EN

Around the cable
Working under tension
Standard program

Main catalogue 2016

haupa®
... convincing solutions

HAUPA

System supplier to specialist electrical wholesalers.

The foundation of the **HAUPA** group were laid in 1961 in Remscheid, the centre of the German tool manufacturing industry. Hans-Udo Paas founded **HAUPA** with the aim of providing high-quality tools for the requirements of the electrical trade.

HAUPA founder and CEO
Hans-Udo Paas

CEO
Jens-Ole Paas

The combination of tradition and progress is the basis for our consistent, stable expansion strategy. A mix of **experience**, **professional competence** and **innovation** is our recipe for success. Our daily aim is to create quality products that will increase your productivity and competiveness.

Constant discussions with industry and trade are important to us. We have our own **HAUPA** branches in Europe which address the country-specific requirements of our customers. Subsidiaries and general importers throughout the whole of Europe ensure a wide-ranging network of distribution partners who are **close to our customers** and can guarantee a constant **readiness to deliver**.

HAUPA is specialist for the product groups
- around the cable
- working under tension
- standard program

This also applies to 2016, for which we have enlarged our range of supply and implemented new products, for example, our high-performance compact LED floodlight **HUPlight**, the mobile **workshop trolley** and the versatile **diamond cutting discs** that we wish to introduce to you. In addition, we also made **lever transmitted pliers** with improved energy and cutting performances, giving up to 50% energy savings, our standard. Diverse **combination spanners** and the contents of our **socket sets** of our standard program can now be ordered as individual items. In the product group “around the cable“ we have expended our range of end sleeves and cable lugs with **small packages**. Additional novelties can be found in the field of **hollow saws** and **switch cabinet keys**.

Discover our comprehensive range which is bound to also have a convincing solution for your needs.

Your **HAUPA** team

It is unwise to pay too much, but it is unwise to pay too little. When you pay too much, you lose a little money; that is all. When you pay too little you sometimes lose everything. Because the thing you bought was incapable of doing the thing you bought it to do. The common law of business balance prohibits paying a little and getting a lot. It cannot be done. If you deal with the lowest bidder, it is well to add something for the risk you run and if you do that, you will have enough to pay for something better.

John Ruskin
English social reformer 1819 – 1900

Quality

HAUPA has been certified according to DIN EN ISO 9000 since 1996 (2003 DIN EN ISO 9001).

In order to incorporate a true quality standard the quality management department of HAUPA decided at a very early stage to apply for ISO 9000 certification, which controls and covers the complete internal working and monitoring procedures.

From goods receipt to dispatch – all working processes are carried out according to defined procedures.

All HAUPA employees receive regular training in order to comply with these standards and to encourage them to actively suggest ways of improving the processes. Special, so-called QMB employees analyse modified structures and integrate these into the defined standards. Independent auditors carry out audits at regular intervals to ensure compliance.

DIN EN ISO 9001:2000 - certificate

german

english

spanish

polish

hungarian

netherlands

russian

HAUPA Productcertification:

Zertifikate PDF

- 1000V IEC 60900:2004
- GOST
- UL
- CSA
- VDE
- EAC
- VPA
- Germanischer Loyd
- DNV
- RoHS
- Brunel

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Cutting

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External Ø of wires and cables (average)

No. of wires Cross-section in mm²	External-Ø **NYM** mm	External-Ø **NYY** (ca.) mm	External-Ø **NYCY** (ca.) mm	External-Ø **H05RR-F** (ca.) mm	External-Ø **H07RN-F** (ca.) mm
2 x 1,5	8,4 – 8,9	11	12	10,5	11,5
2 x 2,5	9,6 – 11	13	13	12,5	13,5
2 x 4	11 – 12,5	14	15	11	12,5
2 x 6	12 – 13,5	15	16	13	14,5
2 x 10	15 – 17	17	17,5	–	16
2 x 16	17 – 20	19	20	–	20
2 x 25	21 – 24	23	–	–	25,5
2 x 35	23,5 – 27,5	–	–	–	29
3 x 1,5	8,8 – 10,5	12	13	–	–
3 x 2,5	10 – 11,5	13	14	–	–
3 x 4	11,5 – 13	15	15	–	–
3 x 6	12 – 15	16	17	–	–
3 x 10	16 – 18	19	18,5	–	–
3 x 16	18,5 – 22	20	20,5	–	–
3 x 25	22,5 – 26	24	26,5	–	–
3 x 35	25 – 29,5	23	28	–	–
3 x 35/16	–	26	25	–	–
3 x 50/25	–	30	32	–	–
3 x 70/35	–	31	32	–	–
3 x 95/50	–	36	37	–	–
3 x120/70	–	39	39	–	–
3 x 150/70	–	43	43	–	–
4 x 1,5	9,5 – 11	13	14	12,5	13,5
4 x 2,5	11 – 12,5	14	15	14	15,5
4 x 4	12,5 – 14,5	16	16	–	18
4 x 6	14,5 – 16,5	17	18	–	22
4 x 10	17 – 19,5	19	20,5	–	28
4 x 16	20,5 – 23,5	22	24	–	32
4 x 25	25 – 28,5	27	29	–	37
4 x 35	27,5 – 32	26	31	–	42
4 x 50	–	35	34	–	48
4 x 70	–	40	37	–	54
4 x 95	–	45	42	–	60
4 x120	–	50	47	–	–
5 x 1,5	9,9 – 12	13	15	13,5	15
5 x 2,5	11,5 – 13,5	14	17	15,5	17
5 x 4	14 – 16,5	16	18	–	19
5 x 6	15,5 – 18	18	20	–	24
5 x 10	18,5 – 21,5	21	–	–	30
5 x 16	22,5 – 26	24	–	35	–
5 x 25	27,5 – 31,5	–	–	–	–
5 x 35	30,5 – 35,5	–	–	–	–

Cutting diameters of cable cutters Profi Line

art.	200111	200112	200113	200177	200114	200116	200115	200119	200179	200124	200126	200131	200151	200089	200183
Ø	page 9	page 9	page 10	page 10	page 10	page 10	page 11	page 11	page 11	page 13	page 13	page 13	page 13	page 9	page 9
	Cu/Al 185 mm² 34 mm Ø	Cu/Al 400 mm² 52 mm Ø	Cu/Al 240 mm² 35 mm Ø	Cu/Al 300 mm² 45 mm Ø	Cu/Al 400 mm² 52 mm Ø		Cu/Al 50 mm² 62 mm Ø	Cu/Al 1000 mm² 80 mm Ø	Cu/Al 1400 mm² 100 mm Ø	Cu/Al 120 mm² 25 mm Ø	Cu/Al 185 mm² 34 mm Ø	Cu/Al 240 mm² 35 mm Ø	Cu/Al 550 mm² 55 mm Ø	Cu/Al 185 mm² 32 mm Ø	Cu/Al 400 mm² 52 mm Ø
	Cu/Al 240 mm² 34 mm Ø	Cu/Al 400 mm² 52 mm Ø	Cu/Al 240 mm² 35 mm Ø	Cu/Al 240 mm² 45 mm Ø	Cu/Al 480 mm² 52 mm Ø		Cu/Al 750 mm² 62 mm Ø	Cu/Al 1000 mm² 80 mm Ø	Cu/Al 1400 mm² 100 mm Ø	Cu/Al 120 mm² 25 mm Ø	Cu/Al 185 mm² 34 mm Ø	Cu/Al 240 mm² 35 mm Ø	Cu/Al 550 mm² 55 mm Ø	Cu/Al 185 mm² 32 mm Ø	Cu/Al 240 mm² 45 mm Ø
	Cu/Al 240 mm² 34 mm Ø	Cu/Al 450 mm² 52 mm Ø	Cu/Al 300 mm² 35 mm Ø	Cu/Al 300 mm² 45 mm Ø	Cu/Al 500 mm² 52 mm Ø	Cu/Al 300 mm² 75 mm Ø	Cu/Al 750 mm² 62 mm Ø	Cu/Al 1000 mm² 80 mm Ø	Cu/Al 1400 mm² 100 mm Ø	Cu/Al 120 mm² 25 mm Ø	Cu/Al 240 mm² 34 mm Ø	Cu/Al 300 mm² 35 mm Ø	Cu/Al 550 mm² 55 mm Ø	Cu/Al 240 mm² 32 mm Ø	Cu/Al 450 mm² 52 mm Ø

PVC pipe cutters

PVC pipe cutter

for PVC pipes and all materials made from plastics and rubber, exchangeable blade, knife made from tool steel hardened in oil.
- little effort through special cutting geometry
- optimal transmission
- effortless work through ergonomically shaped handle
- incremental knife feed

Art. no.	Ø		kg	PU
200214	35		0,235	1
200215		spare blades	0,040	1

PVC pipe cutter

for PVC pipes and all materials made from plastics and rubber, exchangeable blade, knife made from tool steel hardened in oil, retractable by the press of a button.
- little effort through special cutting geometry
- optimal transmission
- effortless work through ergonomically shaped handle
- incremental knife feed

Art. no.	Ø		kg	PU
200216	42		0,270	1
200217		spare blades	0,055	1

PVC pipe cutter (with ratchet)

for PVC pipes and all materials made from plastics and rubber, exchangeable blade, knife made from tool steel hardened in oil, retractable by the press of a button.
- little effort through special cutting geometry
- optimal transmission
- effortless work through ergonomically shaped handle
- incremental knife feed
- suitable for wiring ducts

Video 200218

Art. no.	Ø		kg	PU
200218	0 - 63		0,270	1
200219		replacement blade	0,055	1

Cable cutters

Kevlar cutter

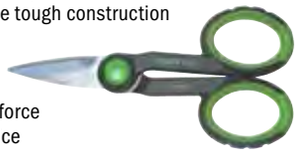
to cut Kevlar fibre on optical fibre cables. Precision cut with cogs prevents the fibres from slipping and ensures a clean cut.
- Micro-meshing
- Riveted joint
- Specially coated blade

Art. no.	TL	kg	PU
200153	160	0,085	1

Cable cutters

Allround soft-grip scissor

The new allround Soft - Grip scissors with its relatively short blades and special handles are designed to fulfil the needs of the professional electrical installers. The impressive cutting performance and the tough construction make this new scissors a special tool.
- ergonomic design (2 component)
- slipping free handle - Soft - Grip
- high cutting performance by low cutting force
- precision toothing • cable stripping device
- stainless



Art. no.	TL	Ø	kg	PU
200155	140	25	0,086	1

Allround soft-grip scissor

The new allround Soft - Grip scissors with its relatively short blades and special handles are designed to fulfil the needs of the professional electrical installers. The impressive cutting performance and the tough construction make this new scissors a special tool.
- ergonomic design (2 component)
- slipping free handle - Soft - Grip
- high cutting performance by low cutting force
- precision toothing • cable stripping device
- stainless

Art. no.	TL	Ø	kg	PU
200185	150	50	0,083	1

Electricians‘ scissor, straight

with wire cutter, bright nickel-plated, plain cutting edge, straight, strong insulation.
- with stripping device
- micro-toothing
- stainless

Art. no.	TL	kg	PU
200062	130	0,096	1

Electricians‘ scissor, angled

with wire cutter, bright nickel-plated, bent cutting edge, angled, strong isolation.
- with stripping device
- micro-toothing
- stainless

Art. no.	TL	kg	PU
200064	130	0,094	1

Combination scissor

stainless special steel, shock-proof plastic handles, one cutting edge slightly serrated, for cutting of cable, thin plate, wire, leather, cardboard, plastic, Al, Ms and Cu foils.
- Opening spring and locking blade
- Jam protection
- Adjustable screw joint

Art. no.	TL	kg	PU
200072	190	0,110	1

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Cable cutters

Cable cutter

- For cutting Cu/Al cables, fine and multi-wiring
- Chrome vanadium steel, dip-insulated handles
- Insulating function in upper head area
- Cable measuring function thanks to the 180 degree crossover of the legs
- Not for solid conductors

Art. no. 201085 (Art. no. 201087)
- Data, telephone and control cable, maximum Ø 8 mm (Ø 12 mm)
- Cu single wire, maximum 16 mm² (16 mm²)
- Cu fine wire, maximum 16 mm² (35 mm²)
- Cu multi-wire, maximum 16 mm² (25 mm²)
- Al single wire, maximum 16 mm² (25 mm²)
- Al multi-wire, maximum Ø 8 mm = 16 mm² (25 mm²)

Ø 8 | Ø 12 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
201085	160	8	16	0,177	1
201087	200	12	35	0,289	1

Cable cutters

- For cutting Cu/Al cables, fine and multi-wiring
- Chrome vanadium steel, plug-on handles
- Insulating function in upper head area
- Cable measuring function thanks to the 180 degree crossover of the legs
- Not for solid conductors

Art. no. 201086 (Art. no. 201088)
- Data, telephone and control cable, maximum Ø 8 mm (Ø 12 mm)
- Cu single wire, maximum 16 mm² (16 mm²)
- Cu fine wire, maximum 16 mm² (35 mm²)
- Cu multi-wire, maximum 16 mm² (25 mm²)
- Al single wire, maximum 16 mm² (25 mm²)
- Al multi-wire, maximum Ø 8 mm = 16 mm² (25 mm²)

Ø 8 | Ø 12 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
201086	180	8	16	0,216	1
201088	240	12	35	0,361	1

Cable cutters with spring joint

- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Chrome vanadium steel
- Self-opening joint spring
- Enormous cutting power with reduced force expenditure
- Not for solid conductors

Ø 10 | Ø 15 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200086	170	10	25	0,266	1
200088	230	15	70	0,475	1

Cable cutter

For cutting Cu/Al cables.
- Data, telephone and control cable, maximum Ø 25 mm
- Cu single wire, maximum 16 mm²
- Cu fine wire, maximum 70 mm²
- Cu multi-wire, maximum 25 mm²

Ø 20 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200105	215	25	70	0,281	1

Cable cutter with a snap

- One-handed cable cutters for fine wire cables only
- Low force required
- Laser-cut components
- CNC-ground cutting
- Inductively hardened blades
- Adjustable screw joint
- Cu fine wire cable, maximum Ø 16.9 mm = 70 mm²

Ø 16,9 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
201002	180	16,9	70	0,241	1

Cable cutter with a snap

- One-handed cable cutters for fine wire cables only
- Two-stage adjustment mechanism (patent)
- Low force required
- Laser-cut components
- CNC-ground cutting
- Inductively hardened blades
- Adjustable screw joint
- Telephone cable maximum Ø 26.1 mm
- Cu fine wire cable, maximum Ø 18.9 mm = 120 mm²

Video 201000

Ø 18,9 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
201000	230	18,9	120	0,514	1

single wire	wire rope
multi-wire	armoured steel cable
sector-shaped	ACSR
fine wire	bolt
communication	solid steel

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable cutters

Cable cutter

- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Low force required thanks to best blade geometry and translation ratios
- Vanadium electro-steel, forged, oil-hardened
- Aluminium legs
- Hardened blades with precision grinding
- Adjustable screw joint

Ø 27 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200087	500	27	150	1,026	1

Cable cutters

- For cutting Cu/Al cables, fine and multi-wiring
- Surface-ground, rust-protected blades made from annealed chrome vanadium steel
- Impact-proof coated, hardened handle tubes, sickle-shaped rounded blades
- Highest stability with the lowest own weight

Ø 20 | Ø 35 | Ø 50 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200073	300	20	120	0,620	1
200073/MK			cutting head	0,190	1
200095	530	35	185	1,652	1
200095/MK			cutting head	0,610	1
200099	780	50	400	3,380	1
200099/MK			cutting head	1,202	1

Cable cutter

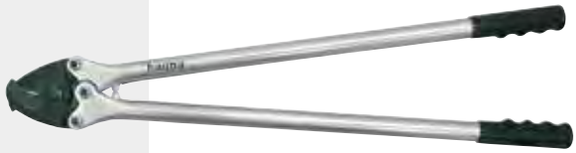
- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Hardened blades with precision grinding
- Dual lever ensures easy cutting
- Adjustable screw joint
- Blade head in chrome vanadium steel, forged and oil-hardened

Ø 24 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200076	600	24	120	0,940	1
200102			cutting head	0,349	1

Cable cutter „Super light"

- For cutting Cu and Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Extremely light thanks to full aluminium handles
- Dual lever ensures easy cutting
- Hardened blades with precision grinding
- Adjustable screw joint
- Blade head in chrome vanadium steel, forged and oil-hardened



Ø 24 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200197	700	24	120	1,839	1

Cable cutter

- For cutting Cu and Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Dual lever ensures easy cutting
- Hardened blades with precision grinding
- Adjustable screw joint
- Blade head in chrome vanadium steel, forged and oil-hardened

Ø 40 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200100	980	40	400	3,920	1
200104			cutting head	0,606	1

Bolt cutters

Bolt cutter

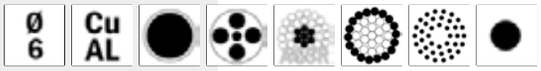
- Cuts soft and hard wires, piano wire
- Cuts bolts, nails, rivets etc. up to Ø 3.6 mm
- Particularly high cutting performance with low force required thanks to extremely effective joint construction
- Blades are also inductively hardened, blade hardness approximately 64 HRC
- Chrome vanadium high-performance steel, forged, oil-hardened

Art. no.	TL	Ø	kg	PU
200170	200	3,6	0,111	1

Wire cutters (ACSR)

Wire cutter

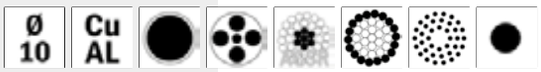
- Cu and Al cables 10 mm²
- ACSR Ø 6 mm
- solid Ø 4 mm
- also suitable for cable and round steel
- suitable for separating open wires with pull relief wire
- with opening spring and latch
- special cutting geometry prevents the wire from unsplicing



Art. no.	TL	Ø	mm²	kg	PU
200173	180	6	10	0,306	1

Wire cutter

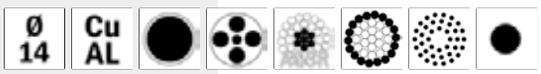
- Cu and Al cable 95 mm²
- ACSR Ø 10 mm
- solid Ø 6 mm
- also suitable for cables and round bars
- special cutting geometry prevents the wire from unsplicing
- suitable for separating open wires with pull relief wire
- exchangeable milling head



Art. no.	TL	Ø	mm²	kg	PU
200175	180	10	95	0,752	1

Wire cutter

- Cu and Al cable 150 mm²
- ACSR Ø 14 mm
- solid Ø 9 mm
- also suitable for cables and round bars
- special cutting geometry prevents the wire from unsplicing
- suitable for separating open wires with pull relief wire
- angled cutting tip allows you to cut individual cables
- optimal transmission for excellent cutting performance
- exchangeable milling head



Art. no.	TL	Ø	mm²	kg	PU
200181	700	14	150	2,390	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hand cable cutter

ratchet action type, with spare blade, for copper and alu cable

Ø 32 | Cu AL

Art. no.
200089

Cutting range:	Cu/Al wire multi wiring	185	32
	Cu/Al wire sector format	185	32
	Cu wire fine wiring	240	32
	Cu wire fine wiring or telecommunication cable		32
Length:			230
Weight:			0,615

Hand cable cutter

ratchet action type, with spare blade, for copper and alu cable

Video 200183

Ø 52 | Cu AL

Art. no.
200183

Cutting range:	Cu/Al wire multi wiring	400	52
	Cu/Al wire sector format	240	45
	Cu wire fine wiring	450	52
	Cu wire fine wiring or telecommunication cable		52
Length:			280
Weight:			0,914

INFO

Cable cutters

Precise cut!
The blade joints (screw connection on rotation blade) are adjusted to 0.05 mm!

Durable and strong
Serrations on the blade and the transport handle are milled!
The contact pressure is thus lower than for cast teeth.

200111, 200112:
- One-handed cable cutter
- Lever joint bolts, thickness 6.5 mm
- 16 mm Full material, milled knee lever

Cable cutter

Handy one-hand device with smooth-running and robust drive technology for everyday use up to 34 mm Ø, all moveable parts made from hardened steel

Ø 34 | Cu AL

Art. no.
200111

Cutting range:	Cu/Al wire multi wiring	185	34
	Cu/Al wire sector format	240	34
	Cu wire fine wiring	240	34
	Cu wire fine wiring or telecommunication cable		34
Length:			250
Weight:			0,790

Cable cutter

Handy one- and two-hand tool with smooth-running and robust drive technology for everyday use up to 52 mm Ø, all moving parts made from hardened steel

Video 200112

Ø 52 | Cu AL

Art. no.
200112

Cutting range:	Cu/Al wire multi wiring	400	52
	Cu/Al wire sector format	400	52
	Cu wire fine wiring	450	52
	Cu wire fine wiring or telecommunication cable		52
Length:			320
Weight:			1,122

INFO

Cable cutters

200113, 200177, 200114, 200116:

- One-handed cable cutter
- Dual needle-bearing offset lever 14 mm
- Particularly easy to move, thanks to reduction of friction on joint
- Considerable reduction of manual force
- Lever joint bolts, thickness 8 mm
- For the toughest of usage conditions
- Locking with a locking shaft
- Accidental opening of handles in tool case is prevented
- Transport handle play is fixed

Cable cutter

Particularly smooth-running cable cutter with needle bearing eccentric drive for everyday use up to 35 mm Ø. Extremely durable tool

Ø 35 | Cu AL

Art. no. 200113

Cutting range:	Cu/Al wire multi wiring	240	35
	Cu/Al wire sector format	240	35
	Cu wire fine wiring	300	35
	Cu wire fine wiring or telecommunication cable		35
Length:			250
Weight:			0,976

Cable cutter

Particularly smooth-running cable cutter with needle bearing eccentric drive for everyday use up to 45 mm Ø. Extremely durable tool

Ø 45 | Cu AL

Art. no. 200177

Cutting range:	Cu/Al wire multi wiring	300	45
	Cu/Al wire sector format	240	45
	Cu wire fine wiring	300	45
	Cu wire fine wiring or telecommunication cable		45
Length:			260
Weight:			0,900

Cable cutter

Particularly smooth-running cable cutter with needle bearing eccentric drive for everyday use up to 52 mm Ø. Extremely durable tool

Ø 52 | Cu AL

Art. no. 200114

Cutting range:	Cu/Al wire multi wiring	400	52
	Cu/Al wire sector format	480	52
	Cu wire fine wiring	500	52
	Cu wire fine wiring or telecommunication cable		52
Length:			325
Weight:			1,340

Special cable cutter

for data and telephone cables up to 75 mm Ø, high cutting quality through special cutting geometry, smooth-running due to needle-bearing drive mechanics, not suitable for steel wire and very wiry conductors of power supply (EVU etc.)

Ø 75 | Cu AL

Art. no. 200116

Cutting range:	Cu/Al wire multi wiring	300	75
	Cu/Al wire sector format	240	75
	Cu wire fine wiring	240	75
	Cu wire fine wiring or telecommunication cable		75
Length:			370
Weight:			1,585

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

Cable cutters

200115, 200119, 200179:

- Two-handed cable cutter for armoured steel cable
- Dual needle-bearing offset lever 14 mm
- Particularly easy to move, thanks to reduction of friction on joint
- Considerable reduction of manual force
- Lever joint bolts, thickness 12 mm
- Extremely well reinforced version for particularly tough uses
- Locking with a locking shaft
- Accidental opening of handles is prevented
- Integrated toothed comb for cleaning in handle
- Transport handle play is fixed

Cable cutter

Almost maintenance-free two-hand cable cutter up to 62 mm Ø, smooth-running through needle-bearing eccentric drive, great range of application, comes with cog comb to clean cogs

Art. no.
200115

Cutting range:	Cu/Al wire multi wiring	750	62
	Cu/Al wire sector format	750	62
	Cu wire fine wiring	750	62
	Cu wire fine wiring or telecommunication cable		62
Length:			410
Weight:			2,224

Cable cutter

Almost maintenance-free quality tool up to 80 mm Ø. Smooth-running due to needle-bearing eccentric drive, also suitable for cables with steel plate jacket and soft steel wire reinforcement, ST 52. Comes with cog comb to clean cogs, integrated in the handle

Art. no.
200119

Cutting range:	Cu/Al wire multi wiring	1000	80
	Cu/Al wire sector format	1000	80
	Cu wire fine wiring	1000	80
	Cu wire fine wiring or telecommunication cable		80
Length:			610
Weight:			3,322

Cable cutter

Almost maintenance-free quality tool up to 100 mm Ø. Smooth-running due to needle-bearing eccentric drive, also suitable for cables with steel plate jacket and soft steel wire reinforcement, ST 52. Comes with cog comb to clean cogs, integrated in the handle

Art. no.
200179

Cutting range:	Cu/Al wire multi wiring	1400	100
	Cu/Al wire sector format	1400	100
	Cu wire fine wiring	1400	100
	Cu wire fine wiring or telecommunication cable		100
Length:			610
Weight:			3,322

Special cable cutter

- One-hand universal- and steel rope cutter with exchangeable cutting segments
- In the case of wear or changing requirements only the cutting segment need to be replaced
- Cleaner included
- Double needle bearing excenter lever 14mm
- Very easy to use through reduction of the attrition of the joint
- Strong reduction of the manuar force
- Lever joint bolt strength 9mm
- Central lubrication
- Cone fitting in the bolt with cross drilling on the bearing points
- Adjustable level of the transport plugs
- Opening of the cutter possible at any time, also suitable for the highest demands without additives

Separable materials:
- Cable AL /Cu
- Cable with soft steel cover
- Steel coverd ropes
- Steel armoured ropes
- Niro ropes
- Flexible steel ropes
- Tracking rope cable
- Steel armoured hose
- ACSR DIN 48 204
- Constructional steel 235JR+AR
- Screws

Complete set:
- Universal cable cutter • 1 pair of cutting segments S1 (art. 200178/S1)

Art. no.	TL	Ø	mm²	mm²	kg	PU
200178	230	50	300	240	1,140	1

Video 200178 PDF 200178

Further accessories for cable cutter item no. 20 01 78

Application: AL/CU: Cross-section 300 mm², Ø 50 mm
Flexible steel cables: Cross-section 95 mm², Ø 14 mm
Niro cables Ø 8 mm, 19/1
ACSR DIN 48 204: Cross-section 150/25 mm², Ø 20 mm, 7/2.1 mm
Steel armoured tubing: Ø 50 mm

Art. no.	Ø	mm²	kg	PU
200178/S1	50	300	0,100	1

Application: AL/CU: Cross-section 150 mm, Ø 30 mm
Flexible steel cables: Cross-section 70 mm, Ø 12 mm
Supporting cable: Cross-section 70/300 mm², Ø 12/30 mm, Type 8
ACSR DIN 48 204: Cross-section 70/12 mm², Ø 11.7 mm, 7/1.44 mm

Art. no.	Ø	mm²	kg	PU
200178/B	30	150	0,100	1

Application: AL/CU: Cross-section: 350 mm, Ø 50 mm
Clean cut and low handgrip with large cross sections
suitable for highly flexible conductors
not for steel

Art. no.	Ø	mm²	kg	PU
200178/C	50	350	0,100	1

Application: AL/CU: Cross-section 350 mm, Ø 50 mm
Flexible steel cables: Cross-section 95 mm, Ø 16 mm
Cable with soft steel sleeve: Cross-section 240 mm², Ø 50 mm
Clean cut and normal handgrip

Art. no.	Ø	mm²	kg	PU
200178/S	50	350	0,100	1

Application: AL/CU: Cross-section 200 mm², Ø 50 mm
Flexible steel cables: Cross-section 95 mm², Ø 14 mm
Niro cables: Ø 8 mm, 19/1
ACSR DIN 48 204: Cross-section 300/50 mm², Ø 24.5, 7/3 mm
Steel armoured tubing: Ø 50 mm
Construction steel 235JR+AR: Ø 10 mm, full material
Screws: Ø 8 mm, 8.8
Can lead to crimping of steel cables are highly flexible, slightly edgy cutaway section, increased handgrip

Art. no.	Ø	mm²	kg	PU
200178/S2	50	200	0,100	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

Cable cutters

Precise cut!
The blade joints (screw connection on rotation blade) are adjusted to 0.05 mm!

Durable and strong
Serrations on the blade and the transport handle are milled!
The contact pressure is thus lower than for cast teeth.

200124, 200126:
- One-handed cable cutter
- Lever joint bolts, thickness 6.5 mm.
- 16 mm Full material, milled knee lever.

Front cable cutter

for Copper and Alu-cable 25 mm Ø, squeeze-free cutting, optimized lever-transmission

Ø 25 | Cu AL

Art. no. 200124

Cutting range:	Cu/Al wire multi wiring	120	25
	Cu/Al wire sector format	120	25
	Cu wire fine wiring	120	25
	Cu wire fine wiring or telecommunication cable		25
Length:			245
Weight:			1,020

Front cable cutter

for Copper and Alu-cable 34 mm Ø, squeeze-free cutting, optimized lever-transmission by eccentric drive system

Ø 34 | Cu AL

Art. no. 200126

Cutting range:	Cu/Al wire multi wiring	185	34
	Cu/Al wire sector format	240	34
	Cu wire fine wiring	240	34
	Cu wire fine wiring or telecommunication cable		34
Length:			330
Weight:			1,541

Front cable cutter

Very easy to use precision one-handed front cutter, excellent crush-free cutting quality even with fine wired cables, tried and tested and almost wear-free offset drive, rotation blade can be locked in any position, cutting range up to a diameter of 35 mm.
- One-handed cable cutter
- Dual needle-bearing offset lever 14 mm
- Particularly easy to move, thanks to reduction of friction on joint
- Considerable reduction of manual force
- Lever joint bolts, thickness 8 mm
- For the toughest of usage conditions
- Locking with a locking shaft
- Accidental opening of handles in tool case is prevented
- Transport handle play is fixed

Ø 35 | Cu AL

Art. no. 200131

Cutting range:	Cu/Al wire multi wiring	240	35
	Cu/Al wire sector format	240	35
	Cu wire fine wiring	300	35
	Cu wire fine wiring or telecommunication cable		35
Length:			330
Weight:			1,673

Front cable cutter

Easy to use two-handed front cutter with patented offset drive, excellent crush-free cutting quality even for large cross-sections, rotation blade can be locked in any position, cutting range up to a diameter of 55 mm.
- Two-handed cable cutter for armoured steel cable
- Dual needle-bearing offset lever 14 mm
- Particularly easy to move, thanks to reduction of friction on joint
- Considerable reduction of manual force
- Lever joint bolts, thickness 12 mm
- Extremely well reinforced version for particularly tough uses
- Locking with a locking shaft
- Accidental opening of handles is prevented
- Integrated toothed comb for cleaning in handle

Ø 55 | Cu AL

Art. no. 200151

Cutting range:	Cu/Al wire multi wiring	550	55
	Cu/Al wire sector format	550	55
	Cu wire fine wiring	550	55
	Cu wire fine wiring or telecommunication cable		55
Length:			485
Weight:			3,493

Hydraulic cutting

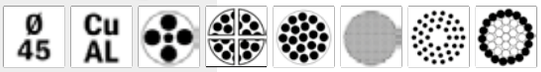
haupa®

... convincing solutions

Hydraulic cable cutters

Hydraulic cable cutter „HH 45-ST“

- in case • cutting head can be rotated 180°
- for copper and aluminium cable • ACSR: Ø 28 mm
- soft CU round bar: Ø 25 mm • soft AL round bar: Ø 22 mm
- soft steel round bar: Ø 16 mm
- CU/AL wire stranded: Ø 32 mm

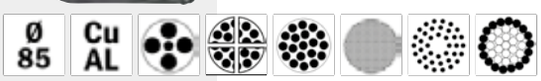


Art. no.	TL	Ø	kg	PU
216402	580	45	5,300	1

Hydraulic cutter „HH 85-ST“

- in case • cutting head can be rotated 180°
- with hydraulic quick connections • copper and aluminium cable
- armoured steel cable

For technical data, see page 20



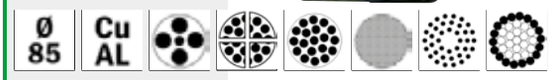
Art. no.	TL	Ø	kg	PU
216404	690	85	7,000	1

Hydraulic cutting headstocks

Hydraulic cutting headstock

- in bag • with hydraulic quick connections
- copper and aluminium cable • armoured steel cable

For technical data, see page 20

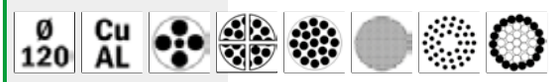


Art. no.	Ø	kg	PU
216408	85	11,300	1

Hydraulic cutting headstock

- in bag • with hydraulic quick connections
- copper and aluminium cable • armoured steel cable

For technical data, see page 20

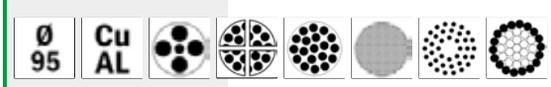


Art. no.	Ø	kg	PU
216410	120	14,600	1

Hydraulic cutting headstock

- in bag • with hydraulic quick connections
- copper and aluminium cable • armoured steel cable

For technical data, see page 20



Art. no.	Ø	kg	PU
216415	95	11,300	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hydraulic safety life line cable cutter

DIN EN 50340 HAUPA Schneidgeräteserie 60.000 V

used for working under voltage acc. to VDE 0105, part 100.

Consisting of:

- Hydraulic shear with high pressure hose of 10 m, with leak-free coupling system and earth harness acc. to EN 50340
- Double piston pump mounted on foot-pedal, with foot-operated switch
- Transport case
- Fully operational and filled with special oil

According to VDE 0105 Part 1 Para. 9.6.4 the cable cutter 216416 is used for cutting low and medium voltage cables up to 60 KV AC. It has been tested by the Professional Association of Precision Mechanics and Electro-Technology based on-testing GS ET-23 and has been awarded the GS-seal of approval. If a live wire is cut by accident, the operator is not in any danger.
The 10 m long high pressure hydraulic hose, which connects the pump to the cutting head, guarantees the highest standard of safety due to it special insulating features. The cutting process is controlled by watching the manometer attached to the pump, since, in general, the cutting head con not be seen when a cable is cut. This process has been tested repeatedly at medium voltage, with live wires and continuing main supply.
The cutting range goes up to 85 mm. The 12 mm cutting blades are made of high yield point steel and are polished, thus wear- and tear- resistant, A strongly dimensioned guidance of the blades guarantees a high degree of mechanical stability. Even in the event of a short circuit, a safe cutting of the wires is guaranteed, since the individual blades overlap by approx. 20 mm. The blades open themselves when pressure is reduced. The high pressure hose bursts at 2700 bar. The pressure relief safety system of the pump has been adjusted at a 625 bar level.

Ø 85 | Cu AL

Art. no.	Ø	NP	kg	PU
216417	85	625	12,000	1

Hydraulic safety life line cable cutter

Ø 95 | Cu AL

Art. no.	Ø	NP	kg	PU
216421	95	625	12,000	1

Hydraulic safety life line cable cutter

Video 216416

Ø 120 | Cu AL

Art. no.	Ø	NP	kg	PU
216416	120	625	12,000	1
216416/850	120	850	12,000	1

Battery powered cable cutter „AS-52“

- for copper and aluminium cable
- diameter up to 52 mm

Scope of delivery:
1 cutting tool, 1 quick charger, 1 battery 18V Li-Ion, 3 Ah, in plastic case

Ø 52 | Cu AL | Li-ION 18V 3Ah

Art. no.	Ø	kg	PU
216434	52	3,000	1

Battery powered cable cutter „AS-52ACSR“

- for copper and aluminium cable
- diameter up to 52 mm
- ACSR 19 mm

Scope of delivery:
1 cutting tool, 1 quick charger, 1 battery 18V Li-Ion, 3 Ah, in plastic case

Video 216436

Ø 52 | Cu AL | Li-ION 18V 3Ah

Art. no.	Ø	kg	PU
216436	52	3,000	1

Battery powered cable cutters

Battery powered cable cutter „AS6-S20 “

hydraulic for cutting telecommunications cables, cutting head can be rotated by 180°, manual return after the cut has been completed.
Scope of delivery: 1 cutting tool, 1 quick charger, 1 battery, 1 carry strap loop, in SysCon stacking box.

- Pressing force kN: 60 kN
- Working pressure in bar: 700
- Cutting width Ø: 20
- Battery charging time in minutes: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- ACSR
- Sheet and wire armouring Cu
- Wire rope, bracing wire
- Soft rod steel
- Lead sleeve cable

Video 216418

Ø 20 | Cu AL | 60 kN | 700 bar | 180° | Li-ION 18V 1,5Ah | SysCon

Art. no.	Ø	kg	PU
216418	20	8,100	1

Battery powered cable cutter „AS6-S32“

Hydraulic for cutting telecommunications cables, cutting head can be rotated by 180°, manual return after the cut has been completed.
Scope of delivery: 1 crimping tool, 1 quick charger, 1 battery, 1 carry strap loop, in SysCon stacking box.

- Pressing force kN: 60 kN
- Working pressure in bar: 700
- Cutting width Ø: 32
- Battery charging time in minutes: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah

Video 216419

Ø 32 | Cu AL | 60 kN | 700 bar | 180° | Li-ION 18V 1,5Ah | SysCon

Art. no.	Ø	kg	PU
216419	32	8,100	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Battery powered cable cutter „AS6-40"

Crimping head 180° swivelling, manual return, LED for battery control, 1 quick charger, 1 battery, carrying belt, in bag, for copper and aluminium cable.

- Pressing force kN: 60
- Working pressure in bar: 700
- Cutting width Ø: 40
- Battery charging time in minutes: 60
- Battery type: Li-Ion, 18 V, 3 Ah

Video 216422

Ø 40 | Cu AL | 60 kN | 700 bar | 180° | Li-ION 18V 3Ah

Art. no.	TL	kg	PU
216422	385	8,100	1

Battery powered cable cutter „AS12-52“

Cutting head can be rotated by 180°, manual return, for copper, aluminium cable.

Scope of delivery:

1 crimping tool, 1 quick charger, 1 battery, 1 carry strap loop, in plastic case.

- Pressing force kN: 120
- Working pressure in bar: 700
- Cutting width Ø: 52
- ACSR
- Battery charging time in minutes: 60
- Battery type: Li-Ion, 18 V, 3 Ah

Ø 52 | Cu AL | 120 kN | 700 bar | 180° | Li-ION 18V 3Ah

Art. no.	TL	kg	PU
216424	385	8,500	1

Battery powered cable cutter „AS6-85“

Cutting head can be rotated by 180°, manual return, for copper and aluminium cable, telephon cable.

Scope of delivery:

1 crimping tool, 1 quick charger, 1 battery, 1 carry strap loop in plastic case.

- Pressing force kN: 60 • Working pressure in bar: 700
- Cutting width Ø: 85
- Battery charging time in minutes: 60
- Battery type: Li-Ion, 18 V, 3 Ah

Video 216428

Ø 85 | Cu AL | 60 kN | 700 bar | 180° | Li-ION 18V 3Ah

Art. no.	TL	kg	PU
216428	385	9,000	1

Battery powered cable cutter „SAS6-85“

Cutting head can be rotated by 180°, manual return, for copper and aluminium cable as well as armoured steel cable, telephon cable.

Scope of delivery:

1 crimping tool, 1 quick charger, 1 battery, 1 carry strap loop, in plastic bag.

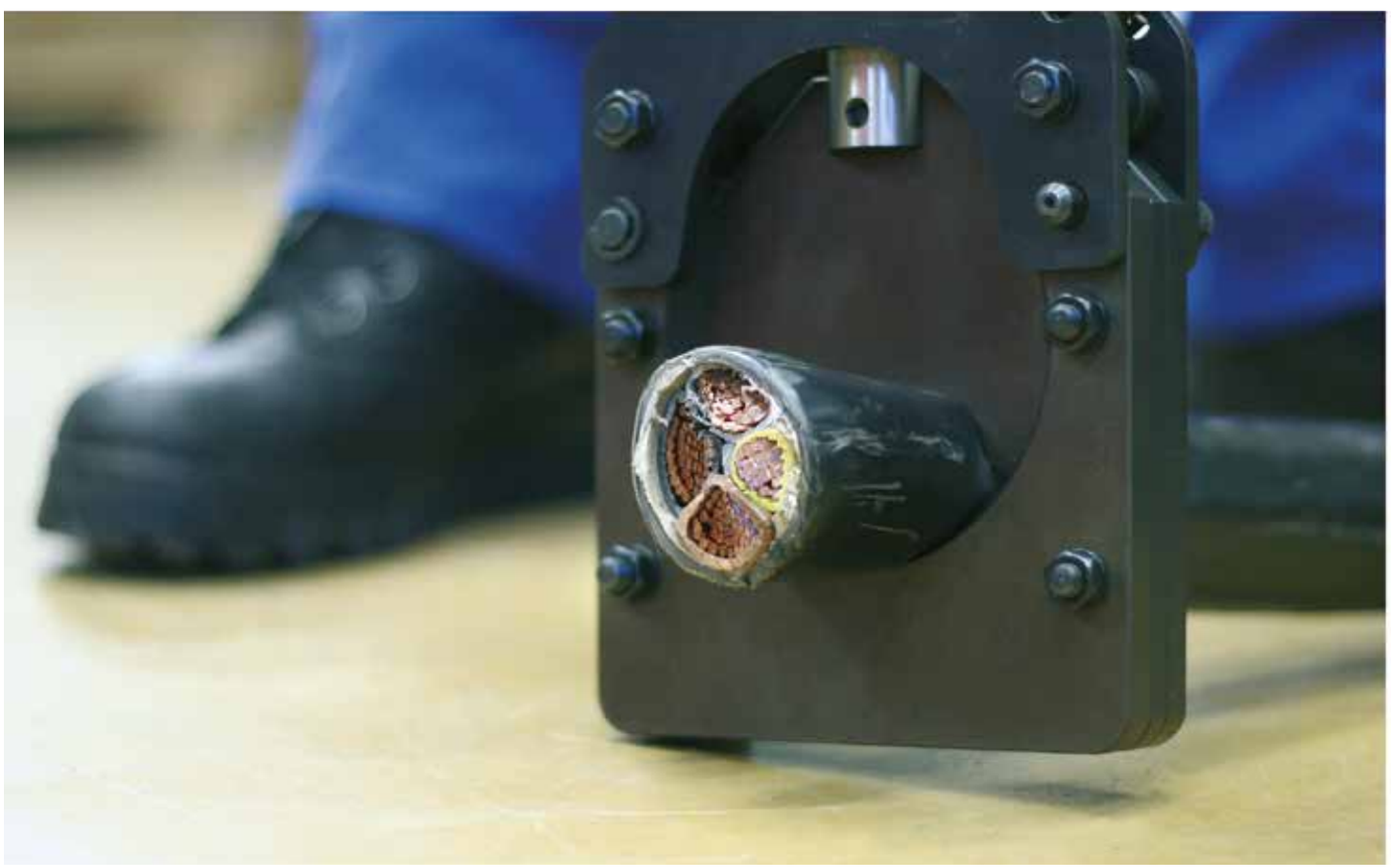
- Pressing force kN: 60 • Working pressure in bar: 700
- Cutting width Ø: 85
- Armoured steel cable
- Battery charging time in minutes: 60
- Battery type: Li-Ion, 18 V, 3 Ah

Video 216430

Ø 85 | Cu AL | 60 kN | 700 bar | 180° | Li-ION 18V 3Ah

Art. no.	TL	kg	PU
216430	385	14,000	1

Battery hydraulic cutting tools								
Art	216418	216419	216422	216424	216428	216430	--	--
Type	AS6ST-20	AS6S-32	AS6-40	AS12-52	AS6-85	SAS6-85	--	--
Hand hydraulic cutting tools								
Art	--	--	--	--	--	216404	--	--
Type	--	--	--	--	--	HS-85	--	--
Hydraulic cutting heads								
Art	--	--	--	--	--	216408	216415	216410
Type	--	--	--	--	--	KS-85	KS-95	KS120
Diameter	20	32	40	52	85	85	95	120
Head	swivel	open	swivel	swivel	swivel	swivel	open	swivel
Output force	6	6	6	12	6	700 bar	700 bar	700 - 850 bar
Immediately motor-stop	●	●	●	●	●	●	●	●
Material								
Copper	20	32	40	52	46	85	95	120
Aluminium	20	28	40	52	28	85	95	120
Undergroundcable	--	--	40	52	50	85	95	120
Telephone cable	--	--	40	--	85	85	95	120
ACSR	●	--	--	32	--	--	--	--
Wire rope	●	--	●	●	--	--	●	●
	16	--	22	●	--	--	22	22
	20	--	25	●	--	--	25	25
	20	--	25	●	--	--	25	25
Guy wire	●	--	--	●	--	--	●	●
	20	--	20	●	--	--	15	15
	20	--	25	●	--	--	20	20
Soft steel bar	(under SS41) 13 mm	--	16	25	--	--	--	--
Sheetmetal & Wire armouring, C	20	--	--	●	--	85	95	120
Lead sheated cable	20	--	40	52	85	85	95	120



Stripping

haupa®

... convincing solutions

INFO

Cable strippers

Information for stripper

Stripping removes the outer sleeve of a installation cable.
For cables that have already been installed in installation sockets and are thus difficult to access, you use a round stripper.
When stripping, open the stripper and place it on the cable in such a way as to ensure that the round blade is position at the point of the sleeve you wish to remove.
Turn the stripper a quarter turn to the left and to the right, bend the cable a little, and open up the stripper.
Place the tool closer to the end of the cable, close again, and stripper the sleeve away easily.
There is a variety of strippers available for the various types of cable.

Important: Important, when stripping the insulation of inner wires may not be damaged.

Cable stripper „Kabifix“

- For slicing open and removing the sleeve from cables
- Lengthwise and round cuts
- Ø 6 – 28 mm • NYY 4 – 16 mm² • NYM 5 – 16 mm²
- Coaxial and bell round cable
- Isoflex and PVC piping maximum Ø 25 mm
- Interior adjustment screw for adjusting the cutting depth
- Exchangeable blades

Art. no.	Ø		kg	PU
200022	6-28		0,096	1
200024		spare blades	0,010	1

Cable stripper „Kabifix LWL”

- Fibre-optic cable, slicing open and removing the sleeve from Ø 6 - 25 mm
- Lengthwise and round cuts
- Interior adjustment screw for adjusting the cutting depth
- Exchangeable blades

Art. no.	Ø		kg	PU
200023	6-25		0,136	1
200023/M	6-25	spare blades	0,003	1

Cable stripping knive

- For removing the sleeve from all current round cables
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- Cutting depth can be adjusted using the setting screw on the end of the handle
- Automatic adjustment to round and lengthwise cuts
- Handle security thanks to soft component insert on the bar and handle
- Titanium nitride coated replacement blade in the housing
- Housing made from high-quality, hard wearing polyamide
- With titanium nitride coated hook blade
- TÜV / GS tested

Video 200031

Art. no.	Ø		kg	PU
200031	8-28		0,100	1
200046		spare blades	0,004	1

Cable stripping knive

- For removing the sleeve from all current round cables
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- Cutting depth can be adjusted using the setting screw on the end of the handle
- Automatic adjustment to round and lengthwise cuts
- Handle security thanks to soft component insert on the bar and handle
- Titanium nitride coated replacement blade in the housing
- Housing made from high-quality, hard wearing polyamide
- TÜV / GS tested

Art. no.	Ø		kg	PU
200038	4 - 16		0,090	1
200040	8 - 28		0,091	1
200042	28 - 35		0,101	1
200044	35 - 50		0,108	1
200046		Spare blades	0,004	1

Stripper „All-rounder“

- Cable stripper for round cables from Ø 4 - 15 mm and flat cables up to 15 mm width
- Stripping 1.5 - 2.5 mm² single wire • Lengthwise cut

Video 200050

Art. no.	Ø	kg	PU
200050	4 - 15	0,111	1

Stripper standard

- For removing the sleeve from all current round cables
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- No need to set blades required to cutting depth
- Fixture clip for safe storage
- Housing made from high-quality, hard wearing polyamide
- TÜV / GS tested

Video 200036

Art. no.	Ø	kg	PU
200036	8-13	0,065	1

Universal stripper

- Stripper for removing the sleeve from all current round cables Ø 8 to 13 mm
- Removing the insulation on various cable types, e.g. NYM 3 x 1.5 mm² to 5 x 2.5 mm²
- Contoured blades for stripping wires 0.2-0.3-0.8-1.5-2.5-4.0 mm²
- Ideal for working in distribution and junction boxes
- Longer cable lengths can be stripped using the lengthwise cutting mechanism
- Safe hold thanks to the inclusion of anti-slip handle zones
- No need to set blades required to cutting depth
- Additional titanium nitride coated retractable blade
- TÜV / GS tested

Video 200043

Art. no.	Ø	kg	PU
200043	0,2 - 4,0	0,063	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Flatcable stripper

For stripping round cables with rubber or hard plastic sleeves and flat cables up to 12 mm in width (e.g. NYM cable4 3 x 1.5 to 5 x 2.5 mm², insulated flat cables of flexible cables).

- Stripping tool for cables and litz wire 0.8 - 1.5 - 2.5 mm²
- Ideal for working in tight and difficult to access areas
- Additional blade for lengthwise cut
- Fixture clip for safe storage
- TÜV / GS tested

Art. no.	Ø	kg	PU
200037	0,8 - 2,5	0,068	1

Stripper "Coaxi"

- For removing the sleeve from all current coax cables
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- 2 blade pairs for two-stage stripping
- Cutting depth does not need to be set
- No damage to the inner sheath and inner cable elements
- Embossed scale for precise stripping length
- No limitation on the stripping length
- With fixture at the end of the handle
- TÜV / GS tested

Art. no.	Ø	kg	PU
200035	4,8 - 7,5	0,039	1

Stripper for coaxial cable

- For removing the sleeve from all current coaxial cables Ø 4 to 7.5 mm
- For stripping various cable types, e.g. TV coax, RG 58 / RG 59, PVC flex 3 x 0.75 mm²
- New closure system
- Safe hold thanks to the 2-component handle shells
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- 2 blade pairs for two-stage stripping
- Cutting depth does not need to be set
- No damage to the inner sheath and inner cable elements
- Easily recognised, internal length scale
- TÜV / GS tested

Art. no.	Ø	kg	PU
200636	4,8 - 7,5	0,041	1

Cable strippers for short-circuit proof lines

Solar

- For stripping current energy and safety cables
- For stripping short-circuited and grounded, flame retardant, halogen-free cables, e.g. NSGAFÖU, VER H07RN-F
- With lengthwise stop 8 - 10 - 12 mm for even stripping lengths
- For stripping safety and energy cables
- No need to set blades required to cutting depth
- For stripping dual insulated solar cables
- TÜV / GS tested

Art. no.	Ø	kg	PU
200630	1,5	0,054	1
200632	2,5 - 6	0,054	1
200634	10 - 16	0,054	1

PC-Strip

- For stripping round cables Ø 5 - 15 mm
- For stripping various cable types, e.g. IBM Type 1, Type 2, flexible cables, etc.
- For stripping PVC insulated data, communication and control cables
- With stripping tool for cables and litz wire from 0.2 - 4 mm²
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- No need to set blades required to cutting depth
- TÜV / GS tested

Art. no.	Ø	kg	PU
200039	5,5 - 15	0,064	1

Stripper for coaxial cable

- For coaxial cables, RG-58, RG-59/62, RG-6 and 6QS
- With 3 replaceable and individually adjustable blades
- Cutting distance of 8 and 4 mm

Art. no.	crimp	kg	PU
200069	RG 58-59-62-6	0,048	1

PC Cat

- For stripping round cables Ø 4.5 - 10 mm
- Stripping various cable types, e.g. CAT 5, CAT 6, CAT 7, Twisted-Pair cable
- With stripping tool for cables and litz wire from 0.2 - 0.8 mm²
- For stripping PVC insulated CAT and network cables
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- No need to set blades required to cutting depth
- TÜV / GS tested

Art. no.	TL	Ø	kg	PU
200637	125	4,5 - 10	0,062	1

PC-Cat

- For stripping PVC insulated data, communication and control cables Ø 4.8 - 10.0 mm
- Cat5, Cat6, Cat7, Twisted-Pair cable
- Blades, titanium nitride coated, thanks to the higher cutting speed
- Lower wear, increased durability
- 2 blade pairs for outer sleeve and foil sheath
- Cutting depth does not need to be set
- With length scale
- TÜV / GS tested

Art. no.	TL	Ø	kg	PU
200638	128	4,8 - 10	0,050	1

Stripper for UTP-/STP-data cable

Universal tool for cutting, stripping and removing the sleeve from round and flat cables, sheathed and unsheathed cables.

- Cutting depth can be set
- Exchangeable blades
- For cable with a diameter of 3.5 to 9 mm

Video 200068

Art. no.	Ø	kg	PU
200068	3,5 - 9	0,060	1

Precision stripper PWS Plus

Areas of **Application:** Data processing equipment, control device production, telecommunication, 3 integrated functions:

- Precise stripping from AWG 30 (0.25 mm² Ø) to AWG 20 (0.8 mm² Ø)
- Adjustable straight dog up to 15 mm
- Wire cutter up to 0.8 mm Ø (CU cable)

Art. no.	Ø	kg	PU
200033	0,25 - 0,8	0,039	1

Precision stripper for optic fibres

Light and handy precision stripping tool to remove the sleeve from optic fibres (wires).

- in the application areas of electronics and telecommunication
- for 0.18 mm Ø

Art. no.	Ø	kg	PU
200622	0,18	0,029	1

Sensor Tool LSA

Standard tool for all data, information and telecommunication cables with cutting mechanisms, hook and blade

- Cable diameter: 0.35 - 0.9 mm
- Core diameter: 0.7 - 2.6 mm

Art. no.	Ø	kg	PU
300322	0,35 - 0,9	0,078	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Stripping pliers

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INFO

Wire stripper

Stripping is the removal the insulation on an electrical cable (wire). The following stripping pliers are used to do this:

Manually adjustable stripping pliers
Are set by hand to the stripping diameter by eye. The risk of damaging the cable is thus very high.

Automatic or self-adjusting stripping pliers
For fast and precise cutting and stripping. These tools automatically adjust to the required cable cross-section or insulation thickness. Thus it is not possible to damage the cable or the insulation. A lengthwise stop makes serial insulation easier.

Micro-precision stripping tools
These are used when fi ne wires are to be stripped. Data technology, network technology, controller construction, telecommunications, electronics, model construction.

Stripping tools for special insulation types
Tefl on insulations are a rubber-like insulation type which make removing the insulation of an electrical cable more diffi cult. In such tough situations we recommend stripping tools that cut the insulation sleeve.

Advantages
- Constant safe stripping results
- Fault free processing
- Precision in every cut
- Serial stripping is made easier by lengthwise stop
- Automatic stripping pliers = 3 in 1 = cut + remove sleeve + strip

Cable stripper, manual

Multi-functional tool including cable cutter for copper cable.
- Comfortable handles
- Precise removal of sleeve thanks to formed blade
- Cutting function
- Gripping function
- With handle lock

Art. no.	TL	mm²	kg	PU
210620	175	0,5-2,5	0,158	1
210624	175	0,25-0,75	0,161	1

Cable stripper, manual optical fibre

Multi-functional tool for fibre optic cables.
- For slicing open and cutting cables
- Cutting depth can be set
- Specially designed for use with fibre optic cables (outer sleeves and buffer)
- With handle lock

Art. no.	TL	mm²	kg	PU
200057	150	0,18	0,120	1

Cable stripper, automatic

- No damage to the cable
- Sleeve is removed according to standard from fine wire cables
- Replaceable blade made from special steel
- Robust metal body
- A pressure spring returns the cutters to the starting position
- Also ideally suited for use with fibre optic cables.

Art. no.	TL	mm²	kg	PU
210691	165	0,5-2	0,340	1
210692	165	1-4	0,350	1

Wire stripper „High Strip“

- Suitable for cables with problematic insulation types, e.g. rubber, silicone, TPE, etc.
- For cable sized 0.5 - 0.75 - 1.5 -2.5 - 4.0 mm²,
- Adjustable lengthwise stop 5 to 15 mm,
- TÜV / GS tested

Art. no.	TL	mm²	kg	PU
210684	170	0,5-4	0,130	1

Super wire stripper

- Automatic setting to the cross-section
- Working range of 0.5 to 4 mm²
- Integrated side cutter up to 2.5 mm²

Art. no.	TL	mm²	kg	PU
210683	170	0,5-4	0,119	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Automatic wire stripper Super Plus

for solid and flexible conductors and strands between 0.2 and 6.0 mm²
(AWG 24 - 10)

- For fast and precise stripping even of difficult – to-access places
- No adjustment to wire cross section necessary
- Suitable for cables with insulation made from PVC and other materials
- Special scanning system, therefore no damage to conductors
- Adjustable longitudinal stop from 6.0 to 15.0 mm for even serial stripping
- External side cutters for conductors up to 2.5 mm²
- Body of pliers made from fibre-glass reinforced polyamide
- Handle of pliers with elongated hole at the bottom for mounting
- TÜV / GS tested

Video 210695

Art. no.	TL	mm²		kg	PU
210695	170	0,2-6		0,088	1
210695/E			spare blades	0,010	1

Automatic wire stripper

- For single, multiple and fine wire cables from 0.2 to 6.0 mm²
- Ergonomic, automatic strippers
- Increased operating comfort thanks to anti-slip soft components on the stripper handle
- Automatic, energy-saving scanning system
- Cable cross-section does not need to be set
- Optimally positioned side cutter for up to 2.5 mm²
- Adjustable lengthwise stop 6 to 18 mm for same sleeve removal lengths when carrying out series work
- Exchangeable blades
- TÜV / GS tested

Video 210696

Art. no.	TL	mm²		kg	PU
210696	180	0,2-6		0,151	1
210696/2			spare blades	0,030	1

Automatic wire stripper HAUPA-Special

- Ergonomic, automatic strippers
- For cable from 0.5 to 6.0 mm²
- Automatic scanning system
- Cable cross-section does not need to be set
- Optimally positioned side cutter for Cu wires up to Ø 2.8 mm
- Adjustable lengthwise stop to 18 mm
- TÜV / GS tested

Art. no.	TL	mm²	kg	PU
210681	170	0,5-6	0,179	1

Wire stripper / Solar

- For cables with large cross-sections from 6.0 to 16 mm²
- Also for stripping PVC flex 3 x 0.75 mm² or solar cables Solarflex-X PV1-F
- Automatic strippers
- Optical lengthwise stop to 20 mm
- Cable cross-section does not need to be set
- Any stripping length can be selected as needed
- Exchangeable blades
- TÜV / GS tested

Art. no.	TL	mm²	kg	PU
210685	160	6-16	0,147	1

Flat cable pliers

- For PVC insulated flat cables up to a maximum of 12 mm in width and a cross-section of 0.75 x 2.5 mm²
- Automatic strippers
- Optical lengthwise stop to 20 mm
- Strippers do not need to be set
- Any stripping length can be selected as needed
- Exchangeable blades
- TÜV / GS tested

Art. no.	TL	mm²	kg	PU
210686	160	0,75-2,5	0,148	1

Wire stripper Sensor Mini

The HAUPA Sensor Mini has a specially designed blade geometry with a working area as of 3.2 mm Ø for sensor cables with smaller cross-sections.

- Automatic wire strippers for stripping combination wires for connecting sensor actuators, distribution boxes/bus couplings
- Any length can be stripped
- No need to make setting to the cable cross-section
- Blades can be replaced
- TÜV/GS tested

Art. no.	TL	Ø	kg	PU
210730	170	> 3,2	0,121	1

Wire stripper sensor special

Automatic stripper for stripping combination cables for connection of sensor actuators, distribution boxes/bus couplings. For stripping halogen-free screened or unscreened sensor actuator cables with PUR or PVC exterior sleeve and a cable construction with 3 to 8 cores.

- e.g. sensor cable 3 x 0.34 mm² unscreened up to 8 x 0.25 mm² screened
- Any stripping length
- Cable cross-section does not need to be set
- Exchangeable blades
- TÜV / GS tested

Art. no.	TL	Ø	kg	PU
210729	170	4,4 - 7,0	0,122	1

Cable stripper ASI, automatic

For stripping AS interface cables with TPE/PUR exterior insulation. For use in connecting actuator-sensor interface components.

- Blade contour designed for use with the AS interface cable
- Strippers do not need to be set
- Any stripping length can be selected as needed
- Exchangeable blades
- TÜV / GS tested

Art. no.	TL		kg	PU
210693	160		0,117	1
210693/1		spare blades	0,030	1

Cable stripper Outlet 20/55

Article number 210697

- For stripping round cable Ø 7.5 to 9 mm
- Insulation thickness of cable maximum 1.2 mm
- Ideal for processing NYM cables 3 x 1.5 mm to 5 x 1.5 mm²
- Compatible with the Cable Outlet laying system from OBO Bettermann or R & M

Article number 210699

- For stripping round cable Ø 7.5 to 9 mm
- Insulation thickness of cable maximum 1.65 mm
- Ideal for processing NYM cables 3 x 1.5 mm to 5 x 1.5 mm²
- Coaxial cable, screened or unscreened measuring control and control cables

Suitable for connecting potential equalising, screened connection system or grounding clips.

Art. no.	TL	Ø		kg	PU
210697	160	7,5 - 9	55	0,104	1
210699	160	7,5 - 9	20	0,100	1

Automatic cable stripper

- For stripping fine wires and solid cables 0.08 – 2.5 mm²
- Stripping length, maximum 15 mm
- Automatic setting to the cross-section
- Integrated side cutter of up to 6 mm²
- With stripping lengthwise stop

Art. no.	TL	mm²		kg	PU
211928	160	0,08-2,5		0,156	1
211928/1			spare blades	0,005	1

Automatic cable stripper

- For stripping fine wires and solid cables 0.03 – 6 mm²
- For stripping and cutting dual insulated cables
- For stripping and cutting 4-6-8-pole telephone or data cables
- Automatic setting to the cross-section
- Integrated side cutter of up to 6 mm²
- With stripping lengthwise stop

Art. no.	TL	mm²	kg	PU
210690	200	0,03-6	0,184	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Automatic cable stripper

Automatic cable stripper

- For stripping fine wires and solid cables 0.08 – 6 mm²
- Automatic setting to the cross-section
- Integrated side cutter of up to 6 mm²
- With stripping lengthwise stop

Art. no.	TL	mm²		kg	PU
211930	205	0,08-6		0,255	1
211930/1			spare blades	0,005	1

Automatic cable stripper

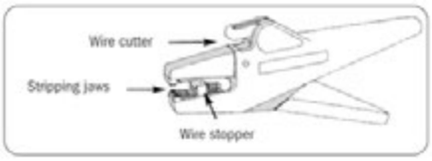
- For stripping fine wires and solid cables 6 – 16 mm²
- Automatic setting to the cross-section
- Integrated side cutter of up to 6 mm²
- With stripping lengthwise stop

Art. no.	TL	mm²		kg	PU
211932	205	6-16		0,250	1
211932/1			spare blades	0,005	1

Automatic cable stripper

- for stripping fine wires and solid cables 0.03 – 10 mm²
- automatic setting to the cross-section
- integrated side cutter of up to 10 mm²
- with stripping lengthwise stop

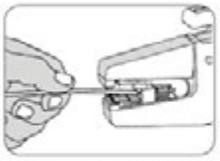
Art. no.	TL	mm²		kg	PU
211934	205	0,03-10		0,413	1



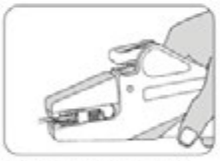
Squeeze wire stopper from both sides

Set the required stripping length

Set the stripping length



Feed wire to the wire stopper with pliers



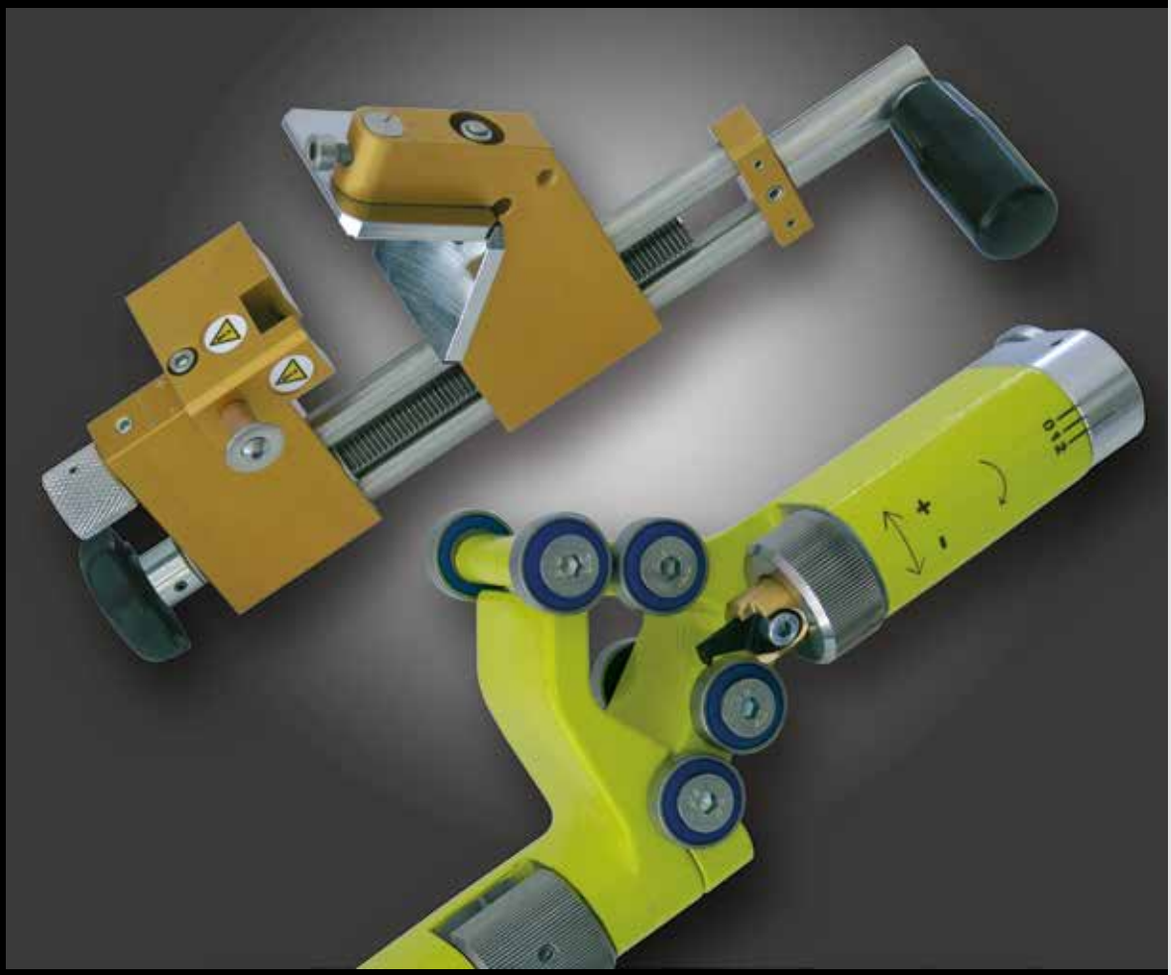
Squeeze pliers handles, pliers close automatically

Stripping slide returns

Release handles, pliers open automatically

Strippers for building installation work

Stripping



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INFO

Cable strippers

Stripping refers to the removal of the outer sleeve of the cable. A special tool is used to first cut in a ring around and then along the length of the cable.
Cable sleeve cutters are available in a wide variety of versions.

Important:
When stripping, the insulation of the inner wires and the wires themselves may not be damaged.

Cable sheath cutter

for removing all insulating layers from cables with diameters as of 25 mm
- Replaceable dual blade
- Cutting depth can be set
- Suitable for lengthwise and circular cuts

Art. no.	Ø		kg	PU
110567	25		0,220	1
110569		spare blades	0,040	1

Stripping pliers

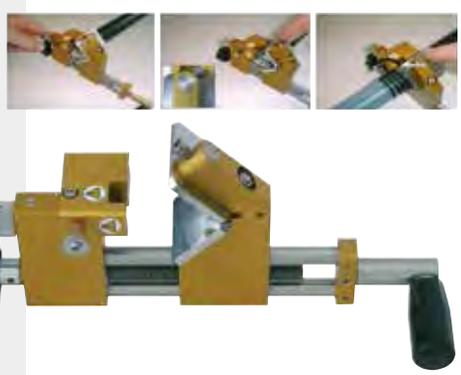
For cutting and removing the cable sheathing of low and medium-high voltage cables

Art. no.	TL	Ø	kg	PU
200187	260	26 - 52	0,760	1
200188	290	47 - 75	1,100	1

Stripping tool for medium-high voltage cable

A universal tool for controlled and safe stripping of the firm extruded exterior semi-conductor layer of medium-high voltage cable with 10-30 KV and for greater voltage levels. Working range 10-50 mm.

- Stripping depth can be set
- Defined round cut
- Automatic work feed



Video 200520

Art. no.	Ø		kg	PU
200520	10 - 50		0,800	1
200520/1		repl. blade set	0,100	5

Cable Sheath Stripper

A combination tool for all standard cross-sections in the medium-high voltage range for VPE single-core cables..
Cutting and stripping the exterior sleeve and the inner cable insulation.
Two feeds and a zero setting can be set to ensure precise stripping. The sleeve is lifted at the cutting point and this prevents damage to the construction elements below.

Video 200524

Art. no.	Ø		kg	PU
200524	35 - 500		0,800	1
200524/1		spare blades	0,020	1

Edge cutter

Art. no.	Ø	kg	PU
200526	40	0,100	1
200528	60	0,100	1

Complete assembly case

Contents:
- Sleeve cutter
- Plastic prism
- Stripping device
- Silicone paste
- Edge cutter
- Key for changing blades

Art. no.	mm²	kg	PU
200522	35-500	0,800	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Pressing and crimping

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INFO

Crimping pliers for end sleeves

When crimping end sleeves a distinction is made between sleeves with and without plastic collars and between trapezoid, square and hexagon pressing.

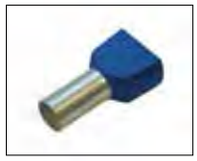
The sleeves with a plastic collar make it easier to insert individual stranded wires. The coloured marking on the wire end sleeves is used to classify the cross section.

Pliers with a square crimp ensure better contact in the terminal strip. The square crimp also facilitates alignment and assembly, as clamps can be attached to each of the surfaces.

insulated end sleeves

for short-circuit-proof cables

TWIN



tin-plated

bare

Crimping pliers

for end sleeves, with cutting and stripping mechanism, matt, chrome-plated

Art. no.	TL	mm²	kg	PU
210820	140	0,25-2,5	0,202	1
210824	220	0,75-16	0,304	1
210826	225	10-35	0,277	1

Crimping pliers

for end sleeves, short construction, 20% angled handy form, with locking device, with adjustable crimp pressure, **trapezoidal pressing**

Art. no.	mm²	kg	PU
211650	0,14-2,5	0,371	1
210841	0,25-6	0,380	1
211652	6-16	0,374	1

Crimping pliers for twin end sleeves

with locking device, with adjustable crimp pressure, chrome plated, **trapezoidal pressing**

Art. no.	mm²	kg	PU
211676	0,5-6	0,576	1
211678	6-16	0,604	1

Crimping pliers

for end sleeves, with locking device, with adjustable crimp pressure, chrome plated, **trapezoidal pressing**

Art. no.	mm²	kg	PU
210763	0,5-4	0,578	1
210842	1-10	0,553	1
210765	6-16	0,582	1
211672	10-25	0,580	1
210768	10-35	0,606	1
211674	25-50	0,600	1

Crimping pliers

for end sleeves, precise **square crimping** profile, automatic setting to the conductor cross-section, unlockable forced lock, guarantees connections that meet DIN, high transmission and ergonomically shaped plastic handles for fatigue free working, **square pressing**.
2 grooved and 2 smooth jaws for better insertion of the sleeve.

Art. no.	mm²		kg	PU
210804	0,08-10	square	0,413	1

Crimping pliers

for end sleeves, precise crimping profile, automatic setting to the conductor crosssection, unlockable forced lock, guarantees connections that meet DIN, high transmission and ergonomically shaped plastic handles for fatigue free working. **Square pressing**

Art. no.	mm²		kg	PU
211816	0,08-16	square	0,413	1

Crimping pliers

for end sleeves, precise hexagonal crimping profile, automatic setting to the conductor cross-section, unlockable forced lock, guarantees connections that meet DIN, high transmission and ergonomically shaped plastic handles for fatigue free working, **hexagonal pressing**

Art. no.	mm²		kg	PU
211805	0,08-6	hexagonal	0,413	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimping pliers for end sleeves

Crimping pliers

for end sleeves, precise crimping profile, automatic setting to the conductor crosssection, unlockable forced lock, guarantees connections that meet DIN, high transmission and ergonomically shaped plastic handles for fatigue free working, **hexagon pressing**

Art. no.	mm²		kg	PU
211818	0,08-10	hexagonal	0,413	1

Front-Crimping pliers

for end sleeves, precise **square crimping** profile, automatic adjustment on wire diameter, frontal approach allows working in small areas, sidewise approach for end sleeves up to 2.5 mm², with locking device, high transmission and ergonomically formed plastic handle, **square pressing**

Art. no.	mm²		kg	PU
210819	0,08-10	square	0,489	1
211810	0,08-16	square	0,489	1

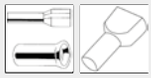
Front-Crimping pliers

for end sleeves, automatic adjustment of crimp-profile, with locking device, with adjustable crimp pressure, **trapezoidal pressing**

Art. no.	mm²	kg	PU
210979	0,14-6	0,575	1
210979/A	2,5-10	0,481	1
210979/B	10-16	0,584	1

Crimping pliers

for end sleeves, lever translated version for better transmission of force, with unlockable locking mechanism, **trapezoidal pressing**



Art. no.	mm²	kg	PU
210788	10-50	0,732	1
210789	50-95	0,800	1

Quadro with magazine

Integration of four functions for precise crimping of connector sleeves from tapes, 0.5 - 2.5 mm Ø.

- Insulation stripping: 0.5 - 2.5 mm Ø
- Twisting: 0.5 - 2.5 mm Ø
- Cutting: cables and cords 0.5 - 2.5 mm Ø
- Crimping: 0.5 - 2.5 mm Ø

Art. no.	TL	mm²	kg	PU
210682/1	170	0,5-2,5	0,056	1

Quadro complete set in case

in case:
1 „Quadro"-pliers incl. magazine
2 spare magazines
Box for end sleeve strips

Art. no.	TL	mm²	kg	PU
210682	170	0,5-2,5	0,713	1
210682/2		Magazine for Quadro	0,020	1
210682/3		Box for end sleeves	0,010	1

HAUPA Pneumatic Crimpers

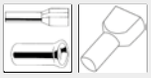
for end sleeves, pneumatic crimpers crimp wire end sleeves quickly and without effort. Table top versions are actuated by a foot switch, allowing the operator to use both hands. The Pneumatic Crimpers are lightweight and easy to use. The crimping mechanism is easily activated, making it perfectly suited for work in control cabinets and electrical equipment. These tools are maintenance free - they require no routine calibration - only 60 - 90 psi to allow proper operation. Incl. spiral hose 2 m

Video 217010-40

Art. no.	TL	mm²	kg	PU
217030	200	0,25-2,5	0,720	1
217040	200	4-10	0,739	1

HAUPA Pneumatic crimpers table top versions

for end sleeves, table top versions are actuated by a foot switch, allowing the operator to use both hands. Incl. spiral hose, foot switch and table clamp



Art. no.	TL	mm²	kg	PU
217010	200	0,25-2,5	5,000	1
217020	200	4-10	5,000	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimping pliers for insulated crimp cable lugs

INFO

Crimping pliers for insulated crimp cable lugs

Insulated cable lugs and crimp cable lugs are crimped in an oval form.

The coloured marking of the wire cross section to the insulated cable lug is defined in DIN 46245, Parts 1, 2 and 3.

- Red => stands for 0.5 to 1 mm²
- Blue => stands for >1.5 to 2.5 mm²
- Yellow => stands for >2.5 to 6 mm²

As the cable lug is rolled from a metal sheet, attention should be paid to the position of the butted edge. It should be in the middle of the top profile. If it is on the side, the edge opens up and the wire is not gastight or adequately clamped.

Butted edge

Ring terminals

Fork terminals

Round terminals

Flat terminals

Socket sleeves (female)

Round sleeves

Round pins

Socket sleeves (male)

Butt connectors

Parallel connectors

End connectors

Crimping pliers

for insulated crimp cable lugs, short construction, 20% angled handy form, with locking device, with adjustable crimp pressure, **oval pressing**

Art. no.	mm²	kg	PU
210845	0,08-2,5	0,343	1

Crimping pliers

for insulated crimp cable lugs, with locking device, with adjustable crimp pressure, chrome plated, **oval pressing**

Art. no.	mm²	kg	PU
210761	0,5-6	0,566	1

Crimping pliers

for shrink connectors, with locking device, with adjustable crimp pressure, chrome plated, **oval pressing**

Art. no.	mm²	kg	PU
211695	0,5-10	0,566	1

Crimping pliers

for insulated crimp cable lugs, lever translated version for better transmission of force, with unlockable locking mechanism, **oval pressing**

Art. no.	mm²	kg	PU
210827	10-16	0,472	1

Crimping pliers

for insulated crimp cable lugs with wire-and bolt-cutters and wire stripper with threaded bolt-cutter, **oval pressing**

Art. no.	mm²	kg	PU
210802	0,5-6	0,178	1

Combi-Crimping pliers

for insulated and uninsulated crimp cable lugs and connectors from 0.5 - 6 mm², C 45, cutting edges induction hardened, with wire-and bolt-cutters and wire stripper with threaded bolt-cutter, **oval pressing**

Art. no.	mm²	kg	PU
210808	0,75-6	0,198	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimping pliers for uninsulated crimp cable lugs

INFO

Crimping pliers for uninsulated terminals

Important when crimping uninsulated terminals and butt space connectors: Uninsulated crimping terminals are pressed together by means of so-called piercing compression. The crimp sleeve is compressed in the middle. The pressing thorn should be set to the separating seam of the sleeve.

Crimping terminals
Ring type

Crimping terminals
Fork type

Crimping terminals
Pin type

Crimping terminals
Butt connectors

Crimping terminals
Parallel connectors

Crimping pliers

for non insulated crimp cable lugs, short construction, 20% angled handy form, with locking device, with adjustable crimp pressure, **mandrel shape pressing**

Art. no.	mm²	kg	PU
210778	0,25-2,5	0,363	1
210779	1,25-6	0,366	1

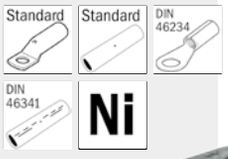
Crimping pliers

for non insulated crimp cable lugs, with locking device, with adjustable crimp pressure, chrome plated, **mandrel shape pressing**

Art. no.	mm²	kg	PU
210764	1,5-10	0,565	1

Crimping pliers

for non insulated crimp cable lugs, lever translated version for better transmission of force, with **mandrel pressing**, for standard tubular cable lugs and connectors. Particularly well suited to nickel tubular cable lugs and connectors



Art. no.		mm²	kg	PU
210772	1-2,5-4 to 6-10	1-10	0,478	1
210774	1 to 2-6-10-16	1-16	0,503	1

Crimping pliers

for non insulated crimp cable lugs, lever translated version for better transmission of force, with **mandrel pressing**, for standard tubular cable lugs and connectors

Art. no.	mm²	kg	PU
210799	0,5-16	0,903	1

Crimping pliers for uninsulated open brass cable lugs

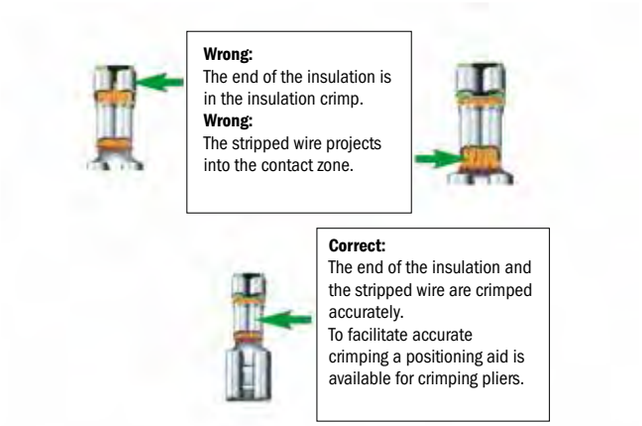
INFO

Crimping pliers for uninsulated open brass cable lugs

We distinguish between wire crimps and insulation crimps. The end of the wire should be flush with the wire crimp or extend beyond it no further than 1 mm, so that the plug function is not affected.

The insulation end must not project into the wire crimp, however it must also not lie just half beneath the insulation crimp. Only in this way can a standard-compliant crimp be ensured.

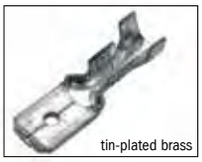
In a good crimp the wire must be deformed. In this case one talks of a “gastight crimp”.

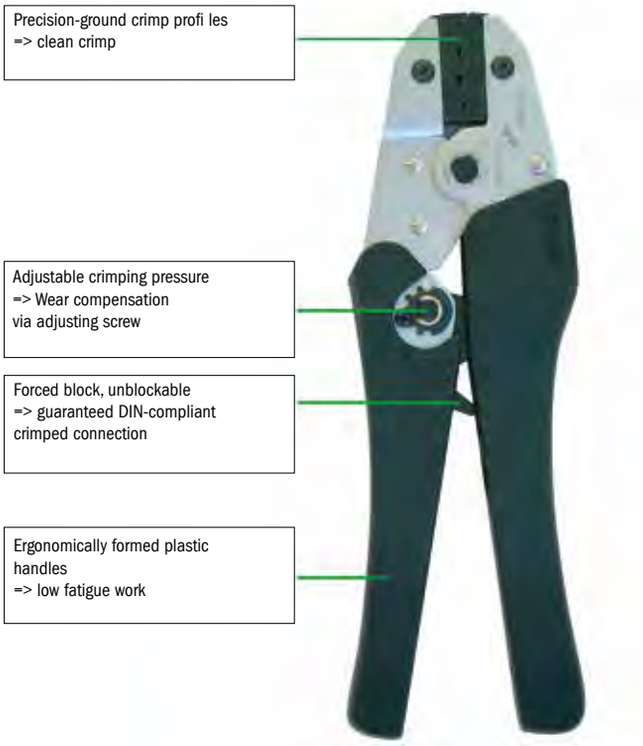


Socket sleeves (female) with cable stop

Socket sleeves (female) with cable stop and side cable connection

Flat terminals





Crimping pliers

for open brass cable lugs, short construction, 20% angled handy form, with locking device, with adjustable crimp pressure, **roll pressing**

Art. no.	mm²	kg	PU
210777	0,5-1,5	0,366	1

Crimping pliers

for open brass cable lugs, with locking device, with adjustable crimp pressure, chrome plated, **roll pressing**

Art. no.	mm²	kg	PU
211682	0,5-2,5	0,568	1
210762	0,25-6	0,575	1

Crimping pliers

for open brass cable lugs, with locking device, with adjustable crimp pressure, chrome plated, **roll pressing**

Art. no.	mm²	kg	PU
210785	0,05-1	0,537	1
210786	1,5-2,5	0,535	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimping pliers for coaxial connections

Crimping pliers

for coax-connections, short construction, 20% angled handy form, with locking device, with adjustable crimp pressure, **hexagon pressing**

Art. no.		crimp	kg	PU
210849	RG 58-59-62-71	RG 55-58-59-62	0,303	1

Crimping pliers

for coax-connections, with locking device, with adjustable crimp pressure, chrome plated, **hexagon pressing**

Art. no.		crimp	kg	PU
210767	RG 58-59-62-6	RG 55-58-59-62	0,567	1
211680	RG 55-58-59-62	RG 55-58-59-62-5-6	0,578	1

Crimping pliers HUPstar Coax

for coaxial connectors. Crimp pliers for industrial users, revolving precision impression dies with parallel feed, changeable dies.

Pressing star 213082/E
Coax:
Hexagon crimp, BNC, TNC, SNB, SNC, SMS, SMA, MCX, 1.07 to 10.9 mm

Art. no.	TL	kg	PU
213082	230	0,650	1

Crimping pliers for contacts and connectors

INFO

Crimping pliers for contacts and connectors

D–Sub plugs are open plug-in connectors that are connected with the wire via a rolling crimp. D-Sub plugs are used in modern office and communication technology.

Rolled contacts are open plug-in connectors that are connected with the wire via a rolling crimp. It is important to choose the correct plug for the cross section of the wire. No single wire may project from the crimp.

Twisted contacts are used to connect computer interfaces, power and control wires in multi-pole plug-in connections and flexible assembly lines in the automotive industry.

Crimping pliers

short construction, for twisted contacts, 20% angled handy form, with locking device, with adjustable crimp pressure, **square crimping**

Art. no.	crimp	kg	PU
211656	0,14-4	0,367	1
211658	1,5-6	0,372	1

Crimping pliers

short construction, for rolled contacts, 20% angled handy form, with locking device, **roll pressing**

Art. no.	crimp	kg	PU
211660	0,5-1,5	0,370	1

Crimping pliers

short construction, for D-Sub-connectors, 20% angled handy form, with locking device, **roll pressing**

Art. no.	crimp	kg	PU
211662	0,08-0,5	0,365	1

Crimping pliers for Photovoltaik

INFO

Photovoltaik

The photovoltaic energy conversion is carried out with the assistance of solar cells that are connected in order to form solar modules in photovoltaic plants. The generated electricity can be stored on site in accumulators or fed into the power network. If the energy is fed into the public power network then the direct current generated by the solar cells with be converted by a converter into alternating current. In order to constantly make energy available, the energy must be stored.

Crimping pliers HUPstar Photovoltaic

for photovoltaic connectors. Crimp pliers for industrial users, revolving precision impression dies with parallel feed, changeable dies.

Pressing star 213084/E
Photovoltaics:
Amphenol Helios H4: 2.5 / 2.5 / 6
Multi-Contact MC3: 2.5 / 2.5 / 6
Multi-Contact MC4: 2.5 / 2.5 / 6
Tyco Solarlok: 1.5 / 1.5 / 4.6

Art. no.	TL	kg	PU
213084	230	0,650	1

Crimping pliers

with locking device, with adjustable crimp pressure, chrome plated **square crimp** (MC 3), **roll crimp** (MC 4)

Art. no.	mm²		kg	PU
211657	2,5-6,0	MC3	0,560	1
211659	2,5-6,0	MC4	0,560	1

Crimpset „MULTI Photovoltaik“

Innovative crimping tool with rapid change system - one tool for almost all crimping applications

Contents of set: Crimping plier Multi (211962)
Crimping dies for „Multi - Contact“ connectors MC3
2,5 + 4 + 6 mm², AWG 13/11/10
Crimping dies for „Multi - Contact“ connectors MC4
2,5 + 4 + 6 mm², AWG 13/11/10

Other advantages of HAUPA Multi set:
- Screw less fast change system for crimping dies
- Single hand operation with expenditure energy
- With ratchet and built-in safety release, guarantees proper electrical connection
- Adjustable crimp pressure
- Chrome plated tool frame
- Additional purchase of other crimping dies possible
- Handy box protects pliers and dies

Art. no.	width	height	depth		kg	PU
212005	260	40	200	MC3 + MC4	1,150	1

HAUPA Crimp System for Photovoltaics

Crimp System Pliers for Photovoltaics

The basic hardware of the carrying case consists of:
- one pair of pliers, chromium-plated without crimping pliers insert
- one allen wrench (A/F 2.5 mm) • one open-jawed wrench (A/F 7)
- 2 pieces spare screws (M4 x 10/M4 x 16 mm)

Specificationen:
- Special crimping pliers for crimping solar contacts of almost all types of connector systems
- Guaranteed exact, solder-free, electric connections
- Parallel closing of the crimping dies
- 30 % reduction of hand force through optimized leverage
- Forced latching for reliable crimping, releasable
- Crimp pressure adjustable
- Long lever arm allowing single-hand and two-hand control
- Easy change of the crimping pliers inserts, Locator fitting option for the determination of the connector position
- Several crimping positions in one crimp die assembly
- Design: chromium-plated with black plastic handle
- Material: specially heat-treated special steel

Art. no.	mm²		kg	PU
212200	6	6-pieces	0,998	1

Crimp inserts for „Huber & Suhner“ contacts		
212206	2,5 + 4 mm², AWG 13/11	1
212208	4 + 6 mm², AWG 13/11	1
Crimp inserts for „multi-contact“ contacts		
212210	MC3, 2,5 + 4 + 6 mm², AWG 13/11/10	1
212212	MC3, Locator	1
Crimp inserts for „multi-contact“ contacts		
212214	MC4, 2,5 + 4 + 6 mm², AWG 13/11/10	1
212216	MC4, Locator	1
Crimp insert for „Hirschmann“ contacts		
212218	2,5 + 4 + 6 mm², AWG 13/11/10	1
Crimp insert for „Tyco“ contacts		
212220	Tyco 1,5 + 2,5 + 4 + 6 mm²	1
212222	Locator for Tyco	1
Dies for Solar contacts Amphenol		
212226	2,5 + 4 mm², AWG 13/11	1
212228	2,5 + 4 mm², AWG 13/11	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimping pliers for modular plugs

INFO

Crimping pliers for modular plugs

Stripping and crimping in one step. The following distinctions can be made between Western plugs:

4pole plug for telephone, power supply
6pole plug for fax and telephone connection
8pole plug for ISDN and PC connections

Crimping pliers for modular plugs

for unshielded modular plugs, inexpensive, lightweight tool for the casual usage

Art. no.	crimp	kg	PU
210867	RJ10 4(4), RJ14	0,218	1
210865	RJ11 6(4), RJ12 6(4)	0,220	1
210869	RJ45	0,233	1

Crimping pliers for modular plugs

for unshielded modular plugs, with cable cutter and stripper, light construction (6p, 8p, 6DEC, 4p)

Art. no.	crimp	kg	PU
213050	RJ11 6(4), RJ12 6(4), RJ45, RJ10 4(4), RJ14	0,300	1

Crimping pliers for modular plugs

for unshielded modular plugs, with cable cutter and stripper. Exactly crimp process through parallel crimping, even crimping quality by means of safety catch

Art. no.	crimp	kg	PU
210857	RJ11, RJ12 6(4), RJ45	0,471	1

Crimping pliers for modular plugs

for unshielded modular plugs 4-,6- and 8pole plug, 6DEC, heavy construction, with linear stroke and locking device, with cable cutter and stripper. Exactly crimp process through parallel crimping, even crimping quality by means of safety catch

Video 210871

Art. no.	crimp	kg	PU
210871	RJ11 6(4), RJ12 6(4), RJ45, RJ10 4(4), RJ14	0,520	1

Crimping pliers for modular plugs

Semi-professional crimping pliers for shielded and unshielded Western plugs, with replaceable crimping dies, easy to use, light on the arms due to optimum leverage, optimum crimping, pliers body made of hardened quality steel, quick and simple replacement of crimping dies, adjustable crimping pressure and depth, application area for small and medium series, 50.000 working processes guaranteed, without dies

Art. no.	kg	PU
213000	0,420	1

Dies

for crimping pliers 213000

Art. no.	crimp	kg	PU
213002	RJ10 4(4)	0,082	1
213004	RJ11 6(4), RJ12 6(4)	0,081	1
213006	6DEC	0,080	1
213008	RJ45	0,076	1
213010	RJ50	0,074	1
213012	8pole, shielded	0,076	1
213014	10pole plug, shielded	0,071	1

Crimping pliers for modular plugs

Professional crimping pliers for screened and unscreened Western plugs, with replaceable crimping dies, easy to use, light on the arms due to optimum leverage, optimum crimping, pliers body made of hardened quality steel, quick and simple replacement of crimping dies, adjustable crimping pressure and depth, application area for medium to large series, 50.000 working processes guaranteed, without dies

Art. no.	kg	PU
213020	0,474	1

Dies

for crimping pliers 213020

Art. no.	crimp	kg	PU
213022	8pole, shielded	0,103	1
213024	10pole shielded	0,102	1
213026	RJ10 4(4)	0,096	1
213028	RJ11 6(4), RJ12 6(4)	0,093	1
213030	6DEC	0,091	1
213032	RJ45	0,106	1
213034	RJ50	0,102	1
213036	8pole, CAT 5	0,106	1
213038	6pole, shielded	0,106	1
213040	8pole, shielded	0,113	1
213042	Ø 3,7 mm	0,030	1
213044	Ø 4,5 mm	0,030	1
213046	Ø 5,2 mm	0,030	1
213048	Ø 6,0 mm	0,030	1

Network range

Case with insert. With tools for cable stripping, cutting, crimping and applying to strips, sockets or fields.

Content:
- 1 crimping pliers for Western plugs (213050)
- 1 wire stripper for UTP/STP data cable (200068)
- 1 Sensor input tool LSA for UTP and STP cable (300322)

Art. no.	kg	PU
300033	0,700	1

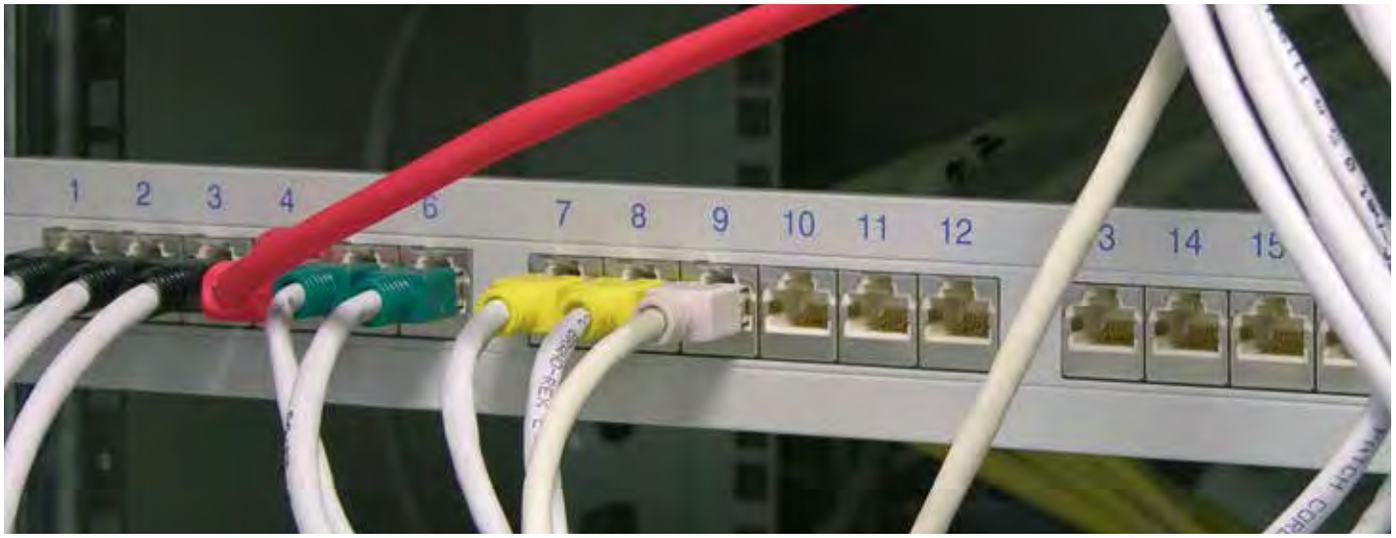
PDF 213000

PDF 213020

Reference list for western plugs on the Internet:

Short to medium runs
http://www.haupa.com/documents/html/d/katalog/ruk/crimp/datenblatt/referenzliste_westernstecker_k.htm

Medium to large runs
http://www.haupa.com/documents/html/d/katalog/ruk/crimp/datenblatt/referenzliste_westernstecker_g.htm



PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Multi-functional pliers

haupa®

... convincing solutions

Innovation

Crimping pliers HUPstar from HAUPA

When it comes to high-end crimping technology for the professional, industrial user, HAUPA has succeeded in introducing an innovation in the shape of the HUPstar, This crimp star is capable of replacing up to 4 crimping tools in the tool case and the workshop.

4 versions of crimp star are already permanent components of the range:

1. End sleeves 0.5 – 10 mm²
   Insulated crimp-style cable shoes 0.1 – 6 mm²
   Ring cable shoes (DIN 46234 / DIN 46341) 0.25 – 10 mm²
2. End sleeves 0.14 – 16 mm² & open brass cable shoes
   0.14 – 6 mm²
3. Coaxial:
   - BNC, TNC, SNB, SNC, SMS, SMA, MCX, 1.07 – 10.9 mm
4. Photovoltaics / Solar:
   - Amphenol Helios H4, multi-contact MC3/ MC4 2.5 - 6,
     Tyco Solarlok, 1.5 – 4.6 mm²

The star can be changed in just 30 seconds!
The colour code on the stars enables fast and correct assignment.

The extremely precise parallel feed and the eroded precision crimp profile mean that this product has been very well received by the industry. Not just thanks to the high quality processing of the crimp star which is, thanks to the surface properties, TÜV guaranteed for around 80,000 precision crimps. After all a precise and safe normed crimp is the guarantee for complication-free, high quality and long-lasting connections.

Ergonomically, the HUPstar can, thanks to the short construction of the handles and the rather small opening angle, also be operated quickly, safely and gentle to joints even with small hands.

Due to the innovative manufacturing procedure, individual stars, designed for industrial customers, can also be made without additional costs.

HUPstar Art. no. 213086
End sleeves / insulated cable lugs / uninsulated cable lugs (DIN 46234 / DIN 46341)

HUPstar Art. no. 213080
End sleeves / socket sleeves

HUPstar Art. no. 213082
Coax

HUPstar Art. no. 213084
Photovoltaic

213086/E		
End sleeves	Insulated cable lugs	uninsulated cable lugs
		DIN 46234 DIN 46341
0.5	0.1-0.25	0.25
0.75	0.5-1	0,5
1,5	1.5	1
2,5	2.5	1,5
4	4	2.5
6	6	4
10		6
		10

End sleeves, insulated crimp cable lugs and non-insulated crimp cable lugs

213080/E	
End sleeves	insulated and uninsulated cable lugs
0.14-0.25	0.14-0.25
0.25-0.5	0.25-0.5
0.75	0.75
1	1
1.5	1.5
2.5	2.5
4	2.54
6	6
10	
16	

End sleeves and and open brass cable lugs

213082/E
Coaxial
1.07
1.2
1.46
1.69
1.72
1.75
2.54
3.25
6.48
7.0
8.1
8.23
9.73
10.9

Coax

213084/E			
Photovoltaic			
Amphenol	Multi-Contact	Multi-Contact	Tyco
Helios H4	**MC3**	**MC4**	**Solar lok**
2.5	2.5	2.5	1.5
2.5	2.5	2.5	1.5
6	6	6	4.6

Photovoltaics

Video 213080-86

Crimping pliers HUPstar

for end sleeves, insulated crimp cable lugs and non-insulated crimp cable lugs DIN 46234. Crimping tool for industrial users, rotating precision impression die with parallel feed, dies can be exchanged, end sleeves 0.5 to 10 mm², insulated crimp cable lugs 0.1 to 6 mm², non-insulated crimp cable lugs 0.25 to 10 mm².

Pressing star 213086/E:
End sleeves: 0,5 / 0,75 / 1,5 / 2,5 / 4 / 6 / 10
Insulated crimp cable lugs: 0.1-0.25 / 0.5-1 / 1.5 / 2.5 / 4 / 6
Non-insulated crimp cable lugs: 0.25 / 0.5 / 1 / 1.5 / 2.5 / 4 / 6 / 10

Video 213080-86

Art. no.	TL		kg	PU
213086	230		0,650	1
213086/E		Dies	0,160	1

Crimping pliers HUPstar

for end sleeves and open brass cable lugs. Crimping pliers for industrial users, rotating precision impression die with parallel feed, dies changeable dies, core cable ends from 0.14 to 16 mm², open non-insulated brass cable shoes 0.14 to 6 mm²

Pressing star 213080/E:
End sleeves:
0.14-0.25 / 0.25-0.5 / 1 / 1.5 / 2.5 / 4 / 6 / 10 / 16
Open non-insulated brass cable lugs:
0.14-0.25 / 0.25-0.5 / 1 / 1.5 / 2.5 / 2.54 / 6

Art. no.	TL		kg	PU
213080	230		0,650	1
213080/E		Dies	0,160	1

Crimping pliers HUPstar Coax

for coaxial connectors. Crimp pliers for industrial users, revolving precision impression dies with parallel feed, changeable dies.

Pressing star 213082/E
Coax:
Hexagon crimp, BNC, TNC, SNB, SNC, SMS, SMA, MCX, 1.07 to 10.9 mm

Art. no.	TL		kg	PU
213082	230		0,650	1
213082/E		Dies	0,160	1

Crimping pliers HUPstar Photovoltaic

for photovoltaic connectors. Crimp pliers for industrial users, revolving precision impression dies with parallel feed, changeable dies.

Pressing star 213084/E
Photovoltaics:
Amphenol Helios H4: 2.5 / 2.5 / 6
Multi-Contact MC3: 2.5 / 2.5 / 6
Multi-Contact MC4: 2.5 / 2.5 / 6
Tyco Solarlok: 1.5 / 1.5 / 4.6

Art. no.	TL		kg	PU
213084	230		0,650	1
213084/E		Dies	0,160	1

Crimping pliers Combi-Crimp

crimping pliers for insulated terminals 0,5 - 2,5 mm² and end sleeves 0,5 - 6 mm²

Art. no.	kg	PU
210784	0,560	1

Crimpset X-Crimp

Crimping pliers used to quickly change HAUPA precision pressing inserts.
Supplied in robust nylon bag (article 220260).

- Reliable crimping results just like with fixed pressing inserts
- Forced lock ensures standardised pressing actions
- Flat construction enables you to work precisely even when space is at a premium

Content:
Art. 211690
Art. 210763/E
Art. 210764/E
Art. 210765/E
Art. 210761/E

Video 211692

Art. no.		kg	PU
211692	set	0,900	1
220260	bag	0,115	1

Crimping pliers X-Crimp

Crimping pliers used to quickly change HAUPA precision pressing inserts, including dies article 210761/E. Supplied in robust nylon bag (art. 220260).

- Reliable crimping results just like with fixed pressing inserts
- Forced lock ensures standardised pressing actions
- Flat construction enables you to work precisely even when space is at a premium

Art. no.	kg	PU
211690	0,566	1

Crimping dies for insulated crimp cable lugs

for insulated crimp cable lugs, **oval pressing**

Art. no.	mm²	kg	PU
210761/E	0,5-6,0	0,053	1

Crimping dies for uninsulated terminals

for uninsulated terminals, **mandrel shape pressing**

Art. no.	mm²	kg	PU
210764/E	1 - 10	0,111	1

Crimping dies for flat connectors

for flat connectors, uninsulated open brass cable lugs, **roll pressing**

Art. no.	mm²	kg	PU
210762/E	0,25-6	0,111	1

Crimping dies for TWIN end sleeves

for TWIN-end sleeves, **trapezoidal pressing**

Art. no.	mm²	kg	PU
211676/E	0,5-6	0,050	1

Crimping dies for end sleeves

for end sleeves, **trapezoidal pressing**

Art. no.	mm²	kg	PU
210763/E	0,5-4	0,072	1
210842/E	1-10	0,054	1
210765/E	6-16	0,111	1
211672/E	10-25	0,050	1

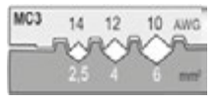
Crimping dies for coaxial cable

for coaxial cable, **hexagon pressing**

Art. no.	crimp	kg	PU
210767/E	RG 58-59-62-6	0,050	1

Crimping dies for Photovoltaik

for „multi-contact“ contacts



Art. no.	mm²		kg	PU
211657/E	6,0	MC3	0,050	1

Crimping dies for Photovoltaik MC4

for „multi-contact“ contacts

Art. no.	mm²		kg	PU
211659/E	6,0	MC4	0,050	1

Crimping dies for cable lugs / end sleeves

for end sleeves 0,5 - 6 mm² / cable lugs 0,5 - 2,5 mm²

Art. no.	mm²	kg	PU
210784/E	0,5-6,0	0,56	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Multi-function pliers

Crimpset MULTI

Innovative crimping tool with rapid change system for the expert - tools for almost all crimping applications

Contents:
- crimping plier MULTI

Dies for:
- (211998) insulated terminals 0.5 - 6 mm²
- (211963) insulated and uninsulated end sleeves 0.5 - 16 mm²
- (211999) uninsulated terminals 0.5 - 10 mm²
- (210000) dies for BNC and TNC coaxial connectors RG 58-59-62-71

Product specifications
- fast change system • easy changing of crimp dies by means of thumb screws
- easy interlock • Nickel plated surface
- no big strength required
- with ratchet and built-in safety release, garantees proper electrical connection
- adjustable crimp pressure
- Pliers body from 3 mm, specially compensated, hardened sheet steel
- ergonomic 2 component handle with soft synthetic material insert

Video 211960

Art. no.	width	height	depth	kg	PU
211960	260	40	200	1,119	1

Crimping pliers „Multi“

Long version, also suitable for two-handed operation, no dies

Art. no.	kg	PU
211962	0,582	1

More possibilities of dies - please, order separately

211963	End sleeves 0,5 - 16 mm²	1
211964	End sleeves 16 - 35 mm²	1
211965	Sockets 0.5 - 2.5 mm²	1
211990	Coax, Thinnet, Mini-UHF, BNC/TNC RG 58, RG 174	1
211991	Coax, BNC/TNC RG 174, RG 179, small coaxial connectors	1
211992	SMA, SMB, Mini-59, Mini-UHF, BNC/TNC RG 6, RG 6 Quad	1
211993	Coax, CATV “F” Typ, BNC/TNC RG 6, RG 6 Quad	1
211994	N-Typ RG 8, RG 11	1
211995	Coax, N-Typ RG 8, RG 11, RG 213, RG 216	1
211996	Fibre Optic, SMA Typ	1
211997	Fibre Optic, SMA, SMB, SFR, ST, SC Typ	1
211968	RJ 45 - 8P8K, Steward Connectors, 22-24 AWG	1
211969	RJ 11, RJ 12 - 6P6K, Steward Connectors, 22-24 AWG	1
211970	Telefon 4P4K, AMP+Steward Connectors, 22-24 AWG	1
211971	RJ 45 - 8P8K, AMP, 22-24 AWG	1
211972	RJ 11, RJ 12 - 6P6C, AMP, 22-24 AWG	1
211973	RJ 11, DEC MMJ - 6P6K, AMP, 22-24 AWG	1
211974	RJ 50 - 10P10K, AMP, 22-24 AWG	1
211980	RJ 45 - 8P8K, short, Steward Connectors, STP 22-24 AWG	1
211981	RJ 45 - 8P8K, long, Hirose, STP 22-24 AWG	1
211982	RJ 45 - 8P8K, short, Hirose, STP 22-24 AWG	1
211983	RJ 45 - 8P8K, Molex, for Ø 5.0 mm, STP 22-24 AWG	1
211985	RJ 45 - 8P8K, AMP, Molex, for Ø 6.0 mm, STP 22-24 AWG	1
211998	insulated terminals 0,5-6,0 mm²	1
211999	uninsulated terminals 0,5-6,0 mm²	1
212000	Coax RG58-59-62-71	1
212007	MC3	1
212008	MC4	1

Elektrik crimper

HAUPA electric crimper

The Electric crimper is an ideal device to securely crimp wires and cable terminals such as:

- insulated cable lugs to 6 mm²/10 AWG
- Tubular cable lugs, solderl. terminals to 10 mm²/8 AWG
- Flat tab terminals to 6 mm²/10 AWG
- Wire end sleeves to 50 mm²/1 AWG

The Electric Crimper can be operated in one of two modes:

Mode 1: controls the entire crimp process by pressing down the pedal switch.
Mode 2: allows the user to fix the terminal on the cable by actuating the foot switch once. To finish the crimping process, he presses down the foot switch once again. Mode 2 is used for more complex terminals.
The onset of compression force can be adjusted for each new terminal to satisfy crimp integrity. That way, damage to dies and terminals can be minimised. Simply press a button to select the opening for each die. Since some female terminals are more difficult to crimp, a moveable locator can be utilised to ensure proper crimping. Various standard dies are available, as well as dies designed to customer specifications.
Technical Data Art. No. 217050: Dimensions (w x h x d): 140 x 220 x 320 mm
Weight: 10 kg / Weight of foot pedal: 1.2 kg / Max. press capacity: 10 kN
Pressing time: 1 s / Counter: -digit LCD display /
Mains connection: 30 V/50 Hz (120 V/60 Hz) / Power consumption: 160 VA

Video 217050

Art. no.	mm²	kg	PU
217050	6-50	10	1

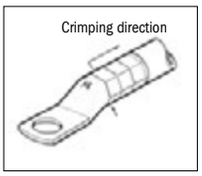
Dies for elektro crimper 217050

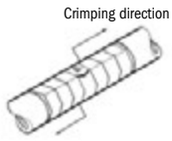
217052	Rolled contacts 0.14-1/1,5/2.5/4 mm²	1
217056	Rolled contacts 0.1-1.5 mm²	1
217058	Rolled crimp contacts 0.1-1.5 mm²	1
217060	Rolled crimp contacts 0.5-6 mm²	1
217062	End sleeves 0.25-6 mm²	1
217064	Insolated terminals 0.5-6 mm² symetric	1
217066	Insolated terminals 0.5-6 mm² asymetric	1
217068	Tube terminals 0.34-2.5 mm²	1
217070	Tube terminals “super flex” 4-10 mm²	1
217072	Tube terminals “standard” 4-10 mm²	1
217074	Crimping terminals 4-10 mm²	1
217076	Crimping terminals 0.5-10 mm²	1
217078	Protection cover to 21 70 56, 21 70 60	1
217080	Protection cover to 21 70 70, 21 70 72, 21 70 74, 21 70 76	1
217082	Protection cover to 21 70 68	1
217084	Protection cover to 21 70 62	1
217086	Protection cover to 21 70 64, 21 70 66	1
217088	Locator to 21 70 60, socket sleeves 6.3 mm	1
217090	Locator to 21 70 56, 21 70 58, 21 70 60, socket sleeves 4.8 mm	1
217092	Locator to 21 70 56, socket sleeves (female) 2.8 x 5 mm	1
217094	Locator to 21 70 56, socket sleeves (female) 2.8 x 6 mm	1
217096	Locator to 21 70 60, socket (male) 6.3 mm	1
217098	Locator to 21 70 60, socket (male) 6.3 mm HN	1

INFO

Crimping pliers for uninsulated tubular cable lugs

1. Choosing the connector
To achieve a standard-compliant connection it is necessary to choose the correct connector for the application and the right cable cross section.
2. Stripping
Before notching, the cable must be stripped according to the insertion length (+10% due to change in length of the crimping sleeve.
3. Cleaning
The ends of the wire must be cleaned thoroughly to remove all traces of dirt and oxidation before being assembled.
4. Assembly
Insert the cable into the cable lug or connector to its full insertion length. Crimp the cable lug or connector with the correct tool, taking account of the crimping direction (see figure).





Tube cable lugs

DIN cable lugs

Butt connectors, DIN

Crimping pliers

for non insulated crimp cable lugs, lever translated version for better transmission of force, with mandrel pressing, for standard tubular cable lugs and connectors. Particularly well suited to nickel tubular cable lugs and connectors

Art. no.		mm²	kg	PU
210772	1-2,5-4 to 6-10	1-10	0,478	1
210774	1 to 2-6-10-16	1-16	0,503	1

Crimping pliers

Lever translated version for better transmission of force, with mandrel pressing, for standard tubular cable lugs and connectors. Particularly well suited to nickel tubular cable lugs and connectors

Art. no.	mm²		kg	PU
210830	0,75-16	standard	0,574	1

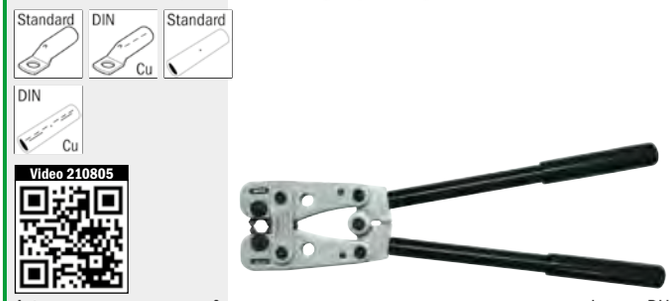
Crimping pliers

with punch and adjustable screw for different cross-sections, for standard tube terminals and connectors, **mandrel shape pressing**

Art. no.	mm²	kg	PU
210791	10-120	3,040	1

Crimping pliers

with built-in rotable profile disk, **hexagon pressing**



Video 210805

Art. no.	mm²		kg	PU
210805	6-50	standard	1,351	1
210805 K	6-50	DIN	1,352	1

Crimping pliers

with built-in rotable profile disk, **hexagon pressing**

Art. no.	mm²		kg	PU
210850	10-120	standard	3,970	1
210853	10-120	DIN	4,016	1

Crimping pliers

for uninsulated "Standard" tube terminals/connectors and tube terminals for fine-wire cables, with integrated rotatable profile disc, **mandrel shape pressing,** with telescopic grips

Art. no.	mm²	kg	PU
210834	6-50	2,588	1
210836	50-120	5,280	1
210838	120-240	5,200	1
210840	185-400	5,200	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

Mechanical crimping pliers for tubular cable lugs

Mechanical crimping tool characterised by its compact design. It is possible to make crimps even in confined working conditions, where conventional large tools cannot be used.

The mature construction of the drive has proven its reliability many times over in practice. In this manual crimping tool very little wear can be seen even after many years of use, this is decisive for the reliable repetition of the required crimping depth. After all, today's highly stressed crimped connections only comply with safety regulations when the required electrical and mechanical values are achieved over long periods.

Another safety aspect is that the crimping tool can only be detached from the crimped lug when the required crimping depth has been reached. By turning the wheel on the handle in an anti-clockwise direction the crimping inset can be set in position on the lug. Only then does the actual crimping process begin with the one-hand lever.

The quality of the crimped connection is dependent on the choice of cable lug, the crimp inset and the correct choice of cable cross section.

Crimping pliers

one hand precise tool, with ratchet and built-in-force-blocking device, crimping pressure 20 kN, interchangeable dies, easy to remove from the crimped lug by opening the crimping head, special small design for working in small areas

Product-specific features
- outstanding manageability
- compact construction
- precision drive
- fast forward feed
- can be used anywhere

Art. no.	mm²	kg	PU
215000	6-50	1,531	1

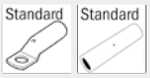
Metal box

for storing of crimping pliers and dies

Art. no.	kg	PU
215002	0,934	1

Crimping dies

for standard cable lugs and compacted cables, suitable for compacted cables



WM pressing

Art. no.	mm²	kg	PU
215004	10	0,041	1
215006	16	0,040	1
215008	25	0,037	1
215010	35	0,036	1
215012	50	0,033	1

Crimping dies

for crimping terminals DIN, **hexagon shape**

Art. no.	mm²	Al	Id.	kg	PU
215030	6		5	0,100	1
215032	10		6	0,100	1
215034	16	10	8	0,100	1
215036	25	16	10	0,150	1
215038	35	25	12	0,150	1
215040	50	35	14	0,150	1

Crimping dies

noninsulated crimping terminals, **mandrel shape pressing**, DIN 46234

Art. no.	mm²	kg	PU
215014	6	0,018	1
215016	10	0,190	1
215018	16	0,190	1
215020	25	0,190	1
215022	35	0,020	1
215024	10-35	0,020	1

Crimping dies

noninsulated crimping terminals, **mandrel shape pressing**, DIN 46234

Art. no.	mm²	kg	PU
215026	10	0,039	1
215028	16	0,039	1

Crimping dies

for end sleeves, **trapezoidal pressing**

Art. no.	mm²	kg	PU
215042	6	0,150	1
215044	10	0,150	1
215046	16	0,150	1
215048	25	0,200	1
215050	35	0,200	1

INFO

Mechanical crimping pliers for tubular cable lugs

These mechanical manual crimping pliers are modern, high performance tools. They can be used anywhere in the wide range of solder-free connection technology thanks to a comprehensive range of crimping dies.

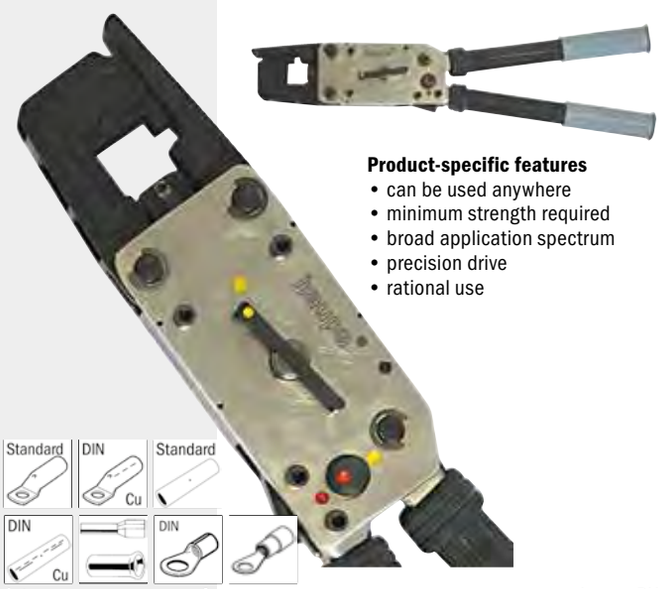
Crimping stroke and pressure (to approx. 5.5 t) are created by several hand lever movements. The manual force required is low due to the high efficiency of the system. The press and the connecting parts can only be separated from one another when the crimp is complete. This drive system ensures that the required crimping depth is always achieved. The hinged cover guarantees comfortable handling of the press, even in awkward-to-reach positions such as in control cabinets.

By turning the fast forward feed lever to place the crimp inset on the cable lug, the number of manual lever movements is considerably reduced and rational work is guaranteed.

Only then does the actual crimping process begin with the hand lever. When the required crimping depth has been reached the press releases pressure spontaneously and the hinged cover can be opened to remove the connector. The crimping process can be interrupted if an error has been made in the choice of the inset, cable lug or cable. To do this swing the hand lever completely out, depress the ratchet and turn the forward feed lever backwards.

Crimping pliers

precise tool with ratchet and built-in-force-locking device, crimping pressure 50 kN, interchangeable dies, easy to remove from the crimped lug by opening the crimping head



Product-specific features
- can be used anywhere
- minimum strength required
- broad application spectrum
- precision drive
- rational use

Art. no.	mm²	kg	PU
215100	6-120	2,100	1

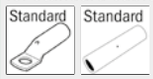
Metal box

for storing of crimping pliers and dies

Art. no.	kg	PU
215102	1,700	1

Crimping dies

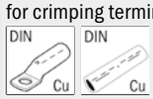
for standard cable lugs and compacted cables, **WM pressing**



Art. no.	mm²	kg	PU
215104	10-70	0,130	1
215106	16-35	0,132	1
215108	25-50	0,126	1
215110	95	0,138	1
215112	120	0,136	1

Crimping dies

for crimping terminals DIN, **hexagonal pressing**



Art. no.	mm²	Al	Id.	kg	PU
215142	10/70	50	6-16	0,128	1
215144	16/35	25	8-12	0,130	1
215146	25/50	35	10-14	0,130	1
215148	95	70	18	0,130	1
215150	120		20	0,130	1

Crimping dies

for uninsulated crimping terminals, for up to four diameter, **mandrel shape pressing**, DIN 46234 + DIN 46341

Art. no.	mm²	kg	PU
215114	6-70	0,080	1
215116	10-35	0,060	1
215118	16-50	0,055	1
215120	6-50	0,150	1
215122	70	0,150	1

Crimping dies

for insulated crimping terminals, **oval pressing**

Art. no.	mm²	kg	PU
215124	10	0,147	1
215126	16	0,152	1
215128	25	0,153	1
215130	35	0,154	1

Crimping dies

for rounding of square copper and aluminium

Art. no.	mm²	kg	PU
215152	25-35	0,155	1
215154	35-70	0,150	1
215156	95	0,150	1

Crimping dies

for end sleeves, **trapezoidal pressing**

Art. no.	mm²	kg	PU
215164	25	0,059	1
215166	35	0,059	1
215168	50	0,059	1
215170	70	0,059	1
215172	95	0,059	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

Mechanical crimping pliers for tubular cable lugs

In this hand press the crimping stroke is produced by a number of hand lever movements. The transport ratchet starts the eccentric wheel moving and con-rods convert the eccentric turning motion into a straight-line stroke of the guide that runs in grooves.

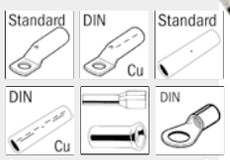
The bottom crimping inset is placed in the guide. It sits on an adjustment plate that is screwed on to the guide. This plate compensates for all the tolerances resulting from the manufacturing process or wear and tear.

By turning the wheel on the handle in an anti-clockwise direction the crimping inset can be transported directly to the installation on the connecting part. Only then does the actual crimping process begin with the hand lever. When the required crimping depth has been reached the press releases the pressure spontaneously and the hinged cover can be opened to remove the connector. The crimping process can be interrupted if an error has been made in the classification of the inset, cable lug or cable. To do this swing the hand lever completely out, depress the ratchet and turn the forward feed lever backwards. The quality of the crimped connection is dependent on the choice of cable lug, the crimp inset and the correct choice of cable cross section.

Crimping pliers

precise tool with ratchet and built-in-force-locking device, interchangeable dies, easy to remove from the crimped lug by opening the crimping head

Product-specific features
- can be used anywhere
- minimum strength required
- broad application spectrum
- precision drive
- rational use



Art. no.	mm²	kg	PU
215200	10-240	4,500	1

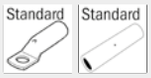
Metal box

for storing of crimping pliers and dies

Art. no.	kg	PU
215202	3,700	1

Crimping dies

for standard cable lugs and compacted cables, **WM pressing**



Art. no.	mm²	kg	PU
215204	10-25	0,221	1
215206	16-35	0,320	1
215208	50	0,349	1
215210	70	0,331	1
215212	95	0,330	1
215201	120	2,486	1
215203	150	0,308	1
215205	185	0,317	1
215207	240	0,300	1

Crimping dies

for crimping terminals DIN, **hexagon pressing**

Art. no.	mm²	Al	Id.	kg	PU
215230	10		6	0,350	1
215232	16		8	0,330	1
215234	25	16	10	0,328	1
215236	35	25	12	0,330	1
215238	50	35	14	0,326	1
215240	70	50	16	0,326	1
215242	95	70	18	0,321	1
215244	120		20	0,300	1
215246	150	120	22	0,305	1
215248	185	150	25	0,305	1
215250	240	185	28	0,290	1

Crimping dies

for uninsulated crimping terminals, **mandrel shape pressing**, DIN 46234 + DIN 46341

Art. no.	mm²	kg	PU
215214	10-70	0,178	1
215216	95-150	0,169	1
215218	10-70	0,163	1
215220	16-35	0,170	1
215222	25-50	0,163	1
215224	95	0,161	1
215226	120	0,152	1
215228	150	0,144	1

Crimping dies

for end sleeves, **trapezoidal pressing**

Art. no.	mm²	kg	PU
215252	16	0,400	1
215254	25	0,380	1
215256	35	0,381	1
215258	50	0,361	1
215260	70	0,400	1
215262	95	0,363	1
215264	120	0,401	1

Pictogram cable connectors

End sleeves

TWIN end sleeves

Insulated crimp-style cable lugs

Insulated shrink connectors

non-insulated cable lugs

Socket sleeves (female)

Socket sleeves (female) with cable stop

Coaxial connectors

for twisted contacts and connectors

for rolled contacts and connectors

for D-Sub connectors

Multi-contact M3 for Photovoltaics

Multi-contact M4 for Photovoltaics

Amphenol for Photovoltaics

Tyco-Solar for Photovoltaics

Connectors for modular connectors

Stewart connectors for modular connectors

Hirose connectors for modular connectors

non-insulated cable lugs DIN 46234

non-insulated connectors DIN 46341

standard tubular terminals

DIN tubular terminals CU

DIN tubular terminals AL

standard tubular terminals, light

Nylon-insulated tubular cable terminals

standard connectors CU

DIN connectors CU

DIN connectors AL

standard connectors, light

F-type

Deep indent connectors

Four thorn pressing without inserts

Pictogram press-profiles

Technical notes for the various pressing formats for the pressing of cables using HAUPA cable lugs and connectors.

The following pressing formats are available:

Hexagonal pressing
for pressing standard CU tubular terminals and connectors, tubular terminals for switching device connections, pressing cable lugs and connectors DIN 46235/DIN 46267, Al pressing cable lugs and connectors and end sleeves

Mandrel shape pressing
for pressing of standard CU tubular terminals and connectors, tubular terminals for switching device connections, crimp-style cable lugs DIN 46234 and pin cable lugs DIN 46230, insulated crimp-style cable lugs, conduit terminals for fine-wired conductors, nickel tubular terminals and connectors

Oval pressing
for pressing of dual pressing cable lugs, C clamps, insulated tubular terminals and connectors, insulated pin cable lugs, press connectors DIN 48217, insulated cable connections

Trapezoidal pressing
for pressing of end sleeves ends and twin end sleeves

Square pressing
for pressing of end sleeves ends and twin end sleeves

Hexagonal pressing
for pressing of end sleeves

Square pressing
Multi-contact
Application area:
Photovoltaics, twisted contacts

Roll pressing
for pressing of brass cable lugs, D-Sub, MC4

WM pressing
for standard cable lugs and compacted cables

Round pressing
of sector-shaped conductors 90° and 120°

Four thorn pressing
for pressing standard tubular terminals and connectors - also on sealed conductors -
F-type tubular terminals and connectors
Light cable lugs and connectors
Tubular terminals = Switching device connections

Hydraulic crimping tools

haupa®

... convincing solutions

Battery powered crimping tools with sensor technology

- Pressing force in kN: 60 - 120
- Working pressing in bar: 700
- Pressing time, battery-operated in seconds: 5 - 10
- Battery charging time in minutes: 30
- Battery type: Li-Ion, 18 V, 1,5 - 3 Ah

Working area illumination

Light is green: Pressing completed in accordance with standard, motor stopped

Light is orange: Battery voltage not sufficient

Light is red: Pressing interrupted before completed

Hydraulic hand pliers „HHs-6“

Crimping head can be rotated by 180°, manual return after completed pressing, light and compact construction in black plastic case, without dies.
- Pressing force in kN: 60
- Working pressure in bar: 700
- Head can be opened
- Pressing width: slim
- Cable lugs: standard Cu 10-240
- DIN Cu 10-185 • DIN Al 16-150
- Connectors: standard Cu 10-240
- DIN Cu 10-185 • DIN Al 16-150

185-H6

10-240 | 10-185 | 16-150 | 10-240 | 10-185 | 16-150

60 kN | 700 bar | 180°

Video 215765

Art. no.	mm²	dimension	kg	PU
215765	10-240	370 x 140 x 75 mm	7,900	1

Battery powered crimping tool „SHs-6“

for interchangeable interchangeable dies, crimping head 180° swivelling, manual return flow after perfect pressure.
Extent of supply: 1 crimping tool, 1 charger, 1 battery, 1 strap, in light plastic box, without crimping headstock.
- Pressing force in kN: 60 kN
- Working pressure in bar: 700
- Head can be opened
- Pressing width: slim
- Cable lugs: standard Cu 10-240 • DIN Cu 10-185 • DIN Al 16-150
- Connectors: standard Cu 10-240 • DIN Cu 10-185 • DIN Al 16-150
- Pressing time, battery-operated in seconds: 5
- Battery charging time in minutes: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- Weight in kg without batterie: 2,1
- Weight of set in kg with batterie: 7,9

185-H6

10-240 | 10-185 | 16-150 | 10-240 | 10-185 | 16-150

60 kN | 700 bar | 180° | Li-ION 18V 1,5Ah | SysCom

Art. no.	mm²	dimension	kg	PU
215770	10 - 185	398 x 75 mm	7,900	1

Battery powered crimping tool „SHs-6M“

Sensor

Technical data and scope of delivery, see 215770.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:
- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 1 white LED designed to illuminate the working area.

185-H6

10-240 | 10-185 | 16-150 | 10-240 | 10-185 | 16-150

60 kN | 700 bar | 180° | Li-ION 18V 1,5Ah | SysCom | Sensor

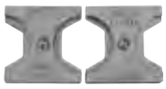
Video 215770/M

Art. no.	mm²	dimension	kg	PU
215770/M	10 - 185	398 x 75 mm	7,900	1

Crimping dies standard

standard copper conduit terminals and connectors, WM pressing suitable for compacted cables

Standard | Standard | 185-H6

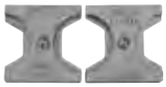


Art. no.	PW	kg	PU
215641	5	0,157	1
215642	5	0,155	1
215643	5	0,150	1
215644	5	0,145	1
215645	5	0,159	1
215646	5	0,156	1
215648	5	0,156	1

Crimping dies DIN

DIN Cu/Al tube terminals and connectors, **hexagonal press**

DIN Cu | DIN Cu | DIN Al | DIN Al | 185-H6



Art. no.	PW	Id.	kg	PU
215650	5	6/8	0,155	1
215651	5	10/12	0,151	1
215652	5	14/16	0,149	1
215653	5	18/20	0,129	1
215654	5	22	0,145	1
215655	5	25	0,147	1

Battery powered crimping tool „SH-6“

hydraulic for interchangeable dies, crimping head 180° swivelling, with fast opening, manual return flow after perfect pressure.
Extent of supply: 1 crimping tool, 1 charger, 1 battery, 1 strap, in SysCon stacking box without dies.

- Pressing force in kN: 60 kN
- Working pressure in bar: 700
- Head can be opened yes
- Opening/ Hub: 17 mm
- Pressing width: slim
- Cable lugs: standard Cu 10-240 • DIN Cu 10-240 • DIN Al 16-185
- Connectors: Cu 10-240 • DIN Cu 10-240 • DIN Al 16-185
- Pressing time, battery-operated in seconds: ca. 5
- Battery charging time in minutes: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- Weight in kg without batterie: 2,4
- Weight of set in kg with batterie: 7,9

240-H6

10-240 | 10-240 | 16-185 | 10-240 | 10-240 | 16-185

60 kN | 700 bar | 180° | Li-ION 18V 1,5Ah | SysCon

Art. no.	mm²	dimension	kg	PU
215881	10 - 240	415 x 75 mm	7,900	1

Battery powered crimping tool „SH-6M“

Sensor

Technical data and scope of delivery, see 215881.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 1 white LED designed to illuminate the working area.

240-H6

10-240 | 10-240 | 16-185 | 10-240 | 10-240 | 16-185

60 kN | 700 bar | 180° | Li-ION 18V 1,5Ah | SysCon | Sensor

Video 215881/M

Art. no.	mm²	dimension	kg	PU
215881/M	10 - 240	415 x 75 mm	7,900	1

Hydraulic hand pliers „HH-6“

Crimping head can be rotated by 180°, manual return after completed pressing, light and compact construction, in SysCon stacking box, without dies.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Opening / Hub: 17 mm
- Head can be opened
- Pressing width: slim
- Cable lugs: standard Cu 10-240 • DIN Cu 10-240 • DIN Al 16-185
- Connectors: standard Cu 10-240 • DIN Cu 10-240 • DIN Al 16-185
- Dual-piston pump
- Weight in kg: 3,0
- Weight of set in kg: 4,5

240-H6

10-240 | 10-240 | 16-185 | 10-240 | 10-240 | 16-185

60 kN | 700 bar | 180°

Art. no.	mm²	dimension	kg	PU
215800	10 - 240	400 x 150 x 65 mm	4,500	1

Crimping dies

standard copper tube terminals and connectors, **hexagonal press**

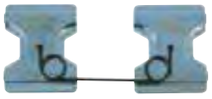
Standard | Standard | 240-H6

Art. no.	mm²	kg	PU
215852	10-16	0,157	1
215854	25-35	0,155	1
215856	50-70	0,150	1
215858	95-120	0,145	1
215859	150	0,159	1
215860	185	0,156	1
215861	240	0,156	1

Crimping dies DIN Cu + Al

DIN Cu/Al tube terminals and connectors, **hexagonal press**

DIN Al | DIN Al | DIN Al | DIN Al | 240-H6



Art. no.	mm²	Al	Id.	kg	PU
215862	10-16		6-8	0,155	1
215864	25-35	16-25	10-12	0,151	1
215866	50-70	35-50	14-16	0,149	1
215868	95-120	70	18-20	0,129	1
215869	150	95-120	22	0,145	1
215870	185	150	25	0,147	1
215872	240	185	28	0,114	1

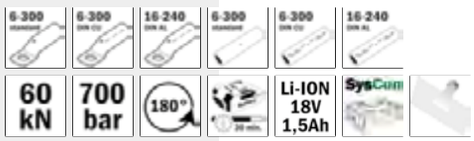
PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Battery powered crimping tool „S0-6“

Hydraulic for interchangeable dies, crimping head 180° swivelling, Head can be opened, manual return flow after perfect pressure.
Extent of supply: 1 crimping tool, 1 charger, 1 battery, 1 strap, in SysCon stacking box „SysCon M“ 220372 without dies.

- Pressing force in kN: 60 kN
- Working pressure in bar: 700
- Head can be opened
- Opening/ Hub: 17 mm
- Pressing width: slim
- Pressing time, battery-operated in seconds: ca. 5
- Battery charging time in minutes: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- Cable lugs: standard Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Connectors: Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240

300-06



Art. no.	mm²	dimension	kg	PU
216801	6 - 300	383 x 75 mm	7,900	1

Battery powered crimping tool „S0-6M“

Sensor

Technical data and scope of delivery, see 216801.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 1 white LED designed to illuminate the working area.

300-06

Video 216801/M

Art. no.	mm²	dimension	kg	PU
216801/M	6 - 300	383 x 75 mm	7,900	1

Battery powered crimping tool „A0-6“

Sensor

2 step hydraulic for replaceable pressing dies, crimping head can be rotated by 180°, can be opened, with quick opening, manual return after completed pressing, LED to check battery status.

Included in delivery: 1 crimping tool, 1 charger, 1 battery, 1 carry strap, in plastic case, without dies.

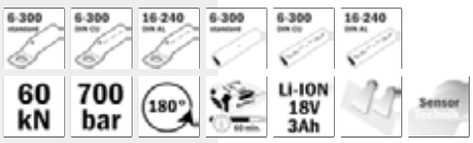
- Pressing force in kN: 60
- Working pressure in bar: 700
- Opening/ Hub: 17 mm
- Head can be opened
- Pressing width: slim
- Cable lugs: standrad Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Connectors: standard Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Pressing time, battery-operated in seconds: 4
- Battery charging time in minutes: 60
- Battery type: Li-Ion 18 V, 3 Ah
- Dual-piston pump
- Weight in kg: 4,5
- Weight of set in kg: 9,5

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 2 white LED designed to illuminate the working area.

300-06



Video 216800

Art. no.	mm²	dimension	kg	PU
216800	6 - 300	375 x 343 x 75 mm	9,500	1

Hydraulic hand pliers „HO-6“

Crimping head can be rotated by 180°, manual return after completed pressing, light and compact construction in black plastic case, without dies.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Head can be opened
- Opening / Hub: 17 mm
- Pressing width: slim
- Cable lugs: standard Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Connectors: standard Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Dual-piston pump
- Weight in kg: 3,5
- Weight of set in kg: 5,0

300-06

6-300 | 6-300 | 16-240 | 6-300 | 6-300 | 16-240

60 kN | 700 bar | 180°

Art. no.	mm²	dimension	kg	PU
216802	6 - 300	500 x 170 x 80 mm	5	1

Hand pliers „MO-6“ for exchangeable dies

Extent of supply: 1 crimping tool, in metal suitcase.

- Crimping range cable lugs: Cu 6-300 • DIN Cu 6-300 / DIN Al 16-240
- Crimping range connectors: Cu 6-300 • DIN Cu 6-300 / DIN Al 16-240

300-06

6-300 | 6-300 | 16-240 | 6-300 | 6-300 | 16-240

60 kN | 180°

Art. no.	mm²	dimension	kg	PU
216804	10 - 300	765 x 175 mm	11,800	1

Crimping headstock „KO-6“

in plastic case, without dies.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Head can be opened
- Opening/ Hub: 17 mm
- Pressing width: slim
- Cable lugs: standard Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Connectors: standard Cu 6-300 • DIN Cu 6-300 • DIN Al 16-240
- Quick coupling
- Weight in kg: 3,2
- Weight of set in kg: 4,2

300-06

6-300 | 6-300 | 16-240 | 6-300 | 6-300 | 16-240

60 kN | 700 bar

Art. no.	mm²	dimension	kg	PU
216807	6 - 300	235 x 91,5 x 57 mm	4,200	1

Dies for terminals and connectors standard

Standard | Standard | 300-06

Art. no.	mm²	PW	kg	PU
216806	6	5	0,136	1
216808	10	5	0,12	1
216810	16	5	0,136	1
216812	25	5	0,135	1
216814	35	5	0,135	1
216816	50	5	0,134	1
216818	70	5	0,132	1
216820	95	5	0,132	1
216822	120	5	0,130	1
216824	150	5	0,128	1
216826	185	5	0,125	1
216828	240	5	0,121	1
216830	300	5	0,118	1

Dies for terminals and connectors DIN

DIN Cu | DIN Cu | DIN Al | DIN Al | 300-06

Art. no.	mm²	Al	PW	Id.	kg	PU
216832	6	-	5	5	0,123	1
216834	10	-	5	6	0,122	1
216836	16	-	5	8	0,125	1
216838	25	-	5	10	0,120	1
216840	35	16-25	5	12	0,120	1
216842	50	35	5	14	0,119	1
216844	70	50	5	16	0,120	1
216846	95	70	5	18	0,120	1
216848	120		5	20	0,120	1
216850	150	95-120	5	22	0,120	1
216852	185	150	5	25	0,120	1
216854	240	185	5	28	0,115	1
216856	300	240	5	32	0,120	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Dies for end sleeves

for end sleeves and compacted conductors, **wave form**

Art. no.	mm²	kg	PU
216950	6	0,120	1
216952	10	0,120	1
216954	16	0,120	1
216956	25	0,120	1
216958	35	0,120	1
216960	50	0,120	1
216962	70	0,120	1
216964	95	0,120	1
216966	120	0,120	1
216968	150	0,120	1
216970	185	0,120	1
216972	240	0,120	1

Dies for tubular terminals „F-Type“

Art. no.	mm²	PW	kg	PU
216876	6	8	0,120	1
216878	10	8	0,146	1
216880	16	9	0,153	1
216882	25	11	0,162	1
216884	35	13	0,171	1
216886	50	13	0,167	1
216888	70	13	0,160	1
216890	95	13	0,164	1
216892	120	20	0,174	1
216894	150	20	0,162	1
216896	185	8	0,124	1
216898	240	8	0,119	1
216899	300	8	0,089	1

Dies for rounding of square conductors

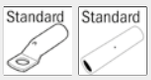
Art. no.	sm	se	kg	PU
216926	10	-	0,120	1
216928	16	-	0,120	1
216930	25	35	0,120	1
216932	35	50	0,120	1
216934	50	70	0,120	1
216936	70	95	0,120	1
216938	95	120	0,120	1
216940	120	150	0,240	1
216942	150	185	0,197	1
216944	185	240	0,120	1
216946	240	300	0,120	1

Dies for ACSR & Aldrey wires available on request.

PDF

Dies for terminals and connectors standard

for standard conduit terminals **and compacted conductors**



Art. no.	mm²	PW	kg	PU
216806/V	6	5	0,136	1
216808/V	10	5	0,136	1
216810/V	16	5	0,136	1
216812/V	25	5	0,135	1
216814/V	35	5	0,135	1
216816/V	50	5	0,134	1
216818/V	70	5	0,132	1
216820/V	95	5	0,132	1
216822/V	120	5	0,130	1
216824/V	150	5	0,128	1
216826/V	185	5	0,125	1
216828/V	240	5	0,121	1
216830/V	300	5	0,118	1

Dies for compacted conductors

Battery powered crimping tool „AC25-12“

Sensor

2 step hydraulic for replaceable pressing dies, crimping head can be rotated by 180°, can be opened, with quick opening, manual return after completed pressing, LED to check battery status.
Included in delivery: 1 crimping tool, 1 charger, 1 battery, 1 carry strap, in plastic case, without dies.
- Pressing force in kN: 120
- Working pressure in bar: 700
- Opening/ Hub: 25 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-185 • DIN Cu 10-150 • DIN Al 16-120
- Pressing time, battery-operated in sec.: 6 - 12
- Battery charging time in min.: 60
- Battery type: Li-Ion, 18 V, 3 Ah
- Dual-piston pump
- Weight in kg: 7 • Weight of set in kg: 12

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:
- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 2 white LED designed to illuminate the working area.

400-C12

10-400 10-300 16-240 10-185 10-150 16-120

120 kN | 700 bar | 180° | Li-ION 18V 3Ah | Sensor

Video 216601

Art. no.	mm²	dimension	kg	PU
216601	10 - 400	375 x 375 x 75 mm	12	1

Hydraulic hand pliers „HC25-12“

Crimping head can be rotated by 180°, manual return after completed pressing, light and compact construction in black plastic case, without dies.
- Pressing force in kN: 120
- Working pressure in bar: 700
- Opening/ Hub: 25 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-185 • DIN Cu 10-150 • DIN Al 16-120
- Dual-piston pump
- Weight in kg: 6,2
- Weight of set in kg: 7,7

400-C12

10-400 10-300 16-240 10-185 10-150 16-120

120 kN | 700 bar | 180°

Art. no.	mm²	dimension	kg	PU
216124	10 - 400	585 x 180 x 72 mm	7,700	1

Hydraulic crimping headstock „KC25-12“

in plastic case, without dies.
- Pressing force in kN: 120
- Working pressure in bar: 700
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-185 • DIN Cu 10-150 • DIN Al 16-120
- Opening/ Hub: 25 mm
- Pressing width: wide
- Quick coupling
- Weight in kg: 3,6
- Weight of set in kg: 4,6

400-C12

10-400 10-300 16-240 10-185 10-150 16-120

120 kN | 700 bar

Art. no.	mm²	dimension	kg	PU
216004	10 - 400	245 x 130 x 72 mm	4,600	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Battery powered crimping tool „AC42-12“ Sensor

2 step hydraulic for replaceable pressing dies, crimping head can be rotated by 180°, can be opened, with quick opening, manual return after completed pressing, LED to check battery status.
Included in delivery: 1 crimping tool, 1 charger, 1 battery, 1 carry strap, in plastic case, without dies.
- Pressing force in kN: 120
- Working pressure in bar: 700
- Opening/ Hub: 42 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Pressing time, battery-operated in sec.: 7 - 13
- Battery charging time in min.: 60
- Battery type: Li-Ion, 18 V, 3 Ah
- Dual-piston pump
- Weight in kg: 8,5 • Weight of set in kg: 13

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:
- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 2 white LED designed to illuminate the working area.

400-C12

10-400 10-300 16-240 10-400 10-300 16-240

120 kN | 700 bar | 180° | Li-ION 18V 3Ah | Sensor

Video 216622

Art. no.	mm²	dimension	kg	PU
216622	10 - 400	430 x 340 x 75 mm	13,000	1

Hydraulic hand pliers „HC42-12“

Crimping head can be rotated by 180°, manual return after completed pressing, light and compact construction in black plastic case, without dies.
- Pressing force in kN: 120
- Working pressure in bar: 700
- Opening/ Hub: 42 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Dual-piston pump
- Weight in kg: 8,2
- Weight of set in kg: 9,7

400-C12

10-400 10-300 16-240 10-400 10-300 16-240

120 kN | 700 bar | 180°

Art. no.	mm²	dimension	kg	PU
216125	10 - 400	640 x 170 x 77 mm	9,700	1

Hydraulic crimping headstock „KC42-12“

in plastic case, without dies.
Pressing force in kN: 120
- Working pressure in bar: 700
- Opening/ Hub: 42 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Quick coupling
- Weight in kg: 5,3
- Weight of set in kg: 6,3

400-C12

10-400 10-300 16-240 10-400 10-300 16-240

120 kN | 700 bar

Art. no.	mm²	dimension	kg	PU
216005	10 - 400	320 x 130 x 76 mm	6,300	1

Battery powered crimping tool „AH-12“ Sensor

2 step hydraulic for replaceable pressing dies, crimping head can be rotated by 180°, can be opened, with quick opening, manual return after completed pressing, LED to check battery status.
Pressing tool for deep indent pressing.
Included in delivery: 1 crimping tool, 1 charger, 1 battery, 1 carry strap, in plastic case, without dies.

- Pressing force in kN: 120
- Working pressure in bar: 700
- Head can be opened
- Opening/ Hub: 20 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Pressing time, battery-operated in sec.: 6 - 13
- Battery charging time in minutes: 60
- Battery type: Li-Ion, 18 V, 3 Ah
- Dual-piston pump
- Weight in kg: 7 • Weight of set in kg: 12

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 2 white LED designed to illuminate the working area.

400-C12

10-400 | 10-300 | 16-240 | 10-400 | 10-300 | 16-240

120 kN | 700 bar | 180° | Li-ION 18V 3Ah | Sensor

Video 216503

Art. no.	mm²	dimension	kg	PU
216503	10 - 400	405 x 353 x 75 m	12,000	1

Hydraulic hand pliers „HH-12“

Crimping head 180° swivelling, manual return flow after perfect pressure, in black metal suitcase, without dies.

- Pressing force in kN: 120
- Working pressure in bar: 700
- Head can be opened
- Opening/ Hub: 20 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Dual-piston pump
- Weight in kg: 4,0
- Weight set in kg: 5,0

400-C12

10-400 | 10-300 | 16-240 | 10-400 | 10-300 | 16-240

120 kN | 700 bar | 180°

Art. no.	mm²	dimension	kg	PU
215946	10 - 400	615 x 180 x 76 mm	7,500	1

Crimping headstock „KH-12“

in plastic case, without dies.

- Pressing force in kN: 120
- Working pressure in bar: 700
- Head can be opened
- Opening/ Hub: 20 mm
- Pressing width: wide
- Cable lugs: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Connectors: standard Cu 10-400 • DIN Cu 10-300 • DIN Al 16-240
- Quick coupling
- Weight in kg: 4
- Weight of set in kg: 5

400-C12

10-400 | 10-300 | 16-240 | 10-400 | 10-300 | 16-240

120 kN | 700 bar

Art. no.	mm²	dimension	kg	PU
215980	10 - 400	275 x 90 x 76 mm	5,000	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

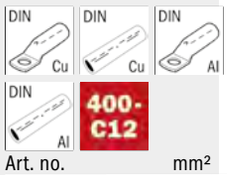
Crimping dies

Standard copper tube terminals and connectors, **hexagonal pressing**

Art. no.	mm²	PW	kg	PU
216008	10	10	0,211	1
216010	16	10	0,212	1
216012	25	10	0,210	1
216014	35	13	0,207	1
216016	50	13	0,224	1
216018	70	14	0,221	1
216020	95	14	0,226	1
216022	120	14	0,200	1
216024	150	11	0,200	1
216026	185	11	0,191	1
216028	240	11	0,186	1
216030	300	11	0,200	1
216032	400	11	0,200	1

Crimping dies DIN Cu + Al

Standard copper tube terminals and connectors, **hexagonal pressing**



Art. no.	mm²	PW	Al	Id.	kg	PU
216036		10		6	0,248	1
216038	16	10		8	0,248	1
216040	25	13		10	0,244	1
216042	35	13	16-25	12	0,235	1
216044	50	13	35	14	0,231	1
216046	70	13	50	16	0,226	1
216048	95	14	70	18	0,229	1
216050	120	14		20	0,225	1
216052	150	10	95-120	22	0,197	1
216054	185	10	150	25	0,193	1
216056	240	10	185	28	0,185	1
216060	300	10		32	0,142	1

Crimping dies

for standard cable lugs **and compacted conductors**

Art. no.	mm²	PW	kg	PU
216008/V	10	10	0,211	1
216010/V	16	10	0,212	1
216012/V	25	10	0,210	1
216014/V	35	13	0,207	1
216016/V	50	13	0,224	1
216018/V	70	14	0,221	1
216020/V	95	14	0,226	1
216022/V	120	14	0,200	1
216024/V	150	11	0,200	1
216026/V	185	11	0,191	1
216028/V	240	11	0,186	1
216030/V	300	11	0,200	1
216032/V	400	11	0,200	1

Dies for ACSR & Aldrey wires available on request.

PDF

Crimping dies

Standard copper tube terminals and connectors, **mandrel shape pressing**

Art. no.	mm²	kg	PU
216064	10	0,200	1
216066	16	0,120	1
216068	25	0,118	1
216070	35	0,116	1
216072	50	0,118	1
216074	70	0,131	1
216076	95	0,119	1
216078	120	0,111	1
216080	150	0,107	1
216082	185	0,095	1
216084	240	0,085	1
216086	300	0,060	1
216065	10-25	0,112	1
216067	35-50	0,121	1
216069	70-120	0,136	1
216071	150-300	0,125	1

Crimping dies

tubular terminals and connectors, F-Type

Art. no.	mm²	PW	kg	PU
216160	10	8	0,211	1
216162	16	8	0,216	1
216164	25	11	0,227	1
216168	50	13	0,232	1
216166	35	13	0,234	1
216170	70	13	0,111	1
216172	95	13	0,230	1
216174	120	20	0,247	1
216176	150	20	0,235	1
216178	185	8	0,190	1
216180	240	8	0,179	1
216182	300	8	0,126	1

Crimping dies

for rounding of square conductors

Art. no.	sm	se	kg	PU
216088	50	70	0,518	1
216090	70	95	0,505	1
216092	95	120	0,489	1
216094	120	150	0,474	1
216096	150	185	0,463	1
216098	185	240	0,441	1
216100	240	300	0,406	1

Crimping dies

for end sleeves and compacted conductors, **wave form**

Art. no.	mm²	PW	kg	PU
216112	50	26	0,194	1
216114	70	26	0,200	1
216116	95	26	0,188	1
216118	120	26	0,200	1
216120	150	26	0,200	1
216122	185	26	0,200	1
216123	240	26	0,200	1

Crimping dies

for insulated tube terminals, **oval pressing**

Art. no.	mm²	PW	kg	PU
216126	10	5	0,200	1
216128	16	5	0,200	1
216130	25	5	0,220	1
216132	35	5	0,218	1
216134	50	5	0,200	1
216136	70	5	0,200	1
216138	95	5	0,200	1
216140	120	5	0,200	1
216142	150	5	0,200	1

Crimping dies

C-connectors, **oval pressing**

Art. no.	mm²	kg	PU
216148	16-25	0,218	1
216150	35	0,208	1
216152	50-70	0,260	1
216154	95	0,217	1
216156	120	0,261	1

Pressing inserts „Deep Indend“ (AH-12/KH-12/HH-12)

for conduit terminals and connectors, **thorn pressing**

Art. no.	mm²		kg	PU
216552	50-70	cable lugs	0,211	1
216554	95-185	cable lugs	0,211	1
216556	240	cable lugs	0,211	1
216562	50-70	connectors	0,211	1
216564	95-185	connectors	0,211	1
216566	240	connectors	0,211	1

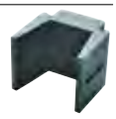
Adapter pressing thorn

Art. no.	size	kg	PU
216570	1 - 4	0,211	1

Pressing thorn

Art. no.	mm²	size	kg	PU
216574	50-70	1	0,211	1
216576	95-185	2	0,211	1
216578	240	4	0,211	1

Holder for „Deep Indend“ pressing inserts



Art. no.	mm²	kg	PU
216580	50-185	0,211	1
216582	240	0,211	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Battery powered crimping tool „SD300-6“

crimping head 360° swivelling, manual return flow after perfect pressure, mandrel shape pressing.
Extent of supply: 1 crimping tool, 1 charger, 1 battery, 1 strap, in light plastic box.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Pressing width: thorn
- Cable lugs: standard Cu 16-300
- Connectors: standard Cu 16-120
- Pressing time, battery-operated in sec.: 6-12
- Battery charging time in min.: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- Weight in kg: 2,4
- Weight of set in kg: 7,9

16-300 | 16-120 | 60 kN | 700 bar | 360° | Li-ION 18V 1,5Ah | SysCom

Art. no.	mm²	dimension	kg	PU
216663	16 - 300	443 x 75 mm	7,900	1

Battery powered crimping tool „SD300-6M“ Sensor

Technical data and scope of delivery, see 216663.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 1 white LED designed to illuminate the working area.

Video 216663/M

16-300 | 16-120 | 60 kN | 700 bar | 360° | Li-ION 18V 1,5Ah | Sensor | SysCom

Art. no.	mm²	dimension	kg	PU
216663/M	16 - 300	443 x 75 mm	7,900	1

Test pin and gauge, see page 68

Hydraulic hand pliers „HD300-6“

Crimping head can be rotated by 360°, manual return after completed pressing, light and compact construction in black plastic case.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Cable lugs: standard Cu 16-300
- Connectors: standard Cu 16-120
- Dual-piston pump
- Weight in kg: 5,0
- Weight of set in kg: 6,5

16-300 | 16-120 | 60 kN | 700 bar | 360°

Art. no.	mm²	dimension	kg	PU
216660	16 - 300	570 x 160 x 60 mm	6,500	1

Crimping headstock „KD300-6“

in plastic case.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Cable lugs: standard Cu 16-300
- Connectors: standard Cu 16-120
- Quick coupling
- Weight in kg: 2,8
- Weight of set in kg: 3,8

16-300 | 16-120 | 60 kN | 700 bar

Art. no.	mm²	dimension	kg	PU
216665	16 - 300	375 x 343 x 75 mm	3,800	1

Hydraulic 4-thorn pressing tool for pressing ordinary conduit terminals and connectors, wide pressing.
Reliable, robust, hydraulic pressing tool.
The solution for your tough jobs!

- Tool adjusts automatically to the conductor cross-section being pressed
- Guaranteed DIN suitable connection
- No need to purchase further pressing inserts
- No need to change insert for each conductor cross-section
- Ideally suited for pressing extremely flexible finest-wired conductors of the cable classes 5 & 6
- Ideally suited to pressing of compacted conductors (no sleeve, no special cable shoe)
- Test thorn and guide for fast, simple, optical pressing pressure control

Note:
DIN pressing cable shoes must be processed in accordance with the standard with DIN hexagonal pressing tools and DIN pressing inserts!

Battery powered crimping tool „SD400-6“

crimping head 360° swivelling, manual return flow after perfect pressure, mandrel shape pressing.
Extent of supply: 1 crimping tool, 1 charger, 1 battery, 1 strap, in light plastic box.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Head can be opened
- Cable lugs: standard Cu 25-400
- Connectors: standard Cu 25-400
- Pressing time, battery-operated in sec.: 6-12
- Battery charging time in min.: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- Weight in kg: 2,4
- Weight of set in kg: 7,9

Art. no.	mm²	dimension	kg	PU
216667	25 - 400	455 x 75 mm	7,900	1

Battery powered crimping tool „SD400-6M“ Sensor

Technical data and scope of delivery, see 216667.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 1 white LED designed to illuminate the working area.

Video 216667/M

Art. no.	mm²	dimension	kg	PU
216667/M	25 - 400	455 x 75 mm	7,900	1

Test pin

Test pin for hydraulic four mandrel pressing tools

Video 216660

Art. no.	kg	PU
216660/B	0,566	1

Hydraulic hand pliers „HD400-6“

Crimping head can be rotated by 360°, manual return after completed pressing, light and compact construction in black plastic case.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Head can be opened
- Cable lugs: standard Cu 25-400
- Connectors: standard Cu 25-400
- Dual-piston pump
- Weight in kg: 5,2
- Weight of set in kg: 6,7

Art. no.	mm²	dimension	kg	PU
216661	25 - 400	585 x 160 x 75 mm	6,700	1

Crimping headstock „HKD400“

in plastic case.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Head can be opened
- Cable lugs: standard Cu 25-400
- Connectors: standard Cu 25-400
- Quick coupling
- Weight in kg: 3
- Weight of set in kg: 4

Art. no.	mm²	dimension	kg	PU
216666	25 - 400	375 x 343 x 75 mm	4,000	1

Template for four mandrel pressing

Template for hydraulic four mandrel pressing tools

Art. no.	kg	PU
216660/L	0,566	1

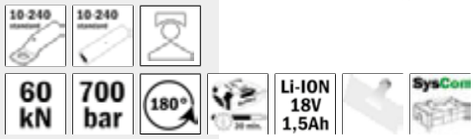
PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Battery powered crimping tools

Battery powered crimping tool „SDE240-6“

crimping head 180° swivelling, manual return flow after perfect pressure, mandrel shape pressing.
Extent of supply: 1 crimping tool, 1 charger, 1 battery, 1 strap, in light plastic box.

- Pressing force in kN: 60
- Working pressure in bar: 700
- Pressing width: thorn
- Cable lugs: standard Cu 10-240
- Connectors: standard Cu 10-240
- Pressing time, battery-operated in sec.: 6-12
- Battery charging time in min.: 30
- Battery type: Li-Ion, 18 V, 1,5 Ah
- Weight in kg: 2,4
- Weight of set in kg: 7,9



Art. no.	mm²	kg	PU
216669	10 - 240	7,900	1

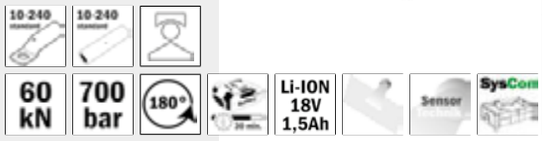
Battery powered crimping tool „SDE240-6M“ Sensor

Technical data and scope of delivery, see 216669.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:

- Light is green: Pressing completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Pressing interrupted before completed

The device also has 1 white LED designed to illuminate the working area.



Video 216669/M

Art. no.	mm²	kg	PU
216669/M	10 - 240	7,900	1

Accessories

Battery Li-Ion 18 V

for all 18 Volt Li-Ion battery tools

Art. no.	kg	PU
215503	0,859	1

Battery Li-Ion 18 V, 3 Ah

for all 18 Volt Li-Ion battery tools

Art. no.	kg	PU
215511	0,859	1

Quick charger Li-Ion 18 V

for all 18 Volt Li-Ion battery tools

Art. no.	kg	PU
215513	0,819	1

Hydraulic oil

0,5 l

Art. no.	kg	PU
216254	1,000	1

Hydraulic crimping headstocks

Hydraulic crimping headstock „KH-25“

for uninsulated terminals 95 - 630 mm², pressure 250 kN, for crimping dies hexagon shape according to DIN 48083 page 3 and 4.

- Pressing force in kN: 250
- Working pressure in bar: 700
- Opening/ Hub:Pin
- Pressing width: wide
- Pressing area Cu/Al: 95-630
- Dual-piston pump
- Quick coupling
- Weight in kg: 6,4
- Weight of set in kg: 9

630-H250

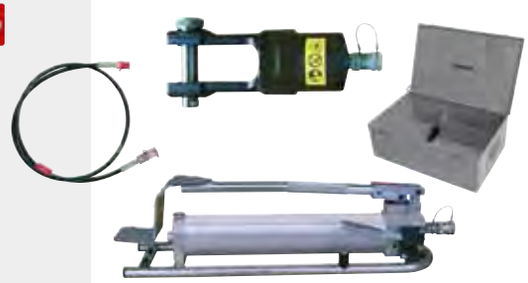
Art. no.	TL	mm²	kg	PU
216236	185	95-630	9,000	1

Hydraulic crimping headstock set

Content: Art. No. 216236 Hydraulic crimping headstock, Art. No. 216238 Hydraulic high-pressure hose, 2 m, Art. No. 216348 Hydraulic foot pump, Art. No. 216251 Carrycase.

- Pressing force in kN: 250
- Working pressure in bar: 700
- Opening/ Hub: Pin
- Pressing width: wide
- Pressing area Cu/Al: 95-630
- Dual-piston pump
- Quick coupling
- Weight in kg: 18,4
- Weight of set in kg: 21

630-H250



Art. no.	mm²	kg	PU
216250	95-630	21,000	1

Crimping dies DIN-connection, Cu/Al

hexagonal pressing dies according DIN 48083 page 4 suitable for DIN-connection material according to DIN. Cu ze (free of tensile)

630-H250

Art. no.	Cu	Al	Id.	kg	PU
212372	95	70	18	1,340	1
212376	120	-	20	1,340	1
212380	150	95-120	22	1,335	1
212382	185	150	25	1,325	1
212384	240	185	28	1,250	1
212388	300	240	32	1,275	1
212390	-	300	34	1,180	1
212392	400	400	38	1,160	1
212394	500	-	42	1,110	1
212396	625	500	44	1,100	1

Dies for ACSR & Aldrey wires available on request.

PDF

Crimping dies, standard, Cu

standard, **hexagonal pressing**

630-H250

Art. no.	Cu	kg	PU
212580	95	1,340	1
212581	120	1,340	1
212582	150	1,335	1
212583	185	1,325	1
212584	240	1,250	1
212585	300	1,275	1
212586	400	1,160	1
212587	500	1,110	1
212588	625	1,100	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hydraulic crimping headstock + cylinder „KH-45“

for terminals and butt connectors to 1000 mm², together with an adapter it is possible to use all other crimping dies of the other crimping headstock, low weight in comparison to the crimping range, excellent price relation, snap head, extensionable system to bend and punch electric bus bars socket-joint connection.

- Pressing force in kN: 450
- Working pressure in bar: 700
- Pressing width: wide
- Pressing area Cu/Al: 120-1000
- Quick coupling
- Weight of set in kg: 13,5

Art. no.	TL	mm²	kg	PU
216355	185	120-1000	13,500	1

Crimping dies, standard

standard, **hexagon** crimping for crimping terminals and connectors DIN 46235 and for Al terminals and Al connector

Art. no.	mm²	kg	PU
216304	120	2,635	1
216306	150	2,600	1
216308	185	2,620	1
216310	240	2,580	1
216312	300	2,580	1
216314	400	2,235	1
216316	500	2,300	1
216318	625	2,300	1

Crimping terminals and connectors, DIN

DIN, **hexagon** crimping for crimping terminals and connectors DIN 46235 and for Al terminals and Al connectors

Art. no.	Cu	Al	Id.	kg	PU
216320	120	-	20	2,635	1
216322	150	95/120	22	2,600	1
216324	185	150	25	2,620	1
216326	240	185	28	2,580	1
216328	300	240	32	2,580	1
216330	-	300	34	2,380	1
216332	400	-	38	2,325	1
216334	500	-	42	2,300	1
216336	625	-	44	2,300	1
216338	800	-	52	2,300	1
216340	1000	-	58	2,040	1

Pumps for hydraulic crimping headstocks

Hydraulic foot pump „F-700“

material: aluminium alloy, light design, twin-cam pump, automatic switching from closing (ca. 25 ccm/Hub) to working feed rate (ca. 2.5 ccm/Hub), security valve, max. working pressure 700 bar (+ 10/- 30 bar), without hose, **with quick coupling**

Art. no.	NP		kg	PU
216348	700		12,000	1

Hydraulic high-pressure hose

steel-reinforced with rapid coupling to foot pump Art. No. 216348

Art. no.	TL	kg	PU
216238	2	0,950	1
216240	3	1,100	1
216242	4	1,600	1
216244	5	2,000	1

Electro-hydraulic pump „PN700 I“

electric foot switch, completely self-acting, also the release of the dies at the end of the operation, 2 m high pressure tube and hydraulic connectors, for industrial uses, where a high level of production is needed, 230 volt, with foot switch control, pump for working outside

Art. no.	NP		kg	PU
216352	700	230V	41,000	1
216358	700	Bat./230V	41,000	1

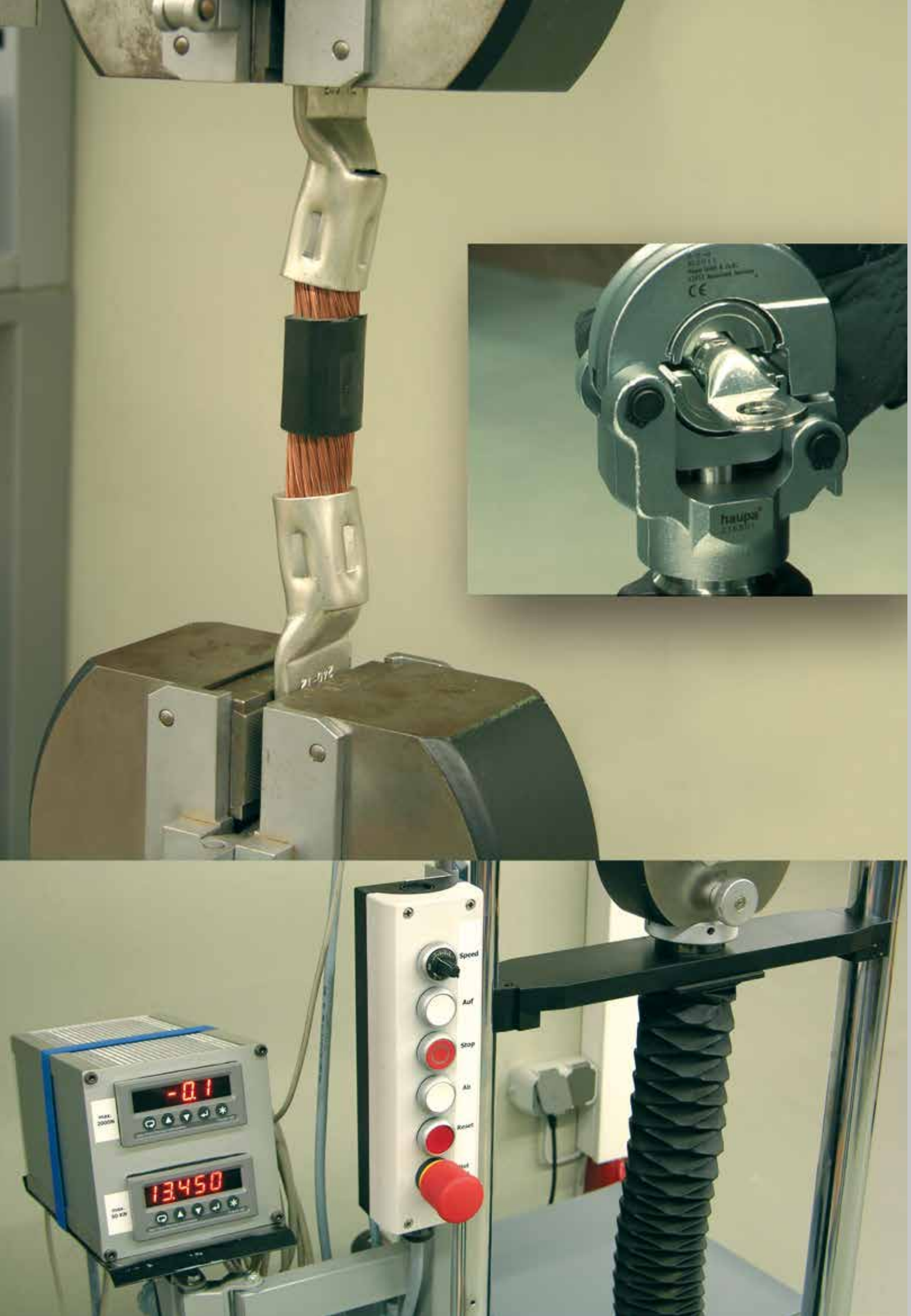
Battery-hydraulic pump „PA-700“

2 stage hydraulics, manual control switch, manual return flow after perfect pressure, LED for battery control, 1 quick charger, 2 batteries Li-Ion 18 V, 3 Ah, carrying belt, max. operating pressure: 700 bar with 1,8 m hose, **with quick coupling**

Art. no.	NP		kg	PU
216357	700	Bat./230V	6,600	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.


haupa
Speed
Auf
Stop
Ab
Reset
-0.1
13.450

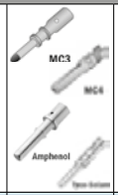
6 tonne pressing tools

Tool	Article No.	Type	Insert range	Pressing width	Sensor techno-logy	Pressing width thorn	Pressing force kN	Working pressure in bar	Head can be opened	Quick coupling	HUB/ opening mm	Pressing range for cable lugs						Pressing range for connectors						Dual piston pump	kg	Set kg	Battery	Pressing time in sec.
												Cu	Cu DIN	F-Type	Al DIN	CU standard PL	CU standard light T	Cu	Cu DIN	F-Type	Al DIN	Cu standard PL	Cu standard light M					
	215765	HHs-6	185 H6	slim	-	-	60	700	●	-	17	10 - 240	10 - 185	-	10 - 185	10 - 185	-	10 - 185	10 - 185	-	10 - 185	10 - 185	-	●	3,000	7,900	-	-
	215770	SHs-6	185 H6	slim	-	-	60	700	●	-	17	10 - 240	10 - 185	-	16 - 185	10 - 240	-	10 - 240	10 - 240	-	16 - 185	10 - 240	-	-	2,400	7,900	Li-Ion 18V 1,5 Ah	5
	215770/M	SHs-6	185 H6	slim	●	-	60	700	●	-	17	10 - 240	10 - 185	-	16 - 185	10 - 240	-	10 - 240	10 - 240	-	16 - 185	10 - 240	-	-	2,400	7,900	Li-Ion 18V 1,5 Ah	5
	215800	HH-6	240 H6	slim	-	-	60	700	●	-	17	10 - 240	10 - 240	-	16 - 185	10 - 240	-	10 - 240	10 - 240	-	16 - 185	10 - 240	-	●	3,000	4,500	-	-
	215881	SH-6	240 H6	slim	-	-	60	700	●	-	17	10 - 240	10 - 240	-	16 - 185	10 - 240	-	10 - 240	10 - 240	-	16 - 185	10 - 240	-	-	2,400	7,900	Li-Ion 18V 1,5 Ah	5
	215881/M	SH-6	240 H6	slim	●	-	60	700	●	-	17	10 - 240	10 - 240	-	16 - 185	10 - 240	-	10 - 240	10 - 240	-	16 - 185	10 - 240	-	-	2,400	7,900	Li-Ion 18V 1,5 Ah	5
	216807	KO-6	300 06	slim	-	-	60	700	●	●	17	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	-	3,200	4,200	-	-
	216804	MO-6	300 06	slim	-	-	60	700	●	-	17	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	-	8,100	11,800	-	-
	215802	HO-6	300 06	slim	-	-	60	700	●	-	17	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	●	3,500	5,000	-	-
	215801	SO-6	300 06	slim	-	-	60	700	●	-	17	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	-	2,400	7,900	Li-Ion 18V 1,5 Ah	5
	215801/M	SO-6	300 06	slim	●	-	60	700	●	-	17	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	-	2,400	7,900	Li-Ion 18V 1,5 Ah	5
	216800/M	AO-6	300 06	slim	●	-	60	700	●	-	17	6 - 300	6 - 300	6 - 300	6 - 240	6-300	6 - 300	6 - 300	6 - 300	6 - 300	6 - 240	6 - 300	6 - 300	●	4,500	9,500	Li-Ion 18V 3 Ah	4
	216665	KD300-6		wide	-	●	60	700	-	●	-	16 - 300	-	16 - 240	-	16 - 300	16 - 300	16 - 120	16 - 300	16 - 95	-	16 - 120	16 - 120	-	2,800	3,800	-	-
	216660	HD300-6		wide	-	●	60	700	-	-	-	16 - 300	-	16 - 240	-	16 - 300	16 - 300	16 - 120	16 - 300	16 - 95	-	16 - 120	16 - 120	●	5,000	6,500	-	-
	216663/M	AD300-6		wide	●	●	60	700	-	-	-	16 - 300	-	16 - 240	-	16 - 300	16 - 300	16 - 120	16 - 300	16 - 95	-	16 - 120	16 - 120	-	4,500	9,500	Li-Ion 18V 1,5 Ah	6
	216666	KD400-6		wide	-	●	60	700	●	●	-	25 - 400	-	25 - 400	-	25 - 400	25 - 400	25 - 400	25 - 400	25 - 400	-	25 - 400	25 - 400	-	3,000	4,000	-	-
	216661	HD400-6		wide	-	●	60	700	●	-	-	25 - 400	-	25 - 400	-	25 - 400	25 - 400	25 - 400	25 - 400	25 - 400	-	25 - 400	25 - 400	●	5,200	6,700	-	-
	216667/M	AD400-6		wide	●	●	60	700	●	-	-	25 - 400	-	25 - 400	-	25 - 400	25 - 400	25 - 400	25 - 400	25 - 400	-	25 - 400	25 - 400	-	4,800	9,800	Li-Ion 18V 1,5 Ah	6
	216669/M	SDE240-6		wide	●	●	60	700	●	-	-	6 - 240	-	6 - 240	-	6 - 240	6 - 240	6 - 240	6 - 240	6 - 240	-	6 - 240	6 - 240	-	2,900	7,900	Li-Ion 18V 1,5 Ah	5

12 tonne pressing tools

Tool	Article No.	Type	Insert range	Pressing width	Sensor techno-logy	Pressing force kN	Working pressure in bar	Head can be opened	Quick coupling	HUB/ opening mm	Pressing range for cable lugs						Pressing range for connectors						Groove pressing	Dual piston pump	kg	Set kg	Battery	Pressing time in sec.
											Cu	Cu DIN	F-Type	Al DIN	CU standard PL	CU standard light T	Cu	Cu DIN	F-Type	Al DIN	Cu standard PL	Cu standard light M						
	216004	KC25-12	400 C12	wide	-	120	700	-	●	25	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 185	10 - 150	10 - 150	16 - 120	10 - 185	10 - 150	-	-	3,600	4,600	-	-
	216124	HC25-12	400 C12	wide	-	120	700	-	-	25	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 185	10 - 150	10 - 150	16 - 120	10 - 185	10 - 150	-	●	6,200	7,700	-	-
	216601	AC25-12	400 C12	wide	●	120	700	-	-	25	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 185	10 - 150	10 - 150	16 - 120	10 - 185	10 - 150	-	●	7,000	12,000	Li-Ion 18V 1,5 Ah	6
	216005	KC42-12	400 C12	wide	-	120	700	-	●	42	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 400	10 - 300	10-300	16 - 240	10 - 400	10 - 300	-	-	5,300	6,300	-	-
	216125	HC42-12	400 C12	wide	-	120	700	-	-	42	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 400	10 - 300	10-300	16 - 240	10 - 400	10 - 300	-	●	8,200	9,700	-	-
	216622	AC42-12	400 C12	wide	●	120	700	-	-	42	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 400	10 - 300	10-300	16 - 240	10 - 400	10 - 300	-	●	8,500	13.000	Li-Ion 18V 1,5 Ah	7
	215980	KH-12	400 C12	wide	-	120	700	●	●	20	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 400	10 - 300	10-300	16 - 240	10 - 400	10 - 300	●	-	4,000	5,000	-	-
	215946	HH-12	400 C12	wide	-	120	700	●	-	20	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 400	10 - 300	10-300	16 - 240	10 - 400	10 - 300	●	●	6,000	7,500	-	-
	216503	AH-12	400 C12	wide	●	120	700	●	-	20	10 - 400	10 - 300	10 - 300	16 - 240	10 - 400	10 - 300	10 - 400	10 - 300	10-300	16 - 240	10 - 400	10 - 300	●	●	7,000	12,000	Li-Ion 18V 1,5 Ah	6
	216236	KH-25	630 - H250	wide	-	250	700	●	●	20	-	95 - 630	-	70 - 500	-	-	-	95 - 630	-	70 - 500	-	-	-	-	6,400	9,000	-	-
	216355	KH-45	1000 - H450	wide	-	450	700	●	●	-	120 - 625	120 - 1000	-	95 - 300	120 - 625	-	120 - 625	120 - 1000	-	120 - 625	-	-	-	-	10,300	13,500	-	-

Series of dies

							DIN 46234		light T/M	standard	F-Type	DIN CU	Ni	Al DIN	PL Al standard	Al/Cu DIN	Al/Cu standard
M210		0,5 - 6	0,5 - 35	RG58 RG59 RG62 RG6	0,5 - 6	✓	1 - 10	-	-	-	-	-	-	-	-	-	-
185-H6		-	-	-	-	-	-	-	-	-	-	10 - 185	-	-	10 - 240	-	-
240-H6		-	on request	-	-	-	on request	on request	-	10 - 240	-	10 - 240	-	10 - 185	10 - 240	10 - 185	-
300-06		-	6 - 185	-	-	-	10 - 150	on request	6 - 300	6 - 300	6 - 300	6 - 300	on request	16 - 240	10 - 300	16 - 240	-
400-C12		-	50 - 150	-	-	-	10 - 300	10 - 150	10 - 300	10 - 300	10 - 185	10 - 300	on request	16 - 240	10 - 400	16 - 240	-
400-C12		-	50 - 150	-	-	-	10 - 300	10 - 150	10 - 300	10 - 300	10 - 185	10 - 300	on request	16 - 240	10 - 400	16 - 240	-
400-C12 TN218		-	50 - 150	-	-	-	10 - 300	10 - 150	10 - 300	10 - 300	10 - 185	10 - 300	on request	16 - 240	10 - 400	16 - 240	35 - 240 TN 218
630-H250		-	-	-	-	-	-	-	-	-	-	70 - 630	-	95 - 500	-	95 - 500	-
1000-H450		-	-	-	-	-	-	-	-	-	-	120 - 1000	-	95 - 300	-	95 - 300	-

Hydraulic punching tools

haupa®

... convincing solutions

Electro-hydraulic punching tool „AS-6M“

Sensor

in SysCon stacking box including 1 charger, 1 battery, 1 carry strap, without inserts.

With the different colours of the sensor LED, it shows whether the pressing has been completed successfully or which errors have occurred:
- Light is green: Punching completed as standard, motor stopped.
- Light is orange: Battery voltage not sufficient
- Light is read: Punching interrupted before completed

The device also has 1 white LED designed to illuminate the working area.

Extent of supply: 1 hydraulic punch: 1 connecting rod 3/8-24 UNF (article no. 217660), 1 connecting rod 3/4-16 UNF (article no. 217662), 1 adapter (article no. 217664), 1 spacer bushing (article no. 217666), 1 SysCon stacking box.

Advantages:
- Head can be rotated by 360°
- Flexible aluminium head
- Automatic end switch off
- Non-slip handle area
- Slim and compact construction
- LED to illuminate the area you are working in
- Li-ion technology

Punching capacity:
Shaped holes 138 x 138 mm (ST37 2.5 mm)
Round holes 150 mm (ST37 3 mm) / 63 mm (VA 2 mm)

Technical data:
- Pressing force: 60 kN
- Working pressure: 700 bar
- Battery charge time: 30 minutes
- Battery voltage: 18 V
- Battery capacity: 1,5 Ah
- Weight: 3.64 kg
- Weight of set: 4.7 kg

Video 217600

60 kN | 700 bar | 360° | Li-ION 18V 1,5Ah | Sensor | SysCon

Art. no.	dimension	kg	PU
217600	455 x 75 mm	4,700	1

SysCon set metric

SysCon

Content: 8 punches

1 220372 ABS plastic box „SysCon M“ (insert including)
1 270600 Electro-hydraulic punching tool „AS-6M“

1 217610 M16
1 217612 M20
1 217614 M25
1 217616 M32
1 217618 M40
1 217620 M50
1 217622 M63
1 217636 PG16

Art. no.	kg	PU
217600/M	4,300	1

SysCon set PG

SysCon

Content: 9 punches

1 220372 ABS plastic box „SysCon M“ (insert including)
1 217600 Electro-hydraulic punching tool „AS-6M“

1 217630 PG9
1 217632 PG11
1 217634 PG13,5
1 217636 PG16
1 217638 PG21
1 217640 PG29
1 217642 PG36
1 217644 PG42
1 217646 PG48

Art. no.	kg	PU
217600/PG	4,300	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hydraulic hand-punching tool „HS-8“

Punches precise holes with almost no burring. Ideal for fast, frontal punching of control panels.
Extent of supply: 1 hydraulic hand punch, 1 connecting rod 3/8-24 UNF (article no. 217660), 1 connecting rod 3/4-16 UNF (article no. 217662), 1 adapter (article no. 217664), 1 spacer bushing (article no. 217666), 1 transport case.

- Punching performance: Steel sheet of up to a maximum of 3 mm
- Pressing force: 80 kN
- Length: 308 mm
- Weight: 2,4 kg
- Weight Set: 3,8 kg

80 kN

Art. no.	kg	PU
217604	3,800	1

Hydraulic hand-punch-cutter „HS-6“

Punches accurate slugs nearly free of burs. Usable for building and maintaining control boxes, for car retrofitting and for sanitary application.
Extent of supply: 1 hydraulic punching tool, 1 rod 3/8-24 UNF (art. 217660), 1 rod 3/4-16 UNF (art. 217662), 1 adapter (art. 217664), 1 sleeve (art. 217666), 1 plastic case with insert.

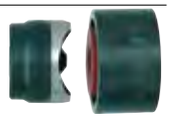
- Punching capacity: Steel plates up to max. 3 mm
- Pressing force: 60 kN
- Length: 230 mm
- Weight: 2,4 kg
- Weight Set: 3,8 kg

60 kN

Art. no.	kg	PU
217602	3,800	1

Punching dies, metric

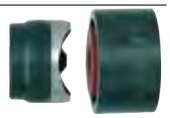
- ST37, 3 mm
- VA 2 mm



Art. no.	Ø		kg	PU
217610	16,5	ISO 16	0,070	1
217612	20,5	ISO 20	0,090	1
217614	25,5	ISO 25	0,150	1
217616	32,5	ISO 32	0,220	1
217618	40,5	ISO 40	0,900	1
217620	50,5	ISO 50	0,640	1
217622	63,5	ISO 63	0,950	1

Punching dies, PG

- ST37, 3 mm
- VA 2 mm



Art. no.	Ø		kg	PU
217630	15,2	PG9	0,060	1
217632	18,6	PG11	0,084	1
217634	20,4	PG13,5	0,091	1
217636	22,5	PG16	0,120	1
217638	28,3	PG21	0,170	1
217640	37	PG29	0,330	1
217642	47	PG36	0,536	1
217644	54	PG42	0,731	1
217646	60	PG48	0,896	1

Punching dies, square

- ST37, 2,5 mm
- UNF

Art. no.	height	kg	PU
217650	46	1,862	1
217652	68	1,500	1
217654	92	2,000	1

Connecting rod

Art. 217660 - 3/8-24 UNF
Art. 217662 - 3/4-16 UNF

Art. no.		kg	PU
217660	1	0,040	1
217662	2	0,203	1

Adapter

for connecting rod art. 217660
- UNF

Art. no.	kg	PU
217664	0,100	1

Spacer bushing

Art. no.	kg	PU
217666	0,100	1

Punch and bending centre

Basic unit

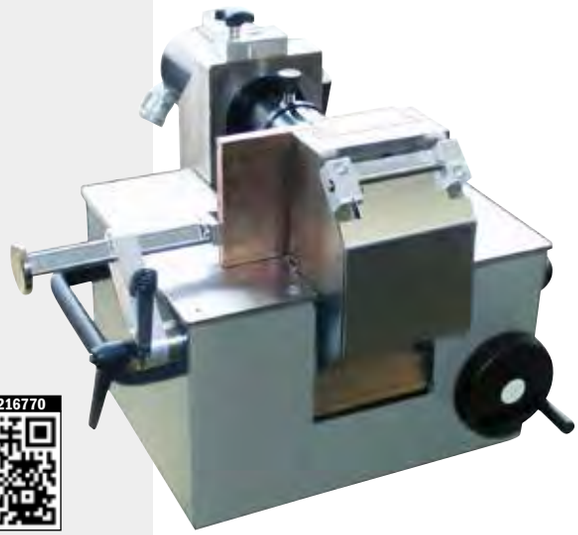
Basic unit to accommodate bending, hole-making, cutting and cranking tools. The processing of lamellar copper rails is possible! Hydraulic tool for connection to a hydraulic pump with 700 bar (10,000 PSI).
The universal tool system is particularly suited for use in workshops and on building sites. Copper and aluminium rails can be processed up to dimension of 12 x 120 mm. The changing of the individual tools is carried out in seconds thanks to the user-friendly construction. The compact construction and light weight enable transportation in any car.

Bending:
Thanks to an integrated proximity switch a 100% repeat accuracy is achieved. The maximum bending angle is 110°.

Hole-making:
The height-adjustable table with side stopper makes working easier. Marking out and measuring is not necessary. Holes from 6.5 to 21.0 mm in diameter can be punched. Slotted holes up to 14 x 20 mm.
With the hole tool II holes can be made in lamellar copper rails and grounding bands.

Cutting:
Our cutting blade geometry enables clean and burr-free cutting.

Cranking:
The offsetting (stepped bending) by a material thickness is carried out in a single process.



Video 216770

Art. no.	kg	PU
216770	51,000	1

Hole-making tools

For punching round and slotted holes.
- Maximum material thickness: 12 mm
- Maximum diameter: 21 mm
- Maximum slotted hole: 17 x 20 mm

216776:
Hole tool for solid copper and aluminium rails
216777:
Hole-making tool for solid copper and aluminium rails as well as for laminated copper rails and grounding bands

Art. no.	kg	PU
216776	4,300	1
216777	4,300	1

Hole inserts for round holes

For both hole-making tools, the following diameters can be supplied

Art. no.	Ø		kg	PU
216778	6,5	M6 > 216776	0,118	1
216778/L	6,5	M6 > 216777	0,421	1
216779	9,0	M8 > 216776	0,114	1
216779/L	9,0	M8 > 216777	0,420	1
216780	10,5	M8 > 216776	0,110	1
216780/L	10,5	M8 > 216777	0,419	1
216781	11,0	M10 > 216776	0,106	1
216781/L	11,0	M10 > 216777	0,418	1
216782	12,7	M10 > 216776	0,102	1
216782/L	12,7	M10 > 216777	0,416	1
216783	13,0	M12 > 216776	0,098	1
216783/L	13,0	M12 > 216777	0,414	1
216784	17,0	M16 > 216776	0,094	1
216784/L	17,0	M16 > 216777	0,412	1
216785	21,0	M20 > 216776	0,090	1
216785/L	21,0	M20 > 216777	0,411	1

Hole inserts for slotted holes

For both hole-making tools, the following diameters can be supplied

Art. no.	Ø		kg	PU
216786	9x18	M8 > 216776	0,098	1
216786/L	9x18	M8 > 216777	0,423	1
216787	11x20	M10 > 216776	0,095	1
216787/L	11x20	M10 > 216777	0,421	1
216788	13x20	M12 > 216776	0,092	1
216788/L	13x20	M12 > 216777	0,419	1
216789	17x20	M16 > 216776	0,089	1
216789/L	17x20	M16 > 216777	0,417	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Bending tool

For bending of solid copper or aluminium rails up to 12 x 120 mm. The bending matrix suits all bending radii

Art. no.	Ø	kg	PU
216771	5	4,000	1
216772	8	4,100	1
216773	10	4,200	1
216774	20	4,500	1
216775	Universal (counterholder)	3,200	1

Cutting tool

for separating solid copper and aluminium rails up to 12 x 120 mm

Art. no.	mm	kg	PU
216790	12 x 120	5,500	1

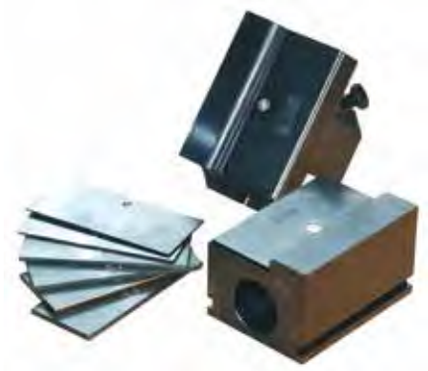
Cutting tool for lamellar rails

for separating lamellar rails made from copper, maximum dimensions: 12 x 120 mm

Art. no.	mm	kg	PU
216791	12 x 120	9,000	1

Cranking tool for stepped bending of power rails

for creating a material offset in rail thicknesses on a length of just 30 mm. Possible offset 5, 6, 8, 10 and 12 mm



Art. no.	kg	PU
216792	10,000	1

Tool cases

Stable metal sheet case for accommodation of hole-making tool with inserts (1) or two tools (2)

Art. no.	quantity	kg	PU
216793	1	2,000	1
216794	2	2,000	1

Electro-hydraulic pump „Special“

electric foot switch, completely self-acting, also the release of the dies at the end of the operation, 2 m high pressure tube and hydraulic connectors, for industrial uses, where a high level of production is needed, 230 volt, with foot switch control, pump for working outside

Art. no.	kg	PU
216359	51,000	1

2 3 4 5 6 7 8 9 10 11 12 13 14 15

Fish tapes
Cable pulling device system

haupa®
... convincing solutions

Fish tapes

Perlon fish tapes

made from stretched „Bayer-Perlon wire“, black, with solid steel end pieces, with additional pilot spring, approx. 120 mm length

Art. no.	TL	Ø	kg/100	PU	PE
150220	5	3	6,000	1	1
150222	10	3	10,300	1	1
150224	15	3	14,100	1	1
150226	20	3	18,800	1	1
150228	25	3	24,600	1	1
150230	30	3	24,400	1	1
150241	10	4	16,000	1	1
150243	15	4	23,400	1	1
150245	20	4	30,300	1	1
150247	25	4	38,600	1	1

Perlon fish tapes

made from stretched „Bayer-Perlon wire“, black, with solid steel end pieces, without additional pilot spring, strip size 4 mm

Art. no.	TL	Ø	kg/100	PU	PE
150232	10	4	15,200	1	1
150234	15	4	23,600	1	1
150236	20	4	30,300	1	1
150238	25	4	40,200	1	1
150239	30	4	44,500	1	1

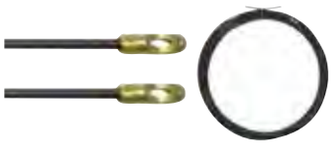
Perlon fish tapes

made from stretched „Bayer-Perlon wire“, black, with solid steel end pieces, with 2 eyes, strip size 3 mm

Art. no.	TL	Ø	kg/100	PU	PE
150450	5	3	4,800	1	1
150452	10	3	9,900	1	1
150454	15	3	13,900	1	1
150456	20	3	16,300	1	1
150458	25	3	21,800	1	1
150462	5	4	8,000	1	1
150464	10	4	15,800	1	1
150466	15	4	24,000	1	1
150468	20	4	29,200	1	1
150470	25	4	38,900	1	1

Perlon fish tapes

made from stretched „Bayer-Perlon wire“, black, with solid steel end pieces, with 2 spring and 2 eyes, strip size 4 mm



Art. no.	TL	Ø	kg/100	PU	PE
150476	10	4	18,000	1	1
150478	15	4	26,000	1	1
150480	20	4	33,200	1	1
150482	25	4	41,200	1	1

Steel fish tapes

with eyelet and brass rolling ball, without additional pilot spring

Art. no.	TL	Ø	kg/100	PU	PE
150152	10	3,5	13,100	1	1
150154	15	3,5	20,800	1	1
150156	20	3,5	26,800	1	1
150158	25	3,5	32,300	1	1

Spiral fish tapes

made from steel spirals, fourfold twisted, with solid steel end pieces, strip size 4 mm

Art. no.	TL	Ø	kg/100	PU	PE
150200	5	4	31,200	1	1
150202	10	4	69,100	1	1
150204	15	4	98,800	1	1
150206	20	4	134,300	1	1
150208	25	4	182,000	1	1
150210	30	4	185,900	1	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

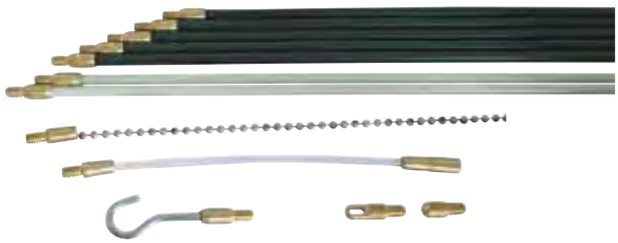
Fibreglas section fish rods kits

Fibre glass push rod set

in nylon bag.

Scope of delivery:
Push rod length: 7 m
5 rods 8 mm Ø black
2 rods 8 mm Ø white

Accessories:
1 hook, 1 chain, 1 magnet, 1 starting block, 1 pulling knob



Art. no.	TL	Ø		kg	PU
150560	7	5 - 7	12 pcs.	0,500	1

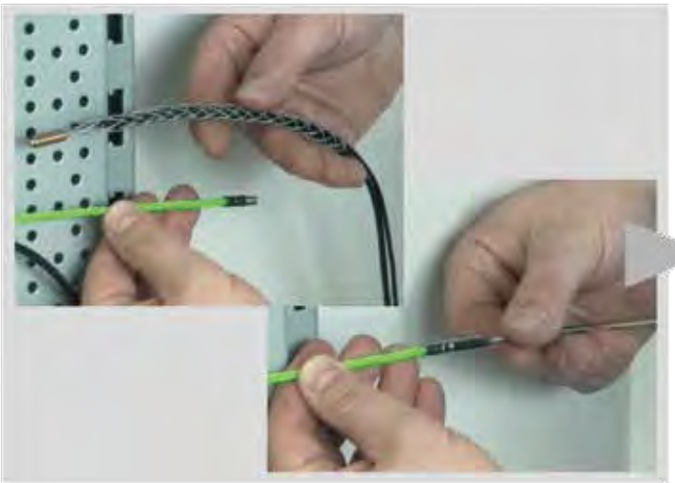
Fibre glass push rod set

in nylon bag.

Scope of delivery:
Push rod length: 10 m
2 rods 6 mm Ø white
6 rods 5 mm Ø yellow
2 rods 4 mm Ø green

Accessories:
1 hook, 1 chain, 1 magnet, 1 starting block, 1 pulling knob, 1 LED lamp

Art. no.	TL		kg	PU
150562	10	16 pcs.	0,700	1



HAUPA PullTec

Cable pulling device HAUPA PullTec

with special plastic coating, M5 thread and probe, in durable plastic housing, colour: black

„Single Composite“, 4 mm green

The advantages of the HAUPA PullTec at a glance:
- Material: Coated with a special plastic
- Slides very well and is highly elastic
- Low friction • Does not break or bend
- M5 thread • With probe
- In durable plastic housing
- Breaking load: 300 kg

Video 143500

Art. no.	TL		Ø		kg	PU
143500	20	M5	4		1,300	1
143502	30	M5	4		1,500	1
143501	20	M5	4	replacement rod	1,000	1
143503	30	M5	4	replacement rod	1,200	1
143508		M5	6	guiding head	0,200	1

Cable pulling device HAUPA PullTec

with special plastic coating, M5 thread and probe, in durable plastic housing, colour: black

„Single Composite“, 5,2 mm black

The advantages of the HAUPA PullTec at a glance:
- Material: Coated with a special plastic
- Slides very well and is highly elastic
- Low friction • Does not break or bend
- M5 thread • With probe
- In durable plastic housing
- Breaking load: 350 kg

Art. no.	TL		Ø		kg	PU
143504	20	M5	5,2		1,500	1
143506	30	M5	5,2		1,700	1
143505	20	M5	5,2	replacement rod	1,100	1
143507	30	M5	5,2	replacement rod	1,300	1
143509		M5	6	guiding head	0,200	1

Additional accessories, see HAUPA fibre, page 86

Cable pulling device, accessories

Cable pulling device HAUPA-FIBRE

Cable pulling device with glass fibre rod Ø 3 mm, with PP casing, including front/end sleeve M5.

Video 143000

Art. no.	TL		Ø		kg	PU
143000	20	M5	3	HAUPA-FIBRE 20 m	1,199	1
143002	30	M5	3	HAUPA-FIBRE 30 m	1,500	1
143002/ECO	30	M5	3	HAUPA-FIBRE 30 m	1,198	1

Pulling unit with loop M5

Art. no.		Ø	kg	PU
143008	M5	6	0,020	1

Guiding head with loop M5

Art. no.		Ø	kg	PU
143010	M5	6	0,200	1

Guiding head M5

Art. no.		Ø	kg	PU
143012	M5	7	0,010	1

Guiding head M5

Art. no.		Ø	kg	PU
143014	M5	10	0,011	1

Guiding head Ø 13 mm with loop M5

Art. no.		Ø	kg	PU
143030	M5	13	0,017	1

Front/end sleeve M5

Art. no.		kg	PU
143016	M5	0,005	1

Connection sleeve for probes Ø 3 mm

Art. no.		Ø	kg	PU
143018	M5	3	0,003	1

Cable grips

Art. no.	TL		Ø	kg	PU
143020	200	M5	4-6	0,007	1

Special pulling aid

for fast pulling of glass fibre rods Ø 3 mm

Art. no.	Ø	kg	PU
143024	3 - 6	0,047	1

Special fast glue for glass fibre rod Ø 3 mm

Art. no.	kg	PU
143026	0,012	1

Replacement glass fibre rod

Ø 3 mm, length 20/30 m, including front/end sleeve M5

Art. no.	TL	Ø	kg	PU
143004	20	3	0,022	1
143006	30	3	0,034	1

Service set for HAUPA-FIBRE

5 front sleeves, 5 guiding heads,
3 connection sleeves, 1 special fast glue

Art. no.		kg	PU
143028	M5	0,041	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable pulling device, accessories

Cable pulling device FOX

Cable pulling device FOX with glass fibre rod Ø 4.5 mm and green PP coating RAL 6018, with zinced steel winder Ø 330 mm, standing version, complete with front/end sleeve M5 and pulling head M5 with loop

Art. no.	TL		Ø	kg	PU
143050	40	M5	4,5	3,900	1
143052	60	M5	4,5	4,400	1
143054	80	M5	4,5	4,800	1

Replacement glass fibre rod FOX

Ø 4.5 mm, complete with front/end sleeve M5

Art. no.	TL		Ø	kg	PU
143056	40	M5	4,5	0,900	1
143058	60	M5	4,5	1,400	1
143060	80	M5	4,5	1,800	1

Guiding head with loop M5

Art. no.		kg	PU
143062	M5	0,011	1

Front bulb with shackle M5

Art. no.		kg	PU
143064	M5	0,100	1

Guiding role made from aluminium M5

Art. no.		kg	PU
143066	M5	0,100	1

Guiding head M5

Art. no.		Ø	kg	PU
143012	M5	7	0,010	1
143014	M5	10	0,011	1
143030	M5	13	0,017	1

Guiding head set with heads Ø 7, 10, 13 mm M5

Art. no.			kg	PU
143068	M5	3-pieces	0,038	1

Front/end sleeve M5

Art. no.		kg	PU
143070	M5	0,100	1

Connection sleeve for probes Ø 4.5 mm

Art. no.	Ø	kg	PU
143072	4,5	0,002	1

Cable pulling device, accessories

Cable pulling device SIX

Cable pulling device SIX with glass fibre rod Ø 6.0 mm and green PP coating RAL 6018, with zinced steel winder Ø 550 mm, in lying and standing version with wheels, complete with front/end sleeve M6 and pulling head M6 with loop

lying version

Art. no.	TL		Ø	kg	PU
143100	40	M6	6	5,200	1
143102	60	M6	6	5,900	1
143104	80	M6	6	6,800	1
143105	100	M6	6	7,700	1

standing version

Art. no.	TL		Ø	kg	PU
143106	40	M6	6	7,200	1
143108	60	M6	6	8,300	1
143110	80	M6	6	9,400	1
143111	100	M6	6	10,300	1

standing version with wheels

Art. no.	TL		Ø	kg	PU
143112	40	M6	6	7,400	1
143114	60	M6	6	8,500	1
143116	80	M6	6	9,600	1
143117	100	M6	6	10,500	1

Replacement glass fibre rod SIX

Ø 6 mm, including front/end sleeve M5

Art. no.	TL		Ø	kg	PU
143118	40	M6	6	1,700	1
143120	60	M6	6	2,500	1
143122	80	M6	6	3,250	1
143124	100	M6	6	4,150	1

Guiding head with loop M6

Art. no.		Ø	kg	PU
143126	M6	6	0,018	1

Front bulb with shackle M6

Art. no.		kg	PU
143128	M6	0,022	1

Guiding role made from aluminium M6

Art. no.		kg	PU
143130	M6	0,026	1

Guiding head M6

Art. no.		Ø	kg	PU
143132	M6	6	0,017	1

Front/end sleeve M6

Art. no.		kg	PU
143134	M6	0,013	1

Connection shackle for probes Ø 6 mm

Art. no.	Ø	kg	PU
143136	6	0,012	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable pulling device, accessories

Cable pulling device FIX

Cable pulling device FIX with glass fibre rod Ø 7.5 mm ad green PP coating RAL 6018, with zinced steel winder Ø 630 mm, in standing version and with wheels, including front/end sleeve M12 and front bulb with shackle M12

standing version

Art. no.	TL		Ø	kg	PU
143150	40	M12	7,5	8,100	1
143152	60	M12	7,5	9,400	1
143154	80	M12	7,5	10,700	1
143156	100	M12	7,5	11,900	1
143158	120	M12	7,5	13,100	1

standing version with wheels

Art. no.	TL		Ø	kg	PU
143160	40	M12	7,5	9,100	1
143162	60	M12	7,5	10,400	1
143164	80	M12	7,5	11,700	1
143166	100	M12	7,5	12,900	1
143168	120	M12	7,5	14,100	1

Replacement glass fibre rod FIX

Ø 7.5 mm, including front/end sleeve M12

Art. no.	TL		Ø	kg	PU
143170	40	M12	7,5	1,500	1
143172	60	M12	7,5	2,000	1
143174	80	M12	7,5	3,000	1
143176	100	M12	7,5	3,700	1
143178	120	M12	7,5	4,500	1

Front bulb with shackle M12

Art. no.		kg	PU
143180	M12	0,010	1

Guiding role made from aluminium M12

Art. no.		kg	PU
143182	M12	0,200	1

Guiding role made from aluminium, length 80 mm M12

Art. no.		Ø	kg	PU
143184	M12	40	0,220	1

Front/end sleeve M12

Art. no.		kg	PU
143186	M12	0,004	1

Connection sleeve for probes Ø 9 + 11 mm

Art. no.	Ø	kg	PU
143187	7,5	0,003	1

Connection sleeve with rotator

Art. no.	TL		Ø	kg	PU
143190	83	M12	30	0,006	1

Catch device made from zinced steel

Catch device made from zinced steel to connect glass fibre rods from two opposite sides with M12 connections on both sides

Art. no.		Ø	Ø St.	Øtu/mm	kg	PU
143192	M12	7,5	7,5	60-80	0,300	1

Catch device made from zinced steel

Catch device made from zinced steel to connect glass fibre rods from two opposite sides with M12 connections on both sides

Art. no.		Ø St.	Øtu/mm	kg	PU
143194	M12	7,5/9/11/14,5	80-100	0,350	1
143196	M12	7,5/9/11/14,5	100-125	0,046	1
143198	M12	7,5/9/11/14,5	125-160	0,090	1

Pipe cleaning brush

Art. no.	Ø	kg	PU
143200	80 mm	0,200	1
143202	97 mm	0,098	1
143204	117 mm	0,400	1

Cable pulling device, accessories

Cable pulling device STRONG

Cable pulling device STRONG with glass fibre rid Ø 9 mm and green PP coating RAL 6018, with zinced steel winder Ø 795 mm (1000 with wheels), in standing version and with wheels, including front/end sleeve M12 and front bulbs with shackle M12

standing version

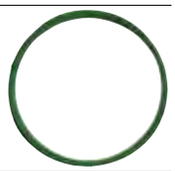
Art. no.	TL		Ø	kg	PU
143210	40	M12	9	9,100	1
143212	60	M12	9	12,900	1
143214	80	M12	9	14,820	1

standing version with wheels

Art. no.	TL		Ø	kg	PU
143216	100	M12	9	29,400	1
143218	120	M12	9	31,300	1
143220	150	M12	9	33,900	1

Replacement glass fibre rod STRONG

Ø 9 mm, including front/end sleeve M12



Art. no.	TL		Ø	kg	PU
143222	40	M12	9	3,800	1
143224	60	M12	9	5,500	1
143226	80	M12	9	7,500	1
143228	100	M12	9	9,400	1
143230	120	M12	9	11,300	1
143232	150	M12	9	13,900	1

Cable pulling device POWER

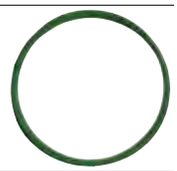
Cable pulling device POWER with glass fibre rod Ø 11 mm and green PP coating RAL 6018, with zinced steel winder Ø 1000 mm, width 150 mm, standing version with wheels, including front/end sleeve M12 and front bulb with shackle M12

standing version with wheels

Art. no.	TL		Ø	kg	PU
143250	150	M12	11	43,000	1
143252	200	M12	11	50,000	1
143254	250	M12	11	56,500	1
143256	300	M12	11	64,500	1

Replacement glass fibre rod POWER

Ø 9 mm, including front/end sleeve M12



Art. no.	TL		Ø	kg	PU
143258	150	M12	11	21,900	1
143260	200	M12	11	29,200	1
143262	250	M12	11	36,400	1
143264	300	M12	11	43,900	1

Cable pulling device KING

Cable pulling device KING with glass fibre rod Ø 14.5 mm and black PP coating, with steel winder Ø 1500 mm with wheels, including front/end sleeve M12 and front bulb with shackle M12

standing version with wheels

Art. no.	TL		Ø	kg	PU
143270	150	M12	14,5	85,000	1
143272	200	M12	14,5	99,000	1
143274	250	M12	14,5	113,000	1
143276	300	M12	14,5	127,000	1
143278	350	M12	14,5	141,000	1
143280	400	M12	14,5	156,000	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable protection

Front bulb with shackle M12

Art. no.		kg	PU
143180	M12	0,010	1

Guiding role made from aluminium M12

Art. no.		kg	PU
143182	M12	0,200	1

Guiding role made from aluminium, length 80 mm M12

Art. no.		Ø	kg	PU
143184	M12	40	0,220	1

Front/end sleeve M12

Art. no.		kg	PU
143185	M12	0,004	1

Connection sleeve for probes

Art. no.	Ø	kg	PU
143188	9	0,150	1
143266	11	0,075	1

Connection sleeve with rotator

Art. no.	TL		Ø	kg	PU
143190	83	M12	30	0,006	1

Catch device made from zinced steel

Catch device made from zinced steel to connect glass fibre rods from two opposite sides with M12 connections on both sides

Art. no.		Ø St.	Øtu/mm	kg	PU
143194	M12	7,5/9/11/14,5	80-100	0,350	1
143196	M12	7,5/9/11/14,5	100-125	0,046	1
143198	M12	7,5/9/11/14,5	125-160	0,090	1

Pipe cleaning brush

Art. no.	Ø	kg	PU
143200	80 mm	0,200	1
143202	97 mm	0,098	1
143204	117 mm	0,400	1

Cable grips for electrical installations

Hand-braided cable grips made from zinced steel braid with a flexible Towing ring with front unit M5 and integrally moulded Talurit ferrule

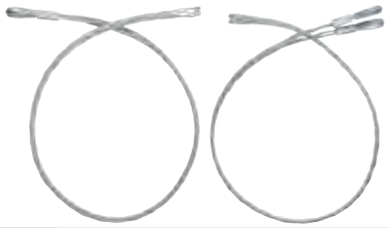
Art. no.	TL		Ø	kg	PU
143300	200	M5	4-6	0,009	1
143302	210	M5	6-9	0,013	1
143304	350	M5	9-12	0,024	1
143306	350	M5	12-15	0,029	1
143308	500	M5	15-19	0,200	1
143310	500	M5	19-25	0,052	1
143312	450	M5	25-31	0,400	1

Cord und cable grips

Art. no.	TL	Ø	kg	PU
143336	2000	8-16	0,250	1
143338	2000	10-20	0,250	1
143340	2000	20-30	0,250	1
143342	2000	30-40	0,250	1

Cable grips for subterraneous cable laying

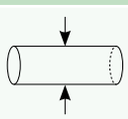
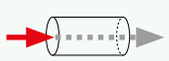
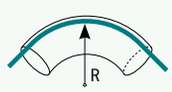
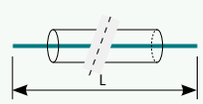
Hand-braided cable grips made from zinced steel braid with 1 loop or 2 loops and integrally moulded Talurit ferrule



Art. No.	TL	Ø	♀	kg	PU
143314	1250	10-20	1	0,378	1
143318	1250	20-30	1	0,380	1
143322	1250	30-40	1	0,424	1
143326	1250	40-50	1	0,430	1
143330	1250	50-65	1	0,388	1
143334	1250	65-80	1	1,120	1

Art. No.	TL	Ø	♀	kg	PU
143316	1250	10-20	2	0,465	1
143320	1250	20-30	2	0,460	1
143324	1250	30-40	2	0,510	1
143328	1250	40-50	2	0,200	1
143332	1250	50-65	2	0,520	1

Legend cable pulling device

Rod diameter	Pipe diameter	Pushing energy	Min. bending radius	Breaking strength	Pulling strength with starting/ ending	Advised length	
ø mm	ø mm	kg	mm	kg	kg	m	
							page
FIBRE 3,0 mm	16-32	+++	160	400	110	20-30 (+ 2-3 m)	86
PullTec 4,0 mm	16-32	+++	100	300	130	10-30 (+ 3-5 m)	85
PullTec 5,2 mm	20-32	+++	100	350	140	10-40 (+ 3-5 m)	85
FOX 4,5 mm	40-60	+++	310	1200	170	20-40 (+ 3-5 m)	87
SIX 6,0 mm	50-80	++++	400	2000	230	30-60 (+ 3-5 m)	88
FIX 7,5 mm	63-100	++++	500	3200	290	40-70 (+ 3-5 m)	89
STRONG 9,0 mm	63-125	++++	620	4400	340	60-150 (+ 3-5 m)	90
POWER 11,0 mm	63-150	++++	770	6250	500	100-300 (+ 3-5 m)	90
KING 15,0 mm	100-250	++++	1150	15000	550	150-450 (+ 3-5 m)	90
PERLON® 3,0 mm	16	+	80	200	110	5-15 (+ 2-3 m)	84
SPIRAL 4,0 mm	20-32	+	180	115	115	10-25 (+ 3-5 m)	84

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Decoiler

haupa®
... convincing solutions

Cable unwinder

Cable unwinder

4 box cable unwinder.

Technical data
Capacity: 50 kg
Max reel diameter: 130 mm

Art. no.	drum/width	drum-Ø	drum/kg	kg	PU
143406	600	130	50	5,5	1

Cable unwinder

Length: 400 mm
Width: 400 mm
Height: 390 mm

Video 143404

Art. no.	drum-Ø	drum/kg	kg	PU
143404	150-600	50	8	1

Decoiler

Decoiler 600

The new HAUPA decoiler have been designed for daily intensive use. The most important characteristics of this product are the ease of operation and the light weight. The side elements are made from galvanised powder-coated steel. The ball bearing drums can be adjusted without the need for specialist tools. Four vibration-damping feet prevent unwanted movement of the roller and protect the floor.

Technical data
Length: 350 mm
Width: 350 mm
Height: 105 mm

Art. no.	drum/width	drum-Ø	drum/kg	kg	PU
143398	330	600	50	3,5	1

Decoiler 1200

The new HAUPA cable decoilers are developed for intensive use. Ease of use and a low weight are fundamental characteristics of this product. The front and the rear sides are made of anodized aluminum with antiskid ribs. For the left and the right side, sink steel with powder coating has been used. Because of this construction, the decoilers are strong, flexible to use, and resistant against heavy circumstances. The roles have bearings and a sliding axis, which make it easy to change the position of the roles without any special tools. Four antiskid buffers ensure that vibrations are subdued and floors remain intact.

Technical data
Length: 610 mm
Width: 570 mm
Height: 115 mm

Art. no.	drum/width	drum-Ø	drum/kg	kg	PU
143400	560	1200	175	9	1

Decoiler 1200 +

The new HAUPA cable decoilers are developed for intensive use. Ease of use and a low weight are fundamental characteristics of this product. The front and the rear sides are made of anodized aluminum with antiskid ribs. For the left and the right side, sink steel with powder coating has been used. Because of this construction, the decoilers are strong, flexible to use, and resistant against heavy circumstances. The roles have bearings and a sliding axis, which make it easy to change the position of the roles without any special tools. Four antiskid buffers ensure that vibrations are subdued and floors remain intact.

Technical data
Length: 705 mm
Width: 570 mm
Height: 115 mm

Art. no.	drum/width	drum-Ø	drum/kg	kg	PU
143402	660	1200	300	10,5	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

End sleeves

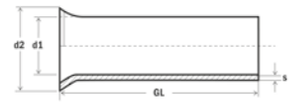
haupa®
... convincing solutions

RoHS

End sleeves

- **of electrolytic copper, bare**
- **Dimensions to DIN 46228, Part 1**

Cu



Art. no.	CSS	d1	d2	s	GL	kg/100	PU
270141	**0,34**	0,85	1,8	0,15	**5**	0,003	1000
270140	**0,5**	1,0	2,1	0,15	**6**	0,004	1000
270140/500		1,0	2,1	0,15	**6**	0,002	500
270142	**0,75**	1,2	2,3	0,15	**6**	0,005	1000
270142/500		1,2	2,3	0,15	**6**	0,003	500
270143		1,2	2,3	0,15	**10**	0,005	1000
270143/500		1,2	2,3	0,15	**10**	0,005	500
270144		1,2	2,3	0,15	**12**	0,007	1000
270146	**1**	1,4	2,5	0,15	**6**	0,005	1000
270146/500		1,4	2,5	0,15	**6**	0,004	500
270148		1,4	2,5	0,15	**10**	0,007	1000
270148/500		1,4	2,5	0,15	**10**	0,006	500
270149		1,4	2,5	0,15	**12**	0,009	1000
270149/500		1,4	2,5	0,15	**12**	0,009	500
270150	**1,5**	1,7	2,8	0,15	**7**	0,005	1000
270150/500		1,7	2,8	0,15	**7**	0,005	500
270152		1,7	2,8	0,15	**10**	0,009	1000
270152/500		1,7	2,8	0,15	**10**	0,008	500
270154		1,7	2,8	0,15	**12**	0,012	1000
270154/500		1,7	2,8	0,15	**12**	0,009	500
270156		1,7	2,8	0,15	**18**	0,014	1000
270156/500		1,7	2,8	0,15	**18**	0,014	500
270158	**2,5**	2,5	3,4	0,15	**7**	0,008	1000
270158/500		2,5	3,4	0,15	**7**	0,010	500
270159		2,5	3,4	0,15	**10**	0,013	1000
270159/500		2,5	3,4	0,15	**10**	0,013	500
270160		2,5	3,4	0,15	**12**	0,012	1000
270160/500		2,5	3,4	0,15	**12**	0,011	500
270164	**4**	2,8	4,0	0,2	**9**	0,018	1000
270164/500		2,8	4,0	0,2	**9**	0,014	500
270166		2,8	4,0	0,2	**12**	0,019	1000
270166/500		2,8	4,0	0,2	**12**	0,018	500
270168		2,8	4,0	0,2	**18**	0,030	1000
270168/500		2,8	4,0	0,2	**18**	0,030	500
270170	**6**	3,5	4,7	0,2	**10**	0,020	250
270172		3,5	4,7	0,2	**12**	0,022	250
270174		3,5	4,7	0,2	**15**	0,034	250
270176		3,5	4,7	0,2	**18**	0,034	250
270178	**10**	4,5	5,8	0,2	**12**	0,028	250
270180		4,5	5,8	0,2	**15**	0,054	250
270182		4,5	5,8	0,2	**18**	0,068	250
270184	**16**	5,8	7,5	0,2	**12**	0,045	250
270186		5,8	7,5	0,2	**15**	0,057	250
270188		5,8	7,5	0,2	**18**	0,059	250
270190	**25**	7,3	9,5	0,2	**12**	0,058	250
270192		7,3	9,5	0,2	**18**	0,080	250
270194	**35**	8,3	11,0	0,2	**18**	0,114	100
270195		8,3	11,0	0,2	**20**	0,108	100
270196		8,3	11,0	0,2	**22**	0,100	100
270198		8,3	11,0	0,2	**26**	0,110	100

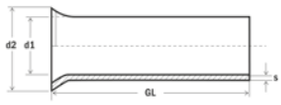
PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

End sleeves

- **of electrolytic copper, tin-plated**
- **Dimensions to DIN 46228, Part 1**

Cu

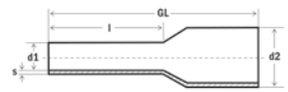


Art. no.	CSS	d1	d2	s	GL	kg/100	PU
270066	**0,25**	0,75	1,7	0,15	**5**	0,003	1000
270066/500		0,75	1,7	0,15	**5**	0,002	500
270068	**0,34**	0,85	1,8	0,15	**5**	0,003	1000
270068/500		0,85	1,8	0,15	**5**	0,001	500
270070	**0,5**	1,0	2,1	0,15	**6**	0,003	1000
270070/500		1,0	2,1	0,15	**6**	0,003	500
270072	**0,75**	1,2	2,3	0,15	**6**	0,003	1000
270072/500		1,2	2,3	0,15	**6**	0,003	500
270074		1,2	2,3	0,15	**12**	0,007	1000
270074/500		1,2	2,3	0,15	**12**	0,003	500
270076	**1**	1,4	2,5	0,15	**6**	0,004	1000
270077		1,7	4,0	0,15	**8**	0,005	1000
270078		1,4	2,5	0,15	**10**	0,007	1000
270078/500		1,4	2,5	0,15	**10**	0,003	500
270079		1,4	2,5	0,15	**12**	0,008	1000
270079/500		1,4	2,5	0,15	**12**	0,004	500
270080	**1,5**	1,7	2,8	0,15	**7**	0,006	1000
270082		1,7	2,8	0,15	**10**	0,009	1000
270082/500		1,7	2,8	0,15	**10**	0,005	500
270084		1,7	2,8	0,15	**12**	0,010	1000
270084/500		1,7	2,8	0,15	**12**	0,005	500
270086		1,7	2,8	0,15	**18**	0,010	1000
270086/500		1,7	2,8	0,15	**18**	0,010	500
270087		1,7	2,8	0,15	**20**	0,018	1000
270088	**2,5**	2,2	3,4	0,15	**7**	0,008	1000
270089		2,2	3,4	0,15	**10**	0,017	1000
270089/500		2,2	3,4	0,15	**10**	0,017	500
270090		2,2	3,4	0,15	**12**	0,011	1000
270090/500		2,2	3,4	0,15	**12**	0,011	500
270091		2,2	3,4	0,15	**15**	0,015	1000
270091/500		2,2	3,4	0,15	**15**	0,015	500
270092		2,2	3,4	0,15	**18**	0,023	1000
270092/500		2,2	3,4	0,15	**18**	0,023	500
270093		2,2	3,4	0,15	**20**	0,020	1000
270093/500		2,2	3,4	0,15	**20**	0,020	500
270094	**4**	2,8	4,0	0,2	**9**	0,015	1000
270096		2,8	4,0	0,2	**12**	0,020	1000
270097		2,8	4,0	0,2	**15**	0,024	1000
270098		2,8	4,0	0,2	**18**	0,030	1000
270100	**6**	3,5	4,7	0,2	**10**	0,020	250
270102		3,5	4,7	0,2	**12**	0,024	250
270104		3,5	4,7	0,2	**15**	0,031	250
270106		3,5	4,7	0,2	**18**	0,036	250
270107		3,5	4,7	0,2	**20**	0,040	250
270108	**10**	4,5	5,8	0,0	**12**	0,032	250
270110		4,5	5,8	0,2	**15**	0,039	250
270112		4,5	5,8	0,2	**18**	0,045	250
270114	**16**	5,8	7,5	0,2	**12**	0,044	250
270116		5,8	7,5	0,2	**15**	0,056	250
270118		5,8	7,5	0,2	**18**	0,068	250
270119		5,8	7,5	0,2	**24**	0,104	250
270120	**25**	7,3	9,5	0,2	**12**	0,063	250
270121		7,3	9,5	0,2	**15**	0,075	250
270122		7,3	9,5	0,2	**18**	0,085	250
270123		7,3	9,5	0,2	**25**	0,121	100
270124	**35**	8,3	11,0	0,2	**18**	0,112	100
270126		8,3	11,0	0,2	**22**	0,132	100
270128		8,3	11,0	0,2	**25**	0,143	100
270130		8,3	11,0	0,2	**30**	0,155	100
270131	**50**	10,3	13,0	0,3	**22**	0,202	100
270132	**70**	12,5	15,0	0,4	**25**	0,259	100
270134	**95**	14,5	17,0	0,4	**30**	0,500	50
270135	**120**	16,5	19,0	0,5	**32**	0,660	50
270136	**150**	18,5	21,0	0,5	**38**	0,529	50
270137	**185**	20,0	23,5	0,6	**40**	1,350	25

RoHS

End sleeves DIN colour range

- **insulated**
- **Electrolytic copper, tin-plated**
- **Dimensions to DIN 46228. Part 4**
- **DIN colour range III**



Art. no.	CSS		d1	d2	s	TL	l	kg/100	PU
270800	**0,5**	white	1,1	3,1	0,15	14,0	**8**	0,010	100
270800/25		white	1,1	3,1	0,15	14,0	**8**	0,010	100
270801		white	1,1	3,1	0,15	14,0	**8**	0,009	500
270802	**0,75**	grey	1,25	3,3	0,15	14,0	**8**	0,009	500
270803		grey	1,25	3,3	0,15	14,0	**8**	0,013	100
270803/25		grau	1,25	3,3	0,15	14,0	**8**	0,013	100
270804	**1**	red	1,5	3,5	0,15	14,6	**8**	0,014	100
270804/25		red	1,5	3,5	0,15	14,6	**8**	0,014	100
270805		red	1,5	3,5	0,15	14,6	**8**	0,009	500
270806		red	1,5	3,5	0,15	18,0	**12**	0,013	500
270807	**1,5**	black	1,7	4,0	0,15	14,6	**8**	0,013	500
270808		black	1,7	4,0	0,15	14,6	**8**	0,014	100
270808/25		black	1,7	4,0	0,15	14,6	**8**	0,014	100
270809		black	1,7	4,0	0,15	14,6	**10**	0,111	100
270810	**2,5**	blue	2,3	4,9	0,15	15,0	**8**	0,020	100
270810/25		blue	2,3	4,9	0,15	15,0	**8**	0,020	100
270811		blue	2,3	4,9	0,15	15,0	**8**	0,017	500
270812		blue	2,3	4,9	0,15	16,5	**10**	0,018	500
270813		blue	2,3	4,9	0,15	25,0	**18**	0,030	500
270814	**4**	grey	2,9	5,6	0,2	17,7	**10**	0,030	100
270814/25		grey	2,9	5,6	0,2	17,7	**10**	0,030	100
270815		grey	2,9	5,6	0,2	17,7	**10**	0,030	500
270816		grey	2,9	5,6	0,2	25,7	**18**	0,040	100
270818	**6**	yellow	3,6	7,0	0,2	20,0	**12**	0,045	100
270818/10		yellow	3,6	7,0	0,2	20,0	**12**	0,045	100
270820		yellow	3,6	7,0	0,2	26,0	**18**	0,055	100
270822	**10**	red	4,6	8,4	0,2	21,5	**12**	0,057	100
270822/10		red	4,6	8,4	0,2	21,5	**12**	0,057	100
270824		red	4,6	8,4	0,2	27,5	**18**	0,072	100
270826	**16**	blue	6,0	9,6	0,2	22,2	**12**	0,082	100
270826/10		blue	6,0	9,6	0,2	22,2	**12**	0,082	100
270828		blue	6,0	9,6	0,2	28,2	**18**	0,103	100
270830	**25**	yellow	7,3	12,0	0,2	30,0	**16**	0,142	50
270830/5		yellow	7,3	12,0	0,2	30,0	**16**	0,142	100
270832		yellow	7,3	12,0	0,2	32,0	**18**	0,152	50
270834		yellow	7,3	12,0	0,2	36,0	**22**	0,168	50
270836	**35**	red	8,3	13,5	0,2	30,0	**16**	0,168	50
270836/5		red	8,3	13,5	0,2	30,0	**16**	0,168	100
270838		red	8,3	13,5	0,2	32,0	**18**	0,178	50
270840		red	8,3	13,5	0,2	39,0	**25**	0,218	50
270842	**50**	blue	10,3	15,0	0,3	36,0	**20**	0,344	50
270844		blue	10,3	15,0	0,3	40,0	**25**	0,404	50

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

End sleeves in tape form, to DIN 46228 P. 4

- **insulated**
- **Copper/plastic, tin-plated surface**
- **DIN color range III**

Art. no.	CSS		l	coils		kg/100	PU
272250	**0,5**	white	**8**	Ø 250 mm		0,010	3000
272254	**0,75**	grey	**8**	Ø 250 mm		0,030	3000
272260	**1,0**	red	**8**	Ø 250 mm		0,010	3000
272264	**1,5**	black	**8**	Ø 250 mm		0,010	2500
272268	**2,5**	blue	**8**	Ø 250 mm		0,010	1500

End sleeves in tape form, to DIN 46228 P. 4

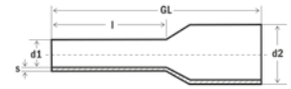
- **insulated**
- **Copper/plastic, tin-plated surface**

Art. no.	CSS		l	dispenser		kg/100	PU
272280	**0,5**	white	**8**	150x150x18 mm		0,070	1000
272284	**0,75**	grey	**8**	150x150x18 mm		0,100	1000
272290	**1**	red	**8**	150x150x18 mm		0,120	1000
272294	**1,5**	black	**8**	150x150x18 mm		0,120	1000
272298	**2,5**	blue	**8**	150x150x18 mm		0,140	500

RoHS

End sleeves, colour range I, (french)

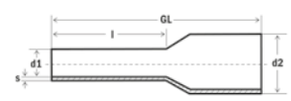
- **insulated**
- **Electrolytic copper, tin-plated**
- **Dimensions to DIN 46228. Part 4**
- **Colour range I, french**



Art. no.	CSS		d1	d2	s	TL	l	kg/100	PU
270014	**0,25**	yellow	0,8	2,3	0,15	10,4	**6**	0,005	100
270015		yellow	0,8	2,3	0,15	10,4	**6**	0,023	500
270016	**0,34**	green	0,8	2,5	0,15	12,4	**6**	0,022	500
270800	**0,5**	white	1,1	3,1	0,15	14,0	**8**	0,010	100
270801		white	1,1	3,1	0,15	14,0	**8**	0,009	500
270021	**0,75**	blue	1,25	3,3	0,15	14,5	**8**	0,021	100
270022		blue	1,25	3,3	0,15	14,5	**8**	0,021	500
270804	**1**	red	1,5	3,5	0,15	14,6	**8**	0,014	100
270805		red	1,5	3,5	0,15	14,6	**8**	0,009	500
270808	**1,5**	black	1,7	4,0	0,15	14,6	**8**	0,014	100
270027		black	1,7	4,0	0,15	24,4	**18**	0,022	100
270028		black	1,7	4,0	0,15	24,4	**18**	0,022	500
270029	**2,5**	grey	2,3	4,9	0,15	15,0	**8**	0,020	100
270030		grey	2,3	4,9	0,15	15,0	**8**	0,020	500
270031		grey	2,3	4,9	0,15	21,0	**18**	0,028	100
270032		grey	2,3	4,9	0,15	21,0	**18**	0,028	500
270033	**4**	orange	2,9	5,6	0,2	17,7	**10**	0,029	100
270034		orange	2,9	5,6	0,2	17,7	**10**	0,029	500
270036		orange	2,9	5,6	0,2	25,7	**18**	0,040	100
270038	**6**	green	3,6	7,0	0,2	20,0	**12**	0,043	100
270040		green	3,6	7,0	0,2	26,0	**18**	0,065	100
270042	**10**	brown	4,6	8,4	0,2	21,5	**12**	0,046	100
270044		brown	4,6	8,4	0,2	27,5	**18**	0,073	100
270046	**16**	ivory	6,0	9,6	0,2	24,2	**12**	0,081	100
270048		ivory	6,0	9,6	0,2	28,2	**18**	0,103	100
270049	**25**	black	7,3	12,0	0,2	30,0	**16**	0,070	50
270050		black	7,3	12,0	0,2	32,0	**18**	0,079	50

End sleeves, colour range II, (german)

- **insulated**
- **Electrolytic copper, tin-plated**
- **Colour range II, german**



Art. no.	CSS		d1	d2	s	TL	l	kg/100	PU
270714	**0,25**	light blue	0,8	2,3	0,15	10,4	**6**	0,007	100
270715		light blue	0,8	2,3	0,15	10,4	**6**	0,005	500
270716	**0,34**	emerald	0,8	2,5	0,15	10,4	**6**	0,005	500
270719	**0,5**	orange	1,1	3,1	0,15	14,0	**8**	0,010	100
270720		orange	1,1	3,1	0,15	14,0	**8**	0,009	500
270721	**0,75**	white	1,25	3,3	0,15	14,6	**8**	0,012	100
270722		white	1,25	3,3	0,15	14,6	**8**	0,011	500
270723	**1**	yellow	1,5	3,5	0,15	14,6	**8**	0,013	100
270724		yellow	1,5	3,5	0,15	14,6	**8**	0,011	500
270725	**1,5**	red	1,7	4,0	0,15	14,6	**8**	0,015	100
270726		red	1,7	4,0	0,15	14,6	**8**	0,013	500
270727		red	1,7	4,0	0,15	24,4	**18**	0,023	100
270728		red	1,7	4,0	0,15	24,4	**18**	0,023	500
270810	**2,5**	blue	2,3	4,9	0,15	15,0	**8**	0,020	100
270811		blue	2,3	4,9	0,15	15,0	**8**	0,017	500
270813		blue	2,3	4,9	0,15	25,0	**18**	0,030	500
270732		blue	2,3	4,9	0,15	25,0	**18**	0,030	500
270814	**4**	grey	2,9	5,6	0,2	17,7	**10**	0,030	100
270815		grey	2,9	5,6	0,2	17,7	**10**	0,030	500
270816		grey	2,9	5,6	0,2	25,7	**18**	0,040	100
270738	**6**	black	3,6	7,0	0,2	20,0	**12**	0,050	100
270740		black	3,6	7,0	0,2	26,0	**18**	0,062	100
270742	**10**	ivory	4,6	8,4	0,2	21,5	**12**	0,066	100
270744		ivory	4,6	8,4	0,2	27,5	**18**	0,081	100
270746	**16**	green	6,0	9,6	0,2	22,2	**12**	0,080	100
270748		green	6,0	9,6	0,2	28,2	**18**	0,104	100
270750	**25**	brown	7,3	11,2	0,2	29,0	**16**	0,132	50
270754	**35**	beige	8,3	12,7	0,2	30,0	**16**	0,170	50
270756		beige	8,3	12,7	0,2	39,0	**25**	0,400	25
270758	**50**	olive	10,3	15,0	0,3	36,4	**20**	0,328	25
270760		olive	10,3	15,0	0,3	41,0	**25**	0,300	25
270762	**70**	yellow	13,5	17,2	0,4	37,0	**21**	0,536	25

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

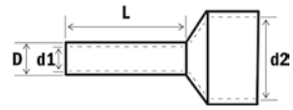
RoHS

End sleeves for short-circuit-proof cables

- **for short-circuit-proof cables with extra thick insulation (NSFGAFÖU)**

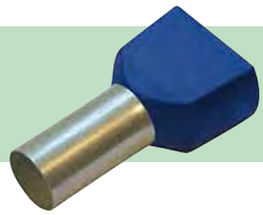
Application: Infeed or branches in front of mains switch, in switching stations, distributors or with rail vehicles, solar heating units, ignition cables

Art. no.	CSS		d1	d2	l	kg/100	PU
270900	**1,5**	black	1,8	6,8	**8**	0,026	100
270902		black	1,8	6,8	**10**	0,024	100
270904	**2,5**	blue	2,3	7,8	**8**	0,033	100
270906		blue	2,3	7,8	**12**	0,360	100
270908	**4**	grey	2,9	7,8	**10**	0,046	100
270910	**6**	yellow	3,8	7,3	**12**	0,062	100
270912	**10**	red	4,5	9,8	**12**	0,081	100
270914	**16**	blue	6,0	12,2	**12**	0,107	100

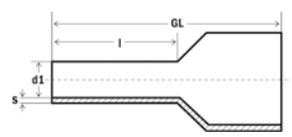


Twin-end sleeves two cables DIN

- **tube section of electrolytic copper**
- **galvanically tin-plated**
- **plastic collar of PP**
- **heat-resistant to 105°C**



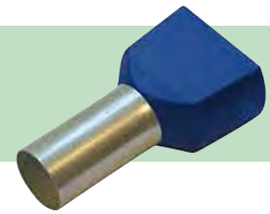
Art. no.	CSS		d1	s	TL	l	kg/100	PU
270778	**0,5**	white	1,5	0,15	15,0	**8**	0,011	100
270778/25		white	1,5	0,15	15,0	**8**	0,011	100
270780	**0,75**	grey	1,8	0,15	15,0	**8**	0,013	100
270780/25		grey	1,8	0,15	15,0	**8**	0,013	100
270782		grey	1,8	0,15	17,0	**10**	0,014	100
270784	**1**	red	2,05	0,15	15,0	**8**	0,014	100
270784/25		red	2,05	0,15	15,0	**8**	0,014	100
270787		red	2,05	0,15	17,0	**10**	0,015	100
270788	**1,5**	black	2,3	0,15	16,0	**8**	0,017	100
270788/25		black	2,3	0,15	16,0	**8**	0,017	100
270790		black	2,3	0,15	20,0	**12**	0,022	100
270792	**2,5**	blue	2,9	0,2	18,5	**10**	0,029	100
270792/25		blue	2,9	0,2	18,5	**10**	0,029	100
270794		blue	2,9	0,2	21,5	**13**	0,033	100
270796	**4**	grey	3,8	0,2	23,0	**12**	0,049	100
270796/10		grey	3,8	0,2	23,0	**12**	0,049	100
270797	**6**	yellow	4,9	0,2	25,0	**14**	0,072	100
270797/10		gelb	4,9	0,2	25,0	**14**	0,072	100
270798	**10**	red	6,5	0,2	26,0	**14**	0,090	100
270798/5		red	6,5	0,2	26,0	**14**	0,090	100
270799	**16**	blue	8,3	0,2	31,0	**16**	0,078	50
270799/5		blue	8,3	0,2	31,0	**16**	0,078	100



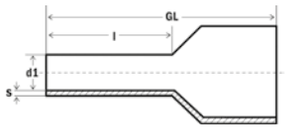
End sleeves

Twin-end sleeves

- **insulated**
- **Copper/plastic, tin-plated surface**
- **Colour range II, german**



Art. no.	CSS		d1	s	TL	l	kg/100	PU
273350	**0,5**	orange	1,5	0,15	15,0	**8**	0,031	100
273352	**0,75**	white	1,8	0,15	15,0	**8**	0,031	100
273354		white	1,8	0,15	17,0	**10**	0,031	100
273356	**1**	yellow	2,05	0,15	15,0	**8**	0,031	100
273358		yellow	2,05	0,15	17,0	**12**	0,031	100
273360	**1,5**	red	2,3	0,15	16,0	**8**	0,031	100
273362		red	2,3	0,15	20,0	**12**	0,031	100
273392	**2,5**	blue	2,9	0,2	18,5	**10**	0,029	100
273394		blue	2,9	0,2	21,5	**13**	0,029	100
273396	**4**	grey	3,8	0,2	23,0	**12**	0,049	100
273364	**6**	black	4,9	0,2	25,0	**14**	0,031	100
273366	**10**	ivory	6,5	0,2	26,0	**14**	0,031	100
273368	**16**	green	8,3	0,2	31,0	**16**	0,031	50



RoHS

Empty dispenser box

Art. no.	kg	PU
270870	0,049	5

Dispenser box with uninsulated end sleeves

Content: tín-plated end sleeves
700 pcs. 0.5 mm², art. 270070
1000 pcs. 0.75 mm², art. 270072
800 pcs. 1.0 mm², art. 270076
500 pcs. 1.5 mm², art. 270080
450 pcs. 2.5 mm², art. 270088

Art. no.	kg	PU
270217	0,240	1

Dispenser box with uninsulated end sleeves

Content: tín-plated end sleeves
200 pcs. 4 mm², art. 270094
100 pcs. 6.0 mm², art. 270102
50 pcs. 10.0 mm², art. 270108
50 pcs. 16.0 mm², art. 270114

Art. no.	kg	PU
270218	0,158	1

Dispenser box with insulated end sleeves (DIN)

Content: Colour range III, DIN
50 pcs. white, 0.5 mm², art. 270800
100 pcs. grey, 0.75 mm², art. 270802
100 pcs. red, 1.0 mm², art. 270804
100 pcs. black, 1.5 mm², art. 270807
50 pcs. blue, 2.5 mm², art. 270810

Art. no.	kg	PU
270854	0,090	1

Dispenser box with insulated end sleeves (DIN)

Content: Colour range III, DIN
50 pcs. grey, 4 mm², art. 270815
20 pcs. yellow, 6 mm², art. 270818
20 pcs. red, 10 mm², art. 270822
10 pcs. blue, 16 mm², art. 270826

Art. no.	kg	PU
270858	0,089	1

Dispenser box with Twin end sleeves (DIN)

Content:
50 pcs. grey, 0.75 mm², art. 270780
50 pcs. red, 1.0 mm², art. 270784
50 pcs. black, 1.5 mm², art. 270788
50 pcs. blue, 2.5 mm², art. 270792

Art. no.	kg	PU
270795	0,080	1

Dispenser box with insulated end sleeves (german)

Content: Colour range II
50 pcs. orange, 0.5 mm², art. 270719
100 pcs. white, 0.75 mm², art. 270721
100 pcs. yellow, 1.0 mm², art. 270723
100 pcs. red, 1.5 mm², art. 270725
50 pcs. blue, 2.5 mm², art. 270810

Art. no.	kg	PU
270852	0,089	1

Dispenser box with insulated end sleeves (german)

Content: Colour range II
50 pcs. grey, 4 mm², art. 270814
20 pcs. black, 6 mm², art. 270738
20 pcs. ivory, 10 mm², art. 270742
10 pcs. green, 16 mm², art. 270746

Art. no.	kg	PU
270856	0,087	1

Dispenser box with insulated end sleeves (french)

Content: Colour range I
50 pcs. white, 0.5 mm², art. 270800
100 pcs. blue, 0.75 mm², art. 270021
100 pcs. red, 1.0 mm², art. 270804
100 pcs. black, 1.5 mm², art. 270808
50 pcs. grey, 2.5 mm², art. 270029

Art. no.	kg	PU
270850	0,090	1

haupa®
...convincing solutions

RoHS

Slide Box with DIN end sleeves

The transparent sliding lids enable easy access and prevent the contents from becoming mixed up.

Product features:
Handy plastic box with Euro holes, 5 separate compartments, simple access through sliding lids, no mixing of contents.
Dimensions: 165 x 58 x 38 mm (L x W x H)

Content: Colour range III DIN
50 pcs white, 0.5 mm², art. 270800
100 pcs. grey, 0.75 mm², art. 270802
100 pcs. red, 1.0 mm², art. 270804
100 pcs. black, 1.5 mm², art. 270807
50 pcs. blue, 2.5 mm², art. 270810

Art. no.	kg	PU
270864	0,109	1

Slide Box with DIN TWIN end sleeves

Content:
50 pcs. white, 2 x 0,5 mm², art. 270778
50 pcs. grey, 2 x 0.75 mm², art. 270780
50 pcs. red, 2 x 1.0 mm², art. 270784
50 pcs. black, 2 x 1.5 mm², art. 270788
25 pcs. blue, 2 x 2.5 mm², art. 270792

Art. no.	kg	PU
270866	0,104	1

End sleeve assortment

Content: end sleeves, tin-plated
1000 End sleeves 6 mm x 0.75 mm², art. 270072
1000 End sleeves 6 mm x 1.0 mm², art. 270076
1000 End sleeves 7 mm x 1.5 mm², art. 270080
500 End sleeves 7 mm x 2.5 mm², art. 270088
500 End sleeves 9 mm x 4.0 mm², art. 270094
500 End sleeves 10 mm x 6.0 mm², art. 270100
250 End sleeves 18 mm x 10.0 mm², art. 270112
250 End sleeves 18 mm x 16.0 mm², art. 270118
1 crimping pliers (Art. 21 08 24), pressing range 0.75 - 16.0 mm², in plastic bulk storage chest 420 x 350 x 60 mm

Art. no.	Content	kg	PU
270039	5000	2,580	1

End sleeve assortment

Content: end sleeves, tin-plated
1 crimping pliers (Art. 21 07 63), press range 0.5 - 4.0 mm² in plastic bulk storage chest 420 x 350 x 60 mm.

1000 End sleeves 6 mm x 0.75 mm², art. 270072
1000 End sleeves 6 mm x 1.0 mm², art. 270076
1000 End sleeves 7 mm x 1.5 mm², art. 270080
500 End sleeves 7 mm x 2.5 mm², art. 270088
500 End sleeves 9 mm x 4.0 mm², art. 270094
500 End sleeves 10 mm x 6.0 mm², art. 2 0100

Art. no.	Content	kg	PU
270041	4500	2,500	1

Assortments of wire-end sleeves

Content: 5.000 insulated wire-end sleeves, 1 crimping pliers (210804), crimping range 0.08 – 10 mm² in plastic bulk storage chest 420 x 350 x 60 mm.

100 Twin end sleeves 8/0,5, white, art. 270778
100 Twin end sleeves 8/0,75, grey, art. 270780
100 Twin end sleeves 8/1, red, art. 270784
100 Twin end sleeves 8/1,5, black, art. 270788
100 Twin end sleeves 10/2,5, blue, art. 270792
100 Twin end sleeves 12/4,0, grey, art. 270796
100 Twin end sleeves 14/6,0, yellow, art. 270797
500 insulated end sleeves 8/0,5, white, art. 270801
500 insulated end sleeves 8/0,75, grey, art. 270802
1.000 insulated end sleeves 8/1, red, art. 270805
1.000 insulated end sleeves 8/1,5, black, art. 270807
500 insulated end sleeves 8/2,5, blue, art. 270811
500 insulated end sleeves 10/4, grey, art. 270815
200 insulated end sleeves 12/6, yellow, art. 270818
200 insulated end sleeves 12/10, red, art. 270822

Art. no.	Content	Type	kg	PU
270888	5100	DIN	2,150	1
270890	5100	II	2,150	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Assortments of wire-end sleeves

Content: 5.300 insulated wire-end sleeves, 1 crimping pliers (210842), crimping range 1 – 10 mm², in plastic bulk storage chest 420 x 350 x 60 mm.

1.000 insulated end sleeves 8/1, red, art. 270805
1.000 insulated end sleeves 8/1,5, black, art. 270807
1.000 insulated end sleeves 8/2,5, blue, art. 270811
500 insulated end sleeves 10/4, grey, art. 270815
200 insulated end sleeves 12/6, yellow, art. 270818
200 insulated end sleeves 12/10, red, art. 270822
500 insulated end sleeves 12/1, red, art. 270806
300 insulated end sleeves 18/1,5, black, art. 270027
250 insulated end sleeves 18/2,5, blue, art. 270813
200 insulated end sleeves 18/4, grey, art. 270816
100 insulated end sleeves 18/6, yellow, art. 270820
50 insulated end sleeves 18/10, red, art. 270824

Art. no.	Content	Type	kg	PU
270891	5300	DIN	2,100	1
270892	5300	I	2,100	1
270893	5300	II	2,100	1

Assortment for Combi-Crimp – DIN

Content: 1 crimping pliers (210784) for insulated terminals 0,5 - 2,5 mm² and end sleeves 0,5 - 6 mm², 2.700 insulated end sleeves, 1.100 insulated terminals in plastic bulk storage chest 420 x 350 x 60 mm.

500 insulated end sleeves 0,5/8, white, art. 270801
500 insulated end sleeves 0,75/8, grey, art. 270802
500 insulated end sleeves 1/8, red, art. 270805
500 insulated end sleeves 1,5/8, black, art. 270807
500 insulated end sleeves 2,5/8, blue, art. 270811
100 insulated end sleeves 4/10, grey, art. 270814
100 insulated end sleeves 6/12, yellow, 270818
200 insulated butt connectors 0,25-1,5, art. 260350
200 insulated butt connectors 1,5-2,5, art. 260352
100 insulated socket sleeves 0,25-1,5/6,3x0,8, art. 260392
100 insulated socket sleeves 1,5-2,5/6,3x0,8, art. 260394
100 insulated ring terminals 0,25-1,5, M5, art. 260258
100 insulated ring terminals 1,5-2,5, M4, art. 260270
100 insulated ring terminals 1,5-2,5, M5, art. 260272
100 insulated ring terminals 1,5-2,5, M6, art. 260274
100 insulated ring terminals 0,25-1,5, M4, art. 260256

Art. no.	Content	Type	kg	PU
270895	3800	DIN	4,300	1
270896	3800	I	4,300	1
270897	3800	II	4,300	1

End sleeve assortment – serie DIN

Content: 4.700 insulated end sleeves, in plastic bulk storage chest 420 x 350 x 60 mm.

100 Twin end sleeves 8/0,5, white, art. 270778
100 Twin end sleeves 8/0,75, grey, art. 270780
100 Twin end sleeves 8/1, red, art. 270784
100 Twin end sleeves 8/1,5, black, art. 270788
100 Twin end sleeves 10/2,5, blue, art. 270792
100 Twin end sleeves 12/4, grey, art. 270796
100 Twin end sleeves 14/6, yellow, art. 270797
100 Twin end sleeves 14/10, red, art. 270798
500 insulated end sleeves 8/0,5, white, art. 270801
500 insulated end sleeves 8/0,75, grey, art. 270802
500 insulated end sleeves 8/1, red, art. 270805
1000 insulated end sleeves 8/1,5, black, art. 270807
500 insulated end sleeves 8/2,5, blue, art. 270811
500 insul. end sl. 10/4, grey, art. 270815
200 insul. end sl. 10/6, yellow, art. 270818
200 insul. end sl. 12/10, red, art. 270822

Art. no.	Content	kg	PU
270899	4700	2,150	1

End sleeve assortment – serie DIN

Content: 1.150 insulated end sleeves
crimping pliers (art. no. 210824), crimp 0,75 - 16,0 mm², in plastic bulk storage chest 420 x 350 x 60 mm.

200 insulated end sleeves 8/0,75, grey, art. 270803
200 insulated end sleeves 8/1, red, art. 270804
200 insulated end sleeves 8/1,5, black, art. 270808
200 insulated end sleeves 8/2,5, blue, art. 270810
100 insulated end sleeves 10/4, grey, art. 270814
100 insulated end sleeves 12/6, yellow, art. 270818
100 insulated end sleeves 18/10, red, art. 270824
50 insulated end sleeves 18/16, blue, art. 270828

Art. no.	Content	Type	kg	PU
270882/DIN	1150	DIN	1,740	1
270882	1150	I	1,700	1
270894	1150	II	2,150	1

Assortments of end sleeves - SysCon

SysCon end sleeves & 210804

Content: 4100 insulated end sleeves

1	220370	ABS plastic box „SysCon S”
1	220375	Assortment insert „SysCon“
1	220399	Foam „SysCon” 400 x 300 x 10 mm
1	210804	Crimping pliers for end sleeves 0,08 – 10 mm²

1000	270805	insulated end sleeves, red	1/8
1000	270802	insulated end sleeves, grey	0,75/8
500	270807	insulated end sleeves, black	1,5/8
500	270811	insulated end sleeves, blue	2,5/8
500	270815	insulated end sleeves, grey	4/10
100	270818	insulated end sleeves, yellow	6/12
200	270788	Twin-end sleeves, black	1,5/8
200	270792	Twin-end sleeves, blue	2,5/10
100	270796	Twin-end sleeves, grey	4,0/12

Art. no.	Content	kg	PU
220382	4100	4,300	1

SysCon end sleeves & 210842

Content: 4950 insulated end sleeves

1	220370	ABS plastic box „SysCon S”
1	220399	Foam „SysCon” 400 x 300 x 10 mm
1	220375	Assortment insert „SysCon“
1	210842	Crimping pliers for end sleeves 1 – 10 mm²

1000	270805	insulated end sleeves, red	1/8
1000	270807	insulated end sleeves, black	1,5/8
1000	270811	insulated end sleeves, blue	2,5/8
500	270815	insulated end sleeves, grey	4/10
200	270818	insulated end sleeves, yellow	6/12
200	270822	insulated end sleeves, red	10/12
500	270806	insulated end sleeves, red	1/12
300	270027	insulated end sleeves, black	1,5/18
250	270813	insulated end sleeves, blue	2,5/18

Art. no.	Content	kg	PU
220390	4950	4,300	1

Insulated crimp terminals

haupa®

... convincing solutions

INFO

The Quality

The elimination of every need to weld complicated operations to effect an electrical connection, the high productivity in cable termination, the low contact resistance as well as the high connection reliability are only some of the multiple advantages guaranteed by the HAUPA crimp systems.

Variety
The wide and complete range of crimp terminals satisfies the most different connection requirements with the widest application field even referring to the hardest and least favourable conditions of operation.

Materials
The high conductivity and the top mechanical caracteristics are guaranteed by the purity (up to 99,9%) of the copper utilized for the production of crimp terminals.
Hot treatment
In order to ensure the maximum malleability of materials during the crimping operations all copper terminals undergo a hot treatment with forced ventilation and controlled temperature.

Surface treatment
The crimp terminals are treated with processes of electrolytic tin plating. This method guarantees the maximum adhesion of tin to the crimp terminal surface in order to reduce the electrical resistance to a minimum and to maximalize the protection against corrosion.

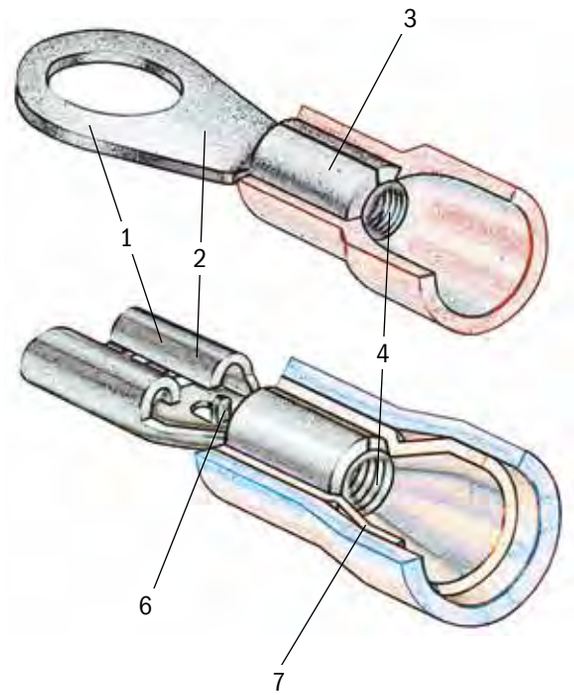
Insulation
The standard models are available with insulation in special self-extinguishing PVC or in Nylon and in colours according to International Standards. The high quality of the insulation materials employed for all crimp terminals ensure a high degree of resistance to the mechanical solicitations that they must undergo during the crimping operations without alteration of their insulation characterictics.

RoHS

PVC insulated crimp terminals Easy Entry

1. Sleeves, made of purest copper
2. Treated with processes of electrolytic tin plating
3. Hot treatment
4. Internal serration for the best most electric contact
5. Insulation Easy Entry sleeve
6. Cable stop
7. Copper sleeve Easy Entry: for quick wire insertions with no strand turn-back and a strong mechanical retention.

Funnel shaped insulating sleeve



Underwriters Laboratories Inc.
Listed File E338116, E336314

RoHS

Ring terminals DIN 46237

- **of electrolytic copper, tin-plated, soldered • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

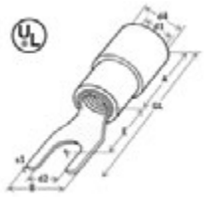
PVC -75°/600V

Art. no.	CSS	M	d2	d1	d4	s1	A	TL	E	B	kg/100		PU
260250	**0,5-1,0**	2,5	2,6	1,95	4,2	0,8	10,4	22,2	8,6	8,0	0,710	500	100
260252		3	3,2	1,95	4,2	0,8	10,4	15,4	4,4	5,5	0,072	500	100
260254		3,5	3,6	1,95	4,2	0,8	10,4	22,2	7,8	8,0	0,065	500	100
260256		4	4,2	1,95	4,2	0,8	10,4	22,0	7,5	8,0	0,079	500	100
260256/10		4	4,2	1,95	4,2	0,8	10,4	22,0	7,5	8,0	0,096	100	100
260258		5	5,2	1,95	4,2	0,8	10,4	22,4	8,0	8,0	0,096	500	100
260258/10		5	5,2	1,95	4,2	0,8	10,4	22,4	8,0	8,0	0,096	100	100
260260		6	6,2	1,95	4,2	0,8	10,4	23,7	8,6	10,0	0,106	500	100
260262		8	8,3	1,95	4,2	0,8	10,4	30,0	12,6	14,0	0,136	500	100
260264		10	10,4	1,95	4,2	0,8	10,4	30,0	12,8	14,0	0,190	500	100
260267	**1,5-2,5**	3	3,2	2,45	4,8	0,8	11,0	18,5	4,3	6,4	0,078	500	100
260268		3,5	3,7	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,078	500	100
260270		4	4,2	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,092	500	100
260270/10		4	4,2	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,092	100	100
260272		5	5,2	2,45	4,8	0,8	11,0	26,0	9,8	10,0	0,111	500	100
260272/10		5	5,2	2,45	4,8	0,8	11,0	26,0	9,8	10,0	0,111	100	100
260274		6	6,2	2,45	4,8	0,8	11,0	28,0	11,7	11,0	0,123	500	100
260274/10		6	6,2	2,45	4,8	0,8	11,0	28,0	11,7	11,0	0,123	100	100
260276		8	8,2	2,45	4,8	0,8	11,0	33,0	14,5	15,0	0,147	500	100
260278		10	10,5	2,45	4,8	0,8	11,0	33,0	14,5	15,0	0,200	500	100
260282	**4,0-6,0**	3,5	3,7	3,5	6,6	1,0	14,0	26,5	8,4	8,0	0,163	500	100
260284		4	4,2	3,5	6,6	1,0	14,0	26,5	8,4	8,0	0,168	500	100
260286		5	5,2	3,5	6,6	1,0	14,0	29,6	10,2	10,0	0,186	500	100
260288		6	6,2	3,5	6,6	1,0	14,0	30,6	11,0	11,0	0,196	500	100
260288/10		6	6,2	3,5	6,6	1,0	14,0	30,6	11,0	11,0	0,196	100	100
260290		8	8,2	3,5	6,6	1,0	14,0	37,0	15,3	15,0	0,243	500	100
260290/10		8	8,2	3,5	6,6	1,0	14,0	37,0	15,3	15,0	0,243	100	100
260292		10	10,5	3,5	6,6	1,0	14,0	40,0	16,5	19,0	0,299	500	100

Fork terminals DIN 46237

- **of electrolytic copper, tin-plated, soldered • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/600V

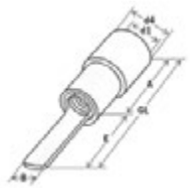


Art. no.	CSS	M	d2	d1	d4	s1	A	TL	E	B	kg/100		PU
260300	**0,5-1,0**	3	3,2	1,95	4,2	0,8	10,4	20,0	6,7	5,6	0,065	500	100
260302		3,5	3,7	1,95	4,2	0,8	10,4	19,4	6,5	6,5	0,065	500	100
260304		4	4,2	1,95	4,2	0,8	10,4	20,9	6,3	6,4	0,070	500	100
260306		5	5,2	1,95	4,2	0,8	10,4	21,2	8,0	8,0	0,092	500	100
260308		6	6,2	1,95	4,2	0,8	10,4	22,4	8,3	9,2	0,101	500	100
260310	**1,5-2,5**	3	3,2	2,45	4,8	0,8	11,0	23,0	8,4	5,6	0,079	500	100
260312		3,5	3,7	2,45	4,8	0,8	11,0	20,3	5,3	6,6	0,085	500	100
260314		4	4,2	2,45	4,8	0,8	11,0	20,3	5,3	6,6	0,084	500	100
260316		5	5,2	2,45	4,8	0,8	11,0	25,0	9,5	9,1	0,109	500	100
260318		6	6,3	2,45	4,8	0,8	11,0	27,0	11,2	10,0	0,118	500	100
260320	**4,0-6,0**	4	4,2	3,5	6,6	1,0	14,0	26,0	7,2	8,1	0,116	500	100
260322		5	5,2	3,5	6,6	1,0	14,0	28,5	10,5	9,0	0,179	500	100
260324		6	6,3	3,5	6,6	1,0	14,0	29,5	11,0	11,0	0,188	500	100
260326		8	8,2	3,5	6,6	1,0	14,0	35,2	15,0	15,2	0,229	500	100
260328		10	10,5	3,5	6,6	1,0	14,0	38,0	16,6	19,0	0,291	500	100

Socket sleeves (male) DIN 46231

- **of electrolytic copper, tin-plated, soldered • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/600V



Art. no.	CSS	d1	d4	A	TL	E	B	kg/100		PU
260330	**0,5-1,0**	1,7	4,2	10,4	19,4	9,0	2,8	0,058	500	100
260331		1,7	4,2	10,4	24,9	14,5	3,0	0,070	500	100
260332	**1,5-2,5**	2,3	4,8	10,4	19,4	9,0	2,8	0,066	500	100
260333		2,3	4,8	10,4	26,4	16,0	2,8	0,080	500	100
260334	**4,0-6,0**	3,4	6,8	13,5	23,5	10,0	2,8	0,120	500	100
260335		3,4	6,8	13,5	31,7	18,2	4,5	0,170	500	100

Crimp terminals, PVC-insulated

RoHS

Butt connectors

- **of electrolytic copper, tin-plated • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/600V

Art. no.	CSS	d1	d4	A	TL	kg/100		PU
260350	**0,5-1,0**	1,7	4,0	15	22,7	0,110	500	100
260350/10			4,0	15	22,7	0,110	100	100
260352	**1,5-2,5**	2,3	4,5	15	22,7	0,130	500	100
260352/10			4,5	15	22,7	0,130	100	100
260354	**4,0-6,0**	3,4	6,8	15	26,7	0,230	500	100
260354/10			6,8	15	26,7	0,230	100	100

Parallel connectors

- **of electrolytic copper, tin-plated • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/600V

Art. no.	CSS	d1	d4	A	TL	kg/100		PU
260360	**0,5-1,0**	1,7	4,0	8,0	16,0	0,060	500	100
260362	**1,5-2,5**	2,3	4,5	8,0	16,0	0,080	500	100
260364	**4,0-6,0**	3,4	6,8	8,0	20,5	0,140	500	100

Round pins

- **of electrolytic copper, tin-plated • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/600V

Art. no.	CSS	d1	d4	A	TL	E	B	kg/100		PU
260370	**0,5-1,0**	1,95	4,20	10,4	22,4	12,0	1,8	0,070	500	100
260371		1,95	4,20	10,4	20,0	9,0	1,8	0,060	500	100
260372	**1,5-2,5**	2,45	4,8	11,0	23,0	12,0	1,8	0,080	500	100
260373		2,45	4,8	11,0	20,0	9,0	1,8	0,070	500	100
260374	**4,0-6,0**	3,5	6,6	14,0	28,0	14,0	2,6	0,170	500	100
260376	**10**	4,5	8,3	21,5	38,0	15,0	4,0	0,300	500	100

Socket sleeves (female)

- **Brass, tin-plated, PVC-insulated**
- **with vibration-free copper sleeve • Easy Entry**

PVC -75°/600V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
260380	**0,5-1,0**	2,8x0,5	3,5	9,5	17,9	6,4	3,2	PVC	0,070	500	100
260382		2,8x0,8	3,5	9,5	17,9	6,4	3,2	PVC	0,070	500	100
260384		4,8x0,5	3,5	9,5	18,7	6,0	5,0	PVC	0,080	500	100
260386		4,8x0,8	3,5	9,5	18,7	6,0	5,0	PVC	0,080	500	100
260400		5,2x0,8	3,5	9,5	18,7	6,4	5,5	PVC	0,090	500	100
260392		6,3x0,8	3,5	9,5	20,5	7,8	6,6	PVC	0,100	500	100
260392/10		6,3x0,8	3,5	9,5	20,5	7,8	6,6	PVC	0,100	100	100
260388	**1,5-2,5**	4,8x0,5	4,3	9,5	18,7	6,0	5,0	PVC	0,090	500	100
260390		4,8x0,8	4,3	9,5	18,7	6,0	5,0	PVC	0,090	500	100
260402		5,2x0,8	4,3	9,5	18,7	6,4	5,5	PVC	0,090	500	100
260394		6,3x0,8	4,3	9,5	20,5	7,8	6,6	PVC	0,120	500	100
260394/10		6,3x0,8	4,3	9,5	20,5	7,8	6,6	PVC	0,120	100	100
260396	**4,0-6,0**	6,3x0,8	6,2	13,5	24,5	7,8	6,6	PVC	0,190	500	100
260396/10		6,3x0,8	6,2	13,5	24,5	7,8	6,6	PVC	0,190	100	100
260404		9,8x1,1	6,2	13,5	29,2	12,0	10,0	PVC	0,260	500	100

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimp terminals, PVC-insulated

RoHS

Socket sleeves (female) with branch

- **Brass, tin-plated, PVC-insulated**
- **with vibration-free copper sleeve • Easy Entry**

PVC -75°/500V

Art. no.	CSS	plug	d1	A	TL	A1	A2	B	B2	material	kg/100		PU
260410	**0,5-1,0**	6,3x0,8	3,5	9,5	22,2	6,6	6,3	7,8	8,0	PVC	0,140	500	100
260412	**1,5-2,5**	6,3x0,8	4,3	9,5	22,2	6,8	6,3	7,8	8,0	PVC	0,150	500	100
260411	**4,0-6,0**	6,3x0,8	4,3	9,5	22,2	6,8	6,3	7,8	8,0	PVC	0,280	500	100

Socket sleeves (female), fully-insulated

- **Brass, tin-plated, PVC-insulated**
- **with vibration-free copper sleeve • Easy Entry**

PVC -75°/500V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
260414	**0,5-1,0**	6,3x0,8	2,7	11,0	22,0	6,8	6,6	PVC	0,129	500	100
260414/10		6,3x0,8	2,7	11,0	22,0	6,8	6,6	PVC	0,129	100	100
260415		4,8x0,8	2,7	11,0	20,0	6,0	5,0	PVC	0,100	500	100
260416	**1,5-2,5**	6,3x0,8	3,2	11,0	22,0	6,8	6,6	PVC	0,130	500	100
260416/10		6,3x0,8	3,2	11,0	22,0	6,8	6,6	PVC	0,130	100	100
260417		4,8x0,8	3,2	11,0	20,0	6,0	5,0	PVC	0,110	500	100
260418	**4,0-6,0**	6,3x0,8	3,8	14,0	25,0	6,8	6,6	PVC	0,220	500	100

Flat terminals

- **Brass, tin-plated, PVC-insulated**
- **with vibration-free copper sleeve • Easy Entry**

PVC -75°/500V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
260510	**0,5-1,0**	2,8x0,5	3,8	10,5	19,2	6,5	2,8	PVC	0,060	500	100
260512		2,8x0,8	3,8	10,5	19,2	6,5	2,8	PVC	0,065	500	100
260514		4,8x0,5	3,8	10,5	19,2	6,5	4,8	PVC	0,075	500	100
260516		4,8x0,8	3,8	10,5	19,2	6,7	4,8	PVC	0,080	500	100
260422		6,3x0,8	3,5	10,0	20,5	7,7	6,3	PVC	0,090	500	100
260422/10		6,3x0,8	3,5	10,0	20,5	7,7	6,3	PVC	0,090	100	100
260518	**1,5-2,5**	4,8x0,5	3,8	10,5	19,2	6,5	4,8	PVC	0,085	500	100
260520		4,8x0,8	3,8	10,5	19,2	6,7	4,8	PVC	0,090	500	100
260424		6,3x0,8	4,0	10,0	20,5	7,7	6,3	PVC	0,100	500	100
260424/10		6,3x0,8	4,0	10,0	20,5	7,7	6,3	PVC	0,100	100	100
260426	**4,0-6,0**	6,3x0,8	5,5	13,5	24,5	7,7	6,3	PVC	0,180	500	100
260426/10		6,3x0,8	5,5	13,5	24,5	7,7	6,3	PVC	0,180	100	100

Round terminals

- **of electrolytic copper, tin-plated • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/500V

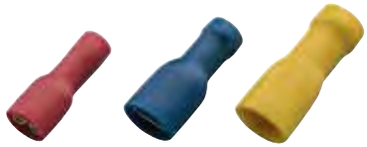
Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
260446	**0,5-1,0**	4 mm	3,5	9,5	20,2	8,7	4,0	PVC	0,090	500	100
260448	**1,5-2,5**	5 mm	4,3	9,5	20,7	8,7	5,0	PVC	0,110	500	100
260449		4 mm	4,3	9,5	20,2	8,7	4,0	PVC	0,100	500	100
260450	**4,0-6,0**	5 mm	6,5	13,5	25,0	10,0	5,0	PVC	0,170	500	100

RoHS

Round sleeves

- **of electrolytic copper, tin-plated • Easy Entry**
- **PVC-insulated, with expanded insulating sleeve, suitable for harmonised cables**

PVC -75°/600V



Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
260440	**0,5-1,0**	4 mm	3,5	9,5	20,2	8,7	4,0	PVC	0,130	500	100
260442	**1,5-2,5**	5 mm	4,3	9,5	20,7	8,7	5,0	PVC	0,150	500	100
260443		4 mm	4,3	9,5	20,2	8,7	4,0	PVC	0,130	500	100
260444	**4,0-6,0**	5 mm	6,5	13,0	25,0	12,0	5,0	PVC	0,250	500	100

End connectors

- **of electrolytic copper, tin-plated**
- **Nylon-insulated**

PVC -75°/600V

Art. no.	CSS	d1	d4	A	TL	B	kg/100		PU
260427	**0,5-1,0**	6,2	2,2	8,0	15,2	5,0	0,060	500	100
260428	**1,5-2,5**	6,5	2,5	8,0	15,2	5,9	0,065	500	100
260430	**4,0-6,0**	9,4	3,5	8,5	17,8	7,3	0,125	500	100
260431	**10**	12,0	4,6	9,5	22,2	9,3	0,260	500	100

Rapid connectors

- **of electrolytic copper, tin-plated**
- **Polypropylene**

Art. no.	CSS	A	TL	kg/100		PU
260336	**0,5-1,0**	13,5	20,0	0,130		100
260500		13,5	20,5	0,100		100
260337	**1,5-2,5**	13,5	20,5	0,130		100
260502		17,0	10,0	0,120		100
260338	**4,0-6,0**	17,0	10,0	0,290		100
260504		17,0	10,0	0,140		100

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Ring terminals DIN 46237

- **of electrolytic copper, tin-plated, soldered • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

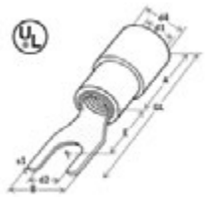
Nylon

Art. no.	CSS	M	d2	d1	d4	s1	A	TL	E	B	kg/100		PU
260650	**0,5-1,0**	2,5	2,6	1,95	4,2	0,8	10,4	22,2	8,6	8,0	0,072	500	100
260651		3	3,2	1,95	4,2	0,8	10,4	22,2	8,6	8,0	0,070	500	100
260654		3,5	3,6	1,95	4,2	0,8	10,4	22,2	7,8	8,0	0,067	500	100
260656		4	4,2	1,95	4,2	0,8	10,4	22,0	7,5	8,0	0,079	500	100
260658		5	5,2	1,95	4,2	0,8	10,4	22,4	8,0	8,0	0,096	500	100
260660		6	6,2	1,95	4,2	0,8	10,4	23,7	8,6	10,0	0,105	500	100
260662		8	8,3	1,95	4,2	0,8	10,4	30,0	12,6	14,0	0,136	500	100
260664		10	10,4	1,95	4,2	0,8	10,4	30,0	12,8	14,0	0,103	500	100
260665	**1,5-2,5**	2,5	2,6	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,100	500	100
260666		3	3,2	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,110	500	100
260667		3,5	3,7	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,080	500	100
260670		4	4,2	2,45	4,8	0,8	11,0	23,0	8,0	8,0	0,088	500	100
260672		5	5,2	2,45	4,8	0,8	11,0	26,0	9,8	10,0	0,107	500	100
260674		6	6,2	2,45	4,8	0,8	11,0	28,0	11,7	11,0	0,120	500	100
260676		8	8,2	2,45	4,8	0,8	11,0	33,0	14,5	15,0	0,142	500	100
260678		10	10,5	2,45	4,8	0,8	11,0	33,0	14,5	15,0	0,133	500	100
260682	**4,0-6,0**	3,5	3,7	3,5	6,6	1,0	14,0	26,5	8,4	8,0	0,150	500	100
260684		4	4,2	3,5	6,6	1,0	14,0	26,5	8,4	8,0	0,165	500	100
260686		5	5,2	3,5	6,6	1,0	14,0	29,6	10,2	10,0	0,182	500	100
260688		6	6,2	3,5	6,6	1,0	14,0	30,6	11,0	11,0	0,190	500	100
260690		8	8,2	3,5	6,6	1,0	14,0	37,0	15,3	15,0	0,237	500	100
260692		10	10,5	3,5	6,6	1,0	14,0	40,0	16,5	19,0	0,311	500	100

Fork terminals DIN 46237

- **of electrolytic copper, tin-plated, soldered • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon



Art. no.	CSS	M	d2	d1	d4	s1	A	TL	E	B	kg/100		PU
260700	**0,5-1,0**	3	3,2	1,95	4,2	0,8	10,4	20,0	6,7	5,6	0,068	500	100
260702		3,5	3,7	1,95	4,2	0,8	10,4	19,4	6,5	6,5	0,066	500	100
260704		4	4,2	1,95	4,2	0,8	10,4	20,9	6,3	6,4	0,071	500	100
260706		5	5,2	1,95	4,2	0,8	10,4	21,2	8,0	8,0	0,092	500	100
260708		6	6,2	1,95	4,2	0,8	10,4	22,4	8,3	9,2	0,080	500	100
260710	**1,5-2,5**	3	3,2	2,45	4,8	0,8	11,0	23,0	8,4	5,6	0,079	500	100
260712		3,5	3,7	2,45	4,8	0,8	11,0	20,3	5,3	6,6	0,086	500	100
260714		4	4,2	2,45	4,8	0,8	11,0	20,3	5,3	6,6	0,084	500	100
260716		5	5,2	2,45	4,8	0,8	11,0	25,0	9,5	9,1	0,110	500	100
260718		6	6,3	2,45	4,8	0,8	11,0	27,0	11,2	10,0	0,170	500	100
260721	**4,0-6,0**	4	4,2	3,5	6,6	1,0	14,0	26,0	7,2	8,1	0,157	500	100
260722		5	5,2	3,5	6,6	1,0	14,0	28,5	10,5	9,0	0,179	500	100
260724		6	6,3	3,5	6,6	1,0	14,0	29,5	11,0	11,0	0,190	500	100
260726		8	8,2	3,5	6,6	1,0	14,0	35,2	15,0	15,2	0,230	500	100
260728		10	10,5	3,5	6,6	1,0	14,0	38,0	16,6	19,0	0,273	500	100

Socket sleeves (male) DIN 46231

- **of electrolytic copper, tin-plated, soldered • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon

Art. no.	CSS	d1	d4	A	TL	E	B	kg/100		PU
260730	**0,5-1,0**	1,7	4,2	10,4	19,4	9,0	2,8	0,059	500	100
260731		1,7	4,2	10,4	24,9	14,5	3,0	0,072	500	100
260732	**1,5-2,5**	2,3	4,8	10,4	19,4	9,0	2,8	0,067	500	100
260733		2,3	4,8	10,4	26,4	16,0	2,8	0,084	500	100
260734	**4,0-6,0**	3,4	6,8	13,5	23,5	10,0	2,8	0,160	500	100
260735		3,4	6,8	13,5	31,7	18,2	4,5	0,173	500	100

Crimp terminals, Nylon-insulated

RoHS

Butt connectors

- **of electrolytic copper, tin-plated • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon -105°/600V

Art. no.	CSS	d1	d4	A	TL	kg/100		PU
260750	**0,5-1,0**	1,7	4,0	15,0	22,7	0,103	500	100
260752	**1,5-2,5**	2,3	4,5	15,0	22,7	0,128	500	100
260754	**4,0-6,0**	3,4	6,8	15,0	26,7	0,221	500	100

Parallel connectors

- **of electrolytic copper, tin-plated • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon -105°/600V

Art. no.	CSS	d1	d4	A	TL	kg/100		PU
263360	**0,5-1,0**	1,7	4,0	8,0	16,0	0,069	500	100
263362	**1,5-2,5**	2,3	4,5	8,0	16,0	0,080	500	100
263364	**4,0-6,0**	3,4	6,8	8,0	16,0	0,150	500	100

Round pins

- **of electrolytic copper, tin-plated • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon -105°/600V

Art. no.	CSS	d1	d4	A	TL	E	B	kg/100		PU
260770	**0,5-1,0**	1,95	4,2	10,4	22,0	12	1,9	0,072	500	100
260771		1,95	4,2	10,4	20,0	9,0	1,9	0,064	500	100
260772	**1,5-2,5**	2,45	4,8	11,0	23,0	12,0	1,9	0,079	500	100
260773		2,45	4,8	11,0	20,0	9,0	1,9	0,074	500	100
260774	**4,0-6,0**	3,6	6,6	14,0	28,0	14,0	2,7	0,078	500	100

Socket sleeves (female)

- **Brass, tin-plated, Nylon-insulated**
- **with vibration-free copper sleeve • Easy Entry**

Nylon -105°/600V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
263380	**0,5-1,0**	2,8x0,5	3,5	9,5	17,9	6,4	3,2	Nylon	0,070	500	100
263382		2,8x0,8	3,5	9,5	17,9	6,4	3,2	Nylon	0,077	500	100
263384		4,8x0,5	3,5	9,5	18,7	6,0	5,0	Nylon	0,080	500	100
263386		4,8x0,8	3,5	9,5	18,7	6,0	5,0	Nylon	0,080	500	100
263400		5,2x0,8	3,5	9,5	18,7	6,4	5,5	Nylon	0,090	500	100
263392		6,3x0,8	3,5	9,5	20,5	7,8	6,6	Nylon	0,100	500	100
263388	**1,5-2,5**	4,8x0,5	4,3	9,5	18,7	6,0	5,0	Nylon	0,090	500	100
263393		4,8x0,8	4,3	9,5	18,7	6,0	5,0	Nylon	0,100	500	100
263402		5,2x0,8	4,3	9,5	18,7	6,4	5,5	Nylon	0,090	500	100
263394		6,3x0,8	4,3	9,5	20,5	7,8	6,6	Nylon	0,110	500	100
263396	**4,0-6,0**	6,3x0,8	6,2	13,5	24,5	7,8	6,6	Nylon	0,190	500	100
263404		9,8x1,1	6,2	13,5	29,2	12,0	10,0	Nylon	0,260	500	100

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Crimp terminals, Nylon-insulated

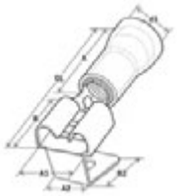
RoHS

Socket sleeves (female) with branch

- **Brass, tin-plated, Nylon-insulated**
- **with vibration-free copper sleeve • Easy Entry**

Nylon -105°/600V

Art. no.	CSS	plug	d1	A	TL	A1	A2	B	B2	material	kg/100		PU
263410	**0,5-1,0**	6,3x0,8	3,5	9,5	22,2	6,8	6,3	7,8	8	Nylon	0,140	500	100
263412	**1,5-2,5**	6,3x0,8	4,3	9,5	22,2	6,8	6,3	7,8	8,0	Nylon	0,150	500	100
263413	**4,0-6,0**	6,3x0,8	4,3	9,5	22,2	6,8	6,3	7,8	8,0	Nylon	0,200	500	100



Socket sleeves (female), fully-insulated

- **Brass, tin-plated, Nylon-insulated**
- **with vibration-free copper sleeve - Easy Entry**

Nylon -105°/600V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
263451	**0,5-1,0**	2,8x0,5	4,0	11,0	19,5	6,5	3,2	Nylon	0,085	500	100
263452		2,8x0,8	4,0	11,0	19,5	6,5	3,2	Nylon	0,086	500	100
263453		4,8x0,5	4,0	11,0	20,2	6,4	5,0	Nylon	0,088	500	100
263414		6,3x0,8	4,0	11,0	21,5	7,5	6,6	Nylon	0,120	500	100
263415		4,8x0,8	4,0	11,0	20,2	6,4	5,0	Nylon	0,100	500	100
263456	**1,5-2,5**	4,8x0,5	5,0	11,0	20,2	6,4	5,0	Nylon	0,104	500	100
263416		6,3x0,8	5,0	11,0	21,5	7,5	6,6	Nylon	0,130	500	100
263417		4,8x0,8	5,0	11,0	20,2	6,4	5,0	Nylon	0,110	500	100
263418	**4,0-6,0**	6,3x0,8	6,5	13,0	24,2	7,5	6,6	Nylon	0,220	500	100

Flat terminals

- **Brass, tin-plated, Nylon-insulated**
- **with vibration-free copper sleeve - Easy Entry**

Nylon -105°/600V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
263510	**0,5-1,0**	2,8x0,5	3,8	10,5	19,2	6,5	2,8	Nylon	0,068	500	100
263512		2,8x0,8	3,5	10,5	19,2	6,5	2,8	Nylon	0,066	500	100
263514		4,8x0,5	3,8	10,5	10,5	6,5	4,8	Nylon	0,076	500	100
263516		4,8x0,8	3,8	10,5	19,2	6,7	4,8	Nylon	0,077	500	100
263422		6,3x0,8	3,5	10,0	20,5	7,7	6,3	Nylon	0,090	500	100
263518	**1,5-2,5**	4,8x0,5	3,8	10,5	19,2	6,5	4,8	Nylon	0,080	500	100
263520		4,8x0,8	3,8	10,5	19,2	6,7	4,8	Nylon	0,086	500	100
263424		6,3x0,8	4,0	10,0	20,5	7,7	6,3	Nylon	0,100	500	100
263426	**4,0-6,0**	6,3x0,8	5,5	13,5	24,5	7,7	6,3	Nylon	0,180	500	100

Round sleeves

- **of electrolytic copper, tin-plated • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon -105°/600V

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
263440	**0,5-1,0**	4 mm	3,5	9,5	20,2	8,7	4,0	Nylon	0,130	500	100
263442	**1,5-2,5**	5 mm	4,3	9,5	20,7	8,7	5,0	Nylon	0,150	500	100
263443		4 mm	4,3	9,5	20,2	87	4,0	Nylon	0,130	500	100
263444	**4,0-6,0**	5 mm	6,5	13,0	25,0	12,0	5,0	Nylon	0,200	500	100

Crimp terminals, Nylon-insulated

RoHS

Round terminals

- **of electrolytic copper, tin-plated • Easy Entry**
- **Nylon-insulated, with expanded insulating sleeve, suitable for harmonised cables**

Nylon

Art. no.	CSS	plug	d1	A	TL	c	B	material	kg/100		PU
263446	**0,5-1,0**	4 mm	3,5	9,5	20,2	8,7	4,0	Nylon	0,090	500	100
263448	**1,5-2,5**	5 mm	4,3	9,5	20,7	8,7	5,0	Nylon	0,110	500	100
263449		4 mm	4,3	9,5	20,2	8,7	4,0	Nylon	0,100	500	100
263450	**4,0-6,0**	5 mm	6,5	13,5	25,0	10,0	5,0	Nylon	0,200	500	100

RoHS

INFO

Shrinkable connectors

These shrinkable connectors are an insulated connecting element for the production of cable connections and circuit points. Their outstanding properties are based on the use of a Polyolefi n shrinkable tube, which is coated with a special adhesive on the inside, which protects the metal crimp connections from environmental infl uences. These connectors or terminal clamps are used wherever a reliable connection is needed under severe environmental conditions.
The shrinkable connectors of the HAUPA-SHRINK series combine crimp technology with the completely waterproof shrink technology in one part: crimp first – **then shrink and make waterproof!**

USE: To create simple, durable and weatherproof electrical connections. Particularly suitable well as in the motor vehicle, agricultural machinery and commercial vehicle sector.

SPECIAL FEATURE: The fusible inside adhesive cover provides excellent durability and is safer than traditional connectors.

SUITABLE FOR MAKING WATERPROOF CONNECTIONS: • Shrink ratio 3:1 • Shrink temperature: >+125°C
• Temperature resistance: -55°C to + 125°C • Insulating sleeve: Polyolefi n with inside adhesive
• Non-halogen • RoHS conform • No additional insulating and sealing required • Waterproof splice connection
• Space-saving and compact • Extremely high strain relief • Easy installation • Full visual testing possible

INSTRUCTIONS: The connector is crimped and then shrunk using a hot air blower (with deflector page 174).
The connection Check whether the fusible inside adhesive comes out on the sides to ensure optimal tightness.

Butt connectors

- **Copper, tin-plated • Insulating cover: Polyolefin with inside adhesive**
- **RoHS conform**

Art. no.	CSS	A	TL	kg/100		PU
363500	**0,5-1,0**	14	36	0,120	500	100
363502	**1,5-2,5**	15	36	0,132	500	100
363504	**4,0-6,0**	15	41	0,300	500	100

Socket sleeves (female)

- **Brass, tin-plated • Insulating cover: Polyolefin with inside adhesive**
- **RoHS conform**

Art. no.	CSS	plug	TL	B	kg/100		PU
363510	**0,5-1,0**	6,3x0,8	30,0	6,6	0,129	500	100
363512	**1,5-2,5**	6,3x0,8	30,0	6,6	0,138	500	100
363514	**4,0-6,0**	6,3x0,8	30,0	6,6	0,200	500	100

Flat terminals

- **Brass, tin-plated • Insulating cover: Polyolefin with inside adhesive**
- **RoHS conform**

Art. no.	CSS	plug	TL	B	kg/100		PU
363520	**0,5-1,0**	6,3x0,8	30,0	6,6	0,092	500	100
363522	**1,5-2,5**	6,3x0,8	30,0	6,6	0,106	500	100
363524	**4,0-6,0**	6,3x0,8	30,0	6,6	0,159	500	100

Shrinkable connectors, Polyolefin-insulated

RoHS

Ring terminals

- **Copper, tin-plated • Insulating cover: Polyolefin with inside adhesive**
- **RoHS conform**

Art. no.	CSS	M	d2	TL	B	kg/100		PU
363530	**0,5-1,0**	4	4,3	28,5	8,0	0,073	500	100
363532		5	5,3	28,5	8,0	0,066	500	100
363534		6	6,5	34,5	11,6	0,104	500	100
363536		8	8,4	34,5	11,6	0,089	500	100
363538		10	10,5	37,5	13,6	0,112	500	100
363540	**1,5-2,5**	4	4,3	30,5	8,5	0,085	500	100
363542		5	5,3	30,5	9,5	0,083	500	100
363544		6	6,5	35,5	12,0	0,122	500	100
363546		8	8,4	35,5	12,0	0,118	500	100
363548		10	10,5	37,5	13,6	0,128	500	100
363550	**4,0-6,0**	4	4,3	34,2	9,5	0,173	500	100
363552		5	5,3	34,0	9,5	0,172	500	100
363554		6	6,5	37,5	12,0	0,201	500	100
363556		8	8,4	42,0	15,0	0,251	500	100
363558		10	10,5	42,0	15,0	0,226	500	100

Welded shrink connector

- **Copper, tin-plated • Insulating cover: Polyolefin with inside adhesive**
- **RoHS conform**

Art. no.	CSS	kg/100		PU
363600	**0,5-1,0**	0,090		100
363602	**1,5-2,5**	0,110		100
363604	**4,0-6,0**	0,160		100

RoHS

Assortment of insulated terminals

Content: 1.250 crimping terminals, crimping pliers (art. no. 210761), crimp 0,5 - 6,0 mm², in plastic bulk storage chest 420 x 350 x 60 mm.

100 insulated ring terminals 0,25-1,5 M3 260252
100 insulated ring terminals 0,25-1,5 M4 260256
100 insulated ring terminals 0,25-1,5 M5 260258
100 insulated ring terminals 1,5-2,5 M4 260270
100 insulated ring terminals 1,5-2,5 M5 260272
50 insulated ring terminals 1,5-2,5 M6 260274
100 insulated ring terminals 2,5-6 M5 260286
50 insulated ring terminals 2,5-6 M6 260288
50 insulated fork type 0,25-1,5 M4 260304
50 insulated fork type 1,5-2,5 M4 260314
50 insulated fork type 2,5-6 M5 260322
50 insulated butt connectors 0,25-1,5 260350
50 insulated butt connectors 1,5-2,5 260352
50 insulated butt connectors 2,5-6 260354
50 insulated round pin 0,25-1,5 260370
50 insulated round pin 1,5-2,5 260372
50 insulated round pin 2,5-6 260374
50 insul. socket sl. 1,5-2,5/6,3x0,8 260394
50 insul. flat term. 1,5-2,5/6,3x0,8 260424

Art. no.	Content	Insulation	kg	PU
260762	1250	PVC	3,139	1

Assortment of insulated terminals

Containing: 1250 insulated terminals, 1 crimping pliers (art. 210802), press range 1.5 - 6 mm², in plastic bulk storage chest.

100 insulated ring terminals 0,25-1,5, M3, art. 260252
100 insulated ring terminals 0,25-1,5, M4, art. 260256
100 insulated ring terminals 0,25-1,5, M5, art. 260258
100 insulated ring terminals 1,5-2,5, M4, art. 260270
100 insulated ring terminals 1,5-2,5, M5, art. 260272
50 insulated ring terminals 1,5-2,5, M6, art. 260274
100 insulated ring terminals 2,5-6, M5, art. 260286
50 insulated ring terminals 2,5-6, M6, art. 260288
50 insulated fork type 0,25-1,5, M4, art. 260304
50 insulated fork type 1,5-2,5, M4, art. 260314
50 insulated fork type 2,5-6, M5, art. 260322
50 insulated butt connectors 0,25-1,5, art. 260350
50 insulated butt connectors 1,5-2,5, art. 260352
50 insulated butt connectors 2,5-6, art. 260354
50 insulated round pin 0,25-1,5, art. 260370
50 insulated round pin 1,5-2,5, art. 260372
50 insulated round pin 2,5-6, art. 260374
50 insul. socket sl. 1,5-2,5/6,3x0,8, art. 260394
50 insul. flat term. 1,5-2,5/6,3x0,8, art. 260424

Art. no.	Content	Insulation		kg	PU
260764	1250	PVC	210802	3,278	1
262048	1250	PVC	-	3,400	1

Assortment of insulated terminals

Content: 1.200 Crimping terminals, 1 crimping pliers for insulated crimping terminals (art. 210761), range 0.5 - 6 mm² in plastic bulk storage chest.

100 insulated ring terminals 0,25-1,5, M4, art. 260256
100 insulated ring terminals 0,25-1,5, M5, art. 260258
100 insulated ring terminals 0,25-1,5, M6, art. 260260
100 insulated ring terminals 1,5-2,5, M4, art. 260270
100 insulated ring terminals 1,5-2,5, M5, art. 260272
100 insulated ring terminals 1,5-2,5, M6, art. 260274
100 insulated ring terminals 2,5-6, M5, art. 260286
100 insulated ring terminals 2,5-6, M6, art. 260288
100 insulated ring terminals 2,5-6, M8, art. 260290
100 insulated butt connectors 0,25-1,5, art. 260350
100 insulated butt connectors 1,5-2,5, art. 260352
100 insulated butt connectors 2,5-6, art. 260354

Art. no.	Content	Insulation	kg	PU
260765	1200	PVC	3,367	1

Assortment of insulated terminals

Content: 1.200 crimping terminals, crimping pliers (art. 210802), crimp 0,5 - 6,0 mm², in plastic bulk storage chest 420 x 350 x 60 mm.

100 insulated ring terminals 0,25-1,5, M4, art. 260256
100 insulated ring terminals 0,25-1,5, M5, art. 260258
100 insulated ring terminals 0,25-1,5, M6, art. 260260
100 insulated ring terminals 1,5-2,5, M4, art. 260270
100 insulated ring terminals 1,5-2,5, M5, art. 260272
100 insulated ring terminals 1,5-2,5, M6, art. 260274
100 insulated ring terminals 2,5-6, M5, art. 260286
100 insulated ring terminals 2,5-6, M6, art. 260288
100 insulated ring terminals 2,5-6, M8, art. 260290
100 insulated butt connectors 0,25-1,5, art. 260350
100 insulated butt connectors 1,5-2,5, art. 260352
100 insulated butt connectors 2,5-6, art. 260354

Art. no.	Content	Insulation	kg	PU
260777	1200	PVC	2,980	1

RoHS

SysCon insulated terminals & 210761

SysCon

Content: 1500 insulated terminals

1	220370	ABS plastic box „SysCon S”
1	220375	Assortment insert „SysCon“
1	220399	Foam „SysCon” 400 x 300 x 10 mm
1	210761	Crimping pliers for insulated terminals 0,5 – 6 mm²

200	260350	Butt connectors, red	0,5/1,0		PVC
200	260352	Butt connectors, blue	1,5/2,5		PVC
100	260354	Butt connectors, yellow	4,0/6,0		PVC
200	260256	Ring terminals, red	0,5/1,0	M4	PVC
200	260258	Ring terminals, red	0,5/1,0	M5	PVC
200	260270	Ring terminals, blue	1,5/2,5	M4	PVC
200	260272	Ring terminals, blue	1,5/2,5	M5	PVC
100	260288	Ring terminals, yellow	4,0/6,0	M6	PVC
100	260290	Ring terminals, yellow	4,0/6,0	M8	PVC

Art. no.	Content	kg	PU
220381	1500	4,300	1

SysCon insulated terminals / end sleeves & 210784

SysCon

Content: insulated terminals and end sleeves

1	220370	ABS plastic box „SysCon S”
1	220375	Assortment insert „SysCon“
1	220399	Foam „SysCon” 400 x 300 x 10 mm
1	210784	Crimping pliers for insulated terminals and end sleeves

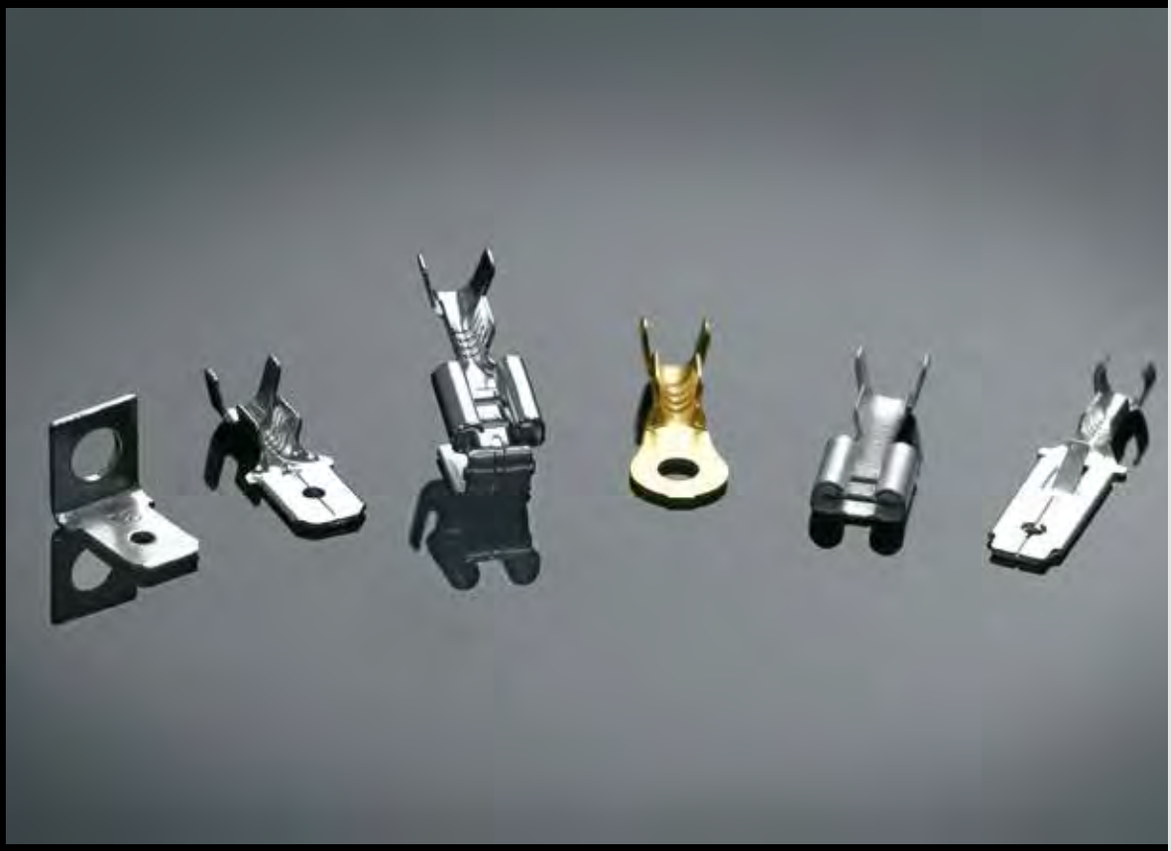
200	260350	Butt connectors, red	0,5-1,0		PVC
200	260352	Butt connectors, blue	1,5-2,5		PVC
200	260256	Ring terminals, red	0,5-1,0	M4	PVC
200	260272	Ring terminals, blue	1,5-2,5	M5	PVC
200	260274	Ring terminals, blue	1,5-2,5	M6	PVC
1000	270807	End sleeves, black	1,5/8		
1000	270811	End sleeves, blue	2,5/8		
500	270815	End sleeves, grey	4/10		
200	270818	End sleeves, yellow	6/12		

Art. no.	Content	kg	PU
220391	3700	4,300	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Socket sleeves



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... convincing solutions

RoHS

Socket sleeves (female) with cable stop

- **bare brass**
- **not insulated, to DIN 46247/part 1 - 3 and similar**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280000	**0,5-1**	6,3x0,8	19,2	7,6	7,6	0,073	200
280004	**1-2,5**	6,3x0,8	19,2	7,6	7,6	0,079	200
280008	**0,5-1,25**	4,8x0,8	15,0	6,4	5,6	0,075	200
280012		4,8x0,5	15,0	6,4	5,6	0,043	200
280016		2,8x0,8	16,0	6,4	3,75	0,040	200
280020		2,8x0,5	16,0	6,4	3,75	0,020	200

Socket sleeves (female) with cable stop

- **bare brass**
- **not insulated, to DIN 46247/part 1 - 3 and similar**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280030	**0,5-1,0**	6,3x0,8	19,2	7,6	7,6	0,073	200
280034	**1,0-2,5**	6,3x0,8	19,2	7,6	7,6	0,038	200
280038	**0,5-1,25**	4,8x0,8	15,0	6,4	5,6	0,0410	200
280042		4,8x0,5	15,0	6,4	5,6	0,027	200
280046		2,8x0,8	16,0	6,4	3,75	0,023	200
280050		2,8x0,5	16,0	6,4	3,75	0,027	200

Socket sleeves (female) with cable stop

- **bare brass**
- **not insulated, to DIN 46247/part 1 - 3 and similar**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280060	**0,5-1,25**	6,3x0,8	14,1	7,6	7,6	0,073	200
280064	**1,0-2,5**	6,3x0,8	14,1	7,6	7,6	0,078	200

Socket sleeves (female) with cable stop

- **bare brass**
- **not insulated, to DIN 46247/part 1 - 3 and similar**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280070	**0,5-1,0**	6,3x0,8	14,1	7,6	7,6	0,075	200
280074	**1,0-2,5**	6,3x0,8	14,1	7,6	7,6	0,078	200

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Socket sleeves (male and female)

RoHS

Socket sleeves (female) with cable stop

- **bare brass**
- **not insulated, to DIN 46247/part 1 - 3 and similar**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280080	**0,5-1,0**	6,3x0,8	19,6	7,7	7,6	0,108	200
280084	**1,0-2,5**	6,3x0,8	16,2	7,7	7,6	0,103	200

Socket sleeves (female) with cable stop

- **bare brass**
- **not insulated, to DIN 46247/part 1 - 3 and similar**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280090	**0,5-1,0**	6,3x0,8	19,6	7,7	7,6	0,110	200
280094	**1,0-2,5**	6,3x0,8	16,2	7,7	7,6	0,112	200

Flat terminals

- **bare brass**
- **uninsulated**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280100	**0,5-1,0**	6,3x0,8	20,6	6,35	6,3	0,055	200
280104	**1,0-2,5**	6,3x0,8	17,2	6,35	6,3	0,057	200

Flat terminals

- **tin-plated brass**
- **uninsulated**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280110	**0,5-1,0**	6,3x0,8	20,6	6,35	6,3	0,054	200
280114	**1,0-2,5**	6,3x0,8	17,2	6,35	6,3	0,057	200

Socket sleeves (male and female)

RoHS

Socket sleeves (male) with latching tongue

- **bare brass**
- **uninsulated**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280101	**0,5-1,0**	6,3x0,8	20,6	6,35	6,3	0,200	200
280105	**1,0-2,5**	6,3x0,8	17,2	6,35	6,3	0,085	200

Socket sleeves (male) with latching tongue

- **tin-plated brass**
- **uninsulated**

Art. no.	CSS	plug	TL	c	B	kg/100	PU
280111	**0,5-1,0**	6,3x0,8	20,6	6,35	6,3	0,082	200
280115	**1,0-2,5**	6,3x0,8	17,2	6,35	6,3	0,089	200

Ring terminals

- **bare brass**
- **uninsulated**

Art. no.	CSS	M	d2	TL	B	kg/100	PU
280120	**0,5-1,0**	3	3,2	21,0	8,0	0,054	200
280124		4	4,3	21,0	8,0	0,038	200
280128		5	5,08	22,0	9,5	0,068	200
280132	**1,0-2,5**	3	3,2	21,0	8,0	0,076	200
280136		4	4,3	21,0	8,0	0,046	200
280140		5	5,08	22,0	9,5	0,045	200

Ring terminals

- **tin-plated brass**
- **uninsulated**

Art. no.	CSS	M	d2	TL	B	kg/100	PU
280150	**0,5-1,0**	3	3,2	21,0	8,0	0,057	200
280154		4	4,3	21,0	8,0	0,040	200
280158		5	5,08	22,0	9,5	0,056	200
280162	**1,0-2,5**	3	3,2	21,0	8,0	0,076	200
280166		4	4,3	21,0	8,0	0,046	200
280170		5	5,08	22,0	9,5	0,043	200

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Flat terminals

- **bare brass**
- **uninsulated**

Art. no.	plug	d2	TL	form		kg/100	PU
280180	6,3x0,8	4,2	19,2	1	0°	0,076	200
280182	6,3x0,8	4,2	10,2	5	45°	0,082	200
280184	6,3x0,8	4,2	11,3	2	90°	0,085	200
280186	6,3x0,8	4,2	30,3	4	0°	0,136	200
280188	6,3x0,8	4,2	11,45	3	90°	0,134	200

Flat terminals

- **tin-plated brass**
- **uninsulated**

Art. no.	plug	d2	TL	form		kg/100	PU
280190	6,3x0,8	4,2	19,2	1	0°	0,083	200
280192	6,3x0,8	4,2	10,2	5	45°	0,084	200
280194	6,3x0,8	4,2	11,3	2	90°	0,095	200
280196	6,3x0,8	4,2	30,3	4	0°	0,137	200
280198	6,3x0,8	4,2	11,45	3	90°	0,272	200

Insulating sleeves

- **of PVC and nylon**

Art. no.	plug	form	material	kg/100	PU
280200	6,3x0,8	1	PVC	0,056	100
280202	6,3x0,8	2	Nylon	0,069	100
280204	4,8x0,8	6	PVC	0,047	100
280206	4,8x0,8	2	Nylon	0,071	100
280208	2,8x0,8	6	PVC	0,036	100
280210	2,8x0,8	5	Nylon	0,043	100
280212	6,3x0,8	4	PVC	0,063	100
280214	6,3x0,8	3	Nylon	0,048	100

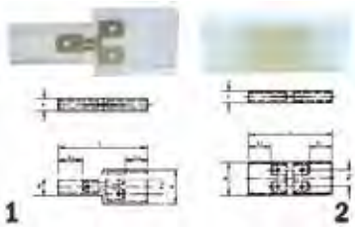
Elastic connectors with socket sleeves (male)

- **1 - 12 pole**
- **PVC, transparent colour**

Art. no.	plug	TL	form	B	material	kg/100	PU
280460	2,8x0,8	7,5	1	35,0	PVC	0,157	100
280482	2,8x0,8	88,0	12	35,0	PVC	1,770	10
280490	4,8x0,8	12,5	1	28,0	PVC	0,200	100
280512	4,8x0,8	147,0	12	28,0	PVC	2,800	10
280520	6,3x0,8	12,5	1	28,0	PVC	0,240	100
280542	6,3x0,8	147,0	12	28,0	PVC	2,850	10
280550	2,8x0,8	12,5	1	28,0	PVC	0,250	100
280572	2,8x0,8	147,0	12	28,0	PVC	0,440	50

Elastic cable distributors

- **PVC, transparent colour**



Art. no.	plug	TL	form	c	material	kg/100	PU
280580	6,3x0,8	53,0	1	15,0	PVC	0,500	50
280582	6,3x0,8	51,0	2	13,0	PVC	0,500	50

Cable lugs and connectors

haupa®

... convincing solutions

INFO

Instructions

1. The choice of the connector

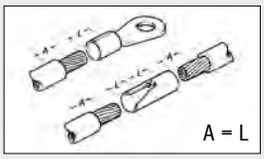
In order to obtain a connection that can be guaranteed for a long time it is necessary to select the connectors suitable to the application field and strictly conform to the section of the cable to be crimped.
In the large range of Haupa products you will certainly find the ideal solution for every requirement.

2. Stripping

Every crimping operation requires first that the cable is stripped without deforming the wires (+10% - since length expansion of crimp sleeve).

3. Cleaning

The conductor ends have to be solidly cleaned from oxidation and every rest of dirt before mounting.

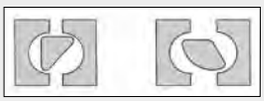


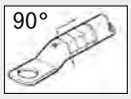
4. Assembling

a) Fit the connector to the cable with a round section in the complete lenght of the stripped area.
b) Verify that there are no wires outside the connector. If you need to use sectoral cables you must arrange a previous rounding crimping operation of the cable.

5. Choice of the crimping tool

All dies and punchings of the Haupa crimp system guarantee a high degree of connection between connector and cable. Exercise the crimping operation as shown in drawing 1 on the terminals and as drawing 2 on the butt connectors. The elevated pressure exerted by dies on terminals cause a uniform deformation on the whole crimping area.





6. Caution

For aluminium cables shoes and connectors, excess, escaped pressing additives must be wiped away.

7. Tensile strength

When correctly processed in accordance with the HAUPA pressing instructions and using HAUPA pressing tools, a tensile strength is ensured in accordance with DIN EN61238-1.

Pressing number for HAUPA conduit terminals and connectors

	HAUPA standard tubular cable lugs "commonly-available version" VDE 0295 class 2		HAUPA F-Type tubular cable lugs Cable class 5 / 6
conductor cross section CSS	quantity crimpings slim 5 mm	quantity crimpings wide > 8 mm	quantity crimpings
0,75	1	-	-
1,5	1	-	-
2,5	1	-	-
4	1	-	-
6	1	-	-
10	1	1	-
16	1	1	1
25	2	1	1
35	2	1	1
50	2	1	1
70	2	1	1
95	2	1	1
120	2	1	1
150	2	1	2
185	2	1*	2
240	4	2	2
300	4	2	2
400	4	2	-
500	4	2	-
625	4	2	-

* when using the four thorn pressing, number of pressings:
AD300-6, SD300-6, HD300-6, KD300-6 /
AD400-6, SD400-6, HD400-6, KD400-6
(page 58 - 59)

Temperature resistance

Connector	Temperature
Cable lugs & connectors copper	max.120° C (in acc. to DIN 46234)
Cable lugs & connectors aluminium	max.120° C (in acc. to IEC 61238)
Cable lugs & connectors of pure nickel	max. 500° C
End sleeves without insulation	max. 120° C (in acc. to DIN 46234)
End sleeves insulated	max. 105° C
Insulated terminals PVC	- 10° C --> + 75° C
Insulated terminals Nylon	- 55° C --> + 105° C
Shrinking terminals	- 55° C --> + 105° C
Socket sleeves male & female, tin-coated brass, uninsulated	- 55° C --> + 100° C

HAUPA cable connections with insulated cables, maximum power loads

Core cross-section mm²	Duct-laid single core cables		Multi-core cables		Exposed air laid single core (gap corresponds to diameter at the least)	
CU	AL	CU	AL	CU	AL	
(A)	(A)	(A)	(A)	(A)	(A)	
0,75	-	-	12	-	15	-
1	11	-	15	-	19	-
1,5	15	-	15	-	19	-
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

Valid at ambient temperatures of 30 degrees Celsius

RoHS

Crimp ring terminals without insulation DIN 46234

- **Material: 99,9% electrolytic copper • Surface: tin-plated**
- **Ring type • For conductors, e.g. to VDE 0295 class 2,5,6**
- **Hard soldered in crimping area**
- **Grooved profile for improved contact caracteristics**

Cu

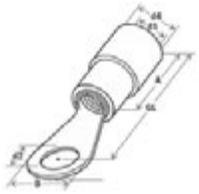
Art. no.	CSS	M	d2	d1	A	TL	B	kg/100	PU
290619	**0,5-1,0**	2,5	2,6	1,95	5,2	17,25	8,0	0,056	100
290620		3	3,2	1,95	5,2	17,25	8,0	0,055	100
290621		3,5	3,7	1,95	5,2	17,25	8,0	0,039	100
290622		4	4,2	1,95	5,2	16,65	8,0	0,065	100
290624		5	5,2	1,95	5,2	17,25	8,0	0,082	100
290623		6	6,2	1,95	5,2	18,5	10,0	0,091	100
290625		8	8,2	1,95	5,2	25,0	14,0	0,121	100
290617		10	10,5	1,95	5,2	25,0	14,0	0,178	100
290626	**1,5-2,5**	3	3,2	2,45	5,2	17,25	8,0	0,065	100
290627		3,5	3,7	2,45	5,2	17,25	8,0	0,058	100
290628		4	4,2	2,45	5,2	17,25	8,0	0,076	100
290630		5	5,2	2,45	5,2	20,0	10,0	0,097	100
290632		6	6,2	2,45	5,2	22,0	11,0	0,110	100
290634		8	8,2	2,45	5,2	26,8	15,0	0,132	100
290635		10	10,5	2,45	5,2	26,8	15,0	0,138	100
290646	**4,0-6,0**	5	5,3	3,6	6,0	15,0	10,0	0,157	100
290648		6	6,5	3,6	6,0	16,0	11,0	0,166	100
290650		8	8,4	3,6	6,0	19,0	14,0	0,214	100
290652		10	10,5	3,6	6,0	21,0	18,0	0,281	100
290654		12	13,0	3,6	6,0	21,0	18,0	0,219	100
290656	**10**	5	5,3	4,5	8,0	16,0	10,0	0,216	100
290658		6	6,4	4,5	8,0	17,0	11,0	0,227	100
290660		8	8,4	4,5	8,0	20,0	14,0	0,280	100
290662		10	10,5	4,5	8,0	21,0	18,0	0,339	100
290663		12	13,0	4,5	8,0	23,0	22,0	0,300	100
290664	**16**	5	5,3	5,8	10,0	20,0	10,0	0,353	100
290666		6	6,4	5,8	10,0	20,0	11,0	0,362	100
290668		8	8,4	5,8	10,0	22,0	14,0	0,404	100
290670		10	10,5	5,8	10,0	24,0	18,0	0,477	100
290672		12	13,0	5,8	10,0	26,0	22,0	0,565	100
290676	**25**	6	6,4	7,5	11,0	25,0	12,0	0,706	50
290678		8	8,4	7,5	11,0	25,0	16,0	0,776	50
290680		10	10,5	7,5	11,0	26,0	18,0	0,764	50
290682		12	13,0	7,5	11,0	31,0	22,0	0,886	50
290684		16	17,0	7,5	11,0	35,0	28,0	1,190	50
290686	**35**	8	8,4	9,0	12,0	26,0	16,0	0,896	50
290688		10	10,5	9,0	12,0	27,0	18,0	0,900	50
290690		12	13,0	9,0	12,0	31,0	22,0	1,000	50
290692		16	17,0	9,0	12,0	36,0	28,0	1,400	50
290694	**50**	8	8,4	11,0	16,0	34,0	18,0	1,600	40
290696		10	10,5	11,0	16,0	34,0	18,0	1,600	40
290698		12	13,0	11,0	16,0	36,0	22,0	1,700	40
290700		16	17,0	11,0	16,0	40,0	28,0	2,000	25
290701	**70**	8	8,4	13,0	18,0	38,0	22,0	2,500	25
290702		10	10,5	13,0	18,0	38,0	22,0	2,500	25
290704		12	13,0	13,0	18,0	38,0	22,0	2,400	20
290707	**95**	8	8,4	15,0	20,0	42,0	24,0	3,800	20
290708		10	10,5	15,0	20,0	42,0	24,0	3,800	20
290710		12	13,0	15,0	20,0	42,0	24,0	3,700	20
290712		16	17,0	15,0	20,0	44,0	28,0	3,900	20
290713	**120**	10	10,5	16,5	22,0	44,0	24,0	5,200	25
290714		12	13,0	16,5	22,0	44,0	24,0	5,200	25
290716		16	17,0	16,5	22,0	48,0	28,0	6,200	25
290717		20	21,0	16,5	22,0	53,0	32,0	5,900	25
290719	**150**	10	17,0	19,0	24,0	50,0	30,0	7,500	25
290721		12	13,0	19,0	24,0	50,0	30,0	7,400	25
290718		16	10,5	19,0	24,0	50,0	30,0	6,800	25
290720	**185**	16	17,0	21,0	25,0	50,0	36,0	9,400	20

RoHS

Insulated crimp cable lugs

- **Nylon-insulated • Material: 99,9% E-Cu • Surface: tin-plated**
- **Ring type • For conductors, e.g. to VDE 0295 class 2, 5, 6**
- **Hard soldered in crimping area • Grooved profile for improved contact caracteristics**
- **Crimp direct with insulation**

Cu



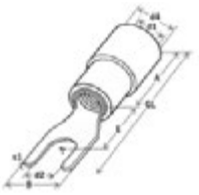
Art. no.	CSS	M	d2	d1	d4	A	TL	kg/100	PU
260902	**10**	5	5,3	4,5	8,0	16,5	24,5	0,283	100
260904		6	6,5	4,5	8,0	16,5	25,5	0,240	100
260906		8	8,4	4,5	8,0	16,5	28,5	0,200	100
260908		10	10,5	4,5	8,0	16,5	29,5	0,400	100
260910		12	13,0	4,5	8,0	16,5	31,5	0,420	100
260912	**16**	5	5,3	5,8	11,0	21,5	31,5	0,400	100
260914		6	6,5	5,8	11,0	21,5	31,5	0,400	100
260916		8	8,4	5,8	11,0	21,5	33,5	0,500	100
260918		10	10,5	5,8	11,0	21,5	35,5	0,600	100
260920		12	13,0	5,8	11,0	21,5	37,5	0,600	100
260922	**25**	5	5,3	7,5	13,0	24,0	38,0	0,800	100
260924		6	6,5	7,5	13,0	24,0	38,0	0,800	100
260926		8	8,4	7,5	13,0	24,0	38,0	0,900	100
260928		10	10,5	7,5	13,0	24,0	39,0	1,000	100
260930		12	13,0	7,5	13,0	24,0	44,0	1,100	100
260932		16	17,0	7,5	13,0	24,0	48,0	1,300	100
260934	**35**	6	6,5	9,0	14,5	27,0	41,0	1,100	100
260936		8	8,4	9,0	14,5	27,0	41,0	1,000	100
260938		10	10,5	9,0	14,0	27,0	42,0	1,000	100
260940		12	13,0	9,0	14,5	27,0	46,0	1,260	100
260942		16	17,0	9,0	14,5	27,0	51,0	1,550	100
260944	**50**	6	6,5	11,0	16,5	29,5	47,5	3,300	50
260946		8	8,4	11,0	16,5	29,5	47,5	3,300	50
260948		10	10,5	11,0	16,5	29,5	47,5	3,200	50
260950		12	13,0	11,0	16,5	29,5	49,5	3,600	50
260952		16	17,0	11,0	16,5	29,5	53,5	4,200	50
260954	**70**	6	6,5	13,0	18,7	31,5	51,0	5,200	50
260956		8	8,4	13,0	18,7	31,5	51,0	5,000	50
260960		12	13,0	13,0	18,7	31,5	51,0	5,000	50
260962		16	17,0	13,0	18,7	31,5	55,0	5,400	50
260964	**95**	8	8,4	15,0	21,7	35,5	57,5	8,000	50
260966		10	10,5	15,0	21,7	35,5	57,5	8,200	50
260968		12	13,0	15,0	21,7	35,5	57,5	7,800	50
260970		16	17,0	15,0	21,7	35,5	59,5	8,200	50
260972	**120**	8	8,4	16,5	24,2	40,0	62,0	10,600	25
260974		10	10,5	16,5	24,2	40,0	62,0	11,200	25
260976		12	13,0	16,5	24,2	40,0	62,0	10,800	25
260978		16	17,0	16,5	24,2	40,0	66,0	11,600	25
260980	**150**	10	10,5	19,0	27,2	44,0	70,0	16,800	25
260982		12	13,0	19,0	27,2	44,0	70,0	16,800	25
260984		16	17,0	19,0	27,2	44,0	70,0	16,800	25

Solderless terminals for meter connection

- **Nylon-insulated • Material: 99,9% E-Cu • Surface: tin-plated**
- **Fork type • For conductors, e.g. to VDE 0295 class 2, 5, 6**
- **Hard soldered in crimping area • Grooved profile for improved contact caracteristics**
- **Crimp direct with insulation**

Cu

Art. no.	CSS	M	kg/100	PU
260858	**10**	5	0,302	100
260860		6	0,320	100
260862	**16**	5	0,584	100
260863		8	0,630	100



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Fork terminals without insulation

- **Material: 99,9% E-Cu • Surface: tin-plated**
- **Fork type • For conductors, e.g. to VDE 0295 class 2, 5, 6**
- **Hard soldered in crimping area**
- **Grooved profile for improved contact caracteristics**

Cu

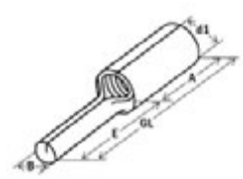
Art. no.	CSS	M	d2	d1	A	TL	B	kg/100	PU
290730	**0,5-1,0**	3	3,2	1,95	5,2	14,6	5,6	0,076	100
290731		3,5	3,7	1,95	5,2	14,9	6,5	0,077	100
290732		4	4,2	1,95	5,2	15,0	6,4	0,058	100
290734		5	5,2	1,95	5,2	16,25	8,0	0,086	100
290735		6	6,2	1,95	5,2	17,5	9,2	0,087	100
290736	**1,5-2,5**	3	3,2	2,45	5,2	17,25	5,6	0,088	100
290739		3,5	3,7	2,45	5,2	14,3	6,6	0,083	100
290738		4	4,2	2,45	5,2	14,3	6,6	0,082	100
290740		5	5,2	2,45	5,2	19,25	9,1	0,095	100
290742		6	6,2	2,45	5,2	21,0	10,0	0,120	100
290744	**4,0-6,0**	4	4,2	3,5	6,5	18,6	8,0	0,152	100
290746		5	5,2	3,5	6,5	21,1	9,0	0,176	100
290748		6	6,2	3,5	6,5	22,3	11,0	0,161	100
290750		8	8,2	3,5	6,5	27,3	15,2	0,252	100
290751		10	10,5	3,5	6,5	30,2	19,0	0,319	100
290752	**10**	5	5,2	4,7	8,5	20,8	9,0	0,248	100
290754		6	6,4	4,7	8,5	20,8	10,3	0,260	100
290756	**16**	6	6,4	5,8	10,5	25,5	11,0	0,513	100

Pin terminals without insulation DIN 46230

- **Material: 99,9% E-Cu • Surface: tin-plated**
- **Pin type • For conductors, e.g. to VDE 0295 class 2, 5, 6**
- **Hard soldered in crimping area**
- **Grooved profile for improved contact caracteristics**

Cu

Art. no.	CSS	d1	A	TL	E	B	kg/100	PU
290770	**0,5-1,0**	1,85	5,0	17,3	12,0	1,8	0,083	100
290771		1,85	5,0	17,3	9,0	1,8	0,078	100
290773	**1,5-2,5**	2,4	5,0	17,3	9,0	1,8	0,065	100
290775		2,4	5,0	17,3	9,0	1,8	0,058	100
290777	**4,0-6,0**	3,6	6,0	24,5	12,5	2,6	0,157	100
290776	**10**	4,5	8,5	20,5	14,0	4,0	0,300	100
290778	**16**	5,8	10,5	26,5	14,0	4,5	0,411	100
290780	**25**	7,0	14,0	33,0	15,0	7,0	0,600	100
290782	**35**	8,2	16,0	40,0	20,0	8,0	1,238	100
290784	**50**	9,5	19,0	45,0	20,0	9,5	1,800	100
290786	**70**	11,2	24,0	55,0	25,0	11,5	3,053	50
290788	**95**	13,59	24,0	55,0	25,0	13,5	4,100	50



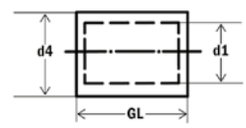
RoHS

Parallel connectors DIN 46341 part 1, type A

- **Material: 99,9% electrolytic copper • Surface: tin-plated**
- **For connecting different conductor cross-sections**
- **Hard soldered in crimping area**
- **Grooved profile for improved contact caracteristics**

Cu

Art. no.	CSS	d1	d4	TL	kg/100		PU
291090	**0,5-1,0**	1,6	3,3	7	0,064	2000	100
291092	**1,5-2,5**	2,3	4,2	7	0,070	2000	100
291096	**4-6**	3,6	5,5	7	0,090	1800	100
291098	**10**	4,5	7,0	9	0,165	2000	100
291100	**16**	5,5	8,5	10	0,274	1000	100
291102	**25**	7,0	10,0	13	0,500	600	100
291104	**35**	8,5	12,0	16	0,800	300	50
291106	**50**	10,0	14,0	19	1,200	300	50
291108	**70**	12,0	16,5	19	1,600	200	50
291110	**95**	13,5	18,0	20	2,400	150	25
291112	**120**	15,0	19,5	22	3,500	100	25
291114	**150**	16,5	21,0	26	3,000	80	20

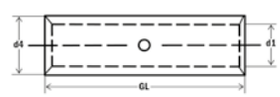


Solderless butt connectors DIN 46341 part 1, type B

- **Material: 99.9% electrolytic copper**
- **Surface: tin-plated • annealing for easier crimping**
- **For stranded conductors e.g. VDE 0295 class 2, 5, 6**
- **With buttmarks for precise cable insertion**

Cu

Art. no.	CSS	d1	d4	TL	kg/100		PU
291119	**0,5-1,0**	1,6	3,3	15	0,200	2000	100
291120	**1,5-2,5**	2,3	4,2	15	0,127	2000	100
291124	**4-6**	3,6	5,5	15	0,200	2000	100
291126	**10**	4,5	7,0	21	0,300	800	100
291128	**16**	5,5	8,5	26	0,600	500	50
291130	**25**	7,0	10,0	29	1,100	400	50
291132	**35**	8,5	12,0	32	1,500	150	25
291134	**50**	10,0	14,0	48	2,300	150	25
291136	**70**	12,0	16,5	48	3,400	100	25
291138	**95**	13,5	18,0	48	5,800	50	25
291140	**120**	15,0	19,5	48	8,500	50	25
291142	**150**	16,5	21,0	48	11,100	40	20



PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

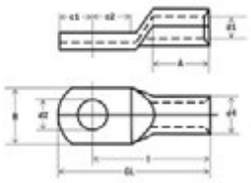
RoHS

Tubular terminals, Light „T“ series

light

- **Material: 99.9% electrolytic copper E-CU DIN 40500**
- **Surface: tin-plated**
- **with sight hole**

Cu



Art. no.	CSS	M	d2	d1	d4	A	TL	kg/100		PU
294000	**1,5**	4	4,3	2,4	4,0	7,0	19,0	0,105	2000	100
294002		5	5,3	2,4	4,0	7,0	19,0	0,101	2000	100
294004		6	6,4	2,4	4,0	7,0	20,0	0,101	2000	100
294006	**2,5**	4	4,3	2,7	4,3	7,0	19,0	0,117	2000	100
294008		5	5,3	2,7	4,3	7,0	19,0	0,113	2000	100
294010		6	6,4	2,7	4,3	7,0	21,0	0,119	2000	100
294012		8	8,3	2,7	4,3	7,0	23,0	0,121	2000	100
294014	**4**	4	4,3	3,1	4,8	9,5	21,5	0,162	2000	100
294016		5	5,3	3,1	4,8	9,5	21,5	0,152	2000	100
294018		6	6,4	3,1	4,8	9,5	23,5	0,100	2000	100
294020		8	8,3	3,1	4,8	9,5	28,5	0,200	2000	100
294022	**6**	4	4,3	3,8	5,5	10,0	26,0	0,200	1800	100
294024		5	5,3	3,8	5,5	10,0	26,0	0,200	1800	100
294026		6	6,4	3,8	5,5	10,0	26,0	0,300	1400	100
294028		8	8,3	3,8	5,5	10,0	29,0	0,200	1400	100
294034	**10**	5	5,3	4,7	6,9	11,5	27,5	0,300	1000	100
294036		6	6,4	4,7	6,9	11,5	27,5	0,300	1000	100
294038		8	8,3	4,7	6,9	11,5	30,5	0,300	800	100
294040		10	10,5	4,7	6,9	11,5	30,5	0,300	600	100
294044	**16**	5	5,3	5,6	7,8	12,0	27,5	0,400	600	100
294046		6	6,4	5,6	7,8	12,0	27,5	0,400	600	100
294048		8	8,3	5,6	7,8	12,0	31,0	0,500	400	100
294050		10	10,5	5,6	7,8	12,0	32,0	0,400	400	100
294052		12	13,2	5,6	7,8	12,0	37,5	0,500	400	100
294054	**25**	6	6,4	7,1	9,5	13,5	34,0	0,700	400	50
294056		8	8,3	7,1	9,5	13,5	34,0	0,700	400	50
294058		10	10,5	7,1	9,5	13,5	37,0	0,700	300	50
294060		12	13,2	7,1	9,5	13,5	40,0	0,800	300	50
294062	**35**	6	6,4	8,2	11,0	16,0	39,0	1,300	240	50
294064		8	8,3	8,2	11,0	16,0	39,0	2,900	240	50
294066		10	10,5	8,2	11,0	16,0	43,0	1,300	160	50
294068		12	13,2	8,2	11,0	16,0	43,0	1,200	160	50
294070		14	14,5	8,2	11,0	16,0	48,0	1,300	160	50
294080	**50**	6	6,4	9,5	12,5	20,0	45,0	1,700	150	40
294082		8	8,3	9,5	12,5	20,0	45,0	1,700	150	40
294084		10	10,5	9,5	12,5	20,0	49,0	1,900	150	40
294086		12	13,2	9,5	12,5	20,0	49,0	1,800	100	40
294088		14	14,5	9,5	12,5	20,0	54,0	1,900	100	30
294094	**70**	8	8,3	11,5	15,0	20,0	47,6	2,700	100	25
294096		10	10,5	11,5	15,0	20,0	51,6	2,800	100	25
294098		12	13,2	11,5	15,0	20,0	51,6	2,600	100	25
294100		14	14,5	11,5	15,0	20,0	62,6	3,300	100	20
294102		16	16,5	11,5	15,0	20,0	62,6	3,100	100	20
294106	**95**	8	8,3	13,5	17,0	22,0	55,8	3,500	100	20
294108		10	10,5	13,5	17,0	22,0	55,8	3,500	100	20
294110		12	13,2	13,5	17,0	22,0	55,8	2,900	100	20
294112		14	14,5	13,5	17,0	22,0	66,8	4,000	40	15
294114		16	16,5	13,5	17,0	22,0	66,8	3,900	40	15
294118	**120**	10	10,5	15,6	20,0	27,0	71,5	6,900	80	10
294120		12	13,2	15,6	20,0	27,0	71,5	6,800	80	10
294122		14	14,5	15,6	20,0	27,0	71,5	6,600	72	10
294124		16	16,5	15,6	20,0	27,0	71,5	6,400	72	10
294128	**150**	10	10,5	16,5	21,0	32,0	78,0	8,000	72	10
294130		12	13,2	16,5	21,0	32,0	78,0	8,000	72	10
294132		14	14,5	16,5	21,0	32,0	78,0	7,800	72	10
294134		16	16,5	16,5	21,0	32,0	78,0	7,500	48	10
294138	**185**	10	10,5	18,4	23,6	34,0	84,0	11,200	40	10
294140		12	13,2	18,4	23,6	34,0	84,0	11,200	40	10
294142		14	14,5	18,4	23,6	34,0	84,0	10,800	40	10
294144		16	16,5	8,4	23,6	34,0	84,0	10,800	40	10

RoHS

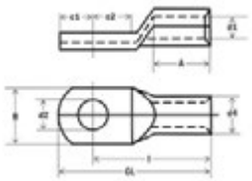
Tubular terminals, Light „T“ series

light

- tubular
- Material: 99.9% electrolytic copper E-CU DIN 40500
- Surface: tin-plated
- with sight hole

Cu

Art. no.	CSS	M	d2	d1	d4	A	TL	kg/100		PU
294150	**240**	12	13,2	21,2	26,4	37,0	90,0	13,300	30	10
294152		14	14,5	21,2	26,4	37,0	90,0	13,000	30	10
294154		16	16,5	21,2	26,4	37,0	90,0	15,000	30	10
294160	**300**	12	13,2	23,4	28,6	40,0	96,0	15,400	16	8
294162		14	14,5	23,4	28,6	40,0	96,0	15,000	16	8
294164		16	16,5	23,4	28,6	40,0	96,0	2,900	16	8
294174	**400**	16	16,5	26,8	32,8	37,0	104,7	22,700	10	5
294176		20	21,0	26,8	32,8	37,0	104,7	22,000	10	5
294184	**500**	16	16,5	29,8	38,4	46,5	115,5	42,000	8	3
294196	**630**	20	21,0	34,5	44,7	50,0	133,0	66,800	6	3



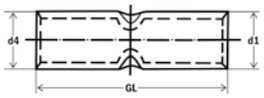
Butt connectors, Light „M“ series

light

- Material: 99.9% electrolytic copper E-CU DIN 40500
- Surface: tin-plated • annealing for easier crimping
- for stranded conductors e.g. VDE 0295 class 2
- with buttmarks for precise cable insertion

Cu

Art. no.	CSS	d1	d4	TL	kg/100		PU
294200	**1,5**	2,4	4,0	22,0	0,080	2000	200
294202	**2,5**	2,7	4,3	22,0	0,080	2000	200
294204	**4**	3,1	4,8	25,0	0,300	1000	100
294206	**6**	3,8	5,5	25,0	0,300	1000	100
294208	**10**	4,7	6,9	25,0	0,400	600	100
294210	**16**	5,6	7,8	29,0	0,500	500	100
294212	**25**	7,1	9,5	29,0	0,700	200	50
294214	**35**	8,2	11,0	35,0	1,200	200	50
294218	**50**	9,5	12,5	35,0	1,400	100	40
294220	**70**	11,5	15,0	45,0	2,700	50	20
294222	**95**	13,5	17,0	47,0	3,200	50	20
294224	**120**	15,6	20,0	52,0	5,500	50	20
294226	**150**	16,5	21,0	59,0	6,500	50	20
294228	**185**	18,4	23,6	65,0	9,200	36	20
294230	**240**	21,2	26,4	75,0	11,900	12	10
294232	**300**	23,4	28,6	90,0	14,500	6	5
294234	**400**	26,8	32,8	106,0	24,200	6	5



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Tubular cable lugs, standard series

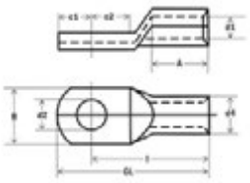
HUPtype

- **For stranded round shaped conductors e.g. VDE 0295 class 2**
- **For preround sector shaped conuctors • Annealed material for easier crimping**
- **Material: 99.9% electrolytic copper E-CU DIN 40500 • Surface: tin-plated**
- **Vibration and shock proofing DIN EN 61373:1999-11, Cat. 1, Cl. B**

Cu

available with and without sight hole e.g. 290900/S (add xx xx xx/s when ordering)

Art. no.	CSS	M	d2	d1	d4	A	v1	v2	l	B	c1	c2	kg/100		PU
290900	**0,75**	3	3,2	1,3	2,8	6,0	1	-	12,0	6,0	3,25	4,0	0,073	2000	100
290902		4	4,3	1,3	2,8	6,0	1	-	13,0	6,5	4,0	5,0	0,064	2000	100
290904	**1,5**	3	3,2	1,8	3,3	6,0	1	-	12,0	6,5	3,25	4,0	0,060	2000	100
290906		4	4,3	1,8	3,3	6,0	1	-	13,0	6,5	4,0	5,0	0,066	2000	100
290908		5	5,3	1,8	3,3	6,0	1	-	14,0	7,5	4,75	5,5	0,087	2000	100
290910		6	6,5	1,8	3,3	6,0	1	-	16,0	9,0	6,5	6,5	0,097	2000	100
290912	**2,5**	3	3,2	2,3	4,2	6,0	1	-	12,0	7,5	3,25	4,0	0,103	2000	100
290914		4	4,3	2,3	4,2	6,0	1	-	13,0	7,5	4,0	5,0	0,112	2000	100
290916		5	5,3	2,3	4,2	6,0	1	-	14,0	8,5	4,75	5,5	0,121	2000	100
290918		6	6,5	2,3	4,2	6,0	1	-	16,0	9,5	6,5	6,5	0,143	2000	100
290920		8	8,5	2,3	4,2	6,0	1	-	20,0	13,0	7,75	9,5	0,151	2000	100
290922	**4**	4	4,3	3,0	5,0	8,0	1	-	17,0	8,5	4,75	5,5	0,200	2000	100
290924		5	5,3	3,0	5,0	8,0	1	-	17,0	9,0	4,75	6,0	0,161	2000	100
290926		6	6,5	3,0	5,0	8,0	1	-	19,0	10,0	6,5	6,5	0,220	2000	100
290928		8	8,5	3,0	5,0	8,0	1	-	22,0	13,0	8,5	9,5	0,300	2000	100
290930	**6**	4	4,3	3,5	6,5	9,0	1	-	18,0	8,5	5,0	5,5	0,452	1800	100
290932		5	5,3	3,5	6,5	9,0	1	-	21,0	10,0	6,5	7,5	0,475	1800	100
290934		6	6,5	3,5	6,5	9,0	1	-	21,0	12,0	6,5	7,5	0,400	1400	100
290936		8	8,5	3,5	6,5	9,0	1	-	23,0	15,0	10,0	10,0	0,500	1400	100
290938	**10**	5	5,3	4,5	7,0	10,0	1	-	22,0	12,0	6,5	7,5	0,400	1000	100
290940		6	6,5	4,5	7,0	10,0	1	-	22,0	12,0	6,5	7,5	0,400	1000	100
290942		8	8,5	4,5	7,0	10,0	1	-	25,0	15,0	10,0	10,0	0,540	800	100
290944		10	10,5	4,5	7,0	10,0	1	-	27,0	17,0	12,0	12,0	0,573	600	100
290946		12	13,0	4,5	7,0	10,0	1	-	29,0	19,0	13,0	13,0	0,600	600	100
290948	**16**	5	5,3	5,5	8,5	13,0	1	1	26,0	12,0	5,5	6,5	0,800	600	100
290950		6	6,5	5,5	8,5	13,0	1	1	27,0	12,0	6,25	7,5	0,700	600	100
290952		8	8,5	5,5	8,5	13,0	1	1	29,0	15,0	8,5	9,5	0,800	400	100
290954		10	10,5	5,5	8,5	13,0	1	1	31,0	17,0	10,5	11,5	0,950	400	100
290956		12	13,0	5,5	8,5	13,0	1	1	33,0	19,0	12,0	13,0	1,000	400	100
290958	**25**	6	6,5	7,0	10,0	15,0	2	1	30,0	14,0	7,5	7,5	1,100	400	50
290960		8	8,5	7,0	10,0	15,0	2	1	32,0	16,0	10,0	10,0	1,200	400	50
290962		10	10,5	7,0	10,0	15,0	2	1	34,0	18,0	12,0	12,0	1,200	300	50
290964		12	13,0	7,0	10,0	15,0	2	1	35,0	19,0	13,0	13,0	1,300	300	50
290966	**35**	6	6,5	8,5	12,0	17,0	2	1	32,0	17,0	7,5	7,5	1,900	240	40
290968		8	8,5	8,5	12,0	17,0	2	1	34,0	17,0	10,0	10,0	1,900	240	40
290970		10	10,5	8,5	12,0	17,0	2	1	37,0	19,0	12,0	12,0	2,100	160	40
290972		12	13,0	8,5	12,0	17,0	2	1	38,0	21,0	13,0	13,0	2,000	160	40
290974		16	17,0	8,5	12,0	17,0	2	1	42,0	26,0	16,0	16,0	2,100	160	40
290976	**50**	6	6,5	10,0	14,0	19,0	2	1	37,0	20,0	10,0	10,0	2,900	160	40
290978		8	8,5	10,0	14,0	19,0	2	1	37,0	20,0	10,0	10,0	2,700	160	40
290980		10	10,5	10,0	14,0	19,0	2	1	39,0	20,0	12,0	12,0	2,900	160	25
290982		12	13,0	10,0	14,0	19,0	2	1	43,0	23,0	13,0	13,0	3,300	100	25
290984		16	17,0	10,0	14,0	19,0	2	1	46,0	28,0	16,0	16,0	3,100	100	25
290985	**70**	6	6,5	12,0	16,5	21,0	2	1	43,0	23,0	10,0	10,0	4,200	100	25
290986		8	8,5	12,0	16,5	21,0	2	1	43,0	23,0	10,0	10,0	4,200	100	25
290988		10	10,5	12,0	16,5	21,0	2	1	44,0	23,0	12,0	12,0	4,300	100	25
290990		12	13,0	12,0	16,5	21,0	2	1	46,0	23,0	13,0	13,0	4,500	100	25
290991		14	15,0	12,0	16,5	21,0	2	1	48,0	23,0	14,5	14,5	4,600	100	25
290992		16	17,0	12,0	16,5	21,0	2	1	50,0	28,0	16,0	16,0	5,100	100	25
290994	**95**	8	8,5	13,5	18,0	25,0	2	1	48,0	26,0	12,0	12,0	5,300	100	25
290996		10	10,5	13,5	18,0	25,0	2	1	48,0	26,0	12,0	12,0	5,100	100	25
290998		12	13,0	13,5	18,0	25,0	2	1	49,0	26,0	13,0	13,0	5,200	100	25
290999		14	15,0	13,5	18,0	25,0	2	1	51,0	26,0	14,5	14,5	5,400	60	15
291000		16	17,0	13,5	18,0	25,0	2	1	54,0	28,0	16,0	16,0	5,600	60	15
291002		20	21,0	13,5	18,0	25,0	2	1	60,0	36,0	22,0	22,0	6,000	60	15



c UL us LISTED (E338116)

Brunel access to excellence

RoHS

Tubular terminals, standard series

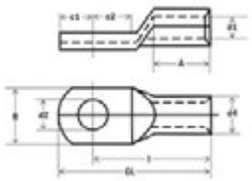
HUPtype

- **For stranded round shaped conductors e.g. VDE 0295 class 2**
- **For preround sector shaped conuctors • Annealed material for easier crimping**
- **Material: 99.9% electrolytic copper E-CU DIN 40500 • Surface: tin-plated**
- **Vibration and shock proofing DIN EN 61373:1999-11, Cat. 1, Cl. B**

Cu

available with and without sight hole e.g. 290004/S (add xx xx xx/s when ordering)

Art. no.	CSS	M	d2	d1	d4	A	v1	v2	l	B	c1	c2	kg/100		PU
290004	**120**	8	8,5	15,0	19,5	26,0	2	1	51,0	28,0	14,0	14,0	6,300	20	15
290006		10	10,5	15,0	19,5	26,0	2	1	51,0	28,0	14,0	14,0	6,200	80	15
290008		12	13,0	15,0	19,5	26,0	2	1	51,0	28,0	14,0	14,0	6,100	80	15
290009		14	15,0	15,0	19,5	26,0	2	1	52,0	28,0	15,0	15,0	5,900	72	18
290010		16	17,0	15,0	19,5	26,0	2	1	54,0	30,0	16,0	16,0	6,200	60	15
290012		20	21,0	15,0	19,5	26,0	2	1	63,0	36,0	22,0	22,0	7,900	60	15
290014	**150**	10	10,5	16,5	21,0	30,0	2	1	56,0	31,0	14,0	14,0	7,500	60	15
290016		12	13,0	16,5	21,0	30,0	2	1	57,0	31,0	15,0	15,0	7,300	60	15
290017		14	15,0	16,5	21,0	30,0	2	1	57,0	31,0	15,0	15,0	7,900	60	15
290018		16	17,0	16,5	21,0	30,0	2	1	58,0	31,0	16,0	16,0	7,500	60	15
290020		20	21,0	16,5	21,0	30,0	2	1	66,0	36,0	22,0	22,0	8,800	48	12
290022	**185**	12	13,0	19,0	24,0	30,0	2	1	65,0	35,0	18,0	18,0	11,100	40	20
290023		14	15,0	19,0	24,0	30,0	2	1	65,0	35,0	18,0	18,0	11,800	40	20
290024		16	17,0	19,0	24,0	30,0	2	1	65,0	35,0	18,0	18,0	10,700	40	20
290026		20	21,0	19,0	24,0	30,0	2	1	69,0	39,0	22,0	22,0	10,700	40	20
290028	**240**	12	13,0	21,0	26,0	35,0	4	2	72,0	39,0	21,5	19,0	13,700	30	15
290029		14	15,0	21,0	26,0	35,0	4	2	72,0	39,0	21,5	19,0	13,400	30	15
290030		16	17,0	21,0	26,0	35,0	4	2	72,0	39,0	21,5	19,0	13,400	30	15
290034	**300**	12	13,0	23,5	29,5	44,0	4	2	87,0	43,0	24,0	24,0	22,000	16	8
290036		14	15,0	23,5	29,5	44,0	4	2	87,0	43,0	24,0	24,0	21,700	16	8
290038		16	17,0	23,5	29,5	44,0	4	2	87,0	43,0	24,0	24,0	21,300	16	8
290040		20	21,0	23,5	29,5	44,0	4	2	87,0	43,0	24,0	24,0	21,400	16	8
290046	**400**	16	17,0	27,0	34,0	44,0	4	2	90,0	49,0	24,0	24,0	31,800	10	5
290048		20	21,0	27,0	34,0	44,0	4	2	90,0	49,0	24,0	24,0	30,500	10	5
290041	**500**	16	17,0	31,0	38,0	70,0	4	2	103,0	55,0	24,0	24,0	45,000	12	6
290043		20	21,0	31,0	38,0	70,0	4	2	103,0	55,0	24,0	24,0	45,000	12	6
290045	**625**	16	17,0	34,0	41,0	70,0	4	2	108,0	60,0	24,0	24,0	49,200	6	3
290047		20	21,0	34,0	41,0	70,0	4	2	108,0	60,0	24,0	24,0	49,200	6	3



c UL us LISTED (E338116)

Brunel access to excellence

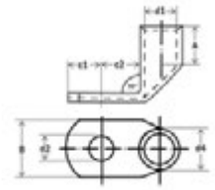
Angled tubular cable lugs 90°, standard series

HUPtype

- **For stranded round shaped conductors e.g. VDE 0295 class 2**
- **For preround sector shaped conuctors • Annealed material for easier crimping**
- **Material: 99.9% electrolytic copper E-CU DIN 40500**
- **Surface: tin-plated**

Cu

Art. no.	CSS	M	d2	d1	d4	A	v1	v2	l	B	c1	c2	kg/100		PU
290932/90	**6**	5	5,3	3,5	6,5	9,0	1	-	21,0	10,0	6,5	7,5	0,475	1800	100
290934/90		6	6,5	3,5	6,5	9,0	1	-	21,0	12,0	6,5	7,5	0,400	1400	100
290936/90		8	8,5	3,5	6,5	9,0	1	-	23,0	15,0	10,0	10,0	0,500	1400	100
290938/90	**10**	5	5,3	4,5	7,0	10,0	1	-	22,0	12,0	6,5	7,5	0,400	1000	100
290940/90		6	6,5	4,5	7,0	10,0	1	-	22,0	12,0	6,5	7,5	50,000	1000	100
290942/90		8	8,5	4,5	7,0	10,0	1	-	25,0	15,0	10,0	10,0	0,540	800	100
290944/90		10	10,5	4,5	7,0	10,0	1	-	27,0	17,0	12,0	12,0	0,573	600	100
290948/90	**16**	5	5,3	5,5	8,5	13,0	1	1	26,0	12,0	5,5	6,5	0,800	600	100
290950/90		6	6,5	5,5	8,5	13,0	1	1	27,0	12,0	6,25	7,5	0,700	600	100
290952/90		8	8,5	5,5	8,5	13,0	1	1	29,0	15,0	8,5	9,5	0,800	400	100
290954/90		10	10,5	5,5	8,5	13,0	1	1	31,0	17,0	10,5	11,5	0,950	400	100
290956/90		12	13,0	5,5	8,5	13,0	1	1	33,0	19,0	12,0	13,0	1,000	400	100
290958/90	**25**	6	6,5	7,0	10,0	15,0	2	1	30,0	14,0	7,5	7,5	1,100	400	50
290960/90		8	8,5	7,0	10,0	15,0	2	1	32,0	16,0	10,0	10,0	1,200	400	50
290962/90		10	10,5	7,0	10,0	15,0	2	1	34,0	18,0	12,0	12,0	1,250	300	50
290964/90		12	13,0	7,0	10,0	15,0	2	1	35,0	19,0	13,0	13,0	1,300	300	50



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PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

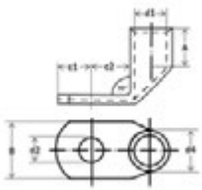
Angled tubular cable lugs 90°, standard series

HUPtype

- For stranded round shaped conductors e.g. VDE 0295 class 2
- For preround sector shaped conuctors • Annealed material for easier crimping
- Material: 99.9% electrolytic copper E-CU DIN 40500
- Surface: tin-plated

Cu

Art. no.	CSS	M	d2	d1	d4	A	v1	v2	l	B	c1	c2	kg/100		PU
290966/90	**35**	6	6,5	8,5	12,0	17,0	2	1	32,0	17,0	7,5	7,5	1,900	240	40
290968/90		8	8,5	8,5	12,0	17,0	2	1	34,0	17,0	10,0	10,0	1,900	240	40
290970/90		10	10,5	8,5	12,0	17,0	2	1	37,0	19,0	12,0	12,0	2,100	160	40
290972/90		12	13,0	8,5	12,0	17,0	2	1	38,0	21,0	13,0	13,0	2,000	160	40
290976/90	**50**	6	6,5	10,0	14,0	19,0	2	1	37,0	20,0	10,0	10,0	2,900	160	40
290978/90		8	8,5	10,0	14,0	19,0	2	1	37,0	20,0	10,0	10,0	2,700	160	40
290980/90		10	10,5	10,0	14,0	19,0	2	1	39,0	20,0	12,0	12,0	2,900	150	25
290982/90		12	13,0	10,0	14,0	19,0	2	1	43,0	23,0	13,0	13,0	3,300	100	25
290986/90	**70**	8	8,5	12,0	16,5	21,0	2	1	43,0	23,0	10,0	10,0	4,200	100	25
290988/90		10	10,5	12,0	16,5	21,0	2	1	44,0	23,0	12,0	12,0	4,300	100	25
290990/90		12	13,0	12,0	16,5	21,0	2	1	46,0	23,0	13,0	13,0	4,500	100	25
290992/90		16	17,0	12,0	16,5	21,0	2	1	50,0	28,0	16,0	16,0	5,100	100	25
290994/90	**95**	8	8,5	13,5	18,0	25,0	2	1	48,0	26,0	12,0	12,0	5,300	100	25
290996/90		10	10,5	13,5	18,0	25,0	2	1	48,0	26,0	12,0	12,0	5,100	100	25
290998/90		12	13,0	13,5	18,0	25,0	2	1	49,0	26,0	13,0	13,0	5,200	100	25
291000/90		16	17,0	13,5	18,0	25,0	2	1	54,0	28,0	16,0	16,0	5,600	60	15
291002/90		20	21,0	13,5	18,0	25,0	2	1	60,0	36,0	22,0	22,0	6,000	60	15
290006/90	**120**	10	10,5	15,0	19,5	26,0	2	1	51,0	28,0	14,0	14,0	6,200	60	15
290008/90		12	13,0	15,0	19,5	26,0	2	1	51,0	28,0	14,0	14,0	6,100	60	15
290010/90		16	17,0	15,0	19,5	26,0	2	1	54,0	30,0	16,0	16,0	6,200	60	15
290014/90	**150**	10	10,5	16,5	21,0	30,0	2	1	56,0	31,0	14,0	14,0	7,500	72	15
290016/90		12	13,0	16,5	21,0	30,0	2	1	57,0	31,0	15,0	15,0	7,300	72	15
290018/90		16	17,0	16,5	21,0	30,0	2	1	58,0	31,0	16,0	16,0	7,500	48	15
290020/90		20	21,0	16,5	21,0	30,0	2	1	66,0	36,0	22,0	22,0	8,800	48	12
291004/90	**185**	10	10,5	19,0	24,0	30,0	2	1	65,0	35,0	18,0	18,0	11,100	40	20
290022/90		12	13,0	19,0	24,0	30,0	2	1	65,0	35,0	18,0	18,0	11,100	40	20
290024/90		16	17,0	19,0	24,0	30,0	2	1	65,0	35,0	18,0	18,0	10,700	40	20
290028/90	**240**	12	13,0	21,0	26,0	35,0	4	2	72,0	39,0	21,5	19,0	13,700	30	15
290030/90		16	17,0	21,0	26,0	35,0	4	2	72,0	39,0	21,5	19,0	13,400	30	15



c UL us LISTED (E338116)

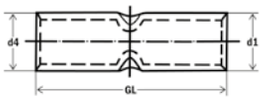
Butt connectors, standard series

HUPtype

- Material: 99.9% E-CU DIN 40500
- Surface: tin-plated • Annealed material for easier crimping
- For stranded conductors e.g. VDE 0295 class 2
- with buttmarks for precise cable insertion

Cu

Art. no.	CSS	d1	d4	v1	v2	TL	kg/100		PU
291050	**0,75**	1,3	2,8	1	-	14	0,051	2000	100
291052	**1,5**	1,8	3,3	1	-	14	0,074	2000	100
291054	**2,5**	2,3	4,2	1	-	16	0,150	2000	100
291056	**4**	3,0	5,0	1	-	19	0,195	1000	100
291058	**6**	3,5	6,5	1	-	19	0,350	1000	100
291060	**10**	4,5	7,0	1	-	30	0,558	600	100
291062	**16**	5,5	8,5	1	1	35	0,984	500	50
291064	**25**	7,0	10,0	2	1	40	1,350	200	50
291066	**35**	8,5	12,0	2	1	45	2,150	200	50
291068	**50**	10,0	14,0	2	1	50	3,100	100	25
291070	**70**	12,0	16,5	2	1	55	4,700	50	25
291072	**95**	13,5	18,0	2	1	60	5,600	50	25
291074	**120**	15,0	19,5	2	1	65	6,800	50	15
291076	**150**	16,5	21,0	2	1	70	7,800	50	20
291078	**185**	19,0	24,0	2	1	80	11,700	36	5
291080	**240**	21,0	26,0	4	2	90	13,900	12	10
291082	**300**	23,5	29,5	4	2	100	22,300	6	5
291084	**400**	27,0	34,0	4	2	100	29,000	6	5



c UL us LISTED (E338116)

RoHS

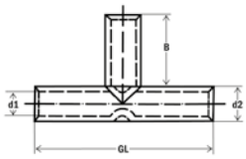
T-connectors, standard series

HUPtype

- **Material: 99.9% E-CU DIN 40500**
- **Annealed material for easier crimping**
- **Surface: tin-plated**
- **For stranded conductors e.g. VDE 0295 class 2**

Cu

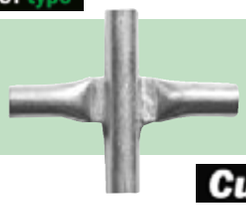
Art. no.	CSS	d1	d4	A	TL	kg/100	PU
291330	**1,5**	1,9	3,9	12	30	0,400	25
291332	**2,5**	2,4	4,4	12	30	0,400	25
291334	**4**	3,0	5,0	12	30	0,600	25
291336	**6**	3,7	5,5	14	35	1,100	25
291338	**10**	4,3	6,7	14	35	1,500	25
291340	**16**	5,4	7,8	21	50	2,300	25
291342	**25**	6,9	9,4	23	55	2,200	25
291344	**35**	8,3	11,3	30	70	3,800	25
291348	**50**	9,6	13,1	34	80	6,000	25
291350	**70**	11,5	15,3	35	85	10,100	25
291352	**95**	13,5	17,5	36	90	11,600	25
291354	**120**	15,5	20,0	38	95	17,800	10
291356	**150**	16,8	21,3	44	110	17,900	10
291358	**185**	19,0	24,0	45	115	28,300	1
291360	**240**	21,0	26,0	52	130	31,200	1



Cross connectors, standard series

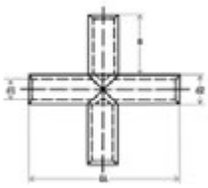
HUPtype

- **Material: 99.9% E-CU DIN 40500**
- **Annealed material for easier crimping**
- **Surface: tin-plated**
- **For stranded conductors e.g. VDE 0295 class 2**



Cu

Art. no.	CSS	d1	d4	A	TL	kg/100	PU
291370	**1,5**	1,9	3,9	12	30	0,450	100
291372	**2,5**	2,4	4,4	12	30	0,520	100
291374	**4**	3,0	5,0	12	30	0,480	25
291376	**6**	3,7	5,5	14	30	0,700	25
291378	**10**	4,3	6,7	14	35	0,800	25
291380	**16**	5,4	7,8	21	50	1,650	25
291382	**25**	6,9	9,4	23	55	3,000	25
291384	**35**	8,3	11,3	30	70	5,100	10
291386	**50**	9,6	13,1	34	80	8,050	10
291388	**70**	11,5	15,3	35	85	10,700	10
291390	**95**	13,5	17,5	36	90	15,700	10
291392	**120**	15,5	20,0	38	95	23,400	10
291394	**150**	16,8	21,3	44	110	18,900	1
291396	**185**	19,0	24,0	45	115	25,000	1
291398	**240**	21,0	26,0	52	130	31,100	1



PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

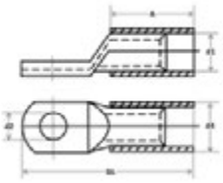
Tubularcable lugs, nylon-insulated, standard series

Nylon

- **Material: 99.9% E-CU DIN 40500**
- **Surface: tin-plated • annealed material for easier crimping**
- **For stranded conductors e.g. VDE 0295 class 2**
- **With inspection hole • crimp directly with insulation**

Cu

Art. no.	CSS	M	d2	d1	d4	A	TL	kg/100	PU
290800	**10**	5	5,5	7,0	9,0	17,0	35,5	0,400	100
290801		6	6,5	7,0	9,0	17,0	35,5	0,600	100
290802		8	8,5	7,0	9,0	17,0	42,0	0,500	100
290804		10	10,5	7,0	9,0	17,0	46,0	0,700	50
290806	**16**	5	5,5	8,5	10,5	21,0	39,5	0,600	100
290810		6	6,5	8,5	10,5	21,0	41,3	0,900	50
290812		8	8,5	8,5	10,5	21,0	45,5	1,000	50
290814		10	10,5	8,5	10,5	21,0	49,5	1,000	50
290816		12	13,0	8,5	10,5	21,0	54,0	1,000	50
290818	**25**	6	6,5	10,0	12,0	24,0	46,5	1,200	25
290820		8	8,5	10,0	12,0	24,0	51,0	1,300	25
290822		10	10,5	10,0	12,0	24,0	55,0	1,500	25
290824		12	13,0	10,0	12,0	24,0	57,0	1,400	25
290826	**35**	6	6,5	12,0	14,0	27,0	49,5	2,100	25
290830		8	8,5	12,0	14,5	27,0	54,0	2,100	25
290832		10	10,5	12,0	14,5	27,0	59,0	2,300	25
290834		12	13,0	12,0	14,5	27,0	61,0	2,300	25
290836	**50**	6	6,5	14,0	16,5	32,0	59,0	3,100	25
290840		8	8,5	14,0	16,5	32,0	59,0	3,100	25
290842		10	10,5	14,0	16,5	32,0	63,0	3,300	25
290844		12	13,0	14,0	16,5	32,0	68,0	3,400	25
290846		14	15,0	14,0	16,5	32,0	71,5	3,600	20
290848	**70**	8	8,5	16,4	18,9	33,5	65,5	3,100	15
290850		10	10,5	16,4	18,9	33,5	66,5	5,000	15
290852		12	13,0	16,4	18,9	33,5	70,5	5,000	15
290854		14	15,0	16,4	18,9	33,5	73,5	5,000	15
290856		16	17,0	16,4	18,9	33,5	78,5	5,000	15
290858	**95**	8	8,5	17,8	20,8	40,0	74,0	5,800	25
290860		10	10,5	17,8	20,8	40,0	74,0	5,800	25
290862		12	13,0	17,8	20,8	40,0	76,0	5,200	25
290864		14	15,0	17,8	20,8	40,0	79,5	6,200	25
290866		16	17,0	17,8	20,8	40,0	84,0	6,200	25
290868	**120**	8	8,5	19,3	22,3	41,5	80,5	6,500	25
290870		10	10,5	19,3	22,3	41,5	80,5	7,000	25
290872		12	13,0	19,3	22,3	41,5	80,5	6,200	20
290874		14	15,0	19,3	22,3	41,5	82,5	6,600	20
290876		16	17,0	19,3	22,3	41,5	85,5	6,500	20
290878	**150**	10	10,5	20,8	23,8	48,0	88,0	8,800	20
290880		12	13,0	20,8	23,8	48,0	89,0	8,400	20
290882		14	15,0	20,8	23,8	48,0	90,0	8,500	20
290884		16	17,0	20,8	23,8	48,0	92,0	8,100	20
290886		20	21,0	20,8	23,8	48,0	106,0	8,100	20



RoHS

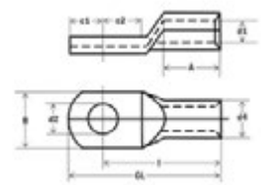
Tubular cable lugs for fine-wired, high flexible conductors

F-type

- For fine stranded conductors, DIN VDE 60228 e.g. VDE 0295 class 5/6
- Material: 99.9% E-CU DIN 40500
- Surface: tin-plated
- With inspection hole

Cu

Art. no.	CSS	M	d2	d1	d4	A	l	c1	c2	kg/100		PU
290250	**10**	6	6,4	5,0	8,0	16,0	23,0	6,0	7,0	0,700	1000	100
290252		8	8,4	5,0	8,0	17,0	26,0	7,0	9,0	0,700	800	100
290254		10	10,5	5,0	8,0	16,0	26,0	8,0	10,0	0,800	600	100
290256		12	13,0	5,0	8,0	17,0	31,0	10,0	14,0	0,800	600	100
290258	**16**	6	6,4	6,0	9,0	17,0	26,0	7,0	9,0	0,900	600	100
290260		8	8,4	6,0	9,0	17,0	26,0	7,0	9,0	0,900	400	100
290262		10	10,5	6,0	9,0	16,0	28,0	10,0	12,0	1,000	400	100
290264		12	13,0	6,0	9,0	22,0	35,0	12,0	13,0	1,000	400	100
290266	**25**	6	6,4	8,0	11,0	20,0	30,0	7,0	10,0	1,300	400	50
290268		8	8,4	8,0	11,0	20,0	30,0	8,0	10,0	1,300	400	50
290270		10	10,5	8,0	11,0	20,0	32,0	10,0	12,0	1,500	300	50
290272		12	13,0	8,0	11,0	22,0	35,0	12,0	13,0	1,500	300	50
290276	**35**	8	8,4	9,0	13,0	25,0	35,0	10,0	10,0	2,500	240	40
290278		10	10,5	9,0	13,0	24,0	35,0	10,0	11,0	2,500	16,0	40
290280		12	13,0	9,0	13,0	26,0	40,0	12,0	14,0	2,600	16,0	40
290282	**50**	8	8,4	11,0	14,5	27,0	39,0	11,0	12,0	3,000	15	25
290284		10	10,5	11,0	14,5	27,0	39,0	11,0	12,0	2,900	150	25
290286		12	13,0	11,0	14,5	27,0	41,0	12,0	14,0	2,900	100	25
290288		16	17,0	11,0	14,5	27,0	44,0	15,0	17,0	3,000	100	25
290290	**70**	8	8,4	13,0	17,0	32,0	44,0	11,0	12,0	4,400	100	25
290292		10	10,5	13,0	17,0	32,0	44,0	11,0	12,0	4,000	100	25
290294		12	13,0	13,0	17,0	32,0	46,0	12,0	14,0	4,400	100	25
290296		16	17,0	13,0	17,0	32,0	49,0	15,0	17,0	4,500	100	25
290300	**95**	10	10,5	15,0	20,0	37,0	54,0	15,0	17,0	7,700	100	25
290302		12	13,0	15,0	20,0	37,0	54,0	15,0	17,0	7,400	100	25
290304		16	17,0	15,0	20,0	37,0	54,0	15,0	17,0	7,000	40	25
290306	**120**	10	10,5	17,0	22,0	41,0	58,0	15,0	17,0	9,400	80	20
290308		12	13,0	17,0	22,0	41,0	58,0	15,0	17,0	8,900	80	20
290310		16	17,0	17,0	22,0	41,0	58,0	15,0	17,0	8,700	72	18
290316	**150**	12	13,0	19,0	25,0	48,0	65,0	15,0	17,0	13,300	70	12
290318		16	17,0	19,0	25,0	48,0	65,0	15,0	17,0	12,700	48	12
290320		20	21,0	19,0	25,0	48,0	68,0	19,0	20,0	8,200	48	10
290322	**185**	12	13,0	21,0	27,0	54,0	71,0	15,0	17,0	16,200	40	20
290324		16	17,0	21,0	27,0	54,0	71,0	15,0	17,0	15,800	40	20
290326		20	21,0	21,0	27,0	54,0	74,0	19,0	20,0	14,200	40	15
290328	**240**	12	13,0	24,0	30,0	56,0	76,0	19,0	20,0	20,300	30	15
290330		16	17,0	24,0	30,0	56,0	76,0	19,0	20,0	20,700	30	15
290332		20	21,0	24,0	30,0	56,0	76,0	19,0	20,0	18,300	30	15
290334	**300**	12	13,0	26,0	32,0	62,0	93,0	21,0	31,0	30,000	16	8
290336		16	17,0	26,0	32,0	62,0	93,0	21,0	31,0	28,100	16	8
290338		20	21,0	26,0	32,0	62,0	93,0	21,0	31,0	26,200	16	8



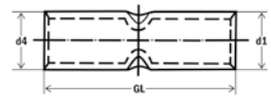
Butt-connector for fine stranded high flexible conductors

F-type

- For fine stranded conductors, DIN VDE 60228 e.g. VDE 0295 class 5/6
- Material: 99.9% E-CU DIN 40500
- Surface: tin-plated
- With buttmarks for precise cable insertion

Cu

Art. no.	CSS	d1	d4	TL	kg/100		PU
290350	**10**	5,0	8,0	30	0,800	600	50
290352	**16**	6,0	9,0	35	1,000	500	50
290354	**25**	8,0	11,0	35	1,300	200	50
290356	**35**	9,0	13,0	35	2,100	200	25
290358	**50**	11,0	14,5	45	3,700	100	25
290360	**70**	13,0	17,0	45	4,600	50	25
290362	**95**	15,0	20,0	45	7,300	50	50
290364	**120**	17,0	22,0	55	6,900	50	25
290366	**150**	19,0	25,0	65	9,800	50	18
290368	**185**	21,0	27,0	70	13,600	36	18
290370	**240**	24,0	30,0	70	16,000	12	6
290372	**300**	26,0	32,0	75	7,000	6	6
290374	**400**	30,0	36,0	100	11,100	6	6



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

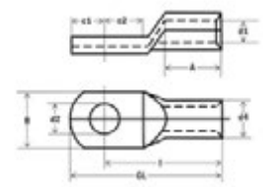
RoHS

Cable lugs acc. to DIN 46235

DIN

- **Material: 99,9% E-Cu DIN 40500**
- **Tube dimension acc. to DIN 46235 • Surface: bare**
- **With marks for correct crimping**
- **Annealed material for easier crimping**

Cu



Art. no.	CSS	M	Id.	d2	d1	d4	A	v1	v2	l	c1	c2	B	kg/100		PU
290001	**6**	5	5	5,3	3,8	5,5	10,0	2	-	24,0	6,5	7,5	8,5	0,300	800	100
290003		6	5	6,4	3,8	5,5	10,0	2	-	24,0	7,5	8,0	8,5	0,300	800	100
290005		8	5	8,4	3,8	5,5	10,0	2	-	24,0	10,0	10,0	13,0	0,300	800	100
290007	**10**	5	6	5,3	4,5	6,0	10,0	2	-	27,0	7,0	8,5	9,0	0,700	800	100
290011		6	6	6,4	4,5	6,0	10,0	2	-	27,0	7,5	8,5	9,0	0,600	800	100
290013		8	6	8,4	4,5	6,0	10,0	2	-	27,0	10,0	10,0	13,0	0,300	800	100
290015		10	6	10,5	4,5	6,0	10,0	2	-	28,0	10,0	10,0	15,0	0,500	800	100
290019	**16**	6	8	6,4	5,5	8,5	20,0	2	1	36,0	7,5	8,0	13,0	1,100	500	50
290021		8	8	8,4	5,5	8,5	20,0	2	1	36,0	10,0	10,0	13,0	1,100	400	50
290025		10	8	10,5	5,5	8,5	20,0	2	1	36,0	12,0	12,0	17,0	1,200	400	50
290027		12	8	13,0	5,5	8,5	20,0	2	1	36,0	13,0	13,0	18,0	1,200	400	50
290031	**25**	6	10	6,4	7,0	10,0	20,0	2	1	38,0	7,5	8,0	14,0	1,300	300	50
290033		8	10	8,4	7,0	10,0	20,0	2	1	38,0	10,0	10,0	16,0	1,400	300	50
290035		10	10	10,5	7,0	10,0	20,0	2	1	38,0	12,0	12,0	17,0	1,600	300	50
290037		12	10	13,0	7,0	10,0	20,0	2	1	38,0	13,0	13,0	19,0	1,400	300	50
290039	**35**	6	12	6,4	8,2	12,5	20,0	2	1	42,0	7,5	8,0	17,0	2,700	150	25
290042		8	12	8,4	8,2	12,5	20,0	2	1	42,0	10,0	10,0	17,0	2,900	150	15
290044		10	12	10,5	8,2	12,5	20,0	2	1	42,0	12,0	12,0	19,0	3,000	150	25
290049		12	12	13,0	8,2	12,5	20,0	2	1	42,0	13,0	13,0	21,0	2,800	150	25
290050	**50**	8	14	8,4	10,0	14,5	28,0	3	1	52,0	10,0	10,0	20,0	4,500	100	25
290051		10	14	10,5	10,0	14,5	28,0	3	1	52,0	12,0	12,0	22,0	4,400	100	25
290052		12	14	13,0	10,0	14,5	28,0	3	1	52,0	13,0	13,0	24,0	4,400	100	25
290053		16	14	17,0	10,0	14,5	28,0	3	1	52,0	16,0	16,0	28,0	4,300	100	20
290054	**70**	8	16	8,4	11,5	16,5	28,0	3	1	55,0	10,0	10,0	24,0	5,900	100	25
290055		10	16	10,5	11,5	16,5	28,0	3	1	55,0	12,0	12,0	24,0	6,000	100	25
290056		12	16	13,0	11,5	16,5	28,0	3	1	55,0	13,0	13,0	24,0	5,300	100	25
290057		16	16	17,0	11,5	16,5	28,0	3	1	55,0	16,0	16,0	30,0	5,600	80	20
290058	**95**	10	18	10,5	13,5	19,0	35,0	4	2	65,0	12,0	12,0	28,0	8,900	60	15
290059		12	18	13,0	13,5	19,0	35,0	4	2	65,0	13,0	13,0	28,0	8,500	60	15
290060		16	18	17,0	13,5	19,0	35,0	4	2	65,0	16,0	16,0	32,0	8,700	60	15
290061	**120**	10	20	10,5	15,5	21,0	35,0	4	2	70,0	15,0	16,0	32,0	11,100	40	20
290063		12	20	13,0	15,5	21,0	35,0	4	2	70,0	16,0	17,0	32,0	11,000	40	20
290064		16	20	17,0	15,5	21,0	35,0	4	2	70,0	19,0	20,0	32,0	10,600	40	20
290065		20	20	21,0	15,5	21,0	35,0	4	2	70,0	21,0	22,0	38,0	11,100	30	20
290066	**150**	10	22	10,5	17,0	23,5	35,0	4	2	78,0	15,0	16,0	34,0	15,800	30	15
290067		12	22	13,0	17,0	23,5	35,0	4	2	78,0	16,0	17,0	34,0	15,600	30	15
290068		16	22	17,0	17,0	23,5	35,0	4	2	78,0	19,0	20,0	34,0	15,700	30	15
290069		20	22	21,0	17,0	23,5	35,0	4	2	78,0	21,0	22,0	40,0	15,800	24	12
290070	**185**	10	25	10,5	19,0	25,5	40,0	4	2	82,0	15,0	16,0	37,0	17,200	24	10
290071		12	25	13,0	19,0	25,5	40,0	4	2	82,0	16,0	17,0	37,0	18,300	24	10
290072		16	25	17,0	19,0	25,5	40,0	4	2	82,0	19,0	20,0	37,0	17,700	24	10
290073		20	25	21,0	19,0	25,5	40,0	4	2	82,0	21,0	22,0	40,0	18,900	20	10
290074	**240**	12	28	13,0	21,5	29,0	40,0	5	2	92,0	16,0	17,0	42,0	26,400	16	8
290075		16	28	17,0	21,5	29,0	40,0	5	2	92,0	19,0	20,0	42,0	26,900	16	8
290076		20	28	21,0	21,5	29,0	40,0	5	2	92,0	21,0	22,0	45,0	26,900	16	8
290077	**300**	16	32	17,0	24,5	32,0	50,0	-	2	100,0	19,0	22,0	46,0	33,000	8	4
290078		20	32	21,0	24,5	32,0	50,0	-	2	100,0	19,0	22,0	46,0	33,000	8	4
290079	**400**	16	38	17,0	27,5	38,5	70,0	-	3	115,0	25,0	25,0	55,0	70,200	6	6
290080		20	38	21,0	27,5	38,5	70,0	-	3	115,0	25,0	25,0	54,0	45,100	6	6
290081	**500**	20	42	21,0	31,0	42,0	70,0	-	3	125,0	25,0	25,0	60,0	76,600	6	6
290082	**625**	20	44	21,0	34,5	44,0	80,0	-	3	125,0	25,0	25,0	64,0	78,000	1	1
290083	**800**	20	52	21,0	40,0	52,0	100,0	-	3	165,0	30,0	30,0	75,0	148,600	1	1
290084	**1000**	20	58	21,0	44,0	58,0	100,0	-	3	165,0	30,0	30,0	83,0	195,200	1	1

RoHS

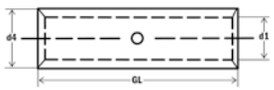
Compression joints acc. to DIN 46267 Part 1 (for non-tension connections)

DIN

- **Material: 99.9% E-Cu DIN 40500**
- **Surface: bare**
- **With marks for correct crimping**
- **Annealed material for easier crimping**

Cu

Art. no.	CSS	Id.	d1	d4	v1	v2	TL	kg/100		PU
291520	**6**	5	3,8	5,5	2	-	30	0,300	1600	100
291522	**10**	6	4,5	6,0	2	-	30	0,600	1000	100
291524	**16**	8	5,5	8,5	2	1	50	1,450	300	50
291526	**25**	10	7,0	10,0	2	1	50	1,700	300	50
291528	**35**	12	8,2	12,5	2	1	50	3,100	200	50
291530	**50**	14	10,0	14,5	3	1	55	4,400	100	25
291532	**70**	16	11,5	16,5	3	1	55	5,300	100	25
291534	**95**	18	13,5	19,0	4	2	70	8,400	50	15
291536	**120**	20	15,5	21,0	4	2	70	9,600	50	25
291538	**150**	22	17,0	23,5	4	2	80	14,500	30	15
291540	**185**	25	19,0	25,5	4	2	85	16,200	30	5
291542	**240**	28	21,5	29,0	5	2	90	22,400	20	10
291544	**300**	32	24,5	32,0	-	2	100	29,500	10	5
291546	**400**	38	27,5	38,5	-	3	150	72,500	6	8
291548	**500**	42	31,0	42,0	-	3	160	85,600	8	5
291550	**625**	44	34,5	44,0	-	3	160	79,900	6	1
291552	**800**	52	40,0	52,0	-	3	200	151,000	6	1
291554	**1000**	58	44,0	58,0	-	3	1000	198,000	6	1



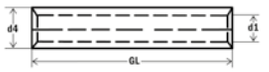
Compression joints acc. to DIN 48085, Part 1 (for full-tension cable connections)

DIN

- **Material: 99.9% E-Cu DIN 40500 • Surface: bare**
- **With marks for correct crimping**
- **Annealed material for easier crimping**
- **For full-tension cable connectiones, overhead line construction**

Cu

Art. no.	CSS	Id.	d1	d4	v1	v2	TL	kg/100		PU
291440	**6**	6	3,8	6,5	8	-	65	1,200		50
291442	**10**	8	4,5	8,5	10	-	80	2,800		50
291444	**16**	8	5,5	8,5	10	-	95	2,300		50
291446	**25**	10	7,0	10,0	10	-	95	2,600		50
291448	**35**	12	8,2	12,5	10	-	95	5,800		25
291450	**50**	14	10,0	14,5	10	-	110	7,000		25
291452	**70**	16	11,5	16,5	10	-	110	9,000		25
291454	**95**	20	13,5	21,0	16	8	145	8,600		10
291456	**120**	22	15,0	23,5	16	8	160	29,200		10
291458	**150**	25	16,5	25,5	16,	8	180	117,100		10
291460	**185**	32	18,5	31,5	-	10	260	17,000		5
291462	**240**	34	21,0	34,5	-	12	310	163,700		5
291464	**300**	38	23,5	38,5	-	14	360	29,200		5



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

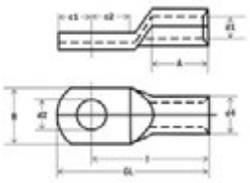
RoHS

Cable lugs acc. to DIN 46235

DIN

- **Material: 99,9% E-Cu DIN 40500**
- **Tube dimension acc. to DIN 46235 • Surface: tin-plated**
- **With marks for correct crimping**
- **Annealed material for easier crimping**

Cu



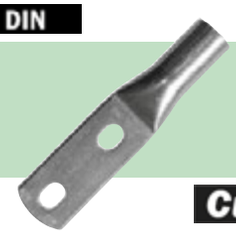
Art. no.	CSS	M	Id.	d2	d1	d4	A	v1	v2	l	c1	c2	B	kg/100		PU
290404	**6**	6	5	6,4	3,8	5,5	10,0	2	-	24,0	7,5	8,0	8,5	0,300	800	100
290406		8	5	8,4	3,8	5,5	10,0	2	-	24,0	10,0	10,0	13,0	0,300	800	100
290408	**10**	5	6	5,3	4,5	6,0	10,0	2	-	27,0	7,0	8,5	9,0	0,400	800	100
290410		6	6	6,4	4,5	6,0	10,0	2	-	27,0	7,5	8,5	9,0	0,400	800	100
290412		8	6	8,4	4,5	6,0	10,0	2	-	27,0	10,0	10,0	13,0	0,400	800	100
290414		10	6	10,5	4,5	6,0	10,0	2	-	28,0	10,0	10,0	15,0	0,400	800	100
290416	**16**	6	8	6,4	5,5	8,5	20,0	2	1	36,0	7,5	8,0	13,0	1,200	500	50
290418		8	8	8,4	5,5	8,5	20,0	2	1	36,0	10,0	10,0	13,0	1,200	400	50
290420		10	8	10,5	5,5	8,5	20,0	2	1	36,0	12,0	12,0	17,0	1,100	400	50
290422		12	8	13,0	5,5	8,5	20,0	2	1	36,0	13,0	13,0	18,0	1,200	400	50
290424	**25**	6	10	6,4	7,0	10,0	20,0	2	1	38,0	7,5	8,0	14,0	1,300	300	50
290426		8	10	8,4	7,0	10,0	20,0	2	1	38,0	10,0	10,0	16,0	1,400	300	50
290428		10	10	10,5	7,0	10,0	20,0	2	1	38,0	12,0	12,0	17,0	1,600	300	50
290430		12	10	13,0	7,0	10,0	20,0	2	1	38,0	13,0	13,0	19,0	1,500	300	50
290432	**35**	6	12	6,4	8,2	12,5	20,0	2	1	42,0	7,5	8,0	17,0	2,700	150	25
290434		8	12	8,4	8,2	12,5	20,0	2	1	42,0	10,0	10,0	17,0	2,900	150	25
290436		10	12	10,5	8,2	12,5	20,0	2	1	42,0	12,0	12,0	19,0	2,900	150	25
290438		12	12	13,0	8,2	12,5	20,0	2	1	42,0	13,0	13,0	21,0	2,700	150	25
290440	**50**	8	14	8,4	10,0	14,5	28,0	3	1	52,0	10,0	10,0	20,0	4,400	100	25
290442		10	14	10,5	10,0	14,5	28,0	3	1	52,0	12,0	12,0	22,0	4,500	100	25
290444		12	14	13,0	10,0	14,5	28,0	3	1	52,0	13,0	13,0	24,0	4,400	100	25
290446		16	14	17,0	10,0	14,0	28,0	3	1	52,0	16,0	16,0	28,0	4,200	100	20
290448	**70**	8	16	8,4	11,5	16,5	28,0	3	1	55,0	10,0	10,0	24,0	5,900	100	25
290450		10	16	10,5	11,5	16,5	28,0	3	1	55,0	12,0	12,0	24,0	5,900	100	25
290452		12	16	13,0	11,5	16,5	28,0	3	1	55,0	13,0	13,0	24,0	5,900	100	25
290454		16	16	17,0	11,5	16,5	28,0	3	1	55,0	16,0	16,0	30,0	5,800	80	20
290456	**95**	10	18	10,5	13,5	19,0	35,0	4	2	65,0	12,0	12,0	28,0	8,800	60	15
290458		12	18	13,0	13,5	19,0	35,0	4	2	65,0	13,0	13,0	28,0	8,900	60	15
290460		16	18	17,0	13,5	19,0	35,0	4	2	65,0	16,0	16,0	32,0	8,700	60	15
290462	**120**	10	20	10,5	15,5	21,0	35,0	4	2	70,0	15,0	16,0	32,0	11,000	40	20
290464		12	20	13,0	15,5	21,0	35,0	4	2	70,0	16,0	17,0	32,0	11,100	40	20
290466		16	20	17,0	15,5	21,0	35,0	4	2	70,0	19,0	20,0	32,0	10,500	40	20
290468		20	20	21,0	15,5	21,0	35,0	4	2	70,0	21,0	22,0	38,0	11,300	25	15
290470	**150**	10	22	10,5	17,0	23,5	35,0	4	2	78,0	15,0	16,0	34,0	15,600	30	15
290472		12	22	13,0	17,0	23,5	35,0	4	2	78,0	16,0	17,0	34,0	15,700	30	15
290474		16	22	17,0	17,0	23,5	35,0	4	2	78,0	19,0	20,0	34,0	15,900	30	15
290476		20	22	21,0	17,0	23,5	35,0	4	2	78,0	21,0	22,0	40,0	16,000	25	25
290478	**185**	10	25	10,5	19,0	25,5	40,0	4	2	82,0	15,0	16,0	37,0	18,000	24	10
290480		12	25	13,0	19,0	25,5	40,0	4	2	82,0	16,0	17,0	37,0	18,400	24	10
290482		16	25	17,0	19,0	25,5	40,0	4	2	82,0	19,0	20,0	37,0	18,400	24	10
290484		20	25	21,0	19,0	25,5	40,0	4	2	82,0	21,0	22,0	40,0	17,700	20	10
290486	**240**	12	28	13,0	21,5	29,0	40,0	5	2	92,0	16,0	17,0	42,0	26,500	16	8
290488		16	28	17,0	21,5	29,0	40,0	5	2	92,0	19,0	20,0	42,0	26,600	16	8
290490		20	28	21,0	21,5	29,0	40,0	5	2	92,0	21,0	22,0	45,0	27,600	10	8
290492	**300**	16	32	17,0	24,5	32,0	50,0	-	2	100,0	19,0	22,0	46,0	34,300	10	5
290494		20	32	21,0	24,5	32,0	50,0	-	2	100,0	19,0	22,0	46,0	33,100	10	5
290496	**400**	16	38	17,0	27,5	38,5	70,0	-	3	115,0	25,0	25,0	54,0	69,800	8	3
290498		20	38	21,0	27,5	38,5	70,0	-	3	115,0	25,0	25,0	54,0	66,400	8	1
290516	**500**	20	42	21,0	31,0	42,0	70,0	-	3	125,0	25,0	25,0	60,0	82,600	8	1
290518	**625**	20	44	21,0	34,5	44,0	80,0	-	3	125,0	25,0	25,0	64,0	79,000	6	1
290520	**800**	20	52	21,0	40,0	52,0	100,0	-	3	165,5	30,0	30,0	75,0	139,400	10	1
290522	**1000**	20	58	21,0	44,0	58,0	100,0	-	3	165,0	30,0	30,0	83,0	195,000	10	1

RoHS

Cable lugs with 2 oval holes acc. to DIN 46235

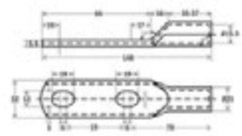
DIN

- **Material: 99,9% E-Cu DIN 40500**
- **Tube dimension acc. to DIN 46235 • Surface: tin-plated**
- **With marks for correct crimping • version with 2 oval holes**
- **Annealed material for easier crimping**



Cu

Art. no.	CSS	M	ld.	d2	d1	d4	A	l	c1	c2	kg/100	PU
290550	**70**	12	16	13,0	11,5	16,5	28,0	55,0	13,0	13,0	10,800	25
290552	**95**	12	18	13,0	13,5	19,0	35,0	65,0	13,0	13,0	14,800	20
290554	**120**	12	20	13,0	15,5	21,0	35,0	70,0	16,0	17,0	18,600	25
290556	**150**	12	22	13,0	17,0	23,5	35,0	78,0	16,0	17,0	26,200	25
290558	**185**	12	25	13,0	19,0	25,5	40,0	82,0	16,0	17,0	26,800	10
290560	**240**	12	28	13,0	21,5	29,0	40,0	92,0	16,0	17,0	40,200	10



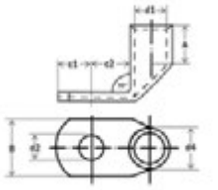
Angled cable lugs 90° acc. to DIN 46325

DIN

- **Material: 99,9% E-Cu DIN 40500**
- **Tube dimension acc. to DIN 46235 • Surface: tin-plated**
- **With marks for correct crimping**
- **Annealed material for easier crimping**

Cu

Art. no.	CSS	M	ld.	d2	d1	d4	A	v1	v2	c1	c2	kg/100	PU
291700	**6**	5	5	5,3	3,8	5,5	10,0	2	-	6,5	9,0	0,400	100
291702		6	5	6,4	3,8	5,5	10,0	2	-	7,5	10,0	0,300	100
291704	**10**	5	6	5,3	4,5	6,0	10,0	2	-	7,0	10,0	0,400	100
291706		6	6	6,4	4,5	6,0	10,0	2	-	7,5	10,0	0,500	100
291708		8	6	8,4	4,5	6,0	10,0	2	-	10,0	13,0	1,100	100
291710	**16**	6	8	6,4	5,5	8,5	20,0	2	1	7,5	11,0	1,200	50
291712		8	8	8,4	5,5	8,5	20,0	2	1	10,0	13,0	1,100	50
291714		10	8	10,5	5,5	8,5	20,0	2	1	12,0	15,0	1,200	50
291716		12	8	13,0	5,5	8,5	20,0	2	1	13,0	18,0	1,200	50
291718	**25**	6	10	6,4	7,0	10,0	20,0	2	1	7,5	11,0	1,500	50
291720		8	10	8,4	7,0	10,0	20,0	2	1	10,0	13,0	1,500	50
291722		10	10	10,5	7,0	10,0	20,0	2	1	12,0	15,0	1,500	50
291724		12	10	13,0	7,0	10,0	20,0	2	1	13,0	18,0	1,500	50
291726	**35**	8	12	8,4	8,2	12,5	20,0	2	1	10,0	13,0	2,600	25
291728		10	12	10,5	8,2	12,5	20,0	2	1	12,0	15,0	2,900	25
291730		12	12	13,0	8,2	12,5	20,0	2	1	13,0	18,0	2,900	25
291732	**50**	8	14	8,4	10,0	14,0	28,0	3	1	10,0	16,0	4,100	25
291734		10	14	10,5	10,0	14,0	28,0	3	1	12,0	16,0	4,200	20
291736		12	14	13,0	10,0	14,5	28,0	3	1	13,0	18,0	4,500	20
291738		16	14	17,0	10,0	14,5	28,0	3	1	16,0	22,0	4,100	20
291740	**70**	8	16	8,4	11,5	16,5	28,0	3	1	10,0	14,0	5,400	30
291742		10	16	10,5	11,5	16,5	28,0	3	1	12,0	16,0	5,500	30
291744		12	16	13,0	11,5	16,5	28,0	3	1	13,0	18,0	6,000	15
291746		16	16	17,0	11,5	16,5	28,0	3	1	16,0	22,0	5,600	30
291748	**95**	10	18	10,5	13,5	19,0	35,0	4	2	12,0	17,0	8,400	10
291750		12	18	13,0	13,5	19,0	35,0	4	2	13,0	18,0	8,700	10
291752		16	18	17,0	13,5	19,0	35,0	4	2	16,0	22,0	8,700	10
291754	**120**	10	20	10,5	15,5	21,0	35,0	4	2	15,0	17,0	10,000	20
291756		12	20	13,0	15,5	21,0	35,0	4	2	16,0	18,0	10,000	20
291758		16	20	17,0	15,5	21,0	35,0	4	2	18,0	22,0	10,200	20
291760		20	20	21,0	15,5	21,0	35,0	4	2	21,0	24,0	9,800	15
291762	**150**	10	22	10,5	17,0	23,5	35,0	4	2	15,0	17,0	13,100	15
291764		12	22	13,0	17,0	23,5	35,0	4	2	16,0	18,0	13,200	15
291766		16	22	17,0	17,0	23,5	35,0	4	2	19,0	22,0	14,100	15
291768		20	22	21,0	17,0	23,5	35,0	4	2	21,0	24,0	13,700	10
291770	**185**	10	25	10,5	19,0	25,5	40,0	4	2	15,0	22,0	16,400	10
291772		12	25	13,0	19,0	25,5	40,0	4	2	16,0	22,0	15,600	10
291774		16	25	17,0	19,0	25,5	40,0	4	2	19,0	22,0	18,600	10
291776		20	25	21,0	19,0	25,5	40,0	4	2	21,0	24,0	17,500	10
291778	**240**	12	28	13,0	21,5	29,0	40,0	5	2	16,0	22,0	22,400	10
291780		16	28	17,0	21,5	29,0	40,0	5	2	19,0	22,0	22,900	10
291782		20	28	21,0	21,5	29,0	40,0	5	2	21,0	24,0	21,000	10



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

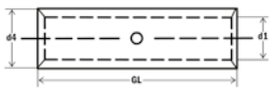
Compression joints acc. to DIN 46267, Part 1 (for non-tension connections)

DIN

- **Material: 99.9% E-CU DIN 40500 • Tube dimension acc. to DIN**
- **Surface: tin-plated • Annealed material for easier crimping**
- **For stranded conductors e.g. VDE 0295 class 2**
- **With buttmarks for precise cable insertion**

Cu

Art. no.	CSS	Id.	d1	d4	v1	v2	TL	kg/100		PU
291521	**6**	5	3,8	5,5	2	-	30	0,300	1600	100
291523	**10**	6	4,5	6,0	2	-	30	0,600	1000	100
291525	**16**	8	5,5	8,5	2	1	50	1,450	300	50
291527	**25**	10	7,0	10,0	2	1	50	1,600	300	50
291529	**35**	12	8,2	12,5	2	1	50	3,000	200	50
291531	**50**	14	10,0	14,5	3	1	55	4,100	100	25
291533	**70**	16	11,5	16,5	3	1	55	5,400	100	25
291535	**95**	18	13,5	19,0	4	2	70	8,300	50	25
291537	**120**	20	15,5	21,0	4	2	70	9,500	50	25
291539	**150**	22	17,0	23,5	4	2	80	14,200	30	15
291541	**185**	25	19,0	25,5	4	2	85	16,900	30	5
291543	**240**	28	21,5	29,0	5	2	90	22,600	20	10
291545	**300**	32	24,5	32,0	-	2	100	29,700	10	5
291547	**400**	38	27,5	38,5	-	3	150	74,000	8	8
291549	**500**	42	31,0	42,0	-	3	160	89,100	5	5
291551	**625**	44	34,5	44,0	-	3	160	79,000	1	1
291553	**800**	52	40,0	52,0	-	3	200	151,300	1	1
291555	**1000**	58	44,0	58,0	-	3	1000	198,000	1	1



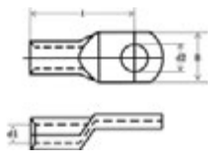
RoHS

Tubular cable lugs of pure nickel, ring type

- **Material: nickel**
- **Temperature resistant to 500° C**

Ni

Art. no.	CSS	M	d2	d1	A	l	kg/100	PU
292560	**0,5-1,0**	4	4,3	1,6	13,0	6,0	0,105	100
292562		5	5,3	1,6	14,0	6,0	0,086	100
292564	**1,5-2,5**	4	4,3	2,3	13,0	6,0	0,109	100
292566		5	5,3	2,3	14,0	6,0	0,122	100
292568		6	6,5	2,3	16,0	6,0	0,134	100
292570	**4-6**	4	4,3	3,6	18,0	8,0	0,300	100
292572		5	5,3	3,6	19,0	8,0	0,200	100
292574		6	6,5	3,6	19,0	8,0	0,300	100

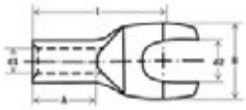


Tubular terminals of pure nickel, forke type

- **Material: nickel**
- **Temperature resistant to 500° C**

Ni

Art. no.	CSS	M	d2	d1	A	l	kg/100	PU
292580	**0,5-1,0**	4	4,3	1,6	13,0	6,0	0,073	100
292582		5	5,3	1,6	14,0	6,0	0,070	100
292584	**1,5-2,5**	4	4,3	2,3	13,0	6,0	0,100	100
292586		5	5,3	2,3	14,0	6,0	0,100	100
292588		6	6,5	2,3	16,0	6,0	0,110	100
292590	**4,0-6,0**	4	4,3	3,6	18,0	8,0	0,300	100
292592		5	5,3	3,6	19,0	8,0	0,300	100

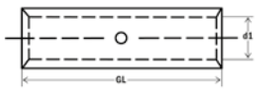


Butt-connectors, made from pure nickel

- **Material: nickel**
- **Temperature resistant to 500° C**
- **With buttmarks for precise able insertion**

Ni

Art. no.	CSS	d1	TL	kg/100	PU
292596	**0,5 - 1,0**	1,6	15	0,101	100
292598	**1,5 - 2,5**	2,3	15	0,110	100
292600	**4 - 6**	3,6	15	0,190	100



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

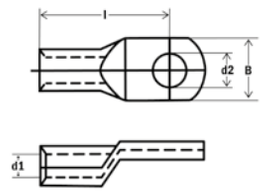
Al compression cable lugs

DIN

- Material: Al 99,5% • Surface: bare • Tube dimension to DIN 46329
- With marks for correct crimping
- For non-tension connections of Al-cables DIN 48201, part 1 and DIN EN 50182
- For pre-rounded sm/se sector shaped conductors • including contact grease

Al

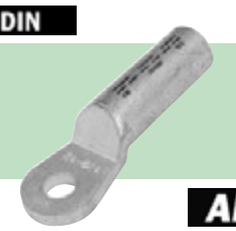
Art. no.	CSS rm/sm	se	M	ld.	d2	d1	v1	v2	l	B	kg/100	PU
292904	**16**	25	8	12	8,5	5,8	4	2	52,0	18,0	1,400	50
292906			10	12	10,5	5,8	4	2	52,0	18,0	1,400	50
292908	**25**	35	8	12	8,5	6,8	4	2	60,0	18,0	1,400	50
292910			10	12	10,5	6,8	4	2	60,0	18,0	1,400	50
292912	**35**	50	10	14	10,5	8,0	5	2	67,0	21,0	2,100	50
292914			12	14	13,0	8,0	5	2	67,0	21,0	2,000	50
292916	**50**	70	10	16	10,5	9,8	5	2	72,0	25,0	2,700	50
292918			12	16	13,0	9,8	5	2	72,0	25,0	2,700	50
292920	**70**	95	10	18	10,5	11,2	6	3	86,0	28,0	4,400	40
292922			12	18	13,0	11,2	6	3	86,0	28,0	4,200	40
292924	**95**	120	10	22	10,5	13,2	6	3	90,0	32,0	6,300	25
292926			12	22	13,0	13,2	6	3	90,0	32,0	6,400	30
292928			16	22	17,0	13,2	6	3	90,0	34,0	6,400	25
292930	**120**	150	12	22	13,0	14,7	6	3	91,0	32,0	6,700	25
292932			16	22	17,0	14,7	6	3	91,0	34,0	7,000	25
292934	**150**	185	12	25	13,0	16,3	6	3	103,0	35,0	9,400	20
292936			16	25	17,0	16,3	6	3	103,0	35,0	8,300	20
292938			20	25	21,0	16,3	6	3	103,0	41,0	9,100	20
292940	**185**	240	12	28	13,0	18,3	6	3	106,0	40,0	11,700	15
292942			16	28	17,0	18,3	6	3	106,0	40,0	11,600	15
292944			20	28	21,0	18,3	6	3	106,0	40,0	12,000	15
292946	**240**	300	12	32	13,0	21,0	8	3	116,0	45,0	16,900	10
292948			16	32	17,0	21,0	8	3	116,0	45,0	16,900	12
292950			20	32	21,0	21,0	8	3	116,0	45,0	16,200	10



Al compression cable lugs acc. to DIN 46329

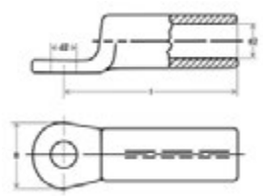
DIN

- Material: Al 99,5% • Surface: bare • Design with oil stop
- Tube dimension to DIN 46329 • With marks for correct crimping
- For non-tension connections of Al-cables DIN 48201, part 1 and DIN EN 50182
- For pre-rounded sm/se sector shaped conductors • Including contact grease



Al

Art. no.	CSS rm/sm	se	M	ld.	d2	d1	v1	v2	l	B	kg/100	PU
292770	**35**	50	10	14	10,5	8,0	5	2	62,0	25,0	2,000	50
292772			12	14	13,0	8,0	5	2	62,0	25,0	2,000	50
292774	**50**	70	10	16	10,5	9,8	5	2	62,0	25,0	2,800	50
292776			12	16	13,0	9,8	5	2	62,0	25,0	2,600	50
292778	**70**	95	10	18	10,5	11,2	6	3	72,0	25,0	3,900	25
292780			12	18	13,0	11,2	6	3	72,0	25,0	3,500	25
292782	**95**	120	10	22	10,5	13,2	6	3	75,0	25,0	5,900	25
292784			12	22	13,0	13,2	6	3	75,0	25,0	5,600	25
292786	**120**	150	12	22	13,0	14,7	6	3	80,0	30,0	6,400	25
292788			16	22	17,0	14,7	6	3	80,0	30,0	6,600	25
292790	**150**	185	10	25	10,5	16,3	6	3	90,0	30,0	8,400	25
292792			12	25	13,0	16,3	6	3	90,0	30,0	8,300	25
292794			16	25	17,0	16,3	6	3	90,0	30,0	8,200	20
292796	**185**	240	10	28	10,5	18,3	6	3	91,0	30,0	10,400	20
292798			12	28	13,0	18,3	6	3	91,0	30,0	10,500	20
292800			16	28	17,0	18,3	6	3	91,0	30,0	12,000	20
292802	**240**	300	12	32	13,0	21,0	8	3	103,0	38,0	16,100	10
292804			16	32	17,0	21,0	8	3	103,0	38,0	15,900	10
292806			20	32	21,0	21,0	8	3	103,0	38,0	15,200	10
292808	**300**	-	12	34	13,0	23,3	8	3	103,0	38,0	17,200	10
292810			16	34	17,0	23,3	8	3	103,0	38,0	18,500	10
292812			20	34	21,0	23,3	8	3	103,0	38,0	17,300	10
292814	**400**	-	12	38	13,0	26,0	-	4	116,0	38,0	24,700	10
292816			16	38	17,0	26,0	-	4	116,0	38,0	23,000	10
292818			20	38	21,0	26,0	-	4	116,0	38,0	23,500	10
292820	**500**	-	12	44	13,0	29,0	-	4	122,0	44,0	43,600	6
292822			16	44	17,0	29,0	-	4	155,0	44,0	33,200	6
292824			20	44	21,0	29,0	-	4	122,0	44,0	43,000	6



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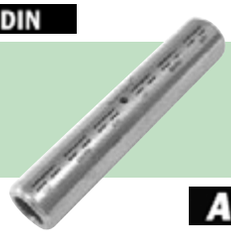
RoHS

Al-Crimp connector DIN 46267 Part 2

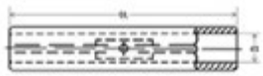
DIN

- **Material: Al 99,5% • Surface: bare • Design with oil stop**
- **Manufactured DIN 46267, part 2 • With marks for correct crimping**
- **For non-tension connections of Al conductors to DIN 48201, DIN EN 50182**
- **For pre-rounded sm/se sector shaped conductors • Including contact grease**



Al

Art. no.	CSS rm/sm	se	d1	v1	v2	TL	Id./Al	kg/100	PU
293542	**25**	35	6,8	8	4	70	12	1,600	100
293544	**35**	50	8,0	10	4	85	14	2,700	100
293546	**50**	70	9,8	10	4	85	16	3,300	50
293548	**70**	95	11,2	12	6	105	18	5,800	50
293550	**95**	120	13,2	12	6	105	22	8,200	25
293552	**120**	150	14,7	12	6	105	22	7,900	25
293554	**150**	185	16,3	12	6	125	25	11,500	25
293556	**185**	240	18,3	12	6	125	28	12,300	20
293558	**240**	300	20,0	16	6	145	32	21,200	15



PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

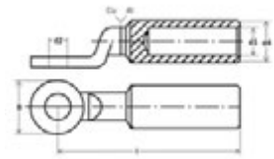
Al and Cu cable lugs, longitudinally sealed

DIN

- **Material: Al 99,5% copper screw-on palm E-Cu 99,9% • Surface: bare**
- **With marking for correct crimping • Barrier design with oil stop • For pre-rounded sector shaped conductors**
- **For non-tension connections of Al-cables DIN 48201, part 1 and DIN EN 50182**
- **including contact grease**

Al.Cu

Art. no.	CSS rm/sm	se	M	ld.	d2	d1	v1	v2	l	B	kg/100	PU
293300	**25**	35	8	12	10,5	6,8	4	2	61,0	23,0	2,600	50
293302			10	12	10,5	6,8	4	2	61,0	23,0	2,500	50
293304			12	12	13,0	6,8	4	2	61,0	23,0	2,900	50
293306	**35**	50	10	14	10,5	8,0	5	2	71,0	23,0	3,200	50
293308			12	14	13,0	8,0	5	2	71,0	23,0	3,500	50
293310	**50**	70	10	16	10,5	9,8	5	2	72,0	25,0	3,400	50
293312			12	16	13,0	9,8	5	2	72,0	25,0	4,100	50
293314	**70**	95	10	18	10,5	11,2	6	3	82,0	26,0	6,100	50
293316			12	18	13,0	11,2	6	3	82,0	26,0	5,500	50
293318	**95**	120	12	22	13,0	13,2	6	3	85,0	30,0	8,200	25
293320			16	22	17,0	13,2	6	3	85,0	30,0	8,500	25
293322	**120**	150	12	22	13,0	14,7	6	3	87,0	30,0	8,500	25
293324			16	22	17,0	14,7	6	3	87,0	30,0	8,700	25
293326	**150**	185	12	25	13,0	16,3	6	3	104,0	36,0	11,000	25
293328			16	25	17,0	16,3	6	3	104,0	36,0	11,200	25
293330	**185**	240	12	28	13,0	18,3	6	3	105,0	36,0	14,100	10
293332			16	28	17,0	18,3	6	3	105,0	36,0	14,300	10
293334	**240**	300	12	32	13,0	21,0	8	3	120,0	36,0	18,000	5
293336			20	32	17,0	21,0	8	3	120,0	36,0	29,000	5
293338	**300**	300	12	34	13,0	23,3	8	3	120,0	38,0	35,000	5



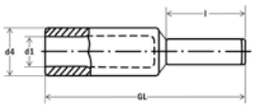
Al/Cu non-tension compession joints with Cu bolt

DIN

- **Material: Al 99,5% E-Cu 99,9% • Surface: bare • Marking for correct crimping**
- **Barrier design with oil stop • For pre-rounded sector shaped conductors**
- **For non-tension connections of Al-cables DIN 48201, part 1 and DIN EN 50182**
- **For non-tension Al-connections in Cu clamps • including contact grease**

Al.Cu

Art. no.	CSS rm/sm	se	d1	d4	TL	l	Øbo.	Ørope	ld./Al	kg/100	PU
293960	**25**	35	6,8	12,0	58	20,0	6	6,3	12	1,600	1
293962	**35**	35	8,0	14,0	71	22,0	7	7,5	14	2,800	1
293964	**50**	50	10,0	16,0	74	25,0	8	9,0	16	3,800	1
293966	**70**	70	11,5	18,5	87	30,0	10	10,0	18	5,400	1
293968	**95**	120	13,2	23,0	91	33,0	12	12,5	22	10,600	1
293970	**120**	150	15,0	23,0	97	38,0	12	14,0	22	9,000	1
293972	**150**	185	16,5	25,5	108	38,0	12	15,8	25	10,900	1
293974	**185**	240	18,5	28,5	116	44,0	14	17,5	28	15,700	1
293976	**240**	300	21,5	32,5	128	44,0	16	20,3	32	17,000	1
293978	**300**	-	23,5	34,5	131	46,0	18	22,5	34	23,200	1



RoHS

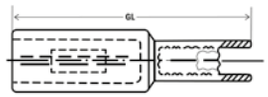
Al-Cu reducing connectors

DIN

- for connections with tension relief of Al/Cu conductors to DIN 28201
- Material: Al 99,5%, DIN 40501, E-Cu DIN 40500
- Surface: bare pickled
- including contact grease

Al.Cu

Art. no.	CSS rm/sm	rm/sm CU	se	TL	Cu	Al	Id./Cu	Id./Al	kg/100	PU
293578	**25**	**16**	35	61	5,5	7,6	8	12	1,600	10
293582	**35**	**16**	50	71	5,5	8,0	8	14	2,100	10
293584		**25**		71	0,0	8,0	10	14	2,500	10
293598	**50**	**25**	70	71,5	7,0	9,8	10	16	3,100	10
293600		**35**		71,5	8,2	9,8	12	16	3,300	10
293606	**70**	**25**	95	79	7,0	11,2	10	18	4,400	10
293608		**35**		79	8,2	11,2	12	18	5,500	10
293610		**50**		85	10,0	11,2	14	18	5,700	10
293622	**95**	**35**	120	79	8,2	13,2	12	22	6,000	5
293624		**50**		85	10	13,2	14	22	8,900	5
293626		**70**		87	11,5	13,2	16	22	8,200	5
293634	**120**	**50**	150	87	10,0	14,7	14	22	7,900	5
293636		**70**		89	11,5	14,7	16	22	9,500	5
293638		**95**		97	13,5	14,7	18	22	10,000	5
293652	**150**	**95**	185	107,5	13,5	16,3	18	25	11,700	5
293654		**120**		107,5	15,5	16,3	20	25	14,200	5
293656		**150**		124,0	17,5	16,3	22	25	16,700	5
293664	**185**	**120**	240	108	15,5	18,3	20	28	16,930	5
293666		**150**		113	17,0	18,3	22	28	19,500	5
293678	**240**	**150**	300	124	17,0	21,0	22	32	23,300	5
293680		**185**		127	19,0	21,0	25	32	25,500	5
293688	**300**	**185**	400	128	185	19,0	25	34	32,700	5
293690		**240**		128	21,5	23,5	28	34	37,500	5



Cupal washer

- Compound material made from aluminium and copper
- Galvanic isolation between Cu and Al
- Processing only in a dry environment
- Al-sided plated with Cu

Al.Cu

Art. no.	Ø	s1	kg/100	PU
293810	10	1	11,100	50
293812	12	2	11,100	50
293814	14	2	11,100	50
293816	16	2	11,100	50

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Screw terminals

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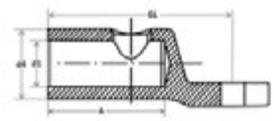
RoHS

AL screw terminals medium voltage 10-30 KV

- **Material: AL 99,5%**
- **for tension relief connections of Al medium-voltage cables**
- **Tin-plated surface**

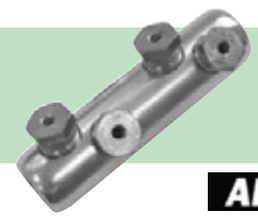
Al

Art. no.	CSS	M	d1	d4	A	TL		kg/100	PU
293140	**16-95**	12	12,5	24,0	32,0	60	1	6,400	1
293142	**50-150**	12	15,5	30,0	35,0	79	1	13,900	1
293144		16	15,5	30,0	35,0	79	1	14,500	1
293146	**95-240**	12	20,0	33,0	56,0	95	2	23,700	1
293148		16	20,0	33,0	56,0	95	2	24,400	1
293150	**120-300**	12	25,0	38,0	67,0	100	2	33,300	1
293152		16	25,0	38,0	67,0	100	2	32,700	1
293154	**185-400**	12	26,0	42,0	82,0	115	3	48,000	1
293156		16	26,0	42,0	82,0	115	3	48,200	1



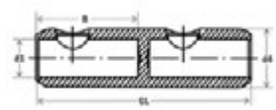
AL screw connectors medium voltage

- **Material: AL 99,5%**
- **Screws: Tin-galvanised brass**
- **Tin-plated surface**



Al

Art. no.	CSS	d1	d4	TL		kg/100	PU
293130	**16-95**	12,5	24,0	70	2	9,800	1
293132	**50-150**	15,5	30,0	85	2	17,700	1
293134	**95-240**	20,0	33,0	120	4	33,500	1
293136	**120-300**	25,0	38,0	142	4	49,000	1
293138	**185-400**	26,0	42,0	170	6	78,900	1



	CSS					
	AL			CU		
	rm	re	sm	rm	sm	
Terminals	16 - 95	16.50/95	25 - 70	16 - 95	25 - 70	1
	50 - 150	50 - 150	50 - 120	35 - 120	50 - 120	1
	95 - 240	95 - 240	95 - 185	95 - 240	95 - 185	2
	120 - 300	120 - 300	120 - 240	120 - 300	120 - 240	2
	155 - 400	185 - 240/400	185 - 300	185 - 300	185 - 300	3
Connectors	16 - 95	16.50/95	25 - 70	16 - 95	25 - 70	2
	50 - 150	50 - 150	50 - 120	35 - 120	50 - 120	2
	95 - 240	95 - 240	95 - 185	95 - 240	95 - 185	4
	120 - 300	120 - 300	120 - 240	120 - 300	120 - 240	4
	155 - 400	185 - 240/400	185 - 300	185 - 300	185 - 300	6

Screw lugs and connectors

Screw connectors are a reliable and economic way of connecting identical or different conductor cross-sections. They can be used up to 36kV. All lugs and connectors are fitted with torque-limited shear-off screws. The actual cross-section of the cable does not need to be known, because each screw lug or connector covers many cable sizes. This results in simplified logistics, a small stock of lugs will cover a wide range of applications. Also, the tin-plated surface means that they can be used on both copper and aluminium cables.

The principle of multiple tear-off screws

The screws of the Haupa screw lugs and connectors have a hexagon head and socket, which clamps the conductor cross-section with optimal clamping torque and therefore reduces assembly time. As the screw is tightened it will shear off when correct torque is reached and a good joint is made.

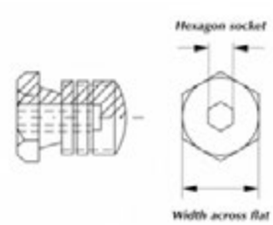
Advantages of the tear-off screw

- simple assembly
- the screw head shears off when clamping torque is right
- no torque key required
- screw can be detached using the hexagon socket

1. The screw is fitted with several tear-off spots, with different shear-off torque, a hexagon head and socket.

2. The tear-off torques are defined in such as way that generally the biggest conductor cross-section is clamped with the biggest clamping torque and the smaller conductor cross-section with the smaller clamping torque. This happens by allocating hexagon head and socket.

3. Assembly is much simpler than with the telescopic screw, because each screw needs to be pulled and torn off only once.



Video

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Tubular cable lugs assortment standard

Content: 380 crimping terminals, crimping pliers (art. 210805), crimp standard 6 - 50 mm², hexagon crimping, in plastic bulk storage chest 420 x 350 x 60 mm.

50 crimping terminal, 6, M6, art. 290934
50 crimping terminal, 6, M8, art. 290936
50 crimping terminal, 10, M6, art. 290940
50 crimping terminal, 10, M8, art. 290942
30 crimping terminal, 16, M8, art. 290952
40 crimping terminal, 16, M10, art. 290954
25 crimping terminal, 25, M8, art. 290960
25 crimping terminal, 25, M10, art. 290962
20 crimping terminal, 35, M8, art. 290968
20 crimping terminal, 35, M10, art. 290970
20 crimping terminal, 50, M8, art. 290978

Art. no.	Content	Type	kg	PU
290380	380	standard	6,000	1

Assortment of tubular terminals, standard

Content: 1.200 crimping terminals, crimping pliers (art. 210830), crimp 0,75-16 mm², mandrel shape crimping, in plastic bulk storage chest 420 x 350 x 60 mm.

100 crimping terminal, 4, M5, art. 290924
100 crimping terminal, 4, M6, art. 290926
100 crimping terminal, 6, M6, art. 290934
100 crimping terminal, 10, M8, art. 290942
100 crimping terminal, 10, M10, art. 290944
50 crimping terminal, 16, M8, art. 290952
50 crimping terminal, 16, M10, art. 290954
100 crimping terminal, 2,5, M6, art. 290918
100 crimping terminal, 2,5, M5, art. 290916
100 crimping terminal, 1,5, M5, art. 290908
100 crimping terminal, 1,5, M4, art. 290906
100 crimping term., 0,75, M4, art. 290902
100 crimping term., 0,75, M3, art. 290900

Art. no.	Content	kg	PU
290381	1200	6	1

Tubular cable lugs assortment DIN 46235

Content: 380 crimping terminals, crimping pliers (art. 210805K), crimp DIN 6 - 50 mm², hexagon crimping, in plastic bulk storage chest 420 x 350 x 60 mm.

50 Crimping terminal DIN 46235, 6, M6, art. 290404
50 Crimping terminal DIN 46235, 6, M8, art. 290406
50 Crimping terminal DIN 46235, 10, M6, art. 290410
50 Crimping terminal DIN 46235, 10, M8, art. 290412
30 Crimping terminal DIN 46235, 16, M8, art. 290418
40 Crimping terminal DIN 46235, 16, M10, art. 290420
25 Crimping terminal DIN 46235, 25, M8, art. 290426
25 Crimping terminal DIN 46235, 25, M10, art. 290428
20 Crimping terminal DIN 46235, 35, M8, art. 290434
20 Crimping terminal DIN 46235, 35, M10, art. 290436
20 Crimping terminal DIN 46235, 50, M8, art. 290440

Art. no.	Content	Type	kg	PU
290382	380	DIN	6,600	1

Assortment of ring terminals, uninsulated

Content: 1.400 crimping terminals, crimping pliers (art. 210774), crimp 1,0-16 mm², mandrel shape crimping, in plastic bulk storage chest 420 x 350 x 60 mm

100 insulated ring terminals DIN, 16, M10, art. 290670
100 insulated ring terminals DIN, 16, M8, art. 290668
100 insulated ring terminals DIN, 16, M6, art. 290666
100 insulated ring terminals DIN, 10, M10, art. 290662
100 insulated ring terminals DIN, 10, M8, art. 290660
100 insulated ring terminals DIN, 10, M6, art. 290658
100 insulated crimp terminals type ring 2,5-6, M8, art. 290642
100 insulated ring terminals DIN, 6, M6, art. 290648
100 insulated crimp terminals type ring, 2,5-6, M5, art. 290638
100 insulated crimp terminals type ring, 1,5-2,5, M6, art. 290632
100 insulated crimp terminals type ring, 1,5-2,5, M5, art. 290630
100 insulated crimp terminals type ring, 1,5-2,5, M4, 290628
100 insulated crimp terminals type ring, 0,25-1,5, M5, 290624
100 insulated crimp terminals type ring, 0,25-1,5, M4, 290622

Art. no.	Content	kg	PU
290386	1400	6,000	1

RoHS

Assortment of ring terminals, uninsulated

Content: 900 crimping terminals, crimping pliers (art. 210764), crimp 1,0-10 mm², mandrel shape crimping, in plastic bulk storage chest
420 x 350 x 60 mm.
100 insulated crimp terminals type ring, 0,25-1,5, M4, art. 290622
100 insulated crimp terminals type ring, 0,25-1,5, M5, art. 290624
100 insulated crimp terminals type ring, 1,5-2,5, M4, art. 290628
100 insulated crimp terminals type ring, 1,5-2,5, M5, art. 290630
100 insulated crimp terminals type ring, 1,5-2,5, M6, art. 290632
100 insulated crimp terminals type ring, 2,5-6, M5, art. 290638
100 insulated ring terminals DIN, 6, M6, art. 290648
100 insulated ring terminals DIN, 10, M6, art. 290658
100 insulated ring terminals DIN, 10, M8, art. 290660

Art. no.	Content	kg	PU
290387	900	6,000	1

Assortment of tubular terminals, light

Content: 1.100 crimping terminals, crimping pliers (art. 210830), crimp 0,75-16 mm², mandrel shape crimping, in plastic bulk storage chest
420 x 350 x 60 mm.
100 Tube terminals, light, 10, M10, art. 294040
100 Tube terminals, light, 16, M8, art. 294048
100 Tube terminals, light, 10, M6, art. 294036
100 Tube terminals, light, 6, M5, art. 294024
100 Tube terminals, light, 6, M6, art. 294026
100 Tube terminals, light, 16, M10, art. 294050
100 Tube terminals, light, 2,5, M4, art. 294006
100 Tube terminals, light, 1,5, M4, art. 294000
100 Tube terminals, light, 2,5, M6, art. 294010
100 Tube terminals, light, 1,5, M5, art. 294002
100 Tube terminals, light, 2,5, M5, art. 294008

Art. no.	Content	kg	PU
294240	1100	6,000	1

Assortment of ring terminals, uninsulated

Content: 1.400 crimping terminals, crimping pliers (art. no. 210830), crimp 0,75-16 mm², mandrel shape crimping, in plastic bulk storage chest
420 x 350 x 60 mm.
100 insulated ring terminals DIN, 16, M10, art. 290670
100 insulated ring terminals DIN, 16, M8, art. 290668
100 insulated ring terminals DIN, 16, M6, art. 290666
100 insulated ring terminals DIN, 10, M10, art. 290662
100 insulated ring terminals DIN, 10, M8, art. 290660
100 insulated ring terminals DIN, 10, M6, art. 290658
100 insulated crimp terminals type ring, 2,5-6 M8, art. 290642
100 insulated ring terminals DIN, 46234 6, M6, art. 290648
100 insulated crimp terminals type ring, 2,5-6, M5, art. 290638
100 insulated crimp terminals type ring, 1,5-2,5, M6, art. 290632
100 insulated crimp terminals type ring, 1,5-2,5, M5, art. 290630
100 insulated crimp terminals type ring, 1,5-2,5, M4, art. 290628
100 insulated crimp terminals type ring, 0,25-1,5, M5, art. 290624
100 insulated crimp terminals type ring 0,25-1,5 M4, art. 290622

Art. no.	Content	kg	PU
290385	1400	6,000	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

SysCon cable lugs DIN & 210805 K

SysCon

Content: 380 cable lugs DIN 46235, tinned

1	220370	ABS plastic box „SysCon S”
2	220376	Foam „SysCon” 400 x 300 x 15 mm
1	500270	Foam for sets 160 x 400 mm
1	210805 K	Crimping pliers hexagonal crimping 6 – 50 mm²

50	290404	Cable lugs DIN	6	M6
50	290406	Cable lugs DIN	6	M8
50	290410	Cable lugs DIN	10	M6
50	290412	Cable lugs DIN	10	M8
30	290418	Cable lugs DIN	16	M8
40	290420	Cable lugs DIN	16	M10
25	290426	Cable lugs DIN	25	M8
25	290428	Cable lugs DIN	25	M10
20	290434	Cable lugs DIN	35	M8
20	290436	Cable lugs DIN	35	M10
20	290440	Cable lugs DIN	50	M8

Art. no.	Content	Type	kg	PU
220385	380	DIN	4,300	1

SysCon cable lugs standard & 210805

SysCon

Content: 380 cable lugse standard, tinned

1	220370	ABS plastic box „SysCon S”
2	220376	Foam „SysCon” 400 x 300 x 15 mm
1	500270	Foam for sets 160 x 400 mm
1	210805	Crimping plier hexagonal crimping 6 – 50 mm²

50	290934	Cable lugs standard	6	M6
50	290936	Cable lugs standard	6	M8
50	290940	Cable lugs standard	10	M6
50	290942	Cable lugs standard	10	M8
30	290952	Cable lugs standard	16	M8
40	290954	Cable lugs standard	16	M10
25	290960	Cable lugs standard	25	M8
25	290962	Cable lugs standard	25	M10
20	290968	Cable lugs standard	35	M8
20	290970	Cable lugs standard	35	M10
20	290978	Cable lugs standard	50	M8

Art. no.	Content	Type	kg	PU
220386	380	standard	4,300	1

RoHS

SysCon cable lugs DIN 46235

SysCon

Content: 389 cable lugs DIN, tinned

1	220370	ABS plastic box „SysCon S”
2	220376	Foam „SysCon” 400 x 300 x 15 mm

100	290404	Cable lugs DIN	6	M6
100	290412	Cable lugs DIN	10	M8
50	290418	Cable lugs DIN	16	M8
50	290426	Cable lugs DIN	25	M8
25	290434	Cable lugs DIN	35	M8
18	290442	Cable lugs DIN	50	M10
12	290450	Cable lugs DIN	70	M10
10	290458	Cable lugs DIN	95	M12
12	290464	Cable lugs DIN	120	M12
4	290472	Cable lugs DIN	150	M12
4	290480	Cable lugs DIN	185	M12
4	290486	Cable lugs DIN	240	M12

Art. no.	Content	Type	kg	PU
220387	389	DIN	4,300	1

SysCon cable lugs standard

SysCon

Content: 389 cable lugs standard

1	220370	ABS plastic box „SysCon S”
2	220376	Foam „SysCon” 400 x 300 x 15 mm

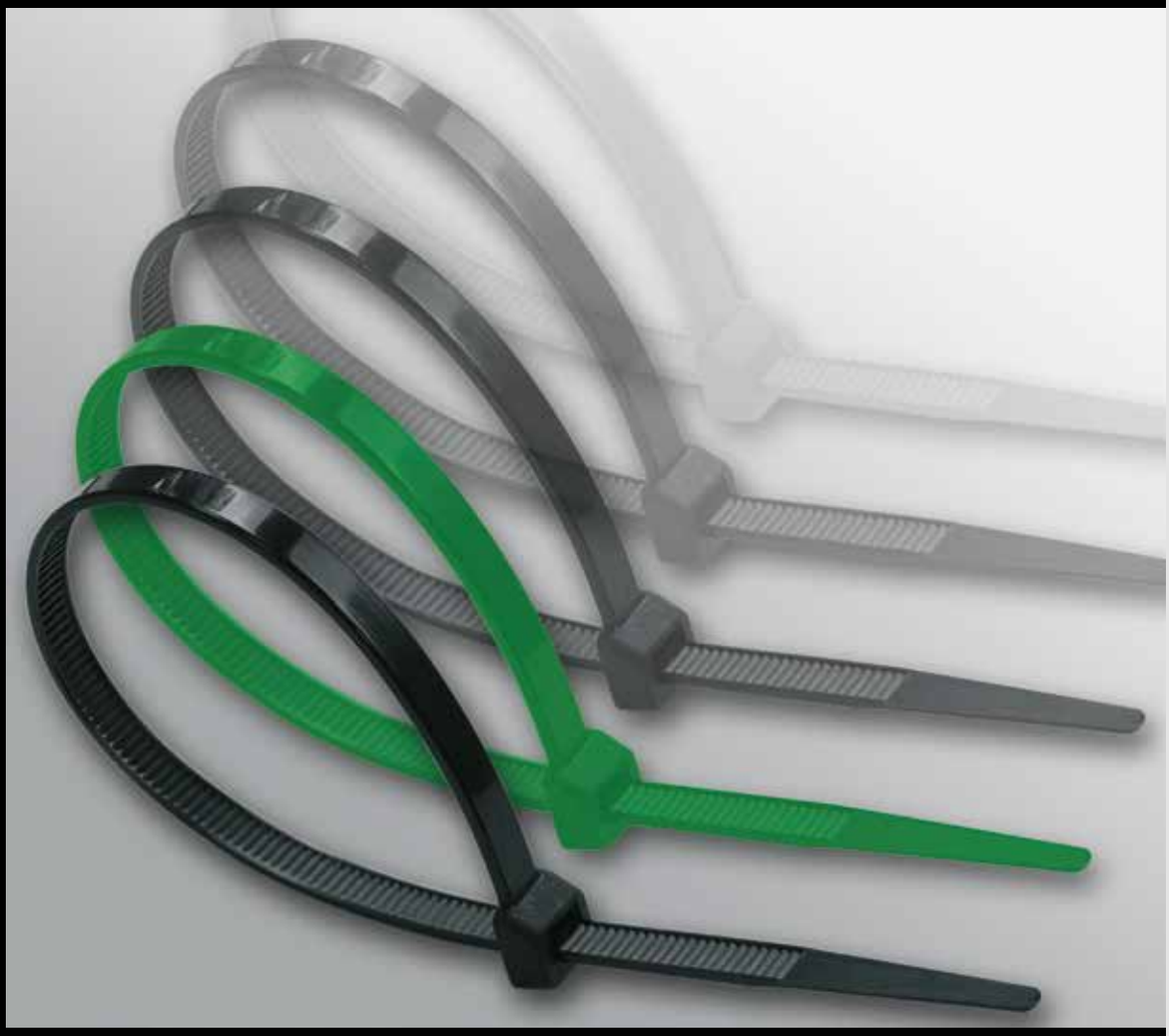
100	290934	Cable lugs standard	6	M6
100	290942	Cable lugs standard	10	M8
50	290952	Cable lugs standard	16	M8
50	290960	Cable lugs standard	25	M8
25	290968	Cable lugs standard	35	M8
18	290980	Cable lugs standard	50	M10
12	290988	Cable lugs standard	70	M10
10	290998	Cable lugs standard	95	M12
12	290008	Cable lugs standard	120	M12
4	290016	Cable lugs standard	150	M12
4	290022	Cable lugs standard	185	M12
4	290028	Cable lugs standard	240	M12

Art. no.	Content	Type	kg	PU
220388	389	standard	4,300	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable ties, accessories



haupa®

... convincing solutions

INFO

Cable ties

HAUPA cable ties are characterised by their tightness, high tensile strength of the loop and extreme flexibility of the cord.
As a result of these characteristics, HAUPA cable ties are able to cope with even the most extreme installation practices, which conventional cable ties would not be able to cope with. All HAUPA cable ties conform to WEEE/RoHS guidelines.

The cable ties product range includes:

- **cable ties**
  colour: transparent/black
- **cable ties**
  colour: black (UV-resistant)
- **releasable ties**
  colour: black
- **double-locking cable ties**
  colour: black
- **cable ties with fixing eye**
  colour: transparent
- **cable ties with label**
  colour: transparent
- **hook and loop ties**
  colour: black, green

Accessories:
- adhesive base, screw base, plug mount base

Ideal storage conditions for cable ties made from nylon
Cable ties are made from high-quality nylon. This technical plastic is usually processed through injection moulding, but it can also be extruded. Nylon is a hygroscopic plastic that absorbs water and can release it. In order to process the ties optimally, it is important that the material is in a balanced state with a water content of approx. 2.5%. The original HAUPA cable tie packaging provides constant water content in the material.

The cable ties should be stored as follows:

Storage in a closed plastic bag made from polyethylene

No direct sunlight

Storage without direct exposure to heat (radiator etc.)

Ideal storage temperature (standard Central European climatic conditions) up to 23° with 50% humidity 23°C

All HAUPA cable ties are made from plastic and are recyclable. The internal toothing of the ties gives you the necessary strength to tie the material. The cable ties can be simply used by hand or with a HAUPA cable tie tool. The slightly bent end allows the tie to be inserted into the head easily.
Use: For bundling and fastening cables, wires and tubes. NH (non-halogen) – RoHS conform

Cable ties

material: nylon, colour transparent, quick and simple to fix by hand or with tensioning tools, extremely resistant to sea water, oil, grease, etc., manufactured in accordance with UL and MIL specification requirements, - 40° C bis 85° C

Art. no.	TL	width			kg/100	PU	PE	
262500/1	75	2,4	15	8	0,035	100	100	30.000
262500	96	2,5	23	8	0,028	100	100	30.000
262502	100	2,5	25	8	0,030	100	100	25.000
262504	142	2,5	35	8	0,044	100	100	25.000
262506	203	2,5	55	8	0,065	100	100	13.000
262508	142	3,2	35	18	0,083	100	100	10.000
262509/1	203	3,6	53	18	0,100	100	100	10.000
262510/1	250	3,6	68	18	0,150	100	100	6.000
262510	292	3,6	85	18	0,155	100	100	7.000
262512/1	120	4,8	52	22	0,080	100	100	10.000
262515	157	4,8	40	22	0,040	100	100	6.000
262512	188	4,8	54	22	0,143	100	100	8.000
262516	199	4,8	52	22	0,145	100	100	7.000
262518	250	4,8	74	22	0,203	100	100	6.000
262520	302	4,8	84	22	0,220	100	100	5.000
262522	371	4,8	102	22	0,274	100	100	4.000
262523	430	4,8	125	22	0,290	100	100	4.000
262528	200	7,6	54	55	0,300	100	100	2.000
262530	290	7,6	82	55	0,400	100	100	2.000
262532	370	7,6	106	55	0,540	100	100	2.500
262536	425	8,8	115	80	0,760	50	100	500
262537	523	8,8	150	80	0,105	50	100	500
262538	610	8,8	180	80	1,270	50	100	500
262535	774	8,8	220	80	1,050	50	100	600
262540	800	8,8	235	80	1,600	20	100	500
262542	920	8,8	278	80	0,860	50	100	500
262543	1219	9,0	374	80	1,100	20	100	500
262545	246	12,4	64	114	0,860	50	100	500
262546	550	12,7	166	114	1,770	50	100	500
262547	1030	12,7	312	114	3,200	20	100	500

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Cable ties

material: nylon - colour black, all other data and properties like No. 262500 - 46, weather- and UV-resistant

Art. no.	TL	width			kg/100	PU	PE	
262600/1	75	2,4	15	8	0,035	100	100	30.000
262600	96	2,5	23	8	0,040	100	100	30.000
262602	100	2,5	25	8	0,040	100	100	25.000
262604	142	2,5	35	8	0,040	100	100	20.000
262606	203	2,5	55	8	0,080	100	100	10.000
262608	142	3,2	35	18	0,080	100	100	10.000
262609/1	203	3,6	53	18	0,100	100	100	10.000
262610/1	250	3,6	68	18	0,150	100	100	6.000
262610	292	3,6	85	18	0,160	100	100	7.000
262616	203	4,6	52	22	0,150	100	100	6.000
262612/1	120	4,8	27	22	0,080	100	100	10.000
262615	157	4,8	40	22	0,100	100	100	6.000
262618	250	4,8	74	22	0,200	100	100	6.000
262620	310	4,8	89	22	0,240	100	100	5.000
262622	368	4,8	102	22	0,270	100	100	4.000
262623	430	4,8	125	22	0,290	100	100	4.000
262628	203	7,6	55	55	0,300	100	100	2.000
262630	280	7,6	78	55	0,400	100	100	2.000
262632	380	7,6	110	55	0,540	100	100	2.500
262636	450	8,8	133	80	0,880	50	100	500
262637	523	8,8	150	80	1,050	50	100	500
262638	610	8,8	185	80	1,280	50	100	500
262635	774	8,8	220	80	1,050	50	100	600
262640	812	8,8	246	80	1,600	20	100	500
262642	914	8,8	270	80	0,880	50	100	500
262643	1219	9,0	374	80	1,100	20	100	500
262645	246	12,4	64	114	0,860	50	100	500
262646	550	12,7	166	114	1,600	50	100	500
262647	1030	12,7	312	114	0,040	20	100	500

Cable ties “UVplus”

Long-term weather resistant, for industrial uses, black, UV resistant, material - polyamide, **7 year guarantee**

Art. no.	TL	width			kg/100	PU	PE
262950	100	2,5	25	8	0,030	100	100
262952	202	2,5	50	8	0,070	100	100
262954	150	3,3	38	18	0,070	100	100
262956	201	3,6	57	18	0,150	100	100
262958	290	3,6	82	18	0,160	100	100
262960	199	4,8	56	22	0,150	100	100
262962	250	4,8	72	22	0,200	100	100
262964	290	4,8	83	22	0,220	100	100
262966	371	4,8	129	22	0,270	100	100
262968	290	7,6	82	54	0,410	100	100
262970	370	7,6	108	54	0,550	100	100
262972	542	7,6	162	54	0,750	100	100
262974	523	8,8	156	79	1,000	50	100
262976	709	8,8	213	79	1,000	50	100
262978	774	8,8	233	79	1,000	50	100
262980	920	8,8	279	79	1,000	50	100

Cable ties

material: polyamide 6,6 - colour transparent, resistant to milden and rotting, extremely resistant to sea water, oil, grease, hydrocarbons and hydraulic fluids, operating temperature: -40° to +85° C, these binders meet the requirements of the military specification Mil.-Spec. 23 190C (WEP) MS-3367, UL 94 V2

Art. no.	TL	width			kg/100	PU	PE	
262100	100	2,5	23	8	0,031	100	100	25.000
262102	142	3,2	35	18	0,074	100	100	10.000
262101	203	3,6	55	18	0,131	100	100	10.000
262106	203	4,6	55	22	0,150	100	100	7.000
262108	310	4,8	89	22	0,228	100	100	5.000
262110	368	4,8	102	22	0,227	100	100	4.000
262114	380	7,6	110	55	0,560	50	100	2.000
262116	550	12,7	166	114	1,600	50	100	500

Cable ties

material: polyamide 6,6 - colour black, all other data and properties like No. 26 21 00 - 16, resistant to sea water, oil, grease, etc., not UV-resistant

Art. no.	TL	width			kg/100	PU	PE	
262120	100	2,5	25	8	0,003	100	100	25.000
262122	142	3,2	35	18	0,065	100	100	10.000
262124	203	3,6	55	18	0,116	100	100	10.000
262126	203	4,6	55	22	0,145	100	100	6.000
262128	302	4,8	89	22	0,248	100	100	5.000
262130	368	4,8	102	22	0,269	100	100	4.000
262132	280	7,6	78	55	0,397	100	100	2.000
262134	380	7,6	110	55	0,580	50	100	2.000
262136	550	12,7	166	114	1,600	50	100	500

Cable ties

material: nylon - colour transparent, all other data and properties like No. 262500 - 46, big packing unit 1000 pcs.

Art. no.	TL	width			kg/100	PU	PE
262501	96	2,5	23	8	0,028	1000	100
262503	100	2,5	25	8	0,026	1000	100
262505	142	2,5	35	8	0,0310	1000	100
262507	203	2,5	55	8	0,065	1000	100
262509	142	3,2	35	18	0,070	1000	100
262511	292	3,6	85	18	0,158	1000	100
262513	190	4,8	52	22	0,140	1000	100
262517	203	4,6	55	22	0,140	1000	100

RoHS

Releasable cable ties for frequent opening and closing

for temporary wiring and sub-assembly, material: polyamide 6,6 - colour black, operation temperature: -40° to +85° C

Art. no.	TL	width			kg/100	PU	PE
262140	150	7,6	35	22	0,201	100	100
262142	200	7,6	50	22	0,249	100	100
262144	300	7,6	80	22	0,349	100	100

Double-locking-cable ties

material: nylon - colour black, (262710 Nylon 12).

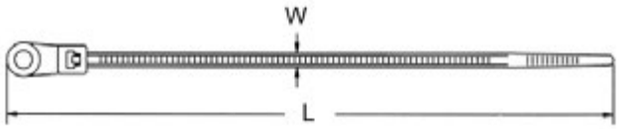
Benefits:
- Flat head geometry
- Exterior
- Smooth side is up against the insulation - no dents or damages
- Wide contact surface protects the cable loom from damages

Application:
- Bundling of tubes in narrow shafts
- Cable bundling in hollow wall spaces
- Pull-out forces are well distributed thanks to the extra-wide tie

Art. no.	TL	width			kg/100	PU	PE
262700	180	9,0	45	55	0,319	100	100
262702	300	9,0	88	55	0,512	100	100
262704	360	9,0	100	55	0,629	100	100
262710	300	9,0	88	55	0,463	100	100

Cable ties with fixing eye

material: nylon, colour transparent, quick and simple to fix by hand or with tensioning tools, extremely resistant to sea water, oil, grease, etc., manufactured in accordance with UL and MIL specification requirements, - 40° C bis 85° C

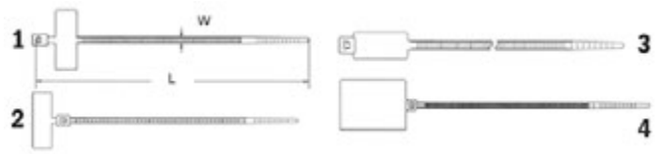


Art. no.	TL	width	Ø			kg/100	PU	PE
262820	100	2,5	3,0	25	8	0,044	100	100
262822	170	3,7	4,8	40	18	0,100	100	100
262824	170	3,7	4,0	40	18	0,105	100	100
262826	205	4,2	4,6	60	22	0,133	100	100
262828	300	4,8	4,8	85	22	0,224	100	100
262830	300	7,8	6,0	80	55	0,443	100	100
262832	370	4,8	4,9	102	22	0,276	100	100
262834	398	7,9	6,1	122	55	0,595	100	100

Cable ties with marking space

These cable ties are suitable for simple labelling and simultaneous bundling ofcable loops. This saves one work step. Material: nylon, colour transparent, can be fastened quickly and easily using a tool or by hand. Extremely resistant to sea water, oil, fats etc, manufactured according to UL gema tested nylon. Technical data: material polyamide 6.6 (N66), operating temperature -40 to +85 C.

Group features: HF (non-halogen), RoHS-conform



Art. no.		TL	width	label			kg/100	PU	PE
262840	1	100	2,5	25 x 8	25	8	0,049	100	100
262842	4	130	2,5	28 x 20	25	8	0,093	100	100
262844	2	110	2,5	25 x 8	25	8	0,058	100	100
262846	3	200	4,6	28 x 13	50	22	0,147	100	100
262848	1	200	2,5	30 x 15	50	8	0,128	100	100
262850	3	270	4,6	28 x 13	75	22	0,198	100	100

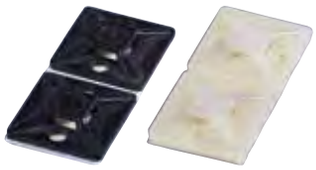
PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

Self adhesive sockets

for cable ties and a quick and reliable fastening of line or cable bundles and other objects



Art. no.	TL			width	kg/100	PU	PE
262160	19	transparent	3,6	19	0,078	100	100
262161	19	black	3,6	19	0,075	100	100
262162	28	transparent	4,8	28	0,178	100	100
262163	28	black	4,8	28	0,190	100	100

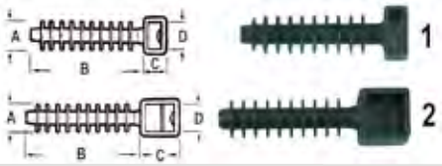
Screw type sockets

for cable ties and a quick and reliable fastening of large diam. Cable bundles and other objects, not UV-resistant

Art. no.	TL			width	kg/100	PU	PE
262164	1,5	transparent	7,8	1	0,121	100	100
262165	1,5	black	7,8	1	0,136	100	100

Dowel Mounting sockets/Christmas trees

for cable ties up to a width of 9 mm, 2 types with different wall-distances, available wall-fixing avoid the friction of the cable on the wall, black colour



Art. no.	TL		width		C	D	PU	PE
262170	37	9	10	1	6,5	9,2	100	100
262172	37	9	10	2	6,5	9,2	100	100

Hook-and-loop cable ties

made from extruded polyamide-velour laminate, thickness approx. 1.4 mm, selfadhesive back to back, suitable for approx. 200 uses. Colours: black and green Hook-and-loop cable ties with loop, cut to binder measurements for all standard electrical installations

pieces

Art. no.	TL		width	kg/100	PU	PE
262750	125	black	12	0,220	20	100
262752	135	black	12	0,240	20	100
262754	180	black	12	0,300	20	100
262756	210	black	16	0,420	20	100
262758	310	black	16	0,560	20	100
262760	125	green	12	0,220	20	100
262762	135	green	12	0,230	20	100
262764	180	green	12	0,300	20	100
262766	210	green	16	0,430	20	100
262768	310	green	16	0,610	20	100

Hook-and-loop cable ties

coil

Art. no.	TL	width	kg/100	PU	PE
262782	10000	20	10,000	1	1

Polyethene spiral binding

transparent, non-flame resistant

Art. no.	TL	Ø	g	kg	PU
262060	30	1,5	10	0,141	1
262062	30	4	25	0,390	1
262064	30	9	32	0,780	1

Polyethene spiral binding

white, nearly flame resistant

Art. no.	TL	Ø	g	kg	PU
262066	30	1,5	10	0,156	1
262068	30	4	25	0,497	1
262069	30	9	32	0,964	1

RoHS

Tensioning tools for cable ties

Prevents overstretching and constriction by continnuonsly adjustable stress limitation. The built-in knife will cut only, when the requested tension has been reached

Art. no.	width	material	kg	PU
262151	2,5-5	plastic	0,240	1

Tensioning tools for cable ties

Prevents overstretching and constriction by continnuonsly adjustable stress limitation. The built-in knife will cut only, when the requested tension has been reached

Art. no.	width	material	kg	PU
262152	2,5-5	metal	0,334	1

Tensioning tools for cable ties

Prevents overstretching and constriction by continnuonsly adjustable stress limitation. The built-in knife will cut only, when the requested tension has been reached

Art. no.	width	material	kg	PU
262154	2,5-13	metal	0,365	1

Tensioning tools for cable ties

Prevents overstretching and constriction by continnuonsly adjustable stress limitation. The built-in knife will cut only, when the requested tension has been reached

Art. no.	width	material	kg	PU
262158	2,5-10	metal	0,303	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Steel cable ties, accessories

haupa®

... convincing solutions

RoHS

Steel cable ties, SS 316 (V4A) with ball closure

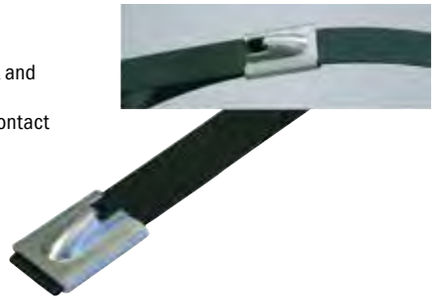
made from stainless steel 316 (DIN 1.4401), corrosion and radiation resistant, non-magnetic, extremely resistant to high temperatures (steel –80 °C to +538 °C) and aggressive chemicals, steel thickness 0.3 mm.
For use in machinery, vehicles, signalling, shipping and mining, in the food and chemical industries, in power plants, underground systems, on drilling platforms, wind-power generation plants and telecommunications, radio technology, stage construction, trade fair construction.

Art. no.	TL	width			kg/100	PU	PE
262940/125	125	4,5	22	45	0,400	100	100
262940/152	152	4,5	25	45	0,230	100	100
262940/200	200	4,5	50	45	0,280	100	100
262940/250	250	4,5	65	45	0,330	100	100
262940/300	300	4,5	75	45	0,420	100	100
262940/360	360	4,5	102	45	0,450	100	100
262940/520	520	4,5	152	45	0,660	25	100
262950/152	152	8,0	25	113	0,480	100	100
262950/200	200	8,0	50	113	0,680	100	100
262950/300	300	8,0	75	113	0,750	100	100
262950/360	360	8,0	102	113	0,920	100	100
262950/520	520	8,0	152	113	1,280	25	100
262950/680	680	8,0	203	113	1,550	25	100
262950/840	840	8,0	254	113	1,840	25	100
262950/1050	1050	8,0	318	113	2,560	25	100
262960/290	290	12,0	80	272	1,500	100	100
262960/360	360	12,0	102	272	1,700	100	100
262960/520	520	12,0	152	272	2,800	25	100
262960/680	680	12,0	203	272	3,300	25	100
262960/840	840	12,0	254	272	4,500	25	100
262960/1000	1000	12,0	302	272	5,000	25	100
262960/1200	1200	12,0	351	272	5,500	25	100

Steel cable ties, SS 316 (V4A) with ball closure

with cable protection sleeve made of epoxy resin polyester, free from halogen, black made from stainless steel 316 (DIN 1.4401), corrosion and radiation resistant, non-magnetic, extremely resistant to high temperatures (steel –80 °C to +538 °C) and aggressive chemicals, steel thickness 0.3 mm.
For use in machinery, vehicles, signalling, shipping and mining, in the food and chemical industries, in power plants, underground systems, on drilling platforms, wind-power generation plants and telecommunications, radio technology, stage construction, trade fair construction.

Benefits:
- Soft edges
- Easy installation comfort and handling
- Fully coated to prevent contact corrosion
- Gentle fixture



Art. no.	TL	width			kg/100	PU	PE
262942/125	125	4,5	22	45	0,190	100	100
262942/152	152	4,5	25	45	0,230	100	100
262942/200	200	4,5	50	45	0,280	100	100
262942/250	250	4,5	60	45	0,330	100	100
262942/300	300	4,5	75	45	0,420	100	100
262942/360	360	4,5	102	45	0,450	100	100
262942/520	520	4,5	152	45	0,660	25	100
262952/152	152	8,0	25	113	0,480	100	100
262952/200	200	8,0	50	113	0,680	100	100
262952/300	300	8,0	75	113	0,750	100	100
262952/360	360	8,0	102	113	0,920	100	100
262952/520	520	8,0	152	113	1,280	25	100
262952/680	680	8,0	203	113	1,550	25	100
262952/840	840	8,0	254	113	1,840	25	100
262952/1050	1050	8,0	318	113	2,560	25	100
262962/290	290	12,0	80	272	1,500	100	100
262962/360	360	12,0	102	272	1,700	100	100
262962/520	520	12,0	152	272	2,800	25	100
262962/680	680	12,0	203	272	3,300	25	100
262962/840	840	12,0	254	272	4,500	25	100
262962/1000	1000	12,0	302	272	5,000	25	100
262962/1200	1200	12,0	351	272	5,500	25	100

Steel cable ties, SS 316 (V4A) with ratchet function

made from stainless steel 316 (DIN 1.4401), corrosion and radiation resistant, non-magnetic, extremely resistant to high temperatures (steel –80 °C to +538 °C) and aggressive chemicals, steel thickness 0.3 mm; installation without additional tools.
For use in machinery, vehicles, signalling, shipping and mining, in the food and chemical industries, in power plants, underground systems, on drilling platforms, wind-power generation plants and telecommunications.

Art. no.	TL	width		kg/100	PU	PE
262970/1100	1100	10,0	330	5,500	10	100
262970/1315	1315	10,0	380	6,000	10	100

Tensioning tools for steel cable ties

Prevents overstretching and constriction by continnuonsly adjustable stress limitation. The built-in knife will cut only, when the requested tension has been reached

Art. no.	width	material	kg	PU
262159	12	metal	0,560	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Nailing clips

haupa®

... convincing solutions

INFO

Nailing clips

Material: hammer-proof polyethylene (PE) halogen-free
Temperature resistant: – 40 °C to + 80 °C, and for short periods up to approximately 100 °C

RoHS

Nailing clips for round cable

for attaching and fixing electrical cables, optimum claw shape for secure fixing of the cable, can be fixed to the cable, version with inserted galvanised nail, material: hammer-proof polyethylene (PE), halogen-free, temperature resistant: – 40 °C to + 80 °C, and for short periods up to approximately 100 °C.

Art. no.	colour	Ø	H	H1	W	NL	ND	kg/100	PU
262200	transparent	2-3	4,3	2,8	2,8	19	1,65	0,032	100
262202	transparent	3-5	5,6	3,7	2,9	15	2,0	0,038	100
262204	pure white	3-5	5,6	3,7	2,9	15	2,0	0,038	100
262206	black	5-7	8,0	6,0	5,3	20	2,0	0,100	100
262208	transparent	5-7	8,0	6,0	5,3	20	2,0	0,100	100
262209	light grey	5-7	8,0	6,0	5,3	35	2,0	0,100	100
262210	pure white	5-7	8,0	6,0	5,3	20	2,0	0,102	100
262212	black	7-10	9,5	7,1	6,8	25	2,0	0,093	100
262214	brown	7-10	9,5	7,1	6,8	25	2,0	0,092	100
262215	grey	7-10	9,5	7,1	6,8	35	2,0	0,092	100
262216	red	7-10	9,5	7,1	6,8	25	2,0	0,093	100
262218	pure white	7-10	9,5	7,1	6,8	25	2,0	0,092	100
262219	light grey	8 - 12	9,5	7,1	6,8	35	2,0	0,120	100
262220	black	10-14	13,0	10,3	9,4	35	2,0	0,166	100
262222	pure white	10-14	13,0	10,3	9,4	35	2,0	0,162	100
262223	light grey	10-14	13,0	10,3	9,4	44	2,0	0,162	100
262224	black	14-20	17,1	13,7	13,1	40	2,5	0,136	50
262226	pure white	14-20	17,1	13,7	13,1	40	2,5	0,138	50
262227	light-grey	14-20	17,1	13,7	13,1	44	2,5	0,138	100
262228	black	18-22	19,5	17,0	16,4	38	3,2	0,402	50
262230	pure white	18-22	19,5	17,0	16,4	38	3,2	0,396	50
262231	light grey	18 - 22	19,5	17	16,4	45	2,0	0,396	50
262232	black	22-26	21,0	19,5	24,0	38	3,2	0,464	50
262234	pure white	22-26	21,0	19,5	24,0	38	3,2	0,458	50
262235	light grey	22 - 26	21,0	19,5	24,0	38	3,2	0,458	50

Nailing clips for flat cable

for attaching and fixing electrical cables, optimum claw shape for secure fixing of the cable, can be fixed to the cable, version with inserted galvanised nail, material: hammer-proof polyethylene (PE), halogen-free, temperature resistant: – 40 °C to + 80 °C, and for short periods up to approximately 100 °C.

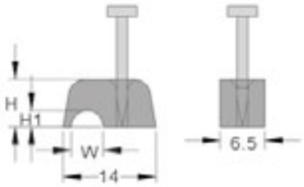
Art. no.	colour	Ø	H	H1	W	NL	ND	kg/100	PU
262236	transparent	2-4	4,0	2,0	4,0	15	2,0	0,032	100
262238	transparent	3-5	5,2	3,3	4,6	15	2,0	0,038	100
262240	transparent	4-6	5,9	3,8	5,8	15	2,0	0,047	100
262242	light grey	5-8	7,5	4,9	7,9	25	2,0	0,107	100
262243	pure white	5-8	7,5	4,9	7,9	25	2,0	0,103	100
262244	light grey	6-10	8,2	5,8	9,8	25	2,0	0,120	100
262245	pure white	6-10	8,2	5,8	9,8	25	2,0	0,120	100
262246	light grey	7-14	9,3	6,5	11,8	25	2,0	0,176	100
262247	pure white	7-14	9,3	6,5	11,8	25	2,0	0,174	100
262248	light grey	9-18	12,2	9,4	16,7	22	2,5	0,237	100
262249	pure white	9-18	12,2	9,4	16,7	22	2,5	0,236	100

NL = nail length
N-Ø = nail diameter
H = height
H1 = height 1
W = width (opening)

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Nailing clips for round cable

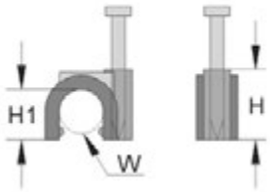
for attaching and fixing electrical cables, version with inserted galvanised nail, material: hammer-proof polyethylene (PE), halogen-free, temperature resistant: – 40 °C to + 80 °C, and for short periods up to approximately 100 °C.



Art. no.	colour	Ø	W	NL	ND	kg/100	PU
262254	light grey	4,1	4,1	15	2,0	0,083	100
262256	light grey	4,1	4,1	20	2,0	0,089	100
262258	light grey	7,0	7,0	20	2,0	0,103	100
262260	light grey	9,0	9,0	20	2,0	0,178	100
262262	light grey	13,2	13,2	20	2,0	0,225	100

ISO nailing clips

for attaching and fixing electrical cables, can be fixed to the cable, version with inserted galvanised nail, material: hammer-proof polyethylene (PE), halogen-free, temperature resistant: – 40 °C to + 80 °C, and for short periods up to approximately 100 °C.



Art. no.	colour	Ø	H	H1	W	NL	ND	kg/100	PU
262264	light grey	2,75	4,5	2,6	2,75	20	2,0	0,083	100
262266	light grey	6,0	9,0	6,6	6,0	20	2,0	0,100	100
262268	light grey	8,0	12,9	9,0	8,0	25	2,0	0,131	100
262270	light grey	9,0	12,0	9,0	9,0	22	2,0	0,132	100
262272	light grey	10,0	13,8	10,4	9,3	25	2,0	0,145	100
262274	light grey	2,75	4,5	2,6	2,75	19	1,65	0,047	100
262276	light grey	3,5	5,9	3,7	3,5	15	2,0	0,060	100
262278	light grey	4,0	6,6	4,2	4,0	18	2,5	0,091	100
262280	light grey	5,0	7,6	5,0	5,0	18	2,5	0,100	100
262282	light grey	6,0	9,0	6,6	6,0	18	2,5	0,106	100
262284	light grey	6,0	10,5	6,9	6,0	20	2,5	0,119	100
262286	light grey	7,0	11,0	7,5	7,0	22	2,5	0,128	100
262288	light grey	8,0	12,9	8,15	8,0	22	2,5	0,136	100
262290	light grey	9,0	12,0	9,0	9,0	22	2,5	0,138	100
262292	light grey	9,5	13,8	10,4	9,3	25	2,5	0,156	100
262294	light grey	11,0	16,6	12,2	11,0	27	2,5	0,234	100
262296	light grey	12,0	16,0	12,3	12,0	27	2,5	0,223	100
262298	light grey	14,0	20,5	15,6	14,0	35	3,0	0,345	100
262300	light grey	16,0	21,7	17,0	16,5	38	3,2	0,472	100
262302	light grey	18,0	22,0	17,5	18,0	38	3,2	0,457	100
262304	light grey	20,0	23,5	18,5	20,0	38	3,2	0,254	50
262306	light grey	22,0	27,8	23,0	22,0	42	3,2	0,321	50
262308	light grey	25,0	30,4	25,0	25,0	47	3,2	0,433	50
262310	light grey	32,0	40,0	33,5	32,0	56	3,6	0,306	25

NL = nail length
N-Ø = nail diameter
H = height
H1 = height 1
W = width (opening)

EL8042

Cable glands, IP68

haupa®

... convincing solutions

RoHS

INFO

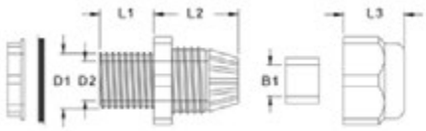
Cable glands polyamide IP68

Properties:
integrated strain relief, fully mounted, RoHS-compliant.
HAUPA cable glands do protect electric equipment (switchboards, distribution boxes) against mechanical influences, dust, and humidity by connecting a cable tight and sealed to the housing.
HAUPA offers next to metric as well PG cable glands.
HAUPA cable glands are IP68 (dust and humidity) to protect human against the potential risk during usage.

Cable glands IP 68, metric or PG, assembled with washer and lock nut, fully mounted

material: polyamide 6.6, (gland body: PA 6.6, halogen free, seal: TPR, halogen free, washer: PVC), colour: light- grey or black, temperature range: – 40°C to + 85°C, vibration protection: integrated anti- twist protection for vibration- firm assembly, fire class: according to UL 94 V–2, protection category: IP68, properties: integrated strain relief; easy to install, RoHS- compliant, completely assembled as shown

IP68



Art. no.	colour		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU	
250040	light- grey	**M12**	3 - 6,5	12,0	8,3	6,9	7,9	19,6	13,6	15	0,024	10	4.250
250042	light- grey	**M16**	5 - 10	16	10,9	9,6	15,5	23,4	16,9	22	0,024	10	1.700
250044	light- grey	**M20**	8 - 12	20,0	14,1	12,5	10,0	25,0	18,1	24	0,024	10	1.200
250046	light- grey	**M20**	10 - 14	20,0	15,0	14,8	10,0	28,5	18,5	27	0,024	10	1.190
250048	light- grey	**M20**	10 - 14	20,0	15,0	14,8	15,0	28,5	18,5	27	0,024	10	1.190
250050	light- grey	**M25**	13 - 18	25,0	18,6	18,4	15,2	29,4	22,3	33	0,024	10	680
250052	light- grey	**M32**	18 - 25	32,0	26,0	25,0	14,7	34,5	25,7	42	0,024	10	340
250054	light- grey	**M40**	22 - 32	40,0	33,7	33,1	18,4	41,7	31,3	54	0,024	5	230
250056	light- grey	**M50**	30 - 38	50,0	41,9	40,0	17,8	44,2	31,3	61	0,024	5	160
250058	light- grey	**M63**	34 - 44	61,0	55,0	43,2	18,5	44,6	32,7	66	0,024	5	120

Art. no.	colour		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU	
250080	black	**M12**	3 - 6,5	12,0	8,3	6,9	7,9	19,6	13,6	15	0,024	10	4.250
250082	black	**M16**	5 - 10	16	10,9	9,6	15,5	23,4	16,9	22	0,024	10	1.700
250084	black	**M20**	8 - 12	20,0	14,1	12,5	10,0	25,0	18,1	24	0,024	10	1.200
250086	black	**M20**	10 - 14	20,0	15,0	14,8	10,0	28,5	18,5	27	1,620	10	1.190
250088	black	**M20**	10 - 14	20,0	15,0	14,8	15,0	28,5	18,5	27	17,000	10	1.190
250090	black	**M25**	13 - 18	25,0	18,6	18,4	15,2	29,4	22,3	33	2,690	10	680
250092	black	**M32**	18 - 25	32,0	26,0	25,0	14,7	34,5	25,7	42	4,560	10	340
250094	black	**M40**	22 - 32	40,0	33,7	33,1	18,4	41,7	31,3	54	8,100	5	230
250096	black	**M50**	30 - 38	50,0	41,9	40,0	17,8	44,2	31,3	61	10,100	5	160
250098	black	**M63**	34 - 44	61,0	55,0	43,2	18,5	44,6	32,7	66	11,400	5	120

Art. no.	colour		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU	
250060	light- grey	**PG7**	3,5 - 6	12,5	8,3	6,9	7,9	20,0	13,3	15	0,024	10	4.250
250062	light- grey	**PG9**	4 - 8	15,2	10,5	7,8	7,9	22,0	15,1	19	0,024	10	2.980
250064	light- grey	**PG11**	5 - 10	18,6	13,2	10,8	7,9	23,7	18,3	22	0,024	10	2.040
250066	light- grey	**PG13,5**	6 - 12	20,4	15,5	12,5	8,9	24,6	18,9	24	0,024	10	1.530
250068	light- grey	**PG16**	10 - 14	22,5	17,2	15,0	9,8	26,2	19,5	27	0,024	10	1.190
250070	light- grey	**PG21**	13 - 18	28,3	22,4	18,5	10,8	30,0	23,7	33	0,024	10	680
250072	light- grey	**PG29**	18 - 25	37,0	30,6	25,3	10,8	35,0	27,4	42	0,024	10	380
250074	light- grey	**PG36**	22 - 32	47,0	35,3	36,3	7,9	42,3	30,3	53	0,024	5	200
250076	light- grey	**PG42**	30 - 38	54,0	40,0	40,4	14,5	44,0	31,2	60	0,024	5	140
250078	light- grey	**PG48**	34 - 44	59,3	46,2	46,3	15,6	42,7	31,3	65	0,024	5	130

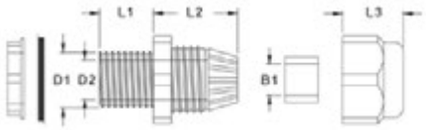
Art. no.	colour		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU	
250100	black	**PG7**	3,5 - 6	12,5	8,3	6,9	7,9	20,0	13,3	15	0,560	10	4.250
250102	black	**PG9**	4 - 8	15,2	10,5	7,8	7,9	22,0	15,1	19	7,500	10	2.980
250104	black	**PG11**	5 - 10	18,6	13,2	10,8	7,9	23,7	18,3	22	1,030	10	2.040
250106	black	**PG13,5**	6 - 12	20,4	15,5	12,5	8,9	24,6	18,9	24	1,400	10	1.530
250108	black	**PG16**	10 - 14	22,5	17,2	15,0	9,8	26,2	19,5	27	1,560	10	1.190
250110	black	**PG21**	13 - 18	28,3	22,4	18,5	10,8	30,0	23,7	33	2,480	10	680
250112	black	**PG29**	18 - 25	37,0	30,6	25,3	10,8	35,0	27,4	42	4,160	10	380
250114	black	**PG36**	22 - 32	47,0	35,3	36,3	7,9	42,3	30,3	53	8,240	5	200
250116	black	**PG42**	30 - 38	54,0	40,0	40,4	14,5	44,0	31,2	60	10,800	5	140
250118	black	**PG48**	34 - 44	59,3	46,2	46,3	15,6	42,7	31,3	65	11,600	5	130

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

RoHS

SlimTop - cable glands IP 68, metric or PG, assembled with washer and lock nut, industry

material: polyamide 6.6, (gland body: PA 6.6, halogen free, seal: TPR, halogen free, washer: PVC), colour: light- grey or black, temperature range: – 40°C to + 85°C, vibration protection: integrated anti- twist protection for vibration- firm assembly, fire class: according to UL 94 V–2, protection category: IP68, properties: integrated strain relief, not mounted, easy to install, RoHS- compliant

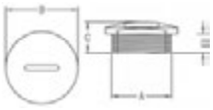


Art. no.	colour		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU	
250140	light- grey	**M12**	3 - 6,5	12,0	7,3	7,1	8,0	19,6	12,7	15	0,400	10	4.250
250142	light- grey	**M16**	5 - 10	16,0	10,7	10,4	8,0	23,3	16,1	20	0,800	10	1.700
250044	light- grey	**M20**	8 - 12	20,0	14,1	12,5	10,0	25,0	18,1	24	0,024	10	1.200
250144	light- grey	**M25**	11 - 17	25,0	18,0	17,3	8,0	30,0	20,0	29	1,400	10	680
250146	light- grey	**M32**	15 - 21	32,0	25,7	21,6	10,0	35,4	24,1	36	2,900	10	340
250148	light- grey	**M40**	20 - 28	40,0	32,7	28,6	10,0	39,4	27,5	46	4,800	5	230
250150	light- grey	**M50**	27 - 35	50,0	42,4	35,8	12,0	43,4	31,8	55	8,300	5	160
250152	light- grey	**M63**	32 - 42	63,0	55,0	48,8	12,0	46,4	33,7	68	10,200	5	120

Art. no.	colour		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU	
250120	light- grey	**M12**	3 - 6,5	12,0	7,3	7,1	8,0	19,6	12,7	15	0,400	10	4.250
250122	light- grey	**M16**	5 - 10	16,0	10,7	10,4	8,0	23,3	16,1	20	0,8	10	1.700
250084	black	**M20**	8 - 12	20,0	14,1	12,5	10,0	25,0	18,1	24	0,024	10	1.200
250124	light- grey	**M25**	11 - 17	25,0	14,1	17,3	20,0	25	18,1	29	1,400	10	680
250126	light- grey	**M32**	15 - 21	32,0	25,7	21,6	10,0	35,4	24,1	36	2,900	10	340
250128	light- grey	**M40**	20 - 28	40,0	32,7	28,6	10,0	39,4	27,5	46	4,800	5	230
250130	light- grey	**M50**	27 - 35	50,0	42,4	35,8	12,0	43,4	31,8	55	8,300	5	160
250132	light- grey	**M63**	32 - 42	63,0	55,0	48,8	12,0	46,4	33,7	68	10,200	5	120

Dummy plugs

Dummy plugs light- grey and black



Art. no.	colour		A	B	D	D	kg/100	PU	
250196	light- grey	**M12**	11,7	15,0	10,0	6,0	0,090	100	
250198	light- grey	**M16**	15,7	20,0	10,5	6,0	0,150	100	
250200	light- grey	**M20**	19,9	24,0	12,8	6,0	0,220	100	
250202	light- grey	**M25**	24,7	29,7	12,8	7,8	0,350	100	
250204	light- grey	**M32**	31,7	36,6	13,3	7,8	0,330	50	
250206	light- grey	**M40**	39,9	45,8	13,4	7,8	0,420	50	
250208	light- grey	**M50**	49,4	55,5	16,2	9,8	1,300	10	
250210	light- grey	**M63**	62,4	69,3	17,5	11,8	1,800	10	
250212	light- grey	**PG7**	12,2	14,8	10,0	6,0	0,090	100	
250214	light- grey	**PG9**	15,1	18,7	10,4	6,0	0,140	100	
250216	light- grey	**PG11**	18,5	21,7	10,4	6,0	0,140	100	
250218	light- grey	**PG13,5**	20,3	23,7	10,3	6,0	0,210	100	
250220	light- grey	**PG16**	22,3	27,0	10,3	6,0	0,290	100	
250222	light- grey	**PG21**	28,2	32,8	12,8	7,8	0,480	100	
250224	light- grey	**PG29**	37,0	44,1	13,2	7,8	0,400	50	
250226	light- grey	**PG36**	47,0	52,6	13,7	7,8	0,500	50	
250228	light- grey	**PG42**	54,0	59,5	16,2	9,6	0,090	10	
250230	light- grey	**PG48**	59,6	64,2	17,5	11,8	1,800	10	

Art. no.	colour		A	B	D	D	kg/100	PU	
250160	black	**M12**	11,7	15,0	10,0	6,0	0,090	100	
250162	black	**M16**	15,7	20,0	10,5	6,0	0,150	100	
250164	black	**M20**	19,9	24,0	10,5	6,0	0,220	100	
250166	black	**M25**	24,7	29,7	12,8	7,8	0,350	100	
250168	black	**M32**	31,7	36,6	13,3	7,8	0,330	50	
250170	black	**M40**	39,9	45,8	13,4	7,8	0,420	50	
250172	black	**M50**	49,4	55,5	16,2	9,8	1,300	10	
250174	black	**M63**	62,4	69,3	17,5	11,8	1,800	10	
250176	black	**PG7**	12,2	14,8	10,0	6,0	0,090	100	
250178	black	**PG9**	15,1	18,7	10,4	6,0	0,140	100	
250180	black	**PG11**	18,5	21,7	10,4	6,0	0,140	100	
250182	black	**PG13,5**	20,3	23,7	10,3	6,0	0,210	100	
250184	black	**PG16**	22,3	27,0	10,3	6,0	0,290	100	
250186	black	**PG21**	28,2	32,8	12,8	7,8	0,480	100	
250188	black	**PG29**	37,0	44,1	13,2	7,8	0,400	50	
250190	black	**PG36**	47,0	52,6	13,7	7,8	0,500	50	
250192	black	**M12**	54,0	59,5	16,2	9,6	1,300	10	
250194	black	**PG48**	59,6	64,2	17,5	11,8	1,800	10	

Cable glands brass nickel-plated, IP68

RoHS

INFO

Cable glands polyamide IP68

Properties:
integrated strain relief, fully mounted, RoHS-compliant.
HAUPA cable glands do protect electric equipment (switchboards, distribution boxes) against mechanical influences, dust, and humidity by connecting a cable tight and sealed to the housing.
HAUPA offers next to metric as well PG cable glands.

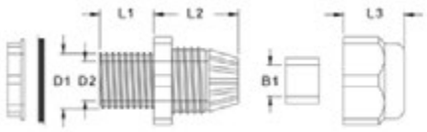
For an EMC-compatible installation, brass cable glands inclusive EMC insets should be used.

HAUPA cable glands are IP68 (dust and humidity) to protect human against the potential risk during usage.

Cable glands brass nickel-plated, IP68, fully mounted

Material: brass nickel-plated, (halogen free)
lock nut/washer: TPR
temperature range: – 40°C to + 120°C
protection category: IP68

IP68



Art. no.		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU
250600	**M12**	3 - 8,5	12,0	8,4	6,8	6,2	17	10,9	14	0,024	10
250602	**M16**	4 - 8	16,0	12,0	8,6	7,7	18,0	12,9	18	0,024	10
250604	**M20**	6 - 12	20,0	16,0	11,9	8,1	20,0	13,9	22	0,030	10
250606	**M25**	10-14	25,0	20,5	14,5	8,5	20,2	14,0	24-27	0,043	10
250608	**M32**	15-22	32,0	27,0	21,5	10	24,5	18,0	35	0,085	10
250610	**M40**	18-25	40,0	35,5	25,5	11	27,0	19,0	40-45	0,140	5
250611	**M40**	22-30	40,0	35,0	30,5	11,0	28,0	20,5	45	0,140	5
250612	**M50**	32-38	50,0	44,0	39,0	13	32,0	23,0	55-57	0,260	5
250614	**M63**	37-44	63,0	55,5	44,5	14	34,0	22,0	64-68	0,380	5

Art. no.		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU
250630	**PG7**	3-6,5	12,0	8,5	6,9	6,5	16,5	10,8	14	0,013	10
250632	**PG9**	4-8	14,8	11,8	8,5	8,1	18,9	12,7	17	0,019	10
250634	**PG11**	5 - 10	18,2	14,2	10,5	8	18,5	13,5	20-21	0,028	10
250636	**PG13,5**	6-12	20,1	16,2	12,1	7,7	20,5	13,9	23-22	0,033	10
250638	**PG16**	10-14	22,2	18,3	14,5	8,3	19,7	14,2	25-24	0,038	10
250640	**PG21**	13-18	28,2	23,8	18,2	8,8	23,3	16,5	30	0,060	10
250642	**PG29**	18-25	36,6	32,4	25,2	10,0	26,3	19,4	40	0,111	10
250644	**PG36**	25-33	46,0	41,5	33,2	11,0	32,0	22,0	50	0,190	5
250646	**PG42**	32-38	53,8	47,7	38,7	12,0	32,0	22,0	57	0,255	5
250648	**PG48**	37 - 44	59,0	52,6	44,5	12,6	33,9	22,8	64	0,345	5

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

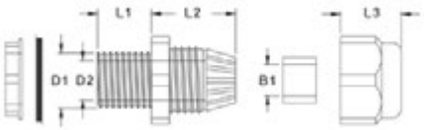
RoHS

EMC-Cable glands brass nickel-plated, IP68, fully mounted

To ensure correct EMP installation, the brass cable screws with EMP inserts should be used.

Material: brass nickel-plated, (halogen free)
lock nut/washer: TPR
temperature range: – 40°C to + 120°C
protection category: IP68

IP68 EMV EMC



Art. no.		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU
250650	**M12**	3 - 8,5	12,0	8,4	6,8	6,2	17,0	10,9	14	0,013	10
250652	**M16**	4 - 8	16,0	12,0	8,6	7,7	18,0	12,9	18	0,024	10
250654	**M20**	6 - 12	20,0	16,0	11,9	8,1	20,0	13,9	22	0,030	10
250656	**M25**	10-14	25,0	20,5	14,5	8,5	20,2	14,0	24-27	0,043	10
250658	**M32**	15-22	32,0	27,0	21,5	10,0	24,5	18,0	35	0,085	10
250660	**M40**	18-25	40,0	35,5	25,5	11,0	27,0	19,0	40-45	0,140	5
250661	**M40**	22-30	40,0	35,0	30,5	11,0	28,0	20,5	45	0,140	5
250662	**M50**	32-38	50,0	44,0	39,0	13,0	32,0	23,0	55-57	0,260	5
250664	**M63**	37-44	63,0	55,5	44,5	14,0	34,0	22,0	64-68	0,380	5

Art. no.		KB	D1	D2	B1	L1	L2	L3	WS	kg/100	PU
250666	**PG7**	3-6,5	12,0	8,5	6,9	6,5	16,5	10,8	14	0,013	10
250668	**PG9**	4-8	14,8	11,8	8,5	8,1	18,9	12,7	17	0,019	10
250670	**PG11**	5-10	18,2	14,2	10,5	8,0	18,5	13,5	20-21	0,028	10
250672	**PG13,5**	6-12	20,1	16,2	12,1	7,7	20,5	13,9	23-22	0,033	10
250674	**PG16**	10-14	22,2	18,3	14,5	8,3	19,7	14,2	25-24	0,038	10
250676	**PG21**	13-18	28,2	23,8	18,2	8,8	23,3	16,5	30	0,024	10
250678	**PG29**	18-25	36,6	32,4	25,2	10,0	26,3	19,4	40	0,111	10
250680	**PG36**	25-33	46,0	41,5	33,2	11,0	32,0	22,0	50	0,190	5
250682	**PG42**	32-38	53,8	47,7	38,7	12,0	32,0	22,0	57	0,255	5
250684	**PG48**	37-44	59,0	52,6	44,5	12,6	33,9	22,8	64	0,345	5

RoHS

Heat shrinkable tubes

of polyolefin, radiation interlaced, self extinguished according to MV SS 302, thin and flexible, dielectric strength 15 - 25 KV/mm acc. to DIN 53481, operating temperature: - 55° C to 135° C, shrinking temperature: > 115° C, **1 m length in self-service-pack**

Art. no.	Ø before	Ø after	mm	kg	PU
262085	4,8	2,4	0,5	0,007	10
262086	6,4	3,2	0,6	0,010	10
262087	9,5	4,8	0,6	0,012	10
262088	12,7	6,4	0,6	0,017	10
262089	19,0	9,5	0,8	0,035	10
262090	25,4	12,7	0,9	0,045	10

Heat shrinkable tubes

of polyolefin, self extinguished according to MV SS 302, thin and flexible universal using, dielectric strength 15 - 25 KV/mm DIN 53481, operating temperature: - 55° C to 135° C, shrinking temperature: > 115° C, **in 5 m length, in self-service-pack**

Art. no.	Ø before	Ø after	mm	kg	PU
262095	19,0	9,5	0,8	0,173	1
262096	25,4	12,7	0,9	0,223	1

Heat shrinkable tubes

of polyolefin, self extinguished according to MV SS 302, thin and flexible universal using, dielectric strength 15 - 25 KV/mm DIN 53481, operating temperature: - 55° C to 135° C, shrinking temperature: > 115° C, **in 10 m length, in self-service-pack**

Art. no.	Ø before	Ø after	mm	kg	PU
262073	1,2	0,6	0,4	0,024	1
262074	1,6	0,8	0,5	0,027	1
262075	2,4	1,2	0,5	0,045	1
262076	3,2	1,6	0,5	0,055	1
262091	4,8	2,4	0,5	0,074	1
262092	6,4	3,2	0,6	0,106	1
262093	9,5	4,8	0,6	0,123	1
262094	12,7	6,4	0,6	0,180	1

Heat shrinkable tubes

of polyolefin, self extinguished according to MV SS 302, thin and flexible universal using, dielectric strength 15 - 25 KV/mm DIN 53481, operating temperature: - 55° C to 135° C, shrinking temperature: > 115° C, **in 75 m role**

Art. no.	Ø before	Ø after	mm	kg	PU
262093/75	9,5	4,8	0,6	1,100	1

Industrial hot air blower for shrink hoses

Electronic hot air blower with continuous temperature control and two blower levels, characterised by low weight and slim design. This makes it ideal for long and fatigue-free working and for use in difficult to access areas. The temperature control is continous, and the air volume can be set to two different levels. For shrink hoses.

Technical data:
Length/Ø (at shock protection): 325 mm / 85 mm
Voltage: 230 V / 50 Hz (special voltages possible)
Power: 2000 W
Temperature: 100° - 600° C continuous control
Air volume: min. 300 l/min. / max. 500 l/min.

Art. no.	kg	PU
262097	0,773	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Electrical insulating tape

haupa®

... convincing solutions

Electro insulating tape

INFO

Electro insulating tape

Typical uses in electrical installations
Insulation, Sealing, Padding, Protection from corrosion, heat, electromagnetic faults, cable marking, etc

Benefits:
- VDE tested
- DIN EN 60454-3-1
- Easy to unroll
- Very good adhesive properties
- High flexibility
- Wrinkle free adhesion to uneven surfaces
- Tear-proof and resistant to aging
- Flame retardant
- Self-extinguishing
- Temperature resistant from -30°C to 105°C
- Water, weather and UV resistant
- With many uses
- For insulating, bundling, marking
- Available in 10 colours

Electrical insulating tape for the professional application

Material: PVC, in tested VDE quality, in accordance with DIN EN 60454-3-1, flame retardant, self-extinguishing. Temperature resistant from -30°C to 105°C, water, weather and UV resistant. Highly flexible with very good adhesive properties, versatile in its uses, tear-resistant and durable, for insulating, bundling and marking. Available in ten colours.

Art. no.	widht/mm	length/m	strength	color	kg		PU
263800	15	10	0,15		0,035	120	10
263802	15	10	0,15		0,035	120	10
263804	15	10	0,15		0,035	120	10
263806	15	10	0,15		0,035	120	10
263808	15	10	0,15		0,035	120	10
263810	15	10	0,15		0,035	120	10
263812	15	10	0,15		0,035	120	10
263814	15	10	0,15		0,035	120	10
263816	15	10	0,15		0,035	120	10
263818	15	10	0,15		0,035	120	10

Art. no.	widht/mm	length/m	strength	color	kg		PU
263822	15	20	0,15		0,060	60	10
263824	15	20	0,15		0,060	60	10
263826	15	20	0,15		0,060	60	10
263828	15	20	0,15		0,060	60	10
263830	15	20	0,15		0,060	60	10
263832	15	20	0,15		0,060	60	10
263834	15	20	0,15		0,060	60	10
263836	15	20	0,15		0,060	60	10
263838	15	20	0,15		0,060	60	10
263840	15	20	0,15		0,060	60	10

Art. no.	widht/mm	length/m	strength	color	kg		PU
263842	19	20	0,15		0,076	48	8
263844	19	20	0,15		0,076	48	8
263846	19	20	0,15		0,076	48	8
263848	19	20	0,15		0,076	48	8
263850	19	20	0,15		0,076	48	8
263852	19	20	0,15		0,076	48	8
263854	19	20	0,15		0,076	48	8
263856	19	20	0,15		0,076	48	8
263858	19	20	0,15		0,076	48	8
263860	19	20	0,15		0,076	48	8

Art. no.	widht/mm	length/m	strength	color	kg		PU
263902	19	25	0,15		0,084	48	8
263904	19	20	0,15		0,084	48	8
263906	19	20	0,15		0,084	48	8
263908	19	20	0,15		0,084	48	8
263910	19	20	0,15		0,084	48	8
263912	19	20	0,15		0,084	48	8
263914	19	20	0,15		0,084	48	8
263916	19	20	0,15		0,084	48	8
263918	19	20	0,15		0,084	48	8
263920	19	20	0,15		0,084	48	8

Art. no.	widht/mm	length/m	strength	color	kg		PU
263862	25	20	0,15		0,100	36	6
263864	25	20	0,15		0,100	36	6
263866	25	20	0,15		0,100	36	6
263868	25	20	0,15		0,010	36	6
263870	25	20	0,15		0,100	36	6
263872	25	20	0,15		0,100	36	6
263874	25	20	0,15		0,100	36	6
263876	25	20	0,15		0,100	36	6
263878	25	20	0,15		0,100	36	6
263880	25	20	0,15		0,100	36	6

Art. no.	widht/mm	length/m	strength	color	kg		PU
263882	19	33	0,15		0,120	48	8
263884	19	33	0,15		0,120	48	6
263886	19	33	0,15		0,120	48	6
263888	19	33	0,15		0,120	48	6
263890	19	33	0,15		0,120	48	6
263892	19	33	0,15		0,120	48	6
263894	19	33	0,15		0,120	48	6
263896	19	33	0,15		0,120	48	6
263898	19	33	0,15		0,120	48	6
263900	19	33	0,15		0,120	48	6

Rainbow-Pack

- VDE tested
- DIN EN 60454-3-1
- Water, weather and UV resistant

Art. no.	widht/mm	length/m	strength	color	set	PU
263820	15	10	0,15		10-pcs.	1
263861	19	20	0,15		10-pcs.	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Electro insulating tape

Cold-resistant

Cold-resistant insulation tape „HUPtape-22plus“

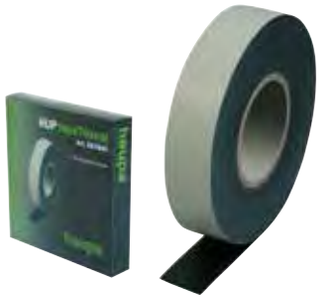
- Excellent wrapping properties
- Can be processed even at very low temperatures
- Extreme weather proof (UV resistant)
- Resistant to corrosion, acids and lyes
- Processing temperature: -18°C to + 60°C
- Individually packaged in plastic box

Art. no.	TL	widht/mm	strength	kg	PU
263930	20 m	19	0,215	0,105	1

Self-welding

Self-welding insulation tape „HUPtape76seal“

- Forms homogenous welding wraps
- Excellent dielectric properties
- Weather proof (UV resistant)
- Insulation on medium voltage cables up to 69 kV
- Resistant to corrosion, acids and lyes
- Individual in box packaging



Art. no.	TL	widht/mm	strength	kg	PU
263940	9 m	19	0,76	0,203	1

Routine tests

Safety advice for working with live voltage

The basic requirements for working with live voltage are safety-insulated tools.
Legal regulations and the following safety advice should always be observed:

1. Transport your safety tools such that damage to the insulation is avoided.
2. Before use, make sure that the insulation is not damaged. Damaged tools must not be used.
3. Keep your safety tools clean and dry.
4. When working overhead or when using cutting pliers, protective glasses must be worn.
5. For your own safety, keep your work space clean and tidy when working with live voltage.
6. In enclosed, cramped spaces, protective clothing and equipment must be worn (e.g. safety gloves, covering drapes, protective hoods)
7. Only use suitable and tested tools. Make sure that loose and cut off parts do not fall onto live components.

Routine tests in accordance with VDE Norm 1000 V IEC 60900:2004

Cold-heading test

In this test, the toughness of the PVC material is checked by dropping a weight onto the tools which have been cooled down to -25°C. The tools must not show any cracking or other damage after the test.

Testing the adhesive strength of the PVC coating

After pliers have been stored for 168 hours at +70°C, the adhesive power of the PVC coating is tested using a pulling force of 500 Nm. The insulation material must stay firmly attached to the basic tool.

Flame resistance test

To exclude any fire risks, only flame-proof PVC material is used.

Pressure test

No puncture must occur, while testing the tool with a voltage of 5,000 V AC when also applying a pressure of 20 Nm at a temperature of +70°C to the tool.

Testing the insulating properties

After storing the tools under water for 24 hours, the tools are tested using 10,000 V AC for three minutes, while simultaneously measuring the discharge current. During this time, no puncture or sparkover must occur.

Voltage test

Each safety tool is individually voltage tested. This means that all tools which bear the relevant mark have been tested at 10,000 V AC and are approved for a voltage of 1,000 V, ensuring 10-fold safety.

Screw profiles

- Slot
- Cross slot Phillips
- Cross slot Pozidriv
- Pozidriv/flat slot
- Tx
- Tx with safety pin
- Allen screw
- Hexagon head
- Ball point

Patent ratchet wrench

The HAUPA ratchet wrench has a number of patented advantages. it is characterised particularly ergonomic handling and high functional safety.
The excellent interlocking of the wrench insert, which must be able to withstand pull-out forces of up to 500 N is the main feature.

The ratchet can be operated with one hand due to a cross slide made from non-conducting material (polyamide). It is ergonomically designed such that it accessible with the thumb of the hand holding it. This cross slide, which is deep in the inside of the ratchet, also ensures that the testing voltage of 10 KV gema DIN 60900 can easily be achieved.

Safety of HAUPA products

All HAUPA products under the product area of "working with live voltage" have a 2-colour multi-layer insulation (wherever technically possible). This multi-layer insulation supports the current VBG4 regulations. This regulation requires that before use all tools are tested for any damage that can be seen externally. The 2-colourcoating – the second insulating layer contrast in yellow – ensures that any damages are visible immediately.

Safety tools

haupa®
... convincing solutions

INFO

Screwdriver range **Industrial quality**

Screwdriver range according to the new Norm IEC 60900:2004. All blades are made of high quality Molybdenum vanadium steel, black, red-covered, Polypropylen moulded. This ergonomic moulded 2-component handles from PP/TPE material guarantees a high security with normal power transmission. Every screwdriver is individually tested and marked according to the new Norm.

1000 V IEC 60900:2004

Injected blades profile on the top of the handle – for a fast access in the tool box, abrasion is not possible

2

Homogeneous sizes-adaptation of the screwdrivers haft for better power transmission. Increase of the soft area for stronger grip

3

Exclusive, ergonomic design, non-slipping 2-component handles from PP/TPE material

4

Roll repressive

5

with 1000 V marking injected

6

Magnetic blade

An addition anti-slip protection on Phillips profiles prevents the tool from slipping out of the screw. *Silver tip protects from corrosion.*

VDE 2-component screwdriver with PZ slot profile

Specifications and advantages of the PZ/FL profile.
The PZ/FL profile can only be used for combination screws that were previously screwed with a slot or recessed head PZ type screwdriver. The screws have an inner PZ profile with an additional cross slot that also allows it to be screwed with a slot screwdriver.

Area of application for PZ/FL profile
The screws are mainly used in electrical installation in automatic circuit breakers and safety switches

1000 V IEC 60900:2004

Art. no.	size	BL	TL	kg	PU
101870	**1**	80	205	0,060	1
101872	**2**	100	270	0,094	1

Screwdriver set with PZ slot profile

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated

Contents:
- 101870
- 101872

1000 V IEC 60900:2004

Art. no.	size	form	set	kg	PU
101879	**1 + 2**	PZ/FL	**2-pcs**	0,200	1

2-component VDE electricians' screwdrivers

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated

1000 V IEC 60900:2004

Art. no.	CW	KSt	BL	TL	kg	PU
101910	**2,5**	0,4	75	155	0,027	1
101912	**3**	0,5	100	185	0,029	1
101914	**3,5**	0,6	100	185	0,035	1
101916	**4**	0,8	100	195	0,052	1
101917	**4**	1,0	100	195	0,052	1
101918	**5,5**	1,0	125	230	0,070	1
101920	**6,5**	1,2	150	255	0,108	1
101922	**8**	1,2	175	295	0,177	1
101924	**10**	1,6	200	320	0,245	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

2-component VDE cross slotted screwdrivers Phillips

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated, engraving on the blade ensures extra grip in the screw

1000 V IEC 60900:2004

Art. no.	size	BL	TL	kg	PU
101940	**0**	60	145	0,034	1
101942	**1**	80	175	0,061	1
101944	**2**	100	205	0,100	1
101946	**3**	150	270	0,165	1

2-component VDE cross slotted screwdrivers Pozidriv

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated

1000 V IEC 60900:2004

Art. no.	size	BL	TL	kg	PU
101950	**0**	60	135	0,033	1
101952	**1**	80	175	0,061	1
101954	**2**	100	205	0,095	1
101956	**3**	150	270	0,166	1

2-component VDE screwdrivers Tx

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated

1000 V IEC 60900:2004

Art. no.	size	BL	TL	kg	PU
101850	**08**	100	185	0,053	1
101852	**09**	100	185	0,051	1
101854	**10**	100	195	0,053	1
101856	**15**	100	195	0,053	1
101858	**20**	100	195	0,052	1
101860	**25**	125	220	0,070	1
101862	**27**	125	230	0,072	1
101864	**30**	150	255	0,109	1
101866	**40**	175	295	0,178	1

2-component VDE cross slotted screwdrivers Square

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated

1000 V IEC 60900:2004

Art. no.	size	BL	TL	form	kg	PU
102550	**0**	60	145	SQ	0,034	1
102552	**1**	80	175	SQ	0,061	1
102554	**2**	100	205	SQ	0,095	1
102556	**3**	150	270	SQ	0,166	1

2-component VDE screwdrivers set

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated, 6-pieces. **Contents:** VDE Electricians' screwdriver 2,5 x 75 mm, 4 x 100 mm, 5,5 x 125 mm, 6,5 x 150 mm, VDE cross slotted screwdrivers Phillips or Pozidriv size 1 and 2

1000 V IEC 60900:2004

Art. no.	form	set	kg	PU
101999	Phillips	**6-pieces**	0,414	1
101999/PZ	Pozidriv	**6-pieces**	0,416	1

VDE socket wrenches 1000 V

2-component VDE socket wrenches DIN 7445

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated

1000 V IEC 60900:2004

Art. no.	WS	BL	TL	kg	PU
102520	**4**	125	220	0,105	1
102522	**5**	125	220	0,109	1
102524	**5,5**	125	220	0,116	1
102526	**6**	125	220	0,115	1
102528	**7**	125	230	0,120	1
102530	**8**	125	230	0,119	1
102532	**9**	125	230	0,122	1
102534	**10**	125	230	0,125	1
102536	**11**	125	245	0,167	1
102538	**12**	125	245	0,165	1
102540	**13**	125	245	0,175	1

2-component VDE socket wrenches set DIN 7445

with 2 component handle made from PP/TPE material, blade made from molybdenum vanadium steel, hardened, blasted, routine checked, insulated. **Contents:** 1 piece each 5 - 5,5 - 7 - 8 - 10 - 11 - 13 mm

1000 V IEC 60900:2004

Art. no.	set	kg	PU
102512	**7-pieces**	1,065	1

„Vario“ 1000 V replaceable blade system

in robust nylon bag, **Contents:** 2C exchangeable handle, screw cap, replaceable blade - slotted blade 0.4 x 2.5 / 0.5 x 3.0 / 0.8 x 4.0 / PH1 / PH2 or PZ1 / PZ2, PZ/FL 2, switch cabinet key – square 1, double-bit

Further characteristic feature include:
- High level of safety
- Exchangeable cap for use as an electronics screwdriver
- Switching cabinet key is integrated into the system
- Space-saving
- Weight-saving
- Cost-effective price/performance ratio
- Meets all relevant standards

1000 V IEC 60900:2004

Video 102000

Art. no.	form	shank	set	kg	PU
102000	**Phillips**	hexagonal	**10 pieces**	0,340	1
102000/PZ	**Pozidriv**	hexagonal	**10 pieces**	0,334	1

„Vario“ nylon bag – empty

Robust nylon bag (with belt loop) wide hook and eye fastening and loop for hanging up

Art. no.		width	height	kg	PU
102042	**empty**	215	290	0,088	1

2-component exchangeable „Vario“ handle

automatic locking mechanism ensures that blades do not fall out unexpectedly, ergonomically formed 2 component book of PP/TPE material

1000 V IEC 60900:2004

Art. no.	TL	shank	kg	PU
102040	120	**hexagonal**	0,058	1

„Vario“ screw cap

Additional screw cap when using as precision tool (electronics)

Art. no.	TL	kg	PU
102044	10	0,002	1

„Vario“ 1000 V replaceable blade

Insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted, with hexagonal shaft, greater torque transmission than a pure pozidrive or slotted blade

1000 V IEC 60900:2004

„Vario“ replaceable blade – pozidrive blade/slotted

Art. no.	form	size	BL	TL	kg	PU
102010	**PZ/FL**	1	85	165	0,035	1
102012	**PZ/FL**	2	85	165	0,045	1

1000 V IEC 60900:2004

„Vario“ replaceable blade – slotted blade

Art. no.	form	CW	BL	TL	kg	PU
102014	**SL**	2,5	85	165	0,013	1
102016	**SL**	3,0	85	165	0,015	1
102017	**SL**	3,5	85	165	0,080	1
102018	**SL**	4,0	85	165	0,022	1
102020	**SL**	5,5	85	165	0,034	1
102022	**SL**	6,5	85	165	0,045	1

1000 V IEC 60900:2004

„Vario“ replaceable blade – Phillips blade

Art. no.	form	size	BL	TL	kg	PU
102001	**PH**	0	85	165	0,023	1
102002	**PH**	1	85	165	0,035	1
102004	**PH**	2	85	165	0,044	1

1000 V IEC 60900:2004

„Vario“ replaceable blade – pozidrive blade

Art. no.	form	size	BL	TL	kg	PU
102005	**PZ**	0	85	165	0,023	1
102006	**PZ**	1	85	165	0,035	1
102008	**PZ**	2	85	165	0,045	1

1000 V IEC 60900:2004

„Vario“ replaceable blade – torx blade

Art. no.	form	size	BL	TL	kg	PU
102060	**S-TX**	8	85	165	0,016	1
102062	**S-TX**	9	85	165	0,016	1
102064	**S-TX**	10	85	165	0,016	1
102066	**S-TX**	15	85	165	0,021	1
102068	**S-TX**	20	85	165	0,021	1
102070	**S-TX**	25	85	165	0,034	1
102072	**S-TX**	30	85	165	0,041	1

1000 V IEC 60900:2004

„Vario“ switch cabinet key – Square

Art. no.	size	BL	kg	PU
102030	6	47	0,010	1
102032	8	47	0,009	1

1000 V IEC 60900:2004

„Vario“ switch cabinet key – Triangular

Art. no.	size	BL	kg	PU
102034	9	47	0,009	1

1000 V IEC 60900:2004

„Vario“ switch cabinet key – Double-bit

Art. no.	size	BL	kg	PU
102036	5,3	47	0,009	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

„Vario Plus“ 1000 V replaceable blade system

The „Vario Plus“ replaceable blade system with insulated replaceable blades, switching cabinet key is integrated into the system, VDE pliers set and voltage tester.

Content:
- Slot: 0,4 x 2,5 x 100; 0,5 x 3,0 x 100; 0,6 x 3,5 x 100; 0,8 x 4,0 x 100; 1,0 x 5,5 x 100; 1,2 x 6,5 x 100
- Phillips: 0 x 100, 1 x 100, 2 x 100 • Pozidriv: 0 x 100, 1 x 100, 2 x 100
- Tx: 8 x 100, 9 x 100, 10 x 100, 15 x 100, 20 x 100, 25 x 100, 30 x 100
- Square: 8 x 47 • Double-bit: 5,3 x 47
- Screw cap, additional screw cap when using as precision tool (electronics)
- 2-component exchangeable handle: 120 mm
- Voltage testers VDE/GS: 100700, 125-250 V
- VDE 2C pliers: 211200, 211204, 211208, 211214

1000 V IEC 60900:2004

Video 102050

Art. no.	set	width	height	depth	kg	PU
102050	**28-pieces**	270	270	80	2,483	1

INFO

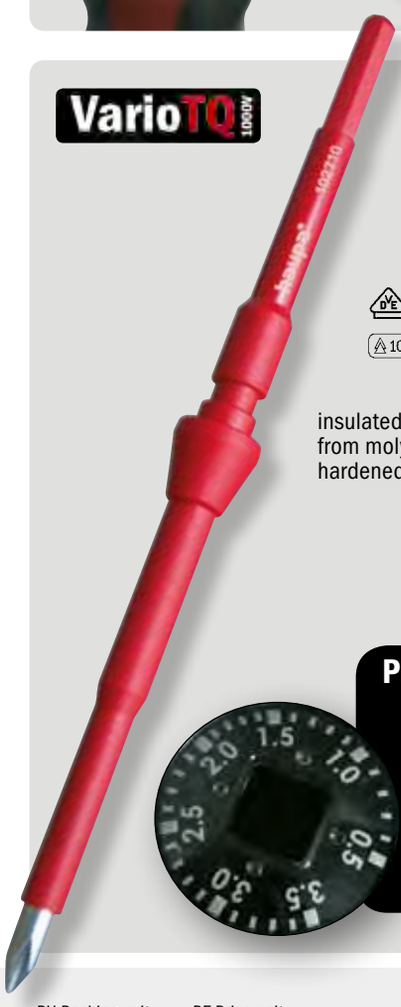
Dynamometric screwdriver with replaceable blades

The new HAUPA 1000 V VarioTQ dynamometric screwdriver is characterised by its precision and functionality.

The ergonomic handles can be adjusted individually.
1. 1.0 - 6.0 Nm
2. 0.5 - 3.5 Nm

HAUPA offers all relevant blade tip profiles as individual items and in set form in a high-quality nylon case.

- torque can be set using a separate key
- scale value can easily be read off
- clearly perceptible and audible signal when the set torque is achieved
- torque accuracy according to EN ISO 6789:2003



VarioTQ 1000V

with hexagonal shaft

1000 V IEC 60900:2004

insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted

Precisely adjustable torque

Two handle versions, also available individually:

Art. no. 102790
1.0 - 6.0 Nm

Art. no. 102792
0.5 - 3.5 Nm

„VarioTQ“ 1000 V dynamometric screwdriver with replaceable blades - Phillips / Pozidriv

VarioTQ 1000V

insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted, with hexagonal shaft, in robust nylon bag (with belt loop and hook and loop closure)

Contents:
- 2-component exchangeable handle (1000 V) 1 - 6 Nm or 0,5 - 3,5 Nm
- slotted 0,4 x 2,5 / 0,5 x 3,0 / 0,8 x 4,0 / 1,0 x 5,5 / 1,2 x 6,5
- PH0 / PH1 / PH2 or PZ0 / PZ1 / PZ2
- PZ/FL 1
- PZ/FL 2
- Square socket key

1000 V IEC 60900:2004

Video 102700

PH

PZ

Art. no.	form	Nm	set	kg	PU
102700	PH	**1 - 6**	12 pieces	0,700	1
102701	PH	**0,5 - 3,5**	12 pieces	0,700	1
102700/PZ	PZ	**1 - 6**	12 pieces	0,700	1
102701/PZ	PZ	**0,5 - 3,5**	12 pieces	0,700	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

„VarioTQ“ 1000 V dynamometric screwdriver with replaceable blades - Tx / Hex

insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted, with hexagonal shaft, in robust nylon bag (with belt loop and hook and loop closure)

Contents:
- 2-component exchangeable handle (1000 V) 1 - 6 Nm or 0,5 - 3,5 Nm
- TX 8 - 9 - 10 - 15 - 20 - 25 - 30
  or TX 8 - 9 - 10 - 15 - 20, HEX 4 - 5
- PZ/FL 1
- PZ/FL 2
- Square socket key

1000 V IEC 60900:2004

Art. no.	form	Nm	set	kg	PU
102702	TX	**1 - 6**	11-pieces	0,700	1
102703	TX	**0,5 - 3,5**	11-pieces	0,700	1
102706	TX+HEX	**1 - 6**	11-pieces	0,760	1
102707	TX+HEX	**0,5 - 3,5**	11-pieces	0,760	1

„VarioTQ“ 1000 V dynamometric screwdriver with replaceable blades - Hex

insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted, with hexagonal shaft, in robust nylon bag (with belt loop and hook and loop closure)

Contents:
- 2-component exchangeable handle (1000 V) 1 - 6 Nm or 0,5 - 3,5 Nm
- HEX 2 - 3 - 3,5 - 4 - 4,5 - 5 - 5,5 mm
- PZ/FL 1
- PZ/FL 2
- Square socket key

1000 V IEC 60900:2004

Art. no.	form	Nm	set	kg	PU
102704	HEX	**1 - 6**	11-pieces	0,700	1
102705	HEX	**0,5 - 3,5**	11-pieces	0,700	1

„VarioTQ“ 1000 V nylon bag – empty

Robust nylon bag (with belt loop) wide hook and eye fastening and loop for hanging up

Art. no.		kg	PU
102785	**empty**	0,115	1

2-component exchangeable „VarioTQ“ 1000 V handle

automatic locking mechanism ensures that blades do not fall out unexpectedly, ergonomically formed 2 component book of PP/TPE material, precisely adjustable torque

1000 V IEC 60900:2004

Art. no.	TL	Nm	kg	PU
102790	122	**1 - 6**	0,185	1
102792	122	**0,5 - 3,5**	0,185	1

Square socket key

for adjustment of the torque for VarioTQ replacement blades

Art. no.	BL	KIBr	kg	PU
102784	40	8	0,056	1

„VarioTQ“ 1000V replaceable blade

Insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted, individually tested with hexagonal shaft

1000 V IEC 60900:2004

„VarioTQ“ 1000 V replaceable blade – pozidrive blade/slotted

Art. no.	form	size	BL	TL	kg	PU
102780	**PZ/FL**	1	195	195	0,040	1
102782	**PZ/FL**	2	195	195	0,040	1

1000 V IEC 60900:2004

„VarioTQ“ 1000 V replaceable blade – slotted blade

Art. no.	form	CW	BL	TL	kg	PU
102710	**SL**	2,5	195	195	0,040	1
102712	**SL**	3,0	195	195	0,040	1
102714	**SL**	4,0	195	195	0,040	1
102716	**SL**	5,5	195	195	0,040	1
102718	**SL**	6,5	195	195	0,040	1

1000 V IEC 60900:2004

„VarioTQ“ 1000 V replaceable blade – Phillips blade

Art. no.	form	size	BL	TL	kg	PU
102720	**PH**	0	195	195	0,040	1
102722	**PH**	1	195	195	0,040	1
102724	**PH**	2	195	195	0,040	1
102726	**PH**	3	195	195	0,040	1

1000 V IEC 60900:2004

„VarioTQ“ 1000 V replaceable blade – pozidrive blade

Art. no.	form	size	BL	TL	kg	PU
102730	**PZ**	0	195	195	0,040	1
102732	**PZ**	1	195	195	0,040	1
102734	**PZ**	2	195	195	0,040	1
102736	**PZ**	3	195	195	0,040	1

1000 V IEC 60900:2004

„VarioTQ“ 1000 V replaceable blade – torx blade

Art. no.	form	size	BL	TL	kg	PU
102740	**TX**	8	195	195	0,040	1
102742	**TX**	9	195	195	0,040	1
102744	**TX**	10	195	195	0,040	1
102746	**TX**	15	195	195	0,040	1
102748	**TX**	20	195	195	0,040	1
102750	**TX**	25	195	195	0,040	1
102752	**TX**	30	195	195	0,040	1

1000 V IEC 60900:2004

„VarioTQ“ 1000 V replaceable blade – hex blade

Art. no.	form	size	BL	TL	kg	PU
102760	**HEX**	2	195	195	0,040	1
102762	**HEX**	3	195	195	0,040	1
102764	**HEX**	3,5	195	195	0,040	1
102766	**HEX**	4	195	195	0,040	1
102768	**HEX**	4,5	195	195	0,040	1
102770	**HEX**	5	195	195	0,040	1
102772	**HEX**	5,5	195	195	0,040	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

2 component pliers **Industrial quality**

HAUPA divides the VDE pliers assortment into three groups.

1. 2C VDE pliers with plug-on handles
2. VDE pliers, coating-insulated, treated with a 2-coloured coatingisolation (outside red/inside yellow)
3. VDE pliers with a 2-coloured coating-isolation (outside red/inside yellow), working head insulated

These pliers fulfil the VDE standard IEC 60900:2004

High leverage pliers offer power saving of up to 50%.

Combination pliers DIN 5244 VDE

german pattern, comfort grip, alloyed carbon steel, C 45, oil-hardened, cutting edges induction hardened, for soft and hard wire up to 150 kp/mm² (N 1500), chrome plated, sheathed handles, **leveraged**

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211200	180	0,287	1
211202	200	0,364	1

Side cutters DIN 5238 B VDE

swedish pattern, high alloyed carbon steel, oil-hardened, C 60, cutting edges induction hardened, for soft and hard wire up to 200 kp/mm² (N 2000), chrome plated, sheathed handles, **leveraged**

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211204	160	0,237	1
211206	180	0,296	1

Side cutting pliers with stripping function 1000 V

Swedish design, power class H, C 60, oil-hardened, induction hardened blades, for hard and soft wire up to 200 kp/mm² (N 2000), chrome plated, push-on grips. Aside from their traditional advantages, these side cutting pliers also possess an additional wire stripping function. (art. 211207, **leveraged**)

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211203	160	0,296	1
211207	180	0,296	1

Wire stripping pliers DIN 5232 VDE

C 45, oil-hardened, with spring and adjustment screw, for cable of 0,2 - 6 mm Ø, chrome plated, sheathed handles

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211214	160	0,202	1

Heavy duty side cutters DIN 5238 A VDE

C 60, cutting edges induction hardened, chrome plated, sheathed handles

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211217	170	0,268	1

Heavy duty side cutters DIN 5238 A VDE

C 60, cutting edges induction hardened, chrome plated, sheathed handles, **leveraged**

Art. no.	TL	kg	PU
211219	200	0,322	1

Long chain nose pliers DIN 5236 A VDE

C 45, oil-hardened, with spring and adjustment screw, for cable of 0,2 - 6 mm Ø, chrome plated, sheathed handles, **leveraged**

1000 V IEC 60900:2004

Art. no.	TL		kg	PU
211208	200	straight	0,255	1

Long chain nose pliers DIN 5236 A VDE

C 45, oil-hardened, with spring and adjustment screw, for cable of 0,2 - 6 mm Ø, chrome plated, sheathed handles, **leveraged**

1000 V IEC 60900:2004

Art. no.	TL		kg	PU
211210	200	45° angled nose	0,260	1

Short flat nose pliers DIN 5258 VDE

C 45, oil-hardened, chrome plated, short body, sheathed handles

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211212	160	0,168	1

Short round nose pliers DIN 5257 VDE

C 45, alloyed carbon steel, oil-hardened, polished chrome plated, sheathed handles

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211216	160	0,161	1

Water pump pliers VDE DIN ISO 8976

self-clamping water pump plier with head adjustment, non-slip, chrome plated, sheathed handles

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
211221	240	0,392	1

Cable cutters VDE

- For cutting Cu/Al cables, fine and multi-wiring
- Chrome vanadium steel, plug-on handles
- Insulating function in upper head area
- Cable measuring function thanks to the 180 degree crossover of the legs
- Not for solid conductors

Art. 211225 (Art. 211223)

- Data, telephone and control cable, maximum Ø 8 mm (Ø 12 mm)
- Cu single wire, maximum 16 mm² (16 mm²)
- Cu fine wire, maximum 16 mm² (35 mm²)
- Cu multi-wire, maximum 16 mm² (25 mm²)
- Al single wire, maximum 16 mm² (25 mm²)
- Al multi-wire, maximum Ø 8 mm = 16 mm² (25 mm²)

1000 V IEC 60900:2004

Ø 8 | Ø 12 | Cu AL

Art. no.	TL	Ø	kg	PU
211225	160	8	0,215	1
211223	200	12	0,352	1

Cable cutters VDE with spring joint

- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Chrome vanadium steel
- Self-opening joint spring
- Enormous cutting power with reduced force expenditure
- Not for solid conductors

1000 V IEC 60900:2004

Ø 10 | Ø 15 | Cu AL

Art. no.	TL	Ø	kg	PU
211226	170	10	0,268	1
211228	230	15	0,457	1

2 components pliers set VDE, sheathed handles

with VDE-safety-isolation, best quality, pliers chrome plated, 4-pieces.

Contents:

- Combination pliers 180 mm
- Side cutter 160 mm
- Long chain nose pliers 200 mm
- Wire stripping pliers 160 mm

1000 V IEC 60900:2004

Art. no.	set	kg	PU
220123	**4-pieces**	1,063	1

Fully insulating 1000 V PVC flat nose pliers

all of plastic, specially for mounting and blocking of electricmeters

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
120051	190	0,109	1

Flat nose pliers 1000 V

all of plastic, specially for mounting and blocking of electricmeters

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
120052	160	0,084	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

VDE-pliers, 2-coloured coating-insulation 1000 V

Combination pliers DIN 5244 VDE

alloyed carbon steel, C 45, oil-hardened, cutting edges induction hardened, for soft and hard wire up to 150 kp/mm² (N 1500), german pattern, chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210056	180	0,300	1
210058	200	0,418	1

Side cutters DIN 5238 B VDE

swedish pattern,high alloyed carbon steel, oil-hardened, C 60, cutting edges induction hardened, for soft and hard wire up to 200 kp/mm² (N 2000), chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210100	160	0,253	1
210102	180	0,303	1

Side cutters DIN 5238 B VDE

swedish pattern, high alloyed carbon steel, oil-hardened, C 60, cutting edges induction hardened, for soft and hard wire up to 200 kp/mm² (N 2000), chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210110	240	0,489	1
210117	180	0,274	1
210119	200	0,368	1

Front cutters 1000 V

alloyed carbon steel, cutting edges induction hardened, chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210303	160	0,328	1

Long chain nose pliers DIN 5236 A VDE

alloyed carbon steel, C 45, oil-hardened, cutting edges induction hardened, for any wire up to 150 kp/mm² (N 1500), chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL		kg	PU
210388	200	straight	0,270	1

Long chain nose pliers DIN 5236 A VDE

alloyed carbon steel, C 45, oil-hardened, cutting edges induction hardened, for any wire up to 150 kp/mm² (N 1500), chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL		kg	PU
210390	200	45° angled nose	0,256	1

Short round nose pliers DIN 5257 VDE

C 45, alloyed carbon steel, oil-hardened, chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210296	160	0,180	1

Short flat nose pliers DIN 5258 VDE

C 45, alloyed carbon steel, oil-hardened, chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210270	160	0,187	1

VDE-pliers, 2-coloured coating-insulation 1000 V

Wire stripping pliers DIN 5232 VDE

C 45, oil-hardened, with spring and adjustment screw, for cable of 0,2 - 6 mm Ø, chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210648	160	0,232	1

Water pump pliers 1000 V

heavy pattern, made of chrome vanadium steel, with roll, chrome plated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210588	260	0,590	1

Water pump pliers DIN 5231 1000 V

chrome vanadium, 31 Cr V3, box-joint, burner hole, teeth induction hardened, finger protection, oil-hardened, 2-coloured coating-insulation - inside yellow/ outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210583	300	0,423	1

Cable cutters 1000 V with spring joint

- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Chrome vanadium steel
- Self-opening joint spring
- Enormous cutting power with reduced force expenditure
- Not for solid conductors

1000 V IEC 60900:2004

Ø 10 | Ø 15 | Cu AL

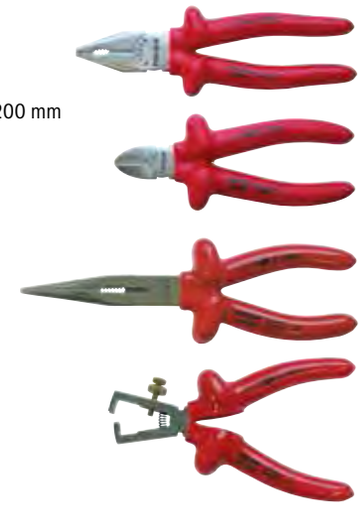
Art. no.	TL	Ø	mm²	kg	PU
200086/VDE	205	10	25	0,274	1
200088/VDE	230	15	70	0,479	1

Pliers set, 2-coloured coating-insulation

C 45, oil-hardened, 2-coloured coating-insulation - inside yellow/ outside red. Pliers chrome plated, 4-pieces.

Contents:
- Combination pliers 180 mm
- Diagonal cutters 160 mm
- Long chain nose pliers, straight 200 mm
- Wire stripping pliers 160 mm

1000 V IEC 60900:2004



Art. no.	set	kg	PU
220126	**4-pieces**	1,000	1

Tool case „Real“ 1000 V

made of plastic, complete with 20 security tools.
Dimension: 450 x 340 x 100 mm.

Contents:
- 2C-VDE electrician‘s screwdrivers 2,5 x 75, 4 x 100, 6,5 x 150, 8 x 175
- 2C-VDE cross slotted screwdrivers PH, size 0, 1, 2
- 2C-VDE socket wrenches 5, 8, 10, 13 mm
- VDE combination pliers 200 mm
- VDE side cutters 180 mm
- VDE telephone pliers, straight 200 mm
- VDE wire stripping pliers 160 mm
- VDE flat nose pliers 160 mm
- VDE round nose pliers 160 mm
- Cable knife
- Cable stripping knife
- 2-pole voltage teste

1000 V IEC 60900:2004

Art. no.	set	kg	PU
220148	**20-pieces**	4,300	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

VDE pliers, coating-insulated 1000 V, head insulated

Combination pliers DIN ISO 5244 1000 V

working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210263	180	0,306	1
210264	200	0,372	1

Side cutters DIN ISO 5749 VDE 1000 V

working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210301	160	0,270	1
210302	180	0,309	1

Long chain nose pliers DIN ISO 5754 VDE 1000 V

straight, working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL		kg	PU
210266	160	straight	0,182	1
210267	200	straight	0,236	1

Long chain nose pliers DIN ISO 5745 VDE 1000 V

angled nose, working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL		kg	PU
210297	200	45° angled nose	0,228	1

Plan grip pliers VDE 1000 V

working head insulated, made of special alloy steel, long, flat, plain griping jaws, round edges, 2-coloured coating-insulation - inside yellow/outside redyellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210298	200	0,215	1

Short flat nose pliers DIN ISO 5745 VDE 1000 V

working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210299	160	0,216	1

Long chain nose pliers DIN ISO 5745 VDE 1000 V

working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210300	160	0,191	1

Wire stripping pliers DIN 5232 VDE 1000 V

working head insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
210265	160	0,180	1

Cable cutter 1000 V

Grave version of vanadium steel, annealed, opening 15 mm, 2-coloured coatinginsulation - inside yellow/outside red

1000 V IEC 60900:2004

Ø 15 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200127	160	15	50	0,289	1

Cable cutter 1000 V

Long version, slight strain, one and two hand handling, proper cutting due to precise grind, forged of special carbon-steel, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Ø 15 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200129	240	15	50	0,484	1

Cable cutter with a snap 1000 V

Laser-cut components made of special carbon steel, oil-hardened, for optimal precision, CNC-ground cutting type, inductively hardened for maximum cutting performance, Screwed joint connections, re-adjustable for longer durability as well as, 2-coloured coating-insulation - inside yellow/outside red, for cables to 16,9 mm Ø (70 mm²)

1000 V IEC 60900:2004

Ø 16,9 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
201002/VDE	180	16,9	70	0,247	1

Allround soft-grip scissors VDE

The new allround Soft - Grip scissors with its relatively short blades and special handles are designed to fulfil the needs of the professional electrical installers. The impressive cutting performance and the tough construction make this new scissors a special tool.

- ergonomic design (2 component)
- slipping free handle - Soft - Grip
- high cutting performance by low cutting force
- precision toothing
- cable stripping device
- stainless

1000 V IEC 60900:2004

Art. no.	TL	mm²	kg	PU
200189	160	25	0,083	1

Cable cutter 1000 V

of carbon-steel, maximum cutting capacity due to special cutting-geometry, with VDE insulation, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Ø 20 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200120	215	20	70	0,403	1

Allround soft-grip scissors VDE

The new allround Soft - Grip scissors with its relatively short blades and special handles are designed to fulfil the needs of the professional electrical installers. The impressive cutting performance and the tough construction make this new scissors a special tool.

- ergonomic design (2 component)
- slipping free handle - Soft - Grip
- high cutting performance by low cutting force
- precision toothing
- cable stripping device
- stainless

1000 V IEC 60900:2004

Art. no.	TL	mm²	kg	PU
200191	160	50	0,082	1

Double edged cable cutter 1000 V

slight strain due to optimal lever-transmission, edges with precise grind for easy and proper cutting by one hand handling, opening 20 mm, forged of special carbon-steel, for copper and alu-cable, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Ø 20 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200128	200	20	50	0,382	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

VDE ratchet cable cutter with cover 1000 V

One-hand cable cutter with ratchet, optimal lever-transmission, encapsulated head, for copper and alu-cable, opening 25 mm, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Ø 34 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200109	290	34	240	1,308	1

Cable cutter 1000 V

- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Low force required thanks to best blade geometry and translation ratios
- Vanadium electro-steel, forged, oil-hardened
- Aluminium legs
- Hardened blades with precision grinding
- Adjustable screw joint

1000 V IEC 60900:2004

Ø 27 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200123	500	27	150	1,389	1

Ratchet cable cutter 1000 V

Extremely durable special steel, single-handed operation, stepped cutting in gradation-free cut for copper and aluminium cable

1000 V IEC 60900:2004

Ø 52 | Cu AL

Art. no.	Ø	mm²	kg	PU
200198	52	400	0,942	1

Cable cutters 1000 V

- For cutting Cu/Al cables, fine and multi-wiring
- Not suitable for steel wire and wire rope
- Hardened blades with precision grinding
- Dual lever ensures easy cutting
- Adjustable screw joint
- Blade head in chrome vanadium steel, forged and oil-hardened

1000 V IEC 60900:2004

Ø 26 | Ø 33 | Cu AL

Art. no.	TL	Ø	mm²	kg	PU
200110	600	26	150	2,327	1
200141	700	33	185	3,292	1

Ratchet cable cutter 1000 V

Two-handed cutter with dual bearing offset mechanism, almost break-proof meshing of rotating blade and tooth blade, separates multiple and fine-wired copper and aluminium cables up to a diameter of 62 mm or 80 mm, but also separates cables with thin steel sheet sleeve or steel sheet armouring in the outer part of the cable, not for hardened steel

1000 V IEC 60900:2004

Ø 62 | Ø 80 | Cu AL

Art. no.	Ø	mm²	kg	PU
200193	62	840	2,200	1
200195	80	1000	3,150	1

single wire
wire rope
multi-wire
armoured steel cable
sector-shaped
ACSR
fine wire
bolt
communication
solid steel

haupa®
...convincing solutions

Wire cutters 1000 V

Wire rope and cable cutter 1000 V

with lever action, blades of high alloyed interchangeable, cutting capacity steelalu ropes up to 16 mm², for copper- and alucable, opening approx 9 mm

1000 V IEC 60900:2004

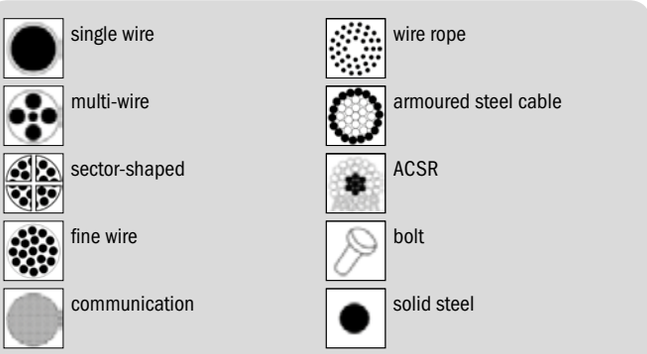
Art. no.	TL	Ø	mm²	kg	PU
200081	700	9	16	2,880	1
200081/MK	Spare cutting head			0,350	1

Wire rope and cable cutter 1000 V

without transmission, blades of high quality special steel, forged, replaceable, opening 20 mm, insulated. Working range: steel-alu-rope up to 120 mm², copper- and alu-cable

1000 V IEC 60900:2004

Art. no.	TL	Ø	mm²	kg	PU
200130	600	20	120	2,348	1
200132	Spare cutting head			0,340	1



Hacksaw frames 1000 V

Hacksaw frame 1000 V

fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	Sbl.	kg	PU
110558	200	150	0,248	1

Hacksaw frame 1000 V

fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	Sbl.	strength	kg	PU
110559	350	300	18 x 8	0,732	1

Cable sheath strippers 1000 V

Stripping pliers 1000 V

full insulated, for cutting and stripping off cable sheaths of PVC, PE and VPE, limited cutting deep and therefore no damage on the inside conductors, easy handling, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	TL	Ø	kg	PU
200149	200	26 - 52	0,739	1

Cable sheath cutter 1000 V

for removing all insulating layers from cables with diameters as of 25 mm

- Replaceable dual blade
- Cutting depth can be set
- Suitable for lengthwise and circular cuts

1000 V IEC 60900:2004

Art. no.	Ø	kg	PU
110561	25	0,250	1
110569	spare blades	0,040	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable knife VDE

with a straight, strong blade, handles made from tough elastic, impact proof plastic, with blade guard

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200000	50	0,110	1

Cable knife VDE

with a hook-shaped blade, handles made from tough elastic, impact proof plastic, with blade guard, thumb recess at the front and finger hook at the end of the handle. **Application:** Round cable

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200002	35	0,093	1

Cable knife VDE

with a hook-shaped insulated blade, handles made from tough elastic, impact proof plastic, with blade guard. **Application:** Large round cables

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200003	35	0,074	1

Cable knife VDE

with a curved blade, handles made from tough elastic, impact proof plastic, with blade guard. **Application:** Sector cable

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200004	35	0,087	1

Cable knife VDE

with a straight, partially-insulated, strong blade, handles made from tough elastic, impact proof plastic, with blade guard. **Application:** To prevent short circuiting

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200005	40	0,106	1

Cable knife VDE with sliding block

with a hook blade for slicing open and removing the sleeve from wet-room cables, handles made from tough elastic, impact proof plastic, with blade guard. **Application:** Wet-room cables, no damage to conductor insulation thanks to sliding block

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200007	50	0,120	1

Cable stripping knife VDE

with a straight, strong blade, handles made from tough elastic, impact proof plastic, with blade guard. **Application:** Rubberised insulation types

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200009	50	0,094	1

Cable knife VDE

with a straight, partially-insulated, strong blade, handles made from tough elastic, impact proof plastic, replaceable blades, fixed blade guard. **Application:** To prevent short circuiting

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
201010	50	0,067	1
201012	replacement blades, 4-pcs.	0,087	1

Cable stripping knife VDE

Blade with a slim, straight blade for fine tasks, handles made from tough elastic, impact proof plastic, with blade guard. **Application:** Phases

1000 V IEC 60900:2004

Art. no.	BL	kg	PU
200013	50	0,094	1

T-Handle socket wrenches 1000 V

chrome vanadium steel, full insulated, for hexagon nuts, DIN 7440, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	BL	handle	kg	PU
110000	**10**	200	160	0,300	1
110002	**11**	200	160	0,315	1
110004	**12**	200	160	0,320	1
110006	**13**	200	160	0,320	1
110008	**14**	200	160	0,426	1
110010	**17**	200	160	0,401	1
110012	**19**	200	160	0,430	1
110022	**11**	300	160	0,429	1
110024	**12**	300	160	0,375	1
110026	**13**	300	160	0,380	1
110028	**14**	300	160	0,385	1
110030	**17**	300	160	0,534	1
110032	**19**	300	160	0,556	1
110034	**22**	300	160	0,662	1
110036	**24**	300	160	0,990	1

Cross type socket wrenches 1000 V

chrome vanadium steel, no contact with steel insert, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	BL	kg	PU
110070	**10-11-14-17**	200	0,451	1
110074	**11-12-13-17**	200	0,225	1
110076	**10-13-14-17**	200	0,455	1
110078	**11-13-14-17**	200	0,449	1
110080	**13-17-19-22**	200	0,502	1

Counter hold spanners 1000 V

chrome vanadium steel (31 CrV 3), 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	TL	kg	PU
110081	**10**	200	0,118	1
110083	**12**	200	0,120	1
110084	**13**	200	0,140	1
110085	**14**	250	0,150	1
110087	**16**	260	0,249	1
110089	**17**	270	0,255	1
110091	**18**	265	0,250	1
110093	**19**	270	0,275	1
110095	**20**	275	0,300	1
110097	**22**	275	0,300	1
110099	**24**	270	0,350	1

Right angle allen keys 1000 V

chrome vanadium steel, for hexagon socket screws, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	kg	PU
110042	**3**	0,016	1
110044	**4**	0,029	1
110046	**5**	0,045	1
110048	**6**	0,051	1
110050	**8**	0,103	1
110052	**10**	0,220	1
110054	**12**	0,352	1

T-handle allen keys 1000 V

chrome vanadium steel, for screws with hexagon inserts, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	kg	PU
110060	**5**	0,222	1
110062	**6**	0,227	1
110064	**8**	0,224	1

Single ended spanners 1000 V

chrome vanadium steel, full insulated, offset at 15°, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	TL	strength	kg	PU
110260	**6**	75	3	0,021	1
110262	**7**	80	3,5	0,020	1
110264	**8**	85	3,5	0,032	1
110266	**9**	100	4	0,035	1
110268	**10**	120	5	0,035	1
110270	**11**	130	5,5	0,044	1
110272	**12**	140	5,5	0,064	1
110274	**13**	155	6	0,061	1
110276	**14**	170	6	0,084	1
110278	**17**	185	6,5	0,121	1
110280	**19**	210	7,5	0,140	1
110282	**22**	230	8,5	0,215	1
110284	**24**	250	9,5	0,242	1
110286	**27**	290	11,5	0,338	1
110288	**30**	345	13	0,390	1
110290	**32**	350	15	0,503	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Single ended tool set acc. to VDE 1000 V

in tool wallet of black imitation leather. **Contents:** 8 single ended tools of chrom vanadium steel, offset at 15°, 2-coloured coating-insulation - inside yellow/outside red.

Populated with:
- Size of key 10, 11, 12, 13, 14, 17, 19, 22

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220017	**8-pieces**	220002	1,181	1

Ring spanners 1000 V

chrome vanadium steel, full insulated, offset at 75°, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	TL	kg	PU
110300	**6**	140	0,061	1
110302	**7**	140	0,066	1
110304	**8**	150	0,084	1
110306	**9**	155	0,066	1
110308	**10**	160	0,092	1
110310	**11**	170	0,089	1
110312	**12**	180	0,130	1
110314	**13**	195	0,132	1
110316	**14**	205	0,147	1
110318	**17**	240	0,233	1
110320	**19**	260	0,236	1
110322	**22**	280	0,345	1
110324	**24**	280	0,357	1

Ratchet ring spanners 1000 V

full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	kg	PU
110870	**8**	0,032	1
110872	**9**	0,040	1
110874	**10**	0,050	1
110876	**11**	0,059	1
110878	**12**	0,065	1
110880	**13**	0,076	1
110882	**14**	0,086	1
110884	**15**	0,105	1
110886	**16**	0,130	1
110888	**17**	0,161	1
110890	**18**	0,179	1
110892	**19**	0,215	1

Adjustable wrenches to DIN 3117 A 1000 V

steel forged, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS max.	TL	kg	PU
110555	**26**	200	0,325	1
110556	**31**	250	0,512	1
110557	**36**	300	0,809	1

Reversible ratchet 1000 V

1/4"

full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220577	1/4"	150	0,145	1

Socket T-wrench 1000 V

1/4"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220578	1/4"	125	0,085	1

Extensions 1000 V

1/4"

with locking device against accidental loosening of sockets or extensions, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220579	1/4"	100	0,050	1
220580	1/4"	150	0,070	1

Hexagon sockets 1000 V

1/4"

1/4" square drive, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
220581	**5**	1/4"	40	0,011	1
220582	**6**	1/4"	40	0,011	1
220583	**7**	1/4"	40	0,012	1
220584	**8**	1/4"	40	0,013	1
220585	**9**	1/4"	40	0,014	1
220586	**10**	1/4"	40	0,014	1
220587	**11**	1/4"	40	0,017	1
220588	**12**	1/4"	40	0,018	1
220589	**13**	1/4"	40	0,021	1
220590	**14**	1/4"	40	0,023	1

Fittings for hexagon socket screws 1000 V

1/4"

1/4" square drive, made of chrome vanadium steel, forged, oil hardened, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
220591	**3**	1/4"	55	0,016	1
220592	**4**	1/4"	55	0,012	1
220593	**5**	1/4"	55	0,012	1
220594	**6**	1/4"	55	0,024	1

Tool case 1000 V

1/4"

made of plastic, complete with 1/4" tools. The plastic material used for socket sets is guaranteed to pass -40°c impact tests. This quarantee that the insulation value will not be compromised due to impact. Dimension: 286 x 255 x 54 mm.

Contents:

- Reversible ratchet 150 mm, 1/4"
- T-slip-on-keys 125 mm, 1/4"
- Extension 100 and 150 mm, 1/4"
- Sockets 1/4", 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm
- Dies for hexagon srews 1/4", 3, 4, 5, 6 mm

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
220576	**18-pieces**	1/4"	1,250	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

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Reversible ratchet 1000 V

1/4"

full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110810	1/4"	135	0,122	1

Torque wrench 1000 V

1/4"

reversible ratchet system, fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	TL	kg	PU
110812	1/4"	2-12	200	0,250	1
110813	1/4"	5-25	200	0,420	1

Socket T-wrench 1000 V

1/4"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110818	1/4"	115	0,156	1

Extensions 1000 V

1/4"

with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110814	1/4"	75	0,043	1
110816	1/4"	125	0,054	1

Extension with bit adapter 1000 V

1/4"

fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	bit adapter	drive	TL	kg	PU
110860	1/4"	1/4"	40	0,023	1

Hexagon sockets 1000 V

1/4"

fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110820	**5**	1/4"	25	0,012	1
110822	**6**	1/4"	25	0,012	1
110824	**7**	1/4"	25	0,014	1
110826	**8**	1/4"	25	0,011	1
110828	**9**	1/4"	25	0,016	1
110830	**10**	1/4"	25	0,014	1
110832	**11**	1/4"	25	0,020	1
110834	**12**	1/4"	25	0,021	1
110836	**13**	1/4"	25	0,021	1
110838	**14**	1/4"	25	0,034	1

Inserts for hexagon socket screws 1000 V

1/4"

fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	kg	PU
110840	**3**	1/4"	0,010	1
110842	**4**	1/4"	0,014	1
110844	**5**	1/4"	0,014	1
110846	**6**	1/4"	0,015	1
110848	**8**	1/4"	0,021	1

Handles with bit adapter 1000 V

1/4"

fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	bit adapter	drive	TL	kg	PU
110864	1/4"	1/4"	120	0,160	1
110866	1/4"	1/4"	160	0,248	1
110868	1/4"	1/4"	250	0,310	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case for household connections 1000 V

1/4"

Plastic case with foam insert, with 1/4“ insert tools.
Dimensions: 450 x 340 x 100 mm.

Contents:
- 1 torque wrench 1/4" 5 - 25 Nm
- 3 extensions 1/4" 75 - 100 - 150 mm
- 2 bit holders 1/4" DIN 3126/FORM C 6,3
- 5 inserts 1/4" 6, 8, 10, 13, 14
- 10 hexagonal bits 5, 6, 8
- Slots 4, 5.5, 6.5
- PZ/FL 1, 2
- PH 1, 2

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
110869	**21-pieces**	1/4"	1,000	1

Tool case 1000 V

1/4"

Plastic case with foam insert, with 1/4“ insert tools.
Dimensions: 450 x 340 x 100 mm.

Contents:
- 1 ratchet 1/4"
- 1 bit holder 1/4"
- 1 T-fitting 1/4"
- 4 extensions 1/4"
- 10 inserts 1/4", 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
- 5 hexagonal inserts 1/4" 3, 4, 5, 6, 8

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
110871	**22-pieces**	1/4"	1,600	1

Reversible ratchet 1000 V

3/8"

full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220410	3/8"	200	0,300	1

Socket T-wrench 1000 V

3/8"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220412	3/8"	200	0,241	1

Extensions 1000 V

3/8"

with locking device against accidental loosening of sockets or extensions, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220414	3/8"	125	0,150	1
220416	3/8"	250	0,250	1

Hexagon sockets 1000 V

3/8"

3/8" square drive, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
220418	**8**	3/8"	44,5	0,027	1
220420	**10**	3/8"	44,5	0,027	1
220422	**12**	3/8"	44,5	0,029	1
220424	**13**	3/8"	44,5	0,032	1
220426	**14**	3/8"	44,5	0,035	1
220428	**17**	3/8"	44,5	0,047	1
220430	**19**	3/8"	46,0	0,051	1
220432	**22**	3/8"	46,0	0,063	1

Fittings for hexagon socket screws 1000 V

3/8"

3/8" square drive, made of chrome vanadium steel, forged, oil hardened, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
220434	**4**	3/8"	60,0	0,036	1
220436	**5**	3/8"	60,0	0,040	1
220438	**6**	3/8"	60,0	0,041	1
220440	**8**	3/8"	60,0	0,042	1

Tool case 1000 V

3/8"

made of plastic, complete with 3/8" tools. The plastic material used for socket sets is guaranteed to pass -40°c impact tests. This quarantee that the insulation value will not be compromised due to impact. Dimension: 286 x 255 x 54 mm.

Contents:

- Reversible ratchet 200 mm, 3/8"
- T-slip-on-keys 200 mm, 3/8"
- Extension 150 and 250 mm, 3/8"
- Sockets 3/8", 8, 10, 12, 13, 14, 17, 19, 22 mm
- Dies for hexagon srews 3/8", 4, 5, 6, 8 mm

1000 V IEC 60900:2004

Video 220402

Art. no.	set	drive	kg	PU
220402	**16-pieces**	3/8"	2,500	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

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Reversible ratchets, torque wrenches, extensions

Reversible ratchet 1000 V

3/8"

full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110331/EN	3/8"	190	0,402	1

Locked torque wrench 1000 V

3/8"

reversible ratchet system, fixed factory-provided valve, possible valve between 5-27 Nm, valve must be indicate before delivery, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	TL	kg	PU
300310/EN	3/8"	5-27	280	0,951	1

Torque wrenches 1000 V

3/8"

reversible ratchet system, fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	TL	kg	PU
110055/EN	3/8"	5-25	200	0,350	1
110056/EN	3/8"	5-25	280	0,920	1
110065/EN	3/8"	5-50	370	1,194	1

Torque T key 1000 V

3/8"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	TL	kg	PU
110071	3/8"	12 Nm	150	0,540	1
110073	3/8"	18 Nm	150	0,540	1
110075	3/8"	25 Nm	150	0,540	1

Torque stoppers 1000 V

3/8"

with short extension, locable for all sockets with 3/8" drive, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	kg	PU
110456/EN	3/8"	-12	0,220	1
110457/EN	3/8"	-18	0,220	1
110458/EN	3/8"	-25	0,224	1

Socket T-wrench 1000 V

3/8"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	BL	handle	kg	PU
110039/EN	**3/8"**	200	160	0,369	1

Extensions 1000 V

3/8"

with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110337/EN	3/8"	125	0,292	1
110335/EN	3/8"	250	0,280	1

Extensions with bit adapter 1000 V

3/8"

full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	bit adapter	drive	TL	kg	PU
110861	1/4"	3/8"	125	0,137	1

Hexagon sockets 1000 V

3/8"

3/8" square drive, 4 edge drive, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110363/EN	**8**	3/8"	40	0,035	1
110364/EN	**9**	3/8"	40	0,032	1
110365/EN	**10**	3/8"	40	0,036	1
110366/EN	**11**	3/8"	40	0,037	1
110367/EN	**13**	3/8"	40	0,032	1
110368/EN	**17**	3/8"	40	0,050	1
110369/EN	**19**	3/8"	40	0,060	1
110371/EN	**14**	3/8"	40	0,070	1
110700/EN	**12**	3/8"	40	0,070	1
110702/EN	**22**	3/8"	40	0,061	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hexagon sockets 1000 V, extra long

3/8"

3/8" square drive, 4 edge drive, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110710	**11**	3/8"	125	0,180	1
110712	**12**	3/8"	125	0,200	1
110713	**13**	3/8"	125	0,210	1
110714	**14**	3/8"	125	0,220	1
110715	**17**	3/8"	125	0,240	1
110716	**19**	3/8"	125	0,260	1
110717	**22**	3/8"	125	0,280	1

Fittings for hexagon socket screws 1000 V

3/8"

3/8" square drive, 4 edge drive, made of chrome vanadium steel, forged, oil hardened, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
300302/EN	**4**	3/8"	65	0,068	1
300296/EN	**5**	3/8"	65	0,065	1
300298/EN	**6**	3/8"	65	0,068	1
300299/EN	**8**	3/8"	65	0,070	1
300305/EN	**10**	3/8"	65	0,082	1

Tool case 1000 V

3/8"

made of plastic, complete with 3/8" tools. Dimension: 450 x 340 x 100 mm.

Contents:
- Reversible ratchet 3/8"
- Extension 125 mm, 3/8"
- Extension 250 mm, 3/8"
- T-slip-on-keys 3/8"
- Sockets 3/8" (10, 12, 13, 14, 17, 19, 22, 24 mm)
- Dies for hexagon srews 3/8", 5, 6, 8 mm
- Torque stopper (12 to 25 Nm)
- 2C-VDE screwdriver 3,5 x 100 mm

with locking system

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
220147	**17-pieces**	3/8"	3,400	1

Tool case 1000 V

3/8"

made of plastic, complete with 3/8" tools. Dimension: 400 x 290 x 110 mm.

Contents:
- Reversible ratchet 3/8"
- Extension 125 mm, 3/8"
- Extension 250 mm, 3/8"
- T-slip-on-keys 3/8"
- Sockets 3/8", 8, 10, 13, 17, 19 mm
- Dies for hexagon srews 3/8", 4, 5, 6, 8 mm

without locking system

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
220212	**13-pieces**	3/8"	2,500	1

Tool case 1000 V

3/8"

Plastic case with foam insert, with 3/8" insert tools.
Dimensions: 400 x 290 x 110 mm.

Contents:
- 1 torque wrenches 3/8" 5-50 Nm
- 2 extensions 3/8" 125/250 mm
- 5 inserts, extra deep in the sizes 10, 13, 14, 17, 19 mm
- 5 inserts for hexagonal screws 3/8" in 4, 5, 6, 8, 10 mm
- Alignment tool for sector-shaped conductors 3/8" in 95-150 mm

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
110873	**14-pieces**	3/8"	3,870	1

Reversible ratchet 1000 V

1/2"

full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220450	1/2"	250	0,550	1

Socket T-wrench 1000 V

1/2"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220452	1/2"	200	0,330	1

Extensions 1000 V

1/2"

with locking device against accidental loosening of sockets or extensions, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
220454	1/2"	125	0,208	1
220456	1/2"	250	0,411	1

Hexagon sockets 1000 V

1/2"

1/2" square drive, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
220458	**10**	1/2"	55,0	0,055	1
220460	**11**	1/2"	55,0	0,055	1
220462	**12**	1/2"	55,0	0,058	1
220464	**13**	1/2"	55,0	0,058	1
220466	**14**	1/2"	55,0	0,061	1
220468	**17**	1/2"	55,0	0,069	1
220470	**19**	1/2"	57,0	0,072	1
220478	**22**	1/2"	57,0	0,087	1
220480	**24**	1/2"	57,0	0,095	1
220482	**27**	1/2"	57,0	0,125	1
220484	**32**	1/2"	57,0	0,170	1

Fittings for hexagon socket screws 1000 V

1/2"

1/2" square drive, made of chrome vanadium steel, forged, oil hardened, full insulated, from shock-resistant plastic

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
220486	**4**	1/2"	120,0	0,113	1
220488	**5**	1/2"	120,0	0,113	1
220490	**6**	1/2"	120,0	0,113	1
220492	**8**	1/2"	120,0	0,115	1
220494	**10**	1/2"	120,0	0,134	1

Tool case 1000 V

1/2"

made of plastic, complete with 1/2" tools. The plastic material used for socket sets is guaranteed to pass -40°c impact tests. This quarantee that the insulation value will not be compromised due to impact. Dimension: 380 x 316 x 61 mm.

Contents:

- Reversible ratchet 250 mm, 1/2"
- T-slip-on-keys 200 mm, 1/2"
- Extension 125 and 250 mm, 1/2"
- Sockets 1/2", 10, 11, 12, 13, 14, 17, 19, 22, 24, 27, 32 mm
- Dies for hexagon srews 1/2", 4, 5, 6, 8, 10 mm

1000 V IEC 60900:2004

Video 220404

Art. no.	set	drive	kg	PU
220404	**20-pieces**	1/2"	4,000	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

SysCon „VDE-Socket“ 1/2“

SysCon

complete with 1/2“ tools. The plastic material used for socket sets is guaranteed to pass –40°c impact tests. This quarantee that the insulation value will not be compromised due to impact.

Contents:
1 220370 ABS plastic box „SysCon S”

- Reversible ratchet 250 mm, 1/2“
- T-slip-on-keys 200 mm, 1/2“
- Extension 125 and 250 mm, 1/2“
- Sockets 1/2“, 10, 11, 12, 13, 14, 17, 19, 22, 24, 27, 32 mm
- Dies for hexagon srews 1/2“, 4, 5, 6, 8, 10 mm

1000 V IEC 60900:2004

Art. no.	set	empty	drive	kg	PU
220612	**20-pieces**	220370	1/2"	7,200	1

Reversible ratchet 1000 V

1/2"

full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110332/EN	1/2"	255	0,687	1

Locked torque wrench 1000 V

1/2"

reversible ratchet system, fixed factory-provided valve, possible valve between 5-27 Nm, valve must be indicate before delivery, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	TL	kg	PU
300312/EN	1/2"	5-27	280	1,052	1

Torque wrenches 1000 V

1/2"

reversible ratchet system, fully insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	torque	TL	kg	PU
110058/EN	1/2"	2-27	280	1,034	1
110066/EN	1/2"	5-50	370	1,121	1
110067/EN	1/2"	20-100	460	1,493	1
110068/EN	1/2"	60-220	530	1,300	1

Socket T-wrench 1000 V

1/2"

chrome vanadium steel, tempered, with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	BL	handle	kg	PU
110040/EN	**12,5**	200	160	0,457	1

Extensions 1000 V

1/2"

with locking device against accidental loosening of sockets or extensions, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	drive	TL	kg	PU
110336/EN	1/2"	125	0,197	1
110338/EN	1/2"	250	0,389	1

Extensions with bit adapter 1000 V

1/2"

full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	bit adapter	drive	TL	kg	PU
110862	1/4"	1/2"	250	0,165	1

Hexagon sockets 1000 V

1/2"

1/2“ square drive, 4 edge drive, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110339/EN	**8**	1/2"	50	0,080	1
110340/EN	**10**	1/2"	50	0,056	1
110342/EN	**11**	1/2"	50	0,062	1
110344/EN	**12**	1/2"	50	0,062	1
110346/EN	**13**	1/2"	50	0,066	1
110348/EN	**14**	1/2"	50	0,063	1
110350/EN	**17**	1/2"	50	0,076	1
110352/EN	**19**	1/2"	50	0,072	1
110354/EN	**22**	1/2"	50	0,104	1
110356/EN	**24**	1/2"	50	0,141	1
110358/EN	**27**	1/2"	50	0,191	1
110360/EN	**30**	1/2"	50	0,224	1
110362/EN	**32**	1/2"	50	0,268	1

Hexagon sockets DIN 7448, 1000 V, 80 mm

1/2"

extra long, 1/2“ square drive, 4 edge drive, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110373/EN	**10**	1/2"	80	0,085	1
110374/EN	**11**	1/2"	80	0,110	1
110375/EN	**13**	1/2"	80	0,123	1
110376/EN	**14**	1/2"	80	0,119	1
110377/EN	**17**	1/2"	80	0,157	1
110378/EN	**19**	1/2"	80	0,168	1
110379/EN	**22**	1/2"	80	0,230	1

Hexagon sockets, 1000 V, 125 mm

1/2"

extra long, 1/2“ square drive, 4 edge drive, full insulated, 2-coloured coatinginsulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110346/125	**13**	1/2"	125	0,250	1
110348/125	**14**	1/2"	125	0,260	1
110350/125	**17**	1/2"	125	0,280	1
110352/125	**19**	1/2"	125	0,295	1
110354/125	**22**	1/2"	125	0,310	1
110356/125	**24**	1/2"	125	0,330	1
110358/125	**27**	1/2"	125	0,350	1
110360/125	**30**	1/2"	125	0,380	1
110362/125	**32**	1/2"	125	0,410	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hexagon sockets, 1000 V, 250 mm

1/2"

extra long, 1/2“ square drive, 4 edge drive, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
110346/250	**13**	1/2"	250	0,485	1
110348/250	**14**	1/2"	250	0,500	1
110350/250	**17**	1/2"	250	0,530	1
110352/250	**19**	1/2"	250	0,550	1
110354/250	**22**	1/2"	250	0,580	1
110356/250	**24**	1/2"	250	0,605	1
110358/250	**27**	1/2"	250	0,635	1
110360/250	**30**	1/2"	250	0,660	1
110362/250	**32**	1/2"	250	0,670	1

Fittings for hexagon socket screws 1000 V

1/2"

1/2“ square drive, 4 edge drive, made of chrome vanadium steel, forged, oil hardened, full insulated, 2-coloured coating-insulation - inside yellow/outside red

1000 V IEC 60900:2004

Art. no.	WS	drive	TL	kg	PU
300294/EN	**4**	1/2"	70	0,094	1
300297/EN	**5**	1/2"	70	0,096	1
300295/EN	**6**	1/2"	70	0,101	1
300303/EN	**8**	1/2"	70	0,100	1
300306/EN	**10**	1/2"	70	0,106	1

Tool case 1000 V

1/2"

made of plastic, complete with 1/2“ tools. Dimension: 450 x 340 x 100 mm.

Contents:
- Reversible ratchet 1/2“
- Extension 125 mm, 1/2“
- Extension 250 mm, 1/2“
- Slip-on-keys 1/2“
- Hexagon sockets 1/2“, 10, 12, 13, 14, 17, 19, 22, 24 mm
- Dies for hexagon srews 1/2“, 5, 6, 8 mm
- 2C-VDE screwdriver 3,5 x 100 mm

with locking system

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
220205/EN	**16-pieces**	1/2"	4,080	1

Tool case „Biber“ 1000 V

1/2"

made of plastic, complete with 26 security tools.
Dimension: 450 x 340 x 100 mm.

Contents:
- 2C-VDE electrician‘s screwdrivers 4 x 100, 5,5 x 125, 6,5 x 150, 8 x 175 mm
- VDE combination pliers 205 mm
- VDE side cutters 185 mm
- VDE telephone pliers, straight, 200 mm
- Reversible ratchet 1/2“
- Extension 250 mm, 1/2“
- Hexagon sockets 1/2“, 10, 11, 12, 13, 14, 17, 19 mm
- Open end spanners 10, 11, 12, 13, 14, 17, 19 mm
- 2-pole voltage tester
- Cable knife
- Cable stripping knife

with locking system

1000 V IEC 60900:2004

Art. no.	set	drive	kg	PU
220146	**26-pieces**	1/2"	5,000	1

Alignment tool, 3/8“ 1000 V

3/8“ drive, for the alignment of 3 or 4-wire sector conductors, made from impact-resistant plastic

Art. no.	size	kg	PU
110704	95 - 150 mm²	0,068	1
110705	185 - 240 mm²	0,088	1

Universal alignment tool

for aligning sector-shaped conductors from 50, 70, 95, 150, 185, and 240 mm²

1000 V IEC 60900:2004

Art. no.	kg	PU
110709	0,142	1

Counter holder 1000 V

for the easier handling of screwed connections when assembling coupling sleeves, variably adjustable

1000 V IEC 60900:2004

Art. no.	TL	mm	kg	PU
120101	240	0 - 15	0,280	1
120103	220	15 - 40	0,380	1
120104	300	25 - 50	0,610	1

Plastic wedges

with bright slot for all common cable cutters, oval form without sharp edges

1000 V IEC 60900:2004

Art. no.	material	TL	width	kg	PU
120102	plastic	22,5	4,5	0,234	1

Wedges

without slot, oval form without sharp edges, long version with large head

1000 V IEC 60900:2004

Art. no.	material	TL	width	kg	PU
120100	plastic	20	2,5	0,085	1

Wedges

wood or plastic, dimension: 16.3 x 3.7 mm

Art. no.	size	material	type	kg	PU
120094	1	plastic	without	0,051	1
120097	2	plastic	with	0,074	1
120098	1	wood	without	0,043	1
120099	2	wood	with	0,043	1

Cleaning brushes Safety Line

PVC-pattern

1000 V IEC 60900:2004

Art. no.	TL	width	kg	PU
150036	420	25	0,053	1
150037	420	28	0,061	1
150038	420	50	0,100	1

Electrician‘s safety levels

nonconducting plastic material, with 2 tubes horizontal and vertical

Art. no.	TL	kg	PU
240057	400	0,188	1
240058	600	0,274	1

PVC hammer 1000 V

Bounce-free, head of polyethylen, break-, wear- and splinter-proof, heads interchangeable

1000 V IEC 60900:2004

Art. no.	TL	Ø	kg	PU
180295	290	25	0,570	1
180297	290	35	0,825	1

Combined dowel and contact spanners

may be used for screws 2 - 63 A by changing the insert, handle made from insulating material

Art. no.	TL	kg	PU
120002	105	0,046	1

Insulated tweezers VDE 1000 V

austenitic steel, pointed, PVC-insulated

1000 V IEC 60900:2004

Art. no.	TL	form	kg	PU
211060	130	**pointed**	0,029	1

1000 V IEC 60900:2004

Art. no.	TL	form	kg	PU
211064	145	**wide round, flat,**	0,042	1

1000 V IEC 60900:2004

Art. no.	TL	form	kg	PU
211062	150	**pointed round, bent,**	0,031	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

1000 V Tool cases

Tool cases 1000 V can be found from page 308 on.

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... convincing solutions

Voltage testers

haupa®

... convincing solutions

Voltage tester “Profi LCDplus II”

The “Profi LCDplus II” is the new top model in our tried and tested professional series. The innovative two-pole voltage tester is characterised by a wide performance spectrum and practical one-handed operation. It enables testing without finger contact and, thanks to the high CAT IV 1000 V safety level, is suitable with immediate effect for taking measurements on hybrid and electrical vehicles as well as for photovoltaic systems.

Functions and benefits
- Highest CAT IV 1000 V safety level
- Large, illuminated LCD
- Voltage display up to 1000 V AC and 1400 V DC
- Resistance measurement up to 1999 Ω
- Frequency display up to 1000 Hz

Technical data	**„Profi LCDplus II“**
Display:	Optical, LCD
Measuring range:	Automatic
Over-voltage category:	CAT IV 1,000 V
Dimensions:	300 x 75 x 20 mm
Weight:	270 g
Colour:	Red/black
Scope of delivery:	Including batteries
Accessories (optional):	Carry bag
Voltage range:	3–1000 V AC (TRMS/RMS) 4–1400 V DC
Throughput check:	0–50 Ω with acoustic signal
Phase display:	> 100 V AC
Voltage supply:	2 x 1.5 V AAA (display of voltages is possible even without batteries)
Polarity:	Yes (- in LCD)
PELV display:	Optical, acoustic and vibrating
Protection class:	IP 65
Standard:	EN 61243-3:2010
Resistance measurement:	1–1999 Ω
Frequency measurement:	0-1000 Hz
Data-hold:	Voltage and resistance
Automatic power off function:	Yes
FI/RCD test:	30 mA at 230 V AC using two buttons
Single-pole phase test:	Yes
Two-pole phase-sequence test:	Yes
Illumination of measuring point:	White LED
4-mm test tip adapter:	Can be unscrewed
Guarantee:	5 years

Art. no.	TMA	kg	PU
103826	3-1000	0,264	1

Voltage tester “Profi LEDplus II”

The new two-pole voltage tester “Profi LEDplus II” is the result of consistent further development of our popular “Profi LEDplus”. It is characterised by user-friendly handling, robust and safe construction and meets all the requirements a specialist user makes of the modern voltage tester. Thanks to the highest safety level, CAT IV 1000 V, it is also suitable for measurements on hybrid and electrical vehicles as well as photovoltaic systems.

Functions and benefits
- Highest CAT IV 1000 V safety level
- Practical one-handed operation
- Robust, safe construction format
- Tests without finger contact
- Display on voltages even without battery

Technical data	**„Profi LEDplus II“**
Display:	Optical, LEDs
Measuring range:	Automatic
Over-voltage category:	CAT IV 1,000 V
Dimensions:	300 x 75 x 20 mm
Weight:	270 g
Colour:	Red/black
Scope of delivery:	Including batteries
Accessories (optional):	Carry bag
Voltage range:	6–1000 V AC 6–1400 V DC
Throughput check:	0–50 kΩ optical/acoustic
Phase display:	> 100 V AC
Voltage supply:	2 x 1.5 V AAA (display of voltages is possible even without batteries)
Diode test:	Yes
Polarity:	Yes (+,- LED)
PELV display:	Optical, acoustic and vibrating
Protection class:	IP 65
Standard:	EN 61243-3:2010
Automatic power off function:	Yes
FI/RCD test:	30 mA at 230 V AC using two buttons
Single-pole phase test:	Yes
Two-pole phase-sequence test:	Yes
Illumination of measuring point:	White LED
4-mm test tip adapter:	Can be unscrewed
Guarantee:	5 years

Art. no.	TMA	kg	PU
103824	6-1000	0,264	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Voltage tester “Basic +”

The two-pole voltage tester reliably indicates direct and alternating voltages within a range of 6 to 400 V in 7 intervals per LED (6, 12, 24, 50, 120, 230 and 400). The electronics also enable the determination of polarity and the phase to protective conductor. The “Basic +” is characterised by a user-friendly construction and robust housing that ensures long operational life. The rubberised handles offer non-slip hold. The “Basic +” operates without batteries. It takes its operating voltage from the test object.

Functions and benefits
- User-friendly and robust
- Voltage range up to 400 V AC/DC
- Phase search to protective conductor

Technical data	**„Basic +“**
Display:	Optical, 8 LEDs
Over-voltage category:	CAT III 400 V
Dimensions:	120 x 60 x 30 mm
Weight:	100 g
Colour:	Red/black
Accessories (optional):	Carry bag
Voltage range:	6 - 400 V AC/DC
Voltage supply:	Via measuring object
Polarity:	Yes (+,- LED)
Standard:	EN 61243-3:2010
Housing:	High quality plastic with rubberised handle area
Guarantee:	5 years

Art. no.	TMA	kg	PU
103800	6-400	0,097	1

“Multi Clamp II” digital miniature clamp transducer AC/DC 600 V

Thanks to the versatile measuring functions, the digital probe ampere meter “Multi Clamp II” may be used universally. Handy details, such as the large display, the manual or automatic measuring range selection and the measuring point illumination, make operation particularly convenient and safe.

Functions and benefits
- Large range of functions
- Easy to read LCD
- LED measuring point illumination

Technical data	**„Multi Clamp II“**
Display:	LCD with 4 digits
Over-voltage category:	CAT III 600 V
Dimensions:	220 x 75 x 35 mm
Weight:	340g
Colour:	Red/black
Scope of delivery:	Including measuring cables, batteries and carry bag
Voltage supply:	3x 1.5V
Diode test:	Test current - 1 mA, test voltage - 3.3 V
Throughput test:	Throughput tone under 30Î©
Direct voltage:	600m, 6, 60, 600V
Direct current:	60A, 600A
Alternating voltage:	600mV, 6, 60, 600V, 40 to 400Hz
Alternating current:	60A, 600A, 40 to 400Hz
Alternating current accuracy:	±3.0 % +10 digit
Alternating current, highest resolution:	10 mA
Direct current, highest resolution:	10 mA
Alternating voltage accuracy:	±1.5 % +10 digit to 600 mV / ±1.2 % +5 digit to 60 V / ±1.5 %+10 digit to 600 V
Alternating voltage, highest resolution:	100 µV
Alternating voltage input resistance:	10 MΩ
Direct voltage accuracy:	±0.8 % +3 digit to 60 V / ±1.0 %V +5 digit to 600 V
Direct voltage, highest resolution:	100 µV
Direct voltage input resistance:	10 MΩ

Frequency measuring tongs: 600 Hz, 1 kHz, > 1 A AC rms
Frequency measuring tongs, accuracy: ±1.5 % +5 digit to 1 kHz
Frequency measuring tongs, highest resolution: 100 mHz
Frequency measuring socket: 600 Hz, 6 kHz, 10 kHz, > 0.2 V AC rms
Frequency measuring socket, accuracy: ±1.5 % +5 digit to 10 kHz
Frequency measuring socket, highest resolution: 100 mHz
Sampling rate: 10 to 95 %, ±3.0 %, > 1 A AC rms
Sampling rate, frequency range: 10 Hz to 1 kHz
Sampling rate, capacity measurement: To 60 mF
Resistance accuracy: ±1.2 % +2 digit to 6 MΩ
±2.0 % +5 digit to 60 MΩ
Resistance highest accuracy: 100 MΩ
Diode test resolution: 1 mV
Diode test throughput test: Throughput tone under 30 Ω
Guarantee: 5 years

Art. no.	kg	PU
103809	0,426	1

“Multi Check II” - digital high-capacity multimeter

The “Multi Check II” is particularly safe to use. Thanks to the automatic measuring range protection, it is impossible to operate incorrectly. In addition, the digital multimeter has an easy to read LC display with background illumination.

Functions and benefits
- Automatic measuring range protection
- Large LCD with background lighting
- Temperature measurement

Technical data	**„Multi Check II“**
Display:	37 mm, large, illuminated LCD
Over-voltage category:	CAT III 600 V
Weight:	380g including batteries.
Scope of delivery:	Including measuring cables, holster, temperature sensor and battery
Voltage supply:	1x 9 V 6LR61
Diode test:	Yes
Standard:	IEC/EN 61010-1, IEC/EN 61010-2-033
Dimension:	200 x 89 x 38 mm
AC voltage:	2 V, 20 V, 200 V ; ±1.0 %, ±5 Digits 600 V ; ±1.2 %, ±5 Digits
AC current:	2 mA, 20 mA ; ±1.0 %, ±5 digits 200 mA ; ±1.5 %, ±3 digits 10 A ; ±2.0 %, ±8 digits
Operating temperature range:	0–40 °C (32–104 °F)
DC voltage:	200 mV, 2 V, 20 V, 200 V ; ±0.5 %, ±3 digits 600 V ; ±0.8 %, ±5 digits
DC current:	2 mA, 20 mA ; ±1.0 %, ±3 digits 200 mA ; ±1.5 %, ±3 digits 10 A ; ±2.0 %, ±5 digits
Throughput test:	Yes
Input impedance:	> 7.5 MΩ, type 10 MΩ (ACV & DCV)
Frequency measurement range:	0-20 kHz
Capacity measurement range:	To 20 µF
Storage temperature range:	-10-50 °C (14-122 °F)
Maximum input voltage:	600 V AC/DC
Fuses:	200 mA (resettable) 10 A/1000 V (fast)
Temperature measurement:	-20–1000°C with K-type sensor
Alternating current bandwidth:	50-400 Hz
Resistance:	200 Ω ; ±1.0 %, ±5 digits 2 kΩ, 20 kΩ, 200 kΩ ; ±1.0 %, ±5 digits 2 MΩ ; ±1.0 %, ±5 digits 20 MΩ ; ±1.5 %, ±5 digits
Guarantee:	5 years

Art. no.	kg	PU
103811	0,433	1

Circuit tester “Control”

The “Control” recognises, thanks to the no-contact voltage sensor, alternating voltages through insulation. Defective lamps, for example, in fairy light chains or similar will be shown quickly and precisely. The incorporated current warning issues and alarm when life-threatening voltage is present. The electronics also enable single-pole phase detection. Throughput tester with LED pocket torch, without flat battery, with replaceable measuring cables.

Functions and benefits
- Reliable throughput tester
- No-contact voltage sensor
- High-performance LED torch

Technical data	**„Control“**
Over-voltage category:	CAT II 300 V
Dimensions:	120 x 60 x 30 mm
Weight:	90 g (without batteries)
Colour:	Red
Scope of delivery:	2 measuring cables
Accessories (optional):	Crocodile clips, carry bag
Throughput check:	Optical 0–20 Ω acoustic 0–250 Ω
Test voltage:	4.5 V
Test current:	Optical - 10 mA acoustic - 2 mA
External voltage protection:	Up to 300 V
Guarantee:	5 years

Art. no.	kg	PU
100666	0,139	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Voltage testers

Voltage tester “TestPen Profi”

The non-contact voltage tester “TestPen Profi” recognises current-carrying cables as of 12 V, including low-voltage systems.. Invisible cable breaks in extension cords or a defect lamp in fairy lights can be localised to the centimetre in seconds thanks to the capacitive measuring procedure.

Functions and benefits
- Capacitive measuring procedure
- Measurements as of 12 V
- LED torch
- Vibrating display

Technical data	**„TestPen Profi“**
Display:	Optical and vibrating
Measuring range:	12–1000 V AC
Over-voltage category:	CAT III 1,000 V
Dimensions:	160 x 25 mm
Weight:	45 g
Colour:	Red
Scope of delivery:	Including batteries
Integrated LED torch:	Yes
Voltage supply:	2 x 1.5 V AAA Micro, LR03
Standard:	IEC/EN 61010-1 (DIN VDE 0411)
Housing:	Impact/break proof ABS plastic
Guarantee:	5 years

Art. no.	TMA	TL	kg	PU
103817	12-1000	140	0,190	1

Voltage testers VDE/GS

5 mm surrounding hand-protection, clip of insulating material, fixed installed scale with dark background

Art. no.	TMA	TL	BL	kg	PU
100700	125-250	190	-	0,036	1

Voltage tester “Basic”

surounding hand-protection, clip of insulating material, fixed installed scale with dark background

Art. no.	TMA	TL	kg	PU
102075	125-250	190	0,035	1

Infrared thermometer

Infrared thermometer

The intended use includes the contact-free measurement of temperatures between –20 to +380°C. As power supply, only a 9V battery of the type 006P, IEC6F22, NEDA 1604 or one of the same type may be used. The thermometer may only be used in a dry environment and contact with moisture must be avoided.

Specifications:
- Temperature range: -20 - +380°C (-4 - 716°F)
- Response time: less than 1 second
- Distance from measuring point ratio: 8:1
- Spectral range: 5 - 14µm
- Emission ratio: 0.95 hard
- Temperature resolution: 0.1°C (0.1°F)
- Laser: 1mW, wave length 630 - 670nm, class II
- Working temperature: 0 - +50°C (32 - 122°F)
- Storage temperature: -20 - +65°C (-4 - 149°F)
- Air humidity: 10% - 90%, non-condensing
- Power supply: 9V battery
- Product size: 16.5 cm x 9 cm x 4 cm
- Weight: 150 g (including battery)
- 3 years guarantee

Art. no.	TMA	kg	PU
103818	–20 to +380°C	0,193	1

Personal protection equipment

haupa®

... convincing solutions

Gloves in accordance with DIN EN 60903

made from latex, for working voltages of 500, 1000, 7500, 15000, 17000 to 26500 Volt. Electricians gloves by HAUPA protect from dangers through arcing faults. Pleasant, slightly roughened surface in the palm and finger area (improved non-slip)

Art. no.	size	Volt	TL	strength	kg	PU
120004	**9**	500	350	0,5	0,270	1
120005	**10**	500	350	0,5	0,293	1
120006	**9**	1000	400	1,0	0,270	1
120007	**10**	1000	400	1,0	0,280	1
120007/1	**11**	1000	400	1,0	0,300	1
120006 561	**10**	7500	400	1,5	0,646	1
120006 564 S	**10**	17000	400	2,3	0,727	1
120006 587	**10**	26500	400	2,9	0,947	1

Glove tester

Pneumatic tester for electrician's protective gloves
It is recommended to carry out a test of this nature before starting work.

Art. no.	kg	PU
120109	0,800	1

Heat protection gloves acc. to EN 407

Inner glove for heat insulation according to EN 407, flame resistant, made from NOMEX III, heat insulation for contact and insulation against convective heat

Art. no.	kg	PU
120011	0,039	1

Cotton gloves for putting underneath

short cotton gloves to wear with latex-gloves
Art. No. 120004 - 120007

Art. no.	kg	PU
120003	0,041	1

Outer gloves

for mechanical protection from insulated gloves for low voltages 2.5 kV and 5 kV. Made from cow-skin shagreen, water-repellent and silicone treated. Hoop and loop closure on the back of the hand. 150 mm length, sheath sewn on to the exterior. Leather thickness: Only 0.8 / 1.1 mm. Corresponds to the following standards: EN 420-94 General EEC criteria EN 388-94

Art. no.	kg	PU
120028	0,070	1

Set with protective gloves

Safety sets, 3 and 4 pieces in storage bag, with name plate window, made from polyester (art. no. 220259)

Content 120029:
120006, 120003, 120028

Content 120037:
120006, 120003

Art. no.	TL	set	kg	PU
120029	400	**4-pieces**	6,860	1
120037	400	**3-pieces**	6,860	1

Safety fuse grips

with slip off protection and protection sleeve, for low voltage (NH) fuses class 00 - 3, protective sleeve made from smooth, impregnated leather

Art. no.	kg	PU
120012	0,563	1

Electricians‘ protection helmets acc. to DIN EN 397 1000 V

low weight, very weatherproof even in cold areas and a stable and very comfortable 4-point belt strap interior. Adjustable to head size, rain catch, slots for ear protection, mount for face protection shields (Art. 120010)

Art. no.	colour	kg	PU
120008	**green**	0,343	1
120008 GELB	**yellow**	0,343	1
120008 ROT	**red**	0,343	1
120008 WEISS	**white**	0,343	1

Electricians protection visor acc. to EN 166

Protection against short circuit lighting, vision screen of acetate, glassy, transparent forehead protection, convenient head mounting and individual adjustable

1000 V

Art. no.	colour	kg	PU
150377	**transparent**	0,373	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Electrician-safety face mask class II

Electrician-safety face mask with chin guard, protection according DIN EN 166 + 170, GS-ET-29 (protection against arc faults Class II, 7kA), luminous transmission index 0

Art. no.	colour	kg	PU
120034	**transparent**	0,275	1

Safety-face masks acc. to EN 166

for protection against arc faults

GS CE 1000 V

Art. no.	colour	kg	PU
120010	**transparent**	0,275	1

Safety classes acc. to EN 166

Goggles with transparent lenses, black/orange nylon frame, lenses made of polycarbonate, light weight, high wearing comfort, protects against mechanical risks caused by flying parts, EN166, ANSI Z87.1

CE

Art. no.	kg	PU
120087	0,270	1

Safety classes acc. to EN 166

Single lens goggles with transparent lenses, black nylon frame, lenses made of polycarbonate, light weight, high wearing comfort, arm length can be adjusted Protects against mechanical risks caused by flying parts, EN166, ANSI Z87.1

CE

Art. no.	kg	PU
120088	0,029	1

Safety classes acc. to EN 166

Single lens goggles with transparent lenses, soft transparent PVC frame, lenses made of polycarbonate, light weight, high wearing comfort, elastic and adjustable head band, protects against mechanical risks caused by flying parts, EN166, ANSI Z87.1

CE

Art. no.	kg	PU
120093	0,067	1

Safety glasses acc. to EN 166 with UV filter

Protective goggles with heavily tinted lenses, black nylon frame with non-slip pads, lenses made from polycarbonate, low weight, high level of comfort when wearing, protects from mechanical risks caused by flyaway parts, particular when outside EN 166, ANSI Z87.1

CE

Art. no.	kg	PU
120117	0,270	1

Ear defenders acc. to EN 352

Enclosed hearing protectors according to EN 352 with universal bow, soft sealing cushions for long comfort in wear, SNR: 23 dB

Art. no.	dB	colour	kg	PU
120111	23	red	0,143	1

Ear defenders acc. to EN 352

Dielectric design for environments with the risk of electrical influences, supersoft sealing cushions for long comfort in wear, three wearing positions make combination with safety helmets, face and breathing masks and other safety equipment easy, SNR: 26 dB

Art. no.	dB	colour	kg	PU
120112	26	blue	0,184	1

Ear muffs for helmet

Ear muffs including helmet holder, SNR 23 for all currently available protective helmets.

Art. no.	dB	colour	kg	PU
120116	23	green	0,184	1

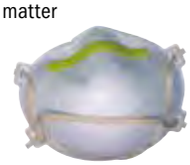
Ear protection plugs

Universal size, the material adapts individually to every auditory canal, simple to handle, reusable SNR: 30 dB

Art. no.	dB	colour	kg	PU
120115	30	orange	0,010	1

Dust masks

light type, made of filter-fleece, against fine particulate matter



Art. no.	FFP	kg	PU
120120	filterclass P 1	0,010	1
120122	filterclass P 1	0,014	1

Safety-sets VDE/GS

in practical bag, 6-pieces. **Contents:** Electricians' helmet, safety mask, safety handle, gloves size 10 (1000 V), insulating mat 1000 x 1000 x 4 mm

Art. no.	set	kg	PU
300228	**6-pieces**	6,860	1
300229	**5-pieces** (without insulating mat)	3,480	1

Security bag, empty

without contents, material: Nylon

Art. no.		width	height	kg	PU
300420	**empty**	390	590	0,680	1

SysCon „SafetySet“

Contents:
1 220650 ABS plastic box „SysCon XL“

1 120007 VDE gloves 1000 V size 10
1 120008 Electricians' protection helmet
1 120012 VDE NH fuse grip
1 120010 VDE electricians protection visor 1000 V

Art. no.	set	empty	kg	PU
220652	**5-pieces**	220650	2,000	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Safety Jacket IPS acc. to DIN VDE 0680 part 1 E

length 90 cm, with sewed on cowl, breast pocket with plate, colour signal-red, similar to DIN IEC 304, 500 volt

Art. no.	size	colour	kg	PU
120020	S, M, L, XL	red	1,500	1
150300	bag for storing	red	0,319	1

Safety trousers IPS acc. to DIN VDE 0680 part 1 E

band trousers, adjustable elastic braces, outside pocket with plate, colour signalred, similar to DIN IEC 304, 500 volt

Art. no.	size	colour	kg	PU
120022	S, M, L, XL	red	1,100	1
150300	bag for storing	red	0,319	1

Electricians‘ boots acc. to EN 50321 Class 0

size 42 to 48

Art. no.	size	colour	kg	PU
120014	42	white	2,160	1
120015	43	white	2,235	1
120016	44 - 45	white	2,400	1
120017	46	white	2,550	1
120018	47 - 48	white	2,160	1

Safety shoes, insulating location, up to 1000 V

Insulating safety shoes offer comprehensive workplace safety. Safety shoe tested to EN 50321 for modified test water height, location insulating, up to 1000 V. Protection classes: S1+S2, S3 (not antistatic).

Shoe size: 38 – 48

Further features:
- top metal-free Nubuk combined with full-grain leather
- Wellmax midsole
- insulation for low voltage
- waterproof high dry membrane
- composite toe cap

Art. no.	size	colour	kg	PU
120035/38	38	black	2,160	1
120035/39	39	black	2,160	1
120035/40	40	black	2,160	1
120035/41	41	black	2,160	1
120035/42	42	black	2,160	1
120035/43	43	black	2,160	1
120035/44	44	black	2,160	1
120035/45	45	black	2,160	1
120035/46	46	black	2,160	1
120035/47	47	black	2,160	1
120035/48	48	black	2,160	1

Climping irons acc. to DIN 48 345

postal-type, with 2 points, offset foot-plate and wide leather heel cap, width of points 260 mm, for wooden posts of 150 - 240 mm diam.

Art. no.	kg	PU
150280	4,050	1

Safety ropes acc. to A-DIN 83330

Safety ropes with hand loop and safety spring hooks acc. to A-DIN 5290. Type: 16 mm drilled polyamide rope

Art. no.	TL	strength	kg	PU
150262	5 m	16	1,185	1
150264	10 m	16	2,040	1
150266	15 m	16	2,810	1
150268	20 m	16	3,781	1

Safety belts acc. EN 358

safety belt universal for all sizes, length 1,50 meter

Art. no.	TL	kg	PU
150240	1,5 m	1,210	1

Fallstop acc. to EN 354

Breaking device and rope shortening acc. to EN 355, length 2 m, one hand spring hooks on both sides

Art. no.	TL	kg	PU
150274	2 m	1,090	1

Travelling safety device DIN 353-2, Type ASK 1

Rope shortener function: takes up slack rope and thus reduces height of the fall. Fall absorber function: in the case of a fall this limits the catching impact to a medically acceptable level of 6 kN. Features: Rope shortener made from V2A stainless steel, connection band with integrated fall absorber and self-securing trigger snap, high level of functional safety and absolutely maintenance free due to simplest mechanism, cannot be operated incorrectly, as every device is firmly attached to the rope

Art. no.	TL	strength	kg	PU
150275	5 m	12	1,953	1
150276	10 m	12	2,482	1
150277	15 m	12	3,062	1
150278	20 m	12	3,174	1
150279	25 m	12	3,675	1

Safety harness DIN EN 361

Universal harness, rapid adjustment of shoulder strap (orange, 45 mm), body strap (orange, 45 mm) and leg straps (blue, 45 mm), fits all sizes, 1 back D ring, 2 side rings, lightweight, comfortable fabric. The forces that develop during a fall are transferred to less sensitive parts of the body

Art. no.	kg	PU
150270	1,614	1

Personal safety set

Safety harness (150270), safety device (150277) and shock absorbing rope (15 m) in practical backpack

Art. no.	set	kg	PU
150258	**4-pieces**	4,961	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Insulating floor mats acc. to IEC-61111

with anti-skid surfaces, colour: grey

art: 120030, 120031 = Class 2 / 17.000 Volt
art: 120033 = Class 4 / 36.000 Volt

Art. no.	KV	TL			kg	PU
120030	**17**	1000	1 m x 1 m x 3,0 mm		3,754	1
120031	**17**	10000	10 m x 1 m x 3,0 mm	**role**	34,000	1
120033	**36**	10000	10 m x 1 m x 4,5 mm	**role**	42,000	1

Isolating magnetic rubber towels

Isolating rubber towels 1000 V, with magnets,
IEC 61112 A-KX 55-15 Class 0-Categorie A+Z.

120160: 300 x 500 x 1 mm with 6 magnets
120162: 500 x 700 x 1 mm with 12 magnets
120164: 300 x 700 x 1 mm with 8 magnets
120166: 1100 x 1100 x 1 mm with 20 magnets

1000 V

Video 120160_66

Art. no.	TL	width	strength	magnets	kg	PU
120160	300	500	1,6	6	0,370	1
120162	500	700	1,6	12	0,500	1
120164	300	700	1,6	8	0,700	1
120166	1100	1100	1,6	20	2,000	1

VDE magnet for rubber cloth

1000 V

Art. no.	TL	width	strength	magnets	kg	PU
120168	70	70	1,6	1	0,025	1

Rubber towels acc. to VDE 0680/1

grease and acid-proof, for covering of live equipment

1000 V

Art. no.	TL	width	strength	kg	PU
120040	120	120	1,6	0,037	1
120042	350	250	1,6	0,193	1
120044	600	600	1,6	1,000	1
120046	1000	1000	1,6	2,485	1
120048	1200	1200	1,6	3,200	1

Covering blankets transparent

in accordance with VDE 0680 part 1, with special labelling 1000 V, transparent, largely UV-resistant, flexible in the cold

1000 V

Art. no.	TL	width	strength	kg	PU
120200	50000	1300	0,5	41,500	1
150322	25000	1200	1,0	38,000	1

Covering blankets transparent

in accordance with VDE 0680 part 1, with special labelling 1000 V, transparent, largely UV-resistant, flexible in the cold

1000 V

Art. no.	TL	width	strength	kg	PU
150302	1000	600	1,0	0,750	1
150304	1000	600	0,5	0,332	1
150306	1000	400	1,0	0,520	1
150308	1000	400	0,5	0,260	1
150310	1000	300	1,0	0,380	1
150312	1000	300	0,5	0,190	1
150314	600	400	1,0	0,340	1
150316	600	400	0,5	0,171	1
150318	400	300	1,0	0,170	1
150320	400	300	0,5	0,100	1

Plastic clips 1000 V

for fastening of rubber towels

Art. no.	TL	kg	PU
120049	80	0,029	1
120050	160	0,069	1

Self adhesive PVC tape

VDE 0340/T1/5.75, temperature area - 10 to + 90° C, 100 x 0,15 mm

Art. no.	TL	colour	kg	PU
120095	10000	grey	0,192	1
120096	10000	red	0,190	1

Slip on bushes 1000 V

for protective covering of bare live cable terminals, numbered: No. 1 - 2 - 3

1000 V IEC 60900:2004

Art. no.	TL	Ø	for No.	kg	PU
120060	80	10	1	0,008	1
120062	80	10	2	0,008	1
120064	80	10	3	0,008	1

Slip on bushes 1000 V

self clamping, not numbered

1000 V IEC 60900:2004

Art. no.	TL	Ø	kg	PU
120070	75	10	0,011	1
120072	100	20	0,121	1
120074	120	30	0,207	1
120071	135	40	0,372	1
120069	155	50	0,172	1
120073	150	60	0,144	1

Insulator cover for gable insulators 1000 V

with plastic buttons, absolutely safety attachments, touch protection on the bottom side, of weak, weather proofed insulation-material, for long term usage suitable

1000 V IEC 60900:2004

Art. no.	TL	width	kg	PU
120079	245	270	0,900	1

Insulator cover for gable insulators 1000 V

with plastic buttons, absolutely safety attachments, touch protection on the bottom side, of weak, weather proofed insulation-material, for long term usage suitable

1000 V IEC 60900:2004

Art. no.	TL	width	kg	PU
120089	115	270	1,100	1

Insulator cover for gable insulators 1000 V

double faced, inside soft and outside strong plastic, for transformers and similar products

1000 V IEC 60900:2004

Art. no.	TL	kg	PU
120057	80	0,400	1
120059	300	0,775	1

NH-protecting caps 1000 V

for the covering of spring contacts

1000 V IEC 60900:2004

Art. no.	TL	width	kg	PU
120058	315	170	0,390	1

NH-protecting caps 1000 V

for the covering of spring contacts

1000 V IEC 60900:2004

Art. no.	TL	width	kg	PU
120077	170	140	0,155	1
120078	255	135	0,205	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Sealing pliers

made of cast iron, punch exchangeable and hardened, bright nickel-plated

Art. no.	TL	dies-Ø	kg	PU
210700	125	8	0,243	1
210702	145	9	0,316	1
210704	165	10	0,448	1

Dies for sealing pliers

loose dies

Art. no.	dies-Ø	kg	PU
210710	8	0,004	1
210712	9	0,004	1
210714	10	0,006	1

Engraving for sealing pliers

Special engraving on request

Art. no.	
210731	up to 3 letters
210732	every further letter
210733	every border

Lead seals

Art. no.	Ø	kg	PU
150340	8	1,080	1
150342	9	1,110	1
150344	10	1,010	1

Plastic seals

Art. no.	Ø	kg	PU
150343	9	0,002	1000
150345	10	0,003	1000

Seal wire

Material: Iron wire, galvanised

Art. no.	TL	d1	d2	kg	PU
150360	115	0,5	0,5	0,532	1
150362	230	0,5	0,5	1,041	1
150364	190	0,5	0,3	0,530	1
150366	380	0,5	0,3	1,035	1
150368	300	0,3	0,3	0,533	1
150370	600	0,3	0,3	1,037	1

Plastic seal wire

Art. no.	TL	d1	d2	colour	kg	PU
150375 BLAU	1000	0,5	0,6	blue	0,199	1
150375 GRÜN	1000	0,5	0,6	green	0,220	1
150375 ROT	1000	0,5	0,6	red	0,207	1

Parallel rope tension clamps

for copper and steel cables and wires

Art. no.	for ropes mm²	Ø	load kg	kg	PU
130064	6-35	3-8	1000	0,890	1
130066	16-70	4-12	1400	1,262	1
130068	50-100	8-16	2500	1,920	1

Tackle blocks

made from steel, with turnable hooks, 2 blocks, rust protected finish, with 3 brass rolls

Art. no.	roll-Ø	rope-Ø	load kg	kg	PU
130004	50	8	200	1,820	1
130006	60	10	250	1,700	1

Hemp tackle block ropes

made of hemp, 20 m long

Art. no.	rope-Ø	kg	PU
130042	8	0,950	1
130044	10	1,519	1

Standard tools

haupa®
... convincing solutions

INFO

Screwdrivers range **Industrial quality**

The HAUPA screwdriver series features:

- homogenous size adjustment of the screwdriver handles for better power transmission. Enlargement of soft zone
- elegant, ergonomically shaped, non-slip 2-component handles made from PP/TPE material
- injected blade profile, for easy access in the tool case. Abrasion not possible!
- magnetic blade for secure hold of screws High-gripsystem
- blade made from molybdenum vanadium steel
- an addition anti-slip protection on Phillips profiles prevents the tool from slipping out of the screw

2-component Electricians' screwdrivers

with 2-component handle made from PP/TPE material, blade made from molybdenum- vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Art. no.	CW	BL	TL	kg	PU
101604	**2,5**	75	160	0,027	1
101606	**4**	100	195	0,051	1
101608	**4**	125	220	0,054	1
101610	**5**	150	245	0,067	1
101612	**5**	175	270	0,069	1
101614	**5**	200	295	0,074	1

2-component Engineers' screwdrivers

with 2-component handle made from PP/TPE material, blade made from molybdenum- vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Art. no.	CW	BL	TL	kg	PU
101640	**5**	75	170	0,056	1
101642	**6**	100	205	0,090	1
101644	**7**	125	230	0,109	1
101646	**8**	150	270	0,160	1
101648	**9**	175	295	0,170	1
101650	**10**	200	320	0,238	1

2-component cross slotted screwdrivers Phillips

with 2-component handle made from PP/TPE material, blade made from molybdenum- vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point, engraving on the blade ensures extra grip in the screw

Art. no.	size	BL	TL	kg	PU
101684	**0**	60	145	0,032	1
101686	**1**	80	175	0,055	1
101688	**2**	100	205	0,087	1
101690	**3**	150	270	0,161	1

2-component cross slotted screwdrivers Pozidriv

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Art. no.	size	BL	TL	kg	PU
102612	**1**	80	175	0,055	1
102614	**2**	100	205	0,088	1
102616	**3**	150	270	0,160	1

2-component screwdrivers Tx

with 2-component handle made from PP/TPE material, blade made from molybdenum- vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Art. no.	size	BL	TL	kg	PU
101229/6	**6**	100	185	0,036	1
101230	**8**	100	185	0,036	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

2-component screwdrivers Tx with security pin

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Art. no.	size	BL	TL	kg	PU
101200	**9**	100	185	0,036	1
101202	**10**	100	195	0,057	1
101204	**15**	100	195	0,054	1
101206	**20**	100	195	0,058	1
101208	**25**	125	195	0,064	1
101210	**27**	125	230	0,093	1
101211	**30**	150	255	0,093	1

2-component cross slotted screwdrivers Square

with 2-component handle made from PP/TPE material, blade made from molybdenum- vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Art. no.	size	BL	TL	form	kg	PU
103130	**0**	60	145	SQ	0,032	1
103132	**1**	80	175	SQ	0,055	1
103134	**2**	100	205	SQ	0,087	1
103136	**3**	150	270	SQ	0,161	1

2-component screwdriver set Tx

screwdriver set Tx with security pin, with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point, 5-pieces.

Contents:
1 screwdriver each
Tx 10, Tx 15, Tx 20, Tx 25, Tx 30

Art. no.	form	set	kg	PU
101212/S	TX	**5-pieces**	0,337	1

2-component Electricians' screwdrivers

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, blade black PVC covered

Art. no.	CW	BL	TL	kg	PU
101520	**2,5**	75	160	0,027	1
101521	**3**	100	195	0,030	1
101522	**4**	100	195	0,051	1
101524	**4**	125	220	0,054	1
101526	**5**	150	245	0,068	1
101528	**5**	175	270	0,072	1
101530	**5**	200	295	0,078	1

2-component Engineers' screwdrivers

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, blade black PVC covered

Art. no.	CW	BL	TL	kg	PU
101532	**5**	75	170	0,057	1
101534	**6**	100	205	0,091	1
101536	**7**	125	230	0,114	1
101538	**8**	150	270	0,146	1
101540	**9**	175	295	0,210	1
101541	**10**	200	320	0,214	1

2-component cross slotted screwdrivers Phillips

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, blade black PVC covered, engraving on the blade ensures extra grip in the screw

Art. no.	size	BL	TL	kg	PU
101542	**0**	60	145	0,032	1
101544	**1**	80	175	0,059	1
101546	**2**	100	205	0,091	1
101548	**3**	150	270	0,147	1

2-component cross slotted screwdrivers Pozidriv

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, blade black PVC covered

Art. no.	size	BL	TL	kg	PU
101550	**1**	80	175	0,056	1
101552	**2**	100	205	0,088	1
101554	**3**	150	270	0,146	1

2-component Screwdriver set

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, blade black PVC covered.

Contents:
2 electricians' screwdrivers
2 engineers' screwdrivers
2 screwdrivers Phillips

Art. no.	form	set	kg	PU
101560	Phillips	**6-pieces**	0,431	1

2-component Screwdriver set

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, blade black PVC covered.

Contents:
2 electricians' screwdrivers
2 engineers' screwdrivers
2 screwdrivers Pozidriv

Art. no.	form	set	kg	PU
101562	Pozidriv	**6-pieces**	0,429	1

2-component screwdrivers

2C-Stubby gasifier screwdrivers

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished

Art. no.	CW	BL	TL	kg	PU
103120	**6**	30	80	0,050	1
103122	**8**	40	90	0,051	1

2C-Stubby gasifier cross slot screwdrivers Phillips

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished

Art. no.	size	BL	TL	kg	PU
103080	**1**	30	80	0,051	1
103082	**2**	40	90	0,051	1

2C-Piercing awls

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished

Art. no.	Ø	BL	form	kg	PU
103470	**6**	100	round	0,083	1
103472	**6**	100	square	0,085	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

2-component socket wrenches

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished

Art. no.	WS	BL	TL	kg	PU
101484	**5**	125	220	0,105	1
101486	**5,5**	125	220	0,107	1
101488	**6**	125	220	0,110	1
101490	**7**	125	230	0,113	1
101492	**8**	125	230	0,115	1
101494	**9**	125	230	0,120	1
101496	**10**	125	230	0,124	1
103498	**11**	125	245	0,145	1
101500	**12**	125	245	0,165	1
101502	**13**	125	245	0,171	1

2-component socket wrenches set

with 2-component handle made from PP/TPE material, blade made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, 7-pieces.

Contents: 1 piece each
5 - 5,5 - 7 - 8 - 10 - 11 - 13 mm

Art. no.	set	kg	PU
101510	**7-pieces**	0,898	1

Industrial screwdriver set with replaceable dual blades.

2-component screwdriver shaft with 10 interchangeable blades, hexagonal, Material: bit steel S2, (chrome silicon manganese molybdenum vanadium steel), in a stable metal case. **Replaceable blades are also available loose.** (see Page 235).

Blade types:
Slotted 3, 4, 5, 7
Phillips 0, 1, 2, 3
Pozidriv 0, 1, 2, 3
Tx 10, 15, 20, 25
Hexagonal 2, 3, 4, 5

Art. no.	set	kg	PU
104008	**11-pieces**	1,060	1

INFO

Dynamometric screwdriver with replaceable blades

The new HAUPA 1000 V VarioTQ dynamometric screwdriver is characterised by its precision and functionality.

The ergonomic handles can be adjusted individually.
1. 1.0 - 6.0 Nm
2. 0.5 - 3.5 Nm

HAUPA offers all relevant blade tip profiles as individual items and in set form in a high-quality nylon case.

VarioTQ

- torque can be set using a separate key
- scale value can easily be read off
- clearly perceptible and audible signal when the set torque is achieved
- torque accuracy according to EN ISO 6789:2003

Replaceable dual blades
made from molybdenum-vanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point

Precisely adjustable torque

Two handle versions, also available individually:

Art. no. 103070
1.0 - 6.0 Nm

Art. no. 103072
0.5 - 3.5 Nm

„VarioTQ“ dynamometric screwdriver with replaceable blades

VarioTQ

replaceable dual blades made from molybdenumvanadium steel, sanded blade, hardened, blast-finished, chrome plated with black point, with hexagonal shaft, in robust nylon bag (with belt loop and hook and loop closure), 10 replaceable blades (20 profiles)

Contents:
- 2-component exchangeable handle 1 - 6 Nm or 0,5 - 3,5 Nm
- slotted 3/4 – 5,5/6,5
- PH0/PH1
- PZ0/PZ1
- PH2/PZ2
- TX 10/15 – 20/25
- HEX 2/3 – 4/5
- PZ/FL1
- PZ/FL2
- Square socket key

Video 103000

Art. no.	form	Nm	set	kg	PU
103000	Mix	**1 - 6**	12-pieces	0,765	1
103002	Mix	**0,5 - 3,5**	12-pieces	0,765	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Replaceable blade

insulated replaceable blade made from molybdenum vanadium steel, hardened, blasted, individually tested

Replaceable blade – pozidrive blade/slotted

Art. no.	form	size	BL	kg	PU
103028	**PZ/FL**	1 + 2	175	0,040	1

Replaceable blade – slotted blade

Art. no.	form	CW	BL	kg	PU
103010	**SL**	3 + 4	175	0,040	1
103012	**SL**	5,5 + 6,5	175	0,040	1

Replaceable blade – Phillips blade

Art. no.	form	size	BL	kg	PU
103014	**PH**	0 + 1	175	0,040	1

Replaceable blade – pozidrive blade

Art. no.	form	size	BL	kg	PU
103016	**PZ**	0 + 1	175	0,040	1

Replaceable blade – Phillips blade/pozidrive blade

Art. no.	form	size	BL	kg	PU
103018	**PH + PZ**	2 + 2	175	0,040	1

Replaceable blade – torx blade

Art. no.	form	size	BL	kg	PU
103020	**TX**	10 + 15	175	0,040	1
103022	**TX**	20 + 25	175	0,040	1

Replaceable blade – hex blade

Art. no.	form	size	BL	kg	PU
103024	**HEX**	2 + 3	175	0,040	1
103026	**HEX**	4 + 5	175	0,040	1

„VarioTQ“ nylon bag – empty

Robust nylon bag (with belt loop) wide hook and eye fastening and loop for hanging up

Art. no.		kg	PU
103034	**empty**	0,080	1

2-component exchangeable „VarioTQ“ handle

automatic locking mechanism ensures that blades do not fall out unexpectedly, ergonomically formed 2 component book of PP/TPE material, precisely adjustable torque

Art. no.	TL	Nm	kg	PU
103070	125	**1 - 6**	0,185	1
103072	125	**0,5 - 3,5**	0,185	1

Square socket key

for adjustment of the torque for VarioTQ replacement blades

Art. no.	BL	KlBr	kg	PU
102784	40	8	0,056	1

INFO

ESD electronic screwdrivers

Now with 2-component handle, these screwdrivers do not just convince because of their homogenous design, but also because of their user-friendly handle.

Benefits:
- chrome molybdenum vanadium steel
- blades hardened throughout
- two component handels, hard and soft components
- permanently discharging special synthetic material
- Quick rotating zone
- rotating centring head with recessed grip
- black precision tips
- chromed blade

Security advice:
HAUPA ESD screwdrivers are not insulating and therefore unsuitable for work with live parts.

ESD electronic screwdrivers

Blade made from chrome molybdenum vanadium steel, chromed with black tip, slotted

Art. no.	CW	BL	TL	kg	PU
100704	**0,8**	60	150	0,023	1
100250	**1,0**	50	150	0,014	1
100704 A	**1,2**	60	150	0,021	1
100241	**2,5**	60	150	0,015	1
100243	**3,5**	100	150	0,018	1
100252	**1,6**	50	150	0,014	1
100257	**2,0**	50	150	0,015	1
100259	**2,4**	75	175	0,017	1
100261	**3,0**	50	200	0,020	1

ESD electronic screwdrivers

Blade made from chrome molybdenum vanadium steel, chromed with black tip, cross recess, Philipps

Art. no.	size	BL	TL	kg	PU
100714	**000**	50	150	0,015	1
100715	**00**	50	150	0,022	1
100716	**0**	50	150	0,024	1
100249	**1**	50	150	0,017	1

ESD electronic screwdrivers

Blade made from chrome molybdenum vanadium steel, chromed with black tip, hexagonal

Art. no.	size	BL	TL	kg	PU
100728	**1,5**	50	150	0,014	1
100729	**2,0**	50	150	0,015	1
100729 A	**2,5**	50	150	0,017	1
100736	**3,0**	50	150	0,020	1

ESD electronic screwdrivers

Blade made from chrome molybdenum vanadium steel, chromed with black tip, Tx/Safety Tx

Art. no.	size	BL	TL	form	kg	PU
100741	**4**	50	150	TX	0,017	1
100742	**5**	50	150	TX	0,018	1
100718 A	**6**	50	150	TX	0,018	1
100720	**7**	50	150	S-TX	0,014	1
100721	**8**	50	150	S-TX	0,018	1
100712	**9**	50	150	S-TX	0,018	1
100713	**10**	50	150	S-TX	0,016	1
100723	**15**	50	150	S-TX	0,020	1
100734	**20**	50	150	S-TX	0,020	1

ESD electronic screwdrivers

Blade made from chrome molybdenum vanadium steel, chromed with black tip, Tri-Wing

Art. no.	size	BL	TL	kg	PU
100738	**2,4**	50	150	0,017	1

ESD electronic screwdriver set

Blade made from chrome molybdenum with 2-component handles, 7-pieces, slotted/cross recess.

Contents:
1 ESD electronic screwdriver each 1.6 x 50, 2.0 x 50, 2.4 x 50, 3.0 x 50 and 1 Phillips size 1. 0 and 00 x 50 each

Art. no.	set	kg	PU
104010	**7-pieces**	0,225	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

HAUPA Electronic screwdriver set standard

chrome vanadium steel, chrome-plated, with large plastic handle, with black point, 7 pieces.

Contents:
1 Electricians' screwdriver size 1.6 x 50, 2.0 x 50, 2.4 x 50, 3.0 x 50, and 1 Phillips size 1, 0 and 00 x 50

Art. no.	set	kg	PU
104000	**7-pieces**	0,221	1

Electronic screwdriver set

Chrome vanadium steel, screw holder with black /green plastic handle, 4 x hex head 3, 4, 5, 6 and 8 exchangeable screwdriver blades (slot/Phillips/Tx /hex head)

Art. no.	set	kg	PU
104004	**13-pieces**	0,288	1

Electronic screwing bit set

Chrome vanadium steel, screw holder with black/green plastic handle, 1 bit holder, 2 nuts of 5 + 6 mm, 30 bits for slot/Phillips/Pozidriv/Tx/hex head

Art. no.	set	kg	PU
104002	**34-pieces**	0,230	1

Flexible screwdrivers „Piccolo“

with pliable, plastic coated shank, plastic handle

Art. no.	CW	BL	TL	kg	PU
100364	**2,8**	125	205	0,020	1

Claw retrievers

with inflexible shaft, chrome-plated, for gripping and retrieving of small parts in normally inaccessible places

Art. no.	TL	kg	PU
100366	165	0,050	1

Checking mirrors

with double ball joint

Art. no.	TL	Ø	kg	PU
100680	210	60	0,028	1

Checking mirrors

with illumination, flexible shaft and plastic handle, 3 interchangeable mirrors Ø 14-23-30 mm, with battery

Art. no.	TL	Ø	kg	PU
100684	530	12	0,169	1

Magnetic retriever

flexible shaft and plastic handle

Art. no.	TL	Ø	kg	PU
100694	520	12	0,097	1

Allen keys set

chrome vanadium steel, (59 Cr-Mo-V 4), DIN 911, chrome-plated, on key ring.

Contents:
size 2,5 - 3 - 4 - 5 - 6 - 8 - 10

Art. no.	WS	quantity	kg	PU
100640	2,5-10	8	0,250	1

Allen keys set

chrome vanadium steel, (59 Cr-Mo-V 4), im metal clip, key bronzed, DIN 911.

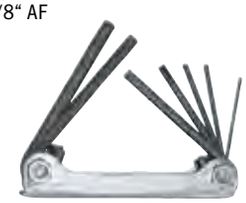
Contents:
Art. 10 06 30: 2,5-3-4-5-6-8 mm
Art. 10 06 33: 1,5-2,5-3-4-5-6 mm
Art. 10 06 34: 2,5-3-4-5-6-8-10 mm

Art. no.	WS	quantity	kg	PU
100630	2,5-8	6	0,249	1
100633	1,5-6	7	0,145	1
100634	2,5-10	7	0,335	1

Allen keys set

chrome vanadium steel, (59 Cr-Mo-V 4), im metal clip, key bronzed, DIN 911.

Contents:
Art. 10 06 32: 3/32-1/8-5/32-3/16-1/4-5/16“ AF
Art. 10 06 35: 1/16-5/64-3/32-1/8-5/32-3/16-7/32” AF
Art. 10 06 36: 3/32-1/8-5/32-3/16-1/4-5/16-3/8“ AF



Art. no.	WS	quantity	kg	PU
100632	3/33"-5/16"	6	0,251	1
100635	1/16"-7/32"	7	0,135	1
100636	3/32"-3/8"	7	0,328	1

Key set Tx

chrome vanadium steel, (59 Cr-Mo-V 4), in metal-clip, surface black, keys black.

Contents:
TX 9 - 10 - 15 - 20 - 25 - 27 - 30 - 40

Art. no.	size	quantity	kg	PU
100943	TX9 - 40	8	0,260	1

Ball point allen keys

chrome vanadium steel, (59 Cr-Mo-V 4), im metal clip, black keys, DIN 911

Contents:
size 2.5 - 3 - 4 - 5 - 6 - 8 - 10

Art. no.	WS	quantity	kg	PU
100917	2,5-10	7	0,334	1

Allen keys set

chrome vanadium steel, (59 Cr-Mo-V 4), chrome-plated, DIN 911, 8 pieces in handy plastic box, with sliding plexiglasscover.

Contents:
size 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10

Art. no.	WS	quantity	kg	PU
100585	2-10	8	0,303	1

Ball point allen keys

chrome vanadium steel, (59 Cr-Mo-V 4), DIN 911, chrome-plated, 8 pieces in handy plastic box, with pushable plexiglasscover.

Contents:
size 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10

Art. no.	WS	quantity	kg	PU
100915	2-10	8	0,301	1

Allen keys set Tx

chrome vanadium steel, (59 Cr-Mo-V 4), 8 pieces in handy plastic box, surface black.

Contents:
TX 9 - 10 - 15 - 20 - 25 - 27 - 30 - 40

Art. no.	size	quantity	kg	PU
100941	TX9 - 40	8	0,205	1

Hexagon angle screwdriver set

extra long, with ball points, folding holder,
WS 1.5 / 2 / 2.5 / 3 / 4 / 5 / 6 / 8 / 10

Art. no.	WS	quantity	kg	PU
100921	1,5-10	9	0,300	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Allen keys DIN 911

chrome vanadium steel, (59 Cr-Mo-V 4), DIN 911, chrome-plated

Art. no.	TL	WS	Inch	kg	PU
100590	45x14	1,5	1/16"	0,020	1
100592	50x16	2	5/64"	0,020	1
100594	56x18	2,5	3/32"	0,020	1
100596	63x20	3	1/8"	0,030	1
100598	70x25	4	5/32"	0,080	1
100600	80x28	5	3/16"	0,019	1
100602	90x32	6	1/4"	0,028	1
100606	100x36	8	5/16"	0,058	1
100610	112x40	10	3/8"	0,099	1
100612	125x45	12		0,160	1
100614	132x50	13	1/2"	0,202	1

Ball point allen keys

chrome vanadium steel, (59 Cr-Mo-V 4), DIN 911, chrome-plated

Art. no.	TL	WS	Inch	kg	PU
100902	56x18	2,5	3/32"	0,003	1
100903	63x20	3	1/8"	0,005	1
100904	70x25	4	5/32"	0,011	1
100905	80x28	5	3/16"	0,019	1
100906	90x32	6	1/4"	0,029	1
100908	100x36	8	5/16"	0,058	1
100909	112x40	10	3/8"	0,102	1

VDE/GS-Voltage testers, VDE-tested 0426/72

with clear-transparent, shock-resistant plastic handle.
Art. No. 100646 each in wallet
Art. No. 100647 loose

Art. no.	BL	TL	TMA	kg	PU
100646	50x3	140	100-250	0,020	1
100647	50x3	140	100-250	0,016	1
100648	100x3,5	190	100-250	0,037	1
100649	100x3,5	190	100-250	0,032	1

Voltage tester

Finnlish type, Cellidor, only available for Finland

Art. no.	BL	TL	TMA	kg	PU
100645	50x3	140	150-250	0,016	1

Voltage tester VDE/GS

with retactable screwdriver blade

Art. no.	BL	TL	TMA	kg	PU
100650	25x4	140	100-250	0,020	1

Voltage testers VDE/GS

5 mm surrounding hand-protection, clip of insulating material, fixed installed scale with dark background

Art. no.	BL	TL	TMA	kg	PU
100700	-	190	125-250	0,036	1

INFO

Bits **Industrial quality**

HAUPA-Bits are made of high-alloyed tool steel, best hardened (H Rc 60 - 63). They show very high tenacity and tolerance. The long life speakes of the hard use and quality.

1 box = 10 pieces (self-service packaging)

Screwdriver bits

DIN 3126, form E 6,3, shank 1/4“, 10 pieces on card

Art. no.	size	CW	TL	kg	PU
102110	0,6x4,5	4,5	50	0,104	1
102112	0,8x5,5	5,5	50	0,115	1

Screwdriver bits

DIN 3126, form E 6,3, shank 1/4“, 10 pieces on card

Art. no.	size	TL	kg	PU
102152	PH 1	25	0,062	1
102154	PH 2	25	0,067	1
102156	PH 1 TiN	25	0,064	1
102158	PH 2 TiN	25	0,066	1
102114	PH 1	50	0,105	1
102116	PH 2	50	0,124	1
102160	PH 1 TiN	50	0,106	1
102162	PH 2 TiN	50	0,123	1
102164	PH 1	90	0,180	1
102166	PH 2	90	0,097	1
102168	PH 1 TiN	90	0,063	1
102170	PH 2 TiN	90	0,100	1
102172	PH 1	150	0,251	1
102174	PH 2	150	0,358	1

Screwdriver bits, red.

DIN 3126, form E 6,3, shank 1/4“, 10 pieces on card
for PH 1 and PH 2

Art. no.	size	TL	kg	PU
102155	2	25	0,064	1

Screwdriver bits

DIN 3126, form E 6.3, shank 1/4“, 10 pieces on card

Art. no.	size	TL	kg	PU
102176	PZ 1	25	0,062	1
102178	PZ 2	25	0,065	1
102180	PZ 1 TiN	25	0,062	1
102182	PZ 2 TiN	25	0,066	1
102118	PZ 1	50	0,107	1
102120	PZ 2	50	0,123	1
102184	PZ 1 TiN	50	0,106	1
102186	PZ 2 TiN	50	0,122	1
102188	PZ 1	90	0,179	1
102190	PZ 2	90	0,231	1
102192	PZ 1 TiN	90	0,177	1
102194	PZ 2 TiN	90	0,229	1
102196	PZ 1	150	0,257	1
102198	PZ 2	150	0,360	1

Screwdriver bits Tx

DIN 3126, form E 6.3, shank 1/4“, 10 pieces on card

Art. no.	size	TL	kg	PU
102200	Tx 15	25	0,061	1
102202	Tx 20	25	0,063	1
102204	Tx 25	25	0,065	1
102208	Tx 30	25	0,070	1
102122	Tx 15	50	0,100	1
102124	Tx 20	50	0,110	1
102126	Tx 25	50	0,112	1

Bits for PZ slot profile

The PZ/FL profile can only be used for combination screws that were previously screwed with a slot or recessed head PZ type screwdriver. The screws have an inner PZ profile with an additional cross slot that also allows it to be screwed with a slot screwdriver

1 PU (packaging unit) = 2 pieces

Art. no.	size	TL	kg	PU
101874	1	60	0,012	1
101876	2	60	0,013	1
101880	1	90	0,179	1
101882	2	90	0,231	1

Magnetic holder

with strong magnetic, shank 1/4“, form C 6,3 DIN 3126, for holding the screws, socket made of stainless steel, suitable for all

Art. no.	TL	kg	PU
102130	75	0,056	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

SDS magnetic holder

with strong permanent magnet, bit holder 1/4”, form C 6.3 DIN 3126, to hold screws, rust-free, stainless steel sleeve, suitable for SDS bits holders

Art. no.	TL	kg	PU
102131	55	0,045	1

Magnetic holder

with strong magnetic, shank 1/4“, form C 6.3 DIN 3126, for holding the screws, socket made of stainless steel, with inside ring, suitable for all

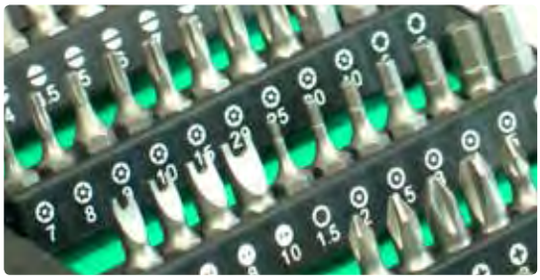
Art. no.	TL	kg	PU
102132	75	0,045	1
102134	60	0,040	1

HAUPA „Bit box“

Description:
- Belt clip
- Ergonomic (with the opening of the box the bits will be moved in 45° angle, easy pick up position)
- A special mechanism fixes the bits even in an up side down position

Contents: 17-pieces
Screwdriver bits, form E 6.3, shank 1/4", 25 mm
PH: 1, PH 2, PH 3
PZ: 1, PZ 2, PZ3
Tx: 10, T 15, T 20, T 25
slotted: 4.0 (0.5), 5.0 (0.8), 5.0 (1.0), 6.0 (1.0)
hexagon: 4.0, 5.0, 6.0
Magnetic holder 60 mm

Art. no.	set	kg	PU
102210	**17-pieces**	0,170	1



Ratchet screwdriver „Flex“ for short bits

Flex

Ratchet screwdriver with right/left hand motion. Adjustable operating angle of 180°. Safety and special bit set - top quality S2! The screwing grasp also Quick change penholder and 2-components Handle provides for anti-slip and fatigue-free working. The ergonomic form and the soft zones within the pressure area range make a relaxed possible screws. With hanging up hole.
Only for 1/4", = 25 mm Bits.

Art. no.	bit	kg	PU
104005	**= 25 mm**	0,216	1

Ratchet screwdriver „FlexPlus“ for long bits

FlexPlus

Ratchet screwdriver with right/left hand motion. Adjustable operating angle of 180°. Safety and special bit set - top quality S2! The screwing grasp also Quick change penholder and 2-components Handle provides for anti-slip and fatigue-free working. The ergonomic form and the soft zones within the pressure area range make a relaxed possible screws. With hanging up hole.

Art. no.	bit	kg	PU
104009	**> 25 mm**	0,216	1

Ratchet screwdriver set „Flex“

Flex

Ratchet screwdriver with right/left hand motion. Adjustable operating angle of 180°. Safety and special bit set - top quality S2! The screwing grasp also Quick change penholder and 2-components Handle provides for anti-slip and fatigue-free working. The ergonomic form and the soft zones within the pressure area range make a relaxed possible screws. With hanging up hole.
Only for 1/4", = 25 mm Bits.

Advantages:
- Ratchet function
- Left/clockwise rotation adjustable
- Bending bar: 0°– 45°– 90°
- Ergonomic working within restrained ranges
- S2 steel industry bit for nearly all applications
- 2-components handle
- 55 bits ¼" 25 mm and 1 adapter for ¼" nut

Video 104006

Art. no.	bit	set	kg	PU
104006	= 25 mm	**58-pieces**	0,810	1

Ratchet screwdriver set „FlexBag“ with 50 mm S2 bits and reduced shank

FlexBag

Ratchet screwdriver with right/left hand motion. Adjustable operating angle of 180°. Safety and special bit set - top quality S2! The screwing grasp also Quick change penholder and 2-components Handle provides for anti-slip and fatigue-free working. The ergonomic form and the soft zones within the pressure area range make a relaxed possible screws. With hanging up hole.

Contents:
1/4" 50 mm Power bits Tx: T5, T6, T7, T8, T9, T10, T15, T20, T25, T30, T40
1/4" 50 mm Power bits Hex (hole): H2, H2.5, H3, H4, H5, H6
1/4" 50 mm Power bits PH: 0, 1, 2, 3
1/4" 50 mm Power bits PZ: 0, 1, 2, 3
1/4" 50 mm Power bits slot: 3, 4, 5, 6, 7, 8
1/4" 50 mm Power bits SQ: 0, 1, 2, 3
1/4" 50 mm Power bits Tri-Wing: 1, 2, 3
1/4" 50 mm Power bits PZ/FL 1 & 2
Above bits are in reduced shank except T40, H6,
flat: 6, 7, 8 in full hex shank
2 pcs. Adapters: 1/4" 50 mm, 1/4" 80 mm
8 pcs. sockets: 5, 5.5, 6, 7, 8, 10, 12, 13
1 pc of FlexPlus ratcheting driver

Video 104020

Art. no.	bit	set	kg	PU
104020	50 mm	**51-pieces**	0,810	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Socket sets

haupa®

... convincing solutions

Double ended spanners acc. to DIN 3110

chrome vanadium steel, bright chrome-plated, head polished, offset at 15°

Art. no.	TL	WS	strength	kg	PU
110090	120	6-7	3,2	0,240	1
110092	140	8-9	3,5	0,340	1
110094	157	10-11	4,0	0,590	1
110096	172	12-13	4,5	0,057	1
110100	190	14-15	5,0	0,760	1
110104	205	16-17	5,5	0,144	1
110108	223	18-19	6,0	0,182	1
110112	250	21-23	7,0	0,212	1
110114	250	24-26	7,0	0,273	1
110120	302	27-32	8,2	0,519	1

Double ended spanners set acc. to DIN 3110

chrome vanadium steel, chrome-plated, head polished, plastic holder included.

Art. no.	WS	set	kg	PU
110130	6-22	**8-pieces**	0,940	1
110132	6-32	**12-pieces**	2,353	1

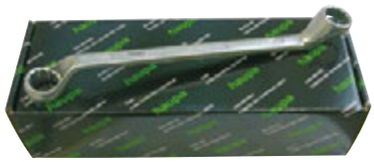
Double ended ring spanners to DIN 838

chrome vanadium steel, bright chrome-plated, head polished, offset at 75°

Art. no.	TL	WS	kg	PU
110140	170	6 - 7	0,035	1
110142	185	8 - 9	0,066	1
110144	205	10 - 11	0,075	1
110146	220	12 - 13	0,107	1
110148	240	14 - 15	0,154	1
110152	265	16 - 17	0,175	1
110154	280	18 - 19	0,297	1
110160	335	24 - 26	0,468	1
110164	370	27 - 32	0,611	1

Double ended ring spanner sets DIN 838

chrome vanadium steel, bright chrome-plated, head polished, in paper box



Art. no.	WS	set	kg	PU
110170	6-22	**8-pieces**	1,289	1
110172	6-32	**12-pieces**	2,451	1

Combination spanners similar to DIN 3113

chrome vanadium steel, chrome-plated, head polished, offset at 15°

Art. no.	TL	WS	kg	PU
110180	100	6	0,016	1
110182	110	7	0,021	1
110184	120	8	0,028	1
110186	130	9	0,036	1
110188	140	10	0,043	1
110190	150	11	0,058	1
110192	160	12	0,061	1
110194	170	13	0,081	1
110196	180	14	0,075	1
110198	190	15	0,087	1
110202	210	17	0,160	1
110204	220	18	0,164	1
110206	230	19	0,187	1
110212	260	22	0,266	1
110216	280	24	0,316	1
110222	310	27	0,401	1

Combination spanners similar to DIN 3113

chrome vanadium steel, bright chrome-plated, head polished, plastic holder included.

Art. no.	WS	set	kg	PU
110250	6-22	**12-pieces**	1,144	1

Combination spanners similar to DIN 3113

chrome vanadium steel, bright chrome-plated, head polished, in roll bag with eyes for hanging

Art. no.	WS	set	kg	PU
110252	6-27	**16-pieces**	1,948	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Open-jawed ring wrench with ratch function

Open-jawed ring wrench with ratch function made from chromium-vanadium steel, chromed surface, polished, fine-toothed, 72 teeth, swing angle 5°, DIN 3113, ISO 3318, in a practical plastic box mit Metallveschluss, wrench size 8 - 9 - 10 - 12 - 13 - 14 - 17 - 19 mm

Art. no.	WS	set	kg	PU
110900	8-19	**8-piece**	1,255	1

Open-jawed ring wrench with ratch function

made from chromium-vanadium steel, chromed surface, polished, fine-toothed, 72 teeth, swing angle 5°, DIN 3113, ISO 3318

Art. no.	TL	WS	kg	PU
110900/8	134	**8**	0,030	1
110900/9	152	**9**	0,060	1
110900/10	157	**10**	0,060	1
110900/12	167	**12**	0,080	1
110900/13	175	**13**	0,100	1
110900/14	190	**14**	0,120	1
110900/17	223	**17**	0,180	1
110900/19	245	**19**	00	1

Adjustable single-head wrench

Adjustable single-head wrench with ratch function made from chromium-vanadium steel, forged, chromed, DIN 3117, handle made from TPR, with lasered measuring scale

Art. no.	size	TL	kg	PU
110590	6-19	150	0,160	1
110592	9-24	200	0,342	1
110594	10-29	240	0,400	1
110596	10-34	300	0,634	1

Adjustable single-head wrench with ratch function

Adjustable single-head wrench with ratch function made from chromium-vanadium steel, fast and effective working, use of singlehead wrench does not need to be discontinued, forged, chromed, DIN 3117, handle made from TPR, with lasered measuring scale, mounting with anti-theft device and function test

Video 110583

Art. no.	size	TL	kg	PU
110583	6-19	150	0,160	1
110585	9-24	200	0,342	1

Socket set

1/4"

chrome vanadium steel, industrial quality GS tested, black plastic case with metal catch with metal catch, 1/4".

Contents:
12 Sockets: 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12- 13 mm, 1 ratchet handle, 72 gears with quick release function, 14 insert bit socket PH: 1 - 2 - 3, HX: 3 - 4 - 5 - 6 - 8, TX: 10 - 15 - 20 - 25 - 27 - 30, 1 flexible extension bar, 2 extension bars 50 & 100 mm, 1 universal joint, 1 sliding adapter 3/8" x 1/4" for extension bar work as T handle, 1 spinner handle for screwdriver

Art. no.	set	kg	PU
110674	**33-pieces**	1,051	1

Reversible ratchet 1/4''

1/4"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	kg	PU
110674/K	1/4"	0,111	1

Extension 1/4''

1/4"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	TL	kg	PU
110700	1/4"	50	0,024	1
110701	1/4"	100	0,063	1

Flexible extension bar 1/4''

1/4"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	TL	kg	PU
110702	1/4"	100	0,059	1

Sockets 1/4''

■ 1/4"

chrome vanadium steel, industrial quality GS tested, square drive

Art. no.	WS	kg	PU
110703/4	**4**	0,010	1
110703/45	**4,5**	0,010	1
110703/5	**5**	0,010	1
110703/55	**5,5**	0,011	1
110703/6	**6**	0,011	1
110703/7	**7**	0,014	1
110703/8	**8**	0,012	1
110703/9	**9**	0,016	1
110703/10	**10**	0,016	1
110703/11	**11**	0,024	1
110703/12	**12**	0,024	1
110703/13	**13**	0,025	1

Sliding adapter 3/8'' x 1/4''

3/8" 1/4"

chrome vanadium steel, industrial quality GS tested, for extension bar work as T handle

Art. no.	kg	PU
110706	0,029	1

Spinner handle for screwdriver 1/4''

1/4"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	kg	PU
110725	1/4"	0,064	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Universal joint 1/4''

1/4''

chrome vanadium steel, industrial quality GS tested

Art. no.	kg	PU
110726	0,024	1

Insert bit sockets PH 1/4''

1/4''

chrome vanadium steel, industrial quality GS tested

Art. no.	size	kg	PU
110711	1	0,015	1
110727	2	0,015	1
110728	3	0,016	1

Insert bit sockets HEX 1/4''

1/4''

chrome vanadium steel, industrial quality GS tested

Art. no.	WS	kg	PU
110729	**3**	0,015	1
110747	**4**	0,015	1
110749	**5**	0,016	1
110754	**6**	0,018	1
110718	**8**	0,018	1

Insert bit sockets TX 1/4''

1/4''

chrome vanadium steel, industrial quality GS tested

Art. no.	size	kg	PU
110719	10	0,013	1
110720	15	0,015	1
110721	20	0,015	1
110722	25	0,015	1
110723	27	0,015	1
110724	30	0,015	1

Insert bit sockets slot 1/4''

1/4''

chrome vanadium steel, industrial quality GS tested

Art. no.	KlBr	kg	PU
110759	5,5	0,015	1
110760	7	0,014	1

Socket set

3/8"

chrome vanadium steel, industrial quality GS tested, black plastic case with metal catch with metal catch, 3/8".

Contents:
18 Sockets: 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 mm, 1 ratchet handle, 72 gears with quick release function, 1 universal joint, 1 sliding adapter 1/2" x 3/8" for extension bar work as T handle, 2 spark plug sockets 16 & 21 mm, 3 extension bars 20 - 75 - 150 mm

Art. no.	set	kg	PU
110676	**26-pieces**	2,309	1

Reversible ratchet 3/8''

3/8"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	kg	PU
110676/K	1/2"	0,111	1

Extension 3/8''

3/8"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	TL	kg	PU
110731	3/8"	20	0,045	1
110733	3/8"	75	0,075	1
110735	3/8"	150	0,143	1

Sockets 3/8''

■ 3/8"

chrome vanadium steel, industrial quality GS tested, square drive

Art. no.	WS	kg	PU
110737/6	**6**	0,019	1
110737/7	**7**	0,020	1
110737/8	**8**	0,021	1
110737/9	**9**	0,023	1
110737/10	**10**	0,023	1
110737/11	**11**	0,024	1
110737/12	**12**	0,024	1
110737/13	**13**	0,024	1
110737/14	**14**	0,031	1
110737/15	**15**	0,040	1
110737/16	**16**	0,035	1
110737/17	**17**	0,046	1
110737/18	**18**	0,061	1
110737/19	**19**	0,056	1
110737/20	**20**	0,066	1
110737/21	**21**	0,060	1
110737/22	**22**	0,078	1
110737/24	**24**	0,085	1

Spark plug sockets 3/8''

3/8"

chrome vanadium steel, industrial quality GS tested

Art. no.	WS	kg	PU
110738	**16**	0,092	1
110739	**21**	0,139	1

Sliding adapter 1/2'' x 3/8''

1/2" 3/8"

chrome vanadium steel, industrial quality GS tested, for extension bar work as T handle

Art. no.	kg	PU
110741	0,070	1

Universal joint 3/8''

3/8"

chrome vanadium steel, industrial quality GS tested

Art. no.	kg	PU
110745	0,067	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Socket set

1/2"

chrome vanadium steel, industrial quality GS tested, black plastic case with metal catch, 1/2".

Contents:
20 Sockets: 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 26 - 27 - 28 - 30 - 32 mm, 1 ratchet handle, 72 gears with quick release function, 1 extension bar, safety locking type 250 mm, 1 extension bar 125 mm, 1 sliding T-bar 300 mm, 1 universal joint, 1 sliding adapter 3/8" x 1/2" for extension bar work as T handle

Art. no.	set	kg	PU
110677	**25-pieces**	4,739	1

Reversible ratchet 1/2''

1/2"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	TL	kg	PU
110677/K	1/2"	260	0,560	1

Extension 1/2''

1/2"

chrome vanadium steel, industrial quality GS tested

Art. no.	drive	TL	kg	PU
110751	1/2"	75	0,137	1
110752	1/2"	125	0,200	1
110753	1/2"	250	0,388	1

Sockets 1/2''

1/2"

chrome vanadium steel, industrial quality GS tested, square drive

Art. no.	WS	kg	PU
110754/10	**10**	0,046	1
110754/11	**11**	0,051	1
110754/12	**12**	0,052	1
110754/13	**13**	0,053	1
110754/14	**14**	0,055	1
110754/15	**15**	0,052	1
110754/16	**16**	0,052	1
110754/17	**17**	0,060	1
110754/18	**18**	0,060	1
110754/19	**19**	0,066	1
110754/20	**20**	0,066	1
110754/21	**21**	0,080	1
110754/22	**22**	0,094	1
110754/24	**24**	0,100	1
110754/26	**26**	0,120	1
110754/27	**27**	0,150	1
110754/28	**28**	0,165	1
110754/30	**30**	0,177	1
110754/32	**32**	0,206	1

Spark plug sockets 1/2''

1/2"

chrome vanadium steel, industrial quality GS tested

Art. no.	WS	kg	PU
110755	**16**	0,092	1
110756	**21**	0,141	1

Sliding adapter 3/8'' x 1/2''

3/8" 1/2"

chrome vanadium steel, industrial quality GS tested, for extension bar work as T handle

Art. no.	kg	PU
110757	0,069	1

Universal joint 1/2''

1/2"

chrome vanadium steel, industrial quality GS tested

Art. no.	kg	PU
110758	0,152	1

Socket set

1/2" 1/4"

chrome vanadium steel, industrial quality GS tested, black plastic case with metal catch.

Contents:
1/4": 12 Sockets 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm, 1 ratchet handle, 1 universal joint, 1 sliding adapter 3/8" x 1/4" for extension bar work as T handle, 2 extension bars 50 + 150 mm, 1 spinner handle for screwdriver, 12 insert bit sockets: PH: 1-2, HX: 3 - 4 - 5 - 6, FD: 5.5 - 7, TX: 20 - 25 - 27 - 30, 5 Hex keys: 1.25 - 1.5 - 2.0 - 2.5 - 3.0 mm

1/2": 13 sockets 10 - 11 - 12 - 13 - 14 - 15 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm, 1 ratchet handle, 2 extension bars 75 + 250 mm, 1 sliding adapter 3/8" x 1/2" for extension bar work as T handle, 2 plug sockets, 1 universal joint

Art. no.	set	kg	PU
110678	**53-pieces**	4,385	1

SysCon „SocketMax" ½" + ¼"

SysCon

chrome vanadium steel, industrial quality GS tested, in ABS plastic box.

Contents:

1 220370 ABS plastic box „SysCon S"

12 Sockets 1/4" 4-4.5-5-5.5-6-7-8-9-10-11-12-13 mm
2 Extensions 1/4" 50 – 150mm
1 Adapter 3/8" x 1/4" for sliding handle
1 Kardanjoint 1/4"
1 Bit adapter 1/4"
1 Reversible ratchet 1/4"
13 Sockets 1/2" 10-11-12-13-14-15-17-19-22-24-27-30-32 mm
2 Extensions 1/2" 75 – 250 mm
1 Adapter 3/8" x 1/2" for sliding handle
1 Kardanjoint 1/2"
1 Reversible ratchet 1/2"
1 Ratchet screwdriver „Flex"
2 Adapter 50 – 80 mm
4 Bit 1/4" 50 mm PH 0 - 1 - 2 - 3
4 Bit 1/4" 50 mm PZ 0 - 1 - 2 - 3
2 Bit 1/4" 50 mm PZ/FL 1 - 2
4 Bit 1/4" 50 mm SL 3 - 4 - 5 - 6 mm
6 Bit 1/4" 50 mm hexagon 2 - 2.5 - 3 - 4 - 5 - 6

Art. no.	set	empty	kg	PU
220600	**55-pieces**	220370	6,000	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

Torque wrench **Industrial quality**

- With built-in changeover ratchet, accuracy +/- 3%,
- Material: Chrome-Vanadium steel DIN-3122; ISO 6789
- Measuring range from 5 – 25 Nm, 21 – 119 Nm, 42 – 210 Nm
- With viewing window display and locking mechanism
- Easy to read scale
- In impact-proof storage box

Torque wrenches 1/4"

reversible ratchet system, +/- 3%, Chrome-Vanadium-Steel DIN-3122; ISO 6789

Art. no.	drive	Nm	kg	PU
110607	1/4"	5 - 25	1,000	1

Torque wrenches 3/8"

reversible ratchet system, +/- 3%, Chrome-Vanadium-Steel DIN-3122; ISO 6789

Art. no.	drive	Nm	kg	PU
110608	3/8"	21 - 119	1,500	1

Torque wrenches 1/2"

reversible ratchet system, +/- 3%, Chrome-Vanadium-Steel DIN-3122; ISO 6789

Art. no.	drive	Nm	kg	PU
110610	1/2"	21 - 119	1,500	1

Torque wrenches 1/2"

reversible ratchet system, +/- 3%, Chrome-Vanadium-Steel DIN-3122; ISO 6789

Art. no.	drive	Nm	kg	PU
110609	1/2"	42 - 210	1,750	1

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SysCon socket wrench set “Torque” ¼"

chrome vanadium steel, industrial quality GS tested, in ABS plastic box.

Contents:

1 220370 ABS plastic box “SysCon S”

12 sockets ¼" 4 - 4.5 - 5 -5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 mm
5 sockets ¼" Tx, long version T20, T25, T27, T30, T40
4 sockets ¼" Hex, long version 4, 5, 6, 8 without hole
2 extension bar ¼", 50 and 150 mm
1 adapter ⅜" x ¼" for extension bar work as T-handle
1 universal joint ¼"
1 bit adapter ¼"
1 reversible ratchet ¼"
1 torque wrenches ¼", 5 – 25 Nm
1 ratchet screwdriver “Flex”
2 adapter 50 and 80 mm
4 bits ¼" 50 mm PH 0 - 1 - 2 - 3
4 bits ¼" 50 mm PZ 0 - 1 - 2 - 3
2 bits ¼" 50 mm PZ/FL 1 - 2
4 bits ¼" 50 mm SQ 3 - 4 - 5 - 6 mm
6 bits ¼" 50 mm hexagonal 2 - 2.5 - 3 - 4 - 5 - 6

Art. no.	set	empty	kg	PU
220640	**51-pieces**	220370	3,900	1

SysCon socket wrench set “Torque” ½"

chrome vanadium steel, industrial quality GS tested, in ABS plastic box.

Contents:

1 220370 ABS plastic box “SysCon S”

17 sockets ½" 8 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 19 - 21 - 22 - 23 - 24 - 27 - 30 - 32 mm
5 sockets ½" Tx, long version T30, T40, T45, T50, T55
4 sockets ½" Hex, long version 8, 10, 12, 14 without hole
2 extension bar ½", 75 and 250 mm
1 adapter ⅜" x ½" for extension bar work as T-handle
1 universal joint ½"
1 reversible ratchet ½"
1 torque wrenches ½", 21 – 119 Nm

Art. no.	set	empty	kg	PU
220642	**32-pieces**	220370	4,300	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Switch cabinet key, „HUPkey“

Inside square 6 - 7 mm, 8 - 9 mm,
Outside square 5 - 10 mm, two-way 3 - 5 mm,
Triangle socket 7 - 9 mm, triangle socket 11 mm and chain

Art. no.	kg	PU
110691	0,115	1

Switch cabinet key, „HUPkey“ with converting bit

Inside square 6 - 7 mm, 8 - 9 mm,
Outside square 5 - 10 mm, two-way 3 - 5 mm,
Triangle socket 7 - 9 mm, triangle socket 11 mm,
SI converting bit for slotted and cross-headed screws
Including 5 mm inside square and crescent on chain

not available in GB and FR

Art. no.	kg	PU
110692	0,145	1

Converting bit for bleeding

SI converting bit for slotted and cross-headed screws
Including 5 mm inside square and crescent on chain

Art. no.	kg	PU
110693	0,030	1

Universal switch cabinet key with crescent, „HUPkey“

Inside square 6 - 7 mm, 8 - 9 mm, crescent,
Two-way 3 - 5 mm, triangle socket 7- 9 mm,
Triangle socket 11 mm, SI converting bit for slotted
and cross-headed screws on chain

not available in GB and FR

Art. no.	kg	PU
110697	0,094	1

Switch cabinet key, „HUPkey“ Universal Puck

Inside square 6 mm, inside square 7 - 9 mm,
Two-way 3 - 5 mm, crescent, triangle socket 7- 9 mm

Art. no.	kg	PU
110679	0,074	1

Spanners for switch cabinet key „HUPkey Uni“

Spanner for switch cabintes with push construction,
bitholder and bit on chain, external square 7 + 8 mm, inside
square 6, 7, 8, 9 mm, double size 3 - 5 mm, inside
threesquare 7, 8, 9, 10, 11 mm

not available in GB and FR

Video 110698

Art. no.	kg	PU
110698	0,105	1

Spanners for switch-cabinets „HUPkey“

made of metal for hight torques, small size, low weight, with chain inside square 6 mm, inside square 7 - 8 mm, inside threesquare 7 - 8 mm, double size 3 - 5 mm

Art. no.	size	kg	PU
110696	72 x 72	0,059	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Pliers

haupa®

... convincing solutions

INFO

2-component pliers **Industrial quality**

Pliers range with 2-component handles made of highquality, non-slip, thermoplastic elastomer.

High leverage pliers offer power saving of up to 50%.

Chrome plated, cutting edges inductive hardened

leveraged

slipping protection

slim shape for easy handling

reinforced handle for maximum cutting force

2-component combination pliers DIN 5746

alloyed carbon steel, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome-plated, for soft wire and hard wire**, leveraged**

Art. no.	TL	soft	hard	kg	PU
210052	160	4,0	2,0	0,197	1
210053	180	4,0	2,2	0,286	1
210054	200	4,2	2,5	0,410	1

2-component side cutters DIN 5749

alloyed carbon steel, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome-plated, for soft wire and hard wire**, leveraged**

Art. no.	TL	soft	hard	kg	PU
210067	140	4,0	1,8	0,172	1
210068	160	4,0	2,0	0,237	1

2-component heavy duty side cutters DIN 5749

alloyed carbon steel, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome-plated, for soft wire and hard wire

Art. no.	TL	soft	hard	kg	PU
210157	180	4,0	2,7	0,264	1

2-component heavy duty side cutters DIN 5749

alloyed carbon steel, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome-plated, for soft wire and hard wire**, leveraged**

Art. no.	TL	soft	hard	kg	PU
210158	200	4,2	3,0	0,326	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

2-component long flat nose pliers DIN 5745

alloyed carbon steel, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome-plated

Art. no.	TL	kg	PU
210313	160	0,155	1

2-component long round nose pliers DIN 5745

alloyed carbon steel, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome-plated

Art. no.	TL	kg	PU
210350	160	0,153	1

2-component long chain nose pliers DIN 5745

with side cutter, straight, alloyed carbon steel, forged and annealed, cutting edges induction hardened, for soft wire and hard wire, with 2 component plastic handle with hand protection, chrome-plated**, leveraged**

Art. no.	TL	form	kg	PU
210394	170	straight	0,154	1
210396	200	straight	0,253	1

2-component long chain nose pliers DIN 5745

with side cutter, 45° angled nose, alloyed carbon steel, forged and annealed, cutting edges induction hardened, for soft wire and hard wire, with 2 component plastic handle with hand protection, chrome-plated**, leveraged**

Art. no.	TL	form	kg	PU
210398	200	45°	0,251	1

Wire stripping pliers DIN 7168

alloyed carbon steel C 45, forged and annealed, cutting edges induction hardened, with 2 component plastic handle with hand protection, chrome plated

Art. no.	TL	mm²	kg	PU
210644	160	0,6-10	0,196	1

2-component water pump pliers DIN 8976

chrome vanadium steel, forged and annealed, curved jaws, gripping chuck hardened, self-locking nut, finger protection, with 2 component plastic handle with hand protection, titanium-finish

Art. no.	TL	kg	PU
210584	240	0,368	1

Water pump pliers DIN ISO 8976

chrome vanadium steel, forged and annealed, curved jaws, gripping chuck hardened, chrome-plated, dipped, setting at touch of a button, safe engaging

Art. no.	TL	kg	PU
210616	170	0,185	1
210617	240	0,330	1
210618	300	0,545	1

2-component pliers set

Contents:
1 compination pliers 180 mm
1 diagonal cutter 160 mm
1 long chain nose pliers 200 mm
1 wire stripping pliers 160 mm

Art. no.	set	kg	PU
220128	**4-pieces**	1,044	1

2-component pliers set

Contents:
1 compination pliers 180 mm
1 heavy duty diagonal cutter 180 mm
1 long chain nose pliers 200 mm
1 wire stripping pliers 160 mm

Art. no.	set	kg	PU
220129	**4-pieces**	1,082	1

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Special pliers

Grip pliers

one jaw straight, one jaw movable, forged of chrome vanadium, a real universal plier for gripping any kind of workpiece, flat round or square, with quick-release lever and adjustable screw

Art. no.	TL	WS	kg	PU
210556	250	0-40	0,518	1

Grip pliers

jaws drop, forged of chrome vanadium, adjustable screw, quick-release lever, half-round jaws, with wire cutter

Art. no.	TL	WS	kg	PU
210562	250	0-40	0,565	1

Pipe wrenches

chrome vanadium steel, polished

Art. no.	TL	WS	tube	kg	PU
210592	320	-45	1"	0,798	1
210594	435	-59	1 1/2"	0,800	1
210596	560	-76	2"	2,460	1

Riveting pliers

made of aluminium-pressure casting, all inner parts made of special alloyed steel and hardened, with 4 exchangeable nozzles 2,4-3-4-5 mm, for blind rivets of aluminium-copper or steel

Art. no.	TL	kg	PU
210770	250	0,552	1

Riveting tool set

in portable plastic box. **Contents:** 1 plier no. 210770, 100 pieces of alu space rivets 4 mm Ø, short-middle-long, 2 twist drills and washers.

Art. no.	TL	kg	PU
210776	250	0,840	1

2-component electronic pliers

Microelectronic side cutters

without cutting-facet, clearance angle: 50°, with clip, for soft wires up to 0.8 mm²

Art. no.	TL	kg	PU
211708	118	0,069	1

Microelectronic side cutters

without cutting-facet, clearance angle: 21°, with clip, for soft wires up to 1.3 mm²

Art. no.	TL	kg	PU
211720	132	0,086	1
211722	158	0,087	1

Tweezers

special design for wafers, long, extra small blades, needle fine top ends, stainless steel, antimagnetism acid resistent

Art. no.	TL	kg	PU
211080	130	0,017	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

ESD Electronic pliers **Industrial quality**

Advantages:
- Elegant, ergonomically shaped, non-slip 2-component handle ensures comfortable and precise working
- Special tool steel, forged and tempered, edges hardened (58 ± 2HRC)
- Surface resistance 10.9 Ohm, in accordance with electronics area ESD
- Each mechanism checked
- precision pliers for meticulous assembly work for example in electronics and precision engineering
- for picking up, holding and bending
- model with electric discharging
- precision hinges
- smooth handle surfaces
- low-friction double spring for smooth and steady opening
- handles with two-coloured multi-component handle covers black/green
- special tool steel

Not only people, objects also experience electrostatic charging as a result of movement, friction and being handled. Such charging can lead to the destruction of endangered components.
HAUPA ESD - electronics pliers discharge such energy slowly and in a controlled way.

ESD Electronic needle nose pliers

with wire cutter, special tool steel

Art. no.	TL	form	kg	PU
211850	130	straight	0,091	1

ESD Electronic needle nose pliers, 45° angle

with wire cutter, special tool steel

Art. no.	TL	form	kg	PU
211852	130	45°	0,089	1

ESD Electronic needle nose pliers

straight construction, special tool steel

Art. no.	TL	form	kg	PU
211854	130	straight	0,082	1

ESD Electronic needle nose pliers, 45° angle

45° angle, special tool steel

Art. no.	TL	form	kg	PU
211856	130	45°	0,081	1

ESD Electronic thin needle nose pliers

straight construction, special tool steel

Art. no.	TL	form	kg	PU
211858	140	straight	0,083	1

ESD Electronic thin needle nose pliers, 45° angle

45° angle, special tool steel

Art. no.	TL	form	kg	PU
211860	140	45°	0,084	1

ESD Electronic thin needle nose pliers

straight construction, special tool steel

Art. no.	TL	form	kg	PU
211862	150	straight	0,087	1

ESD Electronic thin needle nose pliers, 45° angle

45° angle, special tool steel

Art. no.	TL	form	kg	PU
211864	150	45°	0,087	1

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ESD Electronic flat nose pliers

Special tool steel

Art. no.	TL	kg	PU
211866	130	0,090	1

ESD Electronic front cutter

Special tool steel

Art. no.	TL	kg	PU
211874	115	0,093	1

ESD Electronic round nose pliers

straight construction, special tool steel

Art. no.	TL	kg	PU
211868	130	0,091	1

ESD Electronic combination pliers

with wire cutter, special tool steel

Art. no.	TL	kg	PU
211876	115	0,077	1

ESD Electronic side cutter

normal construction, head width 14 mm,
special tool steel

Art. no.	TL	kg	PU
211870	115	0,078	1

ESD Electronic side cutters

slim construction, head width 10 mm,
special tool steel

Art. no.	TL	kg	PU
211872	110	0,075	1

ESD Electronic side cutter without cutting-facet

normal construction, head width 14 mm
without chamfer, special tool steel

Art. no.	TL	kg	PU
211875	115	0,075	1

ESD Electronic pliers set

Special tool steel

Contents:
Art. No. 211862, 211870, 211874, 211876

Art. no.	set	kg	PU
211880	**4-pieces**	0,585	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

LED lamps/torches

haupa®

... convincing solutions

INFO

LED lamps/torches **Industrial quality**

HAUPA high-performance LED lamps/torches for daily work use

Extremely high illumination performance with minimum battery load thanks to highly modern **CREE LED** bulbs

LED „Mini Torch“

- Compact
- Very small and light
- Extremely high lighting performance
- LED 3 Watt CREE XR-E
- 1xAAA battery

Art. no.	size	kg	PU
130310	Ø 20 x 92,5 mm	0,080	1

LED „Focus Torch“

- Adjustable focus for near and far
- LED 3 Watt CREE XP-E
- 3xAAA batteries

Art. no.	size	kg	PU
130312	Ø 34,4 x 115 mm	0,200	1

LED „IP67 Torch“

- IP67, dust-tight, protected against brief submersion (water-tight)
- 1 x switch operation 100 % lighting performance
  2 x switch operation 30 % lighting performance
- LED 5 Watt CREE XP-G
- 4xAAA batteries

Art. no.	size	kg	PU
130314	Ø 40,5 x 141 mm	0,440	1

LED „RC Torch“

- Rechargeable battery, lithium-ion 2200 mAH 3.7 V
- Integrated charging unit
- 1 x switch operation 100 % lighting performance
  2 x switch operation 30 % lighting performance
- Additional battery holder as backup
- Deep discharge protection
- LED 5 Watt CREE XP-G
- Charging cable 230 Volt, charging cable for automobile
- Battery holder (battery operation is an alternative)

Art. no.	size	kg	PU
130316	Ø 40,5 x 180 mm	0,440	1

LED „Max Torch“

- Illumination range: 300 m
- LED 10 Watt CREE XML-T6
- Extreme illumination range
- 1 x switch operation 100 % lighting performance,
  2 x switch operation 25 % lighting performance
- 3xC batteries included
- Including wrist strap

Art. no.	size	kg	PU
130324	Ø 40,5 x 234 mm	0,440	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

LED „Pen Torch“

- Illumination range: 50 m
- 50 Lm
- LED 1 Watt CREE
- With clip
- 2xAAA batteries

Art. no.	size	kg	PU
130328	Ø 14 x 143 mm	0,200	1

LED „Headlight“ headlamp

- Very light and balanced headlamp (battery compartment at the rear)
- 4 lighting levels:
  Switch position 1 = 100 % lighting performance
  Switch position 2 = 80 % lighting performance
  Switch position 3 = 30 % lighting performance
  Switch position 4 = red LED
- LED 3 Watt CREE XP-E
- 2xAA batteries

Art. no.	size	kg	PU
130318	143 mm	0,180	1

Holster for LED torches

Suitable for item numbers: 130312, 130314

Art. no.	width	depth	height	kg	PU
130322	30	10	100	0,180	1

LED Battery-powered „Working Lamp“

- Extremely large lighting range (Working area) light cone
- Rechargeable battery, lithium-ion 2000 mAH 3.7 V
- Integrated charging unit
- 1 x switch operation 100 % lighting performance
  2 x switch operation 20 % lighting performance
  3 x switch operation gives a flash
- Deep discharge protection
- Holding magnetic on the rear
- Emergency light function in the event of power failure (Approximately 19 hours of illumination)
- LED 3 Watt CREE XP-E
- Charging cable 230 Volt
  Charging cable for automobile
- Wall mount, colour disks

Video 130320

Art. no.	size	kg	PU
130320	Ø 100 x 105 x 260 mm	0,180	1

Signal light „HUPemergency“

- 16 x LED
- 9 different flashing modes
- High-quality plastic, drop-protected and weather-proof
- Integrated lithium ion battery pack
- Charging cable 230 Volt, car charging cable
- Magnetic, with hanging eye

Video 130326

Art. no.	size	kg	PU
130326	Ø 105 x 3,5 mm	0,200	1

Compact floodlight “HUPlight10”

- Rechargeable battery, lithium-ion 4400 mAH 7,4 V
- LED 10 Watt
- High quality aluminium housing, protected against spray water in accordance with IP54
- Extremely bright light
- Lighting performance is variable, can be dimmed
- at least 7 hours of operating power
- External devices may be charged via USB connections
- Charging cable 230 Volt, car charging cable

Art. no.	Watt	size	kg	PU
130330	10	167 x 185 x 260 mm	1,470	1

Mini working light “HUPlight4”

- Rechargeable battery, lithium-ion 1800 mAH 3,7 V
- LED 4 Watt
- Approximately 200 Lumen lighting performance
- at least 3 hours of operating power
- charged via Micro-USB connections
- Stand, magnet, hook for attachment
- Can be used and carried everywhere

Art. no.	Watt	size	kg	PU
130336	4	60 x 25 x 120 mm	0,260	1

Compact floodlight “HUPlight20”

- Rechargeable battery, lithium-ion 8800 mAH 7,4 V
- LED 20 Watt
- High quality aluminium housing, protected against spray water in accordance with IP54
- Extremely bright light
- Lighting performance is variable, can be dimmed
- at least 8 hours of operating power
- External devices may be charged via USB connections
- Charging cable 230 Volt, car charging cable

Art. no.	Watt	size	kg	PU
130332	20	245 x 185 x 275 mm	2,390	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Measuring tools

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Folding rules

with spring joint, mm-graduations on both sides

Art. no.	TL	type	width	kg	PU
240002	2 m	wood	16	0,022	1
240005	2 m	fibre glass	16	0,138	1

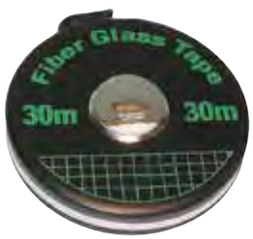
Measuring tapes

with spring steel tapes, case: plastic, with automatic return motion and locking key, tape with stove-enamel finished

Art. no.	TL	width	kg	PU
240011	3 m	13	0,104	1
240012	5 m	16	0,179	1

Measuring tapes

in metal case, with woven rayon tape, strengthened against streching by 8 bronze wires woven into tape, scale graduations both sides: metres and centimetres



Art. no.	TL	width	kg	PU
240018	20 m	16	0,432	1
240020	25 m	16	0,544	1
240022	30 m	16	0,586	1
240024	50 m	16	0,857	1

Aluminium spirit levels

bubble level made of acrylic glass, accuraty of measurement: 0,043° = 0,75 mm/m, fall arrest on flanks

Art. no.	TL	kg	PU
240041	300	0,168	1
240042	400	0,198	1
240044	600	0,282	1
240046	800	0,406	1
240048	1000	0,534	1

Electrician's safety levels

nonconducting plastic material, with 2 tubes horizontal and vertical

Art. no.	TL	kg	PU
240057	400	0,188	1
240058	600	0,274	1

Cabinet levels

Torped type, nonconducting plastic material, with 3 tubes horizontal, vertical and 45°

Art. no.	TL	kg	PU
240059	200	0,078	1

Precision pocket vernier calipers „Stainless“

manufactured from stainless steel, completely hardened, with measuring nibs, depth gauge and thread tables, in plastic wallet, 1/20“ or 1/128 mm, size 140 mm

Art. no.	TL	kg	PU
240071	232	0,157	1

Precision pocket vernier calipers „digital“

manufactured from stainless steel, completely hardened, with measuring nibs, depth gauge and thread tables, in plastic box with sight window, 1/20“ or 1/128 mm, size 140 mm

Art. no.	TL	kg	PU
240073	235	0,150	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Engineers' squares

manufactured from steel, bright

Art. no.	TL	width	kg	PU
240132	150x100	20	0,181	1
240134	200x130	20	0,237	1
240136	250x160	25	0,378	1
240138	300x180	25	0,445	1

Engineers' squares

manufactured from steel, bright

Art. no.	TL	width	kg	PU
240152	150x100	20	0,170	1
240154	200x130	20	0,340	1
240156	250x160	25	0,511	1
240158	300x180	25	0,440	1
240160	400x230	30	0,783	1

Steel point scribers

knurled handle, replaceable screw-out hardened points, handle with one straight and one bent point (90°)

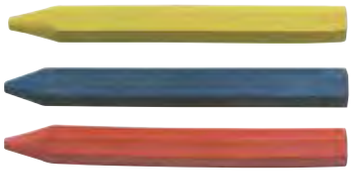
Art. no.	TL	kg	PU
240234	250	0,046	1

Carpenters' pencils

Art. no.	TL	kg	PU
150090	150	0,007	1

Marking chalk

12 items per packaging unit



Art. no.	colour	set	kg	PU
150015 B	blue	**12-pieces**	0,017	1
150015 G	yellow	**12-pieces**	0,017	1
150015 R	red	**12-pieces**	0,016	1
150015/1		Holder for marking crayons	0,020	1

Deep hole marker

Marker and writing implement with a refillable solid lead, suitable for all surfaces (including dusty, rough, damp or oily surfaces) cap in a bright signalling colour **with integrated sharpener**. Also suitable for dark surfaces.

Art. no.		kg	PU
150025		0,291	1
150027	spare lead 10 pc	0,291	1

Chalk line roller Squid, 15 m

Chalk line roller made from cast magnesium with push system: Pressure on the axle does not turn the crank; hardened hook with curved spike, integrated storage for the hook, **Art. no. 150023: fast-retraction transmission 5:1**

Art. no.	size		kg	PU
150019	15 m	**Squid**	0,291	1
150023	15 m	**Fast Squid**	0,291	1

Chalk

in plastic bottles, 250 g

Art. no.	colour	kg	PU
140510	red	0,284	1
140520	blue	0,276	1
140530	yellow	0,279	1

Maintenance

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Hand brush „Prestige“ short

- Soft Elaston PET bristles
- Unvarnished wooden body
- 29 cm
- Handle with hole for hanging up

Art. no.	TL	kg	PU
393000	290	0,250	1

Hand brush „Prestige“ long

- Soft Elaston PET bristles
- Unvarnished wooden body
- 43 cm
- Handle with hole for hanging up

Art. no.	TL	kg	PU
393002	430	0,280	1

Street broom

- Elaston 40 cm
- 6/15 rows

Art. no.	TL	kg	PU
393008	400	0,300	1

Broom, for rough dirt

- Elaston 40 cm
- For coarse dirt
- Made from wooden corbel
- With hole for handle

Art. no.	TL	kg	PU
393012	400	0,300	1

Broom, for smooth ground

- 40 cm
- For smooth floors and fine dirt
- Made from wooden corbel
- With hole for handle

Art. no.	TL	kg	PU
393010	400	0,300	1

Metal dustpan with wooden handle

- Made from metal
- Painted black
- Wooden handle with hole for hanging up
- Robust version
- 450 x 230 mm

Art. no.	TL	width	kg	PU
393006	450	230	0,400	1

Bucket

- Made from plastic
- 12 l
- With carry handle

Art. no.	kg	PU
300102	0,450	1

Broomstick

- Sanded cleanly
- Rounded head
- 1400 mm

Art. no.	TL	kg	PU
393004	1400	0,250	1

Textile tape

Particularly strong adhesive, UV-resistant.

- 50 m

Art. no.	length/m	width	kg	PU
393014	50	38	0,350	1
393016	50	50	0,400	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tarpaulin premium

Protects from dust and damp, for indoor use.

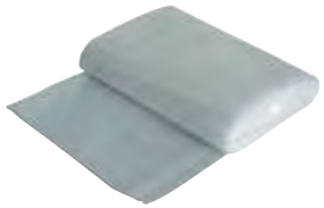
- 12 my
- 4 x 12,5 m

Art. no.	TL	width	kg	PU
393026	12500	4000	0,250	1

Tarpaulin, strong

Effective protection from dirt whatever the job, for indoor use.

- 30 my
- 4 x 5 m

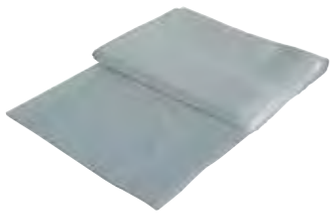


Art. no.	TL	width	kg	PU
393022	5000	4000	0,200	1

Tarpaulin, strong

Effective protection from dirt whatever the job, for indoor use.

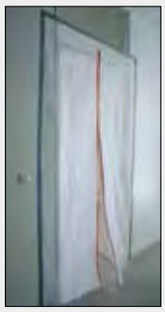
- 30 my
- 4 x 12,5 m

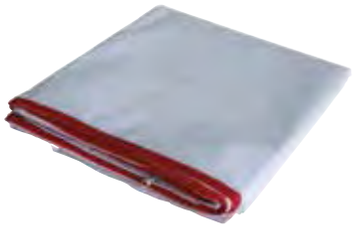


Art. no.	TL	width	kg	PU
393024	12500	4000	0,500	1

Dust protection door, multi-fleece

Protects from dust and dirt, approximately 120 x 220 cm, zip length approximately 215 cm.





Art. no.	TL	width	kg	PU
393032	2200	1200	0,350	1

Builders waste sack

- LDPE
- Roll containing 5 sacks
- 75 l
- 100 my
- 575 x 1000 mm

Art. no.	TL	width	kg	PU
393018	1000	575	0,020	1

Waste sack, extra

- LDPE
- Roll containing 10 sacks
- 120 l
- 50 my
- 700 x 1100 mm

Art. no.	TL	width	kg	PU
393020	1100	700	0,020	1

Construction foil „Profi“

Optimum protection for all jobs indoors and for all outdoor situations.

- 3 x 10 m 200g/m²

Art. no.	TL	width	kg	PU
393030	10000	3000	4,500	1

Multi-fleece

Extremely absorbent, anti-slip thanks to PE anti-slip sheet, prevents the ingress of paint or damp, for all DIY, renovation, construction and painting work. Easy to lay, can be reused multiple times, dirt on clothes and shoes is not transported further.

- 1 x 10 m

Art. no.	TL	width	kg	PU
393028	10000	1000	1,500	1

Wire brushes

Art. no.	TL	kg	PU
150002	300	0,131	1

Water brushes

real bristles, vulcanized, textile bound, bristles-Ø 24 mm, length of bristle 48 mm

Art. no.	width	kg	PU
150004	24	0,036	1

Plaster cups

soft rubber

Art. no.	Ø	depth	kg	PU
150006	125	90	0,105	1

Plaster pan

metal, with wooden handle

Art. no.	Ø	depth	kg	PU
150008	160	40	0,341	1

Paint scrapers

steel, polished blade, with oval wooden handle

Art. no.	TL	width	kg	PU
150024	185	40	0,043	1
150026	205	50	0,051	1
150028	205	60	0,047	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Chisels, Hammers

haupa®

... convincing solutions

Flat chisels to DIN 6453 A, flat oval shank

chrome vanadium air hardenend steel, golden varnishes

Art. no.	TL	CW	mat/S	mat/S1	kg	PU
180008	200	28	23	13	0,392	1
180010	250	28	23	13	0,490	1
180012	300	32	26	13	0,606	1

Stone chisels, flat oval shank

chrome vanadium air hardenend steel, golden varnishes

Art. no.	TL	CW	mat/S	mat/S1	kg	PU
180042	250	28	20	12	0,394	1
180044	300	32	23	13	0,584	1

Stone chisels, octagonal shank

chrome vanadium air hardenend steel, golden varnishes

Art. no.	TL	CW	mat/S	mat/S1	kg	PU
180062	250	28	16	16	0,387	1
180064	300	30	18	18	0,595	1

Jointing chisel

chrome vanadium air hardenend steel, golden varnishes, for light works, the wide and flat cutting edge allows a quick working and avoid a breaking out of the wall

Art. no.	TL	CW	mat/S	mat/S1	kg	PU
180076	250	26	26	7	0,302	1

Stone chisels, octagonal shank

chrome vanadium air hardenend steel, golden varnishes

Art. no.	TL	CW	mat/S	mat/S1	kg	PU
180082	250	14	14	14	0,358	1
180084	300	16	16	16	0,573	1

Electricians' chisels

chrome vanadium air hardenend steel, golden varnishes

Art. no.	TL	CW	mat/S	mat/S1	kg	PU
180090	200	8	6	6	0,052	1
180092	250	10	8	8	0,119	1
180094	250	12	8	8	0,121	1

Centre punch to DIN 7250

octagonal shank, chrome vanadium air hardenend steel, golden varnishes

Art. no.	TL	Ø	kg	PU
180120	120	12	0,091	1

Firmer chisels DIN 5139

with bevelled edges and polished wooden handle and cutting edge protector

Art. no.	TL	CW	BL	kg	PU
180464	280	14	150	0,120	1
180466	280	16	150	0,132	1
180468	280	18	150	0,161	1
180470	280	20	150	0,170	1
180474	280	24	150	0,193	1

Rubber hand guard

total length 140 mm, max. Ø 90 mm, for chisels flat oval shank

Art. no.	size	mat/S	mat/S1	kg	PU
180110	3	23	13	0,125	1

Pin punch set

golden varnishes, in folding metal case
Contents: Ø 2 - 3 - 4 - 5 - 6 - 8 mm

Art. no.	set	kg	PU
180170	**6-pieces**	0,502	1

Household hatchet

varnished and polished cutting edge, DIN 5131

Art. no.	kg	PU
180173	0,600	1

Claw hammer

American model, 16 Oz, wooden handle

Art. no.	size	kg	PU
180321	16	0,621	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Claw hammer

American model, 16 Oz, fibreglass handle

Art. no.	size	kg	PU
180323	16	0,748	1

Engineers‘ hammer DIN 1041

with polished hickory handle, with steel handle protection

Art. no.	HW	kg	PU
180182	200	0,238	1
180184	300	0,370	1
180186	400	0,470	1
180188	500	0,622	1

Engineers‘ hammer DIN 1041

with steel pipe handle and rubber grip

Art. no.	HW	kg	PU
180200	300	0,552	1
180202	500	0,740	1

Engineers‘ hammer DIN 1041

with red ultramid handle, low vibration

Art. no.	HW	kg	PU
180232	300	0,410	1

Engineers‘ hammer

English pattern, ball pin

Art. no.	HW	kg	PU
180274	340	0,416	1
180276	450	0,485	1

Sledge hammer to DIN 6475

with steel pipe handle and rubber grip

Art. no.	HW	kg	PU
180290	1000	1,210	1
180292	1250	1,504	1

Sledge hammer to DIN 6475

with polished, fluted hickory handle, with steel handle protection

Art. no.	HW	kg	PU
180300	1000	1,093	1
180302	1250	1,375	1

Plastic hammer

with replaceable cellidor striking faces and ash handle

Art. no.	Ø		kg	PU
180334	32		0,328	1
180346		replacement heads	0,460	1

Steel stamps

Steel stamp, figures (0 - 9) DIN 1451

Art. no.	size	set	kg	PU
130200	3	0-9	0,160	1
130201	4	0-9	0,243	1
130202	5	0-9	0,300	1
130203	6	0-9	0,450	1
130204	8	0-9	0,650	1
130206	10	0-9	0,800	1

Steel stamp, letters (A - Z), DIN 1451

Art. no.	size	set	kg	PU
130208	3	A-Z	0,461	1
130209	4	A-Z	0,650	1
130210	5	A-Z	0,850	1
130211	6	A-Z	1,200	1
130212	8	A-Z	1,950	1
130214	10	A-Z	2,479	1

Files

Warding files DIN 7283

Set: 6 files with wooden handle, section A, B, C, D, E, F
in plastic wallet

Art. no.	TL	set	kg	PU
190120	100	**6-pieces**	0,108	1

Contact files

Set: 6 files in plastic wallet

Art. no.	TL	set	kg	PU
190126	130	**6-pieces**	0,078	1

File assortments

Set: 5 files in plastic wallet, files with plastic handle

Form:
round
square
flat
half round
triangular

Art. no.	TL	set	kg	PU
190130	100	**bastard cut 1**	0,784	1
190132	200	**smooth cut 3**	0,799	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Knives

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Cable stripping or lead tube knives

with wooden handle

Art. no.	BL	kg	PU
200008	40	0,047	1

Cable stripping knives

solid handle, shock-proof synthetic, blade with straight and rounded scraper

Art. no.	BL	type	kg	PU
200010	60	1	0,073	1

Cable stripping knives

with black plastic scales, stainless blade with scraper

Art. no.	BL	type	kg	PU
200011	60	1	0,082	1

Cable stripping knives

with wooden scales, blade with scraper

Art. no.	BL	type	kg	PU
200012	60	1	0,079	1

Cable stripping knives

with wooden scales, blade and reamer

Art. no.	BL	type	kg	PU
200014	60	2	0,078	1

Cable stripping knives

with wooden scales, blade, reamer and screwdriver

Art. no.	BL	type	kg	PU
200016	60	3	0,089	1

Cable stripping knives

with plastic scales, 2 blades, reamer and screwdriver

Art. no.	BL	type	kg	PU
200018	60	4	0,092	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cable stripping knives

Utility metal knives

Cutting of plastic, wallpaper, cardboards, leather, plywood, carpets, with automatic blades locking, reserve blade in the handle

Art. no.	BL	kg	PU
200025	9	0,072	1
200025/KL	spare blades	0,050	1

Utility metal knives

Cutting of plastic, wallpaper, cardboards, leather, plywood, carpets, with automatic blades locking, reserve blade in the handle

Art. no.	BL	kg	PU
200027	18	0,150	1
200032	spare blades	0,054	1

Utility knives "EXTRA" with spare blades

Cutting of plastic, wallpaper, cardboards, leather, plywood, carpets, with automatic blades locking, reserve blade in the handle, softgrip

Art. no.	BL	kg	PU
200051	18	0,022	1

Utility knife

Utility knive with holder, tool-free blade change, with blade depot, ergonomic design with softgrip

Art. no.	BL	kg	PU
200059	20	0,111	12

Utility knives

manufactured from zinc di-cast, with 4 straight blades and 1 hook blade

Art. no.	BL	TL	kg	PU
200026	20	145	0,192	1
200028	Utility knives hook form		0,004	1
200030	Utility knives straight form		0,005	1

Tin snips, tube cutters

Hole-cutting tin snips

with polished blade, carbon steel, figure cuts (large radii)

Art. no.	TL	kg	PU
200140	250	0,523	1

Figure tin snips

with polished blade, carbon steel, right-hand cutting, for short straight and figure cutting (small radii)

Art. no.	TL	kg	PU
200154	260	0,513	1

Small tube cutter

with 1 cutting wheel and dual roller guides
Ø 1/8“ - 5/8“

Art. no.	Ø	kg	PU
200190	3-16	0,107	1
200192	**loose spare wheels**	0,025	1

Tube cutter

with 1 cutting wheel and dual roller guides, retractable burr remover,
Ø 1/8“ - 1 3/8“

Art. no.	Ø	kg	PU
200194	3-35	0,401	1
200196	**loose spare wheels**	0,006	1

Junior hacksaw

strong frame, nickel-plated

Art. no.	type	Sbl.	kg	PU
200280	metal	150	0,149	1

Junior hacksaw DIN 6473 C

hacksaw blade for metal

Art. no.	type	Sbl.	kg	PU
200284	metal	150	0,069	1

Junior hacksaw

heavy type, with pistol type handle and hacksaw blade for metal, form A

Art. no.	type	Sbl.	kg	PU
200285	metal	150	0,164	1

Hand saw „PUK“

with hacksaws blade for metal, with fixed, varnished wooden handle

Art. no.	type	Sbl.	kg	PU
200290	metal	150	0,100	1

Hand saw „PUK“

with adjustable, varnished wooden handle, in plastic bag

Art. no.	type	Sbl.	kg	PU
200292	metal	150	0,119	1

Hacksaw blades „PUK“

acc. to DIN 6494C,
for Art. No. 200292, 200280, 200290, 200284, 200285, 110558

Art. no.	type	type	Sbl.	kg	PU
200286	wood	wood	150	0,036	1
200288	metal	universal	150	0,036	1

Hacksaw frame

steel pipe with flat oval section, bright chrome-plated, tension bolt made from steel, form A

Art. no.	type	Sbl.	kg	PU
200304	metal	300	0,408	1

Hacksaw blades to DIN 6494

type A, single sided blade HSS-Bi-metal

Art. no.	type	Sbl.	kg	PU
200310	metal	300	0,016	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Drilling tools

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... convincing solutions

Twist drills DIN 338/HSS type N

point angle 118°, spiral angle 25 - 35°, Ø-tolerance h 8, of HSS, for drilling of steel, steel-casting alloyed and unalloyed up to approx. 900 N/mm² strength grey- and tempered casting, sinter iron, newsilver, graphit, alu-alloy, bronze and brass

Packaging unit in blister pack:
0,5 - 3,0 mm; 1 SPU = 3 pieces
3,2 - 6,0 mm; 1 SPU = 2 pieces
6,5 - 13,0 mm; 1 SPU = 1 piece

xxxxxx/CO = Cobalt

Art. no.	Ø	core-hole	SL	TL	VE
230010	0,5		6	22	1
230020	1		12	34	1
230020/CO					1
230030	1,5		18	40	1
230030/CO					1
230032	1,6	**M2**	20	43	1
230032/CO					1
230040	2		24	49	1
230040/CO					1
230050	2,5	**M3**	30	57	1
230050/CO					1
230060	3		33	61	1
230060/CO					1
230064	3,2		36	65	1
230064/CO					1
230066	3,3	**M4**	36	65	1
230066/CO					1
230070	3,5		39	70	1
230070/CO					1
230080	4		43	75	1
230080/CO					1
230084	4,2	**M5**	43	75	1
230084/CO					1
230090	4,5		47	80	1
230090/CO					1
230100	5	**M6**	52	86	1
230100/CO					1
230110	5,5		57	93	1
230110/CO					1
230120	6	**M7**	57	93	1
230120/CO					1
230130	6,5		63	101	1
230130/CO					1
230136	6,8	**M8**	69	101	1
230136/CO					1
230140	7		69	109	1
230140/CO					1
230160	8		75	117	1
230160/CO					1
230170	8,5	**M10**	75	117	1
230170/CO					1
230180	9		81	125	1
230180/CO					1
230190	9,5		81	125	1
230190/CO					1
230200	10		87	133	1
230200/CO					1
230204	10,2	**M12**	87	133	1
230204/CO					1
230210	10,5		87	133	1
230210/CO					1
230220	11		87	133	1
230220/CO					1
230230	11,5		94	142	1
230230/CO					1
230240	12	**M14**	101	151	1
230240/CO					1
230244	12,5		101	151	1
230244/CO					1
230250	13		101	151	1
230250/CO					1

Twist drills DIN 338/HSS type N

made from hight power steel, in plastic pocket

Technical information:
Standard version: Industrial quality, dressed to size from solid material, high true tuning precision, long tool life, cutter separate packet in plastic bags or as a set in a box.

/PB: as beside
/R: workshop quality, wheeled milled
/TIN: as beside, titanium nitride coating

Art. no.	Ø	set	kg	PU
230312	1 - 10	**19-pieces**	0,312	1
230312/R	1 - 10		0,284	1
230312/TIN	1 - 10		0,345	1
230314	1 - 13	**25-pieces**	1,270	1
230314/R	1 - 13		1,213	1
230314/TIN	1 - 13		1,290	1

Bulk storage chest for twist drills

HSS, DIN 338, 170 pieces, TYP N, short, ground, bright, with split point, TIN coated.
Contents: 1.0 - 10.0 mm (upstairs in 0.5 mm steps)
up to 8,0 mm 10 pieces/size
> 8,5 mm 5 pieces/size

Art. no.	set	kg	PU
230301/TIN	**170-pieces**	4,550	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Auger bit, type Lewis

Art. no.	TL	Ø	kg	PU
231502	460	6	0,005	1
231508	235	10	0,098	1
231516	235	14	0,005	1
231524	235	18	0,200	1
231526	460	18	0,468	1
231528	235	20	0,005	1
231530	460	20	0,005	1
231532	235	22	0,300	1
231534	460	22	0,642	1
231540	235	26	0,005	1
231544	235	28	0,005	1
231546	460	28	0,005	1

Drill type machine bits for wood

made from carbon steel, concentrically ground, with centre point and front cutter

Art. no.	TL	Ø	kg	PU
230616	70	3	0,005	1
230618	80	4	0,008	1
230620	90	5	0,011	1
230622	100	6	0,015	1
230626	120	8	0,031	1
230628	130	9	0,039	1
230630	137	10	0,047	1
230634	150	12	0,075	1
230636	170	13	0,088	1

Flat bits

with flat cutter head, square shank, DIN 6447 A

Art. no.	TL	Ø	shank	kg	PU
230732	150	10	6	0,041	1
230734	150	12	6	0,041	1
230736	150	14	6	0,048	1
230738	150	16	6	0,051	1
230740	150	18	6	0,047	1
230742	150	20	6	0,045	1
230746	150	24	6	0,045	1

Casing drill

With cylindrical clamping shaft, cutting element made of chrome vanadium steel

Art. no.	TL	Ø	kg	PU
231750	400	6	0,100	1
231752	400	8	0,005	1
231754	400	10	0,160	1
231756	400	12	0,200	1
231758	400	13	0,200	1
231760	400	17	0,005	1
231766	400	22	0,200	1

Drills

Masonry drills DIN 8039

carbide tipped, with straight shank, each piece in plastic pocket

Art. no.	TL	Ø	CL	kg	PU
230330	70	3	40	0,003	1
230331	75	3,5	45	0,056	1
230332	80	4	45	0,008	1
230334	85	4,5	50	0,008	1
230336	90	5	50	0,011	1
230338	95	5,5	55	0,012	1
230340	100	6	60	0,018	1
230342	105	6,5	65	0,018	1
230344	110	7	65	0,018	1
230346	120	8	70	0,027	1
230352	140	10	90	0,035	1
230354	150	11	95	0,082	1
230356	160	12	105	0,090	1
230358	170	13	110	0,100	1
230360	180	14	115	0,120	1
230362	190	15	125	0,165	1
230364	190	16	125	0,092	1

Masonry drills DIN 8039

carbide tipped, with straight shank, each piece in plastic pocket

Art. no.	TL	Ø	CL	kg	PU
230370	400	8	300	0,130	1
230372	400	10	300	0,124	1
230374	400	12	300	0,143	1
230376	400	14	300	0,316	1
230378	400	16	300	0,232	1
230380	400	18	300	0,460	1
230382	400	20	300	0,608	1
230400	600	8	500	0,222	1
230402	600	10	500	0,222	1
230404	600	12	500	0,330	1
230406	600	14	500	0,463	1
230408	600	16	500	0,568	1
230410	600	18	500	0,715	1
230412	600	20	500	0,896	1
230414	600	22	500	1,164	1

Masonry drill bit

High-Helix Masonry drill bit, sand blasted, countersink construction, professional quality

Art. no.	TL	Ø	kg	PU
231700	70	3	0,007	1
231702	85	4	0,011	1
231704	95	5	0,017	1
231706	100	6	0,018	1
231708	100	7	0,020	1
231710	120	8	0,027	1
231712	120	9	0,030	1
231714	120	10	0,035	1
231716	150	11	0,090	1
231718	150	12	0,100	1

SDS hammer drill bits

Top quality: SDS-Plus fast fitting system: 2 lengthwise slots and 2 round slots at the end of the shank. Universal tool fitting for different types of hammer drills according to the SDS-Plus system

Art. no.	TL	Ø	CL	kg	PU
230430	110	5	50	0,037	1
230431	160	5	100	0,042	1
230432	110	5,5	50	0,037	1
230433	160	5,5	100	0,045	1
230434	110	6	50	0,039	1
230436	160	6	100	0,045	1
230438	110	6,5	50	0,038	1
230438/A	160	7	100	0,050	1
230438/B	160	6,5	100	0,047	1
230440	110	7	50	0,041	1
230442	110	8	50	0,046	1
230442/A	160	8	100	0,056	1
230444	210	8	150	0,064	1
230444/A	460	8	400	0,150	1
230448	160	10	100	0,065	1
230450	210	10	150	0,087	1
230450/A	260	10	150	0,118	1
230451	460	10	400	0,192	1
230453	210	12	150	0,107	1
230454	160	12	100	0,097	1
230456	260	12	200	0,159	1
230457	460	12	400	0,263	1
230458	160	13	85	0,111	1
230459	600	12	540	0,286	1
230460	160	14	100	0,087	1
230460/A	260	14	200	0,171	1
230461	460	14	400	0,257	1
230464	210	16	150	0,197	1
230466	460	16	400	0,418	1
230467	600	14	540	0,339	1
230473	600	16	540	0,561	1
230474	210	20	150	0,246	1
230475	460	18	400	0,475	1
230478/1	600	10	540	0,270	1
230395	460	20	400	0,585	1
230396	600	20	540	0,737	1
230397	460	22	400	0,669	1
230398	460	25	400	0,998	1

SDS-Nut-hammer drill sets

Contents: 5, 6, 8 x 110 / 6, 8, 10, 12 x 160

Art. no.	set	kg	PU
230479	**7-pieces**	0,679	1

SDS hammer drill bits

Workshop quality: SDS-Plus fast fitting system: 2 lengthwise slots and 2 round slots at the end of the shank. Universal tool fitting for different types of hammer drills according to the SDS-Plus system

Art. no.	TL	Ø	CL	kg	PU
230900	110	5	50	0,036	1
230902	160	5	100	0,042	1
230904	110	5,5	50	0,036	1
230906/1	160	5,5	100	0,043	1
230908	110	6	50	0,040	1
230910	160	6	100	0,045	1
230912	110	6,5	50	0,041	1
230914	160	6,5	100	0,045	1
230916	110	7	50	0,040	1
230918	160	7	100	0,045	1
230920	110	8	50	0,045	1
230922	160	8	100	0,055	1
230924	210	8	150	0,067	1
230926	160	10	100	0,068	1
230928	210	10	150	0,095	1
230930/1	260	10	150	0,107	1
230932	450	10	400	0,155	1
230934	600	10	540	0,365	1
230936	260	11	210	0,070	1
230938	160	12	100	0,077	1
230940	210	12	150	0,106	1
230942	310	12	260	0,120	1
230944	460	12	400	0,250	1
230946	600	12	540	0,315	1
230948	160	13	100	0,085	1
230950	160	14	100	0,200	1
230952	260	14	210	0,250	1
230954/1	460	14	400	0,300	1
230956	600	14	540	0,365	1
230958	160	15	100	0,120	1
230960	210	16	150	0,195	1
230962/1	460	16	400	0,346	1
230964	600	16	540	0,418	1
230966	200	18	140	0,180	1
230968	460	18	400	0,395	1
230970	210	20	150	0,221	1
230972	310	20	250	0,383	1
230974	460	20	400	0,503	1
230976	460	22	400	0,583	1
230978	460	25	400	0,753	1

SDS-hammer drill sets

Contents: 5, 6 x 110, 6, 8, 10 x 160

Art. no.	set	kg	PU
230979	**5-pieces**	0,261	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Combination step drills/HSS

for metric PG rough thread-through-hole and core-hole-drillings, 6 drilling diameters for core-hole with 5 mm step for sheet metal up to max. 6 mm.
Through-hole: 8,5 – 12,5 – 16,5 – 20,5 – 25,5 – 32,5 – 40,5 mm
core-hole: 10,5 (M12) – 14,5 (M16) – 18,5 (M20) – 23,5 (M25) – 30,5 (M32) – 38,5 (M40)

Art. no.	min./Ø	max./Ø	kg	PU
231319	8,5	40,5	0,269	1

Step drills /HSS

Special type for electric assembly, for sheet metal up to max. 4 mm gauge, for metric thread through-hole drilling,
8,5 – 12,5 – 16,5 – 20,5 – 25,5 – 32,5 – 40,5 mm

Art. no.	min./Ø	max./Ø	kg	PU
231324	8,5	40,5	0,199	1

Step drills /HSS

thickness up to max. 6 mm, for metric core-hole-drilling,
8,5 - 10,5 - 14,5 - 18,5 - 23,5 - 30,5 mm

Art. no.	min./Ø	max./Ø	kg	PU
231326	8,5	30,5	0,208	1

PDF

Step drills /HSS

special type for electric assembly, for sheet steel up to 4 mm thickness, for amoured conduit thread sizes

Art. no.	min./Ø	max./Ø	kg	PU
231320	7	29	0,237	1
231322	7	21	0,151	1

Step drills /HSS

for mechanical engineering and tinsmith working, with 2 cutters, metric

Art. no.	shank	min./Ø	max./Ø	kg	PU
231336	6	4	12	0,027	1
231338	9	12	20	0,079	1
231340	12	20	30	0,203	1
231342	12	30	40	0,371	1
231350	6	4	12	0,027	1
231352	8	4	20	0,059	1
231354	10	6	30	0,162	1

Step drills assortiment/HSS

3 pieces, for mechanical engineering and tinsmith working, with 2 cutters.

Contents:
Ø 4 - 12 mm, Ø 12 - 20 mm, Ø 20 - 30 mm

Art. no.	Ø	set	kg	PU
231327	4 - 30	**3-pieces**	0,597	1

Rotary guide value for step drills/cone drills

Material	unleg. Baustahl < 700 N/mm² Mild steel < 700 N/mm²	unleg. Baustahl > 700 N/mm² Mild steel > 700 N/mm²	leg. Stahl < 1000 N/mm² Alloy steel < 1000 N/mm²	Gußeisen < 250 N/mm² Cast iron < 250 N/mm²	Gußeisen > 250 N/mm² Cast iron > 250 N/mm²	Edelstahl rostfrei Stainless steel	CuZn Leg. spröde CuZn alloy brittle	CuZn Leg. zäh CuZn alloy tough	AL Leg. < 11% Si Alloy steel < 11% Si	Thermo-plaste Thermo plastic	Duro-plaste Duro plastic	Holz Wood
Materialstärke Material gauge	6,0 mm	6,0 mm	6,0 mm	6,0 mm	6,0 mm	3,0 mm	6,0 mm	6,0 mm	6,0 mm	6,0 mm	6,0 mm	25,0 mm
Kühlung Lubricant	Bohrpaste Drilling paste	Bohrpaste Drilling paste	Bohrpaste Drilling paste	Luft Air	Luft Air	Bohrpaste Drilling paste	Luft Air	Luft Air	Bohrpaste Drilling paste	H^2O H^2O	Luft Air	Luft Air
Vc = m / min	25	20 - 25	20	15	10	5	60	35	30	20	15	> 40
ø mm	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m
4,0 - 12,0	1900 - 600	1700 - 580	1550 - 520	1190 - 400	800 - 250	400 - 130	4700 - 1550	2750 - 920	2350 - 790	1550 - 520	1190 - 400	3000 - 1000
4,0 - 20,0	1900 - 400	1700 - 350	1550 - 300	1190 - 240	800 - 160	400 - 80	4700 - 950	2750 - 550	2350 - 470	1550 - 300	1190 - 240	3000 - 650
12,0 - 20,0	600 - 400	600 - 350	520 - 300	400 - 240	250 - 160	130 - 80	1550 - 950	920 - 550	790 - 470	520 - 300	400 - 240	1000 - 650
4,0 - 24,0	1900 - 300	1700 - 280	1550 - 250	1190 - 200	800 - 130	400 - 65	4700 - 790	2750 - 460	2350 - 400	1550 - 250	1190 - 200	3000 - 550
6,0 - 30,0	1300 - 250	1200 - 230	1000 - 200	780 - 150	530 - 100	250 - 50	3150 - 630	1850 - 370	1590 - 310	1000 - 200	780 - 150	2100 - 420
20,0 - 30,0	400 - 250	350 - 230	300 - 200	230 - 150	160 - 100	80 - 50	950 - 630	550 - 370	470 - 310	300 - 200	230 - 150	650 - 420
6,0 - 36,0	1300 - 220	1200 - 200	1000 - 170	780 - 130	530 - 90	250 - 45	3150 - 530	1850 - 300	1590 - 260	1000 - 170	780 - 130	2100 - 350
30,0 - 40,0	250 - 200	230 - 180	200 - 150	150 - 120	100 - 80	50 - 40	630 - 470	370 - 280	310 - 240	200 - 150	150 - 120	420 - 310
40,0 - 50,0	200 - 160	180 - 140	150 - 125	120 - 90	80 - 65	40 - 30	470 - 380	280 - 220	240 - 190	150 - 125	120 - 90	310 - 250
50,0 - 60,0	160 - 130	140 - 110	125 - 100	90 - 80	65 - 50	30 - 25	380 - 310	220 - 185	190 - 150	125 - 100	90 - 80	250 - 210

Cone drills

Cone drills/Aerial drills/HSS

for edgefree drilling of thin material

Art. no.	shank	min./Ø	max./Ø	kg	PU
231300	6	3	14	0,027	1
231301	8	6	20	0,055	1
231330	8	6	22,5	0,085	1
231302	10	16	30	0,139	1
231304	12	26	40	0,265	1
231305	10	6	30	0,166	1
231306	12	36	50	0,350	1
231307	13	46	60	0,551	1

Set of cone drills/HSS

3 pieces, in metal box.

1 piece each No. 1, 2, 3 (Ø 3 - 30 mm), suitable for NE material, soft steel sheet, similar to ST 14 - 37, Nirosta steel sheet A 2, for duro or thermo plastic

Art. no.	Ø	set	kg	PU
231312	3 - 30	**3-pieces**	0,510	1

Screw punches

Screw punches

matching for cable connection acc. the new Euro-Norm EN 50262, with 3 cutting edges for iron sheet up to 2 mm, steel sheet up to 1,5 mm, stainless-steel sheet up to 1,5 mm thickness

Art. no.			screws	kg	PU
180513	**metric**	ISO 16	180530	0,101	1
180515	**metric**	ISO 20	180530	0,115	1
180517	**metric**	ISO 25	180530	0,154	1
180519	**metric**	ISO 32	180532	0,320	1
180521	**metric**	ISO 40	180532	0,950	1
180523	**metric**	ISO 50	180534	0,636	1
180525	**metric**	ISO 63	180534	0,974	1
180500	**PG**	PG9	180530	0,097	1
180502	**PG**	PG11	180530	0,106	1
180504	**PG**	PG13,5	180530	0,115	1
180506	**PG**	PG16	180530	0,100	1
180508	**PG**	PG21	180530	0,176	1
180510	**PG**	PG29	180532	0,400	1
180512	**PG**	30,5	180534	0,202	1
180514	**PG**	PG36	180534	0,590	1
180516	**PG**	PG42	180534	1,250	1
180518	**PG**	PG48	180534	0,319	1
180520	**PG**	1 1/8"	180530	0,250	1

Spare screws

Spare screws for screw punches

Art. no.	size	kg	PU
180530	10 x 1,0	0,048	1
180532	12 x 1,5	0,070	1
180534	16 x 1,5	0,139	1

PDF

Rotary guide value for step drills/cone drills

Material	unleg. Baustahl < 700 N/mm² Mild steel < 700 N/mm²	unleg. Baustahl > 700 N/mm² Mild steel > 700 N/mm²	leg. Stahl < 1000 N/mm² Alloy steel < 1000 N/mm²	Gußeisen < 250 N/mm² Cast iron < 250 N/mm²	Gußeisen > 250 N/mm² Cast iron > 250 N/mm²	Edelstahl rostfrei Stainless steel	CuZn Leg. spröde CuZn alloy brittle	CuZn Leg. zäh CuZn alloy tough	AL Leg. < 11% Si Alloy steel < 11% Si	Thermo-plaste Thermo plastic	Duro-plaste Duro plastic	Holz Wood
Materialstärke Material gauge	6,0 mm	6,0 mm	6,0 mm	6,0 mm	6,0 mm	3,0 mm	6,0 mm	6,0 mm	6,0 mm	6,0 mm	6,0 mm	25,0 mm
Kühlung Lubricant	Bohrpaste Drilling paste	Bohrpaste Drilling paste	Bohrpaste Drilling paste	Luft Air	Luft Air	Bohrpaste Drilling paste	Luft Air	Luft Air	Bohrpaste Drilling paste	H^2O H^2O	Luft Air	Luft Air
Vc = m / min	25	20 - 25	20	15	10	5	60	35	30	20	15	> 40
ø mm	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m	U/min r.p.m
4,0 - 12,0	1900 - 600	1700 - 580	1550 - 520	1190 - 400	800 - 250	400 - 130	4700 - 1550	2750 - 920	2350 - 790	1550 - 520	1190 - 400	3000 - 1000
4,0 - 20,0	1900 - 400	1700 - 350	1550 - 300	1190 - 240	800 - 160	400 - 80	4700 - 950	2750 - 550	2350 - 470	1550 - 300	1190 - 240	3000 - 650
12,0 - 20,0	600 - 400	600 - 350	520 - 300	400 - 240	250 - 160	130 - 80	1550 - 950	920 - 550	790 - 470	520 - 300	400 - 240	1000 - 650
4,0 - 24,0	1900 - 300	1700 - 280	1550 - 250	1190 - 200	800 - 130	400 - 65	4700 - 790	2750 - 460	2350 - 400	1550 - 250	1190 - 200	3000 - 550
6,0 - 30,0	1300 - 250	1200 - 230	1000 - 200	780 - 150	530 - 100	250 - 50	3150 - 630	1850 - 370	1590 - 310	1000 - 200	780 - 150	2100 - 420
20,0 - 30,0	400 - 250	350 - 230	300 - 200	230 - 150	160 - 100	80 - 50	950 - 630	550 - 370	470 - 310	300 - 200	230 - 150	650 - 420
6,0 - 36,0	1300 - 220	1200 - 200	1000 - 170	780 - 130	530 - 90	250 - 45	3150 - 530	1850 - 300	1590 - 260	1000 - 170	780 - 130	2100 - 350
30,0 - 40,0	250 - 200	230 - 180	200 - 150	150 - 120	100 - 80	50 - 40	630 - 470	370 - 280	310 - 240	200 - 150	150 - 120	420 - 310
40,0 - 50,0	200 - 160	180 - 140	150 - 125	120 - 90	80 - 65	40 - 30	470 - 380	280 - 220	240 - 190	150 - 125	120 - 90	310 - 250
50,0 - 60,0	160 - 130	140 - 110	125 - 100	90 - 80	65 - 50	30 - 25	380 - 310	220 - 185	190 - 150	125 - 100	90 - 80	250 - 210

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Diamond hollow core cutters

Carrier turned from solid material, suitable for soft materials and brickwork, concrete and artificial stone, takes M 16, without receiving shaft and centre drill, laser-welded, use only without impact

Art. no.	Ø	shank	kg	PU
230676	68	-	0,453	1
230677	82	-	0,590	1

Diamond hollow core cutters

shank M 16, with tapered cylindrical drill bit, laser-welded, use only without impact

Art. no.	Ø	shank	kg	PU
230676/K	68	SDS-plus	0,672	1
230677/K	82	SDS-plus	0,764	1

Diamond hollow core cutter special

Diamond drill bit for socket outlets with laser wielded segments, suitable for soft materials and brickwork, concrete and artificial stone, optimal rotating speed 800 - 1.000 U/min, maximum rotating speed 1.600 – 1.800 U/min, use only without impact

Art. no.	Ø	shank	kg	PU
230885/K	68	SDS-plus	0,450	1
230886/K	82	SDS-plus	0,787	1

Drill for Diamond hollow core cutters

tapered shank

Art. no.	TL	Ø	kg	PU
230679	120	9	0,044	1

Shank for hollow core cutters, SDS-Plus

SDS-Plus-shank, M 16, conic

Art. no.	TL	shank	kg	PU
230681/K	100	SDS-plus	0,150	1

Hollow core cutters

for tungsten carbide tipped, with centre bit and 100 mm hexagon shank, 12 mm

Art. no.	Ø	shank	kg	PU
230661	68	hexagon	0,832	1
230665	82	hexagon	1,158	1
230667	68	SDS-plus	0,827	1
230675	82	SDS-plus	1,079	1

Centre bits with tungsten carbide tipped cutting edge

for tungsten carbide tipped hollow core cutters, cylindrical

Art. no.	TL	Ø	kg	PU
230680	120	9	0,038	1

Shank for hollow core cutters, SW 12

hexagon shank, SW 12, for centre bits, cylindrical cutter

Art. no.	shank	kg	PU
230678	hexagon	0,139	1

Shank for hollow core cutters

SDS-Plus-shank, M16, connection thread, cylindrical cutter

Art. no.	TL	shank	kg	PU
230681	100	SDS-plus	0,121	1

Diamond cutting blades

laser-welded, high diamond concentration, long life, for the professional works
– Industrial quality –

Art. no.	Ø		kg	PU
230689	115		0,100	1
230691	125		0,149	1
230720	135	**(FUBAG)**	0,193	1
230721	140	**(FLEX)**	0,219	1
230704	150		0,245	1
230705	180		0,317	1
230706	230		0,700	1
230711	300		1,256	1

Diamond cutting blades

sintered – Profi Quality –

Art. no.	Ø	kg	PU
230701	115	0,132	1
230702	125	0,169	1
230708	180	0,339	1
230709	230	0,681	1

Diamond cutting blades, FL tiles

– Profi Quality –, continuous rim. universal application,
granite, tiles, ceramics, stone- and marble-flatters

Art. no.	Ø	kg	PU
230714	115	0,121	1

Diamond cutting blades, TBM Turbo

– Profi quality –

Art. no.	Ø	kg	PU
230722	115	0,120	1
230723	125	0,134	1
230725	230	0,706	1

INFO

Diamond cutting discs — Industrial quality

A new generation for metalworking.

These HAUPA discs can cut **everything but stone**! From iron, stainless steel, PVC etc. through to wood, simply everything. This is a special feature and innovative since these cutting discs are usually only used for cutting stone.

The advantage of these diamond cutting discs compared to an ordinary disc is, above all, the durability, which is 20-40 times the norm! And there is no limit on storage. Ordinary cutting discs will become porous after 2-3 years. HAUPA cutting discs can be stored for a lifetime and beyond. The main arguments in favour of the HAUPA cutting discs are the fact that the diameter is never reduced, there is a much lower incidence of sparks and thus considerably less odour is produced.

All the benefits at a glance:
- Versatile scope of application (metal profiles, iron, die cast, steel, steel pipes, wood, Inox, GRP, CFP, polycarbonate, stoneware, fine stoneware)
- Constantly maintained diameter, thus always full cutting depth
- High cutting speed
- High level of durability (20 - 40 times more than normal, depending on materials cut)
- Reduced incidence of sparks
- Reduced odour development
- Unlimited storage times

Diamond cutting disk

Short-toothed vacuum coating of a new generation for metal work. High diamond concentration enables the processing of materials impossible with traditional diamond tools.

- Versatile areas of application (metal profiles, iron, cast, steel, steel pipes, wood, Inox, GRP, CFRP, polycarbonate, masonry, fine masonry)
- High cutting speed
- High stand time
- Reduced spark formation
- Reduced odour development
- Can be stored with no time restrictions
- Constant diameter, thus always full cutting depth

Video 230727

Art. no.	Ø	kg	PU
230727	115	0,120	1
230731	125	0,134	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

INFO

Hole saws **Industrial quality**

The performance of a saw blade depends on the base material quality, the kind of toothing and the tooth geometry. These factors guarantee in conjunction with the correct use of the machine and blade selection the optimum result in cutting all materials.

- Above average concentricity
- Even cutting performance
- Extremely quiet operation even at high speeds
- True diameter
- High resistance even with high loads and torques
- Fast progress thanks to aggressive and permanently sharp cutting performance
- Highest lifetime even with very hard materials such as cast and stainless steel

T.C.T. Hole Saw

High concentricity and smooth cutting through strong construction. Precise and clean cut. Large tungsten carbide inserts for resharping and long lifetime. Hole saw comes complete with shank, drill bit, ejector spring and allen key. Long lifetime. **especially for:** Flat materials of steel, cast steel, stainless steel (up to 4 mm), Chrome-nickel Steel (up to 2 mm), non-ferrous metals, glassfibre and carbon-fibre reinforced products (CRP, GRP), epoxy, reinforced textures and sandwich-materials (up to 6 mm).

Art. no.	Ø	kg	PU
392100	16	0,095	1
392102	20	0,115	1
392104	22	0,135	1
392106	22,5	0,155	1
392108	25	0,175	1
392110	30	0,195	1
392112	32	0,215	1
392114	35	0,235	1
392116	40	0,255	1
392118	50	0,275	1
392120	60	0,295	1

T.C.T. center drill for hole saw arbors

Art. no.	TL	Ø	kg	PU
392122	100	6,5	0,020	1

Spring for hole saw arbors

Art. no.		kg	PU
392124	**spring**	0,005	1

T.C.T. Hole Saw Fastcut

Very fast and aggressive cut in wood due to large exhaust slots. **especially for:** wood materials up to 60 mm.

Art. no.	Ø/Inch	Ø	kg	PU
231942	3/4	19	0,047	1
231944	7/8	22	0,062	1
231946	1	25	0,077	1
231948	1 1/6	27	0,092	1
231950	1 3/16	30	0,115	1
231952	1 1/4	32	0,122	1
231954	1 3/8	35	0,133	1
231956	1 9/16	40	0,123	1
231958	1 3/4	44	0,144	1
231960	2	51	0,179	1
231962	2 1/8	54	0,198	1
231964	2 3/8	60	0,206	1
231966	2 1/2	64	0,267	1
231968	2 9/16	65	0,279	1
231970	2 11/16	68	0,275	1
231972	2 3/4	70	0,316	1
231973	2 7/8	73	0,296	1
231974	3	76	0,298	1
231976	3 1/8	79	0,379	1
231978	3 1/4	83	0,428	1
231980	4	102	0,591	1
231982	4 1/2	114	0,773	1

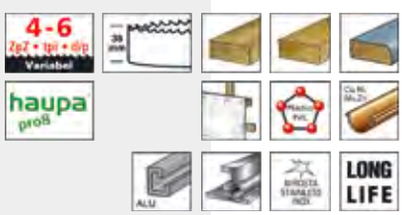
Bi-Metal Hole Saws 10 tpi **8% Cobalt**

Finely toothed, 10 tpi, made of high quality, cobalt-alloyed bi-metal for clean and fast cuts and a long lifetime. Massive back plate ensures a smooth cut and precise holes for threads, cable and pipe lead-throughs. **especially for:** steel and stainless steel, sheet metal up to 1 mm.

Art. no.	Ø	kg	PU
392050	16	0,036	1
392052	19	0,039	1
392054	20	0,046	1
392056	21	0,052	1
392058	22	0,055	1
392060	24	0,059	1
392062	25	0,064	1
392064	29	0,070	1
392066	30	0,077	1
392068	32	0,081	1
392070	38	0,092	1
392072	40	0,098	1

Bi-Metal Hole Saws 4 - 6 tpi — 8% Cobalt

Variable toothing of 4 - 6 tpi and high quality, cobaltalloyed bi-metal for clean and fast cuts and a long lifetime. Massive back plate ensures a smooth cut and precise holes for sockets, threads, cable and pipe lead-throughs. **especially for:** Wood, gypsum board, plastics, non-ferrous metals, aluminium steel and stainless steel minimum 1 mm. Special cutting depth on request.



Art. no.	Ø/Inch	Ø	kg	PU
231803	9/16	14	0,036	1
231900	3/4	19	0,036	1
231901/21		21	0,050	1
231902	7/8	22	0,046	1
231904	1	25	0,071	1
231904/29		29	0,050	1
231906	1 1/6	27	0,075	1
231908	1 3/16	30	0,079	1
231910	1 1/4	32	0,085	1
231912	1 3/8	35	0,092	1
231912/38		38	0,050	1
231914	1 9/16	40	0,086	1
231914/46		46	0,050	1
231916	1 3/4	44	0,105	1
231918	2	51	0,133	1
231920	2 1/8	54	0,145	1
231922	2 3/8	60	0,168	1
231924	2 1/2	64	0,192	1
231926	2 9/16	65	0,198	1
231928	2 11/16	68	0,214	1
231930	2 3/4	70	0,223	1
231931	2 7/8	73	0,236	1
231932	3	76	0,253	1
231934	3 1/8	79	0,275	1
231936	3 1/4	83	0,304	1
231938	4	102	0,429	1
231939/111		111	0,050	1
231940	4 1/2	114	0,549	1
231940/127		127	0,050	1
231940/152		152	0,650	1
231940/210		210	0,850	1

Hole saw with edge countersink and board ejector

For setting wall-flush sockets, Ø 68 mm

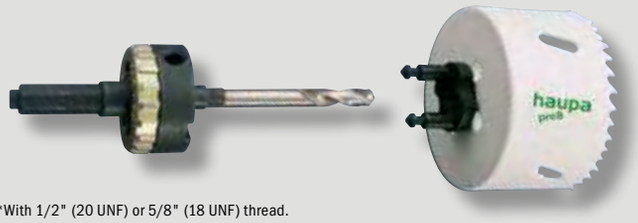
- Cutting depth 40 mm
- High concentricity
- Specially for plasterboard, softwood, plywood, Fermacell etc.
- 11 mm hexagonal holder
- In plastic box

Art. no.	Ø/Inch	Ø	Bohrer-Ø	ST	kg	PU
231929	2 11/16	68	6,35	35	0,360	1

INFO

Professional Quick Release System for Hole Saws

- Change quickly in seconds between the different diameters and various types of hole saws.
- One arbor for all diameters between 14 - 210 mm.
- Absolute concentricity and diameter true to size.
- Compact "heavy duty" design for highest demands and very long life.
- No time-consuming seizing up of the hole saw onto the thread of the arbor.
- Runs two hole saws at the same time. A smaller diameter guides as a centering aid when enlarging already existing holes.
- Fits all standard hole saw brands.*



*With 1/2" (20 UNF) or 5/8" (18 UNF) thread.

Quick change holder for hole saws, "RE-LOAD" — RE-LOAD

for all diameters from 14-210 mm, 9.5 mm hexagonal shank

Video

Art. no.	size	kg	PU
392010	14 - 210	0,100	1

Adapter assortment for holder, "RE-LOAD" — RE-LOAD

Art. no.	set	kg	PU
392012	**5 x Ø 14-30 mm**	0,100	1
392014	**5 x Ø 32-210 mm**	0,075	1
392016	**2 x Ø 14-30 mm, 3 x Ø 32- 210 mm**	0,065	1

Adapter assortment for hole enlarger "RE-LOAD" — RE-LOAD

1 x Ø 14 - 30 mm, 1 x Ø 32 - 210 mm

Art. no.	size		kg	PU
392018	14 - 210	**Adapter**	0,050	1

Centre drill for holder, "RE-LOAD" — RE-LOAD

Art. no.	TL	Ø	kg	PU
392020	100	6,5	0,030	1
392022	100	6,5	0,030	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hex shank with plug ejection

hexagon shank

Art. no.	size	kg	PU
392028	32 - 210	0,050	1

SDS-shank

hexagon shank, 11 mm (14 - 30 mm)

Art. no.	size	kg	PU
392024	14 - 30	0,050	1

SDS-shank

hexagon shank, 11 mm (32 - 210 mm)

Art. no.	size	kg	PU
392026	32 - 210	0,050	1

Adapter "QuickLock"

hexagon shank

Art. no.	size	shank	kg	PU
231998	14-30	hexagon	0,067	1
231999	32-152	hexagon	0,107	1

Certre drills for 231998 / 231999

Art. no.	TL	type	Ø	shank	kg	PU
232007	120	universal	9	hexagon	0,020	1

Bi-metal hole saw set

RE-LOAD

Set in black plastic case, dimensions: 255 x 210 x 72 mm, including adapter for RE-LOAD quick change system

Contents:
- Hole saws bi-metal 35 mm
- Hole saws bi-metal 68 mm
- Hole saws bi-metal 76 mm
- Quick change holder for hole saws “RE-LOAD”
- 3 adapters for holder “RE-LOAD” 14 – 30 mm

Art. no.	Content	kg	PU
231984	**3-pieces**	1,300	1

Drilling tools

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HSS taps "Direct cutter"

with intermittent teeth, dimensions to DIN 371, or ISO metric thread to DIN 13

Art. no.	shank	thread	kg	PU
230982	4,5	4	0,008	1
230984	6	5	0,014	1
230986	6	6	0,017	1
230988	6	8	0,012	1

Taps for armoured steel conduits, metric thread

Art. no.	thread	kg	PU
140236	16	0,040	1
140238	20	0,060	1
140240	25	0,206	1
140242	32	0,359	1
140244	40	0,648	1
140246	50	0,230	1
140248	63	1,688	1

Adjustable tap wrenches

short pattern

Art. no.	thread	tap wrench	kg	PU
140180	M 7-25	21	0,850	1
140182	M 32-63	48	1,900	1

Nipple threading dies

with guide, replaceable dies and taps

Art. no.	thread	kg	PU
140190	M 10	0,100	1
140192	M 13	0,130	1

Nipple threading dies

with guide, replaceable dies and tap

Art. no.	thread	kg	PU
140210	M 10, M 13	0,210	1

Complete stocks, metric thread

Art. no.	thread	kg	PU
140214	M 16, M 20, M 25	1,000	1
140216	M 20, M 25	1,350	1
140218	M 32, M 40	2,850	1
140220	M 50, M 63	3,500	1

Dies, metric thread

Art. no.	thread	kg	PU
140222	M16	0,175	1
140224	M20	0,138	1
140226	M25	0,145	1
140228	M32	0,477	1
140230	M 40	0,130	1
140232	M 50	0,980	1
140234	M 63	0,791	1

Guides, metric

Art. no.	thread	kg	PU
140250	16	0,037	1
140252	20	0,040	1
140254	25	0,035	1
140256	32	0,030	1
140258	40	0,060	1
140260	50	0,070	1
140262	63	0,134	1

Screw extractor set

Art. no.	size	kg	PU
230682	1-5/M3-18	0,111	1
230683	1-6/M3-24	0,231	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Hand taps DIN 352, type N/HSS

set of 3, for ISO metric thread to DIN, 1, 2, 3-cutter, made of HSS, for pass-through threading, for good chipping steel up to approx. 900 N/mm2

Art. no.	Ø	shank	thread	kg	PU
230800	1	2,5	1	0,010	1
230802	1,4	2,5	1,4	0,010	1
230804	1,6	2,5	1,6	0,002	1
230806	1,8	2,5	1,8	0,002	1
230808	2	2,8	2	0,002	1
230810	2,2	2,8	2,2	0,002	1
230812	2,5	2,8	2,5	0,002	1
230814	3	3,5	3	0,003	1
230816	3,5	4	3,5	0,004	1
230818	4	4,5	4	0,004	1
230820	4,5	5,5	4,5	0,005	1
230822	5	6	5	0,034	1
230824	6	6	6	0,035	1
230826	7	6	7	0,039	1
230828	8	6	8	0,046	1
230830	9	7	9	0,065	1
230832	10	7	10	0,071	1
230834	11	8	11	0,025	1
230836	12	9	12	0,115	1
230838	14	11	14	0,052	1
230840	16	12	16	0,062	1
230842	18	14	18	0,102	1
230844	20	16	20	0,125	1
230846	22	18	22	0,182	1
230848	24	18	24	0,205	1
230850	27	20	27	0,260	1
230852	30	22	30	0,395	1
230854	33	25	33	0,480	1
230856	36	28	36	0,645	1
230858	39	32	39	0,820	1
230860	42	32	42	0,930	1
230862	45	36	45	1,140	1
230864	48	36	48	1,370	1
230866	52	40	52	1,650	1
230868	56	45	56	2,800	1
230870	60	45	60	2,900	1

Ratchet wrenches

for right-hand and left-hand action

Art. no.	thread	Zoll	TL	shank	kg	PU
231070	M3 - 10	1/8 - 3/8	85	2,4 - 5,5	0,173	1
231072	M5 - 12	7/32 - 1/2	100	4,5 - 8,0	0,272	1
231074	M3 - 10	1/8 - 3/8	250	2,4 - 5,5	0,250	1
231076	M5 - 12	7/32 - 1/2	300	4,5 - 8,0	0,440	1

HSS taps set

with taps to DIN 352, in metal box,
Contents: M3, M 4, M 5, M 6, M 8, M 10, M 12

Art. no.	set	kg	PU
231080	**23-pieces**	0,696	1

Combi, threading bit set, made of HSSG SGE-Bit (DBGM)

for drilling, threading and countersinking, for stand drilling machines and hand drills, suitable for steel and NE metal up to 1 xd (M 6 = 6 mm thickness of material), up to 600 N/mm² tensile strength, rpm according to the cutting speeds of the tride, in metal box
Contents: M 3, 4, 5, 6, 8, 10

Art. no.	set	kg	PU
231082	**7-pieces**	0,188	1

Adjustable tap wrenches DIN 1814

for taps

Art. no.	thread	tap wrench	kg	PU
231050	M1 - 8	0	0,050	1
231052	M1 - 10	1	0,099	1
231054	M1 - 12	1,5	0,097	1
231056	M4 - 12	2	0,285	1
231058	M5 - 21	3	0,700	1
231060	M9 - 27	4	1,270	1
231062	M12 - 33	5	1,630	1
231064	M19 - 38	6	4,520	1

HSS Tap set

Contents:
hand tap (DIN 352) M 3, 4, 5, 6, 8, 10, 12
Dies (DIN 223) M 3, 4, 5, 6, 8, 10, 12,
Dies stock 20 x 5/20 x 7/25 x 9/30 x 11/38 x 14 mm
tape holder size 1 + 2, in metal box

Art. no.	set	kg	PU
231280	**23-pieces**	3,700	1

HSS Tap set

Contents:
Hand tap (DIN 352) M 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20
Dies (DIN 223) M 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20
Dies holder 20 x 7/25 x 9/30 x 11/38 x 14/ 45 x 18 mm
Tap holder size 1, 2 + 3, in metal box

Art. no.	set	kg	PU
231282	**25-pieces**	8,200	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Screws
Screws assortments

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Universal countersunk screw

Chipboard screw, galvanised, counter-sunk head, Pozidriv

Art. no.	TL	Ø		drive	kg	PE	PU
790005	15	3,0	Pozidriv PZ	2	0,002	100	200
790006	25	3,0	Pozidriv PZ	2	0,002	100	200
790008	40	3,0	Pozidriv PZ	2	0,002	100	200
790015	20	3,5	Pozidriv PZ	2	0,001	100	200
790016	25	3,5	Pozidriv PZ	2	0,001	100	200
790017	30	3,5	Pozidriv PZ	2	0,002	100	200
790018	35	3,5	Pozidriv PZ	2	0,002	100	200
790079	40	3,5	Pozidriv PZ	2	0,002	100	200
790027	30	4,0	Pozidriv PZ	2	0,002	100	200
790029	40	4,0	Pozidriv PZ	2	0,002	100	200
790030	45	4,0	Pozidriv PZ	2	0,003	100	200
790031	50	4,0	Pozidriv PZ	2	0,003	100	200
790040	35	4,5	Pozidriv PZ	2	0,003	100	200
790041	40	4,5	Pozidriv PZ	2	0,003	100	200
790043	50	4,5	Pozidriv PZ	2	0,004	100	200
790051	30	5,0	Pozidriv PZ	2	0,003	100	100
790053	40	5,0	Pozidriv PZ	2	0,004	100	100
790054	50	5,0	Pozidriv PZ	2	0,005	100	100
790055	60	5,0	Pozidriv PZ	2	0,005	100	100
790056	80	5,0	Pozidriv PZ	2	0,007	100	100
790063	50	6,0	Pozidriv PZ	3	0,007	100	100
790064	60	6,0	Pozidriv PZ	3	0,008	100	50
790065	80	6,0	Pozidriv PZ	3	0,011	100	50

Universal pan head screw

Fibreboard screws, galvanised, pan head Pozidriv

Art. no.	TL	Ø		drive	kg	PE	PU
790090	25	3,5	Pozidriv PZ	2	0,002	100	200
790091	30	3,5	Pozidriv PZ	2	0,002	100	200
790093	40	3,5	Pozidriv PZ	2	0,002	100	200
790100	30	4,0	Pozidriv PZ	2	0,002	100	200
790101	35	4,0	Pozidriv PZ	2	0,002	100	200
790102	40	4,0	Pozidriv PZ	2	0,003	100	200
790103	45	4,0	Pozidriv PZ	2	0,003	100	200
790104	50	4,0	Pozidriv PZ	2	0,003	100	200
790111	40	4,5	Pozidriv PZ	2	0,004	100	200
790112	45	4,5	Pozidriv PZ	2	0,004	100	200
790113	50	4,5	Pozidriv PZ	2	0,004	100	200
790118	30	5,0	Pozidriv PZ	2	0,004	100	200
790120	40	5,0	Pozidriv PZ	2	0,005	100	200
790121	50	5,0	Pozidriv PZ	2	0,005	100	200

Hexagonal wood screws, hot zinc dipped

in accordance with DIN 571, hot zinc dipped, general requirements according to DIN 267 Part 1

Art. no.	TL	Ø	WS		kg	PE	PU
790212/V	80	6	10	Hexagon	0,015	100	25
790223/V	60	8	13	Hexagon	0,021	100	25
790224/V	80	8	13	Hexagon	0,027	100	25
790235/V	60	10	17	Hexagon	0,036	100	10

Dry wall screws

galvanised, counter-sunk head, Tx

Art. no.	TL	Ø		drive	kg	PE	PU
790920	32	3,9	Torx	20	0,002	100	200
790922	41	3,9	Torx	20	0,002	100	200

Chipboard screw countersunk „TwinSpeed“

Chipboard screw, galvanised, counter-sunk head, Tx, double helix thread, considerably shortened screw-in times when compared to traditional screws thanks to the double start thread. Uses: Wood, plywood, plasterboard, rawlplugs

Art. no.	TL	Ø		drive	kg	PE	PU
793005	16	2,9	Torx	10	0,002	100	200
793006	25	2,9	Torx	10	0,002	100	100
793007	32	2,9	Torx	10	0,002	100	100
793008	38	2,9	Torx	10	0,002	100	100
793027	32	3,9	Torx	15	0,002	100	100
793029	38	3,9	Torx	15	0,002	100	100
793030	45	3,9	Torx	15	0,003	100	100
793031	50	3,9	Torx	15	0,003	100	100
793040	32	4,2	Torx	20	0,003	100	100
793041	38	4,2	Torx	20	0,003	100	100
793043	50	4,2	Torx	20	0,004	100	100
793051	30	4,8	Torx	25	0,003	100	100
793053	38	4,8	Torx	25	0,004	100	100
793054	50	4,8	Torx	25	0,005	100	100
793055	60	4,8	Torx	25	0,005	100	100
793064	60	6,3	Torx	30	0,008	100	50
793065	80	6,3	Torx	30	0,011	100	50

Chipboard screw pan head „TwinSpeed“

Chipboard screw, galvanised, pan head, Tx, double helix thread, considerably shortened screw-in times when compared to traditional screws thanks to the double start thread. Uses: Wood, plywood, plasterboard, rawlplugs

Art. no.	TL	Ø		drive	kg	PE	PU
793099	20	3,9	Torx	15	0,002	100	100
793100	32	3,9	Torx	15	0,002	100	100
793101	35	3,9	Torx	15	0,002	100	100
793102	38	3,9	Torx	15	0,003	100	100
793103	45	3,9	Torx	15	0,003	100	100
793104	50	3,9	Torx	15	0,003	100	100
793111	38	4,2	Torx	20	0,004	100	100
793112	45	4,2	Torx	20	0,004	100	100
793113	50	4,2	Torx	20	0,004	100	100
793118	32	4,8	Torx	25	0,004	100	100
793120	38	4,8	Torx	25	0,005	100	100
793121	50	4,8	Torx	25	0,005	100	100
793125	60	6,3	Torx	30	0,002	100	50

Hexagonal wood screws

in accordance with DIN 571, galvanised, general requirements according to DIN 267 Part 1

Art. no.	TL	Ø	WS		kg	PE	PU
790210	40	6	10	Hexagon	0,008	100	50
790211	60	6	10	Hexagon	0,012	100	25
790212	80	6	10	Hexagon	0,015	100	25
790222	50	8	13	Hexagon	0,018	100	50
790223	60	8	13	Hexagon	0,021	100	25
790224	80	8	13	Hexagon	0,027	100	25
790225	100	8	13	Hexagon	0,033	100	25
790235	60	10	17	Hexagon	0,036	100	10
790236	80	10	17	Hexagon	0,048	100	10
790237	100	10	17	Hexagon	0,055	100	10

Hooks

galvanised

Art. no.	Ø	SftL		kg	PE	PU
790900	4,2	50		0,006	100	50
790902	5,8	80		0,008	100	10

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tin screws, assembly screws

TwinSpeed self tapping screw

galvanised, pan head, Philips cross-head and double helix thread, considerably shortened screw-in times when compared to traditional screws thanks to the double start thread. Uses: Wood, plywood, plasterboard, rawlplugs

Art. no.	TL	Ø		drive	kg	PE	PU
790303	19	3,5	Phillips PH	2	0,001	100	100
790311	32	3,5	Phillips PH	2	0,002	100	100
790325	13	4,2	Phillips PH	2	0,001	100	100
790326	16	4,2	Phillips PH	2	0,001	100	100
790327	19	4,2	Phillips PH	2	0,001	100	100
790329	25	4,2	Phillips PH	2	0,002	100	100
790332	31	4,2	Phillips PH	2	0,002	100	100
790333	38	4,2	Phillips PH	2	0,003	100	100
790334	45	4,2	Phillips PH	2	0,003	100	100
790335	65	4,2	Phillips PH	2	0,005	100	100

Plate screw DIN 7504

in accordance with DIN 7504M (formerly N), self-tapping, hardened steel, galvanised, pan head with Phillips slot, plate screw thread according to DIN 7970

Art. no.	TL	Ø		drive	kg	PE	PU
790411	13	3,5	Phillips PH	2	0,001	100	200
790413	19	3,5	Phillips PH	2	0,001	100	200
790416	13	3,9	Phillips PH	2	0,001	100	200
790417	16	3,9	Phillips PH	2	0,002	100	200
790419	25	3,9	Phillips PH	2	0,002	100	200
790422	13	4,2	Phillips PH	2	0,002	100	200
790423	16	4,2	Phillips PH	2	0,002	100	200
790424	19	4,2	Phillips PH	2	0,002	100	200
790426	25	4,2	Phillips PH	2	0,002	100	200
790428	32	4,2	Phillips PH	2	0,002	100	200
790432	13	4,8	Phillips PH	2	0,002	100	200
790433	16	4,8	Phillips PH	2	0,003	100	200
790434	19	4,8	Phillips PH	2	0,003	100	200
790436	25	4,8	Phillips PH	2	0,003	100	200

Plate screw DIN 7504, Tx

in accordance with DIN 7504M (formerly N), self-tapping, hardened steel, galvanised, Tx, plate screw thread according to DIN 7970

Art. no.	TL	Ø		drive	kg	PE	PU
790510	13	4,2	Torx	20	0,002	100	100
790512	16	4,2	Torx	20	0,002	100	100
790514	19	4,2	Torx	20	0,002	100	100
790516	25	4,2	Torx	20	0,002	100	100

Mounting screws

galvanised with washer, Philips cross-head, self-cutting

Art. no.	TL	Ø		drive	kg	PE	PU
790450	13	4,2	Phillips PH	2	0,001	100	100
790452	25	4,2	Phillips PH	2	0,002	100	100
790454	31	4,2	Phillips PH	2	0,002	100	100
790456	45	4,2	Phillips PH	2	0,003	100	100

Mounting screws

self-cutting and self-boring, galvanised with washer, Tx

Art. no.	TL	Ø		drive	kg	PE	PU
790500	13	4,2	Torx	20	0,001	100	100
790502	19	4,2	Torx	20	0,002	100	100
790504	25	4,2	Torx	20	0,002	100	100

Mounting screws

self-cutting and self-boring, galvanised with washer, Philips cross-head

Art. no.	TL	Ø		drive	kg	PE	PU
790470	13	4,2	Phillips PH	2	0,001	100	100

Machinery screws, cylinder screws

Hexagonal machine screws

according to DIN 933, continuous thread, galvanised, 8.8 quality

Art. no.	TL	Ø	WS		kg	PE	PU
790540	20	M6	10	Hexagon	0,006	100	100
790542	25	M6	10	Hexagon	0,007	100	100
790544	30	M6	10	Hexagon	0,008	100	100
790562	20	M8	10	Hexagon	0,012	100	100
790564	25	M8	10	Hexagon	0,014	100	100
790566	30	M8	10	Hexagon	0,016	100	100
790588	20	M10	10	Hexagon	0,023	100	100
790592	30	M10	10	Hexagon	0,028	100	100
790616	30	M12	10	Hexagon	0,040	100	50
790618	40	M12	10	Hexagon	0,047	100	50

Socket cup screw DIN 84 Form A

in accordance with ISO 1207, EN 21207 or DIN 84, Form A, with slit, made of hardened steel, galvanised, 4.8 quality

Art. no.	TL	Ø		drive	kg	PE	PU
790806	16	M3	slot	5,5x0,8	0,001	100	200
790808	20	M3	slot	5,5x0,8	0,001	100	200
790832	16	M4	slot	7,0x1,2	0,002	100	200
790834	20	M4	slot	7,0x1,2	0,002	100	200
790837	30	M4	slot	7,0x1,2	0,003	100	200
790862	16	M5	slot	8,5x1,2	0,003	100	200
790864	20	M5	slot	8,5x1,2	0,004	100	200
790867	30	M5	slot	8,5x1,2	0,005	100	200
790882	16	M6	slot	10,0x1,6	0,005	100	200
790884	20	M6	slot	10,0x1,6	0,055	100	200
790888	30	M6	slot	10,0x1,6	0,007	100	200

Machine screw counter sunk

continuous thread, zinc-plated, pan headed Pozidriv

Art. no.	TL	Ø		drive	kg	PE	PU
790700	20	M3	Pozidriv PZ	2	0,001	100	100
790702	30	M3	Pozidriv PZ	2	0,001	100	100
790704	40	M3	Pozidriv PZ	2	0,002	100	100
790706	50	M3	Pozidriv PZ	2	0,002	100	100
790710	20	M4	Pozidriv PZ	2	0,002	100	100
790712	30	M4	Pozidriv PZ	2	0,003	100	100
790714	40	M4	Pozidriv PZ	2	0,003	100	100
790716	50	M4	Pozidriv PZ	2	0,004	100	100
790721	25	M5	Pozidriv PZ	2	0,004	100	100
790722	30	M5	Pozidriv PZ	2	0,004	100	100
790724	40	M5	Pozidriv PZ	2	0,005	100	100
790726	50	M5	Pozidriv PZ	2	0,007	100	100

Hexagonal nuts, washers

Hexagonal nut DIN 934

in accordance with ISO 4032, EN 24032 or DIN 934, steel galvanised, 8 quality

Art. no.	Ø	WS	kg	PE	PU
792000	M3	5,5	0,001	100	200
792001	M4	7	0,001	100	200
792002	M5	8	0,001	100	200
792003	M6	10	0,002	100	200
792005	M8	13	0,005	100	200
792006	M10	17	0,011	100	200
792008	M12	19	0,010	100	100

Washers DIN 125

in accordance with ISO 7089, EN 27089 or DIN 125, Form A without chamfer, steel galvanised

Art. no.	M	d1	d4	kg	PE	PU
792600	M3	3,2	7	0,000	100	200
792602	M4	4,3	9	0,000	100	200
792603	M5	5,3	10	0,001	100	200
792604	M6	6,4	12	0,001	100	200
792606	M8	8,4	16	0,002	100	200
792607	M10	10,5	20	0,003	100	200

Washers

in accordance with ISO 7093, DIN 9021N, zinc-plated steel

Art. no.	M	d1	d4	kg	PE	PU
792650	M4	4,3	12	0,001	100	100
792651	M5	5,3	15	0,001	100	100
792652	M6	6,4	20	0,012	100	100
792654	M8	8,4	25	0,011	100	100
792656	M10	10,5	40	0,010	100	100
792658	M12	13,0	40	0,010	100	100

Spring washers

according to DIN 127, form A, curved, zinc-plate steel

Art. no.	M	d1	d4	kg	PE	PU
792756	M6	6,4	11,8	0,001	100	100
792758	M8	8,4	14,8	0,002	100	100
792760	M10	10,5	18,1	0,003	100	100
792762	M12	13,0	21,1	0,004	100	100

Screws assortments

"Mix" Screws assortment box

Content: 1.425 screws, in plastic bulk storage chest 420 x 350 x 60 mm

Qty.	Description	Size	Drive	Art. no.
200	universal counter-sunk screws	3,5 x 20	PZ2	790015
200	universal counter-sunk screws	3,5 x 30	PZ2	790017
200	universal counter-sunk screws	3,5 x 40	PZ2	790079
200	universal counter-sunk screws	4,5 x 35	PZ2	790040
100	universal counter-sunk screws	4,5 x 50	PZ2	790043
50	universal counter-sunk screws	5,0 x 80	PZ2	790056
50	universal counter-sunk screws	6,0 x 50	PZ3	790063
200	universal pan head srews	3,5 x 30	PZ2	790091
100	universal pan head srews	4,0 x 40	PZ2	790102
50	universal pan head srews	5,0 x 50	PZ2	790121
50	hexagonal wood screws	6 x 40		790210
25	hexagonal wood screws	6 x 80		790212

Art. no.	empty	Content	kg	PE	PU
792802	220131	**1.425-pcs.**	5,022	1	1

"Pan head" Screws assortment box

Content: 1.700 screws, in plastic bulk storage chest 420 x 350 x 60 mm

Qty.	Description	Size	Drive	Art. no.
200	universal pan head srews	3,5 x 30	PZ2	790091
200	universal pan head srews	3,5 x 40	PZ2	790093
200	universal pan head srews	4,0 x 30	PZ2	790100
200	universal pan head srews	4,0 x 40	PZ2	790102
200	universal pan head srews	4,0 x 50	PZ2	790104
200	universal pan head srews	4,5 x 40	PZ2	790111
200	universal pan head srews	4,5 x 50	PZ2	790113
100	universal pan head srews	5,0 x 30	PZ2	790118
100	universal pan head srews	5,0 x 40	PZ2	790120
100	universal pan head srews	5,0 x 50	PZ2	790121
1	Bit-Box 17-pcs., incl. holder			102210

Art. no.	empty	Content	kg	PE	PU
792804	220131	**1.700-pcs.**	6,000	1	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

"Countersunk" Screws assortment box

Content: 1.800 screws, in plastic bulk storage chest 420 x 350 x 60 mm

Qty.	Description	Size	Drive	Art. no.
200	universal counter-sunk screws	3,5 x 20	PZ2	790015
200	universal counter-sunk screws	3,5 x 30	PZ2	790017
200	universal counter-sunk screws	3,5 x 40	PZ2	790079
200	universal counter-sunk screws	4,0 x 30	PZ2	790027
200	universal counter-sunk screws	4,0 x 40	PZ2	790029
200	universal counter-sunk screws	4,0 x 50	PZ2	790031
200	universal counter-sunk screws	4,5 x 40	PZ2	790041
100	universal counter-sunk screws	5,0 x 40	PZ2	790053
100	universal counter-sunk screws	5,0 x 50	PZ2	790054
100	universal counter-sunk screws	5,0 x 60	PZ2	790055
50	universal counter-sunk screws	6,0 x 60	PZ3	790064
50	universal counter-sunk screws	6,0 x 80	PZ3	790065
1	Bit-Box 17-pcs., incl. holder			102210

Art. no.	empty	Content	kg	PE	PU
792806	220131	**1.800-pcs.**	5,000	1	1

"Countersunk" Screws assortment box

Content: 1.800 screws, in plastic bulk storage chest 420 x 350 x 60 mm

Qty.	Description	Size	Drive	Art. no.
200	universal counter-sunk screws	3,0 x 15	PZ2	790005
200	universal counter-sunk screws	3,0 x 25	PZ2	790006
200	universal counter-sunk screws	3,0 x 40	PZ2	790008
200	universal counter-sunk screws	4,0 x 30	PZ2	790027
200	universal counter-sunk screws	4,0 x 40	PZ2	790029
200	universal counter-sunk screws	4,0 x 50	PZ2	790031
200	universal counter-sunk screws	4,5 x 40	PZ2	790041
100	universal counter-sunk screws	5,0 x 40	PZ2	790053
100	universal counter-sunk screws	5,0 x 50	PZ2	790054
100	universal counter-sunk screws	5,0 x 60	PZ2	790055
50	universal counter-sunk screws	6,0 x 60	PZ3	790064
50	universal counter-sunk screws	6,0 x 80	PZ3	790065
1	Bit-Box 17-pcs., incl. holder			102210

Art. no.	empty	Content	kg	PE	PU
792810	220131	**1.800-pcs.**	5,000	1	1

"Mix Tx" Screws assortment box

Content: 1.475 screws, in plastic bulk storage chest 420 x 350 x 60 mm

Qty.	Description	Size	Drive	Art. no.
200	TwinSpeed counter-sunk screws	2,9 x 15	Tx10	793005
200	TwinSpeed counter-sunk screws	2,9 x 30	Tx10	793007
200	TwinSpeed counter-sunk screws	2,9 x 40	Tx10	793008
200	TwinSpeed counter-sunk screws	4,2 x 35	Tx20	793040
100	TwinSpeed counter-sunk screws	4,2 x 50	Tx20	793043
100	TwinSpeed counter-sunk screws	4,8 x 50	Tx25	793054
50	TwinSpeed counter-sunk screws	6,3 x 80	Tx30	793065
200	TwinSpeed pan head srews	3,9 x 30	Tx15	793100
100	TwinSpeed pan head srews	3,9 x 40	Tx15	793102
50	TwinSpeed pan head srews	4,8 x 50	Tx25	793121
50	hexagonal wood screws	6 x 40		790210
25	hexagonal wood screws	6 x 80		790212

Art. no.	empty	Content	kg	PE	PU
792816	220131	**1.475-pcs.**	5,022	1	1

"Mix Tx plus" Screws assortment box

Content: 1.475 screws, in plastic bulk storage chest 420 x 350 x 60 mm

Qty.	Description	Size	Drive	Art. no.
200	TwinSpeed counter-sunk screws	2,9 x 15	Tx10	793005
200	TwinSpeed counter-sunk screws	2,9 x 30	Tx10	793007
200	TwinSpeed counter-sunk screws	2,9 x 40	Tx10	793008
200	TwinSpeed counter-sunk screws	4,2 x 35	Tx20	793040
100	TwinSpeed counter-sunk screws	4,2 x 50	Tx20	793043
100	TwinSpeed counter-sunk screws	4,8 x 50	Tx25	793054
50	TwinSpeed counter-sunk screws	6,3 x 80	Tx30	793065
200	TwinSpeed pan head srews	3,9 x 30	Tx15	793100
100	TwinSpeed pan head srews	3,9 x 40	Tx15	793102
50	TwinSpeed pan head srews	4,8 x 50	Tx25	793121
50	hexagonal wood screws	6 x 40		790210
25	hexagonal wood screws	6 x 80		790212
1	Bit-Box 17-pcs., incl. holder			102210

Art. no.	empty	Content	kg	PE	PU
792818	220131	**1.475-pcs.**	5,022	1	1

SysCon universal countersunk screws

Content: 1650 universal countersunk screws

1 220370 ABS plastic box „SysCon S"
1 220375 Foam „SysCon" 400 x 300 x 10 mm
1 220399 Assortment insert „SysCon"

Qty.	Art. no.	Description	Size	Drive
400	790015	Universal countersunk screws	3,5 x 20	PZ2
200	790027	Universal countersunk screws	4,0 x 30	PZ2
200	790029	Universal countersunk screws	4,0 x 40	PZ2
200	790031	Universal countersunk screws	4,0 x 50	PZ2
200	790041	Universal countersunk screws	4,5 x 40	PZ2
100	790053	Universal countersunk screws	5,0 x 40	PZ2
100	790054	Universal countersunk screws	5,0 x 50	PZ2
100	790055	Universal countersunk screws	5,0 x 60	PZ2
50	790064	Universal countersunk screws	6,0 x 60	PZ3
100	790065	Universal countersunk screws	6,0 x 80	PZ3

Art. no.	empty	Content	kg	PE	PU
220389	220370	**1.650-pcs**	7,000	1	1

SysCon plate screws

Content: 2000 universal screws

1 220370 ABS plastic box „SysCon S"
1 220375 Foam „SysCon" 400 x 300 x 10 mm
1 220399 Assortment insert „SysCon"

Qty.	Art. no.	Description	Size	Drive
200	790327	Universal screw pan head	4,2 x 19	PH2
200	790329	Universal screw pan head	4,2 x 25	PH2
200	790332	Universal screw pan head	4,2 x 31	PH2
200	790333	Universal screw pan head	4,2 x 38	PH2
200	790450	Assembly screw pan head with washer	4,2 x 13	PH2
200	790452	Assembly screw pan head with washer	4,2 x 25	PH2
200	790456	Assembly screw pan head with washer	4,2 x 45	PH2
200	790470	Assembly screw with washer, self-tapping	4,2 x 13	PH2
200	790423	Plate screw DIN 750, 4M	4,2 x 16	PH2
200	790426	Plate screw DIN 750, 4M	4,2 x 25	PH2

Art. no.	empty	Content	kg	PE	PU
220398	220370	**2.000-pcs**	5,000	1	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool cases

haupa®

... convincing solutions

Classification for tool cases

	Type:
ABS *	ABS
ABS+ **	ABS+

	Type:
ABSfly ***	ABSfly
HDPEfly ***	HDPE

Specifications

Type	Art. No.	Description	Dimensions	Colour	Document compartment	Combination lock	Properties
ABS	220031	Tool case „Start up Profi“ empty	470 x 200 x 360	black	yes	yes	• Impact-resistant ABS material • Surrounding impact edge protection • High quality metal locks, lockable • Stable and hardened aluminium frame • Ergonomic handle • 3 metal hinges • Including carrying strap • Tested under continuous professional usage situations up to **20 kg**
	220023	Trolly „Start up Profi“ empty	470 x 220 x 360	black	yes	yes	
ABS+	220076	VDE-Tool case „Pendant“ empty	460 x 180 x 310	red	yes	yes	• Impact-resistant ABS material • **Extra wide surrounding impact edge protection** • High quality metal locks, lockable • **Extra stable and hardened aluminium frame** • 3 metal hinges • **Particularly stable lid holder** • Tested under continuous professional usage situations up to **25 kg**
	220068	Tool case „Omega“ empty	460 x 180 x 310	black	yes	yes	
	220038	Tool case „Aktion“ empty	460 x 160 x 310	black	no	no	
	220073	Tool case „Netzwerk“ empty	460 x 160 x 310	black	no	no	
	220042	Tool case „Omega Max“ empty	470 x 200 x 360	black	yes	yes	
	220048	Tool case „Omega Trolly“ empty	470 x 220 x 360	black	yes	yes	
ABSfly	220032	VDE-Tool case „Venus“ empty	460 x 180 x 310	red	yes	yes	• **Flight-suitable** • **Extremely impact-resistant ABS-PRO material** • Extra wide surrounding impact edge protection • **High quality metal die cast locks, lockable** • **Extremely stable and specially hardened aluminium frame** • 3 riveted metal hinges • Particularly stable lid holder • Tested under continuous professional usage situations up to **40 kg**
	220034	Tool case „Merkur“ empty	460 x 180 x 310	black	yes	yes	
HDPEfly	220248	HDPE trolley, flight-suitable	470 x 220 x 360	black	yes	no	• **Flight-suitable and break-proof** • **Extreme durability thanks to HDPE shell with soft-touch look** • **Corners additionally reinforced with aluminium** • Extra wide surrounding impact edge protection • Locking, extra-long trolley system • **Ball-bearing mounted easy running castors** • **High quality metal die cast locks, lockable** • Additional combination lock • Extremely stable and specially hardened aluminium frame • 3 riveted metal hinges • Particularly stable lid holder • **Screw-fitted handle and locks** • Tested under continuous professional usage situations up to **40 kg**

Nylonbags

HAUPA „ToolPouch“

7 pockets to keep your tools handy with hammerloop and tapeholder belt loop with strong snap-button for easy attachment to belt. Material: extra strong 600D polyester, colour: black/green.

Art. no.	width	depth	height	kg	PU
220103	150	30	260	0,102	1

HAUPA „ToolBelt“

8 compartments for your tools, reinforced main compartment, steel rivets for high reliable quality. Big front compartment for nails or measurement tape, hammer sleeve, fits up to 135 cm hips, material: extra strong 600D polyester, colour: black/green.

Art. no.	width	depth	height	kg	PU
220105	200	100	300	0,326	1

Tool belts

Tool belt

10 compartments to organize your tools, hammer sleeve and tapeholder belt loop for easy attachment to belt, materials: extra strong 600D polyester, colour: black/green.

Art. no.	width	depth	height	kg	PU
220224	880	30	280	0,350	1

Backpacks

„Backpack“

Tool backpack not only for the trainee, base shell rubber reinforced, double cross seam for high load. Material: extra strong 600D polyester, watertight and dirtrepellent, colour: black/green.

Features:
- 1. Front compartment with 7 compartments narrow and wide
- 2. 2 Side compartments with zipper
- 3. inside 6 compartments small and 6 compartments wide
- 4. double bottom with small parts box

Art. no.	width	depth	height	kg	PU
220275	420	170	380	1,880	1

Jackets

HAUPA „Tool Jacket“, empty

Tool jacket for quick access to your tools. Quick assembly with strong zip, inside and outside pockets, particularly suitable for use in hot temperatures. Colour: green, black, width 500 mm, height 580 mm.
Non-slip shoulder belt, breathable inside net, 2 document holders at back, 5 screwdriver pockets (with rubber adjustment), 1 pen pocket, 1 mobile phone pocket (Velcro®), 1 shear pocket (with rubber adjustment), 2 pliers pockets (pushbutton fastener), 1 voltage detector pocket (Velcro®), 1 pocket for small parts (Velcro®), hammer loop.

Art. no.	width	height	kg	PU
220053	500	580	0,764	1

HAUPA „ToolBag“

Tool bag with inner and outer tool compartments, rubber-reinforced base. Waterproof and dirt resistant, double cross-seam for heavy loads, removable shoulder strap, adjustable, 10 compartments outside (various sizes), 10 compartments inside (various sizes), belt for spirit level (outside), material: extra strong 600D polyester, colour: black/green.

Art. no.	width	depth	height	kg	PU
220061	320	190	280	1,507	1

HAUPA „ToolBag XL“

Tool bag XL with inner and outer tool compartments, rubber-reinforced base. Features: waterproof and dirt resistant, rubber-reinforced base, double cross-seam for heavy loads, removable shoulder strap, adjustable, 10 compartments inside/outside (various sizes), belt for spirit level (outside), material: extra strong 600D polyester, colour: black/green.

Art. no.	width	depth	height	kg	PU
220366	420	220	310	2,000	1

HAUPA „BigBox“

very big box look alike Tool bag, easy approach to the tools, inside and outside compartments for tools, reinforced handles, material: extra strong 600D polyester, colour: black/green.

Art. no.	width	depth	height	kg	PU
220095	410	240	320	1,937	1

HAUPA „ProBag“

Tool bag with compartments inside and out, base shell made from plastic, dual seat seaming for high loads, removable shoulder strap, adjustable, 4 outer pockets (in various sizes), holder for insulation tape, 2 large internal compartments, suitable, for example, for DIN A4 folders or 15“ laptops plus various compartments (in various sizes), straps for spirit level (outside), material: extremely strong 1680D polyester, water and dirt resistant, colour: black/green.

Art. no.	width	depth	height	kg	PU
220368	420	300	430	2,500	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Service bags

„Supply“ service bag

Document pocket, pockets for tools and measuring devices, bag for small parts, large pockets, rubber rings, separate main compartment (padded) for laptop and documents, can be divided using the removable wall section. Notebook pocket up to 15". Colour: black/green.

Features:
- Ergonomic handle
- Adjustable carrying strap with shoulder pad
- Business card pocket for identification purposes
- 2 large side zipped pockets (one of which can be opened fully and has inserts)
- 2 large folding side pockets, can be removed individually, one of which as a small pocket on the front
- Polytex straps for transport securing

Art. no.	width	depth	height	kg	PU
220292	510	220	335	3,000	1

Tool wallets

Tool wallets

of black linen, with leather strap fastening

Art. no.	width	depth	kg	PU
220006	600	310	0,452	1

Tool wallets 1000 V

VDE/GS - Tool wallets „Rebell“

in red coloured plastic wallet

Art. no.	width	depth	height	kg	PU
220016	300	50	230	0,814	1

HAUPA „ToolPouch“

7 pockets to keep your tools handy with hammerloop and tapeholder belt loop with strong snap-button for easy attachment to belt. Material: extra strong 600D polyester, colour: black/green.

Contents:
- 2C combination pliers
- 2C electricians' screwdriver
- 2C cross slotted screwdriver PH
- Cable stripper, manual
- VDE/GS voltage tester

Art. no.	set	empty	kg	PU
220506	**5-pieces**	220103	0,789	1

HAUPA „ToolBelt Standard“

8 compartments for your tools, reinforced main compartment, steel rivets for high reliable quality. Big front compartment for nails or measurement tape, hammer sleeve, fits up to 135 cm hips. Material: extra strong 600D polyester, colour: black/green.

Contents:
- 2C cross slotted screwdrivers PH, size 1 and 2
- 2C electrician's screwdriver
- 2C combination pliers 200 mm
- 2C side cutters 160 mm
- Engineers' hammer, 300 g
- Cable stripping knife, 1-piece
- Measuring tape, 3 m

Art. no.	set	empty	kg	PU
220213	**8-pieces**	220105	2,222	1

HAUPA „ToolBelt VDE“ 1000 V

8 compartments for your tools, reinforced main compartment, steel rivets for high reliable quality. Big front compartment for nails or measurement tape, hammer sleeve, fits up to 135 cm hips, material: extra strong 600D polyester, colour: black/green.

Contents:
- 2C combination pliers, 200 mm
- 2C side cutters, 160 mm
- 2C electrician's screwdriver
- 2C cross slotted screwdrivers PH, size 1 and 2
- Voltage tester "Basic"
- Cable knife, 1-piece

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220211	**7-pieces**	220105	1,723	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool belt „Basic“

10 compartments to organize your tools, hammer sleeve and tapeholder belt loop for easy attachment to belt, materials: extra strong 600D polyester, colour: black/green.

Contents:
- 2C-VDE-Electricians’ screwdriver 5,5x125 mm
- 2C-VDE-Electricians’ screwdriver 3x100 mm
- 2C-VDE-Cross slotted screwdrivers PH 2
- Measuring tape 3 m
- 2C-Combination pliers 180 mm
- 2C-Side cutters 160 mm
- VDE/GS Voltage tester 125-250 V
- Utility metal knife
- Wire stripper, hooked blade, 8-28 mm Ø
- Cable cutter with stripping function

Art. no.	set	empty	kg	PU
220280	**10-pieces**	220224	2,120	1

Tool belt „VDE Plus“ 1000 V

10 compartments to organize your tools, hammer sleeve and tapeholder belt loop for easy attachment to belt, materials: extra strong 600D polyester, colour: black/green.

Contents:
- 2C-VDE-Cable cutters 200 mm
- 2C-VDE-Side cutters 165 mm
- 2C-VDE-Combination pliers 185 mm
- 2C-Replaceable blade system „Vario“ 1000 V, 10 pcs.
- VDE-Cable cutter straight blade, 50 mm
- Voltage tester „Profi“ 12-690 V
- Test Pen „Basic“

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220281	**16-pieces**	220224	2,740	1

Tool belt „VDE“ 1000 V

10 compartments to organize your tools, hammer sleeve and tapeholder belt loop for easy attachment to belt, materials: extra strong 600D polyester, colour: black/green.

Contents:
- 2C-VDE-Side cutters 165 mm
- 2C-VDE-Cable cutters 160 mm
- 2C-VDE-Combination pliers 185 mm
- 2C-VDE-Electricians’ screwdriver 5,5x125 mm
- 2C-VDE-Cross slotted screwdrivers PH 2
- 2C-VDE-Electricians’ screwdriver 3x100 mm
- VDE-Cable cutter straight blade, 50 mm
- Test Pen „Basic“

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220282	**8-pieces**	220224	2,020	1

Backpack „Basic“

Tool backpack not only for the trainee, base shell rubber reinforced, double cross seam for high load. Backpack 220275.

Contents:
- 2C-VDE electricians’ screwdriver set, 6 pcs.
- 2C-Combination pliers 180 mm
- 2C-Side cutters 160 mm
- 2C-Telephone pliers 160 mm
- 2C-Wire stripping pliers 160 mm
- Voltage tester 100-250 V
- Wire stripper, hooked blade, 8-28 mm Ø
- Stone chisel, 32x300 mm
- Electricians’ chisel, 10x250 mm
- Engineers’ hammer, 300 g
- Sledge hammer, 1000 g
- Cable knife, 1 blade
- PUK pocket saw, fixed handle
- Paint scraper, 40 mm
- Carpenters’ pencil
- Water brush
- Plaster cup

Art. no.	set	empty	kg	PU
220278	**22-pieces**	220275	6,660	1

Backpack „Basic VDE“

Tool backpack not only for the trainee, base shell rubber reinforced, double cross seam for high load. Backpack 220275.

Contents:
- 2C-VDE electricians’ screwdrivers 2,5 x 75, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C-VDE combination pliers, 185 mm
- 2C-VDE side cutters, 165 mm
- 2C-VDE telephone pliers, 200 mm
- 2C-VDE wire stripping pliers, 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1 blade
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Paint scraper, 40 mm
- Voltage tester, blade 50 mm
- Measuring tape, 3 m
- Water brushes

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220290	**19-pieces**	220275	4,200	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Backpack „VDE Plus“ 1000 V

Tool backpack not only for the trainee, base shell rubber reinforced, double cross seam for high load.

Contents:
- 2C-VDE-Cable cutters 200 mm
- 2C-VDE-Telephone pliers straight, 200 mm
- 2C-VDE-Wire stripping pliers 160 mm
- VDE-Cable knife, straight blade, 50 mm
- 2C-VDE-Combination pliers 185 mm
- 2C-VDE-Side cutters 165 mm
- 2C-Replaceable blade system „Vario“, 1000 V, 10 pcs.
- Voltage tester „Profi“ 12-690 V
- Test Pen „Basic“
- NH-safety fuse grip
- Electricians‘ protection helmet
- Safety-face mask

1000 V IEC 60900:2004

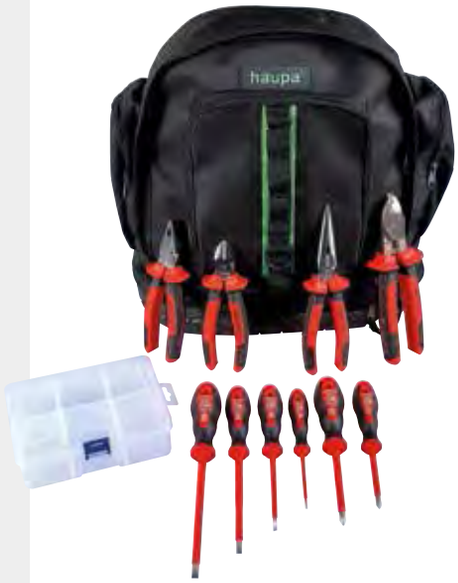
Art. no.	set	empty	kg	PU
220277	**21-pieces**	220275	6,540	1

Backpack „VDE“ 1000 V

Tool backpack not only for the trainee, base shell rubber reinforced, double cross seam for high load.

Contents:
- 2C-VDE-Electricians’ screwdriver set, 6 pcs.
- 2C-VDE-Cable cutters 200 mm
- 2C-VDE-Telephone pliers straight, 200 mm
- 2C-VDE-Combination pliers 185 mm
- 2C-VDE-Side cutters 165 mm

1000 V IEC 60900:2004



Art. no.	set	empty	kg	PU
220279	**10-pieces**	220275	4,200	1

HAUPA „Tool Jacket“

Tool jacket for quick access to your tools. Tool jacket for fitters including 10 tools. Quick assembly with strong zip, inside and outside pockets, particularly suitable for use in hot temperatures. Colour: green, black, width 500 mm, height 580 mm.
Non-slip shoulder belt, breathable inside net, 2 document holders at back, 5 screwdriver pockets (with rubber adjustment), 1 pen pocket, 1 mobile phone pocket (Velcro®), 1 shear pocket (with rubber adjustment), 2 pliers pockets (pushbutton fastener), 1 voltage detector pocket (Velcro®), 1 pocket for small parts (Velcro®), hammer loop.

Contents:
- 2C-VDE electrician’s screwdriver with PZ/FL profile
- 2C-VDE electrician’s screwdrivers, 75, 10, 125 mm
- 2C cross slotted screwdriver, PH, 80 mm
- 2C electrician’s scissors
- Combination pliers VDE
- Diagonal cuttter VDE
- Voltage tester “Basic”
- Engineer’s hammer 300 g

Art. no.	set	empty	kg	PU
220560	**10-pieces**	220053	2,700	1

HAUPA „ToolBag“

Tool bag with inner and outer tool compartments, rubber-reinforced base. Comes complete with 22 tools. Features: Waterproof and dirt resistant, rubber-reinforced base, double cross-seam for heavy loads, removable shoulder strap, adjustable, 10 compartments outside (various sizes), 10 compartments inside (various sizes), belt for spirit level (outside), material: extra strong 600D polyester, colour: black/green.

Contents:
- 2C combination pliers, 200 mm
- 2C side cutters, 160 mm
- 2C telephone pliers, straight
- 2C wire stripping pliers, 160 mm
- VDE screwdriver set, 6 electrician’s screwdrivers
- Voltage tester
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Water brush
- Paint scraper, 40 mm
- Electrician’s chisel, 10 x 250 mm
- Stone chisel, 300 mm
- Engineers’ hammer, 300 g
- Sledge hammer, 1000 g
- Plaster container
- Cable knife, 1-pieces
- PUK pocket saw, fixed handle
- Carpenter’s pencil

Art. no.	set	empty	kg	PU
220500	**22-pieces**	220061	6,350	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

ToolBag 1000 V

HAUPA „ToolBag“ 1000 V

Tool bag with inner and outer tool compartments, rubber-reinforced base. Comes complete with 13 tools.

Contents:
- 2C-VDE combinations pliers 185 mm
- 2C-VDE side cutters 165 mm
- 2C-VDE telephone pliers pliers, straight, 200 mm
- 2C-VDE wire stripping pliers 160 mm
- 2C-VDE-screwdriver set, 6 electrician's screwdrivers
- Spanner for switch-cabinets
- Cable knive
- Voltagetester “Basic”

1000 V IEC 60900:2004

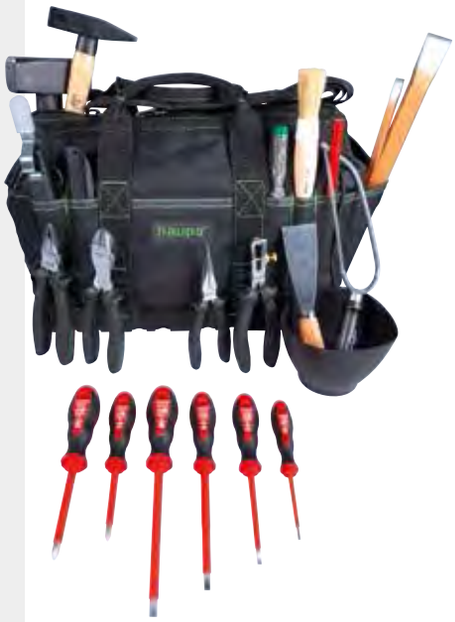
Art. no.	set	empty	kg	PU
220510	**13-pieces**	220061	3,919	1

ToolBag XL

HAUPA „ToolBag XL Classic“

Tool bag XL with inner and outer tool compartments, rubber-reinforced base. Comes complete with 22 tools. Features: Waterproof and dirt resistant, rubber-reinforced base, double cross-seam for heavy loads, removable shoulder strap, adjustable, 10 compartments inside/outside (various sizes), belt for spirit level (outside), material: extra strong 600D polyester, colour: black/green. ToolBag XL 220366.

Contents:
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C combination pliers, 200 mm
- 2C heavy duty side cutters, 175 mm
- 2C telephone pliers, straight, 200 mm
- 2C wire stripping pliers, 160 mm
- Voltage tester
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Water brush
- Paint scraper, 40 mm
- Electrician's chisel, 10 x 250 mm
- Stone chisel, 300 mm
- Engineers' hammer, 300 g
- Sledge hammer, 1000 g
- Plaster container
- Cable knife, 1 blade
- PUK pocket saw, fixed handle
- Carpenter's pencil



Art. no.	set	empty	kg	PU
220802	**22-pieces**	220366	9,810	1

ToolBag XL

HAUPA „ToolBag XL Go“

Tool bag XL with inner and outer tool compartments, rubber-reinforced base. Features: Waterproof and dirt resistant, rubber-reinforced base, double cross-seam for heavy loads, removable shoulder strap, adjustable, 10 compartments inside/outside (various sizes), belt for spirit level (outside), material: extra strong 600D polyester, colour: black/green. ToolBag 220366.

Contents:
- 2C-VDE combinations pliers, 185 mm
- 2C-VDE heavy duty side cutters, 170 mm
- 2C-VDE telephone pliers, straight, 200 mm
- 2C-VDE electrician’s screwdriver PZ/FL 1 + 2
- 2C-VDE electrician’s screwdriver
  2,5 x 75, 3,5 x 100, 4 x 100, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH 1 + 2
- Automatic wire stripper 0,2-6 mm²
- Switching cabinet key
- Cable stripper hooked blade, 8 - 28 mm Ø

Art. no.	set	empty	kg	PU
220804	**14-pieces**	220366	4,400	1

ToolBag XL 1000 V

HAUPA „ToolBag XL 1000 V“

Tool bag XL with inner and outer tool compartments, rubber-reinforced base. Comes complete with 13 tools. Material: extra strong 600D polyester, colour: black/green. ToolBag XL 220366.

Contents:
- 2C-VDE combinations pliers, 185 mm
- 2V-VDE heavy duty side cutters, 170 mm
- 2C-VDE telephone pliers, straight, 200 mm
- 2C-VDE wire stripping pliers, 160 mm
- 2C-VDE electrician‘s screwdrivers,
  2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- Spanners for switch-cabinets
- Cable knife
- Voltage tester „Basic“

Art. no.	set	empty	kg	PU
220800	**13-pieces**	220366	4,600	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

HAUPA „TrendBox Plus“

Tool bag for professional use. With inside and outside pockets, including 25 tools, easy access to the tools, inside and outside compartments for tools, reinforced handles, material: extra strong 600D polyester, colour: black/green. BigBox 220095.

Contents:
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C combination pliers, 180 mm
- 2C telephone pliers, 200 mm
- 2C side cutters, 160 mm
- 2C water pump pliers, 240 mm
- 2C wire stripping pliers, 160 mm
- Bit-Box, 17-pieces
- Voltage tester „Basic“
- Allen keys set, 7-pieces
- Adjustable single-head wrench
- Chalk - blue
- Impact cord roller
- Carpenters’ pencil
- Engineers’ hammer 300 g
- Cable stripping knive
- Junior hacksaw, heavy 150 mm
- Cable cutters 160 mm insulatet
- Combi-Drillbox
- Spanners for switch-cabinets
- Folding rule, fibre glass, 2 m

Art. no.	set	empty	kg	PU
220556	**25-pieces**	220095	6,430	1

HAUPA „TrendBox“

Tool bag for professional use. With inside and outside pockets, including 20 tools, easy access to the tools, inside and outside compartments for tools, reinforced handles, material: extra strong 600D polyester, colour: black/green. BigBox 220095.

Contents:
- 2C combination pliers, 200 mm
- 2C side cutters, 160 mm
- 2C telephon pliers, straight, 200 mm
- 2C water pump pliers, 240 mm
- VDE screwdrivers set, 6 electricians’ screwdrivers
- Cable ties, 292 x 3,6 mm
- Cabinet spirit level
- Filling knife, 40 mm
- Electrician’s chisel, 10 x 250 mm
- Voltage tester, VDE/GS
- Fitter’s hammer, 300 g
- Universal stripper
- Measuring tape, 3 m
- PUK pocket saw, fixed handle
- Carpenters pencil

Art. no.	set	empty	kg	PU
220550	**20-pieces**	220095	5,540	1

HAUPA „ProBag Max“

Tool bag with compartments inside and out, base shell made from plastic, dual seat seaming for high loads, removable shoulder strap, adjustable, 4 outer pockets (in various sizes), holder for insulation tape, 2 large internal compartments, suitable, for example, for DIN A4 folders or 15“ laptops plus various compartments (in various sizes), straps for spirit level (outside), material: extremely strong 1680D polyester, water and dirt resistant, colour: black/green. ProBag 220368.

Contents:
- 2C-VDE combinations pliers, 185 mm
- 2C-VDE heavy duty side cutters, 170 mm
- 2C-VDE telephone pliers, straight, 200 mm
- 2C-VDE electrician’s screwdriver
  2,5 x 75, 3,5 x 100, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH 1 + 2
- 2C-VDE electrician’s screwdriver PZ/FL 1 + 2
- Cable cutter 160 mm
- ESD electronic pliers 110 mm
- Allround soft-grip scissor 150 mm
- Automatic cable stripper 0,08-6,0 mm²
- LED „Headlight“ headlamp
- VDE cable knife 50 mm
- Utility knives „EXTRA“ with spare blades 19 mm
- Voltage tester „Profi LCD Plus“ 12-1.000 V
- Spanners for switch-cabinets
- Measuring tapes 3 m
- Adjustable single-head wrench 24 mm
- Bit set, 33 pieces
- Industrial cleaning wipes
- Cable ties black UV resistant, 203x4,6 mm
- Cable ties natural 203x4,6 mm
- HAUPA „Flex Bag“

Art. no.	set	empty	kg	PU
220810	**29-pieces**	220368	9,180	1

HAUPA „ProBag Start VDE“

Tool bag with compartments inside and out, base shell made from plastic, dual seat seaming for high loads, removable shoulder strap, adjustable, 4 outer pockets (in various sizes), holder for insulation tape, 2 large internal compartments, suitable, for example, for DIN A4 folders or 15“ laptops plus various compartments (in various sizes), straps for spirit level (outside), material: extremely strong 1680D polyester, water and dirt resistant, colour: green, black. ProBag 220368.

Contents:
- 2C-VDE electrician‘s screwdrivers,
  2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C-VDE telephone pliers, 200 mm
- 2C-VDE combination pliers, 180 mm
- 2C-VDE heavy duty side cutters, 170 mm
- 2C-VDE wire stripping pliers, 160 mm
- Cable knife, 1 blade
- Electricians’ chisel, 10 x 250 mm
- VDE/GS Voltage tester - blade 50 mm
- PUK pocket saw, fixed handle
- Brush
- Stone chisel, 300 mm
- Engineers’ hammer, 300 g
- Double-face sledge hammer, 1000 g
- Spatula, 40 mm
- Plaster container

Art. no.	set	empty	kg	PU
220814	**20-pieces**	220368	0,009	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

HAUPA „ProBag Go 1000 V“

Tool bag with compartments inside and out, base shell made from plastic, dual seat seaming for high loads, removable shoulder strap, adjustable, 4 outer pockets (in various sizes), holder for insulation tape, 2 large internal compartments, suitable, for example, for DIN A4 folders or 15“ laptops plus various compartments (in various sizes), straps for spirit level (outside), material: extremely strong 1680D polyester, water and dirt resistant, colour: black/green. ProBag 220368.

Contents:
- 2C-VDE combinations pliers, 185 mm
- 2C-VDE heavy duty side cutters, 170 mm
- 2C-VDE telephone pliers, straight, 200 mm
- 2C-VDE electrician’s screwdriver PZ/FL 1 + 2
- 2C-VDE electrician’s screwdriver 2,5 x 75, 3,5 x 100, 4 x 100, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH 1 + 2
- Automatic wire stripper 0,2-6 mm²
- Switching cabinet key
- Cable stripper hooked blade, 8 - 28 mm Ø

Art. no.	set	empty	kg	PU
220812	**14-pieces**	220368	9,180	1

„Supply Max“ service bag

Document pocket, pockets for tools and measuring devices, bag for small parts, large pockets, rubber rings, separate main compartment (padded) for laptop and documents, can be divided using the removable wall section. Notebook pocket up to 15". Colour: black/green.

Contents:
- 2K-VDE electrician's screwdriver 2.5 x 75, 3.5 x 100, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2K-VDE screwdriver PH 1 + 2
- 2K-VDE screwdriver PZ/FL 1 + 2
- Cable cutter 160 mm dip-insulated
- VDE side cutter 165 mm
- VDE combination pliers 185 mm
- VDE-long chain nose pliers straight
- Electronic side cutter 110 mm
- Electrician's scissors, stainless steel 150 mm
- Switching cabinet key
- Adjustable single-head wrench 24 mm
- Bit set, 33 pieces
- All-purpose industrial cleaning cloths
- Cable-ties, black, UV-resistant 203 x 4.6 mm
- Cable-ties, natural, 203 x 4.6 mm
- Automatic strippers 0.08 - 6.0 qmm
- LED head lamp 75 lm
- VDE cable knife with replaceable blades 50 mm
- Cutting knife "EXTRA" with replacement blades 19 mm
- Voltage tester "Profi LCD Plus" 12 - 1,000 V
- Electrical insulating tape VDE 15 mm x 10 m, Rainbow pack, 263820, 10 coulors
- Measuring tape 3 m
- HAUPA "Flex Bag"
- Set X-CrimpPlus

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220293	**30-pieces**	220292	6,350	1

„Supply Plus“ service bag

Document pocket, pockets for tools and measuring devices, bag for small parts, large pockets, rubber rings, separate main compartment (padded) for laptop and documents, can be divided using the removable wall section. Notebook pocket up to 15". Colour: black/green.

Contents:
- 2K-VDE electrician's screwdriver 2.5 x 75, 3.5 x 100, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2K-VDE screwdriver PH 1 + 2
- 2K-VDE screwdriver PZ/FL 1 + 2
- 2K-VDE-long chain nose pliers straight
- Cable cutter 160 mm dip-insulated
- VDE side cutter 165 mm
- VDE combination pliers 185 mm
- Electronic side cutter 110 mm
- Electrician's scissors, stainless steel 150 mm
- Cutting knife "EXTRA" with replacement blades 19 mm
- Adjustable single-head wrench 24 mm
- All-purpose industrial cleaning cloths
- Cable-ties, black, UV-resistant 203 x 4.6 mm
- Electrical insulating tape VDE 15 mm x 10 m, Rainbow pack, 263820, 10 coulors
- Voltage tester "Basic" 6 - 400 V
- Switching cabinet key
- Measuring tape 3 m
- LED head lamp 75 lm

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220294	**24-pieces**	220292	6,350	1

„Supply Basic“ service bag

Document pocket, pockets for tools and measuring devices, bag for small parts, large pockets, rubber rings, separate main compartment (padded) for laptop and documents, can be divided using the removable wall section. Notebook pocket up to 15". Colour: black/green.

Contents:
- 2K-VDE electrician's screwdriver 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2K-VDE screwdriver PH 1 + 2
- 2K-VDE screwdriver PZ/FL 1 + 2
- VDE side cutter 165 mm
- VDE combination pliers 185 mm
- Cable cutter 160 mm dip-insulated
- Electrical insulating tape VDE 15 mm x 10 m, Rainbow pack, 263820, 10 coulors
- Measuring tape 3 m

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220298	**14-pieces**	220292	6,350	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Kick-Off“

Solid Nylon tool case for the trainee – with 20 tools.

Contents:
- 2C-VDE telephone pliers, 200mm
- 2C-VDE combination pliers, 180mm
- 2C-VDE side cutters, 160mm
- 2C-VDE wire stripping pliers, 160mm
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150mm
- 2C-VDE cross slotted screwdrivers PH, size 1+2
- Cable knife, 1-piece
- PUK pocket saw, fixed handle
- Brush
- Electricians’ chisel, 10 x 250mm
- VDE/GS Voltage tester, blade 50 mm, 100 – 250 V
- Stone chisel, 250mm
- Engineers’ hammer, 300 g
- Double-face sledge hammer, 1000 g
- Spatula, 40mm
- Plaster container

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220574	**20-pieces**	220573	7,650	1

Tool case „Kick-Off Light“

Solid Nylon tool case for the trainee – with 10 tools.

Contents:
- 2C-VDE telephone pliers, 200mm
- 2C-VDE combination pliers, 180mm
- 2C-VDE side cutters, 160mm
- 2C-VDE wire stripping pliers, 160mm
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150mm
- 2C-VDE cross slotted screwdrivers PH, size 1+2

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220575	**10-pieces**	220573	5,200	1

VDE security set 1000 V

Bag of imitation leather, for working under tension up to 1000 V. 10-pieces

Contents:
- 2C-VDE electricians screwdrivers 2,5 x 75, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PZ, size 1 + 2
- 2C-VDE combination pliers VDE 185 mm
- 2C-VDE side cutters 185 mm
- Voltage tester “Basic”
- Cable stripping knife, 35 mm

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220014	**10-pieces**	220004	1,688	1

VDE/GS - Tool sets 1000 V

in red coloured plastic wallet, 11-pieces.

Contents:
- VDE combination pliers 185 mm
- VDE round nose pliers 160 mm
- VDE side cutters 165 mm
- VDE wire stripping pliers 160 mm
- 2C-VDE electricians screwdrivers 75, 100, 125, 150 mm
- 2C-VDE cross slotted screwdrivers PZ, size 1
- 2C-VDE socket wrench 7 mm
- VDE/GS voltage tester

1000 V IEC 60900:2004

Art. no.	set	width	height	depth	kg	PU
220130	**11-pieces**	300	230	50	2,216	1

Tool case „Tradition“ and „Fan“

made of black leather, with 2 inside loops and 2 snap-locks.

220022: Tradition
220024: Fan

Art. no.	width	depth	height	kg	PU
220022	340	110	170	0,821	1
220024	370	115	255	1,669	1

Tool case „Achat“

made of black leather, all outside edges reinforced with Alu-squares, with galvanized floor-onsert of sheet-metal collapsable front, snap-fasteners riveted on side, side-loops for carrying-belts, 2 snap-locks, all 4 inside with tool-compartments and adjustable loops, without carrying belts

Art. no.	width	depth	height	kg	PU
220052	420	165	320	3,113	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Favorit - Admiral - Profi“

made of black leather, with galvanized floor-onsert of sheet-metal collapsable front, with locks, side-, front-, rear-parts as well as bottom and cover reinforced, inside with tool-compartments and adjustable loops, without carrying belts.

220060: Favorit
220064: Admiral
220066: Profi

Art. no.	width	depth	height	kg	PU
220060	365	150	250	2,126	1
220064	470	145	315	2,990	1
220066	420	150	250	2,378	1

Tool case „Comet“

made of black leather, all outside edges reinforced with Alu-squares, with galvanized floor-onsert of sheet-metal collapsable front, snap-fasteners riveted on side, side-loops for carrying-belts, 2 snap-locks, all 4 inside with tool-compartments and adjustable loops, without carrying belts

Art. no.	width	depth	height	kg	PU
220070	420	165	320	3,939	1

Tool case „Magister“

of signal-red leather, with many compartements for tools, empty

Art. no.	width	depth	height	kg	PU
220142	440	165	260	2,700	1

Accessories

Brass padlocks

body made from a solid brass block, hardenend steel shackle, with 2 keys

Art. no.	size	kg	PU
220110	30	0,085	1
220112	40	0,135	1

Carrying belts

with 2 spring hooks

Art. no.	kg	PU
220054	0,114	1

Tool case „Phoenix“

Tool case for electrical contractor, made of black neat's leather, with 39 tools. Case 220070.

Contents:
- 2C long flat nose pliers, 160 mm
- 2C telephone pliers, 200 mm
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C wire stripping pliers, 160 mm
- 2C water pump pliers, 240 mm
- ESD electronic side cutters, 115 mm
- ESD electronic needle nose pliers, 130 mm
- Crimping pliers multi insulated and non-insulated crimping terminals
- 2C engineers' screwdrivers 100, 125, 150 mm
- 2C electrician‘s screwdrivers 2.5 x 75, 4 x 125, 5 x 150, 5 x 175 mm
- 2C cross slotted screwdrivers PH, size 0, 1 and 2
- 2C cross slotted screwdrivers PZ, size 1 and 2
- Electronic screwdriverset, 7-pieces
- 2C socket wrenches, 5.5, 12, 17
- Reamer, round
- Allen key set, 8-pieces
- Adjustable wrench, 340 mm
- Cable stripper hooked blade, 8 - 28 mm Ø
- Combination snips, 190 mm
- PUK“ pocket saw, fixed handle
- Electrician's chisel, 10 x 250 mm
- Folding rules, 2 m
- Light metal spirit level, 400 mm
- Bench hammer, 300 g
- Cable cutter, max. 16.9 mm
- Cutter knife, plastic
- Cable stripping knife, plastic scales
- VDE/GS voltage tester 125 - 250 V

Art. no.	set	empty	kg	PU
220156	**39-pieces**	220070	9,900	1

Tool case „Saphir“

Tool case for electrical contractor, made of green neat's leather, with 31 tools. Case 220070.

Contents:
- 2C long-nosed round pliers, 160 mm
- 2C telephone pliers, 200 mm
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C wire stripping pliers, 160 mm
- 2C water pump pliers, 240 mm
- ESD elektronic side cutters, 115 mm
- 2CE electrician‘s screwdrivers 2.5 x 75, 4 x 100, 4 x 125, 5 x 150 m
- 2C engineers' screwdrivers 6 x 100, 7 x 125, 8 x 150 mm
- 2C cross slotted screwdrivers PH, size 1 and 2
- 2C cross slotted screwdrivers PZ, size 1 and 2
- Electronic screwdriverset, 7-pieces
- Socket wrenches SW 5.5, 13, 17
- Allen key set, 8-pieces
- Cable stripper hooked blade, 8 - 28 mm Ø
- Combination snips 190 mm
- „PUK“ pocket saw, fixed handle
- Bench hammer 400 g
- Folding rules 2 m
- Cable cutter max. 16.9 mm
- Cable stripping knife plastic scales
- Voltage tester VDE/GS

Art. no.	set	empty	kg	PU
220154	**31-pieces**	220070	8,150	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Novelle 1“

Tool case for electrical contractor, made of black neat’s, leather, with 26 tools. Case 220066.

Contents:
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C heavy duty side cutters, 180 mm
- 2C telephone pliers, 200 mm
- 2C telephone pliers, 200 mm, bent
- 2C water pump pliers, 240 mm
- 2C wire stripping pliers, 160 mm
- 2C electrician‘s screwdrivers, 75, 125, 150 mm
- 2C engineers’ screwdrivers, 100, 150 mm
- 2C cross slotted screwdrivers PH, size 1 and 2
- 2C cross slotted screwdrivers PZ, size 1 and 2
- Reamer square
- Cable stripper 0.5 - 4 Ø
- Cable stripper hooked blade, 8 - 28 mm Ø
- Painter scrapers
- Bench hammer 300 g
- Cable stripping knife plastic scales
- Combination snips 140 mm
- „PUK“pocket saw, adjustable handle
- Voltage tester “Basic”
- Voltage tester VDE/GS

Art. no.	set	empty	kg	PU
220152/1	**26-pieces**	220066	6,500	1

Tool case „Alpha“

Tool case made from black neat's leather, equipped with 19 tools. Case 220060.

Contents:
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C telephone pliers, 200 mm
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 and 2
- Voltage tester VDE/GS
- Wire stripping pliers, 0.5 - 4 mm²
- Cable stripper hooked blade, 8 - 28 mm Ø
- Cable knife, 1-pieces
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Stone chisel, 250 mm
- Engineers’ hammer, 300 g
- Measuring Tape, 3 m
- Cabinet Level, 250 m

Art. no.	set	empty	kg	PU
220169	**19-pieces**	220060	5,200	1

Tool case „Start“

Tool case for apprentices, made from black cow hide equipped with 20 tools. Case 220060.

Contents:
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 and 2
- 2C telephone pliers, 200 mm
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C wire stripping pliers, 160 mm
- Cable knife, 1-piece
- PUK pocket saw, fixed handle
- Double-face sledge hammer, 1000 g
- VDE/GS Voltage tester - blade 50 mm
- Electricians’ chisel, 10 x 250 mm
- Stone chisel, 300 mm
- Engineers’ hammer, 300 g
- Spatula, 40 mm
- Plaster container
- Brush

Art. no.	set	empty	kg	PU
220168	**20-pieces**	220060	6,100	1

Tool case „Start VDE“

Tool case for apprentices, made from black coloured cowhide equipped with 20 tools, case 220060.

Contents:
- 2C-VDE telephone pliers, 200 mm
- 2C-VDE combination pliers, 180 mm
- 2C-VDE cutters, 160 mm
- 2C-VDE wire stripping pliers, 160 mm
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- Cable knife, 1 blade
- Electricians’ chisel, 10 x 250 mm
- VDE/GS Voltage tester - blade 50 mm
- PUK pocket saw, fixed handle
- Brush
- Stone chisel, 300 mm
- Engineers’ hammer, 300 g
- Double-face sledge hammer, 1000 g
- Spatula, 40 mm
- Plaster container

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Art. no.	set	empty	kg	PU
220168/VDE	**20-pieces**	220060	6,700	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Delux“ 1000 V

of signal-red leather, with 54 safety tools, case 220142 containing:

Contents:
- 2C-VDE electrician‘s screwdriver 2,5 x 75, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross slotted screwdriver PH, size 1 + 2
- VDE telephone pliers, straight, 200 mm
- VDE telephone pliers, bent, 200 mm
- VDE combination pliers 185 mm
- VDE side cutters 165 mm
- VDE wire stripping pliers 160 mm
- Socket wrenches 5,5, 7,0, 8,0, 10,0 mm
- Voltage tester „Profi“
- Hexagon sockets 10, 11, 12, 13, 14, 15, 16
- Reversible ratchet 1/2“
- T-sliding handle 1/2“
- Open end spanners 10, 12, 13, 19, 22, 24
- Cable knive
- Cable scissor 200 mm
- Slip-on bushes 5-pieces No. 1, 10 mm
- Slip-on bushes 5-pieces No. 2, 10 mm
- Slip-on bushes 5-pieces No. 3, 10 mm
- Plastic pliers 180 mm
- Plastic clamp
- Covering tape, grey
- Covering tape, red
- Safety grip
- Gloves size 9

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220135	**54-pieces**	220142	9,460	1

Tool case „Rotor“ 1000 V

of signal-red leather, with 46 safety tools, case 220142 containing:

Contents:
- VDE combination pliers 185 mm
- VDE side cutters 165 mm
- VDE wire stripping pliers
- VDE round nose pliers 160 mm
- Plastic clamp
- Gloves, size 10
- 2C-VDE electrician‘s screwdrivers 2,5 x 75, 4 x 100 mm
- Safety grip
- Socket wrenches, size 6, 7, 8, 9
- Rubber towels 1000 mm
- 5 slip-on-bushes size 1, 10 mm
- 5 slip-on-bushes size 2, 10 mm
- 5 slip-on-bushes size 3, 10 mm
- 5 slip-on-bushes 10 mm
- 5 slip-on-bushes 20 mm
- 5 slip-on-bushes 30 mm
- Cable knives
- Voltage tester 150 - 250 V

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220140	**46-pieces**	220142	6,400	1

Tool case „Start-up Profi“

ABS

Hard-top case, black, 2 tool kits, document pocket with hook-and-loop fixing, combination lock, bottom half of case equipped with variable partitions, shoulder strap

Art. no.	width	depth	height	kg	PU
220031	470	200	360	6,740	1

Tool case trolly „Start-up Profi“

ABS

rigid case, made of ABS-plastic material, black, integrated rolls and pull-out handle in the bottom, locks of alu-press-casting, empty. Inside: 1 separation for documents, 1 plate for tools, 1 cover-plate with pocket compartments and clip-compartment, 1 bottom-tray

Art. no.	width	depth	height	kg	PU
220023	470	220	360	6,740	1

Tool case „OmegaMax“

ABS+

rigid case, black, 28 compartments, 1 combination lock, 1 separation for documents, 2 plate for tools, 2 lockable locks, ground bowl with variables to dividing bars, framed push border

Art. no.	width	depth	height	kg	PU
220042	470	200	360	6,500	1

Tool case trolly „OmegaMax Trolly“

ABS+

rigid case, black, 28 compartments, 1 combination lock, 1 separation for documents, 2 plate for tools, 2 lockable locks, ground bowl with variables to dividing bars, framed push border

Art. no.	width	depth	height	kg	PU
220048	470	220	360	7,000	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Aktion“

ABS+

2 tool kits (one with document pocket). Ground bowl with variables to dividing bars

Art. no.	width	depth	height	kg	PU
220038	460	160	310	4,580	1

Tool case „Omega“

ABS+

rigid case, black, 28 compartments, 1 combination lock, 1 separation for documents, 2 plate for tools, 2 lockable locks, ground bowl with variables to dividing bars, framed push border

Art. no.	width	depth	height	kg	PU
220068	460	180	310	5,039	1

Network service case HAUPA

ABS+

Hard-top case, black, for electricians and network technicians, 2 tool kits (one with document pocket), bottom half of case contains 8 small removable boxes, secured for transport purposes

Art. no.	width	depth	height	kg	PU
220073	460	160	310	4,661	1

Hard-top tool cases

Tool case „Pendant“

ABS+

rigid case, signal red, with Alu frame and 2 locks, with 3 plates with many compartements for tools

Art. no.	width	depth	height	kg	PU
220076	460	180	310	5,107	1

Tool case „Merkur“

ABSfly

rigid case, made of ABS-plastic material, black, empty, excellent rib-profile on the outside, high-quality locks, inside with separation for documents, 2 plates with compartments for several tools, 1 tray of ABS-plastics with separations for individual divisions

Art. no.	width	depth	height	kg	PU
220034	460	180	310	5,320	1

Hard-top tool cases

Tool case „Venus“

ABSfly

rigid case, made of ABS-plastic material, signal-red, empty, suitable especially for safety-tools, excellent rib-profile on the outside, high-quality locks, inside with separation for documents, 2 plates with compartments for several tools, 1 tray of ABS-plastics with separations for individual divisions.

Art. no.	width	depth	height	kg	PU
220032	460	180	310	5,240	1

Tool case trolly „Fly“

HDPEfly

hard-side case, black, 3 tool sections, 2 locks, document pocket, with high-grade fittings, bottom half of case equipped with variable partitions

Art. no.	width	depth	height	kg	PU
220248	470	220	360	5,320	1

Attractive laser marking

Attractive laser marking for your individual tool case

Show profile – give your tool case your name!
Logo and name in noble laser design on aluminium plate.

You decide where it’s placed!

Art. no.		kg	PU
220193	**Label**	0,020	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Start-up“

ABS

Hard-top case, black, 2 tool kits, document pocket with hook-and-loop fixing, combination lock, bottom half of case equipped with variable partitions, shoulder strap, 19 tools.

Contents:
- 2C-VDE electrician‘s screwdrivers 2.5 x 75, 4 x 100, 5.5 x 125 und 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers, PH, size 1 + 2
- 2C combination pliers, 185 mm
- 2C side cutters, 165 mm
- 2C telephone pliers, 200 mm
- 2C wire stripping pliers, 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1-pieces
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Paint scraper, 40 mm
- Voltage tester, blade 50 mm
- Measuring tape, 3 m
- Water brush

Art. no.	set	empty	kg	PU
220221	**19-pieces**	220031	9,180	1

Tool case „Start-up VDE“

ABS

Hard-top case, black, 2 tool kits, document pocket with hook-and-loop fixing, combination lock, bottom half of case equipped with variable partitions, shoulder strap, 19 tools.

Contents:
- 2C-VDE electrician‘s screwdrivers 2,5 x 75, 4 x 100, 5,5 x 125 und 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers, PH, size 1 + 2
- 2C-VDE combination pliers 185 mm
- 2C-VDE side cutters 165 mm
- 2C-VDE telephone pliers 200 mm
- 2C-VDE wire stripping pliers 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1-pieces
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Paint scraper, 40 mm
- Voltage tester, blade 50 mm
- Measuring tape,
- Water brushes

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220235	**19-pieces**	220031	9,300	1

Tool case „EXTRA“

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, 19 tools, case 220031.

Contents:
- 2C-VDE screwdriver set PZ, 101999/PZ
- 2C-VDE cross slotted screwdrivers PH, size 1
- 2C-VDE cross slotted screwdrivers PH, size 2
- Automatic wire stripper Super Plus 0,2-6 mm²
- Cable stripping knives without hook blade 8-28 mm²
- Voltagetester „Basic“ black
- Combination pliers VDE 185 mm
- Heavy duty diagonal cutters VDE 205 mm
- Long chain nose pliers VDE angled 200 mm
- Carpenters‘ pencils • Engineers‘ hammers 300 g
- Electricians’ chisels 10x250 mm
- Hand saws „PUK“ mit fixed handle
- Torped-level 225 mm • Folding rules 2 m
- Paint scrapers 40 mm • Water brushes
- Plaster cups • Cable knives 1000 V, 50 mm
- Siedge hammers 1000 g
- Stone chisels, flat oval shank 28x250 mm
- Industrial cleaning wipes
- Crimping pliers crimping pliers for insulated terminals and end sleeves 0,5 - 6 mm
- Stripper 8-13 mm²
- Cable cutters VDE 170 mm
- Electrical insulating tape VDE 15 mm x 10 m, Rainbow pack, 263820, 10 coulors
- Voltage tester „Profi plus“
- HAUPA „Multi Check“ digital high-capacity multimeter

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220309	**33-pieces**	220031	8,680	1

Tool case „Profi VDE“ 1000 V

ABS

Hard-top case, black, 2 tool kits, document pocket with hook-and-loop fixing, combination lock, bottom half of case equipped with variable partitions, shoulder strap, 35 tools.

Contents:
- VDE long chain nose pliers, straight, 200 mm
- VDE combination pliers 185 mm
- VDE heavy duty side cutters 200 mm
- VDE wire stripping pliers 160 mm
- VDE cable cutter, max. 15 mm
- Cable knives, 1000 V, 50 mm
- Finger gloves, size 9
- 2C-VDE electrician’s screwdrivers 2,5 x 75, 3 x 100, 6,5 x 150, 8 x 175 mm
- 2C-VDE socket wrenches, size 5,5, 7, 8, 10
- 2C-VDE cross slotted screwdrivers, PH 1 + 2
- NH-safety fuse grip
- Rubber towels, 1000 x 1000 x 1,6 mm
- Plastic clips, 160 mm
- Slip on bushes, No. 1, 2, 3 (each 5 x)
- Self adhesive PVC tape, red, 10 m
- Heat protection gloves
- Safety glasses

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220232	**35-pieces**	220031	12,920	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case trolly „Profi mobil“

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, 51 tools, case art. 220023.

Contents:
- 2-component socket wrenches set
- 2-component screwdrivers 2,5 x 75, 3 x 100, 4x100, 4 x 125, 5 x 150 mm
- Cross slotted screwdrivers PH, size 1+2, insulated
- Voltage tester “Basic” 6-400 V
- Electronic screwing bit set, 34-pcs
- HAUPA ratchet screwdriver „Flex“, 58-pcs
- Combination spanners sets, 12-pcs
- Adjustable single-head wrench 24 mm
- Spanners for switch-cabinets
- Engineers‘ hammer, 300 g
- Cable stripping knives with hook blade, 8-28 mm²
- Utility knives „EXTRA“ with spare blades 19 mm
- Cable cutter with a snap, max. 16,9 mm
- Cable cutter 160 mm, dipped
- 2C combination pliers 185 mm
- 2C diagonal cutter 165 mm
- 2C long chain nose pliers 200 mm
- Automatic wire stripper Super Plus 0,2-6 mm²
- ESD Electronic side cutter 115 mm
- Measuring tape 5 m
- Cabinet levels 250
- VDE electrical insulating tape 19 mm x 20 m, black (8x)

Art. no.	set	empty	kg	PU
220273	**51-pieces**	220023	14,700	1

Tool case trolly „Start-up“

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, 19 tools, case art. 220023.

Contents:
- 2C-VDE electricians’ screwdrivers 2,5 x 75, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C-VDE combination pliers, 185 mm
- 2C-VDE side cutters, 165 mm
- 2C-VDE telephone pliers, 200 mm
- 2C-VDE wire stripping pliers, 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1 blade
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Paint scraper, 40 mm
- Voltage tester, blade 50 mm
- Measuring tape, 3 m
- Water brushes

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220252	**19-pieces**	220023	10,940	1

Tool case trolly „Master“

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, 38 tools, case art. 220023.

Contents:
- 2C-VDE-screwdrivers set PH
- VDE-Cable knive straight blade
- Industrial cleaning wipes
- Measuring tape 3 m
- PUK pocket saw, fixed handle
- VDE cable cutter 230 mm
- 2C-VDE combination pliers 185 mm
- VDE side cutters 165 mm
- VDE telephone pliers 45°, 200 mm
- Automatic wire stripper 0,2 - 6 mm²
- Ear protection plugs SNR 30 db
- 2C-VDE screwdrivers PZ/FL, size 1
- 2C-VDE screwdrivers PZ/FL, size 2
- Perlon fish tapes 15 mm, 3
- LED Pocket lamp 18 x 91mm 80 lm
- Universal stripper 0,2 - 4 mm²
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Crimping pliers for crimp terminals/end sleeves
- Cable cutter 160 mm, coating-insulated
- Crimping pliers 0,75 - 16 mm²
- Ratched screwdriver „Flex“, 58 pcs.
- Safety glasses
- Spanner for switch-cabinets
- Voltage tester „Profi Plus“
- Elektronik ESD Electronic side cutter 115 mm
- Adjustable single-head wrench 24 mm
- 2C Allround soft-grip scissors 140 mm
- Cable glands IP 68, M20, light-grey
- Dispenser box with insulated end sleeves (DIN)
- Cable ties UV-resistant 250 x 4,8 mm
- Nailing clips for round cable 7-10, white

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220254	**38-pieces**	220023	14,700	1

Tool case trolly „EXTRA“

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, 19 tools, case 220023.

Contents:
- 2C-VDE screwdriver set PZ, 101999/PZ
- 2C-VDE cross slotted screwdrivers PH, size 1
- 2C-VDE cross slotted screwdrivers PH, size 2
- Automatic wire stripper Super Plus 0,2-6 mm²
- Cable stripping knives without hook blade 8-28 mm²
- Voltagetester „Basic“ black • Combination pliers VDE 185 mm
- Heavy duty diagonal cutters VDE 205 mm
- Long chain nose pliers VDE angled 200 mm
- Carpenters‘ pencils • Engineers‘ hammers 300 g
- Electricians’ chisels 10x250 mm • Hand saws „PUK“ mit fixed handle
- Torped-level 225 mm
- Folding rules 2 m
- Paint scrapers 40 mm
- Water brushes
- Plaster cups
- Cable knives 1000 V, 50 mm
- Siedge hammers 1000 g
- Stone chisels, flat oval shank 28x250 mm
- Industrial cleaning wipes
- Crimping pliers crimping pliers for insulated terminals and end sleeves 0,5 - 6 mm
- Stripper 8-13 mm²
- Cable cutters VDE 170 mm
- Electrical insulating tape VDE 15 mm x 10 m, Rainbow pack, 263820, 10 coulors
- Voltage tester „Profi plus“
- HAUPA „Multi Check“ digital high-capacity multimeter

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220307	**33-pieces**	220023	8,680	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Service trolly for hybrid vehicles 1000 V

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, case art. 220023.

Contents:

- 2C-VDE electrician's screwdrivers 2,5 x 75, 3 x 100, 3,5 x 100, 4 x 100 mm
- 2C-VDE cross slotted screwdrivers PH 1, 2, 3
- 2C-VDE cross slotted screwdrivers S-Tx 20, 25, 30
- Hexagon sockets VDE 3/8" WS 8, 9, 10, 12, 13, 14, 17, 19, 22
- Extension 3/8" VDE, 250 mm
- Reversible ratchet VDE 3/8"
- Water pump pliers VDE 240 mm
- Cable cutters VDE 230 mm
- Side heavy duty side cutters VDE 205 mm
- Side cutters VDE 165 mm
- Short flat nose pliers VDE 160 mm
- Long chain nose pliers, angled nose 200 mm
- Combination pliers VDE 205 mm
- Cable stripping knife 1000V, straight blade, 50 mm
- Safety-sets with bag, insulating mat
- Slip on bushes 1000V, 20 mm
- Slip on bushes 1000V, 10 mm
- **VDE-sockets 3/8", M8, M10, M12** (xzn)
- Shutting band red/white 500 m
- Sign „dangerous voltage"
- Sign „do not switch"

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220171	**40-pieces**	220023	11,100	1

Tool case trolly „Secure mobil" 1000 V

ABS

hard-side case, black, 2 tool sections, document pocket, combination lock, bottom half of case equipped with variable partitions, with high-grade fittings, 2 locks, 57 tools, case art. 220023.

Contents:

- 2C-VDE electricians' screwdrivers 2,5 x 75, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- Voltage tester "Profi plus" 12-1,000 V
- Single ended spanner 1000 V 10, 12, 13, 19, 22, 24
- Finger gloves 1000 V, size 9
- Safety fuse grips
- Flat nose pliers 1000 V
- Slip on bushes 1000 V no. 1,2, 3 (each 5x)
- VDE cable knife, 50 mm
- VDE combination pliers 185 mm
- VDE diagonal cutter 165 mm
- VDE long chain nose pliers 200 mm
- Tool case 1000 V, drive 3/8"
- Electrical insulating tape, red (6x)

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220272	**57-pieces**	220023	14,700	1

Network service case „Connect“

ABS+

The perfect Starter package for data and network. Hard-top case, black, 2 tool kits, bottom half of case contains removeable boxes, 13 tools. Case 220073.

Contents:
- 2C electrician screwdrivers 2.5 x 75, 3 x 100, 4 x 125 mm
- 2C cross slotted screwdrivers PH, size 1 and 2
- Electronic screwdriverset, 7-pieces
- Stripper for UTP/STP data cable
- 2C side cutters 160 mm
- 2C telephone pliers, bent, 200 mm
- ESD electronic side cutters, 115 mm
- Crimping pliers for modular plugs
- 2C soft-grip scissors, 140 mm
- Sensor tool

Art. no.	set	empty	kg	PU
220150	**13-pieces**	220073	5,600	1

Tool case „2 component“

ABS+

Hard-top case, for apprentices, black, 2 tool kits, one with document pocket, cover-plate with pocket compartments and clip-compartment, 18 tools. Case 220038.

Contents:
- 2C telephone pliers, straight, 200 mm
- 2C combination pliers, 180 mm
- 2C heavy duty side cutters, 180 mm
- 2C wire stripping pliers, 160 mm
- 2C electrician‘s screwdrivers 2.5 x 75, 3 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C cross slotted screwdrivers, PH, size 1 and 2
- Cable knife, 1-pieces
- Wire stripper, hooked blade, 8 - 28 mm Ø
- PUK pocket saw, fixed handle
- Paint scraper, 40 mm
- Electricians’ chisel, 10 x 250 mm
- Voltage tester, 220 - 250 volt
- Engineers’ hammer, 300 g
- Measuring stick, 2 m

Art. no.	set	empty	kg	PU
220170	**18-pieces**	220038	7,000	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Network service case

ABS+

Hard-top case, black, for electricians and network technicians, 2 tool kits (one with document pocket), bottom half of case contains 8 small removable boxes, secured for transport purposes. Case 220038.

Contents:
- 2C side cutters, 160 mm
- 2C telephone pliers, 180 mm
- 2C telephone pliers, 200 mm, bent
- 2C electrician screwdrivers 75, 100, 150 mm
- 2C cross slotted screwdrivers PH, size 0, 1, 2
- Electronic screwdriver set, 7-pieces
- Control cabinet key
- Precision stripper “PWS-Plus” 0.25 - 0.8 Ø
- Combination snips 190 mm
- „PUK“ pocket saw, fixed handle
- Crimping pliers for coaxial connectors
- ESD electronic side cutters, 130 mm
- Stripper for coaxial cable
- VDE/GS voltage tester
- Stripper for UTP/STP data cable
- Crimping pliers for modular plugs
- Sensor tool

Art. no.	set	empty	kg	PU
220141	**21-pieces**	220038	8,800	1

Tool case „Panther“

ABS+

inside: 1 separation for documents, 2 plate for tools, 1 cover-plate with pocket compartments and clip-compartment. Case 220038.

Contents:
- 2C electrician’s screwdrivers, 75, 100, 125, 150 mm
- 2C engineers’ screwdriver, 100 mm
- 2C cross slotted screwdrivers, PZ, size 1 and 2
- Control cabinet key
- Jointing chisel, 26 x 250 mm
- Electrician's chisel, 10 x 250 mm
- Cable stripping knife, plastic shank
- Universal saw, heavy 150 mm
- 2C combination pliers, 180 mm
- 2C heavy duty side cutters, 180 mm
- 2C telephone pliers, 200 mm
- 2C wire stripping pliers, 160 mm
- Cabinet level, 250 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Bench hammer, 300 g
- Voltage tester “Basic”
- VDE/GS voltage tester

Art. no.	set	empty	kg	PU
220040	**21-pieces**	220038	7,460	1

Tool case „Compact“

ABS+

Hard-top case, black, 2 tool kits (one with document pocket), bottom half of case equipped with variable partitions, case 220038.

Contents:
- 2C electrician‘s screwdrivers, 2,5 x 75, 4 x 100, 4 x 125, 5 x 150 mm
- 2C cross slotted screwdrivers, PH, size 1 and 2
- Electronic screwdriver set, 7-pieces
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C telephone pliers, 200 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable stripping knive, 4 - 16 mm Ø
- Automatic wire stripper, 0,2 - 6 mm²
- Cable cutter with a snap
- 2K Soft-Grip scissor, 140 mm
- PUK pocket saw, fixed handle
- HAUPA „Bit box“, 17-pieces
- SDS-plus set, 5-pieces
- Spirit level, 400 mm
- Measuring tape, 3 m
- Voltage tester „Basic“

Art. no.	set	empty	kg	PU
220229	**47-pieces**	220038	7,180	1

Tool case „Basic“

ABS+

Hard-top case, black, 2 tool kits (one with document pocket), bottom half of case equipped with variable partitions, 19 tools. Case 220038.

Contents:
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2-VDE cross slotted screwdrivers PH, size 1 and 2
- 2C combination pliers, 180 mm
- 2C side cutters, 160 mm
- 2C telephone pliers, straight, 200 mm
- 2C wire stripping pliers, 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1-pieces
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Voltage tester blade, 50 mm
- Measuring stick, 2 m
- Paint scraper, 40 mm
- Water brushes

Art. no.	set	empty	kg	PU
220153	**19-pieces**	220038	6,600	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Basic VDE“

ABS+

hard-side case, black, 2 tool sections (one with document pocket), bottom half of case equipped with variable partitions, with high-grade fittings, 19 tools. Case 220038.

Contents:
- 2C-VDE electrician‘s screwdrivers, 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C-VDE combinations pliers, 185 mm
- 2C-VDE side cutters 165, mm
- 2C-VDE telephone pliers, straight, 200 mm
- 2C-VDE cable cutter 200 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1 blade
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Voltage tester blade, 50 mm
- Measuring stick, 2 m
- Paint scraper, 40 mm
- Water brushes

Art. no.	set	empty	kg	PU
220244	**19-pieces**	220038	7,140	1

Tool case „Inspektor“

ABS+

rigid case, black, with high-grade fittings, Master’s case with 25 tools. Case 220068.

Contents:
- 2C electrician‘s screwdrivers 75, 125, 150 mm
- 2C engineers’ screwdrivers 100, 150 mm
- 2C cross slotted screwdrivers PH, size 1 + 2
- 2C combination pliers, 180 mm
- 2C heavy duty side cutters, 180 mm
- 2C telephone pliers, 200 mm
- 2C telephone pliers, bent 200 mm
- 2C water pump pliers, 240 mm
- 2C wire stripping pliers, 160 mm
- 2C piercing awl
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Voltage tester, 150 - 250 V
- Adjustable wrench, 210 mm
- Paint scraper, 50 mm
- Electricians’ Chisel, 10 x 250 mm
- Engineers’ hammer, 300 g
- Cable knife, 1 blade
- Universal scissors, 190 mm
- PUK pocket saw, fixed handle
- Measuring stick, 2 m
- Alu level 400 mm

Art. no.	set	empty	kg	PU
220176	**25-pieces**	220068	8,980	1

Tool case „Akkurat“

ABS+

Master‘s case for radio and television, with 32 tools, rigid case. Case 220068.

Contents:
- 2C cross slotted screwdrivers, PH, size 1 and 2
- 2C electrician‘s screwdrivers 2.5 x 75, 4 x 100, 4 x 125, 5 x 150
- 2C electrician‘s screwdrivers 2.5 x 75 (bare)
- 2C combination pliers, 160 mm
- 2C side cutters, 160 mm
- 2C telephone pliers, straight, 200 mm
- 2C telephone pliers, bent, 200 mm
- 2C wire stripping pliers, 160 mm
- ESD electronic side cutters, 115 mm
- ESD electronic needle nose pliers, 130 mm
- ESD Electronic round nose pliers, 130 mm
- ESD electronic needle nose pliers, 130 mm, 45°
- Engineers’ screwdrivers, 8 x 150 mm
- Elektronic screwdriver set, 7-pieces
- Tweezer, straight, 130 mm
- Tweezer, flat, 145 mm
- 2C socket wrenches 5, 5.5, 6
- 2C piercing awl, round
- Voltage tester 50 - 250 Volt
- Checking mirror 210 mm
- Claw holder, size 525
- Spanner, 175 mm
- Solder, Sn 60% 1 mm 100 g
- Universal scissors, 190 mm
- Crown scissors, 115 mm
- Contact file set. 6 pieces

Art. no.	set	empty	kg	PU
220179	**32-pieces**	220068	8,180	1

Tool case „Diamant“

ABS+

Master‘s case for domestic appliances, with 23 tools, rigid case, black. Case 220068.

Contents:
- 2C electrician‘s screwdrivers 4 x 100, 5 x 150 mm
- 2C engineers’ screwdrivers 6 x 100, 8 x 150 mm
- 2C cross slotted screwdrivers, PH, size 1 and 2
- 2C long nose round pliers, 160 mm
- 2C long nose flat pliers, 160 mm
- 2C telephone pliers 200 mm
- 2C telephone pliers, bent, 200 mm
- 2C combination pliers 160 mm
- 2C side cutters, 160 mm
- 2C heavy duty side cutters, 200 mm
- Cable stripper 0.5 - 4 Ø
- ESD electronic side cutters, 115 mm
- Crimping pliers for crimping terminals
- Socket wrench set, 1/4”, 33 pieces
- „PUK“ pocket saw, fixed handle
- Bench hammer, 300 g
- Cable stripping knife, plastic scales
- VDE/GS Voltage tester
- Combination snips, 190 mm
- Cable cutter, max. 16.9 Ø

Art. no.	set	empty	kg	PU
220192	**23-pieces**	220068	8,500	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

The ideal tool assortment

ABS+

rigid case for electromaster, with 32 tools. Case 220068.

Contents:
- 2C electrician screwdrivers 75, 75, 125, 150 mm
- 2C engineers' screwdrivers 100, 150 mm
- 2C cross slotted screwdrivers PH, size 1 + 2
- 2C combination pliers, 180 mm
- 2C telephone pliers, 200 mm
- 2C side cutters, 160 mm
- 2C telephone pliers, 200 mm
- 2C water pump pliers, 240 mm
- ESD electronic side cutters, 115 mm
- ESD electronic needle nose pliers, 130 mm
- Electronic screwdriver set, 7-pieces
- Solder for electronic work, Sn 60%, 1.5 mm, 100 g
- Claw retriever with fixed shaft, size 165
- 2C piercing awl, square
- 2C socket wrenches 7, 8, 10
- Checking mirror, 210 mm
- Socket wrench set, 1/4", 33 piece
- Contact soldering iron, 30 watt
- Cable stripping knife, plastic handle
- Bench hammer, 300 g
- Universal saw, heavy 150 mm
- Cable stripper, 0.5 - 4 mm Ø
- Combination snips, 190 mm
- VDE/GS Voltage tester
- Tweezer angled

Art. no.	set	empty	kg	PU
220177	**32-pieces**	220068	10,260	1

Tool case „OmegaMax Start VDE"

ABS+

rigid case, black, 28 compartments, 1 combination lock, 1 separation for documents, 2 plate for tools, 2 lockable locks, ground bowl with variables to dividing bars, framed push border. Tool case 220042.

Contents:
- 2C-VDE electrician's screwdrivers 2.5 x 75, 4 x 100, 5.5 x 125 und 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C combination pliers, 185 mm
- 2C side cutters, 165 mm
- 2C telephone pliers, 200 mm
- 2C wire stripping pliers, 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1 blade
- Engineers' hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians' chisel, 10 x 250 mm
- Paint scraper, 40 mm
- Voltage tester, blade 50 mm
- Measuring tape, 3 m
- Water brush

Art. no.	set	empty	kg	PU
220043	**19-pieces**	220042	11,000	1

Tool case trolly „OmegaMax Trolley Start VDE“

ABS+

rigid case, black, 28 compartments, 1 combination lock, 1 separation for documents, 2 plate for tools, 2 lockable locks, ground bowl with variables to dividing bars, framed push border. Tool case 220048.

Contents:
- 2C-VDE electrician‘s screwdrivers 2.5 x 75, 4 x 100, 5.5 x 125 und 6.5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C combination pliers, 185 mm
- 2C side cutters, 165 mm
- 2C telephone pliers, 200 mm
- 2C wire stripping pliers, 160 mm
- Wire stripper, hooked blade, 8 - 28 mm Ø
- Cable knife, 1 blade
- Engineers’ hammer, 300 g
- PUK pocket saw, fixed handle
- Electricians’ chisel, 10 x 250 mm
- Paint scraper, 40 mm
- Voltage tester, blade 50 mm
- Measuring tape, 3 m
- Water brush

Art. no.	set	empty	kg	PU
220137	**19-pieces**	220048	11,500	1

Tool case „Delux Plus“ 1000 V

ABS+

rigid case, signal-red, with high-grade fittings, complete with 54 safety tools, case 220076.

Contents:
- 2C-VDE electrician‘s screwdriver 2.5 x 75, 4 x 100, 5.5 x 125, 6.5 x 150 mm
- 2C-VDE cross slotted screwdriver PH, size 1 + 2
- VDE telephone pliers, straight, 200 mm
- VDE telephone pliers, bent, 200 mm
- VDE combination pliers 185 mm
- VDE side cutters 165 mm
- VDE wire stripping pliers 160 mm
- Socket wrenches 5.5, 7, 8, 10 mm
- Voltage tester „Profi“
- Hexagon sockets 10, 11, 12, 13, 14, 15, 16
- Reversible ratchet 1/2“
- T-sliding handle 1/2“
- Open end spanners 10, 12, 13, 19, 22, 24
- Cable knife
- Cable scissors 200 mm
- Slip-on bushes 5-pieces No. 1, 10 mm
- Slip-on bushes 5-pieces No. 2, 10 mm
- Slip-on bushes 5-pieces No. 3, 10 mm
- Plastic pliers 180 mm
- Plastic clamp
- Covering tape, grey
- Covering tape, red
- Safety grip
- Gloves size 9

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220239	**54-pieces**	220076	11,780	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „Leopard“ 1000 V

ABS+

rigid case, signal-red, complete with 32 safety tools (460 x 180 x 310 mm).

Contents:
- 2C-VDE electrician’s screwdrivers
  2,5 x 75, 4 x 100, 6,5 x 150, 8,0 x 175, 10,0 x 200 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C-VDE cross slotted screwdrivers PZ, size 1 + 2
- Retaining screwdrivers 100, 125 mm
- Retaining screwdriver, cross-slotted
- Right angle allen keys, 6, 8 mm
- VDE round nose pliers, 160 mm
- VDE telephone pliers, straight, 200 mm
- VDE telephone pliers, bent, 200 mm
- VDE combination pliers 185 mm
- VDE wire stripping pliers 160 mm
- VDE side cutter, 165 mm
- Socket wrenches 5,5, 6, 7, 8 mm
- Voltage Tester „Profi“
- Cable knife, insulated
- Cable knife
- Cable scissor
- Plastic pliers 180 mm
- Covering tape, red 10 m
- NH-safe

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220136	**32-pieces**	220076	9,400	1

Tool case „Power Pack“ 1000 V

ABS+

rigid case, signal red, with Alu frame and 2 locks, 3 plates with many compartements for tools, case 220076 (460 x 180 x 310 mm).

Contents:
- 2C-VDE electrician‘s screwdrivers
  2,5 x 75, 4 x 100, 5,5 x 125 und 6,5 x 150 mm
- 2C-VDE cross slotted screwdrivers PH, size 1 + 2
- 2C-VDE screwdrivers PZ/FL, size 1 + 2
- 2C-VDE combination pliers 185 mm
- 2C-VDE diagonal cutter 165 mm
- 2C-VDE telephone pliers 200 mm
- 2C-VDE cable cutter 200 mm
- 2C-VDE water pump pliers 240 mm
- VDE cable knive, straight blade, 50 mm
- Safety glasses „PRO“
- Automatic wire stripper 0,2 - 6 mm²
- Voltage tester „TestPen“
- Voltage tester „Profi“
- Finger gloves, size 9
- Ear protection plugs
- NH-safety fuse grip

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220303	**21-pieces**	220076	8,680	1

Tool case „Merkur Plus“

ABSfly

rigid case, black, Master's case with 25 tools. Case 220034.

Contents:
- 2C electrician's screwdrivers 75, 125, 150 mm
- 2C engineers' screwdrivers 100, 150 mm
- 2C cross slotted screwdrivers, PH, size 1 and 2
- Universal scissor, 190 mm
- Cable knife, 1-piece
- Wire stripper, hooked blade, 8 - 28 mm Ø
- 2C combination pliers, 180 mm
- 2C heavy duty side cutters, 180 mm
- 2C telephone pliers, 200 mm
- 2C telephone pliers, bent, 200 mm
- 2C water pump pliers, 240 mm
- 2C wire stripping pliers, 160 mm
- PUK pocket saw, fixed handle
- Electricians' chisel 10 x 250 mm
- Measuring stick, 2 m
- Alu level, 400 mm
- 2C piercing awl
- Voltage tester 150 - 250 V
- Adjustable wrench, 210 mm
- Engineers' hammer, 300 g
- Paint scraper, 50 mm

Art. no.	set	empty	kg	PU
220035	**25-pieces**	220034	9,980	1

Tool case „Venus Plus“ 1000 V

ABSfly

rigid case, signal-red, complete with 32 safety-tools. (460 x 180 x 310 mm).

Contents:
- Electrician's screwdrivers 75, 100, 150, 175, 200 mm
- Cross slotted screwdriver, PH size 1 + 2
- Cross slotted screwdriver, PZ No. 1 + 2
- VDE round nose pliers 160 mm
- VDE telephone pliers, straight, 200 mm
- VDE telephone pliers, bent, 200 mm
- VDE combination pliers 185 mm
- VDE side cutter 165 mm
- VDE wire stripping pliers 160 mm
- Retaining screwdrivers 100, 125 mm
- Retaining screwdriver cross-slotted
- Right angle allen keys, 6, 8 mm
- 2C-VDE socket wrenches 5,5, 6, 7, 8 mm
- Voltage tester "Profi"
- Cable knife, insulated
- Cable knife
- Cable scissor
- Plastic pliers 180 mm
- Self adhesive PVC tape, red, 10 m
- NH-Safety grip
- Finger gloves, size 9

1000 V IEC 60900:2004

Art. no.	set	empty	kg	PU
220033	**32-pieces**	220032	10,160	1

PU Packing unit PE Price unit

The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Tool case „HAUPA – Lifesaver“ 1000 V

Aluminium case, equipped with 54 safety tools.
Size: 830 mm x 550 mm x 300 mm, weight: 37 kilos.

Contents:

- 2C-VDE socket wrenches 5, 5,5, 7, 8, 10, 11, 13 mm
- Voltage-Tester
- 2C-VDE electrician’s screwdrivers
  2,5 x 75, 3 x 100, 4 x 100, 5,5 x 125, 6,5 x 150 mm
- 2C-VDE cross-slotted-screwdrivers PH, size 1, 2
- 2C-VDE cross-slotted-screwdrivers PZ, size 0, 1, 2
- VDE right angle-allen key 3
- VDE right angle-allen key 4
- VDE right angle-allen key 5
- VDE right angle-allen key 6
- VDE right angle-allen key 8
- VDE right angle-allen key 10
- VDE right angle-allen key 12
- VDE open-End Spanners
  6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19, 22, 24, 27, 30 32
- spanner for switch-cabinets
- finger gloves, size 10
- VDE safety face mask
- VDE safety grip
- VDE electricans boots, size 42
- VDE insulating floor mat
- VDE rubber towels 600 mm
- VDE plastic clip 160 mm (2-pieces)
- Slip-on busches 10 mm (4-pieces)
- Safety belt 1400 mm
- Fallstop-breaking device and rope shortening 2 m
- VDE knife with strong blade
- VDE cable cutter 200 mm
- VDE combination pliers 185 mm
- VDE side cutter 185 mm
- VDE long chain nose pliers 200 mm
- VDE wire stripping pliers 160 mm
- VDE tweezer, pointed round 150 mm
- Fall breaking belt typ A

1000 V IEC 60900:2004

Art. no.	set	width	height	depth	kg	PU
220400	**54-pieces**	830	550	300	37,0	1
220079	**empty**	830	550	300	18,6	1

Assortment box (Polypropylene)

Features: Ideal for small parts – the lighter and reliable alternative to sheet steel bulk storage chests. Equipped with removable boxes thus allowing individual division. U-profiles in the cover and grids in the bottom of the box prevent unwanted slipping and allow stacking of several bulk storage chests.
Dimensions: W = 420 x D = 350 x H = 60 mm, colour: black/green.
Material: Bulk storage chest from polypropylene with transparent cover, rounded edges, ergonomic carrying handle and rigid snap closures.

Art. no.	width	height	depth	kg	PU
220131	420	65	335	1,200	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

SysCon - Systemcontainer

haupa®

... convincing solutions

HAUPA SysCon product profile:

The basic idea behind the System Container is that the individual containers can be connected to each other to enable easy transport thus ensuring that simple access is provided to the contents of all containers.
The containers may be offered in an empty state or with contents. If sold with contents, the contents should encompass assortments which include connection materials, fixture materials and tools.

In addition, the System Container should also acts as a transportation method of HAUPA Smart Hydraulics since the stacking concept enables the hydraulic pressing tools to be organised along with the appropriate cable lugs thus forming a system unit.

The four conical feet on the uppermost container are automatically guided into the correct position on the container below. The connection of the containers is made without expenditure of force, simply be placing them on top of one another: The snap closures on the side mean that the containers can be separated just as easily. The closures are pull gently outwards which enables lifting.

When stacking, the container handles may be extended or folded in.

The design of the container ensures that water cannot enter the container.

Quality profile:
In order to ensure maximum stability, the containers are made from ABS. ABS is capable of withstanding both high and low temperatures without distorting or breaking.

The hard tests under a variety of conditions:
Fall tests with both empty and filled containers, stress tests, bounce tests and tensile tests have proved the robustness of the container and of components such as handles, closing flaps, snap closures etc.

Target group:
Due to the high quality and the extreme robustness afforded by this product, the target users are professionals:
Trade - Industry - Laboratories, etc.

ABS plastic box „SysCon S“

outer dimensions: 464 x 353 x 142 mm
inner dimensions: 400 x 300 x 80 mm

without inlay

Art. no.	width	depth	height	kg	PU
220370	400	300	80	2,200	1

ABS plastic box „SysCon S mobil“

outer dimensions: 464 x 353 x 142 mm
inner dimensions: 400 x 300 x 80 mm
2 swivel castors
2 swivel castors with locking function

without inlay

Art. no.	width	depth	height	kg	PU
220371	400	300	80	4,300	1

ABS plastic box „SysCon M“

outer dimensions: 464 x 353 x 212 mm
inner dimensions: 400 x 300 x 150 mm

without inlay

Art. no.	width	depth	height	kg	PU
220372	400	300	150	2,600	1

ABS plastic box „SysCon M mobil“

outer dimensions: 464 x 353 x 212 mm
inner dimensions: 400 x 300 x 150 mm
2 swivel castors
2 swivel castors with locking function

without inlay

Art. no.	width	depth	height	kg	PU
220380	400	300	150	4,700	1

ABS plastic box „SysCon XL“

outer dimensions: 464 x 335 x 362 mm
inner dimensions: 400 x 300 x 312 mm

without inlay

Art. no.	width	depth	height	kg	PU
220650	400	300	142	2,800	1

ABS plastic box „SysCon XL mobil“

outer dimensions: 464 x 335 x 362 mm
inner dimensions: 400 x 300 x 312 mm
2 swivel rolls
2 swivel rolls with locking function

without inlay

Art. no.	width	depth	height	kg	PU
220651	362	335	464	9,180	1

Video SysCon

SysCon for assortment inserts, empty

Contents:
1 220370 ABS plastic box „SysCon S“
2 220376 Foam insert „SysCon“ 400 x 300 x 15 mm
27 220131/M small boxes M

Art. no.		kg	PU
220620	**empty**	2,800	1

SysCon M for assortment insert, empty

Contents:
1 220372 ABS plastic box „SysCon M“
1 220374/S Assortment insert SysCon with foam
1 220399 Foam „SysCon“ 395 x 300 x 10 mm
18 220131/S Small boxes S
15 220131/M Small boxes M
4 220131/L Small boxes L

Art. no.		kg	PU
220770	**leer**	3,000	1

SysCon for assortment inserts, empty

Contents:
1 220370 ABS plastic box „SysCon S“
2 220376 Foam insert „SysCon“ 400 x 300 x 15 mm
11 220131/M small boxes M
8 220131/L small boxes L

Art. no.		kg	PU
220628	**empty**	2,900	1

SysCon tool box, empty

Contents:
1 220372 ABS plastic box „SysCon M“
1 220399 Foam insert „SysCon“ 300 x 395 x 10 mm
1 220374 Tools insert „SysCon“
1 220379 Tool plate „SysCon“ 11 compartments

Art. no.		kg	PU
220622	**empty**	2,400	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

SysCon tool box, empty

Contents:
1 220370 ABS plastic box „SysCon S“
2 220377 Foam insert „SysCon“ 400 x 300 x 20 mm
1 220406 Tools insert „SysCon“

Art. no.		kg	PU
220626	**empty**	2,500	1

ABS plastic box „SysCon XL“ variable

outer dimensions: 464 x 335 x 362 mm
inner dimensions: 400 x 300 x 312 mm

incl. tool plate and adjustable inner divider

Art. no.		kg	PU
220654	**empty**	4,300	1

Tool plate SysCon XL

adjustable inner divider with 10 tool straps
dimensions: 275 x 285 mm

Art. no.		kg	PU
220655	**empty**	0,200	1

Tool plate SysCon

11 compartments

Art. no.	width	depth	height	kg	PU
220379	400	300	20	0,200	1

Tools insert SysCon

Polypropylen, 5 compartments

Art. no.	width	depth	height	kg	PU
220374	400	300	80	0,200	1

Assortment insert SysCon

Polypropylen, 10 compartments

Art. no.	width	depth	height	kg	PU
220355	400	300	80	0,200	1

Tools insert SysCon with foam

Polypropylen
Contents:
1 220374 Tools insert „SysCon“
1 220399 Foam „SysCon“ 395 x 300 x 10 mm

Art. no.	width	depth	height	kg	PU
220374/S	400	300	80	0,220	1

Assortment insert SysCon with foam

Polypropylen
Contents:
1 220399 Foam „SysCon“ 395 x 300 x 10 mm
1 220355 Assortment insert „SysCon“

Art. no.	width	depth	height	kg	PU
220355/S	400	300	80	0,220	1

Assortment insert SysCon

Polypropylen, 10 compartments

Art. no.	width	depth	height	kg	PU
220375	400	300	80	0,200	1

Assortment insert SysCon

Polypropylen, 10 compartments

Art. no.	width	depth	height	kg	PU
220356	400	300	80	0,200	1

Assortment insert SysCon with foam

Polypropylen
Contents:
1 220399 Foam „SysCon“ 395 x 300 x 10 mm
1 220375 Assortment insert „SysCon“

Art. no.	width	depth	height	kg	PU
220375/S	400	300	80	0,220	1

Assortment insert SysCon with foam

Polypropylen, with adjustable compartments
Contents:
1 220399 Foam „SysCon“ 395 x 300 x 10 mm
1 220356 Assortment insert „SysCon“, with adjustable compartments

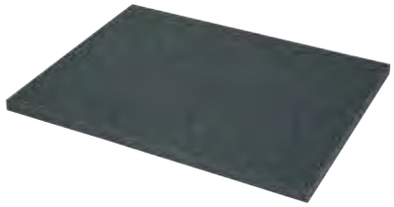
Art. no.	width	depth	height	kg	PU
220356/S	400	300	80	0,220	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Foam insert SysCon

SysCon

soft foam, 400 x 300 x 15 mm

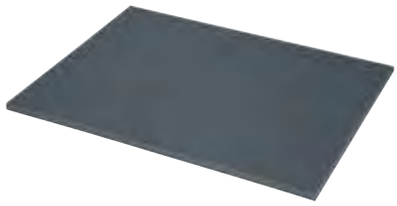


Art. no.	width	depth	height	kg	PU
220376	400	300	15	0,030	1

Foam insert SysCon

SysCon

soft foam, 400 x 300 x 10 mm

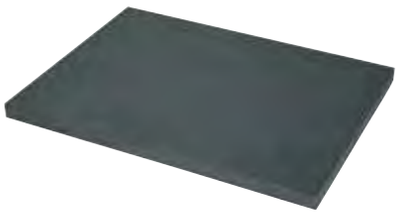


Art. no.	width	depth	height	kg	PU
220399	400	300	10	0,020	1

Foam insert SysCon

SysCon

rigid foam, 400 x 300 x 20 mm

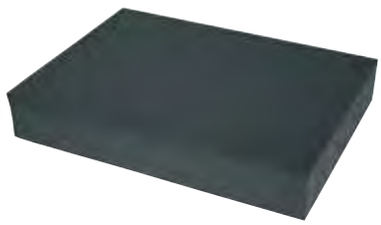


Art. no.	width	depth	height	kg	PU
220377	400	300	20	0,055	1

Foam insert SysCon

SysCon

rigid foam, 400 x 300 x 65 mm



Art. no.	width	depth	height	kg	PU
220378	400	300	65	0,200	1

SysCon hand truck

SysCon

Properties:
- up to 60 kg
- sturdy aluminum frame
- Hand truck shovel: 390 x 280 mm

Art. no.	max.kg	kg	PU
220602	60	2,500	1

SysCon starter set

SysCon

Car securing trolley made from anodised aluminium for HAUPA SysCon system containers. The ideal companion for use out and about. Easy installation in all car models.

220370 ABS plastic box “SysCon S”
220372 ABS plastic box “SysCon M”
220644 SysCon load securing “SysCon Car”
220375 Assortment inset “SysCon”
220374 Tool inset “SysCon”

Properties:
21 slots (rear side)
3 round holes each side, left and right
5 round holes in floor plate

Volume for contents:
maximum 5 ABS boxes “SysCon M”
maximum 8 ABS boxes “SysCon S”

Art. no.	width	depth	height	kg	PU
220646	475	360	1080	10,000	1

SysCon tool case set

Contents: 17 tools

220372	ABS plastic box „SysCon M”
220374	Tools insert „SysCon“
220399	Foam „SysCon” 400 x 300 x 10 mm
220379	Tool plate „SysCon“ 11 compartments
210696	Spanner for switch-cabinets
210695	Automatic wire stripper 0,2 – 6 mm²
263842	VDE electrical tape 19 mm x 20 mm, black
263844	VDE electrical tape 19 mm x 20 mm, white
263860	VDE electrical tape 19 mm x 20 mm, green/yellow
200031	Cable stripping knife 8 – 28 mm²
211200	2C-VDE combination plier DIN 5244, 185 mm
211204	2C-VDE side cutter DIN 5238 B, 165 mm
211208	2C-VDE telephone plier DIN 5236 A, 200 mm, straight
101870	2C-VDE screwdriver PZ/FL 1
101872	2C-VDE screwdriver PZ/FL 2
181910	2C-VDE screwdriver 2,5 x 75 mm
101914	2C-VDE screwdriver 3,5 x 100 mm
101916	2C-VDE screwdriver 4,0 x 100 mm
101920	2C-VDE screwdriver 6,5 x 150 mm
101942	2C-VDE screwdriver PH1
101944	2C-VDE screwdriver PH2

Art. no.	set	empty	kg	PU
220392	**17-pieces**	220372	4,300	1

SysCon tool case set „Start VDE“

Contents: 22 tools

220372	ABS plastic box „SysCon M”
220374	Tools insert „SysCon“
220399	Foam „SysCon” 400 x 300 x 10 mm
220379	Tool plate „SysCon“ 11 compartments
240042	Aluminium spirit levels 400 mm
180184	Engineers‘ hammer 300 g
210695	Wire stripper Super Plus 0,2 – 6 mm²
200043	Universal stripper 0,2 – 4 mm²
211200	2C-VDE combination pliers DIN 5244, 185 mm
211217	2C-VDE heavy duty side cutters DIN 5238 A, 170 mm
211208	2C-VDE telephone pliers DIN 5236 A, 200 mm, straight
101999	2C-VDE screwdrivers set
101870	2C-VDE screwdriver with PZ slot profile PZ/FL 1
101872	2C-VDE screwdriver with PZ slot profile PZ/FL 2
180092	Electricians’ chisels 10 x 250 mm
100647	Voltage tester VDE/GS
150090	Carpenters‘ pencil
150024	Paint scrapers 40 mm
150004	Water brushes
240002	Folding rules 2 m
150006	Plaster cup

Art. no.	set	empty	kg	PU
220608	**22-pieces**	220372	6,500	1

PU Packing unit PE Price unit

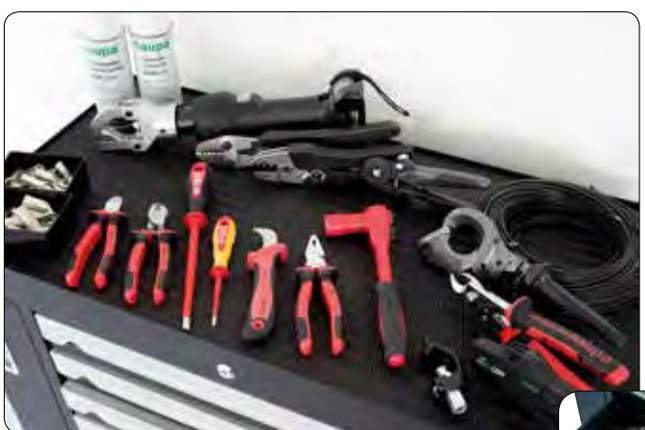
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

HAUPA workshop trolley

without contents (inlays)

- With 6 drawers and 2 outer compartments
- Outside dimensions: 907 x 474 x 815
- Drawer dimensions:
  3 small drawers: 568 x 75 x 398 mm
  3 large drawers: 568 x 154 x 398 mm
- Material thickness: 0.8 mm
- With practical side handle
- 4 castors (2 rollers with brake)
- 40 kg load capacity per drawer
- Drawers suitable for HAUPA foam inserts
- 3 integrated locks
- EVA mats on the trolley and in the drawers prevent unintentional slippage

Art. no.	width	depth	height	kg	PU
220750	907	474	815	69,5	1



Workshop trolley

Robust, versatile and mobile

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...convincing solutions

Germany: **HAUPA**, Koenigstr. 165-169, 42853 Remscheid, Phone: +49 (0)2191 8418-0, Fax: +49 (0)2191 8418-840, sales@haupa.com

Suitable for the new HAUPA workshop trolley - Your individual content options:

Foam inlay for socket set "Torque" ¼"

including tools

Art. no. 220640/H
51-pieces, ¼"

Foam inlay for socket set "Torque" ½"

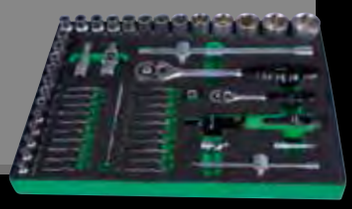
including tools

Art. no. 220642/H
32-pieces, ½"

Foam inlay for socket set "SocketMax" ¼" + ½"

including tools

Art. no. 220600/H
57-pieces, ¼" + ½"



Foam inlay for socket set "VDE-Socket" ½"

with ½" insert tools, impact-proof plastic up to -40 °C, for safe working even in low temperatures

Art. no. 220413
20-pieces, ½"

Foam inlay for smart battery hydraulics "S0-6"

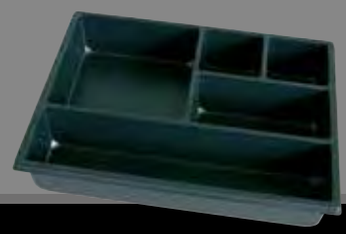
Hydraulics for replaceable pressing tools, head can be rotated by 180°, with quick opening, manual return after completed pressing.

Art. no. 216801/H
6 - 300 m²

Tool inlay "SysCon"

Polypropylen

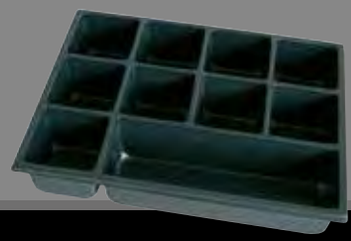
Art. no. 220374
5 compartments



Assortment insert "SysCon"

Polypropylen

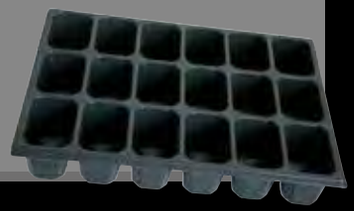
Art. no. 220375
10 compartments



Assortment insert "SysCon"

Polypropylen

Art. no. 220355
18 compartments



Assortment insert "SysCon"

Polypropylen, with adjustable compartments

Art. no. 220356
variable

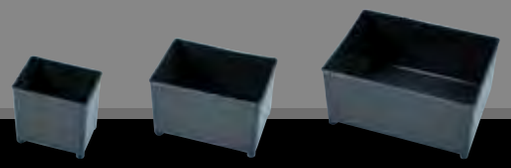
"SysCon" small parts box

Size S: 40 x 55 x 53 mm (220131/S)
Size M: 80 x 55 x 53 mm (220131/M)
Size L: 80 x 110 x 53 mm (220131/L)

Art. no. 220131/S
40 x 55 x 53 mm

Art. no. 220131/M
80 x 55 x 53 mm

Art. no. 220131/L
80 x 110 x 53 mm



HUPchemie

haupa®
... convincing solutions

Construction Glue HUPfix+

Application HUPFix+:
Gluing of metal, wood and synthetic materials in electrical sectors, building, furniture manufacture, container construction, metal work, machinery, air conditionioning, yacht/boat construction, body-work, vessel construction and construction of window and door frames. Suitable in applications where silicones can not be used. An adhesive with a grab and bond strength so good it can be classed as the ultimate performance adhesive. With HUPfix+ it is possible to glue heavy materials like cables, stone, wood, tiles and metals on ceilings and walls, where other common glues fail.

Characteristics:
The materials which needs to be glued, must be clean, free of oil and grease. Apply the HUPfix+ on one side, place the material to be glued together and press firm. Direct adhesion. Skinning time after 10 till 20 minutes. Curing 3 mm/24 hours. Shelf life: 12 months. Temperature resistance: -40 till +100°C (130°C short-term up to 2-3 hours). Application temperature: +5 till +40°C.

170206 HUPfix+

Art. no.	ml	form	kg	PU
170206	310	Adhesion+Sealing	0,450	1

MS-Polymer HUPfix

How to use HUPfix:
HUPfix is a high-quality adhesive and sealant with an MS polymer base. UV, weather, saltwater and chlorine resistant. Very good adhesion to many surfaces, in most cases, without primer. Hardens quickly. The join must be smoothed immediately after application using acid-free soapy water.

Properties:
Temperature resistant from -40 to +100°C. Processing temperature +5 to +40°C. HUPfix can be used both as adhesive and for grouting. Can be painted.

Art. no.	ml	form	colour	kg	PU
170216	310	Adhesion+Sealing	transparent	0,300	1
170210	310	Adhesion+Sealing	grey	0,440	1
170212	310	Adhesion+Sealing	black	0,440	1
170214	310	Adhesion+Sealing	white	0,440	1
170218	120	Adhesion+Sealing	white	0,120	1

Construction Adhesive HUPmount

How to use HUPmount:
Used to joint wood, plywood, fibreboard, MDF, laminated boards, metals, aluminium, natural stone, artificial stone such as Corian and Varicor, cement, marble, ceramics, acrylic, plastics, plasterboard, polystyrene, hard foam, insulation and many more, for fitting and securing dowels in brickwork.

Properties:
HUPmount is weather-resistant in accordance with DIN EN 204 D4, combines almost all materials, single-component, easy to use, solvent-free, silicone-free, aging-resistant, resistant to many chemicals, good initial adhesion (full load may be applied after approximately 15 minutes), frost-safe, high final durability, suitable for natural stone.
Temperature resistant from -30°C to +110°C.

Art. no.	ml	form	kg	PU
170208	310	Adhesion+Sealing	0,470	1

HUPsilicon

How to use HUPsilicon:
For grouting indoors and outdoors, window glazing and sealing of joints in wood, plastic and aluminium windows. Corresponds to DIN 18545 Part 2. Very good adhesion on the majority of usual varnishes and paints.

Properties:
Permanently elastic. Aging, weather and UV resistant. Odour neutral. No early crack formation. Good adhesion on worktops. No surface stickiness.
Temperature resistant from -50°C to +150°C
Processing temperature +5°C to +40°C.
Skin formation time approximately 10-15 minutes (at 23°C).

Art. no.	ml	form	colour	kg	PU
170200	310	Adhesion+Sealing	transparent	0,450	1
170202	310	Adhesion+Sealing	white	0,450	1
170204	310	Adhesion+Sealing	grey	0,450	1

High temperature silicon HUPsilicon

How to use HUPsilicon:
For sealing joints and surfaces in temperature-critical areas (extreme cold and heat). Can be used as coating for solid seals. For sealing drive axle covers, inlet systems, differential covers, gear, front and camshaft bearing covers, thermostat housings, oil pumps, oil tanks, spur-wheel covers, spotlights and street lighting, windscreens, water pumps etc. (not suitable for adherence to PP, PE, Teflon® and bitumen surfaces, or for parts constantly exposed to solvents)

Properties:
Sealing and adhesive mass with a silicone base. Heat stabilised, excellent resistance to UV and weather influences as well as to motor and gear oils, resistant to chemicals, mechanical and environmental influences, resistant to water, salt water, cold, heat, very high flexibility and good adherence on almost all surfaces.
Colour: Black
Skin formation time: 10 minutes
Temperature resistance: -40° to +260°

Art. no.	ml	colour	kg	PU
170250	310	black	0,450	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cartridge gun

for 310 ml cartridges

- for processing silicone and polymer cartridges

Art. no.	kg	PU
170252	0,450	1

Cartridge gun „Profi“

for 310 ml cartridges

- for processing silicone and polymer cartridges

Art. no.	kg	PU
170254	0,450	1

2 Component High-Performance-Adhesive HUPmega

How to use HUPmega:
HUPmega is mixed automatically. Within 4 minutes, combine the pieces and wait 24 hours to harden (approximately 75% of the final hardness will be achieve after 2 hours at room temperature).

Properties:
Temperature-resistant: -55°C to+120°C
Open time: approximately 5 minutes
Mechanical processing: After approximately 30 minutes
Final hardness: After 24 hours
Processing temperature: from +10°C to +30°C
Weather-resistant, good media resistance
Storage temperature +6°C to maximum +28°C

Art. no.	ml	form	kg	PU
170220	25	Adhesion+Sealing	0,050	1

Mixing nozzle

- for 2-component adhesive

1 PU = 2 sleeves

Art. no.	form	kg	PU
170234	Adhesion+Sealing	0,003	1

2 Component-epoxyd glue HUPepoxyd

How to use HUPexpoxyd:
Clean the surfaces to be glued, open the cap and screw the mixing nozzle into place. Dispose of the first 2 g since this will not be mixed 1:1. Then apply the glue and join the parts. Remove the mixing nozzle and dispose it. Replace the cap. Store open cartridges in a cool place and use as soon as possible (you can also work without the nozzle).

Properties:
Temperature resistant: -40°C to +80°C. Processing temperature: +10°C to +30°C. Final hardness: 24 hours. Open time: approximately 5 minutes.

Art. no.	ml	form	kg	PU
170222	25	Adhesion+Sealing	0,025	1

2 Component liquid metal HUPfastMetal

How to use HUPfastMetal:
Clean the surfaces to be glued, open the cap and screw the mixing nozzle into place. Dispose of the first 2 g since this will not be mixed 1:1. Then apply the glue and join the parts. Remove the mixing nozzle and dispose it. Replace the cap. Store open cartridges in a cool place and use as soon as possible (you can also work without the nozzle).

Properties:
Temperature resistant: -50°C to +120°C, Open time approximately 5 - 10 minutes. After approximately 30 minutes, you will be able to mechanically process the repaired location.

Art. no.	ml	form	kg	PU
170224	25	Adhesion+Sealing	0,025	1

HUPsuperglue

How to use HUPsuperglue:
The surfaces must be clean and free of oil or grease. Apply a thin layer of HUPsuperglue to one side and join the parts.

Art. no.	ml	form	kg	PU
170226	20	Adhesion+Sealing	0,020	1

Fine droplet tip

- for superglue

1 PU = 2 tips

Art. no.	form	kg	PU
170236	Adhesion+Sealing	0,001	1

Double-Sided Acryl Tape HUPtapeDouble

How to use HUPtapeDouble:
Permanent and safe hold on almost all smooth surfaces such as metal, wood, glass, plastic, ceramics and rubber. Ideal for mounting brackets, signs, hooks, shelf elements, etc.
Not suitable for: PE, PP, PTFE (e.g. Teflon®), silicone, paper and vinyl wallpaper, non-load-carrying surfaces as well as surfaces with dirt-repelling coatings.

Properties:
HUPtapeDouble is an extremely strong, double-sided sticky tape. For durable adhesion, installation and securing both indoors and outdoors. Load up to a maximum of 1.3 kg.
Transparent. Surfaces are not damaged. Moisture resistant.
Used in dry, clean and well-aired areas with temperatures of +10°C to +30°C.

Art. no.	form	kg	PU
170232	Adhesion+Sealing	0,050	1

UV-Hardening GRP Repair-Film HUPplaxUV

How to use HUPplaxUV:
Easy to use – cut to the size of the surface to be repaired, done. Extremely durable, fibre-glass reinforced plastic, vibration resistant, remains flexible, weather, UV and moisture resistant. Good subsequent processing (sanding, drilling, painting, etc.), resistant to oils and solvents, permanently temperature resistant from -40°C to +200°C, no shrinking or expansion during processing and hardening, adheres to all surfaces except polypropylene (PP), quick to harden (as of 5 minutes, depending on UV radiation).

Properties:
HUPplaxUV is a unique, easy to use repair foil that is activated and hardened by UV radiation or sunlight. The foil is a fibre-glass reinforced polyester with extremely good adhesive and a long life. No mixing, no weighing, no sources of error.

Maintenance and repair of roofs, stairs, basins. pipes, lines, cable ducts, switching cabinets etc., all surfaces made of wood, metal, glass, ceramic, brickwork, cement and plastic.

Art. no.	form	kg	PU
170230	Adhesion+Sealing	0,120	1

Screw-Locking Medium-Strength HUPlockM

How to use HUPlockM:
For all screws with threads up to M36.
Extremely viscous, medium hard, can be removed.

Properties:
Hand-tight: 10 - 20 minutes
Functionally-tight: 1 - 3 hours
Temperature resistant: -55 to +150°C

Art. no.	ml	form	kg	PU
170238	50	Adhesion+Sealing	0,050	1

Screw-Locking High-Strength HUPlockH

How to use HUPlockH:
For all screws with threads up to M20.
Medium viscosity, extremely durable, difficult to remove.

Properties:
Hand-tight: 10 - 20 minutes
Functionally-tight: 1 - 3 hours
Temperature resistant: -55 to +150°C

Art. no.	ml	form	kg	PU
170240	50	Adhesion+Sealing	0,050	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Anti-Friction-Coating HUPcable

Application HUPcable:
Spray the prepared cable. Wait for the propellant gas to evaporate (a few seconds) then pull in the cable.

Properties:
HUPcable simplifies pulling of cable into the protective hose.

Art. no.	ml	form	kg	PU
170174	400	Coating+Lubrication	0,450	1

Water-based lubricants and slip agents

This prevents 80% of friction and facilitates cable laying through excellent slippage in every situation. As soon as the water is evaporated, the main part of the lubricant remains und ensures that old cables can easily be pulled out and new ones inserted, for many years and at different temperatures.

Gel lubricant art. 143344: plastic bottle 500 ml
Gel lubricant art. 143345: plastic bottle 1.000 ml

Art. no.		kg	PU
143344	plastic bottle 500 ml	0,572	1
143345	plastic bottle 1.000 ml	1,150	1

Dispenser for plastic bottle

Art. no.	kg	PU
143346	0,016	1

Water-based lubricants and slip agents

This prevents 80% of friction and facilitates cable laying through excellent slippage in every situation. As soon as the water is evaporated, the main part of the lubricant remains und ensures that old cables can easily be pulled out and new ones inserted, for many years and at different temperatures.

Foam lubricant, spray can 400 ml

Art. no.		kg	PU
143348	spray can 400 ml	0,457	1

Aluminium-Spray HUPalu

Application HUPalu:
For servicing and maintaining the value of machine parts, for processing of machines, furnaces, heating and steam systems, pipes, exhaust systems, turbines, etc., as a container protection, coating for wheels, trucks bodies and much more.

Properties:
HUPalu pure aluminum spray 99.5%, heat resistant up to 900°C, anti-corrosive and high-temperature-resistant, scratch-, brushing and abrasion resistant, weather resistant.

Art. no.	ml	form	kg	PU
170154	400	Coating+Lubrication	0,450	1

Marking Paint HUPmark

Application HUPmark:
The area to by sprayed must be dry, clean and grease-free. Bring the can up to room temperature. Before use and after each pause in spraying, shake well until the mixing ball moves freely. After use, spray out upside down.

Properties:
Marking spray for industrial, craft, construction and mining etc. For fast, clean and permanent marking of: Cement, wood, masonry, metal, asphalt, soil, plaster, glass, ceramics etc. For labelling and marking of: Pavements and roads, construction measures, breakthroughs, pipe and cable ducts, free from heavy metals, lead and cadmium, dries quickly and is friction and waterproof.

Art. no.	ml	colour	kg	PU
170140	500	luminous red	0,550	1
170141	500	luminous yellow	0,550	1
170142	500	luminous pink	0,550	1

Zinc-Spray dark HUPzincDark/Light

Application HUPzincDark:
For rectification of hot-dip galvanized parts, subsequent protection after welding, to repair damaged surfaces, corrosion protection by galvanic effect, protective coating for pipes and metals, primer for subsequent coats. Forms a durable protective layer with water-insoluble Zinc oxide, iron (steel) and thus protects also defective places.

Properties:
HUPzinc is a mixture of high-purity zinc and aluminum powder, heat resistant, weather-resistant and quick-drying.

Art. no.	ml	form	colour	kg	PU
170150	400	Coating+Lubrication	Dark	0,450	1
170152	400	Coating+Lubrication	Light	0,450	1

Stainless-Steel-Spray HUPinox

Application HUPinox:
For maintenance and repair, maintaining the value of stainless steel, for processing of pipes, machinery, truck bodies, silos, turbines, etc., as a container and tank system protection and much more.

Properties:
HUPinox stainless steel coating, alloy, consisting of chrome >15%, nickel >7%, manganese >1%, heat resistant to 300°C, protects against corrosion, durable and weather-resistant protective layer, good and secure adhesion to metal, wood, glass, stone and much more.

Art. no.	ml	form	kg	PU
170156	400	Coating+Lubrication	0,450	1

Silicone-Spray HUPsil

Application HUPsil:
In order to eliminate creaking, squeaking and running noise of machines, vehicles, chains. As a lubricant, and as anti-aging. To clean, care and protection of metals, rubber and plastic, for retracting of rubber and plastic profiles, etc.

Properties:
HUPsil is a universal silicone spray and lubricant. It is waterproof, weather and temperature-resistant from -30°C to +200°C. It acts antistatic and dust repellent, lubricates and waterproofs all surfaces without being greasy, anti-corrosive and moisture-resistant.

Art. no.	ml	form	kg	PU
170162	400	Coating+Lubrication	0,450	1

Universal-Lubricant HUP40

Application HUP40:
Loosens persistent fittings, nuts, bolts, etc. due to rust and oxidation, removes moisture and condensation on cables and electrical connections and contacts, is based on an ultra-thin film which protects all metal surfaces and prevents further corrosion, keeps moisture from cables and contacts and prevents further accumulation of moisture, Lubricates cares and protects tools, machines, precision instruments, locks, sliding and guiding rails, wheels, bolts, hinges, fittings, etc.
Silicone free! It even melts ice on locks, bolts, hinges, fittings, etc.

Properties:
HUP40 high quality universal spray with 1001 solutions!

Art. no.	ml	form	kg	PU
170166	400	Coating+Lubrication	0,450	1
170168	50	Coating+Lubrication	0,075	1

PTFE-Spray HUPptfe

Application HUPptfe:
Anywhere where oil- and grease coatings are unwanted. The special lubricant for all maintenance-free gliding lubrications, protects all metals, leather and wood parts - anti-aging for rubber parts, seals and plastics.
To eliminate creaking, squeaking and running noise of machinery, chains, windows, doors, trays, etc. In the electro-, plastics-, wood-, paper- and textileindustrie. Water-resistant coating of paper, cork and textiles.

Properties:
HUPptfe Oil-free Dry Lubrication Spray. High temperature resistant surface protection from -60 °C to +250°C with long-term effect and low coefficient of friction, quick drying, highly adhesive, grease-free and colorless, tasteless after application, the protection film seems anti-corrosive and moisture repellent.

Art. no.	ml	form	kg	PU
170158	400	Coating+Lubrication	0,450	1

Allround PTFE-Spray HUPptfeSynt

Application HUPptfeSynt:
Especially for long-lasting lubrication under very strong pressure and frictional conditions. It protects all moving parts and prevents snagging, creaks and squeaks.

Properties:
HUPptfeSynt for lubrication of precision, such as pressure-loaded parts in an enormously wide range of temperatures.

Art. no.	ml	form	kg	PU
170160	400	Coating+Lubrication	0,450	1

Polymer-Spray HUPpolymer

Application HUPpolymer:
Substitute for silicone spray as a retraction, sliding and lubricating aid, as well as long-term care for rubber, EPDM, PP, PVC etc. Significantly improved gliding characteristics on coated surfaces - the coefficients of friction are reduced up to 40%. Treated surfaces have a color-intensifying appearance. Coated surfaces are water-resistant, insensitive to contamination, further processing (gluing, painting, printing, etc.) of adjacent materials without having trouble.

Properties:
HUPpolymer contamination of tools and manufactured parts, which can occur when using silicone oils, are avoided. No stress cracking when in contact treated profiles with plexiglas or polycarbonate.

Art. no.	ml	form	kg	PU
170170	400	Coating+Lubrication	0,450	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Cutting-Oil HUPdrill

Application HUPdrill:
Targeted and clean to use when cutting, very economical and efficient in consumption. For machines, for which the complete separation of the coolant from the hydraulic oil used or lubricating oil is not present. Suitable for the treatment of iron and non-ferrous metals.

Properties:
HUPdrill special cutting oil, transparent. Alloyed oil contains highly effective EP-Additives and polar substances, elastic film of lubricant with corrosion protection, high loads through sustainable boundary layer formation, high load carrying capacity.
Provides low-wear operation with corrosion protection.

Art. no.	ml	form	kg	PU
170172	400	Coating+Lubrication	0,450	1

Anti-Rust-Spray HUPrustEX

Application HUPrustEX:
Penetrates the rust, removes oils, resins, tar and oil coal, solves persistent connections easily, eliminates rattles and squeaks protects the long term, penetrates even constrictions and facilitates the disassembly of parts. Triggers stuck screw, brings all corroded connections, such as screw, nuts, bolts, joints moving again.

Properties:
HUPrustEx penetrates and dissolves extremely effective rust, preserves and protects against new rust attack by a MoS2 protective film.

Art. no.	ml	form	kg	PU
170164	400	Coating+Lubrication	0,450	1

Contact spray HUPwetBlock

Application HUPwetBlock:
Due to its highly effective ingredients all types of electrical contacts and connections are protected against moisture and corrosion. Water and moisture is reliably suppressed. The product properties remain even after several months of use indoors and also outdoor and prevent permanent leakage currents and short circuits in: lighting systems, connections and sockets, electrical machinery and equipment, pumps, intercom systems, switches and fittings, connectors and contacts sockets, fuse boxes, cable connections, cable reels, battery terminals, engine electrical, electric, bell systems and much more.

170180 HUPwetBlock

Art. no.	ml	form	kg	PU
170180	400	Coating+Lubrication	0,450	1

Fast degreaser HUPdegreaser

Application HUPdegreaser:
For cleaning and degreasing of dust, dirt, oil, mechanical parts. For removing wax-stains, fats and resins from high potential switches, air conditioning, antenna insulaters, motors, ventilators, switchboards, cables, stubborn dirt on glass and car paint, etc.

Properties:
HUPdegreaser is a quick and intensive degreaser and cleaner for mechanical and electrical equipment. Residue-free and fast evaporating.

Art. no.	ml	form	kg	PU
170102	500	Cleaning	0,600	1

Electric-Engine-Cleaner HUPelectroClean

Application HUPelectroClean:
It is used to remove dust, dirt, oil, grease, lubricants and coal dust to electromechanical contacts, relays, wires, distributors, coils, etc. Can also be used for pre-cleaning for subsequent painting.

Properties:
HUPelectroClean consisting of a mixture of hydrocarbons and cleaning boosters. Cleans spot and streak free and evaporates without residue after cleaning.

Art. no.	ml	form	kg	PU
170114	400	Cleaning	0,450	1

Electric-Contact-Cleaner non-flammable HUPcontactXtra

Application HUPcontactXtra:
Spray on the parts to be cleaned or the contact surfaces and allow the dirt to run off. It may be necessary to repeat this if the contact is very dirty. It is not necessary to switch off power-conducting aggregates due to the non-flammable properties of the product.

Properties:
HUPcontactXtra is a safety cleaner based on non-flammable solvents.The product does not have any smell, is physiologically harmless, aroma-free and therefore very well tolerated by the skin compared to commercially available hydrocarbon-based cleaners. It has excellent wetting and creeping properties. It evaporates very quickly without leaving any residue.

Art. no.	ml	form	kg	PU
170120	400	Cleaning	0,450	1

Multi Cleaner HUPcleanMulti

Application HUPcleanMulti:
Cleaning of windows, mirrors, glass, monitors, plastic-surfaces, tiles, etc. in industry and crafts.

Properties:
HUPcleanMulti is a Multi-Foam with orange aroma. Intensive cleaner, for a sparkling shine on all surfaces. Powerful, yet mild. Very economical due to high concentrate, skin-sensitive. Spotless, non-porous, streak-free. Cleans with active-foaming effect.

Art. no.	ml	form	kg	PU
170104	500	Cleaning	0,550	1

Metal Degreaser HUPmetalClean

Application HUPmetalClean:
Removes coarse contamination mechanically. Spray from a short distance and allow the cleaning agent to run off. The parts to be cleaned are clean and dry in just a few seconds. Parts do not need to be removed if the dissolved contaminations are able to run off with the fluid.
Note: Does not attack enamelled paints/Not suitable for plastic and seals! Only for commercial use. Carry out tests for effect and material compatibility.

Properties:
For powerful quick cleaning, residue-free and rapid evaporation, removes grease, oil, wax residue, Edding, felt-tip and ball-point pen, resin and stubborn contaminations from all metal surfaces.
For residue-free degreasing of all metal objects, but may also be used as cleaner for subsequent painting of gluing.

Art. no.	ml	kg	PU
170103	500	0,600	1

Foam Cleaner HUPclean

Application HUPclean:
For cleaning windows, monitors, plastic surfaces, buildings, vehicles and machines.

Properties:
HUPclean is a multifunctional cleaner and achieves best levels of cleanliness on cases of fouling by oil, grease, wax and similar substances.

Art. no.	ml	form	kg	PU
170100	500	Cleaning	0,550	1

Graffiti-Remover HUPgraffitiEx

Application HUPgraffitiEx:
Removes varnish, paint, graffiti and adhesive residues. Cleans easily spotted surfaces made of concrete, stone, brick and wood surfaces, as well as glass, ceramic, porcelain and metal surfaces.

Properties:
Agents and propellants are free of toxic, corrosive and ozone-depleting substances. Usage in all areas of industry and commerce use, as well as installing companies, in printing, paint shops, metal and plastic industry, cleaning companies.

Art. no.	ml	form	kg	PU
170110	400	Cleaning	0,450	1

Label-Remover HUPlableEx

Application HUPlableEx:
Residue-free removal of adhesive residues, labels, lubricants, bitumen, fresh PU foam residues and stubborn stains. For cleaning of metal surfaces (even before painting) suitable in many areas of industry, trade and craft.

Properties:
HUPlableEx is powerful, yet gentle on the material, evaporates quickly and leaves no residue.

Art. no.	ml	form	kg	PU
170112	400	Cleaning	0,450	1

Compressed Air HUPair

Application HUPair:
HUPair compressed air for cooling and debugging overheated parts. To remove dust, dirt and other deposits on computers, Keyboards, engineering components, office equipment, photocopiers, printers etc.

Art. no.	ml	form	kg	PU
170106	400	Cleaning	0,450	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Compressed Air non-flamable HUPairXtra

Application HUPairXtra:
Is used anywhere where dust and loose dirt is only removed with difficulty. In the entire range of maintenance and repair of electronic equipment, components, computers, precision mechanical watches, etc. For dust and dirt removal on keyboards, computer cases, cabinets, measuring and control technology instruments, optical instruments, hi-fi and video equipment, as well as modules, printed circuit boards, magnetic heads, drives, etc.

Properties:
HUPairXtra non-flammable - especially good for suitable cleaning of electrical contacts. For a clean and dry cleaning in hard to reach places and on delicate surfaces.

Art. no.	ml	form	kg	PU
170108	400	Cleaning	0,450	1

HUPskinProtect

Application HUPskinProtect:
Protects hands and other parts of the body by a protective film prior to contact with the oil, grease, tar, paint, dust, and other dirt and pollutant species. It can prevent allergic reactions with many substances, because a protective film between the skin and the medium is established. For daily use in the industrial and craft.

Properties:
HUPskinProtect facilitates skin cleaning. The skin remains breathable and does not dry out. Dermatologically tested.

Art. no.	ml	form	kg	PU
170116	250	Cleaning	0,300	1

Dosage cap „Target Control System“

The „Target Control System“ is a stable, flexible dosage cap that can be removed at any time.
It is compatible with many of the HAUPA aerosol products („parent valve“/star). This means even more accurate, precise spraying and dosage. Targeted, accurate and properly dosed.
Not for sprays art: 170106, 170150, 170152, 170400

Art. no.	form	kg	PU
170406	Cleaning	0,020	1

Cleaning Wipes HUPwipe

Application HUPwipe:
HUPwipe is the ideal aid for removing stubborn.
Contaminants such as: rust, grease, adhesive residue, oil, soot, resins, Edding lines, fresh paint residues, lubricants, nicotine and more. Can be used to remove the heaviest soiling in commercial, industrial and craft.

Art. no.	ml	form	kg	PU
170118	80	Cleaning	1,000	1

Industrial cleaning wipes

HAUPA Industrial cleaning wipes are **perfect for washing hands as well as cleaning tools and work surfaces**. They remove stubborn dirt fast and efficiently such as grease, paint, oil, tar, ink, silicone, glue and much, much more making them the **ideal companions for workshops, offices, home or for those on the go**. These practical wipes have been impregnated with a solvent-free, industrial hand cleaner, which has been dermatologically tested and is also suitable for sensitive skin. The individually perforated wipes ensure easy extraction. The practical and solid storage container with lock-lid prevents the wipes from drying out.
Contents: 40 wipes, each 17 x 25 cm.

The must have for every cleaning job!

Effortlessly removes:
- Grease
- Paint
- Oil
- Tar
- Ink
- Silicone
- Glue
- and more…

Art. no.	TL	width	kg	PU
150600	170	25	0,190	1

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Freeze-Spray HUPcool

Application HUPcool:
HUPcool to remove dust, dirt and other deposits on computers, Keyboards, engineering components, office equipment, photocopiers, printers, etc.
For cooling and debugging overheated parts.

Art. no.	ml	form	kg	PU
170400	400	Testing	0,455	1

Freeze-Spray HUPcoolXtra

Application HUPcoolXtra
For the detection of defects in electrical systems and electronics. With the freeze-spray thermal errors on electric, electronics, computer cases, cabinets, measuring and control technology instruments, optical equipment, hi-fi and video equipment, as well as modules, printed circuit boards, magnetic heads, thermal switches etc. are fast tracked.

Properties:
HUPcoolXtra is a freeze spray with that you achieve cooling to -30°C. Cooling of resistors and transistors to prevent heat damage during soldering.

Art. no.	ml	form	kg	PU
170402	400	Testing	0,455	1

Smoke-Detector-Test-Spray HUPdetect

your smoke detectors occasionally!
Test your smoke detectors once a month with this test spray, to exclude technical defect, as well as the contamination of the detector.

Properties:
- directly simulated fire smoke
- enough for about 150-200 test operations
- Fast and reliable

Art. no.	ml	form	kg	PU
170404	250	Testing	0,180	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Soldering accessoires

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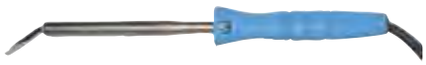
Soldering irons

chrome nickel steel tube, with schuko safety plug, replaceable nickel-plated copper tips



Art. no.	TL	Volt	Watt	kg	PU
160142	265	220	60	0,322	1
160144	315	220	80	0,319	1
160146	320	220	100	0,324	1

Soldering irons

with plastic handle, with schuko safety plug, replaceable copper tips, nickel-plated

Art. no.	TL	Volt	Watt	kg	PU
160150	250	220	30	0,264	1

Soldering irons

soldering tip internally heated, chrome vanadium steel tube, with plastic handle, with schuko safety plug, replaceable nickel-plated copper tips, for electronic work

Art. no.	TL	Volt	Watt	kg	PU
160190	200	220	15	0,257	1

Soldering set

Contents:
- 1 Soldering iron 80 Watt
- 1 Hobbyists' solder 1 m
- 1 Radio solder 1 m
- 1 Soldering grease 20 g

Art. no.	Watt	kg	PU
160234	80	0,387	1

Solder in triangular sticks DIN 1707

length approx. 430 mm, approx. 250 g per stick, size: 11 x 11 x 11 x 430 mm

Art. no.	Sn%	Roll/g	kg	PU
160112	30	250	0,275	1
160114	40	250	0,247	1

Soldering stone

Art. no.	kg	PU
160130	0,070	1

Soldering paste acc. to DIN 8511-F-SW 26

rosin halide-activated, **field of application:** electro-technic, electronics, manufacture of electrical appliances

Art. no.	kg	PU
160090	0,073	1

Soldering fluid acc. to DIN 8511-F-SW 32

rosin halide-activated, **field of application:** electro-technic, electronics, manufacture of electrical appliances

Art. no.	kg	PU
160092	0,054	1

Grease for soft-soldering acc. to DIN 8511-F-SW 21

ammonium chloride, organic preparation field of application: general soldering work

Art. no.	kg	PU
160094	0,072	1
160096	0,132	1

Soldering grease for fittings acc. to DIN 8511-F-W 22

field of application: sanitary technics, copper tubes etc.

Art. no.	kg	PU
160100	0,080	1

Soldering fluid acc. to DIN 8511-F-W 21

ammonium chloride, organic preparation
field of application: sanitary technics, copper tubes etc.

Art. no.	kg	PU
160102	0,065	1

PU Packing unit PE Price unit
The legend for abbreviations for all table headers can be found sorted alphabetically on page 383.

Solder for electronic work acc. to DIN EN 29453

antimony-free, soldering flux acc. To DIN EN 29454, 1.1.2.B (F-SW 26),
S-Sn60Pb40, rosin halide-activated

Art. no.	Ø	Sn%	Roll/g		kg	PU
160020	1	60	100		0,104	1
160022	1	60	250		0,253	1
160024	1	60	500		0,529	1
160026	1	60	1000		1,008	1
160028	1,5	60		1 m	0,016	1
160030	1,5	60	100		0,106	1
160042	1,5	60	250		0,247	1
160044	1,5	60	500		0,528	1
160046	1,5	60	1000		1,022	1
160050	2	60	100		0,108	1
160052	1	60	250		0,250	1
160054	1	60	500		0,529	1

Solder for electronic work acc. to DIN EN 29453

antimony-free, soldering flux acc. to DIN EN 29454, 1.1.2.B (F-SW 26),
S-Sn60Pb40, rosin halide-activated

Art. no.	Ø	Sn%	Roll/g		kg	PU
160000	1	60	100	1 m	0,009	1
160002	1	60	100		0,106	1
160004	1	60	250		0,259	1
160006	1	60	500		0,528	1
160008	1	60	1000		1,015	1
160012	1,5	60	100		0,102	1
160014	1,5	60	250		0,255	1
160016	1,5	60	500		0,523	1
160018	1,5	60	1000		1,024	1

Solder for electronic work acc. to DIN EN 29453

antimony-free, soldering flux acc. To DIN EN 29454, 1.1.2.B (F-SW 26),
S-Pb60Sn40, rosin halide-activated

Art. no.	Ø	Sn%	Roll/g		kg	PU
160060	2	40	100		0,106	1
160062	2	40	250		0,257	1

Fittings' solder acc. to DIN EN 29453

low antimony content, soldering flux acc. to DIN EN 29454, 2.1.3.B (F-SW 24),
S-Pb60Sn40, ammonium chloride based, organically prepared

Art. no.	Ø	Sn%	Roll/g		kg	PU
160070	1,5	40		1 m	0,018	1
160072	2	40	100		0,103	1
160074	2	40	250		0,258	1

Solder wire according to DIN EN 29453

lead-free special alloy, 2.5% flux percentage according
to DIN EN 29454, 1.1.2.B (EN-61190-ROLO), 1.00 mm of Ø, 0,100 kg spools
S-Sn99Cu1, DIN EN 29453 (Sn99, 3Cu0,7 - eutectic)

Art. no.	Ø	Sn%	Roll/g	kg	PU
160420	1	99	100	0,114	1
160422	1	99	250	0,262	1
160424	1	99	500	0,536	1
160426	1	99	1000	1,000	1
160430	1,5	99	100	0,112	1
160442	1,5	99	250	0,266	1
160444	1,5	99	500	0,500	1
160446	1,5	99	1000	1,000	1
160450	2	99	100	0,109	1
160452	2	99	250	0,257	1
160454	2	99	500	0,527	1

Solder wire according to Din EN 29453

lead-free special alloy, 3.5% flux percentage according to
DIN EN 29454, 1.1.3.B (EN-61190-ROLO), 1.00 mm of Ø, 0, 100 kg spools
S-Sn99Cu1, DIN EN 29453 (Sn99, 3Cu0,7 - eutectic)

Art. no.	Ø	Sn%	Roll/g	kg	PU
160402	1	99	100	0,114	1
160404	1	99	250	0,250	1
160406	1	99	500	0,500	1
160408	1	99	1000	1,000	1
160412	1,5	99	100	0,114	1
160414	1,5	99	250	0,258	1
160416	1,5	99	500	0,535	1
160418	1,5	99	1000	1,000	1

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A	sleeve length
Al	aluminium
B	flange width
BL	blade length
c	flange length
c1	flange length 1
c2	flange length 2
CL	cutting length
Col.	colour
Cont.	content
crimp	crimping range
crimp coaxial	crimping range coaxial
crimp modular	crimping range modular
CSS	cross-section in mm
CSS rm/sm	cross-section rm/sm
CSS/red.	conductor cross-section reduced
Cu	copper
CW	cutting width
d1	internal diameter
d1/red.	internal diameter reduced
d2	hole diameter
d4	external diameter
depth (D)	depth in mm
drive	drive
drum/kg	drum weight in kg
drum/Ø	drum diameter in mm
drum/width	drum width in mm
E	length to middle of hole
empty	without tools
H1	height 1 in mm
height (H)	height in mm
HW	hammer weight in g
Id.	identification number
Id. Al	identification number Al
Id. Cu	identification number Cu
kg	weight in kg
kg/100	weight in kg/100 pcs.
l	length in mm
length (L)	length in mm
Load	load
Loc.	locator
mat.	material
mm²	diameter in mm²
N/Ø	nail diameter
NL	nail length
No.	number
NP	nominal pressure in bar
Ø	cross-section in mm
Ø after	diameter after shrinkage
Ø before	diameter before shrinkage
Ø/Inch	diameter in inch
Øbo.	bolt diameter in mm
PB	pressing width
PE/PU	pricing/packing unit
plug	plug
PU	packing unit
PW	press width
role/G	role weight in g
rope-Ø	rope diameter in mm
s	material thickness
Sbl.	saw blade length
se	single core sector
size	size in mm
sm	multiple core sector
strength (St.)	strength in mm
TL	total length in mm
TM	thread metric
TMA	tested/Measured area
v1	slim pressing
v2	wide pressing
width (B)	witdh in mm
WS	wrench size

HAUPA pliers module for wall displays, cabinets and counter

2C standard

Art. No. 220346

Pliers module, 2C pliers

42 pliers

Art. No.	Description	Piece
210053	Combination pliers, 180 mm	6
210068	Diagonal cutter, 160 mm	6
210157	Heavy duty diagonal cutter, 180 mm	6
210158	Heavy duty diagonal cutter, 200 mm	6
210396	Long chain nose pliers, 200 mm	6
210398	Long chain nose pliers, 45°, 200 mm	6
210644	Wire stripping pliers, 160 mm	6

Dimensions: 47 cm x 13 cm x 22 cm (w x h x d)

2C – 1000 V

Art. No. 220349

Pliers module, VDE pliers

sheathed handles - 1000 V - 42 pliers

Art. No.	Description	Piece
211200	Combination pliers, 185 mm	3
211202	Combination pliers, 205 mm	3
211203	Diagonal cutter, stripping function, 165 mm	3
211204	Diagonal cutter, 165 mm	3
211217	Heavy duty diagonal cutter, 170 mm	3
211219	Heavy duty diagonal cutter, 205 mm	3
211226	Cable cutter, 170 mm	3
211228	Cable cutter, 230 mm	3
211225	Cable cutter, 160 mm	3
211223	Cable cutter, 200 mm	3
211208	Long chain nose pliers, 200 mm	3
211210	Long chain nose pliers, 45°, 200 mm	3
211214	Wire stripping pliers, 160 mm	3
211221	Water pump pliers, 240 mm	3

coating-insulation 1000 V

Art. No. 220350

Pliers module, VDE pliers

coating-insulation - 1000 V - 21 pliers

Art. No.	Description	Piece
210058	Combination pliers, 200 mm	3
210388	Long chain nose pliers, 200 mm	3
210390	Long chain nose pliers, 45°, 200 mm	3
210117	Heavy duty diagonal cutter, 170 mm	3
210119	Heavy duty diagonal cutter, 205 mm	3
210102	Diagonal cutter, 185 mm	3
210648	Wire stripping pliers, 160 mm	3

Dimensions:
73 cm x 220 cm x 45 cm (w x h x d)

- ***easy mounting***
- ***individual arrangements possible***
- ***coloured labels***
- ***clear product display***

Dimensions:
40 cm x 163 cm x 35 cm (w x h x d)

Screwdrivercenter

Art. No. 220360

2C VDE Screwdriver center

1000 V - 50 screwdrivers

Art. No.	Description	Piece
101910	Slott 2,5 x 75	6
101916	Slott 4,0 x 100	6
101918	Slott 5,5 x 125	5
101920	Slott 6,5 x 150	5
101940	PH 0	6
101942	PH 1	6
101944	PH 2	5
101952	PZ 1	6
101954	PZ 2	5

Dimensions: 33,0 cm x 33,0 cm x 17,5 cm (w x h x d)

Art. No. 220354

2C Screwdriver center

52 screwdrivers, standard

Art. No.	Description	Piece
101520	Slott 2,5 x 75	6
101522	Slott 4,0 x 100	6
101524	Slott 4,0 x 125	6
101526	Slott 5,0 x 150	6
101542	PH 0	6
101544	PH 1	6
101546	PH 2	5
101550	PZ 1	6
101552	PZ 2	5

Art. No. 220365

2C VDE Screwdriver center Tx

1000 V - 52 screwdrivers

Art. No.	Description		Piece
101850	Tx 8	100 x 3,0	6
101852	Tx 9	100 x 3,0	6
101854	Tx 10	100 x 3,0	6
101856	Tx 15	100 x 3,5	6
101858	Tx 20	100 x 4,0	6
101860	Tx 25	125 x 4,5	6
101862	Tx 27	125 x 5,5	6
101864	Tx 30	150 x 6,5	5
101866	Tx 40	175 x 8,0	5

Art. No. 220364

2C Screwdriver center Tx

52 screwdrivers, standard

Art. No.	Description		Piece
101229/6	Tx 6	100 x 2,0	6
101230	Tx 8	100 x 2,5	6
101200	Tx 9	100 x 2,5	6
101202	Tx 10	100 x 3,0	6
101204	Tx 15	100 x 3,0 - 3,5	6
101206	Tx 20	100 x 3,5 - 4,0	6
101208	Tx 25	125 x 4,0 - 5,0	6
101210	Tx 27	125 x 4,5 - 5,0	5
101211	Tx 30	150 x 6,0 - 7,0	5

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