2	15.0	12.5	14.0	13.5	43	2.70	25

see next page



Compression cable lugs to DIN, Cu

Nominal cross	Size of							Dimens	sion mm				Weight/	
section mm²	bolt diameter	Part No.	Hint	Code	a	b	d1	d2	d4	c1	c2	- 1	100 pcs. ~ kg	Packing unit/pcs
	M 8	106R8		14	28	20.0	10.0	8.4	14.5	10.5	11.0	53	4.46	50
	M 10	106R10		14	28	22.0	10.0	10.5	14.5	12.5	12.5	53	4.48	50
50	M 12	106R12		14	28	24.0	10.0	13.0	14.5	13.5	13.5	53	4.40	50
	M 14	106R14	*	14	28	24.0	10.0	15.0	14.5	14	14.5	53	4.30	25
	M 16	106R16		14	28	28.0	10.0	17.0	14.5	16.5	16.5	53	4.57	25
	M 8	107R8		16	28	24.0	11.5	8.4	16.5	10.5	10.5	56	5.92	50
	M 10	107R10		16	28	24.0	11.5	10.5	16.5	12.5	12.5	56	6.02	50
70	M 12	107R12		16	28	24.0	11.5	13.0	16.5	13.5	13.5	56	5.89	50
	M 14	107R14	*	16	28	24.0	11.5	15.0	16.5	14.5	13.5	55	5.80	25
	M 16	107R16		16	28	30.0	11.5	17.0	16.5	16.5	16.5	56	6.13	25
	M 8	108R8	*	18	35	28.0	13.5	8.4	19.0	12.5	12.5	66	9.21	25
	M 10	108R10		18	35	28.0	13.5	10.5	19.0	12.5	12.5	66	8.97	50
95	M 12	108R12		18	35	28.0	13.5	13.0	19.0	13.5	13.5	66	8.62	50
	M 14	108R14	*	18	35	28.0	13.5	15.0	19.0	13.5	14.5	66	8.78	25
	M 16	108R16		18	35	32.0	13.5	17.0	19.0	16.5	16.5	66	9.00	50
	M 10	109R10		20	35	32.0	15.5	10.5	21.0	12.5	16.0	71	11.40	50
	M 12	109R12		20	35	32.0	15.5	13.0	21.0	13.5	17.0	71	11.31	50
120	M 14	109R14	*	20	35	32.0	15.5	15.0	21.0	18.0	18.0	70	11.45	25
	M 16	109R16		20	35	32.0	15.5	17.0	21.0	16.5	18.0	71	11.24	50
	M 20	109R20		20	35	38.0	15.5	21.0	21.0	19.0	21.0	71	11.03	25
	M 10	110R10		22	35	34.0	17.0	10.5	23.5	12.5	15.5	79	16.38	10
	M 12	110R12		22	35	34.0	17.0	13.0	23.5	13.5	17.0	79	16.29	25
150	M 14	110R14	*	22	35	34.0	17.0	15.0	23.5	17.5	20.0	79	16.38	10
	M 16	110R16		22	35	34.0	17.0	17.0	23.5	16.5	20.0	79	16.17	10
	M 20	110R20		22	35	40.0	17.0	21.0	23.5	19.5	22.0	79	15.90	10
	M 10	111R10		25	40	37.0	19.0	10.5	25.5	12.5	16.5	83	18.96	10
	M 12	111R12		25	40	37.0	19.0	13.0	25.5	13.5	17.5	83	18.11	10
185	M 14	111R14	*	25	40	37.0	19.0	15.0	25.5	17.5	19.0	83	19.21	10
	M 16	111R16		25	40	37.0	19.0	17.0	25.5	16.5	20.0	83	18.74	25
	M 20	111R20		25	40	40.0	19.0	21.0	25.5	19.5	22.0	83	18.69	10
	M 12	112R12		28	40	42.0	21.5	13.0	29.0	13.5	18.0	93	27.00	10
	M 14	112R14	*	28	40	42.0	21.5	15.0	29.0	17.5	20.0	93	27.58	10
240	M 16	112R16		28	40	42.0	21.5	17.0	29.0	16.5	21.0	93	27.37	25
	M 20	112R20		28	40	45.0	21.5	21.0	29.0	19.5	23.0	93	26.88	10
	M 12	113R12	*	32	50	46.0	24.5	13.0	32.0	14.0	22.0	101	32.89	5
	M 14	113R14	*	32	50	46.0	24.5	15.0	32.0	17.0	22.0	101	33.29	5
300	M 16	113R16		32	50	46.0	24.5	17.0	32.0	16.5	23.0	101	32.94	5
	M 20	113R20		32	50	46.0	24.5	21.0	32.0	19.5	22.0	101	33.24	5
	M 14	114R14	*	38	70	54.0	27.5	15.0	38.5	22.5	23.0	116	69.38	5
400	M 16	114R16		38	70	54.0	27.5	17.0	38.5	22.5	23.0	116	68.54	5
	M 20	114R20		38	70	54.0	27.5	21.0	38.5	22.5	22.0	116	65.40	5
	M 16	115R16	*	42	70	60.0	31.0	17.0	42.0	23.5	26.0	126	83.31	1
500	M 20	115R20		42	70	60.0	31.0	21.0	42.0	22.5	26.0	126	81.58	1
	M 16	116R16	*	44	80	64.0	34.5	17.0	44.0	23.0	26.0	137	79.60	1
625	M 20	116R20		44	80	64.0	34.5	21.0	44.0	22.5	26.0	136	79.69	1
	M 16	117R16	*	52	100	75.0	40.0	17.0	52.0	30.0	30.0	166	150.00	1
800	M 20	117R20		52	100	75.0	40.0	21.0	52.0	22.5	30.0	166	149.00	1
	M 16	118R16	*	58	100	83.0	44.0	17.0	58.0	30.0	30.0	166	199.00	1
1000		118R20		58	100	83.0	44.0	21.0	58.0	30.0	30.0	166	195.00	1

Angled compression cable lugs, Cu, 90° angled







- ► For non-tension copper cables, e.g. to DIN 48201-1
- ▶ For pre-rounded multi-stranded sector shaped conductors
- ▶ Tube dimensions according to DIN 46235
- ▶ With code number for clear tool assignment



Characteristics

- With crimp markings for correct crimp positioning
- Simple and safe connection due to flat contact surfaces and internal chamfer



Material

- Copper (EN13600)



Surface

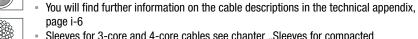
Tin-plated to protect against corrosion

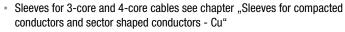




Technical instructions

Tool: see page 1.59

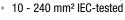


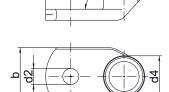




Additional information

Possible as a special bright version on request. Part Number appendix "BK"







Nominal	Size of						Dimension mn	n			Weight/	
cross section mm²	bolt diameter	Part No.	Code	a	b	d1	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs
	M 5	161R5	5	10.5	8.5	3.8	5.3	5.5	6.5	9	0.28	50
6	M 6	161R6	5	10.5	8.5	3.8	6.4	5.5	8.0	10	0.32	50
	M 5	162R5	6	10.5	9.0	4.5	5.3	6.0	6.5	10	0.34	50
10	M 6	162R6	6	10.5	9.0	4.5	6.4	6.0	8.0	10	0.35	50
	M 8	162R8	6	10.5	13.0	4.5	8.4	6.0	10.0	13	0.37	50
	M 6	163R6	8	20.5	13.0	5.5	6.4	8.5	8.0	11	1.20	50
	M 8	163R8	8	20.5	13.0	5.5	8.4	8.5	10.5	13	1.30	50
16	M 10	163R10	8	20.5	17.0	5.5	10.5	8.5	12.5	15	1.40	50
	M 12	163R12	8	20.5	18.5	5.5	13.0	8.5	13.0	18	1.33	50
	M 6	164R6	10	20.5	14.0	7.0	6.4	10.0	8.0	11	1.54	25
	M 8	164R8	10	20.5	16.0	7.0	8.4	10.0	10.5	13	1.60	25
25	M 10	164R10	10	20.5	17.0	7.0	10.5	10.0	12.5	15	1.63	25
	M 12	164R12	10	20.5	19.0	7.0	13.0	10.0	13.5	18	1.70	25
	M 8	165R8	12	20.5	17.0	8.2	8.4	12.5	10.5	13	2.72	25
25	M 10	165R10	12	20.5	19.0	8.2	10.5	12.5	12.5	15	2.76	25
35	M 12	165R12	12	20.5	21.0	8.2	13.0	12.5	13.5	18	2.85	25
	M 14	165R14	12	20.5	21.0	8.2	15.0	12.5	14.0	20	2.92	25
	M 8	166R8	14	29.0	20.0	10.0	8.4	14.5	10.5	13	4.39	25
	M 10	166R10	14	29.0	22.0	10.0	10.5	14.5	12.5	16	4.46	25
50	M 12	166R12	14	29.0	24.0	10.0	13.0	14.5	13.5	18	4.49	25
	M 14	166R14	14	29.0	24.0	10.0	15.0	14.5	14.0	20	4.73	25
	M 16	166R16	14	29.0	28.0	10.0	17.0	14.5	16.5	22	4.66	25

see next page



Angled compression cable lugs, Cu, 90° angled

Nominal	Size of					Г	Dimension mm	1			Weight/	5.11
cross section mm ²	bolt diameter	Part No.	Code	a	b	d1	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs
	M 8	167R8	16	29.0	24.0	11.5	8.4	16.5	10.5	14	5.92	25
	M 10	167R10	16	29.0	24.0	11.5	10.5	16.5	12.5	16	6.31	25
70	M 12	167R12	16	29.0	24.0	11.5	13.0	16.5	13.5	18	6.34	25
_	M 14	167R14	16	29.0	24.0	11.5	15.0	16.5	14.5	20	6.50	25
	M 16	167R16	16	29.0	30.0	11.5	17.0	16.5	16.5	22	6.63	25
_	M 10	168R10	18	36.0	28.0	13.5	10.5	19.0	12.5	17	9.03	25
95 -	M 12	168R12	18	36.0	28.0	13.5	13.0	19.0	13.5	18	9.27	25
90	M 14	168R14	18	36.0	28.0	13.5	15.0	19.0	13.5	20	9.06	25
	M 16	168R16	18	36.0	32.0	13.5	17.0	19.0	16.5	22	9.18	25
	M 10	169R10	20	36.0	32.0	15.5	10.5	21.0	12.5	17	10.41	10
	M 12	169R12	20	36.0	32.0	15.5	13.0	21.0	13.5	18	10.65	10
120	M 14	169R14	20	36.0	32.0	15.5	15.0	21.0	18.0	20	10.75	10
	M 16	169R16	20	36.0	32.0	15.5	17.0	21.0	16.5	22	10.72	10
	M 20	169R20	20	36.0	38.0	15.5	21.0	21.0	19.5	24	11.00	10
_	M 10	170R10	22	36.0	34.0	17.0	10.5	23.5	12.5	17	14.18	10
_	M 12	170R12	22	36.0	34.0	17.0	13.0	23.5	13.5	18	14.33	10
150	M 14	170R14	22	36.0	34.0	17.0	15.0	23.5	17.5	20	15.60	10
	M 16	170R16	22	36.0	34.0	17.0	17.0	23.5	16.5	22	15.24	10
	M 20	170R20	22	36.0	40.0	17.0	21.0	23.5	19.5	24	15.70	10
	M 10	171R10	25	41.0	37.0	19.0	10.5	25.5	12.5	22	18.60	10
	M 12	171R12	25	41.0	37.0	19.0	13.0	25.5	13.5	22	18.69	10
185	M 14	171R14	25	41.0	37.0	19.0	15.0	25.5	17.5	22	19.10	10
	M 16	171R16	25	41.0	37.0	19.0	17.0	25.5	16.5	22	19.00	10
	M 20	171R20	25	41.0	40.0	19.0	21.0	25.5	19.5	24	18.72	10
	M 12	172R12	28	41.0	42.0	21.5	13.0	29.0	13.5	22	25.09	10
040	M 14	172R14	28	41.0	42.0	21.5	15.0	29.0	17.5	22	25.70	10
240 —	M 16	172R16	28	46.0	42.0	21.5	17.0	29.0	16.5	22	24.96	10
_	M 20	172R20	28	46.0	45.0	21.5	21.0	29.0	19.5	24	25.26	10

Angled compression cable lugs, Cu, 45° angled





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



Characteristics

- Flat contact surface by special angle pressing process
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer



Material

Copper (EN13600)



Surface

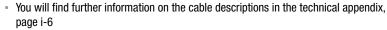
Tin-plated to protect against corrosion

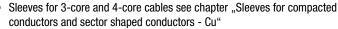


Technical instructions

Tool: see page 1.59





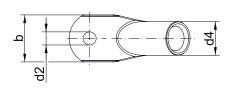


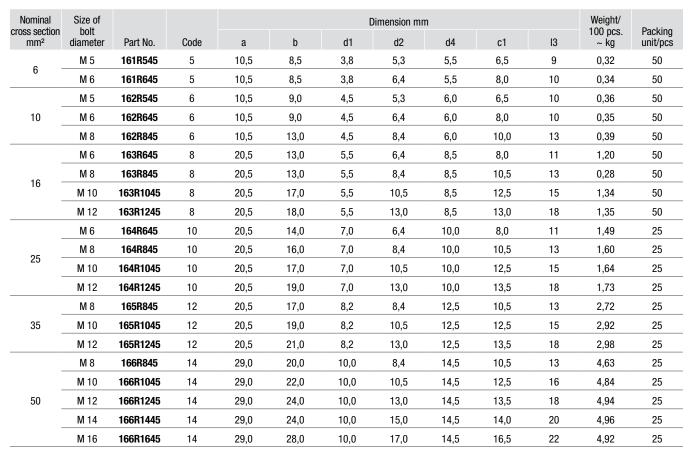


Additional information

Possible as a special bright version on request. Part Number appendix "BK"







see next page



Angled compression cable lugs, Cu, 45° angled

Nominal	Size of					[imension mn	1			Weight/	Doolsing
cross section mm²	bolt diameter	Part No.	Code	a	b	d1	d2	d4	c1	13	100 pcs. ~ kg	Packing unit/pcs
	M 8	167R845	16	29.0	24.0	11.5	8.4	16.5	10.5	14	6.40	25
70	M 10	167R1045	16	29.0	24.0	11.5	10.5	16.5	12.5	16	6.76	25
70	M 12	167R1245	16	29.0	24.0	11.5	13.0	16.5	13.5	18	6.90	25
	M 14	167R1445	16	29.0	24.0	11.5	15.0	16.5	14.5	20	6.72	25
	M 10	168R1045	18	36.0	28.0	13.5	10.5	19.0	12.5	17	9.64	25
95	M 12	168R1245	18	36.0	28.0	13.5	13.0	19.0	13.5	18	9.21	25
90	M 14	168R1445	18	36.0	28.0	13.5	15.0	19.0	13.5	20	9.51	25
	M 16	168R1645	18	36.0	32.0	13.5	17.0	19.0	16.5	22	9.40	25
	M 10	169R1045	20	36.0	32.0	15.5	10.5	21.0	12.5	17	11.09	10
	M 12	169R1245	20	36.0	32.0	15.5	13.0	21.0	13.5	18	11.45	10
120	M 14	169R1445	20	36.0	32.0	15.5	15.0	21.0	18.0	20	11.55	10
	M 16	169R1645	20	36.0	32.0	15.5	17.0	21.0	16.5	22	11.76	10
	M 20	169R2045	20	36.0	38.0	15.5	21.0	21.0	19.5	24	11.55	10
	M 10	170R1045	22	36.0	34.0	17.0	10.5	23.5	12.5	17	15.93	10
	M 12	170R1245	22	36.0	34.0	17.0	13.0	23.5	13.5	18	16.08	10
150	M 14	170R1445	22	36.0	34.0	17.0	15.0	23.5	17.5	20	16.38	10
	M 16	170R1645	22	36.0	34.0	17.0	17.0	23.5	16.5	22	16.90	10
	M 20	170R2045	22	40.0	40.0	17.0	21.0	23.5	19.5	24	16.49	10
	M 10	171R1045	25	41.0	37.0	19.0	10.5	25.5	12.5	22	20.16	10
	M 12	171R1245	25	41.0	37.0	19.0	13.0	25.5	13.5	22	19.60	10
185	M 14	171R1445	25	41.0	37.0	19.0	15.0	25.5	17.5	22	20.05	10
	M 16	171R1645	25	41.0	37.0	19.0	17.0	25.5	16.5	22	19.68	10
	M 20	171R2045	25	41.0	40.0	19.0	21.0	25.5	19.5	24	19.95	10
	M 12	172R1245	28	47.0	42.0	21.5	13.0	29.0	13.5	22	26.46	10
240	M 14	172R1445	28	46.0	42.0	21.5	15.0	29.0	17.5	22	26.99	10
	M 16	172R1645	28	46.0	42.0	21.5	17.0	29.0	16.5	22	26.92	10

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





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



Characteristics

- Easy to process due to crimp markings
- Flat contact surface by special pressing technique
- Internal chamfer for simple cable insertion



Material

- Copper (EN13600)



Surface

Tin-plated to protect against corrosion



Technical instructions

Tool: see page 1.59



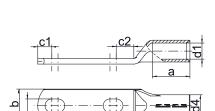
 You will find further information on the cable descriptions in the technical appendix, page i-6



Additional information

Part Number appendix for bright version "BK"

Nominal cross section mm ²	Size of bolt diameter	Part No.	Code	a	b	d1	D d2	imension m	ım c1	c2	I	12	Weight/ 100 pcs. ~ kg	Packing unit/pcs
70		147D212	16	29.0	24	11.5	13	16.5	13.5	13.5	56	50 - 62	10.82	5
95	_	148D212	18	36.0	28	13.5	13	19.0	13.5	13.5	66	50 - 62	15.24	5
120	- 2 x	149D212	20	36.0	32	15.5	13	21.0	13.5	17.0	70	50 - 62	18.62	5
150	M 12	150D212	22	42.0	34	17.0	13	23.5	13.5	17.0	78	50 - 62	26.10	5
185	-	151D212	25	41.0	37	19.0	13	25.5	13.5	17.5	82	50 - 62	30.48	5
240		152D212	28	47.0	42	21.5	13	29.0	13.5	18.0	92	50 - 62	41.52	5





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





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

Characteristics

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

Material

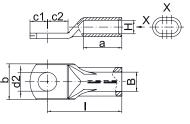
- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.60
- You will find further information on the cable descriptions in the technical appendix, page i-6



Nominal cross section mm ²	Size of bolt diameter	Part No.	Code	a	b	Dimens	sion mm c1	c2	I	н	В	Weight/ 100 pcs. ~ kg	Packing unit/pcs
2 x 50		136DP12	22 DP	42	34	13	13.5	17.0	79	10.0	20	16.30	5
2 x 70		137DP12	24 DP	41	37	13	13.5	17.5	83	11.5	23	18.90	5
2 x 95	M 12	138DP12	29 DP	47	42	13	13.5	18.0	93	13.5	27	27.12	5
2 x 120	-	139DP12	32 DP	52	46	13	14.0	22.0	101	15.5	31	33.50	5

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







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





- Simple cable entry due to internal chamfer
- Flat contact surface by special pressing technique

Material

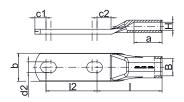
Copper (EN13600)

Characteristics

Surface

Tin-plated to protect against corrosion

- Tool: see page 1.60
- You will find further information on the cable descriptions in the technical appendix, page i-6



Nominal cross	Size of					D	imension m	m					Weight/	
section mm ²	bolt diameter	Part No.	Code	a	b	d2	c1	c2	1	12	Н	В	100 pcs. ~ kg	Packing unit/pcs
2 x 50		136DP212	22 DP	42	34	13	13.5	17.0	79	50 - 62	10.0	20	23.20	5
2 x 70	2 x	137DP212	24 DP	42	34	13	13.5	17.0	79	50 - 62	11.5	23	29.64	5
2 x 95	M 12	138DP212	29 DP	47	42	13	13.5	18.0	93	50 - 62	13.5	27	38.50	5
2 x 120	-	139DP212	32 DP	52	46	13	19.0	22.0	101	50 - 62	15.5	31	45.80	5

Compression joints to DIN, Cu





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



Characteristics

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



Material

- Copper (EN13600)



Surface

Tin-plated to protect against corrosion



Technical instructions

Tool: see page 1.59



 You will find further information on the cable descriptions in the technical appendix, page i-6



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

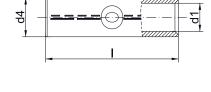




Additional information

- Possible as a special bright version on request. Part Number appendix "BK"
- 10 800 mm² IEC-tested

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





Compression joints, Cu







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



Characteristics

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



Suitable for

Non-tension connections



Material - Copper (EN13600)



Surface

Tin-plated to protect against corrosion



Technical instructions

Tool: see page 1.59



- You will find further information on the cable descriptions in the technical appendix, page i-6
- Sleeves for 3-core and 4-core cables see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"
- Reduction sleeves for connecting unequal cross-sections can be found on page 1.58



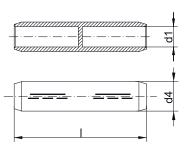
Additional information

Part Number appendix for bright version "BK"

Nominal cross	Part			Dimension mm		Weight/ 100 pcs.	
section mm ²	No.	Code	d1	d4	I	~ kg	Packing unit/pcs
16	523R	8	5.5	8.5	50	1.54	25
25	524R	10	7.0	10.0	50	1.84	25
35	525R	12	8.2	12.5	50	2.99	25
50	526R	14	10.0	14.5	56	4.46	25
70	527R	16	11.5	16.5	56	5.61	25
95	528R	18	13.5	19.0	70	8.88	25
120	529R	20	15.5	21.0	70	10.06	5
150	530R	22	17.0	23.5	80	14.89	5
185	531R	25	19.0	25.5	85	17.57	5
240	532R	28	21.5	29.0	90	24.23	5
300	533R	32	24.5	32.0	100	30.15	5
400	534R	38	27.5	38.5	150	75.60	5
500	535R	42	31.0	42.0	160	92.00	1

Compression joint for cable connections 10 - 30 kV, copper







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

Cu

Characteristics

- Also available as barrier design with oil stop
- Easy to process due to crimp markings
- Simple cable entry due to internal chamfer



Suitable for

Non-tension connections



Material

Copper (EN13600)



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Surface - Bright



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- Technical instructions
 Tool: see page 1.59
- You will find further information on the cable descriptions in the technical appendix, page i-6



- Sleeves for 3-core and 4-core cables see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"
- Reduction sleeves for connecting unequal cross-sections can be found on page 1.58

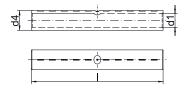
Nominal cross	Part			Dimension mm		Number (of crimps	Weight/	Packing unit/
section mm ²	No.	Code	d1	d4	1	Cu (5 mm)	Cu (wide)	100 pcs. ~ kg	pcs
Normalversion									
25	504R	12	7.5	12.5	60	2/2	1/1	4.08	10
35	505R	12	8.2	12.5	60	2/2	1/1	3.56	10
50	506R	14	10.0	14.5	65	3/3	1/1	4.90	10
70	507R	16	11.5	16.5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



Compression joints to DIN, Cu









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



DNV

Characteristics

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

Material

- Copper (EN13600)

Surface

Bright

Technical instructions

- Tool: see page 1.59
- · You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

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

Reduction sleeves, Cu



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



Characteristics

- Simple cable entry due to internal chamfer

Suitable for

For non-tension compression joints

Material

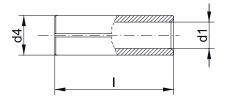
- Copper (EN13600)

Surface

Bright

Technical instructions

Refer to the installation instructions in the technical appendix on page i-6



				Dimension mm		Weight/	
Part No.	Nominal cross section mm ² from	Nominal cross section mm ² to	d1	d4	1	100 pcs. ~ kg	Packing unit/pcs
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



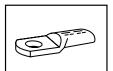


Tool application chart

Compression cable lugs and compression joints

	Crimping range	С	rimping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	25 - 150	K09D		2.21		\bigcirc
crimping tools	6 - 120	K06D		2.20		\bigcirc
	6 - 50	K05D		2.19		\bigcirc
Mechanical, electrical,	6 - 25	EK50ML		6.6	2.82	\bigcirc
oneumatic crimping tools with interchangeable		K50		2.23	2.82	\bigcirc
dies / heads	6 - 120	K354		2.24	2.85	\bigcirc
	6 - 300	K22		2.26	2.88	\bigcirc
Hand hydraulic	6 - 300	HK6022		2.56	2.88	\bigcirc
crimping tools	10 - 300	HK12030		2.60	2.92	\bigcirc
		HK12042		2.62	2.92	\bigcirc
		HK120U		2.64	2.92	\bigcirc
Battery powered	6 - 120	EK354		2.36	2.85	\bigcirc
crimping tools		EK354ML		2.32	2.85	\bigcirc
	6 - 300	EK6022		2.40	2.88	\bigcirc
		EK60UNV	+UA22	6.12	2.88	\bigcirc
		EKM6022		2.38	2.88	\bigcirc
		EKM6022IS		4.6	2.88	\bigcirc
		EKM60UNV	+UA22	6.11	2.88	\bigcirc
	10 - 300	EK12032		2.46	2.92	\bigcirc
		EK12042		2.48	2.92	\bigcirc
		EK120U		2.50	2.92	\bigcirc
		EK120UNV	+UA12TKL	6.13	2.92	\bigcirc
	10 - 625	EK135FT	+UA15T	2.52	2.92 + 2.96	\bigcirc
Hydraulic	6 - 300	THK22		2.68	2.88	\bigcirc
crimping systems	10 - 625	HK252	+25A13	2.78	2.92 + 2.96	\bigcirc
	10 - 300	THK120		2.72	2.92	\bigcirc
Hydraulic	6 - 300	PK22		2.68	2.88	\bigcirc
crimping heads		PK60UNV	+UA22	6.10	2.88	\bigcirc
	10 - 300	PK12042		2.72	2.92	\bigcirc
		PK120U		2.74	2.92	\bigcirc
	10 - 625	PK252	+25A13	2.76	2.92 + 2.96	\bigcirc





Tool application chart

Double compression cable lugs

	Crimping range	Cri	imping Tool	Catalog			
Tool type	corresponds to nominal cross-section mm ²	Part No. Crimping head / adapter		Crimping Tool	Crimping die	Crimp profile	
Mechanical, electrical, pneumatic crimping tools with interchangeable dies / heads	2x70	K22		2.26	2.59	0	
Hand hydraulic	2x50 - 2x120	HK12030		2.60	2.93	0	
crimping tools		HK12042		2.62	2.93	\circ	
		HK120U		2.64	2.93	0	
	2x70	HK6022		2.56	2.59	\circ	
Battery powered	2x50 - 2x120	EK12032		2.46	2.93	\circ	
crimping tools		EK12042		2.48	2.93	0	
		EK120U		2.50	2.93	\circ	
		EK135FT	+UA15T	2.52	2.93	\circ	
		EK120UNV	+UA12TKL	6.13	2.93	\circ	
	2x70	EKM6022		2.38	2.59	\circ	
		EK6022		2.40	2.59	\circ	
		EKM6022IS		4.6	2.59	\circ	
		EKM60UNV	+UA22	6.11	2.59	\circ	
		EK60UNV +UA22		6.12	2.59	\circ	
Hydraulic	2x50 - 2x120	THK120		2.72	2.93	0	
crimping systems		HK252 +25A13		2.78	2.93	0	
	2x70	THK22		2.68	2.59	0	
Hydraulic	2x50 - 2x120	PK12042		2.72	2.93	0	
crimping heads		PK120U		2.74	2.93	0	
		PK252	+25A13	2.76	2.93	0	
	2x70	PK22		2.68	2.59	0	
		PK60UNV	+UA22	6.10	2.59	0	



PUNCHED - SOLDERLESS TERMINALS MADE FROM COPPER TO DIN 46234

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



In brief

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



▶ Hard soldered for reliable contact

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

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





▶ Well insulated

Klauke products make your day-to-day work easier.

Thanks to the widened insulation, the conductor can be very conveniently inserted into our insulated solderless terminals.

The insulation remains intact even after crimping, eliminating the need for retrospective insulation. Everything accomplished in one operation.

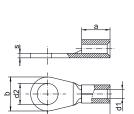
- Easy to use thanks to widened sleeve
- No additional insulation, hence fast processing
- As a fork-type, ideal for connecting meters in confined areas for example
- Easy conductor insertion thanks to widened sleeve



Solderless terminals to DIN, Cu









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



Characteristics

Improved contact properties due to grooved profile

Material



- Copper (EN13599)

Surface



Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.72
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

- * = Bore not standardised
- 0.5 6 mm² not UL-tested

Nominal	Nominal					Weight/ 100 pcs.	Daakina				
cross section mm ²	size to DIN	Part No.	Hint	a	b	d1	d2	1	s	~ kg	Packing unit/pcs
-	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
0.5 - 1	4 - 1	16204		5	8	1.6	4.3	12	0.8	0.070	100
0.5 - 1	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	8.0	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
_	4 - 2.5	16304		5	8	2.3	4.3	12	8.0	0.080	100
_	3.5 - 2.5	163035		5	6	2.3	3.7	11	8.0	0.065	100
1.5 - 2.5	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	8.0	0.110	100
	8 - 2.5	16308		5	14	2.3	8.4	17	8.0	0.130	100
	10 - 2.5	163010	*	5	18	2.3	10.5	19	8.0	0.160	100
	12 - 2.5	163012	*	5	18	2.3	12,5	19	8.0	0.160	100
	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
4 - 6	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
-	5 - 10	16525		8	10	4.5	5.3	16	1.1	0.230	100
-	6 - 10	16526		8	11	4.5	6.5	17	1.1	0.24	100
10	8 - 10	16528		8	14	4.5	8.4	20	1.1	0.340	100
	10 - 10	165210		8	18	4.5	10.5	21	1.1	0.340	100
	12 - 10	165212		8	22	4.5	13.0	23	1.1	0.420	100
	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
16 _	8 - 16	16538		10	14	5.8	8.4	22	1.2	0.43	100
	10 - 16	165310		10	18	5.8	10.5	24	1.2	0.500	100
	12 - 16	165312		10	22	5.8	13.0	24	1.2	0.500	100

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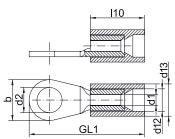


Solderless terminals to DIN, Cu

Nominal	Nominal				Weight/						
cross section mm ²	size to DIN	Part No.	Hint	a	b	d1	d2	1	S	100 pcs. ~ kg	Packing unit/pcs
	5 - 25	16545		11	12	7.5	5.3	25	1.5	0.750	100
-	6 - 25	16546		11	12	7.5	6.5	25	1.5	0.750	100
25	8 - 25	16548		11	16	7.5	8.4	25	1.5	0.750	100
	10 - 25	165410		11	18	7.5	10.5	26	1.5	0.750	100
	12 - 25	165412		11	22	7.5	13.0	31	1.5	0.920	100
	16 - 25	165416		11	28	7.5	17.0	35	1.5	1.320	100
_	6 - 35	16556		12	16	9.0	8.4	26	1.6	0.980	100
	8 - 35	16558		12	16	9.0	8.4	26	1.6	0.980	100
35	10 - 35	165510		12	18	9.0	10.5	27	1.6	1.000	100
	12 - 35	165512		12	22	9.0	13.0	31	1.6	1.260	100
	16 - 35	165516		12	28	9.0	17.0	36	1.6	1.550	100
_	6 - 50	16566		16	18	11.0	6.5	34	1.8	1.650	100
_	8 - 50	16568		16	18	11.0	8.4	34	1.8	1.650	100
50	10 - 50	165610		16	18	11.0	10.5	34	1.8	1.600	100
	12 - 50	165612		16	22	11.0	13.0	36	1.8	1.800	100
	16 - 50	165616		16	28	11.0	17.0	40	1.8	2.100	100
	6 - 70	16576		18	22	13.0	6.5	38	2.0	2.600	50
_	8 - 70	16578		18	22	13.0	8.4	38	2.0	2.500	50
70	10 - 70	165710		18	22	13.0	10.5	38	2.0	2.500	50
_	12 - 70	165712		18	22	13.0	13.0	38	2.0	2.400	50
	16 - 70	165716		18	28	13.0	17.0	42	2.0	2.700	50
_	8 - 95	16588		20	24	15.0	8.4	42	2.5	4.300	50
95 -	10 - 95	165810		20	24	15.0	10.5	42	2.5	4.1	50
90	12 - 95	165812		20	24	15.0	13.0	42	2.5	3.900	50
	16 - 95	165816		20	28	15.0	17.0	44	2.5	4.100	50
_	8 - 120	16598		22	24	17.0	8.4	44	3.0	5.601	50
120	10 - 120	165910		22	24	17.0	10.5	44	3.0	5.600	50
120	12 - 120	165912		22	24	17.0	13.0	44	3.0	5.400	50
	16 - 120	165916		22	28	17.0	17.0	48	3.0	5.800	50
150	10 - 150	166010		24	30	19.0	10.5	50	3.2	7.600	50
	12 - 150	166012		24	30	19.0	13.0	50	3.2	7.600	50
	16 - 150	166016		24	30	19.0	17.0	50	3.2	7.500	50
185 -	12 - 185	166112		28	36	21.0	13.0	50	3.5	11.300	50
	16 - 185	166116		28	36	21.0	17.0	50	3.5	11.300	50
240 -	12 - 240	166212		32	38	23.5	13.0	56	4.0	15.900	25
	16 - 240	166216		32	38	23.5	17.0	56	4.0	15.900	25

Insulated solderless terminals, Cu with Easy-Entry









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



Characteristics

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

Material

- Copper (EN13599)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.73
- You will find further information on the cable descriptions in the technical appendix, page i-6

Naminal areas	Part No.		Dimension mm							Weight	Weight	De alaine a south/
Nominal cross section mm ²		Colour	b	d1	d12	d13	d2	GI1	l10	100 pcs. ~kg Cu	100 pcs. ~kg Total	Packing unit/ pcs
10	6526		11	4.5	6.7	8.6	6.5	34.0	19.0	0.24	0.28	100
	6528		14	4.5	6.7	8.6	8.4	37.5	19.0	0.29	0.33	100
	65210		18	4.5	6.7	8.6	10.5	41.5	19.0	0.34	0.38	100
	65212		22	4.5	6.7	8.6	13.0	45.5	19.0	0.42	0.46	100
	6535		11	5.8	7.7	9.6	5.3	39.5	20.5	0.39	0.44	100
	6536		11	5.8	7.7	9.6	6.5	39.5	20.5	0.38	0.43	100
16	6538		14	5.8	7.7	9.6	8.4	41.5	20.5	0.43	0.48	100
	65310		18	5.8	7.7	9.6	10.5	43.5	20.5	0.50	0.55	100
	65312		18	5.8	7.7	9.6	13.0	50.5	20.5	0.58	0.63	100
25	6545		12	7.5	11.0	13.0	5.3	40.0	20.0	0.75	0.84	50
	6546		12	7.5	11.0	13.0	6.5	42.5	20.0	0.69	0.78	50
	6548		16	7.5	11.0	13.0	8.4	43.0	20.0	0.75	0.84	50
23	65410		18	7.5	11.0	13.0	10.5	45.0	20.0	0.80	0.89	50
	65412		22	7.5	11.0	13.0	13.0	51.0	20.0	0.92	1.00	50
	65416		28	7.5	11.0	13.0	17.0	59.0	20.0	1.32	1.40	50
	6556		16	9.0	12.7	15.0	6.5	44.0	22.5	1.01	1.14	50
	6558		16	9.0	12.7	15.0	8.4	44.5	22.5	0.98	1.10	50
35	65510		18	9.0	12.7	15.0	10.5	46.5	22.5	1.00	1.12	50
	65512		22	9.0	12.7	15.0	13.0	52.5	22.5	1.26	1.38	50
	65516		28	9.0	12.7	15.0	17.0	54.5	22.5	1.55	1.67	50
50	6566		18	11.0	15.4	18.0	6.5	54.5	27.5	1.65	1.90	50
	6568		18	11.0	15.4	18.0	8.4	60.5	27.5	1.65	1.90	50
	65610		18	11.0	15.4	18.0	10.5	60.5	27.5	1.60	1.85	50
	65612		22	11.0	15.4	18.0	13.0	60.5	27.5	1.80	2.05	50
	65616		28	11.0	15.4	18.0	17.0	67.5	27.5	2.10	2.35	50

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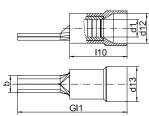


Insulated solderless terminals, Cu with Easy-Entry

Nominal cross	Part					D	mension m	m		Weight 100 pcs. ~kg	Weight 100 pcs. ~kg	Packing unit/
section mm ²	No.	Colour	b	d1	d12	d13	d2	GI1	l10	Cu	Total	pcs
	6576		22	13.0	17.4	20.0	6.5	61.5	30.5	2.60	2.90	50
	6578		22	13.0	17.4	20.0	8.4	61.5	30.5	2.50	2.80	50
70	65710		22	13.0	17.4	20.0	10.5	61.5	30.5	2.50	2.80	50
	65712		22	13.0	17.4	20.0	13.0	66.5	30.5	2.40	2.70	50
	65716		28	13.0	17.4	20.0	17.0	70.5	30.5	2.70	3.00	50
	65810		24	15.0	20.5	23.5	10.5	70.0	34.0	4.10	4.50	25
95	65812		24	15.0	20.5	23.5	13.0	70.0	34.0	3.90	4.40	25
	65816		28	15.0	20.5	23.5	17.0	76.0	34.0	4.10	4.50	25
	65910		24	17.0	23.5	26.7	10.5	79.0	36.0	5.60	6.10	25
120	65912		24	17.0	23.5	26.7	13.0	82.0	36.0	5.40	5.90	25
	65916		28	17.0	23.5	26.7	17.0	90.0	36.0	5.80	6.30	25
	66010		30	19.0	26.0	29.2	10.5	80.0	39.0	7.60	8.40	25
150	66012		30	19.0	26.0	29.2	13.0	83.0	39.0	7.60	8.40	25
	66016		30	19.0	26.0	29.2	17.0	83.0	39.0	7.50	8.30	25

Insulated pin terminals, Cu with Easy-Entry









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







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

Material

- Copper (EN13599)
- Insulation sleeve: PA

Surface

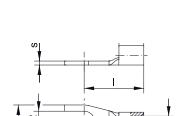
Tin-plated to protect against corrosion

- Tool: see page 1.73
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal cross				Dimension mm						Weight 100 pcs.	Packing
section mm ²	Part No.	Colour	b	d1	d12	d13	GI1	l10	100 pcs. ~kg Cu	~kg Total	unit/pcs
10	ST1716IS		4.3	4.3	7.4	9.4	33.0	19.0	0.27	0.31	100
16	ST1717IS		5.5	5.4	8.6	10.6	38.0	20.0	0.39	0.44	100
25	ST1718IS		6.8	6.7	12.5	14.5	43.5	23.5	0.63	0.73	50
35	ST1719IS		8.0	8.2	14.0	16.4	51.5	27.5	1.17	1.34	50
50	ST1720IS		9.5	9.5	15.5	18.0	59.0	33.0	1.79	2.10	50
70	ST1721IS		11.0	11.2	18.0	20.5	69.0	38.0	2.92	3.20	50
95	ST1722IS		12.5	13.5	20.7	23.5	71.0	40.0	4.30	4.70	25

Solderless terminals, Cu, fork type







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



Characteristics

Improved contact properties due to grooved profile



Material

- Copper (EN13599)



Surface

- Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.72
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

• 0.5 - 6 mm² not UL-certified

Nominal cross section	Nominal size				Dimens	ion mm			Weight	Packing unit/
mm ²	to DIN	Part No.	a	b	d1	d2	1	s	100 pcs. ~kg	pcs
	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
0.5 - 1	4 - 1	1620C4	5.0	8,0	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
	3 - 2.5	1630C3	5.0	5.5	2.3	3.2	11,0	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
1.5 - 2.5	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	1650C4	6.0	8.0	3.6	4.3	14.0	1.0	0.140	100
4 0	5 - 6	1650C5	6.0	10.0	3.6	5.3	15.0	1.0	0.160	100
4 - 6	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
10	6 - 10	1652C6	10.0	11.0	4.3	6.4	21.0	1.0	0.260	100
16	6 - 16	1653C6	11.5	11.0	5.8	6.4	24.0	1.0	0.350	100



Pin terminals to DIN, Cu







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



Characteristics

- Improved contact properties due to grooved profile



Material

- Copper (EN13599)





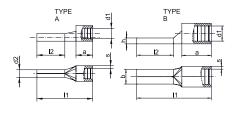
Tin-plated to protect against corrosion



- Tool: see page 1.72
- You will find further information on the cable descriptions in the technical appendix, page i-6



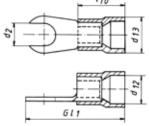
- * = not standardised
- 0.5 6 mm² not UL-tested



Nominal cross section	Nominal size		_						sion mm	10			Weight 100 pcs.	Packing
mm ²	to DIN	Part No.	Тур	Hint	a	b	d1	d2	l1	12	S	h	~kg	unit/pcs
0.5 - 1	1	ST1705	Α		5.0		1.6	1.9	17.0	10	0.8		0.060	100
1.5 - 2.5	2.5	ST1710	Α		5.0		2.3	1.9	17.0	10	0.8		0.072	100
4 - 6	6	ST1715	Α		6.0		3.6	2.7	20.0	11	1.0		0.160	100
10		ST1716	В	*	10.0	4.3	4.3		24.5	11	1.0	2.0	0.270	100
16		ST1717	В	*	11.5	5.8	5.4		29.5	15	1.0	2.0	0.390	100
25		ST1718	В	*	13.5	6.8	6.8		33.5	15	1.2	2.4	0.630	100
35		ST1719	В	*	16.0	8.0	8.2		40.5	20	1.5	3.2	1.170	50
50		ST1720	В	*	19.0	9.5	9.5		45.0	20	1.8	3.6	1.790	50
70		ST1721	В	*	24.0	11.0	11.2		55.0	23	2.0	4.0	2.920	50
95		ST1722	В	*	24.0	12.5	13.5		55.0	23	2.5	5.0	4.300	50

Insulated solderless terminals for meter connections, Cu, fork type







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



Characteristics

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

Material

- Copper (EN13599)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

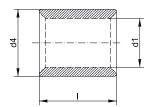
Technical instructions

- Tool: see page 1.73
- You will find further information on the cable descriptions in the technical appendix, page i-6

Naminal areas	Doub				Dimension mm	Gewicht	Gewicht	Dealting unit/		
Nominal cross section mm ²	Part No.	Colour	d12	d13	d2	GI1	l10	100 St. ~kg Cu	100 St. ~kg Ges.	Packing unit/ pcs
10	652C5		7.0	9.6	5.3	33.5	19.0	0.24	0.28	100
10	652C6		7.0	9.6	6.4	33.5	19.0	0.26	0.30	100
16	653C6		8.6	10.6	6.4	37.5	20.5	0.35	0.40	100

Solderless connectors to DIN, Cu, short type









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





Characteristics

· Simple cable entry due to internal chamfer

Material

Copper (EN13600)



Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.72
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

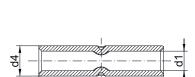
The sum of the single conductor cross sections must be within the specified cross section range.

Naminal areas	Nominal aiza			Dimension mm	Weight		
Nominal cross section mm ²	Nominal size to DIN	Part No.	d1	d4	1	100 pcs. ~kg	Packing unit/pcs
> 0.5 - 1	1	1620K	1.8	3.3	8	0.045	100
> 1 - 2.5	2.5	1630K	2.5	4.1	8	0.055	100
> 2.5 - 6	6	1650K	3.8	5.8	9	0.090	100
> 6 - 10	10	1652K	4.7	6.9	10	0.170	100
> 10 - 16	16	1653K	5.8	8.4	11	0.260	100
> 16 - 25	25	1654K	7.7	10.7	14	0.510	100
> 25 - 35	35	1655K	9.2	12.4	16	0.730	100
> 35 - 50	50	1656K	11.2	14.8	19	1.200	100
> 50 - 70	70	1657K	13.2	17.2	19	1.530	50
> 70 - 95	95	1658K	15.3	20.3	20	2.370	50
> 95 - 120	120	1659K	16.8	22.8	22	3.450	50
> 120 - 150	150	1660K	19.3	25.7	26	5.060	50



Solderless connectors to DIN, Cu, long type







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



Characteristics

Simple cable entry due to internal chamfer

Material



- Copper (EN13600)

Surface

Tin-plated to protect against corrosion

- Tool: see page 1.72
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal cross	Nominal size			Dimension mm		Weight	
section mm ²	to DIN	Part No.	d1	d4	1	100 pcs. ~kg	Packing unit/pcs
> 0.5 - 1	1	1620L	1.8	3.3	15	0.08	100
> 1.5 - 2.5	2.5	1630L	2.5	4.1	15	0.10	100
> 4 - 6	6	1650L	3.8	5.8	15	0.19	100
> 10	10	1652L	4.7	6.9	21	0.36	100
> 16	16	1653L	5.8	8.4	26	0.62	100
> 25	25	1654L	7.7	10.7	29	1.11	100
> 35	35	1655L	9.2	12.4	32	1.50	100
> 50	50	1656L	11.2	14.8	38	2.44	100
> 70	70	1657L	13.2	17.2	42	3.54	50
> 95	95	1658L	15.3	20.3	48	5.87	50
> 120	120	1659L	16.8	22.8	52	8.46	50
> 150	150	1660L	19.3	25.7	56	10.86	50

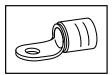


Tool application chart

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

Tool type		Crimping range	Cr	imping Tool	Catalog	ue page	
Mechanical orinning looks or circlings of the process of	Tool type	corresponds to nominal	Part No.		Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical, pleumidate crimping about with interchangeable dies / heads Neumidate crimping about with interchangeable dies / heads Neumidate crimping about with interchangeable dies / heads Neumidate crimping tools		0,5 - 16	K25			, ,	
Pretail for infinite of the protest of the prot	crimping tools	16 - 95	K95		2.17		\bigcirc
with interchangeaple dies / heads Roff 222 Comment dies / heads 10 - 35 K354 224 2.85 CM Hand hydraulic crimping tools 10 - 70 HK22 2.56 2.89 CM Hand hydraulic crimping tools 16 - 150 HK12042 2.60 2.93 CM HX12042 2.62 2.93 CM CM CM CM Battery powered crimping tools 6 - 95 EK300ML 2.00 2.93 CM FASS-MINE 2.30 2.85 CM CM CM CM FASS-MINE 2.30 2.85 CM CM <t< td=""><td>Mechanical, electrical,</td><td>0,5 - 10</td><td>EK50ML</td><td></td><td>6.6</td><td>2.82</td><td>\bigcirc</td></t<>	Mechanical, electrical,	0,5 - 10	EK50ML		6.6	2.82	\bigcirc
diss / heads Extra / 10 - 35 K507 2.22 CH 10 - 70 K22 2.26 2.89 CH Hand hydraulic prinping bools 10 - 70 HK6022 2.56 2.89 CH HX12004 2.60 2.93 CH CH <td< td=""><td></td><td></td><td>K50</td><td></td><td>2.23</td><td>2.82</td><td>$\overline{\bigcirc}$</td></td<>			K50		2.23	2.82	$\overline{\bigcirc}$
No			K507		2.22		\bigcirc
Hand hydraulic crimping tools 10 - 70 HK6022 2.56 2.89 ○ HK12042 2.60 2.93 ○ HK12042 2.62 2.93 ○ Battery powered crimping tools HK1200 2.64 2.93 ○ FK801DML 2.30 ○ ○ FK854 2.36 2.85 ○ HK1204 2.32 2.85 ○ HK1204 2.32 2.85 ○ HK1602 2.40 2.89 ○ HK6022 2.38 2.89 ○ HK6002 2.38 2.89 ○ HK6001 4.48 2.93 ○ HK1002 2.46 2.93 ○		10 - 35	K354		2.24	2.85	\bigcirc
crimping lools H6 - 150 (H1204) HK12030 2.60 2.93 □ Battery powered rimping lools 6 - 95 EX300ML 2.64 2.93 □ Fastery powered rimping lools 6 - 95 EX300ML 2.30 □ □ Fastery powered rimping lools 10 - 25 EX354ML 2.32 2.85 □ Fastery powered rimping lools 10 - 70 EK0602L 2.40 2.89 □ Fastery powered rimping lools EK600V +UA22 6.12 2.89 □ Fastery powered rimping lools EK600V +UA22 6.12 2.89 □ Fastery power power power look EK600V +UA22 6.12 2.89 □ EK600V +UA22 6.11 2.89 □ EK600V +UA22 6.11 2.89 □ EK600V +UA22 2.48 2.93 □ EK12042 +UA15TL 6.13 2.93 □ EK1204W +UA15TL 6.13 2.93		10 - 70	K22		2.26	2.89	\bigcirc
National Property		10 - 70	HK6022		2.56	2.89	\bigcirc
Note	crimping tools	16 - 150	HK12030		2.60	2.93	\bigcirc
Battery powered brimping tools 6 - 95 EK30IDML 2.30 ♥ 10 - 35 EK354 2.36 2.85 ♥ 10 - 70 EK354ML 2.32 2.85 ♥ 10 - 70 EK6022 2.40 2.89 ♥ EK600INV +UA22 6.12 2.89 ♥ EKM6022 S 2.38 2.89 ♥ EKM6022 S 4.6 2.99 ♥ EKM6022 S 4.6 2.99 ♥ EKM600INV +UA22 6.11 2.89 ♥ EKM60IDIS 4.8 ♥ ♥ EK12032 2.46 2.93 ♥ EK12042 2.48 2.93 ♥ EK12042 2.48 2.93 ♥ EK120UV +UA15T 2.52 2.93 ♥ EK120UW +UA12TKL 6.13 2.93 ♥ Hydraulic crimping systems EK120U +25A13 2.78 2.93 ♥ Hydraulic crimping			HK12042		2.62	2.93	\bigcirc
Frimping tools EK354 2.36 2.85 ♥ 10 - 70 EK6022 2.40 2.89 ♥ EK00UV +UA22 6.12 2.89 ♥ EKM6022IS 2.38 2.89 ♥ EKM602IS 4.6 2.89 ♥ EKM60UV +UA22 6.11 2.89 ♥ EKM60IDIS 4.6 2.89 ♥ EKM60IDIS 4.8 ♥ EK12042 2.44 ₹ ₹ EK12042 2.46 2.93 ♥ EK12042 2.48 2.93 ♥ EK12042 2.48 2.93 ♥ EK135FT +UA15T 2.52 2.93 ♥ EK136UV +UA12TKL 6.13 2.93 ♥ EK120UV +UA12TKL 6.13 2.93 ♥ EK140UV +UA12TKL 6.13 2.93 ♥ EK140UV +UA12TKL 6.10 2.89 ♥ <			HK120U		2.64	2.93	\bigcirc
Part		6 - 95	EK30IDML		2.30		\odot
Part	crimping tools	10 - 35	EK354		2.36	2.85	\bigcirc
Figure			EK354ML		2.32	2.85	\odot
EKM6022 2.38 2.89 ○		10 - 70	EK6022		2.40	2.89	\bigcirc
FKM6022IS			EK60UNV	+UA22	6.12	2.89	\odot
FKM60UNV			EKM6022		2.38	2.89	\bigcirc
Part			EKM6022IS		4.6	2.89	\odot
FKM60IDIS 4.8			EKM60UNV	+UA22	6.11	2.89	\odot
Fixed Parison Fixed Parison Paris		10 - 240	EKM60ID		2.44		\odot
EK12042 2.48 2.93			EKM60IDIS		4.8		$\overline{\bigcirc}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		16 - 150	EK12032		2.46	2.93	$\overline{\bigcirc}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			EK12042		2.48	2.93	$\overline{\bigcirc}$
EK120UNV			EK120U		2.50	2.93	$\overline{\bigcirc}$
Hydraulic orimping systems 10 - 70 THK22 2.68 2.89 ♥ 16 - 150 HK252 +25A13 2.78 2.93 ♥ THK120 2.72 2.93 ♥ Hydraulic orimping heads 10 - 70 PK22 2.68 2.89 ♥ PK60UNV +UA22 6.10 2.89 ♥ 10 - 240 PK60ID 2.71 ♥ 16 - 150 PK12042 2.72 2.93 ♥ PK120U 2.74 2.93 ♥			EK135FT	+UA15T	2.52	2.93	\odot
Hydraulic crimping systems 10 - 70 THK22 2.68 2.89 ♥ 16 - 150 HK252 +25A13 2.78 2.93 ♥ Hydraulic crimping heads 10 - 70 PK22 2.68 2.89 ♥ PK60UNV +UA22 6.10 2.89 ♥ 10 - 240 PK60ID 2.71 ♥ 16 - 150 PK12042 2.72 2.93 ♥ PK120U 2.74 2.93 ♥			EK120UNV	+UA12TKL	6.13	2.93	\odot
		95 - 500	EK120ID		2.45		\odot
Hydraulic crimping heads 10 - 70	-	10 - 70	THK22		2.68	2.89	
Hydraulic crimping heads 10 - 70 PK22 2.68 2.89 ♥ PK60UNV +UA22 6.10 2.89 ♥ 10 - 240 PK60ID 2.71 ♥ 16 - 150 PK12042 2.72 2.93 ♥ PK120U 2.74 2.93 ♥	crimping systems	16 - 150	HK252	+25A13	2.78	2.93	\odot
crimping heads PK60UNV +UA22 6.10 2.89 ♥ 10 - 240 PK60ID 2.71 ♥ 16 - 150 PK12042 2.72 2.93 ♥ PK120U 2.74 2.93 ♥			THK120		2.72	2.93	\odot
10 - 240 PK60ID 2.71 \(\sigma\)		10 - 70	PK22		2.68	2.89	\odot
16 - 150 PK12042 2.72 2.93 ♥ PK120U 2.74 2.93 ♥	crimping heads		PK60UNV	+UA22	6.10	2.89	\odot
PK120U 2.74 2.93 \bigcirc		10 - 240	PK60ID		2.71		\odot
		16 - 150	PK12042		2.72	2.93	\odot
PK252 +25A13 2.76 2.93 \hookrightarrow			PK120U		2.74	2.93	\odot
			PK252	+25A13	2.76	2.93	\odot





Tool application chart

Insulated crimp terminals Insulated pin cable lugs

	Crimping range	Cr	imping Tool	Catalog	ue page		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile	
Mechanical crimping tools	10 + 16	K16		2.13		0	
Mechanical, electrical,	10 - 16	K354		2.24	2.85	\bigcirc	
pneumatic crimping tools with interchangeable		K50		2.23	2.83	0	
dies / heads		EK50ML		6.6	2.83	0	
	10 - 70	K22		2.26	2.89	\odot	
Hand hydraulic	10 - 70	HK6022		2.56	2.89	\odot	
crimping tools	10 - 95	HK12030		2.60	2.93	\supset	
		HK12042		2.62	2.93	\odot	
		HK120U		2.64	2.93	\odot	
Battery powered	10 - 16	EK354ML		2.32	2.85	\odot	
crimping tools		EK354		2.36	2.85	\bigcirc	
	10 - 70	EKM6022		2.38	2.89	\bigcirc	
		EK6022		2.40	2.89	\bigcirc	
		EKM6022IS		4.6	2.89	\bigcirc	
		EKM60UNV	+UA22	6.11	2.89	\bigcirc	
		EK60UNV	+UA22	6.12	2.89	\bigcirc	
	10 - 95	EK12032		2.46	2.93	\bigcirc	
		EK12042		2.48	2.93	\bigcirc	
		EK120U		2.50	2.93	\bigcirc	
		EK135FT	+UA15T	2.52	2.93	\bigcirc	
		EK120UNV	+UA12TKL	6.13	2.93	\bigcirc	
Hydraulic	10 - 70	THK22		2.68	2.89	\bigcirc	
crimping systems	10 - 95	THK120		2.72	2.93	\bigcirc	
		HK252	+25A13	2.78	2.93	\odot	
Hydraulic	10 - 70	PK22		2.68	2.89	\odot	
crimping heads		PK60UNV	+UA22	6.10	2.89	\odot	
	10 - 95	PK12042		2.72	2.93	\odot	
		PK120U		2.74	2.93	\odot	
		PK252	+25A13	2.76	2.93	\bigcirc	

COMPENSATING - SLEEVES FOR COPPER SECTOR-SHAPED AND COMPACTED CONDUCTORS

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



In brief

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



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



▶ Filled in two steps

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

No additional tools and no special solutions required.

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

▶ Pre-rounded sector-shaped conductors

Pre-rounds 3 and 4-sector-shaped conductors made of copper.

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





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





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

Material

- Copper (HCP)

Surface

Tin-plated to protect against corrosion

Technical instructions

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

4		- C
	_ I	

Manajaral ayana anatina			Dimension mm		Weight	
Nominal cross section mm ²	Part No.	d1	d4	1	Weight 100 pcs. ~kg	Packing unit/pcs
16	VHR16	5.0	5.3	11	0.024	100
25	VHR25	6.4	6.7	14	0.038	100
35	VHR35	7.7	8.2	15	0.083	100
50	VHR50	9.0	9.5	18	0.118	50
70	VHR70	10.6	11.2	19	0.173	50
95	VHR95	12.4	13.0	21	0.223	50
120	VHR120	13.9	14.5	22	0.261	50
150	VHR150	15.4	16.0	26	0.342	25
185	VHR185	17.6	18.2	26	0.396	25
240	VHR240	19.9	20.5	30	0.508	25
300	VHR300	22.4	23.0	38	0.723	10
400	VHR400	25.4	26.2	38	1.108	10



Sleeves for sector shaped conductors, 3-core cable, standard type





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

Material

Copper (HCP)

Surface

Tin-plated to protect against corrosion

- For round crimping dies, see "Crimping dies"
- Refer to the installation instructions in the technical appendix on page i-8

<u> </u>

Nominal cross section mm ²	Part No.	Dimension mm für l	Weight 100 pcs. ∼kg	Packing unit/pcs
Standard type				
35	VHR353	14	0.08	100
50	VHR503	17	0.17	50
70	VHR703	18	0.29	50
95	VHR953	22	0.45	50
120	VHR1203	23	0.49	50
150	VHR1503	25	0.58	25
185	VHR1853	25	0.80	25

Electrical connection systems

Sleeves for compacted conductors and sector-shaped conductors - copper

Sleeves for sector shaped conductors, 3-core cable, DIN version





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



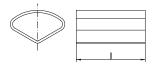
Material

- Copper (HCP)

Surface

Tin-plated to protect against corrosion

- For round crimping dies, see "Crimping dies"
- Refer to the installation instructions in the technical appendix on page i-8



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



Sleeves for sector shaped conductors, 4-core cable





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

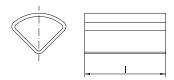
Material

Copper (HCP)

Surface

Tin-plated to protect against corrosion

- Refer to the installation instructions in the technical appendix on page i-8
- For round crimping dies, see "Crimping dies"



Nominal cross section mm ²	Part No.	Dimension mm für I	Weight 100 pcs. ~kg	Packing unit/pcs
Standard type				
35	VHR354	14	0.13	100
50	VHR504	17	0.17	50
70	VHR704	18	0.28	50
95	VHR954	22	0.40	50
120	VHR1204	23	0.51	50
150	VHR1504	25	0.57	25
185	VHR1854	25	0.78	25
240	VHR2404	30	0.85	25
DIN version				
35	VHD354	17.5	0.11	100
50	VHD504	25.0	0.25	50
70	VHD704	25.0	0.38	50
95	VHD954	32.0	0.63	50
120	VHD1204	32.0	0.71	50
150	VHD1504	32.0	0.73	25
185	VHD1854	35.0	1.09	25
240	VHD2404	35.0	1.13	25

RELIABLE - ALUMINIUM COMPRESSION CABLE LUGS AND CONNECTORS TO DIN

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

In brief

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





▶ Deep drawn

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

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

▶ Same excellent quality

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

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



Cross-section Code Ohole

Manufacturer's mark

▶ Flexibility in power line construction

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

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

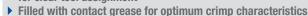


Compression cable lugs to DIN, AI (surface bright or tinned)





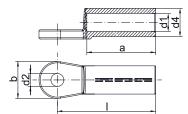
- For non-tension connections of aluminium conductors to EN 60228 and aluminium cables to DIN EN 50182
- ▶ For pre-rounded sector shaped conductors
- ▶ To DIN 46329
- With code number for clear tool assignment for clear tool assignment





Characteristics

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



Material





Surface

Bright





Technical instructions

Tool: see page 1.90



 You will find further information on the cable descriptions in the technical appendix, page i-6



Additional information

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

			Nomina section						Dimens	ion mm			Number o	of crimps		
Size of bolt dia.	Part No. bright	Part No. tinned	rm/sm	re/se	Hint	Code	a	b	d1	d2	d4	ı	Al (7 mm)	Al (wide)	Weight 100 pcs. ~kg	Packing unit/pcs
M 8	263R8	263R8V	16	25	*	12	30	20	5,8	8,4	12	50	4	2	1,20	4
M 10	263R10	263R10V	16	25	*	12	30	20	5,8	10,5	12	50	4	2	1,20	4
M 8	264R8	264R8V	25	35		12	30	25	6,8	8,4	12	50	4	2	1,30	4
M 10	264R10	264R10V	25	35		12	30	25	6,8	10,5	12	50	4	2	1,24	4
M 12	264R12	264R12V	25	35		12	30	25	6,8	13,0	12	50	4	2	1,22	4
M 8	265R8	265R8V	35	50		14	42	25	8,0	8,4	14	62	5	2	2,50	4
M 10	265R10	265R10V	35	50		14	42	25	8,0	10,5	14	62	5	2	1,98	4
M 12	265R12	265R12V	35	50		14	42	25	8,0	13,0	14	62	5	2	2,50	4
M 8	266R8	266R8V	50	70		16	42	25	9,8	8,4	16	62	5	2	2,75	4
M 10	266R10	266R10V	50	70		16	42	25	9,8	10,5	16	62	5	2	2,70	4
M 12	266R12	266R12V	50	70		16	42	25	9,8	13,0	16	62	5	2	2,65	4
M 8	267R8	267R8V	70	95		18	52	25	11,2	8,4	18,5	72	6	3	3,45	4
M 10	267R10	267R10V	70	95		18	52	25	11,2	10,5	18,5	72	6	3	3,80	4
M 12	267R12	267R12V	70	95		18	52	25	11,2	13,0	18,5	72	6	3	3,35	4
M 10	268R10	268R10V	95	120		22	56	25	13,2	10,5	22	75	6	3	6,90	4
M 12	268R12	268R12V	95	120		22	56	25	13,2	13,0	22	75	6	3	4,92	4
M 16	268R16	268R16V	95	120	*	22	56	25	13,2	17,0	22	75	6	3	6,00	4
M 10	269R10	269R10V	120	150		22	56	30	14,7	10,5	23	80	6	3	5,95	4
M 12	269R12	269R12V	120	150		22	56	30	14,7	13,0	23	80	6	3	5,84	4
M 16	269R16	269R16V	120	150		22	56	30	14,7	17,0	23	80	6	3	6,60	4

See next page

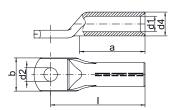


Compression cable lugs to DIN, Al (surface bright or tinned)

			Nomina section						Dimens	sion mm			Number	of crimps	Weight	
Size of bolt dia.	Part No. bright	Part No. tinned	rm/sm	re/se	Hint	Code	а	b	d1	d2	d4	ı	Al (7 mm)	Al (wide)	100 pcs. ~kg	Packing unit/pcs
M 10	270R10	270R10V	150	185		25	60	30	16,3	10,5	25	90	6	3	8,50	4
M 12	270R12	270R12V	150	185		25	60	30	16,3	13,0	25	90	6	3	7,73	4
M 16	270R16	270R16V	150	185		25	60	30	16,3	17,0	25	90	6	3	7,60	4
M 10	271R10	271R10V	185	240		28	60	30	18,3	10,5	28,5	91	6	3	11,00	4
M 12	271R12	271R12V	185	240		28	60	30	18,3	10,5	28,5	91	6	3	9,88	4
M 16	271R16	271R16V	185	240		28	60	30	18,3	17,0	28,5	91	6	3	10,10	4
M 20	271R20	271R20V	185	240	*	28	60	30	18,3	21,0	28,5	91	6	3	10,00	4
M 10	272R10	272R10V	240	300	*	32	70	38	21,0	10,5	32	103	8	3	15,50	4
M 12	272R12	272R12V	240	300		32	70	38	21,0	13,0	32	103	8	3	13,80	4
M 16	272R16	272R16V	240	300		32	70	38	21,0	17,0	32	103	8	3	13,48	4
M 20	272R20	272R20V	240	300		32	70	38	21,0	21,0	32	103	8	3	15,00	4
M 12	273R12	273R12V	300			34	70	38	23,3	13,0	34	103	8	3	17,60	1
M 16	273R16	273R16V	300			34	70	38	23,3	17,0	34	103	8	3	17,28	1
M 20	273R20	273R20V	300			34	70	38	23,3	21,0	34	103	8	3	17,40	1
M 12	274R12	274R12V	400			38	73	38	26,0	13,0	38,5	116		4	38,00	1
M 16	274R16	274R16V	400			38	73	38	26,0	17,0	38,5	116		4	37,40	1
M 20	274R20	274R20V	400			38	73	38	26,0	21,0	38,5	116		4	40,20	1
M 12	275R12	275R12V	500			44	79	44	29,0	13,0	44	122		4	43,70	1
M 16	275R16	275R16V	500			44	79	44	29,0	17,0	44	122		4	43,30	1
M 20	275R20	275R20V	500			44	79	44	29,0	21,0	44	122		4	43,00	1

Compression cable lugs, Al







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



Characteristics

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



Material

E-aluminium



Surface

Bright



Technical instructions

- Tool: see page 1.90
- You will find further information on the cable descriptions in the technical appendix, page i-6



Additional information

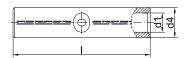
- re = round single solid wire, rm = round multi-stranded, se = sector shaped single solid wire, sm = sector shaped multi-stranded, sector shaped conductors must be pre-rounded
- 16 400 mm² IEC-tested

		Nominal cross	section mm²				Dir	nension ı	nm		Number	of crimps	Weight	
Size of bolt dia.	Part No.	rm/sm	re/se	Code	a	b	d1	d2	d4	ı	AI (7 mm)	Al (wide)	100 pcs. ~kg	Packing unit/pcs
M 6	202R6	10	16	10	32	16	5.0	6.5	10	52	4	2	0.86	25
MO	202R8	10	16	10	32	18	5.0	8.5	10	52	4	2	0.88	25
M 8	203R8	16	25	12	32	18	5.8	8.5	12	52	4	2	1.37	10
M 10	203R10	16	25	12	32	18	5.8	10.5	12	52	4	2	1.39	10
M 8	204R8	25	35	12	38	18	6.8	8.5	12	60	4	2	1.41	10
M 10	204R10	25	35	12	38	18	6.8	10.5	12	60	4	2	1.46	10
M 10	205R10	35	50	14	42	21	8.2	10.5	14	67	5	2	2.08	10
M 12	205R12	35	50	14	42	21	8.2	13.0	14	67	5	2	2.05	10
M 10	206R10	50	70	16	45	25	9.8	10.5	16	72	5	2	2.68	10
M 12	206R12	50	70	16	45	25	9.8	13.0	16	72	5	2	2.73	10
M 10	207R10	70	95	18	55	28	11.2	10.5	18.5	86	6	3	4.42	10
M 12	207R12	70	95	18	55	28	11.2	13.0	18.5	86	6	3	4.27	10
M 10	208R10	95	120	22	55	32	13.2	10.5	22	90	6	3	7.40	4
M 12	208R12	95	120	22	55	32	13.2	13.0	22	90	6	3	7.50	4
M 16	208R16	95	120	22	55	34	13.2	17.0	22	90	6	3	7.30	4
M 12	209R12	120	150	22	55	32	14.7	13.0	23	91	6	3	6.68	4
M 16	209R16	120	150	22	55	34	14.7	17.0	23	91	6	3	6.41	4
M 12	210R12	150	185	25	63	35	16.5	13.0	25	103	6	3	9.64	4
M 16	210R16	150	185	25	63	35	16.5	17.0	25	103	6	3	9.24	4
M 12	211R12	185	240	28	65	40	18.5	13.0	28	106	6	3	12.61	1
M 16	211R16	185	240	28	65	40	18.5	17.0	28.5	106	6	3	11.92	1
M 20	211R20	185	240	28	65	40	18.5	21.0	28	106	6	3	13.10	1
M 12	212R12	240	300	32	70	45	21.3	13.0	32	116	8	3	18.30	1
M 16	212R16	240	300	32	70	45	21.3	17.0	32	116	8	3	17.60	1
M 20	212R20	240	300	32	70	45	21.3	21.0	32	116	8	3	17.30	1
M 16	213R16	300		34	75	49	23.6	17.0	34	124	8	3	17.50	1
M 20	213R20	300		34	75	49	23.6	21.0	34	124	8	3	17.30	1
M 16	214R16	400		38	95	58	26.0	17.0	38.5	165		4	32.20	1
M 20	214R20	400		38	95	58	26.0	21.0	38.5	165		4	31.90	1



Compression joint to DIN, Al











- ▶ With code number for clear tool assignment
- ▶ Filled with contact grease for optimum crimp characteristics
- ▶ For pre-rounded sector shaped conductors

Characteristics

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



E-aluminium



Surface



Bright



Technical instructions

- Tool: see page 1.90
- You will find further information on the cable descriptions in the technical appendix, page i-6



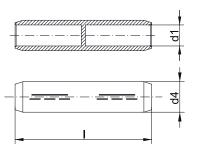
Additional information

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

Dowt	Nominal cros	s section mm²			Di	mension m	m	Number o	of crimps	Weight	Dealine wit/
Part No.	rm/sm	re/se	Hint	Code	d1	d4	ı	AI (7 mm)	Al (wide)	100 pcs. ~kg	Packing unit/ pcs
222R	10	16	*	10	5.0	10.0	55	3/3		0.95	10
223R	16	25	*	12	5.8	12.0	55	3/3		1.40	10
224R	25	35		12	6.8	12.0	70	4/4	2/2	1.60	10
225R	35	50		14	8.0	14.0	85	5/5	2/2	2.60	10
226R	50	70		16	10.0	16.0	85	5/5	2/2	3.20	10
227R	70	95		18	11.5	18.5	105	6/6	3/3	5.30	10
228R	95	120		22	13.5	22.0	105	6/6	3/3	7.60	10
229R	120	150		22	15.0	23.0	105	6/6	3/3	7.80	10
230R	150	185		25	16.5	25.0	125	6/6	3/3	10.70	10
231R	185	240		28	18.5	28.5	125	6/6	3/3	14.30	5
232R	240	300		32	21.0	32.0	145	8/8	3/3	20.30	5
233R	300			34	23.3	34.0	145	8/8	3/3	22.20	1
234R	400			38	26.0	38.5	210		5/5	40.80	1
235R	500			44	29.0	44.0	210		5/5	56.00	1

Compression joints, Al









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



Characteristics

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



Material









Technical instructions



- Tool: see page 1.90
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

Dout	Nominal cros	s section mm²		D	imension m	m	Number o	of crimps	Mainh	Doolsing unit/
Part No.	rm/sm	re/se	Code	d1	d4	1	Al (7 mm)	Al (wide)	Weight 100 pcs. ~kg	Packing unit/ pcs
Standard	type									
405R	35	50	14	8.0	14	90	4/4	2/2	2.7	10
406R	50	70	16	9.8	16	90	4/4	2/2	3.4	10
407R	70	95	18	11.2	18.5	95	4/4	2/2	4.6	10
408R	95	120	22	13.2	22	100	4/4	2/2	6.8	10
409R	120	150	22	14.7	23	105	4/4	2/2	7.4	10
410R	150	185	25	16.3	25	105	4/4	2/2	8.7	10
411R	185	240	28	18.3	28.5	125	5/5	2/2	13.4	5
412R	240	300	32	21.0	32	125	5/5	2/2	15.7	5
413R	300		34	23.3	34	125	5/5	2/2	16.3	1
414R	400		38	27.0	38.5	150		3/3	25.8	1
Barrier v	ersion									
416R	50	70	16	9.8	16	95	4/4	2/2	5.6	5
417R	70	95	18	11.2	18.5	100	4/4	2/2	6.1	5
418R	95	120	22	13.2	22	105	4/4	2/2	9.2	5
419R	120	150	22	14.7	23	110	4/4	2/2	10.3	5
420R	150	185	25	16.3	25	110	4/4	2/2	12.0	5
421R	185	240	28	18.3	28.5	130	5/5	2/2	15.6	5
422R	240	300	32	21.0	32	130	5/5	2/2	19.1	5
423R	300		34	23.3	34	135	5/5	2/2	30.7	1
424R	400		38	26.0	38	165		3/3	30.0	1



Reduction compression joints, Al, barrier type



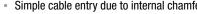


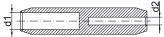
- ▶ For non-tension connections of aluminium conductors to EN 60228 and aluminium cables to DIN EN 50182
- In nominal cross-section area tube dimension to DIN 46267, part 2
- ▶ For pre-rounded sector shaped conductors
- Ideal for connecting differing conductor cross-sections
- ▶ Filled with contact grease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



Characteristics

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







E-aluminium



Surface

Material

Bright



Technical instructions

- Tools: see chart page 1.90
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

	No	ominal cros	s section m	m²			Dimens	ion mm		Number o	of crimps	Weight	
Part No.	re/se from	rm/sm from	re/se to	rm/sm to	Code	d1	d2	d4	I	Al (7 mm)	Al (wide)	100 pcs. ~kg	Packing unit/pcs
425R25	50	35	35	25	14	8.0	6.8	14	95	4/4	2/2	2.8	5
426R35	70	50	50	35	16	9.8	8.0	16	95	4/4	2/2	3.45	5
428R50	120	95	70	50	22	13.2	9.8	22	105	4/4	2/2	7.60	5
428R70	120	95	95	70	22	13.2	11.2	22	105	4/4	2/2	7.35	5
429R70	150	120	95	70	22	14.7	11.2	23	110	4/4	2/2	7.10	5
429R95	150	120	120	95	22	14.7	13.2	23	110	4/4	2/2	6.55	5
430R70	185	150	95	70	25	16.3	11.2	25	110	4/4	2/2	9.80	5
430R95	185	150	120	95	25	16.3	13.2	25	110	4/4	2/2	9.50	5
430R120	185	150	150	120	25	16.3	14.7	25	110	4/4	2/2	8.65	5
431R70	240	185	95	70	28	18.3	11.2	28.5	130		2/2	15.05	5
431R95	240	185	120	95	28	18.3	13.2	28.5	130		2/2	14.40	5
431R120	240	185	150	120	28	18.3	14.7	28.5	130	5/5	2/2	13.70	5
431R150	240	185	185	150	28	18.3	16.3	28.5	130	5/5	2/2	14,17	5
432R120	300	240	150	120	32	21.0	14.7	32	130		2/2	18.80	5
432R150	300	240	185	150	32	21.0	16.3	32	130	5/5	2/2	18.125	5
432R185	300	240	240	185	32	21.0	18.3	32	130	5/5	2/2	17.275	5
433R150	-	300	185	150	34	23.3	16.3	34	135	5/5	2/2	21.10	1
433R185	-	300	240	185	34	23.3	18.3	34	135	5/5	2/2	20.12	1
433R240	-	300	300	240	34	23.3	21.0	34	135	5/5	2/2	18.73	1
434R300	-	400	-	300	38	26.0	23.3	34	165		3/3	31.20	1

Reduction-compression joints, Al





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





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











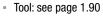
Surface

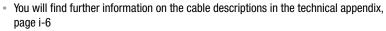


Bright



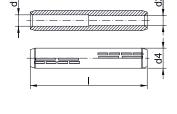
Technical instructions







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

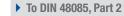


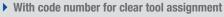
	No	ominal cros	s section m	m²		Dimension mm			Number o	of crimps	Weight		
Part No.	re/se from	rm/sm from	re/se to	rm/sm to	Code	d1	d2	d4	I	Al (7 mm)	Al (wide)	100 pcs. ~kg	Packing unit/pcs
284R16	35	25	25	16	12	6.8	5.8	12	70	4/4	2/2	1.53	10
285R25	50	35	35	25	14	8.0	6.8	14	85	5/5	2/2	2.50	10
286R25	70	50	35	25	16	9.8	6.8	16	85	5/5	2/2	3.24	10
286R35	70	50	50	35	16	9.8	8.0	16	85	5/5	2/2	3.09	10
287R25	95	70	35	25	18	11.2	6.8	18.5	105	6/6	3/3	5.50	10
287R35	95	70	50	35	18	11.2	8.0	18.5	105	6/6	3/3	5.35	10
287R50	95	70	70	50	18	11.2	9.8	18.5	105	6/6	3/3	4.96	10
288R25	120	95	35	25	22	13.2	6.8	22	105	6/6	3/3	9.10	10
288R35	120	95	50	35	22	13.2	8.0	22	105	6/6	3/3	8.90	10
288R50	120	95	70	50	22	13.2	9.8	22	105	6/6	3/3	8.51	10
288R70	120	95	95	70	22	13.2	11.2	22	105	6/6	3/3	8.15	10
289R70	150	120	95	70	22	14.7	11.2	23	105	6/6	3/3	7.66	10
289R95	150	120	120	95	22	14.7	13.2	23	105	6/6	3/3	7.14	10
290R70	185	150	95	70	25	16.3	11.2	25	125	6/6	3/3	11.70	10
290R95	185	150	120	95	25	16.3	13.2	25	125	6/6	3/3	11.05	10
290R120	185	150	150	120	25	16.3	14.7	25	125	6/6	3/3	10.49	10
291R120	240	185	150	120	28	18.3	14.7	28.5	125	6/6	3/3	13.80	5
291R150	240	185	185	150	28	18.3	16.3	28.5	125	6/6	3/3	13.19	5
292R95	300	240	120	95	32	21.0	13.2	32	145		3/3	22.24	5
292R120	300	240	150	120	32	21.0	14.7	32	145		3/3	21.59	5
292R150	300	240	185	150	32	21.0	16.3	32	145		3/3	20.87	5

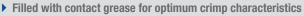


Compression joint to DIN, AI, full tension









▶ For full tension connections of aluminium cables to DIN EN 50182



Characteristics

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

Material

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

Surface

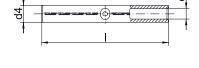
- Bright

Technical instructions

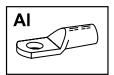
- Tool: see page 1.90
- You will find further information on the cable descriptions in the technical appendix, page i-6



* = not standardised



Nominal	Dowl				Dimension mm		Number	of crimps	Conductor	Weight	Dooking
cross section mm ²	Part No.	Hint	Code	d1	d4	1	Al (7 mm)	Al (wide)	Conductor mm dia.	100 pcs. ~kg	Packing unit/pcs
16	243R	*	12	5.8	12.0	140	8/8	4/4	5.1	3.4	10
25	244R		12	7.0	12.0	140	8/8	4/4	6.3	2.9	10
35	245R		14	8.2	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



Tool application chart

Compression cable lugs and connectors made from E-Al

Compression cable lugs for full-tension connections from Al conductors DIN EN 50182, 16 - 95 $\rm mm^2$

	Crimping range	Cri	imping Tool	Catalog	jue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical,	10 rm/sm - 95 re/se	K354		2.24	2.86	\bigcirc
pneumatic crimping tools with interchangeable die / head	10 rm/sm - 300 re/se	K22		2.26	2.89	\bigcirc
Hand hydraulic	10 rm/sm - 300 re/se	HK12030		2.60	2.94	\bigcirc
crimping tools		HK12042		2.62	2.94	\bigcirc
		HK120U		2.64	2.94	\bigcirc
		HK6022		2.56	2.89	\bigcirc
Battery powered	10 rm/sm - 95 re/se	EK354ML		2.32	2.86	\bigcirc
crimping tools		EK354		2.36	2.86	\bigcirc
	10 rm/sm - 300 re/se	EK12032		2.46	2.94	\bigcirc
		EK12042		2.48	2.94	\bigcirc
		EK120U		2.50	2.94	\bigcirc
		EK120UNV	+ UA12TKL	6.13	2.94	\bigcirc
		EK135FT	+UA15T	2.52	2.94	\bigcirc
		EK6022		2.40	2.89	\bigcirc
		EK60UNV	+UA22	6.12	2.89	\bigcirc
		EKM6022		2.38	2.89	\bigcirc
		EKM6022IS		4.6	2.89	\bigcirc
		EKM60UNV	+UA22	6.11	2.89	\bigcirc
	50 - 240	EKM60ID*		2.44		\smile
		EKM60IDIS		4.8		\bigcirc
	400 - 500	EK135FT	+UA15T	2.52	2.95	\bigcirc
Hydraulic	10 rm/sm - 300 re/se	THK120		2.72	2.94	\bigcirc
crimping systems		THK22		2.68	2.89	\bigcirc
	10 rm/sm - 500	HK252	+25A13	2.78	2.94 + 2.97	\bigcirc
Hydraulic	10 - 240	PK60ID*		2.71		$\overline{\bigcirc}$
crimping heads	10 rm/sm - 300 re/se	PK12042		2.72	2.94	\bigcirc
		PK120U		2.74	2.94	\bigcirc
		PK22		2.68	2.89	\bigcirc
		PK60UNV	+UA22	6.10	2.89	\bigcirc
	400 - 500	PK252	+25A13	2.76	2.94 + 2.97	\bigcirc

^{*} Not suitable for full-tension connections



CONNECTED - COMPRESSION CABLE LUGS MADE FROM ALUMINIUM AND COPPER

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



In brief

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



▶ As good as always

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

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

▶ Numerous versions available

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

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

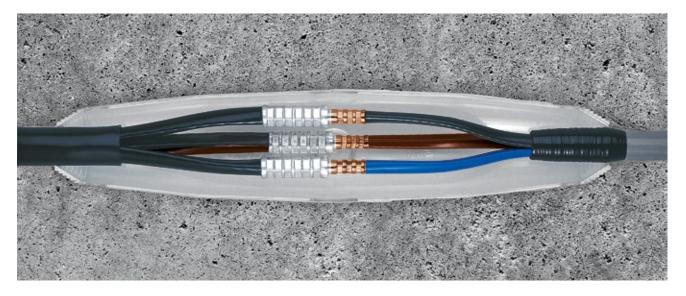


TOTAL TOTAL

▶ Well connected in every situation

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

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

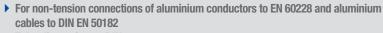


Compression cable lugs, Al/Cu



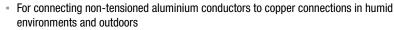


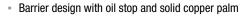




- ▶ Tube dimension to DIN 46329
- ► For pre-tounded sector shaped conductors
- With code number for clear tool assignment
- Filled with contact grease for optimum crimp results
- Friction welding connection to prevent galvanic corrosion



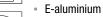




- With crimp markings for correct crimp positioning
- Internal chamfer for simple cable insertion









Characteristics



Material

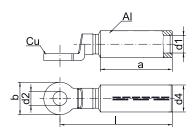




- Tool: see page 1.101
- You will find further information on the cable descriptions in the technical appendix, page i-6



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



Size of		Nominal cross	s section mm²				Dimens	ion mm			Number	of crimps	Weight 100 St. ~kq	Weight 100 St. ~kg	Packing
bolt dia.	Part No.	rm/sm	re/se	Code	a	b	d1	d2	d4	- 1	(7 mm)	Al (wide)	Cu	total	unit/pcs
M 8	363R8	16	25	12	34	24	6.0	8.5	12	68	4	2	4.4	5.9	10
M 10	363R10	16	25	12	34	24	6.0	10.5	12	68	4	2	4.2	5.7	10
M 8	364R8	25	35	12	34	24	6.8	8.5	12	68	4	2	4.4	5.8	10
M 10	364R10	25	35	12	34	24	6.8	10.5	12	68	4	2	4.2	5.6	10
M 12	364R12	25	35	12	34	24	6.8	13.0	12	68	4	2	3.9	5.3	10
M 8	365R8	35	50	14	43	24	8.0	8.5	14	77	5	2	4.4	6.3	10
M 10	365R10	35	50	14	43	24	8.0	10.5	14	77	5	2	4.2	6.1	10
M 12	365R12	35	50	14	43	24	8.0	13.0	14	77	5	2	3.8	5.8	10
M 8	366R8	50	70	16	43	25	9.8	8.5	16	77	5	2	4.4	6.4	10
M 10	366R10	50	70	16	43	25	9.8	10.5	16	77	5	2	4.2	6.2	10
M 12	366R12	50	70	16	43	25	9.8	13.0	16	77	5	2	3.9	5.9	10
M 8	367R8	70	95	18	52	25	11.2	8.5	18.5	84.5	6	3	3.9	6.9	10
M 10	367R10	70	95	18	50	25	11.2	10.5	18.5	85	6	3	4.2	7.4	10
M 12	367R12	70	95	18	50	25	11.2	13.0	18.5	85	6	3	3.9	7.1	10
M 8	368R8	95	120	22	56	30	13.2	8.5	22	90.5	6	3	4.1	8.0	5
M 10	368R10	95	120	22	50.5	30	13.2	10.5	22	90.5	6	3	7.4	11.4	10
M 12	368R12	95	120	22	50.5	30	13.2	13.0	22	90.5	6	3	6.8	10.8	10
M 16	368R16	95	120	22	50.5	30	13.2	17.0	22	90.5	6	3	6.4	10.4	10
M 8	369R8	120	150	22	50.5	30	14.7	8.5	23	95	6	3	3.9	8.3	5
M 10	369R10	120	150	22	50.5	30	14.7	10.5	23	92	6	3	6.1	11.5	5
M 12	369R12	120	150	22	50.5	30	14.7	13.0	23	92.0	6	3	6.8	11.4	5
M 16	369R16	120	150	22	50.5	30	14.7	17.0	23	92.0	6	3	6.4	10.8	5
M 8	370R8	150	185	25	62	30	16.3	8.5	25	104	6	3	7	13.3	5
M 10	370R10	150	185	25	62	30	16.3	10.5	25	104	6	3	6.8	13.6	5
M 12	370R12	150	185	25	62	30	16.3	13.0	25	104.0	6	3	6.8	13.1	5
M 16	370R16	150	185	25	62	30	16.3	17.0	25	104.0	6	3	6.4	12.7	5

see next page



Compression cable lugs, Al/Cu

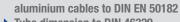
		Nominal cross	s section mm²				Dimens	ion mm			Number	of crimps	Weight	Weight	
Size of bolt dia.	Part No.	rm/sm	re/se	Code	a	b	d1	d2	d4	- 1	Al (7 mm)	Al (wide)	100 St. ~kg Cu	100 St. ~kg total	Packing unit/pcs
M 8	371R8	185	240	28	62	30	18.3	8.5	28.5	105	6	3	11.3	19.4	5
M 10	371R10	185	240	28	62	30	18.3	10.5	28.5	105.5	6	3	10.3	18.6	5
M 12	371R12	185	240	28	62	35	18.3	13.0	28.5	105.5	6	3	10.1	18.4	5
M 16	371R16	185	240	28	62	35	18.3	17.0	28.5	105.5	6	3	9.3	17.6	5
M 20	371R20	185	240	28	62	35	18.3	21.0	28.5	105.5	6	3	10.1	18.4	5
M 10	372R10	240	300	32	72	35	21.0	10.5	32	118.5	8	3	12.1	22.5	5
M 12	372R12	240	300	32	72	35	21.0	13.0	32	118.5	8	3	11.8	22.2	5
M 16	372R16	240	300	32	72	35	21.0	17.0	32	118.5	8	3	11.0	21.4	5
M 20	372R20	240	300	32	72	35	21.0	21.0	32	118.5	8	3	10.1	20.5	5
M 10	373R10	300		34	72	36	23.3	10.5	34	124	8	3	14.3	27.2	2
M 12	373R12	300		34	72	36	23.3	13.0	34	124	8	3	17.7	33.7	2
M 16	373R16	300		34	72	36	23.3	17.0	34	124	8	3	16.9	32.9	2
M 20	373R20	300		34	72	40	23.3	21.0	34	124	8	3	16.0	32.0	1
M 12	374R12	400		38	100	40	26.0	13.0	38.5	150.5		4	25.6	37.4	1
M 16	374R16	400		38	100	40		17	38.5	150.5		4	22.1	37.4	1

Compression cable lugs, Al/Cu with Cu eye











Unique tool assignment due to coding





Characteristics



▶ For non-tension connections of aluminium conductors to EN 60228 and

- With Cu eyelet in screw-on area
- Easy to process due to crimp markings
 - Simple cable entry due to internal chamfer



Material



- E-aluminium
- Copper (EN13600)



Surface



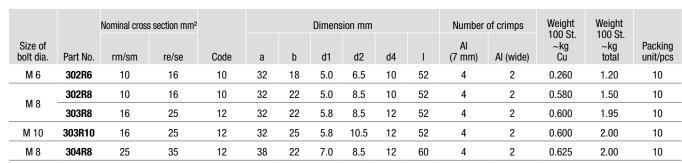


Technical instructions

- Tool: see page 1.101
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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



see next page



Compression cable lugs, Al/Cu with Cu eye

		Nominal cross	s section mm²				Dimens	ion mm			Number	of crimps	Weight 100 St.	Weight 100 St.	
Size of bolt dia.	Part No.	rm/sm	re/se	Code	a	b	d1	d2	d4	I	Al (7 mm)	Al (wide)	~kg Cu	~kg total	Packing unit/pcs
M 10	304R10	25	35	12	38	25	7.0	10.5	12	60	4	2	0.900	2.10	10
IVI 10	305R10	35	50	14	42	26	8.2	10.5	14	67	5	2	0.800	3.00	10
M 12	305R12	35	50	14	42	30	8.2	13.0	14	67	5	2	1.120	3.10	10
M 10	306R10	50	70	16	45	27	10.0	10.5	16	72	5	2	0.900	3.60	10
M 12	306R12	50	70	16	45	30	10.0	13.0	16	72	5	2	1.120	3.80	10
M 10	307R10	70	95	18	55	29	11.5	10.5	18.5	86	6	3	1.075	5.60	10
M 12	307R12	70	95	18	55	32	11.5	13.0	18.5	86	6	3	1.300	5.70	10
M 10	308R10	95	120	22	55	32	13.5	10.5	22	90	6	3	1.435	10.00	5
M 12	308R12	95	120	22	55	35	13.5	13.0	22	90	6	3	1.735	9.50	5
M 16	308R16	95	120	22	55	38	13.5	17.0	22	90	6	3	2.655	10.00	5
M 12	309R12	120	150	22	55	35	15.0	13.0	23	91	6	3	1.810	8.70	5
M 16	309R16	120	150	22	55	38	15.0	17.0	23	91	6	3	2.230	8.80	5
M 12	310R12	150	185	25	63	35	16.5	13.0	25	103	6	3	2.025	12.20	5
M 16	310R16	150	185	25	63	41	16.5	17.0	25	103	6	3	2.655	12.30	5
M 12	311R12	185	240	28	65	40	18.5	13.0	28.5	106	6	3	2.320	15.00	5
M 16	311R16	185	240	28	65	42	18.5	17.0	28.5	106	6	3	4.975	15.50	5
M 20	311R20	185	240	28	65	46	18.5	21.0	28.5	106	6	3	4.610	15.50	5
M 12	312R12	240	300	32	70	45	21.0	13.0	32	116	8	3	2.750	20.00	5
M 16	312R16	240	300	32	70	45	21.3	17.0	32	116	8	3	3.400	21.00	5
M 20	312R20	240	300	32	70	49	21.3	21.0	32	116	8	3	4.600	22.00	5
M 16	313R16	300		34	75	51	23.3	17.0	34	124	8	3	3.980	21.60	1
M 20	313R20	300		34	75	51	23.3	21.0	34	124	8	3	5.510	22.20	1
M 16	314R16	400		38	95	58	26.25	17.0	38.5	165		4	4.200	35.00	1
M 20	314R20	400		38	95	58	26.25	21.0	38.5	165		4	5.950	35.00	1

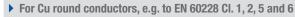


Compression joints, Al/Cu









- ► For non-tension copper cables, e.g. to DIN 48201-1
- ▶ For pre-rounded sector shaped conductors
- ▶ Tube dimension to DIN 46235 part 1 and 2
- ▶ With code number for clear tool assignment





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



















Material

- E-aluminium
- Copper (EN13600)

Surface

Bright

Technical instructions

- Sleeves for compacted conductors and sleeves for 3-core and 4-core cables, see chapter "Sleeves for compacted conductors and sector shaped conductors - Cu"
- Reduction sleeves for connecting unequal cross-sections can be found on page 1.58
- Tool: see page 1.101
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

	Nomin	Nominal cross section mm ²			Dimension mm	ı	Co	de	Weight 100 St.	Weight 100 St.	
Part No.	Al rm/sm	Al re/se	Cu re/rm/se/sm	I	Inner dia. Al	Inner dia. Cu	Al	Cu	~kg Cu	~kg total	Packing unit/pcs
322R10	10		10	55.0	5.0	4.5	10	6	0.212	1.100	4
322R16	10		16	61.0	5.0	5.4	10	8	0.714	1.550	4
323R10	16		10	55.0	6.0	4.5	12	6	0.212	1.500	4
323R16	16		16	61.0	6.0	5.4	12	8	0.714	1.750	4
324R10	25	35	10	55.0	6.8	4.5	12	6	0.212	1.400	4
324R16	25	35	16	61.0	6.8	5.5	12	8.0	0.714	1.650	4
324R25	25	35	25	63.0	6.8	7.0	12	10	0.892	1.900	4
324R35	25	35	35	63.0	6.8	8.2	12	12.0	1.624	2.000	4
324R50	25	35	50	72.0	6.8	10.0	12	14	2.362	3.500	4
324R416	25/4	35	16	61.0	7.6	5.5	12	8.0	0.714	1.600	4
325R16	35	50	16	71.0	8.0	5.5	14	8.0	0.714	2.500	4
325R25	35	50	25	71.0	8.0	7.0	14	10	0.892	2.650	4
325R35	35	50	35	71.0	8.0	8.2	14	12.0	1.519	3.300	4
325R50	35	50	50	77.0	8.0	10.0	14	14.0	2.362	3.530	4
325R616	35/6	50	16	71.0	9.0	5.5	14	8.0	0.714	2.450	4
325R625	35/6	50	25	71.0	9.0	7.0	14	10	0.892	2.600	4
325R635	35/6	50	35	71.0	9.0	8.2	14	12.0	1.624	3.250	4
326R16	50	70	16	71.5	9.8	5.5	16	8.0	0.714	2.850	4
326R25	50	70	25	71.5	9.8	7.0	16	10	0.892	3.200	4
326R35	50	70	35	71.5	9.8	8.2	16	12.0	1.624	3.800	4
326R50	50	70	50	77.5	9.8	10.0	16	14.0	2.362	4.550	4
327R16	70	95	16	79.0	11.2	5.5	18.5	8.0	0.714	4.100	4

see next page



Compression joints, Al/Cu

	Nomina	al cross secti	on mm²		Dimension mm	1	Co	ode	Weight 100 St.	Weight 100 St.	
Part No.	Al rm/sm	Al re/se	Cu re/rm/se/sm	1	Inner dia. Al	Inner dia. Cu	Al	Cu	~kg Cu	~kg total	Packing unit/pcs
327R25	70	95	25	79.0	11.2	7.0	18,5	10	0.892	3.950	4
327R35	70	95	35	79.0	11.2	8.2	18	12	1.624	4.900	4
327R50	70	95	50	85.0	11.2	10.0	18	14	2.362	5.700	4
327R70	70	95	70	85.0	11.2	11.5	18	16	2.921	7.250	4
327R95	70	95	95	95.0	11.2	13.5	18	18	4.957	9.360	4
327R120	70	95	120	99.0	11.2	15.5	18	20	5.640	10.540	4
328R16	95	120	16	79.0	13.2	5.5	22	8	0.714	6.150	4
328R25	95	120	25	79.0	13.2	7.0	22	10	0.892	6.300	4
328R35	95	120	35	79.0	13.2	8.2	22	12	1.519	6.800	4
328R50	95	120	50	85.0	13.2	10.0	22	14	2.362	8.050	4
328R70	95	120	70	87.0	13.2	11.5	22	16	3.105	8.200	4
328R95	95	120	95	95.0	13.2	13.5	22	18	4.957	10.350	4
328R120	95	120	120	95.0	13.2	15.5	22	20	5.640	11.550	4
329R35	120	150	35	81.0	14.7	8.2	22	12	1.519	7.600	4
329R50	120	150	50	87.0	14.7	10.0	22	14	2.362	7.900	4
329R70	120	150	70	89.0	14.7	11.5	22	16	3.105	8.500	4
329R95	120	150	95	97.0	14.7	13.5	22	18	4.857	11.000	4
329R120	120	150	120	97.0	14.7	15.5	22	20	5.640	10.280	4
330R16	150	185	16	95.5	16.3	5.4	25	8	0.714	7.800	4
330R25	150	185	25	95.5	16.3	6.8	25	10	0.892	8.000	4
330R35	150	185	35	95.5	16.3	8.2	25	12	1.624	8.400	4
330R50	150	185	50	98.5	16.3	10.0	25	14	2.362	10.200	4
330R70	150	185	70	99.5	16.3	11.5	25	16	3.105	10.350	4
330R95	150	185 185	95 120	107.5	16.3	13.5	25	18	4.957	12.650	4
330R120 330R150	150	185	150	107.5	16.3	15.5 17.0	25 25	20	5.640	13.900	4
331R50	150 185	240	50	99.0	18.3	10.0	28	23 14	8.231 2.362	12.100	4 1
331R70	185	240	70	100.0	18.3	11.5	28	16	3.105	13.000	1
331R95	185	240	95	108.0	18.3	13.5	28	19	4.957	14.450	1
331R120	185	240	120	108.0	18.3	15.5	28	28	5.640	13.720	<u>·</u>
331R150	185	240	150	113.0	18.3	17.0	28	22	8.231	19.550	1
331R185	185	240	185	116.0	18.3	19.0	28	25	9.621	21.000	1
332R50	240	300	50	110.0	21.0	10.0	32	14	2.362	16.500	1
332R70	240	300	70	111.0	21.0	11.5	32	16	3.105	18.000	1
332R95	240	300	95	119.0	21.0	13.5	32	18	4.957	19.000	1
332R120	240	300	120	119.0	21.0	15.5	32	20	5.640	20.500	1
332R150	240	300	150	124.0	21.0	17.0	32	22	8.231	23.300	1
332R185	240	300	185	127.0	21.0	19.0	32	25	9.621	25.500	1
332R240	240	300	240	128.0	21.0	21.5	32	28	12.705	30.100	1
333R120	300		120	119.0	23.5	15.5	34	21	5.640	27.800	1
333R150	300		150	124.0	23.5	17.0	34	23,5	8.234	31.100	1
333R185	300		185	127.0	23.5	19.0	34	25	9.621	32.700	1
333R240	300		240	128.0	23.5	21.5	34	28	12.705	37.500	1
333R300	300		300	134.0	23.5	24.5	34	32	16.099	41.700	1



Compression joints with Cu bolts, Al





- ▶ For pre-rounded sector shaped conductors
- ▶ Tube dimension to DIN 46267, part 2
- ▶ Unique tool assignment due to coding



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















Material

- E-aluminium
- Copper (EN13600)

Surface

Bright

Technical instructions

- Tool: see page 1.101
- You will find further information on the cable descriptions in the technical appendix, page i-6

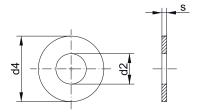
Additional information

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

Part No.	Nominal cross	s section mm²	Code	d Ø	Dimens	sion mm	11	Bolt mm dia.	Conductor mm dia.	Weight 100 St. ~kg Cu	Weight 100 St. ~kg total	Packing unit/pcs
344R	25	35	12	12.0	6.8	60	20	6	6.3	0.462	1.6	10
345R	35	50	14	14.0	8.0	71	22	7	7.5	0.695	2.5	10
346R	50	70	16	16.0	10.0	74	25	8	9.0	1.037	3.3	10
347R	70	95	18	18.5	11.5	87	30	10	10.5	1.958	5.4	10
348R	95	120	22	23.0	13.2	91	33	12	12.5	3.112	8.7	10
349R	120	150	22	23.0	15.0	97	38	12	14.0	3.598	9.0	10
350R	150	185	25	25.5	16.5	108	38	12	15.8	3.598	10.9	10
351R	185	240	28	28.5	18.5	116	44	14	17.5	3.692	15.7	5
352R	240	300	32	32.5	21.5	128	44	16	20.3	7.435	21.8	5
353R	300		34	34.5	23.5	131	46	18	22.5	9.410	26.7	1







Characteristics

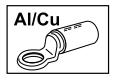
- Washer to prevent galvanic corrosion when connecting aluminium and copper
- For connecting copper conductors to aluminium in dry environments
- For connecting aluminium conductors to copper in dry environments
- Can also be used for connecting tinned aluminium cable lugs in humid environments

Material

- E-Al, one side copper plated

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





Tool application chart

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

	Crimping range	Cr	imping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
mechanical, electrical,	10 rm/sm - 95 re/se	K354		2.24	2.86	\bigcirc
pneumatic crimping tools with interchangeable die / head	10 rm/sm - 300 re/se	K22		2.26	2.89	\bigcirc
Hand hydraulic	10 rm/sm - 300 re/se	HK12030		2.60	2.94	\bigcirc
crimping tools		HK12042		2.62	2.94	\bigcirc
		HK120U		2.64	2.94	\bigcirc
		HK6022		2.56	2.89	\bigcirc
Battery powered	10 rm/sm - 95 re/se	EK354ML		2.32	2.86	\bigcirc
crimping tools		EK354		2.36	2.86	\bigcirc
	10 rm/sm - 300 re/se	EK12032		2.46	2.94	\bigcirc
		EK12042		2.48	2.94	\bigcirc
		EK120U		2.50	2.94	\bigcirc
		EK120UNV	+ UA12TKL	6.13	2.94	\bigcirc
		EK135FT	+UA15T	2.52	2.94	\bigcirc
		EK6022		2.40	2.89	\bigcirc
		EK60UNV	+UA22	6.12	2.89	\bigcirc
		EKM6022		2.38	2.89	\bigcirc
		EKM6022IS		4.6	2.89	\bigcirc
		EKM60UNV	+UA22	6.11	2.89	\bigcirc
	50 - 240	EKM60ID*		2.44		$\underline{\smile}$
		EKM60IDIS		4.8		\odot
	400 - 500	EK135FT	+UA15T	2.52	2.95	\bigcirc
Hydraulic	10 rm/sm - 300 re/se	THK120		2.72	2.94	\bigcirc
crimping systems		THK22		2.68	2.89	\bigcirc
	10 rm/sm - 500	HK252	+25A13	2.78	2.94 + 2.97	
Hydraulic	10 - 240	PK60ID*		2.71		$\overline{\bigcirc}$
crimping heads	10 rm/sm - 300 re/se	PK12042		2.72	2.94	\bigcirc
		PK120U		2.74	2.94	\bigcirc
		PK22		2.68	2.89	\bigcirc
		PK60UNV	+UA22	6.10	2.89	\bigcirc
	400 - 500	PK252 +25A13		2.76	2.94 + 2.97	\bigcirc

UNCOMPLICATED CLAMPS AND SCREW CONNECTORS

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



In brief

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



▶ Continuously connected

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

- Flexible due to the large cross-sectional range, C-clamps from 2.5 mm² to 185 mm² nominal cross-sections,

 H-clamps from 70 mm² nominal cross-section
- Efficient connections, without having to cut the main conductor.
- Straightforward connection of various cross-sections.





▶ Screwing instead of crimping

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

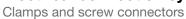
- Connections from 2.5 mm² to 185 mm² nominal crosssection
- No special tool required
- The right screw solution to suit a host of requirements
- For aluminium and copper conductors
- For round and sector shaped conductors
- For conductors and wires

▶ Clamps for continuous supply

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

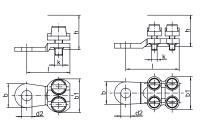
- Especially suitable for the energy supply industry
- Can be installed while live
- Main conductor remains intact
- Different versions available for 3 and 4 core cables





Punched cable lugs, Cu







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



Characteristics

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

Material

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

Surface

- Tin-plated to protect against corrosion

Technical instructions

Possible as a special bright version on request.
 Part Number appendix "BK"

Nominal				Dimens	ion mm			No of		M/-:	Da alain a
cross section mm²	Part No.	b	b1	d2	k	h	1	Number of screws	Torque Nm	Weight/pcs. ~kg	Packing unit/pcs
6 - 10	572R6	15.0	18.0	6.5	M4	10	23.0	2	4	1.30	50
10 10	573R6	15.0	20.5	6.5	M5	14	27.0	2	6	1.30	50
10 - 16	573R8	15.0	20.5	8.5	M5	14	27.0	2	6	1.30	50
	574R8	15.0	25.0	8.5	M5	16	30.0	2	6	2.75	50
16 - 25	584R8	18.5	22.5	8.5	M5	16	36.0	4	6	3.70	25
	584R10	19.5	22.5	10.5	M5	16	37.0	4	6	3.75	25
	575R8	18.5	24.0	8.5	M5	16	25.5	2	6	2.50	50
05 05	585R8	18.5	24.0	8.5	M5	16	38.5	4	6	4.30	25
25 - 35	585R10	21.5	24.0	10.5	M5	16	42.0	4	6	4.65	25
	585R12	21.5	24.0	13.0	M5	16	42.0	4	6	4.50	25
35 - 50	586R10	19.0	28.0	10.5	M6	19	46.0	4	8	6.75	25
35 - 50	586R12	21.0	28.0	13.0	M6	19	47.0	4	8	6.70	25
50 - 70	587R10	23.5	31.0	10.5	M6	19	51.0	4	8	9.35	10
50 - 70	587R12	23.5	31.0	13.0	M6	19	51.0	4	8	9.30	10
70 - 95	588R10	24.0	34.0	10.5	M6	25	57.0	4	8	12.00	10
70 - 95	588R12	24.0	34.0	13.0	M6	25	57.0	4	8	11.85	10
	589R10	30.0	42.0	10.5	M8	32	61.0	4	20	20.15	10
95 - 150	589R12	30.0	42.0	13.0	M8	32	61.0	4	20	20.20	10
	589R16	30.0	42.0	17.0	M8	32	61.5	4	20	20.10	10
150 - 240	590R12	34.0	48.5	13.0	M8	32	68.5	4	20	24.35	5
185 - 300	592R12	32.0	50.0	13.0	M8	37	68.5	4	20	27.95	5



Tubular soldering sleeves, CuZn





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



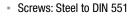
Characteristics

- Simple processing due to fixed screws and solder hole



Material

- CuZn 40 Pb 2

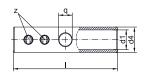




Tin-plated to protect against corrosion



- A connection needs to be soldered



Nominal cross	Part		Dimensi	on mm		Number of set			
section mm ²	No.	d1	d4	1	Diameter q	screws z	Weight/pcs. ~kg	Packing unit/pcs	
6	551R	3.5	7	25	3.3	2	0.60	10	
10	552R	4.5	6	30	3.3	2	1.20	10	
16	553R	5.5	10	40	4.2	4	1.90	10	
25	554R	7.0	12	45	4.2	4	2.85	10	
35	555R	8.5	13	45	5.0	4	3.00	10	
50	556R	10.0	15	48	5.0	4	4.00	10	
70	557R	12.0	18	52	6.8	4	6.30	10	
95	558R	13.5	20	55	6.8	4	8.05	10	
120	559R	15.0	22	60	6.8	4	9.90	10	

Electrical connection systems

Clamps and screw connectors

Parallel groove clamps, Cu, 2 screws





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



Characteristics

- Also for outdoor assembly
- Version with 2 screws



Material

- Copper (ETP)
- Screws: V2A

Surface

Bright



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















Nominal cross			Dimension mm					Weight/pcs.	Packing unit/
section mm ²	Part No.	b	h	1	Α	М	Torque Nm	weight/pcs. ∼kg	pcs
6 - 70	SAK670	36	40	40	20	M8	23	18,16	5
10 - 95	SAK1095	42,5	45	42	22	M8	20	24,15	5
16 - 150	SAK16150	52	50	50	25	M10	39	39,25	5

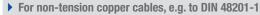




Branch clamps in C-type, Cu







- ▶ Ideal for clamping identical conductor cross-sections e.g. to VDE 60228 Cl. 1 and 2
- No need to cut the main conductor



Material

Copper (ETP)



Surface

Tin-plated to protect against corrosion



- Optimum conducting characteristics in combination with compound
- Tool: see page 1.117
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

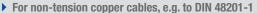
Part		Cross section main o	conductor mm² rm/re		Dimens	sion mm		
No.	Hint	Main conductor	Tab conductor	Hint	b	1	Weight/pcs. ~kg	Packing unit/pcs
CK16		16/25	16/25		16.0	15	0.94	25
CK25	*	25/35	25/35	*	20.2	16	1.68	25
CK35		35/50	35/50		25.7	22	3.42	25
CK50		50/-	50/-		28.0	23	4.88	25
CK70		70/-	70/-		34.16	28	9.69	10
CK95		95/-	95/-		35.0	25	7.30	10

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









- Ideal for clamping non-identical conductor cross-sections e.g. to VDE 60228 Cl. 1 and 2
- ▶ No need to cut the main conductor
- > Optimum conducting characteristics in combination with compound



Material

Copper (ETP)



Surface

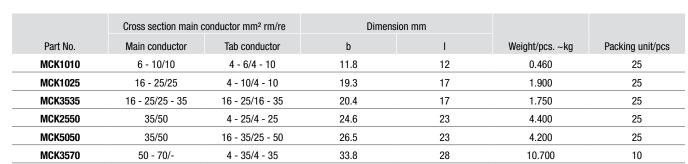
Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.117
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

- Part Number appendix for bright version "BK"
- rm = round multi-stranded; re = round single solid





Clamps and screw connectors

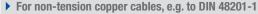
Branch clamps in C-type, Cu, multi-purpose clamps

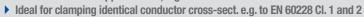
	Cross section main of	conductor mm² rm/re	Dimensi	on mm		
Part No.	Main conductor	Tab conductor	b	1	Weight/pcs. ~kg	Packing unit/pcs
MCK3595	95/-	16 - 35	41.0	30	15.000	10
MCK7095	95/-	35 - 70	41.0	30	14.000	10
MCK120120	120/-	35 - 120	45.0	30	16.550	10
MCK150150	150/-	70 - 150	53.0	35	23.000	5
MCK185185	185/-	95 - 185	60.0	40	33.000	5

Branch clamps in H-type, Cu











No need to cut the main conductor



Characteristics

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



Material

Surface



Copper (ETP)

Technical instructions

- Tool: see page 1.118
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

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

Compound for branch clamps



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

Characteristics

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

Part No.
KF125

Screw connectors for shielded copper wires





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

Characteristics

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

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

Tin-plated to protect against corrosion

Technical instructions

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

Additional information

rm = round multi-stranded; re = round single solid

Dout	Nominal cros	s section mm²		Dimens	sion mm			Mainht/naa	Doolsing unit/
Part No.	re	rm	D	d1	L	AF	Torque Nm	Weight/pcs. ~kg	Packing unit/ pcs
SV100	6 - 35	6 - 25	14	7.2	40	4	10	3.9	4

Screw connectors for street lighting





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

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

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

Surface

- Either bright or tin-plated

Technical instructions

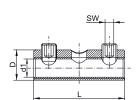
Refer to the installation instructions in the technical appendix on page i-8

Additional information

rm = round multi-stranded; re = round single solid

	Nominal cross	s section mm²		Dimens	ion mm			Woight/noo	Dooking unit/
Part No.	re	rm	D	d1	L	AF	Torque Nm	Weight/pcs. ~kg	Packing unit/ pcs
With thread	led pin, tin-plated								
SV200	1.5 - 16	1.5 - 16	10	5.5	30	2.5	4	1.35	4
With thread	led pin, bright finis	shed							
SV200BK	1.5 - 16	1.5 - 16	10	5.5	30	2.5	4	1.35	4





Clamps and screw connectors

Screw connector with 2 screws























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

Characteristics

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

Material

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

Surface

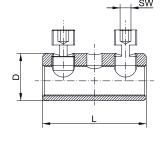
Either bright or tin-plated

Technical instructions

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

Additional information

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



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

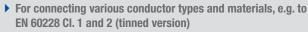


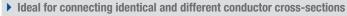
Screw connector with barrier











Characteristics

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



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



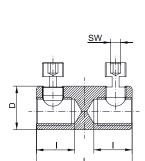
Either bright or tin-plated

Technical instructions

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

Additional information

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



					Dimension mm							
Part No.	re	rm	se	sm	Hint	D	1	L	AF	Torque Nm	Weight/ pcs. ~kg	
With threaded pir	n, bright finished											
SV315	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 35 Al 10 - 35	Cu 2.5 - 35 Al 10 - 35		16	17.5	40	4	9	1.7	4
SV309	16 - 95	16 - 95	50 - 95	35-95 (r), 35-70		25	22	55	5	20	6.6	4
SV320	25 - 150	25 - 150	50 - 150 (90°), 50 - 150 (120°)	35 - 150		28	31	70	6	25	11.3	4
SV310	35 - 50	35 - 185	50 - 185 (90°)	35 - 185 (r)		32	32	80	6	25	16	4
With threaded pir	n, tin-plated											
SV315V	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 35 Al 10 - 35	Cu 2.5 - 35 Al 10 - 35		16	17.5	40	4	9	1.7	4
SV309V	16 - 95	16 - 95	50 - 95	35-95 (r), 35-70		25	22	55	5	20	6.6	4
SV320V	25 - 150	25 - 150	50 - 150 (90°), 50 - 150 (120°)			28	31	70	6	25	11.3	4
SV310V	35 - 50	35 - 185	50 - 185 (90°)	35 - 185 (r)		32	32.5	80	6	25	16	4
With shear head,	bright finished											
SV312AKNL	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 35 Al 10 - 35	Cu 2.5 - 35 Al 10 - 35		16	17.5	40	4	9	1.7	4
SV309AK	16 - 95	16 - 95	50 - 95	35-95 (r), 35-70		25	22	55	5	20	6.6	4
SV310AK	35 - 50	35 - 185	50 - 185 (90°)	35 - 185 (r)		32	32.5	80	6	25	16	4
With shear head,	tin-plated											
SV311AKNL	6 - 35	6 - 25				14	17.5	40	4	8	1.5	4
SV312AKNLV	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 50 Al 10 - 50	Cu 2.5 - 35 Al 10 - 35	Cu 2.5 - 35 Al 10 - 35		16	17.5	40	4	9	1.7	4
SV319AKNLV	10 - 70	10 - 70	50 - 70	35 - 70		22	24	57	5	15	7.6	4
SV309AKV	16 - 95	16 - 95	50 - 95	35-95 (r), 35-70	*	25	22	55	5	20	6.6	4
SV310AKV	35 - 50	35 - 185	50 - 185 (90°)	35 - 185 (r)	*	32	32.5	80	6	25	16	4

Screw connector with 4 screws













▶ For connecting various conductor types and materials, e.g. to EN 60228





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





Material

Surface

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



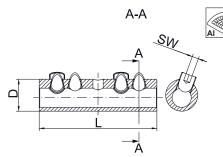
· Either bright or tin-plated



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



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



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

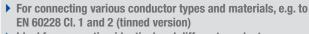


Insulated screw connector









- Ideal for connecting identical and different conductor cross-sections
- ▶ Reliable processing due to cable insertion control (dissimilar materials must not come into contact)



Characteristics

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





Material

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



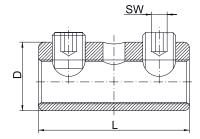
Either bright or tin-plated



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



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

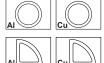


		Nominal cross section mm ² Dimension mm						Weight/pcs.	Packing	
Part No.	re	rm	se	sm	D	L	AF	Torque Nm	weight/pcs. ∼kg	unit/pcs
With threaded p	in, bright finished									
SV400	6 - 35	6 - 25	50 - 70 (120°)	35 - 70	14	60	4	8	1.7	4
SV410	16-95	16-95	50-95	35-95 (r), 35-70	28.2	58.2	5	20	6	4
With threaded p	in, tin-plated									
SV405V	10 - 70	10 - 70	50 - 70, 50 - 150 (120°)	35 - 70, 35 - 150	25	87	5	15	5	4
SV420V	35 - 50	35 - 185	50 - 185 (90°)	35 - 185 (r)	36	84	6	25	14.5	4
With shear head	d, bright finished									
SV410AK	16-95	16-95	50-95	35-95 (r), 35-70	28.2	58.2	5	20	6	4

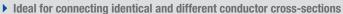


Screw connector with barrier









Special groove profile inside to destroy the oxidation layer when crimping

Either with threaded pin or shear head, shear head partly fixed















Material

Characteristics

Insulated body

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

Version with 2 screws and barrier

Surface

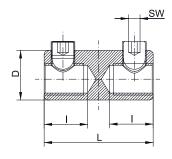
Either bright or tin-plated

Technical instructions

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

Additional information

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



	Nominal cross section mm ²				Dimensi	ion mm					
Part No.	re	rm	se	sm	D	ı	L	AF	Torque Nm	Weight/ pcs. ~kg	Packing unit/pcs
With threaded	d pin, bright										
SV430	16-50	16-95	50 - 70 (120°), 50 - 95 (90°)	35 - 70, 35 - 95 (r)	28.2	23.6	58.2	5	20	6.6	4
With shear he	ead, bright										
SV430AK	16 - 50	16 - 95	50 - 70 (120°), 50 - 95 (90°)	35 - 70, 35 - 95 (r)	28.2	23.6	58.2	5	20	6.6	4
SV440AK	35 - 50	35 - 185	50 - 150 (120°), 50 - 185 (90°)	35 - 150, 35 - 185 (r)	36	34.5	84	6	25	16.0	4



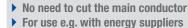
Compact tap connectors with shear heads, four conductor cables















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

▶ Suitable for main and branch conductors made from Al and Cu

· With shear heads for the main conductor, fixed





Technical instructions

A mounting instruction is included with every clamp



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

Main conductor	Тар

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

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





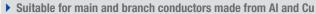












- No need to cut the main conductor
- ▶ For use e.g. with energy suppliers

Characteristics

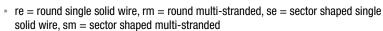
VDE: can be installed under voltage with corresponding fully insulated assembly tools

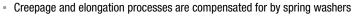
Technical instructions

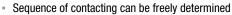
A mounting instruction is included with every clamp

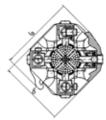


Additional information









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



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

















- No need to cut the main conductor
- ▶ For use e.g. with energy suppliers

Characteristics

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

Suitable for main and branch conductors made from Al and Cu

· With threaded pins for the main conductor

Technical instructions

A mounting instruction is included with every clamp

Additional information

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

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

Compact tap connectors, three conductor cables

























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

Suitable for main and branch conductors made from Al and Cu

· With threaded pins for the main conductor

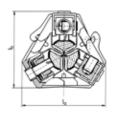
No need to cut the main conductor For use e.g. with energy suppliers

Technical instructions

- A mounting instruction is included with every clamp

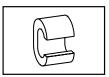
Additional information

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



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





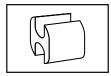
Tool application chart

C-Clamps

	Crimping range	Cri	mping Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical,	10 - 35	K354		2.24	2.86	\circ
pneumatic crimping tools with interchangeable die / head	10 - 70	K22		2.26	2.90	0
Hand hydraulic	10 - 70	HK12030		2.60	2.94	0
crimping tools		HK12042		2.62	2.94	0
		HK120U		2.64	2.94	0
		HK6022		2.56	2.90	0
Battery powered	10 - 35	EK354ML		2.32	2.86	0
crimping tools		EK354		2.36	2.86	\circ
	10 - 70	EK12032		2.46	2.94	\circ
		EK12042		2.48	2.94	0
		EK120U		2.50	2.94	\circ
		EK135FT	+UA15T	2.52	2.94	\circ
		EK120UNV	+ UA12TKL	6.13	2.94	\circ
		EKM6022		2.38	2.90	0
		EK6022		2.40	2.90	0
		EKM6022IS		4.6	2.90	0
		EKM60UNV	+UA22	6.11	2.90	\circ
		EK60UNV	+UA22	6.12	2.90	\circ
Hydraulic	10 - 70	THK120		2.72	2.94	\circ
crimping systems		THK22		2.68	2.90	0
	10 - 185	HK252	+25A13	2.78	2.94 + 2.97	0
Hydraulic	10 - 70	PK12042		2.72	2.94	0
crimping heads		PK120U		2.74	2.94	0
		PK22		2.68	2.90	0
		PK60UNV	+UA22	6.10	2.90	0
	10 - 185	PK252	+25A13	2.76	2.94 + 2.97	0

Electrical connection systems

Clamps and screw connectors



Tool application chart

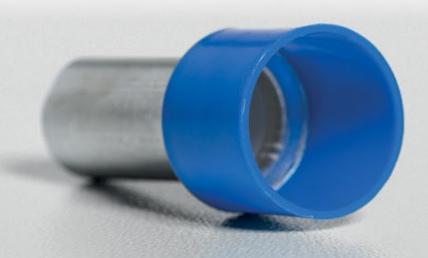
H-Clamps

	Crimping range	Crim	oing Tool	Catalog	ue page	
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical, pneumatic crimping tools with interchangeable die / head	70	K22		2.26	2.90	0
Hand hydraulic	70	HK6022		2.56	2.90	0
crimping tools	70 - 120	HK12030		2.60	2.94	\circ
		HK12042		2.62	2.94	\circ
		HK120U		2.64	2.94	0
Battery powered	70	EKM6022		2.38	2.90	\circ
crimping tools		EK6022		2.40	2.90	0
		EKM6022IS		4.6	2.90	\circ
		EKM60UNV	+UA22	6.11	2.90	\circ
		EK60UNV	+UA22	6.12	2.90	\circ
	70 - 120	EK12032		2.46	2.94	\circ
		EK12042		2.48	2.94	\circ
		EK120U		2.50	2.94	\circ
		EK135FT	+UA15T	2.52	2.94	\circ
		EK120UNV	+ UA12TKL	6.13	2.94	\circ
Hydraulic	70	THK22		2.68	2.90	0
crimping systems	70 - 120	THK120		2.72	2.94	\circ
		HK252	+25A13	2.78	2.94	\circ
Hydraulic	70	PK22		2.68	2.90	\circ
crimping heads		PK60UNV	+UA22	6.10	2.90	0
	70 - 120	PK12042		2.72	2.94	0
		PK120U		2.74	2.94	0
		PK252	+25A13	2.76	2.94	0



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

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



In brief

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



▶ Simple diversity

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

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



▶ Always the right crimp shape

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

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



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

▶ Easy-Entry insulation

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

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



Electrical connection systems

Cable end-sleeves

Cable end-sleeves to DIN, Cu







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



Characteristics

- To DIN 46228, part 1 and similar



Material

- Copper

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.134
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

Nominal cross				Dimen		Weight/ 1000 pcs.		
section mm ²	Part No.	Hint	d1	d2	I	S	~ kg	Packing unit/pcs
0.25	695V	*	0.75	1.7	5	0.15	0.02	1000
0.25	697V	*	0.75	1.7	7	0.15	0.03	1000
0.34	705V	*	0.85	1.8	5	0.15	0.02	1000
0.34	707V	*	0.85	1.8	7	0.15	0.03	1000
	71S6V		1.00	2.1	6	0.15	0.03	1000
0.5	71S8V	*	1.00	2.1	8	0.15	0.04	1000
	71S10V		1.00	2.1	10	0.15	0.05	1000
	716V		1.20	2.3	6	0.15	0.04	1000
	718V	*	1.20	2.3	8	0.15	0.05	1000
0.75	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
	72S8V	*	1.40	2.5	8	0.15	0.06	1000
1	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
	728V	*	1.70	2.8	8	0.15	0.07	1000
1.5	7210V		1.70	2.8	10	0.15	0.09	1000
1.5	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
	7310V		2.20	3.4	10	0.15	0.11	1000
2.5	7312V		2.20	3.4	12	0.15	0.13	1000
	7315V	*	2.20	3.4	15	0.15	0.17	1000
	7318V		2.20	3.4	18	0.15	0.20	1000
	7320V	*	2.20	3.4	20	0.15	0.22	1000
See next nage								



Cable end-sleeves to DIN, Cu

Nominal cross section mm²	1000 pcs. ~ kg 0.14 0.16 0.17 0.20 0.27 0.32 0.35 0.23 0.27 0.34	Packing unit/pcs 1000 1000 1000 1000 1000 1000 1000 10
749V 2.80 4.0 9 0.20 7410V * 2.80 4.0 10 0.20 4 7412V 2.80 4.0 12 0.20 7415V 2.80 4.0 15 0.20 7418V 2.80 4.0 18 0.20 7420V * 2.80 4.0 20 0.20 7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.16 0.17 0.20 0.27 0.32 0.35 0.23 0.27	1000 1000 1000 1000 1000 1000 1000
7410V * 2.80 4.0 10 0.20 7412V 2.80 4.0 12 0.20 7415V 2.80 4.0 15 0.20 7418V 2.80 4.0 18 0.20 7420V * 2.80 4.0 20 0.20 7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.17 0.20 0.27 0.32 0.35 0.23	1000 1000 1000 1000 1000 1000
4 7412V 2.80 4.0 12 0.20 7415V 2.80 4.0 15 0.20 7418V 2.80 4.0 18 0.20 7420V * 2.80 4.0 20 0.20 7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.20 0.27 0.32 0.35 0.23 0.27	1000 1000 1000 1000 1000
7415V 2.80 4.0 15 0.20 7418V 2.80 4.0 18 0.20 7420V * 2.80 4.0 20 0.20 7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.27 0.32 0.35 0.23 0.27	1000 1000 1000 1000
7418V 2.80 4.0 18 0.20 7420V * 2.80 4.0 20 0.20 7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.32 0.35 0.23 0.27	1000 1000 100
7420V * 2.80 4.0 20 0.20 7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.35 0.23 0.27	1000 100
7510V 3.50 4.7 10 0.20 7512V 3.50 4.7 12 0.20	0.23 0.27	100
7512V 3.50 4.7 12 0.20	0.27	
		100
	0.34	
7515V 3.50 4.7 15 0.20		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
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
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
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
25 7820V * 7.3 9.5 20 0.2	1.31	50
7825V 7.5 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
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 8.5 11.0 25 0.2	1.80	50
7930V * 8.3 11.0 30 0.2	2.20	50
7932V 8.5 11.0 32 0.2	2.35	50
8018V 10.3 13.0 18 0.3	1.69	50
8022V * 10.3 13.0 22 0.3	2.05	50
50 8025V 10.3 13.0 25 0.3	2.32	50
8030V * 10.3 13.0 30 0.3	2.77	50
8032V 10.3 13.0 32 0.3	2.95	50

See next page



Cable end-sleeves

Cable end-sleeves to DIN, Cu

Nominal cross				Dimens	ion mm		Weight/ 1000 pcs.	
section mm ²	Part No.	Hint	d1	d2	1	S	~ kg	Packing unit/pcs
	8122V	*	12.7	15.0	22	0.4	3.31	25
70	8125V	*	12.7	15.0	25	0.4	3.75	25
70	8130V	*	12.7	15.0	30	0.4	4.48	25
	8132V	*	12.7	15.0	32	0.4	4.78	25
	8225V	*	14.7	17.0	25	0.4	4.32	25
O.F.	8230V	*	14.7	17.0	30	0.4	5.17	25
95	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
	8332V	*	16.7	19.0	32	0.5	7.83	25
120	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
150	8438V	*	18.7	21.0	38	0.5	10.36	25
	8440V	*	18.7	21.0	40	0.5	10.89	25
405	8532V	*	20.2	23.5	32	0.6	11.38	25
185	8540V	*	20.2	23.5	40	0.6	14.17	25
040	8634V	*	23.0	26.0	34	0.5	11.25	25
240	8640V	*	23.0	26.0	40	0.5	13.23	25
							-	



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





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



Characteristics

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



Material

- Cu-DHP
- Synthetic material: polypropylene

Surface

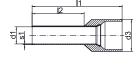
Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.134
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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



Name in all annua						Dimension mm			Weight/	Darling weit
Nominal cross section mm ²	Part No.	Colour	Hint	d1	d3	l1	12	s1	1000 pcs. ~ kg	Packing unit/ pcs
	4696			1.0	3.1	12	6	0.15	0.070	1000
0.5	4698			1.0	3.1	14	8	0.15	0.070	1000
0.5	GR4698		***	1.0	3.1	14	8	0.15	0.070	500
	46910			1.0	3.1	16	10	0.15	0.085	1000
	4706			1.2	3.3	12	6	0.15	0.080	1000
	4708			1.2	3.3	14	8	0.15	0.080	1000
0.75	GR4708		***	1.2	3.3	14	8	0.15	0.080	500
	47010			1.2	3.3	16	10	0.15	0.100	1000
	47012			1.2	3.3	18	12	0.15	0.105	1000
	4716			1.4	3.5	12	6	0.15	0.090	1000
	4718			1.4	3.5	14	8	0.15	0.100	1000
1	GR4718		***	1.4	3.5	14	8	0.15	0.100	500
	47110			1.4	3.5	16	10	0.15	0.120	1000
	47112			1.4	3.5	18	12	0.15	0.125	1000
	4726		*	1.7	4.0	12	6	0.15	0.105	1000
	4728			1.7	4.0	14	8	0.15	0.110	1000
4.5	GR4728		***	1.7	4.0	14	8	0.15	0.110	500
1.5	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
	4738			2.2	4.7	14	8	0.15	0.150	1000
0.5	GR4738		***	2.2	4.7	14	8	0.15	0.150	500
2.5	47312			2.2	4.7	18	12	0.15	0.200	1000
	47318			2.2	4.7	24	18	0.15	0.250	1000
	47410			2.8	5.4	17	10	0.20	0.210	100
4	47412			2.8	5.4	20	12	0.20	0.250	100
	47418			2.8	5.4	26	18	0.20	0.320	100
	47512			3.5	6.9	20	12	0.20	0.350	100
6	47518			3.5	6.9	26	18	0.20	0.460	100
	47612			4.5	8.4	22	12	0.20	0.450	100
10	47618			4.5	8.4	28	18	0.20	0.650	100

See next page

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

Nominal cross							Weight/ 1000 pcs.	Packing unit/		
section mm ²	Part No.	Colour	Hint	d1	d3	l1	12	s1	~ kg	pcs
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
	47816			7.3	12.0	30	16	0.20	1.600	50
25	47818			7.3	12.0	30	18	0.20	1.700	50
	47822			7.3	12.0	36	22	0.20	2.000	50
	47916			8.3	13.5	30	16	0.20	1.900	50
35	47918			8.3	13.5	30	18	0.20	2.100	50
	47925			8.3	13.5	39	25	0.20	2.500	50
50	48020			10.3	16.0	36	20	0.30	3.300	50
50	48025			10.3	16.0	40	25	0.30	3.600	50
70	48121		*	13.5	17.2	37	21	0.40	4.620	25
95	48225		*	14.5	19.2	44	25	0.40	6.000	25
120	48327		*	16.7	21.4	48	27	0.45	7.850	25
150	48432		*	19.5	25.0	58	32	0.50	12.330	25

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







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





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



Material

- Cu-DHP
- Synthetic material: polypropylene

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.134
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

Maurinal areas				Dimension mm					Weight/ 1000 pcs.	Doolsing weit/
Nominal cross section mm ²	Part No.	Colour	Hint	d1	d3	11	12	s1	~ kg	Packing unit/ pcs
0.14	166GR		*	0.7	2.5	10.0	6	0.15	0.035	1000
0.14	166GRL		*	0.7	2.5	12.0	8	0.15	0.040	1000
0.05	167H		*	0.8	2.5	10.0	6	0.15	0.045	1000
0.25	167HL		*	0.8	2.5	12.0	8	0.15	0.050	1000
0.04	168T		*	0.8	2.5	10.0	6	0.15	0.045	1000
0.34	168TL		*	0.8	2.5	12.0	8	0.15	0.050	1000
0.5	1690K			1.0	3.1	12.0	6	0.15	0.070	1000

See next page



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

Nominal cross						Dimension mm			Weight/ 1000 pcs.	Packing unit/
section mm ²	Part No.	Colour	Hint	d1	d3	11	12	s1	~ kg	pcs
	170WK			1.2	3.3	12.0	6	0.15	0.080	1000
	170W			1.2	3.3	14.0	8	0.15	0.080	1000
0.75	GR170W		**	1.2	3.3	14.0	8	0.15	0.080	500
	170WH			1.2	3.3	16.0	10	0.15	0.100	1000
	170WL			1.2	3.3	18.0	12	0.15	0.105	1000
	171GK			1.4	3.5	12.0	6	0.15	0.090	1000
	171G			1.4	3.5	14.0	8	0.15	0.100	1000
1	GR171G		**	1.4	3.5	14.0	8	0.15	0.100	500
	171GH			1.4	3.5	16.0	10	0.15	0.120	1000
	171GL			1.4	3.5	18.0	12	0.15	0.125	1000
	172RK			1.7	4.0	12.0	6	0.15	0.105	1000
	172R0			1.7	4.0	14.0	8	0.15	0.110	1000
1 5	GR172R0		**	1.7	4.0	14.0	8	0.15	0.110	500
1.5	172RH			1.7	4.0	16.0	10	0.15	0.130	1000
	172RM			1.7	4.0	18.0	12	0.15	0.140	1000
	172RL			1.7	4.0	24.0	18	0.15	0.190	1000
	173B			2.2	4.7	14.0	8	0.15	0.150	1000
0.5	GR173B		**	2.2	4.7	14.0	8	0.15	0.150	500
2.5	173BH			2.2	4.7	18.0	12	0.15	0.200	1000
	173BL			2.2	4.7	24.0	18	0.15	0.250	1000
	174GR			2.8	5.4	17.0	10	0.20	0.210	100
4	174GRH			2.8	5.4	20.0	12	0.20	0.250	100
	174GRL			2.8	5.4	26.0	18	0.20	0.320	100
C	175S			3.5	6.9	20.0	12	0.20	0.350	100
6	175SL			3.5	6.9	26.0	18	0.20	0.460	100
10	176E			4.5	8.4	22.0	12	0.20	0.450	100
10	176EL			4.5	8.4	28.0	18	0.20	0.650	100
10	177GR			5.8	9.6	24.0	12	0.20	0.650	100
16	177GRL			5.8	9.6	28.0	18	0.20	0.800	100
OF	178BR			7.3	12.0	30.0	16	0.20	1.600	50
25	178BRL			7.3	12.0	36.0	22	0.20	2.000	50
0.5	179B			8.3	13.5	30.0	16	0.20	1.900	50
35	179BL			8.3	13.5	39.0	25	0.20	2.500	50
50	1800			10.3	16.0	36.0	20	0.30	3.300	50

Cable end-sleeves

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

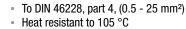




- ▶ For fine and superfine stranded conductors, e.g. to EN 60228 Cl. 5 and 6
- ▶ Easy-Entry insulation for splice-free cable insertion
- ▶ Halogen-free



Characteristics





Material - Cu-DHP

- Synthetic material: polypropylene

Surface

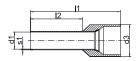
Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.134
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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



Nominal cross						Dimension mm			Weight/ 1000 pcs.	Packing unit/
section mm ²	Part No.	Colour	Hint	d1	d3	11	12	s1	~ kg	pcs
0.14	1666		*	0.7	2.5	10.0	6	0.15	0.035	1000
0.14	1668		*	0.7	2.5	12.0	8	0.15	0.040	1000
0.25	1676		*	0.8	2.5	10.0	6	0.15	0.045	1000
0.25	1678		*	0.8	2.5	12.0	8	0.15	0.050	1000
0.34	1686		*	0.8	2.5	10.0	6	0.15	0.045	1000
0.34	1688		*	0.8	2.5	12.0	8	0.15	0.050	1000
	1696			1.0	3.1	12.0	6	0.15	0.070	1000
0.5	1698			1.0	3.1	14.0	8	0.15	0.080	1000
	GR1698		**	1.0	3.1	14.0	8	0.15	0.080	500
	1706			1.2	3.3	12.0	6	0.15	0.080	1000
0.75	1708			1.2	3.3	14.0	8	0.15	0.095	1000
	GR1708		**	1.2	3.3	14.0	8	0.15	0.095	500
	1716			1.4	3.5	12.0	6	0.15	0.085	1000
1	1718			1.4	3.5	14.0	8	0.15	0.100	1000
G	GR1718		**	1.4	3.5	14.0	8	0.15	0.100	500
	1726			1.7	4.0	12.0	6	0.15	0.100	1000
	1728			1.7	4.0	14.0	8	0.15	0.120	1000
1.5	GR1728		**	1.7	4.0	14.0	8	0.15	0.120	500
1.5	17210			1.7	4.0	16.0	10	0.15	0.130	1000
	17212			1.7	4.0	18.0	12	0.15	0.140	1000
	17218			1.7	4.0	24.0	18	0.15	0.220	1000
	1738			2.2	4.7	14.0	8	0.15	0.140	1000
2.5	GR1738		**	2.2	4.7	14.0	8	0.15	0.140	500
2.0	17312			2.2	4.7	18.0	12	0.15	0.200	1000
	17318			2.2	4.7	24.0	18	0.15	0.280	1000
	17410			2.8	5.4	17.0	10	0.20	0.260	100
4	17412			2.8	5.4	20.0	12	0.20	0.300	100
	17418			2.8	5.4	26.0	18	0.20	0.390	100
6	17512			3.5	6.9	20.0	12	0.20	0.410	100
	17518			3.5	6.9	26.0	18	0.20	0.530	100

See next page



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

Naminal areas						Dimension mm			Weight/ 1000 pcs.	Doolsing unit/
Nominal cross section mm ²	Part No.	Colour	Hint	d1	d3	11	12	s1	~ kg	Packing unit/ pcs 100 100 100 100 50
40	17612			4.5	8.4	22.0	12	0.20	0.550	100
10	17618			4.5	8.4	28.0	18	0.20	0.710	100
10	17712			5.8	9.6	24.0	12	0.20	0.660	100
16	17718			5.8	9.6	28.0	18	0.20	0.850	100
	17816			7.3	12.0	30.0	16	0.20	1.500	50
25	17818			7.3	12.0	30.0	18	0.20	1.550	50
	17822			7.3	12.0	36.0	22	0.20	2.000	50

Insulated cable end-sleeves with lug









- ▶ With identification system for max. 6 identification rings
- ► Halogen-free





Characteristics

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



- Copper (EN13600)
- Synthetic material: polypropylene



Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.134
- You will find further information on the cable descriptions in the technical appendix, page i-6

Naminal areas	Dowl				Weight/				
Nominal cross section mm ²	Part No.	Colour	d1	d3	I1	12	s1	1000 pcs. ~ kg	Packing unit/pcs
0.5	3698		1.0	3.1	13.0	8	0.15	0.16	1000
0.75	3708		1.2	3.2	13.5	8	0.15	0.16	1000
1	3718		1.4	3.4	13.5	8	0.15	0.18	1000
1.5	3728		1.7	3.9	13.5	8	0.15	0.20	1000
2.5	3738		2.2	4.7	14.5	8	0.15	0.22	1000



Designation ring and insert fork



▶ For identifying the insulated cable end-sleeves with lugs

Characteristics

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

Additional information

* = without letters "I", "0" and "Y"

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

Insulated cable end-sleeves for short circuit resistant conductors











Characteristics

► Halogen-free



- Heat resistant to 105 °C
- Easy-Entry insulation for simple cable insertion

► For short circuit resistant conductors (e.g. NSGAFÖU)

Colour-coded cross-section assignment

Material

- Copper (EN13600)
- Synthetic material: polypropylene

Tin-plated to protect against corrosion

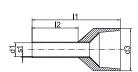
Technical instructions

- Tool: see page 1.134
- You will find further information on the cable descriptions in the technical appendix, page i-6

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

Nominal cross	Part			Dimension mm					
section mm ²	No.	Colour	d1	d3	l1	12	s1	1000 pcs. ~ kg	Packing unit/pcs
1.5	4328		1.7	8.1	17.5	8	0.15	0.22	100
1.0	43210		1.7	8.1	19.5	10	0.15	0.27	100
2.5	4338		2.2	8.6	17.5	8	0.15	0.24	100
2.0	43312		2.2	8.6	21.5	12	0.15	0.36	100
4	43410		2.9	10.5	19.5	10	0.20	0.36	100
6	43512		3.5	11.0	23.0	12	0.20	0.49	100
10	43612		4.5	12.5	24.0	12	0.20	0.65	100
16	43712		5.8	14.5	25.5	12	0.20	0.93	100







Insulated twin cable end-sleeves







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



Characteristics

Heat resistant to 105 °C



Material

- Copper (EN13600)
- Synthetic material: polypropylene

Surface

- Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.135
- You will find further information on the cable descriptions in the technical appendix, page i-6

Namena				Gewicht/ 1000 St.					
Nennquer- schnitt mm²	ArtNr.	Farbe	d1	d3	11	12	s1	~ kg	VE/St.
2 x 0.25	8678		1.20	2.3/3.9	15.0	8	0.15	0.110	1000
2 x 0.34	8688		1.20	2.3/3.9	15.0	8	0.15	0.110	1000
2 x 0.5	8698		1.40	3.0/5.2	15.0	8	0.15	0.110	1000
0 0.75	8708		1.70	3.3/5.5	15.0	8	0.15	0.130	1000
2 x 0.75	87010		1.70	3.3/5.5	17.0	10	0.15	0.150	1000
0 1	8718		2.00	4.0/6.0	15.0	8	0.15	0.170	1000
2 x 1	87110		2.00	4.0/6.0	17.0	10	0.15	0.170	1000
0.15	8728		2.20	4.2/7.2	16.0	8	0.15	0.183	1000
2 x 1.5	87212		2.20	4.2/7.2	20.0	12	0.15	0.237	1000
	87310		2.80	4.8/8.4	18.5	10	0.20	0.312	100
2 x 2.5	87313		2.80	4.8/8.4	21.5	13	0.20	0.340	100
2 x 4	87412		3.70	5.7/9.6	23.0	12	0.20	0.467	100
2 x 6	87514		4.80	7.7/10.8	26.0	14	0.20	0.730	100
2 x 10	87614		6.40	8.0/13.8	26.0	14	0.20	0.884	100

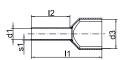
30.0

14

0.20

1.273

100



2 x 16

87714

8.20

10.4/19.2

Insulated cable end-sleeves, strip form





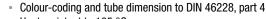








Characteristics



Heat resistant to 105 °C

50 pcs. cable end-sleeves per strip

Material

- Copper (EN13600)
- Synthetic material: polypropylene

Surface

Tin-plated to protect against corrosion

<u> 11 </u>
12

			Dimension mm		Weight/ 1000 pcs.	
Nominal cross section mm ²	Part No.	Colour	11	12	~ kg	Packing unit/pcs
0.5	ST9698		14	8	0.100	500
0.75	ST9708		14	8	0.100	500
1	ST9718		14	8	0.100	500
1.5	ST9728		14	8	0.100	500
2.5	ST9738		14	8	0.100	500

Insulated cable end-sleeves, small coil



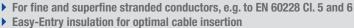


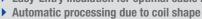












▶ Halogen-free



Characteristics

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

Material

- Copper (EN13600)
- Synthetic material: polypropylene

Tin-plated to protect against corrosion

			Dimensi	ion mm	Weight/	
Nominal cross section mm ²	Part No.	Colour	l1	12	1000 pcs. ~ kg	Packing unit/pcs
0.5	BAK9698		14	8	0.136	1100
0.75	BAK9708		14	8	0.154	1100
1	BAK9718		14	8	0.187	800
1.5	BAK9728		14	8	0.200	800
2.5	BAK9738		14	8	0.300	500













Insulated cable end-sleeves, large coil







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



Characteristics

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

Material

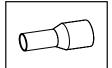
- Copper (EN13600)
- Synthetic material: polypropylene

Surface

Tin-plated to protect against corrosion

Naminal areas section			Dimens	ion mm	Weight/ 1000 pcs.	
Nominal cross section mm ²	Part No.	Colour	11	12	~ kg	Packing unit/pcs
0.5	BAG9698		14	8	0.120	10000
0.75	BAG9708		14	8	0.130	10000
1	BAG9718		14	8	0.160	7500
1.5	BAG9728		14	8	0.173	7500
2.5	BAG9738		14	8	0.230	5000

Cable end-sleeves



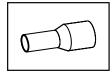
Tool application chart

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

Part 1 of 2

	Crimping range		Crimping Tool	Catalog		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	0,08 - 10	K303		2.9		\Diamond
crimping tools	0,08 - 16	K306K		2.10		\bigcirc
		K304K		2.9	\Diamond	
	0,14 - 10	K3014K		2.10		\Diamond
		K3016K		2.11		\bigcirc
		K32		2.8		
	0,14 - 2,5	K48		2.7		
	0,5 - 2,5	K4		2.6		\otimes
	0,5 - 6	K36		2.8		
	0,5 - 16	K3		2.6		\otimes
	10 - 35	K35		2.7		\otimes
	25 - 50	K05WF50		2.18	\Diamond	
	50 - 95	K05WF95		2.18	2.18	\Diamond
Mechanical, electrical,	0,5 - 6	K507		2.22		\Diamond
pneumatic crimping tools with interchangeable	0,5 - 50	K507WF		2.22		\Diamond
die / head		K50		2.23	2.82	\Diamond
		EKWF50ML		6.5	2.82	\Diamond
		EK50ML		6.6	2.82	\Diamond
	10 - 50	K354		2.24	2.86	\Box
	25 - 240	K22		2.26	2.90	\Diamond
Hand hydraulic	25 - 240	HK6022		2.56	2.90	\Diamond
crimping tools		HK12030		2.60	2.94	\Diamond
		HK12042		2.62	2.94	\Diamond
		HK120U		2.64	2.94	\Diamond
Battery powered	6 - 120	EKWF120ML		2.31		\Diamond
crimping tools	10 - 50	EK354ML		2.32	2.86	\Box
		EK354		2.36	2.86	\Box
	25 - 240	EKM6022		2.38	2.90	\Diamond
		EK6022		2.40	2.90	\Diamond
		EK12032		2.46	2.94	\Diamond
		EK12042		2.48	2.94	\Diamond
		EK120U		2.50	2.94	\Diamond
		EK135FT	+UA15T	2.52	2.94	\Diamond
		EKM6022IS		4.6	2.90	\Diamond
		EKM60UNV	+UA22	6.11	2.90	\Diamond
		EK60UNV	+UA22	6.12	2.90	\Diamond
		EK120UNV	+UA12TKL	6.13	\Diamond	



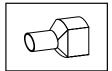


Tool application chart

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

Part 2 of 2

	Crimping range		Crimping Tool	Catalog		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Hydraulic	25 - 240	THK22		2.68	2.90	\Diamond
crimping systems		THK120		2.72 2.94		\bigcirc
		HK252	+25A13	2.78	2.94	\bigcirc
Hydraulic	25 - 240	PK22		2.68	2.90	\Diamond
crimping heads		PK12042		2.72	2.94	\Diamond
		PK120U		2.74	2.94	\Diamond
		PK252	+25A13	2.76	2.94	\Diamond
		PK60UNV	+UA22	6.10	2.90	\Diamond



Tool application chart

Insulated twin cable end-sleeves

	Crimping range	Cri	imping Tool	Catalog		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimp profile	
Mechanical	2 x 0,25 - 2 x 4	K36		2.8		
crimping tools		K32		2.8		
		K303		2.9	\Diamond	
		K3014K		2.10	\Diamond	
		K3016K		2.11	\bigcirc	
	2 x 0,5 - 2 x 6	K304K		2.9	\Diamond	
	2 x 0,5 - 2 x 10	K306K		2.10	\bigcirc	
	2 x 16	K05WF50		2.18	\Diamond	
Mechanical, electrical,	2 x 6 - 2 x 16	K50		2.23	2.83	\Diamond
pneumatic crimping tools with interchangeable		EKWF50ML		6.5	2.83	\Diamond
die / head		EK50ML		6.6	\Diamond	
		K507WF		2.22	\Diamond	
Battery powered crimping tools	6 - 120	EKWF120ML		2.31		\Diamond



PRECISION CABLE CONNECTIONS, INSULATED AND NON-INSULATED

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



In brief

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



▶ Easy insulation

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

- Cable connections with nominal cross-sections from 0.1 mm² to 6 mm²
- Resistant to temperatures of up to 105 °C

- Flame retardant polyamide insulation: No toxic vapours in case of fire
- Halogen-free
- Insensitive to corrosion due to tinning ander the insulation
- Simple processing thanks to Easy-Entry
- Grooved profile on the inside for improved contacting

▶ More hold with grooved profile

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

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



▶ Quality in detail

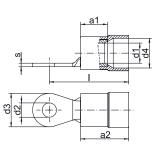
In a machine, everything has to pull together. For the machine to run, every component has to function. Even when it comes to small parts, better to go for high quality products with a high capacity, for our receptacles with snap-in point for example. The snap-in point guarantees a reliable connection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

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



Insulated solderless terminals







- ▶ To DIN 46237
 - ▶ High-quality brazing process in the crimp area
 - ► Insulation sleeve halogen-free

Characteristics

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



Material

- Copper (ETP)
- Insulation sleeve: PA

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

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

Additional information

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

Nominal cross	Nominal							Dimens	ion mm					
section mm ²	size to DIN	Part No.	Colour	Hint	a1	a2	d1	d2	d3	d4	I	S	Weight/ pcs. ~kg	Packing unit/pcs
0.1 - 0.4		6192		*			1.0	2.3	5.0	2.2	14.0	0.5	0.020	100
		61925		*			1.0	2.6	5.0	2.2	14.0	0.5	0.020	100
		6193		*			1.0	3.3	5.0	2.2	14.0	0.5	0.020	100
		61935		*			1.0	3.8	6.5	2.2	16.0	0.5	0.025	100
		6194		*			1.0	4.4	7.0	2.2	16.0	0.5	0.025	100
		6195		*			1.0	5.4	8.0	2.2	15.0	0.5	0.025	100
	2.5 - 1	62025			5	10.5	1.6	2.8	6.0	4.5	16.5	0.8	0.060	100
	3.0 - 1	6203			5	10.5	1.6	3.2	6.0	4.5	16.5	0.8	0.060	100
	3.5 - 1	62035			5	10.5	1.6	3.7	6.0	4.5	16.5	0.8	0.550	100
0.5 - 1	4.0 - 1	6204			5	10.5	1.6	4.3	8.0	4.5	17.5	0.8	0.070	100
	5.0 - 1	6205			5	10.5	1.6	5.3	10.0	4.5	18.5	0.8	0.090	100
		6206		*	5	10.5	1.6	6.5	11.0	4.5	20.5	0.8	0.080	100
		6208		*	5	10.5	1.6	8.4	14.0	4.5	22.5	0.8	0.130	100
		62010		*	5	10.5	1.6	10.5	18.0	4.5	24.5	0.8	0.130	100
	3.0 - 2.5	6303			5	11.5	2.3	3.2	6.0	5.0	17.5	8.0	0.065	100
	3.5 - 2.5	63035			5	11.0	2.3	3.7	6.0	5.1	17.5	0.8	0.065	100
	4.0 - 2.5	6304			5	11.5	2.3	4.3	8.0	5.1	18.5	0.8	0.080	100
1.5 - 2.5	5.0 - 2.5	6305			5	11.5	2.3	5.3	10.0	5.1	20.5	8.0	0.090	100
	6.0 - 2.5	6306			5	11.5	2.3	6.5	11.0	5.1	22.5	0.8	0.110	100
	8.0 - 2.5	6308			5	11.5	2.3	8.4	14.0	5.1	23.5	8.0	0.130	100
		63010		*	5	11.5	2.3	10.5	18.0	5.1	25.5	8.0	0.160	100
	4.0 - 6	6504			6	12.5	3.6	4.3	8.0	6.5	20.5	1.0	0.140	100
4 - 6	5.0 - 6	6505			6	12.5	3.6	5.3	10.0	6.5	21.5	1.0	0.160	100
	6.0 - 6	6506			6	12.5	3.6	6.5	11.0	6.5	22.5	1.0	0.170	100
7 0	8.0 - 6	6508			6	12.5	3.6	8.4	14.0	6.5	25.5	1.0	0.220	100
	10.0 - 6	65010			6	12.5	3.6	10.5	18.0	6.5	27.5	1.0	0.290	100
		65012		*	6	12.5	3.6	13.0	18.0	6.5	27.5	1.0	0.320	100



Insulated solderless terminals, fork type









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



Characteristics

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



- Copper (ETP)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

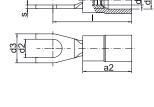
Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

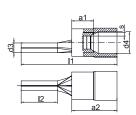
Nominal cross	Nominal				Dimension mm									
section mm ²	size to DIN	Part No.	Colour	Hint	a1	a2	d1	d2	d3	d4	1	S	Weight/ pcs. ~kg	Packing unit/pcs
0.1 - 0.4		619C3		*				3.2	5.0		14.0	0.5	0.020	100
	3.0 - 1	620C3			5	10.5	1.6	3.2	6.0	4.5	16.5	0.8	0.060	100
	3.5 - 1	620C35			5	10.5	1.6	3.7	6.8	4.5	17.5	0.8	0.060	100
0.5 - 1	4.0 - 1	620C4			5	10.5	1.6	4.3	6.8	4.5	17.5	0.8	0.070	100
	5.0 - 1	620C5			5	10.5	1.6	5.3	10.0	4.5	18.5	0.8	0.090	100
		620C6		*	5	10.5	1.6	6.5	11.0	4.5	20.5	0.8	0.080	100
	3.0 - 2.5	630C3			5	11.5	2.3	3.2	6.0	5.1	17.5	0.8	0.060	100
	3.5 - 2.5	630C35			5	11.5	2.3	3.7	6.8	5.1	18.5	0.8	0.065	100
1.5 - 2.5	4.0 - 2.5	630C4			5	11.5	2.3	4.3	6.8	5.1	18.5	0.8	0.080	100
	5.0 - 2.5	630C5			5	11.5	2.3	5.3	10.0	5.1	20.5	0.8	0.090	100
	6.0 - 2.5	630C6			5	11.5	2.3	6.5	11.0	5.1	22.5	0.8	0.110	100
	4.0 - 6	650C4			6	12.5	3.6	4.3	8.0	6.5	20.5	1.0	0.140	100
	5.0 - 6	650C5			6	12.5	3.6	5.3	10.0	6.5	21.5	1.0	0.160	100
4 - 6	6.0 - 6	650C6			6	12.5	3.6	6.5	11.0	6.5	22.5	1.0	0.170	100
	8.0 - 6	650C8			6	12.5	3.6	8.4	14.0	6.5	25.5	1.0	0.220	100
	10.0 - 6	650C10			6	12.5	3.6	10.5	18.0	6.5	27.5	1.0	0.280	100



Cable connections, insulated and non insulated

Insulated pin terminals







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



Characteristics

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



Material

- Copper (ETP)
- Insulation sleeve: PA

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

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

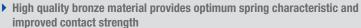
Nominal cross	Nominal						Dimens	sion mm				
section mm²	size to DIN	Part No.	Colour	Hint	a1	a2	d3	d4	l1	12	Weight/ pcs. ~kg	Packing unit/pcs
0.1 - 0.4		704		*			1.4		18.0	9.0	0.020	100
0.5.1	4	705			5	10.5	1.9	4.5	22.0	10.0	0.065	100
0.5 - 1	1	705K		*	5	10.5	1.9	4.5	18.0	6.0	0.060	100
		710			5	11.5	1.9	5.1	23.0	10.0	0.065	100
1.5 - 2.5	2.5	710K		*	5	11.5	1.9	5.1	19.5	6.5	0.060	100
		710L		*	5	11.5	1.9	5.1	27.5	16.0	0.100	100
4 - 6	6	715			6	12.5	2.7	6.5	26.0	11.0	0.160	100

Insulated pin receptacles











Characteristics

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



Material

- Bronze (CuSnZn)
- Insulation sleeve: PVC

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

1.5 - 2.5 mm² and 4 - 6 mm² not CSA-tested

	Dowl		Dimens	sion mm		
Nominal cross section mm ²	Part No.	Colour	Pin dia.	11	Weight/pcs. ~kg	Packing unit/pcs
0.5 - 1	920		4	22	0.060	100
1.5 - 2.5	930		5	22	0.120	100
4 - 6	950		5	22	0.125	100

Insulated pin receptacles





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



Characteristics

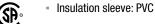
Cross-section-dependent colour-coding





Material

Brass (CuZn)





Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

1.5 - 2.5 mm² and 4 - 6 mm² not CSA-tested

Naminal anna andian	Dowl			Dimension mm				
Nominal cross section mm ²	Part No.	Colour	Pin dia.	l1	12	Weight/pcs. ~kg	Packing unit/pcs	
0.5 - 1	1020		4	22	9	0.060	100	
1.5 - 2.5	1030		5	22	9	0.075	100	
4 - 6	1050		5	22	9	0.110	100	



Insulated pin receptacles, fully insulated







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

Cu

Characteristics



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

Material

- Bronze (CuSnZn)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

4 - 6 mm² not CSA-tested

Naminal anna andian	Part			Dimension mm			
Nominal cross section mm ²	Part No.	Colour	Pin dia.	l1	S	Weight/pcs. ~kg	Packing unit/pcs
0.5 - 1	920V		4	24	0.38	0.065	100
4 - 6	950V		5	27	0.40	0.150	100

Insulated pin receptacles, fully insulated











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

- High quality bronze material provides optimum spring characteristic and improved contact strength
- Fast processing as no additional insulation of the crimped connection is required
- Insulation sleeve halogen-free

Characteristics



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

Material

- Bronze (CuSnZn)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

1.5 - 2.5 mm² and 4 - 6 mm² not CSA-tested

Nominal cross section	Dead			Dimension mm			
nominal cross section mm ²	Part No.	Colour	Pin dia.	l1	12	Weight/pcs. ~kg	Packing unit/pcs
0.5 - 1	1020V		4	25	11	0.065	100
1.5 - 2.5	1030V		5	25	11	0.080	100
4 - 6	1050V		5	27	13	0.120	100



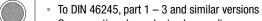
Insulated receptacles, tinned brass

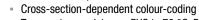


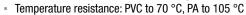


▶ For fine and superfine stranded conductors, e.g. to EN 60228 Cl. 5 and 6

Characteristics







Material



Brass (CuZn)

Insulation sleeve: PVC/PA

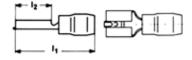
Surface

Tin-plated to protect against corrosion

Technical instructions

Tool: see page 1.157

• You will find further information on the cable descriptions in the technical appendix, page i-6



Nominal cross section Nominal						Dimens	sion mm	Insulation	Maight/pag	Packing
mm ²	size to DIN	Part No.	Colour	Tab Thickn.	Tab Width	l1	12	material	Weight/pcs. ~kg	unit/pcs
		8201		0.5	2.8	17.5	8.0	PVC	0.035	100
		8201A		0.8	2.8	17.5	8.0	PVC	0.045	100
0.5.1		8202		0.5	4.8	18.0	6.0	PVC	0.065	100
0.5 - 1	4.8 - 1	8203		0.8	4.8	18.0	6.0	PVC	0.065	100
	6.3 - 1	720		0.8	6.3	22.0	7.5	PVC	0.090	100
		7208		0.8	7.7	25.0	9.5	PVC	0.110	100
		8301		0.5	2.8	18.0	8.0	PA	0.050	100
		8301A		0.8	2.8	18.0	8.0	PA	0.060	100
45.05		8302		0.5	4.8	18.0	6.0	PVC	0.070	100
1.5 - 2.5	4.8 - 2.5	8303		0.8	4.8	18.0	6.0	PVC	0.070	100
	6.3 - 2.5	730		0.8	6.3	21.0	7.4	PVC	0.090	100
		7308		0.8	7.7	25.0	9.5	PVC	0.115	100
		8503		0.8	4.8	23.0	7.5	PA	0.138	100
4 - 6	6.3 - 6	750		0.8	6.3	21.0	7.5	PVC	0.100	100
		7509		1.2	9.5	26.5	12.0	PVC	0.150	100

Insulated receptacles, tinned bronze





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



Characteristics

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



Material

- Bronze (CuSnZn)
- Insulation sleeve: PVC

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Nominal	Naminal sins					Dimens	ion mm	laculation	Maiaht/naa	Dacking unit/
cross section mm ²	Nominal size to DIN	Part No.	Colour	Tab Thickn.	Tab Width	11	12	Insulation material	Weight/pcs. ~kg	Packing unit/ pcs
0.5 - 1	6.3 - 1	720BZ		0.8	6.3	22	7.5	PVC	0.09	100
1.5 - 2.5	6.3 - 2.5	730BZ		0.8	6.3	21	7.4	PVC	0.09	100
4 - 6	6.3 - 6	750BZ		0.8	6.3	21	7.5	PVC	0.10	100

Insulated receptacles, multiple type





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



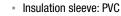
Characteristics

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



Material

Brass (CuZn)





Surface

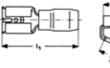
- Tin-plated to protect against corrosion



- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Naminal areas	Dowl					Dimension mm		luovilation	Weight/pcs.	Packing unit/
Nominal cross section mm ²	Part No.	Colour	Tab Thickn.	Tab Width	l1	12	13	Insulation material	weight/pcs. ~kg	Packing unit/ pcs
0.5 - 1	720AZ		0.8	6.3	22	7.5	8	PVC	0.11	100
1.5 - 2.5	730AZ		0.8	6.3	22	7.5	8	PVC	0.11	100
4 - 6	750AZ		0.8	6.3	25	8.0	8	PVC	0.18	100









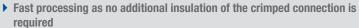
Insulated receptacles, fully insulated











Characteristics



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



Material

Brass (CuZn)

Insulation sleeve: PVC/PA

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157

You will find further information on the cable descriptions in the technical appendix, page i-6

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Nominal cross	Part				Dimens	ion mm	Insulation		
section mm ²	No.	Colour	Tab Thickn.	Tab Width	11	12	material	Weight/pcs. ~kg	Packing unit/pcs
	8201V		0.5	2.8	19.0	5.5	PA	0.07	100
	8201AV		0.8	2.8	19.0	5.5	PA	0.07	100
0.5 - 1	8202V		0.5	4.8	20.0	7.0	PVC	0.10	100
	8203V		0.8	4.8	20.0	7.0	PVC	0.10	100
	720V		0.8	6.3	21.0	7.5	PVC	0.08	100
	8301V		0.5	2.8	20.0	8.0	PVC	0.14	100
	8301AV		0.8	2.8	20.0	8.0	PVC	0.14	100
1.5 - 2.5	8302V		0.5	4.8	20.5	7.0	PVC	0.11	100
	8303V		0.8	4.8	20.5	7.0	PVC	0.11	100
	730V		0.8	6.3	21.0	7.5	PVC	0.15	100
	8502V		0.5	4.8	20.5	9.5	PVC	0.15	100
4 - 6	8503V		0.8	4.8	20.5	9.5	PVC	0.15	100
	750V		0.8	6.3	25.5	11.5	PVC	0.16	100

Insulated tabs





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

Characteristics

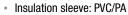


- Cross-section-dependent colour-coding
- Temperature resistance: PVC to 70 °C, PA to 105 °C



Material

Brass (CuZn)





Surface

Tin-plated to protect against corrosion

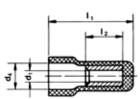
Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Naminal arasa	Dort			Tala NACAMA	Dimens	ion mm	Inquistion		
Nominal cross section mm ²	Part No.	Colour	Tab Thickn.	Tab Width	11	12	Insulation material	Weight/pcs. ~kg	Packing unit/pcs
	8201C		0.5	2.8	22.0	11.5	PA	0.040	100
	8201B		0.8	2.8	14.6	5.5	PVC	0.060	100
0.5 - 1	8202B		0.5	4.8	22.0	11.5	PA	0.070	100
	8203B		0.8	4.8	22.0	11.5	PA	0.070	100
	820		0.8	6.3	22.0	8.0	PVC	0.060	100
	8302B		0.5	4.8	22.0	11.5	PA	0.070	100
1.5 - 2.5	8303B		0.8	4.8	22.0	11.5	PA	0.070	100
	830		0.8	6.3	22.0	8.0	PVC	0.065	100
	8502B		0.5	4.8	24.5	10.5	PA	0.120	100
4 - 6	8503B		0.8	4.8	24.5	10.5	PA	0.120	100
•	850		0.8	6.3	22.0	8.0	PVC	0.110	100

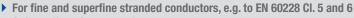
Insulated end-splices







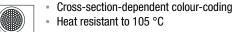




- ► Safe sealing of open conductors
- Insulation sleeve halogen-free



Characteristics





Material

- Copper (ETP)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

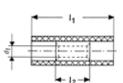
Manda dana	Dout			Dimens	sion mm			
Nominal cross section mm ²	Part No.	Colour	d1	d2	l1	12	Weight/pcs. ~kg	Packing unit/pcs
1.5 - 2.5	1130		2.3	5.2	16	7	0.05	100
4 - 6	1150		3.6	7.0	18	7	0.14	100





Insulated butt connectors







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



Characteristics

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



Material

- Copper (ETP)
- Insulation sleeve: PA

Surface

- Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

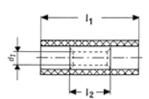
Additional information

0.1 - 0.4 mm² not CSA-tested

Naminal areas asstica	Dowl			Dimension mm			
Nominal cross section mm ²	Part No.	Colour	d1	l1	12	Weight/pcs. ~kg	Packing unit/pcs
0.1 - 0.4	669		1.2	20	12	0.030	100
0.5 - 1	670		1.6	25	15	0.090	100
1.5 - 2.5	680		2.3	25	15	0.115	100
4 - 6	700		3.6	27	15	0.250	100

Insulated butt connectors with heat shrink insulation









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



Characteristics

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

Material

- Copper (ETP)
- Insulation sleeve: PE

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

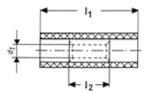
Naminal areas section	Dout			Dimension mm			
Nominal cross section mm ²	Part No.	Colour	d1	l1	12	Weight/pcs. ~kg	Packing unit/pcs
0.5 - 1	670WS		1.6	36	15	0.12	100
1.5 - 2.5	680WS		2.3	36	15	0.15	100
4 - 6	700WS		3.4	41	15	0.25	100

Electrical connection systems

Cable connections, insulated and non insulated

Insulated parallel connectors









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

Characteristics

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



Material

- Copper (ETP)
- Insulation sleeve: PA

Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.157
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

- 0.1 - 0.4 mm² not CSA-tested

Nominal cross section	Part			Dimension mm			
mm ²	No.	Colour	d1	l1	12	Weight/pcs. ~kg	Packing unit/pcs
0.1 - 0.4	769		1.2	13	5	0.020	100
0.5 - 1	770		1.6	17	7	0.030	100
1.5 - 2.5	780		2.3	17	7	0.035	100
4 - 6	790		3.6	21	7	0.105	100



Non-insulated receptacles





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



Characteristics

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



Material

Brass (CuZn)



Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.158
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

* = nickel-plated steel version also available, Part Number appendix "ST"

Naminal areas	Nominal		T-1-				Dimens	ion mm			\\\-:-\-\/	Dealder
Nominal cross section mm ²	size to DIN	Part No.	Tab Thickn.	Tab Width	a1	a2	11	12	13	S	Weight/ pcs. ~kg	Packing unit/pcs
		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
05.1	B 2.8 - 1	18201A	0.8	2.8	5.5	2.5	14.0	6.3	3.3	0,35	0.025	100
0.5 - 1		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
15 05	4.8 - 2.5	18303	0.8	4.8	6.0	3.4	15.6	6.0	3.8	0.35	0.055	100
1.5 - 2.5	6.3 - 2.5	*1730	0.8	6.3	8.5	4.5	19.0	7.4	4.0	0.45	0.082	100
4 - 6	6.3 - 6	*1750	0.8	6.3	8.5	4.5	19.0	7.4	4.0	0.45	0.100	100

Non-insulated receptacles, multiple type





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



Characteristics

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



Material

Brass (CuZn)



Surface

- Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.158
- You will find further information on the cable descriptions in the technical appendix, page i-6

Additional information

* = corresponds to DIN 46345

		- .					Dimensi	ion mm				5
Nominal cross section mm ²	Part No.	Tab Thickn.	Tab Width	Hint	a1	a2	11	12	13	s	Weight/ pcs. ~kg	Packing unit/pcs
0.5 - 1	18203AZ	8.0	4.8		6.0	3.4	15.6	7	6.0	0.38	0.09	100
15.05	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











Non-insulated receptacles with locking latch





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



Characteristics

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



Material

Brass (CuZn)



Surface

Tin-plated to protect against corrosion

Technical instructions

- Tool: see page 1.158
- You will find further information on the cable descriptions in the technical appendix, page i-6

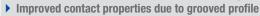
Nominal	Part					Dimens	ion mm			Weight/pee	Packing
cross section mm ²	No.	Tab Thickn.	Tab Width	a1	a2	11	12	13	s	Weight/pcs. ~kg	unit/pcs
0.5 - 1	2720	0.8	6.3	8.5	4.5	19.2	7.4	7	0.38	0.070	100
1.5 - 2.5	2730	0.8	6.3	8.5	4.5	19.2	7.4	7	0.38	0.075	100
4 - 6	2750	0.8	6.3	8.5	4.5	19.2	7.4	7	0.38	0.090	100

Non-insulated receptacles with lateral conductor connector











Material

Brass (CuZn)



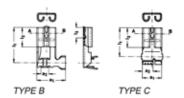
Surface

Tin-plated to protect against corrosion



Technical instructions

- Tool: see page 1.158
- You will find further information on the cable descriptions in the technical appendix, page i-6



Nominal	Dowt						Dimens	ion mm			Wainbt/	Doolsing
cross section mm²	Part No.	Tab Thickn.	Tab Width	Тур	a1	a2	11	12	13	14	Weight/ pcs. ~kg	Packing unit/pcs
0.5 - 1	3720	8.0	6.3	В	11.0	3.0	12.5	7.4	4.0	7.2	0.080	100
0.5 - 1.5	3725	8.0	6.3	С	7.5	4.0	11.00	7.4	4.0	7.2	0.085	100
1.5 - 2.5	3735	0.8	6.3	В	11.0	3.0	13.5	7.0	4.0	7.2	0.085	100



Non-insulated tabs







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



Material

Brass (CuZn)



Surface

Tin-plated to protect against corrosion



Technical instructions

- Tool: see page 1.158
- You will find further information on the cable descriptions in the technical appendix, page i-6

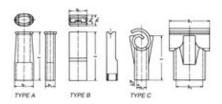
Additional information

* = dimensions in the plug sector to DIN 46244

Nominal cross	Nominal							D	imension m	m			
section mm ²	size to DIN	Part No.	Tab Thickn.	Tab Width	Тур	Hint	a1	a2	d2	11	12	Weight/ pcs. ~kg	Packing unit/pcs
		2235	0.8	2.8	Α	*	6.0	3.2	1.30	22.5	12.7	0.045	100
0.5 - 1	46343 B6.3 - 1	2220	0.8	6.3	Α		8.2	4.0	1.65	28.0	16.0	0.085	100
45.05	46248 A6.3 - 2.5	1830	0.8	6.3	В		9.0	4.5	1.65	20.0	8.0	0.065	100
1.5 - 2.5	46343 B6.3 - 2.5	2230	0.8	6.3	Α		8.2	4.0	1.65	28.0	16.0	0.090	100
4 - 6	46343 B6.3 - 6	2250	0.8	6.3	Α		8.2	4.0	1.65	28.0	16.0	0.100	100

Insulation sleeves





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

Characteristics

For post-insulation of crimped non-insulated receptacles

Material

PA / PE / PVC

Nominal	Naminal					Dimension mm		Inquistion		Waight/nas	Doolsing
cross section mm²	Nominal size to DIN	Part No.	Colour	Тур	b1	1	h1	Insulation material	for item	Weight/pcs. ~kg	Packing unit/pcs
0.5 - 1	2.8	2755		Α	5.0	20.0	3.5	PE	18251,18251A, 18201A	0.015	100
0.5 - 1.5	4.8	2760		Α	7.0	20.0	4.0	PE	18202,18203	0.015	100

see next page



Insulation sleeves

Nominal	Nominal					Dimension mm		Insulation		Waight/noa	Doolring
cross section mm ²	Nominal size to DIN	Part No.	Colour	Тур	b1	1	h1	material	for item	Weight/pcs. ~kg	Packing unit/pcs
0.5.0.5		2770		Α	12.5	23.0	8.5	PE	1720,1730	0.035	100
0.5 - 2.5		2775		Α	9.5	25.0	5.0	PE	1820,1830	0.030	100
0.5 - 4	6.3	2780		Α	9.5	25.0	6.0	PE	1720,1730, 1820,1830	0.030	100
		2785		В	9.2	24.5	5.6	PA	1720,1730,1750, 2720,2730,2750	0.055	100
0.5 - 6		2790		С	13.5	15.0	3.1	PVC	3720,3725, 3735	0.060	100

Non-insulated tabs, angled version





Characteristics

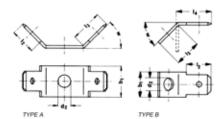
- To DIN 46342, part 1 and similar versions
- Dimensions in the plug sector to DIN 46244

Material

Brass (CuZn)

Surface

Tin-plated to protect against corrosion

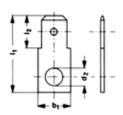


Naminal		Tab					Dimens	sion mm			Mainht/	Doolsing
Nominal size to DIN	Part No.	Tab Thickn.	Tab Width	Тур	b1	d2	12	13	14	W	Weight/ pcs. ~kg	Packing unit/pcs
_	2040	8.0	2.8	Α	2.8	3.2	5.5	2.2		60°	0.040	100
_	2045	0.8	6.3	Α	6.3	4.3	8.0	4.0		45°	0.160	100
	2060	0.8	6.3	В	6.3	4.3	8.0	4.0	10.7	30°	0.085	100
	2070	0.8	6.3	В	6.3	3.2	8.0	4.0	10.7	45°	0.085	100
	2075	0.8	6.3	В	6.3	4.3	8.0	4.0	10.7	45°	0.085	100
B 6.3 - 0.8	2080	0.8	6.3	В	6.3	4.3	8.0	4.0	10.7	45°	0.085	100
	2083	0.8	6.3	В	6.3	5.3	8.0	4.0	10.7	45°	0.080	100
	2090	0.8	6.3	В	6.3	5.3	8.0	4.0	10.7	45°	0.080	100
	2105	0.8	6.3	В	6.3	3.2	8.0	4.0	11.5	90°	0.085	100
C 6.3 - 0.8	2115	0.8	6.3	В	6.3	4.3	8.0	4.0	11.5	90°	0.090	100



Non-insulated tabs, straight version





TYPE A

Characteristics

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

Material

Brass (CuZn)

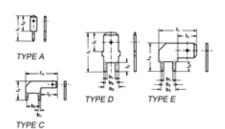
Surface

- Tin-plated to protect against corrosion

No actional							Mainhten	De alde e			
Nominal size to DIN	Part No.	Tab Thickn.	Tab Width	Тур	b1	d2	l1	12	s	Weight/pcs. ~kg	Packing unit/pcs
	2123	0.8	2.8	Α	4.5	3.1	13.0	5.5	8.0	0.028	100
A 6.3 - 0.8	2140	0.8	6.3	Α	8.0	4.3	19.0	8.0	0.8	0.086	100
	2145	0.8	6.3	Α	8.0	5.3	19.0	8.0	0.8	0.080	100

Non-insulated tabs for soldering





▶ Material used offers very good soldering characteristics

Characteristics

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

Material

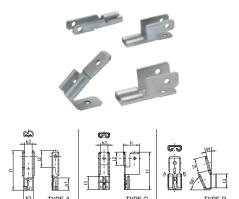
Brass (CuZn)

Surface

Tin-plated to protect against corrosion

Doub	Tab				Dimension mm							Mainht/	Doolsing
Part No.	Tab Thickn.	Tab Width	Тур	b1	b2	b3	l1	12	13	14	S	Weight/ pcs. ~kg	Packing unit/pcs
2010	8.0	2.8	Α				10.5	6.5			8.0	0.015	100
2020	0.5	2.8	С	1.0	5			7.1	8	13.4	0.5	0.025	100
2025	0.8	2.8	С	1.0	5			7.1	8	13.4	0.8	0.040	100
2030	0.8	6.3	D	3.5	5	6.4	16.0	8.0	4	12.0	0.8	0.065	100
2035	0.8	6.3	Е	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

Materia

Brass (CuZn)

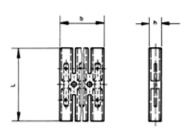
Surface

Tin-plated to protect against corrosion

Dont	T-1-	Tak			Dimension mm								
Part No.	Tab Thickn.	Tab Width	Тур	a1	b2	b3	11	12	13	h	w	Weight/pcs. ~kg	Packing unit/pcs
735	0.8	2.8	Α	5	3.2	3.1	16.0	6.7				0.060	100
755	0.8	4.8	С		4.4		20.0	7.0	7.0	8.0		0.155	100
775	0.8	6.3	С				20.5	12	7.5	9.6		0.200	100
725	0.8	6.3	D					8	7.5		15°	0.115	100

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





▶ No additional insulation required

Characteristics

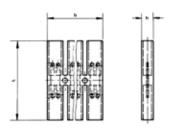
- With tabs 2.8, 4.8 or 6.3 x 0.8 mm
- 1, 2 and 12-poles
- Further poles on request

	Part				Dimens	sion mm		Bolt size mm				Packing
No.	Tab Thickn.	Tab Width	Poles	b	1	h	S	Insulation material	Distance	Diameter	Weight/ pcs. ~kg	unit/pcs
Tab Widt	th 2.8 mm											
8101	0.8	2.8	1	7.5	35	5.5	0.8	PVC			0.2	100
8102	0.8	2.8	2	15.0	35	5.5	0.8	PVC		2.7	0.3	50
81012	0.8	2.8	12	88.0	35	5.5	0.8	PVC	75	2.7	1.6	10
Tab Widt	th 4.8 mm											
8051	8.0	4.8	1	12.5	28	6.6	0.8	PVC			0.25	100
8052	0.8	4.8	2	25.0	28	6.6	0.8	PVC		3.2	0.50	50
80512	0.8	4.8	12	142.0	28	6.6	0.8	PVC	120	3.2	2.80	10
Tab Widt	th 6.3 mm											
8001	0.8	6.3	1	12.5	28	6.6	0.8	PVC			0.30	100
8002	0.8	6.3	2	25.0	28	6.6	0.8	PVC		3.7	0.55	50
80012	0.8	6.3	12	142.0	28	6.6	0.8	PVC	120	3.7	3.20	10



Polyamide connector, tab width 2.8 and 6.3 mm





▶ No additional insulation required

Characteristics

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

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

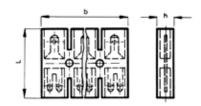
Flexible circuit distributor, tab width 2.8 mm

▶ No additional insulation required





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



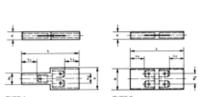
Doub				Dimension mm			la sudadi sa	Bolt size mm		\A/=: -+/	Packing	
Part No.	Tab Thickn.	Tab Width	Poles	b	ı	h	S	Insulation material	Distance	Diameter	Weight/ pcs. ~kg	unit/pcs
8151	0.8	2.8	1	12.5	28	7	0.8	PVC			0.25	100
81512	0.8	2.8	12	147.0	28	7	0.8	PVC	123	3.2	2.80	10



Cable connections, insulated and non insulated

Flexible circuit distributor, tab width 6.3 mm





▶ No additional insulation required

Characteristics

With tabs 6.3 x 0.8 mm

	. .					[Dimension mr	m					Packing
Part No.	Tab Thickn.	Tab Width	Тур	b	b1	b2	1	l1	h	S	Insulation material	Weight/ pcs. ~kg	Packing unit/pcs
816	0.8	6.3	Α	21	11.3	9	53	15	7.5	0.8	PVC	0.60	10
817	0.8	6.3	В	20	11.3	9	51	13	7.0	0.8	PVC	0.65	10





Tool application chart

Insulated cable connections

	Crimping range	Crim	oing Tool	Catalog		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	0,1 - 1	K80		2.11		\bigcirc
crimping tools	0,5 - 6	K82A		2.12		\circ
		K82T		2.13		$\overline{}$
Mechanical, electrical,	0,1 - 16	K50		2.23	2.83	0
pneumatic crimping tools with interchangeable		EK50ML		6.6	2.83	0
	0,5 - 6	K507		2.22		\circ



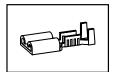
Tool application chart

Butt connectors with heat shrink insulation

	Crimping range	Crimp	ing Tool	Catalog		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical,	0,1 - 16	K50		2.23	2.83	
pneumatic crimping tools with interchangeable		EK50ML		6.6	2.83	$\overline{}$
die / head	0,5 - 6	K82T		2.13		0

Electrical connection systems

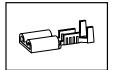
Cable connections, insulated and non insulated



Tool application chart

Non-insulated receptacles, straight type

	Crimping range	Cri	imping Tool	Catalog		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical	0,5 - 2,5	K582		2.14		\odot
crimping tools	0,5 - 6	K592		2.14		\odot
Mechanical, electrical,	0,25 - 6	K50		2.23	2.83	\odot
pneumatic crimping tools with interchangeable die / head		EK50ML		6.6	2.83	\otimes



Tool application chart

Non-insulated receptacles, with lateral conductor connector

	Crimping range	Crimp	ing Tool	Catalogu		
Tool type	corresponds to nominal cross-section mm ²	Part No.	Crimping head / adapter	Crimping Tool	Crimping die	Crimp profile
Mechanical, electrical,	3720, 3735	K50		2.23	2.83	\odot
pneumatic crimping tools with interchangeable		EK50ML		6.6	2.83	\odot
die / head	3725	K50		2.23	2.83	\odot
		EK50ML		6.6	2.83	\odot



PRACTICAL POCKET BOXES AND ASSORTMENT BOXES

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



In brief

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



▶ Practical and always to hand

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

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



▶ Our range, your order

We have already compiled an assortment for you.

We offer pre-filled boxes for various applications.

You can also fill the robust box yourself if you want.

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



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





▶ Pocket box made from impact-resistant plastic

Characteristics

Stackable and resealable

Item Pocket box w	ith cable end-sleeves 0.25 - 1 mm² to DIN 46228 p	art 1	Part No. ST23B
Scope of supply	Description	l mm	Quantity
ST23L 695V	Pocket box Cable end-sleeve, 0.25 mm², 5 mm	5	1000
705V	Cable end-sleeve, 0.34 mm², 5 mm, Cu tinned	5	1000
716V	Cable end-sleeve, 0.75 mm ² , 6 mm	6	1000
71S6V	Cable end-sleeve, 0.5 mm ² , 6 mm, Cu tinned	6	500
72S6V	Cable end-sleeve, 1.0 mm ² , 6 mm	6	500

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





▶ Pocket box made from impact-resistant plastic

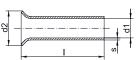
Characteristics

Stackable and resealable

Item Pocket box w	Part No. ST21B		
Scope of supply	Description	I mm	Quantity
ST21L	Pocket box		1
71S6V	Cable end-sleeve, 0.5 mm², 6 mm, Cu tinned	6	1000
716V	Cable end-sleeve, 0.75 mm², 6 mm	6	500
72S6V	Cable end-sleeve, 1.0 mm², 6 mm	6	500
727V	Cable end-sleeve, 1.5 mm ² , 7 mm	7	500
737V	Cable end-sleeve, 2.5 mm², 7 mm	7	500

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





▶ Pocket box made from impact-resistant plastic

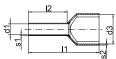
Characteristics

Item Pocket box wi	Part No. ST22B		
Scope of supply	Description Pocket box	l mm	Quantity 1
749V	Cable end-sleeve, 4 mm², 9 mm	9	200
7512V	Cable end-sleeve, 6 mm², 12 mm, Cu tinned	12	100
7612V	Cable end-sleeve, 10 mm², 12 mm, Cu tinned	12	70
7712V	Cable end-sleeve, 16 mm², 12 mm, Cu tinned	12	70



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





▶ Pocket box made from impact-resistant plastic

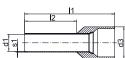
Characteristics

Stackable and resealable

Item				Part No.
Pocket box wi	th twin ca	ble end-sleeves 2 x 0.75 - 2 x 2.5 mm ²		ST15B
Scope of supply	Colour	Description	I2 mm	Quantity
ST15L		Pocket box		1
8708		Insl. twin cable end-sleeve, 2 x 0.75 mm ²	8	50
8718		Insl. twin cable end-sleeve, 2 x 1 mm ²	8	50
8728		Insl. twin cable end-sleeve, 2 x 1.5 mm²	8	50
87310		Insl. twin cable end-sleeve, 2 x 2.5 mm ²	10	50

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





▶ Pocket box made from impact-resistant plastic

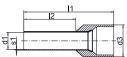
Characteristics

Stackable and resealable

Item				Part No.
Pocket box with	n insl. cable	e end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4, col	our code 1	ST1B
Scope of supply	Colour	Description	I2 mm	Quantity
ST1L		Pocket box		1
1690		Insl. cable end-sleeve, 0.5 mm², 14 mm	8	50
170W		Insl. cable end-sleeve, 0.75 mm², 14.6 mm	8	100
171G		Insl. cable end-sleeve, 1 mm ² , 14.6 mm	8	100
172R0		Insl. cable end-sleeve, 1.5 mm², 14.6 mm	8	100
173B		Insl. cable end-sleeve, 2.5 mm², 15.2 mm	8	50

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





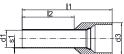
▶ Pocket box made from impact-resistant plastic

Characteristics

Item				
Pocket box wi	ith insl. ca	ble end-sleeves 0.5 - 2.5 mm², DIN 46228 Pa	rt 4	ST11B
Scope of supply	Colour	Description	I2 mm	Quantity
ST11L		Pocket box		1
4698		Insl. Cable end-sleeve, 0.5 mm², 14 mm	8	50
4708		Insl. cable end-sleeve, 0.75 mm², 14 mm	8	100
4718		Insl. cable end-sleeve, 1 mm ² , 14 mm	8	100
4728		Insl. cable end-sleeve, 1.5 mm², 14 mm	8	100
4738		Insl. cable end-sleeve, 2.5 mm², 14 mm	8	50

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





▶ Pocket box made from impact-resistant plastic

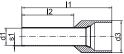
Characteristics

Stackable and resealable

Item				Part No.
Pocket box with insl. cable end-sleeves 0.5 - 2.5 mm², DIN 46228 Part 4, colour code 2				ST31B
Scope of supply	Colour	Description	I2 mm	Quantity
ST31L		Pocket box		1
1698		Insl. cable end-sleeve, 0.5 mm², 13 mm	8	50
1708		Insl. cable end-sleeve, 0.75 mm², 13.5 mm	6	100
1718		Insl. cable end-sleeve, 1 mm², 13.5 mm	8	100
1728		Insl. cable end-sleeve, 1.5 mm², 13.5 mm	8	100
1738		Insl. cable end-sleeve, 2.5 mm², 14.5 mm	8	50

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





▶ Pocket box made from impact-resistant plastic

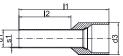
Characteristics

Stackable and resealable

Item Pocket box wit	Part No. ST12B			
Scope of supply	Colour	Description	I2 mm	Quantity
ST12L		Pocket box		1
47410		Insl. cable end-sleeve, 4 mm ² , 17 mm	10	50
47512		Insl. cable end-sleeve, 6 mm ² , 20 mm	12	20
47612		Insl. cable end-sleeve, 10 mm², 22 mm	12	20
47712		Insl. cable end-sleeve, 16 mm², 24 mm	12	10

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





▶ Pocket box made from impact-resistant plastic

Characteristics

Item	Part No.			
Pocket box with	n insl. cabl	e end-sleeves 4 - 16 mm², DIN 46228 Part 4, 0	colour code 1	ST2B
Scope of supply	Colour	Description	I2 mm	Quantity
ST2L		Pocket box		1
174GR		Insl. cable end-sleeve, 4 mm², 16.5 mm	10	50
175S		Insl. cable end-sleeve, 6 mm ² , 20 mm	12	20
176E		Insl. cable end-sleeve, 10 mm², 21.5 mm	12	20
177GR		Insl. cable end-sleeve, 16 mm², 22.2 mm	12	10



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



▶ Pocket box made from impact-resistant plastic

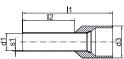
Characteristics

Stackable and resealable

Item	المحمد المحادة	le and elegane 4 10 mm² DIN 40000 Dent 4 4	andarus anda O	Part No.
POCKEL DOX WILL	n insi. cadi	le end-sleeves 4 - 16 mm², DIN 46228 Part 4, 0	colour code 2	ST32B
Scope of supply	Colour	Description	I2 mm	Quantity
ST32L		Pocket box		1
17410		Insl. cable end-sleeve, 4 mm², 16.5 mm	10	50
17512		Insl. cable end-sleeve, 6 mm ² , 20 mm	12	20
17612		Insl. cable end-sleeve, 10 mm², 21.5 mm	12	20
17712		Insl. cable end-sleeve, 16 mm², 23.5 mm	12	10

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





▶ Pocket box made from impact-resistant plastic

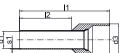
Characteristics

Stackable and resealable

Item				Part No.
Pocket box with	n insl. cable	e end-sleeves 0.25 - 1 mm², DIN 46228 Part 4, col	our code 1	ST3B
Scope of supply	Colour	Description	I2 mm	Quantity
ST3L		Pocket box		1
167H		Insl. cable end-sleeve, 0.25 mm², 10.4 mm	6	30
168T		Insl. cable end-sleeve, 0.34 mm², 10.4 mm	6	30
1690		Insl. cable end-sleeve, 0.5 mm², 14 mm	8	30
170W		Insl. cable end-sleeve, 0.75 mm², 14.6 mm	8	30
171G		Insl. cable end-sleeve, 1 mm², 14.6 mm	8	30

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





▶ Pocket box made from impact-resistant plastic

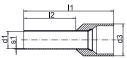
Characteristics

Item				Part No.
Pocket box with insl. cable end-sleeves 0.25 - 1 mm², DIN 46228 Part 4 & similar, colour code 1			ST13B	
Scope of supply	Colour	Description	I2 mm	Quantity
ST13L		Pocket box		1
167H		Insl. cable end-sleeve, 0.25 mm², 10.4 mm	6	30
168T		Insl. cable end-sleeve, 0.34 mm ² , 10.4 mm	6	30
4698		Insl. Cable end-sleeve, 0.5 mm², 14 mm	8	30
4708		Insl. cable end-sleeve, 0.75 mm ² , 14 mm	8	30
4718		Insl. cable end-sleeve, 1 mm², 14 mm	8	30

ST 33 B pocket box with insl. cable end-sleeves 0.25-1 mm²,

DIN 46228 Part 4 & similar, colour code 2





▶ Pocket box made from impact-resistant plastic

Characteristics

Stackable and resealable

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

Scope of supply	Colour	Description	I2 mm	Quantity
ST33L		Pocket box		1
1676		Insl. cable end-sleeve, 0.25 mm², 11 mm	6	30
1686		Insl. cable end-sleeve, 0.34 mm ² , 11 mm	6	30
1698		Insl. cable end-sleeve, 0.5 mm², 13 mm	6	30
1708		Insl. cable end-sleeve, 0.75 mm², 13.5 mm	8	30
1718		Insl. cable end-sleeve, 1 mm², 13.5 mm	8	30

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



▶ Pocket box made from impact-resistant plastic

Characteristics

Stackable and resealable

Item				Part No.
Pocket box with insulated cable end-sleeves 0.5 mm² to DIN 46228 part 4				
Scope of supply	Colour	Description	I2 mm	Quantity
4698		Insl. Cable end-sleeve, 0.5 mm², 14 mm	8	1000

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



▶ Pocket box made from impact-resistant plastic

Characteristics

Stackable and resealable

Item					
Pocket box wit	Pocket box with insulated cable end-sleeves 0.75 mm ² DIN 46228 part 4				
Scope of supply	Colour	Description	I2 mm	Quantity	
4708		Insl. cable end-sleeve, 0.75 mm², 14 mm	8	1000	

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



▶ Pocket box made from impact-resistant plastic

Characteristics

Item	Part No.			
Pocket box wit	GR4718D0			
Scope of supply	Colour	Description	I2 mm	Quantity
4718		Insl. cable end-sleeve, 1 mm², 14 mm	8	1000



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



▶ Pocket box made from impact-resistant plastic

Characteristics

Stackable and resealable

Item	Part No.			
Pocket box with	GR4728D0			
Scope of supply	Colour	Description	I2 mm	Quantity
4728		Insl. cable end-sleeve, 1.5 mm², 14 mm	8	1000

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



▶ Pocket box made from impact-resistant plastic

Characteristics

Stackable and resealable

Item	Part No.			
Pocket box wi	GR4738D0			
Scope of supply	Colour	Description	I2 mm	Quantity
4738		Insl. cable end-sleeve, 2.5 mm², 14 mm	8	1000

ST 5 L assortment of empty pocket boxes



▶ Pocket box made from impact-resistant plastic

Characteristics

- Stackable and resealable

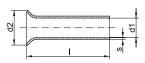
Item	Part No.
Assortment of pocket boxes	ST5L

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

727V

737V





▶ Hammer-tone finished assortment box

Cable end-sleeve, 1.5 mm², 7 mm

Cable end-sleeve, 2.5 mm², 7 mm

Ideal for workshop equipment

Item		Dimension mm	Part No.
Steel assort and crimpin		200 x 140 x 40	SK30B
Scope of supply	Description	l mm	Quantity
SK30L	OL Steel carrying case		1
K48	Crimping tool for cable end-sleeves 0.14 - 2.5 mm	n² 6	1
716V	Cable end-sleeve, 0.75 mm², 6 mm	6	1000
72S6V	Cable end-sleeve, 1.0 mm ² , 6 mm	6	1000

1000

1000

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



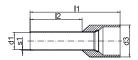


- ▶ Broad cable end-sleeve assortment appropriate crimping tool
- ▶ Hammer-tone finished assortment box
- **▶** Ideal for workshop equipment

Item		Dimension mm	Part No.
Steel assort and crimpin	ment box with cable end-sleeves g tool	285 x 155 x 45	SK32B
Scope of supply	Description	l mm	Quantity
SK32L	Steel carrying case		1
K3	Crimping tool for cable end-sleeves 0.5 - 16 mm ²		1
716V	Cable end-sleeve, 0.75 mm ² , 6 mm	6	1000
72S6V	Cable end-sleeve, 1.0 mm ² , 6 mm	6	1000
727V	Cable end-sleeve, 1.5 mm ² , 7 mm	7	1000
737V	Cable end-sleeve, 2.5 mm², 7 mm	7	500
749V	Cable end-sleeve, 4 mm², 9 mm	9	500
7510V	Cable end-sleeve, 6 mm², 10 mm	10	500
7618V	Cable end-sleeve, 10 mm², 18 mm	18	250
7718V	Cable end-sleeve, 16 mm², 18 mm	18	150

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





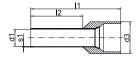
- ► Four of the most important insulated cable end-sleeve types in a steel carrying case including an appropriate crimping tool
- ▶ Hammer-tone finished assortment box
- ▶ Ideal for workshop equipment

Item	ltem			nension mm	Part No.
Steel assortment box with insl. cable end-sleeves and crimping tool		200 x 140 x 40		SK45B	
Scope of supply	Colour	Description		I2 mm	Quantity
SK30L		Steel carrying case			1
K48		Crimping tool for cable end-sleeves 0.14 - 2.5 mm ²		8	1
4708		Insl. cable end-sleeve, 0.75 mm², 14 mi	m	8	300
4718		Insl. cable end-sleeve, 1 mm², 14 mm		8	300
4728		Insl. cable end-sleeve, 1.5 mm², 14 mm	1	8	300
4738		Insl. cable end-sleeve, 2.5 mm ² , 14 mm	1		200



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





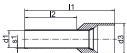
- ▶ Flexible use due to large cross-sectional range
- ▶ Hammer-tone finished assortment box
- ▶ Ideal for workshop equipment

Item			Dimension mm	Part No.
	Steel assortment box with insl. cable end-sleeves 2 and crimping tool		285 x 155 x 45	SK47B
Scope of supply	Colour	Description	I2 mm	Quantity
SK32L		Steel carrying case		1
K3		Crimping tool for cable end-sleeves 0.5 - 16 mm ²		1
4708		Insl. cable end-sleeve, 0.75 mm ² , 14 m	m 8	200
4718		Insl. cable end-sleeve, 1 mm ² , 14 mm	8	200
4728		Insl. cable end-sleeve, 1.5 mm², 14 mm	n 8	200
4738		Insl. cable end-sleeve, 2.5 mm², 14 mm	n 8	200
47410		Insl. cable end-sleeve, 4 mm ² , 17 mm	10	100
47512		Insl. cable end-sleeve, 6 mm ² , 20 mm	12	100
47618		Insl. cable end-sleeve. 10 mm ² . 28 mm	18	100

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

47718





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

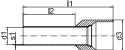
Insl. cable end-sleeve, 16 mm², 28 mm

Item			Dir	mension mm	Part No.
Plastic assortn	nent box v	with insl. cable end-sleeves and tools	395	5 x 295 x 106	SK303P
Scope of supply	Colour	Description		I2 mm	Quantity
K432		Automatic wire stripper K43/2 0.02 - 10 mm²			1
K303		Crimping tool for cable end-sleeves at twin cable end-sleeves 0.08 - 10 mm		8	1
4698		Insl. Cable end-sleeve, 0.5 mm², 14 m	nm	8	400
4708		Insl. cable end-sleeve, 0.75 mm ² , 14	mm	8	400
4718		Insl. cable end-sleeve, 1 mm ² , 14 mm	1	8	400
4728		Insl. cable end-sleeve, 1.5 mm ² , 14 m	ım	8	400
4738		Insl. cable end-sleeve, 2.5 mm², 14 m	ım	10	200
47410		Insl. cable end-sleeve, 4 mm ² , 17 mm	1	12	200
47512		Insl. cable end-sleeve, 6 mm², 20 mm	1	12	100
47612		Insl. cable end-sleeve, 10 mm², 22 m	m		100

50

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



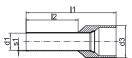


- ▶ With everything needed for conductor preparation
- ► The exact-shaped foam inlays of the case prevent the contents slipping even with severe impacts

Item			Dir	mension mm	Part No.
Plastic assortment box with insl. cable end-sleeves and crimping tool		27	5 x 230 x 83	SK303S	
Scope of supply	Colour	Description		I2 mm	Quantity
K303		Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm ²			1
4698		Insl. Cable end-sleeve, 0.5 mm², 14 m	m	8	100
4708		Insl. cable end-sleeve, 0.75 mm², 14 n	nm	8	100
4718		Insl. cable end-sleeve, 1 mm ² , 14 mm		8	100
4728		Insl. cable end-sleeve, 1.5 mm², 14 mi	m	8	100
4738		Insl. cable end-sleeve, 2.5 mm², 14 mi	m	10	50
47410		Insl. cable end-sleeve, 4 mm ² , 17 mm		12	50
47512		Insl. cable end-sleeve, 6 mm², 20 mm		18	30
47612		Insl. cable end-sleeve, 10 mm ² , 22 mn	n	18	30

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





- ▶ With everything needed for conductor preparation
- ▶ Ideal for workshop equipment

Item			Dimension mm	Part No.
Steel assortment box with insl. cable end-sleeves and tools		370 x 210 x 40	SK43NB	
Scope of supply	Colour	Description	I2 mm	Quantity
SK43L		Steel carrying case		1
K432		Automatic wire stripper K43/2 0.02 - 10 mm ²		1
K32		TWIST-it Crimping tool for cable end-sleeves and twin cable end-sleeve 0.14 - 10 mm ²	es	1
4698		Insl. cable end-sleeve, 0.5 mm ² , 14 mr	n 8	500
4708		Insl. cable end-sleeve, 0.75 mm ² , 14 m	im 8	500
4718		Insl. cable end-sleeve, 1 mm ² , 14 mm	8	400
4728		Insl. cable end-sleeve, 1.5 mm ² , 14 mr	n 8	400
4738		Insl. cable end-sleeve, 2.5 mm², 14 mr	n 10	300
47410		Insl. cable end-sleeve, 4 mm², 17 mm	12	100
47512		Insl. cable end-sleeve, 6 mm², 20 mm	18	100
47612		Insl. cable end-sleeve, 10 mm², 22 mm	n 18	100



SK 65 B Assortment box from steel with tubular cable lugs and crimping tool



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

Characteristics

Sturdy steel carrying case with lock and handle

Item		Dimension mm	Part No.
	ortment box with tubular cable lugs "standard type" ping tool K05	400 x 250 x 50	SK65B
Scope of supply	Description		Quantity
SK65L	Steel carrying case		1
K05	Crimping tool for tubular cable lugs and connectors, standard type 6 - 50 mm ²		1
1R6	Tubular cable lug without inspection hole, 6 mm², Me	5, Cu tinned	25
1R8	Tubular cable lug without inspection hole, 6 mm², Ma	3, Cu tinned	25
2R6	Tubular cable lug without inspection hole, 10 mm², M	16, Cu tinned	25
2R8	Tubular cable lug without inspection hole, 10 mm², M	18, Cu tinned	25
3R8	Tubular cable lug without inspection hole, 16 mm², M	18, Cu tinned	25
3R10	Tubular cable lug without inspection hole, 16 mm², M	110, Cu tinned	25
4R8	Tubular cable lug without inspection hole, 25 mm², M	18, Cu tinned	25
4R10	Tubular cable lug without inspection hole, 25 mm², M	110, Cu tinned	25
5R8	Tubular cable lug without inspection hole, 35 mm², M	18, Cu tinned	20
5R10	Tubular cable lug without inspection hole, 35 mm², M	110, Cu tinned	20
6R10	Tubular cable lug without inspection hole, 50 mm², M	110, Cu tinned	20
6R12	Tubular cable lug without inspection hole, 50 mm², M	112, Cu tinned	20

EVERYTHING UNDER CONTROL!

A selection of the most commonly used tubular cable lugs, including crimping tool arranged in an assortment box. There are also other packages in an L-BOXX.

The perfectly coordinated L-BOXXes stand for intelligent mobility and are used for storage and for transport from the workshop to the construction site.



SK 50 B Steel assortment box with DIN compressed cable lugs and crimping tool



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

Characteristics

Sturdy steel carrying case with lock and handle

Item Dimension mm			Part No.
Steel assortment box with DIN compression cable lugs $$400\mathrm{x}250\mathrm{x}50$$ and crimping tool			SK50B
Scope of supply	Description		Quantity
SK65L	Steel carrying case		1
K05D	Crimping tool for compression cable lugs and co (DIN 46235 / DIN 46267, Part 1) 6 - 50 mm ²	onnectors	1
101R5	Compression cable lug, DIN 46235, 6 mm², M5,	Cu tinned	50
101R6	Compression cable lug, DIN 46235, 6 mm², M6,	Cu tinned	50
102R5	Compression cable lug, DIN 46235, 10 mm², M5	5, Cu tinned	50
102R6	Compression cable lug, DIN 46235, 10 mm², M6	6, Cu tinned	50
103R8	Compression cable lug, DIN 46235, 16 mm², M8	3, Cu tinned	25
103R10	Compression cable lug, DIN 46235, 16 mm², M	0, Cu tinned	25
104R8	Compression cable lug, DIN 46235, 25 mm², M8	3, Cu tinned	25
104R10	Compression cable lug, DIN 46235, 25 mm², M³	0, Cu tinned	25
105R8	Compression cable lug, DIN 46235, 35 mm², M8	3, Cu tinned	20
105R10	Compression cable lug, DIN 46235, 35 mm², M³	0, Cu tinned	20
106R10	Compression cable lug, DIN 46235, 50 mm², M	0, Cu tinned	15
106R12	Compression cable lug, DIN 46235, 50 mm², M	2, Cu tinned	15
	·		



MK 230 B 507 Steel assortment box with insl. cable connections and crimping tool



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

Item			Dimension mm	Part No.
Steel assortme and crimping t		th insl. cable connections	366 x 230 x 51	MK230B507
Scope of supply	Colour	Description		Quantity
MK230L		Steel carrying case		1
K507		Crimping tool with replaceable dies		1
6204		Insl. solderless terminal M4, 0.5 - 1 m	nm²	50
6205		Insl. solderless terminal M5, 0.5 - 1 m	nm²	50
6206		Insl. solderless terminal M6, 0.5 - 1 m	nm²	50
6304		Insl. solderless terminal M4, 1.5 - 2.5	mm²	50
6305		Insl. solderless terminal M5, 1.5 - 2.5	mm²	50
6306		Insl. solderless terminal M6, 1.5 - 2.5	mm²	50
670		Insl. butt connector, 0.5 - 1 mm ²		50
680		Insl. butt connector, 1.5 - 2.5 mm ²		50
705		Insl. pin terminal, 0.5 - 1 mm², 22 mn	า	50
710		Insl. pin terminal, 1.5 - 2.5 mm², 23 n	nm	50
730		Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.	5 mm²	50
830		Insl. tab 6.3 x 0.8 mm, 1.5 - 2.5 mm ²		50
620C4		Insl. solderless terminal M4, 0.5 - 1 m	nm²	50
630C4		Insl. solderless terminal M4, 1.5 - 2.5	mm²	50
715		Insl. pin terminal, 4 - 6 mm², 26 mm		25
700		Insl. butt connector, 4 - 6 mm ²		25
6505		Insl. solderless terminal M5, 4 - 6 mm	1 ²	25
6506		Insl. solderless terminal M6, 4 - 6 mm	1 ²	25
650C6		Insl. solderless terminal M6, 4 - 6 mm	1 ²	25

SK 82 P Assortment box from plastic with insl. cable connections and tools



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

Item			Dimension mm	Part No.
Plastic assortment box with insl. cable connections and tools 395 x 295 x 106			SK82P	
Scope of supply	Colour	Description		Quantity
K432		Automatic wire stripper K43/2 0.02 -	10 mm²	1
K82A		Crimping tool for insulated cable conr 0.5 - 6 mm ²	nections	1
6204		Insl. solderless terminal M4, 0.5 - 1 m	nm²	50
6205		Insl. solderless terminal M5, 0.5 - 1 m	nm²	50
670		Insl. butt connector, 0.5 - 1 mm ²		50
720	720 Insl. receptacle 6.3 x 0.8 mm, 0.5 - 1 mm ²		50	
6304	Insl. solderless terminal M4, 1.5 - 2.5 mm ²		50	
6305	Insl. solderless terminal M5, 1.5 - 2.5 mm²		50	
680		Insl. butt connector, 1.5 - 2.5 mm ²		50
730		Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2	.5 mm²	50
6505		Insl. solderless terminal M5, 4 - 6 mm	l ²	20
6506		Insl. solderless terminal M6, 4 - 6 mm	1 ²	20
700		Insl. butt connector, 4 - 6 mm ²		20
715		Insl. pin terminal, 0.1 - 0.4 mm², 26 n	nm	20
620C4		Insl. solderless terminal M4, 0.5 - 1 m	nm²	20
630C4		Insl. solderless terminal M4, 1.5 - 2.5	mm²	20
705		Insl. pin terminal, 0.5 - 1 mm², 22 mn	n	20
710		Insl. pin terminal, 1.5 - 2.5 mm², 23 n	nm	20

SK 82 S Assortment box from plastic with insl. cable connections and crimping tool



► The exact-shaped foam inlays of the case prevent the contents slipping even with severe impacts

Item			Part No.
Plastic assortment box with insl. cable connections and crimping tool			SK82S
Scope of supply	Colour	Description	Quantity
K82A		Crimping tool for insulated cable connections 0.5 - 6 mm ²	1
6204		Insl. solderless terminal M4, 0.5 - 1 mm²	20
6205		Insl. solderless terminal M5, 0.5 - 1 mm²	20
670		Insl. butt connector, 0.5 - 1 mm ²	20
720		Insl. receptacle 6.3 x 0.8 mm, 0.5 - 1 mm ²	20
6304		Insl. solderless terminal M4, 1.5 - 2.5 mm ²	20
680		Insl. butt connector, 1.5 - 2.5 mm ²	20
730		Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.5 mm ²	20
6305		Insl. solderless terminal M5, 1.5 - 2.5 mm ²	20



SK 30 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

4 small and 1 large additional compartments with lock

Suitable for

For optional storage of crimping tools type K4 and K48

ltem	Dimension mm	Weight kg	Part No.
Steel carrying case	200 x 140 x 40	1.2	SK30L

SK 32 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

8 small and 1 large additional compartments with lock

Suitable for

For optional storage of crimping tools type K3 and K35

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	285 x 155 x 45	1.3	SK32L

SK 4 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

6 small and 1 large additional compartments with lock

Suitable for

For optional storage of crimping tools type K02, K2, K16 and K25

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	370 x 160 x 40	1.4	SK4L

SK 43 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

8 small and 2 large additional compartments with lock

Suitable for

For storage of crimping tool K 32 and wire stripper K 41

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	370 x 210 x 40	1.9	SK43L

MK 55 Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

8 small and 1 large additional compartments with lock

Suitable for

For storage of 8 pairs of dies and crimping tool K50

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	245 x 130 x 37	0.7	MK55

MK 210 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

4 small and 1 large additional compartments with lock

Suitable for

For storage of crimping tool K82A

ltem	Dimension mm	Weight kg	Part No.
Steel carrying case	250 x 155 x 40	1.0	MK210L

MK 220 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

8 small and 1 large additional compartments with lock

Suitable for

For storage of crimping tool K82A

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	370 x 160 x 40	1.4	MK220L

MK 230 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

• 19 small and 1 large additional compartments with lock and handle

Suitable for

For storage of crimping tool K82A

ltem	Dimension mm	Weight kg	Part No.
Steel carrying case	366 x 230 x 51	2.4	MK230L



SK 65 L Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

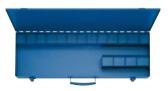
12 small and 1 large additional compartments with lock and handle

Suitable for

For storage of crimping tools type K 05, K 05 BC, K 35/4

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	400 x 250 x 50	2.3	SK65L

MK 22 Steel carrying case



▶ Hammer-tone finished assortment box

Characteristics

• 17 small and 1 large additional compartments with lock and handle

Suitable for

For storage of 17 pairs of dies and crimping tool K 22

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	600 x 220 x 65	3.5	MK22

KKPE Plastic case



Characteristics

With lock and handle

Suitable for

For storing complete crimping die sets

Item	Part No.
Plastic case	ККРЕ
Plastic case	KKPEH25
Plastic case for crimping dies of series 13	KKPE13

MKU Steel carrying case with wheels



▶ Hammer-tone finished assortment box

Characteristics

With additional compartment for dies with lock and handle

Suitable for

For storage of hydraulic crimping tool HK25/2

Item	Dimension mm	Weight kg	Part No.
Steel carrying case	810 x 310 x 210	10.0	MKU

TT2 Carrying case



Suitable for

For storing all crimping and cutting heads (excluding SDK 105 and SDK 120)

Item	Weight kg	Part No.
Carrying bag	0.48	TT2

TT4 Carrying case



Suitable for

For storage of cutting heads SDK 105 and SDK 120

Item	Weight kg	Part No.
Carrying bag	0.73	TT4



SYSTEMATIC ORDER -L-BOXX FROM BS SYSTEMS

We must have order, especially when on the go. L-Boxx from BS Systems is a well thought out arrangement system for safely transporting your Klauke tool and connectors no matter what. Klauke products are safely stowed in the L-Boxx - matched to your individual equipment. Keep the overview!



In brief

- Available in various sizes
- Maximum protection due to shock and impact resistant materials
- Easy to transport with practical handle on the cover and the sides
- Simple stacking of several boxes thanks to click system

▶ Large or small?

The L-Boxx provides the right tool every time. Select what you need from the broad range of sizes. The boxes are always shock and impact resistant and and can be stacked without risk of slipping due to a click system.

- Available in various sizes
- Shock and impact resistant
- Easy to transport with practical handles on the cover and on the sides
- Safe transportation and storage due to click system



▶ Everything practically packed

The L-Box doesn't just stow your tools - they also assign them exactly the right storage location. Trust in our Klauke system of pre-stocked boxes for various applications.

- Pre-stocked boxes equipped to your needs
- Choice for differing areas of applications
- Everything to hand in one box

▶ Sorted on the go

Do you need your toolboxes on the go? With the TÜV-tested Sortimo vehicle equipment, all Klauke tools and ranges can be systematically and safely transported in L-Boxxes.

- Quickly located thanks to the Sortimo system overview
- Avoid injury by securing the boxes against accidents and braking actions
- Short searching time for efficient operations



L-BOXX 65B from plastic with standard equipment for electrical installations



► Comprehensive equipment for conductor preparation, comprising cable cutter, cable knife, crimping tool and connectors

Characteristics

- Manufactured from shock and impact resistant ABS plastic, very robust, 100 kg capacity
- Stackable using an Easy-Click system, which allows easy opening and closing

Item	Dimension mm	Part No.	
L-BOXX from p for electrical in	plastic with standard equipment nstallations	442 x 357 x 117	LBOXX65B
Scope of supply	Description		Quantity
K05	Crimping tool for tubular cable lugs and connector standard type 6 - 50 mm ²	S,	1
K100	Hand-operated cutting tool for Cu and Al cables to	14 mm dia.	1
KL740416	Cable knife, without blade 4 - 16 mm dia.		1
1R6	Tubular cable lug without inspection hole, 6 mm ² , M6, Cu tinned		
1R8	Tubular cable lug without inspection hole, 6 mm²,	25	
2R6	Tubular cable lug without inspection hole, 10 mm ²	, M6, Cu tinned	25
2R8	Tubular cable lug without inspection hole, 10 mm ²	, M8, Cu tinned	25
3R10	Tubular cable lug without inspection hole, 16 mm ²	, M10, Cu tinned	25
4R8	Tubular cable lug without inspection hole, 25 mm ²	, M8, Cu tinned	20
4R10	Tubular cable lug without inspection hole, 25 mm ²	20	
5R8	Tubular cable lug without inspection hole, 35 mm ²	20	
5R10	Tubular cable lug without inspection hole, 35 mm²,	20	
6R10	Tubular cable lug without inspection hole, 50 mm²,	M10, Cu tinned	15
LB0XX102LFG	L-BOXX with front handle		1

L-BOXX with electromechanical crimping tool EK 50 ML 0.14 to 50 mm² and extensive additional equipment



Item	Item Dimension mm			
	L-BOXX with electromechanical crimping tool EK 50 ML $$ 442 x 357 x 151 0.14 - 50 mm² and extensive additional equipment			
Scope of supply	Description		Quantity	
RAML1225	Battery 10.8 V / 2.5 Ah, Li-lon (27 Wh)		1	
LGML1	Charger for 10.8 V Li-Ion batteries, 230 V		1	
K118	Hand-operated cutting tool for Cu and Al cables	to 12 mm dia.	1	
AE5072	Crimping dies AE 507 for cable end-sleeves, 10	- 25 mm²	1	
47612	Insl. cable end-sleeve, 10 mm², 22 mm	50		
47712	Insl. cable end-sleeve, 16 mm ² , 24 mm			
47818	Insl. cable end-sleeve DIN 46228 part 4, 25 mm ²			
R505	Crimping dies R 50, 16 - 25 mm ²	1		
3R8	Tubular cable lug without inspection hole, 16 m	m², M8, Cu tinned	25	
4R8	Tubular cable lug without inspection hole, 25 m	m², M8, Cu tinned	25	
AE5073	Crimping dies AE 507 for cable end-sleeves, 35	- 50 mm ²	1	
47918	Insl. cable end-sleeve DIN 46228 part 4, 35 mm	25		
48025	Insl. cable end-sleeve DIN 46228 part 4, 50 mm	20		
IS5072	Crimping dies IS 50, single crimping, 10 - 16 m	1		
652C6	Insl. solderless terminal M6, 10 mm², fork-type	50		
LB0XX136LFG				



L-BOXXes from plastic with tubular cable lugs



LB0XX3R8SET

 Comprehensive equipment for conductor preparation for construction site and workshop

Characteristics

- Manufactured from shock and impact resistant ABS plastic, very robust,
 100 kg capacity
- Stackable using an Easy-Click system, which allows easy opening and closing

Item		Dimension mm	Part No.
L-BOXX from plastic	L-BOXX from plastic with tubular cable lugs 16 - 95 mm ² 442 x 357 x 117		
L-BOXX from plastic	with tubular cable lugs 50 - 185 mm ²	442 x 357 x 117	LB0XX6R10SET
Scope of supply LBOXX3R8SET	Description Tubular cable lug without inspection hole, 1	6 mm ² . M8. Cu tinned	Quantity 50
4R8	Tubular cable lug without inspection hole, 2	25 mm², M8, Cu tinned	50
5R8	Tubular cable lug without inspection hole, 3	35 mm², M8, Cu tinned	50
6R10	Tubular cable lug without inspection hole, §	50 mm², M10, Cu tinned	30
7R10	7R10 Tubular cable lug without inspection hole, 70 mm², M10, Cu tinned		
8R10	Tubular cable lug without inspection hole, 9	95 mm², M10, Cu tinned	20
Scope of supply LBOXX6R10SET 6R10	Description Tubular cable lug without inspection hole,	50 mm² M10. Cu tinned	Quantity 30
7R10	Tubular cable lug without inspection hole,	· · ·	20
8R10	Tubular cable lug without inspection hole,	95 mm², M10, Cu tinned	20
9R12	Tubular cable lug without inspection hole,	120 mm², M12, Cu tinned	12
10R12	Tubular cable lug without inspection hole,	150 mm², M12, Cu tinned	12
11R12	Tubular cable lug without inspection hole,	185 mm², M12, Cu tinned	12

L-BOXX 50B from plastic with standard equipment for electrical installations



► Comprehensive equipment for conductor preparation, comprising cable cutter, cable knife, crimping tool and connectors

Characteristics

- Manufactured from shock and impact resistant ABS plastic, very robust,
 100 kg capacity
- Stackable using an Easy-Click system, which allows easy opening and closing

Dimension mm

L-BOXX from plate electrical installa	LBOXX65B		
Scope of supply	Description		Quantity
K05D	Crimping tool for compression cable lugs (DIN 46235 / DIN 46267, Part 1) 6 - 50 m		1
K100	Hand-operated cutting tool for Cu and Al	cables to 14 mm dia.	1
KL740416	Cable knife, without blade 4 - 16 mm dia	1.	1
101R6	Compression cable lug, DIN 46235, 6 mr	m², M6, Cu tinned	25
101R8	Compression cable lug, 6 mm ² , M8, Cu ti	inned	25
102R6	Compression cable lug, DIN 46235, 10 m	nm², M6, Cu tinned	25
102R8	Compression cable lug, 10 mm², M8, Cu	tinned	25
103R10	Compression cable lug, DIN 46235, 16 m	nm², M10, Cu tinned	25
104R8	Compression cable lug, DIN 46235, 25 m	nm², M8, Cu tinned	20
104R10	Compression cable lug, DIN 46235, 25 m	nm², M10, Cu tinned	20
105R8	Compression cable lug, DIN 46235, 35 m	nm², M8, Cu tinned	15
106R8	Compression cable lug, DIN 46235, 50 m	nm², M8, Cu tinned	10
106R10	Compression cable lug, DIN 46235, 50 m	nm², M10, Cu tinned	10
LB0XX102LFG	L-BOXX with front handle		1



L-BOXX 230 B from plastic with standard equipment for electrical installations



Item		Dimension mm	Part No.	
L-B0XX from plastic with standard equipment $$442x357x117$$ for electrical installations		LBOXX230B		
Scope of supply	Colour	Description		Quantity
K432		Automatic wire stripper K43/2 0.02 -	10 mm²	1
K507		Crimping tool with replaceable dies		1
720		Insl. receptacle 6.3 x 0.8 mm, 0.5 - 1	mm²	50
730		Insl. receptacle 6.3 x 0.8 mm, 1.5 - 2.	5 mm²	50
820		Insl. tab 6.3 x 0.8 mm, 0.5 - 1 mm ²		50
830		Insl. tab 6.3 x 0.8 mm, 1.5 - 2.5 mm ²		50
6204		Insl. solderless terminal M4, 0.5 - 1 m	ım²	50
6305		Insl. solderless terminal M5, 1.5 - 2.5	mm²	50
6506		Insl. solderless terminal M6, 4 - 6 mm	Insl. solderless terminal M6, 4 - 6 mm²	
670		Insl. butt connector, 0.5 - 1 mm ²		50
680		Insl. butt connector, 1.5 - 2.5 mm ²		50
700		Insl. butt connector, 4 - 6 mm ²		25
1652C5		Solderless terminals fork type 10 mm	², M 5	50
1652C6		Solderless terminals fork type 10 mm	², M 6	50
16505		Solderless terminals DIN 46234, 4 - 6 mn	n², M5, Cu tinned	50
16506		Solderless terminals DIN 46234, 4 - 6 mn	n², M6, Cu tinned	50
4708		Insl. cable end-sleeve, 0.75 mm ² , 14 i	mm	400
4718		Insl. cable end-sleeve, 1 mm ² , 14 mm	l	400
4728		Insl. cable end-sleeve, 1.5 mm², 14 mm		400
4738		Insl. cable end-sleeve, 2.5 mm², 14 m	m	200
47410		Insl. cable end-sleeve, 4 mm ² , 17 mm		100
47512		Insl. cable end-sleeve, 6 mm ² , 20 mm		100
47612		Insl. cable end-sleeve, 10 mm², 22 mi	m	100
LB0XX102LFG		L-BOXX with front handle		1



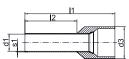
L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm²



Item				Part No.
		h crimping tool ves 1.5 - 10 mm²		LBOXXMINIK306K
Scope of supply	Colour	Description	I2 mm	Quantity
K306K		Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm ²		1
K118		Hand-operated cutting tool for Cu and Al cables to 12 mm dia.		1
4728		Insl. cable end-sleeve, 1.5 mm ² , 14 mm	8	100
47312		Insl. cable end-sleeve, 2.5 mm², 18 mm	12	100
47412		Insl. cable end-sleeve, 4 mm ² , 20 mm	12	50
47512		Insl. cable end-sleeve, 6 mm², 20 mm	12	50
47612		Insl. cable end-sleeve, 10 mm², 22 mm	12	30
LBOXXMINIL		L-BOXX "Mini"		1

L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm²





Item				Part No.
		h crimping tool ves 1.5 - 10 mm²		LBOXXMINIK304K
Scope of supply	Colour	Description	I2 mm	Quantity
K304K		K 30/4 K crimping tool for cable end-sleeves 0.08 to 16 mm² and twin cable end-sleeves 2 x 0,5 - 2 x 6 mm²		1
K118		Hand-operated cutting tool for Cu and Al cables to 12 mm dia.		1
4728		Insl. cable end-sleeve, 1.5 mm², 14 mm	8	100
47312		Insl. cable end-sleeve, 2.5 mm², 18 mm	12	100
47412		Insl. cable end-sleeve, 4 mm ² , 20 mm	12	50
47512		Insl. cable end-sleeve, 6 mm ² , 20 mm	12	50
47612		Insl. cable end-sleeve, 10 mm², 22 mm	12	30
LBOXXMINIL		L-BOXX "Mini"		1

L-BOXX Mini from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm²



Item				Part No.	
	L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm ²				
Scope of supply	Colour	Description	I2 mm	Quantity	
K3014K		Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm ²		1	
K118		Hand-operated cutting tool for Cu and Al cables to 12 mm dia.		1	
4728		Insl. cable end-sleeve, 1.5 mm ² , 14 mm	8	100	
47312		Insl. cable end-sleeve, 2.5 mm², 18 mm	12	100	
47412		Insl. cable end-sleeve, 4 mm ² , 20 mm	12	50	
47512		Insl. cable end-sleeve, 6 mm ² , 20 mm	12	50	
47612		Insl. cable end-sleeve, 10 mm², 22 mm	12	30	
LBOXXMINIL		L-BOXX "Mini"		1	

L-BOXXes with the new battery powered tools of the NEXT GENERATION





This is just a small extract of our range. If you need a different combination, contact us.

Bosch battery

Tool	Crimping	Cutting	Punching	Part No.
EK 35/4	6 - 150 mm ²			LBOXXEK354CFB
EKM 60/22	6 - 300 mm ²			LBOXXEKM6022CFB
EKM 60 ID	10 - 240 mm²			LBOXXEKM60IDCFB
ES 20		max. 20 mm dia.		LB0XXES20CFB
ES 32 F		max. 32 mm dia.		LB0XXES32FCFB
ES 32		max. 32 mm dia.		LB0XXES32CFB
EKM 60 UNV	6 - 300 mm ²	max. 25 mm dia.	round/shape	LBOXXEKM60UNVCFB
LS 50 FLEX			round/shape	LB0XXLS50FLEXCFB

Makita battery

Tool	Crimping	Cutting	Punching	Part No.
EK 35/4	6 - 150 mm ²			LBOXXEK354CFM
EKM 60/22	6 - 300 mm ²			LBOXXEKM6022CFM
EKM 60 ID	10 - 240 mm²			LBOXXEKM60IDCFM
ES 32 F		max. 32 mm dia.		LBOXXES32FCFM
ES 32		max. 32 mm dia.		LBOXXES32CFM
LS 50 FLEX			round/shape	LBOXXLS50FLEXCFM

Crimping & cutting (shown is the scope of supply with Bosch battery)















								200
					LB0XX-			
Part No.	Scope of supply	EK354	EKM6022	EKM60ID	ES20	ES32	ES32F	EKM60UNV
RALB1EU	Bosch battery 18 V / 2.0 Ah, Li-lon	•	•	•	•	•	•	•
LGLB1EU	Bosch charger for 18 V Li-lon batteries	•	•	•	•	•	•	•
UA22	Adapter for crimping dies							•
LB0XX136LFG	L-B0XX (W/D/H: 442 x 357 x 151 mm)	•	•	•	•	•	•	•

Punching

(shown is the scope of supply with Bosch battery)



				LBOXXLS50FLEX				
Part No.	RALB2EU	LGLB1EU	52085691	50032488	52049371	51300430	50339672	LB0XX136GL
Scope of supply	Bosch battery 18 V / 5.0 Ah, Li-lon	Bosch charger for 18 V Li-lon batteries	Draw stud for hydraulic operation 19 x 105 x 122 mm	Spacer, short	Kwik Stepper™ step bit with ROTASTOP® shaft 6-21 mm	Draw stud for punch with hydraulic operation 9.5 x 71 mm	Adapter 19 x 48 mm with internal thread 9.5 mm	L-B0XX (W/D/H: 442 x 357 x 151 mm)









Crimping

Mechanical crimping tools Mechanical crimping tools	2.4 2.6
Mechanical crimping tools with interchangeable dies	2.22
Battery powered crimping tool	2.29
10.8 V - base	2.30
18 V - base	2.34
Hand-operated hydraulic crimping tools	2.55
Hydraulic crimping heads and crimping systems	2.67
Hydraulic crimping heads	2.68
Hydraulic crimping systems	2.78
Crimping dies	2.80
Series 50	2.82
Series 4	2.84
Series 22	2.87
Series 13	2.91
Series 15	2.95
Series 25	2.96

FULL FORCE TRANSMISSION - MECHANICAL CRIMPING TOOLS

Less force is more. Klauke crimping tools were developed specifically to make your

work faster, more precise and simpler. Ergonomic handles ensure the right grip, improved lever effects provide a manual actuation that transmits your force exactly where it's needed: With 33 % less effort.

In brief

- ▶ Effortless operation due to a third less force
- Exact crimping with precise actuation
- Reliable assignment through clear marking of the crimping profiles
- Durable material
- Individually selectable crimping profiles from 0.08 mm² to 400 mm²



▶ Developed for a broad range of applications

To ensure efficient crimps, a good tool needs optimum force transmission and high-quality materials. So we developed our mechanical series to make your work easier. These function make the difference especially with frequent use.

- Crimping profiles with nominal cross-sections from 0.08 mm² to 400 mm²
- High-quality steel for long service life
- Best possible force transmission: Up to 33 % less effort
- Optimum crimp results with integrated ratchet
- Ergonomic design for fast and effortless operations



K 4 Crimping tool for cable end-sleeves 0.5 - 2.5 mm²





▶ Indent crimping for round clamp opening



Characteristics

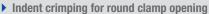
- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

Technical data		
Crimping range	0.5 - 2.5 mm ²	
Length	150 mm	
Weight	0.16 kg	
Item		Part No.
Crimping tool for cable e	nd-sleeves 0.5 - 2.5 mm ²	K4
Accessories		Part No.
Steel carrying case		SK30L

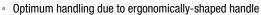
K 3 Crimping tool for cable end-sleeves 0.5 - 16 mm²











- Optimised crimp range (up to 3-times wider than before)
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Integrated cable stripper

Technical data		
Crimping range	0.5 - 16 mm ²	
Length	230 mm	
Weight	0.35 kg	
Item		Part No.
Crimping tool for cable	end-sleeves 0.5 - 16 mm ²	К3
Accessories		Part No.
Steel carrying case		SK32L
Variants		Part No.
Steel assortment box v	vith cable end-sleeves and crimping tool	SK32B
Steel assortment box w	SK47B	
L-BOXX from plastic w	ith crimping tool and cable end-sleeves	LB0XXMINIK3



K 35 Crimping tool for cable end-sleeves 10 - 35 mm²





- Indent crimping for round clamp opening
- ▶ For large cross-sections to 35 mm²

Characteristics

- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

Technical data		
Crimping range	10 - 35 mm ²	
Length	230 mm	
Weight	0.24 kg	
Item		Part No.
Crimping tool for cable end-s	leeves 10 - 35 mm²	K35
Accessories		Part No.
Steel carrying case		SK32L

K 48 Crimping tool for cable end-sleeves 0.14 - 2.5 mm²





▶ Trapezoid crimping suitable for box terminals



- One crimp profile per cross-section
- Lateral insertion (side crimping)
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Optimum handling due to ergonomically-shaped handle

Technical data		
Crimping range	0.14 - 2.5 mm ²	
Length	150 mm	
Weight	0.16 kg	
Item		Part No.
Crimping tool for cable 6	end-sleeves 0.14 - 2.5 mm ²	K48
Accessories		Part No.
Steel carrying case		SK30L
Variants		Part No.
Steel assortment box wi	th cable end-sleeves and crimping tool	SK30B
Steel assortment box with	n insl. cable end-sleeves and crimping tool	SK45B

K 36 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.5 - 6 mm²







- Two crimping profiles with the cross-section areas 0.5 2.5 mm² and 4 6 mm²
- Quick repetition of work steps due to spring-actuated tool opening

Characteristics

- Front sleeve insertion (front crimping)
- Ergonomically-designed handle with slip guard

Technical data			
Crimping range cable end-sleeves	0.5 - 2.5 and 4 - 6 mm ²		
Crimping range twin cable end-sleeves	2 x 0.25 - 2 x 1.5 and 2 x 2.5 - 2x4	l mm²	
Length	200 mm		
Weight	0.22 kg		
Item		Part No.	
Crimping tool for cable end-sle end-sleeves 2 x 0.25 - 2 x 1.5	eeves 0.5 - 6 mm² and twin cable and 2 x 2.5 - 2 x 4 mm²	K36	
Accessories		Part No.	
Steel carrying case		SK32L	



K 32 TWIST-it Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm²









- **▶** Unique long service life
- One crimping profile for all cross-sections due to automatic cross-section adjustment
- ► TWIST-it Crimping die for more flexibility and safety
- **▶** Lockable crimping die for error prevention
- ► Extremely small, light and ergonomic

Characteristics

- Quick change between front sleeve insertion and lateral insertion
- Serrated crimping die for optimal pull-out values of the crimp connection
- With ratchet for consistently controlled crimp results
- With safety eye for attaching a security strap
- Ergonomic design with a small hand opening angle and balanced weight

Suitable for

Push-in, spring clamp and screw technology

Technical data		
Crimping range cable end-sleeves	0.14 - 10 mm ²	
Crimping range twin cable end-sleeves	2 x 0.25 - 2 x 4 mm ²	
Length	177 mm	
Weight	0.298 kg	
Item		Part No.
Crimping tool for cable end-s end-sleeves 2 x 0,25 - 2 x 4	leeves 0,14 - 10 mm² and twin cable mm²	K32
	•	K32 Part No.
end-sleeves 2 x 0,25 - 2 x 4	•	
end-sleeves 2 x 0,25 - 2 x 4 l Accessories	•	Part No.



K 30/3 Crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 10 mm²





▶ Square crimping suitable for box terminals and spring clamp technology







- One crimping profile for cross-sections from 0.08-10 mm² due to automatic crosssection adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel

Technical data		
Crimping range cable end-sleeves	0.08 - 10 mm ²	
Crimping range twin cable end-sleeves	2 x 0.25 - 2 x 4 mm ²	
Length	190 mm	
Weight	0.3 kg	
Item		Part No.
Crimping tool for cable end-slee 0.08 - 10 mm ²	K303	
Accessories		Part No.
Steel carrying case		SK30L
Variants		Part No.
Plastic assortment box with insl	SK303P	
Plastic assortment box with insl.	SK303S	
Steel assortment box with insl.	SK43NB	

K 30/4 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm²













▶ Square crimping K 30/4 K

- One crimping profile for cross-sections from 0.08-16 mm² due to automatic crosssection adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Positioner for small cable end-sleeves
- Handle with slip guard and inscription panel

. •		
Technical data		
Crimping range cable end-sleeves	0.08 - 16 mm ²	
Crimping range twin cable end-sleeves	2 x 0.5 - 2 x 6 mm²	
Length	215 mm	
Weight	0.5 kg	
Item		Part No.
Crimping tool for cable end-sl 0.08 - 16 mm², square crimpi	eeves and twin cable end-sleeves ng	K304K
Accessories		Part No.
Steel carrying case		SK30L
Variants		Part No.
L-BOXX from plastic with crim and insl. cable end-sleeves 1.		LBOXXMINIK304K

K 30/6 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.08 - 16 mm²







▶ Hexagonal crimping K 30/6 K





Characteristics

- One crimping profile for cross-sections from 0.08-16 mm² due to automatic crosssection adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Positioner for small cable end-sleeves
- Handle with slip guard and inscription panel

Technical data		
Crimping range cable end-sleeves	0.08 - 16 mm ²	
Crimping range twin cable end-sleeves	2 x 0.5 - 2 x 10 mm ²	
Length	215 mm	
Weight	0.5 kg	
Item		Part No.
Crimping tool for cable end-sle 0.08 - 16 mm², hexagonal crir	eeves and twin cable end-sleeves nping	K306K
Accessories		Part No.
Steel carrying case		SK30L
Variants		Part No.
L-BOXX from plastic with crim and insl. cable end-sleeves 1.		LBOXXMINIK306K

K 301/4 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm²











▶ Very light and ergonomic





- One crimping profile for all cross-sections due to automatic cross-section adjustment
- · With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel
- Safety pad in handle for slip-free working

Technical data		
Crimping range cable end-sleeves	0.14 - 10 mm²	
Crimping range twin cable end-sleeves	2 x 0.25 - 2 x 4 mm ²	
Length	175 mm	
Weight	0.35 kg	
Item		Part No.
Crimping tool for cable end-sl and twin cable end-sleeves 0		K3014K
Variants		Part No.
L-BOXX from plastic with crimping tool and insl. cable end-sleeves 1.5 - 10 mm ²		LBOXXMINIK3014K



K 301/6 K Self-adjusting crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm²







- Hexagonal crimping
- ▶ Very light and ergonomic



Characteristics

- One crimping profile for all cross-sections due to automatic cross-section adjustment
- With ratchet for consistently-controlled crimp results
- Lateral insertion (side crimping)
- Handle with slip guard and inscription panel
- Safety pad in handle for slip-free working

Technical data		
Crimping range cable end-sleeves	0.14 - 10 mm²	
Crimping range twin cable end-sleeves	2 x 0.25 - 2 x 4 mm ²	
Length	175 mm	
Weight	0.35 kg	
Item		Part No.
Crimping tool for cable end-sleeves and twin cable end-sleeves 0.14 - 10 mm ²		K3016K

K 80 Crimping tool for insulated cable connections 0.1 - 1 mm²







- Crimping of conductor and insulation in one step
- ▶ Adjusting disc to compensate for the natural tool wear

- Accurate drive
- With ratchet for consistently-controlled crimp results
- Colour-coded cross-section assignment
- Handle with slip guard and inscription panel

Technical data		
Crimping range red insulation sleeve	0.5 - 1.0 mm²	
Crimping range yellow insulation sleeve	0.1 - 0.4 mm²	
Length	195 mm	
Weight	0.38 kg	
Item		Part No.
Crimping tool for insulated o	cable connections 0.1 - 1 mm²	K80
Accessories		Part No.
Steel carrying case		SK43L

K 82 A Crimping tool for insulated cable connections 0.5 - 6 mm²





- ▶ With additional locator to ensure a precise crimp connection
- ▶ 33 % less effort
- ▶ 3-Component handle grip
- ▶ Optimised material quality for a long service life
- ▶ Precise pre-tension setting maintains constant crimp performance

- Less effort required due to new mechanical lever system
- 3C handle: YELLOW: hard core for force transmission, BLUE: soft ergonomic grip area, GREY: soft slip protection
- Easy handling thanks to reduced tool opening width, optimum ergonomics due to the position of the palms and fingers, which is gentle on the joints
- Crimping of conductor and insulation in one step

Technical data		
Crimping range red insulation sleeve	0.5 - 1.0 mm²	
Crimping range blue insulation sleeve	1.5 - 2.5 mm²	
Crimping range yellow insulation sleeve	4.0 - 6.0 mm ²	
Length	225 mm	
Weight	0.53 kg	
Item		Part No.
Crimping tool for insulated of	cable connections 0.5 - 6 mm²	K82A
Accessories		Part No.
Steel carrying case		MK230L
Variants		Part No.
Plastic assortment box with tool	insl. cable connections and crimping	SK82S
Diagtic accortment has with	insl. cable connections and tools	SK82P
Flasuc assurunent box with	ilisi. Gabie GuilleGuulis aliu tuuis	ONOZI



K 82 T Crimping tool for insulated cable connections 0.5 - 6 mm²









- ▶ With additional locator to ensure a precise crimp connection
- Also suitable for the processing of insulated connectors with vibration protection
- 33 % less effort
- ▶ 3-Component handle grip
- ▶ Optimised material quality for a long service life
- ▶ Precise pre-tension setting maintains constant crimp performance

Characteristics

- Less effort required due to new mechanical lever system
- 3C handle: YELLOW: hard core for force transmission, BLUE: soft ergonomic grip area, GREY: soft slip protection
- Easy handling thanks to reduced tool opening width, optimum ergonomics due to the position of the palms and fingers, which is gentle on the joints
- Crimping of conductor and insulation in one step
- Extremely high voltage protection due to special crimping of the cable insulation (diamond crimp)

(======================================		
Technical data		
Crimping range red insulation sleeve	0.5 - 1.0 mm²	
Crimping range blue insulation sleeve	1.5 - 2.5 mm²	
Crimping range yellow insulation sleeve	4.0 - 6.0 mm²	
Length	225 mm	
Weight	0.53 kg	
Item		Part No.
Crimping tool for insulated cable connections 0.5 - 6 \mbox{mm}^{2}		K82T
Accessories		Part No.
Steel carrying case		MK230L
Variants		Part No.
Plastic assortment box with insl. cable connections and crimping tool		SK82S
Plastic assortment box with insl. cable connections and tools		
	insl. cable connections and	SK82P

K 16 Crimping tool for insulated solderless terminals 10 + 16 mm²







- Oval crimping
- Crimping tool also for meter connections

- With ratchet for consistently-controlled crimp results
- Colour-coded cross-section assignment

Crimping range red	10 mm²	
insulation sleeve		
Crimping range blue nsulation sleeve	16 mm ²	
_ength	305 mm	
Weight	0.61 kg	
tem		Part No.
Crimping tool for insulated solderless terminals 10 + 16 mm ²		K16
Accessories		Part No.
Steel carrying case		SK4L

K 58/2 Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm²





- **▶** Roll crimping
- ▶ Crimping of conductor and insulation in one step
- ▶ Tool pre-tensioning adjustable

Characteristics

- Simple and quick due to spring-actuated tool opening
- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Adjusting disc for compensating for the natural tool wear

Suitable for

Tabs with 4.8 mm tab width

Technical data		
Crimping range	0.5 - 2.5 mm ²	
Length	220 mm	
Weight	0.55 kg	
Item		Part No.
Crimping tool for non-insulated tabs and receptacles 4.8 mm; 0.5 - 2.5 mm²		K582

K 59/2 Crimping tool for non-insulated tabs and receptacles 6.3 mm; 0.5 - 6 mm²







- **▶** Roll crimping
- Crimping of conductor and insulation in one step
- ▶ Tool pre-tensioning adjustable

Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Simple and quick due to spring-actuated tool opening
- Adjusting disc for compensating for the natural tool wear

Suitable for

Tabs with 6.3 mm tab width

Technical data		
Crimping range	0.5 - 6 mm ²	
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 ²		K592



K 93 Crimping tool for connectors for solid conductors 1.5 - 4 mm²





- **▶** Hexagonal crimping
- ▶ Tool pre-tensioning adjustable

Characteristics

- Accurate drive
- · With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel
- Adjusting disc for compensating for the natural tool wear

Technical data		
Crimping range	1.5 - 4 mm ²	
Length	220 mm	
Weight	0.56 kg	
Item		Part No.
Crimping tool for connectors for solid conductors 1.5 - 4 mm ²		K93

K 94 Crimping tool for tubular cable lugs and connectors for solid conductors 6 - 10 mm²







- ▶ Hexagonal crimping
- ▶ Tool pre-tensioning adjustable

- Accurate drive
- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool
- Handle with slip guard and inscription panel
- Adjusting disc for compensating for the natural tool wear

Technical data		
Crimping range	6 - 10 mm ²	
Length	220 mm	
Weight	0.56 kg	
Item		Part No.
Crimping tool for tubular cal conductors 6 - 10 mm ²	ble lugs and connectors for solid	K94

K 2 Crimping tool for tubular cable lugs and connectors, standard type 0.75 - 16 mm²





- ► Indent crimping
- Ideal crimping tool with spring-actuated tool opening

Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

Technical data		
Crimping range	0.75 - 16 mm ²	
Length	325 mm	
Weight	0.6 kg	
Item		Part No.
Crimping tool for tubular cable lugs and connectors, standard type 0.75 - 16 mm ²		К2
Accessories		Part No.
Steel carrying case		SK4L

K 02 Crimping tool for tubular cable lugs and connectors for solid conductors 0.75 - 16 mm²







- ► Indent crimping
- Ideal crimping tool with spring-actuated tool opening
- ▶ For tubular cable lugs and connectors for solid conductors

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

Technical data		
Crimping range	0.75 - 16 mm ²	
Length	325 mm	
Weight	0.6 kg	
Item		Part No.
Crimping tool for tubular conductors 0.75 - 16 m	r cable lugs and connectors for solid m ²	K02
Accessories		Part No.
Steel carrying case		SK4L



K 25 Crimping tool 0.5 - 16 mm²













- Ideal crimping tool with spring-actuated tool opening
- ▶ For solderless terminals to DIN 46234, pin terminals to DIN 46230
- ▶ For nickel and stainless steel tubular cable lugs and connectors EN 60228 Cl. 2 to 6 mm²

Characteristics

- With ratchet for consistently-controlled crimp results
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the crimping tool

0.5 - 16 mm ²	
325 mm	
0.6 kg	
	Part No.
	K25
	Part No.
	SK4L
	325 mm

K 95 Crimping tool 16 - 95 mm²







For smaller copper conductors

Characteristics









Optimised force transmission Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors
- Solderless terminals DIN 46234, pin terminals DIN 46230

16 - 95 mm ²	
630 mm	
3.6 kg	
	Part No.
2	K95
	630 mm



K 5 Crimping tools 6 - 50 mm²





- ► Indent crimping
- ▶ Low-maintenance mechanical drive



Characteristics

- For smaller copper conductors
- Simple and safe: Exact cross-section assignment thanks to permanent marking on the dies

Suitable for

- Tubular cable-lugs and connectors, standard type
- Tubular cable lugs and connectors for fine-stranded conductors

Technical data		
Crimping range	6 - 50 mm ²	
Length	600 mm	
Weight	2.4 kg	
Item		Part No.
Crimping tool 6 - 50 mm ²		K5

K 05 WF Crimping tools for cable end-sleeves and twin cable end-sleeves 25 - 95 and 2 x 16 mm^2









- ▶ Easy operation thanks to pre-tensioning using additional lever
- ▶ Optimal use for connection in plug-in and screw-type terminal blocks
- ▶ High compression thanks to square crimp
- ▶ Reduction of crimps due to an increased crimp width

Eigenschaften

- Square crimping
- Modern, rigid and lightweight elliptical handle tubes
- Ergonomic 2-component handle with two-sided slip guard
- Energy-saving and effortless tool mechanics
- High durability

Technical data		
Part No.	K05WF50	K05WF95
Crimping range cable end-sleeve	25 - 50 mm²	50 - 95 mm²
Crimping range twin cable end-sleeve	2 x 16 mm ²	-
Length	433 mm	433 mm
Weight	1.6 kg	1.6 kg
Item		Part No.
Crimping tools for cable end-sleeves ar 25 - 50 and 2 x 16 mm ²	nd twin cable end-sleeves	K05WF50
Crimping tool for cable end-sleeves 50	- 95 mm²	K05WF95
Accessories		Part No.
Crimping die AE for cable end-sleeves a 25 - 50 and 2 x 16 mm ²	and twin cable end-sleeves	AE512550
Crimping die AE for cable end-sleeves	50 - 95 mm²	AE515095





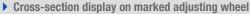


K 05 / K 05 D Syncro Crimping tools for tubular cable lugs and connectors, standard type 6 - 50 mm² for DIN compression cable lugs and connectors 6 - 50 mm²









Characteristics

- Hexagonal crimping
- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes
- Ergonomic 2-component handle with two-sided slip guard
- Smooth-running, durable and effortless tool mechanism

Technical data		
Crimping range	6 - 50 mm²	
Length	390 mm	
Weight	1.1 kg	
Item		Part No.
Syncro Crimping tool for tu standard type 6 - 50 mm ²	bular cable lugs and connectors,	K05
Syncro Crimping tool for co (DIN 46235 / DIN 46267, P	ompression cable lugs and connectors art 1) 6 - 50 mm²	K05D
Variants		Part No.
Steel assortment box with crimping tool K05	tubular cable lugs 6 - 50 mm ² and	SK65B
L-BOXX from plastic with s electrical installations	tandard equipment for	LB0XX65B
Steel assortment box with and crimping tool	DIN compression cable lugs	SK50B
L-BOXX from plastic with s for electrical installations	tandard equipment	LB0XX50B

K 06 Syncro Crimping tools for tubular cable lugs and connectors, standard type 6 - 120 mm²







- ▶ Unique with extra large crimping range
- Hexagonal crimping
- ▶ Faster, safer and synchronous cross-section adjustment
- **▶** Ergonomic design
- ▶ Extremely light and rigid

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

Technical data		
Crimping range	6 - 120 mm ²	
Length	600 - 750 mm	
Weight	2.6 kg	
Item		Part No.
Syncro Crimping tools for tubula dard type 10 - 120 mm ²	r cable lugs and connectors, stan-	K06

K 06 D Syncro Crimping tools for DIN compr. cable lugs and connectors 6 - 120 mm²





- ▶ Unique with extra large crimping range
- ▶ Hexagonal crimping
- ▶ Faster, safer and synchronous cross-section adjustment
- ▶ Ergonomic design
- ► Extremely light and rigid

Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

6 - 120 mm ²	
600 - 750 mm	
2.6 kg	
	Part No.
•	K06D
	600 - 750 mm

K 09 Syncro Crimping tools for tubular cable lugs and connectors, standard type 25 - 150 mm²







- ▶ Unique with extra large crimping range
- Hexagonal crimping
- ▶ Faster, safer and synchronous cross-section adjustment
- ▶ Ergonomic design
- Extremely light and rigid

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

Crimping range	25 - 150 mm ²	
Length	600 - 750 mm	
Weight	2.9 kg	
Item		Part No.
Syncro Crimping tools f dard type 25 - 150 mm	or tubular cable lugs and connectors, stan-	K09



K 09 D Syncro Crimping tools for DIN compression cable lugs and connectors, 25 - 150 mm²





- ▶ Unique with extra large crimping range
 - Hexagonal crimping
 - ▶ Faster, safer and synchronous cross-section adjustment
 - **▶** Ergonomic design
 - ▶ Extremely light and rigid

Characteristics

- Precisely synchronised head plate position for optimum and consistent crimp results
- Modern, rigid and lightweight elliptical handle tubes

Technical data		
Crimping range	25 - 150 mm ²	
Length	600 - 750 mm	
Weight	2.9 kg	
Item		Part No.
Syncro Crimping tool for compre (DIN 46235 / DIN 46267, Part 1)	ession cable lugs and connectors 25 - 150 mm²	K09D

DN-K 74/2 Crimping tool for BNC connectors and coax cable







- ▶ Hexagonal crimping
- ▶ Tool pre-tensioning adjustable

Characteristics

- · With ratchet for consistently-controlled crimp results
- Adjusting disc for compensating for the natural tool wear

Suitable for

Coax cable RG 58, RG 59, RG 62 and RG 71

Technical data		
Length	220 mm	
Weight	0.560 kg	
Crimping dimension 1	A: 6.48 mm, B: 10 mm	
Crimping dimension 2	A: 5.4 mm, B: 10 mm	
Crimping dimension 3	A: 1.72 mm, B: 2.3 mm	
Item		Part No.
Mechanical crimping tool fo 59, RG 62 and RG 71	r BNC connector, coax cable RG 58, RG	DNK742

K 507 Crimping tool with interchangeable dies









- Fast change of crimping die, no tools required, without readjustment by special fixing system
- ▶ Additional crimping dies integrated in the handle

Characteristics

- With ratchet for consistently-controlled crimp results
- Adjusting disc for compensating for the natural tool wear

Technical data		
Length	220 mm	
Weight	0.635 kg	
Item		Part No.
Crimping tool with inte	erchangeable dies	K507
Scope of supply		Part No.
Crimping die for insulated connectors, 0.5 - 6 mm²		IS5071
Crimping dies for cabl	le end-sleeves, 0.5 -6 mm²	AE5071
Crimping die for insula	ated connectors 0.5 - 10 mm²	Q5071
Variants		ArtNr.
Steel assortment box with insl. cable connections and crimping tool		MK230B507
L-BOXX from plastic w	vith standard equipment ons	LB0XX230B

K 507 Crimping tool with interchangeable dies















- ► Large cross section 0,5 50 mm²
- ▶ One crimping profile for all common conductors
- ▶ Fast, easy replacement of crimping dies
- ▶ Fewer pressures due to optimal crimping die width

Characteristics

- With ratchet for consistently controlled crimp results
- · Adjusting disc to compensate for the natural tool wear

Additional information

Optionally available crimping die for twin cable-end sleeves

Technical data		
Length	220 mm	
Weight	0.657 kg	
Item		Part No.
Crimping tool with in	terchangeable dies	K507WF
Scope of supply		Part No.
Crimping dies for cable-end sleeves, 0,5 - 6 mm ²		AE5071
Crimping dies for cable end-sleeves, 10 - 25 mm ²		AE5072
Crimping dies for cable end-sleeves, 35 - 50 mm ²		AE5073
Accessories		Part No.
Crimping dies for tw	in cable end-sleeves, 2x6 - 2x16 mm²	ZAE5072



K 50 Crimping tool for interchangeable dies



- **▶** Parallel guided crimping jaws
- Fast change of crimping die without readjustment by special fixing system
- ▶ Exact positioning of the crimping dies due to die locating pins

Characteristics

- Optimised force transmission
- With ratchet for consistently-controlled crimp results
- Handle with slip guard and inscription panel

Technical data		
Length	220 mm	
Weight	0.6 kg	
Item		Part No.
Crimping tool for interchangeable dies 0.1 - 50 mm ²		K50
Accessories		Part No.
Steel carrying case		MK55

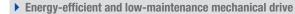
Available dies for Series 50 for K 50

K50 SERIE

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type		0,75 - 10	\bigcirc	2.82
Tubular cable lugs, Cu, standard type		6 - 25		2.82
Tubular cable lugs and connectors for solid conductors, Cu		1,5 - 10		2.82
Compression cable lugs and connectors acc. to DIN - Cu				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1)	DIN	6 - 25		2.82
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		0,5 - 10	\bigcirc	2.82
Insulated solderless terminals and connectors		10 - 16		2.83
Cable end-sleeves				
Cable end-sleeves		0,5 - 50	\bigcirc	2.82
Twin cable end-sleeves		2 x 6 - 2 x 16	\bigcirc	2.83
Cable connections, insulated and non-insulated				
Insulated cable connections, single crimping		0,5 - 16		2.83
Insulated cable connections, double crimping		0,1 - 6		2.83
Non insulated receptacles		0,25 - 6	\odot	2.83
for pin and shielded receptacles, BNC connectors for coax cables RG 58, 59, 60 and 71				2.83
Turned pin connectors, pin receptacles		0,1 - 4	\(\)	2.83

K 35/4 Crimping tool for interchangeable dies 6 - 150 mm²





- Characteristics
 Narrow crimping
- Less effort due to extendible telescopic handle

▶ Very comfortable: Tool-less crimping die change

▶ Optimised for cable glands and control cabinet construction

- Flexible use: Head rotates 360°
- Fast, change of crimping die without readjustment by special fixing system

Technical data		
Length	Stepless 420-590 mm	
Weight	1.9 kg	
Item		Part No.
Crimping tool for interchangeable dies 6 - 150 mm ²		K354
Accessories		Part No.
Steel carrying case		SK65L





Available dies for Series 4 for K 35/4

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 150		2.84
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 70		2.84
Tubular cable lugs and connectors for fine stranded conductors		10 - 35	\bigcirc	2.84
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors, indent crimp	VA	1.5 - 2.5	\bigcirc	2.85
Stainless steel tubular cable lugs and connectors, double indent crimp	VA	4 - 16	\bigcirc	2.85
Nickel tubular cable lugs and connectors, indent crimp	Ni	1.5 - 2.5	\bigcirc	2.85
Nickel tubular cable lugs and connectors, double indent crimp	Ni	4 - 16	\bigcirc	2.85
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 120		2.85
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN $$		10 - 35	\bigcirc	2.85
Insulated solderless terminals and connectors		10 - 16	\bigcirc	2.85
Sleeves for compacted conductors and sector-shaped conductors, $% \left(1\right) =\left(1\right) \left(1$	copper			
Pre-rounding dies for sector-shaped AI and Cu conductors		16 sm - 150 se / 120 sm		2.86
Aluminium compression cable lugs and connectors acc. to DIN				
Aluminium compression cable lugs and connectors to DIN	AI	10 rm/sm, 95 re/se		2.86
Aluminium/copper compression cable lugs and connectorsl				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA4, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD4 Clamps	Al/Cu	10 rm/sm, 95 re/se		2.86
Clamps, C-type		10 - 35		2.86
Cable end-sleeves				
Cable end-sleeves		10 - 50		2.86

K 22 Crimping tool for interchangeable dies 6 - 300 mm²





- ► Change of crimping dies without tools
- Optimised for cable glands and control cabinet construction ▶ Energy-efficient and low-maintenance mechanical drive

Characteristics

- Narrow crimping
- Large cross section by half shell dies
- Less effort due to extendible telescopic handle
- Flip top style head rotates 360°
- Fast, change of crimping die without readjustment by special fixing system

Technical data		
Length	Stepless 560-860 mm	
Weight	2.5 kg	
Item		Part No.
Crimping tool for int	erchangeable dies 6 - 300 mm²	K22
Accessories		Part No.
Steel carrying case		MK22





Available dies for Series 22 for K 22

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 300		2.87
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 150		2.87
Tubular cable lugs and connectors for fine stranded conductors		10 - 70	\bigcirc	2.88
Tubular cable lugs and connectors for solid conductors	O	1.5 - 16		2.88
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors	VA	10 - 50	\bigcirc	2.88
Nickel tubular cable lugs and connectors	Ni	10 - 50	\bigcirc	2.88
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 300		2.88
Double compression cable lugs	DIN	2 x 70		2.88
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN		10 - 70	\bigcirc	2.89
Insulated solderless terminals and connectors		10 - 70	\bigcirc	2.89
Sleeves for compacted conductors and sector-shaped conductors, c	opper			
Pre-rounding dies for sector-shaped Al and Cu conductors		10 sm - 300 se / 300 sm		2.89
Aluminium compression cable lugs and connectors to DIN				
Aluminium compression cable lugs and connectors to DIN	Al	10 sm - 300 se / 300 sm		2.89
Aluminium/copper compression cable lugs and connectors				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22	Al/Cu	10 sm - 300 se / 300 sm		2.89
Clamps				
Clamps, C-type		10 - 70		2.90
Clamps, H-type		70		2.90
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.90



THE LITTLE CRIMPING EXPERT - BATTERY-POWERED HYDRAULIC CRIMPING TOOL (10.8 V)

We have made performance easy: The Klauke mini is light-weight yet powerful. The Klauke mini's practical dimensions make it the ideal solution for confined areas, in panel building for instance. A convenient expert for crimp to 150 mm² nominal cross-section.



▶ Pure performance without frills

The Klauke mini concentrates on its core task: reliable crimping. Even without pressure sensor and display, the little expert does its job well - no fuss or quibble.

▶ Usage time at a glance

Read the charge level at any time from the powerful 10.8 V battery.

▶ All-round crimping

How can confined areas be easily reached? With crimping heads rotating through 360°.



EK 30 ID ML Battery powered hydraulic crimping tool 6 - 120 mm²





- ▶ Powerful 10.8 V Li-lon battery technology with battery charge indicator
- ▶ Indent crimping no change of crimping dies required

Characteristics

- Closed head, flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft lining
- Effortless working thanks to low weight
- Automatic retraction when operation is complete
- Maintenance display via LED

Suitable for

- Very well suited for compacted conductors
- Especially for fine strand conductors to EN 60228

Technical data					
Crimping force	30 kN				
Stroke / opening width	22 mr	n			
Crimping range	6 - 12	20 mm²			
Crimping cycle	2,5 s	up to 5 s (deper	nding on crim	p cross-section)	
Charging time	45 mi	n.			
Weight incl. battery	1.95 k	кg			
Ambient temperature	-10 °(C up to +40 °C			
Item				Part No.	
Battery powered hydrau	ılic crimping too	ol 6 - 120 mm²		EK30IDML	-
Scope of supply					
Battery 10.8 V / 2.5 Ah,	Li-lon (27 Wh)				RAML1225
Charger for 10.8 V Li-lo	n batteries, 230	V			LGML1
Plastic case					KKML
Suitable for	Connection material	Crimping range mm ²	Crimp profile		
Copper tubular cable lug	gs and connecto	ors			
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 120	\bigcirc		
Tubular cable lugs and connectors for fine stranded conductors		6 - 120	\bigcirc		
Terminals, connectors a	nd pin terminal	s acc. to DIN, co	pper		
Solderless terminals (DIN 46234), connec- tors (DIN 46341) and pin terminals (DIN 46230)		6 - 95	\bigcirc		



EK WF 120 ML Battery powered hydraulic crimping tool 6 - 120 mm²



- Innovative square crimping no change of crimping dies required
- ▶ Only one crimp necessary (up to a cable end-sleeve length of 32 mm)
- ▶ Powerful 10.8 V Li-lon battery technology with battery charge indicator

Characteristics

- Closed crimping head
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft lining
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Manual retraction stop (MRS) for positioning control for multiple crimps
- Maintenance display via LED

Suitable for

 Cable end-sleeves acc. to DIN, insulated cable end-sleeves and insulated twin cable end-sleeves

Technical data	
Crimping force	10 / 40 kN
Stroke / opening width	19 mm
Crimping range	6 - 120 mm²
Crimping cycle	1 s up to 5 s (depending on cross-section)
Battery voltage	10.8 V
Battery capacity	2.5 Ah, Li-lon
Charging time	approx. 45 min.
Weight incl. battery	1.96 kg
Ambient temperature	-10 °C up to +40 °C

Item	Part No.
Battery powered hydraulic crimping tool 6 - 120 mm ²	EKWF120ML
Scope of supply	Part No.
Battery 10.8 V / 2.5 Ah, Li-Ion (27 Wh)	RAML1225
Charger for 10.8 V Li-lon batteries, 230V	LGML1
Plastic case	KKML

suitable for	Connection material	Crimping range mm²	Crimp profile
Cable end-sleeves			
Cable end-sleeves		6 - 120	\Diamond
Twin cable end-sleeves		6 - 120	\bigcirc



EK 35/4 ML Battery powered hydraulic crimping tool 6 - 150 mm²







- ▶ Large cross section range up to 150 mm²
- ▶ Slim crimping head ideal when space is critical
- ▶ Powerful 10.8 V Li-lon battery technology with battery charge indicator

Characteristics

- Closed head, flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

Suitable for

4-series interchangeable dies, narrow crimping

Technical data		
Crimping force	35 kN	
Stroke / opening width	9 mm	
Crimping range	6 - 150 mm²	
Crimping cycle	3 s to 4 s (depending on crimp c	ross-section)
Number of crimps	approx. 200 at 120 mm² Cu	
Battery voltage	10.8 V	
Battery capacity	21.5 Ah, Li-Ion	
Charging time	approx. 45 min.	
Weight incl. battery	1.6 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Battery powered hydraulic cri	imping tool 6 - 150 mm²	EK354ML
Scope of supply		Part No.
Battery 10.8 V / 2.5 Ah, Li-lon	ı (27 Wh)	RAML1225
Charger for 10.8 V Li-lon batt	LGML1	
Plastic case		KKML
Variants		Part No.
EK 35/4 ML with crimping die set HR 4 from 6 - 150 mm²		EK354MLSETHR
EK 35/4 ML with crimping die	EK354MLSETHD	



Available dies for Series 4 for K 35/4 ML

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 150		2.84
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 70		2.84
Tubular cable lugs and connectors for fine stranded conductors		10 - 35	\bigcirc	2.84
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors, indent crimp	VA	1.5 - 2.5	\bigcirc	2.85
Stainless steel tubular cable lugs and connectors, double indent crimp	VA	4 - 16	\Box	2.85
Nickel tubular cable lugs and connectors, indent crimp	Ni	1.5 - 2.5	\bigcirc	2.85
Nickel tubular cable lugs and connectors, double indent crimp	Ni	4 - 16	\bigcirc	2.85
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 120		2.85
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN		10 - 35	\bigcirc	2.85
Insulated solderless terminals and connectors		10 - 16	\bigcirc	2.85
Sleeves for compacted conductors and sector-shaped conductors, $\\$	copper			
Pre-rounding dies for sector-shaped AI and Cu conductors		16 sm - 150 se / 120 sm		2.86
Aluminium compression cable lugs and connectors acc. to DIN				
Aluminium compression cable lugs and connectors to DIN	AI	10 rm/sm, 95 re/se		2.86
Aluminium/copper compression cable lugs and connectorsl				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA4, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD4 Clamps	Al/Cu	10 rm/sm, 95 re/se		2.86
Clamps, C-type				
		10 - 35		2.86
Cable end-sleeves				
Cable end-sleeves		10 - 50	\square	2.86

THE NEW STANDARD - KLAUKE NEXT GENERATION

CRIMPING TOOLS

To guarantee the quality, you can check the tool data from the display or via Klauke Link® App at any time. You can easily make this information available to your customers as project documentation at the touch of a button. The balanced design ensures effortless and continuously high-quality operations up to the end of each working day.



In brief

- ▶ Selectable battery platform: with Bosch or Makita
- > Proof of quality can be created via Bluetooth
- ► Ensure tool availability: Read the tool properties from the display or via the app
- Effortless operations thanks to modern, ergonomic design





▶ Making work easier

Klauke tools guarantee effortless operations: The "mini" impresses through its low weight and the pistol shape thanks to the balanced centre of gravity

- Our compact "mini" is just perfect for confined areas
- The 2-stage hydraulic system ensures fast operations with fast feed and power stroke (pistol shape)
- Especially impressive and reliable: The one-button control concept for all tools with automatic retraction

The ARS function (Automatic Retraction Stop) stops the automatic retraction when a crimp is complete through a fully-automated process

▶ Guarantees quality

- All relevant tool data immediately in view on the integrated display
- In case of a fault, you are warned by a visual and audible signal from the tool
- Provide written proof of the quality of your work with Link® App - now simply and conveniently connect the tool to the computer via Bluetooth.



▶ Klauke Link® App

Show your customers how well you work. Klauke Next Generation records your operations, and these can then be transmitted by Bluetooth. The free Klauke Link® software uses these data to create for you, if you want, a project report - the proof of quality for your correct operations. You have control over your quality.

► Klauke Link® App

Connectivity is the generic term for the digital application that Klauke is making available to its customers in addition to its tools – the new Klauke Link® App. This application offers you new possibilities with all Klauke Next Generation tools.

The Klauke Link® App can be found at:

https://www.klauke.com/de/en/klauke-link-connectivity







EK 35/4 Battery powered hydraulic crimping tool 6 - 150 mm²











- Large cross section range up to 150 mm²
- ▶ Slim crimping head ideal when space is critical
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Simple and safe: Automatic retraction when operation is complete
- Effortless working thanks to low weight
- LED for work area illumination
- Always ready-to-use thanks to battery charge and service display

Suitable for

- 4-series interchangeable dies, narrow crimping

Technical data			
Crimping force	35 kN		
Stroke / opening width	9 mm		
Crimping range	6 - 150 mm ²		
Crimping cycle	3 s to 4 s (depending or	n crimp cross-sectio	n)
Charging time	15 min.		
Weight incl. battery	2.4 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic crim	oing tool 6 - 150 mm²	EK354CFB	EK354CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-lon		RALB1EU	
Bosch quick-charger for 18 V Li-lon battery		LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-lon			RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KK50NG	KK50NG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-lon (54 Wh)			RAL2
Variants			
L-BOXX with battery powered crimping tool EK354CFB, 6 - 150 mm ²		LBOXXEK354CFB	
L-BOXX with battery powered confidence of a 150 mm ²	rimping tool EK354CFM,		LBOXXEK354CFM



Available dies for Series 4 for K 35/4

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 150		2.84
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 70		2.84
Tubular cable lugs and connectors for fine stranded conductors		10 - 35	\bigcirc	2.84
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors, indent crimp	VA	1.5 - 2.5	\bigcirc	2.85
Stainless steel tubular cable lugs and connectors, double indent crimp	VA	4 - 16	\bigcirc	2.85
Nickel tubular cable lugs and connectors, indent crimp	Ni	1.5 - 2.5	\bigcirc	2.85
Nickel tubular cable lugs and connectors, double indent crimp	Ni ©	4 - 16	\bigcirc	2.85
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 120		2.85
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN $$		10 - 35	\bigcirc	2.85
Insulated solderless terminals and connectors		10 - 16	\bigcirc	2.85
Sleeves for compacted conductors and sector-shaped conductors, $\\$	copper			
Pre-rounding dies for sector-shaped AI and Cu conductors		16 sm - 150 se / 120 sm		2.86
Aluminium compression cable lugs and connectors acc. to DIN				
Aluminium compression cable lugs and connectors to DIN	AI	10 rm/sm, 95 re/se		2.86
Aluminium/copper compression cable lugs and connectorsl				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies HA4, copper side of aluminum/copper compression cable lugs and connectors: crimping dies HD4	Al/Cu	10 rm/sm, 95 re/se		2.86
Clamps				
Clamps, C-type		10 - 35		2.86
Cable end-sleeves				
Cable end-sleeves		10 - 50		2.86



EKM 60/22 Battery powered hydraulic crimping tool 6 - 300 mm²











- ▶ Large crimping range up to 300 mm²
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

Suitable for

22-series interchangeable dies, narrow crimping

Technical data			
Crimping force	60 kN		
Hub	17.5 mm		
Crimping range	6 - 300 mm²		
Crimping cycle	2 s (bei ARS) und 5 s (d	depending on crimp o	cross-section)
Charging time	15 min.		
Weight incl. battery	3.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic crimp	oing tool 6 - 300 mm ²	EKM6022CFB	EKM6022CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-lo	on	RALB1EU	
Bosch quick-charger for 18 V Li-	lon battery	LGLB1EU	
Plastic case		KK50NG	
Makita battery 18 V / 1.5 Ah, Li-	lon		RAL1
Makita quick-charger for 18 V Li	-lon battery		LGL1
Plastic case			KK50L
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-lo	on	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL40
Variants			
L-BOXX with battery powered cr EKM6022CFB, 6 - 300 mm ²	imping tool	LBOXXEKM6022CFB	
L-BOXX with battery powered cr EKM6022CFM, 6 - 300 mm ²	imping tool		LBOXXEKM6022CFM



Available dies for Series 22 for EKM 60/22

Refer to the limitations when crimping connectors in the technical a	appendix.			
Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 300		2.87
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 150		2.87
Tubular cable lugs and connectors for fine stranded conductors		10 - 70	\bigcirc	2.88
Tubular cable lugs and connectors for solid conductors		1.5 - 16		2.88
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors	VA	10 - 50	\bigcirc	2.88
Nickel tubular cable lugs and connectors	Ni ©	10 - 50	\bigcirc	2.88
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 300		2.88
Double compression cable lugs	DIN	2 x 70		2.88
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN		10 - 70	\bigcirc	2.89
Insulated solderless terminals and connectors		10 - 70	\bigcirc	2.89
Sleeves for compacted conductors and sector-shaped conductors,	copper			
Pre-rounding dies for sector-shaped Al and Cu conductors		10 sm - 300 se / 300 sm		2.89
Aluminium compression cable lugs and connectors to DIN				
Aluminium compression cable lugs and connectors to DIN	Al	10 sm - 300 se / 300 sm		2.89
Aluminium/copper compression cable lugs and connectors				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22	Al/Cu	10 sm - 300 se / 300 sm		2.89
Clamps				
Clamps, C-type		10 - 70		2.90
Clamps, H-type		70		2.90
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.90

EK 60/22 Battery powered hydraulic crimping tool 6 - 300 mm²











- ▶ Large crimping range up to 300 mm²
- ► Fast crimp cycles due to Automatic Retraction Stop (ARS)
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- · Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

Suitable for

22-series interchangeable dies, narrow crimping

Technical data				
Crimping force	60 kN			
Hub	17 mm			
Crimping range	6 - 300 mm ²			
Crimping cycle	3 s to 5 s (depending or	n crimp cros	ss-sectio	on)
Charging time	45 min.			
Weight incl. battery	4.4 kg			
Ambient temperature	-10 °C up to +40 °C			
Item		Part No.	Bosch	Part No. Makita
Battery powered hydraulic crim	ping tool 6 - 300 mm ²	EK6022	2CFB	EK6022CFM
Scope of supply				
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2	2EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1	EU	
Makita battery 18 V / 4.0 Ah, Li-	lon			RAL40
Makita quick-charger for 18 V L	i-lon battery			LGL1
Plastic case		KK120	NG	KK120NG
Accessories				
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2	2EU	
Makita battery 18 V / 4.0 Ah, Li-	lon			RAL40
Item				Part No.
EK 60/22 with crimping die set	D 22 from 16 - 240 mm ²		Е	K6022CFMSETD
EK 60/22 with crimping die set	R 22 from 16 - 240 mm ²		Е	K6022CFMSETR



Available dies for Series 22 for EK 60/22

Refer to the limitations when crimping connectors in the technical appendix. Suitable for Copper fubular cable lugs and connectors Tubular cable lugs and connectors standard type, tubular cable ups for without connections connections of the standard type, insulated cable lugs and connectors for fine stranded conductors Insulated cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors Tubular cable lugs and connectors fine stranded conductors for fine strandard fine strandard fine strandard fine fine strandard	anabio aido ioi dolloo EE ioi Eix o				
Copper tubular cable lugs and connectors standard type, tubular cable lugs for switchgaar connections. Standard type, tubular cable lugs and connectors standard type, insulated cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors, Ni, VA Stainless steel tubular cable lugs and connectors Nickel tubular cable lugs and connectors to DIN Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN Double compression cable lugs and connectors to DIN, copper Solderiess terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderiess terminals and connectors Note that the subular cable lugs and connectors to DIN Aluminium compression cable lugs and connectors compered to aluminum/copper compression cable lugs and connectors crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors crimping dies A22, copper side of	er to the limitations when crimping connectors in the technical a	appendix.			
Tubular cable lugs and connectors, standard type, tubular cable lugs and connectors of the strandard type, insulated cable lugs and compression joints, standard type, insulated pain terminals Tubular cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors, Ni, VA Stainless steel tubular cable lugs and connectors Tubular cable lugs and connectors, Ni, VA Stainless steel tubular cable lugs and connectors Tubular cable lugs and connectors to DIN Copper compression cable lugs and connectors to DIN Copper compression cable lugs and connectors to DIN Terminals, connectors and pin terminals acc. to DIN, copper Solderless terminals (DIN 46234), connectors and pin terminals acc. to DIN terminals (DIN 46234), connectors and pin terminals (DIN 46234), connectors and pin terminals (DIN 46234), connectors Tubular cable lugs and connectors Tubular cable lugs and connectors Tubular cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium side of aluminum/copper compression cable lugs and connectors crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors crimping dies D22 Clamps Clamps, H-type Tubular cable lugs and connectors to Din Clamps Tubular cable lugs and connectors to Din Clamps Tubular cable lugs and connectors to Din Clamps Tubular cable lugs and connectors to	able for	Connection material	Crimping range mm ²	Crimp profile	Page
lugs for switchgear connections Graph Gra	per tubular cable lugs and connectors				
insulated pin terminals Tubular cable lugs and connectors for fine stranded conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors, Ni, VA Stainless steel tubular cable lugs and connectors Ni consider tubular cable lugs and connectors to DIN Copper compression cable lugs (DIN 46235) and connectors (DIN copper compression cable lugs (DIN 46235) and connectors (DIN copper compression cable lugs No copper compression cable lugs and connectors No copper compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors cable lugs and connectors compression cable lugs and connectors c			6 - 300		2.87
Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors for solid conductors Tubular cable lugs and connectors, Ni, VA Stainless steel tubular cable lugs and connectors Tubular cable lugs and connectors to DIN Tubular cable lugs and connectors to DIN Tubular cable lugs and connectors and pin terminals acc. to DIN, copper Terminals, connectors and pin terminals acc. to DIN, copper Solderless terminals (DIN 46234), connectors and pin terminals Tubular cable lugs are conductors and pin terminals Tubular cable lugs are conductors and pin terminals Tubular cable lugs are conductors and pin terminals Tubular cable lugs and connectors Tubular cable lugs and connectors to DIN Tubular cable lugs and connectors to DIN Tubular cable lugs and connectors to DIN Tubular cable lugs and connectors cabl			10 - 150		2.87
Tubular cable lugs and connectors, NI, VA Stainless steel tubular cable lugs and connectors Nickel tubular cable lugs and connectors to DIN Copper compression cable lugs and connectors to DIN Din	ılar cable lugs and connectors for fine stranded conductors		10 - 70	\bigcirc	2.88
Stainless steel tubular cable lugs and connectors Name	ular cable lugs and connectors for solid conductors		1.5 - 16		2.88
Nickel tubular cable lugs and connectors Nickel tubular cable lugs and connectors to DIN Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN Copper compression cable lugs (DIN 46235) and connectors (DIN 6-300 6-300 7-300) Double compression cable lugs Din 2 x 70 7-30 Terminals, connectors and pin terminals acc. to DIN, copper Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN 7-70 7-30 Insulated solderless terminals and connectors 7-30 Sleeves for compacted conductors and sector-shaped conductors, copper Pre-rounding dies for sector-shaped Al and Cu conductors 7-30 Aluminium compression cable lugs and connectors to DIN 7-30 Aluminium compression cable lugs and connectors DIN 7-300 se / 300 sm 7-300 se /	ılar cable lugs and connectors, Ni, VA				
Copper compression cable lugs and connectors to DIN Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN Double compression cable lugs DIN 2 x 70 Terminals, connectors and pin terminals acc. to DIN, copper Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderless terminals and connectors DIN 2 DIN 3 DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderless terminals and connectors DIN 3 DIN 4 DIN	nless steel tubular cable lugs and connectors	VA	10 - 50	\bigcirc	2.88
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN Double compression cable lugs DiN 2 x 70 Terminals, connectors and pin terminals acc. to DIN, copper Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderless terminals and connectors In - 70 Sleeves for compacted conductors and sector-shaped conductors, copper Pre-rounding dies for sector-shaped Al and Cu conductors Aluminium compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium side of aluminum/copper compression cable lugs and connectors Aluminium side of aluminum/copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps, C-type To - 70 Clamps, H-type	el tubular cable lugs and connectors	Ni	10 - 50	\bigcirc	2.88
Double compression cable lugs Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderless terminals and connectors Double compacted conductors and sector-shaped conductors, copper Pre-rounding dies for sector-shaped Al and Cu conductors To sm - 300 se / 300 sm Aluminium compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium/copper compression cable lugs and connectors Aluminium/copper compression cable lugs and connectors Aluminium side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type To To Clamps, H-type	per compression cable lugs and connectors to DIN				
Terminals, connectors and pin terminals acc. to DIN, copper Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderless terminals and connectors Insulated solderless terminals (DIN 46234), conper solde sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solde sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solde sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solde sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solde sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solder sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solder sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solder sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solder sector-shaped conductors, copper Insulated solderless terminals (DIN 46234), copper solder sector-shaped conductors, copper sector-shaped solder		DIN	6 - 300		2.88
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN Insulated solderless terminals and connectors 10 - 70 Sleeves for compacted conductors and sector-shaped conductors, copper Pre-rounding dies for sector-shaped Al and Cu conductors Aluminium compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium/copper compression cable lugs and connectors Aluminum side of aluminum/copper compression cable lugs and connectors Aluminum side of aluminum/copper side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 - 70 Clamps, H-type	ble compression cable lugs		2 x 70		2.88
(DIN 46230) acc. to DIN Insulated solderless terminals and connectors Insulated solderless terminals and connectors to DIN Insulated solderless terminals and connectors and sector-shaped conductors, copper Insulated solderless terminals and connectors and sector-shaped conductors, copper Insulated solderless terminals and connectors and sector-shaped conductors and sector-shaped con	ninals, connectors and pin terminals acc. to DIN, copper				
Sleeves for compacted conductors and sector-shaped conductors, copper Pre-rounding dies for sector-shaped Al and Cu conductors Aluminium compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium/copper compression cable lugs and connectors Aluminium/copper compression cable lugs and connectors Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 - 70 Clamps, H-type			10 - 70	\bigcirc	2.89
Pre-rounding dies for sector-shaped Al and Cu conductors 10 sm - 300 se / 300 sm Aluminium compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium/copper compression cable lugs and connectors Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 sm - 300 se / 300 sm Clamps, H-type 70	lated solderless terminals and connectors		10 - 70	\bigcirc	2.89
Aluminium compression cable lugs and connectors to DIN Aluminium compression cable lugs and connectors to DIN Aluminium/copper compression cable lugs and connectors Aluminium/copper compression cable lugs and connectors Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm Clamps To To Clamps, H-type	ves for compacted conductors and sector-shaped conductors,	copper			
Aluminium compression cable lugs and connectors to DIN Aluminium/copper compression cable lugs and connectors Aluminium side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 - 70 Clamps, H-type 70	rounding dies for sector-shaped Al and Cu conductors		10 sm - 300 se / 300 sm		2.89
Aluminium/copper compression cable lugs and connectors Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm Clamps To Clamps, H-type	ninium compression cable lugs and connectors to DIN				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm 70	ninium compression cable lugs and connectors to DIN	Al	10 sm - 300 se / 300 sm		2.89
connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22 Clamps Clamps, C-type 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm 10 sm - 300 se / 300 sm 70	ninium/copper compression cable lugs and connectors				
Clamps, C-type 10 - 70 Clamps, H-type 70	nectors: crimping dies A22, copper side of aluminum/copper	Al/Cu	10 sm - 300 se / 300 sm		2.89
Clamps, H-type 70	nps				
	nps, C-type		10 - 70		2.90
Cable end-sleeves	nps, H-type		70		2.90
	le end-sleeves				
Cable end-sleeves 25 - 240	le end-sleeves		25 - 240	\bigcirc	2.90

EK 60 VP Battery powered hydraulic crimping tool 10 - 240 mm²











- ▶ Crimps optimised at all times due to the patented centring system
- ► Fast crimp cycles due to Automatic Retraction Stop (ARS)
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Quad-point indent crimping feature with patented centring system, no dies required
- Open head, rotatable
- · Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Always ready-to-use thanks to battery charge and service display

Technical data			
Crimping force	55 kN		
Crimping range	10 - 240 mm²		
Crimping cycle	3 s to 6 s (depending or	n crimp cross-section	n)
Charging time	45 min.		
Weight incl. battery	5.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic crim	ping tool 10 - 240 mm ²	EK60VPCFB	EK60VPCFM
Scope of supply			
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL40
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KK120NG	KK120NG
Accessories			
Gauge and 10 Test cylinder		TS10B	TS10B

Copper tubular cable lugs and connectors Tubular cable lugs, standard type, tubular cable lugs for switchgear connections Connectors, standard type Tubular cable lugs for fine stranded conductors Connectors for fine stranded conductors Tubular cable lugs for fine stranded conductors Connectors for fine stranded conductors	Suitable for	Connection material	Crimping range mm ²	Crimp profile
standard type, tubular cable lugs for switchgear connections Connectors, standard type Tubular cable lugs for fine stranded conductors Connectors for fine	Copper tubular cable	lugs and connecto	ors	
standard type Tubular cable lugs for fine stranded conductors Connectors for fine	standard type, tubular cable lugs for switchgear		10-240	
for fine stranded conductors Connectors for fine 10-240	,		10-120	
10-95	for fine stranded		10-240	
Strainucu conductors	Connectors for fine stranded conductors		10-95	



EK 60 VP/FT Battery powered hydraulic crimping tool 16 - 300 mm²











- Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 300 mm²
- ▶ Fast crimp cycles due to Automatic Retraction Stop (ARS)
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Quad-point indent crimping feature with patented centring system, no dies required
- Closed head with bolt interlock, rotatable, flip top style
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

Technical data			
Crimping force	55 kN		
Crimping range	16 - 300 mm ²		
Crimping cycle	3 s to 6 s (depending or	n crimp cross-sectio	n)
Charging time	45 min.		
Weight incl. battery	5.1 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic cr	rimping tool 16 - 300 mm ²	EK60VPFTCFB	EK60VPFTCFM
Scope of supply			
Bosch battery 18 V / 5.0 Ah, I	Li-lon	RALB2EU	
Bosch quick-charger for 18 V	/ Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah,	Li-lon		RAL40
Makita quick-charger for 18	V Li-lon battery		LGL1
Plastic case		KK120NG	KK120NG
Accessories			
Bosch battery 18 V / 5.0 Ah, I	Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah,	Li-lon		RAL40

Suitable for	Connection material	Crimping range mm ²	Crimp profile
Tubular cable lugs an	d connectors - Cu	l	
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		16-300	
Tubular cable lugs and connectors for fine stranded conductors		16-300	

EKM 60 ID Battery powered hydraulic crimping tool 10 - 240 mm²











Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lug	gs and connecto	ors	
Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections		10 - 240	\bigcirc
Tubular cable lugs and connectors for fine stranded conductors		10 - 240	\bigcirc
Terminals, connectors a	nd pin terminals	s acc. to DIN	
Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341)		10 - 240	\bigcirc
Aluminum compression	cable lugs and	connectors	
Aluminum compression cable lugs and connectors acc. to DIN	AI	50 - 240	\bigcirc
Aluminum/copper comp	ression cable lu	igs and connec	tors
Aluminum/copper compression cable lugs and connectors	Al/Cu	50 - 240	\otimes

- ▶ Extra large crimping area due to innovative 2-stage telescopic cylinder
- ▶ Indent crimping no changing of dies required
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- With innovative 2-stage telescopic cylinder
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Always ready-to-use thanks to battery charge and service display

Suitable for

- Very well suited for compacted conductors
- Especially for fine strand conductors to EN 60228
- Certified from 16 mm² onwards

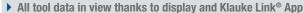
Technical data			
Crimping force	30 - 60 kN		
Stroke / opening width	40.5 mm		
Crimping range Cu	10 - 240 mm²		
Crimping range Al	50 - 240 mm²		
Crimping cycle	2 s (for ARS) to 7 s (dep	ending on cross-sec	ction)
Charging time	15 min.		
Weight incl. battery	2.5 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic crim	ping tool 10 - 240 mm²	EKM60IDCFB	EKM60IDCFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-	on	RALB1EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KK50NG	KK50NG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-	on	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL40
Variants			
L-BOXX with battery powered c EKM60IDCFB, 10 - 240 mm ²	rimping tool	LBOXXEKM60IDCFB	
L-BOXX with battery powered c EKM60IDCFM, 10 - 240 mm ²	rimping tool		LBOXXEKM60IDCFM



EK 120 ID Battery powered hydraulic crimping tool 35 - 500 mm²







Characteristics

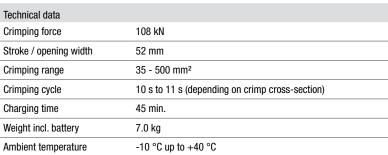
- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth

Indent crimping, no dies required

- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity

► For superfine-stranded conductors to 500 mm²

- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display



Ambient temperature 10 0 up to ++0 0		
Item	Part No. Bosch	Part No. Makita
Battery powered hydraulic crimping tool 35 - 500 mm²	EK120IDCFB	EK120IDCFM
Scope of supply		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40
Makita quick-charger for 18 V Li-lon battery		LGL1
Plastic case	KK120NG	KK120NG
Accessories		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40

Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lug	gs and connecto	ors	
Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections		70 - 185	\bigcirc
Tubular cable lugs and connectors for fine stranded conductors		70 - 240	\boxtimes
Terminals, connectors a	nd pin terminals	s acc. to DIN	
Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341)		95 - 500	\bigcirc









EK 120/32 Battery powered hydraulic crimping tool 16 - 400 mm²







· Choose your battery system: Bosch or Makita

▶ Very large crimping range up to 400 mm²

- All data can be easily read via Bluetooth
- Open head, rotatable
- Quality assurance via visual and audible signals in case of error

▶ All tool data in view thanks to display and Klauke Link® App

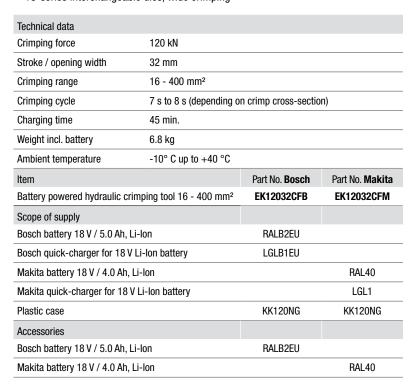
Simple and safe: One-button operating concept for controlling all tool functions

Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools

- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display



- 13-series interchangeable dies, wide crimping









Available dies for Series 13 for EK 120/32

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors, $% \left(1\right) =\left(1\right) \left(1$	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	Al	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.94

EK 120/42 Battery powered hydraulic crimping tool 16 - 400 mm²











- ▶ C-head with very wide crimping range to 400 mm²
- ▶ Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- ► Easy handling by optimum weight distribution
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

13-series interchangeable dies, wide crimping

Technical data			
Crimping force	120 kN		
Stroke / opening width	42 mm		
Crimping range	16 - 400 mm²		
Crimping cycle	8 s to 9 s (depending or	n crimp cross-sectio	n)
Charging time	45 min.		
Weight incl. battery	7.1 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic crim	ping tool 16 - 400 mm ²	EK12042CFB	EK12042CFM
Scope of supply			
Bosch battery 18 V / 5.0 Ah, Li-	lon	RALB2EU	
Bosch quick-charger for 18 V L	-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-	·lon		RAL40
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KK120NG	KK120NG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-	lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL40



Available dies for Series 13 for EK 120/42

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\sim	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni ©	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni (C)	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.94

EK 120 U Battery powered hydraulic crimping tool 16 - 400 mm²







Characteristics

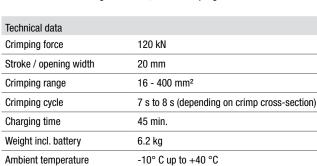
- Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- ▶ All tool data in view thanks to display and Klauke Link® App
- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth

▶ H-head for deep groove crimps

- Closed head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

Suitable for

- 13-series interchangeable dies, wide crimping



Item	Part No. Bosch	Part No. Makita
Battery powered hydraulic crimping tool 16 - 400 mm ²	EK120UCFB	EK120UCFM
Scope of supply		
Bosch battery 18 V / 5.0 Ah, Li-Ion	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40
Makita quick-charger for 18 V Li-lon battery		LGL1
Plastic case	KK120NG	KK120NG
Accessories		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40







Available dies for Series 13 for EK 120 U

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors, $% \left(1\right) =\left(1\right) \left(1$	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	Al	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.94

EK 135 FT Battery powered hydraulic crimping tool 10 - 630 mm²













- ▶ Very large crimping range to 630 mm²
- ▶ Very powerful with a crimping force of 13.5 t
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display

Suitable for

- 13-series interchangeable dies, wide crimping
- 15-series interchangeable dies, wide crimping

Technical data			
Crimping force	135 kN		
Stroke / opening width	50.8 mm		
Crimping range	10 - 630 mm²		
Crimping cycle	ca. 10 s to 11 s (depend	ding on cross-section	n)
Charging time	45 min.		
Weight incl. battery	10.2 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic crimp	oing tool 10 - 630 mm²	EK135FTCFB	EK135FTCFM
Scope of supply			
Adapter for crimping dies series	13	UA15T	UA15T
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL40
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KK135FTNG	KK135FTNG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL40



Available dies for Series 13 for EK 135 FT

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\sim	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni ©	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni Si	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240		2.94



Available dies for Series 15 for EK 135 FT

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	400 - 625		2.95
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	Al	400 - 500		2.95
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	400 - 500		2.95

USE ADAPTERS!

Please note the use of the adapter UA15T!
The adapter extends the cross-section range, as crimping dies of series 13 can also be used!

Please inform yourself!

EASY TO HANDLE HAND-OPERATED HYDRAULIC CRIMPING TOOLS

Klauke tools work for you. The 2-stage hydraulic system ensures automatic retraction after crimping. Rotating heads come into their own even in confined areas and support you up to a cross-sectional range of 400 mm². Aluminium makes the tool lighter and the work easier. The bolt interlock makes the device safe when not in use. You save energy and time. All you need to do yourself is crimp.



▶ Convenient to use

Several crimps in succession are tiring. And so for our hand-operated hydraulic tools, we produced the housing and pump lever from aluminium to achieve a low weight. The pump lever is in exactly the correct position, and so the pump movement requires only a small space. Work better with the convenience of Klauke.

- Large crimping range up to 400 mm²
- Ergonomic design for effortless operations
- 2-stage hydraulic system with fast feed and power stroke
- Simple and reliable due to automatic retraction after every crimping operation
- Low weight thanks to the aluminium pump lever and housing

▶ Adapts

All hand-operated hydraulic crimping tools have crimping heads that rotate through 360°. You can work even in confined areas with flexible settings.

- 360° rotating crimping heads for safe operations in confined spaces
- Well suited for installing cable joints underground or in panel building

▶ Save yourself the return stroke

Your effort goes only into the crimping process. When the crimping process is complete, the crimping jaws retract into the home position via the automatic retraction function.



HK 60/22 Hand-operated hydraulic crimping tool 6 - 300 mm²





- ▶ Large crimping range up to 300 mm²
- ▶ Slim crimping head ideal when space is critical

Characteristics

- Closed head, flip top style, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Suitable for

22-series interchangeable dies, narrow crimping

Technical data		
Crimping force	60 kN	
Stroke	17 mm	
Crimping range	6 - 300 mm ²	
Length	460 mm	
Weight	3.3 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic crimpi	ng tool 6 - 300 mm²	HK6022
Scope of supply		Part No.
Steel carrying case		MK6022
Variants		Part No.
HK 60/22 with crimping die set	D 22 from 16 - 240 mm ²	HK6022SETD



Available dies for Series 22 for HK 60/22

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 300		2.87
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 150		2.87
Tubular cable lugs and connectors for fine stranded conductors		10 - 70	\bigcirc	2.88
Tubular cable lugs and connectors for solid conductors	0	1.5 - 16		2.88
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors	VA	10 - 50	\sim	2.88
Nickel tubular cable lugs and connectors	Ni ©	10 - 50	\bigcirc	2.88
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 300		2.88
Double compression cable lugs	DIN	2 x 70		2.88
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN		10 - 70	\bigcirc	2.89
Insulated solderless terminals and connectors		10 - 70	\bigcirc	2.89
Sleeves for compacted conductors and sector-shaped conductors, c	opper			
Pre-rounding dies for sector-shaped Al and Cu conductors		10 sm - 300 se / 300 sm		2.89
Aluminium compression cable lugs and connectors to DIN				
Aluminium compression cable lugs and connectors to DIN	AI	10 sm - 300 se / 300 sm		2.89
Aluminium/copper compression cable lugs and connectors				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22	Al/Cu	10 sm - 300 se / 300 sm		2.89
Clamps				
Clamps, C-type		10 - 70		2.90
Clamps, H-type		70		2.90
Cable end-sleeves				
Cable end-sleeves		25 - 240		2.90



HK 60 VP Hand-operated hydraulic crimping head 10 - 240 mm²







- ► Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors up to 240 mm²
- ▶ The patented centring system guarantees optimum crimps every time

Characteristics

- Quad-point indent crimping feature with patented centring system, no dies required
- Open head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Technical data		
Crimping force	55 kN	
Crimping range	10 - 240 mm²	
Length	525 mm	
Weight	4.1 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic crimp	oing tool 10 - 240 mm²	HK60VP
Scope of supply		Part No.
Steel carrying case		MK60VP
Gauge and 10 test cylinder		TS10B
Accessories		Part No.
Gauge and 10 test cylinder		TS10B

Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lugs and connectors			
Tubular cable lugs, standard type, tubular cable lugs for switchgear connections		10 - 240	
Connectors, standard type		10 - 120	
Tubular cable lugs for fine stranded conductors		10 - 240	
Connectors for fine stranded conductors		10 - 95	



HK 60 VP/FT Hand-operated hydraulic crimping head 16 - 300 mm²







- ▶ Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 300 mm²
- ▶ The patented centring system guarantees optimum crimps every time
- ▶ Closed crimping head ideal for utility lines construction

Characteristics

- Quad-point indent crimping feature with patented centring system, no dies required
- Closed head with bolt interlock, rotatable, flip top style
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Technical data		
Crimping force	55 kN	
Crimping range	16 - 300 mm²	
Length	535 mm	
Weight	4.1 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part-No.
Hand-operated hydraulic cri	mping tool 16 - 300 mm ²	HK60VPFT
Scope of supply		Part-No.
Steel carrying case		MK60VP
Gauge and 10 test cylinder		TS10B
Accessories		PartNo.
Gauge and 10 test cylinder		TS10B

Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lugs and connectors			
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		16 - 300	
Tubular cable lugs and compression joints for fine stranded conductors		16 - 300	



HK 120/30 Hand-operated hydraulic crimping tool 16 - 400 mm²







- ▶ Very large crimping range to 400 mm²
- ▶ Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools

Characteristics

- Open head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Suitable for

13-series interchangeable dies, wide crimping

Technical data		
Crimping force	120 kN	
Stroke	30 mm	
Crimping range	16 - 400 mm²	
Length	510 mm	
Weight	5.4 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic crimping tool 10 - 400 mm ²		HK12030
Scope of supply		Part No.
Steel carrying case		MK12042



Available dies for Series 13 for HK 120/30

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni ©	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240		2.94

HK 120/42 Hand-operated hydraulic crimping tool 16 - 400 mm²







- ▶ Very large crimping range up to 400 mm²
- ▶ Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools
- C-head with larger 42 mm jaw opening

Characteristics

- Open head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Suitable for

13-series interchangeable dies, wide crimping

Technical data		
Crimping force	120 kN	
Stroke	42 mm	
Crimping range	16 - 400 mm²	
Length	560 mm	
Weight	5.9 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic cr	imping tool 16 - 400 mm ²	HK12042
Scope of supply		Part No.
Steel carrying case		MK12042



Available dies for Series 13 for HK 120/42

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.94

Crimping Hand-opera

HK 120 U Hand-operated hydraulic crimping tool 16 - 400 mm²





- ▶ H-head for deep groove crimps
- ▶ Up to 60% fewer crimps thanks to wide crimping in comparison to 6 t tools

Characteristics

- Closed head, rotatable
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Suitable for

13-series interchangeable dies, wide crimping

Technical data		
Crimping force	120 kN	
Stroke	20 mm	
Crimping range	16 - 400 mm²	
Length	540 mm	
Weight	5.2 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic crimp	ing tool 16 - 400 mm ²	HK120U
Scope of supply		Part No.
Steel carrying case		MK120U



Available dies for Series 13 for HK 120 U

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.94

FLEXIBLE HEADS - HYDRAULIC CRIMPING HEADS AND CRIMPING TOOL SYSTEMS

No matter whether continuous operation in the workshop or portable use in the field -Klauke crimping heads and systems provide the right solution each and every time.



▶ The Klauke system

Full flexibility with the Klauke system - all hydraulic heads and pumps are mutually compatible and your 13 and 22 series crimping dies can also be used in the hydraulic crimping heads.

- Crimping heads for the 13 and 22 series, also for workbench mounting
- Crimping heads with a crimping force of 55 kN to 1000 kN
- Workbench tools BG-tested

▶ High crimping force for greater width

The crimping heads achieve a crimping force of 55 kN to 1000 kN. Allowing you to process cable lugs of up to 1600 mm².

- Compact design
- Easy handling
- Versatile
- Broadest range of applications

PK 22 Hydraulic crimping heads 6 - 300 mm²





- ▶ Large crimping range up to 300 mm²
- ▶ Slim crimping head ideal when space is critical

Characteristics

- Closed head, flip top style, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Suitable for

22-series interchangeable dies, narrow crimping

Additional information

Part Number appendix for W crimping dies (UL-tested) "W"

Technical data		
Crimping force	60 kN	
Stroke / opening width	17 mm	
Crimping range	6 - 300 mm²	
Operating pressure	max. 700 bar	
Length	305 mm	
Weight	3.0 kg	
Item		Part No.
Hydraulic crimping head 6 - 30) mm²	PK22
Scope of supply		Part No.
Carrying bag		TT2

THK 22 Hydraulic crimping tool for workbench mounting 6 - 300 mm²



K22 SERIE

- ► Large crimping range up to 300 mm²
- ► For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results

Characteristics

- Quick coupling
- For workbench mounting
- BG-conformity version

Suitable for

22-series interchangeable dies, narrow crimping

Technical data		
Crimping force	60 kN	
Crimping range	6 - 300 mm ²	
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 wor	kbench mounting 6 - 300 mm²	THK22

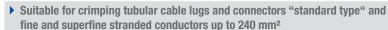


Available dies for Series 22 for PK 22 and THK 22

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 300		2.87
insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 150		2.87
Tubular cable lugs and connectors for fine stranded conductors		10 - 70	\bigcirc	2.88
Tubular cable lugs and connectors for solid conductors		1.5 - 16		2.88
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors	VA	10 - 50	\sim	2.88
Nickel tubular cable lugs and connectors	Ni	10 - 50	\bigcirc	2.88
Copper compression cable lugs and connectors to DIN				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) acc. to DIN	DIN	6 - 300		2.88
Double compression cable lugs	DIN	2 x 70		2.88
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN		10 - 70	\bigcirc	2.89
insulated solderless terminals and connectors		10 - 70	\bigcirc	2.89
Sleeves for compacted conductors and sector-shaped conductors,	copper			
Pre-rounding dies for sector-shaped Al and Cu conductors		10 sm - 300 se / 300 sm		2.89
Aluminium compression cable lugs and connectors to DIN				
Aluminium compression cable lugs and connectors to DIN	Al	10 sm - 300 se / 300 sm		2.89
Aluminium/copper compression cable lugs and connectors				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22	Al/Cu	10 sm - 300 se / 300 sm		2.89
Clamps				
Clamps, C-type		10 - 70		2.90
Clamps, H-type		70		2.90
Cable end-sleeves				
Cable end-sleeves				

PK 60 VP Hydraulic crimping head 10 - 240 mm²





- ▶ The patented centring system guarantees optimum crimps every time
- ▶ No additional dies required

Characteristics

- Quad-point indent crimping and wide crimping
- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Crimping force	55 kN	
Crimping range	10 - 240 mm ²	
Operating pressure	max. 700 bar	
Length	305 mm	
Weight	2.8 kg	
Item		Part No.
Hydraulic crimping head 10 - 2	240 mm²	PK60VP

Item	Part No.
Hydraulic crimping head 10 - 240 mm ²	PK60VP
Scope of supply	Part No.
Carrying bag	TT2

	ourrying bug		112
Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lugs and connectors			
Tubular cable lugs, standard type, tubular cable lugs for switchgear connections		10 - 240	
Connectors, standard type		10 - 120	
Tubular cable lugs for fine stranded conductors		10 - 240	
Connectors for fine stranded conductors		10 - 95	

PK 60 VP/FT Hydraulic crimping head 16 - 300 mm²



- ► Suitable for crimping tubular cable lugs and connectors "standard type" and fine and superfine stranded conductors to 300 mm²
- ▶ The patented centring system guarantees optimum crimps every time
- ▶ Closed crimping head ideal for utility lines construction, for example

Characteristics

- Quad-point indent crimping and wide crimping
- Closed head, flip top style, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Crimping force	55 kN	
Crimping range	16 - 300 mm ²	
Operating pressure	max. 700 bar	
Length	315 mm	
Weight	2.8 kg	
Item		Part No.
Hydraulic crimping head 16 -	300 mm ²	PK60VPFT
Scope of supply		Part No.
Carrying bag		TT2

	Carrying bag		TT2
Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lugs and connectors			
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		16 - 300	
Tubular cable lugs and connectors for fine stranded conductors		16 - 300	



PK 60 ID Hydraulic crimping head 10 - 240 mm²



- ▶ Extra large crimping area due to innovative 2-stage telescopic cylinders
- ▶ Indent crimping no changing of dies required

Characteristics

- Closed head, flip top style, rotatable
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Crimping force	30 - 60 kN	
Stroke / opening width	40.5 mm	
Crimping range copper	10 - 240 mm²	
Crimping range aluminum	50 - 240 mm²	
Operating pressure	max. 700 bar	
Length	249.5 mm	
Weight	approx. 2.5 kg	
Item		Part No.
Hydraulic crimping head 10 - 2	40 mm²	PK60ID
Scope of supply		Part No.
Carrying bag		TT2

Suitable for	Connection material	Crimping range mm ²	Crimp profile
Copper tubular cable lugs and connectors			
Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections		10 - 240	\bigcirc
Tubular cable lugs and connectors for fine stranded conductors		10 - 240	\bigcirc
Terminals, connectors and pin terminals acc. to DIN			
Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341)		10 - 240	\bigcirc
Aluminum compression cable lugs and connectors			
Aluminum compression cable lugs and connectors acc. to DIN	AI	50 - 240	\bigcirc
Aluminum/copper compression cable lugs and connectors			
Aluminum/copper compression cable lugs and connectors	Al/Cu	50 - 240	\bigcirc

PK 120/42 Hydraulic crimping head 10 - 400 mm²



- ▶ Large crimping range up to 400 mm²
- ▶ C-head with larger 42 mm jaw opening
- Up to 60% fewer crimps thanks to wide crimping in comparison to narrow crimping

Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

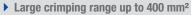
Suitable for

- 13-series interchangeable dies, wide crimping

	ŭ	•		
Technical data				
Crimping force		120 kN		
Stroke / opening width		42 mm		
Crimping range		10 - 400 mm ²	2	
Operating pressure		max. 700 bar		
Length		335 mm		
Weight		4.5 kg		
Item				Part No.
Hydraulic crimping hea	d 10 - 400) mm²		PK12042
Scope of supply				Part No.

TT2

THK 120 Hydraulic crimping tool for workbench mounting 10 - 400 mm²



- **▶** For workbench mounting
- **▶** BG-compliant version
- Up to 60% fewer crimps thanks to wide crimping in comparison to narrow crimping



Carrying bag

- Quick coupling
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Suitable for

- 13-series interchangeable dies, wide crimping

Item		Part No.
Dimensions	H x W x D: 285 x 160 x 110 mm	
Weight	12 kg	
Operating pressure	max. 700 bar	
Crimping range	10 - 400 mm²	
Crimping force	120 kN	





Available dies for Series 13 for PK 120/42 and THK 120

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni Single Control of the Control of	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni ©	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	, Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240	\bigcirc	2.94

PK 120 U Hydraulic crimping head 10 - 400 mm²



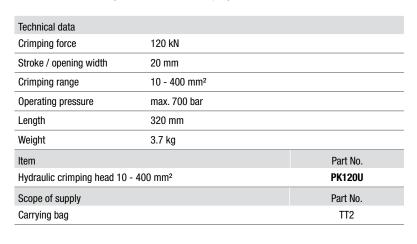
 Up to 60% fewer crimps thanks to wide crimping in comparison to narrow crimping

Characteristics

- Head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Suitable for

13-series interchangeable dies, wide crimping









Available dies for Series 13 for PK 120 U

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni ©	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240		2.94

PK 25/2 Hydraulic crimping head 16 - 625 mm²









- For dies acc. to DIN 48083, sheet 3
- ▶ Very large crimping range up to 625 mm²
- ► For connecting to hydraulic pumps with 700 bar operating pressure for optimum crimping results

Characteristics

Head with quick coupling, 360° rotation when not pressurised

Suitable for

- 25-series interchangeable dies, wide crimping
- When using adapter item no. 25A13 also for interchangeable dies of the 13 series

Technical data		
Crimping force	250 kN	
Stroke / opening width	20 mm	
Crimping range	16 - 625 mm²	
Operating pressure	max. 700 bar	
Length	335 mm	
Weight	5.3 kg	
Item		Part No.
Hydraulic crimping head 16 - 62	25 mm²	PK252
Scope of supply		Part No.
Carrying bag		TT2
Accessories		Art-Nr.
Adapter for crimping dies of the	Klauke 13-series	25A13

Available dies for Series 25 for PK 25/2

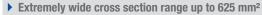
Refer to the limitations when crimping connectors in the technical	appendix.			
Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		300 - 400		2.96
Tubular cable lugs and connectors for fine stranded conductors		240	\bigcirc	2.96
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	300 - 625		2.96
Sleeves for compacted conductors and sector shaped conductors, $ \\$	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors, 3 and 4 core sector shaped conductors		400 - 500		2.96
Compression cable lugs and connectors acc. to DIN - Al				
Compression cable lugs and connectors acc. to DIN - Al	AI	400 - 500		2.97
Aluminium/copper compression cable lugs and connectors				
Aluminum side of aluminium/copper compression cable lugs and connectors: crimping dies HA25, copper side of aluminium/copper compression cable lugs and connectors: crimping dies HD25	Al/Cu	400 - 500		2.97
Clamps and screw connectors				
C-clamps		35 - 185		2.97



Available dies for Series 13 for PK 25/2

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs and connectors, Cu, standard type, tubular cable lugs for switchgear connections		16 - 400		2.91
Insulated tubular cable lugs and connectors, insulated pin terminals		10 - 150		2.92
Tubular cable lugs and connectors for fine stranded conductors		10 - 150	\bigcirc	2.92
Tubular cable lugs and connectors - stainless steel, Ni				
Tubular cable lugs and connectors – VA	VA	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors – VA	VA	70 - 95	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni	16 - 50	\bigcirc	2.92
Tubular cable lugs and connectors - Ni	Ni ©	70 - 95	\bigcirc	2.92
Compression cable lugs and connectors acc. to DIN - Cu				
Compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1) Cu	DIN	10 - 300		2.92
Double compression cable lugs		2 x 50 - 2 x 120		2.93
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		16 - 150	\bigcirc	2.93
Insulated terminals and pin terminals		10 - 95	\bigcirc	2.93
Sleeves for compacted conductors and sector shaped conductors,	Cu			
Pre-rounding crimping dies for Al and Cu sector shaped conductors		10 sm - 300 se / 300 sm		2.93
Aluminum compression cable lugs and connectors acc. to DIN				
Aluminum compression cable lugs and connectors acc. to DIN	AI	10 sm - 300 re/see		2.94
Aluminum/copper compression cable lugs and connectors				
Aluminum/copper compression cable lugs and connectors	Al/Cu	10 sm - 300 re/se		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70 - 120		2.94
Cable end-sleeves				
Cable end-sleeves		25 - 240		2.94

HK 25/2 Hydraulic crimping tool with foot pump 16 - 625 mm²



- ▶ Hydraulic system with 250 kN crimping force
- ▶ Foot pump with two-stage hydraulics



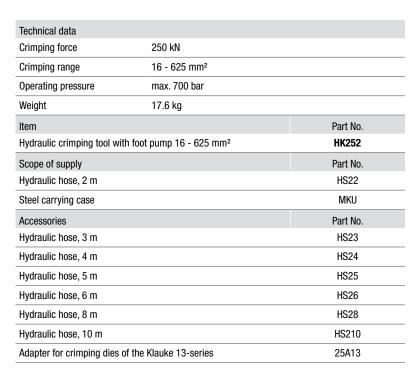
- Head with quick coupling, 360° rotation when not pressurised
- Manual retract as required

Suitable for

25-series interchangeable dies, wide crimping

Additional information

- The wide choice of available crimping dies can be found in chapter "Crimping dies" under Series 25.
- When using adapter item no. 25A13 also for interchangeable dies of the 13 series











SIX SERIES IN USE - CRIMPING DIES

The Klauke range of crimping dies is unbeatable. We have developed a total of 6 series to suit your requirements. All are set apart by their high durability and highest precision. For optimum crimping results, the crimping surface of the dies are polished. You can count on that: Tools, crimping dies and connection materials from Klauke deliver the perfect electrical connection every time.



In brief

- ▶ Broad range with 6 different crimping dies series
- ▶ Solutions for every material
- ▶ Polished crimping surfaces for optimum crimping results

Adapter

The use of adapters for crimping tools increases the area of application and enables the processing of smaller cross-sectional

areas. Inform yourself!

K15 Series: Part no. UA15T for crimping

dies of series 13

K25 Series: Part no. 25A13 for crimping

dies of series 13



	K50 SERIE	K4 SERIE	K22 SERIE	K13 SERIE	K15 SERIE	K25 SERIE
Connection material	www					
	0,75-25 mm²	6-150 mm ²	6-300 mm ²	16-400 mm ²	16-400 mm²	16-400 mm²
	-	10-70 mm²	10-150 mm²	10-150 mm²	10-150 mm²	10-150 mm ²
	-	10-35 mm²	10-70 mm²	10-150 mm²	10-150 mm²	10-240 mm²
	1,5-10 mm²	_	1,5-16 mm²	-	-	-
VA	-	1,5-16 mm²	10-50 mm²	16-95 mm²	16-95 mm²	16-95 mm²
Ni	-	1,5-16 mm²	10-50 mm²	16-95 mm²	16-95 mm²	16-95 mm²
DIN	6-25 mm²	6-120 mm²	6-300 mm ²	10-300 mm²	10-625 mm²	10-625 mm²
	-	_	2x70 mm²	2x50-2x120 mm²	2x50-2x120 mm ²	2x50-2x120 mm ²
	0,5-10 mm²	10-35 mm²	10-70 mm²	16-150 mm²	16-150 mm²	16-150 mm²
	0.5-16 mm ²	10-16 mm²	10-70 mm²	10-95 mm²	10-95 mm²	16-95 mm²
	-	16-150 mm ^{2*}	10-300 mm ^{2*}	10-300 mm ^{2*}	10-300 mm ^{2*}	10-500 mm ^{2*}
Al	-	10-95 mm²	10-300 mm²	10-300 mm²	10-500 mm²	10-500 mm²
Al/Cu	-	10-95 mm²	10-300 mm²	10-300 mm²	10-500 mm²	10-500 mm²
	-	10-35 mm²	10-70 mm²	10-70 mm²	10-70 mm²	10-185 mm²
	-	_	70 mm²	70-120 mm²	70-120 mm²	70-120 mm²
	0,5-50 mm²	10-50 mm²	25-240 mm²	25-240 mm²	25-240 mm²	25-240 mm²
	2x6-2x16 mm²	-	-	+	-	-
	0,1-16 mm²	-	-	-	-	-
	0,25-6 mm²	-	-	-	-	-
BNC plug	RG 58, RG 59, RG 62, RG 71	-	-	-	-	-
Turned pin receptacle and pin connectors	0,1-4 mm²	-	-	-	-	-

^{*} Cross-section depending on conductor structure





Crimping dies R 50, indent crimping





Suitable for

- Tubular cable lugs and connectors - Cu, standard type

Cross section mm²	For item	Part No.
0.75 - 2.5	91R, 92R, 93R	R501
4 - 10	94R, 95R, 2R	R502

Crimping dies D 50





Suitable for

 Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

Cross section mm ²	Part No.
6 - 16	D504
16 - 25	D505

Crimping dies R 50, hexagonal crimping





Crimping dies Q 50





Suitable for

- Tubular cable lugs and connectors - Cu, standard type

Cross section mm ²	Part No.
6 - 16	R504
16 - 25	R505

Suitable for

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 Cu

Cross section mm ²	Part No.
0.5 - 10	Q501

Crimping dies M 50





Crimping dies AE 507





Suitable for

Tubular cable lugs and connectors for solid conductors

Cross section mm ²	Part No.
1.5 - 4	M50154
6 - 10	M50610

Suitable for

- Cable end-sleeves

Cross section mm ²	Part No.
0,5 - 6	AE5071
10 - 25	AE5072
35 - 50	AE5073



Crimping dies IS 50, single crimping











Suitable for

- Insulated cable connections, single crimping
- Insulated solderless terminals and pin terminals

Cross section mm²	Part No.	for item
0,5 - 2,5	IS504	670 WS, 680 WS
4 - 6	IS505	700 WS
10 - 16	IS5072	ST1716IS, ST1717IS, 652C5, 652C6, 653C6

Crimping dies IS 50, double crimping







Suitable for

Insulated cable connections, double crimping

Cross section mm²	Part No.	for item
0,1 - 1	IS503	8201-8201B
0,5 - 6	IS5071	

Suitable for

Stud and shielded sleeves

Crimping dies BNC 50

BNC plugs for coax cable RG 58, 59, 62 and 71

Part No.
 BNC501

Crimping dies SB 50





Suitable for

- Turned pin receptacles
- Pin connectors

Cross section mm ²	Part No.
0.1 - 1; 1.5 - 2.5; 4	SB501

Crimping dies CR 50







Suitable for

Non-insulated receptacles

Cross section mm ²	Part No.	for item	Tab Width
0.25 - 6	CR501		2.8 / 6.3
0.5 - 2.5	CR502		4.8
0.5 - 2.5	CR504	3720, 3735	6.3
0.5 - 1.5	CR505	3725	6.3

Crimping dies ZAE 507





Suitable for

Twin cable end-sleeves

Cross section mm ²	Part No.
2x6 - 2x16	ZAE5072







Crimping dies HR 4







Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

Cross section mm ²	Part No.	Crimp width mm
6	HR46	5
10	HR410	5
16	HR416	5
25	HR425	5
35	HR435	5
50	HR450	5
70	HR470	5
95	HR495	5
120	HR4120	5
150	HR4150	5

Crimping dies HIS 4







Suitable for

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

Cross section mm ²	Part No.	Crimp width mm
10	HIS410	5
16	HIS416	5
25	HIS425	5
35	HIS435	5
50	HIS450	5
70	HIS470	5

Crimping die set, 6 - 150 mm² HR 4 in plastic case, 11-pce.







Crimping dies HF 4







Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

Part No.	
HR4SET	

Suitable for

- Tubular cable lugs and connectors for fine stranded conductors

Cross section mm ²	Part No.
10	HF410
16	HF416
25	HF425
35	HF435



Crimping dies HN 4, Double indent crimping









Suitable for

- Tubular cable lugs and connectors Ni
- Tubular cable lugs and connectors stainless steel

Cross section mm ²	Part No.
4 - 6	HN446
10	HN410
16	HN416

Crimping dies HN 4, Indent crimping









Suitable for

- Tubular cable lugs and connectors Ni
- Tubular cable lugs and connectors stainless steel

Cross section mm ²	Part No.
1.5 - 2.5	HN41525

Crimping die set, 6 - 120 mm² HD 4 in plastic case, 10-pce.







Suitable for

 Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

Part No.
HD4SET

Crimping dies HD 4







Suitable for

 Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

Cross section mm ²	Part No.	Code	Crimp width mm
6	HD46	5	5
10	HD410	6	5
16	HD416	8	5
25	HD425	10	5
35	HD435	12	5
50	HD450	14	5
70	HD470	16	5
95	HD495	18	5
120	HD4120	20	5

Crimping dies HQ 4







Suitable for

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 Cu

Cross section mm ²	Part No.
10	HQ410
16	HQ416
25	HQ425
35	HQ435

Crimping dies HISQ 4







Suitable for

Insulated solderless terminals and pin terminals

Cross section mm ²	Part No.
10	HISQ410
16	HISQ416



Crimping dies HRU 4





Suitable for

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

Nominal cross section mm² re/se	Nominal cross section mm² rm/sm	Part No.	Dia. mm after pre-rounding	Pre-rounding width mm
	16	HRU416	5.1	9
35	25	HRU43525	6.3	9
50	35	HRU45035	7.5	9
70	50	HRU47050	9.0	9
95	70	HRU49570	10.5	9
120	95	HRU412095	12.5	9
150	120	HRU4150120	14.0	9

Crimping dies HA 4









Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

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Crimping dies HC 4 / HMC 4







Suitable for

C-clamps

Cross section mm ²	Part No.	Crimp width mm
16	HC416	5
25	HC425	5
10 - 10	HMC410	5
10 - 16 10 - 25 35 - 35	HMC435	5

Crimping dies HAES 4







Suitable for

- Cable end-sleeves

Cross section mm ²	Part No.	Crimp width mm
10	HAES410S	10
16	HAES416S	10
25	HAES425S	10
35	HAES435S	10
50	HAES450S	10







Crimping dies R 22





Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

Cross section mm ²	Part No.	Crimp width mm	
6	R226	5	
10	R2210	5	
16	R2216	5	
25	R2225	5	
35	R2235	5	
50	R2250	5	
70	R2270	5	
95	R2295	5	
120	R22120	5	
150	R22150	5	
185	R22185	5	
240	R22240	5	
300	R22300	5	

Crimping die set, 6 - 300 mm² R 22 in plastic case, 14-pce.







Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

Part No.
R22SET

Crimping dies IS 22





Suitable for

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

Cross section mm ²	Part No.	Crimp width mm
10	IS2210	5
16	IS2216	5
25	IS2225	5
35	IS2235	5
50	IS2250	5
70	IS2270	5
95	IS2295	5
120	IS22120	5
150	IS22150	5

Crimping dies F 22





Suitable for

Tubular cable lugs and connectors for fine stranded conductors

Cross section mm²	Part No.
10	F2210
16	F2216
25	F2225
35	F2235
50	F2250
70	F2270

Crimping dies M 22





Suitable for

Tubular cable lugs and connectors for solid conductors

Cross section mm²	Part No.	Crimp width mm
1.5 - 4	M22154	5
6 - 10	M22610	5
16	M2216	5

Crimping dies N 22







Suitable for

- Tubular cable lugs and connectors Ni
- Tubular cable lugs and connectors stainless steel

Cross section mm ²	Part No.
10	N2210
16	N2216
25	N2225
35	N2235
50	N2250

Crimping dies D 22





Suitable for

 Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

Cross section mm ²	Part No.	Code	Crimp width mm
6	D226	5	5
10	D2210	6	5
16	D2216	8	5
25	D2225	10	5
35	D2235	12	5
50	D2250	14	5
70	D2270	16	5
95	D2295	18	5
120	D22120	20	5
150	D22150	22	5
185	D22185	25	5
240	D22240	28	5
300	D22300	32	5

Crimping die set, 6-300 mm² D 22 in plastic case, 14-pce.





Suitable for

 Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

Part No.
D22SET

Crimping dies DP 22





Suitable for

- Double compression cable lugs

Cross section mm²	Part No.	Code
2 x 70	DP2270	24 DP



Crimping dies Q 22





Suitable for

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 Cu

Cross section mm ²	Part No.
10	Q2210
16	Q2216
25	Q2225
35	Q2235
50	Q2250
70	Q2270

Crimping dies ISQ 22





Suitable for

Insulated solderless terminals and pin terminals

Cross section mm²	Part No.
10	ISQ2210
16	ISQ2216
25	ISQ2225
35	ISQ2235
50	ISQ2250
70	ISQ2270

Crimping die set, 10-300 mm² A 22 in plastic case, 11-pce.







Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

Part No.
A22SET

Crimping dies RU 22







- Pre-rounding of sector-shaped Al- and Cu-conductors
- 3- and 4-core sector-shaped conductors

Nominal cross section mm² re/se	Nominal cross section mm² rm/sm	Part No.	Dia. mm after pre-rounding	Pre-rounding width mm
	10	RU2210	4,1	19,5
	16	RU2216	5,1	19,5
35	25	RU223525	6,3	19,5
50	35	RU225035	7,5	19,5
70	50	RU227050	9,0	19,5
95	70	RU229570	10,5	19,5
120	95	RU2212095	12,5	19,5
150	120	RU22150120	14,0	19,5
185	150	RU22185150	15,8	19,5
240	185	RU22240185	17,5	19,5
300	240	RU22300240	20,3	19,5
	300	RU22300SM	22,5	19,5

Crimping dies A 22









Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

Nominal cross section mm ² re/se	Nominal cross section mm ² rm/sm	Part No.	Code	Crimp width mm
16	10	A2210	10	7
25-35	16-25	A221625	12	7
50	35	A2235	14	7
70	50	A2250	16	7
95	70	A2270	18	7
120-150	95-120	A2295120	22	7
185	150	A22150	25	7
240	185	A22185	28	7
300	240	A22240	32	5
	300	A22300	34	5



Crimping dies H 22





Suitable for

H-clamps

Cross section mm ²	Part No.	Crimp width mm
70	H2270	5

Crimping dies C 22 / MC 22





Suitable for

C-clamps

Cross section mm²	Part No.	Crimp width mm
16	C2216	5
25	C2225	5
35	C2235	5
50	C2250	5
70	C2270	5
10 - 10	MC2210	5
10 - 1 10 - 25 35 - 35	MC2235	5
50	MC2250	5

Crimping dies AE 2213

▶ The crimping dies can be used with tools from crimping dies series 22 und 13





Suitable for

- Cable end-sleeves

Cross section		Crimp width
mm²	Part No.	mm
25	AE221325	21.5
35	AE221335	21.5
50	AE221350	21.5
70	AE221370	21.5
95	AE221395	21.5
120	AE2213120	21.5
150	AE2213150	21.5
185	AE2213185	21.5
240	AE2213240	21.5







Crimping die set 16 - 400 mm² HR13 in plastic case, 13 - pce.





Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

	Part No.		
	HR13SET		

Crimping dies HR 13





Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

Additional information

* = Narrow crimping (crimp 5 x)

Cross section mm²	Part No.	Crimp width mm
16	HR1316	10
25	HR1325	10
35	HR1335	10
50	HR1350	13
70	HR1370	13
95	HR1395	14
120	HR13120	14
150	HR13150	14
185	HR13185	11
240	HR13240	11
300	HR13300	11
400 *	HR13400	5



Crimping dies HF 13





Suitable for

Tubular cable lugs and connectors for fine stranded conductors

Cross section mm ²	Part No.
10	HF1310
16	HF1316
25	HF1325
35	HF1335
50	HF1350
70	HF1370
95	HF1395
120	HF13120
150	HF13150

Crimping dies HN 13, Double indent crimping







Suitable for

- Tubular cable lugs and connectors Ni
- Tubular cable lugs and connectors stainless steel

Cross section mm ²	Part No.
16	HN1316
25	HN1325
35	HN1335
50	HN1350

Crimping dies HN 13, Indent crimping







Suitable for

- Tubular cable lugs and connectors Ni
- Tubular cable lugs and connectors stainless steel

Cross section mm ²	Part No.
70	HN1370
95	HN1395

Crimping dies HIS 13





Suitable for

- Insulated tubular cable lugs and connectors
- Insulated pin terminals

Cross section mm ²	Part No.	Crimp width mm
10	HIS1310	5
16	HIS1316	5
25	HIS1325	5
35	HIS1335	5
50	HIS1350	5
70	HIS1370	5
95	HIS1395	5
120	HIS13120	5
150	HIS13150	5

Crmping dies HD 13







Suitable for

- Compression cable lugs to DIN 46235 Cu
- Compression joints to DIN 46267, part 1 Cu

Technical instructions

 For connectors, refer to the installation instructions in the technical appendix, page i-8

Additional information

* = Narrow crimping (crimp 5 x)

Cross section mm²	Part No.	Code	Crimp width mm
10	HD1310	6	10
16	HD1316	8	10
25	HD1325	10	10
35	HD1335	12	10
50	HD1350	14	13
70	HD1370	16	13
95	HD1395	18	14
120	HD13120	20	14
150	HD13150	22	10
185	HD13185	25	10
240	HD13240	28	10
300 *	HD13300	32	7



Crimping dies HDP 13







Crimping dies HISQ 13





Suitable for

- Double compression cable lugs

Cross section mm ²	Part No.	Code	Crimp width mm
2 x 50	HDP1350	22 DP	12
2 x 70	HDP1370	24 DP	12
2 x 95	HDP1395	29 DP	12
2 x 120	HDP13120	32 DP	12

Suitable for

Insulated solderless terminals and pin terminals

Cross section mm ²	Part No.
10	HISQ1310
16	HISQ1316
25	HISQ1325
35	HISQ1335
50	HISQ1350
70	HISQ1370
95	HISQ1395

Crimping dies HQ 13





Suitable for

- Solderless terminals to DIN 46234 and pin terminals to DIN 46230 - Cu
- Solderless connectors to DIN 46341 Cu

Cross section mm²	Part No.
16	HQ1316
25	HQ1325
35	HQ1335
50	HQ1350
70	HQ1370
95	HQ1395
120	HQ13120
150	HQ13150

Crimping dies HRU 13





Suitable for

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

Nominal cross section mm² re/se	Nominal cross section mm ² rm/sm	Part No.	Dia. mm after pre-rounding	Pre-rounding width mm
	10	HRU1310	4.1	35
	16	HRU1316	5.1	35
35	25	HRU133525	6.3	35
50	35	HRU135035	7.5	35
70	50	HRU137050	9.0	35
95	70	HRU139570	10.5	35
120	95	HRU1312095	12.5	35
150	120	HRU13150120	14.0	35
185	150	HRU13185150	15.8	35
240	185	HRU13240185	17.5	35
300	240	HRU13300240	20.3	35
	300	HRU13300SM	22.5	35

Crimping die set 10 - 300 mm² HD13 in plastic case, 13 - pce.





Suitable for

- Compression cable lugs DIN 46235 Cu
- Compression joints DIN 46267, part 1 Cu

Part No.	
HD13SET	



Crimping dies HA 13









Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

Technical instructions

 For connectors, refer to the installation instructions in the technical appendix, page i-8

Nominal cross section mm ² re/se	Nominal cross section mm ² rm/sm	Part No.	Code	Crimp width mm
16	10	HA1310	10	12
25-35	16-25	HA131625	12	12
50	35	HA1335	14	12
70	50	HA1350	16	12
95	70	HA1370	18	12
120-150	95-120	HA1395120	22	14
185	150	HA13150	25	14
270	185	HA13185	28	14
300	240	HA13240	32	17
-	300	HA13300	34	17

Crimping die set 10 - 300 mm² HA13 in plastic case, 11-pce.







Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

Part No.	
HA13SET	

Crimping dies HAH 13





Suitable for

H-clamps

Cross section mm ²	Part No.	Crimp width mm
70	HAH1370	30
95	HAH1395	30
120	HAH13120	20

Crimping dies HC 13 / HMC 13





Suitable for

- C-clamps

Cross section mm ²	Part No.	Crimp width mm
16	HC1316	16
25	HC1325	17
35	HC1335	20
50	HC1350	20
70	HC1370	20
10 - 10	HMC1310	13
10 - 16 10 - 25 35 - 35	HMC1335	18
25 - 50 50 - 50	HMC1350	20
35 - 70	HMC1370	20

Crimping dies AE 2213

► The crimping dies can be used with tools from crimping dies series 22 und 13





Suitable for

Cable end-sleeves

Cross section mm ²	Part No.	Crimp width mm
25	AE221325	21.5
35	AE221335	21.5
50	AE221350	21.5
70	AE221370	21.5
95	AE221395	21.5
120	AE2213120	21.5
150	AE2213150	21.5
185	AE2213185	21.5
240	AE2213240	21.5







Adapter for crimping dies Series 13



Suitable for

- All crimping dies of series 13

Item	Part No.
Adapter for crimping dies Series 13	UA15T

Crimping dies HA 15









Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

Cross section mm ²	Part No.	Code	Crimp width mm
400	HA15400	38	15
500	HA15500	44	15

Crimping dies HD 15







Suitable for

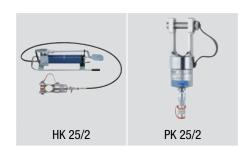
 Compression cable lugs to DIN 46235 and connectors to DIN 46267, part 1 - Cu

Additional information

* = Narrow crimping (crimp 7 x)

Cross section mm ²	Part No.	Code	Crimp width mm
400 *	HD15400	38	7
500 *	HD15500	42	7
625 *	HD15625	44	7





Adapter for crimping dies Series 13



suitable for

- All crimping dies of series 13

Item	Part No.
Adapter for crimping dies Series 13	25A13

Crimping dies HR 25







Suitable for

- Tubular cable lugs and connectors Cu, standard type
- Tubular cable lugs for switchgear connections

Cross section mm ²	Part No.	Crimp width mm
300	HR25300	20
400	HR25400	20

Crimping dies HF 25





Suitable for

Tubular cable lugs and connectors for fine stranded conductors

Cross section mm ²	Part No.
240	HF25240

Crimping dies HD 25







Suitable for

- Compression cable lugs to DIN 46235 Cu
- Compression joints to DIN 46267, part 1 Cu

Cross section mm ²	Part No.	Code	Crimp width mm
300	HD25300	32	17
400	HD25400	38	17
500	HD25500	42	17
625	HD25625	44	15

Crimping dies HRU 25





Suitable for

- Pre-rounding dies for sector-shaped Al and Cu conductors
- 3- and 4-core sector-shaped conductors

400 HRU25400SM 26 40 500 HRU25500SM 29 40	Nominal cross section mm² re/se	Nominal cross section mm² rm/sm	Part No.	Dia. mm after pre-rounding	Pre-roun- ding width mm
500 HRU25500SM 29 40		400	HRU25400SM	26	40
111020000111 20 10		500	HRU25500SM	29	40



Crimping dies HA 25









Suitable for

- Compression cable lugs and connectors to DIN Al
- Compression cable lugs and connectors Al/Cu (aluminium side)

Nominal cross section mm ² re/se	Nominal cross section mm ² rm/sm	Part No.	Code	Crimp width mm
-	400	HA25400	38	17
-	500	HA25500	44	15

Crimping dies HC 25 / HMC 25







Suitable for

C-clamps

Cross section mm ²	Part No.	Crimp width mm
95	HC2595	20
35 - 95; 70 - 95	HMC2595	20
120 - 120	HMC25120	20
150 - 150	HMC25150	20
185 - 185	HMC25185	20







Mechanical cutting tools	3.4
Battery powered cutting tools	3.10
Platform based on 10.8 V	3.11
Platform based on 18 V	3.14
Hand-operated hydraulic cutting tools	3.39
Hydraulic cutting heads and cutting systems	3.41
Hydraulic cutting heads	3.42
Hydraulic cutting systems	3.47
Special cutting tools	3.48
DIN rail cutting tools	3.49
Wiring duct cutter	3.50

PERFECT CUTTING - MECHANICAL CUTTING TOOLS

In use, every cut must sit straight away. Our mechanical cutting tools are prepared for your work. The ergonomic handle is there to assist you, because the first moment, the typical Klauke lever technology optimally transfers your force. Your cuts are precise, the tools are easy to use and durable thanks to high material quality. Good first impression.



In brief

- Cutting tools for aluminium and copper cables up to 100 mm diameter
- ▶ Simple working due to optimised force transmission
- ▶ Precise cuts with high-quality cutting blades
- ▶ Effortless operations thanks to ergonomic shape



▶ For everyday use

Klauke cutting tools are made from high-quality materials: "Made in Germany". Highly durable and are therefore best suited for daily use in workshops or on the construction site.

- Cutting tools for aluminium and copper cables up to 100 mm diameter
- Also available as fully-insulated tool to 1000 V to DIN EN 60900
- Re-adjustable cutters
- Effortless operations due to low weight
- Processing of high-quality materials



▶ Powerful in every situation

- Compact and convenient size
- Practical single-handed operation with low effort
- Effective cutting performance up to Cu 12 mm dia.
- Reduced effort required due to different cutting profiles for large and small diameters

▶ Flexible in use

- Stepless telescopic handles permit optimum lever adjustment
- Cutting head can be replaced
- Well suited for fine-stranded conductors



K 118 Hand-operated cutting tool for Al and Cu cables to 12 mm dia.



- Perfect in confined areas
- ▶ Handy shape with high cutting performance
- Exceptional cutting tool for solid, multi, fine and superfine stranded cables e.g. to DIN EN 60228, Class 1, 2, 5 and 6
- Increased user convenience thanks to two cutting profiles for small and large cable dimensions

Characteristics

One-hand operation

Suitable for

- For solid conductors, class 1, to 10 mm² (max. 4 mm dia.)
- Copper stranded conductors, class 2, to 16 mm² (max. 5 mm dia.)
- Aluminium stranded conductors, class 2, to 25 mm² (max. 10 mm dia.)
- Copper fine and superfine stranded conductors, class 5 and 6, to 50 mm² (max. 12 mm dia.)

Technical data			
Cutting range	max. 12 mm dia., e.g. 1 x 50	max. 12 mm dia., e.g. 1 x 50 mm² H07VK	
Length	165 mm		
Weight	0.17 kg		
Item		Part No.	
Hand-operated cutting to	ool for to 12 mm dia.	K118	

K 100 Hand-operated cutting tool for Al and Cu cables to 14 mm dia.



▶ Optimised cutting tool for fine and multi-stranded cables

Characteristics

- Compact design permits cutting in confined areas
- Two-hand operation

Technical data			
Cutting range	max. 14 mm dia., e.g. 1 x 50 mm ² H0	max. 14 mm dia., e.g. 1 x 50 mm² H07VK	
Length	280 mm		
Weight	0.55 kg		
Item		Part No.	
Hand-operated cuttir	ig tool for Cu and Al cables to 14 mm dia.	K100	

K 102 Hand-operated cutting tool for to 20 mm dia.



- Optimised cutting tool for fine and superfine stranded Cu cables to DIN EN 60228, Cl. 5+6
- ▶ Adjustable pivot point

Characteristics

- Handle with slip guard and inscription panel
- Two-handed locking

max. 20 mm dia., e.g. 1 x 95 mm² H07V-K	
210 mm	
Part No.	
K102	



K 106/1 Hand-operated cutting tool for Al and Cu cables, class 2 to Ø 34 mm



- ▶ Effortless operations thanks to energy-saving 2-stage ratchet system
- ▶ Lightweight design with great cutting performance

Characteristics

- One-hand operation
- Not suitable for cutting steel or steel wire
- Handle with slip guard and inscription panel

Technical data		
Cutting range	max. 34 mm dia., e.g. 4 x 35 mm² N	YY
Length	260 mm	
Weight	0.6 kg	
Item		Part No.
Hand-operated cutting tool for Cu and Al cables to 34 mm dia. K1061		K1061

K 106/2 Hand-operated cutting tool for Al and Cu cables, class 2 to Ø 62 mm



- ▶ Effortless operations thanks to energy-saving 2-stage ratchet system
- Lightweight design with great cutting performance
- ► Cutting range to 62 mm

Characteristics

- One-hand operation
- Not suitable for cutting steel or steel wire
- Handle with slip guard and inscription panel

Technical data			
Cutting range	e.g. 4 x 120 mm² NYY, max. 62 mm d	e.g. 4 x 120 mm ² NYY, max. 62 mm dia.	
Length	260 mm	260 mm	
Weight	0.6 kg	0.6 kg	
Item		Part No.	
Hand-operated cutting tool for Cu and Al cables to 62 mm dia.		K1062	

K 103/1 Hand-operated cutting tool for Al and Cu cables to 60 mm dia.



- ► Energy-efficient 2-stage ratchet system
- ▶ For earth, plastic and rubber cables

Characteristics

Not suitable for cutting steel or steel wire

Technical data				
Cutting range	e.g. 4 x 240 mm² NAYY, max. 60 mm	e.g. 4 x 240 mm² NAYY, max. 60 mm dia.		
Length	720 mm	720 mm		
Weight	4.5 kg			
Item		Part No.		
Hand-operated cutting tool for Cu and Al cables to 60 mm dia.		K1031		

K 130 Hand-operated cutting tool for Al and Cu cables to 30 mm dia.



- Exceptional cutting performance even with fine-stranded conductors thanks to specially designed, extremely sharp cutting blades
- **▶** Large cutting range

Characteristics

- Safe working thanks to roughened handle
- Not suitable for cutting steel or steel wire

Technical data		
Cutting range	e.g. 4 x 35 mm² NYY, max. 30 mm dia.	
Length	570 mm	
Weight	1.7 kg	
Item		Part No.
Hand-operated cutting tool for Cu and Al cables to 30 mm dia.		K130

K 150 Hand-operated cutting tool for Al and Cu cables to 50 mm dia.



- Exceptional cutting performance even with fine-stranded conductors thanks to specially designed, extremely sharp cutting blades
- ▶ Secure grip due to roughened handle

Characteristics

- Large cutting range
- · Not suitable for cutting steel or steel wire

Technical data		
Cutting range	max. 50 mm dia., e.g. 4 x 120 mm ² NYY	
Length	710 mm	
Weight	3 kg	
Item		Part No.
Hand-operated cutting tool for	Cu and Al cables to 50 mm dia.	K150

K 105/1 Hand-operated cutting tool for Al and Cu cables to 26 mm with telescopic handles dia.



- ▶ Compact dimensions with extending telescopic handles for easier carrying
- ▶ High cutting performance
- ▶ Also for fine-stranded conductors e.g. to DIN EN 60228 Cl. 5

Characteristics

- Two-hand operation
- Maintenance on-site due to replacement of cutting heads
- Safe working thanks to roughened handle
- Not suitable for cutting steel or steel wire

Technical data		
Cutting range	e.g. 4 x 25 mm² NYY, max. 26 mm dia.	
Length	Stepless 350 - 520 mm	
Weight	1.4 kg	
Item		Part No.
Hand-operated cutting tool for Al and Cu cables to 26 mm dia., length 350 - 520 mm continuous		K1051
Accessories		Part No.
Replacement cutting head		K1011E



K 101/1 Hand-operated cutting tool for Al and Cu cables to 26 mm dia.



- ▶ Can be maintained on-site thanks to replaceable cutting heads
- ▶ Exceptional cutting performance even with fine-stranded conductors

Characteristics

- Two-hand operation
- Excellent leverage
- Not suitable for cutting steel or steel wire
- Safe working thanks to roughened handle

Technical data		
Cutting range	e.g. 4 x 25 mm² NYY, max. 26 mm dia.	
Length	570 mm	
Weight	1.8 kg	
Item		Part No.
Hand-operated cutting tool for Co	u and Al cables to 26 mm dia.	K1011
Accessories		Part No.
Replacement cutting head		K1011E

K 101/2 Hand-operated cutting tool for Al and Cu cables to 38 mm dia.



- ▶ Large cutting range
- Telescopic handles
- ▶ Also for fine-stranded conductors e.g. to DIN EN 60228 Cl. 5
- ▶ Can be maintained on-site thanks to replaceable cutting heads

Characteristics

- Not suitable for cutting steel or steel wire
- Safe working thanks to roughened handle

Technical data		
Cutting range	max. 38 mm dia.	
Length	930 mm	
Weight	4.2 kg	
Item		Part No.
Hand-operated cutting tool for C	ou and Al cables to 38 mm dia.	K1012
Accessories		Part No.
Replacement cutting head		K1012E

K 104/1 Hand-operated cutting tool for Al and Cu cables to 100 mm dia.



- ► Energy-efficient 2-stage ratchet system
- ► For earth, plastic and rubber cables
- ▶ Very wide cutting range up to 100 mm diameter

Characteristics

Not suitable for cutting steel or steel wire

Technical data			
Cutting range	e.g. 4 x 400 mm² NAYY, max. 100 mm dia.		
Length	870 mm		
Weight	5.7 kg		
Item		Part No.	
Hand-operated cutting tool for C	Cu and Al cables to 100 mm dia.	K1041	



THE LITTLE CUTTING EXPERT BATTERY-POWERED HYDRAULIC CUTTING TOOL (10.8 V)

The Klauke mini is lightweight yet powerful. The high-quality shears cut with an opening width of 32 mm, the bolt cutters with a 12 mm opening width. Its practical dimensions make it especially suitable for confined areas.



▶ Pure performance without frills

The Klauke mini concentrates on its core task: reliable cutting. Even without pressure sensor and display, the little expert does its job well - no fuss or quibble.

▶ Usage time at a glance

Read the charge level at any time directly from the powerful 10.8 V battery.

▶ All-round cutting

Cutting in confined areas? No problem with these cutting heads, which rotate through 360°.





EBS 8 ML / EBS 12 ML Battery powered hydraulic bolt cutter 8 mm dia. / 12 mm dia.



- For cutting cable channels, bolts and steel wire, medium-hard (e.g. ST 37)
- ▶ Slim cutting head ideal when space is critical
- ▶ Powerful 10.8 V Li-lon battery with charge status display

Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

Technical data			
Cutting range	EBS8ML: max. 8 mm dia., EBS12M	L: max. 12 mm dia.	
Cutting force	EBS8ML: 15 kN, EBS12ML: 45 kN		
Cutting time	EBS8ML: 2 s, EBS12ML: 4 s (depen	ding on material thickness)	
Number of cuts	ES8ML: 100 at silver steel 6 mm, EBS12ML: 150 at mild steel 10 mm		
Battery voltage	10.8 V		
Battery capacity	2.5 Ah, Li-lon		
Charging time	approx. 45 min.		
Weight incl. battery	EBS8ML: 1.2 kg, EBS12ML: 1.8 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No.	
Battery powered hydraulic bolt	cutting tool 8 mm dia.	EBS8ML	
Battery powered hydraulic bolt	cutting tool 12 mm dia.	EBS12ML	
Scope of supply		Part No.	
Battery 10.8 V / 1.5 Ah, Li-lon (16.2 Wh)		RAML1	
Battery 10.8 V / 2.5 Ah, Li-lon (27 Wh) RAML12		RAML1225	
Plastic case		KKML	

<u>IEC</u>



ES 20 ML Battery powered hydraulic cutting tool 20 mm dia.





- ► For cutting AI/St conductors (ACSR) to DIN EN 50182, solid AI/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars
- **▶** Extremely robust design and lightweight
- ▶ Powerful 10.8 V Li-lon battery technology with battery charge indicator

Characteristics

- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

Technical data				
Cutting range	Multi-stranded max. 20 mm dia. (de	Multi-stranded max. 20 mm dia. (depending on cable type)		
Cutting force	23 kN			
Cutting time	4 s to 6 s (depending on material tr	nickness)		
Number of cuts	approx.200 for steel cable 8 mm			
Battery voltage	10.8 V			
Battery capacity	21.5 Ah, Li-lon			
Charging time	approx. 45 min.			
Weight incl. battery	1.6 kg			
Ambient temperature	-10 °C up to +40 °C			
Item		Part No.		
Battery powered hydraulic c	cutting tool 20 mm dia.	ES20ML		
Scope of supply		Part No.		
Battery 10.8 V / 2.5 Ah, Li-lo	on (27 Wh)	RAML1225		
Charger for 10.8 V Li-lon ba	tteries, 230 V	LGML1		
Plastic case		KKML		
Accessories		Part No.		
Replacement blade		ES20E		



ES 32 ML / ES 32 F ML Battery powered hydraulic cutting tools 32 mm dia.



<u>IEC</u>

- ▶ Cuts multi-stranded copper and aluminium cables (ES 32 ML)
- ▶ Cuts fine and superfine stranded copper cables (ES 32 F ML)
- ▶ Slim cutting head ideal when space is critical
- ▶ Powerful 10.8 V Li-lon battery technology with battery charge indicator

Characteristics

- Open head, rotatable
- Electronic control and monitoring of operation
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Effortless working thanks to low weight
- Simple and safe: Automatic retraction when operation is complete
- Maintenance display via LED

Technical data		
Cutting range	max. 32 mm dia.	
Cutting force	15 kN	
Cutting time	8 s to 10 s (depending on material	thickness)
Number of cuts	ES32ML: approx. 100 at 150 mm ² I ES32FML: approx. 150 at H07V-K 1	· ·
Battery voltage	10.8 V	
Battery capacity	2.5 Ah, Li-lon	
Charging time	approx. 45 min.	
Weight incl. battery	1.8 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Battery powered hydraulic cut	tting tool 32 mm dia.	ES32ML
Battery powered hydraulic cur superfine-stranded	tting tool 32 mm dia.,	ES32FML
Scope of supply		Part No.
Battery 10.8 V / 2.5 Ah, Li-Ion	(27 Wh)	RAML1225
Charger for 10.8 V Li-lon batte	eries, 230 V	LGML1
Plastic case		KKML
Accessories		Part No.
Replacement blade set		ES32E

THE NEW STANDARD KLAUKE NEXT GENERATION CUTTING TOOLS

Aspire to the new standard: Battery-powered hydraulic cutting tools from Klauke offer impressive power and durability. The tools effortlessly cut cross-sections up to 105mm, with open cutting head for better accessibility or closed cutting head for improved force transmission. Improved ergonomics with optimised centre of gravity makes work more convenient and faster. Also through the time-saving opening mechanism.



In brief

- Freely-selectable battery platform: with Bosch or Makita
- > Proof of quality can be created via Bluetooth
- Ensure tool availability: Read the tool properties from the display or via the app
- Effortless operations thanks to modern, ergonomic design

Interested in Klauke Next Generation tools? Then take a look at our Multi universal tool on Page x.xx



▶ Making work easier

Klauke cutting tools guarantee effortless operations: The "mini" impresses through its low weight and the pistol shape ensures a balanced centre of gravity

- Our compact "mini" is just perfect for confined areas
- The 2-stage hydraulic system allows you to work quickly thanks to fast feed and power stroke
- Save time with the innovative opening mechanism of the cutters. They open immediately after every cut.
- Extremely impressive and reliable: The one-button control concept for all tools



▶ Latest developments for your everyday work

Mini design - Pure cutting force: The ESGM45 and the ESM50 impress all along the line and for every application

- Cutting made simple thanks to a new, improved cutter geometry
- Burr-free cutting of wire mesh cable trays without any rework whatsoever thanks to the new wire mesh cable tray cutter

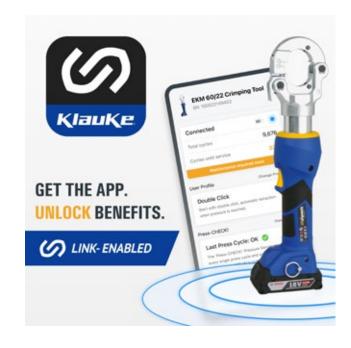
► Klauke Link® App

Connectivity is the generic term for the digital application that Klauke is making available to its customers in addition to its tools – the new Klauke Link® App. This application offers you new possibilities with all Klauke Next Generation tools.

The Klauke Link® App can be found at:

https://www.klauke.com/de/en/klauke-link-connectivity





EBS 6 L GKS Battery powered hydraulic cable tray cutter 6 mm dia.







- ▶ No follow-up work required thanks to burr-free cutting
- ▶ Fast and efficient operations: The cut is made in less than 1 second
- Maintenance required only after 20.000 cuts (renew hydraulic shock absorber system)
- ▶ Always cut ready due to autonomous replaceable blades

Characteristics

- Open head, rotatable
- Electronic control and monitoring of operation
- Simple and safe: One-button operating concept for controlling all tool functions
- Comfortable and secure one-hand operation thanks to 2-component plastic housing with soft grips
- Balanced centre of gravity for easy handling and effortless operations
- LED for work area illumination
- Powerful 18 V Li-lon battery high capacity, short charging time
- High-performance motor for maximum operating speed
- Energy saving function with motor cut-out after successful operation
- Quick motor stop for high user safety
- Simple and safe: Automatic retraction when operation is complete
- Manual retract as required
- Multifunction LED for maintenance display and charge status display of the battery
- Environmentally-friendly hydraulic oil, quickly biodegradable

Technical data			
Cutting range	max. 6 mm (VA)		
Cutting force	24 kN		
Cutting time	<18		
Number of cuts	approx. 300 at 6 mm VA, 360 at gri	d channel 5 mm	
Battery voltage	18 V		
Battery capacity	1.5 Ah		
Charging time	15 min.		
Weight incl. battery	1.9 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No.	
Battery powered hydraulic cabl	e tray cutter 6 mm dia.	EBS6LGKS	
Scope of supply		Part No.	
Makita battery 18 V / 1.5 Ah, Li	-lon	RAL1	
Makita quick-charger for 18 V I	Li-lon battery	LGL1	
Plastic case		KK50L	
Accessories		Part No.	
Makita battery 18 V / 3.0 Ah, Li-Ion (54 Wh)		RAL2	
Makita battery 18 V / 4.0 Ah, Li	-lon	RAL40	
18 V mains adapter for 230 V V	oltage	NG2230	



EBS 8 Battery powered hydraulic bolt cutter 8 mm dia.







<u>IEC</u>

- ▶ For cutting cable trays, bolts and medium-hard steel wire (e.g. ST 37)
- ▶ Narrow crimping head Ideal in confined areas
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- LED display for showing tool data
- Always ready-to-use thanks to battery charge and service display

Suitable for

· Cable trays, bolts, medium-hard steel wire

•			
Technical data			
Cutting range	max. 8 mm dia.		
Cutting force	15 kN		
Cutting time	1 s (depending on mate	erial thickness)	
Charging time	15 min.		
Weight incl. battery	1.65 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part-No. Bosch	Part-No. Makita
Battery powered hydraulic b	olt cutting tool 8 mm dia.	EBS8CFB	EBS8CFM
Scope of supply			
December 10 V / 0 0 Ab	I : Iom	DALDAELL	

Item	Part-No. Bosch	Part-No. Makita
Battery powered hydraulic bolt cutting tool 8 mm dia.	EBS8CFB	EBS8CFM
Scope of supply		
Bosch battery 18 V / 2.0 Ah, Li-lon	RALB1EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-lon		RAL1
Makita quick-charger for 18 V Li-lon battery		LGL1
Plastic case 450 x 370 x 105 mm	KK50NG	KK50NG
Accessories		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-lon (54 Wh)		RAL2

EBS 12 Battery powered hydraulic bolt cutter 12 mm dia.







- For cutting cable trays, bolts and medium-hard steel wire (e.g. ST 37)
- ▶ Slim cutting head ideal when space is critical
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- LED display for showing tool data
- Always ready-to-use thanks to battery charge and service display

Suitable for

- Cable trays, bolts, medium-hard steel wire

Technical data			
Cutting range	max. 12 mm dia.		
Cutting force	45 kN		
Cutting time	2 s (depending on cable	e size)	
Charging time	15 min.		
Weight incl. battery	2.1 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic bolt cutting tool 12 mm dia.		EBS12CFB	EBS12CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li	-lon	RALB1EU	
Bosch quick-charger for 18 V	Li-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-lon			RAL1
Makita quick-charger for 18 V	Li-lon battery		LGL1
Plastic case 450 x 370 x 105 mm		KK50NG	KK50NG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li	-lon	RALB2EU	
Makita battery 18 V / 3.0 Ah, L	i-lon (54 Wh)		RAL2



ES 20 Battery powered hydraulic cutting tool 20 mm dia.







- ► For cutting AI/St conductors (ACSR) to DIN EN 50182, solid AI/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars
- ► Extremely robust design and lightweight
- ▶ Slim cutting head ideal when space is critical
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations

L-BOXX with battery powered cutting tool ES20CFB

Always ready-to-use thanks to battery charge and service display

Suitable for

Al/St wire (ACSR)

Technical data			
Cutting range	max. 18 mm dia. (depe	nding on cable type)	
Cutting force	23 kN		
Cutting time	2 s to 4 s (depending o	n cable type)	
Charging time	15 min.		
Weight incl. battery	2.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic c	utting tool 20 mm dia.	ES20CFB	ES20CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah,	Li-lon	RALB1EU	
Bosch quick-charger for 18	V Li-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah	, Li-lon		RAL1
Makita quick-charger for 18	V Li-lon battery		LGL1
Plastic case 450 x 370 x 105	5 mm	KK50NG	KK50NG
Accessories			
Replacement blade		ES20E	ES20E
Bosch battery 18 V / 5.0 Ah,	Li-lon	RALB2EU	
Makita battery 18 V / 3.0 Ah	, Li-Ion (54 Wh)		RAL2
Variants			
Tarianto			

LB0XXES20CFB

Battery powered hydraulic cutting tool with remote control 20 mm and 32 mm dia.









Scope of supply for ES 20 RMC

- ▶ Tool with remote control, e.g. for telescopic rods
- ▶ ES20RMC: For cutting Al/St conductors (ACSR) to DIN EN 50182, solid Al/Cu cables to DIN EN 60228, Class 1 and laminated copper bus bars
- ▶ ES32RMC: Cuts multi-stranded Al/Cu cables Class 2
- ▶ Extremely robust design and lightweight
- ▶ Slim cutting head ideal when space is critical
- ▶ All tool data in view thanks to display and Klauke Link® App
- ▶ Powerful 18 V Li-lon battery high capacity, short charging time
- Can also be used as a normal cable cutter when the Hotstick holder is not attached

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless operations due to balanced centre of gravity, even when used with a telescopic rod
- LED for work area illumination
- Quick motor stop for high user safety
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Energy saving: Motor stops when the operation is complete
- Always ready-to-use thanks to battery charge and service display
- Simple one-hand operation via remote control

ES 20 RMC suitable for

- Al/St wire (ACSR)
- Solid Al/Cu cables to DIN EN 60228 Class 1
- Laminated Cu bus-bars

ES 32 RMC suitable for

• Multi-stranded Al/Cu cable Class 2

Additional information

Part number suffix for tools without battery and charger "0000"

Technical data			
Head type	Cutter open		
Cutting range	max. Ø 20 mm / max. Ø	ð 32 mm	
Cutting time	2 s to 8 s (depending o	n material thickness)	
Charging time	15 min.		
Weight incl. battery	2.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic o	cutting tool 20 mm dia.	ES20RMCCFB	
Battery powered hydraulic o	cutting tool 20 mm dia.		ES20RMCCFM
Battery powered hydraulic o	cutting tool 32 mm dia.	ES32RMCCFB	
Battery powered hydraulic o	cutting tool 32 mm dia.		ES32RMCCFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah,	Li-lon	RALB1EU	
Makita battery 18 V / 1.5 Ah	, Li-lon		RAL1
Bosch quick-charger for 18	V Li-lon battery	LGLB1EU	
Makita quick-charger for 18	V Li-lon battery		LGL1
Bluetooth remote control		BTC3	BTC3
Accessories			
Bosch battery 18 V / 4.0 Ah,	Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah	, Li-lon		RAL40
Replacement blade set for E	S 20 RMC	ES20E	ES20E
Replacement blade set for E	S 32 RMC	ES32E	ES32E



Battery powered hydraulic cutting tool with remote control 65 and 105 mm dia.





ESG105RMCCFM







- ▶ Remote control tool for safe distance when cutting
- ▶ Real end position detection that is unique worldwide
- For cutting copper and aluminum cables according to DIN EN 60228 class 1 and 2, also with light steel armouring
- Cutting forces: ESG65RMC: 60 kN, ESG105RMC: 120 kN for extra large cutting areas
- ▶ All tool data in view thanks to display and Klauke Link® App
- Of course, manual operation is also possible without using the remote control.

Characteristics

- Acoustic and visual notification on the remote control that the cut has been completed
- Very long range up to 70 m
- Convenient one-hand control via the remote control
- Closed head, rotatable
- Quick motor stop for high user safety
- Retraction stop for efficient operations
- Energy saving: the motor stops after the cut has been completed
- Always in view: charge status and service display
- All data can be easily read via Bluetooth

Suitable for

- Cu and Al cables even armoured cable

Technical data	ESG65RMCCFM	ESG105RMCCFM
Head type	Guillotine closed	Guillotine closed
Cutting range	max. 65 mm dia., e.g. NYCWY 4 x 240 SM/120	max. 105 mm dia., e.g. NYCWY 4 x 240 SM/120
Cutting time	2 s bis 13 s (depending on cable type)	2 s bis 13 s (depending on cable type)
Charging time	36 min.	36 min.
Weight incl. battery	6.0 kg	10.5 kg
Ambient temperature	-10 °C up to +40 °C	-10 °C up to +40 °C
Item	Part No.	Part No.
Battery powered hydraulic cutting tool 65 mm dia.	ESG65RMCCFM	
Battery powered hydraulic cutting tool 105 mm dia.		ESG105RMCCFM
Scope of supply		
Makita battery 18 V / 4.0 Ah, Li-lon	RAL40	RAL40
Makita quick charger for 18 V Li-lon	LGL1	LGL1
battery		
Bluetooth remote control	BTC3	BTC3
	BTC3	BTC3
Bluetooth remote control	BTC3	BTC3



ESG 105 RMCP Battery powered hydraulic cutting tool with remote control dia. 105 mm (Bosch-battery)





- ▶ Remote control tool for safe distance when cutting
- ▶ Real end position detection that is unique worldwide
- For cutting copper and aluminum cables according to EN 60228 class 1 and 2, also with light steel armouring
- **▶** Display in German language
- ▶ All tool data in view thanks to display and Klauke Link® app

Characteristics

- Acoustic and visual notification on the remote control that the cut has been completed
- Very long range up to 70 m
- Convenient one-hand control via the remote control
- Closed head, rotatable
- Quick motor stop for high user safety
- Retraction stop for efficient operations
- Energy saving: the motor stops after the cut has been completed
- Always in view: charge status and service display
- All data can be easily read via Bluetooth

Suitable for

- Cu and Al cables even armoured cable

Technical data		
Head type	Guillotine closed	
Cutting range	max. 105 mm dia, e.g. NY	CWY 4 x 240 SM/120
Cutting time	2 s up to 13 s (depending	on cable type)
Cutting force	120 kN	
Charging time	36 min.	
Weight incl. battery	10.5 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Battery powered hydraulic cutting 105 mm	g tool with remote control dia.	ESG105RMCPCFB
Scope of supply		Part No.
Bosch battery 18 V / 5.0 Ah, Li-lo	n	RALB2EU
Bosch quick charger for 18 V Li-l	on-batteries	LGLB1EU
Bluetooth remote control		BTC3
Accessories		Part No.
Bosch battery 18 V / 5,0 Ah, Li-lo	n	RALB2EU
Bluetooth remote control		BTC3



ESG 105 RMCP Battery powered hydraulic cutting tool with remote control dia. 105 mm (Makita-battery)





- ▶ Remote control tool for safe distance when cutting
- ▶ Real end position detection that is unique worldwide
- ► For cutting copper and aluminum cables according to EN 60228 class 1 and 2, also with light steel armouring
- ▶ Display in German language
- ▶ All tool data in view thanks to display and Klauke Link® app

Characteristics

- Acoustic and visual notification on the remote control that the cut has been completed
- Very long range up to 70 m
- Convenient one-hand control via the remote control
- Closed head, rotatable
- Quick motor stop for high user safety
- Retraction stop for efficient operations
- Energy saving: the motor stops after the cut has been completed
- Always in view: charge status and service display

Suitable for

Cu and Al cables even armoured cable

Additional information

Part number suffix for tools without battery and charger "0000"

Technical data		
Head type	Guillotine closed	
Cutting range	max. 105 mm dia, e.g. N	YCWY 4 x 240 SM/120
Cutting time	2 s up to 13 s (dependin	g on cable type)
Cutting force	120 kN	
Charging time	36 min.	
Weight incl. battery	10.5 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Battery powered hydraulic cutting 105 mm	tool with remote control dia.	ESG105RMCPCFM
Battery powered hydraulic cutting without chatger and battery	tool with remote control	ESG105RMCPCFM0000
Scope of supply		Part No.
Makita battery 18 V / 4.0 Ah, Li-lo	n	RAL40
Makita quick charger for 18 V Li-l	on-batteries	LGL1
Bluetooth remote control		BTC3
Accessories		Part No.
Makita battery 18 V / 4.0 Ah, Li-lo	n	RAL40
Bluetooth remote control		BTC3

ESG 25 Battery powered hydraulic cutting tool 25 mm dia.







- ► For cutting Al/St cables (ACSR), round materials (Cu, Al, St) as well as armoured cables, solid structural steel and stay wire
- High-performance cutting characteristics for highly-flexible conductors and wire cables
- ▶ Extremely robust design and lightweight
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head, flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

 Al/St wire (ACSR), Cu, Al, St and armoured cables, construction steel, stay wire

stay wile			
Technical data			
Head type	Guillotine closed		
Cutting range	max. 25 mm dia.		
Cutting force	60 kN		
Cutting time	Depending on material		
Charging time	15 min.		
Weight incl. battery	2.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic of	cutting tool 25 mm dia.	ESG25CFB	ESG25CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah	, Li-lon	RALB1EU	
Bosch quick-charger for 18	V Li-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ar	ı, Li-lon		RAL1
Makita quick-charger for 18	3 V Li-lon battery		LGL1
Plastic case 450 x 370 x 10	5 mm	KK50NG	KK50NG
Accessories			
Inner moving blade		ESG2	52ES
Outer fixed blade		ESG2	52EF

Plastic case 450 x 370 x 105 mm	KKSUNG	KK5UNG
Accessories		
Inner moving blade	ESG2	252ES
Outer fixed blade	ESG252EF	
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-lon (54 Wh)		RAL2
Replacement blade set	ESG252ESET	ESG252ESET



ESM 25 Battery powered hydraulic cutting tool 25 mm dia.







- ▶ Protected cutting mechanism through plastic housing
- ▶ All tool data in view thanks to display and Klauke Link® App
- Quick-change cutting blades

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

suitable for

• Open wires (ACSR, Aldrey), stay wires and high-tensile stay wires

opon whoo (1001), run oy), only whoo and mgh tohono only whoo				
Technical data				
Head type	Cutter open			
Cutting range	Open wire (ACSR, A) 0 12 mm	Open wire (ACSR, Aldrey) up to Ø 25 mm, stay wires up to Ø 12 mm		
Cutting force	67 kN			
Cutting time	8 s up to 10 s (dep	8 s up to 10 s (depending on material thickness)		
Charging time	15 min.			
Weight incl. battery	3.0 kg			
Ambient temperature	-10 °C up to +40			
Item		Part No. Bosch	Part No. Makita	
Battery powered hydraulic cutti	ng tool 25 mm dia.	ESM25CFB	ESM25CFM	
Scope of supply				
Makita battery 18 V / 1.5 Ah, Li	-lon		RAL1	
Makita quick-charger for 18 V L	i-lon battery		LGL1	

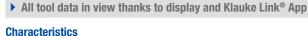
		. a. c. ror martina
Battery powered hydraulic cutting tool 25 mm dia.	ESM25CFB	ESM25CFM
Scope of supply		
Makita battery 18 V / 1.5 Ah, Li-lon		RAL1
Makita quick-charger for 18 V Li-lon battery		LGL1
Bosch battery 18 V / 2.0 Ah, Li-lon	RALB1EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Plastic case	KK50NG	KK50NG
Accessory		
Makita battery 18 V / 3.0 Ah, Li-lon (54 Wh)		RAL2
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Replacement blade set	ESM25ESET	ESM25ESET



ES 32 Battery powered hydraulic cutting tool 32 mm dia.







- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity

▶ Slim cutting head - ideal when space is critical

- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations

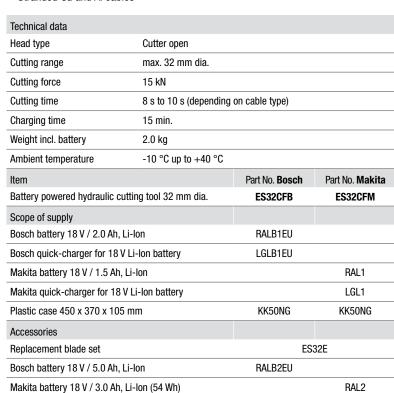
L-BOXX with battery powered cutting tool ES32CFB

L-BOXX with battery powered cutting tool ES32CFM

Always ready-to-use thanks to battery charge and service display

Suitable for

Stranded Cu and Al cables



LBOXXES32CFB

LBOXXES32CFM

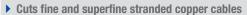




ES 32 F Battery powered hydraulic cutting tool 32 mm dia. for fine and superfine stranded copper cable







- ▶ Slim cutting head ideal when space is critical
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

Fine and superfine stranded copper cables

Technical data			
Head type	Cutter open		
Cutting range	max. 32 mm dia.		
Cutting force	15 kN		
Cutting time	8 s to 10 s (depending	on material thicknes	s)
Charging time	15 min.		
Weight incl. battery	2.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic cutti 32 mm dia., superfine-stranded		ES32FCFB	ES32FCFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-	lon	RALB1EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	-lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case 450 x 370 x 105 m	m	KK50NG	KK50NG
Accessories			
Replacement blade set for fine a copper cables	nd superfine stranded	ES3	2FE
Bosch battery 18 V / 5.0 Ah, Li-	lon	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-	-lon (54 Wh)		RAL2
Variants			
L-BOXX with battery powered c	utting tool ES32FCFB	LBOXXES32FCFB	
L-BOXX with battery powered c	utting tool ES32FCFM		LB0XXES32FCFM



ESM 35 Battery powered hydraulic cutting tool 35 mm dia. for copper and aluminium cable





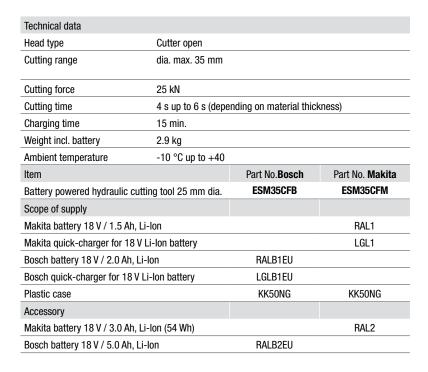
- ▶ Protected cutting mechanism through plastic housing
- ▶ For cutting copper and aluminum cables of all classes of conductor
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

suitable for

For cutting copper and aluminum cables of all classes of conductor







ESGM 45 Battery powered hydraulic cutting tool 45 mm dia.





- ► For cutting Al/St cables (ACSR), round materials (Cu, Al, St) as well as armoured cables, solid structural steel and fine-stranded copper cables
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations

Suitable for

Cu and Al cables, Al/St wires (ACSR)

Technical data			
Head type	Guillotine closed		
Cutting range	max. 45 mm dia.		
Cutting force	70 kN		
Cutting time	8 s to 10 s (depending	on material thicknes	S)
Charging time	15 min.		
Weight incl. battery	4.6 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic cutti	ng tool 45 mm dia.	ESGM45CFB	ESGM45CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-	lon	RALB1EU	
Bosch quick-charger for 18 V L	i-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	-lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case 450 x 370 x 105 m	ım	KKESGM45NG	KKESGM45NG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-	lon	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-	-lon (54 Wh)		RAL2

SPECIALIST FOR ARMOURED CABLE + CONSTRUCTION STEEL

Thanks to its closed and rotating head, the ESGM45 is the specialist for cutting ACSR ropes, round materials (Cu, Al, St), and also armoured cable and solid construction steel, for instance. Even fine-stranded and highly-flexible conductors and wire ropes up to 45 mm can be precisely cut. As a special highlight, the tool has the innovative opening mechanism, which facilitates safe and fast operations. If an unwelcome object happens to be located between the cutters, all you need to do is release the control button. The two cutting blades then move apart straight away. This mechanism also makes sure that the tool is quickly ready to use again after a completed cut.



ESGM 452 Battery powered hydraulic cutting tool 45 mm dia.









- ► For cutting Al/St cables (ACSR), round materials (Cu, Al, St) as well as armoured cables and solid structural steel
- ▶ All tool data in view thanks to display and Klauke Link® App
- ▶ Cutting blades are interchangeable with a snap lock without special tools
- Optimized cutting head

Characteristics

- Battery system: Makita
- All data can be easily read via Bluetooth
- Closed head with foldig lock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations

Suitable for

- Cu and Al cables, Al/St wires (ACSR)

,,	,	
Technical data		
Head type	Guillotine closed	
Cutting range	max. 45 mm dia.	
Cutting force	70 kN	
Cutting time	8 s to 10 s (depending on material thick	kness)
Charging time	15 min.	
Weight incl. battery	4.6 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Battery powered hydraulic cutti	ng tool 45 mm dia.	ESGM452CFM
Battery powered hydraulic cutti	ng tool 45 mm dia.	ESGM452CFM0000
Scope of supply		
Makita battery 18 V / 1.5 Ah, Li-	lon	RAL1
Makita quick-charger for 18 V L	i-lon battery	LGL1
Plastic case		KKESGM45NG
Accessories		
Makita battery 18 V / 3.0 Ah, Li-	lon (54 Wh)	RAL2
Blade set		ESGM452ESET



ESG 45 Battery powered hydraulic cutting tool 45 mm dia.







- ▶ High cutting force cuts armoured copper and aluminium cables and AI/St cables (ACSR)
- Also suitable for round material made of Al, Cu and steel
- **Extremely robust design and lightweight**
- Saves time with multiple cuts thanks to innovative opening mechanism
- ▶ All tool data in view thanks to display and Klauke Link® App

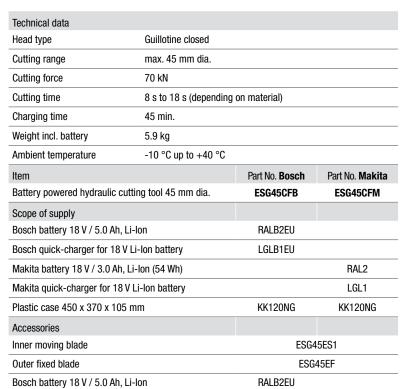
Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

Armoured Cu and Al cables, Al/St wires

Makita battery 18 V / 4.0 Ah, Li-lon





IEC



RAL40



ESM 50 Battery powered hydraulic cutting tool 50 mm dia. for copper and aluminium cable





- ► For cutting copper and aluminium cables (fine-stranded also)
- Very high cutting capacity thanks to innovative cutting geometry
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

Cu and Al cables (multi and fine stranded)

Technical data			
Head type	Cutter open		
Cutting range	max. 50 mm dia.		
Cutting force	38 kN		
Cutting time	8 s up to 10 s (dependi	ng on material thick	ness)
Charging time	15 min.		
Weight incl. battery	3.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic cutti	ng tool 50 mm dia.	ESM50CFB	ESM50CFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-	on	RALB1EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case 450 x 370 x 105 m	m	KKESGM45NG	KKESGM45NG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-	on	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-	lon (54 Wh)		RAL2

A GENUINE ALL-ROUNDER!

One tool for (almost) all situations! Both multi-stranded and fine-stranded (including armoured) cables are reliably cut. So you need only require one tool for a range of applications. Thanks to new cutting geometry, the annoying jamming of strands in the cutting blades is also a thing of the past.



ESG 55 Battery powered hydraulic cutting tool 55 mm dia.





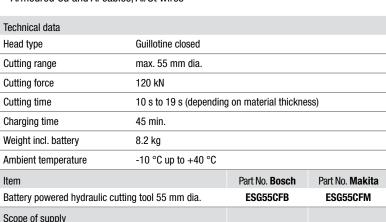
- ▶ High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and steel
- 120 kN cutting force for maximum output
- Saves time with multiple cuts thanks to innovative opening mechanism

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

Armoured Cu and Al cables, Al/St wires



Part No. Bosch	Part No. Makita
ESG55CFB	ESG55CFM
RALB2EU	
LGLB1EU	
	RAL40
	LGL1
KK120NG	KK120NG
ESG55ES	
ESG55EF	
RALB2EU	
	RAL40
	ESG55CFB RALB2EU LGLB1EU KK120NG ESG6



ES 65 Battery powered hydraulic cutting tool 65 mm dia.







- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- ▶ Also suitable for fine-stranded cables (depending on cable type)
- ▶ Saves time with multiple cuts thanks to innovative opening mechanism
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- All data can be easily read via Bluetooth
- Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

Cu/Al cable

ou/Ai oubic			
Technical data			
Head type	Cutter open		
Cutting range	max. 65 mm dia.		
Cutting force	40 kN		
Cutting time	Depending on material thickness		
Charging time	45 min.		
Weight incl. battery	6.3 kg		
Ambient temperature	-12 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery powered hydraulic cutting tool 65 mm dia.		ES65CFB	ES65CFM
Scope of supply			
Bosch battery 18 V / 5.0 Ah, Li-lon		RALB2EU	

item	Part No. Bosch	Part No. Iviakita
Battery powered hydraulic cutting tool 65 mm dia.	ES65CFB	ES65CFM
Scope of supply		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 3.0 Ah, Li-lon (54 Wh)		RAL2
Makita quick-charger for 18 V Li-lon battery		LGL1
Plastic case 450 x 370 x 105 mm	KK120NG	KK120NG
Accessories		
Replacement blade	ES65E	
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40



ESG 85 Battery powered hydraulic cutting tool 85 mm dia.





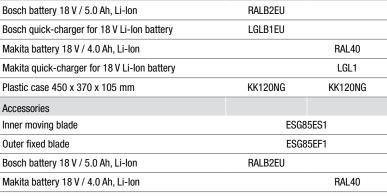
- ▶ Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Larger cutting area, optimum force transmission due to closed head shape
- Simple and safe: One-button operating concept for controlling all tool functions
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

lightly armoured Cu and Al cables				
Technical data				
Head type	Guillotine closed			
Cutting range	max. 85 mm dia.			
Cutting force	60 kN			
Cutting time	Depending on material	Depending on material thickness		
Charging time	45 min.			
Weight incl. battery	6.8 kg			
Ambient temperature	-10 °C up to +40 °C			
Item		Part No. Bosch	Part No. Makita	
Battery powered hydraulic cutting tool 85 mm dia.		ESG85CFB	ESG85CFM	
Scope of supply				
Bosch battery 18 V / 5.0 Ah, Li-lon		RALB2EU		
Bosch quick-charger for 18 V Li-lon battery		LGLB1EU		
			541.40	





ES 85 Battery powered hydraulic cutting tool 85 mm dia.







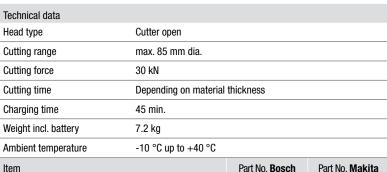
- ▶ Also suitable for fine-stranded cables (depending on cable type)
- ▶ Saves time with multiple cuts thanks to innovative opening mechanism
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

Cu and Al cable



Item	Part No. Bosch	Part No. Makita
Battery powered hydraulic cutting tool 85 mm dia.	ES85CFB	ES85CFM
Scope of supply		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40
Makita quick-charger for 18 V Li-lon battery		LGL1
Plastic case 450 x 370 x 105 mm	KK120NG	KK120NG
Accessories		
Replacement blade	ES85E	
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40





ESG 105 Battery powered hydraulic cutting tool 105 mm dia.







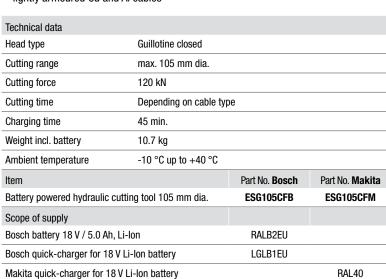
- ▶ 120 kN cutting force for extremely wide cutting range up to 105 mm dia.
- ▶ Remarkably lightweight for tools in this performance class
- ▶ Saves time with multiple cuts thanks to innovative opening mechanism
- All tool data in view thanks to display and Klauke Link® App

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Closed head with bolt interlock, rotatable, flip top style
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

lightly armoured Cu and Al cables



Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita quick-charger for 18 V Li-lon battery		RAL40
Plastic case 450 x 370 x 105 mm		LGL1
Makita battery 18 V / 4.0 Ah, Li-lon	MK105NG	MK105NG
Accessories		
Inner moving blade	ESG1	05ES
Outer fixed blade	ESG1	05EF
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40

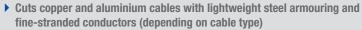


Cutting

ES 105 Battery powered hydraulic cutting tool 105 mm dia.







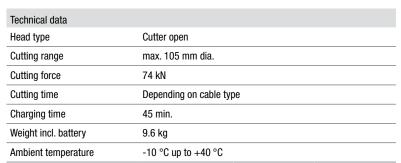
- ▶ Extremely large cutting area to 105 mm dia.
- ▶ Saves time with multiple cuts thanks to innovative opening mechanism
- ▶ All tool data in view thanks to display and Klauke Link® App

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display

Suitable for

- Cu and Al cable



Item	Part No. Bosch	Part No. Makita
Battery powered hydraulic cutting tool 105 mm dia.	ES105CFB	ES105CFM
Scope of supply		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40
Makita quick-charger for 18 V Li-lon battery		LGL1
Plastic case 450 x 370 x 105 mm	MK105NG	MK105NG
Accessories		
Replacement blade	ES1	05E
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40





ALWAYS IN POSITION - 2 STAGES FOR MORE POWER

We promise you: Our cutting tools are powerful. The 2-stage hydraulic system uses its power to the full, the automatic retraction returns the cutter to the original position once the cut is made. Made from aluminium, it feels light in the hand.

As we said: a powerful tool!



▶ Comfortable all day long

Numerous cuts in succession are tiring. With the handoperated hydraulic cutting tools, the housing and pump lever are therefore made from aluminium. The pump lever is in exactly the correct position, and so the pump movement requires only a small space - compared to a mechanical tool. Work better with the convenience of Klauke.

- Effortless operations due to the ergonomic design and low weight
- Work faster with the innovative 2-stage hydraulic system for fast feed and power stroke with counter pressure

▶ Adapts

All hand-operated hydraulic cutting tools have press heads that rotate through 360°. So you can work even in confined areas with flexible settings.

- Rotating heads for work in confined areas
- Extremely robust cutting heads

▶ Save yourself the return stroke

Your force acts in just one direction: Forwards. When the cutting process is complete, the cutting blades retract into the home position via the automatic retraction function. You save on the return path.

- Automatic retraction returns the cutting blades to the home position after the cut is made
- More reliability and shorter intervals between cutting processes
- Can be used up to a diameter of 85 mm
- Cutting force up to 120 kN
- Bolt locking of cutting blade

HSG 45 Hand-operated hydraulic cutting tool 45 mm dia.



- ▶ Cuts armoured copper and aluminium cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and steel
- ► Extremely sturdy design

Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Technical data		
Cutting range	max. 45 mm dia.	
Cutting force	60 kN	
Length	560 mm	
Weight	4.9 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic cutting	ng tool 45 mm dia.	HSG45
Scope of supply		Part No.
Steel carrying case for HSG 45	or HSG 50	MK50
Accessories		
Outer fixed blade		ESG45EF
Inner moving blade		ESG45ES1

HSG 85/2 Hand-operated hydraulic cutting tool 85 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- ▶ Large cutting range
- ▶ High user safety owed to cutting head with bolt interlock

- Closed head with bolt interlock, 360° rotation when not pressurised
- Light weight due to high quality aluminium housing
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete

Technical data		
Cutting range	max. 85 mm dia.	
Cutting force	60 kN	
Length	approx. 677 mm	
Weight	5.9 kg	
Ambient temperature	-20 °C up to +40 °C	
Item		Part No.
Hand-operated hydraulic cutting	tool 85 mm dia.	HSG852
Scope of supply		Part No.
Steel carrying case for HSG 85		MK852
Accessories		
Accessories		
Outer fixed blade		ESG85EF1

EXPAND YOUR APPLICATIONS

The correct cutting head creates a host of potentials. Get your pump ready for every application. Klauke cutting heads can be flexibly combined with Klauke system pumps (see page 484) to offer you an individual solution for every challenge.



Improved cutting using the right cutting heads.

Tool		Design		Opening	Cutting	Application Feature	•	•	pplication Feature		Feature
		Open head	Closed head	width	force kN	Cu / Al*	AI / St (ACSR)	Cu / Al, solid	Steel, solid		
SDG 45	0		•	45	60	•	~	~	•	Especially for Al/St wires to 45 mm dia. and St, solid.	
SDG 55	0		~	55	120	~	~	•	•	With 120 kN cutting force, for all cables and Al/St ropes up to 55 mm diameter.	
SDK 65	9	~		65	42	~				Ideal for cutting earth cables up to 65 mm diameter.	
SDG 85/2	Q		~	85	60	V				For cutting copper and aluminium cables up to 85 mm diameter.	
SDK 85		~		85	30	~				For cutting telecommunication and earth cables up to 85 mm diameter.	
SDG 105	Q		~	105	120	~		•		Very wide cutting range up to 105 mm - also for armoured cables diameter.	
SDK 105	(1)	~		105	74	~				Also for fine stranded cables up to 105 mm diameter.	
SDK 120		~		120	55	~				Extremely broad cutting range up to 120 mm diameter.	

 $^{^{\}star}$ This column also includes Cu / Al multi-stranded and Cu / Al with sheet metal and wire armouring. ** The exact cutting performance depends on the type of cable or wire.



SDG 45 Hydraulic cutting head 45 mm dia.



- High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and steel

- Closed head with bolt interlock, flip open jaws
- Head with quick coupling, 360° rotatable
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Cutting range	max. 45 mm dia.	
Cutting force	60 kN	
Operating pressure	max. 700 bar	
Length	340 mm	
Weight	3.8 kg	
Item		Part No.
Hydraulic cutting head 45 mm di	a.	SDG45
Scope of supply		Part No.
Carrying bag		TT2
Accessories		
Inner fixed blade		ESG45ES1
Outer moving blade		ESG45EF



SDG 55 Hydraulic cutting head 55 mm dia.



- High cutting force cuts armoured copper and aluminium cables and Al/St cables (ACSR)
- ▶ Also suitable for round material made of Al, Cu and steel
- ▶ 120 kN cutting force for maximum output

Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- Ergonomic handling through grip

Technical data		
Cutting range	max. 55 mm dia.	
Cutting force	120 kN	
Operating pressure	max. 700 bar	
Length	380 mm	
Weight	5.6 kg	
Item		Part No.
Hydraulic cutting head 55 mm o	lia.	SDG55
Scope of supply		Part No.
Carrying bag		TT2
Accessories		
Inner moving blade		ESG55ES
Outer fixed blade		ESG55EF

SDK 65 Hydraulic cutting head 65 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Also suitable for fine-stranded cables (depending on cable type)
- ▶ Safe operations due to high ground stability by double handles
- Improved cutting characteristics due to new cutting geometry

- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Cutting range	max. 65 mm dia.	
Cutting force	42 kN	
Operating pressure	max. 700 bar	
Length	425 mm	
Weight	4.7 kg	
Item		Part No.
Hydraulic cutting head 65 mm	dia.	SDK65
Scope of supply		Part No.
Carrying bag		TT2
Accessories		
Replacement blade		ES65E

Cutting

SDG 85/2 Hydraulic cutting head 85 mm dia.



- ▶ High user safety owed to cutting head with bolt interlock
- ► Exceptionally light and compact design
- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)

Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- Simple handling

max. 85 mm dia.	
60 kN	
max. 700 bar	
445 mm	
4.3 kg	
	Part No.
ia.	SDG852
	Part No.
	TT2
	ESG85ES1
	ESG85EF1
	60 kN max. 700 bar 445 mm 4.3 kg

SDK 85 Hydraulic cutting head 85 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Suitable for fine-stranded cable and telecommunication cable (depending on cable type)
- Safe operations due to high ground stability by double handles
- Improved cutting characteristics due to new cutting geometry

- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- Uniform cut by knife guide

Technical data		
Cutting range	max. 85 mm dia.	
Cutting force	30 kN	
Operating pressure	max. 700 bar	
Length	450 mm	
Weight	5.2 kg	
Item		Part No.
Hydraulic cutting head 85 m	ım dia.	SDK85
Scope of supply	ım dia.	SDK85 Part No.
, ,	ım dia.	
Scope of supply	ım dia.	Part No.



SDG 105 Hydraulic cutting head 105 mm dia.



- ▶ Cuts copper and aluminium cables with armouring
- ▶ 120 kN cutting force for extremely wide cutting range up to 105 mm dia.

Characteristics

- Closed head with bolt interlock, 360° rotation when not pressurised
- Compact design permits cutting in confined areas
- Simple handling
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Cutting range	max. 105 mm dia.	
Cutting force	120 kN	
Operating pressure	max. 700 bar	
Length	432 mm	
Weight	7.7 kg	
Item		Part No.
Hydraulic cutting head 105	mm dia.	SDG105
Scope of supply		Part No.
Carrying bag		TT2
Accessories		
Inner moving blade		ESG105ES
Outer fixed blade		ESG105EF

SDK 105 Hydraulic cutting head 105 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Extremely wide cutting range up to 105 mm dia., also for fine-stranded cables (depending on cable type)
- ▶ Safe operations due to high ground stability by double handles

- Open head with quick coupling, 360° rotation when not pressurised
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results
- High stability due to double grip

Technical data		
Cutting range	max. 105 mm dia.	
Cutting force	74 kN	
Operating pressure	max. 700 bar	
Length	510 mm	
Weight	7.7 kg	
Item		Part No.
Hydraulic cutting head 10	5 mm dia.	SDK105
Scope of supply		Part No.
Carrying bag		TT4
Accessories		
Replacement blade		ES105E



SDK 120 Hydraulic cutting head 120 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- Extremely wide cutting range up to 120 mm dia., also for fine-stranded cables (depending on cable type)
- ▶ Exceptionally light and compact design
- ▶ Safe operations due to high ground stability by double handles

- Open head with quick coupling, 360° rotation when not pressurised
- High stability due to double grip
- For connecting to hydraulic pumps with 700 bar operating pressure for best possible results

Technical data		
Cutting range	max. 120 mm dia.	
Cutting force	55 kN	
Operating pressure	max. 700 bar	
Length	538 mm	
Weight	8.7 kg	
Item		Part No.
Hydraulic cutting head 120 mm	dia.	SDK120
Scope of supply		Part No.
Carrying bag		TT4
Accessories		
Replacement blade		ES120E



AS 105 FHP / AS 120 FHP Hydraulic cutting tools for foot pump 105 and 120 mm dia.



- Cuts copper and aluminium cables with lightweight steel armouring (depending on cable type)
- ► Suitable for fine-stranded cable and telecommunication cable
- ▶ Safe operations due to high ground stability by double handles
- ▶ Wide cutting range also for fine-stranded cables

- Foot pump with two-stage hydraulics
- Open head with quick coupling, 360° rotation when not pressurised
- Manual retract as required
- Hydraulic hose, 2 m

Technical data		
Cutting range	AS 105 FHP: max. 105 mm dia., AS	S120FHP: max. 120 mm dia
Cutting force	AS105FHP: 74 kN, AS120FHP: 55 k	KN .
Operating pressure	max. 700 bar	
Weight	AS105FHP: 19.7 kg, AS120FHP: 20).7 kg
Item		Part No.
Hydraulic cutting tool with fo	ot pump 105 mm dia.	AS105FHP
Hydraulic cutting tool with foot pump 120 mm dia.		
Scope of supply		Part No.
Hydraulic hose, 2 m		HS22
Steel carrying case		MKU
Accessories		Part No.
Replacement blade		ES105E
Replacement blade		ES120E
Hydraulic hose, 3 m		HS23
Hydraulic hose, 4 m		HS24
Hydraulic hose, 5 m		HS25
Hydraulic hose, 6 m		HS26
Hydraulic hose, 8 m		HS28
Hydraulic hose, 10 m		HS210

5 PROFILES FOR SPECIAL CUTTING TOOLS

For challenging operations in plant construction and panel building, we use the Greenlee brand of tools. Built compact, the high-quality devices perform all the functions you need.



▶ DIN profile rails

So you retain the profile as you cut: DIN profile rail cutter from Greenlee.

- Burr-free cutting to length and punching of all common DIN profiles
- Hand lever with optimum force transmission
- High-quality cutting blades with hardly any wear
- Integrated locating holes simplifies mounting on the workbench
- Easily replaceable cutting plate cassette

▶ Cutting values

Work precisely with our wiring conduit cutter.

- For halogen-free cable conduit up to 125 mm wide
- Maintenance-free mechanism
- Measuring rule enables precise cutting to length
- High level of operator safety while working due to fullycovered cutting blades

▶ Always on the right track: Wiring conduit cutter

Everything fits well, from the very first setting. The measuring cutter simplifies precision cutting to length. The cutting blades are covered for safety. They cut halogen-free cable conduit up to 125 mm wide as accurately as you want. High-quality

materials and optimised processing ensure safety and reliability: The cutting blades are practically wear-free, the cutting mechanism is entirely maintenance-free. No worries about these tools. You concentrate fully on the task.



DIN profile conductor cutting and punching tool



- ▶ For burr-free cutting and punching
- ▶ Less effort needed
- ▶ Includes die plate holder with 5 profiles

Suitable for

- Punches vertical and horizontal mounting holes 6.4 x 12.0 mm
- With holes for workbench assembly

Item	Part No.
DIN profile conductor cutting and punching tool	50115413

Profile conductor cutter Compact



- ▶ For burr-free cutting to length
- Less effort needed
- ▶ Includes die plank holder with 2 profiles

Suitable for

- With holes for workbench assembly
- Manual operation

Item	Length of rail guide mm	Length of hand lever mm	Part No.
Profile conductor cutter Compact	1000	850	52055684

Wiring conduit cutter





- ▶ Burr-free cutting even with halogen-free cable ducts
- ▶ 90° angle cutting
- ▶ Protects from injury when not in use

Characteristics

- Simple workbench mounting
- Maintenance free
- Cutting mechanism completely protected

Suitable for

 Standard and halogen-free plastic profile with 2.5 mm wall thickness and up to 125 mm width

Technical data		
Cutting width	125 mm	
Dimension	1460 x 250 x 990 mm	
Weight	10.5 kg	
Length of rail guide	1000 mm	
Length of hand lever	600 mm	
Wiring duct (wall thickness)	2.5 mm	
Item		Part No.
Wiring conduit cutter		50125701
Scope of supply		Part No.
Hand lever		
Fixing device		50115537
Measurement scale		

Cutting die





suitable for

- knot chains
- For stranded conductors up to bis 25 mm² e.g. EN 60228 Class 2
- Copper rails up to 3 mm x 10 mm
- Steel cables and similar materials up to 3 mm

Item	Part No.
Cutting die	S502







safety tools

Safety cutters	4.14
VDE-battery powered crimping tools VDE-battery powered cutting tools	4.6 4.9
VDE-battery powered crimping and cutting tools	4.4



KLAUKE ORANGE SAFETY IS A CHOICE WE MAKE!
THINK SAFE. ACT SAFE.

Globally unique

For even more safety, Klauke has now developed the world's first battery hydraulic crimping and cutting tools with Tri-Insulation Barrier technology that provides users with 1,000V protection against electrical shocks.

Whether you work as a panel builder or in utilities:

Think safe. Act safe.

Choose Klauke ORANGE for more safety.





VDE tested and certified to 1,000 V in accordance to the electrical requirements of IEC 60900 and fully certified to IEC 62841-1 $\,$

In brief

- Applied voltage at the tool head does not disrupt to tool hody
- Integrated slip-off protection prevents unintentional contact with live parts
- Housing in signal orange for simple differentiation from standard tools

Klauke ORANGE - Safety is a choice we make. https://www.youtube.com/watch?v=Uq6vV79KyhM







▶ Much safer operations

Working with utility lines presents a series of challenges: Proximity to potentially live parts, limited space and time pressure.

This is why safety and using the right protection equipment are essential when doing this type of work. With Klauke ORANGE, you can rely on an additional layer of protection, whenever it is not possible to disconnect the circuits or when you may not be aware that you are working on a live circuit.





Accidental touching of live parts is prevented by standard-conforming slip-off protection

▶ Safe and convenient

Electrical system cannot be de-energized or disconnected in many cases, so working on live cables cannot be avoided. Our Oranges Line of battery powered crimping and cutting tools increase operating comfort and safety significantly in these cases. They are suitable for all applications in the low-voltage area up to 1,000 V: from the installation of cable joints and working on overhead transmission lines to mounting and repairing street lighting or meter systems.

The tried and proven functions of our Next Generation remain in place. Hence you can see all information at a glance, thanks to the integrated display. Orange Line tools also have a continuously rotating tool head.

▶ Safety cutting tools

The ASSG safety cutting system from Klauke, approved by the trade associates, is able to safely cut live Cu/Al cables with a rated voltage of up to 60 kV, even if a fault occurs. The cutting process is carried out using two powerful and durable 5 Ah Lithium-Ion rechargeable batteries. The remote control ensures increased comfort and optimised control during the cutting operation. The quick coupling located on the ASSG pump allows various cutting heads to be quickly and simply connected to the pre-mounted hydraulic hose.



EKM 60/22 IS VDE-battery powered hydraulic crimping tool 6 - 300 mm²

















- ▶ Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- ▶ Large crimping range up to 300 mm²
- ▶ All tool data in view thanks to the built-in display

Characteristics

- Choose your battery system: Bosch or Makita
- Closed head with bolt interlock, rotatable, flip top style
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Automatic retract stop (ARS) for positioning control in case of multiple crimps
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

22-series interchangeable crimping dies, narrow crimping

Technical data			
Crimping force	60 kN		
Hub	17.5 mm		
Crimping range	6 - 300 mm²		
Crimping cycle	2 s (for ARS) to 5 s (de	epending on cross-sec	tion)
Charging time	15 min.		
Weight incl. battery	3.1 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
VDE-battery powered hydraulic 6 - 300 mm²	crimping tool	EKM6022ISB	EKM6022ISM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-I	on	RALB1EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KK50IS	KK50IS
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-			RAL40





Available dies for Series 22 for EKM 60/22 IS

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Copper tubular cable lugs and connectors				
Tubular cable lugs and connectors, standard type, tubular cable lugs for switchgear connections		6 - 300		2.91
Insulated cable lugs and compression joints, standard type, insulated pin terminals		10 - 150		2.91
Tubular cable lugs and connectors for fine stranded conductors		10 - 70	\bigcirc	2.92
Tubular cable lugs and connectors for solid conductors	O	1.5 - 16		2.92
Tubular cable lugs and connectors, Ni, VA				
Stainless steel tubular cable lugs and connectors	VA	10 - 50	\bigcirc	2.92
Nickel tubular cable lugs and connectors	Ni	10 - 50		2.92
Copper compression cable lugs and connectors to DIN			(~ <u>)</u>	
Copper compression cable lugs (DIN 46235) and connectors DIN 46267, part 1) acc. to DIN	DIN	6 - 300		2.92
Double compression cable lugs		2 x 70		2.92
Terminals, connectors and pin terminals acc. to DIN, copper				
Solderless terminals (DIN 46234), connectors and pin terminals (DIN 46230) acc. to DIN		10 - 70	\bigcirc	2.93
nsulated solderless terminals		10 - 70	\bigcirc	2.93
Sleeves for compacted conductors and sector-shaped conductors, $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) \left(\frac{1}{$	copper			
Pre-rounding dies for sector-shaped Al and Cu conductors		10 sm - 300 se / 300 sm		2.93
Aluminium compression cable lugs and connectors to DIN				
Aluminium compression cable lugs and connectors to DIN	AI	10 - 300		2.93
Aluminium/copper compression cable lugs and connectors				
Aluminum side of aluminum/copper compression cable lugs and connectors: crimping dies A22, copper side of aluminum/copper compression cable lugs and connectors: crimping dies D22	Al/Cu	10 - 300		2.94
Clamps				
Clamps, C-type		10 - 70		2.94
Clamps, H-type		70		2.94
Cable end-sleeves				
Cable end-sleeves, trapezodial		10 - 240		2.94

VDE-battery powered crimping tools

EKM 60 ID IS VDE-battery powered hydraulic crimping tool 10 - 240 mm²







Choose your battery system: Bosch or Makita

on potentially voltage-carrying parts

Indent crimping - no crimping dies required

- With innovative 2-stage telescopic cylinder
- Closed head, flip top style, rotatable
- Quality assurance via visual and audible signals in case of error
- Simple and safe: One-button operating concept for controlling all tool functions

▶ Housing in signal orange for simple differentiation from standard tools Insulated and VDE certified up to 1,000 V for increased safety when working

▶ Extra large crimping area due to innovative 2-stage telescopic cylinders

- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

- Very well suited for compacted conductors
- Especially for fine strand conductors to EN 60228

Additional information

Certified from 16 mm² onwards

30 - 60 kN		
35.5 mm		
10 - 240 mm²		
50 - 240 mm²		
2 s (MRS+) to 7 s (dep	ending on cross-sect	ion)
15 min.		
2.6 kg		
-10 °C up to +40 °C		
	Part No. Bosch	Part No. Makit
crimping tool	EKM60IDISB	EKM60IDISM
lon	RALB1EU	
-lon battery	LGLB1EU	
lon		RAL1
i-lon battery		LGL1
	KK50IS	KK50IS
lon	RALB2EU	
	35.5 mm 10 - 240 mm² 50 - 240 mm² 2 s (MRS+) to 7 s (depto 15 min.) 2.6 kg -10 °C up to +40 °C crimping tool	35.5 mm 10 - 240 mm² 50 - 240 mm² 2 s (MRS+) to 7 s (depending on cross-sect 15 min. 2.6 kg -10 °C up to +40 °C Part No. Bosch EKM60IDISB Ion RALB1EU I-lon battery LGLB1EU I-lon battery









Suitable for	Connection material	Crimping range mm ²	Crimp profile
Coppor tubular cable lue	ne and connecto	re	

Copper tubular cable lugs and connectors

Tubular cable lugs and connectors, standard type, Tubular cable lugs for switch gear connections



10 - 240



Tubular cable lugs and connectors for fine stranded conductors



10 - 240



Terminals, connectors and pin terminals acc. to DIN

Solderless terminals (DIN 46234) connectors and pin terminals (DIN 46230, DIN 46341)



10 - 240



Aluminum compression cable lugs and connectors

Aluminum compression cable lugs and connectors acc. to DIN



50 - 240



Aluminum/copper compression cable lugs and connectors

Aluminum/copper compression cable lugs and connectors



50 - 240





ESM 50 IS VDE-battery powered hydraulic cutting tool 50 mm dia. for copper and aluminium cable









- ▶ Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- ▶ High cutting force cuts copper and aluminium cables (also fine stranded)
- ► Saves time thanks to innovative opening mechanism
- ▶ All tool data in view thanks to the built-in display

Characteristics

- · Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

- Cu and Al cables (multi and fine stranded) even armoured cable

Technical data			
Head type	cutter open		
Cutting range	max. 50 mm dia.		
Cutting force	38 kN		
Cutting cycle	8 s to 10 s (depending	g on material thickness	3)
Charging time	15 min.		
Weight incl. battery	3.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
VDE Battery powered hydraulic 50 mm dia.	cutting tool	ESM50ISB	ESM50ISM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-I	on	RALB1EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Plastic case		KKESM50IS	KKESM50IS
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Makita battery 18 V / 4.0 Ah, Li-	lon		RAL2



ESM 35 IS VDE-battery powered hydraulic cutting tool 35 mm dia. for copper and aluminium cable









- ▶ Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- ▶ High cutting force cuts copper and aluminium cables (also fine stranded)
- ▶ All tool data in view thanks to the built-in display

Characteristics

- · Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

- Cu and Al cables (multi and fine stranded) even armoured cable

Technical data			
Head type	cutter open		
Cutting range			
Cutting force	25 kN		
Cutting cycle	4 s up to 6 s (depending	ng on material thicknes	SS)
Charging time	15 min.		
Weight incl. battery	2.9 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
VDE Battery powered hydraulic c 35 mm dia.	ESM35ISB	ESM35ISM	
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-lo	n	RALB1EU	
Bosch quick-charger for 18 V Li-	lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-le	on		RAL1
Makita quick-charger for 18 V Li-	lon battery		LGL1
Plastic case	KKESM50IS	KKESM50IS	
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-lo	RALB2EU		
Makita battery 18 V / 4.0 Ah, Li-le	on		RAL2



ESM 25 IS VDE-battery powered hydraulic cutting tool 25 mm dia.











- ▶ Housing in signal orange for simple differentiation from standard tools
- Insulated and VDE certified up to 1,000 V for increased safety when working on potentially voltage-carrying parts
- For cutting AI/St cables (ACSR), round materials (Cu, AI, St) as well as armoured cables, steel rods and stay wire
- ▶ Extremely robust design and lightweight
- ▶ All tool data in view thanks to the built-in display

Characteristics

- · Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

• Open wires (ACSR, Aldrey), stay wire and high-tensile stay wire

en	
	, ,
g on material thickness	
to +40 °C	
Part No. Bosch	Part No. Makita
ESM25ISB	ESM25ISM
RALB1EU	
LGLB1EU	
	RAL1
у	LGL1
KKESM50IS	KKESM50IS
RALB2EU	
	RAL2
ire mi in	Part No. Bosch Part No. Bosch ESM25ISB RALB1EU ry LGLB1EU ery KKESM50IS

ES 20 IS VDE battery powered hydraulic cutting tool 20 mm dia.







- ▶ Housing in Signal Orange for simple differentiation from standard tools
- ▶ Insulated and VDE certified to 1000 V for increased safety when working on potentially voltage-carrying parts
- ► For cutting AI/St conductors (ACSR) to DIN EN 50182, solid AI/Cu cables to EN 60228, Class 1 and laminated copper bus bars
- Extremely robust design and lightweight
- ▶ Slim cutting head ideal when space is critical
- All tool data in view thanks to the built-in display

Characteristics

- Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

- Al/St wire (ACSR)

Technical data									
Head type cutter open									
Cutting range max. 18 mm dia. (depe									
23 kN									
2 s to 4 s (depending	on cable size)								
15 min.									
2.1 kg									
-10° to +40 °C									
	Part No. Bosch	Part No. Makita							
cutting tool 20mm dia.	ES20ISB	ES20ISM							
on	RALB1EU								
-lon battery	LGLB1EU								
lon		RAL1							
i-lon battery		LGL1							
Plastic case									
Accessories									
Bosch Akku 18 V / 5,0 Ah, Li-lon									
Makita battery 18 V / 3.0 Ah, Li-lon (54 Wh)									
	ES20E	ES20E							
	max. 18 mm dia. (dep 23 kN 2 s to 4 s (depending 15 min. 2.1 kg -10° to +40 °C cutting tool 20mm dia. on -lon battery lon i-lon battery	max. 18 mm dia. (depending on cable/wire to 23 kN) 2 s to 4 s (depending on cable size) 15 min. 2.1 kg -10° to +40 °C Part No. Bosch cutting tool 20mm dia. ES20ISB On RALB1EU Ion battery LGLB1EU Ion i-lon battery KK50IS RALB2EU Ion (54 Wh)							



ES 32 IS VDE battery powered hydraulic cutting tool 32 mm dia.





- ▶ Housing in Signal Orange for simple differentiation from standard tools
- ► Insulated and VDE certified to 1000 V for increased safety when working on potentially voltage-carrying parts
- ▶ Slim cutting head ideal when space is critica
- ▶ All tool data in view thanks to the built-in display

Characteristics

- Choose your battery system: Bosch or Makita
- Open head, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete
- Manual retract stop (MRS) for efficient operations
- Always ready-to-use thanks to battery charge and service display
- All data can be easily read out via Bluetooth

Suitable for

Multistranded Cu- and Al-cable





Technical data					
Head type	cutter open				
Cutting range	max. 32 mm dia. (dep	ending on cable/wire t	ype)		
Cutting force	15 kN				
Cutting cycle	8 s to 10 s (depending	g on cable size)			
Charging time	15 min.				
Weight incl. battery	2.0 kg				
Ambient temperature	-10 °C to 40 °C				
Item		Part No. Bosch	Part No. Makita		
VDE battery powered hydraul	ic cutting tool 32mm dia.	ES32ISB	ES32ISM		
Scope of supply					
Bosch battery 18 V / 2.0 Ah,	_i-lon	RALB1EU			
Bosch quick-charger for 18 V	Li-lon battery	LGLB1EU			
Makita battery 18 V / 1.5 Ah,	Li-lon		RAL1		
Makita quick-charger for 18	/ Li-lon battery		LGL1		
Plastic case		KK50NG	KK50NG		
Accessories					
Bosch Akku 18 V / 5,0 Ah, Li-	lam	RALB2EU			
	ION	TIALDZEO			
Makita battery 18 V / 3.0 Ah,		INLUZEO	RAL2		
		ES32E	RAL2 ES32E		

SSG Hydraulic safety cutter with foot pump to max. 105 mm dia.



- ► Safety cutter for safe cutting of live Cu/Al cables without steel armouring which, in case of a failure, may carry voltages of up to 60 kV
- Single-core lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz

- Two-stage hydraulics
- Manual retract as required
- The cutting head is generally delivered including safety hydraulic hose (10 m)

Technical data	SSGG105								
Head type	open (SSK105)	closed (SSGG105)							
Cutting range	max.105 mm dia. (depending on cable type)								
Operating pressure	625 bar								
Hydraulic oil	Special oil Rivolta S.B.H.11								
Weight	16 kg	19 kg	19 kg						
Ambient temperature	-20 °C up to +40 °C	-20 °C up to +40 °C	-20 °C up to +40 °C						
Item			Part No.						
Hydraulic safety cutting	unit with foot pump ma	x. 85 mm dia.	SSGG85						
Hydraulic safety cutting	unit with foot pump ma	x. 105 mm dia.	SSG105						
Hydraulic safety cutting	unit with foot pump ma	x. 105 mm dia.	SSGG105						
Scope of supply			Part No.						
Earthing kit			EG1						
Steel carrying case			MKSSG						
Accessories			Part No.						
Heat protection cover 1	.8 m x 1.8 m		HSD1						
Heat protection cover 1	.2 m x 0.9 m		HSD2						
Replacement blade for	SSGG85	SSG105	SSGG105						
ES105E		•							
ESG85EF1	•								
ESG85ES1	•								
ESG105EF	ESG105EF •								
ESG105ES •									
Replacement cutting he	SSGG105								
SSKG85	•								
SSK105		•							
SSKG105			•						



ESSG Battery powered hydraulic safety cutter to max. 105 mm dia.





- ► Safety cutter for cutting live Cu/Al cables without steel armouring which, in case of a failure, may carry voltages of up to 60 kV
- Single-core lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz
- ▶ Powerful 5.0 Ah Li-lon battery

- 2-stage hydraulic system with fast feed and power stroke
- Electronic control
- Multifunction LED for maintenance display and charge status display of the battery
- LED display for service interval after 250 cuts
- The cutting head is generally delivered including safety hydraulic hose (10 m)

Technical data	ESSGG85L	ESSG105L	
Head type	closed (SSKG85)	open (SSK	(105)
Cutting range	max. 85 mm dia. (depending on cable type)	max. 105 on cable t	mm dia. (depending ype)
Cutting force	80 kN		
Cutting time	approx. 21 - 40 s	approx. 2	1 - 40 s
Operating pressure	625 bar	625 bar	
Battery voltage	18 V	18 V	
Battery capacity	5.0 Ah, Li-Ion	5.0 Ah, Li-	-lon
Charging time	60 min.	60 min.	
Hydraulic oil	Special oil Rivolta S.B.H.11	Special oi	l Rivolta S.B.H.11
Weight	9.98 kg	13.13 kg	
Ambient temperature	-20 °C up to +40 °C	-20 °C up	to +40 °C
Item			Part No.
Battery powered hydraulic safe	ety cutter, max. 85 mm dia.		ESSGG85L
Battery powered hydraulic safe	ety cutter, max. 105 mm dia.		ESSG105L
Scope of supply			Part No.
Klauke battery 18 V / 5.0 Ah, Li	i-lon		RALK1850
Klauke charger for 18 V Li-lon	batteries		LGLK18EU
Plastic case for ESSG65L and I	ESSG105L		KKESSGL
Plastic case for ESSGG85L			KKESSGG85L
Earthing kit			EG1
Accessories			Part No.
Heat protection cover 1.8 m x	1.8 m		HSD1
Heat protection cover 1.2 m x	0.9 m		HSD2
Replacement blade for	ESSGG85L		ESSG105L
ES105E			•
ESG85EF1	•		
ESG85ES1	•		
Replacement cutting head	SSGG85		SSG105
SSKG85	•		
SSK105			•

ASSG Battery powered hydraulic safety cutter to max. 120 mm dia.





- DGUV-approved safety cutter for cutting live Cu/Al cables without steel armouring which, in case of a failure, may carry voltages of up to 60 kV
- Single-core lives cables without steel armouring can be cut under voltage of up to 110 kV/60 Hz
- ▶ Very wide opening width to 120 mm
- ► Safe and fast operations by using remote control and 10 m long safety hydraulic hose

Characteristics

- 2-stage hydraulic system with fast feed and power stroke
- Quick motor stop for high user safety
- Electronic control
- DGUV-tested
- 360° rotating connection as with the cutting head
- Battery-powered pump filled with non-conductive oil
- Remote control for increased comfort and safety
- Two powerful 5 Ah, 18 V Lithium-lon batteries (one battery is always there as a replacement)
- Sturdy housing from impact-resistant, fibreglass reinforced polyamide
- The cutting head is generally delivered including safety hydraulic hose (10 m)
- Multi-function display for pressure testing, power consumption and service interval

Additional information

Complete system, different variants available depending on cutting head

Technical data	ASSGG105L		ASSG1	20SL					
Head type	type closed open cl					open			
Cutting range	ting range max. 85 mm dia. max. 105 mm max. 105 m dia.								
Operating pressure									
Battery voltage	18 V	18 V	18 V		18 V				
Battery capacity	2 x 5 Ah Li-lon	2 x 5 Ah Li-lon	2 x 5 Ah L	i-lon	2 x 5	Ah Li-lon			
Charging time	45 min.	45 min.	45 min.		45 mi	n.			
Max. oil volume	approx. 750 ml	approx. 750 ml	approx. 75	50 ml	appro	x. 750 ml			
Hydraulic oil	Shell Naturelle HF-E 15	Shell Naturelle HF-E 15	Shell Natu HF-E 15	relle	Shell HF-E	Naturelle 15			
Weight incl. battery	2 batteries approx. 6.4 kg	2 batteries approx. 6.4 kg	2 batteries approx. 6.	-	2 batteries approx. 6.4 kg				
Ambient tempe- rature	-20 °C up to +40 °C	-20 °C up to +40 °C	-20 °C up +40 °C	to	-20 °C up to +40 °C				
Dimension	330 x 160 x 280 mm	330 x 160 x 280 mm	330 x 160 mm	x 280	330 x 160 x 280 mm				
Item				Part	No.				
Battery powered h	ydraulic safety cutter, max	. 85 mm dia.		ASSG	G85L				
Battery powered h	ydraulic safety cutter, max	. 105 mm dia.		ASSG ⁻	105L				
Battery powered h	ydraulic safety cutter, max	. 105 mm dia.		ASSGG	105L				
Battery powered h	ydraulic safety cutter, max	. 120 mm dia.		ASSG1	20SL				
Scope of supply				Part	No.	Quantity			
Makita battery 18	V / 5.0 Ah, Li-lon (90 Wh)			RAL	_4	2			
Makita quick-charger for 18 V Li-lon battery LGL1 1									
Earthing kit EG1 1									
Carrying strap with shoulder padding TG3 1									
Remote control with 1.5 m cable HTA4 1									
Plastic case				KKAS	SGL	1			
Plastic case for ASSG105L and ASSG120SL KKSSK120S 1									



QUICK AND CLEAN.

Greenlee tools for punching - exactly the right solution for accurate operations. Extreme reliability quickly achieves a burr-free result.







Punching

Round and special shape punches	5.4
Standard punch systems	5.6
Slug Buster® punch systems	5.8
Slug-Splitter® punch system for stainless steel	5.9
Speed-Punch [™] punch system	5.10
Special shape punches	5.13
Punching tools and sets	5,22
KWSET Keyway punch	5.24
Mechanical and hydraulic punching tools	5.24
Battery powered punching tool LS 50 FLEX	5.27
Battery powered punching tool LS100 FLEX	5.28
Slug Buster® punch sets	5.30
Speed-Punch [™] punch sets	5.32
Slug-Splitter® punch sets	5.34
Slug Buster® punching tools and sets	5.35
Hole saws	5,40
HSS bi-metal hole saws	5.42
Bits and step bits	5.48

PATENTED CLEAN SOLUTION ROUND AND SPECIAL SHAPE PUNCH

Speed and innovation set our Greenlee products apart. With Speed Punch and Slug Splitter, you can work quickly and precisely in any application.

Our commitment to your work.



In brief

- **▶** Long service life
- ▶ For aluminium and steel to 3.5 mm thick
- ▶ Threadless profile for quick replacement
- ▶ No jamming of the slug
- ▶ Threads require no maintenance



▶ Quick punching with Speed Punch

We make you faster. Time-saving operations are really easy with the Speed Punch profile. The threadless stamp profile is quickly changed via clamp technology - no more screwing the counter nut off and on! Which also means: Threads are care and maintenance-free. Punching is up to three-times quicker than before.

- Quick punching system: Punching up to 3 x quicker
- For aluminium and steel up to 3.5 mm thick
- Innovative clamp technology
- No more screwing the counter nut off and on
- Threads are now care and maintenance-free

▶ Slug Splitter: Automatic clean punching

We make it easy for you. The Slug Splitter separates punched slug remnants. You can fully concentrate on punching stainless steel, without delays due to time-consuming removal of punched slug remnants.

- Splits the punches into two parts for direct removal of punch slug remnants
- Longest service life due to high-quality stainless steel
- Slug-Splitter: Suitable for use with all Greenlee punching hydraulics





▶ Square punch: Special-shaped punches

Displays and panels require appropriate square-shaped punching. The special punching stamp from Greenlee punches stainless steel and mild steel without leaving burrs. High-quality tool steel meets your requirements - in proven Greenlee quality.

- For mild steel (St37), plastic and aluminium to 3.0 mm thick and V2A stainless steel up to 1.5 mm
- Burr-free punching of display panels
- High-quality tool steel



Standard punch systems



▶ Ball bearing draw stud reduces operating force

Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual / hydraulic

Predrilling

Draw stud 9.5 mm dia., pilot drill 9.7 mm diameter 50360183
 Draw stud 11.1 mm dia., pilot drill 12.7 mm dia. 50344102
 draw stud 19.0 mm dia., pilot drill 20.5 mm diameter 50344030

Scope of supply

- Complete system including punch, die and draw stud for manual operation

Additional information

- * 50042181 Draw stud without ball-bearing
 - ** 52085634 only for 22.5 mm / Pg 16, 2.5 mm mild steel and 2 mm V2A

P	unch si	ze	Max. Material		Individual pa	arts for manu	ıal operation		Draw studs + Accessories for hydraulic units			Complete unit	
			thick- ness						Draw studs Accessories				
True dimen- sion	Stand	ard size	11000			Î							— ,
mm	Pg	ISO	mm (St37)	Punch	Die	Draw stud with ball bearing	Ball bearing nut	Spacer	Hand hydraulic 7804E, 7904E	Battery powered punch LS 50	Hydr. pump 52084920, 52084941 LS100F LEX	Adapter sleeves 9,5/ 19,0 for 51300430	Part No.
12.7	PG 7		1.5	50069969	50042351	50042181							50024086
14.3			1.5	50042300	50042297	50042181							50024337
15.2	Pg 9		2.0	50213164	50320025	50000420							50211153
15.9			1.5	50042238	50042246	50042181						50339672	50024094
16.2		ISO 16	2.0		50351621	50000420			51300430	51300430	52042827	50339672	50351923
18.6			2.0	50177001	50320033	50000420			51300430	51300430	52042827	50339672	50188860
19.1			2.0			50000420			51300430	51300430	52042827	50339672	50206672
20.4	Pg 13	ISO 20	2.0	50176978	50320041	50000420			51300430	51300430	52042827	50339672	50188879
20.6			2.0	50042262	50042254	50000420			51300430	51300430	52042827	50339672	50206680
22.5	Pg16		2.5	52085632	52085629	52085686			52085690	52085690	52085689		52085634
22.5	Pg 16		3.5	51040060	51147220	50000420			51300430	51300430	52042827	50339672	50225634
23.8			2.0	50042386	50042378	50000420			51300430	51300430	52042827	50339672	50253417
25.4		ISO 25	2.0	50039865	50351648	50000420			51300430	51300430	52042827	50339672	50206702
27.0			2.0	50042408	50042424	50000420			51300430	51300430	52042827	50339672	50253425
28.3	Pg 21		3.5	51040080	51069720	50040405			52085691	52085691	52085692	50339672	50225642
28.3	Pg 21		2.0	50368826	50320068	50000420			51300430	51300430	51300430	50339672	50369105
28.6			2.0	50039903	50039911	50000420			51300430	51300430	51300430	50339672	50206710
30.5			1.5	50362828	50362798	50000420			51300430	51300430	51300430	50339672	50365061
31.8			1.5			50000420			51300430	51300430	51300430	50339672	50206737
32.5	Pg 32		3.5	50244590	50351680	50040405			52085691	52085691	52085692		50244760
33.4			1.5		50065866	50000420			52085691	52085691	52085692		50253441





Punching

Slug Buster® punch system



- For quick, clean, effortless and burr-free holes
- > Split slugs fall free and can be removed easily

Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual / hydraulic

Predrilling

Draw stud 9.5 mm dia., pilot drill 9.7 mm diameter 50360183 Draw stud 11.1 mm dia., pilot drill 12.7 mm dia. 50344102 draw stud 19.0 mm dia., pilot drill 20.5 mm diameter 50344030

Scope of supply

- Complete system including punch, die and draw stud for manual operation

Additional information

- * 50042181 Draw stud without ball-bearing
 - ** $\,$ 52085633 only for 22.5mm / Pg16, 2.5mm mild steel and 2mm V2A
 - *** 50339672 Adapter 9.5mm /19mm for draw stud 51300430

Punch size			Max. Material thickness	Individual parts for manual operation			aterial			Draw studs + Accessories for hydraulic units	
True dimension Standard size					Ī			1			
mm	Pg	ISO	mm (St37)	Punch	Die	Draw stud with ball bearing	Hand hydraulic Quick Draw Battery hydraulics LS50FLEX	Hand hydraulic 52084941, 52084920 Battery hydraulics LS100Flex	Part No.		
12.5	Pg 7	ISO 12	1.5	50067281	50067290	50042181			50067273		
15.2	Pg 9		2.0	50319698	50320025	50000420	51300430	52042827	50319892		
16.2		ISO 16	2.0	50351630	50351621	50000420	51300430	52042827	50351770		
18.6	Pg 11		2.0	50319701	50320033	50000420	51300430	52042827	50319906		
20.4	Pg 13	ISO 20	2.0	50319710	50320041	50000420	51300430	52042827	50319914		
22.5	Pg 16		2.0	50317563	51147220	50000420	51300430	52042827	50319620		
22.5	Pg 16		2.5	52085631	52085629	52085686	52085690	52085689	52085633		
25.4		ISO 25	2.0	50351656	50351648	50000420	51300430	52042827	50351788		
28.3	Pg 21		3.0	50317571	51069720	50040405	52085691	52085692	50319639		
28.3	Pg 21		2.0	50319736	50320068	50000420	52085691	52042827	50319930		
30.5			2.0	50362844	50362798	50000420	51300430	52042827	50365088		
30.5			3.5		50362780	50040405	52085691	52085692	50602462		
32.5		ISO 32	3.5	50351699	50351680	50040405	52085691	52085692	50351796		
34.6			3.5		50040111	50040405	52085691	52085692	50319647		
37.0	Pg 29		3.5	50319752	50320084	50040405	52085691	52085692	50319957		
40.5		ISO 40	3.5	50351583	50351591	50040405	52085691	52085692	50351800		
43.2			3.5		50040138	50040405	52085691	52085692	50319655		
47.0	Pg 36		3.5	51319760	51320090	52085688	52085691	52085692	50319965		
49.6			3.5		50040618	52085688	52085691	52085692	50319663		
50.8		ISO 50	3.5	50351605	50351613	52085688	52085691	52085692	50351818		
54.0	Pg 42		3.5	50361724	50361732	52085688	52085691	52085692	50361716		
60.0	Pg 48		3.5	50319787	50320114	52085688	52085691	52085692	50319981		
61.5			3.5	52085668	52085666	52085688	52085691	52085692	52085671		
64.0		ISO 63	3.5		50351664	52085688	52085691	52085692	50351826		



SLUG SPLITTER® punch system (stainless steel)



- ▶ Special alloy for maximum service life
- ▶ Split slugs fall free and can be disposed of easily

Suitable for

• Stainless steel (V2A), mild steel (St37), plastic and aluminium up to 3.5 mm thick

Operation

Hydraulic

Predrilling

 Draw stud 11.1 mm dia., pilot drill 12.7 mm diameter 50344102 draw stud 19.0 mm dia., pilot drill 20.5 mm diameter 50344030

Scope of supply

- Complete system including punch and die

Additional information

* = Slug Splitter SC® - self-centring

Punch size			Max. Material thickness	Individual parts for manual operation		Draw studs	Complete unit
True dimension	Standar	rd size					R
			mm			Pump, hand and	
mm	Pg	ISO	(V2A)	Punch	Die	battery powered	Part No.
15.2	Pg 9		2.5	50311174	50311263	50294512	50069519
16.2		ISO 16	2.5	50045997	50045989	50294512	50069527
18.6	Pg 11		2.5	50311190	50311280	50294512	50069535
20.4	Pg 13	ISO 20	2.5	50311204	50311298	50294512	50069543
22.5	Pg 16		3.5	50281542	50281550	50294512	50069551
25.4		ISO 25	3.5	50046020	50046012	50294512	50069560
28.3	Pg 21		3.5	50281569	50281577	50294520	50069578
30.5			3.5	50364901	50364898	50294520	50069586
32.5		ISO 32	3.5	50046055	50046039	50294520	50069594
34.6			3.5	50281585	50281593	50294520	
37.0	Pg 29		3.5	50311220	50311352	50294520	50069608
40.5		ISO 40	3.5	50046080	50046071	50294520	50069616
43.2			3.5	50281607	50281615	50294520	
47.0	Pg 36		3.5	50311239	50311310	50294520	50069624
49.6			3.5	50281623	50281631	50294520	
50.8		ISO 50	3.5	50046110	50046098	50294520	50069632
54.0	Pg 42		3.5	50311247	50311328	50294520	50069640
60.0	Pg 48		3.5	50311255	50311336	50294520	50069659
61.5			3.5	50281658	50281666	50294520	
64.0		ISO 63	3.5	50046144	50046136	50294520	50069667

Punching

Speed Punch™ punch system



- Innovative threadless punch profile
- ► Easy and quick handling as the screwing and unscrewing of the counter nut is not required

Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia.; pilot drill 9.7 mm dia. draw stud 19.0 mm dia.; pilot drill 20.5 mm dia.

Scope of supply

- Complete system including punch and die

Additional information

- Counter nuts and draw studs must be ordered separately, they are not included in scope of supply
- Draw stud for LS100Flex, manual hydraulics 1725 and 767
 Speed Punch™ draw stud 19 mm to 9.5 mm for ISO 16/20/25 and PG16 Part-No.
 52066000

Speed Punch™ pull stud 19mm for ISO 16/20/25 and PG16 Part-No. 52058897

Punch size		Max. Material thickness	Individu	al parts	Draw studs	Speed lock	Complete unit	
True dimension	Standard	d size						
mm	PG	ISO	mm (St37)	Punch	Die	for LS50Flex and Quick Draw (not included)	(not included)	Part No.
16.2		ISO 16	3.5	52066021	52066022	52066001	52066002	52055431
20.4	PG 13	ISO 20	3.5	52066023	52066024	52066001	52066002	52055432
22.5	PG 16		3.5	52065998	52065999	52066001	52066002	52055433
25.4		ISO 25	3.5	52066025	52066026	52066001	52066002	52055434
32.5		ISO 32	3.5	52066027	52066028	52047818	52047817	52055435
40.5		ISO 40	3.5	52066029	52066030	52047818	52047817	52055436
50.8		ISO 50	3.5	52066031	52066032	52047818	52047817	52055437
64.0		ISO 63	3.5	52066033	52066034	52047818	52047817	52055438
Accessories								Part No.
Speed Punch ^T	Speed Punch™ Speed lock and draw stud 9.5 mm for ISO 16/20/25 and PG 16 52055439					52055439		
Speed Punch ^T	Speed Punch™ Speed lock and draw stud 19.0 mm for ISO 32/40/50/63 52055440					52055440		



Draw studs with manual drivers

▶ High wear resistance

Order info

- To increase the service life, we recommend greasing the draw studs with Greenlee installation paste no. 50115472
- Sizes given are diameter x length
- Subject to tolerance deviations



Punching Round and s

Draw studs for hydraulic drivers

Order info

- To increase the service life, we recommend greasing the draw studs with Greenlee installation paste no. 50115472
- Sizes given are diameter x length
- Subject to tolerance deviations
- Draw stud long, for use with LS100Flex, 767 and 1725 hydraulics (746A punching head)
- Draw stud short, for use with LS50Flex, 767 and Quick Draw hydraulics



Size	Part No.
19 x 28,6 x	52085693
143 mm (long)	
19 x 28,6 x	52093902
124mm (short)	



Size	Part No.
9.5 x 71 mm	51300430



Size	Part No.
11.1 mm x 19mm, 108 mm (short)	52085690
11.1 mmx 19 mm, 127mm (long)	52085689



Size	Part No.
Adapter 19 mm to	50031708
28.6 mm	



Adapter	
Size	Part No.
19 x 48 mm	50339672
(Inside 9.5 mm)	
19 x 48 mm	50601148
(Inside 6.3 mm)	
19 x 48 mm	50601679
(Inside 12.7 mm)	



Size	Part No.
19 x 122 mm (short)	52085691
19 x 143 mm (long)	52085692



Size	Part No.
19 x 140 mm for Slug Splitter®	50294520



Size	Part No.
11.1 x 108 mm for Slug Splitter®	50294512



Size	Part No.
9.5 mm x 19 mm, 122 mm	52042827



Rectangular punch





Suitable for

- Mild steel (St37), plastic and aluminium to 3.0 mm and V2A 1.5 mm
- Punching of burr-free openings

Operation

Manual / hydraulic

Predrilling

9.7 mm dia. pilot drill 50360183 12.7 mm dia. pilot drill 50344102 15.9 mm dia. pilot drill 50344030 30.2 mm dia. 50364146

Scope of supply

Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

Additional information

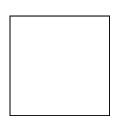
- * = only for use with hydraulic punch drivers 52084920, 52084941, LS50FLEX
 ** = only for use with hydraulic punch drivers 52084920, 52084941, LS50FLEX

Market Mickness Mithickness Mithickn				Individua	ıl parts f. manual opera	tion			
mm (St37) Operating mode Draw studs Ball bearing nut Counter nut Part No. mm Part No. 11.1 x 22.2 1.5 Hand/Hydr. 50601156 50601202 50052446 50601148 9.7 50600251 17.0 x 19.0 2.0 Hand/Hydr. 52020113 50347330 50046381 50339672 12.7 50610281 19.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600346 21.9 x 25.9 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600362 22.0 x 30.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600370 22.0 x 42.0 2.0 Hand/Hydr. 5061172 50601652 50602586 50601679 15.9 50600436 25.1 x 29.0 2.0 Hand/Hydr. 5061172 50601652 50602586 50601679 15.9 50600436 31.8 x 35.1		Punch size Material				66	hydr. punch	Mounting hole-dia.	Complete unit
17.0 x 19.0 2.0 Hand/Hydr. 52020113 50347330 50046381 50339672 12.7 50610281 19.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600311 19.1 x 33.3 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600342 21.9 x 25.9 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600370 22.0 x 30.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600400 22.0 x 42.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600438 25.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600438 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600504 30.0 x 71.0 3.	mm		Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	Part No.
19.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600311 19.1 x 33.3 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600346 21.9 x 25.9 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600370 22.0 x 30.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600400 22.0 x 42.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600438 25.1 x 29.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600476 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600506 30.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045298 30.0 x 90.0 3.0 Hydr. 52046100	11.1 x 22.2	1.5	Hand/Hydr.	50601156	50601202	50052446	50601148	9.7	50600257
19.1 x 33.3 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600346 21.9 x 25.9 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600370 22.0 x 30.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600400 22.0 x 42.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600438 25.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600476 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600508 29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045298 30.0 x 90.0 3.0 Hydr. 52045298 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 <t< td=""><td>17.0 x 19.0</td><td>2.0</td><td>Hand/Hydr.</td><td>52020113</td><td>50347330</td><td>50046381</td><td>50339672</td><td>12.7</td><td>50610281</td></t<>	17.0 x 19.0	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610281
21.9 x 25.9 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600370 22.0 x 30.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600400 22.0 x 42.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600438 25.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600478 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600508 29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045298 30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045297 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 <td>19.1 x 29.0</td> <td>2.0</td> <td>Hand/Hydr.</td> <td>50601172</td> <td>50601652</td> <td>50602586</td> <td>50601679</td> <td>15.9</td> <td>50600311</td>	19.1 x 29.0	2.0	Hand/Hydr.	50601172	50601652	50602586	50601679	15.9	50600311
22.0 x 30.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600400 22.0 x 42.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600438 25.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600478 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600508 29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045296 30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045296 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.*	19.1 x 33.3	2.0	Hand/Hydr.	50601172	50601652	50602586	50601679	15.9	50600346
22.0 x 42.0 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600438 25.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600478 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600508 29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045298 30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045297 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 65.0 3.0 Hydr.* 52046100 52046101 30.2 50600591 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 46.0 x 92.0 3.0 Hydr.* 5204	21.9 x 25.9	2.0	Hand/Hydr.	50601172	50601652	50602586	50601679	15.9	50600370
25.1 x 29.0 2.0 Hand/Hydr. 50601172 50601652 50602586 50601679 15.9 50600478 31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600508 29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045298 30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045297 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 82.0 3.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600636 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600636 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600636 <td>22.0 x 30.0</td> <td>2.0</td> <td>Hand/Hydr.</td> <td>50601172</td> <td>50601652</td> <td>50602586</td> <td>50601679</td> <td>15.9</td> <td>50600400</td>	22.0 x 30.0	2.0	Hand/Hydr.	50601172	50601652	50602586	50601679	15.9	50600400
31.8 x 35.1 2.0 Hand/Hydr. 50184369 50601652 50602586 50601679 15.9 50600508 29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045296 30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045297 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 65.0 3.0 Hydr. 52046100 52046101 30.2 50600591 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	22.0 x 42.0	2.0	Hand/Hydr.	50184369	50601652	50602586	50601679	15.9	50600435
29.0 x 71.0 3.0 Hydr. 52045298 52046101 28.6 52045296 30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045297 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 65.0 3.0 Hydr. 52046100 52046101 30.2 50600591 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600680 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	25.1 x 29.0	2.0	Hand/Hydr.	50601172	50601652	50602586	50601679	15.9	50600478
30.0 x 90.0 3.0 Hydr. 52045298 52046101 28.6 52045297 33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600537 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 65.0 3.0 Hydr. 52046100 52046101 30.2 50600597 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600627 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600627 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 506006567 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600680	31.8 x 35.1	2.0	Hand/Hydr.	50184369	50601652	50602586	50601679	15.9	50600508
33.3 x 66.7 3.0 Hydr. 52046100 52046101 30.2 50600532 35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 65.0 3.0 Hydr. 52046100 52046101 30.2 50600591 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	29.0 x 71.0	3.0	Hydr.	52045298		52046101		28.6	52045296
35.0 x 52.0 3.0 Hydr. 52046100 52046101 30.2 50600567 35.0 x 65.0 3.0 Hydr. 52046100 52046101 30.2 50600597 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600627 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 506006567 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 506006567 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600670	30.0 x 90.0	3.0	Hydr.	52045298		52046101		28.6	52045297
35.0 x 65.0 3.0 Hydr. 52046100 52046101 30.2 50600591 35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	33.3 x 66.7	3.0	Hydr.	52046100		52046101		30.2	50600532
35.0 x 82.0 2.0 Hydr.* 52046100 52046101 30.2 50600621 35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	35.0 x 52.0	3.0	Hydr.	52046100		52046101		30.2	50600567
35.0 x 112.0 2.0 Hydr.* 52046100 52046101 30.2 50600656 46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	35.0 x 65.0	3.0	Hydr.	52046100		52046101		30.2	50600591
46.0 x 92.0 3.0 Hydr.* 52046100 52046101 30.2 50600680 57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	35.0 x 82.0	2.0	Hydr.*	52046100		52046101		30.2	50600621
57.2 x 88.9 3.0 Hydr.* 52046100 52046101 30.2 50600710	35.0 x 112.0	2.0	Hydr.*	52046100		52046101		30.2	50600656
• • • • • • • • • • • • • • • • • • • •	46.0 x 92.0	3.0	Hydr.*	52046100		52046101		30.2	50600680
68.0x138.0 2.0 Hydr.** 52046100 52046101 30.2 5060074 5	57.2 x 88.9	3.0	Hydr.*	52046100		52046101		30.2	50600710
	68.0 x138.0	2.0	Hydr.**	52046100		52046101		30.2	50600745



Square punch





Suitable for

- Mild steel (St37), plastic and aluminium to 3.0 mm and V2A 1.5 mm
- Punching of burr-free openings

Operation

Manual / hydraulic

Predrilling

9.7 mm dia. pilot drill 50360183
 12.7 mm dia. pilot drill 50344102
 15.9 mm dia. pilot drill 50344030
 30.2 mm dia. 50364146

Scope of supply

• Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

Additional information

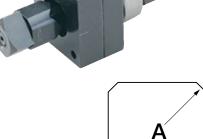
- * = only for use with hydraulic punch drivers 52084920, 52084941, LS50 Flex and LS100 Flex
- ** = only for use with hydraulic punch drivers 52084920, 52084941 and LS100Flex

			Individu	al parts for manual o	peration			
Punch size A x B	ze Max. Material thickness		-		6	Adapter for hydr. punch driver	Mounting hole-dia. mm	Complete unit
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	Part No.
12.7 x 12.7	1.5	Hand/Hydr.	50601156	50601202	50052446	50601148	9.5	50600010
15.9 x 15.9	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610045
19.1 x 19.1	2.0	Hand/Hydr.	50184369	50347330	50602586	50339672	12.7	50610076
22.4 x 22.4	2.0	Hand/Hydr.	50184369	50347330	50602586	50339672	12.7	50610106
24.0 x 24.0	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610137
25.4 x 25.4	2.0	Hand/Hydr.	50601172	50601652	50602586	50601679	15.9	50600168
45.0 x 45.0	3.0	Hydr.	52046100		52046101		30.2	50115723
46.0 x 46.0	3.0	Hydr.	52046100		52046101		30.2	50600192
50.8 x 50.8	3.0	Hydr.	52046100		52046101		30.2	50601687
68.0 x 68.0	3.0	Hydr.	52046100		52046101		30.2	50601717
92.0 x 92.0	3.0	Hydr.*	52046100		52046101		30.2	50601741
104.8 x 104.8	2.0	Hydr.*	52046100		52046101		30.2	50601776
138.0 x 138.0	2.0	Hydr.**	52055901				30.2	50602349



Special square punch with flattened corners





Suitable for

- Mild steel (St37), plastic and aluminium to 2.0 mm
- Punching of burr-free openings

Operation

Manual / hydraulic

Predrilling

12.7 mm dia. pilot drill 50344102

Scope of supply

• Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

			Individual parts for manual operation					
Punch size A x B	Max. Material thickness				6	Adapter for hydr. punch driver	Mounting hole-dia. mm	Complete unit
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	Part No.
22.5 x 20.1	2.0	Hand/Hydr.	50184369	50347330	50602586	50339672	12.7	50611257

Round punch with four anti-rotation tabs



Suitable for

• Mild steel (St37), plastic and aluminium to 3.0 mm

Operation

Manual / hydraulic

Predrilling

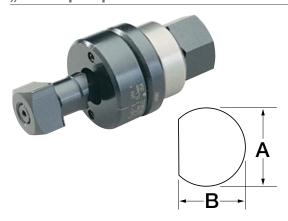
15.9 mm dia. pilot drill 50344030

Scope of supply

- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

			Individual	parts for manual	operation			
Punch size A x B	Max. Material thickness				•	Adapter for hydr. punch driver	Mounting hole-dia. mm	Complete unit
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	Part No.
22.5 x 3.2 x 25.4	2.0	Hand/Hydr.	50184369	50601652	50602586	50601679	15.9	50602381
30.5 x 4.8 x 36.0	3.0	Hand/Hydr.	50184369	50601652	50602586	50601679	15.9	50602420

"D" shaped punch



Suitable for

• Mild steel (St37), plastic and aluminium to 2.0 mm

Operation

Manual / hydraulic

Predrilling

- 12.7 dia. mm pilot drill 50344102

Scope of supply

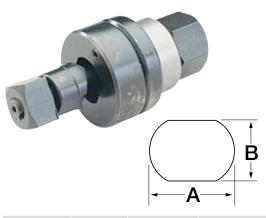
• Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

Additional information

* 50610809 and 50610830 available only as punch unit

			Individual parts for manual operation					
Punch size A x B	Max. Material thickness				•	Adapter for hydr. punch driver	Mounting hole-dia. mm	Complete unit
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	Part No.
12.7 x 11.9	2.0	Hand/Hydr.	50601156	50601202	50052446	50601148	9.5	50600770
15.9 x 15.1	2.0	Hand/Hydr.	50344218	50347330	50046381	50339672	12.7	50610809
19.1 x 17.9	2.0	Hand/Hydr.	50344218	50347330	50046381	50339672	12.7	50610830

Double "D" shaped punch



Suitable for

• Mild steel (St37), plastic and aluminium to 2.0 mm

Operation

Manual / hydraulic

Predrilling

- 15.9 mm dia. pilot drill 50344030

Scope of supply

- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

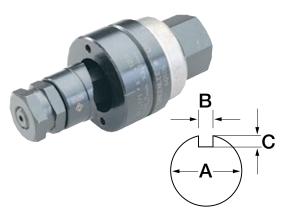
Additional information

- All punches available only as punch unit

			Individua	l parts for manua	al operation			
Punch size A x B	Max. Material thickness				6	Adapter for hydr. punch driver	Mounting hole-dia. mm	Complete unit
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	Part No.
19.5 x 16.3	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610861
20.2 x 17.6	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610892
23.2 x 19.2	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610922
23.2 x 20.2	2.0	Hand/Hydr.	52020113	50347330	50046381	50339672	12.7	50610953



Keyway punch



Suitable for

• Mild steel (St37), plastic and aluminium to 2.0 mm

Operation

Manual / hydraulic

Predrilling

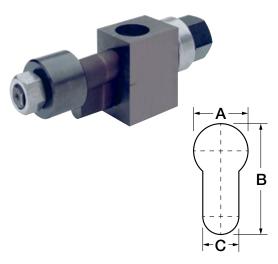
23.8 mm dia. pilot drill 50300083

Scope of supply

• Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

			Individual	parts for manual	operation			
Punch size A x B x C	Max. Material thickness				66	Adapter for hydr. punch driver	Mounting hole-dia. mm	Komplettlocher
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Part No.	mm	ArtNr.
12.2 x 1.4 x 0.8	1.5	Hand/Hydr.	50601156	50601202	50052446	50601148	9.5	50601016

Profile cylinder punch



Suitable for

• Mild steel (St37) up to 2.0 mm and aluminium up to 3.5 mm thick

Operation

Manual / hydraulic

Predrilling

12.7 mm dia. pilot drill 50344102

Scope of supply

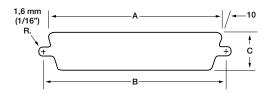
- Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

			Indivi	dual parts fo	r manual opei	ration			
Punch size A x B x C	Max. Material thickness				9		Adapter for hydr. punch driver	Mounting hole-dia. mm	Komplettlocher
mm	mm (St37)	Operating mode	Draw studs	Ball bearing nut	Counter nut	Spacer bushing	Part No.	mm	ArtNr.
17.0 x 33.3 x 10.5	2.0	Hand/Hydr.	50053043	50347330	90500113	50053051	50339672	12.7	50053078



Sub-Min "D" punch





Suitable for

- Mild steel (St37) up to 2.0 mm and aluminium up to 3.5 mm thick
- Front or rear mounting

Operation

Manual / hydraulic

Predrilling

- 12.7 mm dia. pilot drill 50344102

Scope of supply

Punch unit including punch, die, draw stud, counter nut and ball-bearing nut

Sta3ndard	Number Pole		Dimension			Individual	parts for manual	operation	Adapter for hydr. punch driver	Complete unit
							90	•		
		Operating mode	A mm	B mm	C mm	Draw studs	Ball bearing nut	Counter nut	Part No.	Part No.
229	9	Hand/hydr.	20.0	24.9	11.9	52020113	50347330	50046381	50339672	50344366
231	15	Hand/hydr.	28.6	33.3	11.9	52020113	50347330	50046381	50339672	50344374
RS232	25	Hand/hydr.	42.0	47.1	11.9	52020113	50347330	50046381	50339672	50344200
234	37	Hand/hydr.	58.3	63.4	11.9	52020113	50347330	50046381	50339672	50344293
238	50	Hand/hydr.	55.9	61.0	14.7	52020113	50347330	50046381	50339672	50344447



Special shape punch for heavy duty connectors with 4 centre mark points



Characteristics

 Rectangular punches for heavy duty connectors feature a drilling jig built into the die, for drilling the 4 locating holes.

Suitable for

• Mild steel (St37) to 3.0 mm thick and aluminium to 3.5 mm

Operation

Hydraulic

Predrilling

30.2 mm dia. pilot drill 50364146

Scope of supply

- Punch unit including punch, die, draw stud and counter nut

	Punch size A x B	Max. Material thickness			rts for manual ation	Mounting hole-dia.	Complete unit
					66		
Item	mm	mm	Operating mode	Draw studs	Counter nut	mm	Part No.
Special shaped punch for heavy duty connectors, 6-pin, 36 x 52 mm	36.0 x 52.0	3.0	Hydraulic	52046100	52046101	30.2	52033816
Special shaped punch for heavy duty connectors, 10-pin, 36 x 65 mm	36.0 x 65.0	3.0	Hydraulic	52046100	52046101	30.2	52033817
Special shaped punch for heavy duty connectors, 16-pin, 36 x 86 mm	36.0 x 86.0	3.0	Hydraulic	52046100	52046101	30.2	52033818
Special shaped punch for heavy duty connectors, 24-pin, 36 x 91 mm	36.0 x 91.0	3.0	Hydraulic	52046100	52046101	30.2	52033819
Special shaped punch for heavy duty connectors 36 x 112 mm	36.0 x 112.0	3.0	Hydraulic	52046100	52046101	30.2	52033820
Special shaped punch for heavy duty connectors 46 x 112 mm	46.0 x 112.0	3.0	Hydraulic	52046100	52046101	30.2	52033832



Draw studs for shaped punch

Order info

- To increase the service life, we recommend greasing the draw studs with Greenlee installation paste no. 50115472
- Sizes given are diameter x length
- Subject to tolerance deviations





SAVE TIME AND MONEY - WITH EVERY PUNCH!

From the leaders in knockout technology comes the new SPEED PUNCH™ System. The patent pending "no-thread" design eliminates cross-threading, while the innovative SPEED LOCK mechanism quickly secures the punch in place. This means longer tool life and faster punches, saving you time and money on the job. SPEED PUNCH™ is available in ISO 16 to ISO 63 and PG 16 metric sizes and two kit configurations.











▶ Speed Punch - saves time and money

- SPEED LOCK mechanism quickly secures the entire system in place: Punch more holes in less time.
- "No-thread" punch design quickly and easily slides on/off draw stud.
- The fastest punch system on the market today.
- Matched die heights eliminate need for additional spacers.
- Fewer extra parts to lose on the job site.
- No more thread damage and costly down time.

▶ Simplified punching processes

- Standard draw stud end
- Works with your existing hydraulic and battery-operated punch drivers.

LS50 FLEX

In combination with the hydraulic punching tool LS 50 Flex it represents the state of the art in performance and speed.

THE ADVANTAGE IN PUNCHING - PUNCHING TOOLS AND SETS

Greenlee punching tools are quick. No matter whether for straight punchings in steel (St37) and stainless steel or confined areas with swivelling head: Greenlee equips you with the right set for every situation. Combined with the Speed Punch, the quickest and most-efficient punching system in our range puts you in pole position. Take the lead in punching!

In brief

- ▶ Always ready for use due to short battery-charging times
- Heads rotatable through 360° for optimised work ergonomics
- ▶ No fatigue due to low weight
- ▶ 3x quicker punching with the Speed Punch system



▶ The fast one: LS 50 FLEX

The LS 50 FLEX is not just fast. It is integrally designed and produced. It is fully re-charged and ready for use in just 22 minutes. Ergonomic design and a balanced centre of gravity support you when working over long periods of time. The head rotates through 360° and reliably punches in confined areas. Combine the LS 50 FLEX with the Speed Punch system for even faster operations. There's no faster punching than this.

- Can be used for steel (St37) and stainless steel
- Ergonomic design for effortless operations
- Automatic final switch-off for even longer service life of the hole punch
- 22 min. to recharge the battery
- Integrated LED illuminates the work position
- Head rotates through 360°
- Can be combined with Speed Punch punch system for maximum punch speed





▶ Speed Punch set

Punching is up to three times quicker with the Speed Punch. The threadless stamp profile can be quickly replaced via a clamp technology - no more screwing the counter nut on and off. The set contains everything you need for the Speed Punch.

- Speed Punch set ISO 16 63, including accessories for hydraulic activation
- For all standard steel sheet
- High-quality plastic transport case for optimum product protection

▶ Slug Buster® set ISO 16 - 40

The Slug Buster from Greenlee separates the punch remnants automatically so that they fall from the die by themselves. No jamming or time-consuming removal of the punch remnants. The set comprises all components of the punching system.

- Slug Buster system including accessories
- Including ratchet wrench for manual activation
- Pilot drill included
- High-quality plastic transport case for optimum product protection

KWSET, Keyway punch for hydraulic use



Characteristics

- Compatible with all Greenlee hand-operated and battery powered hydraulic punches
- Simple handling

suitable for

- Mild steel (St37) to 2.5 mm thickness
- Stainless steel to 2.5 mm thickness
- 19mm, 3/4" threaded draw stud

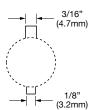
Additional information

 When using the Quick Draw Series or LS50Flex, short spacer (part no. 50032488) is required

Item	Part No.
KWSET	52086978
Acessory	Part No.
Spare Punch Kit for KWSET	52086956
Spare Spring Kit for KWSET	52086957
Spare Die Kit for KWSET	52086955

Keyway punch





- ▶ Time-saving punching of slots for anti-twist protected parts
- **▶** Long service life

Suitable for

- Mild steel (St37) to 3 mm thick
- Manual operation

Item	Part No.
Keyway punch	50265342
Accessories	Part No.
Spare punch for keyway punch	50265369
Spare die for keyway punch	50265385



Hydraulic punch Quick Draw 90™ 7904E



- ▶ Ideal for fast, straight-on front panel punching
- ▶ Head rotates 180° for maximum flexibility
- Very robust

Characteristics

- Compact design
- Hand hydraulic punch driver with 90° head

Suitable for

- Special shape punches up to a maximum size of $68 \times 68 \text{ mm}$ or $35 \times 65 \text{ mm}$
- Round punches up to ISO 63 (64 mm dia.)

Additional information

Accompanying draw studs to 64 mm ST37 are suitable

Technical data		
Dimension	312 x 110 x 65 mm	
Punching force	80 kN	
Weight	3.4 kg	
Item		Part No.
Quick Draw 90™ 7904E		50342991
Scope of supply		Part No.
Hand hydraulic punch 7904E		50337866
Draw stud for punch with hydraulic operation 9.5 x 71 mm		51300430
Draw stud for hydraulic operation 19.0 x 122 mm		52085691
Spacer, short		50032488
Adapter 19.0 x 48 mm with internal thread 9.5 mm		50339672
Plastic case		50352024

Hydraulic punch driver Quick Draw™ 7804E



- Ideal for fast, straight-on front panel punching
- **▶** Compact design
- ► Very robust

Characteristics

Hand hydraulic punch driver with straight head

Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

Additional information

Accompanying draw studs to 64 mm ST37 are suitable

Technical data		
Dimension	321 x 110 x 70 mm	
Punching force	80 kN	
Weight	2.5 kg	
Item		Part No.
Quick Draw™ 7804E		50342916
Scope of supply		Part No.
Hand hydraulic punch	7804E	50342886
Draw stud for punch w	ith hydraulic operation 9.5 x 71 mm	51300430
Draw stud for hydraulic operation 19.0 x 122 mm		52085691
Spacer, short		50032488
Adapter 19.0 x 48 mm	with internal thread 9.5 mm	50339672
Plastic case		50352024

Manual hydraulic punch



▶ Flexible head for multi-purpose use even in confined areas

Characteristics

Rotatable/Swivel

Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

Additional information

- Hand-operated hydraulic punch incl. draw stud, pilot drill and spacer in plastic case
- Without hole
- Accompanying draw studs to 64 mm ST37 are suitable

340 x 150 x 85 mm	
80 kN	
2.2 kg	
360°	
	Part No.
	52033843
	Part No.
eration 9.5 mm to 19 mm, 122 mm	52042827
	52049371
	50032488
	80 kN 2.2 kg 360°



LS 50 FLEX battery powered hydraulic punching tool







- ▶ High flexibility using 360° rotating head
- ▶ An integrated pressure sensor increases the service life of the hole punch
- ▶ Automatic stop makes the punching tools last longer

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Balanced centre of gravity for easy handling and effortless operations
- LED for work area illumination
- Energy saving function with motor cut-out after successful operation
- Manual retract as required
- Always ready-to-use thanks to battery charge and service display

Technical data			
Punching force	ching force 60 kN		
Weight	2.1 kg		
Charging time	15 min.		
Punching time	5 s at 22.5 mm dia., 3 mm 6 s at 63.5 mm dia., 3 mm		
Ambient temperature	-15 °C up to +40 °C		
Dimensions	340 x 115 x 80 mm		
Punching capacity 120 punch operations at 22.5 mm dia., 3.4 mm mild steel 190 punch operations at 22.5 mm dia., 3 mm mild steel 280 punch operations at 22.5 mm dia., 2.5 mm mild steel			mild steel
Item		Part No. Bosch	Part No. Makita
LS 50 FLEX battery power	ed hydraulic punching tool	LS50FLEXCFB	LS50FLEXCFM
Lieferumfang			
Bosch battery 18 V / 2.0 A	h, Li-lon	RALB1EU	
Bosch quick-charger for 1	8 V Li-Ion battery	LGLB1EU	
Makita battery 18 V / 1.5 A	Ah, Li-Ion		RAL1
Makita quick-charger for 18 V Li-lon battery			LGL1
Draw stud for hydraulic operation 19.0 x 122 mm		52085691	52085691
Spacer 22 mm, short		50032488	50032488
HSS Co5 step bit		52049371	52049371
Adapter 19.0 x 48 mm with internal thread 9.5 mm		50339672	50339672
Draw stud for punch with h	ydraulic operation 9.5 x 71 mm	51300430	51300430
Plastic case		KK50FLEXNG	KK50FLEXNG
Accessories			
Bosch battery 18 V / 5.0 A	h, Li-lon	RALB2EU	
Makita battery 18 V / 3.0 A	Ah, Li-Ion (54 Wh)		RAL2
Variants			
L-BOXX with flexible batte LS50FLEXCFB	ry powered hydraulic punch	LBOXXLS50FLEXCFB	
L-BOXX with flexible batte LS50FLEXCFM	ry powered hydraulic punch		LBOXXLS50FLEXCFM

LS 100 FLEX battery powered hydraulic punching tool





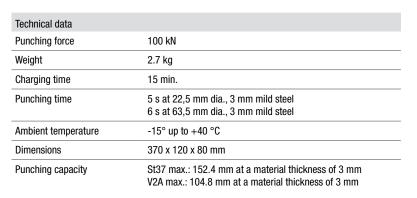
- ▶ High flexibility using rotating head
- ▶ An integrated pressure sensor increases the service life of the hole punch
- ▶ Automatic stop makes the punching tools last longer

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Balanced centre of gravity for easy handling and effortless operations
- LED for work area illumination
- Energy saving function with motor cut-out after successful operation
- Changeable modes for automatic or manual retraction
- Always ready-to-use thanks to battery charge and service display

Additional information

 When used with Speed Punch use the following draw studs: 52066000 (to ISO 25), 50032488, 52058897 (from ISO 25)



Item	Part No. Bosch	Part No. Makita
LS 100 FLEX battery powered hydraulic punching tool	LS100FLEXCFB	LS100FLEXCFM
Scope of supply		
Bosch battery 18 V / 5.0 Ah, Li-lon	RALB2EU	
Bosch quick-charger for 18 V Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah, Li-lon		RAL40
Makita quick-charger for 18 V Li-lon battery		LGL1
Draw stud for hydraulic operation 19.0 x 137 mm	52085692	52085692
Draw stud for hydraulic operation 9.5 mm to 19 mm, 122 mm	52042827	52042827
Spacer, short	50032488	50032488
HSS Co5 step bit	52049371	52049371
Plastic case	KK50FLEXNG	KK50FLEXNG





Hydraulic punch with hand pump



▶ Compact design

Characteristics

· With hand pump, hose and cylinder

Suitable for

- All punches up to 144.1 mm round and 138 x 138 mm square
- St37 up to 3.5 mm and 3.5 mm V2A (depending on punch size)

Operation

Hydraulic

Additional information

- When used with Speed Punch use the following draw studs: 52066000 (to ISO 25), 50032488, 52058897 (from ISO 25)
- Draw stud 52085689 11.1 mm to 19mm, used for 22.5mm Pg16 SB-Punch*52085633, or 22.5mm Pg16 SR-Punch* 52085634.
 *Suitable for mild steel 2.5mm / stainless steel 2mm

Technical data		
Punching force	110 kN	
Weight	8.3 kg	
Item		Part No.
Hydraulic punch with hand pump		52084920
Scope of supply		Part No.
Hydraulic cylinder		50170910
767 Hydraulic hand pump		50132849
Hydraulic hose 6.4 mm dia. x 0.9 m		50383167
Draw stud for hydraulic operation 19.0 x 137 mm		52085692
Draw stud for hydraulic operation 11.1 mm to 19 mm, 127 mm		52085689

Hydraulic punch with foot pump



Characteristics

- With foot pump, hose and cylinder

Suitable for

- Up to 144.1 mm round and 138 x 138 mm square
- St37 up to 3.5 mm and 3.5 mm V2A (depending on punch size)

Operation

Hydraulic

Additional information

- When used with Speed Punch use the following draw studs: 52066000 (to ISO 25), 50032488, 52058897 (from ISO 25)
- Draw stud 52085689 11.1 mm to 19mm, used for 22.5mm Pg16 SB-Punch*52085633, or 22.5mm Pg16 SR-Punch* 52085634.
 *Suitable for mild steel 2.5mm / stainless steel 2mm

Technical data		
Punching force	110 kN	
Weight	15.2 kg	
Item		Part No.
Hydraulic punch with foot pump		52084941
Scope of supply		Part No.
Hydraulic cylinder		50170910
1725 Hydraulic foot pump		50313533
Hydraulic hose 6.4 mm dia. x 3 m		50377299
Draw stud for hydraulic operation 19.0 x 137 mm		52085692
Draw stud for hydraulic operation 11.1 mm to 19 mm, 127 mm		52085689

Thread grease



- Increases the service life
- ▶ Prevents "seizing"
- ▶ Screw and nut threads resistant to wear

Suitable for

Statically and dynamically high stressed thread connections

Item	Part No.
Draw stud thread grease, 30 g	50115472

Slug Buster® punch set for all applications from ISO 16 - 40



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® punch set ISO 16 to 40	50366920
Scope of supply	Part No.
Slug Buster® punch set ISO 16/20/25/32/40	50356178SET
Draw studs for manual operation 9.5 x 40 mm	50000420
Draw studs for manual operation 19.0 x 55 mm	50040405
Ratchet	50349414
Kwik Stepper™ step bit 9.7 mm	50360183
Plastic case	50366858



Slug Buster® punch set for all applications from PG 9 to PG 21 and 30.5 mm



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® punch set PG 9 to PG 21 and 30.5 mm	50366904SET
Scope of supply	Part No.
Slug Buster® punch set PG 9 - 21, 30.5 mm	50323989SET
Draw studs for manual operation 9.5 x 40 mm	50000420
Ratchet	50349414
Kwik Stepper™ step bit 9.7 mm	50360183
Plastic case	50366858

Slug Buster® punch set for ISO 16 - 63



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® punch set ISO 16 to 63	50366939
Scope of supply	Part No.
Slug Buster® punch set ISO 16 - 63	50068920SET
Draw studs for manual operation 9.5 x 40 mm	50000420
Draw studs for manual operation 19.0 mm x 75 mm	50040421
Ratchet	50349414
Kwik Stepper™ step bit 9.7 mm	50360183
Plastic case	50366858

Slug Buster® punch set for all applications from PG 9 - 48 and 30.5 mm



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® punch set PG 9 to PG 48 and 30.5 mm	50366912SET
Scope of supply	Part No.
Draw studs for manual operation 9.5 x 40 mm	50000420
Draw studs for manual operation 19.0 x 55 mm	50040405
Ratchet	50349414
Slug Buster® punch set PG 9 - 48, 30.5 mm	50328034SET
Plastic case	50366858

Speed Punch™ Set ISO 16 - 40



- ▶ Up to 3-times faster than conventional punching tools
- Easy and quick handling as the screwing and unscrewing of the counter nut is not required
- Compatible with all Greenlee hand-operated and battery powered hydraulic tools
- ▶ No greasing of the draw stud required

Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm
- LS50Flex and Quick Draw

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Scope of supply

Complete system including draw stud, cramp, punch and die incl. plastic case

Item	Part No.
Speed Punch [™] punch set ISO 16/20/25/32/40	52055439SET
Scope of supply	Part No.
Punch and die ISO 16 (16.2 mm)	52055431
Punch and die ISO 20 (20.4 mm)	52055432
Punch and die ISO 25 (25.4 mm)	52055434
Punch and die ISO 32 (32.5 mm)	52055435
Punch and die ISO 40 (40.5 mm)	52055436
Speed Lock and draw stud 9.5 mm for ISO 16/20/25 and PG 16	52055439
Speed Lock and draw stud 19.0 mm for ISO 32/40/50/63	52055440
Plastic case	KKSPIS016B63
Accessories	Part No.
Plastic case	KKSPIS016B63



Speed Punch™ Set ISO 16 - 63



- ▶ Up to 3-times faster than conventional punching tools
- Easy and quick handling as the screwing and unscrewing of the counter nut is not required
- Compatible with all Greenlee hand-operated and battery powered hydraulic tools
- ▶ No greasing of the draw stud required

Suitable for

- Mild steel (St37), plastic and aluminium up to 3.5 mm
- LS50Flex and Quick Draw

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Scope of supply

- Complete system including draw stud, cramp, punch and die incl. plastic case

Item	Part No.
Speed Punch™ Set ISO 16 – 63	52055440SET
Scope of supply	Part No.
Punch and die ISO 16 (16.2 mm)	52055431
Punch and die ISO 20 (20.4 mm)	52055432
Punch and die ISO 25 (25.4 mm)	52055434
Punch and die ISO 32 (32.5 mm)	52055435
Punch and die ISO 40 (40.5 mm)	52055436
Punch and die ISO 50 (50.8 mm)	52055437
Punch and die ISO 63 (64.0 mm)	52055438
Speed Lock and draw stud 9.5 mm for ISO 16/20/25 and PG 16	52055439
Speed Lock and draw stud 19.0 mm for ISO 32/40/50/63	52055440
Plastic case	KKSPIS016B63
Accessories	Part No.
Plastic case	KKSPIS016B63

Slug-Splitter® punch set (stainless steel) ISO 16 - 40



- ▶ Unique punch profile
- ▶ Split slugs fall free and can be removed easily

Suitable for

- Stainless steel (V2A), mild steel (St37), plastic and aluminium up to 3.5 mm thick

Operation

Hydraulic

Predrilling

 Draw stud 19 mm dia., pilot drill 20.5 mm dia. 50344030 draw stud 11.1 mm dia., pilot drill 12.7 mm dia. 50344102

Item	Part No.
Slug-Splitter® punch set (stainless steel) ISO 16/20/25/32/40	50766803
Scope of supply	Part No.
Slug-Splitter® punch (stainless steel) 16.2 mm	50069527
Slug-Splitter® punch (stainless steel) 20.4 mm	50069543
Slug-Splitter® punch (stainless steel) 25.4 mm	50069560
Slug-Splitter® punch (stainless steel) 32.5 mm	50069594
Slug-Splitter® punch (stainless steel) 40.5 mm	50069616
Draw stud for hydraulic operation 11.1 mm to 19 mm, 108 mm	50294512
Draw stud for hydraulic operation 19 x 140 mm	50294520
Plastic case	KKSSIS016B63

Slug-Splitter® punch set (stainless steel) ISO 16 - 63



- ▶ Unique punch profile
- > Split slugs fall free and can be removed easily

Suitable for

- Stainless steel (V2A), mild steel (St37), plastic and aluminium up to 3.5 mm thick

Operation

Hydraulic

Predrilling

 Draw stud 19 mm dia., pilot drill 20.5 mm dia. 50344030 draw stud 11.1 mm dia., pilot drill 12.7 mm dia. 50344102

Item	Part No.
Slug-Splitter $^{\! \oplus}$ punch set (stainless steel) ISO 16/20/25/32/40/50/63	50766797
Scope of supply	Part No.
Slug-Splitter® punch (stainless steel) 16.2 mm	50069527
Slug-Splitter® punch (stainless steel) 20.4 mm	50069543
Slug-Splitter® punch (stainless steel) 25.4 mm	50069560
Slug-Splitter® punch (stainless steel) 32.5 mm	50069594
Slug-Splitter® punch (stainless steel) 40.5 mm	50069616
Slug-Splitter® punch (stainless steel) 50.8 mm	50069632
Slug-Splitter® punch (stainless steel) 64 mm	50069667
Draw stud for hydraulic operation 11.1 mm to 19 mm, 108 mm	50294512
Draw stud for hydraulic operation 19 x 140 mm	50294520
Plastic case	KKSSIS016B63



Slug Buster® hand hydraulic punch driver set PG 9 - PG 21, 30.5 mm



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® hand hydraulic punch driver set PG 9 to PG 21 and 30.5 mm $$	50356119SET
Scope of supply	Part No.
Hand hydraulic punch 7804E	50342886
Draw stud for punch with hydraulic operation 9.5 x 71 mm	51300430
Draw stud for hydraulic operation 19.0 x 122 mm	52085691
Spacer, short	50032488
Adapter 19.0 x 48 mm with internal thread 9,5 mm	50339672
Slug Buster® punch set PG 9 - 21, 30.5 mm	50323989SET
Plastic case	50352024

Slug Buster® hand hydraulic 90° punch driver set PG 9 - PG 21, 30.5 mm



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm thick

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® hand hydraulic punch driver set PG 9 to PG 21 and 30.5 mm $$	50356151SET
Scope of supply	Part No.
Hand hydraulic punch 7904E	50337866
Draw stud for punch with hydraulic operation 9.5 x 71 mm	51300430
Draw stud for hydraulic operation 19.0 x 122 mm	52085691
Spacer, short	50032488
Adapter 19.0 x 48 mm with internal thread 9,5 mm	50339672
Slug Buster® punch set PG 9 - 21, 30.5 mm	50323989SET
Plastic case	50352024

Punching to

Slug Buster® hand hydraulic punch driver set ISO 16 - 40



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm thick

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® hand hydraulic punch driver set ISO 16 to 40	50356143SET
Scope of supply	Part No.
Hand hydraulic punch 7804E	50342886
Draw stud for punch with hydraulic operation 9.5 x 71 mm	51300430
Draw stud for hydraulic operation 19.0 x 105 mm	52085691
Spacer, short	50032488
Adapter 19.0 x 48 mm with internal thread 9,5 mm	50339672
Slug Buster® punch set ISO 16/20/25/32/40	50356178SET
Plastic case	50352024

Slug Buster® hand hydraulic 90° punch driver set ISO 16 - 40



Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm thick

Operation

Hydraulic

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Item	Part No.
Slug Buster® hand hydraulic punch driver set ISO 16 to 40	50356160SET
Scope of supply	Part No.
Hand hydraulic punch 7904E	50337866
Draw stud for punch with hydraulic operation 9.5 x 71 mm	51300430
Draw stud for hydraulic operation 19.0 x 122 mm	52085691
Spacer, short	50032488
Adapter 19.0 x 48 mm with internal thread 9,5 mm	50339672
Slug Buster® punch set ISO 16/20/25/32/40	50356178SET
Plastic case	50352024



Hand hydraulic punching set 90° ISO 16 - 40



▶ Flexible head for multi-purpose use even in confined areas

Suitable for

- Special shape punches up to a maximum size of 68 x 68 mm or 35 x 65 mm
- Round punches up to ISO 63 (64 mm dia.)

Item Hand hydraulic punching set ISO 16 - 40	Part No. 52034233
Scope of supply	Part No.
Slug Buster® punch set ISO 16/20/25/32/40	50356178SET
Draw stud for hydraulic operation 9.5 mm to 19 mm, 122 mm	52042827
Draw stud for hydraulic operation 19.0 x 122 mm	52085691
Spacer, short	50032488
HSS Co5 step bit	52049371
Plastic case	KK52034233

Slug Buster® punch set ISO 16 - 40



- ▶ For quick, clean, effortless and burr-free holes
- > Split slugs fall free and can be removed easily

Suitable for

Mild steel (St37), plastic and aluminium to 3.0 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Scope of supply

- Complete system including punch and die incl. plastic case

Item	Part No.
Slug Buster® punch set ISO 16/20/25/32/40	50356178SET
Accessories	Part No.
Plastic case	KKISO16B63R

Slug Buster® punch set ISO 16 - 63



- **▶** Long product life
- Very easy to use

Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Scope of supply

- Complete system including punch and die incl. plastic case

Item	Part No.
Slug Buster® punch set ISO 16/20/25/32/40/50/63	50068920SET
Accessories	Part No.
Plastic case	KKIS016B63R

Slug Buster® punch set PG 9 - 21, 30.5 mm



- **▶** Unique punch profile
- > Split slugs fall free and can be removed easily

Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Scope of supply

- Complete system including punch and die incl. plastic case

Item	Part No.
Slug Buster $^{\! \rm B}$ punch set PG 9/11/13/16/21 and 30.5 mm	50323989SET
Accessories	Part No.
Plastic case	KKPG9B48

Slug Buster® punch set PG 9 - PG 48, 30.5 mm



- ▶ Unique punch profile
- ▶ Split slugs fall free and can be removed easily

Suitable for

• Mild steel (St37), plastic and aluminium up to 3.5 mm

Operation

Manual

Predrilling

 Draw stud 9.5 mm dia., pilot drill 9.7 mm dia. 50360183 draw stud 19.0 mm dia., pilot drill 20.5 mm dia. 50344030

Scope of supply

Complete system including punch and die incl. plastic case

Item	Part No.
Slug Buster® punch set PG 9/11/13/16/21/29/36/48 and 30.5 mm $$	50328034SET
Accessories	Part No.
Plastic case	KKPG9B48



FOR DEEP INCISIONS - HOLE SAWS

Clear the way for cables and electrical connections. Our Greenlee hole saws offer a long-term precise solution. Reinforced back plate reduces vibrations. Saving you effort and ensuring precise concentricity. HSS bi-metal hole saws are suitable for processing steel sheet, cast iron, brass and other materials.



In brief

- ▶ Reduced vibrations thanks to reinforced back plate
- ▶ Long service life due to high-performance steel
- Suitable for numerous materials
- ▶ For multi-functional use, please note our universal tools



▶ HSS bi-metal hole saws

No material is safe from the HSS bi-metal hole saws. Very hard high-performance steel (M 42) for clean and reliable prolonged operation.

- Precise cut with positive pitch
- Reinforced back plate reduces vibrations
- High true running accuracy

- Cooling slots for low heat build-up
- Saws up to a cut depth of of 41.3 mm
- Improved service life due to tooth hardness Rc65-68
- Suitable for steel sheet, cast iron, brass, fibreglass, wood and plastic



▶ Set of hole saws: HSS bi-metal hole saw set

The hole saw set gives you all standard sizes tidily combined. Well sorted and perfectly protected.



HSS Bi-metal hole saws





- ▶ Vibration-reduction and high true running accuracy due to thick back section
- ▶ High-quality serration easily assured, precise cut
- ▶ Cooling slots ensure low heat build-up
- ▶ No canting when sawing

Characteristics

- High-quality, rake variable pitch design provides faster, easier cutting
- High true running accuracy
- Max. cutting depth 41.3 mm
- Tooth hardness Rc 65 68

Suitable for

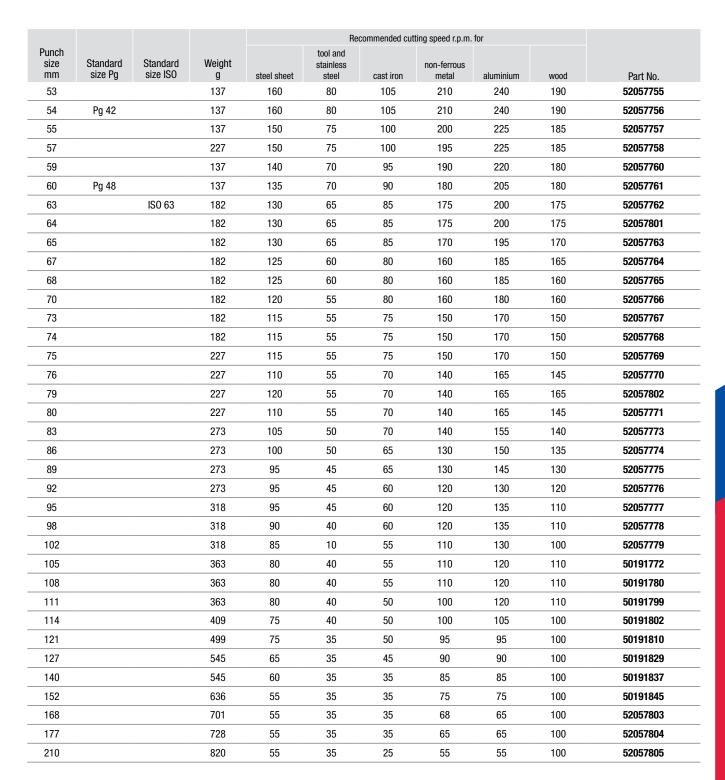
Mild steel, cast iron, brass, aluminium, fibreglass, wood, VA sheet and plastic

Additional information

Arbors have to be ordered separately, not included in scope of supply

Punch size mm	Standard size Pg	Standard size ISO	Weight	eteel about	tool and stainless steel	anat iran	non-ferrous	aluminium	wood	Down No.
14	SIZE FY	3126 130	g 46	steel sheet 580	300	cast iron 400	metal 790	900	800	Part No. 50191314
15			46	580	300	400	790	900	800	52057722
16	Pg 9	ISO 16	46	550	275	365	730	825	760	52057723
17	. 9 0		46	500	250	330	665	750	720	52057724
18			46	500	250	330	665	750	720	52057725
19	Pg 11		46	460	230	300	600	690	680	52057726
20		ISO 20	46	445	220	290	580	660	640	52057727
21	Pg 13		46	425	195	280	560	635	580	52057728
22	Pg 16		46	390	195	260	520	585	560	52057729
23			46	380	190	250	510	570	540	52057730
24			46	370	185	245	494	555	520	52057731
25		ISO 25	46	350	175	235	470	525	500	52057732
26			46	325	160	215	435	480	500	52057733
27			46	300	150	200	400	450	450	52057734
28			46	300	150	200	400	450	450	52057735
29	Pg 21		91	285	145	190	380	425	430	52057736
30			91	270	140	180	360	410	410	52057737
32		ISO 32	91	270	140	180	360	410	410	52057738
33			46	250	125	165	330	375	370	52057739
35			46	240	120	160	315	360	30	52057740
36			91	240	120	160	315	360	30	52057741
37	Pg 29		91	230	115	150	300	345	330	52057742
38			91	220	110	145	290	330	310	52057743
40		ISO 40	91	210	110	140	280	315	290	52057744
41			91	205	105	135	270	305	270	52057745
42			137	205	105	135	270	305	270	52057746
43			91	195	100	130	260	295	250	52057747
44			91	190	95	125	250	285	230	52057748
45			91	190	95	125	250	285	230	52057749
46			137	180	90	120	240	270	210	52057750
48	Pg 36		91	180	90	120	240	270	210	52057751
50		ISO 50	91	170	85	115	230	255	200	52057752
51			137	165	80	110	220	245	200	52057753





HSS Bi-metal hole saw set



- ▶ Saves time thanks to low vibration and heat development
- ▶ Variable pitch for an uniform cut
- ▶ Requires minimal effort when drilling

Characteristics

- High true running accuracy
- Less effort when cutting

Suitable for

 Metal, brass, fibreglass, non-ferrous metal, cast iron, aluminium, wood and plastics, stainless steel sheet

Item	Part No.
HSS bi-metall hole saw set Elektro II	52059292SET
HSS bi-metal universal hole saw set	52059293SET
HSS bi-metal hole saw set ISO 16 to 63	50069497SET
HSS bi-metal plumbing hole saw set	52059294SET
HSS bi-metal hole saw set (830 PG)	50292099SET
HSS bi-metal electrical hole saw set	52059295SET
Electro set with countersink 35/68/75 mm	50125630SET

		Standard size					Hole set			
Description	Nominal size mm	Pg	IS0	52059292SET Electro II	52059293SET Universal	50069497SET ISO 16-63	52059294SET Plumbing	50292099SET 830PG	52059295SET Standard	50125630SET Electro
Bi-metal hole saw	16	Pg 9			•			•	•	
	17		ISO 16			•				
	19	Pg 11			•		•	•	•	
	21	Pg 13	ISO 20			•		•		
	22	Pg 16		•	•			•	•	
	24						•			
	25		ISO 25		•	•				
	29	Pg 21		•	•		•	•	•	
	30							•		
	33		ISO 32			•				
	35			•	•				•	•
	37	Pg 29						•		
	38				•		•			
	41		ISO 40			•				
	44			•	•		•		•	
	48	Pg 36						•		
	51		ISO 50	•	•	•				
	52								•	
	57						•		•	
	60	Pg 48						•		
	63		ISO 63	•	•	•				
	67						•		•	
	68			•						•
	75									•
	76				•					
Countersink for Hole Saw	68 mm									•
Arbor 14 to 30 mm				•	•	•	•	•	•	
Arbor 32 to 152 mm		•	•	•	•	•	•	•		
Case				•	•	•	•	•	•	•



Electro set with countersink



Characteristics

- Countersink with two specially-hardened cutting teeth

Suitable for

 Steel, non-ferrous metal, aluminium, cast iron, stainless steel, wood, plastic and building materials

Scope of supply

 Consisting of hole saws 35 mm, 68 mm, 75 mm, countersink for 68 mm hole saw, arbor with pilot drill and counter nut for hole saws 32 - 152 mm and spare HSS pilot drill 6.35 mm dia.

Item	Part No.
Electro set with countersink 35/68/75 mm	50125630SET
Scope of supply	Part No.
HSS bi-metal hole saw 35 mm	52057740
HSS bi-metal hole saw 68 mm	52057765
HSS bi-metal hole saw 75 mm	52057769
Countersink for hole saws	52033839
Arbor for HSS bi-metal hole saws 8.6 mm	52057781
Plastic case	52059258

Arbor for HSS bi-metal hole saws 14 - 30 mm



Suitable for

Sizes from 14 - 30 mm

Item	Part No.
Arbor 6.3 mm	50371576
Arbor for HSS bi-metal hole saws 7.9 mm	50385224
Arbor 8.6 mm	52057780
Arbor 11.1 mm	50371550

Arbor for HSS bi-metal hole saws 32 - 152 mm



Suitable for

- Sizes from 32 51 mm
- Sizes from 32 152 mm

Item	Part No.
Arbor 7.9 mm for HSS bi-metal hole saws 32 - 51 mm	50371541
Arbor 8.6 mm for HSS bi-metal hole saws 32 - 152 mm	52057781
Arbor 11.1 mm for HSS bi-metal hole saws 32 - 152 mm	50371568

SDS arbor for HSS bi-metal hole saws



Suitable for

- Sizes from 32 152 mm
- Sizes from 14 30 mm

Item	Part No.
SDS arbor for HSS bi-metal hole saws 14 - 30 mm	50069691
SDS arbor for HSS bi-metal hole saws 32 - 152 mm	50069292

Replaceable pilot drill for arbor HSS bi-metal hole saws



Item	Part No.
Replaceable pilot drill for arbor HSS bi-metal hole saws	52057782



SIMPLE DRILLING – EVERYTHING IN ONE OPERATION

Greenlee bits are produced using the latest CNC technology. The benefit to you is clear: Clean cutting edges produce longer and better cutting operations from the very first use. That saves you effort. The two-sided deburring of the edge breaker saves you time. The Rotastop system on the shank prevents the bit from slipping through in the chuck. That's how drilling is done today.



In brief

- ▶ Perfect cutting performance in the first pass
- ▶ Rotastop prevents the bit slipping through
- > Split point requires less effort



▶ Kwik Stepper with Rotastop

Years of experience and development have gone into this bit. The Kwik Stepper drills not only burr-free with optimum swarf removal, the spiral groove also reduces heat build-up during the drilling operation. This makes the Kwik Stepper especially durable. The Rotastop system holds the bit in place - without slipping through. Additionally, the split point reduces your effort during the drilling operation. Great performance from just one bit.

- All required drilling ranges in one tool
- Rotastop for maximum torque transmission
- Quick bit change
- No slipping through in the chuck
- Spiral groove for improved cutting performance
- Two-sided burr removal
- Can be used for sheet, pipes, non-ferrous metals, stainless steel and plastics

▶ Performance in the set: Kwik Stepper set of step bits

To keep you flexible while drilling, we have combined all standard step bits in a practical set and accommodated them in a robust plastic box. Everything to hand.

- All common step bits
- Clear assignment of the bit through laser scaling of the step bit
- Robust plastic box with integrated pop-up hinge
- Easy to transport and store



PunchingBits and step bits

Kwik Stepper™ step bit



- Minimum burrLong service lifeGood torque transmission
- Less effort when drilling

Suitable for

- Sheet, pipe, NF metal and plastic

Item	Drilling range dia. mm	Step sizes dia. mm	Total length mm	Number of steps	Shank dia. mm	Part No.
Kwik Stepper™ step bit 3.2 - 12.7 mm	3.2 - 12.7	3.2 / 4.0 / 4.8 / 5.6 / 6.4 / 7.1 / 7.9 / 8.7 / 9.5 / 10.3 / 11.1 / 11.9 / 12.7	80	13	634	52084123
Kwik Stepper™ step bit 4.8 - 12.7 mm	4.8 - 12.7	4.8 / 6.4 / 7.9 / 9.5 / 11.1 / 12.7	80	6	6.4	52084124
Kwik Stepper™ step bit 22.2 mm	22.2	22.2	85	1	9.5	52084128
Kwik Stepper™ step bit 4.8 - 22.2 mm	4.8 - 22.2	4.8 / 6.4 / 7.9 / 9.5 / 11.1 / 12.7 / 14.3 / 15.9 / 17.5 / 19.1 / 20.6 / 22.2	85	12	9.5	52084129
Kwik Stepper™ step bit 12.7 - 28.6 mm	12.7 - 28.6	12.7 / 22.2 / 28.6	57	3	9.5	52084131
Kwik Stepper™ step bit 22.2 - 34.9 mm	22.2 - 34.9	22.2 / 28.6 / 31.0 / 31.8 / 34.9	73	5	9.5	52084134
Kwik Stepper™ step bit 9.7 mm	9.7	Predrilling for Green- lee-Draw stud 9.7	40	1	6.4	50360183
Kwik Stepper™ step bit 12.7 mm	12.7	Predrilling for Green- lee-Draw stud 12.7	40	1	6.4	52084125
Kwik Stepper™ step bit Pg 7 - 21	Pg 7 - 21	Pg7 / Pg9 / Pg11 / Pg13 / Pg16 / Pg21	90	7	9.5	52084132
Kwik Stepper™ step bit ISO 16 - 32	ISO 16 – 32	ISO 16 / 20 / 25 / 32	80	4	9.5	52084133
Kwik Stepper™ step bit 19.1 mm	19.1	Predrilling for Green- lee-Draw stud	99	1	9,5	52084126
Kwik Stepper™ step bit 12 mm	12	Predrilling for Green- lee-Draw stud	99	1	4,4	52085453
Variants						ArtNr.
Kwik Stepper™ step bit set o	consisting of 52084123	- 52084129				52084141
Kwik Stepper™ step bit set o	consisting of 52084123	+ 52084129 + 5208413	1			52085454



Kwik Stepper™ step bit with ROTASTOP® shaft





- **▶** Minimal burr
- ▶ No slipping in the chuck with ROTASTOP®
- ► Long service life
- ▶ Requires minimum effort when drilling

Suitable for

- Reaming of steel sheets, pipes, non-ferrous metals and plastic







Item	Drilling range dia. mm	Step sizes dia. mm	Total length mm	Number of steps	Shank dia. mm	Part No.
Kwik Stepper™ step bit with ROTASTOP® shaft 4 - 12 mm	4 – 12	4.0 / 5.0 / 6.0 / 7.0 / 8.0 / 9.0 / 10.0 / 11.0 / 12.0	80	9	8.0	50069845
Kwik Stepper™ step bit with ROTASTOP® shaft 4 - 20 mm	4 – 20	4.0 / 6.0 / 8.0 / 10.0 / 12.0 / 14.0 / 16.0 / 18.0 / 20.0	67	9	8.0	50069853
Kwik Stepper™ step bit with ROTASTOP® shaft ISO 12 - 40 mm	6-21	6.0 / 8.0 / 10.0 / 11.5 / 12.5 / 14.5 / 17.0 / 21.0	67.5	8	8	52049371
Kwik Stepper™ step bit with ROTASTOP® shaft 6 - 30 mm	6 – 30	6.0 / 8.0 / 10.0 / 12.0 / 14.0 / 16.0 / 18.0 / 20.0 / 22.0 / 24.0 / 26.0 / 28.0 / 30.0	98	13	10.0	50069861
Kwik Stepper™ step bit with ROTASTOP® shaft 6 - 36 mm	6 – 36	6.0 / 9.0 / 12.0 / 15.0 / 18.0 / 21.0 / 24.0 / 27.0 / 30.0 / 33.0 / 36.0	85	11	12.0	50069870
Kwik Stepper TM step bit with ROTASTOP® shaft ISO 12 - 40 mm	ISO 12 - 40	For ISO 12 / 16 / 20 / 25 / 32 / 40	110	6	12.0	50069888

Kwik Stepper™ step bit set



- ► ROTASTOP® guarantees best-possible torque transmission
- ► Hardly any burr
- ▶ No slipping in the chuck with ROTASTOP®
- **▶** Long service life
- ▶ Requires minimal effort when drilling

Suitable for

- Reaming of steel sheets, pipes, non-ferrous metals and plastic

Item	Part No.
Kwik Stepper™ step bit set	50069900
Scope of supply	Part No.
Kwik Stepper [™] step bit with ROTASTOP® shaft 4 - 12 mm	50069845
Kwik Stepper [™] step bit with ROTASTOP® shaft 4 - 20 mm	50069853
Kwik Stepper™ step bit with ROTASTOP® shaft 6 - 30 mm	50069861

Combi bit set M 3 - M 10



▶ Drill, tap and deburr in one operation

Suitable for

• For use with St37, non-ferrous metals, stainless steel and plastics

Item	Part No.
Combi bit set in plastic cassette M 3 - M 10	50121510
Scope of supply	Part No.
Combi bit M3	50116312
Combi bit M4	50116320
Combi bit M5	50116339
Combi bit M6	50116347
Combi bit M8	50116355
Combi bit M10	50116363
Combi bit holder	50116371



Metric SS DTAP Kit (PKG)



Suitable for

• For use with St37, non-ferrous metals, stainless steel and plastics

Item	Part No.
Metric SS DTAP Kit (PKG)	52086846
Scope of supply	Part No.
Drill/Tap M3 x 0.50 (PKG)	52086840
Drill/Tap M4 x 0.70 (PKG)	52086841
Drill/Tap M5 x 0.80 (PKG)	52086842
Drill/Tap M6 x 1.00 (PKG)	52086843
Drill/Tap M8 x 1.25 (PKG)	52086844
Drill/Tap M10 x 1.50 (PKG)	52086845
Quick change adapter	50116371







Universal tools

Electromechanical universal tool	6.4
Electromechanical crimping tool for cable end-sleeves and twin cable end-sleeves	6.5
Electro mechanical crimping tool	6.6
Electromechanical cutting tool	6.8
Hand-operated hydraulic universal tool, hydraulic universal head	6.10
Battery powered universal tools	6.11
Bus bar tool centre	6.15

SO FAST IN SERIES PRODUCTION THE KLAUKE MICRO

The Klauke Micro is as convenient and quick as a mechanical tool, and just as powerful and easy to handle as a battery-powered hydraulic tool. Compact and portable in one device! Thanks to the innovative PowerSense technology. This tool simplifies your work like never before and that for a large number of applications.





▶ Manual pre-clamping - motorized working

- Flexible to use with interchangeable crimping and cutting dies
- Broad application range of crimping dies up to 50 mm², cutting dies up to 13 mm dis.
- With LED illumination of the work area
- Low weight (< 1 kg)
- Intuitive operation thanks to PowerSense function
- Electronic control with ratchet function and motor stall protection
- Automatic retraction

- Long service life with servicing intervals of 35,000 cycles
- 3 year warranty on tool registration

Link to tool registration:

www.klauke.com/en/werkzeugregistrierung/login-tool-registration/





EK WF 50 ML Electro mechanical crimping tool 0,5 - 50 mm² for cable end-sleeves and twin cable end-sleeves









- ▶ The Klauke micro with intuitive PowerSense function combines the benefits of manual crimping tool K 507WF with the convenience of battery powered hydraulic crimping tools
- One crimping profile for all comman typesr
- Quick and easy changing of the crimping dies
- ▶ Fewer pressures due to optimal crimping die width
- ▶ Excellent crimps with minimum effort

Characteristics

- Simple and safe: One-button operating concept for controlling all tool functions
- PowerSence function: Manual pre-clamping, motorized crimping
- Electronic control with locking function monitors full closing of the dies
- Ergonomic 2C housing in the Klauke "In-line Design"
- Tool fixing point for use with balancer aid or lanyard
- Very low weight and high speed for maximum efficiency
- Powerful drive technology for effortless operations
- Powerful 10.8 V Li-lon battery with charge status display
- LED for work area illumination

Plastic case 450 x 370 x 105 mm

Charger for 10.8 V Li-Ion batteries, 230V

Maintenance display via LED

Suitable for

Cable end-sleeves and twin cable end-sleeves



Technical data		
Crimping range	0.5 - 50 mm ²	
Number of crimps	approx. 400 at 10 mm ²	
Battery voltage	10.8 V	
Battery capacity	2.5 Ah, Li-lon	
Charging time	approx. 45 min.	
Weight incl. battery	0.96 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Electro mechanical crimpin	g tool 0.5 - 50 mm² for cable end-sleeves	EKWF50ML
Scope of supply		Part No.
Crimping dies AE 507 for ca	able end-sleeves, 0,5 - 6 mm²	AE5071
Crimping dies AE 507 for ca	able end-sleeves, 10 - 25 mm²	AE5072
Crimping dies AE 507 for ca	able end-sleeves, 35 - 50 mm²	AE5073
Crimping dies AE 507 for twin cable end-sleeves 2 x 6 - 2 x 16 mm ²		ZAE5072
Battery 10.8 V / 2.5 Ah, Li-lon (27 Wh)		RAML1225

LGML1

KKEK50ML

EK 50 ML Electromechanical crimping tool 0.1 - 50 mm²







- ▶ The Klauke micro with intuitive PowerSense function combines the benefits of manual crimping tools with the convenience of battery powered hydraulic crimping tools
- ▶ Excellent crimps with minimum effort

Characteristics

- Simple and safe: One-button operating concept for controlling all tool functions
- PowerSence function: Manual pre-clamping, motorized crimping
- Electronic control with locking function monitors full closing of the dies
- Ergonomic 2C housing in the Klauke "In-line Design"
- Tool fixing point for use with balancer aid or lanyard
- Very low weight and high speed for maximum efficiency
- Powerful drive technology for effortless operations
- Powerful 10.8 V Li-lon battery with charge status display
- LED for work area illumination
- Maintenance display via LED

Suitable for

50-series interchangeable dies

Technical data		
Crimping range	0.1 - 50 mm ²	
Number of crimps	approx. 400 at 10 mm ²	
Battery voltage	10.8 V	
Battery capacity	2.5 Ah, Li-lon	
Charging time	approx. 45 min.	
Weight incl. battery	0.96 kg	
Ambient temperature	-10 °C up to +40 °C	
Item		Part No.
Electromechanical crimping tool	0.1 - 50 mm²	EK50ML
Scope of supply		Part No.
Battery 10.8 V / 2.5 Ah, Li-lon (2	7 Wh)	RAML1225
Charger for 10.8 V Li-lon batterie	es, 230V	LGML1
Crimping dies IS 50, double crim	ping, 0.5 - 6 mm²	IS501
Plastic case 450 x 370 x 105 mn	1	KKEK50ML
Variants		Part No.
Electromechanical crimping tool crimping die, case, charge	0.1 - 50 mm² with RAML1225 battery, no	EK50ML-L
L-BOXX with electro-mechanical extensive additional equipment	crimping tool EK 50 ML 0.1 to 50 mm² and	LB0XXEK50ML



Available dies of series 50 for EK 50 ML

Suitable for	Connection material	Crimping range mm ²	Crimp profile	Page
Tubular cable lugs and connectors, Cu				
Tubular cable lugs, Cu, standard type		0,75 - 10	\bigcirc	2.82
Tubular cable lugs and connectors, Cu, standard type		6 - 25		2.82
Tubular cable lugs and connectors for solid conductors, Cu		1,5 - 10		2.82
Compression cable lugs and connectors acc. to DIN - Cu				
Copper compression cable lugs (DIN 46235) and connectors (DIN 46267, part 1)	DIN	6 - 25		2.82
Terminals, connectors and pin terminals acc. to DIN - Cu				
Terminals (DIN 46234) and pin terminals (DIN 46230) Cu, solderless connectors (DIN 46341) Cu		0,5 - 10	\bigcirc	2.82
Insulated solderless terminals and connectors		10 - 16		2.83
Cable end-sleeves				
Cable end-sleeves		0,5 - 50	\bigcirc	2.83
Twin cable end-sleeves		2 x 6 - 2 x 16	\bigcirc	2.83
Cable connections, insulated and non-insulated				
Insulated cable connections, single crimping		0,5 - 16		2.83
Insulated cable connections, double crimping		0,1 - 6		2.83
Non insulated receptacles		0,25 - 6	\odot	2.83
for pin and shielded receptacles, BNC connectors for coax cables RG 58, 59, 60 and 71 $$				2.83
Turned pin connectors, pin receptacles		0,1 - 4	₹	2.83
Cutting die				
for cutting knotted chains, cable class 2 to 25 $\mbox{mm}^{2},$ copper rails and steel cable		25 mm²		3.50

EC 50 ML Electro mechanical cutting tool





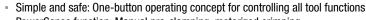








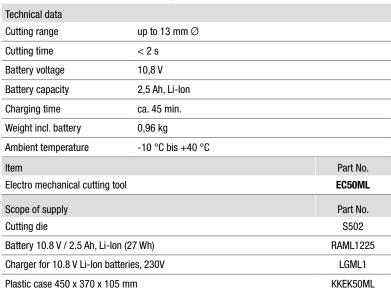
Characteristics



- PowerSence function: Manual pre-clamping, motorized crimping
- Electronic control with locking function monitors full closing of the dies
- Ergonomic 2C housing in the Klauke "In-line Design"
- Tool fixing point for use with balancer aid or lanyard
- Very low weight and high speed for maximum efficiency
- Powerful drive technology for effortless operations
- Powerful 10.8 V Li-lon battery with charge status display
- LED for work area illumination
- Maintenance display via LED

Suitable for

- knotted chains
- For stranded conductors e.g. EN 60228 Class 2
- Copper bars up to 3 mm x 10 mm
- Steel cables and similar materials up to 3 mm

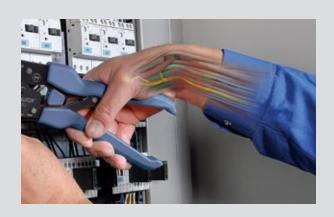






THINK OF YOUR HEALTH!

Frequent manual working eventually leads to over-strain in the wrist and lower arm. To work with the Klauke Micro, **you only need around 10% of the manual force required** by a mechanical hand tool. Motorised working with the Klauke micro is an investment that pays off!





ONE TOOL FOR ALL SITUATIONS – UNIVERSAL TOOLS

Crimping, cutting or punching: Replaceable adapter and dies quickly adapt the tool to individual tasks. Low weight and powerful: Crimping up to 400 mm², cutting up to 40 mm diameter or punching up to 92 x 92 mm, no problem at all for the Klauke Multi.

The Klauke Multi: The right tool in every instance.



▶ Systematic crimping

All crimping dies from Klauke function with every Klauke tool. Crimp cable lugs with with the Klauke series 22 (6 t tools) and wide crimping with the series 13 (12 t tools). Differing crimp shapes and nominal cross-sections up to 400 mm² can be processed with just one tool.

- Can be used with dies series 22 (6 t)
- Wide crimping with dies series 13 (12 t) possible
- Cross sections up to 400 mm²
- Simple adapter replacement

▶ The plus one: Hole punching

Retooling of hole punches is really simple with the Klauke multi. In conjunction with hole punch adapters from Greenlee, you can punch holes up to 64 mm round and max. 92 mm x 92 mm square.

▶ All-around cutting

Stay prepared for various materials. Cables from copper and aluminium are not a problem with appropriate cutting head, likewise for DIN-profile rails, threaded bars or railway catenary wires. Klauke universal tool cuts everything up to 40 mm diameter.

- Differing materials can be cut: Aluminium and copper cables, threaded rods, profile rails, railway catenary wires and open wire
- The right cutting dies for every application
- Cutting range up to 40 mm

▶ Solid in use

The Klauke universal tool can also be used for machining operations on solid bus bars and laminated bus bars up to 120 mm x 12 mm. Bending, punching, cutting and offsetting with one device that can be operated with the AHP700L and the electric pumps from Klauke.

Universal tools

PK 60 UNV Hydraulic universal head







- ▶ One head for crimping, cutting and punching one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- ► For connecting to hydraulic pumps with 700 bar operating pressure for best possible crimping, cutting and punching results

Characteristics

- Universal head with quick coupling, 360° rotation when not pressurised, flip top style
- Various cutting dies for aluminium and copper conductors with and without armouring as well as Al/St-Cables (ACSR)
- Dies to punch DIN rails
- Adapter for crimping dies of the Klauke Series 22

Technical instructions

 Interchangeable adapters and dies for crimping, cutting and punching you will find on page 6.14

Technical data			
Crimping force	60 kN		
Stroke	42 mm		
Crimping cycle	3 s to 5 s (depending on crimping c	ross-section)	
Number of crimps	approx. 300 at 150 mm ² Cu DIN		
Cutting range	max. 40 mm dia.		
Number of cuts	approx. 110 at 4 x 70 mm ² NYY		
Punching capacity	up to 64 mm dia. round, up to 92 x 92 mm square		
Operating pressure	max. 700 bar		
Length	350 mm		
Weight	2.4 kg		
Item		Part No.	
Hydraulic universal head		PK60UNV	
Scope of supply		Part No.	
Carrying bag		TT2	



EKM 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²







- ▶ One head for crimping, cutting and punching one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- ▶ All tool data on view thanks to display and i-press app
- ▶ Small and slim, perfect for cramped conditions

Characteristics

- · Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

Technical instructions

 Interchangeable adapters and dies for crimping, cutting and punching you will find on page 6.14

Technical data			
Crimping force	60 kN		
Stroke	42 mm		
Crimping range	6 - 300 mm²		
Crimping cycle	7 s up to 9 s (depending	on cross-section)	
Cutting range	max. 40 mm dia.		
Punching capacity	up to 64 mm dia. round,	up to 92 x 92 mm s	quare
Charging time	15 min.		
Weight	3.0 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery-powered hydraulic univ	ersal tool 6 - 300 mm²	EKM60UNVCFB	EKM60UNVCFM
Scope of supply			
Bosch battery 18 V / 2.0 Ah, Li-I	on	RALB1EU	
Bosch quick-charger for 18 V Li	-lon battery	LGLB1EU	
Makita battery 18 V / 1.5 Ah, Li-	·lon		RAL1
Makita quick-charger for 18 V L	i-lon battery		LGL1
Adapter for crimping dies of Ser	ries 22	UA22	UA22
Plastic case 450 x 370 x 105 m	m	KKMUNVNG	KKMUNVNG
Accessories			
Bosch battery 18 V / 5.0 Ah, Li-I	on	RALB2EU	
Makita battery 18 V / 3.0 Ah, Li-	lon (54 Wh)		RAL2
Variants			
L-BOXX with battery powered u EKM60UNVCFB	niversal tool	LBOXXEKM60UNVCFB	

EK 60 UNV Battery-powered hydraulic universal tool 6 - 300 mm²











- ▶ One head for crimping, cutting and punching one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- ▶ Fast working due to 2-stage hydraulics
- ▶ All tool data on view thanks to display and i-press app

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

Technical instructions

 Interchangeable adapters and dies for crimping, cutting and punching you will find on page 6.14

60 kN		
42 mm		
6 - 300 mm ²		
3 s to 5 s (depending o	n cross-section)	
max. 40 mm dia.		
up to 64 mm dia. round	l	
45 min.		
4.8 kg		
-10 °C up to +40 °C		
	Part No. Bosch	Part No. Makita
ersal tool 6 - 300 mm²	EK60UNVCFB	EK60UNVCFM
on	RALB2EU	
-lon battery	LGLB1EU	
lon		RAL40
i-lon battery		LGL1
m	UA22	UA22
ies 22	KK120UNVNG	KK120UNVNG
	42 mm 6 - 300 mm² 3 s to 5 s (depending o max. 40 mm dia. up to 64 mm dia. round 45 min. 4.8 kg -10 °C up to +40 °C ersal tool 6 - 300 mm² on -lon battery lon i-lon battery	42 mm 6 - 300 mm² 3 s to 5 s (depending on cross-section) max. 40 mm dia. up to 64 mm dia. round 45 min. 4.8 kg -10 °C up to +40 °C Part No. Bosch ersal tool 6 - 300 mm² EKGOUNVCFB On RALB2EU -lon battery LGLB1EU lon i-lon battery m UA22



EK 120 UNV Battery-powered hydraulic universal tool 10 - 400 mm²











- ▶ One head for crimping, cutting and punching one tool for all
- Ideal in the assembly field where all common jobs can be carried out using one tool
- ▶ All tool data on view thanks to display and i-press app

Characteristics

- Choose your battery system: Bosch or Makita
- All data can be easily read via Bluetooth
- Universal head flip top style, rotatable
- Simple and safe: One-button operating concept for controlling all tool functions
- Effortless working due to balanced centre of gravity
- LED for work area illumination
- 2-stage hydraulic system with fast feed and power stroke
- Simple and safe: Automatic retraction when operation is complete (crimping or cutting)
- Always ready-to-use thanks to battery charge and service display

Technical instructions

 Interchangeable adapters and dies for crimping, cutting and punching you will find on page 6.14

Technical data			
Crimping force	108 kN		
Stroke	42 mm		
Crimping range	10 - 400 mm²		
Crimping cycle	Depending on cable typ	е	
Cutting range	max. 40 mm dia.		
Punching capacity	up to 144 mm dia. roun	d, up to 138 x 138 n	nm square
Charging time	45 min.		
Weight	6.5 kg		
Ambient temperature	-10 °C up to +40 °C		
Item		Part No. Bosch	Part No. Makita
Battery-powered hydraulic i	universal tool 10 - 400 mm²	EK120UNVCFB	EK120UNVCFM
Scope of supply			
Bosch battery 18 V / 5.0 Ah,	Li-lon	RALB2EU	
Bosch quick-charger for 18	V Li-lon battery	LGLB1EU	
Makita battery 18 V / 4.0 Ah	, Li-lon		RAL40
Makita quick-charger for 18	V Li-lon battery		LGL1
Adapter for crimping dies of	the Klauke 13-series	UA12TKL	UA12TKL
Plastic case		KK120NG	KK120NG
Accessories			
Bosch battery 18 V / 5.0 Ah,	Li-lon	RALB2EU	
Makita battery 18 V / 4.0 Ah	, Li-lon		RAL40

Interchangeable adapters and dies for crimping, cutting or punching

Part description	on	Part no.	То	ols
Application: cr	imping		6 ton	12 ton
	Adapter for crimping dies series 13	UA12TKL		•
	Adapter for crimping dies series 22	UA22	•	
Application: cu	uttina		6 ton	12 ton
	Cutting die for Al/Cu conductors to max. 40 mm dia.	UCACSR	0 1011	12 1011
		UCACSN		
	Cutting die for Al/Cu conductors to max. 26 mm dia. (Not suitable for fine and superfine stranded conductors)	UC26	•	•
	Cutting die for Al/Cu conductors to max. 40 mm dia. (Not suitable for fine and superfine stranded conductors)	UC40	•	•
	Cutting die for threaded rods M5 metric	UCM5	•	•
	Cutting die for threaded rods M6 metric	UCM6	•	•
	Cutting die for threaded rods M8 metric	UCM8	•	•
	Cutting die for threaded rods M10 metric	UCM10	•	•
4	Cutting die for threaded rods M12 metric	UCM12	•	•
	Cutting die for threaded rods 1/4"	UCUNC14	•	•
	Cutting die for threaded rods 3/8"	UCUNC38	•	•
	Cutting die for threaded rods 1/2"	UCUNC12	•	•
	Cutting die for profile conductors 35 x 15	UCD3515	•	•
111	Cutting die for profile conductors 32 x 15 x 9	UCD3215	•	•
	Cutting die for profile conductors 35 x 7.5	UCD3575	•	•
	Cutting die for profile conductors 2980	UCN2980	•	•
	Cutting die for laminated Cu bus bars, max. width 37.5 mm	UCF	•	
	Cutting die 107 mm² type AC for catenary wires in railway construction	UCAC107	•	•
_	Cutting die 85 mm² type BC for catenary wires in railway construction	UCBC85	•	•
	Cutting die 110 mm² type BC for catenary wires in railway construction	UCBC110	•	•
	Cutting die 120 mm² type BC for catenary wires in railway construction	UCBC120	•	•
	Cutting die 150 mm² type BC for catenary wires in railway construction	UCBC150	•	•
Application: Po	unching		6 ton	12 ton
	Hole punch adapter for holes to 64 mm dia., 92 x 92 mm and 46 x 92 mm	UA6P	•	
	Hole punch adapter for holes to 144 mm dia., 138 x 138 mm and 68 x 138 mm	UA12P		•
3	Die for punching DIN rails 35 x 15; 32 x 15 x 9; 35 x 7.5	UPD6	•	



Bus bar tool centre



- ▶ Basic tool for bending, punching and cutting solid and laminated bus bars up to 120 x 12 mm
- ▶ Compact design and low weight

Suitable for

Drive with EHP4 or AHP700-L

Additional information

• For drives with EHP4 the Part Number appendix "EHP4" is required (50052241EHP4) For drives with AHP700-L connector Sbz4 is required.

185 kN	
700 bar	
1.5 I / min.	
0.15	
480 x 500 x 360 mm	
51 kg	
	Part No.
	50052241
	700 bar 1.5 I / min. 0.15 I 480 x 500 x 360 mm

Bending tool



- ▶ For Al/Cu materials to max. 120 x 12 mm
- ▶ Bending radius 5.00 mm

Characteristics

Max. bending angle 100°

Technical data	
Weight 7.1 kg	
Item	Part No.
Bending tool, 5.0 mm bending radius	50052250

Punching tool I



Characteristics

Solid conductors from Al/Cu to max. 12 mm and steel to 10 mm thick

Suitable for

Hole diameters from 6.5 - 21 mm

Technical data		
Weight	4.5 kg	
Item		Part No.
Punching tool I		50052128

Punching tool I



Characteristics

Solid conductors from Al/Cu to max. 12 mm and steel to 10 mm thick

Item	Part No.
Punch and die 6.5 mm dia.	50052276
Punch and die 8.5 mm dia.	50052284
Punch and die 11 mm dia.	50052292
Punch and die 13 mm dia.	50052306
Punch and die 15 mm dia.	50052314
Punch and die 17 mm dia.	50052322
Punch and die 21 mm dia.	50052330
Oblong punch and die 6.5 x 13 mm	50052349
Oblong punch and die 8.5 x 16 mm	50052357
Oblong punch and die 11 x 20 mm	50052365
Oblong punch and die 13 x 20 mm	50052373
Oblong punch and die 17 x 20 mm	50052381

Punching tool III



Characteristics

- Solid and laminated bus bars from Al/Cu to max. 12 mm and steel to 10 mm thick

Suitable for

- Hole diameters from 6.5 - 21 mm

Technical data		
Weight	4.5 kg	
Item		Part No.
Punching tool III		50766919

Punch & die for punching tool III









Characteristics

- Solid and laminated bus bars from Al/Cu to max. 12 mm and steel to 10 mm thick

Item	Part No.
Punch and die 6.5 mm dia.	50115286
Punch and die 8.5 mm dia.	50115294
Punch and die 11 mm dia.	50115308
Punch and die 13 mm dia.	50115316
Punch and die 15 mm dia.	50115324
Punch and die 17 mm dia.	50115332
Punch and die 21 mm dia.	50115340
Oblong punch and die 6.5 x 13 mm	50115359
Oblong punch and die 8.5 x 16 mm	50115367
Oblong punch and die 11 x 20 mm	50115375
Oblong punch and die 13 x 20 mm	50115383
Oblong punch and die 17 x 20 mm	50115391



Cutting tool



Characteristics

For Al/Cu materials to max. 120 x 12 mm

Technical data		
Weight	5.3 kg	
Item		Part No.
Cutting tool		50052144

Offset tool



Characteristics

- Workpiece offset 5, 6, 8, 10 and 12 mm by using insertion plates
- For Al/Cu materials to max. 120 x 12 mm

Technical data		
Dimension	175 x 90 x 135 mm	
Weight	10.0 kg	
Item		Part No.
Offset tool		50052152

Aluminium accessory box for punching tools, empty



Suitable for

Storage of accessories

Technical data		
Dimension	350 x 250 x 200 mm	
Weight	4.3 kg	
Item		Part No.
Tool chest alu (empty)		50052160







Pumps

Pumps	7.
Hydraulic pumps	7.
Accessories for hydraulic tools	7.1

THE DRIVE HYDRAULIC PUMPS AND DRIVE UNITS

With Klauke, everything fits together. Klauke hydraulic pumps provide every Klauke crimping, cutting and multi head with the required thrust. All pumps are matched to the various heads.

They generate 700 bar pressure so that the tool



▶ Foot pressure actuation: Hydraulic foot pumps

Keep your hands free: With the steady hydraulic foot pumps, you can operate all crimping and cutting tools by your foot pressure. The 2-stage hydraulic system work especially efficiently.

- Foot pumps with up to 700 bar pressure
- 2-stage hydraulic system for efficient pumping effect
- Automatic pressure switch off
- Best possible convenience and good durability
- Up to 10 m hydraulic hose available

▶ Portable pressure: Battery-powered hydraulic pumps

Pumps wherever you want. Simply take our battery-powered hydraulic pump AHP 700-L along with shoulder strap or rucksack.

- Pumps delivering up to 700 bar pressure
- Compact dimensions for portable use
- Simple operation via hand switch with 1.5 m cable
- Display with reverse function
- Hydraulic hose up to 10 m long available

▶ Pressure with current: Electro-hydraulic pumps

Use the full force of your tools also with EHP 2, 3 or 4 electro-hydraulic drive.

- Power output up to 700 bar
- High capacity with compact dimensions
- Hydraulic hose up to 10 m long available



FHP 2 Foot pump 700 bar





▶ Sturdy design

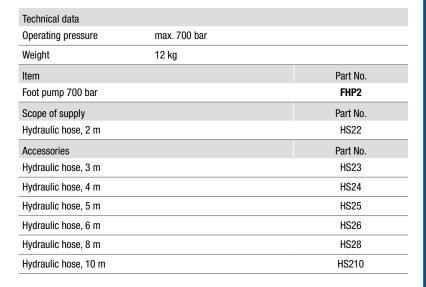
- Automatic pressure switch off

► Two-stage hydraulics

Suitable for

• The operation of hydraulic crimping and cutting heads

Manual retraction if required, also at high pressure



PHD 2 Pneumatic/hydraulic pressure transmitter, 700 bar

▶ Manual retraction if required, also at high pressure

Suitable for

- The operation of hydraulic crimping and cutting heads



Technical data		
Required air pressure	max. 6 bar	
Operating pressure	max. 700 bar	
Weight	6.3 kg	
Item		Part No.
Pneumatic/hydraulic press	ure transmitter	PHD2
Scope of supply		Part No.
Hydraulic hose, 2 m		HS22
Accessories		Part No.
Hydraulic hose, 3 m		HS23
Hydraulic hose, 4 m		HS24
Hydraulic hose, 5 m		HS25
Hydraulic hose, 6 m		HS26
Hydraulic hose, 8 m		HS28
Hydraulic hose, 10 m		HS210



EHP 2 Electro hydraulic drive unit 400 V, 700 bar



▶ Compact dimensions and low weight combined with high conveying capacity

Characteristics

- With AC motor
- Hydraulic hose, 2 m
- Three-stage safety foot switch
- Electronic control
- 70 % power-on time

Suitable for

• The operation of hydraulic crimping and cutting heads

Toolson's all data		
Technical data	Thuse whose wester	
Version	Three-phase motor	
Rated output	0.55 kW	
Motor voltage	360 V - 440 V / 50 Hz	
Capacity	0.82 I / min.	
Operating pressure	max. 700 bar	
Weight	22.9 kg	
Operating mode	70 % power-on time	
Item		Part No.
Electro-hydraulic pump, 4	00 V, 700 bar	EHP2380
Scope of supply		Part No.
Hydraulic hose, 2 m		HS22
Foot switch for electro-hy	draulic pumps EHP 4 and HK 12/2 EL	FTA1
Accessories		Part No.
Transport trolley for electr	o-hydraulic pump EHP 2	TW50
Two-hand safety controlle	er for pumps EHP 2 to EHP 4	ZST3
Hydraulic hose, 3 m		HS23
Hydraulic hose, 4 m		HS24
Hydraulic hose, 5 m		HS25
Hydraulic hose, 6 m		HS26
Hydraulic hose, 8 m		HS28
Hydraulic hose, 10 m		HS210
Adapter Klauke sleeve to	Greenlee plug	CMGSK



EHP 3 Electro hydraulic drive unit 400 V, 700 bar



- **▶** Continuous operation
- ▶ High conveying capacities with compact dimensions

Characteristics

- With AC motor
- Hydraulic hose, 2 m
- Three-stage safety foot switch
- Electronic control

Suitable for

The operation of hydraulic crimping and cutting heads

Technical data		
Version	Three-phase motor	
Rated output	1.1 kW	
Motor voltage	360 V - 440 V / 50 - 60 Hz	
Capacity	0.9 I / min.	
Operating pressure	max. 700 bar	
Weight	40.9 kg	
Operating mode	100 % power-on time	
Item		Part No.
Electro-hydraulic pump, 4	00 V, 700 bar	EHP3
Scope of supply		Part No.
Hydraulic hose, 2m		HS22
Foot switch for electro-hyd	draulic pumps EHP 4 and HK 12/2 EL	FTA1
Accessories		Part No.
Two-hand safety controlle	r for pumps EHP 2 to EHP 4	ZST3
Hydraulic hose, 3 m		HS23
Hydraulic hose, 4 m		HS24
Hydraulic hose, 5 m		HS25
Hydraulic hose, 6 m		HS26
Hydraulic hose, 8 m		HS28
Hydraulic hose, 10 m		HS210
Adapter Klauke sleeve to 0	Greenlee plug	CMGSK

EHP 4 Electro-hydraulic pumps, 700 bar



- ▶ High capacity
- Manually adjustable piston stroke speed / delivery volume of the pump
- Closed, compact and lockable housing (IP54 or higher) to protect against humidity, dust and unauthorised manipulation

Characteristics

- Compatibility with Klauke hydraulic crimping and cutting heads
- For connecting to busbar machining centre
- For use in conjunction with the LSK 120 with adapter CMGSK for punching bus bars
- Compatible with Greenlee punching tools (round and special shape punches) with adapter CMGSK

Additional information

• The hydraulic pumps can be individually configured as customer-specific system.

Technical data			
Version	AC		
Rated output	0.75 kW		
Motor voltage	EHP4115: 115 V/50 Hz, EHP4230: 23	0 V/50 Hz	
Capacity	0.82 I / min.	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, 1	15 V	EHP4115	
Electro-hydraulic pump, 2	30 V	EHP4230	
Scope of supply		Part No.	
Hydraulic hose, 3 m		HS23	
Foot switch for electro-hy	draulic pumps EHP 4 and HK 12/2 EL	FTA1	
Accessories		Part No.	
Two-hand safety controlle	r for pumps EHP 2 to EHP 4	ZST3	
Hydraulic hose, 3 m		HS23	
Hydraulic hose, 4 m		HS24	
Hydraulic hose, 5 m		HS25	
Hydraulic hose, 6 m		HS26	
Hydraulic hose, 8 m		HS28	
Hydraulic hose, 10 m		HS210	
Adapter Klauke sleeve to	Greenlee plug	CMGSK	



AHP 700-L Battery powered hydraulic pump, 700 bar





- ▶ Compact and lightweight design for mobile use
- ▶ High capacity

Characteristics

- Select programme from crimping, cutting, and punching
- Housing from impact-resistant, fibreglass reinforced polyamide
- Large display for monitoring, diagnostics and setting the pump
- Two powerful, high-capacity Li-lon batteries
- Automatic retraction when operation is complete
- Manual retract stop with "teach-in" (MRS+) for positioning control for multiple crimps
- Remote control with cable for easy operation of the battery-operated pump
- Maintenance display via LED
- All hydraulic hoses have coupling plug and coupling sleeve, oil filled
- · High wearing comfort with padded shoulder strap

Suitable for

- Operates all single-acting Klauke crimping, cutting and punching tools with 700 bar operating pressure
- The connection to busbar machining centre
- The punching of busbars in conjunction with the LSK 120 with adapter CMGSK

Additional information

AHP 700-L with transport rucksack

Also available in country-specific variants, Part Number appendix "C"

Technical data			
Battery voltage	18 V		
Battery capacity	2 x 4.0 Ah, Li-lon		
Charging time	22 min.		
Weight incl. battery	(with two batteries) approx. 6.4 kg		
Ambient temperature	-12 °C to +40 °C		
Operating pressure	max. 700 bar		
Max. oil volume;	approx. 800 ml		
Dimensions	L x W x H: 330 x 160 x 280 mm		
Item		Part	No.
Battery powered hydraulic pu	ımp, 700 bar	AHP7	'00L
Scope of supply		Part No.	Quantity
Makita battery 18 V / 4.0 Ah,	Li-lon	RAL40	2
Makita quick-charger for 18	V Li-lon battery	LGL1	1
Hydraulic hose, 2 m, oil filled		HS0EL2	1
Carrying strap with shoulder	padding	TG3	1
Carrying bag		TT2	
Remote control with 1.5 m ca	able	HTA4	1
Accessories		Part	No.
Hydraulic hose, 3 m, oil filled		HS0	EL3
Hydraulic hose, 4 m, oil filled		HS0EL4	
Hydraulic hose, 5 m, oil filled		HS0EL5	
Hydraulic hose, 6 m, oil filled		HS0EL6	
Hydraulic hose, 10 m, oil filled		HS0EL10	
18 V mains adapter for 230 V Voltage		NG2230	
Two-hand safety control for battery powered hydraulic pump AHP 700-L		ZST4	
Foot switch for battery powe	red hydraulic pump	FTA	\4
Transport rucksack		TRAHP	700L
Variants		Part	No.
AUD 700 L	diameter.	TD ALIDZ	OOL OFT

TRAHP700LSET

767 Hydraulic hand pump



- Lightweight, portable hand pump
- ▶ Robust construction

Characteristics

- All-purpose works in every position
- Incl. mounting holes for work bench assembly

Additional information

• In combination with punch cylinder 50170910 for all hole sizes

Technical data		
Dimension	330 x 100 x 100 mm	
Operating pressure	max. 460 bar	
Weight	2.7 kg	
Item		Part No.
Hydraulic hand pump 767		50132849
Accessories		Part No.
Hydraulic hose 6.4 mm dia. x 0.9 m		50383167

1725 Hydraulic foot pump



► Foot operation facilitates two-handed operation of round and special shaped punches

Characteristics

- Lockable pedal for storage and transport
- All-purpose

Additional information

In combination with punch cylinder 50170910 for all hole sizes

Technical data		
Dimension	400 x 200 x 150 mm	
Operating pressure	max. 460 bar	
Weight	5.0 kg	
Item		Part No.
1725 Hydraulic foot pump		50313533
Accessories		Part No.
Hydraulic hose 6.4 mm dia. x 3 m		50377299



RAL 1 Makita battery 18 V / 1.5 Ah Li-Ion (27 Wh)



Characteristics

- No memory effect
- Extremely low self-discharge
- Low weight

Suitable for

Next Generation battery-powered hydraulic tools with Makita battery mounting

Technical data		
Battery voltage	18 V	
Battery capacity	1.5 Ah	
Charging time	With LGL1: 15 min.	
Cell technology	Li-lon	
Weight	0.4 kg	
Item		Part No.
Makita battery 18 V / 1.5 Ah, Li-lon		RAL1

RAL 2 Makita battery 18 V / 3.0 Ah Li-Ion (54 Wh)



Characteristics

- No memory effect
- Extremely low self-discharge
- Low weight

Suitable for

Next Generation battery-powered hydraulic tools with Makita battery mounting

Technical data		
Battery voltage	18 V	
Battery capacity	3.0 Ah	
Charging time	With LGL1: 22 min.	
Cell technology	Li-lon	
Weight	0.6 kg	
Item		Part No.
Makita battery 18 V / 3.0	Ah, Li-lon (54 Wh)	RAL2

RAL 40 Makita battery 18 V / 4.0 Ah Li-lon (72 Wh)



Characteristics

- No memory effect
- Extremely low self-discharge
- Light same weight as the Makita 3.0 Ah battery

Suitable for

Next Generation battery-powered hydraulic tools with Makita battery mounting

18 V	
4.0 Ah	
With LGL1: 36 min.	
-20 °C to +40 °C	
Li-lon	
0.6 kg	
	Part No.
-lon	RAL40
	4.0 Ah With LGL1: 36 min20 °C to +40 °C Li-lon

RAL 4 Makita battery 18 V / 5.0 Ah, Li-Ion



Characteristics

- No memory effect
- Extremely low self-discharge
- Light same weight as the Makita 3.0 Ah battery

Suitable for

• Next Generation battery-powered hydraulic tools with Makita battery mounting

Technical data		
Battery voltage	18 V	
Battery capacity	5.0 Ah, Li-lon	
Charging time	With LGL1: 45 min.	
Ambient temperature	-20 °C to +40 °C	
Cell technology	Li-lon	
Weight	0.6 kg	
Item		Part No.
Makita battery 18 V / 5.0 Al	n, Li-Ion (90 Wh)	RAL4

RAL B1 EU Bosch battery 18 V / 2.0 Ah, Li-Ion



Technical data		
Battery capacity	2.0 Ah	
Charging time	With LGLB1EU: 15 min.	
Cell technology	Li-lon	
Voltage range	18 V	
Weight	0.4 kg	
Item		Part No.
Bosch battery 18 V / 2.0 Ah, Li-lon		RALB1EU



RAL B2 EU Bosch battery 18 V / 5.0 Ah, Li-Ion



Technical data		
Battery voltage	18 V	
Battery capacity	5.0 Ah, Li-Ion	
Charging time	With LGLB1EU: 45 min.	
Cell technology	Li-lon	
Weight	0.69 kg	
Item		Part No.
Bosch battery 18 V / 5.0 Ah, Li-lon		RALB2EU

RAML1225 battery 10.8 V / 2.5 Ah, Li-lon (27 Wh)



Technical data		
Battery voltage	10.8 V	
Battery capacity	2.5 Ah	
Cell technology	Li-lon	
Weight	0.3 kg	
Item		Part No.
Battery 10.8 V / 2.5 Ah, Li-lon (27 Wh)		RAML1225

NG2 mains adapter 18 V for 120 V or 230 V mains voltage



Characteristics

- Temperature protection
- Current limiter
- Overload protection 250 V
- Cable lengths: 5 m

Suitable for

• For all Klauke tools with 18 V all-mains sets - Makita version

Technical data		
Mains supply	120 V / 230 V	
Voltage range	18 V	
Weight	0.8 kg	
Item		Part No.
18 V mains adapter for 120 V Voltage		NG2115
18 V mains adapter for 230 V Voltage		NG2230

Pun Acce

LGL 1 Makita quick-charger for 18 V Li-lon batteries

Suitable for

Klauke Li-Ion Makita battery 18 V



Technical data		
Charging time	With RAL1: 15 min., with RAL2: 22 m	nin.
Mains supply	230 V	
Voltage range	18 V	
Weight	1 kg	
Item		Part No.
Makita quick-charger for 18 V Li-lon battery		LGL1

LGL K18 EU Klauke charger for 18 V Li-Ion batteries



Suitable for

Klauke Li-lon battery 18 V

Klauke charger for 18 V	Li-lon batteries	LGLK18EU
Item		Part No.
Weight	0.982 kg	
Voltage range	18 V	
Mains supply	220 - 240 V	
Technical data		

LGL 3 Makita quick-charger for 18V Li-Ion batteries



Suitable for

Klauke Li-Ion Makita battery 18 V

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-lon batteries		LGL3



LGL B1 EU Bosch charger for 18 V Li-Ion batteries



Characteristics

- Charger for safety cutting unit batteries

Suitable for

18 V / 3.30 Ah Li-lon batteries

Technical data		
Charging time	With RALB1EU.:15 min, RALB2EU: 4	45 min.
Mains supply	230 V	
Voltage range	18 V	
Weight	0.65 kg	
Item		Part No.
Bosch quick-charger for 18 V Li-lon battery		LGLB1EU

LGML 1 Charger for 10.8 V Li-Ion batteries, 230 V



Suitable for

Klauke Li-lon battery 10.80 V

Technical data		
Cell technology	Li-lon	
Mains supply	220 - 240 V	
Voltage range	10.8 V	
Weight	0.5 kg	
Item		Part No.
Charger for 10.80 V Li-lon I	batteries, 230 V	LGML1

TG 3 Carrying strap with shoulder padding



Suitable for

Battery powered hydraulic pump AHP 700-L

Item	Part No.
Carrying strap with shoulder padding	TG3

ZST 3 / ZST 4 Two-hand safety controls for pumps



Suitable for

Pumps: EHP 4 and AHP 700-L

Item	Part No.
Two-hand safety controller for pumps EHP 2 to EHP 4	ZST3
Two-hand safety control for battery powered hydraulic pump AHP 700-L	ZST4

FTA 1 / FTA 4 Foot switches for pumps



Suitable for

Pumps: EHP 4, HK 12/2 EL, AHP 700-L

Item	Part No.
Foot switch for electro-hydraulic pumps EHP 4 and HK 12/2 EL	FTA1
Foot switch for battery powered hydraulic pump AHP 700-L	FTA4

T 15 Special hydraulic oil



Characteristics

- Environmentally-friendly hydraulic oil, quickly biodegradable
- 5 I canister

Suitable for

Hydraulic pumps

Item	Part No.
Special hydraulic oil	T15



Characteristics

Specially-developed for GREENLEE hydraulic tools

Item	Part No.
Hydraulic oil 3.8 l	90510593
Hydraulic oil 0.95 l	90508068

HS 2 Hydraulic hoses



Suitable for

- Hydraulic crimping and cutting systems and pumps
- For connecting to hydraulic pumps FHP 2, PHD 2, EHP 2, EHP 3, EHP 4, HK12/2 EL, HK 25/2 EL, AS 65 FHP, AS 105 FHP, HK 25/2, HK 45

Item	Part No.
Hydraulic hose, 2 m	HS22
Hydraulic hose, 3 m	HS23
Hydraulic hose, 4 m	HS24
Hydraulic hose, 5 m	HS25
Hydraulic hose, 6 m	HS26
Hydraulic hose, 8 m	HS28
Hydraulic hose, 10 m	HS210

HS OEL hydraulic hose, oil filled



Characteristics

For connecting to battery-powered hydraulic pump AHP 700-L

Additional information

- Also available in country-specific variants, Part Number appendix "C"

Item	Part No.
Hydraulic hose, 2 m, oil filled	HS0EL2
Hydraulic hose, 3 m, oil filled	HS0EL3
Hydraulic hose, 4 m, oil filled	HS0EL4
Hydraulic hose, 5 m, oil filled	HS0EL5
Hydraulic hose, 6 m, oil filled	HS0EL6
Hydraulic hose, 10 m, oil filled	HS0EL10

Hydraulic hose 6.4 mm dia. x 3 m



Characteristics

- Filled with hydraulic oil

Suitable for

Hydraulic foot pump 1725

Item	Part No.
Hydraulic hose 6.4 mm dia. x 3 m	50377299
Scope of supply	Part No.
Hydraulic hose, 3 m	90525159
Coupler plug	90541693
Dust cap	90541707

Hydraulic hose 6.4 mm dia. x 0.9 m



Characteristics

Without hydraulic oil

Suitable for

Hydraulic hand pump 767

Item	Part No.
Hydraulic hose 6.4 mm dia. x 0.9 m	50383167
Scope of supply	Part No.
Hydraulic hose, 0.9 m	50063022
Coupler plug	90541693
Dust cap	90541707

KST 2 Coupler



Characteristics

Including adapter

Suitable for

Hydraulic crimping and cutting systems and pumps

Item	Part No.
Coupler plug	KST2



KMF 1 Coupler for crimping and cutting heads



Characteristics

- KMF 1: For connecting to hydraulic crimping/cutting heads: PK 22, PK 120/42, PK 120 U, PK 25/2, PK 60 VP, PK 60 VP/FT, PK 60 UNV, THK 22, THK 120, SDG 45, SDG 50, SDG 55, SDG 85/2, SDG 105, SDK 65, SDK 85, SDK 105, SDK 120
- Includes barrel nipple
- With 1/4" connection (external thread)

Item	Part No.
Coupler for crimping and cutting heads with barrel nipple	KMF1

DNP 2 Barrel nipple



Suitable for

To connect and to extend hydraulic hoses HS 2

Item	Part No.
Barrel nipple	DNP2

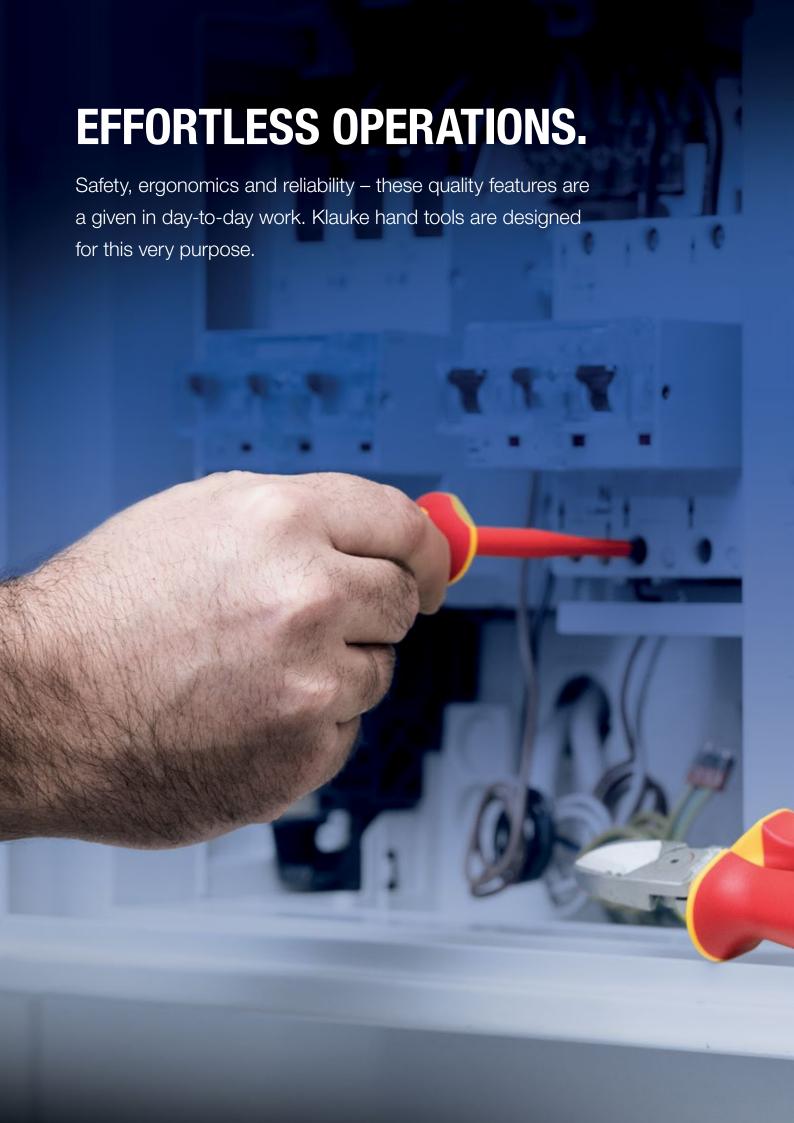
HTA 4 remote control for hydraulic pump



Suitable for

- Battery powered hydraulic pump AHP 700-L

Item	Part No.
Remote control with 1.5 m cable	HTA4





Hand tools

KlauKe

VDE tools	8.4
Pliers	8.6
Screwdrivers	8.10
Assortments and sets	8.13
Standard tools and accessory	8.17
Water pump pliers, fitting pliers	8.18
Electronic / precision mechanic's tools	8.19
Bits, holders and adapters	8.20
Assortments and sets	8.22
Measuring and marking	8.25
Basic tools	8.27
Tool cases	8.30
Wire stripping tools	8.34
Wire stripping tools	8.35
Stripping tools	8.38
Stripping tools for communication technology	8.39

SAFETY-TESTED RANGE – VDE TOOLS

For the safety of our customers, we also have our tools tested by independent bodies. The "VDE Tool" marking indicates that this special Klauke range conforms to the current directives of the safety testing procedure to EN/IEC 60900. All tools with the VDE name are approved to 1000 V alternating current and 1500 V direct current. Special tool steel creates additional robustness.

In brief

- ▶ Conforms to current directive EN/IEC 60900
- Manufactured using special tools steel
- ▶ Effortless operations due to optimal ergonomic design



▶ When you need to go deeper: SLIM range

SLIM range screwdrivers have a tapered blade at the front. Deeper screws, such as those in circuit breakers, can be reached with ease. No slipping and rolling due to special handle shape. With its narrow tip, the SLIM range is best suited for loosening cables in spring terminals.

- For use in confined areas due to tapered blade
- Safe operations due to rolling protection



KlauKe

▶ More than just a force: Power combi-pliers

The power combi-pliers are really multi-talented: Cutting, gripping, counter holding, inserting conductors. Hence the name combi-pliers. Four tools in one: You need fewer tools and the power assist function also helps you when working.

- Cuts cables, conductors and wires
- Grips flat and round material such as safety splints
- Simplifies the insertion of cables into the clamp or circuit breaker
- Can also be used to tighten nuts

▶ Everything under control: VDE cable cutters

The VDE cable cutters are hard-wearing. They withstand cold impact tests to -25 °C, tests of the adhesion of the insulating material to 500 N and individual voltage tests in a water bath with 10,000 V AC. The reward: Certification to EN/IEC 60900. Completely safe.

- Extra hand protection against flying sparks
- Safe operations due to slip-proof overlay
- Safe even under extreme conditions
- For fine and superfine stranded copper and aluminium cables



VDE Cable cutter





Characteristics

- Adjustable joint
- Cuts fine and superfine stranded copper and aluminium cable

Part No.	KL010160IS KL010210IS	
Item	VDE Cable cutter 160 mm	VDE Cable cutter 210 mm
Dimension mm	160	210
Weight g	225	340
Cutting power up to dia.	16	25

VDE Power combination pliers





Characteristics

- With combination spanner from 11 17 mm (M8 M10)
- Holds flat and round material
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

Part No.	KL020165IS	KL020180IS	KL020205IS
Item	VDE Power combina- tion pliers, 165 mm	VDE Power combina- tion pliers, 180 mm	VDE Power combina- tion pliers, 205 mm
Dimension mm	165	180	205
Weight g	200	255	280
Cutting power soft wire dia. mm	4.0	5.2	5.9
Cutting power medium wire dia. mm	3.1	3.4	3.8
Cutting power hard wire dia. mm	2.0	2.2	2.5

VDE Power combination pliers, angled





- Comfortable working due to ergonomically optimised, 45° angled head
- With combination spanner from 11 17 mm (M8 M10)
- Holds flat and round material
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

Part No.	KL026205IS
Item	VDE Power combination pliers, offset, 205 mm
Dimension mm	205
Weight g	285
Cutting power soft wire dia. mm	5.9
Cutting power medium wire dia. mm	3.8
Cutting power hard wire dia. mm	2.5



VDE Side cutter





Characteristics

- Improved cutting of insulated cables from slip-reducing wave profiled blades
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

Part No.	KL040145IS	KL040160IS	KL040180IS
Item	VDE Side cutter 145 mm	VDE Side cutter 160 mm	VDE Side cutter 180 mm
Dimension mm	145	160	180
Weight g	180	210	265
Cutting power soft wire dia. mm	5.0	6.0	7.0
Cutting power medium wire dia. mm	2.5	3.5	4.0
Cutting power hard wire dia. mm	1.7	2.0	2.5
Cutting power up to dia.	8.0	11.0	13.0

VDE Electricians side cutter





Characteristics

- High cutting performance for superfine wires due to hardened precision cutters
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

Part No.	KL042190IS
Item	VDE Electricians side cutter, 190 mm
Dimension mm	190
Weight g	285
Cutting power soft wire dia. mm	2.0
Cutting power medium wire dia. mm	1.0
Cutting power up to dia.	4.0

VDE Power side cutter





- Improved cutting of insulated cables from slip-reducing wave profiled blades
- Optimum handling due to ergonomically-shaped handle
- High cutting performance on hard wires and piano wires

Part No.	KL045180IS	KL044200IS	KL045240IS
Item	VDE Power side cutter, 180 mm	VDE Electric power side cutter, 200 mm	VDE Power side cutter, 240 mm
Dimension mm	180	200	240
Weight g	285	280	420
Cutting power soft wire dia. mm	3.7	4.0	4.5
Cutting power medium wire dia. mm	2.6	2.8	3.5
Cutting power hard wire dia. mm	2.2		3.0
Cutting power piano wire dia. mm		2.5	

VDE Lever power side cutter





Characteristics

- 40% force saving
- High cutting performance for superfine wires due to hardened precision cutters
- Special tool steel drop-forged, oil-hardened
- Cuts medium-hard wires, e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire as well as piano wire

Part No.	KL046200IS
Item	VDE Lever power side cutter, 200 mm
Dimension mm	200
Cutting power medium wire dia. mm	4.5
Cutting power hard wire dia. mm	3.5
Cutting power piano wire dia. mm	3.0

VDE Telephone pliers, straight





Characteristics

- Long, flat/round jaws
- Optimum hold due to toothed grip area
- Cutting edge inductive hardened
- With combination spanner from 11 17 mm (M8 M10)
- With wire cutter for soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

Part No.	KL050205IS
Item	VDE long-nose pliers, straight, 205 mm
Dimension mm	205
Weight g	215
Cutting power soft wire dia. mm	3.9
Cutting power medium wire dia. mm	3.2
Cutting power hard wire dia. mm	2.2

VDE Telephone pliers, curved





- Long, 45° offset, flat/round jaws
- Optimum hold due to toothed grip area
- Cutting edge inductive hardened
- With combination spanner from 11 17 mm (M8 M10)
- Cuts soft wires, e.g. copper, aluminium, medium-hard wires e.g. nails, wire nails and hard wires, e.g. wire cable, steel wire

Part No.	KL055205IS
Item	VDE long-nose pliers, bent, 205 mm
Dimension mm	205
Weight g	215
Cutting power soft wire dia. mm	3.9
Cutting power medium wire dia. mm	3.2
Cutting power hard wire dia. mm	2.2



VDE Wire stripper



Characteristics

- With opening spring and V-shaped cutting edges
- With setting screw for setting the cable diameter

Part No.	KL060160IS
Item	VDE Wire stripper, 160 mm
Dimension mm	160
Weight g	185

VDE Water pump pliers, jaw width 50 mm





Characteristics

- Jaw width 50 mm
- Safe working due to clamp protection and safety joint
- Ratchet adjustment
- Optimum hold due to toothed grip area

Part No.	KL070250IS
Item	VDE Water pump pliers, jaw width 50 mm
Dimension mm	250
Weight g	410

Automatic VDE wire stripper 0.2 - 6 mm²



1000V

Characteristics

- For safe working on live conductors up to 1000 V
- Adjustable length stop from 5 12 mm
- Locking function to protect the blades

Suitable for

Flexible and solid conductors from 0.2 - 6 mm²

Part No.	KL760180IS
Item	Automatic VDE wire stripper 0.2 - 6 mm²
Dimension mm	215
Weight g	130

VDE Slotted screwdriver





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL1007525IS	75	67	18	22	1
KL10010030IS	100	67	18	28	1
KL10010035IS	100	67	18	30	1
KL10010040IS	100	79	23	44	1
KL10012555IS	125	89	27	70	1
KL10015065IS	150	89	27	86	1
KL10017580IS	175	98	32	135	1

VDE Slotted screwdriver, Slim Line





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL10010035ISLIM	100	67	18	35,9	1
KL10010040ISLIM	100	79	23	44	1
KL10012555ISLIM	125	89	27	70	1
KL10012565ISLIM	125	89	27	86	1

VDE Phillips screwdriver





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL110PH1IS	80	89	27	52	1
KL110PH2IS	100	98	32	80	1
KL110PH3IS	150	98	32	145	1

VDE Phillips screwdriver, Slim Line





- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL110PH1ISLIM	80	89	27	52	1
KL110PH2ISLIM	100	98	32	80	1



VDE Pozidriv screwdriver





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL120PZ1IS	80	89	27	49	1
KL120PZ2IS	100	98	32	76	1
KL120PZ3IS	150	98	32	140	1

VDE Pozidriv screwdriver, Slim Line





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL120PZ1ISLIM	80	89	27	49	1
KL120PZ2ISLIM	100	98	32	76	1

VDE Plus/Minus-Pozidriv screwdriver





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

	Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
	KL130PM1IS	80	89	27	52	1
	KL130PM2IS	100	98	32	80	1
_	KL130PM2IS	100	98	32	80	1

VDE Plus/Minus-Pozidriv screwdriver, Slim Line





- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL130PM1ISLIM	80	89	27	52	1
KL130PM2ISLIM	100	98	32	80	1

VDE TORX® screwdriver





Characteristics

- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL150TX10IS	100	79	23	45	1
KL150TX15IS	100	89	27	45	1
KL150TX20IS	125	98	32	69	1
KL150TX25IS	125	98	32	69	1
KL150TX30IS	150	98	32	96	1

VDE TORX® screwdriver, Slim Line





Characteristics

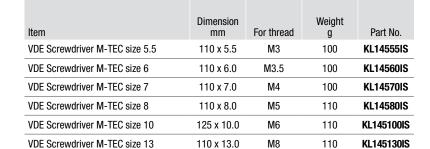
- Ergonomically-shaped handle with optimum force transmission
- A roll-off protection prevents rolling away on inclined surfaces
- Reduced space requirement for use in confined spaces

Part No.	Length of shaft mm	Handle length mm	Handle width mm	Weight g	Packing unit/pcs
KL150TX15ISLIM	100	89	27	45	1
KL150TX20ISLIM	125	98	32	69	1
KL150TX25ISLIM	125	98	32	69	1

VDE-M-TEC Screwdriver for hexagonal nuts



- With box spanner tube immersion depth approx. 41 mm optimal for deep-seated screws and nuts
- With spring-loaded magnetic body







Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V



- Single-pole
- With heavy duty handle

Item	Dimension mm	Weight g	Part No.
Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V	73 x 3.0 x 0.8	30	KL19073IS



VDE Pliers set, 3-pce.



Item	Part No.
VDE Plier set, 3-pieces	KL303IS
Scope of supply	Part No.
VDE Power combination pliers, 180 mm	KL020180IS
VDE Side cutter 160 mm	KL040160IS
VDE long-nose pliers, straight, 205 mm	KL050205IS

VDE Pliers set, 4-pce.



Item	Part No.
VDE Plier set, 4-pieces	KL304IS
Scope of supply	Part No.
VDE Power combination pliers, 180 mm	KL020180IS
VDE Electric power side cutter, 200 mm	KL044200IS
VDE long-nose pliers, straight, 205 mm	KL050205IS
VDE Wire stripper, 160 mm	KL060160IS

VDE Pliers/screwdriver set, 6-pce.





Item	Part No.
Pliers/screwdriver set, 6-pce.	KL306IS
Scope of supply	Part No.
VDE long-nose pliers, straight, 205 mm	KL050205IS
VDE Side cutter 160 mm	KL040160IS
VDE Phillips screwdriver, PH1	KL110PH1IS
VDE Phillips screwdriver, PH2	KL110PH2IS
VDE Slotted screwdriver, 2.5 x 0.4 mm	KL1007525IS
VDE Slotted screwdriver, 4.0 x 0.8 mm	KL10010040IS

VDE Screwdriver set, 3-pce.



Item	Part No.
VDE Screwdriver set, 3-pieces	KL391IS
Scope of supply	Part No.
VDE Phillips screwdriver, PH1	KL110PH1IS
VDE Phillips screwdriver, PH2	KL110PH2IS
VDE Slotted screwdriver, 3.5 x 0.6 mm	KL10010035IS





VDE Screwdriver set, 3-pce.



Item	Part No.
VDE Screwdriver set, 3-pieces	KL392IS
Scope of supply	Part No.
VDE Pozidriv screwdriver, PZ1	KL120PZ1IS
VDE Pozidriv screwdriver, PZ2	KL120PZ2IS
VDE Slotted screwdriver, 4.0 x 0.8 mm	KL10010040IS

VDE Screwdriver set, 3-pce.



Item	Part No.
VDE Screwdriver set, 3-pieces	KL393IS
Scope of supply	Part No.
VDE Plus/Minus-Pozidriv screwdriver, Z1	KL130PM1IS
VDE Plus/Minus-Pozidriv screwdriver, Z2	KL130PM2IS
Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V	KL19073IS

VDE Screwdriver set, 6-pce.





♦ 1000V

Item	Part No.
VDE Screwdriver set, 6-pce.	KL390IS
Scope of supply	Part No.
VDE Phillips screwdriver, PH1	KL110PH1IS
VDE Phillips screwdriver, PH2	KL110PH2IS
VDE Slotted screwdriver, 2.5 x 0.4 mm	KL1007525IS
VDE Slotted screwdriver, 4.0 x 0.8 mm	KL10010040IS
VDE Slotted screwdriver, 5.5 x 1.0 mm	KL10012555IS
Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V	KL19073IS

VDE Screwdriver set Slim Line, 5-pce.



- Reduced blade for optimum fit
- Ergonomically-shaped handle with optimum force transmission
- Anti-roll-guard

Item VDE Screwdriver set Slim Line, 5-pce.	Part No. Kl390ISLIM
Scope of supply	Part No.
VDE Slotted screwdriver 3.5 x 0.6 x 100 Slim Line	KL10010035ISLIM
VDE Slotted screwdriver 5.5 x 1.0 x 125 Slim Line	KL10012555ISLIM
VDE Pozidriv screwdriver PZ1 Slim Line	KL120PZ1ISLIM
VDE Pozidriv screwdriver PZ2 Slim Line	KL120PZ2ISLIM
Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V	KL19073IS



VDE Screwdriver set Slim Line, 6-pce., case





Characteristics

- Reduced blade for optimum fit
- Ergonomically-shaped handle with optimum force transmission
- Anti-roll-guard

Item	Part No.
VDE Screwdriver set Slim Line, 6-pce., case	KL391ISLIM
Scope of supply	Part No.
VDE Slotted screwdriver 3.5 x 0.6 x 100 Slim Line	KL10010035ISLIM
VDE Slotted screwdriver 4.0 x 0.8 x 100 Slim Line	KL10010040ISLIM
VDE Slotted screwdriver 5.5 x 1.0 x 125 Slim Line	KL10012555ISLIM
VDE Phillips screwdriver PH2 Slim Line	KL110PH2ISLIM
VDE Pozidriv screwdriver PZ1 Slim Line	KL120PZ1ISLIM
VDE Pozidriv screwdriver PZ2 Slim Line	KL120PZ2ISLIM

Tool bag, equipped with 9 VDE replaceable blades



- Blades from special chrome/molybdenum/vanadium alloy
- Standard 1/4" mounting for use with torque handles
- Blade length: 170 mm

Item	Part No.
Tool bag, equipped with 9 VDE replaceable blades	KL390TB9
Scope of supply	
VDE Slotted blade, 3.5 x 0.6 mm in blister pack	
VDE Slotted blade, 4.0 x 0.8 mm in blister pack	
VDE Slotted blade, 5.5 x 1.0 mm in blister pack	
VDE Philips blade, PH1 in blister pack	
VDE Philips blade, PH2 in blister pack	
VDE Pozidriv blade, PZ1 in blister pack	
VDE Pozidriv blade, PZ2 in blister pack	
VDE Plus/Minus Pozidriv blade, PM1 in blister pack	
VDE Plus/Minus Pozidriv blade, PM2 in blister pack	
Accessory	Part No.
Tool bag, empty	KL390TL

8

STANDARD – KLAUKE BASIC TOOLS, SETS AND ACCESSORIES

With Klauke sets, you always have your basic equipment to hand.

Whether you are an electronics technician or precision engineer - the Klauke range includes all standard

versions through to pliers for water pumps

and fittings. Rely on Klauke quality from the outset - even just for quick, occasional use.



▶ Socket wrench set KL 361

We have compiled the standard set of socket wrenches for you and made everything shockproof by storing in a high-quality plastic case. In total, the set comprises 29 pieces in 1/4" sizes.

 29 piece: 16-piece bit set, bit holder, adapter, 7-piece socket set, professional ratchet, various extensions,
 T-Smart grip

▶ The apprentice's case: KL 855 B22

The impact-resistant case made from ABS material contains everything an apprentice electrician needs, from standard tools such as cable knives and phase testers through to VDE safety tools.

Head into your apprenticeship well-prepared!

▶ The technician's basic equipment: KL 905 B15

The practical notebook bag holds everything you need on-site. The 15-piece set is securely stowed in the fold-out compartments.

- Technician's notebook bag made from highly durable nylon
- Tools are quickly located thanks to fold-out front pocket
- Reliably transported due to splash-proof base
- Twin fixed carrying handle
- Basic set of VDE screwdrivers
- Standard tools such as phase tester and cable knife

Water pump pliers, jaw width 50 mm



Characteristics

- Jaw width 50 mm
- Safe working due to clamp protection and safety joint
- Ratchet adjustment
- Optimum hold due to toothed grip area
- Plastic coated handles
- 2-component handle

Part No.	KL070250G
Item	Water pump pliers, jaw width 50 mm
Dimension mm	250
Weight g	355

Water pump pliers



Characteristics

- Jaw width up to 65 mm
- Safe working due to clamp protection and safety joint
- Push button adjustment for setting quickly and accurately
- Inverted box joint with wide guide surfaces
- Optimum hold due to toothed grip area
- High retaining force and load-bearing capacity due to inductively-hardened teeth
- Plastic coated handles
- 2-component handle

Part No.	KL072180G	KL072250G	KL072300G
Item	Water pump pliers, jaw width 35 mm	Water pump pliers, jaw width 50 mm	Water pump pliers, jaw width 65 mm
Dimension mm	180	250	300
Weight g	190	300	530

Screwdriver with interchangeable bits



Characteristics

Compact, versatile, ergonomic

Item	Dimension mm	Weight g	Part No.
Screwdriver with interchangeable bits, 8-pce.	128	64	KL180B8
Scope of supply			
Slotted screwdriver bit, 1.0 x 5.5 mm			
Philips screwdriver bit, PH 1 & PH 2			
Pozidriv screwdriver bit, PZ 1 & PZ 2			
TORX® screwdriver bit, Torx 15, 20, 25			
Magnetic bit holder			
Variants			Part No.
Interchangeable bit screwdriver, 8-piece for 12 the sales display	2 units in	KL18	OB8DISPLAY



ESD Electronic side cutter



Characteristics

- Precision pliers for high precision work
- Double leaf spring with low friction
- High cutting force thanks to additional induction hardening
- Anti-static ergonomic non slip grips
- Surface resistance amounts to 1 to 100 M0hm

Suitable for

For soft wires to 1.2 mm

Item	Dimension mm	Weight g	Part No.
Electronic side cutter, with facet	115	62	KL040115EL
Electronic side cutter, without facet/surface flush cut	115	60	KL040115ELW

ESD Electronic long-nose pliers



Characteristics

- Smooth inside jaws, edges rounded
- Anti-static ergonomic non slip grips
- Surface resistance amounts to 1 to 100 M0hm
- Optimised for gripping fine strands of wires

Item	Dimension mm	Weight g	Part No.
Electronic long-nose pliers	115	64	KL050115EL

Electronic side cutter



Characteristics

- Cutter angled at 21°
- Backlash-free operation
- With opening spring
- 2-component handle

Suitable for

For soft wires to 1.3 mm dia.

ltem	Dimension mm	Weight g	Part No.
Electronic side cutter, without wire trapping spring	128	64	KL040128EL
Electronic side cutter, with wire trapping spring	128	66	KL040128ELH

Hand tools Standard tools

Slotted screwdriver bit 1/4", 73 mm

Characteristics

- Shank 1/4" (6.3), DIN 3126

ltem	Dimension mm	Weight g	Number parts	Part No.
Slotted screwdriver bit 1/4", 73 mm	73 x 0.6 x 3.5	16	2	KL2007335
Slotted screwdriver bit 1/4", 73 mm	73 x 0.8 x 4.0	18	2	KL2007340
Slotted screwdriver bit 1/4", 73 mm	73 x 1.0 x 5.5	26	2	KL2007355
Slotted screwdriver bit 1/4", 73 mm	73 x 1.2 x 6.5	34	2	KL2007365

Phillips screwdriver bit 1/4", 73 mm



Characteristics

- Shank 1/4" (6.3), DIN 3126

Item	Dimen- sion mm	Weight g	Number parts	Part No.
Phillips screwdriver bit 1/4", 73 mm PH1	73 x PH 1	22	2	KL21073PH1
Phillips screwdriver bit 1/4", 73 mm PH2	73 x PH 2	30	2	KL21073PH2

Pozidriv screwdriver bit 1/4", 73 mm



Characteristics

• Shank 1/4" (6.3), DIN 3126

ltem	Dimen- sion mm	Weight g	Number parts	Part No.
Pozidriv screwdriver bit 1/4", 73 mm PZ1	73 x PZ 1	22	2	KL22073PZ1
Pozidriv screwdriver bit 1/4", 73 mm PZ2	73 x PZ 2	30	2	KL22073PZ2



Plus/Minus-Pozidriv screwdriver bit, 1/4", 73 mm

Characteristics

- Shank 1/4" (6.3), DIN 3126



Item	Dimen- sion mm	Weight g	Number parts	Part No.
Plus/Minus-Pozidriv screwdriver bit, 1/4", 73 mm	73 x Z 1	20	2	KL23073PM1
Plus/Minus-Pozidriv screwdriver bit, 1/4", 73 mm	73 x Z 2	30	2	KL23073PM2

TORX® screwdriver bit, 1/4", 73 mm

Characteristics

Shank 1/4" (6.3), DIN 3126



Item	Dimension mm	Weight g	Number parts	Part No.
TORX® screwdriver bit, 1/4", 73 mm TX10	73 x TX 10	22	2	KL25073TX10
TORX® screwdriver bit, 1/4", 73 mm TX15	73 x TX 15	22	2	KL25073TX15
TORX® screwdriver bit, 1/4", 73 mm TX20	73 x TX 20	25	2	KL25073TX20
TORX® screwdriver bit, 1/4", 73 mm TX25	73 x TX 25	25	2	KL25073TX25
TORX® screwdriver bit, 1/4", 73 mm TX27	73 x TX 27	25	2	KL25073TX27
TORX® Screwdriver bit, 1/4", 73 mm TX30	73 x TX 30	30	2	KL25073TX30
TORX® Screwdriver bit, 1/4", 73 mm TX40	73 x TX 40	40	2	KL25073TX40

Magnetic holder for screwdriver bits, 1/4", 58 mm

Characteristics

- Shank 1/4" (6.3), DIN 3126
- Strong magnet



Item	Dimension mm	Weight g	Part No.
Magnetic holder for screwdriver bits, 1/4", 58 mm	58	32	KL290

Bit holder with quick-change chuck E6.3 1/4"

- Shank 1/4" (6.3), DIN 3126
- With quick-change chuck



Item	Dimension mm	Weight g	Part No.
Bit holder with quick-change chuck E6.3 1/4"	52	30	KL291

Hand tools Standard tools

Adapter, 1/4", 50 mm



▶ Shank E 6.3 and 1/4" socket wrench

Characteristics

• Shank 1/4" (6.3)

Suitable for

Drive for 1/4" socket wrenches

Item	Dimension mm	Weight g	Part No.
Adapter, 1/4", 50 mm	50	15	KL295

Adapter, 3/8", 50 mm



Characteristics

- Shank 3/8" (10), DIN 3126

Item	Dimension mm	Weight g	Part No.
Adapter, 3/8", 50 mm	50	22	KL296

Socket head bit set 1/4", 29-pce.



Item	Weight g	Number parts	Part No.
Socket head bit set 1/4", 29-pce.	1130	29	KL361
Scope of supply			
16-pce. Bit set C6.3 1/4"			
Bit holder with quick-change chuck E6.3 1/4	II		
7-pce. Socket set AF5 - AF13 1/4"			
Adapter C6.3 (25 mm) 1/4"			
Extension E6.3 (150 mm) 1/4"			
Extension (75 mm) 1/4"			
Professional ratchet 1/4"			
T-Smart handle 105 x 39 mm 1/4"			



Allen key set, 7-pce.



Characteristics

In practical holder

Item	Dimen- sion mm	Weight g	Number parts	Part No.
Allen key set, 7-pce.	SW 2 - 8	171	7	KL370

Ball-point allen key set, 9-pce.



Characteristics

- In practical plastic holder

Item	Dimension mm	Weight g	Number parts	Part No.
Ball-point allen key set, 9-pce.	SW 1.5 - 10	273	9	KL375

Torque-wrench set, 0.6 - 1.5 Nm



- Easy torque adjustment using an Allen key
- Precise release when reaching the set torque

Item	Weight g	Number parts	Part No.
Torque-wrench set, 0.6 - 1.5 Nm	1048	14	KL38715
Scope of supply			
Nm-slotted blade 3.0 x 0.5 x 170 mm			
Nm-slotted blade 3.5 x 0.6 x 170 mm			
Nm-Phillips blade PH 0 x 170 mm			
Nm blade PZ 0 x 170 mm			
Nm-TORX® blade TX 6 x 170 mm			
Nm-TORX® blade TX 7 x 170 mm			
Nm-TORX® blade TX 8 x 170 mm			
Nm-TORX® blade TX IP 7 x 170 mm			
Nm-TORX® blade TX IP 8 x 170 mm			
Nm-TORX® blade TX IP 9 x 170 mm			
Nm blade Z1 x 170 mm			
Nm blade magnetic 170 mm			
Nm handle 0.6 - 1.5 Nm			
Adjusting spanner			

Hand tools Standard tools

Torque-wrench set, 1.5 - 3.0 Nm



Characteristics

- Easy torque adjustment using an Allen key
- Precise release when reaching the set torque

Item	Weight g	Number parts	Part No.
Torque-wrench set, 1.5 - 3.0 Nm, 14 pieces	1066	14	KL38830
Scope of supply			
Nm-slotted blade 4.0 x 0.8 x 170 mm			
Nm-Phillips blade PH 1 x 170 mm			
Nm-Phillips blade PH 2 x 170 mm			
Nm blade PZ 1 x 170 mm			
Nm blade PZ 2 x 170 mm			
Nm-TORX® blade TX 10 x 170 mm			
Nm-TORX® blade TX 15 x 170 mm			
Nm-TORX® blade TX IP 10 x 170 mm			
Nm-TORX® blade TX IP 15 x 170 mm			
Nm blade Z1 x 170 mm			
Nm blade Z2 x 170 mm			
Nm blade magnetic 170 mm			
Nm handle 1.5 - 3.0 Nm			
Adjusting spanner			

Torque-wrench set, 3.0 - 5.4 Nm



- Easy torque adjustment using an Allen key
- Precise release when reaching the set torque

Item	Weight g	Number parts	Part No.
Torque-wrench set, 3.0 - 5.4 Nm	1066	14	KL38954
Scope of supply			
Nm-slotted blade 4.0 x 0.8 x 170 mm			
Nm-Phillips blade PH 2 x 170 mm			
Nm-Phillips blade PH 1 x 170 mm			
Nm blade PZ 1 x 170 mm			
Nm blade PZ 2 x 170 mm			
Nm-TORX® blade TX 15 x 170 mm			
Nm-TORX® blade TX IP 10 x 170 mm			
Nm-TORX® blade TX IP 15 x 170 mm			
Nm blade Z2 x 170 mm			
Nm blade magnetic 170 mm			
Nm handle 3.0 - 5.4 Nm			
Adjusting spanner			



Bit set, 6-piece, 1/4", 73 mm



Characteristics

- Shank 1/4" (6.3), DIN 3126
- KL330: 3.0 x 0.5 mm / 3.5 x 0.6 mm / 4.0 x 0.8 mm / 5.5 x 1.0 mm / PH 1 / PH 2
- KL331: PH 1 / PH 2 / PH 3 / PZ1 / PZ2 / PZ3
- KL335: TX10 / TX15 / TX20 / TX25 / TX30 / TX40

Item	Blade length mm	Weight g	Number parts	Part No.
Bit assortment, 1/4", 73 mm	73	120	6	KL330
Bit assortment, 1/4", 73 mm	73	120	6	KL331
TORX® bit assortment, 1/4", 73 mm	73	120	6	KL335

Bit box Swift, 7-piece, 1/4", 25 mm



Characteristics

- Shank 1/4" (6.3), DIN 3126
- In practical holder
- Incl. magnetic holder
- KL340: 1.0 x 5.5 mm / 1.2 x 6.5 mm / PZ 1 / PZ 2 / PH 1 / PH 2

Item	Blade length mm	Weight g	Number parts	Part No.
Bit box Swift, 1/4", 25 mm	25	75	7	KL340

Combination spanner set, 12-pce.



Characteristics

Material: Chrome vanadium

Surface: chromed

Item	Dimension mm	Weight g	Part No.
Combination spanner set, 12-pce.	SW 8 - 22	1055	KL365

Control cabinet spirit level, 200 mm



Characteristics

With horizontal, vertical and 45° spirit level

Item	Dimension mm	Weight g	Part No.
Control cabinet spirit level, 200 mm	200x42x17	65	KL420200

Alu spirit level



Characteristics

With horizontal and vertical spirit level

ltem	Dimension mm	Weight g	Part No.
Alu spirit level, 400 mm	400 x 40 x 15	210	KL425400
Alu spirit level, 600 mm	600 x 40 x 15	305	KL425600

Wooden folding rule, 2 m

Characteristics

- White/yellow
- No. of links 10



Item	Weight g	Part No.
Wooden folding rule, 2 m	126	KL402

Measuring tape, 3 m

Characteristics

• With 3 functions: Length, inside dimension and circles



Item	Weight g	Part No.
Measuring tape, 3 m	124	KL403

Carpenter's pencil

Characteristics

- Oval shape
- Pointed



Item	Weight g	Part No.
Carpenter's pencil	10	KL449

Marking pen

- Multimark permanent marker, black
- Fine tip 0.6 mm



Item	Weight g	Part No.
Marking pen	10	KL440F



Control cabinet key



Characteristics

- With chain, adapter and interchangeable bit 1/4"
- Inner square 5, 6 and 7-8 mm
- Triangular 9 mm
- Double pin keys 3 5 mm
- Bit PH2 and slot 1.2 x 0.7 mm
- Radiator valve key closing (5 mm square) in the centre slot

Item	Weight g	Part No.
Control cabinet key	75	KL500

Universal cabinet key, subkey Electro



Characteristics

- 30% lighter and simpler opening mechanism
- Inner square 5, 6 and 7-8 mm
- Triangular 9 mm
- Double pin keys 3 5 mm
- Including 1/4" bit mounting and 2 double bits
- Radiator valve key closing (5 mm square) on the pin head
- Bit slot 1.2 x 7 mm, PH2

ltem	Dimension mm	Weight g	Part No.
Universal cabinet key, subkey Electro	145	120	KL510

Engineer's hammer



Characteristics

- Steel-forged head
- Ground finish
- With protective nylon shroud

Item	Dimension mm	Weight g	Part No.
Engineer's hammer, 300 g	370	300	KL580300
Engineer's hammer, 500 g	610	500	KL580500

Sledge hammer



- Steel-forged head
- Ground finish
- With protective nylon shroud

Item	Dimension mm	Weight g	Part No.
Club hammer, 1000 g	1150	1000	KL5821000
Club hammer, 1250 g	1400	1250	KL5821250

Jointing chisel

Characteristics

- Chrome vanadium steel
- Safety head, annealed

Item	Dimension mm	Weight g	Part No.
Jointing chisel	230 x 26 x 7	250	KL584230

Electricians chisel

Characteristics

- Chrome vanadium steel
- Safety head, annealed

Item	Dimension mm	Weight g	Part No.
Electrician's chisel, 200 mm	200	90	KL585200
Electrician's chisel, 250 mm	250	120	KL585250

Safety handle for jointing chisel



Suitable for

- Jointing chisel, part no. KL584230

Item	Weight g	Part No.
Safety handle for jointing chisel	110	KL586

Cable knife



Characteristics

Hinged, with plastic handle

Item	Dimension mm	Weight g	Part No.
Cable knife	80	115	KL540

Mini saw



Characteristics

With fixed wooden handle

Item	Dimension mm	Weight g	Part No.
Mini saw	290	95	KL559
Metal saw blades, 12-piece	150	2	KL550ES

Characteristics

• With fibreglass reinforced plastic handle

Item	Dimension mm	Weight g	Part No.
Universal saw	250	170	KL550
Metal saw blades, 12-piece	150	2	KL550ES

Combination scissors



Characteristics

- Serrated cutting edges
- With safety lock
- Cuts e.g. round and flat material from copper, aluminium, plastic, paper, cardboard, leather

Item	Dimension mm	Weight g	Part No.
Combination scissors	190	100	KL545

Universal knife



Characteristics

With adjustable and replaceable blades

Item	Dimension mm	Weight g	Part No.
Universal knife		305	KL542
Replacement blade for universal knife	60 x 19 x 0.5	8	KL542ES

Cutter knife



Characteristics

· Knife with knock-off blades, all 9 mm

Item	Dimension mm	Weight g	Part No.
Cutter knife	9	45	KL544
Replacement blade for cutter knife	9	5	KL544ES

Hand tools Standard tools

Apprentice case



► Tool case can be personalised with own brand logo http://www.klauke.com/personalization

- Case shell from impact-resistant ABS
- Robust aluminium frame with abutting edges
- Two lockable clips

Item	Dimension mm	Weight kg	Part No.
Apprentice case	500 x 470 x 210	6.0	KL855B22
Scope of supply			Part No.
VDE Power combination pliers, 180 mm			KL020180IS
VDE Side cutter 160 mm			KL040160IS
VDE long-nose pliers, straight, 205 mm			KL050205IS
VDE Slotted screwdriver, 3.0 x 0.5 mm			KL10010030IS
VDE Slotted screwdriver, 4.0 x 0.8 mm			KL10010040IS
VDE Slotted screwdriver, 5.5 x 1.0 mm			KL10012555IS
VDE Pozidriv screwdriver, PZ1			KL120PZ1IS
VDE Pozidriv screwdriver, PZ2			KL120PZ2IS
VDE Plus/Minus-Pozidriv screwdriver, Z1			KL130PM1IS
VDE Plus/Minus-Pozidriv screwdriver, Z2			KL130PM2IS
Phase tester with heavy duty handle, one-pin VDE 0680 150 V - 250 V	,		KL19073IS
Wooden folding rule, 2 m			KL402
Control cabinet spirit level, 200 mm			KL420200
Carpenter's pencil			KL449
Universal saw			KL550
Engineer's hammer, 300 g			KL580300
Cable knife with hooked blade			KL745HK
Automatic VDE wire stripper 0.2 - 6 mm²			KL760180IS
Water brush			
Plasterer's bowl 125 mm			
Painter's spatula 40 mm			



Engineers professional case, 15-piece



▶ Engineers basic equipment, mainly with VDE tools

- Technicians Notebook tool bag
- Material: hard-wearing nylon
- 90° folding-out front pocket
- High-quality zipper
- Spray-water protected bottom
- Each side pocket has a zipper
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Twin fixed carrying handle
- Insert for visitor cards

Item	Part No.
Engineers professional case, 15-piece	KL905B15
Scope of supply	Part No.
Technicians professional case, empty	KL905L
VDE Phillips screwdriver, PH1	KL110PH1IS
VDE Phillips screwdriver, PH2	KL110PH2IS
VDE Slotted screwdriver, 2.5 x 0.4 mm	KL1007525IS
VDE Slotted screwdriver, 4.0 x 0.8 mm	KL10010040IS
VDE Slotted screwdriver, 5.5 x 1.0 mm	KL10012555IS
Phase tester with heavy duty handle, one-pin, VDE 0680 150 V - 250 V	KL19073IS
VDE Plus/Minus-Pozidriv screwdriver, Z1	KL130PM1IS
VDE Plus/Minus-Pozidriv screwdriver, Z2	KL130PM2IS
Cable knife with hooked blade	KL745HK
VDE long-nose pliers, straight, 205 mm	KL050205IS
VDE Electric power side cutter, 200 mm	KL044200IS
Round cable stripper 8 - 13mm ²	KL710
VDE Power combination pliers, 165 mm	KL020165IS
Measuring tape, 3 m	KL403

Hand tools Standard tools

OEM bag, 22-piece



- Equipped with 22 mainly VDE-tested tools
- Robust version with plastic slide rails and upper metal rails with sponge rubber handle
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Outdoors: 1 large lockable label pocket, 9 pockets, 2 Velcro® for fastening spirit level etc. Indoor connections: 3 compartments, 14 straps

Item	Dimension mm	Weight g	Part No.
OEM bag, 22-piece	350 x 200 x 200	2600	KL920B22
Scope of supply			Part No.
VDE Power combination pliers, 180 mm			KL020180IS
VDE Side cutter 160 mm			KL040160IS
VDE long-nose pliers, straight, 205 mm			KL050205IS
VDE Slotted screwdriver, 3.0 x 0.5 mm			KL10010030IS
VDE Slotted screwdriver, 4.0 x 0.8 mm			KL10010040IS
VDE Slotted screwdriver, 5.5 x 1.0 mm			KL10012555IS
VDE Pozidriv screwdriver, PZ1			KL120PZ1IS
VDE Pozidriv screwdriver, PZ2			KL120PZ2IS
VDE-Plus/Minus-Pozidriv screwdriver Z1			KL130PM1IS
VDE Plus/Minus-Pozidriv screwdriver Z2			KL130PM2IS
Phase tester with heavy duty handle, one-pin VDE 0680 150 V - 250 V	,		KL19073IS
Cable knife with hooked blade			KL745HK
Automatic VDE wire stripper 0.2 - 6 mm²			KL760180IS
Wooden folding rule, 2 m			KL402
Control cabinet spirit level, 200 mm			KL420200
Carpenter's pencil			KL449
Universal saw			KL550
Engineer's hammer, 300 g			KL580300
Electrician's chisel, 250 mm			KL585250



Professional installers case



Characteristics

- Robust version with plastic slide rails and upper metal rails with sponge rubber handle
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Outdoors: 1 large lockable label pocket, 9 pockets, 2 Velcro® for fastening spirit level etc. Indoor connections: 3 compartments, 14 straps

Item	Dimension mm	Weight g	Part No.
Profi-installer's pocket	350 x 200 x 200	2600	KL920L

Technicians professional case, empty



Characteristics

- Material: highly durable nylon, splash-proof base
- 90° folding front pocket, each side pocket has a zipper
- Twin fixed carrying handle
- Adjustable carrying belt with quick-release fastener and shoulder pad
- Protected notebook compartment for laptops up to 17", dimensions 285 x 416 x 89 mm
- Insert for visitor cards
- High-quality zipper

Item	Dimension mm	Weight g	Part No.
Technicians professional case, empty	330 x 440 x 200	2600	KL905L

Tool case, empty



Characteristics

- Robust aluminium frame with abutting edges
- With lockable clips

Item	Dimension mm	Weight g	Part No.
Tool case Economy	490 x 365 x 188	4,5	KL855L
Tool case, empty	508 x 362 x 214	5,2	KL865L

Tool wallet from nylon, empty



- Material: Polytex
- Accepts up to 11 tools

Item	Dimension mm	Weight g	Part No.
Tool wallet from nylon, empty	200 x 200 x 50	100	KL910L

PREPARATION WITH PRECISION STRIPPING TOOLS

In the world of professionals, every assignment counts.

Better if you can rely on your tool. Stripping tools from Klauke remove insulation and cable sheathing quickly and precisely.



▶ For very precise use

- Fast and precise removal of insulation and cable sheathing
- Automatic cross-section adjustment
- Reduced effort due to optimum power transmission
- Reduced wear
- Including replacement blade

Special sheath and insulation materials call for special stripping tools! Innovative blade geometries guarantee a clean cut edge - with hard insulation such as PTFE (Teflon) through to soft/tough materials such as silicon!



Automatic wire stripper, 0.02 - 10 mm²



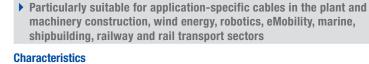
Characteristics

- Self-setting cutting and stripping tool for commercially available flexible cables
 0.02 10 mm² and solid conductors to 1.5 mm²
- Easily replaceable blade system
- Long service life of pliers due to precise adjustment for stripping thin insulation without damaging the conductor
- Integrated side cutter

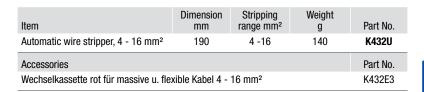
Item	Stripping range mm ²	Weight g	Part No.
Wire-stripping tool K43/2	0.02 - 10	140	K432
Accessories			Part No.
Interchangeable cassette, black, for wire-stripping tool K432 0.02 - 10 mm² flexible conductors and to 1.5 mm² solid conductors			K432E
Interchangeable cassette, blue, for wire-stripping tool K432 for PTFE insulated conductors 0.1 - 4 mm ²			K432E2
Interchangeable cassette, red, for wire-stripp K432 / 4 - 16 mm ²	ing tool		K432E3

Automatic wire stripper, 4 - 16 mm²





- Self-adjusting cutting and stripping tool for application-specific solid and flexible cables
- Ideal, lightweight and ergonomic tool with a long service life
- Automatic opening of the clamping jaws after the stripping process for added safety
- No splicing of single conductors conductor enters the cable end-sleeve with greater ease
- Integrated professional, readily accessible cable cutter accelerates working processes
- Adjustable stop with metric and imperial display for precise stripping length





Wire stripper with stepless stripping range 0.03 - 16 mm²



- ► First wire stripper with stepless stripping range 0.03 16 mm²
- ▶ Perfect for damage-free stripping of solid and flexible conductors with PVC

Characteristics

- Effortless working thanks to ergonomic styling
- Safe working thanks to integrated clamp protection
- Durable tool with easily replaceable blades
- Integrated side cutter up to max. 9 mm dia.
- High stability due to glass fiber reinforced polyamide
- Accurate and consistent stripping length thanks to adjustable stop

Item	Stripping range mm ²	Weight g	Part No.
Wire stripper with stepless stripping range 0.03 - 16 mm²	0.03 - 16	140	K433
Accessories			Part No.
Detachable magazine			K433E

Wire stripper, 0.2 - 6 mm²



Characteristics

- Adjustable length stop from 5 12 mm
- Integrated easy to reach side cutter up to max. 2 mm dia.

Suitable for

For all standard flexible and solid conductors from 0.2 - 6 mm²

Item	Dimen- sion mm	Stripping range mm²	Weight g	Part No.
Wire stripper for flexible and solid conductors	180	0.2 - 6	130	KL760180

Wire stripper for round and flat cables



Characteristics

- Fine adjustment (5-way) on various cable types and cable diameters
- Optical length dimension 8 24 mm (5/16 1 inch)
- Integrated side cutter up to max. 3 mm dia.

Suitable for

- Flat cable: Baring and stripping of 2-core PVC-insulated flat cables from 0.75 - 1.5 mm²
- Round cable: Baring and stripping flexible cables in the range 0.5 16 mm² (20-6 AWG), solid conductors 0.5 - 10 mm² (20-8 AWG)

Item	Dimen- sion mm	Stripping range mm²	Weight g	Part No.
Wire stripper for round and flat cables	180	0.5 - 16	205	KL765FR215



Automatic wire stripper for round cables in the solar technology sector



Characteristics

- Fine adjustment (5-way) on various cable types and cable diameters
- Integrated side cutter up to max. 3 mm dia.
- Optical length dimension 8 24 mm (5/16 1 inch)

Suitable for

 Baring and stripping of all standard, flexible cables from 1.5 - 10.0 mm² (15-9 AWG) in the solar technology sector.

Item	Dimen- sion mm	Stripping range mm ²	Weight g	Part No.
Automatic wire-stripping tool for round cables in the solar technology sector	180	1.5 - 10	205	KL765PV

Cable knife without blade



Characteristics

- Precise, fast and safe stripping of all standard round cables
- No damage to inner conductor due to stepless adjustment of cutting depth
- Round and long cut due to self-rotating knife

Item	Dimension mm	Weight g	Part No.
Cable knife, without blade 4 - 16 mm dia.	4 - 16	70	KL740416
Cable knife, without blade 8 - 28 mm dia.	8 - 28	70	KL740828
Accessories			Part No.
Replacement blade for electricians knife with	KL749ES		

Cable knife with straight blade



- Precise, fast and safe stripping of all standard round cables
- Including protective cover for the blade
- Removable reducing adapter made from extremely abrasion-resistant plastic (POM)
- No damage to inner conductor due to stepless adjustment of cutting depth
- Round and long cut due to self-rotating knife

Item	Dimension mm	Weight g	Part No.
Cable knife with straight blade	4 - 28	80	KL745GK
Accessories			Part No.
Replacement blade for electricians knife with	Replacement blade for electricians knife with hooked blade		

Hand tools

Cable knife with hooked blade



Characteristics

- Precise, fast and safe stripping of all standard round cables
- Including protective cover for the blade
- Removable reducing adapter made from extremely abrasion-resistant plastic (POM)
- No damage to inner conductor due to stepless adjustment of cutting depth
- Round and long cut due to self-rotating knife

Item	Dimension mm	Weight g	Part No.
Cable knife with hooked blade	4 - 28	80	KL745HK
Accessories			Part No.
Replacement blade for electricians knife with	hooked blade		KL749ES

Round cable stripper 8 - 13 mm Ø



Characteristics

- Simple stripping even in hard-to-reach areas, e.g. ceiling and walls, junction and distribution boxes, switch cabinets etc.
- Strips round and damp proof installation cables from 8 13 mm dia. (e.g. NYM 3 x 1.5 mm² to 5 x 2.5 mm²)
- No need to adjust the cutting depth

Item	Dimension mm	Weight g	Part No.
Round cable stripper 8 - 13 mm Ø	8 - 13	43	KL710

Multi-stripper



Characteristics

 Universal stripping tool with the following functions: Baring, round cut, long cut, stripping, cutting

Item	Dimension mm	Weight g	Part No.
Multi-stripper	8 - 13	77	KL730



Photovoltaic stripper



Characteristics

- Replaceable blade system
- Protected blade
- Simple handling
- Fixed stripping from 8.5 mm
- Compact design

Suitable for

For all standard PV cables to 8.5 mm

Item	Dimension mm	Weight g	Part No.
Photovoltaic stripper	8.5	40	KL735PV

Coax-stripper



Characteristics

- No need to adjust the cutting depth
- Gradual stripping of all standard coaxial cables
 (e.g. antenna and transmission cables) 4.8 7.5 mm outside diameter

Suitable for

Flexible cables, e.g. 3 x 0.75 mm², 10 mm² and 16 mm²

Item	Part No.
Coax-stripper	KL720









Cable pulling technology

Fish tapes/pulling rods	9.6
Polyester	9.6
Perlon	9.6
Nylon	9.6
Flex-O-Twist speed flex leader	9.7
Fibreglass cable pulling rods	9.7
Cable pulling systems	9,8
With Polyester tapes (Dura Spinner and Flexi Spinner)	9.8
With fibreglass tapes (Speedy Spinner)	9.9
Fish tapes in winder case	9.10
Smart Butler	9.12
Polyester Butler	9.14
Cable puller	9.14
Easy Roller (cable drum unwinder)	9.14
Easy Roller Plus	9.15
Cable puller with accessory	9.15
Pulling grips	9.16
Pulling grips, closed	9.16
Pulling grips, closed Pulling grips, open	9.17
Accessory	9.18

THE PULLING AID CABLE PULLING TECHNOLOGY

Clean construction site - clean laying. Our cable pulling technology ensures that all cables are cleanly rolled in and out. No parts not required left lying around. No awkward handling. Greenlee pulling systems are made from high-quality ABS plastic. Making them robust and drop-proof. You are in control: Reliable laying with safe cable pulling technology.



In brief

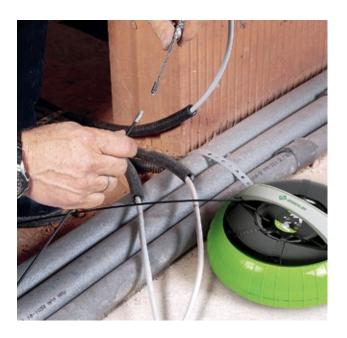
- Simple pulling through of cables and conductors
- Cable puller made from polyester, perion, nylon and fibreglass
- ▶ Cable pulling rods for cavities and suspended ceilings
- ► Made from high-quality ABS plastic
- Solutions for light and heavy cable types, angled ducts or long straights



▶ The Dura Spinner

The Dura Spinner is small, but has a great effect. High-quality materials ensure robustness and the best functionality. Its user-friendly design also permits unwinding on the floor. The Dura Spinner is even able to hold in place cables that are laid around corners. A genuine help on the construction site.

- ABS plastic housing
- Cable puller made from virtually indestructible polyester tape
- Simple unwinding and rewinding
- Unwinding even on the floor
- User-friendly design ensures convenient and smooth operations





Polyester fish tape green 4.5 mm dia.



- ▶ 50% less friction than nylon tapes
- ▶ Extremely flexible and almost unbreakable

Characteristics

- High thrust due to twisted tape design
- Reduces the pulling force due to much lower friction
- Replaceable pulling eyelet and spring guide head

Additional information

• Further detailed information can be found in the application table on page i-14

Length	Part No.	Diameter mm
10 m	52055292	4.5
15 m	52055293	4.5
20 m	52055294	4.5
25 m	52055295	4.5
30 m	52055296	4.5
Accessory		Part No.
5-piece accesso	ory set for polyester	fish tapes 52055396
Rotating spring	guide head with eye	let, M5, 7 mm dia 52055264

Perlon® fish tape 4 mm dia.



Characteristics

- With pressed M4 front piece
- With unscrewable spring guide head and pulling eyelet

Additional information

• Further detailed information can be found in the application table on page i-14

Length	Part No.	Diameter mm
5 m	52055276	4
10 m	52055277	4
15 m	52055278	4
20 m	52055279	4
25 m	52055280	4
30 m	52055281	4
Accessory		Part No.
Tension head wi	th eyelet M4 (1) and	spring guide head M4 (1) 52055288

Nylon fish tape 4 mm dia.



Characteristics

· With pressed spring guide head and eyelet

Additional information

Further detailed information can be found in the application table on page i-14

Length	Part No.	Diameter mm
5 m	52055270	4
10 m	52055271	4
15 m	52055272	4
20 m	52055273	4
25 m	52055274	4
30 m	52055275	4
10 m including rotating spring guide head	52055260	4
20 m including rotating spring guide head	52055261	4
30 m including rotating spring guide head	52055262	4
Accessory		Part No.
Rotating spring guide head with eyelet, M4, 6 m	m dia.	52055263



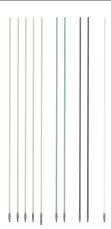
Flex-O-Twist™ speed flex leader



Characteristics

- Especially suitable for sharp bends
- Flexible fish tape leader

Fibreglass cable pulling rods



Characteristics

- Almost unbreakable due to special outer jacket
- Time-saving cable laying
- Laying also under the most difficult conditions

Suitable for

- Cable installation and laying
- Pulling or pushing

Length	Part No.	Version		
10 m	52055385	Comprising of: 4 pce. light green fibreglass rods 5.6 mm dia. with WW connecting sleeve, 1 pce. light green fibreglass rod 5.6 mm dia. with WW connecting sleeve and universal joint, 2 pce. black fibreglass rods 6 mm dia. with WW connecting sleeve, 1 pce. white nylon rod 4 mm dia. with WW connecting sleeve, 2 pce. green fibreglass rods 4.6 mm dia. with WW connecting sleeve		
5 m	52055386	Consists of: 3 pce. light green fibreglass sticks 5.6 mm dia. with WW connecting bushing, 1 pce. black fibreglass stick 6 mm dia. with WW connecting bushing, 1 pce. white nylon stick 4 mm dia. with WW connecting bushing		
Accessories Part No.				
Accessory set for cable pulling rods, 8-pcs. 52055387			52055387	
Accessory set for cable pulling rods, 4-pcs. 52055388				

Dura Spinner polyester fish tape system



- Cable pulling systems with innovative, extremely robust, twisted polyester fish tape
- ▶ Rotatable spring guide head

Characteristics

- Extremely robust fi sh tape for very narrow bending radii
- This product's high thrust makes it the ideal solution for laying additional cables
- New rotatable spring guide head
- Suitable for rigid and flexible conduits
- Tape pulled in and out very simply
- Can also be uncoiled on the floor
- Including accessories and spare parts
- Robust ABS housing
- No more broken tapes

Suitable for

The laying of additional cables

Item	Part No.
Dura Spinner 3.0 mm dia., 20 m	52074656
Dura Spinner 3.0 mm dia., 30 m	52074657
Scope of supply	Part No.
Rotating spring guide head with eyelet, M4, 6 mm dia.	52055263
Tension head with eyelet, M4	
Pulling aid for pulling system 3 - 6 mm dia.	52055311
Accessories	Part No.
Dura Spinner spare fish tape 3.0 mm dia., 20 m	52074654
Dura Spinner spare fish tape 3.0 mm dia., 30 m	52074655
Tension head with eyelet M4 (1) and spring guide head M4 (1)	52055288

Flexi Spinner polyester cable pulling system



- Almost unbreakable
- ▶ Approx. 50 % less frictional resistance compared with nylon and perlon
- ▶ High thrust for long distances with narrow bending radius

Characteristics

- Highly-flexible polyester tape
- Modern design
- Robust housing

Additional information

Further detailed information can be found in the application table on page i-14

Item	Length	Part No.	Diameter mm
Flexi Spinner polyester cable pulling system	20 m	52055389	4.5
Flexi Spinner polyester cable pulling system	25 m	52055390	4.5
Flexi Spinner polyester cable pulling system	30 m	52055391	4.5
Flexi Spinner, winder case empty		52055392	
Scope of supply		Part No.	Quantity
5-piece accessory set for polyester fish tapes		52055396	1
Accessories			Part No.
Polyester fish tape green 4.5 mm dia., 20 m		52055294	
Polyester fish tape green 4.5 mm dia., 25 m		52055295	
Polyester fish tape green 4.5 mm dia., 30 m		52055296	
Rotatable head with eye M5, dia. 7 mm			52055264



Speedy Spinner fibreglass cable pull-in system



- ► Unique, user-friendly design
- ▶ Very simple and quick pulling in and out of fibreglass tapes

Characteristics

- One-handed operation
- Uncoiling also possible on the floor
- Flexible fibreglass spring for quick pulling in and out
- High thrust
- Accessory set supplied as standard

Suitable for

- Tube diameter: 16 - 32 mm

Additional information

- Further detailed information can be found in the application table on page i-14
- Always order repair adhesive separately!

Item	Diameter mm	Length	Par	t No.
Speedy Spinner fibreglass cable pull-in system	3	20 m		55298
Speedy Spinner fibreglass cable pull-in system	3	30 m	520	55299
Speedy Spinner fibreglass cable pull-in system	3	40 m	520	55300
Scope of supply		P	art No.	Quantity
Head with eye M5		52	055304	3
Spring guide head with eye M5		52	055305	1
Spring guide head with eye M5 -	· 10 mm	52	055306	1
Start/bushing sleeves M5		52	055308	3
Connecting sleeves		52	055309	3
Cable grip M5, 4-15 mm dia.		52	055310	1
Pulling aid for pulling system 3 - 6 mm dia. 52055311				
Accessories				Part No.
Speedy Spinner accessory, repair patch for fibreglass tape 3 mm			a.	52055312
Fibreglass replacement tape 3 mm dia., 20 m				52055289
Fibreglass replacement tape 3 mm dia., 30 m				52055290
Fibreglass replacement tape 3 mm dia., 40 m				52055291
Speedy Spinner repair set, 10-pi	ece			52055303
Rotatable head with eye M5, dia	. 7 mm			52055264
Item repair set				Part No.
Speedy Spinner repair set, 10-piece				52055303
Scope of supply repair set			art No.	Quantity
Head with eye M5		52	055304	3
Start/bushing sleeves M5		52	055308	3
Connecting sleeves			055309	3
Pulling aid for pulling system 3 -	6 mm dia.	52	055311	1
Connecting sleeves Pulling aid for pulling system 3 - 6 mm dia.		52055309 52055311		

EASILY FORGOTTEN:

Be aware of the laying temperatures of cables and conductors! These can be obtained from manufacturer's data sheets. For a NYM conductor, for example, this temperature is +5° C.

MagnumPRO™ oil-hardened steel fish tape



Characteristics

- · Winder case eases cable pulling
- Dirt-free tape finish
- High impact nylon winder case with large handle grip

Item	Tape dimen- sions mm	Length	Part No.
MagnumPR0™ oil-hardened steel fish tape	3.2 x 1.5	19.8 m	52041709
MagnumPR0™ oil-hardened steel fish tape	6.4 x 1.5	30.5 m	52041745
MagnumPRO™ oil-hardened steel fish tape	3.2 x 1.5	38.1 m	52041741
MagnumPRO™ oil-hardened steel fish tape	3.2 x 1.5	73.2 m	52041743

MagnumPRO™ stainless steel fish tape



- **▶** Stainless, speed flex leader
- ▶ Slim pulling eyelet permits trouble-free pulling in long and winding conduits

Characteristics

- Can be used in conjunction with every steel fish tape with a tape dimension of 3.0 x 1.5 mm
- High impact nylon winder case with large handle grip

Item	Tape dimen- sions mm	Length	Part No.
MagnumPRO™ stainless steel fish tape	3.2 x 1.5	30.5 m	52041746
MagnumPRO™ stainless steel fish tape	3.2 x 1.5	61 m	52041747

Accessory	Part No.
Speed Flex leader for fish tapes with tape dimension 3.0 x 1.5 mm	50143921

MagnumPRO™ nylon fish tape



▶ Non-conductive, non-coiling nylon tape

- Diameter 4.8 mm
- High impact nylon winder case with large handle grip

Item	Diameter mm	Length	Part No.
MagnumPRO™ nylon fish tape	4.8	15.2 m	52041750
MagnumPRO™ nylon fish tape	4.8	30.5 m	52041751
Accessory			Part No.
Replacement tip			50016644

MagnumPRO™ fish tape



Characteristics

- · Fish tape from multi-strand steel tape
- Flexible type
- High impact nylon winder case with large handle grip

Suitable for

For quick and simple application

Item	Diameter mm	Length	Part No.
MagnumPR0™ fish tape	4.8	15.2 m	52041748
MagnumPRO™ fish tape	4.8	30.5 m	52041749

MagnumPRO™ fibreglass fish tape



Characteristics

- Non-conductive fibreglass tape with low friction coating
- To fish in small and large conduits even with wire or cable in place
- High impact nylon winder case with large handle grip

Suitable for

- Data and telecommunication industry

Item	Diameter mm	Length	Part No.
MagnumPRO™ fibreglass fish tape	4.3	15.2 m	52041752
MagnumPRO™ fibreglass fish tape	4.3	30.5 m	52041753
MagnumPRO™ fibreglass fish tape	4.8	61 m	50357468
Accessory			Part No.
Fibreglass fish tape accessory set			50357506
Pulling eyelet 4.8 mm			50359304

Steel fish tape EZ Reach



- With hand crank
- Flat steel tape for working above suspended ceilings, under carpets and through walls

Item	Tape dimen- sions mm	Length	Part No.
Steel fish tape EZ Reach	6.4 x 0.8	7.6 m	50016962

Smart Butler fibreglass cable pulling-in system with steel reel basket



- ▶ Unique, user-friendly design, galvanised and sprayed
- ▶ Teflon-coated adapter for low resistance when winding and unwinding

Characteristics

- High thrust
- Low-friction unwinding and rewinding
- Secure working thanks to operative holding brake
- Effective working with accessories mounted directly on frame
- From size 790 mm dia. steel reel basket, incl. rollers

Additional information

- 4.5 / 6 mm dia.: Tension head with eyelet, fish tape with pressed start/end sleeves, connecting sleeve WW 1/4" - M6, starting spinner with shackle
- 7.5 / 9 / 11 mm dia.: Tension head with eyelet, fish tape with pressed start/end sleeves, connecting sleeve WW 1/2" - M12, starting spinner with shackle

tem	Diameter mm	steel reel basket mm	Version	Length	Weight kg	Part No.
Smart Butler fibreglass cable pulling-in system 4.5 mm dia. with steel reel basket 330 mm dia. 40 m	4.5	330 dia.		40 m	4	52055313
Smart Butler fibreglass cable pulling-in system 330 mm dia. steel reel basket, 60 m	4.5	330 dia.		60 m	5	52055315
Smart Butler fibreglass cable pulling-in system 330 mm dia. steel reel basket, 80 m	4.5	330 dia.	-	80 m	6	52055316
Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 40 m	6.0	550 dia.		40 m	10	52055325
Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 60 m	6.0	550 dia.		60 m	11	52055326
Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 80 m	6.0	550 dia.		80 m	12	52055327
Smart Butler fibreglass cable pulling-in system 550 mm dia. steel reel basket, 100 m	6.0	550 dia.		100 m	12	52055328
Smart Butler fibreglass cable pulling-in system 360 mm dia. steel reel basket, 40 m	7.5	660 dia.		40 m	13	52055337
Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 60 m	7.5	660 dia.		60 m	14	52055338
Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 80 m	7.5	660 dia.		80 m	15	52055339
Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 100 m	7.5	660 dia.		100 m	17	52055340
Smart Butler fibreglass cable pulling-in system 860 mm dia. steel reel basket, 120 m	7.5	660 dia.		120 m	18	52055341
Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 40 m	9.0	660 dia.		40 m	14	52055347
Smart Butler fibreglass cable pulling-in system 660 mm dia. steel reel basket, 60 m	9.0	660 dia.		60 m	16	52055348
Smart Butler fibreglass cable pulling-in system '90 mm dia. steel reel basket, 80 m	9.0	790 dia.	incl. rollers	80 m	31	52055349
Smart Butler fibreglass cable pulling-in system 790 mm dia. steel reel basket, 100 m	9.0	790 dia.	incl. rollers	100 m	33	52055350
Smart Butler fibreglass cable pulling-in system 000 mm dia. steel reel basket, 120 m	9.0	1000 dia.	incl. rollers	120 m	35	52055351
Smart Butler fibreglass cable pulling-in system 000 mm dia. steel reel basket, 150 m	9.0	1000 dia.	incl. rollers	150 m	37	52055352
mart Butler fibreglass cable pulling-in system 000 mm dia. steel reel basket, 150 m	11.0	1000 dia.	incl. rollers	150 m	53	52055359
Smart Butler fibreglass cable pulling-in system 000 mm dia. steel reel basket, 200 m	11.0	1000 dia.	incl. rollers	200 m	60	52055360
mart Butler fibreglass cable pulling-in system 000 mm dia. steel reel basket, 250 m	11.0	1000 dia.	incl. rollers	250 m	67	52055361
mart Butler fibreglass cable pulling-in system 000 mm dia. steel reel basket, 300 m	11.0	1000 dia.	incl. rollers	300 m	75	52055362



Accessories	Part No.
Smart Butler fibreglass replacement tape 4.5 mm dia., 40 m $$	52055317
Smart Butler fibreglass replacement tape 4.5 mm dia., 60 m	52055318
Smart Butler fibreglass replacement tape 4.5 mm dia., 80 m	52055319
Smart Butler fibreglass replacement tape 6 mm dia., 40 m	52055329
Smart Butler fibreglass replacement tape 6 mm dia., 60 m	52055330
Smart Butler fibreglass replacement tape 6 mm dia., 80 m	52055331
Smart Butler fibreglass replacement tape 6 mm dia., 100 m	52055332
Smart Butler fibreglass replacement tape 7.5 mm dia., 40 m	52055342
Smart Butler fibreglass replacement tape 7.5 mm dia., 60 m	52055343
Smart Butler fibreglass replacement tape 7.5 mm dia., 80 m	52055344
Smart Butler fibreglass replacement tape 7.5 mm dia., 100 m	52055345
Smart Butler fibreglass replacement tape 7.5 mm dia., 120 m	52055346
Smart Butler fibreglass replacement tape 9 mm dia., 40 m	52055353
Smart Butler fibreglass replacement tape 9 mm dia., 80 m	52055355
Smart Butler fibreglass replacement tape 9 mm dia., 100 m	52055356
Smart Butler fibreglass replacement tape 9 mm dia., 150 m	52055358
Smart Butler fibreglass replacement tape 11 mm dia., 150 m	52055363
Smart Butler fibreglass replacement tape 11 mm dia., 200 m	52055364
Smart Butler fibreglass replacement tape 11 mm dia., 250 m	52055365
Smart Butler fibreglass replacement tape 11 mm dia., 300 m	52055366
Starter and end bushing WW 1/4" for fish tape 4.5 mm dia.	52055321
Starter and end bushing WW 1/4" for fish tape 6.0 mm dia.	52055333
Starter and end bushing WW ½" for fish tape 7.5 mm dia.	52055369

Accessory	Part No.
Starter and end bushing WW $1\!\!/_{\!2}\text{"}$ for fish tape 9 mm dia.	52055370
Starter and end bushing WW ½" for fish tape 11 mm dia.	52055371
Connecting sleeve for fibreglass 4.5 mm dia.	52055322
Connecting sleeve for fibreglass 6 mm dia.	52055334
Connecting sleeves for fibreglass tape 9 mm dia.	52055372
Connecting sleeves for fibreglass tape 11 mm dia.	52055373
Connecting sleeve WW 1/2" with rotary swivel	52055374
Bulb with shackle WW ¼" for 4.5 mm dia.	52055323
Bulb with shackle WW ¼" for 6.0 mm dia.	52055335
Bulb with shackle WW ½" for 7.5 mm dia.	52055367
Bulb with castor WW ½"	52055368
Tension head with eyelet WW 1/4" for 4.5 - 6 mm dia.	52055320
Emergency repair set for fibreglass tape 4.5 mm dia.	52055324
Emergency repair set for fibreglass tape 6 mm dia.	52055336
Emergency repair set for fibreglass tape 7.5 mm dia.	52055375
Emergency repair set for fibreglass tape 9 mm dia.	52055376
Emergency repair set for fibreglass tape 11 mm dia.	52055377

Mechanical counter for Smart Butler



- Mechanical counter
- Can be retrofitted for smart butlers from 6 mm and production date from May 2019

Item	Part No.
Mechanical counter for 6 mm dia.	52055267
Mechanical counter for 7.5 / 9 and 11 mm dia.	52055268

Polyester Butler cable pulling system with steel reel basket



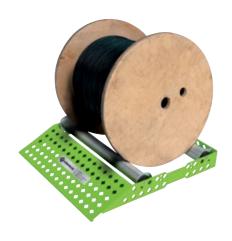
- ▶ Unique, user-friendly design, galvanised and sprayed
- ▶ Teflon-coated adapter for low resistance when winding and unwinding

Characteristics

- High thrust
- Low-friction unwinding and rewinding
- Secure working thanks to operative holding brake
- Effective working with accessories mounted directly on frame

Item	Diameter mm	steel reel basket mm	Length m	Weight kg	Part No.
Polyester Butler cable pulling system 350 mm dia. steel reel basket, 50 m	6	Ø 350	50	10	52074658
Scope of supply Part No.					Part No.
Smart Butler accessory - start/end sleeves WW 1/4" for rod 4.5 mm dia.				52055321	
Smart Butler accessory - starting spinner with shackle WW 1/4" for 4.5 mm dia.				52055323	
Spring guide head with eye M5				52055265	
Head with eye M5 WW 1/4" for dia. 4.5 - 6 mm			52055320		

Easy Roller cable drum unwinder



- ► Unique, user-friendly design
- ▶ 30 % less weight
- ▶ Ramp with shallow incline

Characteristics

- Light 30% less weight
- Easy loading and unloading of heavy cable drums thanks to the shallow inclined ramp
- Rollers with integrated side guides
- Possible to fit to the cable drum diameter

Suitable for

- Large and small cable drums
- Width 530 mm, 200 kg carrying capacity
- Width 670 mm, 250 kg carrying capacity

Item	Dimension mm	Width mm	Part No.
Standard	530 x 570 x 90	530	52055383
Wide	670 x 605 x 95	670	52055384
Accessory		Part No.	
Easy Roller replacement roller, standard			52055383ER
Easy Roller replacement roller, wide			52055384ER



Cable drum uncoilers Easy Roller Plus



- ▶ Reduced incline on the loading ramp allows simple rewinding of the cable drum
- ▶ Handles for easy positioning and carrying
- **▶** Ball-bearing mounted rollers
- ▶ U-sections for fixing the unwinding rails

Additional information

 Cable drum unwinders consisting of 2 cable drum unwinding rails and one spacer rail

Item	Dimensions mm	Weight kg	Part No.
Cable drum uncoiler Easy Roller Plus S	950 x 145 x 110	33.5	52055401
Cable drum uncoiler Easy Roller Plus L	1050 x 145 x 110	35.5	52055402
Cable drum uncoiler Easy Roller Plus ALS	950 x 145 x 110	19.5	52055403

Rope for cable puller 6800-22 CE



- Breaking strength approx. 14.2 t
- Rope diameter 22 mm
- Rope on rope stand

Item	Part No.
Rope for cable puller 6800-22 CE, 91 m	50341367
Rope for cable puller 6800-22 CE, 182 m	50341375
Rope for cable puller 6800-22 CE, 365 m	50341383
Rope stand for ropes 91 m and 182 m	50343629

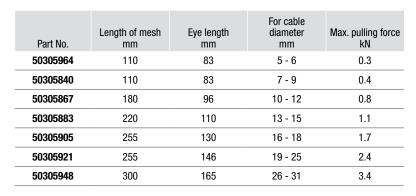
Pulling grips Junior, closed

Characteristics

- Single weave, galvanized steel mesh with flexible pulling eyelet

Suitable for

- The pulling-in of small diameter cables
- For manual pulling of feed lines in pipes and cable ducts



T-Basket type pulling grips, closed

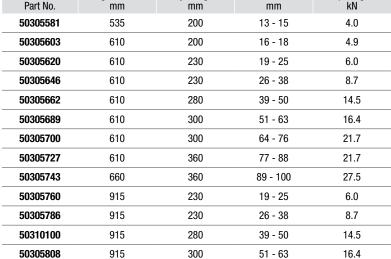
Characteristics

Double weave galvanized steel mesh with flexible pulling eyelet

Suitable for

· Medium-weight pulls in pipes and cable ducts

Length of mesh



Eye length

For cable

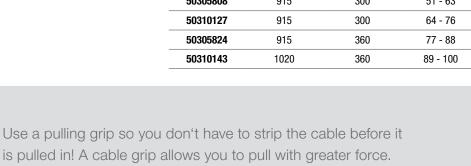
diameter

Max. pulling force

21.7

21.7

27.5



This prevents tapering of the cross-section.





Pulling grip set, closed



Characteristics

 Set of the most important pulling grips for the most frequently required pulling operations

Part No.	Diameter mm
50307584	7 - 31
50314823	19 - 50
50314831	51 - 76
50314840	19 - 76

Pulling grip, open



Characteristics

- Single weave, galvanised steel netting mesh with bar closure
- Offset flexible eyelet

Suitable for

- Easy and straight pulls when the cable end is not available

Length of mesh mm	Eye length mm	For cable diameter mm	Max. pulling force kN	
150	175	13 - 15	1.3	
200	175	16 - 18	1.6	
250	175	19 - 25	1.9	
300	200	26 - 31	3.0	
350	200	32 - 38	4.0	
380	230	39 - 44	5.1	
400	250	45 - 50	6.7	
480	250	51 - 63	8.0	
500	250	64 - 76	9.7	
530	300	77 - 88	10.6	
600	300	89 - 100	10.6	
	mm 150 200 250 300 350 380 400 480 500 530	mm mm 150 175 200 175 200 175 250 175 300 200 350 200 380 230 400 250 480 250 500 250 530 300	Length of mesh mm Eye length mm diameter mm 150 175 13 - 15 200 175 16 - 18 250 175 19 - 25 300 200 26 - 31 350 200 32 - 38 380 230 39 - 44 400 250 45 - 50 480 250 51 - 63 500 250 64 - 76 530 300 77 - 88	



Cable installation lubricant







Characteristics

- Reduces friction by up to 80 %
- Biodegradable
- Harmless to the user

Suitable for

- Electric/telephone cables in pipes 16 25 mm dia.
- Large cable diameters

Item	Part No.
Cable lubricant gel in tube 0.25 kg	52055379
Lubricant foam bottle 1.00 kg	52055380
Cable lubricant liquid for optical fibres and power cables, canister 5 kg	52055381
Cable lubricant liquid for optical fibres and power cables, canister 10 kg	52055382

Lubricant spray



Characteristics

- Reduces friction by up to 80 %
- Biodegradable
- Silicon-free
- Not flammable

Suitable for

• Electric/telephone cables in pipes 16 - 25 mm dia.

Item	Part No.
Lubricant foam bottle 400 ml	52055378







Technical Appendix



Alphanumerical Index	i-19
Alphabetical index	i-17
Standards an norms	i-16
Hydraulic punches	i-15
Holemaking systems	i-1
Metric cable glands EN50262	i-1
Cable pulling technology - Typical applications	i-14
General technical inormation	i-14
(QR code for the checklist for the production of cable lugs and connectors)	i-13
The perfect connection	
Customised cable lugs and connectors	i-1:
Assembly instruction for screw connectors	i-1:
General notes	i-1:
Assembly instructions for sleeves for type VHR and VHD compacted conductors	i-1
Processing instructions for connecting materials Assembly instructions for cable lugs and connectors	i-1 0 i-10
Mechanical properties	i-!
Electrical properties	j-!
Material properties	i-
Special properties of connecting materials	j-:
Assignment of cables and conductors	i-
Marking of conductors and cables according to European harmonised standard	i-
Markings of conductors and cables according to VDE (Germany)	j-
Widely used names for conductors and cables	i-
Legend of pictograms used for test marks	j-:
Legend of pictograms used for connecting materials	i-
Legend of pictograms used for type of cable	i-s
Legend of pictograms used for crimp profiles	i-t
Legends of the different pictograms	i-:





Technical notes on the various crimping types

	Crimping	Designation
	Hexagonal crimping	for crimping tubular copper cable lugs and connectors "standard type", tubular cable lugs for switchgear connections, compression cable lugs and connectors to DIN 46235/DIN 46267, aluminum cable lugs and connectors
\odot	Indent crimping	for crimping tubular copper cable lugs and connectors "standard type", tubular cable lugs for switchgear connections, solderless terminals to DIN 46234 and pin cable lugs to DIN 46230, insulated solderless terminals, tubular cable lugs and connectors for fine stranded conductors, nickel tubular cable lugs and connectors, stainless steel tubular cable lugs and connectors
\bigcirc	Oval crimping	for crimping tubular double compression cable lugs, C-clamps, insulated tubular cable lugs and connectors, insulated pin cable lugs and compression joints to DIN 48217, insulated cable connectors
\sim	Indent crimping	for crimping copper tubular cable lugs and connectors "standard type", tubular cable lugs for switchgear connections, tubular cable lugs and connectors for fine stranded conductors
\sim	Double indent crimping	for crimping copper tubular cable lugs and connectors "standard type", tubular cable lugs for switchgear connections, nickel tubular cable lugs and connectors, stainless steel tubular cable lugs and connectors
	Trapezoid crimping	for crimping cable end-sleeves and twin cable end-sleeves
\otimes	Indent crimping	for crimping cable end-sleeves and twin cable end-sleeves
\Diamond	Square crimping	for crimping cable end-sleeves and twin cable end-sleeves
\odot	Roll crimping	for crimping non-insulated receptacles and cable end-sleeves DIN 46228, part 2
	Round crimping	for crimping cable end-sleeves and twin cable end-sleeves
	nound or imping	of 90° and 120° sector-shaped conductors
\square	Quad-point indent crimping	for crimping copper tubular cable lugs and connectors "standard type", tubular cable lugs for switchgear connections, tubular cable lugs and connectors for fine stranded conductors
\(\)	Four point crimping	for crimping turned pin receptacles and pin connectors
\square	Special trapezoid crimping	particularly for crimping cable end-sleeves with compacted fine stranded conductors

i-2



Legend of pictograms used for type of conductors

Material conductor		or	Type of conductors
Cu	Al	Cu and Al	
Cu	AI		Solid conductor (class 1 according to EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy
Cu	AI		Multi-stranded conductor (class 2 according to EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy
Cu	AI		Fine stranded conductor (class 5 according to EN 60228) made of bright or coated soft-annealed copper
Cu	AI		Superfine stranded conductor (class 6 according to EN 60228) made of bright or coated soft-annealed copper
	AI		Solid sector shaped conductor 120 ° (class 1 according to EN 60228) made of aluminium or aluminium alloy
	AI		Solid sector shaped conductor 90 ° (class 1 according to EN 60228) made of aluminium or aluminium alloy
Cu	AI		Multi-stranded sector shaped conductor 120 ° (class 2 according to EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy
Cu	AI		Multi-stranded sector shaped conductor 90 ° (class 2 according to EN 60228) made of bright or coated soft-annealed copper, aluminium or aluminium alloy
Cu	AI	8888	Copper conductor for overhead lines (DIN 48201-1) and aluminium or aluminium alloy conductors (DIN EN 50182)

i

Please consider the material of the conductor (Cu, Al). This information is shown in the pictogram.



Legend of pictograms used for connecting materials

Connecting material	Designation
	Tubular cable lugs and connectors – Cu, standard type
	Insulated cable lugs and connectors, standard type
	Tubular cable lugs and connectors for fine stranded conductors
	Tubular cable lugs and connectors for solid conductors
VA	Tubular cable lugs and connectors – stainless steel
Ni	Tubular cable lugs and connectors – Ni
DIN	Compression cable lugs and connectors to DIN - Cu
	Copper compression cable lugs, double crimp (double cable entry)
	Solderless terminls, connectors and pin terminals to DIN - Cu
	Insulated solderless terminals
	Sleeves for compacted conductors and sector shaped conductors - Cu
Al	Compression cable lugs and connectors to DIN - Al
Al/Cu	Compression cable lugs and connectors - Al/Cu
	C-Clamps
	H-Clamps
	Cable end-sleeves
	Twin cable end-sleeves
	Insulated cable connections
	Non-insulated receptacles

i-4



Legend of pictograms used for test marks

Test mark

Content



GS (safety tested):

The GS marking of our crimping and cutting tools stands for the highest possible safety and quality level.



UL (Underwriters Laboratory):

The electrical connection material and the crimping tools are certified according to UL/CSA standards.



CSA (Canadian Standard Association):

Electrical connection material and tooling certified to UL/CSA standards..



VDE (Verband der Elektrotechnik e.V.):

Tests and certifies the electrical safety of tools, chargers and tools for live workung.



IEC Certificates:

The unique safety level of our products has been proven in the area of electrical connection material with the internationally recognized test standard IEC 61238-1 and for battery tools with the internationally recognized standard IEC 60 45-1.



DNV Certificates:

The world's largest consulting company for onshore and offshore systems



CE Sign

The product has been tested by the manufacturer and meets all EU-wide requirements for safety, health protection and environmental protection.



Markings of conductors and cables according to VDE (Germany)

Notes on wire names

Some of the conductors and cables mentioned below are offered as solid and stranded conductors depending on the cross-section. Please note this when processing.

In the list, a possible protective conductor (marking -J/-0) is not taken into account, as it is not relevant for the assignment and processing..

- Conductor class 1 = round conductor solid,
- Conductor class 2 = round conductor stranded,
- Conductor class 5 = round conductor fine-stranded,
- Conductor class 6 = round conductor superfine-stranded

		Conductor class	Connecting material							
Name of wire	Material conductor	VDE 0295 / EN 60228				DIN		AI	Al/Cu	
2YSLCY	Copper	5	• *	•		•	•			•
HSL(C)H-OZ/JZ	Copper	5	• *	•		•	•			•
NOV(C)LI	Copper	1			•	•				
N2X(C)H	Соррег	2	•			•	•			
NAYCWY	Aluminium	1						•	•	
NATOWT	Alullilliulli	2						•	•	
NAYY	Aluminium	1						•	•	
INATT	Alullilliulli	2						•	•	
NHX(C)H E30/E90	Copper	1			•	•				
1411A(O)11 E30/E90	ООРРСІ	2	•			•	•			
NHXMH	Copper	1			•	•				
ΙΝΠΛΙΝΙΠ	Соррег	2	•			•	•			
NSGAFÖU	Copper	5	• *	•		•	•			•
NSSHÖU	Copper	5	• *	•		•	•			•
NYCWY	Copper	1			•	•				
INT GVV T	Соррег	2	•			•	•			
NYCY	Copper	1			•	•				
NYM	Copper	1			•	•				
INTIVI	Сорреі	2	•			•	•			
NYY	Copper	1			•	•				
INII	ООРРОІ	2	•			•	•			
Y(S)SLY-OZ/JZ/OB/JB	Copper	5	• *	•		•	•			•

Names of conductors and cables for Austria: The names correspond to the German names, but without the indicated "N".

Sector shaped conductors must be pre-rounded!

* Please note the correct choice of tools or the use of the correct crimping dies when processing fine-stranded conductors (conductor class 5)! The products offered are designed for the processing of stranded round conductors!

i-6



Marking of conductors and cables according to European harmonised standard

		Conductor class	Connecting material							
Name of wire	Material conductor	VDE 0295 / EN 60228				DIN		AI	Al/Cu	
H01N2-D	Copper	5	• *	•		•	•			•
חטוואב-ט	Coppei	6		•		•	•			•
H03VV-F	Copper	5	• *	•		•	•			•
H05BQ-F	Copper	5	• *	•		•	•			•
H05RN-F	Copper	5	• *	•		•	•			•
H05RR-F	Copper	5	• *	•		•	•			•
H05V-K	Copper	5	• *	•		•	•			•
H05V-U	Copper	1			•	•				
H05VV-F	Copper	5	• *	•		•	•			•
H07BQ-F	Copper	5	• *	•		•	•			•
H07RN-F	Copper	5	• *	•		•	•			•
H07V-K	Copper	5	• *	•		•	•			•
H07V-R	Copper	2	•			•	•			
H07V-U	Copper	1			•	•				
HO1N2-D	Copper	5	• *	•		•	•			•
NYFAZ	Copper	5	• *	•		•	•			•

i

^{*} Please note the correct choice of tools or the use of the correct crimping dies when processing fine-stranded conductors (conductor class 5)! The products offered are designed for the processing of stranded round conductors!

Assignment of cables and conductors

a) Copper

Our copper cable lugs and connectors are suitable for connecting copper cables according to DIN EN 60228 and copper conductors DIN 48201 part 1. Please use the table below.

b) Aluminium

Our aluminium cable lugs and connectors are suitable for connecting aluminium cables according to DIN EN 60228 and aluminium conductors according to DIN EN 50182. Please use the table below.



Sector-shaped conductors must be rounded with pre-rounding tools before assembly.

Cross-section compatibility chart for cable lugs and connectors for copper and aluminum conductors

■ With the help of this table you can determine the cross-section of your conductor in case of doubt. The minimum diameter of the conductor is for the classes 1 and 2 (not compacted). For classes 5 and 6 are defined by the conductance rather than the minimum diameter. Therefore, no specification can be made regarding the minimum diameter.

Nominal cross-section mm ²	Type of conductor acc. to DIN EN 60228 / IEC 60228								
	Copper cond	uctors			Aluminium co	onductors			
	Round conductor solid, class 1	Round conductor multi-stran- ded, class 2	Round conduc stranded comp	tor multi- pacted, class 2	Round conductor fine and superfine, class 5 and class 6	Round conductor solid, class 1		Round conductor multi- stranded compacted, class 2	
	Max. conductor dia. mm	Max. conductor dia. mm	Min. conductor dia. mm	Max. conductor dia. mm	Max. conductor dia. mm	Min. conductor dia. mm	Max. conductor dia. mm	Min. conductor dia. mm	Max. conductor dia. mm
0.5	0.9	1.1	_	_	1.1	_	-	_	_
0.75	1	1.2	_	_	1.3	_	-	_	_
1	1.2	1.4	_	_	1.5	_	-	_	_
1.5	1.5	1.7	-	-	1.8	-	-	_	_
2.5	1.9	2.2	-	-	2.4	-	-	_	_
4	2.4	2.7	-	-	3	-	_	_	_
6	2.9	3.3	-	-	3.9	_	_	_	_
10	3.7	4.2	3.6	4	5.1	3.4	3.7	3.6	4
16	4.6	5.3	4.6	5.2	6.3	4.1	4.6	4.6	5.2
25	5.7	6.6	5.6	6.5	7.8	5.2	5.7	5.6	6.5
35	6.7	7.9	6.6	7.5	9.2	6.1	6.7	6.6	7.5
50	7.8	9.1	7.7	8.6	11	7.2	7.8	7.7	8.6
70	9.4	11	9.3	10.2	13.1	8.7	9.4	9.3	10.2
95	11	12.9	11	12	15.1	10.3	11	11	12
120	12.4	14.5	12.3	13.5	17	11.6	12.4	12.3	13.5
150	13.8	16.2	13.7	15	19	12.9	13.8	13.7	15
185	15.4	18	15.3	16.8	21	14.5	15.4	15.3	16.8
240	17.6	20.6	17.6	19.2	24	16.7	17.6	17.6	19.2
300	19.8	23.1	19.7	21.6	27	18.8	19.8	19.7	21.6
400	22.2	26.1	22.3	24.6	31	21.2	22.2	22.3	24.6
500	-	29.2	25.3	27.6	35	24	25.1	25.3	27.6
630	-	33.2	28.7	32.5	39	27.3	28.4	28.7	32.5
800	-	37.6	_	-	_	30.9	32.1	-	_
1000	-	42.2	-	_	-	34.8	36	_	_



Material properties

Information on materials used for copper and aluminum cable lugs and connectors

■ Cable end-sleeves to DIN 46228 part 1 and part 4 are manufactured from Cu to DIN EN 13600.from Cu to DIN EN 13600.

Electrical properties

Our cable connections can be loaded with the currents defined in VDE 0298. For higher current loads, we ask for consultation. The current values of VDE 0298 can be found in the table below.

	Group 1		Group 2		Group 3		
	tors laid in conduits		Multi-core conductors, e. conduit wires, lead-sheat webbed conductors, flexi	hed conductors, flat	Overhead single-core conductors with clearance of at least their diameter		
Nominal	Cu	Al	Cu	Al	Cu	Al	
cross-section mm ²	(A)	(A)	(A)	(A)	(A)	(A)	
0.75	_	_	12	-	15	_	
1	11	_	15	-	19	-	
1.5	15	_	18	-	24	_	
2.5	20	_	26	-	32	-	
4	25	_	34	-	42	-	
6	33	_	44	-	54	_	
10	45	_	61	48	73	57	
16	61	48	82	64	98	77	
25	83	65	108	85	129	103	
35	103	81	135	105	158	124	
50	132	103	168	132	198	155	
70	165	_	207	163	245	193	
95	197	_	250	197	292	230	
120	235	_	292	230	344	268	
150	-	-	335	263	391	310	
185	-	-	383	301	448	353	
240	-	-	453	357	528	414	
300	-	_	504	409	608	479	
400	-	-	_	-	726	569	
500	-	-	_	-	830	649	

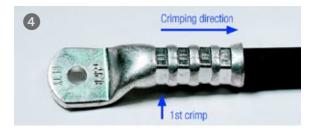
Values applicable only at an ambient temperature of 30 °C

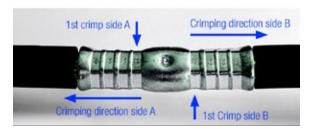
Mechanical properties

■ The connections made with our tools in accordance with the processing instructions have sufficient tensile strength in accordance with the standard applicable to the connection (depending on the material used), i.e. IEC 61238-1, DIN EN 60999, DIN EN 60352-2, UL486A-486B, DNV, UL486F.

Please note, that crimping solderless cable connections using tools from other manufactures does not guarantee a proper connection. We recommend only the use of solderless cable connections from **KIBUKE** using **KIBUKE** tools.







Assembly instructions for cable lugs and connectors

- 1 Strip conductor in line with insertion depth (+ 10 % because of length change of crimp sleeve).
- 2 The conductor ends must be cleaned mechanically prior to assembly.
- 3 Insert conductor fully into cable lug or connector.
- Observing the crimping direction, crimp the cable lug or connector using the appropriate tools. The crimping direction for cable lug and connector is indicated in the diagram opposite.
- 5 Remove excess compound emerging from aluminum cable lugs and connectors.

We recommend the following number of crimps for individual cross sections:

	Tubular cable lugs			Cable lugs DIN 46235		Al-Cable lugs		
Cross-section in mm ²	5 mm Crimping die	width Crimping dies (quad-point indent crimping **)	EKM60ID	5 mm Crimping die	width Crimping dies	7 mm Crimping die	width Crimping dies	EKM60ID
6****	1			2				
10****	1		1	2				
16****	1	1	1	2	1	4	2	
25	2	1	1	2	1	4	2	
35	2	1	1	2	1	5	2	
50	2	1	1	3	1	5	2	2
70	2	1	1	3	1	6	3	3
95	2	1	1	4	2	6	3	3
120	2	1	1	4	2	6	3	3
150	2	1	1	4	2	6	3	3
185	2	1*	1	4	2	6	3	3
240	4	2	2	5	2	8	3	3
300	4	2		5	2	8	3	
400	5	2			3		4	
500					3		4	
625					3			
800					3			
1000					4 (20 mm) 2 (40 mm) ***			

^{*} when using quad-point indent crimping (HK60VP, EK60VP/FT etc.) Number of crimping operations: 2

^{****} When using crimping dies of the series 50, 2 crimps are required!



When crimping F-series cable lugs and solderless terminals according to DIN 46234 by using indent crimping dies, for each cross section only one crimp is necessary.

^{**} Note the cross section of the tool!

^{***} Crimp with crimping dies of Series 100



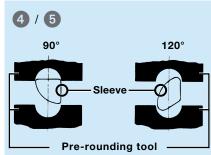
Assembly instructions for sleeves for type VHR and VHD compacted conductors

We recommend the use of additional VHR and VHD sleeves for compacted round conductors to ensure that the tubular cable lugs and connectors fit accurately.

For sector-shaped conductors, we recommend the use of additional sector sleeves VHR 3 or VHR 4 and VHD 3 or VHD 4 with Cu cable lugs and connectors to prevent the conductor recoil. Sleeves need to be rounded with pre-rounding tools.

Please note:

- Ensure that the conductor is deformed as little as possible when cutting to length.
- Strip the conductor insulation in line with the insertion length.
- 3 Slip the sleeve up to the front cut edge of the conductor.
- Place the conductor and sleeve in the pre-rounding tool as per the diagram.
- Crimp the sleeve
 - a) Crimping operation as per the diagram (1st pre-crimp)
 - b) Crimp turned through 90° (2nd pre-crimp)
 - c) Crimp turned through 30° (finish-crimp)
 - d) Crimp turned through 30° as required (finish-crimp)



Instructions for fitting reduction sleeves

Only wide hydraulic crimping dies to be used when crimping more than two cross-sections.

Assembly instructions for full tension Al/steel connectors to DIN 48085, part 3

The connectors consist of an Al sleeve (E-Al 99.5) and a soft steel sleeve (St 52).

- Straighten cable ends, remove dirt and any oxide layer.
- Slip the Al-compression joint onto one of the cable ends.
- Tie off the cable end and strip the Al cores.
- Tie off Al and steel cores.
- Slip on the steel sleeve and crimp through according to the crimping marks.
- Slide the Al sleeve centrally over the crimped steel sleeve and crimp according to the crimping marks
 - Caution: Do not crimp in the centre, in the area of the steel connector. Do not crimp in the area of the cones.
- Remove excess compound after crimping the connector.
 - Warning: The compound must not be removed, either fully or partially, prior to assembly.

The tool dies can be assigned either by colour-coding, or preferably based on the code assigned to the cross-section. The dies for the steel sleeve have a black finish, those for the Al sleeve are zinc-coated.

General information:

The crimping process has to be continued until the dies are completely closed, otherwise a proper crimp cannot be quaranteed.



General notes

Crimping dies:

The crimping dies of the series 18 as well as the series 25 correspond in the external dimensions of DIN 48083 part 1 or part 3. For all interchangeable dies, for mechanical tools as well as hydraulic tools, the series D (= for DIN cable lugs and connectors 46235 and 46267) and the series A (aluminium cable lugs and connectors as well as aluminium/copper cable lugs and connectors) the hexagonal dimensions are of DIN 48083 part 4.

Surfaces:

All mentioned dies are supplied "chrome-yellow" or "blue coated" for copper and "galvanized" for aluminum and nickel.

Testing of our copper and aluminium connecting material was carried out with the following maximum torque on the connecting bolt.

Size of thread	Tightening torque (Nm)	Size of thread	Torque (Nm)
M 5	5	M 12	75
M 6	9	M 14	120
M 7	15	M 16	190
M 8	22	M 20	380
M 10	44		

Assembly instruction for screw connectors

Because they are detachable connecting elements, screw connectors are used preferably for heat-shrunk or cast resin joints. However, they also can be used in all other types of cable joints. Four-screw connectors are especially suitable for multi-stranded conductors, since the longer connector length increases the transverse conductance of the individual wires and the contact resistance decreases accordingly. In addition, higher pull-out values are achieved. Barrier type four-screw connector clamps are suitable for cables with mass-impregnated paper insulation.

In an electrolyte-free, e.g. dry environment, aluminum as well as copper conductors can be combined. This also applies in combination with heat-shrunk hoses. If conductors of different materials (e.g. Cu and Al cables) have to be connected, a barrier type connector is recommended.

While identical types of cables (e.g. NAYY-NAVY) can be used with non-barrier types of connectors for unequal cables (e.g. NAYY-NAKBA), plastic or earth cables, the use of connectors with barrier as an oil stop is recommended.

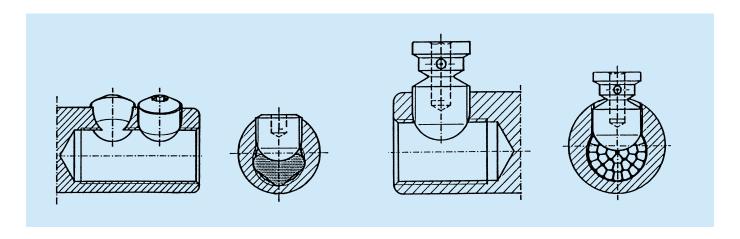
Insertion depth of conductors is controlled either by the conductor stop at the barrier, or by inspection hole on screw connectors without barrier.

In addition to the conventional screw connectors, we offer screw connectors with shear-off heads. The benefit of this design is the defined tightening torque, which is pre-determined by the maximum transferable torque at the rated breaking point. This contact force defined by the manufacturer guarantee optimum electrical and mechanical properties (DIN EN 61238). No torque wrenches are required for assembly of this connector type.

With standard screw connectors, the required contact pressures are reached at approx. 80% of the specified torque. Over-crimping beyond the torque specified for the connector must be avoided.

The cross-grooves on the conductor channels allow high tensile forces to be transmitted. The tensile forces of our screw connectors correspond to compression joints to DIN 46267, part 2, with identical cross section.

The screws are treated with a high-gliding, molybdenum sulphide-based lubricant. This guarantees adequate contact pressure with a relatively low tightening torque.





The perfect connection

Klauke is a manufacturer of cable lugs and connectors. For special applications or requirements, the standardised cable lugs no longer satisfy certain users and specific solutions tailored to the application concerned are required. Upon request, we develop and produce cable lugs and connectors specifically for you.



Cable pulling technology – Typical applications

Туре	Tape dia.	Pipe dia .	Thrust	Min. curve radius	Breaking strength	Tensile force with start/ end sleeve	Recommended length
	<u></u>	→	→		← \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	← \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	─ / ─
	mm	mm	kg	mm	kg	kg	m
Fibreglass							
Speedy Spinner	3	16 - 32	+++	160	400	110	20-30
	4,5	40 - 60	+++	310	1200	>200	40-80
	6	50 - 80	+++	400	2000	>300	40-110
Smart Butler	7,5	63 - 100	+++	500	3000	>400	40-120
	9	63 - 125	+++	620	4500	>500	40-150
	11	63 - 150	+++	770	7500	>700	150-300
Polyester Polyester							
Dura Spinner	3	16 - 40	+++	50	300	100	20-30
Polyester Butler	6	40 - 60	+++	160	600	300	50
Nylon, Perlon®	4	16 - 25	+	80	280	120	10-20
Steel	4	16 - 25	+	100	900	115	10-20
for trade for indu	ustry						



Metric cable glands for electrical installation EN 50262

The new European standard EN 50262 defines conditions for all manufacturers of electrical appliance housings and all electrical installation.

It's scope includes cables and conductors for control cabinets, distributor housings, junction boxes, domestic connections, installation boxes, equipment housings etc.

EN 50262 replaces the Pg thread (steel tank pipe thread) used for all housing designs for decades with a metric thread. Sizes Pg 7 to Pg 48 are being replaced by ISO M 6 to M75.

Greenlee holemaking tools in ISO sizes acc. to EN 50262

ISO sizes	mm	Slug-Buster® punch	Slug-Splitter® punch	HSS hole saws	Step bits
12	12.5	✓			
16	16.5	V	✓		✓
20	20.5	✓	✓	✓	✓
25	25.5	V	✓	✓	✓
32	32.5	V	✓		✓
40	40.5	V	✓		✓
50	50.5	V	✓	✓	
63	63.5	✓	<i>'</i>	✓	

Holemaking systems

Round punch	Operation	Capacity	Hole size
Slug-Buster®	Manual, Hydraulic punches	max. 3.0 mm in St 37	12.5 to 64.0 mm
Slug-Splitter®	Hydraulic punches	max. 3.5 mm in V2A	15.2 to 64.0 mm
Speed Punch™	Hydraulic punches	3.5 mm in St 37	16.2 to 64.0 mm
Standard	Manual, Hydraulic punches	max. 3.0 mm in St 37	66.7 to 144.1 mm
Special shaped punches	Operation	Capacity	Hole size
Special shaped punches	Manual, Hydraulic punches	max. 3.0 mm in St 37 bzw. 1.5 mm in V2A	See data for the individual punches

Hydraulic punches

			Description
Ì	LS 50 FLEX Battery powered hydraulic punching tool	LS 50 FLEX	 with micro-processor control 60 kN punching force punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size
	Hydraulic punch Quick Draw™ 7804E	50342916	 ideal for fast, frontal punching 80 kN punching force punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size
	Hydraulic punch Quick Draw 90™ 7904E	50342991	 rectangular cylinder head rotatable around 180° maximum flexibility in narrow working spaces 80 kN punching force punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size
\$	Hydraulic punch with hand pump	52084920	 compact design of punch, pump and cylinder 110 kN punching force punches up to 3.5 mm St 37 and up to 3.5 mm V2A, depending on hole size
	Hydraulic punch with foot pump	52084941	 foot pump leaves both hands free for operating the punch 110 kN punching force punches up to 3.5 mm St 37 and up to 3.5 mm V2A, depending on hole size
	Hand hydraulic punch Flex Draw	52033843	 rectangular cylinder head rotatable around 180° maximum flexibility in narrow working spaces 80 kN punching force punches up to 3.0 mm St 37 and up to 3.5 mm V2A, depending on hole size

Standards for cabling

A number of standardisation committees that define the technical features of cabling systems have been in existence since 1993. These directives must be observed when planning and setting up networks.

Full volumes can be obtained from specialist bookshops.

International standards

International Standards are published by the ISO (International Standards Organisation). In Europe these international directives are used for information purposes.

ISO/IEC IS 11801 Description of the performance requirements for

a general cabling system

IEC 1156 Multi-core and symmetrical conductors for digital

message transmission

IEC 1156-1 Basic specification

IEC 1156-2 Framework specification for service cables

IEC1156-3 Framework specification for patch and

equipment connecting cables

IEC 1156-4 Framework specification for building connecting

and rising cables

European standards

In collaboration with national standard institutes, the European Committee for Electrical Standardisation CENELEC (Comite Europeen de Normalisation Electrotechnique) has published European standards that are based on the international ISO/IEC 11801 and hence normative for Europe.

EN 50173 Description of the performance requirements for

a general cabling system (EN 50173 also refers to

HD 608 and also EN 55022)

608 General specification for symmetrical conductors

for digital message transmission

EN 50167 Framework specification for service cables

EN 50168

Framework specification for patch and equipment

connecting cables

EN 50169 Framework specification for building connection

and rising cablesl

EN 55022 Framework specification for electromagnetic

compatibility (EMC). This specification contains threshold values and measuring procedures for radio interference of data processing equipment.

American standards

The American standards are published by the EINTIA (Electronic Industries Association / Telecommunication Industries Association) an American Joint Venture.

TSB 36 Framework specification for symmetrical data

cables (100 Ohm, unsheathed)

TSB 40 Framework specification for passive components

(100 0hm, unsheathed)

EIA/TIA 568

Framework specification for cabling systems



Keyword	Page
10.8 V - base	2.30
18 V - base	2.34
Α	
Accessories for hydraulic tools	7.11
Accessory	9.18
Alphabetical index	i-16
Alphanumerical Index	i-17
Aluminium compression cable lugs acc. to DIN 46329 and similar version	ons1.82
Aluminium compression cable lugs and connectors acc. to DIN	1.80
Aluminium compression joints acc. to DIN 46267 part 2 and similar vers	
Aluminium compression joints, full tension	1.89
Aluminium reduction compression joints	1.87
Aluminium/copper compression cable lugs and connectors	1.92
Aluminium/copper compression cable lugs	1.94
Aluminium/copper compression joints	1.97
Angle compression cable lugs	1.48
Angle tubular cable lugs	1.11
Assembly instructions for cable lugs and connectors	i-10
Assembly instructions for sleeves for type VHR and VHD compacted conducto	
Assignment of cables and conductors	i-8
Assortment boxes with cable end-sleeves	1.167
Assortment boxes with insulated cable-end sleeves	1.168
Assortment boxes with insulated terminals	1.173
Assortment boxes with tubular and compression cable lugs	1.171
	3, 8.22
Assortments	1.160
В	
Basic tools	8.27
Battery powered crimping tool	2.29
Battery powered cutting tools	3.10
Battery powered punching tool LS 50 FLEX	5.27
Battery powered punching tool LS100 FLEX	5.28
Battery powered universal tools	6.11
Bi-metallic washer	1.100
Bits and step bits	5.48
Bits, holders and adapters	8.20
Bus bar tool centre	6.15
C	
C- and H-shaped clamps - copper	1.107
Cable connections, insulated and non insulated	1.136
Cable end-sleeves DIN 46228, part 1 and part 2	1.122
Cable end-sleeves	1.120
Cable puller with accessory	9.15
Cable puller	9.14
Cable pulling systems	9.8
Cable pulling technology - Typical applications	i-13
Clamps and screw connectors	1.102
Compact tab connectors, high resistant aluminium alloy	1.115
Compression cable lugs acc. to DIN 46235	1.46
Compression cable lugs, special type	1.52
Compression joints acc. to DIN 46267, part 1 and similar versions	1.54
Connectors	1.15
Copper compression cable lugs and connectors acc. to DIN	1.44
Copper terminals, connectors and pin terminals acc. to DIN	1.62
Copper tubular cable lugs and connectors	1.4
Crimping dies	2.80

Keyword	Page
D	
DIN rail cutting tools	3.49
·	
E	
Easy Roller (cable drum unwinder)	9.14
Easy Roller Plus	9.15
Electrical properties	i-9
Electro mechanical crimping tool	6.6
Electromechanical crimping tool for cable end-sleeves and twin cable end-s	leeves 6.5
Electromechanical cutting tool	6.8
Electromechanical universal tool	6.4
Electronic / precision mechanic`s tools	8.19
F	
Fibreglass cable pulling rods	9.7
Fish tapes in winder case	9.10
Fish tapes/pulling rods	9.6
Flexible connectors	1.154
Flex-O-Twist speed flex leader	9.7
G	
General notes	i-11
General technical inormation	i-13
Н	
Hand-operated hydraulic crimping tools	2.55
Hand-operated hydraulic cutting tools	3.39
Hand-operated hydraulic universal tool, hydraulic universal head	6.10
Hole saws	5.40
Holemaking systems	i-14
HSS bi-metal hole saws	5.42
Hydraulic crimping heads and crimping systems	2.67
Hydraulic crimping heads	2.68
Hydraulic crimping systems	2.78
Hydraulic cutting heads and cutting systems	3.41
Hydraulic cutting heads	3.42
Hydraulic cutting systems	3.47
Hydraulic pumps	7.5
Hydraulic punches	i-14
I Insulated cable end-sleeves for short circuit resistant conductors	1.130
Insulated cable-end sleeves acc. to DIN 46228, part 4 and similar ve	
Insulated cable-end sleeves, strips and tapes	1.132
Insulated solderless terminals for meter connections	1.70
Insulated solderless terminals	1.66
Insulated terminals	1.138
Insulated tubular cable lugs und connectors	1.19
Insulated twin cable-end sleeves	1.131
K KWSET Keyway punch	5.24
KWOLT Keyway pulicii	J.24
L	
L-BOXXes	1.180
Legend of pictograms used for connecting materials	i-4
Legend of pictograms used for crimp profiles	i-2
Legend of pictograms used for test marks	i-5
Logoria or protograms asca for tost marks	

Technical Appendix

Alphanumerical Index

Keyword	Pag
Legends of the different pictograms	i-2
M	
Marking of conductors and cables according to European harmonised	standard i-7
Markings of conductors and cables according to VDE (Germany)	i-6
Material properties	i-9
Measuring and marking	8.25
Mechanical and hydraulic punching tools	5.24
Mechanical crimping tools with interchangeable dies	2.22
Mechanical crimping tools	2.4, 2.6
Mechanical cutting tools	3.4
Mechanical properties	i-9
Metric cable glands EN50262	i-14
N	
Non insulated flat connectors	1.149
Wion	9.6
1,1011	0.0
P	
r Parallel groove clamps - copper	1.106
Perlon	9.6
Platform based on 10.8 V	3.11
	3.14
Platform based on 18 V	****
Pliers	8.6
Pocket boxes with cable end-sleeves	1.162
Pocket boxes with insulated cable end-sleeves	1.163
Polyester Butler	9.14
Polyester	9.6
Processing instructions for connecting materials	i-10
Pulling grips	9.16
Pulling grips, closed	9.16
Pulling grips, open	9.17
Pumps	7.4
Punched cable lugs - copper	1.104
Punching tools and sets	5.22
R	
Round and special shape punches	5.4
S	
Safety cutters	4.14
Screw connector for shielded copper wires	1.109
Screw connectors for street lighting - brass	1.109
Screw connectors with soldering hole - brass	1.105
Screw connectors, high-resistant aluminium alloy	1.110
Screwdrivers	8.10
Series 4	2.84
Series 13	2.91
Series 15	2.95
Series 22	2.93
Series 25	2.96
Series 50	2.82
Sleeves for compacted conductors and sector-shaped conductors	• • •
Slug Buster® punch sets	5.30
Slug Buster® punch systems	5.8
Slug Buster® punching tools and sets	5.35
Slug-Splitter® punch sets	5.34
Slug-Splitter® punch system for stainless steel	5.9

V	D
Keyword	Page
Solderless connectors acc. to DIN 46341, part 1	1.70
Solderless terminals acc. to DIN 46234	1.64
Solderless terminals, fork and pin type	1.68
Special cutting tools	3.48
Special properties of connecting materials	i-9
Special shape punches	5.13
Speed-Punch [™] punch sets	5.32
Speed-Punch [™] punch system	5.10
Standard punch systems	5.6
Standard tools and accessory	8.17
Standards an norms	i-15
Steel carrying cases / bags	1.175
Stripping tools for communication technology	8.39
Stripping tools	8.38
Т	
Tool cases	8.30
Tubular cable lugs and compression joints for solid conductors	1.22
Tubular cable lugs and connectors - nickel	1.40
Tubular cable lugs and connectors - nickel, stainless steel	1.36
Tubular cable lugs and connectors - stainless steel	1.38
Tubular cable lugs and connectors for fine stranded conductors	1.25
Tubular cable lugs for switchgear connections	1.10
Tubular cable lugs	1.6
V	
VDE tools	8.4
VDE-battery powered crimping and cutting tools	4.4
VDE-battery powered crimping tools	4.6
VDE-battery powered cutting tools	4.9
W	
Water pump pliers, fitting pliers	8.18
Widely used names for conductors and cables	i-6
Wire stripping tools	8.34, 8.35
Wiring duct cutter	3.50
With fibreglass tapes (Speedy Spinner)	9.9
With Polyester tapes (Dura Spinner and Flexi Spinner)	9.8



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
101R5	1.46	110R10	1.47	12R20	1.9	161R5	1.48
101R6	1.46	110R12	1.47	12R20MS	1.9	161R545	1.50
101R8	1.46	110R14	1.47	12SG10	1.10	161R6	1.48
020	1.141	110R16	1.47	12SG12	1.10	161R645	1.50
020V	1.142	110R20	1.47	12SG16	1.10	162010	1.64
02R5	1.46	111R10	1.47	130R	1.54	162025	1.64
02R6	1.46	111R12	1.47	131R	1.54	16203	1.64
02R8	1.46	111R14	1.47	132R	1.54	162035	1.64
1030	1.141	111R16	1.47	133R	1.54	16204	1.64
030V	1.142	111R20	1.47	134R	1.54	16205	1.64
03R10	1.46	112R12	1.47	135R	1.54	16206	1.64
03R12	1.46	112R14	1.47	136DP12	1.53	16208	1.64
03R6	1.46	112R16	1.47	136DP212	1.53	1620C3	1.68
03R8	1.46	112R20	1.47	136R	1.54	1620C35	1.68
104R10	1.46	1130	1.146	137DP12	1.53	1620C4	1.68
04R12	1.46	113R12	1.47	137DP212	1.53	1620C5	1.68
04R6	1.46	113R14	1.47	137R	1.54	162006	1.68
04R8	1.46	113R16	1.47	138DP12	1.53	1620K	1.70
050	1.141	113R20	1.47	138DP212	1.53	1620L	1.71
050V	1.142	114R14	1.47	138R	1.54	162R	1.16
05R10	1.46	114R16	1.47	139DP12	1.53	162R5	1.48
05R12	1.46	114R20	1.47	139DP212	1.53	162R545	1.50
05R14	1.46	1150	1.146	13R12	1.9	162R6	1.48
05R6	1.46	115R16	1.47	13R12MS	1.9	162R645	1.50
05R8	1.46	115R20	1.47	13R14	1.9	162R8	1.48
06R10	1.47	116R16	1.47	13R14MS	1.9	162R845	1.50
06R12	1.47	116R20	1.47	13R16	1.9	163010	1.64
06R14	1.47	117R16	1.47	13R16MS	1.9	163012	1.64
06R16	1.47	117R20	1.47	13R20	1.9	16303	1.64
106R8	1.47	118R16	1.47	13R20MS	1.9	163035	1.64
107R10	1.47	118R20	1.47	13SG10	1.10	16304	1.64
107R12	1.47	11R10	1.9	13SG12	1.10	16305	1.64
107R14	1.47	11R10MS	1.9	13SG16	1.10	16306	1.64
107R16	1.47	11R12	1.9	147D212	1.52	16308	1.64
107R8	1.47	11R12MS	1.9	148D212	1.52	1630C3	1.68
08R10	1.47	11R14	1.9	148R	1.16	1630C35	1.68
08R12	1.47	11R14MS	1.9	149D212	1.52	1630C4	1.68
08R14	1.47	11R16	1.9	149R	1.16	1630C5	1.68
108R16	1.47	11R16MS	1.9	14R12	1.9	1630C6	1.68
08R8	1.47	11R20	1.9	14R12MS	1.9	1630K	1.70
09R10	1.47	11R20MS	1.9	14R14	1.9	1630L	1.70
109R12	1.47	11SG10	1.10	14R14 14R14MS	1.9	163R	1.71
109R14	1.47	11SG12	1.10	14R16	1.9	163R10	1.48
09R16	1.47	11SG16	1.10	14R16MS	1.9	163R1045	1.50
09R20	1.47		1.54	14R20	1.9	163R12	1.48
0810	1.47	121R 122R	1.54	14R20MS	1.9	163R1245	1.40
OR10MS	1.9	123R	1.54	150D212	1.52	163R6	1.48
OR12	1.9	124R	1.54	150R	1.16	163R645	1.50
OR12MS	1.9	125R	1.54	151D212	1.52	163R8	1.48
OR14	1.9	126R	1.54	151R	1.16	163R845	1.50
OR14MS	1.9	127R	1.54	152D212	1.52	164R10	1.48
OR16	1.9	128R	1.54	152R	1.16	164R1045	1.50
OR16MS	1.9	129R	1.54	153R	1.16	164R12	1.48
0R20	1.9	12R10	1.9	154R	1.16	164R1245	1.50
OR2OMS	1.9	12R10MS	1.9	155R	1.16	164R6	1.48
OR8	1.9	12R12	1.9	156R	1.16	164R645	1.50
OR8MS	1.9	12R12MS	1.9	157R	1.16	164R8	1.48
0SG10	1.10	12R14	1.9	158R	1.16	164R845	1.50
0SG12	1.10	12R14MS	1.9	159R	1.16	165010	1.64
OSG6	1.10 1.10	12R16	1.9	160R	1.16	165012	1.64
10SG8		12R16MS	1.9	161R	1.16	16504	1.64

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
16505	1.64	165910	1.65	1696	1.128	172RM	1.127
16506	1.64	165912	1.65	1698	1.128	172R0	1.127
16508	1.64	165916	1.65	1690K	1.126	1730	1.149
1650C4	1.68	16598	1.65	169R10	1.49	1730AZ	1.149
1650C5	1.68	1659K	1.70	169R1045	1.51	17312	1.128
1650C6	1.68	1659L	1.71	169R12	1.49	17318	1.128
1650C8	1.68	165R10	1.48	169R1245	1.51	1738	1.128
1650K	1.70	165R1045	1.50	169R14	1.49	173B	1.127
1650L	1.71	165R12	1.48	169R1445	1.51	173BH	1.127
165210	1.64	165R1245	1.50	169R16	1.49	173BL	1.127
165212	1.64	165R14	1.48	169R1645	1.51	17410	1.128
16525	1.64	165R8	1.48	169R20	1.49	17412	1.128
16526	1.64	165R845	1.50	169R2045	1.51	17418	1.128
16528	1.64	166010	1.65	1706	1.128	174GR	1.127
1652C5	1.68	166012	1.65	1708	1.128	174GRH	1.127
1652C6	1.68	166016	1.65	170R10	1.49	174GRL	1.127
1652K	1.70	1660K	1.70	170R1045	1.51	1750	1.149
1652L	1.71	1660L	1.71	170R12	1.49	17512	1.128
165310	1.64	166112	1.65	170R1245	1.51	17518	1.128
165312	1.64	166116	1.65	170R14	1.49	175S	1.127
16535	1.64	166212	1.65	170R1445	1.51	175SL	1.127
16536	1.64	166216	1.65	170R16	1.49	17612	1.129
16538	1.64	1666	1.128	170R1645	1.51	17618	1.129
1653C6	1.68	1668	1.128	170R20	1.49	176E	1.127
1653K	1.70	166GR	1.126	170R2045	1.51	176EL	1.127
1653L	1.71	166GRL	1.126	170W	1.127	17712	1.129
165410	1.65	166R10	1.48	170WH	1.127	17718	1.129
165412	1.65	166R1045	1.50	170WK	1.127	177GR	1.127
165416	1.65	166R12	1.48	170WL	1.127	177GRL	1.127
16545	1.65	166R1245	1.50	1716	1.128	17816	1.129
16546	1.65	166R14	1.48	1718	1.128	17818	1.129
16548	1.65	166R1445	1.50	171G	1.127	17822	1.129
1654K	1.70	166R16	1.48	171GH	1.127	178BR	1.127
1654L	1.71	166R1645	1.50	171GK	1.127	178BRL	1.127
165510	1.65	166R8	1.48	171GL	1.127	179B	1.127
165512	1.65	166R845	1.50	171R10	1.49	179BL	1.127
165516	1.65	1676	1.128	171R1045	1.51	17R	1.15
16556	1.65	1678	1.128	171R12	1.49	1800	1.127
16558	1.65	167H	1.126	171R1245	1.51	181R	1.57
1655K	1.70	167HL	1.126	171R14	1.49	18201A	1.149
1655L	1.71	167R10	1.49	171R1445	1.51	18202	1.149
165610	1.65	167R1045	1.51	171R16	1.49	18203	1.149
165612	1.65	167R12	1.49	171R1645	1.51	18203AZ	1.149
165616	1.65	167R1245	1.51	171R20	1.49	18251	1.149
16566	1.65	167R14	1.49	171R2045	1.51	18251A	1.149
16568	1.65	167R16	1.49	1720	1.149	182R	1.57
1656K	1.70	167R1645	1.51	17210	1.128	1830	1.151
1656L	1.71	167R8	1.49	17212	1.128	18303	1.149
165710	1.65	167R845	1.51	17218	1.128	18303AZ	1.149
165712	1.65	1686	1.128	1726	1.128	183R	1.57
165716	1.65	1688	1.128	1728	1.128	184R	1.57
16576	1.65	168R10	1.49	172R12	1.49	185R	1.57
16578	1.65	168R1045	1.51	172R1245	1.51	186R	1.57
1657K	1.70	168R12	1.49	172R14	1.49	187R	1.57
1657L	1.71	168R1245	1.51	172R1445	1.51	188R	1.57
165810	1.65	168R14	1.49	172R16	1.49	189R	1.57
165812	1.65	168R1445	1.51	172R1645	1.51	18R	1.15
165816	1.65	168R16	1.49	172R20	1.49	190R	1.57
16588	1.65	168R1645	1.51	172RH	1.127	191R	1.57
1658K	1.70	168T	1.126	172RK	1.127	192R	1.57
1658L	1.71	168TL	1.126	172RL	1.127	193R	1.57
.3002	14/1	IUUIL	1.120	17 EILE	1.121	10011	1.01



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
19R	1.15	222R	1.85	268R10	1.82	2785	1.152
IR10	1.8	2230	1.151	268R10V	1.82	2790	1.152
R10MS	1.8	2235	1.151	268R12	1.82	27R	1.15
R12	1.8	223R	1.85	268R12V	1.82	284R16	1.88
R12MS	1.8	224R	1.85	268R16	1.82	285R25	1.88
R5	1.8	2250	1.151	268R16V	1.82	286R25	1.88
R5MS	1.8	225R	1.85	269R10	1.82	286R35	1.88
R6	1.8	226R	1.85	269R10V	1.82	287R25	1.88
R6MS	1.8	227R	1.85	269R12	1.82	287R35	1.88
R8	1.8	228R	1.85	269R12V	1.82	287R50	1.88
IR8MS	1.8	229R	1.85	269R16	1.82	288R25	1.88
2010	1.153	22R	1.15	269R16V	1.82	288R35	1.88
2020	1.153	230R	1.85	26R	1.15	288R50	1.88
2025	1.153	231R	1.85	270R10	1.83	288R70	1.88
02R6	1.84	232R	1.85	270R10V	1.83	289R70	1.88
02R8	1.84	233R	1.85	270R12	1.83	289R95	1.88
030	1.153	234R	1.85	270R12V	1.83	28R	1.15
035	1.153	235R	1.85	270R16	1.83	290R120	1.88
03R10	1.84	23R	1.15	270R16V	1.83	290R70	1.88
03R8	1.84	243R	1.89	271R10	1.83	290R95	1.88
040	1.152	244R	1.89	271R10V	1.83	291R120	1.88
045	1.152	245R	1.89	271R12	1.83	291R150	1.88
04R10	1.84	246R	1.89	271R12V	1.83	292R120	1.88
04R8	1.84	247R	1.89	271R16	1.83	292R150	1.88
05R10	1.84	248R	1.89	271R16V	1.83	292R95	1.88
05R12	1.84	249R	1.89	271R20	1.83	29R	1.15
060	1.152	24R	1.15	271R20V	1.83	2R10	1.8
06R10	1.84	250R	1.89	2720	1.150	2R10MS	1.8
06R12	1.84	251R	1.89	272R10	1.83	2R12	1.8
070	1.152	252R	1.89	272R10V	1.83	2R12MS	1.8
075	1.152	253R	1.89	272R12	1.83	2R5	1.8
07R10	1.84	25A13	2.96	272R12V	1.83	2R5MS	1.8
207R12	1.84	25R	1.15	272R16	1.83	2R6	1.8
2080	1.152	263R10	1.82	272R16V	1.83	2R6MS	1.8
2083	1.152	263R10V	1.82	272R20	1.83	2R8	1.8
08R10	1.84	263R8	1.82	272R20V	1.83	2R8MS	1.8
08R12	1.84	263R8V	1.82	2730	1.150	302R6	1.95
08R16	1.84	264R10	1.82	273R12	1.83	302R8	1.95
090	1.152	264R10V	1.82	273R12V	1.83	303R10	1.95
09R12	1.84	264R12	1.82	273R16	1.83	303R8	1.95
09R16	1.84	264R12V	1.82	273R16V	1.83	304R10	1.96
OR	1.15	264R8	1.82	273R20	1.83	304R8	1.95
105	1.152	264R8V	1.82	273R20V	1.83	305R10	1.96
10R12	1.132	265R10	1.82	274R12	1.83	305R12	1.96
10R12 10R16	1.84	265R10V	1.82	274R12V	1.83	306R10	1.96
115	1.152	265R12	1.82	274R12V 274R16	1.83	306R12	1.96
11R12	1.84	265R12V	1.82	274R16V	1.83	307R10	1.96
11R16	1.84	265R8	1.82	274R20	1.83	307R12	1.96
11R20	1.84	265R8V	1.82	274R20V	1.83	308R10	1.96
123	1.153	266R10	1.82	2750	1.150	308R12	1.96
12R12	1.84	266R10V	1.82	2755	1.151	308R16	1.96
12R16	1.84	266R12	1.82	275R12	1.83	309R12	1.96
12R20	1.84	266R12V	1.82	275R12V	1.83	309R16	1.96
13R16	1.84	266R8	1.82	275R16	1.83	30R	1.15
13R20	1.84	266R8V	1.82	275R16V	1.83	310R12	1.96
140	1.153	267R10	1.82	275R20	1.83	310R16	1.96
	1.153	267R10V	1.82	275R20V	1.83	311R12	1.96
145							
	1.84	267R12	1.82	2760	1.151	311R16	1.96
145 14R16 14R20		267R12 267R12V	1.82 1.82	2760 2770	1.151 1.152	311R16 311R20	1.96 1.96
14R16	1.84						

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
312R20	1.96	332R120	1.98	372R10	1.95	42R10	1.11
313R16	1.96	332R150	1.98	372R12	1.95	42R1045	1.13
313R20	1.96	332R185	1.98	372R16	1.95	42R12	1.11
314R16	1.96	332R240	1.98	372R20	1.95	42R1245	1.13
314R20	1.96	332R50	1.98	3735	1.150	42R5	1.11
31R	1.15	332R70	1.98	3738	1.129	42R545	1.13
322R10	1.97	332R95	1.98	373R10	1.95	42R6	1.11
322R16	1.97	333R120	1.98	373R12	1.95	42R645	1.13
323R10	1.97	333R150	1.98	373R16	1.95	42R8	1.11
323R16	1.97	333R185	1.98	373R20	1.95	42R845	1.13
324R10	1.97	333R240	1.98	374R12	1.95	430R120	1.87
324R16	1.97	333R300	1.98	374R16	1.95	430R70	1.87
324R25	1.97	33R	1.15	380/+	1.130	430R95	1.87
324R35	1.97	344R	1.99	380/-	1.130	431R120	1.87
324R416	1.97	345R	1.99	380/0 bis 9	1.130	431R150	1.87
324R50	1.97	346R	1.99	380/A bis Z	1.130	431R70	1.87
325R16	1.97	347R	1.99	3R10	1.8	431R95	1.87
325R25	1.97	348R	1.99	3R10MS	1.8	43210	1.130
325R35	1.97	349R	1.99	3R12	1.8	4328	1.130
325R50	1.97	34R	1.15	3R12MS	1.8	432R120	1.87
325R616	1.97	350R	1.99	3R5	1.8	432R150	1.87
325R625	1.97	351R	1.99	3R5MS	1.8	432R185	1.87
325R635	1.97	352R	1.99	3R6	1.8	43312	1.130
326R16	1.97	353R	1.99	3R6MS	1.8	4338	1.130
326R25	1.97	363R10	1.94	3R8	1.8	433R150	1.87
326R35	1.97	363R8	1.94	3R8MS	1.8	433R185	1.87
326R50	1.97	364R10	1.94	405R	1.86	433R240	1.87
327R120	1.98	364R12	1.94	406R	1.86	43410	1.130
327R16	1.97	364R8	1.94	407R	1.86	434R300	1.87
327R25	1.98	365R10	1.94	408R	1.86	43512	1.130
327R35	1.98	365R12	1.94	409R	1.86	43612	1.130
327R50	1.98	365R8	1.94	410R	1.86	43712	1.130
327R70	1.98	366R10	1.94	411R	1.86	43R10	1.11
327R95	1.98	366R12	1.94	412R	1.86	43R1045	1.13
328R120	1.98	366R8	1.94	413R	1.86	43R12	1.11
328R16	1.98	367R10	1.94	414R	1.86	43R1245	1.13
328R25	1.98	367R12	1.94	416R	1.86	43R5	1.13
328R35	1.98	367R8	1.94	417R	1.86	43R545	1.13
328R50			1.94	417R	1.86	43R6	1.11
328R70	1.98 1.98	368R10 368R12	1.94	419R	1.86	43R645	1.13
328R95	1.98	368R16	1.94	41R10	1.11	43R8	1.11
329R120	1.98	368R8	1.94	41R1045	1.13	43R845	1.13
329R35	1.98	3698	1.129	41R12	1.11	44R10	1.11
329R50	1.98	369R10	1.94	41R1245	1.13	44R1045	1.13
329R70	1.98	369R12	1.94	41R5	1.11	44R12	1.11
329R95	1.98	369R16	1.94	41R545	1.13	44R1245	1.13
32R	1.15	369R8	1.94	41R6	1.11	44R14	1.11
330R120	1.98	3708	1.129	41R645	1.13	44R1445	1.13
330R150	1.98	370R10	1.94	41R8	1.11	44R5	1.11
330R16	1.98	370R12	1.94	41R845	1.13	44R545	1.13
330R25	1.98	370R16	1.94	420R	1.86	44R6	1.11
330R35	1.98	370R8	1.94	421R	1.86	44R645	1.13
330R50	1.98	3718	1.129	422R	1.86	44R8	1.11
330R70	1.98	371R10	1.95	423R	1.86	44R845	1.13
330R95	1.98	371R12	1.95	424R	1.86	45R10	1.11
331R120	1.98	371R16	1.95	425R25	1.87	45R1045	1.13
331R150	1.98	371R20	1.95	426R35	1.87	45R12	1.11
331R185	1.98	371R8	1.95	428R50	1.87	45R1245	1.13
331R50	1.98	3720	1.150	428R70	1.87	45R14	1.11
331R70	1.98	3725	1.150	429R70	1.87	45R16	1.11
331R95	1.98	3728	1.129	429R95	1.87	45R1645	1.13



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
45R6	1.11	47R645	1.14	50052306	6.16	50188909	5.7
45R645	1.13	47R8	1.12	50052314	6.16	50188917	5.7
45R8	1.11	47R845	1.14	50052314	6.16	50188925	5.7
45R845	1.13	48020	1.126	50052330	6.16	50191314	5.42
46910	1.125	48025	1.126	50052349	6.16	50191772	5.43
4696	1.125	48121	1.126	50052357	6.16	50191780	5.43
4698	1.125	48225	1.126	50052365	6.16	50191799	5.43
46R10	1.12	48327	1.126	50052373	6.16	50191802	5.43
46R1045	1.14	48432	1.126	50052381	6.16	50191810	5.43
46R12	1.12	48R10	1.12	50053043	5.20	50191829	5.43
46R1245	1.14	48R1045	1.14	50053078	5.17	50191837	5.43
46R14	1.12	48R12	1.12	50067273	5.8	50191845	5.43
46R16	1.12	48R1245	1.14	50068920SET	5.37	50199803	5.7
46R1645	1.14	48R14	1.12	50069292	5.46	50206672	5.6
46R20	1.12	48R16	1.12	50069497SET	5.44	50206680	5.6
46R6	1.12	48R1645	1.14	50069519	5.9	50206702	5.6
46R645	1.14	48R20	1.12	50069527	5.9	50206710	5.6
46R8	1.12	48R2045	1.14	50069535	5.9	50206737	5.6
46R845	1.14	48R8	1.12	50069543	5.9	50206761	5.7
47010	1.125	48R845	1.14	50069551	5.9	50206788	5.7
47012	1.125	49R10	1.12	50069560	5.9	50206796	5.7
4706	1.125	49R1045	1.14	50069578	5.9	50211153	5.6
4708	1.125	49R12	1.12	50069586	5.9	50212141	5.7
47110	1.125	49R1245	1.14	50069594	5.9	50212168	5.7
47112	1.125	49R14	1.12	50069608	5.9	50215191	5.7
4716	1.125	49R1445	1.14	50069616	5.9	50225634	5.6
4718	1.125	49R16	1.12	50069624	5.9	50225642	5.6
47210	1.125	49R1645	1.14	50069632	5.9	50225650	5.7
47212	1.125	49R20	1.12	50069640	5.9	50225677	5.7
47218	1.125	49R8	1.12	50069659	5.9	50244760	5.6
							5.7
4726	1.125	49R845	1.14	50069667	5.9	50244779	
4728	1.125	4R10	1.8	50069691	5.46	50253417	5.6
47312	1.125	4R10MS	1.8	50069845	5.51	50253425	5.6
47318	1.125	4R12	1.8	50069853	5.51	50253441	5.6
4738	1.125	4R12MS	1.8	50069861	5.51	50253492	5.7
47410	1.125	4R14	1.8	50069870	5.51	50253506	5.7
47412	1.125	4R14MS	1.8	50069888	5.51	50253514	5.7
47418	1.125	4R5	1.8	50069900	5.52	50253603	5.7
47512	1.125	4R5MS	1.8	50115286	6.16	50253611	5.7
47518	1.125	4R6	1.8	50115294	6.16	50253727	5.7
47612	1.125	4R6MS	1.8	50115308	6.16	50253832	5.7
47618	1.125	4R8	1.8	50115316	6.16	50254030	5.7
47712	1.126	4R8MS	1.8	50115324	6.16	50254278	5.7
47718	1.126	50000420	5.11	50115332	6.16	50254286	5.7
47716 47816	1.126	50000420	9.11	50115340	6.16	50265342	5.24
47818 47000	1.126	50024086	5.6	50115359	6.16	50292099SET	5.44
47822	1.126	50024094	5.6	50115367	6.16	50294512	5.12
47916	1.126	50024337	5.6	50115375	6.16	50294520	5.12
47918	1.126	50031708	5.12	50115383	6.16	50305581	9.16
47925	1.126	50040405	5.11	50115391	6.16	50305603	9.16
47R10	1.12	50041886	5.11	50115413	3.49	50305620	9.16
47R1045	1.14	50042181	5.11	50115472	5.30	50305646	9.16
47R12	1.12	50052128	6.15	50115723	5.14	50305662	9.16
47R1245	1.14	50052144	6.17	50121510	5.52	50305689	9.16
47R14	1.12	50052152	6.17	50125630SET	5.44	50305700	9.16
47R1445	1.14	50052160	6.17	50125630SET	5.45	50305727	9.16
47R16		50052160		50125701	3.50	50305743	9.16
	1.12		6.15				
47R1645	1.14	50052250	6.15	50132849	7.10	50305760	9.16
47R20	1.12	50052276	6.16	50186353	5.7	50305786	9.16
47R2045	1.14	50052284	6.16	50188860	5.6	50305808	9.16
47R6	1.12	50052292	6.16	50188879	5.6	50305824	9.16

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
50305840	9.16	50356143SET	5.36	50610106	5.14	52034233	5.37
50305867	9.16	50356151SET	5.35	50610137	5.14	52041709	9.10
50305883	9.16	50356160SET	5.36	50610281	5.13	52041741	9.10
50305905	9.16	50356178SET	5.37	50610809	5.16	52041743	9.10
50305921	9.16	50357468	9.11	50610830	5.16	52041745	9.10
50305948	9.16	50360183	5.50	50610861	5.16	52041746	9.10
50305964	9.16	50361716	5.8	50610892	5.16	52041747	9.10
50306588	9.17	50365061	5.6	50610922	5.16	52041748	9.11
50306600	9.17	50365088	5.8	50610953	5.16	52041749	9.11
50306626	9.17	50366904SET	5.31	50611257	5.15	52041750	9.10
50306642	9.17	50366912SET	5.32	506R	1.56	52041751	9.10
50306669	9.17	50366920	5.30	506RLD	1.56	52041752	9.11
50306685	9.17	50366939	5.31	50766797	5.34	52041753	9.11
50307584	9.17	50369105	5.6	50766803	5.34	52042827	5.12
50308599	9.7	50371541	5.46	50766919	6.16	52045296	5.13
50310100	9.16	50371550	5.46	507R	1.56	52045297	5.13
50310127	9.16	50371568	5.46	507RLD	1.56	52046100	5.20
50310143	9.16	50371576	5.46	508R	1.56	52049371	5.51
50310240	9.17	50377299	7.18	508RLD	1.56	52055260	9.6
50310267	9.17	50383167	7.18	509R	1.56	52055261	9.6
50310283	9.17	50385224	5.46	509RLD	1.56	52055262	9.6
50310305	9.17	504R	1.56	50R10	1.12	52055265	9.14
50310321	9.17	504RLD	1.56	50R1045	1.14	52055267	9.13
50313533	7.10	505R	1.56	50R12	1.12	52055268	9.13
50314823	9.17	505RLD	1.56	50R1245	1.14	52055270	9.6
50314831	9.17	50600010	5.14	50R14	1.12	52055271	9.6
50314840	9.17	50600168	5.14	50R1445	1.14	52055272	9.6
50319620	5.8	50600192	5.14	50R16	1.12	52055273	9.6
50319639	5.8	50600257	5.13	50R1645	1.14	52055274	9.6
50319647	5.8	50600311	5.13	50R20	1.12	52055275	9.6
50319655	5.8	50600346	5.13	50R8	1.12	52055276	9.6
50319663	5.8	50600370	5.13	50R845	1.14	52055277	9.6
50319892	5.8	50600400	5.13	510R	1.56	52055278	9.6
50319906	5.8	50600435	5.13	510RLD	1.56	52055279	9.6
50319914	5.8	50600478	5.13	511R	1.56	52055280	9.6
50319930	5.8	50600508	5.13	511RLD	1.56	52055281	9.6
50319957	5.8	50600532	5.13	512R	1.56	52055292	9.6
50319965	5.8	50600567	5.13	512RLD	1.56	52055293	9.6
50319981	5.8	50600591	5.13	51300430	5.12	52055294	9.6
50323989SET	5.38	50600621	5.13	513R	1.56	52055295	9.6
50328034SET	5.38	50600656	5.13	513RLD	1.56	52055296	9.6
50339672	5.12	50600680	5.13	514R	1.56	52055298	9.9
50341367	9.15	50600710	5.13	514RLD	1.56	52055299	9.9
50341375	9.15	50600745	5.13	51R10	1.12	52055300	9.9
50341383	9.15	50600770	5.16	51R1045	1.14	52055313	9.12
50342916	5.25	50601016	5.17	51R12	1.12	52055315	9.12
50342991	5.25	50601148	5.12	51R1245	1.14	52055316	9.12
50343629	9.15	50601156	5.20	51R14	1.12	52055320	9.14
50344200	5.18	50601172	5.20	51R1445	1.14	52055321	9.14
50344293	5.18	50601660	5.20	51R16	1.12	52055323	9.14
50344366	5.18	50601679	5.12	51R1645	1.14	52055325	9.12
50344374	5.18	50601687	5.14	51R20	1.12	52055326	9.12
50344447	5.18	50601717	5.14	51R2045	1.14	52055327	9.12
50351770	5.8	50601741	5.14	52020113	5.20	52055328	9.12
50351788	5.8	50601776	5.14	52033816	5.19	52055337	9.12
50351796	5.8	50602349	5.14	52033817	5.19	52055338	9.12
50351800	5.8	50602381	5.15	52033818	5.19	52055339	9.12
50351818	5.8	50602420	5.15	52033819	5.19	52055340	9.12
50351826	5.8	50602462	5.8	52033820	5.19	52055341	9.12
50351923	5.6	50610045	5.14	52033832	5.19	52055347	9.12
50356119SET	5.35	50610076	5.14	52033843	5.26	52055348	9.12



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
52055349	9.12	52057746	5.42	52085634	5.6	558R	1.105
52055350	9.12	52057747	5.42	52085671	5.8	559R	1.105
52055351	9.12	52057748	5.42	52085672	5.7	56C4	1.41
52055352	9.12	52057749	5.42	52085675	5.7	56C5	1.41
52055359	9.12	52057750	5.42	52085678	5.7	56N3	1.40
52055360	9.12	52057751	5.42	52085681	5.7	56N4	1.40
52055361	9.12	52057752	5.42	52085684	5.7	56N5	1.40
52055362	9.12	52057753	5.42	52085686	5.11	572R6	1,104
52055378	9.18	52057754	5.43	52085688	5.11	573R6	1.104
52055379	9.18	52057755	5.43	52085689	5.12	573R8	1.104
52055380	9.18	52057756	5.43	52085690	5.12	574R8	1.104
52055381	9.18	52057757	5.43	52085691	5.12	575R8	1.104
52055382	9.18	52057758	5.43	52085692	5.12	57C4	1.41
52055383	9.14	52057760	5.43	52085693	5.12	57C5	1.41
52055384	9.14	52057761	5.43	52085694	5.11	57C6	1.41
		52057761		5_55555			
52055385	9.7		5.43	52086846	5.53	57N3	1.40
52055386	9.7	52057763	5.43	52086978	5.24	57N4	1.40
2055389	9.8	52057764	5.43	52093902	5.12	57N5	1.40
2055390	9.8	52057765	5.43	523R	1.55	57N6	1.40
2055391	9.8	52057766	5.43	524R	1.55	584R10	1.104
2055392	9.8	52057767	5.43	525R	1.55	584R8	1.104
52055401	9.15	52057768	5.43	526R	1.55	585R10	1.104
52055402	9.15	52057769	5.43	527R	1.55	585R12	1.104
52055403	9.15	52057770	5.43	528R	1.55	585R8	1.104
2055431	5.10	52057771	5.43	529R	1.55	586R10	1.104
2055432	5.10	52057773	5.43	52R10	1.12	586R12	1.104
2055433	5.10	52057774	5.43	52R1045	1.14	587R10	1.104
2055434	5.10	52057775	5.43	52R12	1.12	587R12	1.104
2055435	5.10	52057776	5.43	52R1245	1.14	588R10	1.104
2055436	5.10	52057777	5.43	52R14	1.12	588R12	1,104
52055437	5.10	52057778	5.43	52R16	1.12	589R10	1.104
52055438	5.10	52057779	5.43	52R1645	1.14	589R12	1,104
52055439	5.10	52057780	5.46	52R20	1.12	589R16	1.104
52055439SET	5.32	52057781	5.46	52R2045	1.14	58C4	1.41
52055440	5.10	52057782	5.46	530R	1.55	58C5	1.41
52055440SET	5.33	52057702	5.43	531R	1.55	58C6	1.41
			5.43			58N4	1.40
52055684	3.49	52057802		532R	1.55		
52057722	5.42	52057803	5.43	533R	1.55	58N5	1.40
52057723	5.42	52057804	5.43	534R	1.55	58N6	1.40
2057724	5.42	52057805	5.43	535R	1.55	58N8	1.40
2057725	5.42	52059292SET	5.44	53R12	1.12	590R12	1.104
2057726	5.42	52059293SET	5.44	53R1245	1.14	592R12	1.104
52057727	5.42	52059294SET	5.44	53R14	1.12	59C5	1.41
2057728	5.42	52059295SET	5.44	53R1445	1.14	59C6	1.41
52057729	5.42	52074656	9.8	53R16	1.12	59N5	1.40
2057730	5.42	52074657	9.8	53R1645	1.14	59N6	1.40
2057731	5.42	52074658	9.14	53R20	1.12	5R10	1.8
2057732	5.42	52084123	5.50	54R12	1.12	5R10MS	1.8
2057733	5.42	52084124	5.50	54R1245	1.14	5R12	1.8
2057734	5.42	52084125	5.50	54R14	1.12	5R12MS	1.8
2057735	5.42	52084126	5.50	54R1445	1.14	5R14	1.8
2057736	5.42	52084128	5.50	54R16	1.12	5R14MS	1.8
2057737	5.42	52084129	5.50	54R1645	1.14	5R16	1.8
2057738	5.42	52084131	5.50	54R20	1.12	5R16MS	1.8
2057739	5.42	52084132	5.50	551R	1.105	5R6	1.8
i2057739 i2057740	5.42	52084133	5.50	552R	1.105	5R6MS	1.8
52057741	5.42	52084134	5.50	553R	1.105	5R8	1.8
52057742	5.42	52084920	5.29	554R	1.105	5R8MS	1.8
52057743	5.42	52084941	5.29	555R	1.105	5SG6	1.10
52057744	5.42	52085453	5.50	556R	1.105	602R10	1.19
52057745	5.42	52085633	5.8	557R	1.105	602R12	1.19

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
602R5	1.19	620C3	1.139	6546	1.66	703F10	1.25
602R6	1.19	620C35	1.139	6548	1.66	703F12	1.25
602R8	1.19	620C4	1.139	65510	1.66	703F5	1.25
603R10	1.19	620C5	1.139	65512	1.66	703F6	1.25
603R12	1.19	620C6	1.139	65516	1.66	703F8	1.25
603R5	1.19	622R	1.21	6556	1.66	704	1.140
603R6	1.19	623R	1.21	6558	1.66	704F10	1.25
603R8	1.19	624R	1.21	65610	1.66	704F12	1.25
604R10	1.19	625R	1.21	65612	1.66	704F5	1.25
604R12	1.19	626R	1.21	65616	1.66	704F6	1.25
604R14	1.19	627R	1.21	6566	1.66	704F8	1.25
604R5	1.19	628R	1.21	6568	1.66	705	1.140
604R6	1.19	62N10	1.40	65710	1.67	705F10	1.25
604R8	1.19	62N6	1.40	65712	1.67	705F12	1.25
605R10	1.19	62N8	1.40	65716	1.67	705F14	1.25
05R12	1.19	62R	1.42	6576	1.67	705F6	1.25
05R14	1.19	63010	1.138	6578	1.67	705F8	1.25
605R16	1.19	6303	1.138	65810	1.67	705K	1.140
605R6	1.19	63035	1.138	65812	1.67	705V	1.122
605R8	1.19	6304	1.138	65816	1.67	706F10	1.25
606R10	1.20	6305	1.138	65910	1.67	706F12	1.25
606R12	1.20	6306	1.138	65912	1.67	706F14	1.25
606R14	1.20	6308	1.138	65916	1.67	706F16	1.25
06R16	1.20	630C3	1.139	65N10	1.40	706F6	1.25
606R20	1.20	630C35	1.139	65N12	1.40	706F8	1.25
06R8	1.20	630C4	1.139	65R	1.42	707F10	1.26
07R10	1.20	630C5	1.139	66010	1.67	707F12	1.26
07R12	1.20	630C6	1.139	66012	1.67	707F12 707F14	1.26
07R16	1.20	63N10	1.40	66016	1.67	707F16	1.26
607R6	1.20	63N8	1.40	669	1.147	707F8	1.26
607R8	1.20	63R	1.42	66R	1.42	707V	1.122
608R10	1.20	64N10	1.40	670	1.147	708F10	1.26
608R12	1.20	64N12	1.40	670WS	1.147	708F12	1.26
608R8	1.20	64R	1.42	680	1.147	708F14	1.26
609R10	1.20	65010	1.138	680WS	1.147	708F16	1.26
09R12	1.20	65012	1.138	695V	1.122	708F8	1.26
60C5	1.41	6504	1.138	697V	1.122	709F10	1.26
60C6	1.41	6505	1.138	6R10	1.9	709F12	1.26
60C8	1.41	6506	1.138	6R10MS	1.9	709F14	1.26
60N10	1.40	6508	1.138	6R12	1.9	709F16	1.26
60N5	1.40	650C10	1.139	6R12MS	1.9	709F20	1.26
60N6	1.40	650C4	1.139	6R14	1.9	710	1.140
60N8	1.40	650C5	1.139	6R14MS	1.9	710F10	1.26
192	1.138	650C6	1.139	6R16	1.9	710F12	1.26
1925	1.138	650C8	1.139	6R16MS	1.9	710F14	1.26
193	1.138	65210	1.66	6R20	1.9	710F16	1.26
1935	1.138	65212	1.66	6R20MS	1.9	710F20	1.26
194	1.138	6526	1.66	6R6	1.9	710K	1.140
195	1.138	6528	1.66	6R6MS	1.9	710L	1.140
19C3	1.139	652C5	1.70	6R8	1.9	7110V	1.122
1N10	1.40	652C6	1.70	6R8MS	1.9	7112V	1.122
1N6	1.40	65310	1.66	6SG10	1.10	7115V	1.122
1N8	1.40	65312	1.66	6SG6	1.10	711F10	1.26
2010	1.138	6535	1.66	6SG8	1.10	711F12	1.26
2025	1.138	6536	1.66	700	1.147	711F14	1.26
203	1.138	6538	1.66	700WS	1.147	711F16	1.26
2035	1.138	653C6	1.70	702F10	1.25	711F20	1.26
		65410	1.66	702F12	1.25	712F10	1.26
	1.138	00710	1.00				
6204	1.138 1.138	65412	1.66	702F5	1.25	712F12	
6204 6205 6206							1.26 1.26



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
712F20	1.26	742F6	1.27	7615V	1.123	8032V	1.123
713F12	1.26	742F8	1.27	7618V	1.123	8051	1.154
713F14	1.26	743F10	1.27	7620V	1.123	80512	1.154
713F16	1.26	743F12	1.27	7625V	1.123	8052	1.154
713F20	1.26	743F5	1.27	769	1.148	80R	1.39
715	1.140	743F6	1.27	770	1.148	80V4	1.38
716V	1.122	743F8	1.27	7712V	1.123	80V5	1.38
718V	1.122	744F10	1.27	7715V	1.123	80V6	1.38
71S10V	1.122	744F12	1.27	7718V	1.123	8101	1.154
71S6V	1.122	744F5	1.27	7710V 7720V	1.123	81012	1.154
71S8V	1.122	744F6	1.27	7725V	1.123	8102	1.154
720	1.143	744F8	1.27	7732V	1.123	8122V	1.124
²⁰	1.143	745F10	1.27	775	1.154	8125V	1.124
720AZ	1.144	745F12	1.27	780	1.148	8130V	1.124
20AZ 20BZ	1.144	745F6	1.27	7812V	1.123	8132V	1.124
'20V '210V	1.145	745F8	1.27	7815V	1.123	8151	1.155
	1.122	746F10	1.27	7818V	1.123	81512	1.155
'212V	1.122	746F12	1.27	7820V	1.123	816	1.156
215V	1.122	746F14	1.27	7825V	1.123	817	1.156
7218V	1.122	746F6	1.27	7828V	1.123	81R	1.39
7220V	1.122	746F8	1.27	7832V	1.123	81V4	1.38
'22F	1.29	747F10	1.28	790	1.148	81V5	1.38
723F	1.29	747F12	1.28	7912V	1.123	81V6	1.38
'24F	1.29	747F14	1.28	7915V	1.123	820	1.146
25	1.154	747F16	1.28	7918V	1.123	8201	1.143
25F	1.29	747F8	1.28	7920V	1.123	8201A	1.143
'26F	1.29	748F10	1.28	7922V	1.123	8201AV	1.145
26V	1.122	748F12	1.28	7925V	1.123	8201B	1.146
27F	1.29	748F14	1.28	7930V	1.123	8201C	1.146
727V	1.122	748F16	1.28	7932V	1.123	8201V	1.145
728F	1.29	748F8	1.28	79R	1.39	8202	1.143
28V	1.122	748V	1.123	79V4	1.38	8202B	1.146
'29F	1.29	749F10	1.28	79V5	1.38	8202V	1.145
'2\$10V	1.122	749F12	1.28	7R10	1.9	8203	1.143
72S12V	1.122	749F14	1.28	7R10MS	1.9	8203B	1.146
72S15V	1.122	749F16	1.28	7R12	1.9	8203V	1.145
'2S6V	1.122	749V	1.123	7R12MS	1.9	8225V	1.124
2S8V	1.122	750	1.143	7R14	1.9	8230V	1.124
730	1.143	7509	1.143	7R14MS	1.9	8232V	1.124
308	1.143	750AZ	1.144	7R16	1.9	8234V	1.124
30AZ	1.144	750BZ	1.144	7R16MS	1.9	82R	1.39
30BZ	1.144	750F10	1.28	7R20	1.9	82V5	1.38
'30F	1.29	750F12	1.28	7R20MS	1.9	82V6	1.38
'30V	1.145	750F14	1.28	7R6	1.9	82V8	1.38
7310V	1.122	750F16	1.28	7R6MS	1.9	830	1.146
312V	1.122	750F20	1.28	7R8	1.9	8301	1.143
'315V	1.122	750V	1.145	7R8MS	1.9	8301A	1.143
318V	1.122	7510V	1.123	7SG10	1.10	8301AV	1.145
'31F	1.29	7512V	1.123	7SG12	1.10	8301V	1.145
320V	1.122	7515V	1.123	7SG6	1.10	8302	1.143
35	1.154	7518V	1.123	7SG8	1.10	8302B	1.146
37V		751F12	1.28	8001	1.154	8302V	1.145
37 V 38 V	1.122			80012			
	1.122	751F14	1.28		1.154	8303	1.143
410V	1.123	751F16	1.28	8002	1.154	8303B	1.146
412V	1.123	751F20	1.28	8011	1.155	8303V	1.145
415V	1.123	7520V	1.123	80112	1.155	8330V	1.124
'418V	1.123	7525V	1.123	8012	1.155	8332V	1.124
'420V	1.123	752F16	1.28	8018V	1.123	8334V	1.124
'42F10	1.27	755	1.154	8022V	1.123	8338V	1.124
42F12	1.27	7610V	1.123	8025V	1.123	8340V	1.124
42F5	1.27	7612V	1.123	8030V	1.123	83R	1.39

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Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
83V5	1.38	8R20MS	1.9	9R12MS	1.9	BAG9728	1.133
83V6	1.38	8R8	1.9	9R14	1.9	BAG9738	1.133
83V8	1.38	8R8MS	1.9	9R14MS	1.9	BAK9698	1.132
8432V	1.124	8SG10	1.10	9R16	1.9	BAK9708	1.132
8434V	1.124	8SG12	1.10	9R16MS	1.9	BAK9718	1.132
8438V	1.124	8SG6	1.10	9R20	1.9	BAK9728	1.132
8440V	1.124	8SG8	1.10	9R20MS	1.9	BAK9738	1.132
84R	1.39	90508068	7.17	9R8	1.9	BNC501	2.83
84V6	1.38	90510593	7.17	9R8MS	1.9	C2216	2.90
84V8	1.38	91C3	1.7	9SG10	1.10	C2225	2.90
850	1.146	91C4	1.7	9SG12	1.10	C2235	2.90
8502B	1.146	91C5	1.7	9SG6	1.10	C2250	2.90
8502V	1.145	91R3	1.6	9SG8	1.10	C2270	2.90
8503	1.143	91R4	1.6	A2210	2.89	CK16	1.107
8503B	1.146	91R5	1.6	A22150	2.89	CK25	1.107
8503V	1.145	920	1.141	A221625	2.89	CK35	1.107
8532V	1.124	920V	1.142	A22185	2.89	CK50	1.107
8540V	1.124	92C3	1.7	A22240	2.89	CK70	1.107
85R	1.39	92C4	1.7	A22300	2.89	CK95	1.107
85V6	1.38	92C5	1.7	A2235	2.89	CR501	2.83
85V8	1.38	92C6	1.7	A2250	2.89	CR502	2.83
8634V	1.124	92R3	1.6	A2270	2.89	CR504	2.83
8640V	1.124	92R4	1.6	A2295120	2.89	CR505	2.83
8678	1.131	92R5	1.6	A22SET	2.89	CS1022	1.100
8688	1.131	92R6	1.6	A300	1.130	CS1228	1.100
8698	1.131	930	1.141	AE2213120	2.90	CS1428	1.100
86R	1.39	93C4	1.7	AE2213120	2.94	CS1635	1.100
86V10	1.38	93C5	1.7	AE2213150	2.90	CS615	1.100
86V12	1.38	93C6	1.7	AE2213150	2.94	CS818	1.100
86V6	1.38	93R3	1.6	AE2213185	2.90	D2210	2.88
86V8	1.38	93R4	1.6	AE2213185	2.94	D22120	2.88
87010	1.131	93R5	1.6	AE2213240	2.90	D22150	2.88
8708	1.131	93R6	1.6	AE2213240	2.94	D2216	2.88
87110	1.131	93R8	1.6	AE221325	2.90	D22185	2.88
8718	1.131	94C4	1.7	AE221325	2.94	D22240	2.88
87212	1.131	94C5	1.7	AE221335	2.90	D2225	2.88
8728	1.131	94C6	1.7	AE221335	2.94	D22300	2.88
87310	1.131	94C8	1.7	AE221350	2.90	D2235	2.88
87313	1.131	94R4	1.6	AE221350	2.94	D2250	2.88
87412	1.131	94R5	1.6	AE221370	2.90	D226	2.88
87514	1.131	94R6	1.6	AE221370	2.94	D2270	2.88
87614	1.131	94R8	1.6	AE221395	2.90	D2295	2.88
87714	1.131	950	1.141	AE221395	2.94	D22SET	2.88
87R	1.39	950V	1.142	AE5071	2.82	D504	2.82
87V10	1.38	95C4	1.7	AE5072	2.82	D505	2.82
87V12	1.38	95C5	1.7	AE5073	2.82	DNK742	2.21
87V16	1.38	95C6	1.7	AE512550	2.18	DNP2	7.19
87V8	1.38	95C8	1.7	AE515095	2.18	DP2270	2.88
88R	1.39	95R4	1.6	AH120120	1.108	EBS12CFB	3.18
88V10	1.38	95R5	1.6	AH7070	1.108	EBS12CFM	3.18
88V12	1.38	95R6	1.6	AH9595	1.108	EBS12ML	3.11
88V8	1.38	95R8	1.6	AHP700L	7.9	EBS6LGKS	3.16
8R10	1.9	96C5	1.7	AS105FHP	3.47	EBS8CFB	3.17
8R10MS	1.9	9606	1.7	AS120FHP	3.47	EBS8CFM	3.17
8R12	1.9	96C8	1.7	ASSG105L	4.16	EBS8ML	3.11
8R12MS	1.9	9705	1.7	ASSG120SL	4.16	EC50ML	6.8
8R14	1.9	9706	1.7	ASSGG105L	4.16	EHP2380	7.6
8R14MS	1.9	97C8	1.7	ASSGG85L	4.16	EHP3	7.7
8R16	1.9	9R10	1.7	BAG9698	1.133	EHP4115	7.7
8R16MS		9R10MS	1.9	BAG9708	1.133	EHP4115 EHP4230	7.8
	1.9						
8R20	1.9	9R12	1.9	BAG9718	1.133	EK12032CFB	2.46



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
EK12032CFM	2.46	ESG105CFM	3.37	HA1310	2.94	HD450	2.85
EK12042CFB	2.48	ESG105RMCCFM	3.21	HA13150	2.94	HD46	2.85
EK12042CFM	2.48	ESG105RMCPCFB	3.22	HA131625	2.94	HD470	2.85
EK120IDCFB	2.45	ESG105RMCPCFM0000	3.23	HA13185	2.94	HD495	2.85
EK120IDCFM	2.45	ESG105RMCPCFM	3.23	HA13240	2.94	HD4SET	2.85
EK120UCFB	2.50	ESG25CFB	3.24	HA13300	2.94	HDP13120	2.93
EK120UCFM	2.50	ESG25CFM	3.24	HA1335	2.94	HDP1350	2.93
EK120UNVCFB	6.13	ESG45CFB	3.31	HA1350	2.94	HDP1370	2.93
EK120UNVCFM	6.13	ESG45CFM	3.31	HA1370	2.94	HDP1395	2.93
EK135FTCFB	2.52	ESG55CFB	3.33	HA1395120	2.94	HF1310	2.92
EK135FTCFM	2.52	ESG55CFM	3.33	HA13SET	2.94	HF13120	2.92
EK30IDML	2.30	ESG65RMCCFM	3.21	HA15400	2.95	HF13150	2.92
EK354CFB	2.36	ESG85CFB	3.35	HA15500	2.95	HF1316	2.92
EK354CFM	2.36	ESG85CFM	3.35	HA25400	2.97	HF1325	2.92
EK354ML	2.32	ESGM452CFM0000	3.30	HA25500	2.97	HF1335	2.92
EK50ML	6.6	ESGM452CFM	3.30	HA410	2.86	HF1350	2.92
EK6022CFB	2.40	ESGM45CFB	3.29	HA41625	2.86	HF1370	2.92
EK6022CFM	2.40	ESGM45CFM	3.29	HA435	2.86	HF1395	2.92
EK60UNVCFB	6.12	ESM25CFB	3.25	HA450	2.86	HF25240	2.96
EK60UNVCFM	6.12	ESM25CFM	3.25	HA470	2.86	HF410	2.84
EK60VPCFB	2.42	ESM25ISM	4.11	HAES410S	2.86	HF416	2.84
EK60VPCFM	2.42	ESM25ISMB	4.11	HAES416S	2.86	HF425	2.84
EK60VPFTCFB	2.43	ESM35CFB	3.28	HAES425S	2.86	HF435	2.84
EK60VPFTCFM	2.43	ESM35CFM	3.28	HAES435S	2.86	HIS1310	2.92
EKM6022CFB	2.38	ESM35ISB	4.10	HAES450S	2.86	HIS13120	2.92
EKM6022CFM	2.38	ESM35ISM	4.10	HAH13120	2.94	HIS13150	2.92
EKM6022ISB	4.6	ESM50CFB	3.32	HAH1370	2.94	HIS1316	2.92
EKM6022ISM	4.6	ESM50CFM	3.32	HAH1395	2.94	HIS1325	2.92
EKM60IDCFB	2.44	ESM50ISB	4.9	HC1316	2.94	HIS1335	2.92
EKM60IDCFM	2.44	ESM50ISM	4.9	HC1325	2.94	HIS1350	2.92
EKM60IDISB		ESSG105L	4.15		_		2.92
	4.8			HC1335	2.94	HIS1370	
EKM60IDISM	4.8	ESSGG85L	4.15	HC1350	2.94	HIS1395	2.92
EKM60UNVCFB	6.11	F2210	2.88	HC1370	2.94	HIS410	2.84
EKM60UNVCFM	6.11	F2216	2.88	HC2595	2.97	HIS416	2.84
EKWF120ML	2.31	F2225	2.88	HC416	2.86	HIS425	2.84
EKWF50ML	6.5	F2235	2.88	HC425	2.86	HIS435	2.84
ES105CFB	3.38	F2250	2.88	HD1310	2.92	HIS450	2.84
ES105CFM	3.38	F2270	2.88	HD13120	2.92	HIS470	2.84
ES20CFB	3.19	FHP2	7.5	HD13150	2.92	HISQ1310	2.93
ES20CFM	3.19	FTA1	7.16	HD1316	2.92	HISQ1316	2.93
ES20E	3.12	FTA4	7.16	HD13185	2.92	HISQ1325	2.93
ES20ISB	4.12	GR1698	1.128	HD13240	2.92	HISQ1335	2.93
ES20ISM	4.12	GR1708	1.128	HD1325	2.92	HISQ1350	2.93
ES20ML	3.12	GR170W	1.127	HD13300	2.92	HISQ1370	2.93
ES20RMCCFB	3.20	GR1718	1.128	HD1335	2.92	HISQ1395	2.93
ES20RMCCFM	3.20	GR171G	1.127	HD1350	2.92	HISQ410	2.85
ES32CFB	3.26	GR1728	1.128	HD1370	2.92	HISQ416	2.85
ES32CFM	3.26	GR172R0	1.127	HD1395	2.92	HK12030	2.60
ES32FCFB	3.27	GR1738	1.128	HD13SET	2.93	HK12042	2.62
ES32FCFM	3.27	GR173B	1.127	HD15400	2.95	HK120U	2.64
ES32FML	3.13	GR4698	1.125	HD15500	2.95	HK252	2.78
ES32ISB	4.13	GR4698D0	1.166	HD15625	2.95	HK6022	2.76
ES32ISM	4.13	GR4708	1.125	HD25300	2.95	HK60VP	2.58
ES32ML	3.13	GR4708D0	1.166	HD25400	2.96	HK60VPFT	2.59
ES32RMCCFB	3.20	GR4718	1.125	HD25500	2.96	HMC1310	2.94
ES32RMCCFM	3.20	GR4718D0	1.166	HD25625	2.96	HMC1335	2.94
ES65CFB	3.34	GR4728	1.125	HD410	2.85	HMC1350	2.94
ES65CFM	3.34	GR4728D0	1.167	HD4120	2.85	HMC1370	2.94
ES85CFB	3.36	GR4738	1.125	HD416	2.85	HMC25120	2.97
ES85CFM	3.36	GR4738D0	1.167	HD425	2.85	HMC25150	2.97
ESG105CFB	3.37	H2270	2.90	HD435	2.85	HMC25185	2.97

Dort No.	Dogo	Dort No.	Dago	Dort No.	Dogo	Dort No.	Dogo
Part No. HMC2595	Page 2.97	Part No.	Page 2.93	Part No.	Page 3.9	Part No. KL050205IS	Page 8.8
HMC410	2.86	HRU139570	2.93	K1051	3.8	KL055205IS	8.8
HMC435	2.86	HRU25400SM	2.93	K1061	3.7	KL060160IS	8.9
							8.18
HN1316	2.92	HRU25500SM	2.96	K1062	3.7	KL070250G	
HN1325	2.92	HRU412095	2.86	K118	3.6	KL070250IS	8.9
HN1335	2.92	HRU4150120	2.86	K130	3.8	KL072180G	8.18
HN1350	2.92	HRU416	2.86	K150	3.8	KL072250G	8.18
HN1370	2.92	HRU43525	2.86	K16	2.13	KL072300G	8.18
HN1395	2.92	HRU45035	2.86	K2	2.16	KL10010030IS	8.10
HN410	2.85	HRU47050	2.86	K22	2.26	KL10010035IS	8.10
HN41525	2.85	HRU49570	2.86	K25	2.17	KL10010035ISLIM	8.10
HN416	2.85	HS210	7.17	K3014K	2.10	KL10010040IS	8.10
HN446	2.85	HS22	7.17	K3016K	2.11	KL10010040ISLIM	8.10
HQ13120	2.93	HS23	7.17	K303	2.9	KL10012555IS	8.10
HQ13150	2.93	HS24	7.17	K304K	2.9	KL10012555ISLIM	8.10
HQ1316	2.93	HS25	7.17	K306K	2.10	KL10012565ISLIM	8.10
HQ1325	2.93	HS26	7.17	K3	2.6	KL10015065IS	8.10
HQ1335	2.93	HS28	7.17	K32	2.8	KL10017580IS	8.10
HQ1350	2.93	HSG45	3.40	K35	2.7	KL1007525IS	8.10
HQ1370	2.93	HSG852	3.40	K354	2.24	KL110PH1IS	8.10
HQ1395	2.93	HS0EL10	7.17	K36	2.8	KL110PH1ISLIM	8.10
HQ410	2.85	HS0EL2	7.17	K4	2.6	KL110PH2IS	8.10
HQ416	2.85	HS0EL3	7.17	K432	8.35	KL110PH2ISLIM	8.10
HQ425	2.85	HS0EL4	7.17	K432U	8.35	KL110PH3IS	8.10
HQ435	2.85	HS0EL5	7.17	K433	8.36	KL120PZ1IS	8.11
HR13120	2.91	HS0EL6	7.17	K48	2.7	KL120PZ1ISLIM	8.11
HR13150	2.91	HTA4	7.19	K50	2.23	KL120PZ2IS	8.11
HR1316	2.91	IS2210	2.87	K507	2.22	KL120PZ2ISLIM	8.11
HR13185	2.91	IS22120	2.87	K507WF	2.22	KL120PZ3IS	8.11
HR13240	2.91	IS22150	2.87	K5	2.18	KL130PM1IS	8.11
HR1325	2.91	IS2216	2.87	K582	2.14	KL130PM1ISLIM	8.11
HR13300	2.91	IS2225	2.87	K592	2.14	KL130PM2IS	8.11
HR1335	2.91	IS2235	2.87	K80	2.11	KL130PM2ISLIM	8.11
HR13400	2.91	IS2250	2.87	K82A	2.12	KL145100IS	8.12
HR1350	2.91	IS2270	2.87	K82T	2.13	KL145130IS	8.12
HR1370	2.91	IS2295	2.87	K93	2.15	KL14555IS	8.12
HR1395	2.91	IS503	2.83	K94	2.15	KL14560IS	8.12
HR13SET	2.91	IS504	2.83	K95	2.17	KL14570IS	8.12
HR25300	2.96	IS505	2.83	KF125	1.108	KL14580IS	8.12
HR25400	2.96	IS5071	2.83	KKPE	1.177	KL150TX10IS	8.12
HR410	2.84	IS5072	2.83	KKPE13	1.177	KL150TX15IS	8.12
HR4120	2.84	ISQ2210	2.89	KKPEH25	1.177	KL150TX15ISLIM	8.12
HR4150	2.84	ISQ2216	2.89	KL010160IS	8.6	KL150TX20IS	8.12
	2.84						
HR416		ISQ2225	2.89	KL010210IS	8.6	KL150TX20ISLIM	8.12
HR425	2.84	ISQ2235	2.89	KL020165IS	8.6	KL150TX25IS	8.12
HR435	2.84	ISQ2250	2.89	KL020180IS	8.6	KL150TX25ISLIM	8.12
HR450	2.84	ISQ2270	2.89	KL020205IS	8.6	KL150TX30IS	8.12
HR46	2.84	K02	2.16	KL026205IS	8.6	KL180B8	8.18
HR470	2.84	K05	2.19	KL040115EL	8.19	KL180B8DISPLAY	8.18
HR495	2.84	K05D	2.19	KL040115ELW	8.19	KL19073IS	8.12
HR4SET	2.84	K05WF50	2.18	KL040128EL	8.19	KL2007335	8.20
HRU1310	2.93	K05WF95	2.18	KL040128ELH	8.19	KL2007340	8.20
HRU1312095	2.93	K06	2.19	KL040145IS	8.7	KL2007355	8.20
HRU13150120	2.93	K06D	2.20	KL040160IS	8.7	KL2007365	8.20
HRU1316	2.93	K09	2.20	KL040180IS	8.7	KL21073PH1	8.20
HRU13185150	2.93	K09D	2.21	KL042190IS	8.7	KL21073PH2	8.20
HRU13240185	2.93	K100	3.6	KL044200IS	8.7	KL22073PZ1	8.20
HRU13300240	2.93	K1011	3.9	KL045180IS	8.7	KL22073PZ2	8.20
HRU13300SM	2.93	K1012	3.9	KL045240IS	8.7	KL23073PM1	8.21
HRU133525	2.93	K102	3.6	KL046200IS	8.8	KL23073PM2	8.21
HRU135035	2.93	K1031	3.7	KL050115EL	8.19	KL25073TX10	8.21



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
KL25073TX15	8.21	KL730	8.38	LS100FLEXCFM	5.28	R2250	2.87
KL25073TX20	8.21	KL735PV	8.39	LS50FLEXCFB	5.27	R226	2.87
KL25073TX25	8.21	KL740416	8.37	LS50FLEXCFM	5.27	R2270	2.87
KL25073TX27	8.21	KL740828	8.37	M22154	2.88	R2295	2.87
KL25073TX30	8.21	KL745GK	8.37	M2216	2.88	R22SET	2.87
KL25073TX40	8.21	KL745HK	8.38	M22610	2.88	R501	2.82
KL290	8.21	KL760180	8.36	M50154	2.82	R502	2.82
KL291	8.21	KL760180IS	8.9	M50610	2.82	R504	2.82
KL295	8.22	KL765FR215	8.36	MC2210	2.90	R505	2.82
KL296	8.22	KL765PV	8.37	MC2235	2.90	RAL1	7.11
KL303IS	8.13	KL855B22	8.30	MC2250	2.90	RAL2	7.11
KL304IS	8.13	KL855L	8.33	MCK1010	1.107	RAL40	7.12
KL306IS	8.13	KL865L	8.33	MCK1025	1.107	RAL4	7.12
KL330	8.25	KL905B15	8.31	MCK120120	1.108	RALB1EU	7.12
KL331	8.25	KL905L	8.33	MCK150150	1.108	RALB2EU	7.13
KL335	8.25	KL910L	8.33	MCK185185	1.108	RAML1225	7.13
KL340	8.25	KL920B22	8.32	MCK2550	1.107	RH12050	1.58
KL361	8.22	KL920L	8.33	MCK3535	1.107	RH12070	1.58
KL365	8.25	KMF1	7.19	MCK3570	1.107	RH12095	1.58
KL370	8.23	KSK1504	1.115	MCK3595	1.108	RH150120	1.58
KL375	8.23	KSK504	1.115	MCK5050	1.107	RH15070	1.58
KL38715	8.23	KST2	7.18	MCK7095	1.108	RH15095	1.58
KL38830	8.24	KV10	1.18	MK210L	1.176	RH185120	1.58
KL38954	8.24	KV120	1.18	MK220L	1.176	RH185150	1.58
KL390IS	8.14	KV16	1.18	MK22	1.177	RH18595	1.58
KL390ISLIM	8.14	KV2.5	1.18	MK230B507	1.173	RH240120	1.58
KL390TB9	8.15	KV35	1.18	MK230L	1.176	RH240150	1.58
KL390TL	8.15	KV4	1.18	MK55	1.176	RH240185	1.58
KL391IS	8.13	KV50	1.18	MKU	1.178	RH2510	1.58
KL391ISLIM	8.15	KV6	1.18	N2210	2.88	RH2516	1.58
KL392IS	8.14	KV70	1.18	N2216	2.88	RH300150	1.58
KL393IS	8.14	KV95	1.18	N2225	2.88	RH300185	1.58
KL402	8.26	LB0XX230B	1.184	N2235	2.88	RH300240	1.58
KL403	8.26	LB0XX3R8SET	1.183	N2250	2.88	RH3510	1.58
KL420200	8.25	LBOXX50B	1.183	NG2115	7.13	RH3516	1.58
KL425400	8.26	LBOXX65B	1.182	NG2230	7.13	RH3525	1.58
KL425600	8.26	LBOXX6R10SET	1.183	PHD2	7.5	RH5016	1.58
KL440F	8.26	LBOXXEK354CFB	1.186	PK12042	2.72	RH5025	1.58
KL449	8.26	LBOXXEK354CFM	1.186	PK120U	2.74	RH5035	1.58
KL500	8.27	LBOXXEK50ML	1.182	PK22	2.68	RH7025	1.58
KL510	8.27	LBOXXEKM6022CFB	1.186	PK252	2.76	RH7035	1.58
KL540	8.28	LBOXXEKM6022CFM	1.186	PK60ID	2.71	RH7050	1.58
KL542	8.29	LBOXXEKM60IDCFB	1.186	PK60UNV	6.10	RH9535	1.58
KL542ES	8.29	LBOXXEKM60IDCFM	1.186	PK60VP	2.70	RH9550	1.58
KL544	8.29	LBOXXEKM60UNVCFB	1.186	PK60VPFT	2.70	RH9570	1.58
KL544ES	8.29	LBOXXES20CFB	1.186	Q2210	2.89	RU2210	2.89
KL545	8.29	LBOXXES32CFB	1.186	Q2216	2.89	RU2212095	2.89
KL550	8.29	LBOXXES32CFM	1.186	Q2225	2.89	RU22150120	2.89
KL550ES	8.28	LBOXXES32FCFB	1.186	Q2235	2.89	RU2216	2.89
KL550ES	8.29	LBOXXES32FCFM	1.186	Q2250	2.89	RU22185150	2.89
KL559	8.28	LBOXXLS50FLEXCFB	1.186	Q2270	2.89	RU22240185	2.89
KL580300	8.27	LBOXXLS50FLEXCFM	1.186	Q501	2.82	RU22300240	2.89
KL580500	8.27	LBOXXMINIK3014K	1.185	R2210	2.87	RU22300SM	2.89
KL5821000	8.27	LBOXXMINIK3014K	1.185	R22120	2.87	RU223525	2.89
KL5821000 KL5821250	8.27	LBOXXMINIK304K	1.185	R22150	2.87	RU225035	2.89
	8.2 <i>1</i> 8.28	LGUXXMINIK3U6K	7.14	R2216			2.89
KL584230					2.87	RU227050	
KL585200	8.28	LGL3	7.14	R22185	2.87	RU229570	2.89
KL585250	8.28	LGLB1EU	7.15	R22240	2.87	\$502	3.50
KL586	8.28	LGLK18EU	7.14	R2225	2.87	SAK1095	1.106
KL710	8.38	LGML1	7.15	R22300	2.87	SAK16150	1.106
KL720	8.39	LS100FLEXCFB	5.28	R2235	2.87	SAK670	1.106

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
SB501	2.83	ST1717IS	1.67	SV306	1.112	UC26	6.14
SDG105	3.45	ST1718	1.69	SV306AK	1.112	UC40	6.14
SDG45	3.42	ST1718IS	1.67	SV306AKV	1.112	UCAC107	6.14
SDG55	3.43	ST1719	1.69	SV306V	1.112	UCACSR	6.14
SDG852	3.44	ST1719IS	1.67	SV307AKNL	1.110	UCBC110	6.14
SDK105	3.45	ST1720	1.69	SV307V	1.110	UCBC120	6.14
SDK120	3.46	ST1720IS	1.67	SV308	1.110	UCBC150	6.14
SDK65	3.43	ST1721	1.69	SV309	1.111	UCBC85	6.14
SDK85	3.44	ST1721IS	1.67	SV309AK	1.111	UCD3215	6.14
SK303P	1.169	ST1722	1.69	SV309AKV	1.111	UCD3515	6.14
SK303S	1.170	ST1722IS	1.67	SV309V	1.111	UCD3575	6.14
SK30B	1.167	ST1B	1.163	SV310	1.111	UCF	6.14
SK30L	1.175	ST21B	1.162	SV310AK	1.111	UCM10	6.14
SK32B	1.168	ST22B	1.162	SV310AKV	1.111	UCM12	6.14
SK32L	1.175	ST23B	1.162	SV310V	1.111	UCM5	6.14
SK43L	1.175	ST2B	1.164	SV311AKNL	1.111	UCM6	6.14
SK43NB	1.170	ST31B	1.164	SV312AKNL	1.111	UCM8	6.14
SK45B	1.168	ST32B	1.165	SV312AKNLV	1.111	UCN2980	6.14
SK47B	1.169	ST33B	1.166	SV315	1.111	UCUNC12	6.14
SK4L	1.175	ST3B	1.165	SV315V	1.111	UCUNC14	6.14
SK50B	1.172	ST5L	1.167	SV319AKNLV	1.111	UCUNC38	6.14
SK65B	1.171	ST9698	1.132	SV320	1.111	UPD6	6.14
SK65L	1.177	ST9708	1.132	SV320V	1.111	VHD1203	1.78
SK82P	1.174	ST9718	1.132	SV35	1.23	VHD1204	1.79
SK82S	1.174	ST9728	1.132	SV400	1.113	VHD1503	1.78
SKR1204	1.116	ST9738	1.132	SV405V	1.113	VHD1504	1.79
SKR1501504	1.116	STV10	1.23	SV4	1.23	VHD1853	1.78
SKR1503	1.116	STV1525	1.23	SV410	1.113	VHD1854	1.79
SKR1504	1.116	STV16	1.23	SV410AK	1.113	VHD2404	1.79
SKR150504	1.116	STV25	1.23	SV420V	1.113	VHD353	1.78
SKR1854	1.116	STV35	1.23	SV430	1.114	VHD354	1.79
SKV1525	1.24	STV4	1.23	SV430AK	1.114	VHD503	1.78
SKV16	1.24	STV50	1.23	SV440AK	1.114	VHD504	1.79
SKV4	1.24	STV6	1.23	SV50	1.23	VHD703	1.78
SKV6	1.24	SV100	1.109	SV6	1.23	VHD704	1.79
SR106	1.22	SV10	1.23	T15	7.16	VHD953	1.78
SR108	1.22	SV1525	1.23	TG3	7.15	VHD954	1.79
SR166	1.22	SV16	1.23	THK120	2.72	VHR120	1.76
SR168	1.22	SV200	1.109	THK22	2.68	VHR1203	1.77
SR256	1.22	SV200BK	1.109	TT2	1.178	VHR1204	1.79
SR258	1.22	SV25	1.23	TT4	1.178	VHR150	1.76
SR3510	1.22	SV300	1.110	TV10	1.17	VHR1503	1.77
SR358	1.22	SV300V	1.110	TV120	1.17	VHR1504	1.79
SR5010	1.22	SV301	1.110	TV150	1.17	VHR16	1.76
						-	
SR506 SR508	1.22 1.22	SV301AK SV301AKV	1.110	TV15 TV16	1.17 1.17	VHR185 VHR1853	1.76 1.77
			1.110				
SR65 SR66	1.22 1.22	SV301V SV302	1.110	TV185 TV2.5	1.17 1.17	VHR1854 VHR240	1.79 1.76
SSG105	4.14	SV302AK	1.110	TV240	1.17	VHR2404	1.76
			1.110				
SSGG105 SSGC05	4.14	SV302AKV	1.110	TV25	1.17	VHR25	1.76
SSGG85	4.14	SV302V SV303	1.110	TV35 TV4	1.17	VHR300 VHR35	1.76
ST11B	1.163		1.110		1.17		1.76
ST12B	1.164	SV303AK	1.110	TV50	1.17	VHR353	1.77
ST13B	1.165	SV303AKNL	1.110	TV6	1.17	VHR354	1.79
ST15B	1.163	SV303V	1.110	TV70	1.17	VHR400	1.76
ST1705	1.69	SV304AKNL	1.110	TV95	1.17	VHR50	1.76
ST1710	1.69	SV304AKNLV	1.110	UA12P	6.14	VHR503	1.77
ST1715	1.69	SV305	1.112	UA12TKL	6.14	VHR504	1.79
ST1716	1.69	SV305AK	1.112	UA15T	2.95	VHR70	1.76
ST1716IS	1.67	SV305AKV	1.112	UA22	6.14	VHR703	1.77
ST1717	1.69	SV305V	1.112	UA6P	6.14	VHR704	1.79



Part No.	Page
VHR95	1.76
VHR953	1.77
VHR954	1.79
ZAE5072	2.83
ZST3	7.16
ZST4	7.16

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