

Electrics, Electronics



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Nail Clamps 4-7/7-11 mm

- For cables 4-7 mm or 7-11 mm
- Hardened galvanised steel nail
- Material: HD-PE
- Colour: light grey similar to RAL 7035



Article No.	Article Description	QTY
8410 4 7 18	NAIL CLIP 4-7/18	200
8410 4 7 25	NAIL CLIP 4-7/25	200
8410 7 11 25	NAIL CLIP 7-11/25	200
8410 7 11 35	NAIL CLIP 7-11/35	200
8410P 7 11 25	PCK(4000)NAIL CLIP 7-11/25	1
8410P 7 11 35	PCK(4000)NAIL CLIP 7-11/35	1

Technical Data

Cable clamping range mm	Nail length mm
4-7	18
4-7	25
7-11	25
7-11	35
7-11	25
7-11	35

Nail Clamps 10-14mm

- For cables 10-14mm
- Hardened galvanised steel nail
- Material: HD-PE
- Colour: Light grey similar to RAL 7035



Article No.	Article Description	QTY
8410 10 14 35	NAIL CLIP 10-14/35	200
8410 10 14 40	NAIL CLIP 10-14/40	200

Technical Data

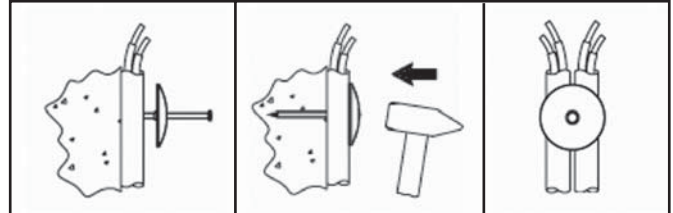
Cable clamping range mm	Nail length mm
10-14	35
10-14	40

Nail Washers with Steel Nail

- Effortless fixing of cables in cable slots, pipeline routes in walls and ceilings
- Ideal for laying tape conduits
- Hardened and galvanised steel nail
- Pre-assembled



Assembly instructions:



Article No.	Article Description	QTY
8877 27 2 40	NAIL WASHER VZ 27/2 X40	300
8877 34 33 40	NAIL WASHER GA 34/3.3X40	150
8877 34 2 60	NAIL WASHER GA 34/2 X40	150
8877 34 33 50	NAIL WASHER GA 34/3.3X50	150
8877 34 33 60	NAIL WASHER GA 34/3.3X60	100
8877 34 33 70	NAIL WASHER GA 34/3.3X70	100

(Ø Nail washer mm/ Ø steel nail mm x length mm)

Nail Washers

Article No.	Article Description	QTY
8877 27	NAIL WASHER 27	500
8877 34	NAIL WASHER 34	500

(Ø Nail washer mm)



Nail Washers with Square Steel Nail

- For fixing cables quickly in pipe chases or on the masonry prior to plastering
- Hardened and galvanised steel nail
- Nail washer made from polypropylene
- Colour: plain

Article No.	Article Description	QTY
8423 2 40	NAIL WASHER RKS 27/34 2 X40	300
8423 2 50	NAIL WASHER RKS 27/34 2 X50	250
8423 2 60	NAIL WASHER RKS 27/34 2 X60	200
8423 25 70	NAIL WASHER RKS 27/34 2.5 X70	100
8423 33 40	NAIL WASHER RKS 27/34 3.3 X40	150
8423 33 50	NAIL WASHER RKS 27/34 3.3 X50	150
8423 33 60	NAIL WASHER RKS 27/34 3.3 X60	100

(Nail washer mm/ Ø steel nail mm x length mm)



Nail Washer with Oval Steel Nail

- For fixing cables quickly in pipe chases or on the masonry prior to plastering
- Plastic washer with pre-assembled nail, whereby several cables can be fixed in one single operation
- Practical in pipe chases and also beneath insulation material
- Material: clamping washer: Polypropylene(PP), colour: plain
- Material nail: steel, hardened, galvanised (blue)

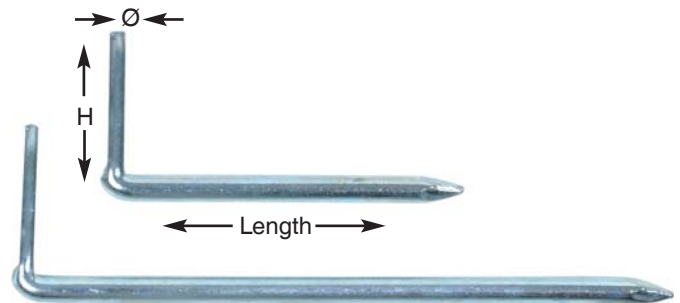


Article No.	Article Description	QTY
8424 3 40	TUBE CONNEXION DROIT TP GS 3	150
8424 3 50	TUBE CONNEXION DROIT TP GS 3	150
8424 3 60	TUBE CONNEXION DROIT TP GS 3	100
8424 3 70	TUBE CONNEXION DROIT TP GS 3	100

(Nail washer mm/ Ø steel nail mm x length mm)

Spikes, Galvanised

- For fixing pipes, cables and frames
- Galvanised and unhardened



Article No.	Article Description	QTY
8422 3 40	SPIKES VZ 3X40MM	250
8422 3 50	SPIKES VZ 3X50MM	250
8422 3 60	SPIKES VZ 3X60MM	250
8422 3 70	SPIKES VZ 3X70MM	250

Technical Data

Ø mm	Length mm	Height mm
3.0	40	15
3.0	50	15
3.0	60	15
3.0	70	15

Plasterboard Fasteners

- For mounting electrical equipment on plasterboard and Heraklith panels
- Even when screwing in the fastener, the dowel remains firmly anchored in the building material
- Quick and easy mounting
- Galvanized spring steel
- Temperature range: -10°C to +85°C
- Colour: light grey



Article No.	Article Description	QTY
8104 30	PLASTERBOARD FASTENERS 30MM	100
8104 43	PLASTERBOARD FASTENERS 43MM	100

Technical Data

Art. No.	Screw- Ø	Length mm
8104 30	3.5 - 4.5	30
8104 43	3.5 - 4.5	43

Cable Clamping Brackets

Cable clamping brackets for a quick and easy mounting to the wall or ceiling using nail dowels or nail screw dowels

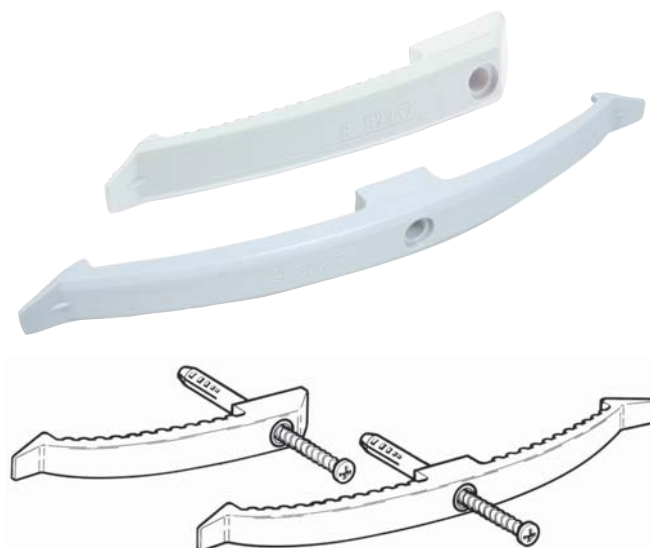
- Supplied with or without pre-assembled nail dowels
- Pre-assembled nail dowels can be hammered in without using a tool
- Pre-assembled version (with nail dowels) offers great advantages for assembly, fixes quickly and easily
- Easy to open due to large grooved lips
- Easy to transfer cables afterwards
- High quality polyamide PA-6: UV-resistant, long life, high load capacity, permanent elasticity
- Colour: grey (RAL 7035)
- Material: Polyamide PA-6 halogen and silicone-free
- Temperature resistance: +80°C long-term, +130° short-term

Art. No. 8414 8:

- Supplied **without** nail dowels 6 x 55

Art. No. 8414 16:

- Supplied **without** nail dowels 6 x 55



Article No.	Article Description	QTY
8414 8	CABLE CLAMPING BRACKETS KKB 8	100
8414 8 6	CABLE CLAMP.BRACKETS KKB8/6X55	50
8414 16	CABLE CLAMPING BRACKETS KKB 16	100
8414 16 6	CABLE CLAMP. BRACK. KKB16/6X55	50

Technical Data

Dimension nail wall plug mm	Capacity NYM 3 x 1.5mm ²
without nail wall plug	8 cable
6 x 55	8 cable
without nail wall plug	16 cable
6 x 55	16 cable

Flame-Retardant Cable Clamping Brackets

Cable clamping brackets for quick and easy mounting to the wall or ceiling using nail dowels or nail screw dowels

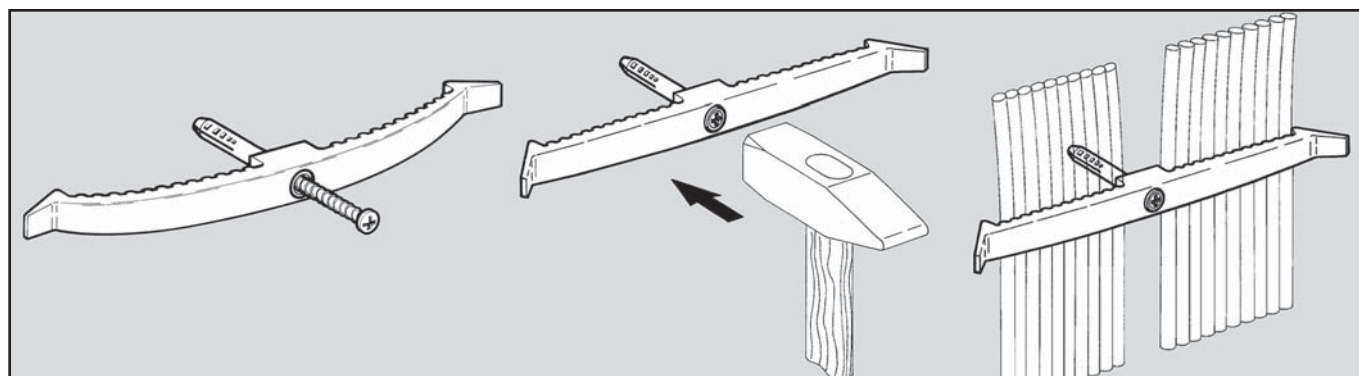
- Mounts quickly and easily
- Easy to open due to large grooved lips
- Easy to transfer cables afterwards
- High quality polyamide PA-6: UV-resistant, long life, high load capacity, permanent elasticity
- Colour: grey (RAL 7030)
- Material: polyamide PA -6 halogen and silicone-free
- Flame resistance: VDE 0471/DIN IEC 695
- Test temperature: +960°C



Article No.	Article Description	QTY
8414 8 1	FLAME-RET. CAB.CLAMP.BR. KKB8	100
8414 16 1	FLAME-RET. CAB.CLAMP.BR. KKB16	50

Technical Data

Capacity NYM 3 x 1.5mm ²
8 cable
16 cable



Cable Support “Speed”

For quick laying of cables in false ceilings on walls or ceilings using nail dowels

- Fastening point easily accessible without tool set
- Patented one-hand assembly system
- Smooth-running closing mechanism
- Wall and ceiling assembly with socket part
- Material: polypropylene, halogen and silicone-free
- Colour: grey (RAL 7035)
- Temperature resistance: +80 °C long-term, +130 °C short-term

Art.-No. 8415 15:

- Supplied **without** pre-assembled nail wall plugs 6 x 55

Art.-No. 8415 30:

- Supplied **without** pre-assembled nail wall plugs 6 x 55



Article No.	Article Description	QTY
8415 15	CABLE SUPPORT SH15	50
8415 15 6	CABLE SUPPORT SH15/6X55	50
8415 30	CABLE SUPPORT SH30	25
8415 30 6	CABLE SUPPORT SH30/6X55	25

Technical Data

Capacity NYM 3 x 1.5mm²

15 cable
15 cable
30 cable
30 cable

Flame-Resistant Cable Support “Speed”

For quick laying of cables in false ceilings on walls or ceilings using nail dowels

- Fastening point easily accessible without tool set
- Patented one-hand assembly system
- Smooth-running closing mechanism
- Wall and ceiling assembly with socket part
- Material: polyamide PA 6 halogen and silicone-free
- Colour: grey (RAL 7030)
- Flame resistance: VDE 0471/DIN IEC 695
- Test temperature: +960°C



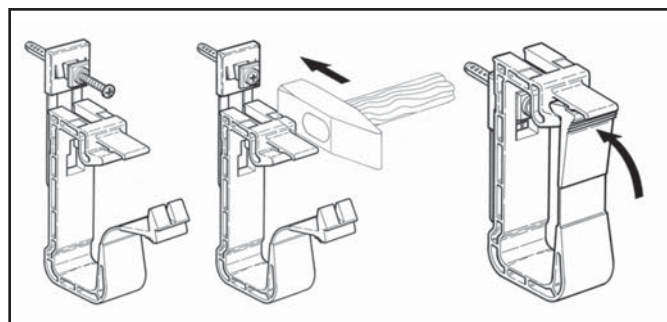
Article No.	Article Description	QTY
8415 15 1	FLAME-RES. CABLE SUPPORT SH15	100
8415 30 1	FLAME-RES. CABLE SUPPORT SH30	50

Technical Data

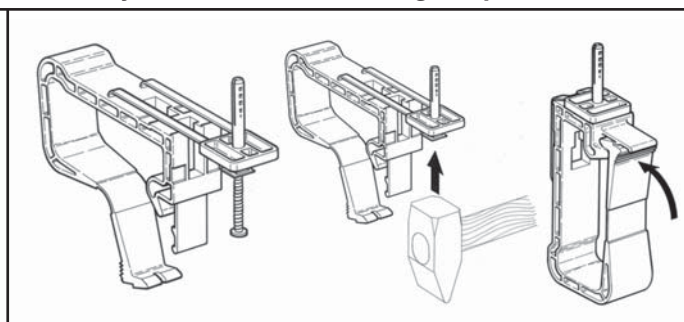
Capacity NYM 3 x 1.5mm²

15 cable
30 cable

Assembly instructions for wall instruction:



Assembly instructions for ceiling suspension:



Metal Cable Support

- Galvanised steel
- Wall/ceiling assembly
- High mechanical strength
- Particularly suitable for use with false ceilings
- Mounted holes Ø 6 mm
- No fire load, flame-retardant, halogen-free
- Not for functional integrity



8416 15

8416 30

Article No.	Article Description	QTY
8416 15	METAL CABLE SUPPORT SHM 15	50
8416 30	METAL CABLE SUPPORT SHM 30	25

Technical Data

Capacity NYM 3 x 1.5 mm²

15 cable

30 cable

Snap-In Clamp 6-16 mm

- For cables 6-16 mm
- Impact resistant material polystyrene
- Colour: grey RAL 7035
- Cable adjustment by pressure screening

Article No.	Article Description	QTY
8413 6 16	SNAP-IN CLAMP 6-16MM	100



ISO Grip Clamp 6-16 mm

- For cables 6-16 mm
- Impact resistant material polystyrene
- Colour: grey RAL 7035
- Cable adjustment by pressure screening

Article No.	Article Description	QTY
8413 6 16 1	ISO GRIP CLAMP 6-16MM	100



Spacer Clip

- Galvanised steel
- Spacer clip for fixing cables and pipes
- Easy assembly due to slot hole
- Quick assembly made possible due to upper part's special lock
- Not for functional integrity



Article No.	Article Description	QTY
8427 11 13	SPACER CLIP VZ 11-13MM	50
8427 14 16	SPACER CLIP VZ 14-16MM	50
8427 19 21	SPACER CLIP VZ 19-21MM	50
8427 24 29	SPACER CLIP VZ 24-29MM	50
8427 30 38	SPACER CLIP VZ 30-38MM	25
8427 39 48	SPACER CLIP VZ 39-48MM	25
8427 48 54	SPACER CLIP VZ 48-54MM	25
8427 63	SPACER CLIP VZ 63MM	20

Technical Data

Dimension Ø mm	Steel conduit DIN EN	Threaded pipes inch
11 - 13	EN 12	-
14 - 16	EN 16	-
19 - 21	EN 20	1/2
24 - 29	EN 25	3/4
30 - 38	EN 32	1
39 - 48	EN 40	1 1/4
48 - 54	EN 50	1 1/2
63	EN 63	2

Spacer Clip M6

- Galvanised steel
- Spacer clip for fixing cables and pipes
- With M6 thread
- Quick assembly made possible due to upper part's special lock
- Not for functional integrity



Article No.	Article Description	QTY
8427 1 5 6	SPACER CLIP M6 5-6MM	100
8427 1 7 8	SPACER CLIP M6 7-8MM	100
8427 1 9 10	SPACER CLIP M6 9-10MM	100
8427 1 105 12	SPACER CLIP M6 10.5-12MM	100
8427 1 125 14	SPACER CLIP M6 12.5-14MM	100
8427 1 145 16	SPACER CLIP M6 14.5-16MM	100
8427 1 165 18	SPACER CLIP M6 16.5-18MM	100
8427 1 185 20	SPACER CLIP M6 18.5-20MM	50
8427 1 20 22	SPACER CLIP M6 20-22MM	50
8427 1 22 24	SPACER CLIP M6 22-24MM	50
8427 1 24 26	SPACER CLIP M6 24-26MM	50
8427 1 28 30	SPACER CLIP M6 28-30MM	50
8427 1 31 33	SPACER CLIP M6 31-33MM	25
8427 1 33 35	SPACER CLIP M6 33-35MM	25
8427 1 36 38	SPACER CLIP M6 36-38MM	25
8427 1 38 40	SPACER CLIP M6 38-40MM	25
8427 1 40 42	SPACER CLIP M6 40-42MM	25
8427 1 43 45	SPACER CLIP M6 43-45MM	25
8427 1 46 48	SPACER CLIP M6 46-48MM	25
8427 1 48 50	SPACER CLIP M6 48-50MM	25
8427 1 58 60	SPACER CLIP M6 58-60MM	25
8427 1 61 63	SPACER CLIP M6 61-63MM	25

Technical Data

Dimension Ø mm	Steel conduit DIN EN	Threaded pipes inch
5 - 6	-	-
7 - 8	-	-
9 - 10	-	1/8
10.5 - 12	EN 12	-
12.5 - 14	-	1/4
14.5 - 16	EN 16	-
16.5 - 18	-	3/8
18.5 - 20	EN 20	-
20 - 22	-	1/2
22 - 24	-	-
24 - 26	EN 25	-
28 - 30	-	-
31 - 33	EN 32	-
33 - 35	-	1
36 - 38	-	-
38 - 40	EN 40	-
40 - 42	-	-
43 - 45	-	-
46 - 48	-	-
48 - 50	EN 50	1 1/2
58 - 60	-	-
61 - 63	EN 63	-

Blade Socket

- To mount pipes and cables with a cable tie (9mm)
- Easy to insert
- Corrosion free
- Can be used with all construction materials
- Quick, solid and decorative fixing
- Material: polyamide PA -6 halogen and silicone-free
- Colour: black (RAL 9011)
- Temperature resistance: +80° long-term, +130° short-term
- Flame resistance: UL 94 HB



Article No.	Article Description	QTY
8417 6 40	BLADE SOCKET 6X36MM	100
8417 8 40	BLADE SOCKET 8X43.5MM	100

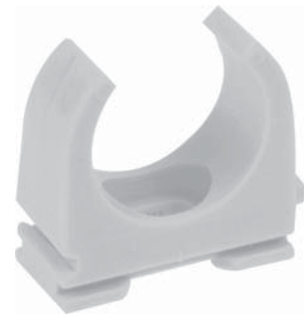
Technical Data

Ø mm	L mm	Embedment depth in mm	Max. cable tiewidth in mm
6	36	30	5 mm
8	43.5	35	9 mm

Attaching Cable Clamps

- Effective and precise fixing for corrugated steel conduit, PG-pipes, light insulation pipes as well as metric pipes
- High quality and resistance of material
- High temperature resistance in use from -40°C to +80°C
- Retractable in profile rims with slot width of 11 mm
- Can be attached to almost all attaching cable clamps
- Easily mounted due to 6 mm mounting hole
- Halogen-free
- Silicone-free
- Colour: grey (RAL 7035) material: Polypropylene (PP)
- Stackable from M12 - M40

Article No.	Article Description	QTY
8412 12	PIPE CLIP IEC 12	100
8412 16	PIPE CLIP IEC 16	100
8412 20	PIPE CLIP IEC 20	100
8412 25	PIPE CLIP IEC 25	50
8412 32	PIPE CLIP IEC 32	50
8412 40	PIPE CLIP IEC 40	50
8412 50	CLIP IEC 50	20
8412 63	CLIP IEC 63	20



Technical Data

Nominal size	Pipe outer-Ø mm
12	12-13
16	15-16
20	20-21
25	25-26
32	31-32
40	38-40
50	50
63	63

Cable Spacing Clamp

- For mounting individual pipes a specific distance from a wall or roof
- Low energy expenditure and a great deal of time saved
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +85 °C
- Colour: light grey

Area of application:

- Suitable for concrete, solid brick, hollow brick and aerated concrete



Article No.	Article Description	QTY
8412 1 16	CABLE SPACING CLAMP 16MM	200
8412 1 20	CABLE SPACING CLAMP 20MM	200
8412 1 25	CABLE SPACING CLAMP 25MM	100
8412 1 32	CABLE SPACING CLAMP 32MM	100
8412 1 40	CABLE SPACING CLAMP 40MM	50
8412 1 50	CABLE SPACING CLAMP 50MM	50

Technical Data

Outer pipe-Ø mm
16
20
25
32
40
50

EURO-Clip Pipe Clips

- For assembly on all types of subsurface
- Pushing the clip will spread it over the whole width of the clamp and it can be separated again without damage, simply by snapping it apart
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 2 16	EURO-CLIP PIPE CLIPS 16MM	100
8412 2 20	EURO-CLIP PIPE CLIPS 20MM	100
8412 2 25	EURO-CLIP PIPE CLIPS 25MM	100
8412 2 32	EURO-CLIP PIPE CLIPS 32MM	50
8412 2 40	EURO-CLIP PIPE CLIPS 40MM	50
8412 2 50	EURO-CLIP PIPE CLIPS 50MM	50

Technical Data

Outer pipe-Ø mm
16
20
25
32
40
50

EURO Plug-In Anchor

- For pipe installation
- This is a “clip-on” for the Euro-Clip and is placed on the latter (snaps in)
- Low energy expenditure and no tools needed Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 3 11	EURO PLUG-IN ANCHOR 11MM	200
8412 3 30	EURO PLUG-IN ANCHOR 30MM	100
8412 3 45	EURO PLUG-IN ANCHOR 45MM	100
8412 3 80	EURO PLUG-IN ANCHOR 80MM	50

Technical Data

Anchor length mm

11

30

45

80

EURO-Interlocking Devices for Fixing Cable Routes

- For fastening pipes on all conventional cable routes with elongated or round holes and a plate thickness of 0.55 to 1.1 mm
- An ideal way to relieve the burden on cable routes which are full to capacity
- Quick and easy fastening
- Tensile strength: 40 kg
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +85 °C
- Colour: light Grey



8412 4 1



8412 4 2

Article No.	Article Description	QTY
8412 4 1	EURO-TWIST LOCK	200
8412 4 2	EURO-PLUG LOCK	200

EURO-Clip Connector

- For connecting two EURO-Clips, to mount several pipes into difficult-to-access and narrow areas
- Improved installation
- Quick and easy fastening
- Halogen-free
- UV-stabilised Silicone-free
- Temperature range: -20°C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 4 3	EURO-CLIP-CONNECTOR	200

Threaded Clip

- For fastening pipes to threaded rods M8 - M10, in conjunction with the EURO-Clip
- Can be combined with all EURO-Clips 16 - 50
- Quick and easy fastening
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -10 °C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 4 4	THREAD-CLIP M8-M10	100

Construction Steel Mesh Clip

- For fixing tubing onto raw concrete ceilings
- Quick and easy fastening
- Press the tube into the clip, fasten other end of clip onto the mesh and the tube will stay in place
- Halogen-free, silicone-free
- Temperature range: -10 °C to +85 °C
- Colour: Brown



Article No.	Article Description	QTY
8412 4 5	CONSTRUCTION STEEL MESH CLIP	500

Technical Data

Hose dimensions mm
20 and 25

Bearing Anchor Plate

- For installing wires on subsurfaces like metal, wood or plasterboard
- Wires can be installed on metal or wood, with additional use of bearing anchors and alignment brackets
- Improved installation performance
- Quick and easy fastening
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -10 °C to +85 °C
- Colour: light grey



Article No.	Article Description	QTY
8412 4 35 16	BEARING ANCHOR PLATE 35X 16MM	100
8412 4 35 35	BEARING ANCHOR PLATE 35X 35MM	100

Technical Data

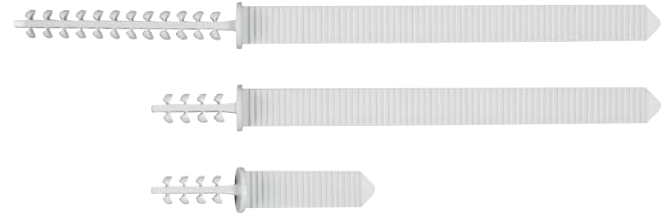
Length x Breadth mm

35 x 16

35 x 35

Bearing Anchor

- For laying out sheathed cables, flexible pipes and hoses on and under plastering
- With a second row, more pipes can be installed under each other
- Fasten quickly and easily
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 4 30	BEARING ANCHOR 30MM	100
8412 4 100	BEARING ANCHOR 100MM	100
8412 4 30 55	BEARING ANCHOR 30X 55MM	100
8412 4 100 55	BEARING ANCHOR 100X 55MM	100

Technical Data

Shaft length mm

30

100

30

100

Anchor length mm

25

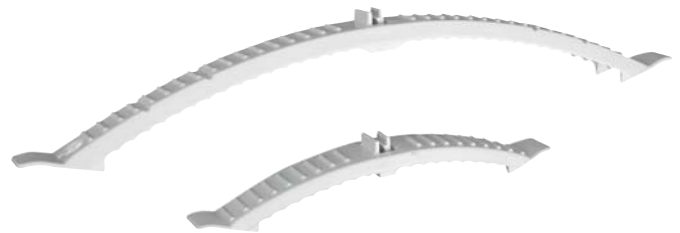
25

55

55

Alignment Brackets

- For aligning sheathed cables,
- Flexible pipes and hoses on and under plastering
- Quick and easy fastening
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +100 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 4 1 100	ALIGNMENT BRACKETS 100MM	50
8412 4 1 200	ALIGNMENT BRACKETS 200MM	25

Technical Data

Clamping range mm

100

200

Automatic Buried Clamps

- These clamps are available in 3 clamping sizes, with each size able to accommodate 2 hose sizes
- This can also be used for a 20' or 25' hose
- Closes automatically when hose is installed
- Quick and easy fastening, with anchors
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -10 °C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 5 16 20	AUTO.BURI. CLAMPS CEMENT 16-20	100
8412 5 20 25	AUTO.BURI. CLAMPS CEMENT 20-25	100
8412 5 25 32	AUTO.BURI. CLAMPS CEMENT 25-32	50
8412 5 1 16 20	AUTO.BURI. CLAMPS CONCR. 16-20	100
8412 5 1 20 25	AUTO.BURI. CLAMPS CONCR. 20-25	100
8412 5 1 25 32	AUTO.BURI. CLAMPS CONCR. 25-32	100
8412 5 2 16 20	AUTO.BURI. CLAMPS HOL.TH.16-20	100
8412 5 2 20 25	AUTO.BURI. CLAMPS HOL.TH.20-25	100
8412 5 2 25 32	AUTO.BURI. CLAMPS HOL.TH.25-32	50

Technical Data

Range mm	Anchor length mm
16-20	11
20-25	11
25-32	11
16-20	25
20-25	25
25-32	25
16-20	55
20-25	55
25-32	55

EURO Adhesive Plate

- For fixing wires onto all subsurfaces where drilling or screwing is not possible
- Also suitable for the assembly and fixing of wire cables with cable ties
- Quick and easy fastening
- Halogen-free, UV-stabilised, silicone-free
- Temperature range: -20 °C to +85 °C
- Colour: light Grey



Article No.	Article Description	QTY
8412 6 38 35	EURO ADHENSIVE PLATE 38-35MM	100

Technical Data

Length × Breadth mm
38 × 35

Dowel Clamping Washer FIX

Cables of varying diameters held quickly and securely with **dowel clamping washer**

- Comfortable one-hand assembly
- For secure fixing of cables of various diameters and pipes
- UV-stable and halogen-free
- Material: Polypropylene
- Colour: light grey
- Drill diameter: 6 mm
- With regards flush-mounting, install in the wall slit

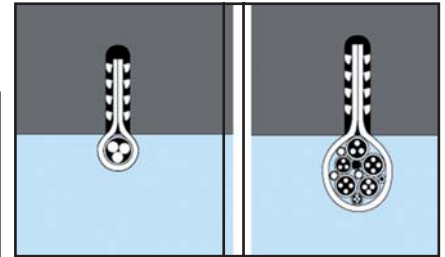
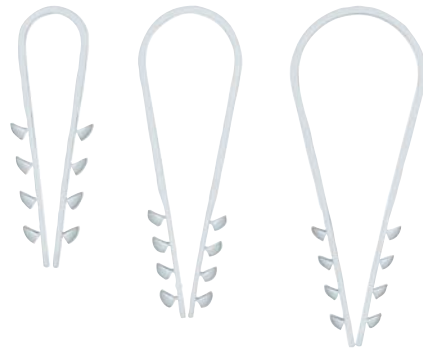
Applications:

- Concrete
- Solid brick
- Lime sand brick
- Aerated concrete

Article No.	Article Description	QTY
8418 1 3 13	DOWEL CLAMP. WASHER FIX 3-13MM	300
8418 1 6 20	DOWEL CLAMP. WASHER FIX 6-20MM	200
8418 1 8 28	DOWEL CLAMP. WASHER FIX 8-28MM	150
8418 1 20 40	DOWEL CLAMP. WASHER FIX20-40MM	100

Technical Data

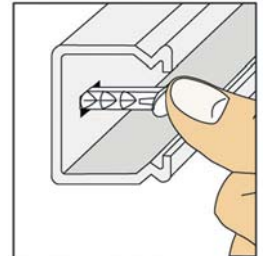
Clamping range mm
 3 - 13
 6 - 20
 8 - 28
 20 - 40



Dowel Fastening Nail

Secure trunking fastening using **dowel fastening nails** by pressing your thumb

- Comfortable one-hand assembly
- Three different lengths for efficiency on sub-surfaces with or without plaster
- UV stable and halogen-free
- Material: Polypropylene
- Colour: light grey
- Drill diameter: 6 mm
- Head dimensions: 10 x 14 mm



Technical Data

Max. clamping area
 8 mm
 13 mm
 16 mm

Article No.	Article Description	QTY
8418 5 30	DOWEL FASTENING NAIL 30MM	500
8418 5 40	DOWEL FASTENING NAIL 40MM	400
8418 5 50	DOWEL FASTENING NAIL 50MM	250

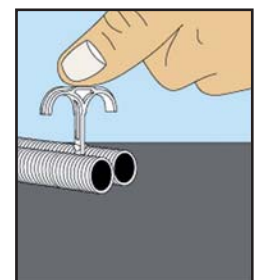
Double Fast-On Clips FIX

Perfect for laying 2 cables in ceiling and wall

- Comfortable one-hand assembly
- Particularly suitable for rigid and flexible pipes
- For laying embedded pipes in wall and ceiling
- UV-stable and halogen-free
- Material: Polyprone
- Colour: light grey
- Drill diameter: 6 mm

Applications:

- Concrete
- Solid brick
- Lime sand brick
- Aerated concrete



Technical Data

Clamping area mm
 4 - 12
 12 - 25

Article No.	Article Description	QTY
8418 2 10	DOUBLE FAST-ON CLIPS 4-12MM	300
8418 2 21	DOUBLE FAST-ON CLIPS 12-25MM	100

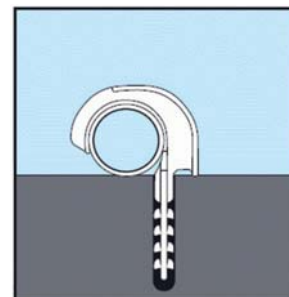
Individual Fast-On Clips FIX

Perfect for laying 2 cables in ceiling and wall

- Comfortable one-hand assembly
- Particularly suitable for rigid and flexible pipes
- UV-stable and halogen-free
- Material: Polypropylene
- Colour: light grey
- Drill diameter: 6 mm

Applications:

- Concrete
- Solid brick
- Lime sand stone
- Aerated concrete



Article No.	Article Description	QTY
8418 3 18	IND. FAST-ON CLIPS FIX 16-20MM	100
8418 3 22	IND. FAST-ON CLIPS FIX 20-25MM	100
8418 3 28	IND. FAST-ON CLIPS FIX 25-32MM	50

Technical Data

Clamping range mm

16 - 20
20 - 25
25 - 32

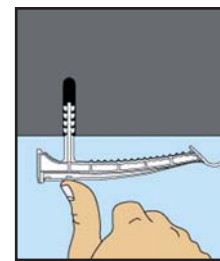
Cable Clamping Brackets FIX

For quick and secure fix in suspended ceilings

- Comfortable one-hand assembly
- With practical entry for easy insertion of the cables
- UV stable and halogen-free
- Material: Polypropylene
- Colour: light grey RAL 7035
- Drill diameter: 6 mm

Applications:

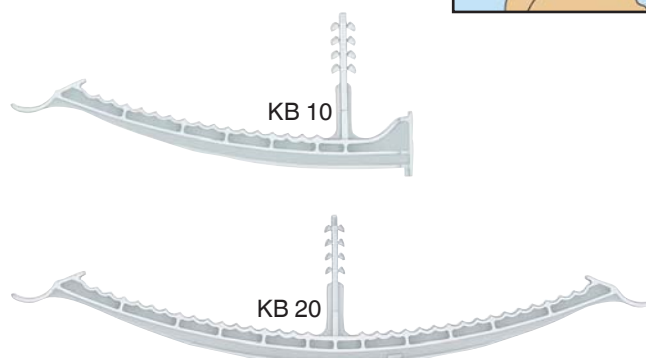
- Concrete



Technical Data

Art. No.	Width mm	Capacity NYM 3 x 1.5 mm ² cable
8418 4 10	100	9
8418 4 20	200	18

Article No.	Article Description	QTY
8418 4 10	CABLE CLAMP. BRACKETS FIX KB10	100
8418 4 20	CABLE CLAMP. BRACKETS FIX KB20	50



Profile Rails

- Perforated profile rails, length 2m
- Slot width 16.5 mm, material thickness 1.5 mm
- Suitable for fixing bolt clamps
- Dimension: (W x H) 35 x 18 mm
- Material: strip galvanised steel
- Not for functional integrity

Article No.	Article Description	QTY
8426 35 18	PROFILE RAILS 2N VZ 35X18	20



Bolt Clamps Type H

- For quick and easy assembly of cables, lines and pipes
- Counter trough made from polypropylene, halogen-free, colour black
- With rounded edges to protect cables from damage
- Suitable for all C profile rails with 16- 17 mm slot width
- Screw: hexagonal screw SW 10
- Clamp and screw made from hot-dip galvanised steel
- Not for functional integrity
- Warning: counter troughs must be ordered separately



Article No.	Article Description	QTY
8426 8 12	BOLT CLAMPS TYPE H 8-12MM FVZ	100
8426 12 16	BOLT CLAMPS TYPE H 12-16MM FVZ	100
8426 16 22	BOLT CLAMPS TYPE H 16-22MM FVZ	100
8426 22 28	BOLT CLAMPS TYPE H 22-28MM FVZ	100
8426 28 34	BOLT CLAMPS TYPE H 28-34MM FVZ	100
8426 34 40	BOLT CLAMPS TYPE H 34-40MM FVZ	100
8426 40 46	BOLT CLAMPS TYPE H 40-46MM FVZ	100
8426 46 52	BOLT CLAMPS TYPE H 46-52MM FVZ	100
8426 52 58	BOLT CLAMPS TYPE H 52-58MM FVZ	100
8426 58 64	BOLT CLAMPS TYPE H 58-64MM FVZ	100
8426 64 70	BOLT CLAMPS TYPE H 64-70MM FVZ	100
8426 70 76	BOLT CLAMPS TYPE H 70-76MM FVZ	25
8426 76 82	BOLT CLAMPS TYPE H 76-82MM FVZ	25
8426 82 90	BOLT CLAMPS TYPE H 82-90MM FVZ	25
8426 90 100	BOLT CLAMPS TYPE H 90-100MM FVZ	25

Technical Data

Clamping area mm	Height bolt clamp mm
8-12	40
12-16	44
16-22	50
22-28	58
28-34	66
34-40	72
40-46	79
46-52	86
52-58	93
58-64	99
64-70	106
70-76	114
76-82	121
82-90	130
90-100	140

Universal Counter Troughs

- Counter troughs made from polypropylene, colour black, halogen-free
- Counter trough for protection between cable and rail
- Unit pressure distribution at the fixing point
- Universally suitable with all rails due to the suspension on the legs of the bolt clamp

Article No.	Article Description	QTY
8426 1 8 12	UNI COUNTER TROUGHS SW 8-12MM	100
8426 1 12 16	UNI COUNTER TROUGHS SW 12-16MM	100
8426 1 16 22	UNI COUNTER TROUGHS SW 16-22MM	100
8426 1 22 28	UNI COUNTER TROUGHS SW 22-28MM	100
8426 1 28 34	UNI COUNTER TROUGHS SW 28-34MM	100
8426 1 34 40	UNI COUNTER TROUGHS SW 34-40MM	100
8426 1 40 46	UNI COUNTER TROUGHS SW 40-46MM	100
8426 1 46 52	UNI COUNTER TROUGHS SW 46-52MM	100
8426 1 52 58	UNI COUNTER TROUGHS SW 52-58MM	100
8426 1 58 64	UNI COUNTER TROUGHS SW 58-64MM	100
8426 1 64 70	UNI COUNTER TROUGHS SW 64-70MM	100
8426 1 70 76	UNI COUNTER TROUGHS SW 70-76MM	25
8426 1 76 82	UNI COUNTER TROUGHS SW 76-82MM	25
8426 1 82 90	UNI COUNTER TROUGHS SW 82-90MM	25
8426 1 90 100	UNI COUNTER TROUGHS SW 90-100MM	25



Switch Box Flush-Mounted

- 20 and 25 mm pipe inlet
- Screw distance: 60 mm
- Depth box: 45 mm
- 4 screw boss
- Material: PS, recyclable
- Colour: black
- **Halogen-free**
- **Protection class IP 20**
- **Fire resistance: +650 °C**
- **VDE-tested**

Article No.	Article Description	QTY
8430 42	SWITCH BOX FLUSH-MOUN. 42X60MM	25



Switch Junction Box Flush-Mounted

- 20 and 25 mm pipe inlet
- Screw distance: 60 mm
- Depth box: 65 mm
- 4 screw boss
- Material: PS, recyclable
- Colour: black
- **Halogen-free**
- **Protection class IP 20**
- **Fire resistance: +650 °C**
- **VDE-tested**

Article No.	Article Description	QTY
8430 63	SW JUNC BOX FLUSH-MOUN 63X60MM	20



Junction Box Flush-Mounted

- Diameter: 72 mm
- Depth: 35 mm
- 11 pipe inlet
- Material: PS, recyclable
- Colour: black
- **Halogen-free**
- **Protection class IP 20**
- **Fire resistance: +650 °C**
- **VDE-tested**

Article No.	Article Description	QTY
8430 70	JUNC. BOX FLUSH-MOUN. 36X70MM	w 25



Device Screws

- Device screws for flush-mounted box programme
- Refined surface
- With long slot

Article No.	Article Description	QTY
8433 32 15	DEVICE SCREWS 3.2X15MM	100
8433 32 25	DEVICE SCREWS 3.2X25MM	100
8433 32 40	DEVICE SCREWS 3.2X40MM	100

Technical Data

Ø x length mm
3.2 x 15
3.2 x 25
3.2 x 40



Flush-mounted device sockets windproof

- 20 and 25 mm pipe insertion
- Screw clearance: 60 mm
- Socket depth, Art.-No. 8430 46 60 1: 46 mm
- Socket depth, Art.-No. 8430 62 60 1: 62 mm
- 4 screw bosses
- Material: PP, TPE, recyclable
- Colour: black
- **Halogen-free**
- **Protection type: IP 30**
- **Fire resistance: +650 °C**
- **VDE-tested**

Article No.	Article Description	QTY
8430 46 60 1	FM DEVICE SOCKET 46X60MM WP	25
8430 62 60 1	FM DEVICE SOCKET 62X60MM WP	25



8430 46 60 1

8430 62 60 1

Flush-mounted electronics socket windproof

- Guaranteed wind-resistant
- Sustainable increase in energy efficiency in buildings
- Creates increased comfort by avoiding draughts
- Easy to mount
- Simple handling without additional tools
- 17 cable inserts, max. 2.5 mm²
- 20 and 25 mm pipe insertion
- Screw clearance: 60 mm
- Socket depth: 67 mm
- 4 screw bosses
- Material: PP, TPE, recyclable
- Colour: black
- **Halogen-free**
- **Protection type: IP 30**
- **Fire resistance: +650 °C**
- **VDE-tested**

Article No.	Article Description	QTY
8430 67 60 1	FM ELECTR.SOCKET WINDPROOF	1



Flush-mounted outlet socket

- 20 mm pipe insertion
- depth: 31 mm
- with shaped dowels
- Material: PS, recyclable
- Colour: white
- **Halogen-free**
- **Protection type: IP 20**
- **Fire resistance: +650 °C**

Article No.	Article Description	QTY
8430 31 31 60	FM-OUTL.SOCKET 31X31X60MM HF	25



Spring Lid

- Box fully covered due to large external diameter
- Stable springs with notches for 60 and 70 mm boxes
- Material: polystyrene

Technical Data

Art. No.	Dimension
8431 1 60	Ø 75 mm
8431 1 70	Ø 85 mm

Article No.	Article Description	QTY
8431 1 60	SPRING LID 60MM	100
8431 1 70	SPRING LID 70MM	100



Signal Cover

- For device sockets with 60 mm screw spacing
- For simple finding of device and connection sockets after plastering
- Can be reused
- Protects the interior of the sockets, the screw bosses and the screw heads on plastering
- Material: PE, LD, recyclable
- Colour: Red
- Halogen-free
- Fire resistance: +650 °C

Article No..	Article Description	QTY
8431 60	SIGNAL COVER 60MM	50



Movable Flange

- For compensation of deep-seated device and connection sockets
- With pre-mounted device screws, length 15 mm
- Plaster compensation rings of the same diameter can be mounted on one another
- Material: PS, recyclable
- Colour: red
- Halogen-free
- Fire resistance: +650 °C

Technical Data

Art. No.	H x Ø mm
8431 60 12	12 x 60
8431 60 24	24 x 60

Article No.	Article Description	QTY
8431 60 12	MOVABLE FLANK 12X60MM	50
8431 60 24	MOVABLE FLANK 24X60MM	50



8431 60 12

8431 60 24

Junction Box Flush-Mounted

- For clear wiring with the option of circuit separation
- With break-out opening up to M40
- Including cover screws and white cover
- Material: PS, recyclable
- Colour: grey
- Halogen-free
- Protection rating IP 20
- Fire resistance: +650 °C
- VDE-tested

CE IP 20



Technical Data

Art.-No.	H x W x D mm
8433 80	80 x 80 x 50
8433 100	100 x 100 x 50

Article No.	Article Description	QTY
8433 80	JUNC. BOX FLUSH-MOUN. 80X80MM	10
8433 100	JUNC. BOX FLUSH-MOUN. 100X100MM	10

Replacement Cover Junction Box Flush-Mounted

- Replacement cover for flush-mounted junction boxes

Technical Data

Art. No.	H x W mm
8433 80 1	80 x 80
8433 100 1	100 x 100

Article No.	Article Description	QTY
8433 80 1	REPL COV JUNC BOX FL-MOUN 80MM	10
8433 100 1	REPL COV JUNC BOX FL-MOUN100MM	10



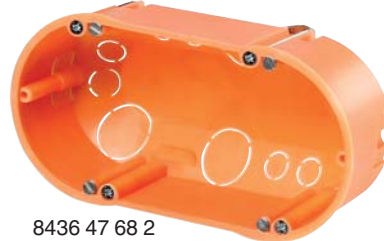
Cavity Wall Switch and Junction Box

- The tried-and-trusted version with metal claw for cost-efficient installation
- With pre-mounted device screws
- With break-out openings for cables and pipes
- Milled hole Ø 68 mm
- Material: PP, recyclable
- Colour: orange
- Protection rating IP 30
- Fire resistance: +850 °C
- VDE-tested

IP 30



8436 47 68



8436 47 68 2



8436 61 68

Technical Data

Art.-No.	Depth box mm	Fräsloch Ø mm
8436 47 68	47	68
8436 47 68 2	47	68 x 2
8436 61 68	61	68

Article No.	Article Description	QTY
8436 47 68	CAVITY WALL BOX 47X68MM	25
8436 47 68 2	CAVITY WALL BOX DOUB 47X68X2MM	100
8436 61 68	CAVITY WALL JUNC. BOX 61X68MM	25 V

Hollow-wall junction box 74 mm

- Milled hole Ø: 74 mm
- Cable insertions: 6 x 2.5 mm²
- including cover, white
- Material: PP, recyclable
- Colour: orange
- **Protection type: IP 30**
- **Fire resistance: +850 °C**
- **ÖVE-tested (Austrian Federation for Electrical Engineering)**



Article No.	Article Description	QTY
8436 55 74	HW JUNCTION BOX 55X74MM	10

Hollow-wall junction box 120 mm

- Milled hole Ø: 120 mm
- Cable insertions: 2 x M20, 2 x M25, 30 different insertions
- including cover, white
- Material: PP, recyclable
- Colour: orange
- **Protection type: IP 30**
- **Fire resistance: +850 °C**
- **ÖVE-tested (Austrian Federation for Electrical Engineering)**



Article No.	Article Description	QTY
8436 66 120	HW JUNCTION BOX 66X120MM	20

Cavity Wall Switch Boxes with Perforation Membrane

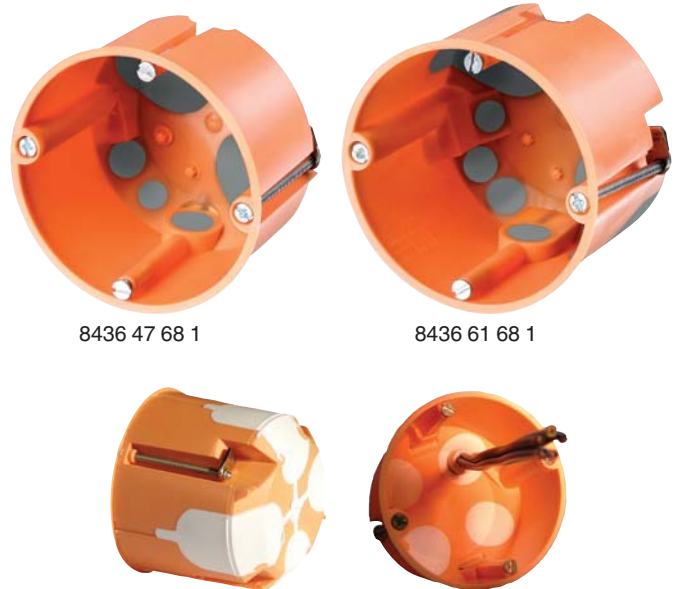
IP 30

- Guaranteed wind-resistant
- Sustainable increase in energy efficiency in buildings
- Creates increased comfort by avoiding draughts
- Easy to mount
- Simple handling without additional tools
- Milled hole Ø 68 mm
- 4 cable entries: (2×) M25, (2×) 3×1.5 mm², (2×) 3×2.5 mm² – 5×1.5 mm²
- Including wind-resistant screw connection
- 8436 61 68 1 also possesses 2 additional cable entries for 7×1.5 mm² or 5×2.5 mm²
- Material: PP, TPE, recyclable
- Colour: orange
- Protection rating IP 30
- Fire resistance: +850 °C
- VDE-tested

Technical Data

Art.-No.	Height mm	Ø mm
8436 47 68 1	47	68
8436 61 68 1	61	68

Article No.	Article Description	QTY
8436 47 68 1	CAVITY WALL BOX MEMB. 47X68MM	25
8436 61 68 1	CAVITY WALL BOX MEMB. 61X68MM	25



8436 47 68 1

8436 61 68 1

Hollow-wall electronics socket windproof

- One-hole mounting for convenient and time-saving installation
- Side connection space for all common relays and actuators
- Compliance with the bending radius, especially for mains cables easily possible
- Milled hole Ø: 68 mm
- Material: PP, TPE, recyclable
- Colour: orange
- **Protection type: IP 30**
- **Fire resistance: +850 °C**
- **VDE-tested**



Article No.	Article Description	QTY
8436 66 68 1	HW ELECTR.SOCKET WINDPROOF	10

Hollow-wall junction box 120 mm windproof

- Guaranteed wind-resistant
- Sustainable increase in energy efficiency in buildings
- Creates increased comfort by avoiding draughts
- Easy to mount
- Simple handling without additional tools
- Milled hole Ø: 120 mm
- Cable insertions: 2 × M20, 2 × M25, 30 different insertions
- including cover, white
- Material: PP, recyclable
- Colour: orange
- **Protection type: IP 30**
- **Fire resistance: +850 °C**
- **ÖVE-tested (Austrian Federation for Electrical Engineering)**

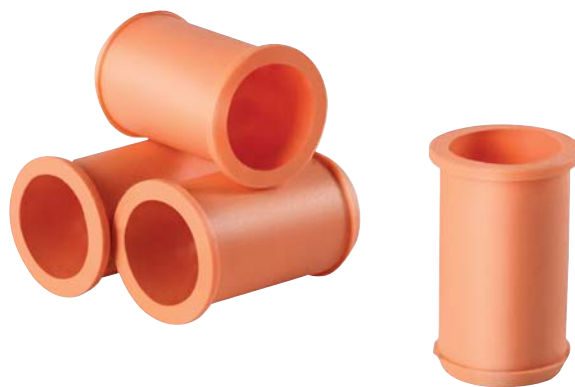


Article No.	Article Description	QTY
8436 66 120 1	HW JUNCT.BOX66X120MM WINDPROOF	20

Hollow-wall connecting pieces windproof

- For windproof through-wiring of socket combinations
- Fits Art.-No. 8436 47 68 1 and Art.-No. 8436 61 68 1
- Material: PP, recyclable
- Colour: orange
- **Protection type: IP 30**
- **Fire resistance: +850 °C**

Article No.	Article Description	QTY
8436 23 10	HW CONNECT.PIECES WINDPROOF	25



Hollow-wall outlet socket

- Milled hole Ø: 35 mm
- Cable insertions: 1 × 2.5 mm²
- including cover, white
- Material: PP, recyclable
- Colour: orange
- **Protection type: IP 30**
- **Fire resistance: +850 °C**

Article No.	Article Description	QTY
8436 45 35	HW OUTLET SOCKET 45X35MM	25



Hollow-wall connector socket, halogen-free

- **No formation of toxic smoke gases in the event of fire**
- Milled hole Ø: 68 mm
- Cable insertions: 6 × 2.5 mm²
- Screw clearance: 60 mm
- Socket depth, Art.-No. 8436 47 68 3: 47 mm
- Socket depth, Art.-No. 8436 61 68 3: 61 mm
- 4 screw bosses
- Material: PP, recyclable
- Colour: white
- **Halogen-free**
- **Protection type: IP 30**
- **Fire resistance: +850 °C**
- **VDE-tested**



8436 47 68 3



8436 61 68 3

Article No.	Article Description	QTY
8436 47 68 3	HW CONN.SOCK.47X68MM HAL.FREE	25
8436 61 68 3	HW CONN.SOCK.61X68MM HAL.FREE	25

Hollow-wall noise-protection socket windproof

- **Tested noise-protection effect**
- Guaranteed wind-resistant
- Easy to mount
- Simple handling without additional tools
- Milled hole Ø: 68 mm
- Cable insertions: 2 × M25 mm, 4 × 2.5 mm²
- Screw clearance: 60 mm
- Socket depth: 58 mm
- 4 screw bosses
- Material: PP-C, TPE-S recyclable
- Colour: grey
- **Protection type: IP 30**
- **Fire resistance: +850 °C**
- **VDE-tested**



Article No.	Article Description	QTY
8436 58 68	HW WALL-NOIS.PROT.58X68MM WP	10

Fire-protection sockets

- 2 × 14.4 mm line insertion
- Screw clearance: 60 mm
- Socket depth, Art.-No. 8436 45 74: 45 mm
- Socket depth, Art.-No. 8436 54 74: 54 mm
- Socket depth, Art.-No. 8436 54 74 2: 54 mm
- Milled hole Ø: 74 mm (double for 8436 54 74 2)
- Material: high-strength, special temperature-resistant plastic
- Colour: black
- **Halogen-free**
- **Fire-resistance class: EI90**
- **Fire resistance: +960 °C**
- **VDE-tested**
- **ETA approval**

8436 45 74
8436 54 74

8436 54 74 2

Article No.	Article Description	QTY
8436 45 74	FIRE-PROT.SOCKET FLAT 45X74MM	12
8436 54 74	FIRE-PROT.SOCKET DEEP 54X74MM	12
8436 54 74 2	FIRE-PROT.SO.DEEP.DOUBL45X74MM	6

Damp Room Junction Box Surface-Mounted

- Damp room junction box for the surface-mounted installation
- Fire resistance: +750°C
- Safety class: IP 54
- Colour: grey
- VDE-tested quality

Technical Data

Art. Ao.	L x W x H mm	Number of installations
8437 75 75	75 x 75 x 38	7 + 1
8437 85 85	85 x 85 x 38	12 + 1
8437 89 42	89 x 42 x 38	8 + 1
8437 100 100	100 x 100 x 38	12 + 1

Article No.	Article Description	QTY
8437 75 75	DAMP ROOM JU BOX SUR-M 75X75MM	25
8437 85 85	DAMP ROOM JU BOX SUR-M 85X85MM	25
8437 89 42	DAMP ROOM JU BOX SUR-M 89X42MM	25
8437 100 100	DAMP ROOM JU BOXSUR-M100X100MM	25



Damp Room Junction Box Aqua-Line

IP 54

With integrated perforation membrane , IP 54

- Very easy to assemble
- With integrated perforation membrane on all 4 sides
- No additional tools needed - uncomplicated and quick
- VDE-tested
- Unbeatable when it comes to price and performance

Advantages:

- Great time saving
- Assembly significantly simplified
- Lid attached to the bottom part to prevent it getting lost
- With integrated cable tie feature
- With membrane entry on the reverse side



Technical Data

Art. No.	L x W x H mm
8437 1 75 75	75 x 75 x 40
8437 1 85 85	85 x 85 x 40

Article No.	Article Description	QTY
8437 1 75 75	DAMP ROOM JU BOX AQ-LI 75X75MM	20
8437 1 85 85	DAMP ROOM JU BOX AQ-LI 85X85MM	10



Terminal Strips

- 12-pole screw terminals
- Temperature resistant: -50°C to +60°C
- VDE-tested quality



Article No.	Article Description	QTY
3706 25	TERM.CHOC STRIP BL.UP TO2,5QMM	10
3706 6	TERM.CHOC STRIP BL.UP TO 6QMM	10
3706 10	TERM.CHOC STRIP BL.UP TO10 QMM	10
3706 16	TERM.CHOC STRIP BL.UP TO16 QMM	10
3706 25 2	TER.CHOC STRIP WHI.UP TO2.5QMM	10
3706 6 2	TERM.CHOC STRIP WHIT.UP TO6QMM	10
3706 10 2	TERM.CHOC STRIP WHI.UP TO10QMM	10
3706 16 2	TERM.CHOC STRIP WHI.UP TO16QMM	10

Technical Data

Article No.	Dimensions mm	For cable dia. to mm ²
3706 2 5	15 x 93 x 12	2.5
3706 6	18 x 106 x 14	6
3706 10	21 x 135 x 18	10
3706 16	24.5 x 155 x 22.5	16
3706 25 2	16 x 96 x 14	2.5
3706 6 2	20 x 117 x 17	6
3706 10 2	24 x 140 x 20	10
3706 16 2	25 x 158 x 25	16

Plug-in Terminal Mini

Screwless and compact plug-in terminals for safe connection in tight spaces

- For massive copper conductor from 0.5 mm² - 1.5 mm²
- With testing slot
- Temperature resistant from -30°C to +105°C
- No plugging through of blank conductors possible
- Very compact and space-saving design
- VDE: 24A, 450V
- Material: self-extinguishing according to UL 94V-2



Technical Data

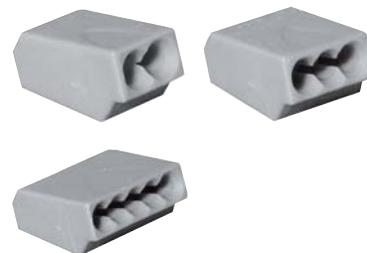
Connections	Clamping range mm ²	H x W x D mm
3	0.5 - 1.5	8.4 x 11.1 x 18.2
5	0.5 - 1.5	8.4 x 17.2 x 18.2
8	0.5 - 1.5	8.4 x 26.1 x 18.2

Article No.	Article Description	QTY
8450 3 3	PLUG-IN MINI 0,5-1,5MM ² 3-POLE	100
8450 3 5	PLUG-IN MINI 0,5-1,5MM ² 5-POLE	100
8450 3 8	PLUG-IN MINI 0,5-1,5MM ² 8-POLE	50

Plug-in Terminal, Grey

Screwless plug-in terminal for safe connection

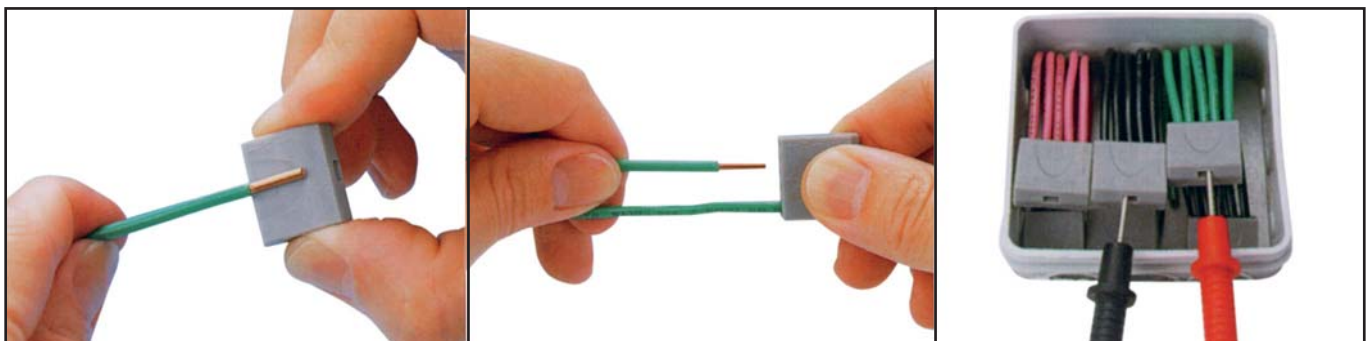
- For massive copper conductor from 1.0 mm² - 2.5 mm²
- With testing slot
- Temperature resistant from -30°C to +110°C
- No plugging through of blank conductors possible
- Space-saving compact design
- VDE: 24A, 450V
- Material: self-extinguishing according to UL94V-2



Technical Data

Connections	Clamping range mm ²	H x W x D mm
2	1.0 - 2.5	9.5 x 10.5 x 19.5
3	1.0 - 2.5	9.5 x 13.5 x 19.7
5	1.0 - 2.5	9.5 x 21.1 x 19.7
8	1.0 - 2.5	16.8 x 17.5 x 19.0

Article No.	Article Description	QTY
8450 1 2	PLUG-IN GREY 1.0-2.5MM ² 2-POLE	100
8450 1 3	PLUG-IN GREY 1.0-2.5MM ² 3-POLE	100
8450 1 5	PLUG-IN GREY 1.0-2.5MM ² 5-POLE	100



Connection terminals, compact

Screwless, compact connection terminals for secure connections in confined spaces and visual checking of the plug connection

- For solid copper conductors of 0.5–2.5 mm²
- Rated current 24 A, rated voltage 450 V
- With test slot
- Clear identification through colour coding
- Individual pressure springs for shockproof wiring in a screwless terminal, even for different cable diameters
- Temperature-resistant up to 110 °C
- Self-extinguishing according to UI94v-2
- VDE and ENEC-tested (ENEC 10)



Article No.	Article Description	QTY
8450 7 2	CONN.CLAMP 0,5-2,5MM ² 2POL.	100
8450 7 3	CONN.CLAMP 0,5-2,5MM ² 3POL.	100
8450 7 4	CONN.CLAMP 0,5-2,5MM ² 4POL.	100
8450 7 5	CONN.CLAMP 0,5-2,5MM ² 5POL.	100
8450 7 8	CONN.CLAMP 0,5-2,5MM ² 8POL.	100

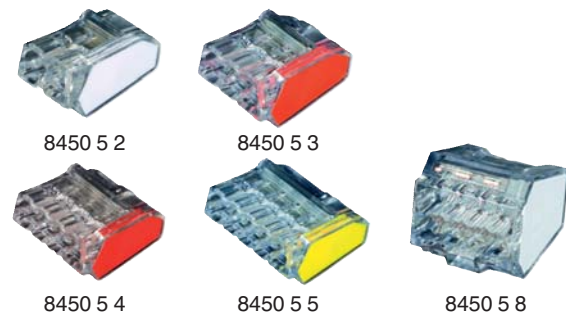
Technical Data

Connections	Clamping range mm ²	H x W x D mm
2	0,5–2,5	6,0 x 10,0 x 16,5
3	0,5–2,5	6,0 x 14,0 x 16,5
4	0,5–2,5	6,0 x 18,0 x 16,5
5	0,5–2,5	6,0 x 22,0 x 16,5
8	0,5–2,5	11,0 x 18,2 x 16,5

Compact Plug-In Terminals, Transparent

Screw-less and compact terminal connectors for a safe connection in restricted spaces and visual check of the plug connection

- Check of the plug connection for solid copper pipes of 1.0 - 2.55mm
- Clearly identifiable due to the colour coding
- With test slot
- Ergonomic shape
- Comfortable to use thanks to the ergonomic shape and secure handle
- Individual compression springs for a vibration-free wiring in a plug-in terminal, even with different cable diameters
- Temperature resistant to 110°C, self-extinguishing according to UL 94V-0
- Nominal power 24A, nominal voltage 450V
- ENEC-tested



Article No.	Article Description	QTY
8450 5 2	PLUG-IN COMP. 1,0-2,5MM ² 2-POLE	100
8450 5 3	PLUG-IN COMP. 1,0-2,5MM ² 3-POLE	100
8450 5 4	PLUG-IN COMP. 1,0-2,5MM ² 4-POLE	100
8450 5 5	PLUG-IN COMP. 1,0-2,5MM ² 5-POLE	100
8450 5 8	PLUG-IN COMP. 1,0-2,5MM ² 8-POLE	50

Technical Data

Clamping area mm ²	H x W x D mm	H x B x T mm
2	1.0–2.5	8.8 x 10.0 x 17.4
3	1.0–2.5	8.8 x 13.1 x 17.4
4	1.0–2.5	8.8 x 18.0 x 17.4
5	1.0–2.5	8.8 x 20.3 x 17.4
8	1.0–2.5	14.8 x 16.8 x 17.4

Connecting Terminal

Connecting clamp with lever-operated CAGE

CLAMP®-connection for flexible and rigid conduits

- For stripped finely stranded conductors from 0.08 mm² to 4 mm² and single or multiple wired conductors up to 2.5 mm²
- With operated-lever - individually releasable conductor
- Insulating housing with testing slot
- Max. operating temperature 85°C
- Nominal current 32A, nominal voltage 400V
- ENEC-tested



Article No.	Article Description	QTY
8450 4 2	CONNECT.TERM.RELEASE.2-POLE	100
8450 4 3	CONNECT.TERM.RELEASE.3-POLE	100
8450 4 5	CONNECT.TERM.RELEASE.5-POLE	100

Technical Data

Connections	HxWxD mm
2	14.5 x 12.4 x 20.5
3	14.5 x 17.0 x 20.5
5	14.5 x 26.6 x 20.5



Mini connection terminal

Connection terminal with lever-activated CAGE-CLAMP® Connection for all conductor types

- with activation lever, conductors can be individually detached
- single-wire conductor of 0.2 mm² to 4 mm²
- multi-wire conductor of 0.2 mm² to 4 mm²
- fine-wire conductor of 0.14 mm² to 4 mm²
- Stripping length: 11 mm
- Insulating housing with test slot
- Max. ambient temperature: 85 °C
- Rated current: 32 A
- Rated voltage: 450 V
- ENEC-tested



Article No.	Article Description	QTY
8450 8 2	MINI CONN.TERMINAL 2-POLE	100
8450 8 3	MINI CONN.TERMINAL 3-POLE	50
8450 8 5	MINI CONN.TERMINAL 5-POLE	25

Technical Data

Connections	H × W × D mm
2	8.3 × 13.1 × 18.6
3	8.3 × 18.7 × 18.6
5	8.3 × 29.9 × 18.6

Gel Cable Connectors

- Grease-filled connector for 2 and 3-core connections
- For low voltage systems, eg: telecommunication systems, signalling, bell and alarm systems
- No stripping required = the ultimate in time saving
- No contact problems (contact gel)
- Temperature resistant up to +200° C
- Terminal is halogen-free, nickel-free and resistant to ageing
- Quick, permanent and inexpensive



Article No.	Article Description	QTY
8450 6 2	GEL CABLE CONNECTORS 2 CORE	H 500
8450 6 3	GEL CABLE CONNECTORS 3 CORE	H 500

Technical Data

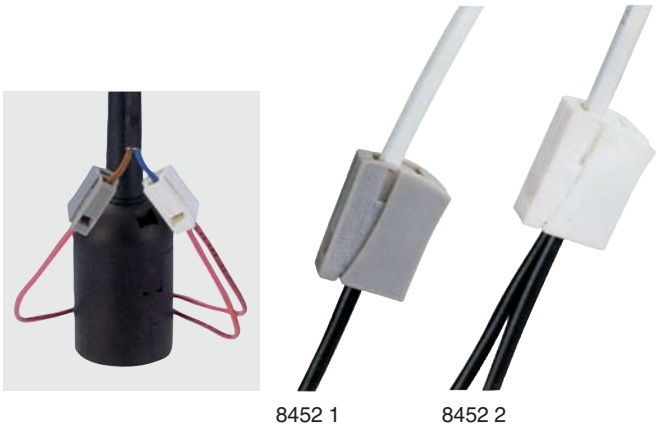
Core	Cable cross-section
2	0.2 – 0.5 mm ²
3	0.2 – 0.8 mm ²

Luster Terminal

- Side 1 for massive conductor
 - Side 2 for finely-wired conductor (flexible)
 - Separate testing slot
 - Temperature resistant from -30°C to +105°C
 - Compact and space-saving design
 - VDE: 24A, 450V, -30 to +105°C, 2.5 mm² sol
 - Material: self-extinguishing according to UL 94V-2
- Note:** 2-pole version enables looping through of rigid conductors

Technical Data		
Art. No.	Colour	Clamping range mm²
8452 1	grey	2.5 mm²
8452 2	white	2.5 mm²

Article No.	Article Description	QTY
8452 1	LUSTER TERMINAL 1-POLE	100
8452 2	LUSTER TERMINAL 2-POLE	100



Socket for the Construction Site E 27

- Safe and fast mounting with high economy of time
- Wired ready for connection
- 3-part ISO socket E 27
- 200 mm connecting cable
- With strain relief and suspension
- **Standard:** with luster terminals
- **Profi:** with lamp terminals

Article No.	Article Description	QTY
8489 1	SOCKET E27 STANDARD	10
8489 2	SOCKET E27 PROFI	10



Multicore Cable End, Insulated DIN

- Material: E-Cu galvanized
- Polyamide 6.0 leading-in funnel - Heat resistant up to +110°C
- For conductors from 0.5 to 50 mm²



Article No.	Article Description	QTY
3713 05 115	CBL END SLEEVE 0.5K WHITE	H 500
3713 05 135	CBL END SLE.ISO.DIN/B 0.5N WHI	H 500
3713 05 155	CBL END SLEEVE 0.5HL WHITE	H 500
3713 075 12	CBL END SLEEVE 0.75K GREY	H 500
3713 075 14	CBL END SLE.ISO.DIN 0.75N GREY	H 500
3713 075 16	CBL END SLEEVE 0.75HL GREY	H 500
3713 075 18	CBL END SLEEVE 0.75L GREY	H 500
3713 1 12	CBL END SLEEVE 1K RED	H 500
3713 1 14	CBL END SLE.ISO.DIN/B 1N RED	H 500
3713 1 16	CBL END SLEEVE 1HL RED	H 500
3713 1 18	CBL END SLEEVE 1L RED	H 500
3713 15 14	CBL END SLE.ISO.DIN/B 1.5N BLA	H 500
3713 15 16	CBL END SLEEVE 1.5HL BLACK	H 500
3713 15 24	CBL END SLEEVE 1.5L BLACK	H 500
3713 25 15	CBL END SLE.ISO.DIN/A 2.5NBLUE	H 500
3713 25 19	CBL END SLEEVE 2.5HL BLUE	H 500
3713 25 25	CBL END SLEEVE 2.5L BLUE	H 500
3713 4 168	CBL END SLEEVE 4N GREY	H 500
3713 4 198	CBL END SLEEVE 4HL GREY	H 500
3713 6 20	CBL END SLEEVE 6N YELLOW	100
3713 10 21	CBL END SLEEVE 10N RED	100
3713 10 27	CBL END SLEEVE 10L RED	100
3713 16 23	CBL END SLEEVE 16N BLUE	100
3713 16 29	CBL END SLEEVE 16L BLUE	100
3713 25 29	CBL END SLEEVE 25N YELLOW	50
3713 35 30	CBL END SLEEVE 35N RED	50
3713 35 39	CBL END SLEEVE 35L RED	50
3713 50 36	CBL END SLEEVE 50N BLUE	50
3713 50 41	CBL END SLEEVE 50L BLUE	50

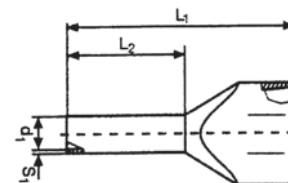
Technical Data

Nom. cross section mm ²	Type	Length L1 mm	Length L2 mm	D1 mm
0.5	K	11.5	6	1.4
0.5	N	13.5	8	1.4
0.5	HL	15.5	10	1.4
0.75	K	12	6	1.6
0.75	N	14	8	1.6
0.75	HL	16	10	1.6
0.75	L	18	12	1.6
1	K	12	6	1.8
1	N	14	8	1.8
1	HL	16	10	1.8
1	L	18	12	1.8
1.5	N	14	8	2.1
1.5	HL	16	10	2.1
1.5	L	24	18	2.1
2.5	N	15	8	2.5
2.5	HL	19	12	2.5
2.5	L	25	18	2.5
4	N	16.8	9.5	3.2
4	HL	19.8	12	3.2
6	N	20	12	3.9
10	N	21	12	5
10	L	27	18	5
16	N	23	12	6.2
16	L	29	18	6.2
25	N	29	16	7.7
35	N	30	16	8.9
35	L	39	25	8.9
50	N	36	20	11
50	L	41	25	11

Version: Type K = Short, Type N = Standard, HL = Half long, L = Long
N = Most common dimension

Multicore Cable End for Two Conductors

- Leading-in funnel made of polypropylene
- Heat-resistant up to 110°C
- Material: Electrolytic copper
- Surface: galvanized
- Two conductors can easily be inserted



Technical Data

Cross section in mm ²	Colour	L1	L2
2 x 0.5 N	white	15.0	8.0
2 x 0.75 N	gray	15.0	8.0
2 x 1 N	red	15.0	8.0
2 x 1.5 N	black	16.0	8.0
2 x 2.5 N	blue	18.5	10.0
2 x 4 N	gray	23.0	12.0
2 x 6 N	yellow	25.0	14.0
2 x 10 N	red	26.0	14.0
2 x 16 N	blue	31.0	16.0

Multicore Cable End, Insulated A

- Material: E-Cu galvanized
- Polyamide 6.0 leading-in funnel
- Heat resistant up to +110°C
- For conductors from 0.5 to 50 mm²



Article No.	Article Description	QTY
3712 05 115	CBL END SLEEVE ORANGE 0.5K	H 500
3712 05 135	CBL END SLEEVE ORANGE 0.5N	H 500
3712 075 12	CBL END SLEEVE WHITE 0.75K	H 500
3712 075 14	CBL END SLEEVE WHITE 0.75N	H 500
3712 075 16	CBL END SLEEVE WHITE 0.75HL	H 500
3712 1 12	CBL END SLEEVE YELLOW 1K	H 500
3712 1 14	CBL END SLEEVE YELLOW 1N	H 500
3712 1 16	CBL END SLEEVE YELLOW 1HL	H 500
3712 15 14	CBL END SLEEVE RED 1.5N	H 500
3712 15 16	CBL END SLEEVE RED 1.5HL	H 500
3712 6 20	CBL END SLEEVE BLACK 6N	100
3712 6 26	CBL END SLEEVE BLACK 6L	100
3712 10 21	CBL END SLEEVE IVORY 10N	100
3712 10 27	CBL END SLEEVE IVORY 10L	100
3712 16 23	CBL END SLEEVE GREEN 16N	100
3712 16 29	CBL END SLEEVE GREEN 16L	100
3712 25 29	CBL END SLEEVE BROWN 25N	50
3712 25 35	CBL END SLEEVE BROWN 25L	50
3712 35 39	CBL END SLEEVE BEIGE 35L	50
3712 50 36	CBL END SLEEVE OLIVE 50N	50

Technical Data

Nom. cross-section mm ²	Type	Length L1 mm	Length L2 mm	D1 mm
0.5	K	11.5	6	1.4
0.5	N	13.5	8	1.4
0.75	K	12	6	1.6
0.75	N	14	8	1.6
0.75	HL	16	10	1.6
1	K	12	6	1.8
1	N	14	8	1.8
1	HL	16	10	1.8
1.5	N	14	8	2.1
1.5	HL	16	10	2.1
6	N	20	12	3.9
6	L	26	18	3.9
10	N	21	12	5
10	L	27	18	5
16	N	23	12	6.2
16	L	29	18	6.2
25	N	29	16	7.7
25	L	35	22	7.7
35	L	39	25	8.9
50	N	36	20	11

Set of Multicore Cable End, Insulated

- Neatly arranged box

Article No.	Article Description	QTY
3719 3713	SET ST.CBL.END SLEEVE 0.5-2.5	1
3719 3712	SET ST.CBL.END SLEEVE 0.5-2.5	1
3719 3710	SET ST.CBL.END SLEEVE 0.5-2.5	1
3719 3713 1	SET ST.CBL.END SLEEVE 4-16	1

Contents Art.-No. 3719 3713, 3719 3712, 3719 3710:

- 50 pieces 0.50 mm² x 13.5 mm
- 100 pieces 0.75 mm² x 14 mm
- 100 pieces 1.00 mm² x 14 mm
- 100 pieces 1.50 mm² x 14 mm
- 50 pieces 2.50 mm² x 15 mm

Contents Art.-No. 3719 3713 1:

- 50 pieces 4 mm² x 16.8 mm
- 20 pieces 6 mm² x 20 mm
- 20 pieces 10 mm² x 21 mm
- 10 pieces 16 mm² x 23 mm



Multicore Cable End, Non-insulated DIN 46228

- Material: E-Cu
- Surface galvanized
- For conductors from 0.5 to 16 mm²



Article No.	Article Description	QTY
3711 05 6	CBL END SLEEVE UNINSUL. 0.5X6	H 1000
3711 075 6	CBL END SLEEVE UNINSUL. 0.75X6	H 1000
3711 075 10	CBL END SLEEVE UNINSUL. 0.75X10	H 1000
3711 1 6	CBL END SLEEVE UNINSULATED 1X6	H 1000
3711 1 10	CBL END SLEEVE UNINSULAT. 1X10	H 1000
3711 1 12	CBL END SLEEVE UNINSULAT. 1X12	H 1000
3711 15 7	CBL END SLEEVE UNINSUL. 1.5X7	H 1000
3711 15 10	CBL END SLEEVE UNINSUL. 1.5X10	H 1000
3711 15 12	CBL END SLEEVE UNINSUL. 1.5X12	H 1000
3711 15 15	CBL END SLEEVE UNINSUL. 1.5X15	H 1000
3711 25 7	CBL END SLEEVE UNINSUL. 2.5X7	H 1000
3711 25 10	CBL END SLEEVE UNINSUL. 2.5X10	H 1000
3711 25 12	CBL END SLEEVE UNINSUL. 2.5X12	H 1000

Article No.	Article Description	QTY
3711 25 15	CBL END SLEEVE UNINSUL. 2.5X15	H 1000
3711 25 18	CBL END SLEEVE UNINSUL. 2.5X18	H 1000
3711 4 9	CBL END SLEEVE UNINSULATED 4X9	H 1000
3711 4 12	CBL END SLEEVE UNINSULAT. 4X12	H 1000
3711 6 10	CBL END SLEEVE UNINSULAT. 6X10	H 500
3711 6 12	CBL END SLEEVE UNINSULAT. 6X12	H 500
3711 6 15	CBL END SLEEVE UNINSULAT. 6X15	H 500
3711 6 18	CBL END SLEEVE UNINSULAT. 6X18	H 500
3711 10 12	CBL END SLEEVE UNINSULAT. 10X12	100
3711 10 18	CBL END SLEEVE UNINSULAT. 10X18	100
3711 16 12	CBL END SLEEVE UNINSULAT. 16X12	100
3711 075 8	CBL END SLEEVE UNINSUL. 0.75X8	H 1000

Set of Multicore Cable End, Non-insulated

- Neatly arranged box

Article No.	Article Description	QTY
3719 3711	SET CBL END SLEE. UNINS. 0.5-2.5	1
3719 3711 1	SET CBL END SLEE. UNINS. 0.75-4	1

Contents Art.-No. 3719 3711:

- 500 pieces 0.50 mm² x 6 mm
- 500 pieces 0.75 mm² x 6 mm
- 400 pieces 1.00 mm² x 6 mm
- 300 pieces 1.50 mm² x 7 mm
- 200 pieces 2.50 mm² x 7 mm

Contents Art.-No. 3719 3711 1:

- 400 pieces 0.75 mm² x 8 mm
- 300 pieces 1.00 mm² x 10 mm
- 200 pieces 1.50 mm² x 10 mm
- 150 pieces 2.50 mm² x 12 mm
- 100 pieces 4.00 mm² x 12 mm



Multicore Cable Ends in Assortment

- Insulated / non-insulated = 901 pieces

Contents:

Article No.	Article Description	Quantity
3711 15 7	CBL END SLEEVE UNINSUL. 1.5X7	100
3711 15 12	CBL END SLEEVE UNINSUL. 1.5X12	100
3711 25 7	CBL END SLEEVE UNINSUL. 2.5X7	100
3711 25 12	CBL END SLEEVE UNINSUL. 2.5X12	100
3711 4 12	CBL END SLEEVE UNINSULAT. 4X12	100
3711 6 15	CBL END SLEEVE UNINSULAT. 6X15	100
3713 05 155	CBL END SLEEVE 0.5HL WHITE	50
3713 075 14	CBL END SLE. ISO. DIN 0.75N GREY	50
3713 1 14	CBL END SLE. ISO. DIN/B 1N RED	50
3713 15 14	CBL END SLE. ISO. DIN/B 1.5N BLA	50
3713 25 15	CBL END SLE. ISO. DIN/A 2.5N BLUE	50
3713 4 168	CBL END SLEEVE 4N GREY	25
3713 6 20	CBL END SLEEVE 6N YELLOW	25
3790 4	MULTICORE CABLE END PLIERS 143	1

Article No.	Article Description	QTY
9000 371	ASS. MULTICORE CABLE END	1
9000R 371	TRAY MULTICORE CABLE END	1



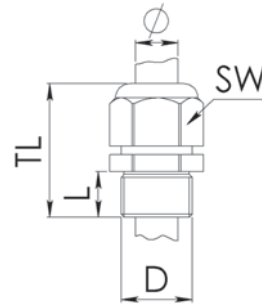
Cable Glands, Nickel-Plated Brass

Metric cable gland, nickel-plated brass with tensile force as per IP68 (5 bar)

- Large clamping area
- Optimum seal and strain relief due to patented lamella system
- Sealing at the enclosure by means of additional O-ring
- VDE approved
- **Protection type as per EN 60 529 and DIN 40 050-T9:** IP 68 up to 5 bar (30 min) / IP 69K
- **Operating temperature:** -40°C to 100°C, for short periods up to about 120°C
- **Material:** Cable gland: nickel-plated brass, Clamping ring: polyamide, Seal: EPDM

Applications: • Mechanical, apparatus and plant engineering

- Control systems
- Measurement and control systems
- Building installation



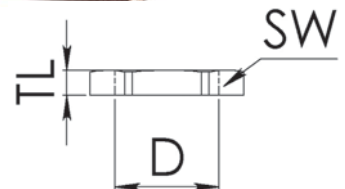
Article No.	Article Description	QTY
8448 9 1 12	CABLE GLANDS MS MTR M12	50
8448 9 1 16	CABLE GLANDS MS MTR M16	50
8448 9 1 20	CABLE GLANDS MS MTR M20	50
8448 9 1 25	CABLE GLANDS MS MTR M25	50
8448 9 1 32	CABLE GLANDS MS MTR M32	25
8448 9 1 40	CABLE GLANDS MS MTR M40	10
8448 9 1 50	CABLE GLANDS MS MTR M50	10
8448 9 1 63	CABLE GLANDS MS MTR M63	10

Technical Data				
D mm	L mm	Ø mm	SW mm	TL mm
M 12 x 1.5	5	3 - 7	16	23 - 30
M 16 x 1.5	5	4.5 - 10	20	26 - 34
M 20 x 1.5	6	6 - 13	24	29 - 37
M 25 x 1.5	7	9 - 17	29	33 - 42
M 32 x 1.5	8	13 - 21	36	36 - 44
M 40 x 1.5	8	16 - 28	46	44 - 55
M 50 x 1.5	9	21 - 35	55	51 - 62
M 63 x 1.5	10	34 - 48	68	56 - 67

Locknuts, Nickel-Plated Brass

Metric lock nut, nickel-plated brass

- For secure tightening of cable glands
- **Operating temperature:** -40°C to 100°C, for short periods up to about 120°C
- **Material:** nickel-plated brass
- **Applications:** installation technology



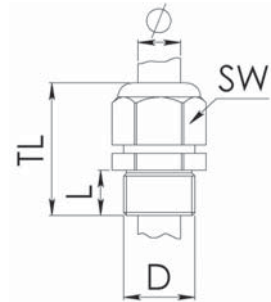
Article No.	Article Description	QTY
8448 9 2 12	LOCKNUTS MS MTR M12	100
8448 9 2 16	LOCKNUTS MS MTR M16	100
8448 9 2 20	LOCKNUTS MS MTR M20	100
8448 9 2 25	LOCKNUTS MS MTR M25	100
8448 9 2 32	LOCKNUTS MS MTR M32	100
8448 9 2 40	LOCKNUTS MS MTR M40	50
8448 9 2 50	LOCKNUTS MS MTR M50	50
8448 9 2 63	LOCKNUTS MS MTR M63	50

Technical Data		
D mm	SW mm	TL mm
M12 x 1.5	15	2.8
M16 x 1.5	19	2.8
M20 x 1.5	24	3
M25 x 1.5	30	3.5
M32 x 1.5	36	4
M40 x 1.5	46	5
M50 x 1.5	60	5
M63 x 1.5	70	6

EMC Cable Glands, Nickel-Plated Brass

Metric EMC cable gland, nickel-plated brass with tensile force as per IP68 (5 bar)

- EMC cable gland with contact spring insert
- Optimum seal and strain relief due to patented lamella system
- Permanent contact with the shielding braid
- Sealing at the enclosure by means of additional O-ring
- VDE approved
- **Protection type as per EN 60 529 and DIN 40 050-T9:** IP 68 up to 5 bar (30 min) / IP 69K
- **Operating temperature:** -40°C to 100°C, for short periods up to about 120°C
- **Material:** Cable gland: nickel-plated brass, Clamping ring: polyamide, Seal: EPDM, Contact spring insert: stainless steel
- **Applications:**
 - Mechanical, apparatus and plant engineering
 - Control systems
 - Measurement and control systems
 - Building installation



Article No.	Article Description	QTY
8448 10 1 12	EMC CABLE GLANDS MS MTR M12	50
8448 10 1 16	EMC CABLE GLANDS MS MTR M16	50
8448 10 1 20	EMC CABLE GLANDS MS MTR M20	50
8448 10 1 25	EMC CABLE GLANDS MS MTR M25	50
8448 10 1 32	EMC CABLE GLANDS MS MTR M32	25
8448 10 1 40	EMC CABLE GLANDS MS MTR M40	10
8448 10 1 50	EMC CABLE GLANDS MS MTR M50	10
8448 10 1 63	EMC CABLE GLANDS MS MTR M63	10

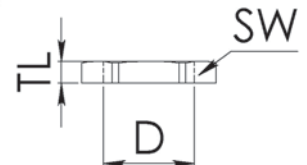
Technical Data

D mm	L mm	Ø mm	SW mm	TL mm
M 12 x 1.5	5	3 - 7	16	23 - 30
M 16 x 1.5	5	4.5 - 10	20	26 - 34
M 20 x 1.5	6	6 - 13	24	29 - 37
M 25 x 1.5	7	9 - 17	29	33 - 42
M 32 x 1.5	8	13 - 21	36	36 - 44
M 40 x 1.5	8	16 - 28	46	44 - 55
M 50 x 1.5	9	21 - 35	55	51 - 62
M 63 x 1.5	10	34 - 48	68	56 - 67

EMC Locknuts, Nickel-Plated Brass

Metric lock nut, nickel-plated brass

- For cutting through paint layers or powder coats for optimal contact for potential equalization
- **Operating temperature:** -40°C to 100°C, for short periods up to about 120°C
- **Material:** nickel-plated brass
- **Applications:** Installation technology



Article No.	Article Description	QTY
8448 10 2 12	EMC LOCKNUTS MS MTR M12	100
8448 10 2 16	EMC LOCKNUTS MS MTR M16	100
8448 10 2 20	EMC LOCKNUTS MS MTR M20	50
8448 10 2 25	EMC LOCKNUTS MS MTR M25	50
8448 10 2 32	EMC LOCKNUTS MS MTR M32	100
8448 10 2 40	EMC LOCKNUTS MS MTR M40	50
8448 10 2 50	EMC LOCKNUTS MS MTR M50	50
8448 10 2 63	EMC LOCKNUTS MS MTR M63	25

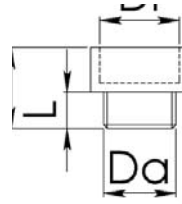
Technical Data

D mm	SW mm	TL mm
M12 x 1.5	15	4.7
M16 x 1.5	19	4.7
M20 x 1.5	24	4.7
M25 x 1.5	30	5.2
M32 x 1.5	36	5.7
M40 x 1.5	46	6.5
M50 x 1.5	60	7
M63 x 1.5	70	7

Extensions, Nickel-Plated Brass

Metric extensions, nickel-plated brass

- For enlarging threaded or through holes to larger thread sizes
- **Applications:** Installation technology



Article No.	Article Description	QTY
8448 8 2 1620	EXTENSIONS MS METRIC 1620	100
8448 8 2 2025	EXTENSIONS MS METRIC 2025	50
8448 8 2 2532	EXTENSIONS MS METRIC 2532	50
8448 8 2 3240	EXTENSIONS MS METRIC 3240	50
8448 8 2 4050	EXTENSIONS MS METRIC 4050	25
8448 8 2 5063	EXTENSIONS MS METRIC 5063	10

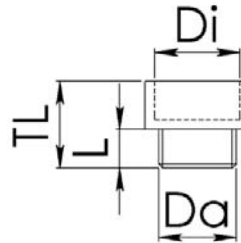
Technical Data

Da mm	Di mm	L mm	TL mm
M 16 x 1.5	M 20 x 1.5	5	17
M 20 x 1.5	M 25 x 1.5	6	19
M 25 x 1.5	M 32 x 1.5	7	21
M 32 x 1.5	M 40 x 1.5	8	24
M 40 x 1.5	M 50 x 1.5	8	31
M 50 x 1.5	M 63 x 1.5	9	31

Reduction, Nickel-Plated Brass

Metric reduction, nickel-plated brass

- For reducing threaded or through holes to smaller thread sizes
- **Application:** Installation technology



Article No..	Article Description	QTY
8448 8 3 2012	REDUCTION MS METRIC 2012	100
8448 8 3 2016	REDUCTION MS METRIC 2016	100
8448 8 3 2516	REDUCTION MS METRIC 2516	50
8448 8 3 2520	REDUCTION MS METRIC 2520	100
8448 8 3 3225	REDUCTION MS METRIC 3225	50
8448 8 3 4032	REDUCTION MS METRIC 4032	25
8448 8 3 5032	REDUCTION MS METRIC 5032	10
8448 8 3 5040	REDUCTION MS METRIC 5040	25
8448 8 3 6350	REDUCTION MS METRIC 6350	10

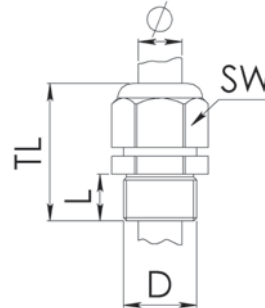
Technical Data

Da mm	Di mm	L mm	TL mm
M 20 x 1.5	M 12 x 1.5	6	8.5
M 20 x 1.5	M 16 x 1.5	6	8.5
M 25 x 1.5	M 16 x 1.5	7	10
M 25 x 1.5	M 20 x 1.5	7	10
M 32 x 1.5	M 25 x 1.5	8	11.5
M 40 x 1.5	M 32 x 1.5	8	11.5
M 50 x 1.5	M 32 x 1.5	9	12.5
M 50 x 1.5	M 40 x 1.5	9	12.5
M 63 x 1.5	M 50 x 1.5	10	14

Cable Glands

Metric cable gland made from polyamide with strain relief IP68 (5 bar)

- Large clamping area
- Optimum sealing and strain relief due to patented lamella system
- Moulded sealing lip for optimum sealing on the housing
- Equal seal width and spanner sizes for all screw connections
- Vibration-resistant profile thread with cap nut over-twist protection
- Colour: light grey, RAL 7035
- Silicone and halogen-free
- **Protection class according to EN 60 529:**
IP 68 to 5 bar (30 min) / M 40 to M 63 with connection thread seal ring
- **Flame resistance:** glow wire test +750° according to EN 606 95-2-11
- **Operating temperature:** +20°C to +100°C, short-term up to +120°C
- **Material:** screw joint: polyamide, moulded seal: EPDM
- **Chemical resistance:** acetone, petrol, benzol, diesel oil, greases, oils, solvents for paint and varnish
- **Applications:**
 - engineering, apparatus engineering and equipment construction
 - control systems
 - measurement, control and regulation construction
 - building installation



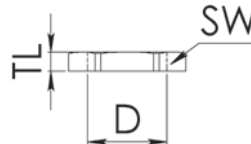
Article No.	Article Description	QTY
8448 1 12	THREAD.CABLE JOINT METRIC M12	100
8448 1 16	THREAD.CABLE JOINT METRIC M16	100
8448 1 20	THREAD.CABLE JOINT METRIC M20	100
8448 1 25	THREAD.CABLE JOINT METRIC M25	50
8448 1 32	THREAD.CABLE JOINT METRIC M32	25
8448 1 40	THREAD.CABLE JOINT METRIC M40	20
8448 1 50	THREAD.CABLE JOINT METRIC M50	10
8448 1 63	THREAD.CABLE JOINT METRIC M63	5

Technical Data				
D mm	L mm	Ø mm	SW mm	TL mm
M 12 x 1.5	9	3 - 7	16	29 - 34
M 16 x 1.5	9	4.5 - 10	20	31 - 37
M 20 x 1.5	10	6 - 13	24	36 - 45
M 25 x 1.5	10	9 - 17	29	38 - 47
M 32 x 1.5	12	13 - 21	36	42 - 51
M 40 x 1.5	12	16 - 28	46	52 - 65
M 50 x 1.5	14	21 - 35	55	59 - 72
M 63 x 1.5	15	34 - 48	68	64 - 78

Locking Nuts

Metric locking nuts made from high-impact polystyrene

- Metric thread
- Colour: light grey, RAL 7035
- **Application:** installation technology
- **Operational temperature:** -20 to +60°C, short-term up to approx. +80°C
- **Material:** high-impact polystyrene
- **Warning:** when using products made from polystyrene, stress cracks may develop in the outer area
- **Chemical resistance:** alkali, alcohol, most acids



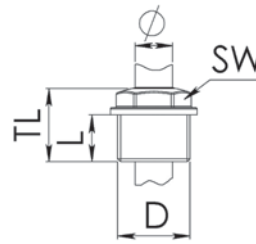
Article No.	Article Description	QTY
8448 2 12	COUNTERNUT METRIC M12	50
8448 2 16	COUNTERNUT METRIC M16	50
8448 2 20	COUNTERNUT METRIC M20	50
8448 2 25	COUNTERNUT METRIC M25	50
8448 2 32	COUNTERNUT METRIC M32	25
8448 2 40	COUNTERNUT METRIC M40	20
8448 2 50	COUNTERNUT METRIC M50	10
8448 2 63	COUNTERNUT METRIC M63	5

Technical Data		
D mm	SW mm	TL mm
M 12 x 1.5	18	5
M 16 x 1.5	22	5
M 20 x 1.5	27	5
M 25 x 1.5	32	6
M 32 x 1.5	40	6
M 40 x 1.5	50	7
M 50 x 1.5	60	7
M 63 x 1.5	75	7

Clamping Glands

Closed design made from polyethylene, IP54

- Simple cable bushing with punctured membrane
- Easy assembly due to extensive hexagon
- **Application:** control system construction, building installation, installation devices
- **Protection class according to EN 60 529:** IP 54
- **Operating temperature:** -40°C to +80°C, short-term to approx. +100°C
- **Material:** polyethylene



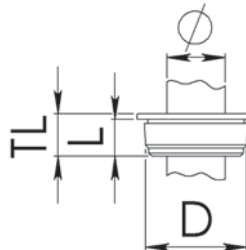
Article No.	Article Description	QTY
8448 3 12	CLAMPING GLANDS M12	50
8448 3 16	CLAMPING GLANDS M16	50
8448 3 20	CLAMPING GLANDS M20	50
8448 3 25	CLAMPING GLANDS M25	50
8448 3 32	CLAMPING GLANDS M32	25
8448 3 40	CLAMPING GLANDS M40	20
8448 3 50	CLAMPING GLANDS M50	10
8448 3 63	CLAMPING GLANDS M63	5

Technical Data

D	L	Ø	SW	TL
mm	mm	mm	mm	mm
M 12 x 1.5	10	3.5 - 6	12	17
M 16 x 1.5	9	5 - 10	15	17
M 20 x 1.5	12	8 - 13.5	19	20
M 25 x 1.5	12	9 - 16	24	22
M 32 x 1.5	14	11 - 22	30	25
M 40 x 1.5	16	17 - 24	37	28
M 50 x 1.5	18	22 - 35	46	31
M 63 x 1.5	20	24 - 43	56	37

Membrane Spouts

- **2-component cable inlets , IP66**
- Dust-proof and easy to assemble Also suitable for sealing special cables
- For use with housing with wall thickness from 2mm
- **Protection class according to EN 60 529:** IP66
- **Operating temperature:** -40°C to +80°C, short-term up to approx. +100°C
- **Material:** polyethylene / thermoplastic elastomere
- **Application:**
 - Engineering, apparatus engineering and equipment construction
 - Control system construction
 - Measurement, control and regulation construction
 - Building installation
 - Lighting industry
 - Installation devices



Article No.	Article Description	QTY
8448 4 16	MEMBRANE SPOUTS M16	100
8448 4 20	MEMBRANE SPOUTS M20	100
8448 4 25	MEMBRANE SPOUTS M25	50
8448 4 32	MEMBRANE SPOUTS M32	25

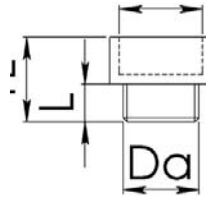
Technical Data

D	L	Ø	TL
mm	mm	mm	mm
16	9.5	1 - 9	11
20	9.5	1 - 13	11
25	9.5	1 - 18	11
32	9.5	1 - 25	11

Plastic Reduction

Metric reduction, glass-fibre reinforced polyamide

- For reducing threaded or through holes to smaller thread sizes
- **Operating temperature:** -40°C to 100°C, for short periods up to about 150°C
- **Applications:** Installation technology



Article No.	Article Description	QTY
8448 8 1 2016	PLASTIC REDUCTION 2016 MTR	100
8448 8 1 2516	PLASTIC REDUCTION 2516 MTR	100
8448 8 1 2520	PLASTIC REDUCTION 2520 MTR	100
8448 8 1 3225	PLASTIC REDUCTION 3225 MTR	50
8448 8 1 4032	PLASTIC REDUCTION 4032 MTR	25
8448 8 1 5032	PLASTIC REDUCTION 5032 MTR	5
8448 8 1 5040	PLASTIC REDUCTION 5040 MTR	5
8448 8 1 6350	PLASTIC REDUCTION 6350 MTR	5

Technical Data

Da mm	Di mm	L mm	SW mm	TL mm
M 20 x 1.5	M 16 x 1.5	9	24	27
M 25 x 1.5	M 16 x 1.5	10	29	17
M 25 x 1.5	M 20 x 1.5	10	29	17
M 32 x 1.5	M 25 x 1.5	12	36	19
M 40 x 1.5	M 32 x 1.5	12	46	19
M 50 x 1.5	M 32 x 1.5	14	55	21
M 50 x 1.5	M 40 x 1.5	14	55	21
M 63 x 1.5	M 50 x 1.5	15	65	22

Clixx 2K Cable Feed

- Safety category as per EN 60 529: IP 66/67
- Operating temperature of -40°C to 65°C
- Made of polypropylene/thermoplastic elastomer
- Dust-proof, easy-to-assemble
- For wall thicknesses of 0.8 - 3.5 mm
- UV-resistant
- Strain relief as per EN 50 262 Type A



Article No.	Article Description	QTY
8448 8 16	CLIXX 2K CABLE FEED M16	50
8448 8 20	CLIXX 2K CABLE FEED M20	50
8448 8 25	CLIXX 2K CABLE FEED M25	50

Technical Data

Cable-Ø	TL mm	Drill-Ø	Wall thickness
4 - 10	15	16.7	0.8 - 3.5
6 - 13	15	20.7	0.8 - 3.5
9 - 17	15	25.7	0.8 - 3.5

Gel Filled Cable Junction Box

- Suitable for through-wiring and junctions
- Includes connectors
- With terminal block and Allen key
- Self-extinguishing
- No additional costs for special tools
- Protection class as per EN 60 529 - IP 68
- Approval in accordance with EN 50393
- Operating temperature -20° C to +90° C
- Impact-resistant plastic housing

Applications:

- Below ground and submersed in up to 1 m of water for single and multi-conductor cables up to 0.1 / 1 kV

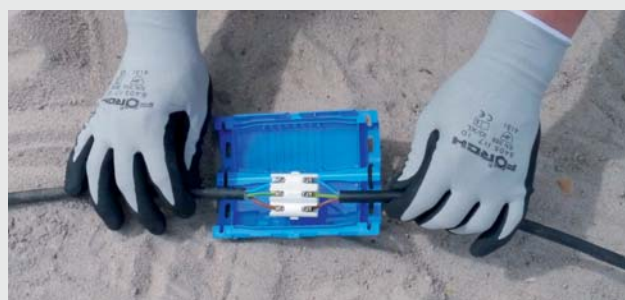


CE

Your Advantage / Benefit

- Economical, cost-saving
- Environmentally friendly
- Exempt from labelling
- Straightforward handling

Application



Article No.	Article Description	QTY
8448 7 72 4023	GEL FIL.CAB.JUNC.BOX 72X40X23	1
8448 7 146 5535	GEL FILLED CABLE JUNC.BOX 146X	1
8448 7 180 6940	GEL FIL.CAB.JUNC.BOX 180X69X40	1

Technical Data

Size mm	Through-wiring mm ²	Main cable mm ²	Outgoing cable mm ²
72 x 40 x 23 mm	1 x 2.5 – 10	1 x 6 – 25	1 x 1.5 – 10
146 x 55 x 35 mm	3 – 5 x 1.5 – 6	3 – 5 x 1.5 – 6	3 – 5 x 1.5 – 2.5
180 x 69 x 40 mm	3 – 5 x 1.5 – 25	3 – 5 x 6 – 10	3 – 5 x 1.5 – 2.5

Related products

- **Electro-Multifunctional Pliers**
FÖRCH
Art. No. 4010 190 5



- **Cable Stripper for Electricians**
Art. No. 3790 50

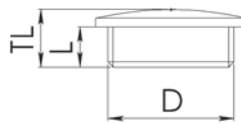


- **Automatic Wire Stripper with Wire Cutter**
Art. No. 3790 31



Screw Plugs

- For the reliable sealing of unused threads or clearance holes
- With metric thread according to EN 60 423
- Colour: light grey, RAL 7035
- Glass fibre reinforced
- **Protection class according to EN 60 529:** IP 56, IP 68 regarding assembly with connection thread seal ring (8448 6
- **Operational temperature:** -40°C to +100°C, short-term up to approx. +150°C
- **Material:** polyamide, glass fibre reinforced



Article No.	Article Description	QTY
8448 5 12	SCREW PLUGS M12	100
8448 5 16	SCREW PLUGS M16	100
8448 5 20	SCREW PLUGS M20	100
8448 5 25	SCREW PLUGS M25	100
8448 5 32	SCREW PLUGS M32	50
8448 5 40	SCREW PLUGS M40	50
8448 5 50	SCREW PLUGS M50	25
8448 5 63	SCREW PLUGS M63	25

Technical Data

D mm	L mm	TL mm
M 12 x 1.5	6	8
M 16 x 1.5	6	9
M 20 x 1.5	6	9.5
M 25 x 1.5	8	11.5
M 32 x 1.5	8	12
M 40 x 1.5	8	13
M 50 x 1.5	10	15
M 63 x 1.5	12	17

Connection Thread Sealing Rings

For additional sealing of the connection housing / cable gland

- Connection thread for additional sealing of the connections
- Resistant to chemicals
- Very high weather resistance
- **Operating temperature:** -40°C to +120°C
- **Material:** EPDM
- **Chemical resistance:** alcohol, ketones, super-heated steam, brake fluid, detergent, natron, potash, silicone oil, grease, many organic and inorganic acids
- **Weather resistance:** very good



Article No.	Article Description	QTY
8448 6 12	CONNECT. THREAD SEAL RINGS M12	50
8448 6 16	CONNECT. THREAD SEAL RINGS M16	50
8448 6 20	CONNECT. THREAD SEAL RINGS M20	50
8448 6 25	CONNECT. THREAD SEAL RINGS M25	50
8448 6 32	CONNECT. THREAD SEAL RINGS M32	50
8448 6 40	CONNECT. THREAD SEAL RINGS M40	50
8448 6 50	CONNECT. THREAD SEAL RINGS M50	25
8448 6 63	CONNECT. THREAD SEAL RINGS M63	25

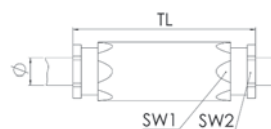
Technical Data

D mm
M 12 x 1.5
M 16 x 1.5
M 20 x 1.5
M 25 x 1.5
M 32 x 1.5
M 40 x 1.5
M 50 x 1.5
M 63 x 1.5

Cable Connecting Sleeves

Made from flame-retardant polystyrene, IP54

- **Application:** fixed installation in cable canal or in suspended ceilings, fixed surface mounting
- **Protection class according to EN 60 529:** IP 54
- **Flame resistance:** glow wire test 750°C according to EN 60695-2-11 (terminal insert: 960°C)
- **Operational temperature:** -25°C to +60°C, short-term up to approx. +80°C
- **Material:** polystyrene with flame protection; clamping insert polyamide, glass fibre reinforced



Article No.	Article Description	QTY
8448 7 25	CABLE CONNECTING SLEEVES 5X2.5	1
8448 7 60	CABLE CONNECTING SLEEVES 5X6.0	1

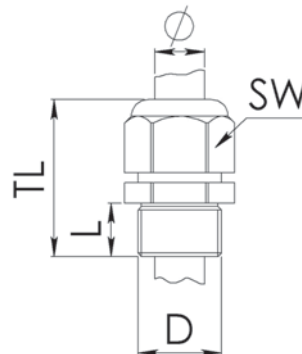
Technical Data

Cable-Ø mm	SW 1 mm	SW 2 mm	TL mm	Clamping area mm ²
6.5 - 16	26	23	92	5 x 1.5 - 2.5
9 - 20	32	30	116	5 x 1.5 - 6

Cable Connection PG

PG threaded cable connection made of polyamide with strain relief

- Optimum sealing and strain relief due to patented lamellar system
- Colour: light grey, RAL 7035
- **Protective class according to EN 60 529:** IP 68 to 5 bar (30 min); PG 7 - 29 with integrated sealing lip PG 36 - 48 with sealing ring
- **Nonflammability:** heating wire 750° C according to EN 60695-2-11
- **Application temperature:** -20° C to +80° C, short-term up to approx. +120° C
- **Material:** polyamide with EPDM-sealing
- **Chemical resistance:** acetone, fuel, benzene, diesel oil, greases, oils, solvents for colour and paints
- **Risk of stress crack:** low
- **Application fields:** - Construction of car bodies, machines, plants etc. - Measuring and controlling construction - Buildings



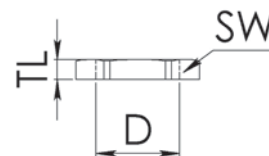
Article No.	Article Description	QTY
8448 1 1 07	CABLE CONNECTION PG 7	100
8448 1 1 09	CABLE CONNECTION PG 9	50
8448 1 1 11	CABLE CONNECTION PG 11	50
8448 1 1 13 5	CABLE CONNECTION PG 13.5	50
8448 1 1 16	CABLE CONNECTION PG 16	50
8448 1 1 21	CABLE CONNECTION PG 21	25
8448 1 1 29	CABLE CONNECTION PG 29	25
8448 1 1 36	CABLE CONNECTION PG 36	10
8448 1 1 42	CABLE CONNECTION PG 42	10
8448 1 1 48	CABLE CONNECTION PG 48	4

Technical Data				
D	L mm	Ø mm	SW mm	TL mm
PG 7	9	3 - 6	15	28 - 32
PG 9	9	4 - 8	19	32 - 36
PG 11	9	5 - 10	22	33 - 39
PG 13.5	10	6 - 12	24	35 - 41
PG 16	11	8 - 14	27	38 - 44
PG 21	11	10 - 18	33	43 - 50
PG 29	12	16 - 25	42	47 - 56
PG 36	14	22 - 32	53	56 - 65
PG 42	14	28 - 38	60	58 - 67
PG 48	15	36 - 44	65	60 - 68

Counternut PG

PG threaded counternut made of polyamide, glass fibre reinforced

- Colour: light grey, RAL 7035
- **Application temperature:** -20° C to +60° C, short-term up to approx. +80° C
- **Material:** polyamide, glass fibre reinforced
- **Chemical resistance:** acetone, fuel, benzene, greased, oils, solvents for colours and paints
- **Risk of stress crack:** low



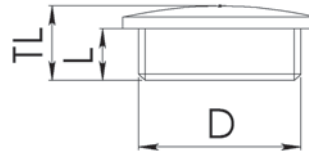
Article No.	Article Description	QTY
8448 2 1 07	COUNTERNUT PG 7	100
8448 2 1 09	COUNTERNUT PG 9	50
8448 2 1 11	COUNTERNUT PG 11	50
8448 2 1 13 5	COUNTERNUT PG 13.5	50
8448 2 1 16	COUNTERNUT PG 16	50
8448 2 1 21	COUNTERNUT PG 21	50
8448 2 1 29	COUNTERNUT PG 29	50
8448 2 1 36	COUNTERNUT PG 36	50
8448 2 1 42	COUNTERNUT PG 42	25
8448 2 1 48	COUNTERNUT PG 48	25

Technical Data		
D	SW mm	TL mm
PG 7	19	5
PG 9	22	5
PG 11	24	5
PG 13.5	27	6
PG 16	30	6
PG 21	36	7
PG 29	46	7
PG 36	60	8
PG 42	73	8
PG 48	78	8

Screw Plugs PG

PG threaded screw plugs made of impact-resistant polystyrene

- For safe locking of threads or through holes that are not in use
- Colour: light grey, RAL 7035
- **Protective class according to EN 60 529:** IP 56, when assembly with sealing ring IP 68
- **Application temperature:** -20°C to +60°C, short-term up to approx. +80°C
- **Material:** impact-resistant polystyrene
- **Chemical resistance:** alkalis, alcohol, most acids
- **Risk of stress crack:** relatively high
- **Note:** The use of products made of polystyrene can cause stress cracks in the exterior area!



Article No.	Article Description	QTY
8448 5 1 07	SCREW PLUG PG 7	100
8448 5 1 09	SCREW PLUG PG 9	50
8448 5 1 11	SCREW PLUG PG 11	50
8448 5 1 13 5	SCREW PLUG PG 13.5	50
8448 5 1 16	SCREW PLUG PG 16	50
8448 5 1 21	SCREW PLUG PG 21	50
8448 5 1 29	SCREW PLUG PG 29	50
8448 5 1 36	SCREW PLUG PG 36	50
8448 5 1 42	SCREW PLUG PG 42	25
8448 5 1 48	SCREW PLUG PG 48	25

Technical Data

D	L mm	TL mm
PG 7	6	8
PG 9	6	9
PG 11	6	9
PG 13.5	6	9.5
PG 16	6	9.5
PG 21	8	11
PG 29	8	12
PG 36	10	15
PG 42	10	16
PG 48	12	16

Sealing Rings PG

O-ring for PG screw plugs

- For additional sealing of connections and screwings
- **Application temperature:** -40°C to +120°C
- **Material:** EPDM rubber (ethylene propylene diene rubber)
- **Chemical resistance:** alcohol, ketone, hot steaming, brake fluids, washing agent, natron, silicone oil, grease and many organical and inorganic acids



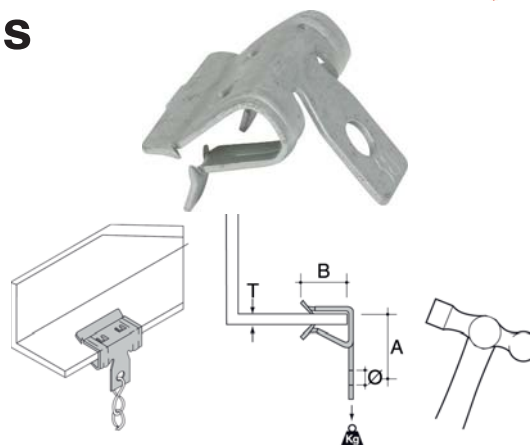
Article No.	Article Description	QTY
8448 6 1 07	SEALING RING PG 7	100
8448 6 1 09	SEALING RING PG 9	50
8448 6 1 11	SEALING RING PG 11	50
8448 6 1 13 5	SEALING RING PG 13.5	50
8448 6 1 16	SEALING RING PG 16	50
8448 6 1 21	SEALING RING PG 21	50
8448 6 1 29	SEALING RING PG 29	50
8448 6 1 36	SEALING RING PG 36	50
8448 6 1 42	SEALING RING PG 42	25
8448 6 1 48	SEALING RING PG 48	25

Technical Data

D	Ø mm	S mm
PG 7	9	1.5
PG 9	14	1.5
PG 11	17	1.5
PG 13.5	19	1.5
PG 16	21	1.5
PG 21	27	2.0
PG 29	36	2.5
PG 36	45	3
PG 42	52	3
PG 48	58	3

Beam Clamps for Suspensions

- Mechanical spring steel fixing system for easy mounting of suspensions via chains at steel beams
- Special coating for a salt-spray-test resistance of minimum 600 hours according to DIN 50021
- No damage of static characteristics of steel beams because no drilling of holes or welding required
- Easy and quick mounting without special tools, only a hammer is required for mounting works
- Suitable for indoor and outdoor application in humid and slightly corrosive environments



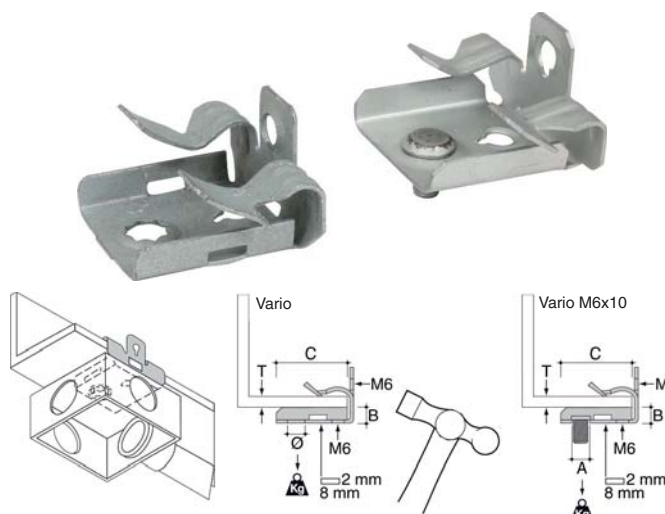
Article No.	Article Description	QTY
8425 1 3 8	BEAM CLAMP F.SUSPENSION 3- 8MM	50
8425 1 8 14	BEAM CLAMP F.SUSPENSION 8-14MM	50
8425 1 14 20	BEAM CLAMP F.SUSPENSION 14-20MM	50

Technical Data				
T mm	Ø mm	A mm	B mm	Load cap. kg
3-8	6.5	18	20.3	90
8-14	6.5	26	20.3	90
14-20	6.5	30	26.6	90

Beam Clamps Vario

- Mechanical spring steel fixing system for easy mounting of suspensions via screws, threaded rods or cable ties at steel beams
- Special coating for a salt-spray-test resistance of minimum 600 hours according to DIN 50021
- No damage of static characteristics of steel beams because no drilling of holes or welding required
- Easy and quick mounting without special tools, only a hammer is required for mounting works
- Suitable for indoor and outdoor application in humid and slightly corrosive environments

Art. No. 8425 2 6 ... Beam Clamps Vario M6x10 with metric threaded pin M6x10 instead of through hole Ø 7 mm

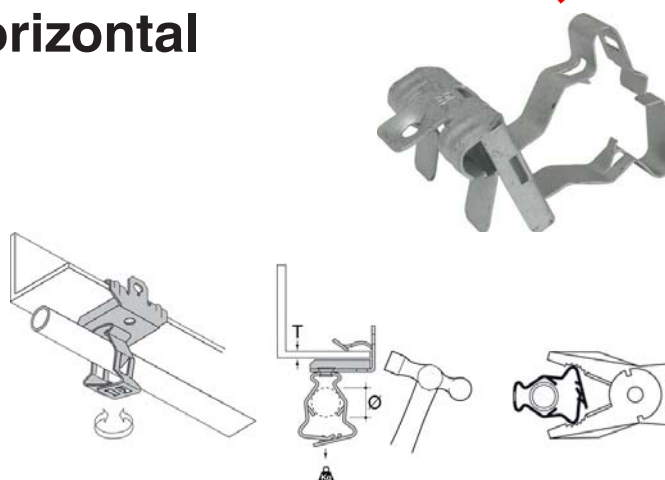


Article No.	Article Description	QTY
8425 2 3 8	BEAM CLAMP VARIO 3- 8MM	25
8425 2 8 14	BEAM CLAMP VARIO 8-14MM	25
8425 2 14 20	BEAM CLAMP VARIO 14-20MM	25
8425 2 6 38	BEAM CLAMP VARIO M6X10 3- 8MM	25
8425 2 6 814	BEAM CLAMP VARIO M6X10 8-14MM	25
8425 2 6 1420	BEAM CLAMP VARIO M6X10 14-20MM	25

Technical Data					
T mm	Ø mm	A mm	B mm	C mm	Load cap. kg
3-8	7	-	7.5	33	45
8-14	7	-	7.5	33	45
14-20	7	-	7.5	33	45
3-8	-	M6x10	7.5	33	45
8-14	-	M6x10	7.5	33	45
14-20	-	M6x10	7.5	33	45

Beam Clamps for Pipes, Horizontal

- Mechanical spring steel fixing system for horizontal suspension of pipes
- Closable (can be locked with pliers) and 360° turnable pipe-clip
- Special coating for a salt-spray-test resistance of minimum 600 hours according to DIN 50021
- No damage of static characteristics of steel beams because no drilling of holes and welding required
- Easy and quick mounting without special tools, only a hammer is required for mounting works
- Suitable for indoor and outdoor application in humid and slightly corrosive environments



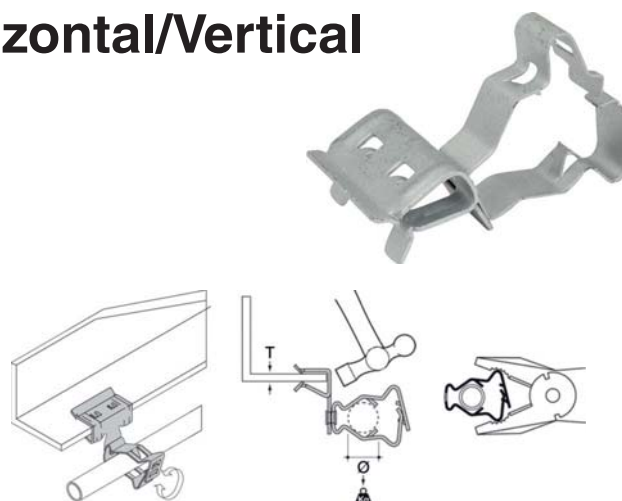
Article No.	Article Description	QTY
8425 4 26 38	BEAM CL.PIPE H 19-26/ 3- 8MM	25
8425 4 32 38	BEAM CL.PIPE H 26-32/ 3- 8MM	25
8425 4 26 814	BEAM CL.PIPE H 19-26/ 8-14MM	25
8425 4 32 814	BEAM CL.PIPE H 26-32/ 8-14MM	25
8425 4 26 1420	BEAM CL.PIPE H 19-26/14-20MM	25
8425 4 32 1420	BEAM CL.PIPE H 26-32/14-20MM	25

Technical Data

T mm	Ø mm	PG-size	Load cap. kg
3-8	19-26	13.5/16	45
3-8	26-32	21	45
8-14	19-26	13.5/16	45
8-14	26-32	21	45
14-20	19-26	13.5/16	45
14-20	26-32	21	45

Beam Clamps for Pipes, Horizontal/Vertical

- Mechanical spring steel fixing system for horizontal and vertical suspension of pipes
- Closable (can be locked with pliers) and 360° turnable pipe-clip
- Special coating for a salt-spray-test resistance of minimum 600 hours according to DIN 50021
- No damage of static characteristics of steel beams because no drilling of holes and welding required
- Easy and quick mounting without special tools, only a hammer is required for mounting works
- Suitable for indoor and outdoor application in humid and slightly corrosive environments



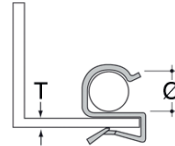
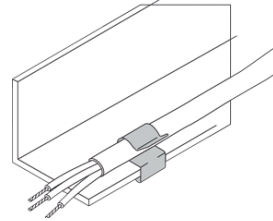
Article No.	Article Description	QTY
8425 3 26 38	BEAM CL.PIPE H/V 19-26/ 3- 8MM	25
8425 3 32 38	BEAM CL.PIPE H/V 26-32/ 3- 8MM	25
8425 3 26 814	BEAM CL.PIPE H/V 19-26/ 8-14MM	25
8425 3 32 814	BEAM CL.PIPE H/V 26-32/ 8-14MM	25
8425 3 26 1420	BEAM CL.PIPE H/V 19-26/14-20MM	25
8425 3 32 1420	BEAM CL.PIPE H/V 26-32/14-20MM	25

Technical Data

T mm	Ø mm	PG-size	Load cap. kg
3-8	19-26	13.5/16	12
3-8	26-32	21	12
8-14	19-26	13.5/16	12
8-14	26-32	21	12
14-20	19-26	13.5/16	12
14-20	26-32	21	12

Beam Clamps for Cables and Conduits

- Mechanical spring steel fixing system for fixing conduits and empty conduits
- Special coating for a salt-test-spray resistance of minimum 600 hours according to DIN 50021
- No damage of static characteristics of steel beams because no drilling of holes and welding required
- Easy and quick mounting without special tools, only a hammer is required for mounting works
- Suitable for indoor and outdoor application in humid and slightly corrosive environments



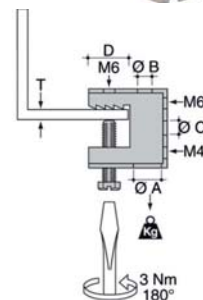
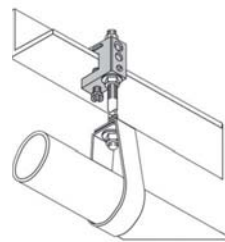
Article No.	Article Description	QTY
8425 5 14 24	BEAM CL.CABLE FIX.12-14/2- 4MM	50
8425 5 18 24	BEAM CL.CABLE FIX.15-18/2- 4MM	50
8425 5 24 24	BEAM CL.CABLE FIX.19-24/2- 4MM	50
8425 5 32 24	BEAM CL.CABLE FIX.25-32/2- 4MM	50
8425 5 14 47	BEAM CL.CABLE FIX.12-14/4- 7MM	50
8425 5 18 47	BEAM CL.CABLE FIX.15-18/4- 7MM	50
8425 5 24 47	BEAM CL.CABLE FIX.19-24/4- 7MM	50
8425 5 32 47	BEAM CL.CABLE FIX.25-32/4- 7MM	50
8425 5 14 812	BEAM CL.CABLE FIX.12-14/8-12MM	50
8425 5 18 812	BEAM CL.CABLE FIX.15-18/8-12MM	50
8425 5 24 812	BEAM CL.CABLE FIX.19-24/8-12MM	50
8425 5 32 812	BEAM CL.CABLE FIX.25-32/8-12MM	50

Technical Data

T mm	Ø mm
2-4	12-14
2-4	15-18
2-4	19-24
2-4	25-32
4-7	12-14
4-7	15-18
4-7	19-24
4-7	25-32
8-12	12-14
8-12	15-18
8-12	19-24
8-12	25-32

Screw Clamps for Threaded Rods-Fixings

- Mechanical fixing element for suspensions via threaded rods or direct fixing via metric screws
- Special coating for a salt-test-spray resistance of minimum 600 hours according to DIN 50021
- No damage of static characteristics of steel beams because no drilling of holes and welding required
- Toothed clamping surface for greater safety
- Suitable for indoor and outdoor application in humid and slightly corrosive environments



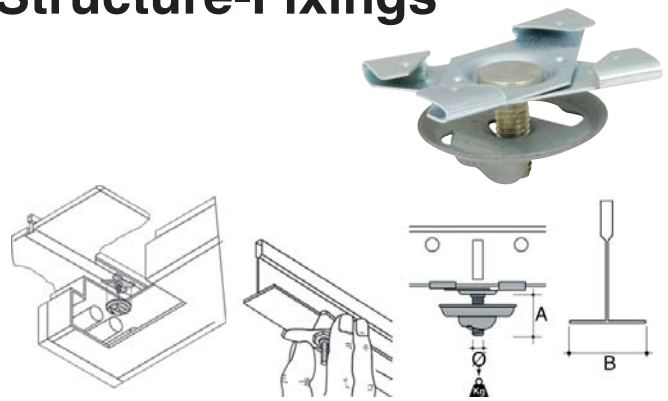
Article No.	Article Description	QTY
8425 7	SCREW CLAMP FOR THREADED RODS	25

Technical Data

T mm	Ø A mm	Ø B mm	Ø C mm	D mm	Load cap. kg
max. 18	10.7	10.7	6.5	19.5	45

Beam Clamps for Acoustic Structure-Fixings

- Mechanical fixing elements for suspensions of lamps, chandeliers, junction boxes etc. at T-Profile-Rails in acoustic structures
- With threaded pins M6 x 16 mm and locking nut
- Special coating for a salt-spray-test resistance of minimum 600 hours according to DIN 50021
- Suitable for indoor and outdoor application in humid and slightly corrosive environments



Article No.	Article Description	QTY
8425 6 16	BEAM CL.ACOUSTIC STRUCT.M6X16	50

Technical Data			
Ø mm	A mm	B mm	Load cap. kg
M6	16	25	22

Knotted Chains, Galvanized

- Galvanized steel
- Knotted chains for suspension of illumination, signs etc.
- Complies with DIN 5686, without quality requirements
- Bundled



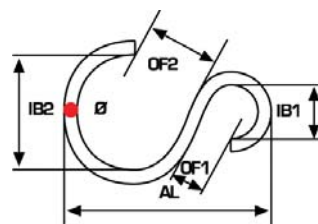
Article No.	Article Description	QTY
8425 22	MTR.KNOTTED CHAIN K25 2.2MM GA	30
8425 25	MTR.KNOTTED CHAIN K27 2.5MM GA	30
8425 28	MTR.KNOTTED CHAIN K30 2.8MM GA	30
8425 31	MTR.KNOTTED CHAIN K32 3.1MM GA	25

Technical Data			
Ø mm	T mm	AB mm	Load cap. kg*
2.2	31	10.0	30
2.5	35	11.0	39
2.8	39	13.0	49
3.1	40	14.0	54

* Recommended max. load capacity is a calculated value, chains without quality requirements. Chains comply with DIN 5685 are not tested on strength in terms of DIN 685 part 3 and may not be used as recording or carrying medium in terms of DIN 15003 as well as not for static suspensions of loads.

S-Hooks, Galvanized

- Galvanized steel

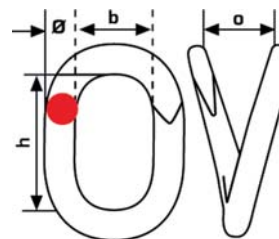


Article No.	Article Description	QTY
8425 4	S-HOOK 4MM GA	50

Technical Data			
Ø mm	IB1 / IB2 mm	OF1/OF2 mm	AL mm
4.0	10/10	7/8	40

Emergency Links, Galvanized

- Galvanized steel



Article No.	Article Description	QTY
8425 4 1	EMERGENCY LINK 4MM GA	50

Technical Data			
Ø mm	b mm	h mm	o mm
4.0	8.0	20.0	8.0

Empty Conduit Impact Fixer C-Fix

- Quick and easy fixing of empty conduit on plasterboard walls
- No damage of the opposite side of the plasterboard wall
- The installation pipe is placed in the clamp and this will then be driven in using a hammer. Drilling not necessary

Article No.	Article Description	QTY
8442 4 16	EMPTY COND. IMPACT FIXER CF16	100
8442 4 20	EMPTY COND. IMPACT FIXER CF20	100
8442 4 25	EMPTY COND. IMPACT FIXER CF25	200



Pipe Classification Code according to DIN EN 61386-1

1. Number Compressive strength		2. Number Impact strength		3. Number Permissible lowest temperature		4. Number Permissible maximum temperature		5. Number Permissible maximum temperature	
1	Very light (125N)	1	Very light (0.5J/100mm)	1	+5 °C	1	+60 °C	1	Rigid
2	Light (320N)	2	Light (1J/100mm)	2	-5 °C	2	+90 °C	2	Pliable
3	Medium (750N)	3	Medium (2J/100mm)	3	-15 °C	3	+105 °C	3	Pliable, recedes itself
4	Heavy (1.250N)	4	Heavy (2J/300mm)	4	-25 °C	4	+120 °C	4	Flexible
5	Very heavy (4.000N)	5	Very heavy (6.8J/300mm)	5	-45 °C	5	+150 °C		
						6	+250 °C		
						7	+400 °C		

Example: Pipe Classification 2232

Light pipe (2) Impact strength light (2) min. temperature -15 °C (3) max. temperature +90 °C (2)

Empty Conduit EFY-HO

- Lightweight conduit
- Colour: orange
- Classification: 2232
- According to VDE 0605 part 1, DIN EN 61386-22
- Pressure resistance: 320 N / 5 cm
- Impact strength: 1,0 kg / 100 mm
- Temperature range: -15 °C up to +90 °C
- Halogen-free
- Flame-retardant



Article No.	Article Description	QTY
8440 1 16	MTR.(100)EMPTY COND.EFY-HO M16	200
8440 1 20	MTR.(100)EMPTY COND.EFY-HO M20	200
8440 1 25	MTR.(100)EMPTY COND.EFY-HO M25	200
8440 1 32	MTR.(50)EMPTY COND.EFY-HO M32	100
8440 1 40	MTR.(25)EMPTY COND.EFY-HO M40	50
8440 1 50	MTR.(50)EMPTY COND.EFY-HO M50	50

Technical Data

Outside-Ø mm	Inside-Ø mm
16	10.7
20	14.1
25	18.2
32	24.2
40	32.4
50	41.2

Empty Conduit EFY

- Lightweight PP conduit
- Colour: black
- Classification: 2232
- According to VDE 0605 part 1, DIN EN 61386-22
- Pressure resistance: 320 N / 5 cm
- Impact strength: 1.0 kg / 100 mm
- Temperature range: -15 °C up to +90 °C
- Flame-retardant

Application:

- On plaster
- Under plaster
- On wood
- In cavity walls
- In screed
- In prefabricated buildings
- In intermediate ceilings

Article No.	Article Description	QTY
8440 2 16	MTR.(100)EMPTY CONDUIT EFY M16	200
8440 2 20	MTR.(100)EMPTY CONDUIT EFY M20	200
8440 2 25	MTR.(100)EMPTY CONDUIT EFY M25	200
8440 2 32	MTR.(50)EMPTY CONDUIT EFY M32	100
8440 2 40	MTR.(25)EMPTY CONDUIT EFY M40	50
8440 2 50	MTR.(25)EMPTY CONDUIT EFY M50	50
8440 2 63	MTR.(25)EMPTY CONDUIT EFY M63	50

Technical Data

Outside-Ø mm	Inside-Ø mm
16	10.7
20	14.1
25	18.2
32	24.2
40	32.4
50	41.2
63	50.6



Empty Conduit EFMP

- Flexible empty conduit for electrical installation in cast, vibrated and compressed concrete
- More safety in case of fire, as due to the halogen-free there will be no toxic and corrosive gases
- Material: PP, flame-resistant, low-fuming
- Application temperature: -5 °C to +105 °C
- Pressure resistance: medium, 750N / 5 cm
- Colour: grey
- Classification: 3422, according to EN 61386-22, VDE 0605
- Measuring smoke density according to DIN EN 61034
- Light transmission >80 %
- Halogen-free
- VDE-tested

Application:

- On plaster
- Under plaster
- On wood
- In earth
- In concrete
- Machine and plant installation
- In cavity walls
- In screed
- In prefabricated building
- In intermediate ceilings

Article No.	Article Description	QTY
8440 5 16	MTR.(100)EMPTY COND.EFMP M16	200
8440 5 20	MTR.(100)EMPTY COND.EFMP M20	200
8440 5 25	MTR.(100)EMPTY COND.EFMP M25	200
8440 5 32	MTR.(50)EMPTY COND.EFMP M32	100
8440 5 40	MTR.(25)EMPTY COND.EFMP M40	50
8440 5 50	MTR.(25)EMPTY COND.EFMP M50	50



Technical Data

Outside-Ø mm	Inside-Ø mm
16	10.7
20	14.1
25	18.2
32	24.2
40	32.4
50	41.2



Empty Conduit EFY-HO with sliding surface

- Light-weight conduit
- Colour: orange
- Classification: 2232
- According to VDE 0605 part 1, DIN EN 6138
- 6-22
- Pressure resistance: 320 N / 5 cm
- Impact strength: 1.0 kg / 100 mm
- Temperature range: -15 °C up to +90 °C
- Halogen-free
- **Not** flame-retardant
- With visible sliding surface



Article No.	Article Description	QTY
8440 6 20	MRT.(100)EMPTY COND. YL-GS M20	200
8440 6 25	MRT.(100)EMPTY COND. YL-GS M25	200
8440 6 32	MRT.(50)EMPTY COND. YL-GS M32	100

Technical Data

External-Ø mm	Internal-Ø mm
20	14.4
25	18.6
32	24.5

Empty Conduit EFY with sliding surface

- Light-weight PP conduit
- Colour: black
- Classification: 2232
- According to VDE 0605 part 1, DIN EN 61386-22
- Pressure resistance: 320 N / 5 cm
- Impact strength: 1.0 kg / 100 mm
- Temperature range: -15 °C up to + 90°C
- Flame-retardant
- With visible sliding surface

Applications:

- Under plaster
- In cavity wall
- In wood
- In screed



Article No.	Article Description	QTY
8440 7 20	MRT.(100)EMPTYCOND. YLF-GSM20	200
8440 7 25	MRT.(100)EMPTYCOND. YLF-GSM25	200
8440 7 32	MRT.(50)EMPTYCOND. YLF-GSM32	100

Technical Data

External-Ø mm	Internal-Ø mm
20	14.4
25	18.6
32	24.5

Empty Conduit EFMP with sliding surface

- Middle-weight conduit
- Colour: grey
- Classification: 3422
- According to VDE 0605 part 22, DIN EN 61386-22, DIN EN 50267
- Pressure resistance: 750 N / 5 cm
- Impact strength: 2.0 kg / 300 mm
- Temperature range: -5 °C up to +90 °C
- Halogen-free (LSOH)
- Flame-retardant
- Low smoke (LSOH)

Applications:

- On plaster
- Under plaster
- In cavity wall
- In screed
- IN concrete
- In soil
- In machine construction



Article No.	Article Description	QTY
8440 8 20	MRT.(100)EMPTYCOND.YSF-GSM20	200
8440 8 25	MRT.(100)EMPTYCOND.YSF-GSM25	200
8440 8 32	MRT.(50)EMPTYCOND.YSF-GSM32	100

Technical Data

External-Ø mm:	Internal-Ø mm:
20	14.4
25	18.6
32	24.5

Empty Conduit EFMP-105 with sliding surface

- Middle-weight conduit
- Colour: blue
- Classification: 3343
- According to VDE 0605 part 22, DIN EN 61386-22, DIN EN 50267
- Pressure resistance: 1000 N / 5 cm
- Impact strength: 2.0 kg / 100 mm
- Temperature range: -25 °C up to +105 °C
- Halogen-free (LSOH)
- Flame-retardant
- Low smoke (LSOH)
- High temperature resistant

Areas of application:

- Under plaster
- In cavity walls
- In screed
- In concrete
- In soil
- In machine construction



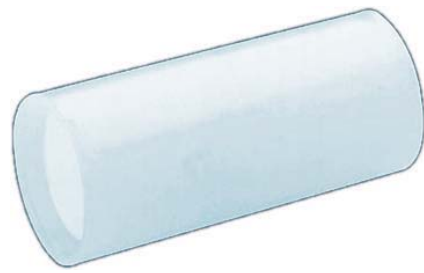
Article No.	Article Description	QTY
8440 9 20	MTR(100)EMP.COND.YSF-GS-HO M20	200
8440 9 25	MTR(100)EMP.COND.YSF-GS-HO M25	200
8440 9 32	MTR(50)EMP.COND.YSF-GS-HO M32	100

Technical Data

Outer-Ø mm:	Inner-Ø mm:
20	14.4
25	18.6
32	24.5

Empty Conduit Sleeves

- For pipe coupling of empty conduits - YL, empty conduits - YLF, empty conduits - YSF
- Material: PVC, flame retardant, transparent



Article No.	Article Description	QTY
8442 1 16	EMPTY CONDUIT SLEEVES M16	100
8442 1 20	EMPTY CONDUIT SLEEVES M20	100
8442 1 25	EMPTY CONDUIT SLEEVES M25	100
8442 1 32	EMPTY CONDUIT SLEEVES M32	100
8442 1 40	EMPTY CONDUIT SLEEVES M40	25
8442 1 50	EMPTY CONDUIT SLEEVES M50	25

Empty Conduit Membrane Locking Tappet

- For wind-proof sealing of the flush-mounted sockets or unused empty conduits
- Ideal for pre-fabricated houses (Blower door test)



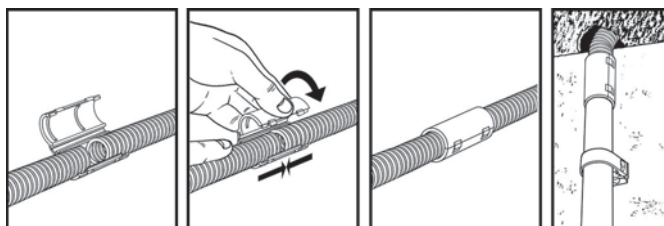
Article No.	Article Description	QTY
8442 3 16	MEMBRANE LOCKING TAPPET M16	50
8442 3 20	MEMBRANE LOCKING TAPPET M20	50
8442 3 25	MEMBRANE LOCKING TAPPET M25	50
8442 3 32	MEMBRANE LOCKING TAPPET M32	50
8442 3 40	MEMBRANE LOCKING TAPPET M40	50

Empty Conduit Uni Flap Sleeve

- Sleeve for flexible empty conduits and rigid conduits

Advantages:

- Easily closed
- Easy to re-open with a slotted screwdriver
- Flexible empty conduits easily connected
- Easy connection from flexible to rigid pipes
- No sound transfer
- Reliable connection
- Repair of damaged empty conduits (flexible)



Article No.	Article Description	QTY
8442 2 16	EMPTY COND UNI FLAP SLEEVE M16	50
8442 2 20	EMPTY COND UNI FLAP SLEEVE M20	50
8442 2 25	EMPTY COND UNI FLAP SLEEVE M25	25
8442 2 32	EMPTY COND UNI FLAP SLEEVE M32	25

Straight Length Conduit Pipe

- Rigid plastic straight length empty conduit made of PVC-U
- Flame resistant, self-extinguishing and anti-corrosion
- Range of application: -5C° to + 60C° and for short periods, up to 70C°
- Pressure resistance: medium, 750N/5cm
- Colour: Grey
- Classification: 3321 in accordance with EN 61386-21, VDE 0605

Areas of application:

- Moderate mechanical loads
- For all installations in vibrated, unshaken and tamped concrete, screed, plastering, hollow walls and suspended ceilings



Article No.	Article Description	QTY
8441 1 16	MTR.STR.LEN.COND. PIPE 16X3000	111
8441 1 20	MTR.STR.LEN.COND. PIPE 20X3000	111
8441 1 25	MTR.STR.LEN.COND. PIPE 25X3000	57
8441 1 32	MTR.STR.LEN.COND. PIPE 32X3000	57

Technical Data	
Outer-Ø mm	Inner-Ø mm
16.0	13.4
20.0	17.1
25.0	21.7
32.0	28.6

Cable ducts

- tested and certified in conformance with DIN EN 50085-1 and DIN EN 50085-2-1
- RoHS compliant
- VDE approved
- material: rigid PVC, free of lead, silicone and cadmium
- ducts 60 x 40 mm and above are fitted with cable clamps and 60 x 60 mm and above with bottom profiles to hold dividers
- holes drilled in the base are 125 mm apart to enable fixing to solid structures
- operating temperature:
 - static: -20 °C to +65 °C
 - dynamic: -5 °C to +65 °C
- Farben:
 - RAL 9010 pure white
 - RAL 7035 light grey
 - RAL 8014 sepia brown
- flame retardant in conformance with DIN 4102-1; class B1
- self-extinguishing

Article No.	Article Description	QTY
8443 15 15	MTR.CAB.DUC.RAL9010 15X15X2000	48
8443 30 15	MTR.CAB.DUC.RAL9010 30X15X2000	24
8443 40 40	MTR.CAB.DUC.RAL9010 40X40X2000	32
8443 60 40	MTR.CAB.DUC.RAL9010 60X40X2000	28
8443 60 60	MTR.CAB.DUC.RAL9010 60X60X2000	24
8443 110 60	MTR.CAB.DUC.RAL9010 110X60X2000	16
8443 1 15 15	MTR.CAB.DUC.RAL7035 15X15X2000	48
8443 1 30 15	MTR.CAB.DUC.RAL7035 30X15X2000	24
8443 1 40 40	MTR.CAB.DUC.RAL7035 40X40X2000	32
8443 1 60 40	MTR.CAB.DUC.RAL7035 60X40X2000	28
8443 1 60 60	MTR.CAB.DUC.RAL7035 60X60X2000	24
8443 1 110 60	MTR.CAB.DUC.RAL7035 110X60X2000	16
8443 2 15 15	MTR.CAB.DUC.RAL8014 15X15X2000	140
8443 2 30 15	MTR.CAB.DUC.RAL8014 30X15X2000	70
8443 2 110 60	MTR.CAB.DUC.RAL8014 110X60X2000	16

Technical Data

Height (H) mm	Breadth(B) mm
15	15
30	15
40	40
60	40
60	60
110	60



Halogen-free cable ducts

- conform to EN 50085
- RoHS compliant
- VDE approved
- material: PC / ABS Blend; free of lead, silicone and cadmium
- operating temperature:
 - static: -20 °C to +75 °C
 - dynamic: -5 °C to +60 °C
- flame retardant in conformance with DIN 4102-1; class B1
- self-extinguishing
- ducts 60 x 40 mm and above are fitted with cable clamps
- ducts 90 x 60 mm and above are fitted with bottom profiles to hold dividers
- ducts 110 x 60 mm and above are fitted with bottom profiles to enable fixing device panel boxes and other devices
- holes drilled in the base are 125 mm apart to enable fixing to solid structures
- colours:
 - similar to RAL 9010 pure white



Technical Data

Height(H) mm	Breadth(B) mm
15	15
30	15
40	40
60	40
90	60
110	60

Article No.	Article Description	QTY
8443 10 15 15	MTR.CAB.DUC.9010 HO 15X15X2000	140
8443 10 30 15	MTR.CAB.DUC.9010 HO 30X15X2000	72
8443 10 40 40	MTR.CAB.DUC.9010 HO 40X40X2000	32
8443 10 60 40	MTR.CAB.DUC.9010 HO 60X40X2000	28
8443 10 90 60	MTR.CAB.DUC.9010 HO 90X60X2000	24
8443 10 110 60	MTR.CAB.DUC.9010 HO 110X60X2000	16

Cable Towing System

- Easy and precise pulling of ducts also in complicated empty conduits
- Stably-advancing despite essential flexibility
- Probe made of glass fibre Ø 3 mm, PP sheathing incl. start and end sleeve
- Special housing construction enables an easy wrapping and winding of the probe
- End stop prevents disappearance of the probe inside the housing
- Suitable for left and right-handed use
- Integrated storing case for accessories, pulling and guide heads etc.
- Ideally suited for construction sites by using high-quality materials
- Dimension ØxH: 247 x 88 mm



Article No.	Article Description	QTY
8492 20	CABLE TOWING SYSTEM 20M	1
8492 30	CABLE TOWING SYSTEM 30M	1

Included in delivery:

- Probe 20m
- Towing eyelet M5
- Guide head Ø 6 mm with eyelet M5
- Pulling aid for probes Ø 3 - 6 mm

Accessories for Cable Towing System

Art. No. 8492 1 10, 8492 1 20, 8492 1 30:

- Replacement probes Ø 3 mm
- Glas fibre core with PP-sheathing
- Incl. start and end sleeves M5
- Art. No. 8492 1 10: length 10 m
- Art. No. 8492 1 20: length 20 m
- Art. No. 8492 1 30: length 30 m

Art. No. 8492 1 1:

- Towing eyelet Ø 6 mm, M5

Art. No. 8492 2 006, 8492 2 007, 8492 2 010:

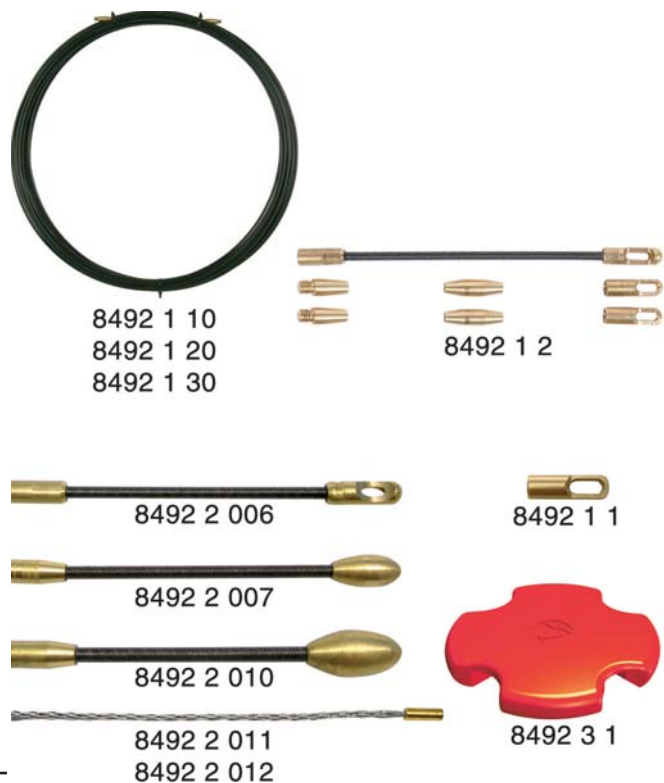
- Guide head, M5
- Art. No. 8492 2 006: Ø 6 mm with eyelet
- Art. No. 8492 2 007: Ø 7 mm
- Art. No. 8492 2 010: Ø 10 mm

Art. No. 8492 2 011, 8492 2 012:

- Cable pulling stocking, M5
- For cable Ø 4 - 6 mm, 6 - 9 mm
- Art. No. 8492 2 011: length 200 mm
- Art. No. 8492 2 012: length 210 mm

Art. No. 8492 3 1:

- Pulling aid for probe Ø 3 - 6 mm



Article No.	Article Description	QTY
8492 1 10	REPLACEMENT PROBE Ø3MM 10M	1
8492 1 20	REPLACEMENT PROBE Ø3MM 20M	1
8492 1 30	REPLACEMENT PROBE Ø3MM 30M	1
8492 1 1	TOWING EYELET M5 Ø6MM	1
8492 2 006	GUIDE HEAD WITH EYELET M5	1
8492 2 007	GUIDE HEAD M5 Ø 7MM	1
8492 2 010	GUIDE HEAD M5 Ø10MM	1
8492 2 011	CABLE PULL.STOCKING M5 4-6MM	1
8492 2 012	CABLE PULL.STOCKING M5 6-9MM	1
8492 3 1	PULL.SUPPORT FOR PROBES Ø3-6MM	1
8492 1 2	REPAI-SET F. CABLE TOW. SYSTEM	1

Cable Towing Probe Nylon

- Probe Ø 4 mm
- With start sleeve M4 and screwable end pieces



Article No.	Article Description	QTY
8492 4 10	CABLE TOWING PROBE Ø4MM M4 10M	1
8492 4 15	CABLE TOWING PROBE Ø4MM M4 15M	1
8492 4 20	CABLE TOWING PROBE Ø4MM M4 20M	1

(Length m)

Anti-Friction Agent for Cables

- High lubricating performance minimizes the frictional resistance when pulling the cable
- Easy and drop-free application onto cables
- Protects against damages to cable sheathings
- Easy to wipe off
- No staining
- Non-combustive
- Colour: transparent



Article No.	Article Description	QTY
8492 100	BO(1KG)ANTI-FRIC.AGENT F.CABLE	e 8

Potential-Equalisation Bar

- Tested in accordance with VDE 0606 § 7 and 8
- Possible connections: 7 x 2.5 to 16 mm², 1 band up to 30 x 3.5 mm, 1 round conductor 7 – 10 mm (lightning protection)
- Cover can be locked in position and lead sealed
- Contact bar made of brass
- Base plate and cover cap made of impact-resistant plastic



Article No.	Article Description	QTY
8454 1	POTENTIAL EQUALISATION BAR VDE	10

Earthing Bar Coax

- Earthing bar for antennas for connecting 6 HF-cable shields and 1 earthing conductor 6 – 25 mm²
- Zinced steel band



Article No.	Article Description	QTY
8454 2	EARTHING BAR COAX	10

Bathroom Earthing Bar

- Bathroom earthing bar made of brass for potential-equalisation
- Possible connection: 1 x 6 – 16 mm², 6 x 1.5 – 10 mm²



Article No.	Article Description	QTY
8454 3	BATH-ROOM EARTHING BAR	10

Bathroom Earthing Clamp

- For additional potential-equalisation in accordance with DIN VDE 0100 part 710
- Contact bolt for round conductor up to max. 16 mm², bolt thread M6
- For bathroom and shower tray earthing on already existing ground strips



Article No.	Article Description	QTY
8454 4	BATHROOM EARTHING CLAMP	10

Earthing Band Clamp

- Earthing band clamp for pipelines made of copper or zinc steel for potential-equalisation in accordance with DIN VDE 0100 and DIN VDE 0190
- Conductor cross-sections from 1 x 2.5 mm² to 2 x 16 mm²
- Strap made of stainless steel A2



Article No.	Article Description	QTY
8454 18 38	EARTHING BAND CLAMP 1/8"-3/8"	10
8454 18 112	EARTHING BAND CLAMP 1/8"-1 1/2"	10
8454 18 4	EARTHING BAND CLAMP 1/8"-4"	10
8454 18 6	EARTHING BAND CLAMP 1/8"-6"	10

Earthing Clamp

- Earthing clamp for round conductor and band steel up to 35 mm width
- Material: Hot-galvanised steel



Article No.	Article Description	QTY
8454 5	EARTHING CLAMP	10

Cross Connector

- Cross connector with intermediate plate for round conductor and band steel up to 35 mm width
- Material: Hot-galvanised steel



Article No.	Article Description	QTY
8454 6	CROSS CONNECTOR	10

LED Wall and Ceiling Light

- Input voltage: 230 volt
- Light colour: 3,000 K
- Colour reproduction value: Ra>80
- Product life: approx. 25,000 h
- Switching cycles: approx. 20,000x
- Non-dimmable
- Beam angle: 120°
- Protection class: IP 20 and IP 44



Article No.	Article Description	QTY
3895 230 6	LED WALL/CEI.LIGHT 230V 3TK 6W	1
3895 230 12	LED WALL/CE.LIGHT 230V 3TK 12W	1
3895 230 18	LED WALL/CE.LIGHT 230V 3TK 18W	1

Technical Data

Power Watt	Luminous flux Lumen	Lumens per Watt	Length mm	Width mm	Height mm
6	400	67	175	175	70
12	806	67	240	240	80
18	1,055	59	320	320	95

LED Wall and Ceiling Light with Motion Sensor

- Input voltage: 230 volt
- Light colour: 3,000 K
- Colour reproduction value: Ra>80
- Product life: approx. 20,000 h
- Switching cycles: approx. 50,000x
- Non-dimmable
- Beam angle: 120°
- Protection class: IP 44

Motion sensor:

- Detection range: approx. 1.5 m – 6.0 m
- Adjustable: 10 %, 25 %, 50 %, 75 % and 100 %
- Time setting: from 5 s to 30 min
- Twilight settings: off, 2 Lux, 10 Lux, 25 Lux, 50 Lux
- Sensor: 5.8 GHz high-frequency sensor



Article No.	Article Description	QTY
3895 230 16	LED CEI.LIGHT PIR 230V 3TK 16W	1

Technical Data

Power Watt	Luminous flux Lumen	Lumens per Watt	Length mm	Width mm	Height mm
16	1,050	66	335	335	100

LED outdoor spotlight

- 230 volt
- 30 cm connection cable H05RN-F 3G1.0
- Grey aluminium housing
- Light colour: 6,000 K
- Product life: approx. 15,000 h
- Switching cycles: approx. 15,000 x
- Beam angle: 120°
- Colour reproduction value: CRI >70
- non-dimmable
- Operating temperature: -20 °C to +40 °C
- Energy efficiency class A
- Protection rating IP65
- TÜV/GS-tested



Article No.	Article Description	QTY
3895 10	LED OUTDOOR SPOTLIGHT 10W	1
3895 30	LED OUTDOOR SPOTLIGHT 30W	1
3895 50	LED OUTDOOR SPOTLIGHT 50W	1
3895 100	LED-GEBAUDESTRALER 100W	1
3895 150 1	LED-GEBAUDESTRALER 150W	1

Technical Data					
Power Watt	Light strength Lumen	Lumens per Watt	Length mm	Width mm	Height mm
10	750	75	115	87	42
30	2.250	75	225	185	60
50	3.750	75	285	235	78
100	7.000	70	425	325	110
150	10.500	70	425	325	160

LED outdoor spotlight with motion sensor

- 230 volt
- 30 cm connection cable H05RN-F 3G1.0
- Grey aluminium housing
- Light colour: 6,000 K
- Product life: approx. 15,000 h
- Switching cycles: approx. 15,000 x
- Beam angle: 120°
- Colour reproduction value: CRI >70
- non-dimmable
- Operating temperature: -20 °C to +40 °C
- Energy efficiency class A
- Protection rating IP44
- TÜV-tested
- **With motion sensor**
 - Detection range: 2 m to 10 m
 - Detection range: 120°
 - Interval timer: 10 seconds to 8 minutes
 - Twilight switch: 3 to 2,000 lux



Article No.	Article Description	QTY
3895 1 10	LED OUTD.SPOTLIGHT 10W WMS	1
3895 1 30	LED OUTD.SPOTLIGHT 30W WMS	1
3895 1 50	LED OUTD.SPOTLIGHT 50W WMS	1

Technical Data					
Power W	Light strength Lumen	Lumens per Watt	Length l mm	Width b mm	Height h mm
10	750	75	115	170	42
30	2,250	75	225	260	60
50	3,750	75	285	320	78

20-Watt LED Spotlight

- 230 V LED spotlight
- Type of protection IP 65 with 1 m of power supply cable (VDE)
- Aluminium enclosure without screws on the front
- Energy efficiency class A
- Colour: silver grey

Technical Data

Lamp output:

Consumption:	20 watts, Bridgelux LED chip (COB)
Luminosity:	1,440 lumens
Light colour:	6,500 Kelvin
Beam angle:	120°
Dimensions W x H x D:	approx. 182 x 143 x 112 mm
Type of protection:	IP 65 with 1 m of power supply cable (VDE)
Power consumption:	20.8 watts / hour
Energy efficiency class:	A



Article-No.	Article Description	QTY
3895 2 20	LED SPOTLIGHT 20W 1440L	1

20-Watt LED Spotlight with Motion Detector

- 230 V LED spotlight with motion detector
- Type of protection IP 44 with 1 m of power supply cable (VDE)
- Aluminium enclosure without screws on the front
- With motion detector
- Colour: silver grey

Technische Daten

Motion detector:

Detection range: 180°
 Rotable: $\pm 30^\circ$
 Range: approx 13 m
 Twilight switch: approx. 4–1,000 Lux
 Switching time: 5 sec. – 4 min continuous adjustable
 Standby consumption: 0.5 W
 Dimensions W x H x D: approx. 182 x 143 x 115 mm

Lamp output:

Consumption: 20 watts, Bridgelux LED-Chip (COB)
 Luminosity: 1,440 lumens
 Light colour: 4,500–6,000 Kelvin
 Beam angle: 120°
 Type of protection: IP 44 with 1 m of power supply cable (VDE)
 Power consumption 20.8 W
 Energy efficiency class: A



Article No.	Article Description	QTY
3895 3 20	LED SPOTLIGHT SENSOR 20W 1440L	1

30-Watt LED Spotlight with Motion Detector

- 230 V LED spotlight with motion detector
- Type of protection IP 44 with 1 m of power supply cable (VDE)
- Aluminium enclosure without screws on the front
- With motion detector
- Colour: silver grey

Technical Data

Motion detector:

Detection range: 180°
 Rotatable: ±30°
 Range: approx. 13 m
 Twilight switch: approx. 4 – 1,000 lux
 Switching time: 5 sec - 4 min continuously adjustable
 Dimensions W × H × D: approx. 225 × 185 × 128 mm

Lamp output:

Consumption: 30 watts, Bridgelux LED chip (COB)
 Luminosity: 2,160 lumens
 Light colour: 4,500 – 6,000 Kelvin
 Beam angle: 120°
 Type of protection: IP 44 with 1 m of power supply cable (VDE)
 Power consumption: 0.5 watts / hour
 Energy efficiency class: A



Article No.	Article Description	QTY
3895 3 30	LED SPOTLIGHT SENSOR 30W 2160L	1

NEXTGEN LED wet room diffuser luminaires

- fixed LED, no maintenance or replacement of illuminant necessary
- Input voltage: 220 – 230 V
- Light colour: 4,000 K
- Colour reproduction value: Ra>80
- Product life: approx. 25,000 h
- Switching cycles: approx. 20,000 x
- non-dimmable
- Protection rating IP 65, dust-tight and water-jet protected



Article No.	Article Description	QTY
3895 7 120	LED WET ROOM DIFF.LUM.120 18W	1
3895 7 150	LED WET ROOM DIFF.LUM.150 22W	1

Technical Data					
Luminous flux Lumen	Power Watt	Beam Angle	Length mm	Width mm	Height mm
2,100	18	120°	1,225	52	54
2,500	22	120°	1,525	52	54

LED wet room diffuser luminaires

- Including high-quality T8 LED tube
- Input voltage 230 V
- Light colour 4,000 K
- Colour reproducibility Ra>80
- Service life approx. 30,000 h
- Switching cycles approx. 15,000 x
- Non-dimmable
- Protection rating IP 65, dust-tight and water-jet protected
- Protection rating IK 08, impact-resistant up to 5 Joule



3895 6 120 18, 3895 6 150 24



3895 6 120 36, 3895 6 150 48

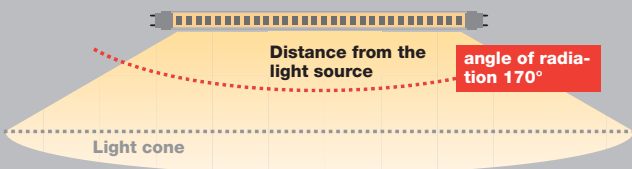
Article No.	Article Description	QTY
3895 6 120 18	LEDWET ROOM DIFF.LUM.120 18W	1
3895 6 120 36	LEDWET ROOM DIFF.LUM.120 36W	1
3895 6 150 24	LEDWET ROOM DIFF.LUM.150 24W	1
3895 6 150 48	LEDWET ROOM DIFF.LUM.150 48W	1

Technical Data					
Luminous flux Lumen	Power Watt	Beam Angle	Length mm	Width mm	Height mm
1700	18	160°	1265	72	86
3400	36	120°	1265	115	86
2400	24	160°	1565	72	86
4800	48	120°	1565	115	86

T8/G13 230 Volt LED Pipes

- TÜV (German technical inspection association) certified*
- Light beam angle 120°
- Delivery incl. starter
- Socket T8/G8

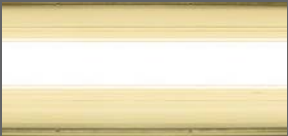
A+
Energy efficiency
class

Colour temperatur



Art. no. 5429 60 - 150:
4 000 K (cold white)



Art. no. 5429 2 60:
3.000 K (warm white)



Art. no. 5429 1 120 - 150:
6 000 K (daylight white)

Technical Data

Art. No.	Lighting efficiency: Lumen	Power: Watt	Dimensions: mm
5429 2 60	850	9	604 x 30
5429 60	850	9	604 x 30
5429 120	1.770	18	1.213 x 30
5429 150	2.200	20	1.515 x 30
5429 1 120	1.850	18	1.213 x 30
5429 1 150	2.300	20	1.515 x 30

Article No.	Article Description	QTY
5429 2 60	LED PIPE 9W 60CM 3000K MATT	1
5429 60	LED PIPE 9W 60CM 4000K MATT	1
5429 120	LED PIPE 18W 120CM 4000K MATT	1
5429 150	LED PIPE 27W 150CM 4000K MATT	1
5429 1 120	LED PIPE 18W 120CM 6500K MATT	1
5429 1 150	LED PIPE 27W 150CM 6500K MATT	1
5429 1	LED-STARTER	1

*Lamp manufacturer's instructions for modification must be followed. The lamp body can only be modified by a trained professional.

Your Advantage / Benefit

- Very low energy usage: in comparison with conventional fluorescent tubes; LEDs need a lot less electricity, as they lose hardly any energy in the form of heat
- 50% lower electricity consumption in comparison with fluorescent tubes, easily resulting in savings of up to a four-digit euro range per year and office
- no mercury or other toxins, so the lamp can be discarded as normal electrical scrap
- LEDs reach their full lighting performance directly after being switched on, without the flickering and slow brightening of energy-saving lamps
- 30,000 hours and over, regardless of how frequently they are switched on and off
- no disturbing flickering or glaring; thus well-suited to offices
- LEDs only emit light in the visible range. They do not emit any damaging UV or infra-red rays and as a result, do not fade colours or materials

Application:



Related products

- **LED Moisture-Proof Lamps**
Art. No. 3895 4 120 / 3895 4 150



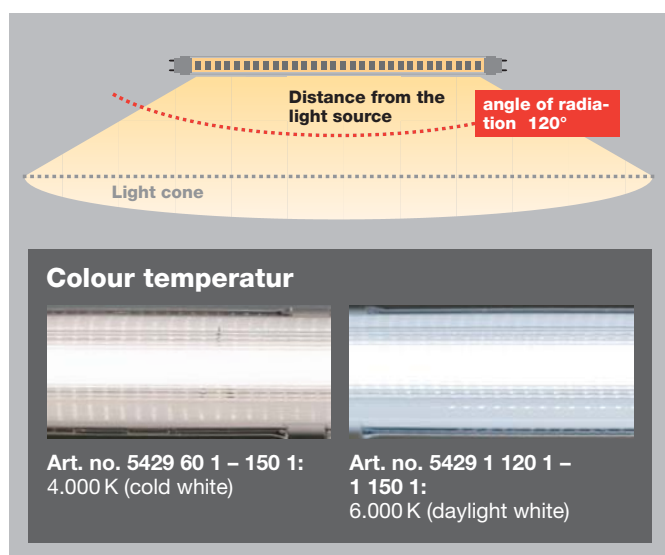
- **LED Moisture-Proof Lamps SLIM**
Art. No. 3895 5 120 / 3895 5 150



LED Tube, clear T8/G13 230 Volt

- TÜV-certified*
- beam angle 120°
- delivery incl. starter
- T8 / G13 socket
- transparent with visible LEDs

A+
Energy efficiency
class

Distance from the light source

angle of radiation 120°

Light cone

Colour temperatur

Art. no. 5429 60 1 – 150 1:
4.000 K (cold white)

Art. no. 5429 1 120 1 –
1 150 1:
6.000 K (daylight white)

Your Advantage / Benefit

- **very low electricity consumption:** compared to conventional fluorescent tubes, LEDs need much less power because they lose little energy through heat radiation
- **cost saving:** compared to fluorescent tubes over 50% less power consumption, thus remunerative savings possible
- **pollution-free:** no mercury or other harmful substances, so the lamp can be disposed of as normal electronic waste
- **immediate brightness:** LEDs produce full light output immediately after switching on, without flickering or slow increase in brightness like energy saving lamps
- **very long-lasting:** 30.000 hours and more, regardless of how often it is turned on and off
- **consistent light:** no annoying flickering and dimming, thus ideal for offices
- **UV free:** LEDs emit only visible light, they send no harmful UV and infrared radiation and thus cannot age colours and materials

Application



Technical Data

Artikel-no.:	Luminous flux: Lumens	Capacity: Watts	Dimension: mm
5429 60 1	850	9	604 × 30
5429 120 1	1.770	18	1.213 × 30
5429 150 1	2.200	20	1.515 × 30
5429 1 120 1	1.850	18	1.213 × 30
5429 1 150 1	2.300	20	1.515 × 30

Article No.	Article Description	QTY
5429 60 1	LED PIPE 9W 60CM 4000K CLEAR	1
5429 120 1	LED PIPE 18W 120CM 4000K CLEAR	1
5429 150 1	LED PIPE 20W 150CM 4000K CLEAR	1
5429 1 120 1	LED PIPE 18W 120CM 6000K CLEAR	1
5429 1 150 1	LED PIPE 20W 150CM 6000K CLEAR	1
5429 1	LED-STARTER	1

*Lamp manufacturer's instructions for modification must be followed. The lamp body can only be modified by a trained professional.

Related products

- **LED Moisture-Proof Lamps**
Art. No. 3895 4 120 / 3895 4 150



- **LED Moisture-Proof Lamps SLIM**
Art. No. 3895 5 120 / 3895 5 150



LED GLS E27 6,5W

- E27 socket
- warm white light colour 2.700 K
- life span 25.000 hrs.
- 6,5 Watt

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
470	40	115	60

Article No.	Article Description	QTY
5429 1 27 65	LED GLS E27 6,5W	e 5



LED GLS E27 9,5 W

- E27 socket
- warm white light colour 2.700 K
- life span 25.000 hrs.
- 9,5 Watt

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
806	60	115	60

Article No.	Article Description	QTY
5429 1 27 95	LED GLS E27 9,5W	e 5



LED GLS E27 dimmable 9,5W

- E27 socket
- warm white light colour 2.700 K
- life span 25.000 hrs.
- 9,5 Watt
- dimmable

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
806	60	115	60

Article No.	Article Description	QTY
5429 1 27 951	LED GLS E27 DIMMABLE 9,5W	e 5



LED Candle E14, clear

- E14 socket
- warm white light colour 2.700 K
- life span: 10. 000 hrs

Technical Data				
Lumen LM	Capacity W	Corresponds light bulb W	Length mm	Diameter mm
250	2,3	25	101	35

Article No.	Article Description	QTY
5429 1 14 30	LED CANDLE CLEAR E14 3.0W	e 5



LED Candle E14 3,5W

- E14 socket
- warm white light colour 2.700 K
- life span 25.000 hrs.
- 3,5 Watt

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
250	25	107	38

Article No.	Article Description	QTY
5429 1 14 435	LED CANDLE E14 3.5 W	e 5



LED Globe45 E14 3,5W

- E14 socket
- warm white light colour 2.700 K
- life span 25.000 hrs.
- 3,5 Watt

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
250	25	87	45

Article No.	Article Description	QTY
5429 1 14 4351	LED GLOBE 45 E14 3.5 W	e 5



LED Spotlight GU10 4.0 W

- GU10 socket
- Warm white light colour 2.700 K
- Life span: 30.000 hrs.
- 4.0 Watt

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
230	35	59	51

Article No.	Article Description	QTY
5429 1 10 35	LED SPOTLIGHT GU10 4.0 W	e 5



5429 1 10 35



5429 1 10 55

LED Spotlight GU5,3 3.7 W

- GU5,3 socket
- Warm white light colour 2.700 K
- Life span: 25.000 hrs.
- 3.7 Watt

Technical Data			
Lumen LM	corresponds Light bulb W	Length mm	Diameter mm
230	23	46	51

Article No.	Article Description	QTY
5429 1 53 37	LED SPOTLIGHT GU5.3 3.7W	e 5



LED Stick G9

- G9 socket
- warm white light colour 3.000 K
- life span: 15.000 hrs



Article No.	Article Description	QTY
5429 1 9 23	LED STICK G9 2.3W	e 5

Technical Data

Lumen LM	Capacity W	Corresponds light bulb W	Length mm
215	2.3	22	53

Energy-Saving Lamp Basic-3U, E27

- E27-socket
- Service life 10,000 hours, Energy Label A
- Warm-white light tone (827 - 2700 K)
- Not suitable for dimmer



Technical Data

Lm	Meets light bulb W	Length mm	Diameter mm
650	55	118	40

Article No.	Article Description	QTY
5429 27 11 2	ESL BASIC-3U E27 11W	e 10

Energy-Saving Lamp Mini-3U, E27

- E27-socket, special compact design
- Service life 10,000 hours, Energy Label A
- Warm-white light tone (827 - 2700 K)
- Not suitable for dimmer



Technical Data

Lm	Meets light bulb W	Length mm	Diameter mm
310	35	90	38
560	55	105	38

Article No.	Article Description	QTY
5429 27 7 1	ESL MINI-3U E27 7W	e 5
5429 27 11 1	ESL MINI-3U E27 11W	e 5

Energy-Saving Lamp Spirale, E27

- E27-socket, very clear and bright light yield compared to conventional energy-saving lamps
- Service life 10,000 hours, Energy Label A
- Warm-white light tone (827 - 2700 K)
- Not suitable for dimmer



Technical Data

Lm	Meets light bulb W	Length mm	Diameter mm
820	75	127	42
1300	100	129	59

Article No.	Article Description	QTY
5429 27 15 3	ESL SPIRALE E27 15W	e 5
5429 27 20 3	ESL SPIRALE E27 20W	e 5

Energy-Saving Lamp GLS, E27

- E27-socket, classic type
- Service life 10,000 hours, Energy Label A
- Warm-white light tone (827 - 2700 K)
- Not suitable for dimmer



Technical Data

Lm	Meets light bulb W	Length mm	Diameter mm
540	55	124	55

Article No.	Article Description	QTY
5429 27 11 7	ESL GLS E27 11W	e 10

Energy-Saving Lamp Mini-3U, E14

- E14-socket, special compact design
- Service life 10,000 hours, Energy Label A
- Warm-white light tone (827 - 2700 K)
- Not suitable for dimmer



Technical Data

Lm	Meets light bulb W	Length mm	Diameter mm
560	55	105	38

Article No.	Article Description	QTY
5429 14 11 1	ESL MINI-3U E14 11W	e 5

Energy-Saving Lamp Candle, E14

- E14-socket, decorative candle form
- Service life 10.000 hours, Energy Label A
- Warm-white light tone (827 - 2700 K)
- Not suitable for dimmer



Technical Data

Lm	Meets light bulb W	Length mm	Diameter mm
310	35	116	38

Article No.	Article Description	QTY
5429 14 7 4	ESL CANDLE E14 7W	e 10

Cable Ties

- Material: Polyamide 6.6
- Material class: UL94V-2 / AGR 3750 UV resistant
- Temperature resistance: -55°C to +100°C
- For quick bundling of cables, cable harnesses, hoses etc.
- Raised tip ensures that tie is easy to insert into fastener
- Not detachable



Article No.	Article Description	QTY
3750 25 102	CABLE TIE 2.6X98 BLACK	H 200
3750 25 160	CABLE TIE 2.5X160 BLACK	H 200
3750 25 200	CABLE TIE 2.5X200 BLACK	H 200
3750 35 145	CABLE TIE 3.5X145 BLACK	H 200
3750 35 215	CABLE TIE 3.5X200 BLACK	H 200
3750 35 280	CABLE TIE 3.5X280 BLACK	H 200
3750 47 195	CABLE TIE 4.7X195 BLACK	H 200
3750 47 285	CABLE TIE 4.7X285 BLACK	H 200
3750 47 360	CABLE TIE 4.7X360 BLACK	H 200
3750 78 202	CABLE TIE 7.8X202 BLACK	H 200
3750 78 282	CABLE TIE 7.8X282 BLACK	H 200
3750 78 363	CABLE TIE 7.8X363 BLACK	H 200
3750 78 464	CABLE TIE 7.8X464 BLACK	f 100
3750 78 540	CABLE TIE 7.8X540 BLACK	f 100
3750 78 750	CABLE TIE 7.8X750 BLACK	f 100
3750 125 225	CABLE TIE 12.5X225 BLACK	50
3750 125 535	CABLE TIE 12.5X535 BLACK	50
3751 25 102	CABLE TIE 2.6X98 WHITE	H 200
3751 25 160	CABLE TIE 2.5X160 WHITE	H 200
3751 25 200	CABLE TIE 2.5X200 WHITE	H 200
3751 35 145	CABLE TIE 3.5X145 WHITE	H 200
3751 35 215	CABLE TIE 3.5X200 WHITE	H 200
3751 35 280	CABLE TIE 3.5X280 WHITE	H 200
3751 47 195	CABLE TIE 4.7X195 WHITE	H 200
3751 47 285	CABLE TIE 4.7X285 WHITE	H 200
3751 47 360	CABLE TIE 4.7X360 WHITE	H 200
3751 78 202	CABLE TIE 7.8X200 WHITE	H 200
3751 78 282	CABLE TIE 7.8X282 WHITE	H 200
3751 78 363	CABLE TIE 7.8X363 WHITE	H 200
3751 78 464	CABLE TIE 7.8X464 WHITE	f 100
3751 78 540	CABLE TIE 7.8X540 WHITE	f 100
3751 78 750	CABLE TIE 7.8X750 WHITE	f 100
3751 125 225	CABLE TIE 12.5X225 WHITE	50
3751 125 535	CABLE TIE 12.5X535 WHITE	50

(Width x length mm)

Technical Data

Art. No.	Bundlung Ø mm
3750 25 102	1.0 – 21
3750 25 160	1.0 – 40
3750 25 200	1.0 – 52
3750 35 145	2.0 – 35
3750 35 215	2.0 – 50
3750 35 280	2.0 – 80
3750 47 195	3.0 – 50
3750 47 285	3.5 – 79
3750 47 360	3.5 – 103
3750 78 202	3.5 – 63
3750 78 282	4.0 – 80
3750 78 363	8.0 – 100
3750 78 464	5.0 – 124
3750 78 540	35.0 – 158
3750 78 750	35.0 – 200
3750 125 225	7.5 – 57
3750 125 535	7.5 – 155
3751 25 102	1.0 – 21
3751 25 160	1.0 – 40
3751 25 200	1.0 – 52
3751 35 145	2.0 – 35
3751 35 215	2.0 – 50
3751 35 280	2.0 – 80
3751 47 195	3.0 – 50
3751 47 285	3.5 – 79
3751 47 360	3.5 – 103
3751 78 202	3.5 – 63
3751 78 282	4.0 – 80
3751 78 363	8.0 – 100
3751 78 464	5.0 – 124
3751 78 540	35.0 – 158
3751 78 750	35.0 – 200
3751 125 225	7.5 – 57
3751 125 535	7.5 – 155

Cable Ties with Plastic Tongue, Coloured

- Material: Polyamide 6.6
- Material class: MIL, UL 94 V-2
- Temperature resistance: -40 to 85 °C
- For quick bundling of cables, cable harnesses, hoses, etc.
- Not detachable



Article No.	Article Description	QTY
3750 36 150 1	CABLE TIE 3.6X150 RED	100
3750 48 200 1	CABLE TIE 4.8X200 RED	100
3750 48 368 1	CABLE TIE 4.8X368 RED	100
3750 36 150 2	CABLE TIE 3.6X150 BLUE	100
3750 48 200 2	CABLE TIE 4.8X200 BLUE	100
3750 48 368 2	CABLE TIE 4.8X368 BLUE	100
3750 36 150 3	CABLE TIE 3.6X150 YELLOW	100
3750 48 200 3	CABLE TIE 4.8X200 YELLOW	100
3750 48 368 3	CABLE TIE 4.8X368 YELLOW	100
3750 36 150 4	CABLE TIE 3.6X150 GREEN	100
3750 48 200 4	CABLE TIE 4.8X200 GREEN	100
3750 48 368 4	CABLE TIE 4.8X368 GREEN	100
3750 36 150 5	CABLE TIE 3.6X150 ORANGE	100
3750 48 200 5	CABLE TIE 4.8X200 ORANGE	100
3750 48 368 5	CABLE TIE 4.8X368 ORANGE	100
3750 36 150 6	CABLE TIE 3.6X150 BROWN	100
3750 48 200 6	CABLE TIE 4.8X200 BROWN	100
3750 48 368 6	CABLE TIE 4.8X368 BROWN	100
3750 48 360 7	CABLE TIE 4.8X360 BROWN	100

(Width × length mm)

Technical Data

Bundling-Ø mm

39
52
102
39
52
102
39
52
102
39
52
102
39
52
102
39
52
102
100

Cable Tie Wall Holder

- Contents: 900 cable ties
- In practical FÖRCH wall holder
 - For hanging on perforated plates
 - Can be screwed to wall or workshop trolley
- The most common cable ties are immediately accessible
 - No more searching
 - Stock transparency
- Variable compartments
 - Compartments can be divided as required

Article No.	Article Description	QTY
3750 5	CABLE TIE HOLDER ASSORT.BLACK	1
3750 50	CABLE TIE HOLDER - EMPTY	1

- Contents: 900 cable ties
- In practical FÖRCH wall holder - For hanging on perforated plates
 - Can be screwed to wall or workshop trolley
- The most common cable ties are immediately accessible - No more searching
 - Stock transparency
- Variable compartments - Compartments can be divided as required



Cable Tie - Set 2

- With plastic tongue

Contents:

Article No.	Art. Description	Quantity
3750 25 102	CABLE TIE 2.6X98 BLACK	500
3750 35 145	CABLE TIE 3.5X145 BLACK	200
3750 35 215	CABLE TIE 3.5X200 BLACK	100
3750 47 195	CABLE TIE 4.7X195 BLACK	200
3750 47 285	CABLE TIE 4.7X285 BLACK	300
3750 47 360	CABLE TIE 4.7X360 BLACK	100

Article No.	Article Description	QTY
3750P 2	CABLE TIES-SET 2 BLACK	1



Cable Tie - Set 3

- With plastic tongue

Contents :

Article No.	Art. Description	Quantity
3750 35 145	CABLE TIE 3.5X145 BLACK	100
3750 35 215	CABLE TIE 3.5X200 BLACK	100
3750 47 195	CABLE TIE 4.7X195 BLACK	100
3750 47 285	CABLE TIE 4.7X285 BLACK	100
3750 47 360	CABLE TIE 4.7X360 BLACK	100

Article No.	Article Description	QTY
3750P 3	CABLE TIES-SET 3 BLACK	1



Cable Tie Package for Trucks, Black

- 1,100 pieces

Contents:

Article No.	Art. Description	Quantity
3750 35 145	CABLE TIE 3.5X145 BLACK	200
3750 47 195	CABLE TIE 4.7X195 BLACK	200
3750 47 285	CABLE TIE 4.7X285 BLACK	300
3750 47 360	CABLE TIE 4.7X360 BLACK	300
3750 78 363	CABLE TIE 7.8X363 BLACK	100

Article No.	Article Description	QTY
3750P 4	CABLE TIE-PACKAGE TRUCK BLACK	1



Cable Tie Package, black

- 2,000-pieces

Contents:

Article No.	Art. Description	Quantity
3750 25 102	CABLE TIE 2.6X98 BLACK	300
3750 35 145	CABLE TIE 3.5X145 BLACK	500
3750 47 195	CABLE TIE 4.7X195 BLACK	500
3750 47 285	CABLE TIE 4.7X285 BLACK	500
3750 47 360	CABLE TIE 4.7X360 BLACK	200

Article No.	Article Description	QTY
3750P 7	CABLE TIES - PACKAGE 7 BLACK	1



Cable Tie Package

- 3,700- pieces

Contents:

Article No.	Art. Description	Quantity
3750 25 102	CABLE TIE 2.6X98 BLACK	500
3750 35 145	CABLE TIE 3.5X145 BLACK	1000
3750 47 195	CABLE TIE 4.7X195 BLACK	1000
3750 47 285	CABLE TIE 4.7X285 BLACK	1000
3750 47 360	CABLE TIE 4.7X360 BLACK	200

Article No.	Article Description	QTY
3750P 9	CABLE TIE PACKAGE 9 BLACK	1



Cable Ties, Detachable

- Permanent lock when tongue is pulled tightly
- Detachable connection for bundling cables loosely
- Single-hole mounting and double-sided processing possible
- Simple to add cables later
- Colour: black

Article No.	Article Description	QTY
3753 34 206	DETACH.CABLE TIE 3.4X206 BLACK	100
3753 46 172	DETACH.CABLE TIE 4.6X172 BLACK	100
3753 46 280	DETACH.CABLE TIE 4.6X280 BLACK	100
3753 76 376	DETACH.CABLE.TIE 7.6X376 BLACK	100

(Width x length mm)



Technical Dta

Art. No.	Bundling-Ø
3753 34 206	50
3753 46 172	45
3753 46 280	76
3753 76 376	102

Cable Ties with Expanding Rivet

- Hole dia.: 7.5 mm
- Material strength: Max. 2.5 mm

Article No.	Article Description	QTY
3755 70 80	CABLE T.W.BODY CL.7.0X80 BLACK	100
3755 90 160	CABLE T.W.BODY CL.9.0X160BLACK	100

(Width x Length mm)



Cable Ties with Steel Tongue Industry

- Polyamide 6.6, black design UV-stabilized
- Material class: UL94V-2
- With rounded edges and inside nubs to prevent lateral slipping
- Corrosion resistant, non-magnetic steel tongue
- Temperature resistant from -40°C to +85°C
- Industry quality



Article No.	Article Description	QTY
3756 24 92	CBL TIE METAL TONGUE BLK 2.4X9	100
3756 36 140	CBL TIE METAL TONGUE BLK 3.6X1	100
3756 36 208	CBL TIE METAL TONGUE BLK 3.6X2	100
3756 48 186	CBL TIE METAL TONGUE BLK 4.8X1	100
3756 48 293	CBL TIE METAL TONGUE BLK 4.8X2	100
3756 48 360	CBL TIE MET.TONGUE BLK 4.8X360	100
3756 76 203	CBL TIE METAL TONGUE BLK 7.6X2	50
3756 76 338	CBL TIE METAL TONGUE BLK 7.6X3	50
3756 24 95 1	CBL TIE MET.TONG.WHITE 2.4X92	100
3756 36 140 1	CBL TIE MET.TONG.WHITE 3.6X140	100
3756 36 208 1	CBL TIE MET.TONG.WHITE 3.6X208	100
3756 36 281 1	CBL TIE MET.TONG.WHITE 3.6X281	100
3756 48 186 1	CBL TIE MET.TONG.WHITE 4.8X186	100
3756 48 293 1	CBL TIE MET.TONG.WHITE 4.8X293	100
3756 48 360 1	CBL TIE MET.TONG.WHITE 4.8X360	100
3756 76 203 1	CBL TIE MET.TONG.WHITE 7.6X203	50
3756 76 338 1	CBL TIE MET.TONG.WHITE 7.6X338	50

(Width x length mm)

Technical Data

Art. No.	Bundling dia. mm
3756 24 92	2-16
3756 36 140	2-29
3756 36 208	2-50
3756 48 186	3.5-45
3756 48 293	3.5-78
3756 48 360	3.5-102
3756 76 203	6-50
3756 76 338	6-90
3756 24 95 1	2-16
3756 36 140 1	2-29
3756 36 208 1	2-50
3756 36 281 1	2-76
3756 48 186 1	3.5-45
3756 48 293 1	3.5-78
3756 48 360 1	3.5-102
3756 76 203 1	6-50
3756 76 338 1	6-90

Cable Ties with Steel Tongue Standard

- Polyamide 6.6, black design UV-stabilized
- Material class: UL94V-2
- With rounded edges and inside nubs to prevent lateral slipping
- Corrosion-resistant and non-magnetic steel tongue
- Temperature resistant from -40°C to +85°C



Article No.	Article Description	QTY
3759 25 98	CABLE TIE WT BLA.STAND.2.5X 98	100
3759 35 140	CABLE TIE WT BLA.STAND.3.5X140	100
3759 35 200	CABLE TIE WT BLA.STAND.3.5X200	100
3759 45 200	CABLE TIE WT BLA.STAND.4.5X200	100
3759 45 290	CABLE TIE WT BLA.STAND.4.5X290	100
3759 45 360	CABLE TIE WT BLA.STAND.4.5X360	100
3759 75 360	CABLE TIE WT BLA.STAND.7.5X360	50
3759 25 98 1	CABLE TIE WT BLA.STAND.2.5X 98	100
3759 35 140 1	CABLE TIE WT BLA.STAND.3.5X140	100
3759 35 200 1	CABLE TIE WT BLA.STAND.3.5X200	100
3759 35 280 1	CABLE TIE WT BLA.STAND.3.5X280	100
3759 45 200 1	CABLE TIE WT BLA.STAND.4.5X200	100
3759 45 290 1	CABLE TIE WT BLA.STAND.4.5X290	100
3759 45 360 1	CABLE TIE WT BLA.STAND.4.5X360	100
3759 75 360 1	CABLE TIE WT BLA.STAND.7.5X360	50

(Width x length mm)

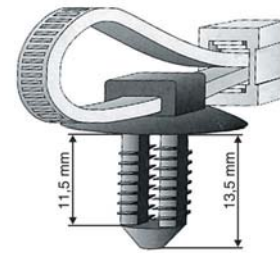
Technical Data

Art. No.	Bundling dia. mm
3759 25 98	2-16
3759 35 140	2-29
3759 35 200	2-50
3759 45 200	3.5-45
3759 45 290	3.5-78
3759 45 360	3.5-102
3759 75 360	6-90
3759 25 98 1	2-16
3759 35 140 1	2-29
3759 35 200 1	2-50
3759 35 280 1	2-76
3759 45 200 1	3.5-45
3759 45 290 1	3.5-78
3759 45 360 1	3.5-102
3759 75 360 1	6-90

Cable Tie Fastening Plugs

- For cable tie widths up to 4.9 mm
- For 6 mm holes in metal, concrete, wood etc.

Article No.	Article Description	QTY
3759 40	CABLE FASTENING PLUG BLACK	f 100



Cable Ties, Stainless Steel

- Flat, self-arresting fastener
- Ideal for the use in aggressive environments
- Temperature resistance: -80°C to +538°C
- Non-magnetic
- No tools required for fastening



Article No.	Article Description	QTY
3752 46 200	STAINL.STEEL CABL.STRAP4.6X200	zg 50
3752 46 360	STAINL.STEEL CABL.STRAP4.6X360	100
3752 46 520	STAINL.STEEL CABL.STRAP4.6X520	100
3752 79 200	STAINL.STEEL CABL.STRAP7.9X200	50
3752 79 360	STAINL.STEEL CABL.STRAP7.9X360	50
3752 79 520	STAINL.STEEL CABL.STRAP7.9X520	50
3752 79 680	STAINL.STEEL CABL.STRAP7.9X680	50

(Width x length mm)

Technical Data

Art. No.	Bundling dia. mm	Min. Pull strength kg
3752 46 200	51	45
3752 46 360	102	45
3752 46 520	152	45
3752 79 200	51	113
3752 79 360	102	113
3752 79 520	152	113
3752 79 680	203	113

Cable Tie Unreeling Unit, Endless

- For bundling cables, hoses etc. for all diameters required
- Handy version, simple to operate
- Cable tie width: 4.5 mm

Part No. 3758 1:

- Cable tie unreeling unit, endless, completely with 15 m endless tie strap and 200 cable tie locks

- Colour: black

Part No. 3758 10:

- Endless cable tie replacement roll

- Colour: black

Part No. 3758 20:

- Endless cable tie replacement roll

- Colour: white

Part No. 3758 11 :

- Cable tie lock replacement clips, 200 locks (10 clips with 20 locks each)

- Colour: black

Part No. 3758 21:

- Cable tie lock replacement clips 200 locks (10 clips with 20 locks each)

- Colour: white



Article No.	Article Description	QTY
3758 1	CABLE TIE UNREEL.UNIT BLACK	1
3758 10	RO(15M) ENDL.CABLE TIE BLACK	1
3758 20	RO(15M)ENDLESS CABLE TIE WHITE	1
3758 11	PCK(200)CABLE TIE LOCKS BLACK	1
3758 21	PCK(200)CABLE TIE LOCK WHITE	1
3758 3	PCK(5)REPL.CUT.F.UNREEL.UNIT	1
3758 4	REP.MOUTH.P.F.CABLE TIE UNR.UN.	1

Cable Ties, Nylon Black

- Material: Polyamide 12
- Temperature resistance: -40°C to +80°C
- Resistant to oil, grease, salt, hydrocarbon
- UV stabilized
- Not resistant to solvents containing chlorine
- For fast bundling of cables, cable harnesses, hoses etc.
- Not detachable



Article No.	Article Description	QTY
3757 90 185 1	CABLE TIE NYLON BLACK 9X180	100
3757 90 265	CABLE TIE NYLON BLACK 9X265	100
3757 90 360	CABLE TIE NYLON BLACK 9X360	100
3757 90 510	CABLE TIE NYLON BLACK 9X510	100
3757 90 760	CABLE TIE NYLON BLACK 9X760	100

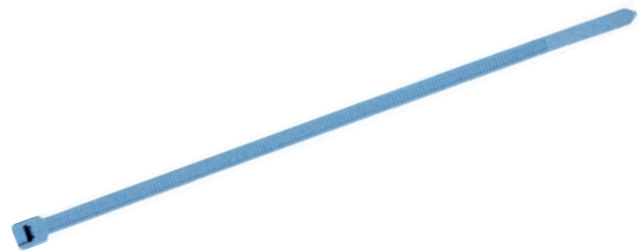
(Width x length mm)

Technical Data

Art. No.	Bundling dia. mm max.	Max pull strength max. Kg/Nm	Locking Lug
3757 90 185 1	47	36/360	Single
3757 90 265	60	51/500	Double
3757 90 360	93	51/500	Double
3757 90 510	140	54/530	Double (reinforced)
3757 90 760	220	54/530	Double (reinforced)

Cable Ties Detectable PA

- The metal impregnation means that it can be detected by metal detectors or x-ray scans
- Due to its blue colour it is also visually recognisable
- Complies with the FDS safety standards of the foodstuffs, beverages and pharmaceutical industry regarding the prevention of product contamination, wastage or recalls
- Curved tip for better application on even surfaces and for quicker threading when installing
- This cable tie is made from 2 materials in order to withstand corrosion of the raw materials being used or the detergent for the production tools
- Material: metal impregnated polyamide 6.6 (PA)
- Safety standard FDA = American Food & Drug Administration
- Colour: light blue
- Temperature resistant: from -60°C (140°F) to +85° (185°F)
- PA cable tie: resistant to neutral materials or detergents



Article No.	Article Description	QTY
3762 25 100	CABLE TIE DETECTAB. PA 2.5X100	100
3762 48 186	CABLE TIE DETECTAB. PA 4.8X186	100
3762 48 366	CABLE TIE DETECTAB. PA 4.8X366	100
3762 76 366	CABLE TIE DETECTAB. PA 7.6X366	50

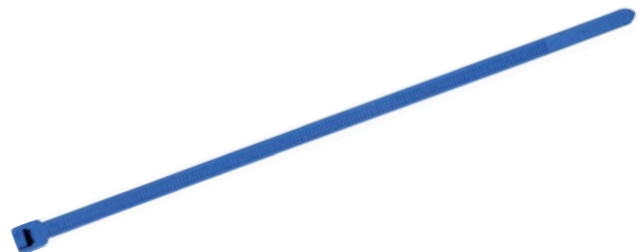
(Width x length mm)

Technical Data

Art. No.	Grouping Ø mm max.	Min. tensile strength N
3762 25 100	3.3 – 22	80
3762 48 186	3.3 – 47	222
3762 48 366	3.3 – 102	222
3762 76 366	6.4 – 102	120

Cable Ties Detectable PP

- Material: metal impregnated polypropylene (PP)
- Safety standard FDA = American Food & Drug Administration
- Colour: dark blue
- Temperature resistant: from -60°C (140°F) to +115° (239°F)
- PA cable tie: resistant to neutral materials or detergents



Article No.	Article Description	QTY
3763 25 100	CABLE TIE DETECTAB. PP 2.5X100	100
3763 48 186	CABLE TIE DETECTAB. PP 4.8X186	100
3763 48 366	CABLE TIE DETECTAB. PP 4.8X366	100
3763 76 366	CABLE TIE DETECTAB. PP 7.6X366	50

(Width x length mm)

Technical Data

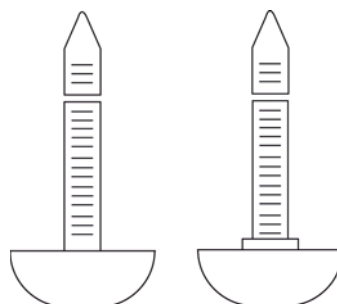
Art. No.	Grouping-Ø mm max.	Min. tensile strength N
3763 25 100	3.3 – 22	67
3763 48 186	3.3 – 47	133
3763 48 366	3.3 – 102	133
3763 76 366	6.4 – 102	267

Cable Ties for Single Hole Mounting

- User-friendly cable tie for single hole mounting
- Fixing from both sides possible (toothed at both sides)
- Can be released as long as the tie is not tightened
- With and without centering (MZE/OZE)
- Colour: black
- Material: Polyamid 6.6 (PA66HS)
- Operating temperature: -40°C to +105°C, short-term up to +145°C
- Fire protection: UL94V2

Application:

The single hole mounting at supports in automobile, truck and engineering



OZE
(without centering)

MZE
(with centering)
Ø: 10.7 mm



Article No.	Article Description	QTY
3754 76 200	C.T.SING.H.MOU.7.6X200 BLA.MZE	100
3754 76 200 1	C.T.SING.H.MOU.7.6X200 BLA.OZE	100
3754 76 375	C.T.SING.H.MOU.7.6X375 BLA.MZE	50
3754 76 375 1	C.T.SING.H.MOU.7.6X375 BLA.OZE	50

(Width x length mm)

Technical Data

Bundling dia. mm	Min. retention force (Nm)
50	700
50	700
100	700
100	700

Cable Tie Clamping Pliers

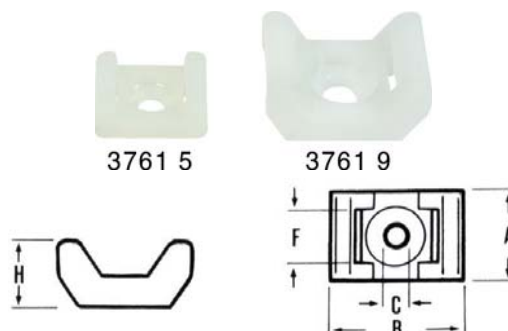
- For cable ties with width of 4.8 to 9.0 mm
- Length 190 mm
- With integrated cable tie cutter



Article No.	Article Description	QTY
3790 48	CABLE TIE CLAMP.PLIERS 4.8-9MM	1

Screw Base

- For fixing of cable ties
- Colour: nature



Article No.	Article Description	QTY
3761 5	SCR.BASE F.CABLE TIE UP TO 5MM	100
3761 9	SCR.BASE F.CABLE TIE UP TO 9MM	100

Technical Data

Art No.	A mm	B mm	C mm	F mm	H mm	For cable tie up to mm
3761 5	9.5	15	3.9	5.0	7.0	5.0
3761 9	15	22.5	5.0	9.0	11.0	9.0

Base, Self-Adhesive

- For fastening cable ties on surfaces free of dust and grease, e.g., metal, paint, plastic, wood, plaster, paper etc.



Article No.	Article Description	QTY
3761 78	ADH.BASE WHITE F.CABLE TIE 7.8	f 100
3761 78 1	ADH.BASE BLACK F.CABLE TIE 7.8	f 100
3761 36	ADH. BASE WHITE F.RIB.CABL.3.6	f 100
3761 32	ADH. BASE WHITE F.RIB.CABL.3.2	f 100

Technical Data

Colour	LxW mm	For cable strap up to mm
white	26 x 26	7.8
black	26 x 26	7.8
white	12.5 x 12.5	3.2
white	19 x 19	3.6

Chassis Clamps

- Galvanized steel
- For fastening cables and lines on chassis, especially on trucks and trailers
- Corrosion resistant



Article No.	Article Description	QTY
3764 28 15 5	CHASSIS CLAMPS ZI 28X12X5MM	100
3764 43 22 5	CHASSIS CLAMPS ZI 43X12X5MM	100
3764 60 28 75	CHASSIS CLAMPS ZI 60X12X7,5MM	100

(L2xWxH mm)

Technical Data

L1	L3	Thickness
22 mm	15 mm	0.6 mm
34 mm	22 mm	0.9 mm
50 mm	28 mm	1.0 mm

Cable Clips

- Self-adhesive, polyamide cable fasteners
- For fastening cables, hoses, pipes etc.
- Adhere to any surface free of dust and grease, e.g., metal, paint, plastic, wood, plaster, paper etc.
- Save time by eliminating drilling, screwing, riveting etc.
- Also easy to install in limited spaces



Article No.	Article Description	QTY
3760 5	CABLE CLIPS SELF-ADHESIVE 5MM	50
3760 8	CABLE CLIPS SELF-ADHESIVE 8MM	50
3760 16	CABLE CLIPS SELF-ADHESIVE 16MM	50
3760 5 1	CABLE CLIPS SELF-ADH.BK 5MM	50
3760 8 1	CABLE CLIPS SELF-ADH BK 8 MM	50
3760 16 1	CABLE CLIPS SELF-ADH.BK 16 MM	50

(for cables up to dia. mm)

Technical Data

Length mm	Width mm	Height mm
16.0	16.0	7
25.5	25.5	11
25.5	25.5	16
19.0	19.0	5
26.0	26.0	8
26.0	26.0	15

Cable Clamps DIN 72571

- Galvanized steel
- Light duty version



Article No.	Article Description		QTY
3765 4	CABLE CLAMPS	4	100
3765 5	CABLE CLAMPS	5	100
3765 6	CABLE CLAMPS	6	100
3765 8	CABLE CLAMPS	8	100
3765 10	CABLE CLAMPS	10	100
3765 12	CABLE CLAMPS	12	100
3765 15	CABLE CLAMPS	15	100
3765 20	CABLE CLAMPS	20	100

(for dia. mm)

Technical Data

Art.-No.	Mounting hole dia. mm
3765 4	4.8
3765 5	4.8
3765 6	4.8
3765 8	4.8
3765 10	4.8
3765 12	5.8
3765 15	5.8
3765 20	7.0

Cable Clamps, Plastic

- For fastening cables and lines



Article No.	Article Description	QTY
3765 100 6	CABLE CLAMPS PLASTIC Ø 6.0MM	f 100
3765 100 8	CABLE CLAMPS PLASTIC Ø 8.0MM	f 100
3765 100 10	CABLE CLAMPS PLASTIC 10MM	f 100
3765 100 12	CABLE CLAMPS PLASTIC 12MM	f 100

(for cables up to Ø mm)

Technical Data

Fixing hole-Ø in mm	Width in mm	Material thickness in mm	Length in mm
4,6	10,0	1,4	20,0
4,6	10,0	1,4	22,0
4,6	12,0	1,5	24,0
4,6	12,0	1,5	31,0

Plastic Cable Clips White

- For fixing cables and wires
- Fixing hole-Ø 5 mm
- Material: Polyamide 6.6
- Halogen free Silicone-free
- Temperature resistance: 0 °C to 65 °C
- Flammability classification: UL 94 V-2



Article No.	Article Description	QTY
3765 200 31	CABLE CLAMPS PLSTC.WH Ø 3,1MM	f 100
3765 200 50	CABLE CLAMPS PLSTC. WH Ø 5,0MM	f 100
3765 200 64	CABLE CLAMPS PLSTC.WH Ø 6,4MM	f 100
3765 200 79	CABLE CLAMPS PLSTC.WH Ø 7,9MM	f 100
3765 200 95	CABLE CLAMPS PLSTC.WH Ø 9,5MM	f 100
3765 200 127	CABLE CLAMPS PLSTC.WH Ø12,7MM	f 100
3765 200 158	CABLE CLAMPS PLSTC.WH Ø15,8MM	f 100
3765 200 194	CABLE CLAMPS PLSTC.WH Ø19,4MM	f 100

Technical Data

Fixing hole-Ø in mm:	Breadth mm:
4.8	9.6
4.8	9.6
4.6	10
4.6	10
4.6	12
5.0	12
4.6	12
4.6	12

Assortment of White Plastic Cable Clips

- 550 parts

Contents:

Article No.	Art. Description	Quantity
3765 200 31	CABLE CLAMPS PLSTC.WH Ø 3,1MM	100
3765 200 50	CABLE CLAMPS PLSTC. WH Ø 5,0MM	100
3765 200 64	CABLE CLAMPS PLSTC.WH Ø 6,4MM	100
3765 200 79	CABLE CLAMPS PLSTC.WH Ø 7,9MM	100
3765 200 95	CABLE CLAMPS PLSTC.WH Ø 9,5MM	50
3765 200 127	CABLE CLAMPS PLSTC.WH Ø12,7MM	50
3765 200 158	CABLE CLAMPS PLSTC.WH Ø15,8MM	25
3765 200 194	CABLE CLAMPS PLSTC.WH Ø19,4MM	25

Article No.	Article Description	QTY
9000 3765 1	ASSORT.CABLE CLIPS PLSTC WHITE	1
9000R 3765 1	INLETT CABLE CLIPS PLSTC WHITE	1



Cable drum empty

- suitable for Förch dispenser systems Art.-No. 3799 1, 3729 4 1 and 3729 8 1
- for AGR 3720 and 3725

Technical Data

Diameter:	165 mm
Width:	108 mm
Weight:	120 g



Article No.	Article Description	QTY
3729 10	CABLE DRUM EMPTY	1

Cable FLY

- Simply isolated single wire
- Insulation material: PVC
- On unrolling coil (without holder)
- Former identification: FLK



Technical Data

Wire	A Ø
0,5 mm ²	2,00 mm
0,75 mm ²	2,20 mm
1,0 mm ²	2,35 mm
1,5 mm ²	2,65 mm
2,0 mm ²	2,70 mm
2,5 mm ²	3,30 mm
4,0 mm ²	4,00 mm
6,0 mm ²	4,70 mm



Article No.	Article Description	QTY
3720 05	RO(100M) CABLE FLY 0.5 BLACK	1
3720 05 2	RO(100M) CABLE FLY 0.5 RED	1
3720 05 4	RO(100M) CABLE FLY 0.5 BLUE	1
3720 05 5	RO(100M) CABLE FLY 0.5 YELLOW	1
3720 05 6	RO(100M) CABLE FLY 0.5 WHITE	1
3720 05 8	RO(100M) CABLE FLY 0.5 BROWN	1
3720 05 10	RO(100M) CABLE FLY 0.5 ORANGE	1
3720 075	RO(100M) CABLE FLY 0.75 BLACK	1
3720 075 1	RO(100M) CABLE FLY 0.75 GRE/YE	1
3720 075 2	RO(100M) CABLE FLY 0.75 RED	1
3720 075 3	RO(100M) CABLE FLY 0.75 GREEN	1
3720 075 4	RO(100M) CABLE FLY 0.75 BLUE	1
3720 075 5	RO(100M) CABLE FLY 0.75 YELLOW	1
3720 075 6	RO(100M) CABLE FLY 0.75 WHITE	1
3720 075 7	RO(100M) CABLE FLY 0.75 GREY	1
3720 075 8	RO(100M) CABLE FLY 0.75 BROWN	1
3720 075 9	RO(100M) CABLE FLY 0.75 VIOLET	1
3720 075 10	RO(100M) CABLE FLY 0.75 ORANGE	1
3720 10	RO(100M) CABLE FLY 1.0 BLACK	1
3720 10 1	RO(100M) CABLE FLY 1.0 GRE/YEL	1
3720 10 2	RO(100M) CABLE FLY 1.0 RED	1
3720 10 3	RO(100M) CABLE FLY 1.0 GREEN	1
3720 10 4	RO(100M) CABLE FLY 1.0 BLUE	1
3720 10 5	RO(100M) CABLE FLY 1.0 YELLOW	1
3720 10 6	RO(100M) CABLE FLY 1.0 WHITE	1
3720 10 7	RO(100M) CABLE FLY 1.0 GREY	1
3720 10 8	RO(100M) CABLE FLY 1.0 BROWN	1

Article No.	Article Description	QTY
3720 15	RO(100M) CABLE FLY 1.5 BLACK	1
3720 15 1	RO(100M) CABLE FLY 1.5 GRE/YEL	1
3720 15 2	RO(100M) CABLE FLY 1.5 RED	1
3720 15 3	RO(100M) CABLE FLY 1.5 GREEN	1
3720 15 4	RO(100M) CABLE FLY 1.5 BLUE	1
3720 15 5	RO(100M) CABLE FLY 1.5 YELLOW	1
3720 15 6	RO(100M) CABLE FLY 1.5 WHITE	1
3720 15 7	RO(100M) CABLE FLY 1.5 GREY	1
3720 15 8	RO(100M) CABLE FLY 1.5 BROWN	1
3720 15 9	RO(100M) CABLE FLY 1.5 VIOLET	1
3720 15 10	RO(100M) CABLE FLY 1.5 ORANGE	1
3720 20	RO(25M) CABLE 2.0 BLACK	1
3720 20 2	RO(50M) CABLE 2,0 RED	1
3720 20 4	RO(25M) CABLE 2,0 BLUE	1
3720 25	RO(50M) CABLE 2,5 BLACK	1
3720 25 1	RO(50M) CABLE 2,5 GREEN/YELLOW	1
3720 25 2	RO(50M) CABLE 2,5 RED	1
3720 25 3	RO(50M) CABLE 2,5 GREEN	1
3720 25 4	RO(50M) CABLE 2,5 BLUE	1
3720 25 5	RO(50M) CABLE 2,5 YELLOW	1
3720 25 6	RO(100M) CABLE 2,5 WHITE	1
3720 25 7	RO(100M) CABLE 2,5 GREY	1
3720 25 8	RO(50M) CABLE 2,5 BROWN	1
3720 4	RO(25M) CABLE 4,0 BLACK	1
3720 4 2	RO(25M) CABLE 4,0 RED	1
3720 6	RO(25M) CABLE 6,0 BLACK	1
3720 60 2	RO(25M) CABLE 6,0 RED	1

FLRY Cable

- Simple insulated single conductor
- Insulation: PVC
- On cable feeding spools (without support)
- More flexible than FLY cables



Technical Data

Wire	A Ø
0.34 mm ²	1.3 mm
0.5 mm ²	1.6 mm
0.75 mm ²	1.9 mm
1.0 mm ²	2.1 mm
1.5 mm ²	2.4 mm
2.5 mm ²	3.0 mm
4.0 mm ²	3.7 mm
6.0 mm ²	4.3 mm



Article No.	Article Description	QTY
3725 034 3	RO(100M)CABLE FLRY 0,34 GREEN	1
3725 034 5	RO(100M)CABLE FLRY 0,34YELLOW	1
3725 034 6	RO(100M)CABLE FLRY 0,34WHITE	1
3725 034 7	RO(100M)CABLE FLRY 0,3GREY	1
3725 034 25	RO(100M)CABLE FLRY 0,34 BN/BL	1
3725 034 31	RO(100M)CABLE FLRY 0,34 RD/YE	1
3725 034 34	RO(100M)CABLE FLRY 0,34 RD/GN	1
3725 034 35	RO(100M)CABLE FLRY 0,34 YE/GN	1
3725 034 36	RO(100M)CABLE FLRY 0,34 YE/BU	1
3725 034 37	RO(100M)CABLE FLRY 0,34 BU/GN	1
3725 034 43	RO(100M)CABLE FLRY 0,34 BU/RD	1
3725 034 45	RO(100M)CABLE FLRY 0,34 GN/BU	1
3725 034 48	RO(100M)CABLE FLRY 0,34 WH/BU	1
3725 034 52	RO(100M)CABLE FLRY 0,34 GN/BK	1
3725 05	RO(100M) CABLE FLRY 0,5 BLACK	1
3725 05 2	RO(100M) CABLE FLRY 0,5 RED	1
3725 05 3	RO(100M)CABLE FLRY 0,5 GREEN	1
3725 05 4	RO(100M) CABLE FLRY 0,5 BLUE	1
3725 05 5	RO(100M) CABLE FLRY 0,5 YELLOW	1
3725 05 6	RO(100M)CABLE FLRY 0,5 WHITE	1
3725 05 7	RO(100M)CABLE FLRY 0,5 GREY	1
3725 05 8	RO(100M) CABLE FLRY 0,5 BROWN	1
3725 05 25	RO(100M)CABLE FLRY 0,5 BN/BK	1
3725 05 28	RO(100M)CABLE FLRY 0,5 GY/RD	1
3725 05 31	RO(100M)CABLE FLRY 0,5 RD/YE	1
3725 05 34	RO(100M)CABLE FLRY 0,5 RD/GN	1
3725 05 36	RO(100M)CABLE FLRY 0,5 YE/BU	1
3725 05 43	RO(100M)CABLE FLRY 0,5 BU/RD	1
3725 05 45	RO(100M)CABLE FLRY 0,5 GN/BU	1
3725 05 48	RO(100M)CABLE FLRY 0,5 WH/BK	1
3725 05 49	RO(100M)CABLE FLRY 0,5 WH/BK	1
3725 05 52	RO(100M)CABLE FLRY 0,5 GN/BK	1
3725 05 53	RO(100M)CABLE FLRY 0,5 BN/YE	1
3725 05 54	RO(100M)CABLE FLRY 0,5 YE/BU	1
3725 075	RO(100M) CABLE FLRY 0,75 BLACK	1
3725 075 2	RO(100M) CABLE FLRY 0,75 RED	1
3725 075 3	RO(100M) CABLE FLRY 0,75 GREEN	1
3725 075 4	RO(100M) CABLE FLRY 0,75 BLUE	1
3725 075 5	RO(100M) CABLE FLRY 0,75 YELLO	1
3725 075 6	RO(100M) CABLE FLRY 0,75 WHITW	1
3725 075 7	RO(100M) CABLE FLRY 0,75 GRAY	1
3725 075 8	RO(100M) CABLE FLRY 0,75 BROWN	1
3725 075 9	RO(100M) CABLE FLRY 0,75 VIOLE	1
3725 075 10	RO(100M) CABLE FLRY 0,75 ORANG	1
3725 075 20	RO(100M) CABLE FLRY 0,75 BL/YE	1
3725 075 21	RO(100M) CABLE FLRY 0,75 BL/RE	1
3725 075 22	RO(100M) CABLE FLRY 0,75 BL/GR	1
3725 075 23	RO(100M) CABLE FLRY 0,75 BL/WH	1
3725 075 24	RO(100M) CABLE FLRY 0,75 BL/GR	1
3725 075 26	RO(100M) CABLE FLRY 0,75 BR/WH	1
3725 075 27	RO(100M) CABLE FLRY 0,75GRA/BL	1
3725 075 28	RO(100M) CABLE FLRY 0,75 GRA/R	1
3725 075 29	RO(100M) CABLE FLRY 0,75 GRA/B	1
3725 075 30	RO(100M) CABLE FLRY 0,75 GRA/G	1
3725 075 31	RO(100M) CABLE FLRY 0,75 RE/YE	1
3725 075 32	RO(100M) CABLE FLRY 0,75 R/BLU	1
3725 075 35	RO(100M) CABLE FLRY 0,75 Y/GRE	1
3725 075 37	RO(100M) CABLE FLRY 0,75 BL/GR	1
3725 075 38	RO(100M) CABLE FLRY 0,75 BL/WH	1
3725 075 39	RO(100M) CABLE FLRY 0,75 BLU/B	1

Article No.	Article Description	QTY
3725 075 43	RO(100M) CABLE FLRY 0,75 OR/BL	1
3725 075 44	RO(100M) CABLE FLRY 0,75 B/BLU	1
3725 075 45	RO(100M) CABLE FLRY 0,75 G/BLU	1
3725 075 46	RO(100M) CABLE FLRY 0,75 R/BL	1
3725 075 47	RO(100M) CABLE FLRY 0,75 W/GRE	1
3725 075 48	RO(100M) CABLE FLRY 0,75 W/BL	1
3725 075 49	RO(100M) CABLE FLRY 0,75 W/BL	1
3725 075 50	RO(100M) CABLE FLRY 0,75 W/YEL	1
3725 075 51	RO(100M) CABLE FLRY 0,75 BL/BR	1
3725 075 53	RO(100M)CABLE FLRY 0,75 BN/YE	1
3725 075 54	RO(100M)CABLE FLRY 0,75 YE/BK	1
3725 075 55	RO(100M)CABLE FLRY 0,75 GY/VT	1
3725 075 56	RO(100M)CABLE FLRY 0,75 WH/RD	1
3725 075 57	RO(100M)CABLE FLRY 0,75 RD/WH	1
3725 075 84	RO(100M)CABLE FLRY 0,75 BN/BU	1
3725 075 95	RO(100M)CABLE FLRY 0,75 VT/YE	1
3725 075 96	RO(100M)CABLE FLRY 0,75 VT/WH	1
3725 075 98	RO(100M)CABLE FLRY 0,75 VT/BK	1
3725 10	RO(100M) CABLE FLRY 1,0 BLACK	1
3725 10 1	RO(100M) CABLE FLRY 1,0 GRE/YE	1
3725 10 2	RO(100M) CABLE FLRY 1,0 RED	1
3725 10 4	RO(100M) CABLE FLRY 1,0 BLUE	1
3725 10 5	RO(100M) CABLE FLRY 1,0 YELLOW	1
3725 10 6	RO(100M) CABLE FLRY 1,0 WHITE	1
3725 10 7	RO(100M) CABLE FLRY 1,0 GRAY	1
3725 10 8	RO(100M) CABLE FLRY 1,0 BROWN	1
3725 10 9	RO(100M) CABLE FLRY 1,0 VIOLET	1
3725 10 21	RO(100M) CABLE FLRY 1,0 BL/RED	1
3725 10 22	RO(100M) CABLE FLRY 1,0 BL/GRE	1
3725 10 23	RO(100M) CABLE FLRY 1,0 BL/WH	1
3725 10 24	RO(100M) CABLE FLRY 1,0 DARKBR	1
3725 10 25	RO(100M)CABLE FLRY 1,0 BN/BL	1
3725 10 27	RO(100M) CABLE FLRY 1,0 GRA/BL	1
3725 10 28	RO(100M) CABLE FLRY 1,0 GRA/RE	1
3725 10 31	RO(100M) CABLE FLRY 1,0 RED/YE	1
3725 10 32	RO(100M) CABLE FLRY 1,0 RE/BLU	1
3725 10 35	RO(100M) CABLE FLRY 1,0 YE/GRE	1
3725 10 37	RO(100M) CABLE FLRY 1,0 BLU/GR	1
3725 15	RO(100M) CABLE FLRY 1,5 BLACK	1
3725 15 1	RO(100M) CABLE FLRY 1,5 GRE/YE	1
3725 15 2	RO(100M) CABLE FLRY 1,5 RED	1
3725 15 3	RO(100M) CABLE FLRY 1,5 GREEN	1
3725 15 4	RO(100M) CABLE FLRY 1,5 BLUE	1
3725 15 5	RO(100M) CABLE FLRY 1,5 YELLOW	1
3725 15 6	RO(100M) CABLE FLRY 1,5 WHITE	1
3725 15 7	RO(100M) CABLE FLRY 1,5 GREY	1
3725 15 8	RO(100M) CABLE FLRY 1,5 BROWN	1
3725 15 9	RO(100M) CABLE FLRY 1,5 VIOLET	1
3725 15 10	RO(100M) CABLE FLRY 1,5 ORANGE	1
3725 15 20	RO(100M) CABLE FLRY 1,5 BL/YE	1
3725 15 21	RO(100M) CABLE FLRY 1,5 BL/RED	1
3725 15 22	RO(100M) CABLE FLRY 1,5 BL/GRE	1
3725 15 23	RO(100M) CABLE FLRY 1,5 BL/WH	1
3725 15 24	RO(100M) CABLE FLRY 1,5 DARKBR	1
3725 15 25	RO(100M) CABLE FLRY 1,5 BR/BL	1
3725 15 26	RO(100M) CABLE FLRY 1,5 BR/WH	1
3725 15 27	RO(100M) CABLE FLRY 1,5 GRA/BL	1
3725 15 28	RO(100M) CABLE FLRY 1,5 GRA/RE	1
3725 15 29	RO(100M) CABLE FLRY 1,5 GY/BU	1
3725 15 30	RO(100M) CABLE FLRY 1,5 GY/GN	1

FLRY Cable

- Simple insulated single conductor
- Insulation: PVC
- On cable feeding spools (without support)
- More flexible than FLY cables



Technical Data

Wire	A Ø
0.34 mm ²	1.3 mm
0.5 mm ²	1.6 mm
0.75 mm ²	1.9 mm
1.0 mm ²	2.1 mm
1.5 mm ²	2.4 mm
2.5 mm ²	3.0 mm
4.0 mm ²	3.7 mm
6.0 mm ²	4.3 mm



Article No.	Article Description	QTY
3725 15 31	RO(100M) CABLE FLRY 1,5 RE/YE	1
3725 15 32	RO(100M) CABLE FLRY 1,5 RE/BLU	1
3725 15 33	RO(100M) CABLE FLRY 1,5 RE/WH	1
3725 15 34	RO(100M) CABLE FLRY 1,5 RE/GRE	1
3725 15 35	RO(100M) CABLE FLRY 1,5 YE/GRE	1
3725 15 36	RO(100M) CABLE FLRY 1,5 YE/BR	1
3725 15 37	RO(100M) CABLE FLRY 1,5 BLU/GR	1
3725 15 38	RO(100M) CABLE FLRY 1,5 BLU/WH	1
3725 15 39	RO(100M) CABLE FLRY 1,5 BLU/B	1
3725 15 40	RO(100M) CABLE FLRY 1,5 GR/GRA	1
3725 15 41	RO(100M) CABLE FLRY 1,5 GR/RE	1
3725 15 42	RO(100M) CABLE FLRY 1,5 WH/RE	1
3725 15 43	RO(100M) CABLE FLRY 1,5 BLU/RE	1
3725 15 44	RO(100M) CABLE FLRY 1,5 VIO/BL	1
3725 15 45	RO(100M) CABLE FLRY 1,5 WH/OR	1
3725 25	RO(50M) CABLE FLRY 2,5 BLACK	1
3725 25 2	RO(50M) CABLE FLRY 2,5 RED	1
3725 25 3	RO(50M) CABLE FLRY 2,5 GREEN	1
3725 25 4	RO(50M) CABLE FLRY 2,5 BLUE	1

Article No.	Article Description	QTY
3725 25 5	RO(50M) CABLE FLRY 2,5 YELLOW	1
3725 25 6	RO(50M) CABLE FLRY 2,5 WHITE	1
3725 25 7	RO(50M) CABLE FLRY 2,5 GRAY	1
3725 25 8	RO(50M) CABLE FLRY 2,5 BROWN	1
3725 25 9	RO(50M) CABLE FLRY 2,5 VIOLET	1
3725 25 10	RO(50M) CABLE FLRY 2,5 ORANGE	1
3725 25 21	RO(50M) CABLE FLRY 2,5 BL/RE	1
3725 25 24	RO(50M) CABLE FLRY 2,5 DARKBR	1
3725 40	RO(25M) CABLE FLRY 4,0 BLACK	1
3725 40 2	RO(25M) CABLE FLRY 4,0 RED	1
3725 40 4	RO(25M) CABLE FLRY 4,0 BLUE	1
3725 40 8	RO(25M) CABLE FLRY 4,0 BROWN	1
3725 40 35	RO(25M) CABLE FLRY 4,0 GN/YE	1
3725 60	RO(25M) CABLE FLRY 6,0 BLACK	1
3725 60 2	RO(25M) CABLE FLRY 6,0 RED	1
3725 60 4	RO(25M) CABLE FLRY 6,0 BLUE	1
3725 60 8	RO(25M) CABLE FLRY 6,0 BROWN	1
3725 60 35	RO(25M) CABLE FLRY 6,0 GN/YE	1

FLRY cable on cardboard core

- Thin wall insulated single-core
- Insulation: PVC
- On cardboard core
- Flexible as cable FLY



Technical Data

Wire	A Ø
0.34 mm ²	1.3 mm
0.5 mm ²	1.6 mm
0.75 mm ²	1.9 mm
1.0 mm ²	2.1 mm
1.5 mm ²	2.4 mm
2.5 mm ²	3.0 mm
4.0 mm ²	3.7 mm



Article No.	Article Description	QTY
3726 034 0	SPU(500M)CABLE FLRY0.34 BLACK	1
3726 034 1	SPU(500M)CABLE FLRY0.34 ORANGE	1
3726 034 2	SPU(500M)CABLE FLRY0.34 RED	1
3726 034 3	SPU(500M)CABLE FLRY0.34 GREEN	1
3726 034 4	SPU(500M)CABLE FLRY0.34 BLUE	1
3726 034 5	SPU(500M)CABLE FLRY0.34 YELL	1
3726 034 6	SPU(500M)CABLE FLRY0.34 WHITE	1
3726 034 7	SPU(500M)CABLE FLRY0.34 GRAY	1
3726 034 8	SPU(500M)CABLE FLRY0.34 BRO	1
3726 034 13	SPU(500M)CABLE FLRY0.34 ORA-GR	1
3726 034 20	SPU(500M)CABLE FLRY0.34 RED-BL	1
3726 034 36	SPU(500M)CABLE FLRY0.34 GRE-WH	1
3726 034 40	SPU(500M)CABLE FLRY0.34 BLU-BL	1
3726 034 63	SPU(500M)CABLE FLRY0.34 WH-GRE	1
3726 034 75	SPU(500M)CABLE FLRY0.34 GRA-YE	1
3726 034 79	SPU(500M)CABLE FLRY0.34 GRA-VI	1
3726 034 80	SPU(500M)CABLE FLRY0.34 BRO-BL	1
3726 05 06	SPU(500M)CABLE FLRY0.5 BL-WHI	1
3726 05 0	SPU(500M)CABLE FLRY0.5 BLACK	1
3726 05 1	SPU(500M)CABLE FLRY0.5 ORANGE	1
3726 05 2	SPU(500M)CABLE FLRY0.5 RED	1
3726 05 3	SPU(500M)CABLE FLRY0.5 GREEN	1
3726 05 4	SPU(500M)CABLE FLRY0.5 BLUE	1
3726 05 5	SPU(500M)CABLE FLRY0.5 YELL	1
3726 05 6	SPU(500M)CABLE FLRY0.5 WHITE	1
3726 05 7	SPU(500M)CABLE FLRY0.5 GRAY	1
3726 05 8	SPU(500M)CABLE FLRY0.5 BROWN	1
3726 05 20	SPU(500M)CABLE FLRY0.5 RED-BL	1
3726 05 23	SPU(500M)CABLE FLRY0.5 RED-GRE	1
3726 05 25	SPU(500M)CABLE FLRY0.5 RED-YEL	1
3726 05 34	SPU(500M)CABLE FLRY0.5 GRE-BLU	1
3726 05 36	SPU(500M)CABLE FLRY0.5 GRE-WHI	1
3726 05 42	SPU(500M)CABLE FLRY0.5 BLU-RED	1
3726 05 43	SPU(500M)CABLE FLRY0.5 BLU-GRE	1
3726 05 46	SPU(500M)CABLE FLRY0.5 BLU-WHI	1
3726 05 50	SPU(500M)CABLE FLRY0.5 YEL-BLU	1
3726 05 54	SPU(500M)CABLE FLRY0.5 YEL-BLU	1
3726 05 60	SPU(500M)CABLE FLRY0.5 WHI-BLU	1
3726 05 64	SPU(500M)CABLE FLRY0.5 WHI-BLU	1
3726 05 68	SPU(500M)CABLE FLRY0.5 WHI-BRO	1
3726 05 72	SPU(500M)CABLE FLRY0.5 GRA-RED	1
3726 05 74	SPU(500M)CABLE FLRY0.5 GRA-BLU	1
3726 05 76	SPU(500M)CABLE FLRY0.5 GRA-WHI	1
3726 05 79	SPU(500M)CABLE FLRY0.5 GRA-VIO	1
3726 05 80	SPU(500M)CABLE FLRY0.5 BRO-BL	1
3726 05 85	SPU(500M)CABLE FLRY0.5 BRO-YEL	1
3726 05 86	SPU(500M)CABLE FLRY0.5 BRO-WHI	1
3726 075 06	SPU(500M)CABLE FLRY0.75 BL-WHI	1
3726 075 08	SPU(500M)CABLE FLRY0.75 BL-BRO	1
3726 075 0	SPU(500M)CABLE FLRY0.75 BLACK	1
3726 075 1	SPU(500M)CABLE FLRY0.75 ORANGE	1
3726 075 2	SPU(500M)CABLE FLRY0.75 RED	1
3726 075 3	SPU(500M)CABLE FLRY0.75 GREEN	1
3726 075 4	SPU(500M)CABLE FLRY0.75 BLUE	1
3726 075 5	SPU(500M)CABLE FLRY0.75 YELL	1
3726 075 6	SPU(500M)CABLE FLRY0.75 WHITE	1
3726 075 7	SPU(500M)CABLE FLRY0.75 GRAY	1

Article No.	Article Description	QTY
3726 075 8	SPU(500M)CABLE FLRY0.75 BROWN	1
3726 075 23	SPU(500M)CABLE FLRY0.75 RED-GR	1
3726 075 24	SPU(500M)CABLE FLRY0.75 RED-BL	1
3726 075 25	SPU(500M)CABLE FLRY0.75 RED-BL	1
3726 075 27	SPU(500M)CABLE FLRY0.75 RED-GR	1
3726 075 34	SPU(500M)CABLE FLRY0.75 GR-BLU	1
3726 075 36	SPU(500M)CABLE FLRY0.75 GR-WHI	1
3726 075 42	SPU(500M)CABLE FLRY0.75 BLU-RE	1
3726 075 43	SPU(500M)CABLE FLRY0.75 BLU-GR	1
3726 075 50	SPU(500M)CABLE FLRY0.75 YEL-BL	1
3726 075 54	SPU(500M)CABLE FLRY0.75 YEL-BL	1
3726 075 60	SPU(500M)CABLE FLRY0.75 WHI-BL	1
3726 075 64	SPU(500M)CABLE FLRY0.75 WH-BLU	1
3726 075 72	SPU(500M)CABLE FLRY0.75 GRA-RE	1
3726 075 79	SPU(500M)CABLE FLRY0.75 YEL-BL	1
3726 075 80	SPU(500M)CABLE FLRY0.75 BRO-BL	1
3726 075 85	SPU(500M)CABLE FLRY0.75 BRO-YE	1
3726 075 94	SPU(500M)CABLE FLRY0.75VIO-BLU	1
3726 10 06	SPU(500M)CABLE FLRY1.0 BL-WHI	1
3726 10 0	SPU(500M)CABLE FLRY1.0 BLACK	1
3726 10 2	SPU(500M)CABLE FLRY1.0 RED	1
3726 10 4	SPU(500M)CABLE FLRY1.0 BLUE	1
3726 10 7	SPU(500M)CABLE FLRY1.0 GRAY	1
3726 10 8	SPU(500M)CABLE FLRY1.0 BROWN	1
3726 10 20	SPU(500M)CABLE FLRY1.0 RED-BL	1
3726 10 25	SPU(500M)CABLE FLRY1.0 RED-YEL	1
3726 10 32	SPU(500M)CABLE FLRY1.0 GRE-RED	1
3726 10 36	SPU(500M)CABLE FLRY1.0 GRE-WHI	1
3726 10 46	SPU(500M)CABLE FLRY1.0 BLU-WHI	1
3726 10 80	SPU(500M)CABLE FLRY1.0 BRO-BL	1
3726 10 85	SPU(500M)CABLE FLRY1.0 BRO-YEL	1
3726 15 0	SPU(500M)CABLE FLRY1.5 BLACK	1
3726 15 2	SPU(500M)CABLE FLRY1.5 RED	1
3726 15 3	SPU(500M)CABLE FLRY1.5 GREEN	1
3726 15 4	SPU(500M)CABLE FLRY1.5 BLUE	1
3726 15 8	SPU(500M)CABLE FLRY1.5 BROWN	1
3726 15 23	SPU(500M)CABLE FLRY1.5 RED-GRE	1
3726 15 25	SPU(500M)CABLE FLRY1.5 RED-YEL	1
3726 15 32	SPU(500M)CABLE FLRY1.5 GRE-RED	1
3726 15 36	SPU(500M)CABLE FLRY1.5 GRE-WHI	1
3726 15 46	SPU(500M)CABLE FLRY1.5 BLU-WHI	1
3726 15 80	SPU(500M)CABLE FLRY1.5 BRO-BL	1
3726 25 0	SPU(400M)CABLE FLRY2.5 BLACK	1
3726 25 2	SPU(400M)CABLE FLRY2.5 RED	1
3726 25 4	SPU(400M)CABLE FLRY2.5 BLUE	1
3726 25 8	SPU(400M)CABLE FLRY2.5 BROWN	1
3726 25 20	SPU(400M)CABLE FLRY2.5 RED-BL	1
3726 25 23	SPU(400M)CABLE FLRY2.5 RED-GRE	1
3726 25 25	SPU(400M)CABLE FLRY2.5 RED-YEL	1
3726 25 32	SPU(400M)CABLE FLRY2.5 GRE-RED	1
3726 25 80	SPU(400M)CABLE FLRY2.5 BRO-BL	1
3726 40 0	SPU(200M)CABLE FLRY4.0 BLACK	1
3726 40 2	SPU(200M)CABLE FLRY4.0 RED	1
3726 40 8	SPU(200M)CABLE FLRY4.0 BROWN	1
3726 60 0	SPU(200M)CABLE FLRY4.0 BROWN	1
3726 60 2	SPU(200M)CABLE FLRY4.0 BROWN	1
3726 60 8	SPU(200M)CABLE FLRY4.0 BROWN	1

Cabel drum divisibly, empty

- divisibly for AGR 3726

Article No.	Article Description	QTY
3726 1	CABLE DRUM EMPTY F.CABLE 3726	1



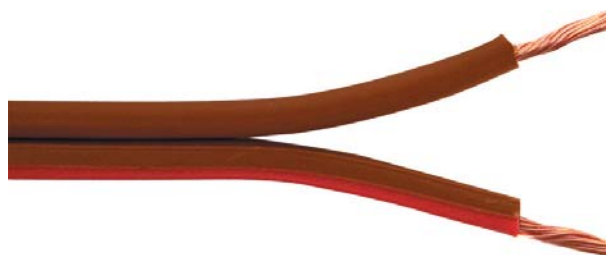
Cable FLKZ

- Double plastic-sheathed
- Speaker cable
- On cable rolls

Colours:

- Art. No. 3721 4 075: black, red, yellow, blue

Article No.	Article Description	QTY
3721 2 075	RO(50M) SPEAKER CABLE 2X0,75	1
3721 2 15	RO(50M) SPEAKER CABLE 2X1,5	1
3721 4 075	RO(25M) SPEAKER CABLE 4X0,75	1



Cable FLYY, role

- Old description FLKK
- Double insulated single wire
- Insulation: PVC
- On cable rolls
- Sheath colour: black



Article No.	Article Description	QTY
3722 15	RO(50M)CABLE FLYY BN 1.5 ROUND	1
3722 25	RO(25M)CABLE FLYY BN 2.5ROUND	1
3722 2 10	RO(50M)CABLE FLYY BN/BK2X1.0FL	1
3722 2 15	RO(25M)CABLE FLYY BN/BK2X1.5FL	1
3722 2 15 1	RO(25M)CABLE FLYY BN/BK2X1.5RD	1
3722 2 15 3	RO(25M)CABLE FLYY RD/BK2X1.5FL	1
3722 2 25	RO(25M)CABLE FLYY BN/BK2X2.5FL	1
3722 2 25 2	RO(25M)CABLE FLYY RD/BK2X2.5FL	1

BN = brown, RD = read, BK = black, FL = flat, RD = round

Technische Daten

Art.-No.	Form	Amount	Wire cross-section in mm ²	Wire colour
3722 15	round	single wire		brown
3722 25	round	1	1.5	brown
3722 2 10	flat	1	2.5	brown/black
3722 2 15	flat	2	1.0	brown/black
3722 2 15 1	round	2	1.5	brown/black
3722 2 15 3	flat	2	1.5	red/black
3722 2 25	flat	2	1.5	brown/black
3722 2 25 2	flat	2	2.5	red/black

Ignition Wire

- Bundled

Article No.	Article Description	QTY
3727 7 1	RI(25M)IGN.CABLE BLACK Ø7X1MM ²	1



FLRYY Cable

- Double-insulated single conductor
- Insulation: PVC
- On cable feeding spools

Article No.	Article Description	QTY
3725 15 1000	RO(1000M) CABLE FLRYY 2X2,5 SZ	1



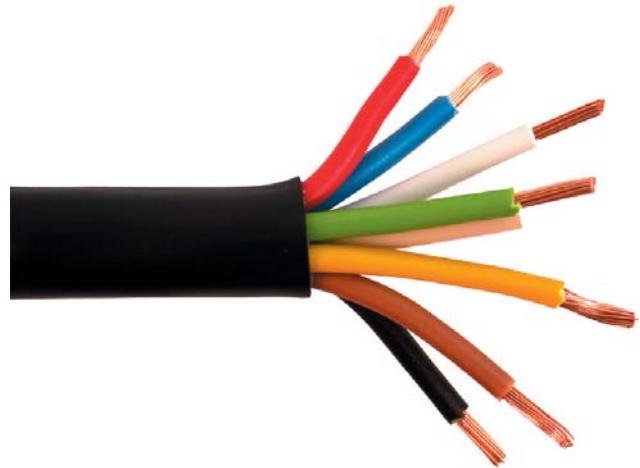
Cable FLYY

- Multiple core cable
- Conductor with various colours
- Bundled conductor
- Black

Colours:

- Art. No. 3723 3 15: white, black, brown
- Art. No. 3723 4 15: white, black, brown, yellow
- Art. No. 3723 5 15: white, black, brown, yellow, green
- Art. No. 3723 7 15: white, black, brown, yellow, green, red, blue
- Art. No. 3723 13 15: red/white, blue/white, orange, yellow/white, brown, black, white, green, purple, blue, red, yellow, grey

Article No.	Article Description	QTY
3723 3 15	RI(50M) MULTI CORE CABLE 3X1,5	1
3723 4 15	RI(50M) MULTI CORE CABLE 4X1,5	1
3723 5 15	RI(50M) MULTI CORE CABLE 5X1,5	1
3723 7 15	RI(50M) MULTI CORE CABLE 7X1,5	1
3723 13 15	RI(25M)MULTI CORE CABLE 13X1.5	1



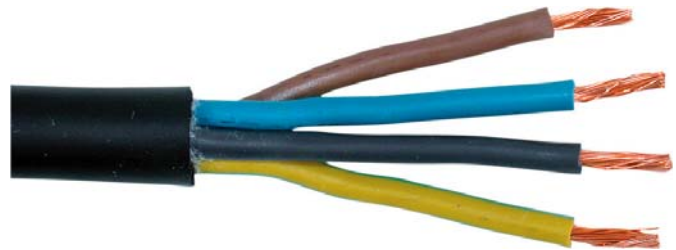
Cable H05RR-F

- Standard designation: H05RR-F
- Light-weight cable with tubular rubber jacket
- Multiple conductor cable
- Conductor with various colours
- Bundled conductor
- Black

Colours:

- Art. No. 3724 2 25: brown, blue
- Art. No. 3724 3 25: brown, blue, green/yellow
- Art. No. 3724 4 25: brown, blue, green/yellow, black

Article No.	Article Description	QTY
3724 2 25	RI(50M)CABL.H05RR-F BLACK2X2,5	1
3724 3 25	RI(50M)CABL.H05RR-F BLACK3X2,5	1
3724 4 25	RI(50M)CABL.H05RR-F BLACK4X2,5	1

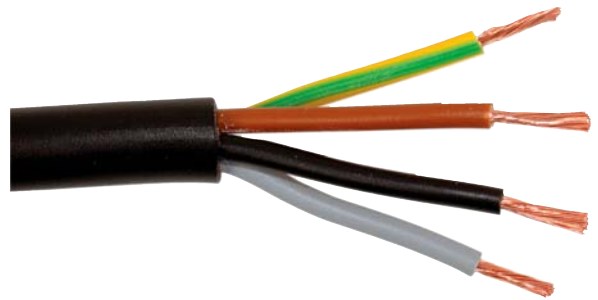


Cable H05VV-F

- Standard designation: H05VV-F
- Medial rubber hose wire
- Multiple conductor cable
- Conductor with various colours
- Bundled conductor

Colours:

- Art. No. 3724 10 2 075: brown, blue
- Art. No. 3724 10 2 1: brown, blue
- Art. No. 3724 10 2 15: brown, blue
- Art. No. 3724 10 2 15 1: brown, blue
- Art. No. 3724 10 4 075: brown, blue, black, green/yellow
- Art. No. 3724 10 4 25: brown, blue, black, green/yellow
- Art. No. 3724 11 2 075: brown, blue
- Art. No. 3724 11 2 1: brown, blue
- Art. No. 3724 11 2 15: brown, blue
- Art. No. 3724 11 3 1: brown, blue, green/yellow
- Art. No. 3724 11 3 15: brown, blue, green/yellow
- Art. No. 3724 11 4 1: brown, black, green/yellow
- Art. No. 3724 11 5 1: blue, grey, green/yellow, brown, black
- Art. No. 3724 11 7 1: black 1, black 2, black 3, black 4, black 5, black 6, yellow/green



Article No.	Article Description	QTY
3724 10 2 075	RI(50M) HO5VV-F 2X0,75 GREY	1
3724 10 2 1	RI(25M) HO5VV-F 2X1 GREY	1
3724 10 2 15	RI(25M) HO5VV-F 2X1,5 GREY	1
3724 10 2 15 1	RI(100M) HO5VV-F 2X1,5 GREY	1
3724 10 4 075	RI(50M) HO5VV-F 4X0,75 GREY	1
3724 10 4 25	RI(25M) HO5VV-F 4X2,5 GREY	1
3724 11 2 075	RI(50M) HO5VV-F 2X0,75 BLACK	1

Article No.	Article Description	QTY
3724 11 2 1	RI(50M) HO5VV-F 2X1 BLACK	1
3724 11 2 15	RI(50M) HO5VV-F 2X1,5 BLACK	1
3724 11 3 1	RI(50M) HO5VV-F 3X1 BLACK	1
3724 11 3 15	RI(50M) HO5VV-F 3X1,5 BLACK	1
3724 11 4 1	RI(50M) HO5VV-F 4X1 BLACK	1
3724 11 5 1	RI(50M) HO5VV-F 5X1 BLACK	1
3724 11 7 1	RI(50M) HO5VV-F 7X1 BLACK	1

Cable Dispenser System

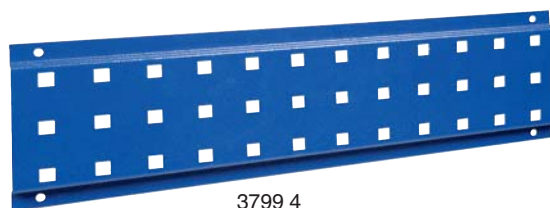
For clear, space-saving storage:

- Individually removable cable spools
- Cable spool stopper in addition for the holder
- One or more spool holder can be mounted on all Förch perforated panels or rack systems

Art.-No. 3799 4:

- for 4 cable spool holder

Article No.	Article Description	QTY
3799 1	CABLE SPOOL HOLDER	1
3799 4	PERFORATED PANEL FOR DISPENSER	1
3799 370	CABLE SPOOL STOPPER	1
3799 10	ADH.TAPED DISP.SYST.AXIS	1



3799 4



3799 1



3799 370



Cable Dispenser System, Not Assembled

Art.no. 3729 41:

- 4 cable spool holders (LxHxD 465x145x155 mm), not assembled and 1 perforated panel

Art.no. 3729 81:

- 8 cable spool holders, not assembled and 2 perforated panels

Article No.	Article Description	QTY
3729 4 1	CABLE DISP.F.4 ROL.NOT-ASSEMB.	1
3729 8 1	CABLE DISP.F.8 ROL.NOT ASSEMB.	1



3729 4 1



3729 8 1

Cable Dispenser – Assembled

Article No.	Article Description	QTY
3729 4	CABLE DISP.ASSEMBLED WITH 4RO.	1
3729 8	CALBE DISP.ASEMBLES WITH 8RO.	1

Contents Art. No. 3729 4:

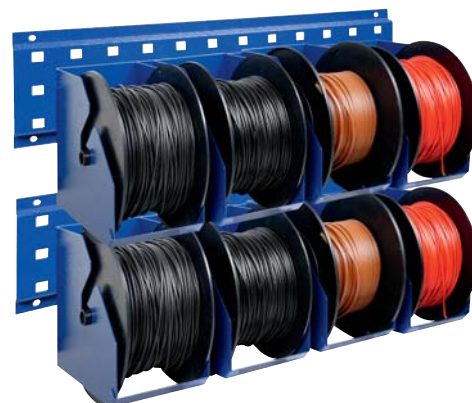
Article No.	Article Description	Quantity
3720 075	RO(100M) CABLE FLY 0.75 BLACK	1
3720 15	RO(100M) CABLE FLY 1.5 BLACK	1
3720 15 2	RO(100M) CABLE FLY 1.5 RED	1
3721 2 075	RO(50M) SPEAKER CABLE 2X0,75	1
3799 1	CABLE SPOOL HOLDER	4
3799 4	PERFORATED PANEL FOR DISPENSER	1

Contents Art. No. 3729 8:

Article No.	Article Description	Quantity
3720 075	RO(100M) CABLE FLY 0.75 BLACK	1
3720 15	RO(100M) CABLE FLY 1.5 BLACK	1
3720 15 2	RO(100M) CABLE FLY 1.5 RED	1
3721 2 075	RO(50M) SPEAKER CABLE 2X0,75	1
3799 1	CABLE SPOOL HOLDER	4
3799 4	PERFORATED PANEL FOR DISPENSER	1



3729 4



3729 8

Snap-on Cable Connectors

- Heat resistant up to 105°C
- Maximum 600 Volt

Art. No. 3701 965

- Cable passage 4 - 6 mm²
- Stub cable 0.75 - 1.5 mm²

Single knife



Double knife:



Article No.	Article Description	QTY
3701 950	CONNECTOR SNAP-ON RED 950	100
3701 957	CONNECTOR SNAP-ON BLUE 957	100
3701 964	CONNECTOR SNAP-ON YELLOW 964	100
3701 962	CONNECTOR SNAP-ON RED 962	100
3701 963	CONNECTOR SNAP-ON BLUE 963	100
3701 965	SNAP-ON CABLE CONNec. BRO 965	100

Technical Data

Article No.	For cable dia. mm ²	Colour:
3701 950	0.5-1.0	red
3701 957	1.5-2.5	blue
3701 964	4.0-6.0	yellow
3701 962	0.5-1.5	red
3701 963	1.5-2.5	blue
3701 965	0.75-1.5 / 4-6	brown

Snap-on Cable Connectors

- Detachable

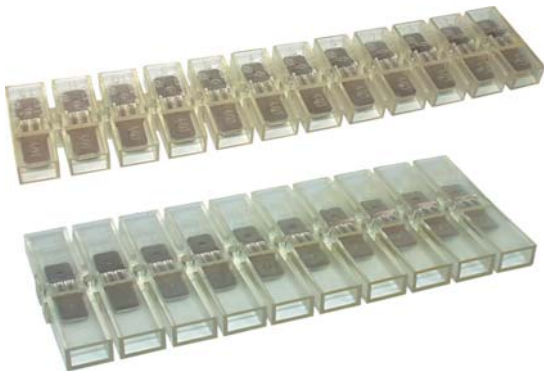


Article No.	Article Description	QTY
3701 975	CONNECTOR SNAP-ON FEMALE RED	100
3701 976	CONNECTOR PRESS FIX FEMALE BLU	100
3701 977	CONNECTOR SNAP-ON FEMALE YEL.	100
3701 978	CONNECTOR SNAP-ON MALE RED	100
3701 979	CONNECTOR SNAP-ON MALE BLUE	100
3701 980	CONNECTOR SNAP-ON MALE YELLOW	100

Technical Data

Article No.	For cable dia. mm ²
3701 975	0.5-1.0
3701 978	0.5-1.0
3701 976	1.5-2.5
3701 979	1.5-2.5
3701 977	4.0-6.0
3701 980	4.0-6.0

Flat Plug Connector Strips



Article No.	Article Description	QTY
3707 1	PLUG CONNECTOR STRIPS 12-POLE	z 100
3707 2	PLUG CONNECTOR STRIPS 10-POLE	z 100

Technical Data	
Article No.	Connector mm
3707 1	6.3
3707 2	6.3

Flat Multi Connectors



Article No.	Article Description	QTY
3707 3	FLAT MULTI CONNECTORS 3X6,3MM	g 100
3707 4	FLAT MULTI CONNECTORS 4X6,3MM	g 100

(connection mm)

Heat-Shrink Y-Branch Connector

- For dust-proof and moisture-proof branch connectors from one to two cables of the same cable cross-section
- With integrated adhesive
- Material: tin-plated copper
- Temperature range: -55°C to 110°C
- Shrinking temperature: 121°C
- Dielectric strength: 500 V

Application:

- Insert stripped cable into Y-shaped branch connector. Make a crimp using a crimping tool.
- Heat up shrinking hose with heat sources e.g. lighter, hot airflow etc. until adhesive flows into the cavities.

Technical Data

Art. No.	For cable mm ²	Length in mm
3702 600	0.35-0.5	44
3702 601	0.75-1.0	49
3702 602	1.5-2.5	54
3702 603	4.0	60

Article No.	Article Description	QTY
3702 600	HS-Y-BRANCH CNCTR WHITE-RED600	g 100
3702 601	HS-Y-BRANCH CNCTR RED-BLUE 601	g 100
3702 602	HS-Y-BRANCH CNCTR BLUE-YEL.602	g 50
3702 603	HS-Y-BRANCH CNCTR YELL.RED 603	25



Y-Connector

- Standard insulated Y-connector
- Art.-No. 3701 501 and 3701 502 round contact Ø 4 mm
- Art.-No. 3701 503 and 3701 504 flat contact 6,3 mm
- Cable-cross section 1,5 mm²
- Cabel length approx. 6,0 cm
- Field of application: Vehicle construction



Article No.	Article Description	QTY
3701 501	Y-CONNECTOR ROUND CONT.4MM FFM	gf 100
3701 502	Y-CONNECTOR ROUND CONT.4MM MMF	gf 100
3701 503	Y-CONNECTOR FLAT CONT.6,3 FFM	gf 100
3701 504	Y-CONNECTOR FLAT CONT.6,3 MMF	gf 100

Heat-Shrink Cable Terminals and Connectors

- For dust-proof and moisture-proof cable connections with one cable
- With integrated adhesive
- Temperature range: -55°C to 125°C
- Shrinking temperature: 180°C
- Dielectric strength: 2.5 kV
- Operating voltage: max. 600 Volt

Application:

- Insert stripped cable into branch connector. Make a crimp using a crimping tool.
- Heat up shrinking hose with heat sources e.g. lighter, hot airflow etc. until adhesive flows into the cavities



Technical Data

Art.-No.	Dimension	For cable mm ²	Length in mm
3702 812	Ring-Ø 4 mm	0,5 – 1,5	28
3702 813	Ring-Ø 5 mm	0,5 – 1,5	31
3702 833	Ring-Ø 6 mm	0,5 – 1,5	31
3702 834	Ring-Ø 8 mm	0,5 – 1,5	35
3702 835	Ring-Ø 10 mm	0,5 – 1,5	38
3702 815	Ring-Ø 4 mm	1,5 – 2,5	30
3702 816	Ring-Ø 5 mm	1,5 – 2,5	32
3702 817	Ring-Ø 6 mm	1,5 – 2,5	34
3702 818	Ring-Ø 8 mm	1,5 – 2,5	38
3702 819	Ring-Ø 10 mm	1,5 – 2,5	40
3702 820	Ring-Ø 5 mm	4,0 – 6,0	34
3702 821	Ring-Ø 6 mm	4,0 – 6,0	37
3702 822	Ring-Ø 8 mm	4,0 – 6,0	42
3702 823	Ring-Ø 10 mm	4,0 – 6,0	45
3702 830	Fork-Ø 4mm	0,5 – 1,5	29
3702 871	Fork-Ø 5 mm	1,5 – 2,5	33
3702 801	6,3 × 0,8 mm	0,5 – 1,5	28
3702 802	6,3 × 0,8 mm	1,5 – 2,5	30
3702 803	6,3 × 0,8 mm	4,0 – 6,0	32
3702 837	6,3 × 0,8 mm	0,5 – 1,5	27
3702 836	6,3 × 0,8 mm	1,5 – 2,5	28
3702 842	-	0,1 – 0,5	31
3702 841	-	0,5 – 1,5	36
3702 839	-	1,5 – 2,5	36
3702 840	-	4,0 – 6,0	38
3702 805	Ø 4 mm	0,5 – 1,5	31
3702 806	Ø 4 mm	0,5 – 1,5	32
3702 807	Ø 4 mm	1,5 – 2,5	31
3702 808	Ø 4 mm	1,5 – 2,5	32

Article No.	Article Description	QTY
3702 812	H SRNK RING TERMINAL RED M4	f 100
3702 813	H SRNK RING TERMINAL RED M5	f 100
3702 833	H SRNK RING TERMINAL RED M6	f 100
3702 815	RING TONGUE BLUE M4 815	f 100
3702 816	H SRNK RING TERMINAL BLUE M5	f 100
3702 817	H SRNK RING TERMINAL BLUE M6	f 100
3702 818	H SRNK RING TERMINAL BLUE M8	f 100
3702 819	RING TONGUE BLUE M10 819	f 100
3702 821	H SRNK RING TERMINAL YELLOW M6	f 100
3702 822	H SRNK RING TERMINAL YELLOW M8	f 100
3702 823	H SRNK RING TERMINAL YELLOW M10	f 100
3702 830	H SRNK RING TERMINAL RED M4	f 100
3702 871	H SRNK RING TERMINAL BLUE M5	f 100
3702 801	H SRNK QK CONN.FEMALE RED 6.3	f 100
3702 802	H SRNK QK CONN.FEMALE BLUE 6.3	f 100

Article No.	Article Description	QTY
3702 837	H SRNK QK CONN.MALE RED 6.3	f 100
3702 836	H SRNK QK CONN.MALE BLUE 6.3	f 100
3702 842	H SRNK BUTT CONNCT.TRANSPARENT	f 100
3702 841	H SRNK BUTT CONNECT.RED 841	f 100
3702 839	H SRNK BUTT CONNECT.BLUE 839	f 100
3702 840	H SRNK BUTT CONNECT.YELLOW 840	f 100
3702 820	H SRNK TERMINAL YELLOW M5 820	f 100
3702 834	H SRNK RING TERM.RED M8 834	f 100
3702 835	H SRNK RING TERM.RED M10 835	f 100
3702 803	H SRNK QK CONN.FEM.YE 6.3 803	f 100
3702 805	H SRNK CONNECT.RED Ø4MM 805	f 100
3702 806	H SRNK CR CNC FEM.RED Ø4MM 806	f 100
3702 807	H SRNK CR CNC MALE BUE Ø4MM 807	f 100
3702 808	H SRNK CR CNC FEM.BU Ø4MM 808	f 100

Heat-Shrink Cable Terminals and Connectors **ECO**

- Dust-proof and moisture-proof cable connections with one cable
- Insulation resistance) 10^3
- With integrated adhesive
- Temperature range: -55 °C to 135 °C
- Minimum shrinking temperature: 160 °C
- Maximum shrinking temperature: 300 °C
- Dielectric strength: 2.5 kV
- Operating voltage: max. 600 volts
- Recommended crimping tool: Art.-No. 3790 24, 3790 70 and 3790 70 60 3 / 3790 70 60 6

Application:

- Insert the stripped cable in the cable connector and crimp with a crimping tool
- Heat the shrink tubing with a heat source, e.g. a stream of hot air, until adhesive emerges

Technical Data

Art.-No.	Dimensions	for cable mm ²	Length in mm
3702N 812	Ring-Ø 4 mm	0,5 – 1,5	28
3702N 813	Ring-Ø 5 mm	0,5 – 1,5	31
3702N 833	Ring-Ø 6 mm	0,5 – 1,5	31
3702N 816	Ring-Ø 5 mm	1,5 – 2,5	32
3702N 817	Ring-Ø 6 mm	1,5 – 2,5	34
3702N 818	Ring-Ø 8 mm	1,5 – 2,5	38
3702N 821	Ring-Ø 6 mm	4,0 – 6,0	37
3702N 822	Ring-Ø 8 mm	4,0 – 6,0	42
3702N 823	Ring-Ø 10 mm	4,0 – 6,0	45
3702N 830	Fork-Ø 4mm	0,5 – 1,5	29
3702N 801	6,3 × 0,8 mm	0,5 – 1,5	28
3702N 802	6,3 × 0,8 mm	1,5 – 2,5	30
3702N 837	6,3 × 0,8 mm	0,5 – 1,5	27
3702N 836	6,3 × 0,8 mm	1,5 – 2,5	28
3702N 842	-	0,1 – 0,5	29
3702N 841	-	0,5 – 1,5	36
3702N 839	-	1,5 – 2,5	36
3702N 840	-	4,0 – 6,0	41



Article No.	Article Description	QTY
3702N 812	H SRNK RI TERM.RED M 4 812 ECO	f 100
3702N 813	H SRNK RI TERM.RED M 5 813 ECO	f 100
3702N 833	H SRNK RI TERM.RED M 8 833 ECO	f 100
3702N 816	H SRNK RI TERM.BLUE M 5 816ECO	f 100
3702N 817	H SRNK RI TERM.BLUE M 6 817ECO	f 100
3702N 818	H SRNK RI TERM.BLUE M 8 818ECO	f 100
3702N 821	H SRNK RI TERM.YELL.M 6 821ECO	f 100
3702N 822	H SRNK RI TERM.YELL M 8 822ECO	f 100
3702N 823	H SRNK RI TERM.YELL M10 823ECO	f 100

Article No.	Article Description	QTY
3702N 830	H SRNK RI TERM.RED M 4 830 ECO	f 100
3702N 801	H SRNK QK CO.FEM.RE6.3 801ECO	f 100
3702N 802	H SRNK QK CO.FEM.BU 6.3 802ECO	f 100
3702N 837	H SRNK QK CO.FE.RED 6.3 837ECO	f 100
3702N 836	H SRNK QK CO.MA BLUE6.3 836ECO	f 100
3702N 842	H SRNK BUTT CONN.TRA. 842 ECO	f 100
3702N 841	H SRNK BUTT CO.RED 841 ECO	f 100
3702N 839	H SRNK BUTT CONN.BLUE 839 ECO	f 100
3702N 840	H SRNK BUTT CONN.YELL840 ECO	f 100

Heat-Shrinking Cable Connectors

- Dust and damp-proof cable connectors with one cable, OEM tested
- Insulation resistance: $\leq 10^3$
- With integrated adhesive
- Operational temperature: -55° to 125°C
- Minimum shrinking temperature: 180°C
- Maximum shrinking temperature: 300°C
- Dielectric strength: 2.5 KV
- Operational voltage: max 600V

Application:

- Insert stripped cable in cable splice and crimp with crimping tool
- Heat with heat sources e.g. warm airflow shrink tubing until adhesive flows out



Article No.	Article Description	QTY
3702 5 839	HS CABLE CONNECTOR BLUE 32MM	f 100
3702 5 840	HS CABLE CONNECTOR YELLOW 38MM	f 100
3702 5 841	HS CABLE CONNECTOR RED 32MM	f 100

Technical Data

Art. No.	Cable mm ²	Length in mm
3702 5 839	1.5-2.5	32
3702 5 840	4.0-6.0	38
3702 5 841	0.5-1.5	28

Heat-Shrink Solder and Butt Connector

- For dust-proof and moisture-proof solder-butt connections with one cable
- With integrated adhesive
- Electric solder in middle ring provides for reliable solder connection of cable ends
- Heat-shrink plastic sleeve adapts optimally to cable width
- Adhesive rings at end of butt connectors for anti-pull off connections
- Temperature range: -55°C to 125°C
- Shrinking temperature: 180°C

Art. No. 3702 538:

- Without adhesive rings



Article No.	Article Description	QTY
3702 538	HS-SOLD.BUTT CNCTR TRANSP. 538	f 100
3702 541	HS-SOLD.BUTT CNCTR RED 541	f 100
3702 539	HS-SOLD.BUTT CNCTR BLUE 539	f 100
3702 540	HS-SOLD.BUTT CNCTR YELLOW 540	f 100

Technical Data

Art. No.	For cable mm ²	Length in mm
3702 538	0.1-0.5	24
3702 541	0.5-1.0	40
3702 539	1.5-2.5	39
3702 540	4.0-6.0	39

Heat-Shrink Solder and Butt Connectors **ECO**

- For dust-proof and moisture-proof solder-butt connections with one cable
- With integrated adhesive
- Electric solder in middle ring provides for reliable solder connection of cable ends
- Adhesive rings at end of butt connectors for anti-pull off connections
- Temperature range: -55 °C to +135 °C
- Shrinking temperature: +180 °C

Art.-No. 3702N 538:

- Without adhesive rings



Article No.	Article Description	QTY
3702N 538	HS-SOLD.BUTT CNCTR TR.538 ECO	f 100
3702N 541	HS-SOLD.BUTT CNCTR RED 541 ECO	f 100
3702N 539	HS-SOLD.BUTT CNCTR BU 539 ECO	f 100
3702N 540	HS-SOLD.BUTT CNCTR YE 540 ECO	f 100

Technical Data

Art.-No.	for cable mm ²	length in mm
3702N 538	0,1–0,5	24
3702N 541	0,5–1,0	40
3702N 539	1,5–2,5	39
3702N 540	4,0–6,0	39

Heat-Shrink End Connector

- For dust-proof and moisture-proof end connection of several cables
- With integrated adhesive
- Temperature range: -55°C to 125°C
- Shrinking temperature: 180°C
- Dielectric strength: 2.0 kV
- Operating voltage: max. 600 Volt



Article No.	Article Description	QTY
3702 400	HS END CONNECTOR GREEN 400	g 50
3702 401	HS END CONNECTOR RED 401	g 50
3702 402	HS END CONNECTOR BLUE 402	g 50
3702 403	HS END CONNECTOR YELLOW 403	g 50

Technical Data

Art. No.	For cable mm ²	Length in mm
3702 400	max. 4.0	38
3702 401	max. 4.5	38
3702 402	max. 7.0	45
3702 403	max. 9.5	46

Solder Ring Terminals DIN 46211 Shape A



Article No.	Article Description	QTY
3705 780	SOLDER RING TERM.10-16 M6	g 100
3705 781	SOLDER RING TERM.10-16 M8	g 100
3705 782	SOLDER RING TERM.10-16 M10	g 100
3705 783	SOLDER RING TERM.10-16 M12	g 100
3705 784	SOLDER RING TERM.16-25 M 8	g 100
3705 785	SOLDER RING TERM.16-25 M10	g 100
3705 786	SOLDER RING TERM.16-25 M12	g 100
3705 787	SOLDER RING TERM.25-35 M8	g 100
3705 788	SOLDER RING TERM.25-35 M10	g 100
3705 789	SOLDER RING TERM.25-35 M12	g 100
3705 790	SOLDER RING TERM.35-50 M8	g 100
3705 791	SOLDER RING TERM.35-50 M10	g 100
3705 792	SOLDER RING TERM.35-50 M12	g 100

Technical Data

Art. No.	Cable entry Ø mm
3705 780	5.4
3705 781	5.4
3705 782	5.4
3705 783	5.4
3705 784	6.8
3705 785	6.8
3705 786	6.8
3705 787	8.2
3705 788	8.2
3705 789	8.2
3705 790	9.5
3705 791	9.5
3705 792	9.5

(For cable mm² / for screws)

Pipe Cable Lugs with Sight Opening



Article No.	Article Description	QTY
3705 8 10 6	PIPE CABLE LUGS 10 M 6	10
3705 8 10 8	PIPE CABLE LUGS 10 M 8	10
3705 8 16 6	PIPE CABLE LUGS 16 M6	10
3705 8 16 8	PIPE CABLE LUGS 16 M8	10
3705 8 25 6	PIPE CABLE LUGS 25 M6	10
3705 8 25 8	PIPE CABLE LUGS 25 M8	10
3705 8 25 10	PIPE CABLE LUGS 25 M10	10
3705 8 35 8	PIPE CABLE LUGS 35 M8	10
3705 8 35 10	PIPE CABLE LUGS 35 M10	10
3705 8 50 8	PIPE CABLE LUGS 50 M8	10
3705 8 50 10	PIPE CABLE LUGS 50 M10	10
3705 8 50 12	PIPE CABLE LUGS 50 M12	10
3705 8 70 10	PIPE CABLE LUGS 60-70 M10	10
3705 8 70 12	PIPE CABLE LUGS 60-70 M12	10
3705 8 95 12	PIPE CABLE LUGS 75-95 M12	10

Technical Data

Art. No.	Cable inside Ø mm	Cable outside Ø mm
3705 8 10 6	4.5	7.4
3705 8 10 8	4.5	7.4
3705 8 16 6	5.5	8.1
3705 8 16 8	5.5	8.1
3705 8 25 6	7.0	9.8
3705 8 25 8	7.0	9.8
3705 8 25 10	7.0	9.8
3705 8 35 8	8.2	11.8
3705 8 35 10	8.2	11.8
3705 8 50 8	10.0	13.0
3705 8 50 10	10.0	13.0
3705 8 50 12	10.0	13.0
3705 8 70 10	11.5	15.5
3705 8 70 12	11.5	15.5
3705 8 95 12	13.5	17.7

(For cables mm² / for screws)

Crimping Tool for Cable Lugs

Art.-No. 3705 6 50:

- For 6 - 50 mm²

Art.-No. 3705 10 120:

- For 10 - 120 mm²

Article No.	Article Description	QTY
3705 6 50	CRIMPING TOOL K05 6-50QMM	1
3705 10 120	CRIMPING TOOL K06 10-120 QMM	1



Compression Terminals

- With sight opening
- Material E-CU Rohr in compliance with DIN 40500
- Surface galvanized
- Heat resistance max. + 120°C



Article No.	Article Description	QTY
3705 9 10 6	COMPRESSION TERMINAL 10 M6	10
3705 9 10 8	COMPRESSION TERMINAL 10 M8	10
3705 9 16 6	COMPRESSION TERMINAL 16 M6	10
3705 9 16 8	COMPRESSION TERMINAL 16 M8	10
3705 9 25 6	COMPRESSION TERMINAL 25 M6	10
3705 9 25 8	COMPRESSION TERMINAL 25 M8	10
3705 9 25 10	COMPRESSION TERMINAL 25 M10	10
3705 9 35 8	COMPRESSION TERMINAL 35 M8	10
3705 9 35 10	COMPRESSION TERMINAL 35 M10	10
3705 9 50 8	COMPRESSION TERMINAL 50 M8	10
3705 9 50 10	COMPRESSION TERMINAL 50 M10	10
3705 9 50 12	COMPRESSION TERMINAL 50 M12	10
3705 9 70 10	COMPRESSION CABLE LUG 50 M12	10
3705 9 70 12	COMPRESSION CABLE LUG 50 M12	10
3705 9 95 12	COMPRESSION CABLE LUG 50 M12	10

Technical Data

Art. No.	Cable inside Ø mm	Cable outside Ø mm
3705 9 10 6	4.5	7.4
3705 9 10 8	4.5	7.4
3705 9 16 6	5.5	8.9
3705 9 16 8	5.5	8.9
3705 9 25 6	7.0	10.4
3705 9 25 8	7.0	10.4
3705 9 25 10	7.0	10.4
3705 9 35 8	8.2	12.4
3705 9 35 10	8.2	12.4
3705 9 50 8	10.0	14.4
3705 9 50 10	10.0	14.4
3705 9 50 12	10.0	14.4
3705 9 70 10	11.5	16.9
3705 9 70 12	11.5	16.9
3705 9 95 12	13.5	18.4

(For cables mm² / for screws)

Crimping Tool for Compression Terminals

Art.-No. 3705 6 50 1:

- For 6 - 50 mm²

Art.-No. 3705 10 120 1:

- For 10 - 120 mm²

Article No.	Article Description	QTY
3705 6 50 1	CRIMPING TOOL K05D 6-50 QMM	1
3705 10 120 1	CRIMPING TOOL K06D 10-120 QMM	1



3705 10 120 1



3705 6 50 1

Crimp terminal without insulation

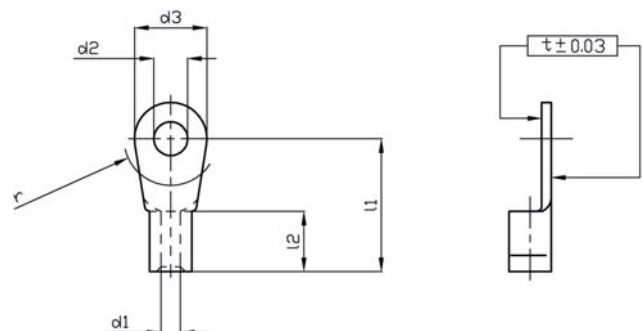
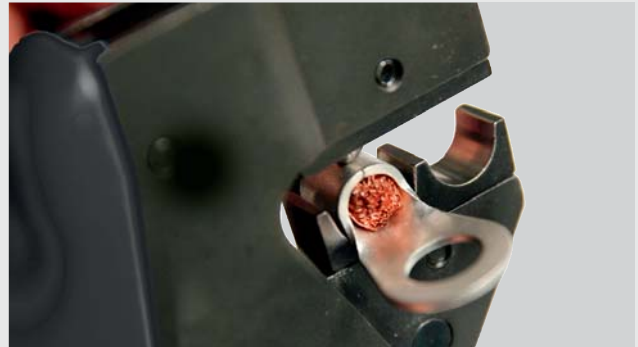
- Ring shaped, soldered
- DIN 46234 and similar designs
- Crimping, brazed
- Material: SE-Cu / tin plated
- Recommended crimping tool: Art.-No. 3790 70 / 3790 70 32 / 3790 70 33
- Recommended insulation: AGR 3730 / 3731 / 3732 / 3733



Article No.	Article Description	QTY
3705 4 4 1	CRI.-TY.CAB.SOCK.RING.F.A 4-1	H 500
3705 4 5 1	CRI.-TY.CAB.SOCK.RING.F.A 5-1	H 500
3705 4 6 1	CRI.-TY.CAB.SOCK.RING.F.A 6-1	H 500
3705 4 4 25	CRI.-TY.CAB.SOCK.RING.F.A 4-2.5	H 500
3705 4 5 25	CRI.-TY.CAB.SOCK.RING.F.A 5-2.5	H 500
3705 4 6 25	CRI.-TY.CAB.SOCK.RING.F.A 6-2.5	H 500
3705 4 8 25	CRI.-TY.CAB.SOCK.RING.F.A 8-2.5	H 500
3705 4 4 6	CRI.-TY.CAB.SOCK.RING.F.A 4-6	H 500
3705 4 5 6	CRI.-TY.CAB.SOCK.RING.F.A 5-6	H 500
3705 4 6 6	CRI.-TY.CAB.SOCK.RING.F.A 6-6	fH 500
3705 4 8 6	CRI.-TY.CAB.SOCK.RING.F.A 8-6	fH 500
3705 4 10 6	CRI.-TY.CAB.SOCK.RING.F.A 10-6	fH 500
3705 4 5 10	CRI.-TY.CAB.SOCK.RING.F.A 5-10	fH 500
3705 4 6 10	CRI.-TY.CAB.SOCK.RING.F.A 6-10	fH 500
3705 4 8 10	CRI.-TY.CAB.SOCK.RING.F.A 8-10	fH 500
3705 4 10 10	CRI.-TY.CAB.SOCK.RING.F.A 10-10	fH 500
3705 4 12 10	CRI.-TY.CAB.SOCK.RING.F.A 12-10	fH 500
3705 4 5 16	CRI.-TY.CAB.SOCK.RING.F.A 5-16	fH 500
3705 4 6 16	CRI.-TY.CAB.SOCK.RING.F.A 6-16	fH 500
3705 4 8 16	CRI.-TY.CAB.SOCK.RING.F.A 8-16	fH 500
3705 4 10 16	CRI.-TY.CAB.SOCK.RING.F.A 10-16	f 100
3705 4 12 16	CRI.-TY.CAB.SOCK.RING.F.A 12-16	f 100
3705 4 6 250	CRI.-TY.CAB.SOCK.RING.F.A 6-25	f 100
3705 4 8 250	CRI.-TY.CAB.SOCK.RING.F.A 8-25	f 100
3705 4 10 250	CRI.-TY.CAB.SOCK.RING.F.A 10-25	f 100
3705 4 12 250	CRI.-TY.CAB.SOCK.RING.F.A 12-25	f 100
3705 4 10 35	CRI.-TY.CAB.SOCK.RING.F.A 10-35	f 100
3705 4 12 35	CRI.-TY.CAB.SOCK.RING.F.A 12-35	f 100
3705 4 16 35	CRI.-TY.CAB.SOCK.RING.F.A 16-35	f 100

technical data please see next page

Application



Related products

- Heat Shrink Tubing
Package 3:1
Art. No. 3732P 3



- Silicone Plaster
red / black each 3 m
Art. No. 3791 50 19



- Batt.-Cable red
Art. No. 3822 25 1



- Batt.-Cable black
Art. No. 3822 25



Technical Data

Art. No.:	Cross section in mm ² :	f. bolt Ø:	t ± 0.03:	d1 mm:	d2 mm:	d3 mm:	l1±0.5:	l2±0.5:	r mm:	DIN:
3705 4 4 1	>0.5-1	M 4	0.8 mm	Ø 1.6 + 0.25	Ø 4.3 + 0.18	Ø 8-0.22	12 mm	5 mm	6	46234
3705 4 5 1	>0.5-1	M 5	0.8 mm	Ø 1.6 + 0.25	Ø 5.3 + 0.18	Ø 10-0.22	13 mm	5 mm	6.5	46234
3705 4 6 1	>0.5-1	M 6	0.8 mm	Ø 1.6 + 0.25	Ø 6.5 + 0.22	Ø 11-0.22	15 mm	5 mm	7.5	-
3705 4 4 25	>1.5-2.5	M 4	0.8 mm	Ø 2.3 + 0.25	Ø 4.3 + 0.18	Ø 8-0.22	12 mm	5 mm	6	46234
3705 4 5 25	>1.5-2.5	M 5	0.8 mm	Ø 2.3 + 0.25	Ø 5.3 + 0.18	Ø 10-0.22	14 mm	5 mm	6.5	46234
3705 4 6 25	>1.5-2.5	M 6	0.8 mm	Ø 2.3 + 0.25	Ø 6.5 + 0.22	Ø 11-0.27	16 mm	5 mm	7.5	46234
3705 4 8 25	>1.5-2.5	M 8	0.8 mm	Ø 2.3 + 0.25	Ø 8.4 + 0.22	Ø 14-0.27	17 mm	5 mm	10	46234
3705 4 4 6	>4-6	M 4	1.0 mm	Ø 3.6 + 0.30	Ø 4.3 + 0.18	Ø 8-0.22	14 mm	6 mm	6	46234
3705 4 5 6	>4-6	M 5	1.0 mm	Ø 3.6 + 0.30	Ø 5.3 + 0.18	Ø 10-0.27	15 mm	6 mm	6.5	46234
3705 4 6 6	>4-6	M 6	1.0 mm	Ø 3.6 + 0.30	Ø 6.5 + 0.22	Ø 11-0.27	16 mm	6 mm	7.5	46234
3705 4 8 6	>4-6	M 8	1.0 mm	Ø 3.6 + 0.30	Ø 8.4 + 0.22	Ø 14-0.27	19 mm	6 mm	10	46234
3705 4 10 6	>4-6	M 10	1.0 mm	Ø 3.6 + 0.30	Ø 10.5 + 0.27	Ø 18-0.5	21 mm	6 mm	12	46234
3705 4 5 10	>6-10	M 5	1.0 mm	Ø 4.5 + 0.30	Ø 5.3 + 0.18	Ø 10-0.22	16 mm	8 mm	6.5	46234
3705 4 6 10	>6-10	M 6	1.0 mm	Ø 4.5 + 0.30	Ø 6.5 + 0.22	Ø 11-0.27	17 mm	8 mm	7.5	46234
3705 4 8 10	>6-10	M 8	1.0 mm	Ø 4.5 + 0.30	Ø 8.4 + 0.22	Ø 14-0.27	20 mm	8 mm	10	46234
3705 4 10 10	>6-10	M 10	1.0 mm	Ø 4.5 + 0.30	Ø 10.5 + 0.27	Ø 18-0.5	21 mm	8 mm	12	46234
3705 4 12 10	>6-10	M 12	1.0 mm	Ø 4.5 + 0.30	Ø 13 + 0.27	Ø 22-0.33	23 mm	8 mm	13	46234
3705 4 5 16	>10-16	M 5	1.2 mm	Ø 5.8 + 0.30	Ø 5.3 + 0.18	Ø 11-0.27	20 mm	10 mm	7.5	46234
3705 4 6 16	>10-16	M 6	1.2 mm	Ø 5.8 + 0.30	Ø 6.5 + 0.22	Ø 11-0.27	20 mm	10 mm	7.5	46234
3705 4 8 16	>10-16	M 8	1.2 mm	Ø 5.8 + 0.30	Ø 8.4 + 0.22	Ø 14-0.27	22 mm	10 mm	10	46234
3705 4 10 16	>10-16	M 10	1.2 mm	Ø 5.8 + 0.30	Ø 10.5 + 0.27	Ø 18-0.5	24 mm	10 mm	12	46234
3705 4 12 16	>10-16	M 12	1.2 mm	Ø 5.8 + 0.30	Ø 13 + 0.27	Ø 22-0.33	26 mm	10 mm	13	46234
3705 4 6 250	>16-25	M 6	1.5 mm	Ø 7.5 + 0.58	Ø 6.5 + 0.22	Ø 12-0.27	25 mm	11 mm	7.5	46234
3705 4 8 250	>16-25	M 8	1.5 mm	Ø 7.5 + 0.58	Ø 8.4 + 0.22	Ø 16-0.27	25 mm	11 mm	10	46234
3705 4 10 250	>16-25	M 10	1.5 mm	Ø 7.5 + 0.58	Ø 10.5 + 0.27	Ø 18-0.27	26 mm	11 mm	12	46234
3705 4 12 250	>16-25	M 12	1.5 mm	Ø 7.5 + 0.58	Ø 13 + 0.27	Ø 22-0.33	31 mm	11 mm	13	46234
3705 4 10 35	>25-35	M 10	1.6 mm	Ø 9.0 + 0.58	Ø 10.5 + 0.27	Ø 18-0.27	27 mm	12 mm	12	46234
3705 4 12 35	>25-35	M 12	1.6 mm	Ø 9.0 + 0.58	Ø 13 + 0.27	Ø 22-0.33	31 mm	12 mm	13	46234
3705 4 16 35	>25-35	M 16	1.6 mm	Ø 9.0 + 0.58	Ø 17 + 0.27	Ø 28-0.33	36 mm	12 mm	16	46234

Butt connector, uninsulated

- Butt connector, DIN 46341
- Cu-DHP acc. to EN 13600 + EN 12449, electrotinned
- Heat-resistant up to +125°C
- Rec. crimping tool: Art.-No. 3790 70 / 3790 70 32 / 3790 70 33
- Rec. insulations: AGR 3730 / 3731 / 3732 / 3733

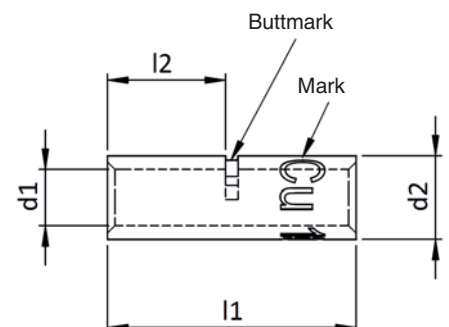


Technical Data

Art.-No.	Cross-section in mm ²	Nominal size	d1 in mm / permissible deviation	d2 in mm / +0.20 -0.05	l1 in mm / permissible deviation	l2 in mm / min.	Mark
3705 2 1	1.00	1.00	1.60 / +0.30 -0.00	3.20	14.50 / ± 0.70	6.00	-
3705 2 2 5	0.5 - 1.0	2.50	2.30 / +0.30 -0.00	3.90	14.50 / ± 0.70	6.00	-
3705 2 6	1.5 - 2.5	6.00	3.60 / +0.30 -0.00	5.60	14.50 / ± 0.70	6.50	-
3705 2 10	4 - 6	10.00	4.50 / +0.30 -0.00	6.70	20.00 / ± 0.70	8.00	Cu 10
3705 2 16	10	16.00	5.80 / +0.30 -0.00	8.20	23.00 / ± 0.70	10.00	Cu 16
3705 2 250 16	25.00	25.00	7.50 / +0.36 -0.00	10.50	25.00 / ± 0.70	11.00	Cu 25
3705 2 35	35.00	35.00	9.00 / +0.36 -0.00	12.20	28.00 / ± 1.00	12.00	Cu 35
3705 2 50	50.00	50.00	11.00 / +0.43 -0.00	14.60	37.00 / ± 1.00	16.00	Cu 50
3705 2 70	70.00	70.00	13.00 / +0.43 -0.00	17.00	40.00 / ± 1.00	17.00	Cu 70
3705 2 95	95.00	95.00	15.00 / +0.43 -0.00	20.00	42,50 / ± 1,50	18.00	Cu 95

95

Article No.	Article Description	QTY
3705 2 1	BUTT CONNECTOR UNINSULAT.1MM ²	H 500
3705 2 2 5	BUTT CONNECTOR UNINSUL.2.5MM ²	H 500
3705 2 6	BUTT CONNECTOR UNINSUL.6MM ²	fH 500
3705 2 10	BUTT CONNECTOR UNINSUL.10MM ²	fH 500
3705 2 16	BUTT CONNECTOR UNINSUL.16MM ²	f 100
3705 2 250	BUTT CONNECTOR UNINSUL.25MM ²	f 100
3705 2 35	BUTT CONNECTOR UNINSUL.35MM ²	z 50
3705 2 50	BUTT CONNECTOR UNINSUL.50MM ²	z 50
3705 2 70	BUTT CONNECTOR UNINSUL.70MM ²	z 50
3705 2 95	BUTT CONNECTOR UNINSUL. 95MM ²	ü 10



Crimping cable, lug pin-shaped, uninsulated

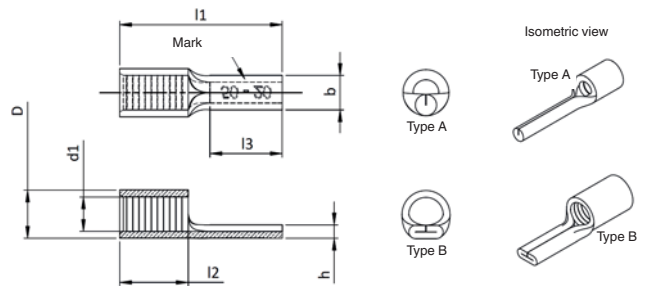
- Crimping cable, lug pin-shaped, uninsulated, DIN 46230
- Cu-ETP acc. to DIN 13599
- Hard-soldered, electrotinned
- Heat-resistant up to +125 °C
- Rec. crimping tool: Art.-No. 3790 70 / 3790 70 32 / 3790 70 33
- Rec. insulations: AGR 3730 / 3731 / 3732 / 3733



Technical Data

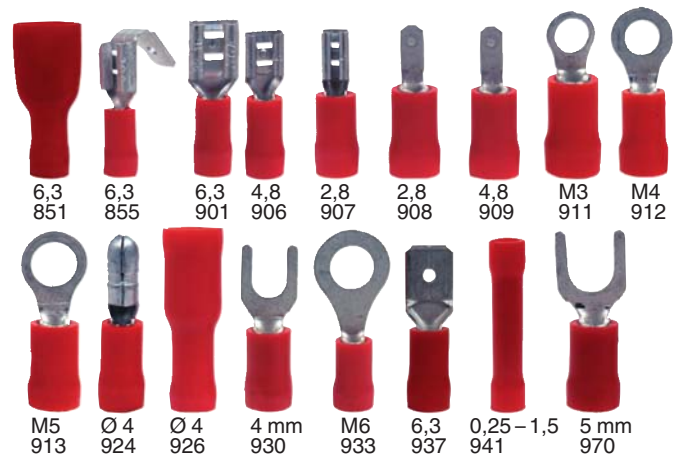
Art.-No.	Cross-section in mm ²	Type	b in mm / perm. deviation	D in mm / perm. deviation	d1 in mm / perm. deviation	l1 in mm / perm. deviation +1,00 -0,50	l2 in mm / perm. deviation	l3 in mm / min.	h in mm / perm. deviation	Mark
3705 1 1	0.5 – 1,0	A	1.90 / +0.00 -0.25	3.50 / ±0.30	1.60 / +0.00 -0.25	17.50	5.00 / ±0.20	10.00	-	-
3705 1 2 5	1.5 – 2.5	A	1.90 / +0.00 -0.25	4.10 / ±0.30	2.30 / +0.00 -0.25	17.50	5.00 / ±0.20	10.00	-	-
3705 1 6	4 – 6	A	2.70 / +0.00 -0.30	5.80 / ±0.30	3.60 / +0.30 -0.00	19.50	6.00 / ±0.20	10.00	-	-
3705 1 10	10	B	4.30 / +0.00 -0.20	6.90 / ±0.30	4.50 / +0.30 -0.00	22.00	8.00 / ±0.20	12.00	2.40 / +0.00 -0.20	K.S. 10-12
3705 1 16	16	B	5.50 / +0.00 -0.20	8.40 / ±0.30	6.00 / +0.30 -0.00	26.50	10.00 / ±0.20	13.00	2.60 / +0.00 -0.20	K.S. 16-13
3705 1 250	25	B	7.00 / ±0.20	9.50 / ±0.30	7.00 / ±0.20	34.00	14.00 / ±0.60	15.00	2.60 / ±0.20	K.S. 25-15
3705 1 35	35	B	8.00 / ±0.20	11.80 / ±0.40	8.40 / ±0.40	41.00	16.00 / ±0.60	20.00	3.20 / ±0.20	K.S. 35-20
3705 1 50	50	B	9.50 / ±0.20	13.60 / ±0.40	9.60 / ±0.40	45.00	19.00 / ±0.60	20.00	3.80 / ±0.20	K.S. 50-20
3705 1 70	70	B	11.00 / ±0.20	15.80 / ±0.40	11.50 / ±0.30	55.00	23.50 / ±0.60	24.00	4.20 / ±0.20	K.S. 70-25
3705 1 95	95	B	12.50 / ±0.40	18.90 / ±0.40	13.50 / ±0.30	55.00	24.00 / ±0.50	24.00	5.20 / ±0.40	K.S. 95-25

Article No.	Article Description	QTY
3705 1 1	CRIMP CABL.LUG PIN-SHAP.1MM ²	H 500
3705 1 2 5	CRIMP.CABL.LUG PIN-SHAP.2.5MM ²	H 500
3705 1 6	CIMP.CABL.LUG PIN-SHAPED 6MM ²	fH 500
3705 1 10	CRIMP.CABL.LUG PIN-SHAP.10MM ²	fH 500
3705 1 16	CRIMP.CABL.LUG PIN-SHAP.16MM ²	f 100
3705 1 250	CRIMP.CABL.LUG PIN-SHAP.25MM ²	f 100
3705 1 35	CRIMP.CABL.LUG PIN-SHAP.35MM ²	z 50
3705 1 50	CRIMP.CABL.LUG PIN-SHAP.50MM ²	z 50
3705 1 70	CRIMP.CABL.LUG PIN-SHAP.70MM ²	z 50
3705 1 95	CRIMP CABL.LUG PIN-SHAP.95MM ²	ü 10



Cable Connectors, Insulated for 0.25-1.0 mm² Cable

Article No.	Article Description	QTY
3700 851	CRIMP CNCTR-RED INS FEMALE 6,3	HR 500
3700 855	CRIMP CNCTR-RED PIGGY BACK RED	HR 500
3700 901	CRIMP CNCTR-RED FEMALE 6,3 901	HR 500
3700 906	CRIMP CNCTR-RED FEMALE 4,8 906	HR 500
3700 907	CRIMP CNCTR-RED FEMALE 2,8 907	HR 500
3700 908	CRIMP CNCTR-RED MALE 2,8 908	HR 500
3700 909	CRIMP CNCTR-RED MALE 4,8 909	HR 500
3700 911	CRIMP CNCTR-RED RING M3	HR 500
3700 912	CRIMP CNCTR-RED RING M4 912	HR 500
3700 913	CRIMP CNCTR-RED RING M5 913	HR 500
3700 924	CRIMP CNCTR-RED MALE BULLET 4M	HR 500
3700 926	CRIMP CNCTR RED 4MM 926	HR 500
3700 930	CRIMP CNCTR-RED SPADE M4	HR 500
3700 933	CRIMP CNCTR-RED M6 933	HR 500
3700 937	CRIMP CNCTR-RED MALE 6,3 937	HR 500
3700 941	BUTT CONNECTOR RED 941	HR 500
3700 947	CRIMP CNCTR-RED 1,9MM	HR 500
3700 970	CRIMP CNCTR-RED SPADE M5	HR 500



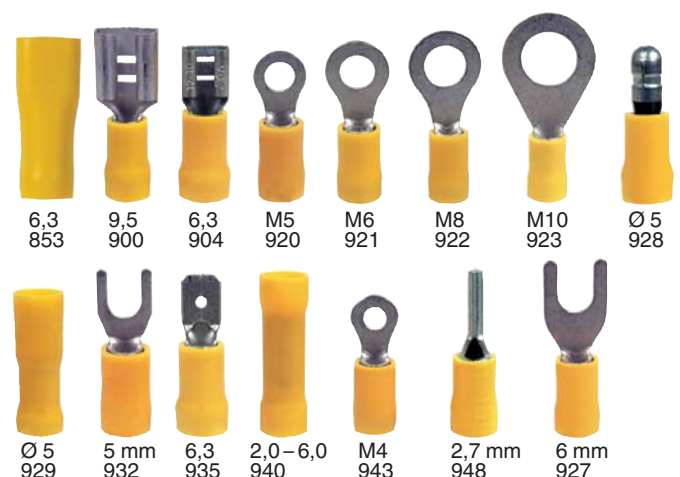
Cable Connectors, Insulated, for 1.5-2.5 mm² Cable

Article No.	Article Description	QTY
3700 852	CRIMP CNCTR-BLUE INS FEM.6.3MM	HR 500
3700 902	CRIMP CNCTR-BLUE FEM.6.3MM 902	HR 500
3700 903	CRIMP CNCTR-BLUE FEMALE 8,0	HR 500
3700 905	CRIMP CNCTR-BLUE PIGGY BL6.3MM	HR 500
3700 910	CRIMP CNCTR-BLUE MALE 4,8 910	HR 500
3700 914	CRIMP CNCTR-BLUE RING M3	HR 500
3700 915	CRIMP CNCTR-BLUE RING M4 915	HR 500
3700 916	CRIMP CNCTR-BLUE RING M5 916	HR 500
3700 917	CRIMP CNCTR-BLUE RING M6 917	HR 500
3700 918	CRIMP CNCTR-BLUE RING M8 918	HR 500
3700 919	CRIMP CNCTR-BLUE RING M10	HR 500
3700 925	CRIMP CNCTR-BLUE MALE BULLET 5	HR 500
3700 927	CRIMP CNCTR-BLUE FEMALE BULLET	HR 500
3700 931	CRIMP CNCTR-BLUE SPADE M4	HR 500
3700 934	CRIMP CNCTR-BLUE FEMALE 4,8	HR 500
3700 936	CRIMP CNCTR-BLUE MALE 6,3 936	HR 500
3700 939	CRIMP CNCTR-BLUE BUTT 939	HR 500
3700 946	CRIMP CNCTR-BLUE 1,9MM	HR 500
3700 971	CRIMP CNCTR-BLUE SPADE M5	HR 500



Cable Connectors, Insulated, for 4.0-6.0 mm² Cable

Article No.	Article Description	QTY
3700 853	CRIMP CNCTR-YEL INS FEMALE 6,3	HR 500
3700 900	CRIMP CNCTR-YEL FEMALE 9,5	HR 500
3700 904	CRIMP CNCTR-YEL FEMALE 6,3	HR 500
3700 920	CRIMP CNCTR-YEL RING M5	HR 500
3700 921	CRIMP CNCTR-YEL RING M6	HR 500
3700 922	CRIMP CNCTR-YEL RING M 8	HR 500
3700 923	CRIMP CNCTR-YEL RING M10	HR 500
3700 928	CRIMP CNCTR-YEL MALE BULLET 5M	HR 500
3700 929	CRIMP CNCTR-YEL FEMALE BULLET	HR 500
3700 932	CRIMP CNCTR YELLOW SPADE M5	HR 500
3700 935	CRIMP CNCTR-YEL MALE 6,3	HR 500
3700 940	CRIMP CNCTR-YEL BUTT	HR 500
3700 943	CRIMP CNCTR-YEL RING M4	HR 500
3700 948	CRIMP CNCTR-YEL 2,7MM	HR 500
3700 972	CRIMP CNCTR-YEL SPADE M6	HR 500



Cable Connect.Ind. Insulat. for 0.25-1.0 mm² Cable

- **Industrial Version**
- Connector with PVC insulation
- Temperature-resistant up to 75 °C
- With „easy entry“ function / simplified insertion
- With additional support sleeve
- Galvanically tin-plated
- Crimp sleeve with retaining section to increase the extraction values
- Recommended crimping tool: Art.-No. 3790 1 / 3790 24 / 3790 70 with 3790 70 60



Article No.	Article Description	QTY
3709 850	CR.CNC.RED INS.FEM.6.3 850-IND	HR 500
3709 851	CR.CNC.RED INS.FEM.6.3 851-IND	HR 500
3709 855	CR.CNC.RED PIGGI B.6,3 855-IND	HR 500
3709 857	CR.CNC.RED 8.8X0.8 857-IND	HR 500
3709 858	CR.CNC.RED 4.8X0.5 858-IND	HR 500
3709 859	CR.CNC.RED 4.8X0.8 859-IND	HR 500
3709 865	CR.CNC.RED 2.8X0.5 865-IND	HR 500
3709 867	CR.CNC.RED 2.8X0.5 867-IND	HR 500
3709 868	CR.CNC.RED 2.8X0.8 868-IND	HR 500
3709 901	CR.CNC.RED FEMALE 6,3 901-IND	HR 500
3709 906	CR.CNC.RED FEMALE 4,8 906-IND	HR 500
3709 907	CR.CNC.RED FEMALE 2,8 907-IND	HR 500
3709 908	CR.CNC.RED MALE 2,8 908-IND	HR 500
3709 909	CR.CNC.RED 4.8X0.5 909-IND	HR 500

Article No.	Article Description	QTY
3709 911	CR.CONNECT.RED RING M3 911-IND	HR 500
3709 912	CR.CONNECT.RED RING M4 912-IND	HR 500
3709 913	CR.CONNECT.RED RING M5 913-IND	HR 500
3709 924	CR.CNC.RED MALE BUL.4MM924-IND	HR 500
3709 926	CR.CNC.RED FEM.BUL.4MM 926-IND	HR 500
3709 930	CR.CONNECT.RED M4 SPADE930-IND	HR 500
3709 933	CR.CNC.RED RING M6 933-IND	HR 500
3709 937	CR.CNC.RED MALE 6,3 937-IND	HR 500
3709 941	CR.CNC.RED BUTT 941-IND	HR 500
3709 947	CR.CONNECTOR-RED 1,9 947-IND	HR 500
3709 970	CR.CONNECT.RED SPADEM5 970-IND	HR 500
3709 974	CR.CONNECT.RED RING M8 974-IND	HR 500
3709 975	CR.CONNECT.RED RING M10 975IND	HR 500

Cable Connect.Ind. Insulated for 1.5-2.5 mm² Cable

- Industry version
- Connector with PVC insulation
- Temperature-resistant up to 75 °C
- With „easy entry“ function / simplified insertion
- With additional support sleeve
- Galvanically tin-plated
- Crimp sleeve with retaining section to increase the extraction values
- Recommended crimping tool: Art.-No. 3790 1 / 3790 24 / 3790 70 with 3790 70 60



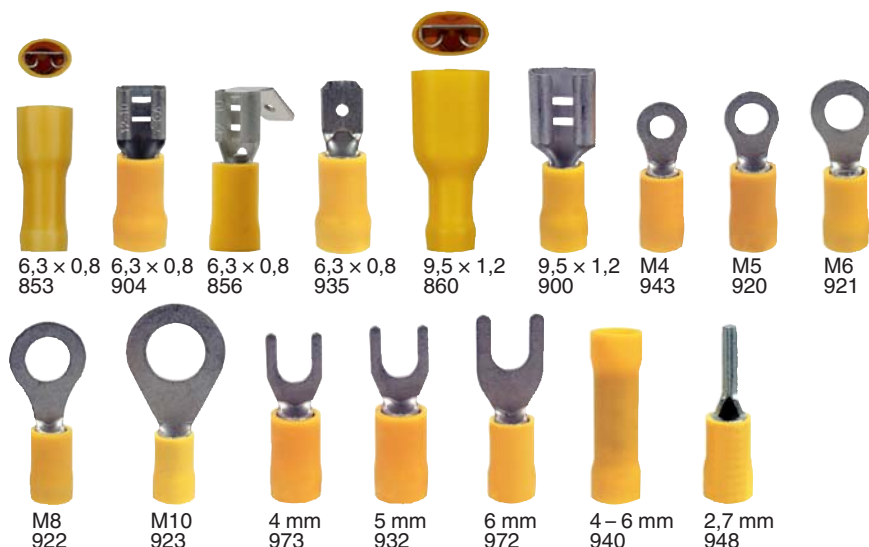
Article No.	Article Description	QTY
3709 854	CR.CONNECT.BLUE 6.3 854-IND	HR 500
3709 861	CR.CONNECT.BLUE 4.8X0.8 861IND	HR 500
3709 862	CR.CONNECT.BLUE 4.8X0.5 862IND	HR 500
3709 863	CR.CONNECT.BLUE 4.8X0.8 863IND	HR 500
3709 870	CR.CONNECT.BLUE 2.8X0.5 870IND	HR 500
3709 871	CR.CONNECT.BLUE 2.8X0.8 871IND	HR 500
3709 872	CR.CONNECT.BLUE 2.8X0.5 872IND	HR 500
3709 873	CR.CONNECT.BLUE 2.8X0.8 873IND	HR 500
3709 902	CR.CNC.BLUE FEMALE 6,3 902-IND	HR 500
3709 903	CR.CONNECT.BLUE 7.8X0.8 903IND	HR 500
3709 905	CR.CNC.BLUE PI.BACK6,3 905-IND	HR 500
3709 910	CR.CONNECT.BLUE 4.8X0.5 910IND	HR 500
3709 915	CR.CNC.BLUE RING M4 915-IND	HR 500
3709 916	CR.CNC.BLUE RING M5 916-IND	HR 500

Article No.	Article Description	QTY
3709 917	CR.CNC.BLUE RING M6 917-IND	HR 500
3709 918	CR.CNC.BLUE RING M8 918-IND	HR 500
3709 919	CR.CNC.BLUE RING M10 919-IND	HR 500
3709 925	CR.CNC.BLUE MALE BUL.5 925-IND	HR 500
3709 927	CR.CNC.BLUE FEM.BUL.5MM927-IND	HR 500
3709 928	CR.CNC.BLUE MAL.BUL.4MM928-IND	HR 500
3709 929	CR.CNC.BLUE FEM.BUL.4MM929-IND	HR 500
3709 931	CR.CNC.BLUE SPADEM4 931-IND	HR 500
3709 934	CR.CNC.BLUE FEMALE 4,8 934-IND	HR 500
3709 936	CR.CNC.BLUE MALE 6,3 936-IND	HR 500
3709 939	CR.CNC.BLUE BUTT 939-IND	HR 500
3709 946	CR.CNC.BLUE 1,9 946-IND	HR 500
3709 971	CR.CNC.BLUE SPADEM5 971-IND	HR 500

Cable Connect.Ind. Insulated for 4.0-6.0 mm² Cable

• Industry version

- Connector with PVC insulation
- Temperature-resistant up to 75 °C
- With „easy entry“ function / simplified insertion
- With additional support sleeve
- Galvanically tin-plated
- Crimp sleeve with retaining section to increase the extraction values
- Recommended crimping tool: Art.-No. 3790 1 / 3790 24 / 3790 70 with 3790 70 60



Article No.	Article Description	QTY
3709 853	CR.CONNECT.YE 6.3 853 IND	HR 500
3709 856	DOUBL.CONN.YE 6.3 856 IND	HR 500
3709 860	CR.CNCT.YELLOW 9.5 860-IND	HR 500
3709 900	CR.CNC.YEL. FEMALE 9,5 900-IND	HR 500
3709 904	CR.CNC.YEL. FEMALE 6,3 904-IND	HR 500
3709 920	CR.CNC.YEL. RING M5 920-IND	HR 500
3709 921	CR.CNC.YEL. RING M6 921-IND	HR 500
3709 922	CR.CNC.YEL. RING M8 922-IND	HR 500

Article No.	Article Description	QTY
3709 923	CR.CNC.YEL. RING M10 923-IND	HR 500
3709 932	CR.CNC.YEL. SPADEM5 932-IND	HR 500
3709 935	CR.CNC.YEL. MALE 6,3 935-IND	HR 500
3709 940	CR.CNC.YEL. BUTT 940-IND	HR 500
3709 943	CR.CNC.YEL. RING M4 943-IND	HR 500
3709 948	CR.CNC.YEL. 2,7 948-IND	HR 500
3709 972	CR.CNC.YEL. SPADEM6 972-IND	HR 500
3709 973	CR.CNC.YEL. SPADEM4 973-IND	HR 500

Cable connector: PA-insulated

- Connector with PA insulation
- Temperature-resistant up to 105 °C
- function / simplified insertion With „easy entry“
- With additional support sleeve
- Galvanically tin-plated
- Crimp sleeve with retaining section to increase the extraction values
- Recommended crimping tool for terminal connectors: Art.-No. 3790 70 and Art.-No. 3790 70 60 3 / 3790 24
- Recommended crimping tool: Art.-No. 3790 70 and Art.-No. 3790 70 60 / 3790 1



Article No.	Article Description	QTY
3709 1 700	TERM.CONNECT.PA 0.5-1.5MM ² 700	f 100
3709 1 701	TERM.CONNECT.PA 1.5-2.5MM ² 701	f 100
3709 1 702	TERM.CONNEC.PA 4.0-6.0MM ² 702	f 100
3709 1 941	BUTT JT W.VIEW.WIND.PA RED 941	f 100
3709 1 939	BUTT JT W.VIEW.WIND.PA BLUE939	f 100
3709 1 940	BUTT JT W.VIEW.WIND. PA YE 940	f 100
3709 1 710	FL.INS.SL.ISO PA RD4.8X0.5 710	f 100
3709 1 711	FL.INS.SL.ISO PA RD4.8X0.8 711	f 100
3709 1 715	FLT INS.SL.IS.PA BL4.8X0.5 715	f 100
3709 1 716	FL.INS.SL.ISO BL.4.8X0.8 716	f 100

Technical Data					
Substrate material	mm ²	Insertion width	max V	max A	Length in mm
Cu	0,5 – 1,5	-	300	7	21,0
Cu	1,5 – 2,5	-	300	12	21,0
Cu	4,0 – 6,0	-	300	17	25,5
Cu	0,5 – 1,5	-	600	19	30,0
Cu	1,5 – 2,5	-	600	27	30,0
Cu	4,0 – 6,0	-	600	48	35,0
Cu	0,5 – 1,5	4,8 x 0,5	300	10	20,0
Cu	0,5 – 1,5	4,8 x 0,8	300	10	20,0
Cu	1,5 – 2,5	4,8 x 0,5	300	15	20,0
Cu	1,5 – 2,5	4,8 x 0,8	300	15	20,0

Cable Connectors, Uninsulat. for Cable 0.5-1.5mm²



Article No.	Article Description	QTY
3703 700	UN-INSULATED FEMALE CNCTR 2,8M	100
3703 701	UN-INSULATED FEMALE CNCTR 2,8M	100
3703 702	UN-INSULATED FEMALE CNCTR 4,8M	100
3703 704	UN-INSULATED FEMALE CNCTR 6,3M	100
3703 706	FEMALE CONN.+LUG 0.5-1.0 6.3	100
3703 715	UN-INSULATED MALE CNCTR 2,8MM	100
3703 720	UN-INSULATED MALE CNCTR 4MM	100
3703 757	ANG.FEM.CNC.SLE.0,5-1,0 2,8MM	100
3703 796	CRIMP CNCTR 0.75-1.0MM	100

Cable Connectors, Uninsulat. for 0.5-2.5 mm² Cable



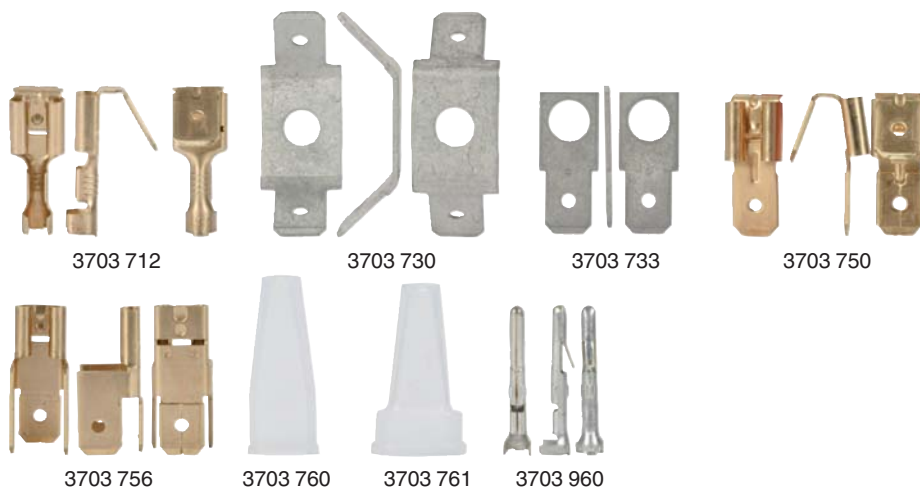
Article No.	Article Description	QTY
3703 703	BL TERMIN. 1,5-2,5 6,3MM	100
3703 705	BL. TERMINAL 1,5-2,5 6,3MM	100
3703 707	FEMALE CONN.+LUG 1.5-2.5 6.3	100
3703 716	UN-INSULATED MALE CNCTR 6,3MM	100
3703 717	UN-INSULATED LNG MALE CNCTR 6,	100
3703 721	CYLINDRICAL PIN 1,5-2,5 4,0MM	100
3703 722	UN-INSULATED MALE CNCTR 5MM	100
3703 797	CRIMP CNCTR 1.5-2.5MM	100
3703 723	ROUND CONNECT.0,5-2,0 TIN4,0MM	100
3703 724	CIRC.SLEEVE 0,5-2,0 TIN4,0MM	100
3703 739	UN-INSULATED CNCTR 1,5X2,5 M6	100
3703 740	RING TONGUE 0,5-2,5 M4	100
3703 741	UN-INSULATED CNCTR RING M5	100
3703 743	UN-INSULATED CNCTR RING M8	100
3703 755	ANG.FEM.CNC.SLE.0,5-1,5 6,3MM	100

Cable Connectors, Uninsulat. for 4.0-6.0 mm² Cable



Article No.	Article Description	QTY
3703 708	UN-INSULATED FEMALE CNCTR 6,3M	100
3703 745	UN-INSULATED CNCTR H/DUTY RING	100
3703 746	UN-INSULATED CNCTR H/DUTY RING	100
3703 748	UN-INSULATED CNCTR H/DUTY RING	100

Plug Connectors, Uninsulated



Article No.	Article Description	QTY
3703 712	PLUG CONNECTOR (ALT 963) 6,3MM	100
3703 730	DO.FL.PLUG CNCTR.L 6,0 6,3MM	100
3703 733	FL.PLUG CNCTR.L 5,0 6,3MM	100
3703 750	UNINSULATED CABLE CNCTR 6,3MM	100
3703 756	MULTIPLE CONNECTOR 6,3MM	100
3703 760	MALE SLEEVE 958	100
3703 761	FEMALE SLEEVE 966	100
3703 960	CONTACT PIN	100

Electronic Plugs Push-on Contacts



Article No.	Article Description	QTY
3704 631	ELECTRONIC PLUG GM/VAG 631	100
3704 632	ELECTRONIC PLUG VAG 632	100
3704 633	ELECTRONIC PLUG DB 633	100
3704 634	ELECTRONIC PLUG BOSCH 634	100
3704 636	ELECTRONIC PLUG BMW 636	100
3704 638	ELECTRONIC PLUG BMW/DB 638	100
3704 639	ELECTRONIC PLUG 639	100
3704 678	ELECTRONIC PLUG 678	100

Technical Data

For cable mm²

0,5 - 1,0	1,7	Brass tin plated
1,0 - 2,5	2,1	Tin bronze, silver plated
0,5 - 2,1	2,1	Brass tin, tin plated
0,5 - 1,0	1,7	Tin bronz tin plated
2,1 - 5,3	3,5	Brass, silver plated
2.1-5.3	3,5	Copper, silver plated
0.5-2.1	3,5	Brass tin, tin plated
0.5-2.5	3.5	Copper, silver plated

Electronic Plugs Push-on Contacts



Article No.	Article Description	QTY
3704 640	ELECTRONIC PLUG 640	100
3704 641	ELECTRONIC PLUG 641	100
3704 643	ELECTRONIC PLUG 643	100
3704 646	ELECTRONIC PLUG 646	100
3704 647	ELECTRONIC PLUG 647	100
3704 648	ELECTRONIC PLUG 648	100
3704 649	ELECTRONIC PLUG 649	100
3704 679	ELECTRONIC PLUG 679	100

Technical Data

For cable mm²

For cable mm ²	Dimension mm ²	Material
1.0-2.5	2.1	Tin bronze, silver-plated
0.5-2.1	2.1	Brass, tin-plated
0.75-1.5	1.5	Brass, tin-plated
0.5-1.0	1.5	Brass, tin-plated
2.1-5.3	3.5	Copper, silver-plated
0.5-2.5	3.5	Tin bronze, tin-plated
0.5-2.1	3.5	Copper, silver-plated
1.5-2.5	1.6	Bronze, tin-plated

Electronic Plugs ST



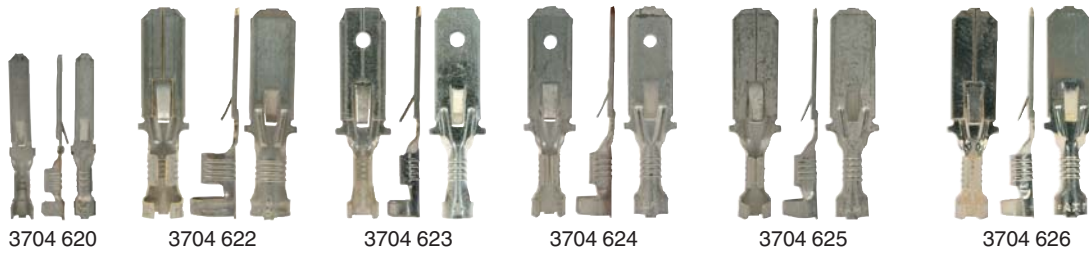
Article No.	Article Description	QTY
3704 650	ELECTRONIC PLUG 650	100
3704 652	ELECTRONIC PLUG 652	100
3704 653	ELECTRONIC PLUG 653	100

Technical Data

For cable mm²

For cable mm ²	Material
0.5-1.0	Tin bronze, tin-plated
0.5-1.5	Tin bronze, tin-plated
1.0-2.5	Tin bronze, tin-plated

Electronic Flat Plugs



Article No.	Article Description	QTY
3704 620	ELECTRONIC PLUG 620	100
3704 622	ELECTRONIC PLUG 622	100
3704 623	ELECTRONIC PLUG 623	100
3704 624	ELECTRONIC PLUG 624	100
3704 625	ELECTRONIC PLUG 625	100
3704 626	ELECTRONIC PLUG 626	100

Technical Data

For cable mm ²	Dimension mm ²	Material
0,5–1,5	2.8 with latch	Phosphor bronze, tin-plated
4,0–6,0	6.3 with latch	Brass, silver-plated
1,0–2,5	6.3 with latch	Brass, tin-plated
0,8–2,1	6.3 with latch	Brass, tin-plated
0,8–2,1	6.3 with latch	Phosphor bronze, tin-plated
0,8–2,1	6.3 with latch	Brass, silver-plated

Electronic Flat Plug Sockets



Article No.	Article Description	QTY
3704 601	ELECTRONIC PLUG 601	100
3704 602	ELECTRONIC PLUG 602	100
3704 604	ELECTRONIC PLUG 604	100
3704 605	ELECTRONIC PLUG 605	100
3704 606	ELECTRONIC PLUG 606	100
3704 607	ELECTRONIC PLUG 607	100
3704 608	ELECTRONIC PLUG 608	100
3704 609	ELECTRONIC PLUG 609	100
3704 610	ELECTRONIC PLUG 610	100
3704 611	ELECTRONIC PLUG 611	100
3704 614	CR.CNC.7.7X0.8 0.5-1.0MM ² 614	H 500
3704 615	CR.CNC.4.8X0.8 0.5-1.0MM ² 615	100
3704 616	CR.CNC.4.8X0.8 1.5-2.5MM ² 616	100
3704 660	ELECTRONIC PLUG 660	100
3704 663	WI.CR.CNC 6.3 1.0-2.5MM ² 663	100
3704 663 1	ISUL.SLEEVE F.CR CNC 663	100
3704 664	CR CNC SL.7.8 1.0-2.5MM ² 664	100

Technical Data

For cable mm ²	Dimension mm ²	Material
0,5–1,5	2.8 with latch	Brass tin-plated
0,5–1,0	2,8	Brass tin-plated
1,0–2,5	4,8	Brass tin-plated
4,0–6,0	6.3 with latch	Phosph.bronze tin-plated
4,0–6,0	6.3 with latch	Brass tin-plated
2,5–4,0	6.3 with latch	Brass tin-plated
1,0–2,5	6.3 with latch	Brass silver-plated
1,0–2,5	6,3	Brass silver-plated
1,0–2,5	6,3	Brass tin-plated
0,5–1,5	6,3	Brass tin-plated
0,5–1,0	7,7 × 0,8 with latch	Bronze tin-plated
0,5–1,0	4,8 × 0,8 with latch	Brass tin-plated
1,5–2,5	4,8 × 0,8 with latch	Brass tin-plated
0,5–1,5	6,3	Brass tin-plated
1,5–2,5	6,3 × 0,8	Brass tin-plated
-	19 × 14 × 9 × 5	PVC
1,5–2,5	7,8 × 0,8 with latch	Brass tin-plated

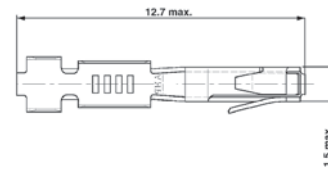
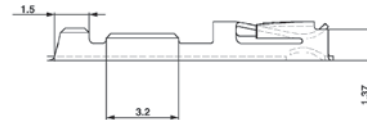
Electronic Plug 675



Technical Data

Designation: Tandem spring
For cable mm²: 0.2 - 0.5
Material: CuSn6 tinned

Article No.	Article Description	QTY
3704 675	ELECTRONIC PLUG 675	100



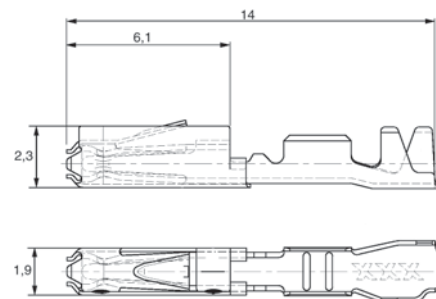
Electronic Plug 677



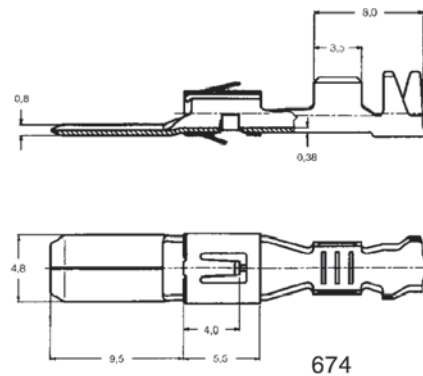
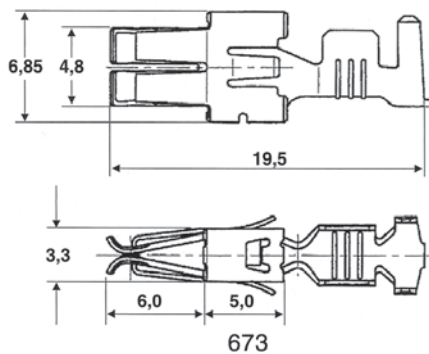
Technical Data

Designation: Micro Power
For cable mm²: 0.25 - 0.5
Material: CuNiSi tinned

Article No.	Article Description	QTY
3704 677	ELECTRONIC PLUG 677	100



Electronic Plug VW 4.8mm



Article No.	Article Description	QTY
3704 673	ELECTRONIC PLUG 673	100
3704 674	ELECTRONIC PLUG 674	100

Technical Data

Designation	For cable mm ²	Material
Standard-Power-Timer 4.8 mm	1.5 - 2.5	CuFe2, tin-plated
Flat connector 4.8 mm x 0.8 mm	1.5 - 2.5	CuFe2, tin-plated

Halogen Headlamp Bulbs FÖRCH*****

- All FÖRCH halogen bulbs are UV-free

Technical Data

ECE/DIN 72061	Base
H1	P14,5s
H2	X511
H3	PK 22 s
H4	P43t
H7	PX26d
H8	PGJ 19-1
H9	PGJ 19-5
H 11	PGJ 19-2
HB 3	P 20 d
H15	PGJ23t-1
H27/1	PG 13
H27/2	PGJ 13
HIR2	PX22d
HB 4	P 22 d
HB4	P22d

Article No.	Article Description	QTY
3801 1111	12V H1 HALOGEN BULB 55W 5*	e 10
3801 1131	12V H2 HALOGEN BULB 55W 5*	e 10
3801 1121	12V H3 HALOGEN BULB 55W 5*	e 10
3801 1101	12V H4 HALOGEN BULB 60/55W 5*	e 10
3801 1117	12V H7 HALOGEN BULB LIFE55W 5*	e 10
3801 1117 1	12V H7 HALOGEN BULB 55W 5*	e 10
3801 1186	12V H8 HALOGEN BULB 35W 5*	e 10
3801 1187	12V H9 HALOGEN BULB 65W 5*	e 10
3801 1188	12V H10 HALOGEN BULB 42W	e 10
3801 1189	12V H11 HALOGEN BULB 55W 5*	e 10
3801 1115	12V H15 HALOGEN BULB 55/15W	e 10
3801 1190	12V H27/1 HALOGEN BULB 27W	e 10
3801 1191	12V H27/2 HALOGEN BULB 27W	e 10
3801 1176	12V HIR2 HALOGEN BULB 55W	e 10
3801 1177	12V HB3 HALOGEN BULB 60W 5*	e 10
3801 1178	12V HB4 HALOGEN BULB 51W 5*	e 10
3802 1112	24V H1 HALOGEN BULB 70W 5*	e 10
3802 1132	24V H2 HALOGEN BULB 70W 5*	e 10
3802 1122	24V H3 HALOGEN BULB 70W 5*	e 10
3802 1102	24V H4 BULB HALOGEN 75/70W 5*	e 10
3802 1107	24V H4 HAL.BU.H.DUTY 75/70W 5*	e 10
3802 1119	24V H7 HALOGEN BULB 70W 5*	e 10
3802 1119 1	24V H7 HALOGEN BULB HD 70W 5*	e 10
3802 1189	24V H11 HALOGEN BULB 70W	e 10

Art.-No. 3801 1189:

- Application H11 e.g. for Audi A4, BMW 300 series, Mercedes-Benz E-Models, Mercedes-Benz M-Models, Ford Mondeo, Peugeot 406, Renault, VW Phaeton fog-lights and for Ford GM American models, Harley Davidson as dim light.

Art.-No. 3802 1107:

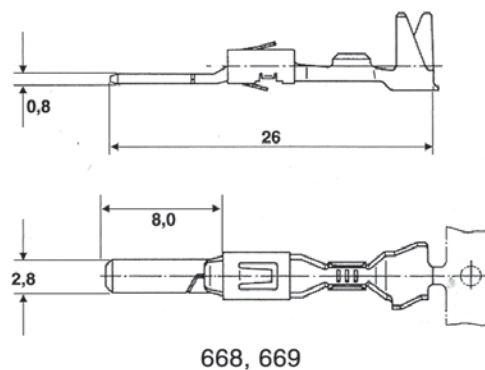
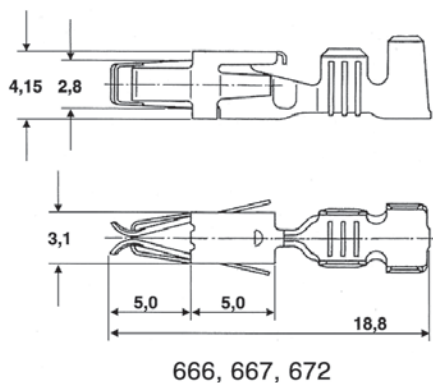
- Heavy-Duty = high resistance to vibration

Art.-No. 3802 1119 1:

- Heavy-Duty = high resistance to vibration



Electronic Plug VW 2.8 mm

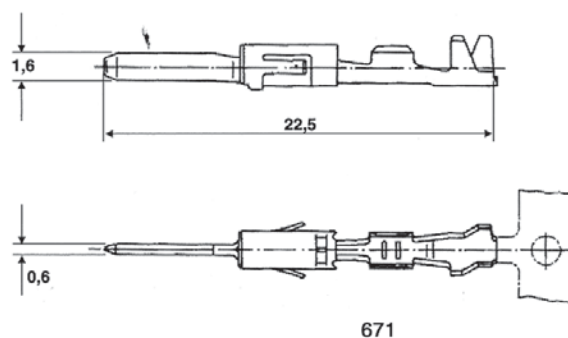
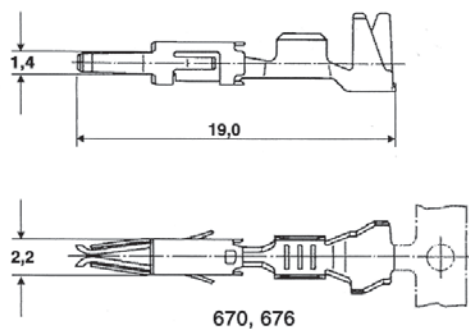


Article No.	Article Description	QTY
3704 666	ELECTRONIC PLUG 666	100
3704 667	ELECTRONIC PLUG 667	100
3704 668	ELECTRONIC PLUG 668	100
3704 669	ELECTRONIC PLUG 669	100
3704 672	ELECTRONIC PLUG 672	100

Technical Data

Designation	For cable mm ²	Material
Junior power timer 2.8 mm	0.5 - 1.0	CuSn4, tin-plated
Junior power timer 2.8 mm	1.5 - 2.5	CuSn4, tin-plated
Junior power timer 2.8 mm	1.5 - 2.5	CuSn4, contact silver-plated
Flat connector 2.8 mm x 0.8 mm	0.5 - 1.0	CuSn4, tin-plated
Flat connector 2.8 mm x 0.8 mm	1.5 - 2.5	CuSn4, tin-plated

Electronic Plug VW 1.6 mm



Article No.	Article Description	QTY
3704 670	ELECTRONIC PLUG 670	100
3704 671	ELECTRONIC PLUG 671	100
3704 676	ELECTRONIC PLUG 676	100

Technical Data

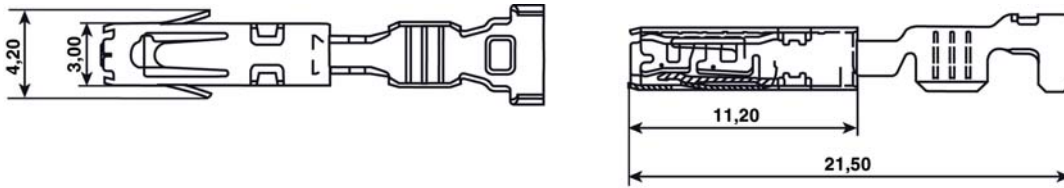
Designation	For cable mm ²	Material
Micro timer II 1.6 mm	0.5 - 1.0	CuSn4, tin-plated
Flat connector 1.6 mm x 0.6 mm	0.5 - 1.0	CuSn4, tin-plated
Micro timer II 1.6 mm	0.3 - 0.6	CuSn4, tin-plated

Electronic Plugs MKR / MKS Plus

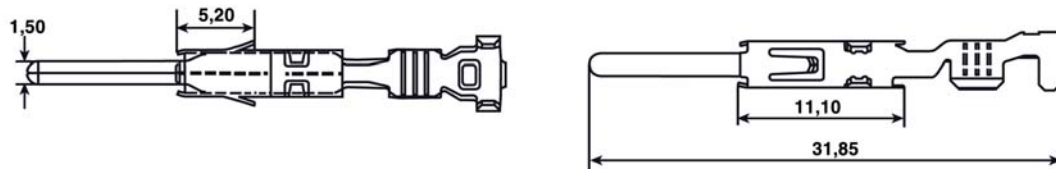
• Range art. no. 9000 3704 5



Socket contact MKR Plus:



Pin contact MKS Plus:



Single wire seal/sealing plugs:



Technical Data Plug

Article No.	Description	Cable mm ²	Material	Coating
3704 500	socket contact MKR Plus	0.35-0.5	CuSn4	pre-tinned
3704 501	socket contact MKR Plus	0.75-1.5	CuSn4	pre-tinned
3704 502	socket contact MKR Plus	1.5-2.5	CuSn4	pre-tinned
3704 510	pin contact MKS Plus	0.35-0.5	CuSn4	pre-tinned
3704 511	pin contact MKS Plus	0.75-1.5	CuSn4	pre-tinned
3704 512	pin contact MKS Plus	1.5-2.5	CuSn4	pre-tinned

Technical data seal

Article No.	Description	Cable mm ²	D1 Crimp-Ø	D2 d2 seal-Ø	Colour
3704 540	single wire seal MKR/MKS	0.35-0.5	2.90 mm	4.00 mm	blue
3704 541	single wire seal MKR/MKS	0.75-1.0	2.90 mm	4.00 mm	red
3704 542	single wire seal MKR/MKS	1.5	2.90 mm	4.00 mm	yellow
3704 543	single wire seal MKR/MKS	2.5	3.40 mm	5.15 mm	brown
3704 544	sealing plugs MKR/MKS	-	-	4.00 mm	green

Article No.	Article Description	QTY
3704 500	ELECTRONIC PLUGS 500	50
3704 501	ELECTRONIC PLUGS 501	50
3704 502	ELECTRONIC PLUGS 502	50
3704 510	ELECTRONIC PLUGS 510	50
3704 511	ELECTRONIC PLUGS 511	50
3704 512	ELECTRONIC PLUGS 512	50
3704 540	WIRE SEAL MKR/S 0,35-0,5 BLUE	f 100
3704 541	WIRE SEAL MKR/S 0,75-1,0 RED	f 100
3704 542	WIRE SEAL MKR/S 1,5 YELLOW	f 100
3704 543	WIRE SEAL MKR/S 2,5 BROWN	f 100
3704 544	SEALING PLUGS MKR/MKS GREEN	f 100

Recommended tools:

- Art. No. 3790 60, Art. No. 3790 60 1, Art. No. 3790 60 2, Art. No. 3790 60 3: Crimping tools
- Art. No. 3794 60, Art. No. 3794 60 1, Art. No. 3794 60 2, Art. No. 3794 60 3: Release tools

015 Technical data subject to change.

Source: Theo Förch GmbH & Co. KG

Availability subject to country specific rules and regulations.

www.iconridge.com 114

Electronic Plugs VKR / VKS Plus

• Range art. no. 9000 3704 5



3704 520
3704 521



3704 530
3704 531



3704 550

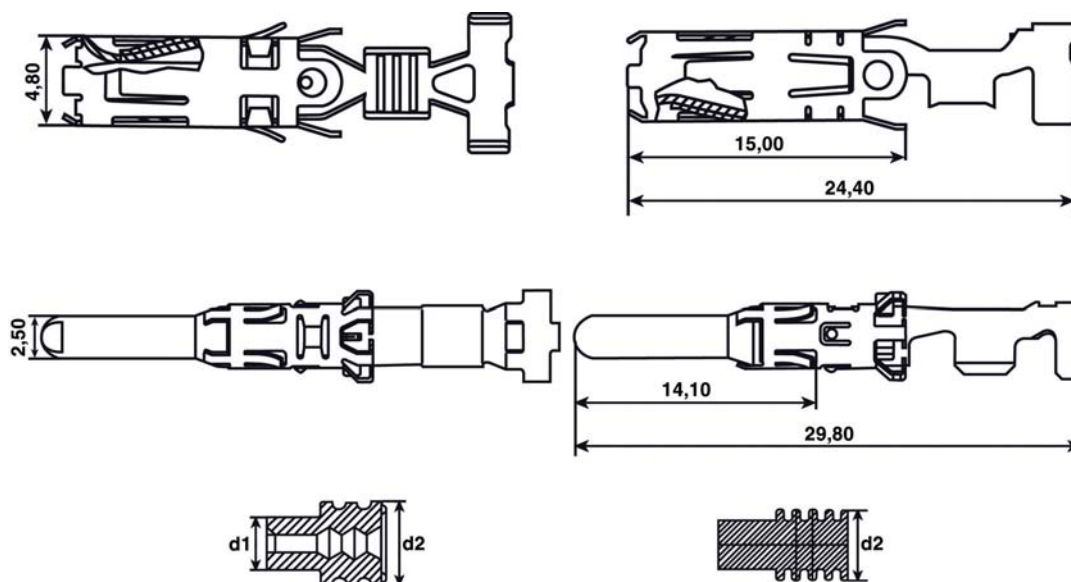


3704 551



3704 552

Socket contact VKR Plus:



Technical Data Plug

Article No.	Description	Cable mm ²	Material	Coating
3704 520	socket contact VKR Plus	0.5-1.0	CuSn4	pre-tinned
3704 521	socket contact VKR Plus	1.5-2.5	CuSn4	pre-tinned
3704 530	pin contact VKS Plus	0.5-1.0	CuSn4	pre-tinned
3704 531	pin contact VKS Plus	1.5-2.5	CuSn4	pre-tinned

Technical data seal

Article No.	Description	Cable mm ²	D1 Crimp-Ø	D2 seal-Ø	Colour
3704 550	single wire seal VKR/VKS	0.5-1.0	4.25 mm	6.70 mm	brown
3704 551	single wire seal VKR/VKS	1.5-2.5	4.25 mm	6.70 mm	grey
3704 552	sealing plugs VKR/VKS	-	-	6.70 mm	green

Article No.	Article Description	QTY
3704 520	ELECTRONIC PLUGS 520	50
3704 521	ELECTRONIC PLUGS 521	50
3704 530	ELECTRONIC PLUGS 530	50
3704 531	ELECTRONIC PLUGS 531	50
3704 550	WIRE SEAL VKR/S 0,5-1,0 BOWN	f 100
3704 551	WIRE SEAL VKR/S 1,5-2,5 GRAY	f 100
3704 552	SEALING PLUGS VKR/VKS GREEN	f 100

Recommended tools:

- Art. No. 3790 60, Art. No. 3790 60 1, Art. No. 3790 60 2, Art. No. 3790 60 3: Crimping tools
- Art. No. 3794 60, Art. No. 3794 60 1, Art. No. 3794 60 2, Art. No. 3794 60 3: Release tools

Plug-type Housing Type ML

- multipole, plug-type housing with easy locking
- tab width: 2,8 mm
- housing type: PA (polyamide)
- max. temperature: 105 °C
- colour: natural
- suitable plug connector: Art.-No. 3703 8 1, 3703 8 1 1, 3703 8 2, 3703 8 2 1
- suitable opening tool: Art.-No. 3794 410 / 3795 7
- recommended crimping tool: 3790 20 / 3790 70 and 3790 70 45



Article No.	Article Description	QTY
3718 8 2	PLUG-TYPE HOUSING ML 2-POL. M	zf 100
3718 8 2 1	PLUG-TYPE HOUSING ML 2-POL. F	zf 100
3718 8 3	PLUG-TYPE HOUSING ML 3-POL. M	zf 100
3718 8 3 1	PLUG-TYPE HOUSING ML 3-POL. F	zf 100
3718 8 4	PLUG-TYPE HOUSING ML 4-POL. M	zf 100
3718 8 4 1	PLUG-TYPE HOUSING ML 4-POL. F	zf 100
3718 8 6	PLUG-TYPE HOUSING ML 6-POL. M	zf 100
3718 8 6 1	PLUG-TYPE HOUSING ML 6-POL. F	zf 100
3718 8 9	PLUG-TYPE HOUSING ML 9-POL. M	zf 100
3718 8 9 1	PLUG-TYPE HOUSING ML 9-POL. F	zf 100
3703 8 1	PLUG CONTACT ML 0,85-1,25	100
3703 8 1 1	SOCKET CONTACT ML 0,85-1,25	100
3703 8 2	PLUG CONTACT ML 0,30-0,50	100
3703 8 2 1	SOCKET CONTACT ML 0,30-0,50	100

Housing AFS / AFK

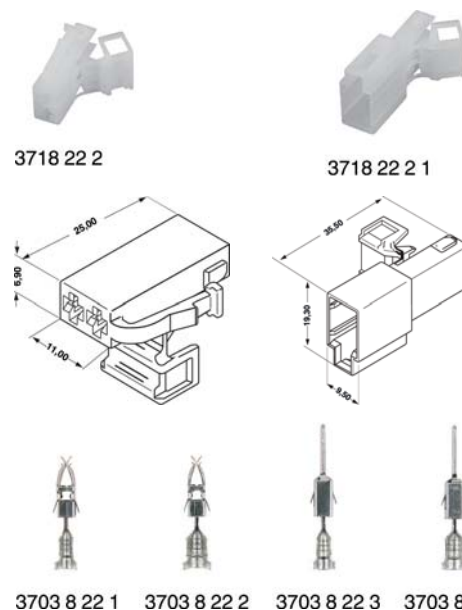
- 2-pole
- hinged secondary locking
- low insert and extraction forces
- pin coding
- housing material: PA 66
- colour: natural
- preferably for use in the vehicle industry
- great contact reliability even at high ambient temperature
- 2 snap-lock arms ensure locking of the housing
- recommended crimp tool, Art.-No. 3790 70 and 3790 70 45
- recommended opening tool, Art.-No. 3795 6 / 3794 250

Art.-No. 3703 8 22 1 and 3703 8 22 2:

- socket contacts for AFK housing Art.-No. 3718 22 2

Art.-No. 3703 8 22 3 and 3703 8 22 4:

- plug contacts for AFS housing Art.-No. 3718 22 2 1



Article No.	Article Description	QTY
3718 22 2	HOUSING AFK 2-POLE 2,8MM	f 100
3718 22 2 1	HOUSING AFS 2 POLE 2,8MM	f 100
3703 8 22 1	SOCKET CONT.AFK2,8X0,8/0,5-1,0	100
3703 8 22 2	SOCKET CONT.AFK2,8X0,8/1,5-2,5	100
3703 8 22 3	PLUG CONT.AFS 2,8X0,8/0,5-1,0	100
3703 8 22 4	PLUG CONT.AFS 2,8X0,8/1,5-2,5	100

Plug-type Housing MATE-N-LOCK universal

- multipole plug-type housing
- with PIN coding
- housing material: PA (polyamide)
- colour: natural
- suitable push-in connector: Art.-No. 3704 641 and 3704 633
- suitable opening tool: Art.-No. 3794 765
- recommended crimping tool: Art.-No. 3790 20/ 3790 70 and 3790 70 45

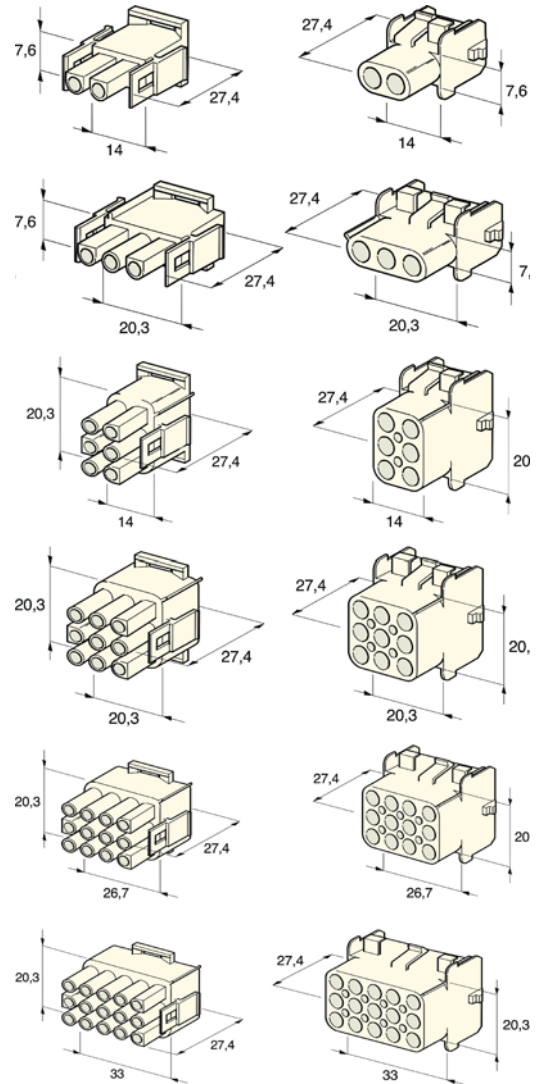


3704 633



3704 641

Article No.	Article Description	QTY
3718 7 2	MULTI PLUG M-N-L UNI 2-POL.M	10
3718 7 2 1	MULTI PLUG M-N-L UNI 2-POL.F	10
3718 7 3	MULTI PLUG M-N-L UNI 3-POL.M	10
3718 7 3 1	MULTI PLUG M-N-L UNI 3-POL.F	10
3718 7 6	MULTI PLUG M-N-L UNI 6-POL.M	5
3718 7 6 1	MULTI PLUG M-N-L UNI 6-POL.F	5
3718 7 9	MULTI PLUG M-N-L UNI 9-POL. M	5
3718 7 9 1	MULTI PLUG M-N-L UNI 9-POL. F	5
3718 7 12	MULTI PLUG M-N-L UNI 12-POL. M	5
3718 7 12 1	MULTI PLUG M-N-L UNI 12-POL. F	5
3718 7 15	MULTI PLUG M-N-L UNI 15-POL. M	5
3718 7 15 1	MULTI PLUG M-N-L UNI 15-POL. F	5

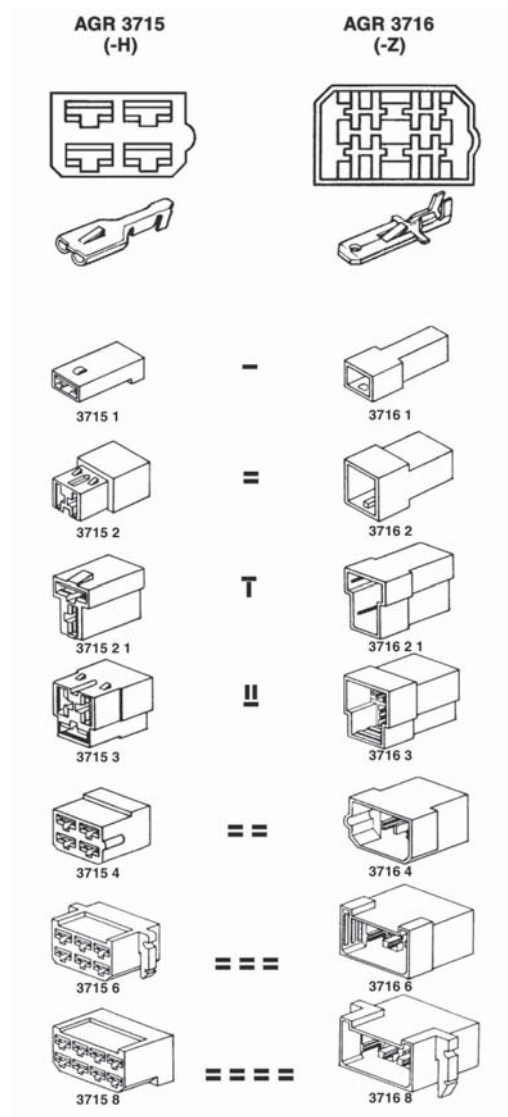


Multiple Plug Housings

- For male and female terminals with 6.3 mm width
- Made of polyamide, natural colour

Article No.	Article Description	QTY
3715 1	MULTIPLE PLUG HOUS.1 MALE CON.	z 25
3715 2	MULTIPLE PLUG HOUS.2 MALE CON.	z 25
3715 2 1	MULTIPLE PLUG HOUS.2 MALE C. T	z 25
3715 3	MULTIPLE PLUG HOUS.3 MALE CON.	z 25
3715 4	MULTIPLE PLUG HOUS.4 MALE CON.	z 25
3715 6	MULTIPLE PLUG HOUS.6 MALE CON.	z 25
3715 8	MULTIPLE PLUG HOUS.8 MALE CON.	z 25
3716 1	MULTIPLE PLUG HOUS.1 FEMALE	z 25
3716 2	MULTIPLE PLUG HOUS.2 FEMALE	z 25
3716 2 1	MULTI.PLUG HOUS.2 FEMALE T	z 25
3716 3	MULTI PLUG HOUSING 3 FEMALE	z 25
3716 4	MULTI PLUG HOUSING 4 FEMALE	z 25
3716 6	MULTI PLUG HOUSING 6 FEMALE	z 25
3716 8	MULTI PLUG HOUSING 8 FEMALE	z 25

MT= Male Terminal, FT = Female Terminal



Male/Female Connectors



Article No.	Article Description	QTY
3703 706	FEMALE CONN.+LUG 0.5-1.0 6.3	100
3703 707	FEMALE CONN.+LUG 1.5-2.5 6.3	100
3704 605	ELECTRONIC PLUG 605	100
3704 606	ELECTRONIC PLUG 606	100
3704 608	ELECTRONIC PLUG 608	100
3704 622	ELECTRONIC PLUG 622	100
3704 624	ELECTRONIC PLUG 624	100
3704 625	ELECTRONIC PLUG 625	100
3704 626	ELECTRONIC PLUG 626	100

Technical Data

Art. No.	Type	Cable dia. mm ²	Material
3703 706	Female connector	0.5 - 1.0	Brass plain
3704 608	Female connector	1.0 - 2.5	Brass silver-plated
3703 707	Female connector	1.5 - 2.5	Brass plain
3704 605	Female connector	4.0 - 6.0	Brass silver-plated
3704 606	Female connector	2.5 - 4.0	Brass tin-plated
3704 622	Male connector	4.0 - 6.0	Brass silver-plated
3704 624	Male connector	0.8 - 2.1	Brass tin-plated
3704 625	Male connector	0.8 - 2.1	Phosphor bronze tin-plated
3704 626	Male connector	0.8 - 2.1	Brass silver-plated

Waterproof Plug Connectors

- In compliance with IEC 529 and DIN 40050 IP 67
- Waterproof
- Suitable for use in automotive industry, agriculture, machine construction industry
- Assortment of waterproof plug connectors Part No. 9000 3718

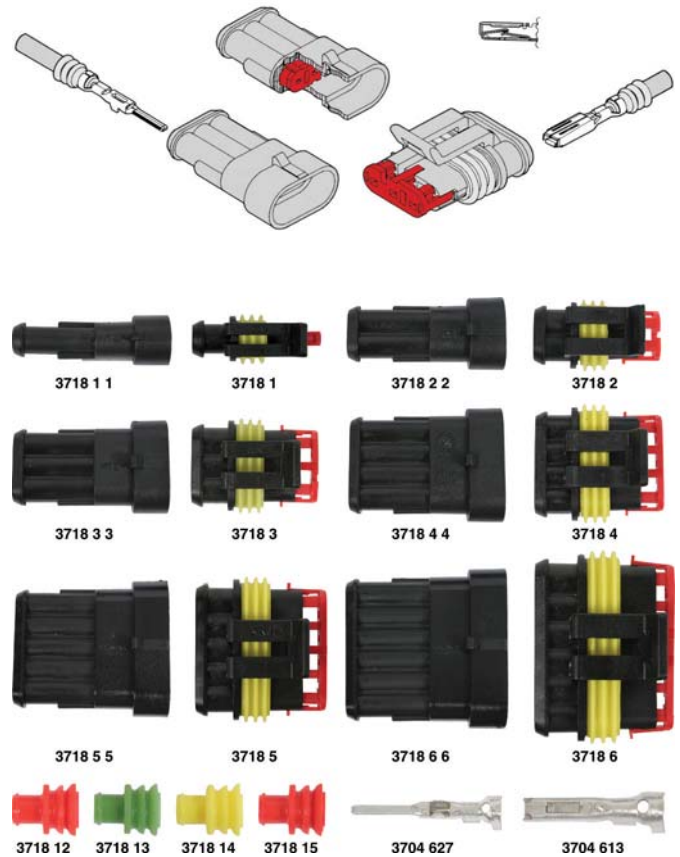
Technical Data

Socket contact material:	CuSn, tin-plated
Pin contact material:	CuSn, tin-plated
Housing material:	Polyamide 6.6
Gasket material:	Silicone
For cable:	0.5 - 1.5 mm ²
For insulation dia.:	1.4 - 3.3 mm
Max. voltage:	24 Volts
Max. current:	14 Amperes

Article No.	Article Description	QTY
3718 1	HOUSING F FEM CONN 1-POLE	e 10
3718 2	HOUSING F FEM CONN 2-POLE	e 10
3718 3	HOUSING F FEM CONN 3-POLE	e 10
3718 4	HOUSING F FEM CONN 4-POLE	e 10
3718 5	HOUSING F FEM CONN 5-POLE	e 10
3718 6	HOUSING F FEM CONN 6-POLE	e 10
3718 1 1	HOUSING F MALE CONN 1-POLE	e 10
3718 2 2	HOUSING F MALE CONN 2-POLE	e 10
3718 3 3	HOUSING F MALE CONN 3-POLE	e 10
3718 4 4	HOUSING F MALE CONN 4-POLE	e 10
3718 5 5	HOUSING F MALE CONN 5-POLE	e 10
3718 6 6	HOUSING F MALE CONN 6-POLE	e 10
3718 12	DUMMY PLUG	100
3718 13	GASKET GREEN 1.4-1.7MM	100
3718 14	GASKET YELLOW 1.8-2.4MM	100
3718 15	GASKET RED 2.6-3.3MM	100
3704 613	FEMALE CONTACT 0.5-1.5MM ²	100
3704 627	MALE CONTACT 0.5-1.5MM ²	100

Recommended Tools:

- Art. No. 3790 60 : Crimp pliers Basic grip
- Art. No. 3790 60 5: Tool head Superseal
- Art. No. 3794 910, Art. No. 3794 595: Releasing tool



Housing and Distribution Clutch MDK 3 PLUS

- 2-pole
- Special design for high operational safety
- with additional locking
- Pin-coded
- for splash-proof applications with seal and single wire gasket
- used in automotive industry, household appliances industry and industrial electronics
- material of plug-housing: PBT (thermoplastic)
temperature range: -50 °C to 140 °C
- clutch material: PA66
temperature range -40 °C to 100 °C
- gasket: MQ (methyl-silicone-rubber)
- VW AG OEM No. 6N0927997
- recommended crimp tool 3790 60 und 3790 60 5
- recommended release tool 3795 6 / 3794 250

Art.-No. 3703 8 20 1 and 3703 8 20 2:

- Female plug connector for Art.-No. 3718 20 2

Art.-No. 3704 543 and 3704 545:

- Single wire gasket for Art.-No. 3718 20 2



Article No.	Article Description	QTY
3718 20 2 3	COUPL.F.MDK3 INCL.HOUSING	f 100
3718 20 2	HOUSING MDK 3PLUS 2-POLE	fH 500
3703 8 20 1	CONT.MDK3PLUS2.8X0.8/0.5-1.0	100
3703 8 20 2	CONT. MDK3PLUS2.8X0.8/1.5-2.5	100
3704 543	WIRE SEAL MKR/S 2.5 BROWN	f 100
3704 545	WIRE SEAL MDK3PLUS1.2-2.1 BL	100



Heat Shrink Tubing SR 2:1

- **Shrinking rate 2:1**
- For cable and connector insulation as well as for bundling cables
- Protects against corrosion and mechanical influences e.g. in form of buckling protection and strain relief
- Modified polyethylene, irradiation cross-linked
- Colour: black
- Dielectric strength in compliance with VDE 0303, Part 2: 20 KV/mm min.
- Dielectric constant in compliance with DIN 53483, S. 2 + 3: 2.5 max.
- Self-extinguishing
- Application temperatures: -55°C to +125°C
- Spec. volume resistance acc. to VDE 0303, Part 3: 10¹⁴ Ohm x cm min.

Specifications:

- UL 224 Approved / E 107857
- CSA C 22.2 Approved / LR 66150
- MIL-/23053 / 5 Class 1

Article No.	Article Description	QTY
3730 12	KT(15M)HEAT SHRINK TUB.1.2/0.6	1
3730 16	KT(15M)HEAT SHRINK TUB.1.6/0.8	1
3730 24	KT(13M)HEAT SHRINK TUB.2.4/1.2	1
3730 32	KT(12M)HEAT SHRINK TUB.3.2/1.6	1
3730 48	KT(11M)HEAT SHRINK TUB.4.8/2.4	1
3730 64	KT(10M)HEAT SHRINK TUB.6.4/3.2	1
3730 95	KT(7M)HEAT SHRINK TUB.9.5/4.8	1
3730 127	KT(6M)HEAT SHRINK TUB.12.7/6.4	1
3730 190	KT(5M)HEAT SHRINK TUB.19.0/9.5	1
3730 254	KT(4M)HEAT SHRINK TUB.25.4/12.7	1
3731 24	HEAT SHRINK TUBE 100MM 2.4	g 100
3731 32	HEAT SHRINK TUBE 100MM 3.2	g 100
3731 48	HEAT SHRINK TUBE 100MM 4.8	g 100
3731 64	HEAT SHRINK TUBE 100MM 6.4	g 100
3731 95	HEAT SHRINK TUBE 100MM 9.5	g 100
3731 127	HEAT SHRINK TUBE 100MM 12.7	g 100
3731 190	HEAT SHRINK TUBE 100MM 19.0	g 100
3731 254	HEAT SHRINK TUBE 100MM 25.4	g 100



Technical Data

Dia. before shrinking mm	Dia. after max. shrinking mm	Thickn. before shrinking mm	Thickn. after max. shrinking mm
1.2	0.6	0.20	0.40
1.6	0.8	0.20	0.40
2.4	1.2	0.25	0.50
3.2	1.6	0.25	0.50
4.8	2.4	0.25	0.50
6.4	3.2	0.30	0.60
9.5	4.8	0.30	0.60
12.7	6.4	0.30	0.60
19.0	9.5	0.40	0.80
25.4	12.7	0.45	0.90
2.4	1.2	0.25	0.50
3.2	1.6	0.25	0.50
4.8	2.4	0.25	0.50
6.4	3.2	0.30	0.60
9.5	4.8	0.30	0.60
12.7	6.4	0.30	0.60
19.0	9.5	0.40	0.80
25.4	12.7	0.45	0.90

Heat Shrink Tube Assortment 2:1

- 2.4 - 25.4 = 120 pieces

Article No.	Article Description	QTY
9000 3731	ASSORTMENT SHRINK TUBES 2:1	1
9000R 3731	TRAY HEAT SHRINK TUBING	1

Contents:

Article No.	Article Description	Quantity
3731 24	HEAT SHRINK TUBE 100MM 2.4	25
3731 32	HEAT SHRINK TUBE 100MM 3.2	25
3731 48	HEAT SHRINK TUBE 100MM 4.8	20
3731 64	HEAT SHRINK TUBE 100MM 6.4	15
3731 95	HEAT SHRINK TUBE 100MM 9.5	15
3731 127	HEAT SHRINK TUBE 100MM 12.7	10
3731 190	HEAT SHRINK TUBE 100MM 19.0	5
3731 254	HEAT SHRINK TUBE 100MM 25.4	5



Unwinding Device

- For 6 dispenser boxes
- Suitable for shrink and braided tubing
- Not assembled
- Dimensions LxWxH: 313 x 183 x 260 mm

Article No.	Article Description	QTY
3730 1	UNWIND.DEV.F.SHRINK+BRAID.TUB.	1



Heat-Shrinking Hoses Red SR 2:1

Shrink rate 2:1 with internal hot-melt adhesive:

- For insulating cables and connectors, as well as cable bundling
- Protect from corrosion and mechanical influences e.g. from bend and strain relief
- Material: flexible, irradiated polyolefin
- Colour: red
- Self-extinguishing
- Operating temperatures: -55°C to +135°C
- Dielectric strength according to ASTM D 2671, 19.7 KV/mm
- Contact resistance according to ASTM D 876, 1x10¹⁴Ω-cm

Specifications:

- NF F 00-608, SNCF approval
- UL 224 approval / E328344
- MIL-I-23053 / 5 class 1 and 3



Article No.	Article Description	QTY
3731 1 48 120	PCK(5)HS HOSES RED 120CM 4.8	1
3731 1 64 120	PCK(5)HS HOSES RED 120CM 6.4	1
3731 1 127 120	PCK(5)HS HOSES RED 120CM 12.7	1

Technical Data

Ø after max. shrinkage	Wall thickness before shrinkage	Wall thickness after max. shrinkage
mm	mm	mm
2.4	0.26	0.43
3.2	0.32	0.56
6.4	0.32	0.56

Heat Shrink Tubing SR 3:1

Shrinking rate 3:1 with inside hot-melt adhesive

- For effective, liquid-proof insulation
- The high shrinking capacity compensates for major differences in diameter
- Self-extinguishing
- Application temperature: -55°C to +85°C
- Spec. volume resistance acc. to VDE 0303, Part 3: $3 \cdot 10^{13} \Omega \cdot \text{cm}$ min

Specifications:

- MIL-/23053/4 black
- AMS 3694

Article No.	Article Description	QTY
3732 3	KT(5M)HEAT SHRINK TUB.IK 3/1	1
3732 6	KT(3.5M)HEAT SHRINK TUB.IK 6/2	1
3732 9	KT(3M)HEAT SHRINK TUB.IK 9/3	1
3732 12	KT(2.5M)HEAT SHRIN.TUB.IK 12/4	1
3732 19	KT(2M)HEAT SHRINK TUB.IK 19/6	1
3732 24	KT(1.5M)HEAT SHRIN.TUB.IK 24/8	1
3733 3	HEAT SHRINK TUBING IK 100MM3/1	g 50
3733 6	HEAT SHRINK TUBING IK 100MM6/2	g 50
3733 9	HEAT SHRINK TUBING IK 100MM9/3	g 50
3733 12	HEAT SHRINK TUBING IK100MM12/4	g 50
3733 19	HEAT SHRINK TUBING IK100MM19/6	25
3733 24	HEAT SHRINK TUBING IK100MM24/8	25



Technical Data

Dia. before shrinking mm	Dia. after max. shrinking mm	Thickness before max. shrinking Adhesive mm	Thickness after max. shrinking Total mm
3	1	0.4	1.0
6	2	0.5	1.2
9	3	0.5	1.4
12	4	0.6	1.7
19	6	0.6	2.1
24	8	0.7	2.4
3	1	0.4	1.0
6	2	0.5	1.2
9	3	0.5	1.4
12	4	0.6	1.7
19	6	0.6	2.1
24	8	0.7	2.4

Heat Shrink Tubing - Package 3:1

- Shrinking ratio 3:1 with inside hot-melt adhesive
- For liquid-proof insulation
- Contains the 4 most common sizes

Article No.	Article Description	QTY
3732P 3	H SHRINK TUB.PACKAGE 3:1 III	1

Consists of:

- 1x Ø 3 mm x 5 / Ø 6 mm x 3.5 m / Ø 9 mm x 3 m / Ø 12 mm x 2.5 m



Heat Shrink Tubing 3:1 - Butt Connector Assortment

- 3 - 19 mm = 55 pieces, 0.5 - 6.0 mm² = 70 pieces

Article No.	Article Description	QTY
9000 3733	ASS.HEAT SHRINK TUBING 3:1 IK	1
9000R 3733	TRAY HEAT SHRINK TUBING 3:1 IK	1

Contents:

Article No.	Article Description	Quantity
3702 839	H SRNK BUTT CONNECT.BLUE 839	30
3702 840	H SRNK BUTT CONNECT.YELLOW 840	20
3702 841	H SRNK BUTT CONNECT.RED 841	20
3733 3	HEAT SHRINK TUBING IK 100MM3/1	20
3733 6	HEAT SHRINK TUBING IK 100MM6/2	10
3733 9	HEAT SHRINK TUBING IK 100MM9/3	10
3733 12	HEAT SHRINK TUBING IK100MM12/4	10
3733 19	HEAT SHRINK TUBING IK100MM19/6	5



Insulating Tubes, PVC

- Non-fabric
- According to DIN 40621
- Flame resistant

Article No.	Article Description	QTY
3735 3	RI(25M) INSULATING TUBE 3	1
3735 4	RI(25M) INSULATING TUBE 4	1
3735 5	RI(25M) INSULATING TUBE 5	1
3735 6	RI(25M) INSULATING TUBE 6	1
3735 8	RI(25M) INSULATING TUBE 8	1
3735 10	RI(25M) INSULATING TUBE 10	1
3735 12	RI(25M) INSULATING TUBE 12	1
3735 16	RI(25M) INSULATING TUBE 16	1
3735 20	RI(25M) INSULATING TUBE 20	1

Technical Data

Ø mm	Mat.thickness mm
3	0.4
4	0.5
5	0.6
6	0.6
8	0.7
10	0.7
12	0.8
16	1.0
20	1.2



Corrugated Tubing, Separable

- Can be opened and closed lengthwise at any time
- Ideal for protecting ignition cable and other conductions against gnawing damage
- Easy re-installation possible
- Outer dia. 13.6 mm
- Inner dia. 8.9 mm

Article No.	Article Description	QTY
3736 1010	RI(10M)CORRUG.TUB.10MM SEPARA.	1
3736 1025	RI(25M)CORRUG.TUB.10MM SEPARA.	1
3736 1050	RI(50M)CORRUG.PE 10MM PARTA.	1



Corrugated Tubing, Closed

- For protecting cables
- Certificated acc. to GGVS/ADR
- Material: polyamide 6, black
- Temperature resistance from -40°C to +120°C
- Resistant to fuel, mineral oil and grease

Article No.	Article Description	QTY
3736 4 1	RI(100M)CORR.TUB.NW4.5ADR/GGVS	1
3736 7 1	RI(50M)CORR.TUB. NW7.5ADR/GGVS	1
3736 8 1	RI(50M)CORR.TUB. NW8.5ADR/GGVS	1
3736 10 1	RI(50M)CORRU.TUB. NW10ADR/GGVS	1
3736 12 1	RI(50M)CORRU.TUB. NW12ADR/GGVS	1
3736 17 1	RI(50M)CORRU.TUB. NW17ADR/GGVS	1
3736 22 1	RI(50M)CORRU.TUB. NW22ADR/GGVS	1

Technical Data

OD	ID
7.0 mm	4.7 mm
10.0 mm	6.7 mm
11.5 mm	8.4 mm
12.8 mm	9.8 mm
15.7 mm	12.3 mm
21.1 mm	16.6 mm
25.5 mm	21.2 mm



Corrugated Pipe, Closed, Grey

- For the protection of piping
- GGVS/ADR tested
- Material: Polyamide 6
- Temperature resistance: -40 °C to +120 °C
- Resistant to fuels, mineral oils and grease

Article No.	Article Description	QTY
3736 12 2	RI(50M)CORRU.TUB. NW12ADR/GGVS	1
3736 22 2	RI(50M)CORRU.TUB.NW22 ADR/GGVS	1

Technical Data

Outer-Ø	Inner-Ø
15.7 mm	12.3 mm
25.5 mm	21.2 mm



Corrugated Tubing, Slotted

- For protecting cables
- Material: polyamide 6, black
- Temperature resistance from -40°C to +120°C
- Resistant to fuel, mineral oil and grease

Article No.	Article Description	QTY
3736 40 6	RO(25M)SLOT.CORRUG.TUBING 6MM	1
3736 40 9	RO(25M)SLOT.CORRUG.TUBING 9MM	1
3736 40 11	RO(25M)SLOT.CORRUG.TUBING 11MM	1
3736 40 13	RO(25M)SLOT.CORRUG.TUBING 13MM	1
3736 40 16	RO(25M)SLOT.CORRUG.TUBING 16MM	1
3736 40 19	RO(25M)SLOT.CORRUG.TUBING 19MM	1
3736 40 23	RO(25M)SLOT.CORRUG.TUBING 23MM	1
3736 40 26	RO(25M)SLOT.CORRUG.TUBING 26MM	1
3736 40 29	RO(25M)SLOT.CORRUG.TUBING 29MM	1
3736 40 33	RO(25M)SLOT.CORRUG.TUBING 33MM	1

Technical Data

OD	ID
9.6 mm	6.0 mm
13.5 mm	9.4 mm
15.7 mm	11.1 mm
18.5 mm	13.4 mm
21.2 mm	15.0 mm
24.0 mm	19.3 mm
28.7 mm	23.4 mm
31.0 mm	15.9 mm
33.9 mm	29.3 mm
38.2 mm	33.1 mm



Spiral Tubing

- For protection and bundling of cables
- Colour: black

Article No.	Article Description	QTY
3736 30 6	RO(25M)SPIRAL TUBE BLACK 6MM	1
3736 30 12	RO(25M)SPIRAL TUBE BLACK 12MM	1

(Outer dia. / bundling dia.)



Braided Sleeve

- To protect bundle cables, lines, wires and hoses
- Suitable for automotive, electrical industries and switch and system construction
- High abrasion protection
- High material strength
- UV-resistant
- Colour: black
- Can be cut cold - no special tool required



Article No.	Article Description	QTY
3737 5	CT(20M)BR.CABLE.SLEE.Ø 5.2-7MM	1
3737 10	CT(15M)BR.CABLE.SLE.Ø10.5-12MM	1
3737 15	CT(15M)BR.CABLE.SLE.Ø15.8-17MM	1
3737 25	CT(10M)BR.CABLE.SL.Ø25.14-25MM	1
3737 30	CT(10M)BR.CABLE.SL.Ø30.18-32MM	1
3737 40	CT(5M)BR.CABLE.SL.Ø40.30-55MM	1

(Nom. dia./application range)

Technical Data

Material:	Polyester PET (halogen and silicone-free)
Elongation range:	50 - 300%
Temperature resistance:	-50°C to +150°C for a short period +200°C
Melting point:	+250°C
Chemical resistance:	alkaline and slightly acidic material, oil, grease, fuel and diesel
Water absorption:	0.01% max.

Unwinding Device

- For 6 dispenser boxes
- Suitable for shrink and braided tubing
- Not assembled
- Dimensions LxWxH: 313 x 183 x 260 mm

Article No.	Article Description	QTY
3730 1	UNWIND.DEV.F.SHRINK+BRAID.TUB.	1



Insulating Fabric Tape

- Tested in compliance with VDE 0340 Part 2 DIN 40633, page 2
- Fabric tape made of spun rayon fabric with plastic coating, 0.3 mm thickness, weather resistant

Article No.	Article Description	QTY
3741 1	RO(25M)INSULAT.TAPE BLACK 25MM	1
3741 2	RO(25M)INSULAT.TAPE RED 25MM	1



Insulating Tape PVC

- Tested in compliance with VDE 0340 DIN EN 60454
- Soft PVC foil, 0.15 mm thickness
- Dielectric strength 6.5 KV, low flammability
- Resistant to ageing and temperature
- Resistant to diluted acids and bases

Article No.	Article Description	QTY
3740 1	RO(10M)ISOT.0.15X12MM VDE BLAC	e 10
3740 2	RO(10M)ISOT.0.15X12MM VDE RED	e 10
3740 3	RO(10M)VDE INS-TAPE 12MM GREEN	e 10
3740 4	RO(10M)ISOT.0.15X12MM VDE BLUE	e 10
3740 5	RO(10M)ISOT.0.15X12MM VDE YELL	e 10
3740 6	RO(10M)VDE INS-TAPE 12MM WHITE	e 10
3740 7	RO(10M)VDE INS-T.0,15X12MM GRE	e 10
3740 8	RO(10M)VDE INS-T.0,15X12MM BRO	e 10
3740 9	RO(10M)VDE INS-T.0,15X12MM VIO	e 10
3740 10	RO(10M)VDE INS-T.0,15X12MM ORA	e 10
3740 11	RO(25M)VDE INS-TAPE 19MM BLACK	e 10
3740 12	RO(25M)VDE INS-T.0,15X19MM RED	e 10
3740 13	RO(25M)VDE IN-T.0,15X19MM GREE	e 10
3740 14	RO(25M)VDE IN-T.0,15X19MM BLUE	e 10
3740 15	RO(25M)VDE IN-T.0,15X19MM YELL	e 10
3740 16	RO(25M)VDE IN-T.0,15X19MM WHIT	e 10
3740 17	RO(25M)VDE IN-T.0,15X19MM GREY	e 10
3740 18	RO(25M)VDE IN-T.0,15X19MM BROW	e 10
3740 19	RO(25M)VDE IN-T.0,15X19MM VIOL	e 16
3740 20	RO(10M)VDE IN-T.0,15X12GREE/GR	e 10
3740 21	RO(25M)VDE IN-T.0,15X19MM ORAN	e 10
3740 22	RO(25M)VDE IN-T.0,15X19GREE/GR	e 10
3740 30	RO(25M)VDE IN-T.0,15X30MM BLAC	e 5



Insulating Tape Set

Part No. 3740P 1:

- Tape width 12 mm, all colours

Part No. 3740P 2:

- Tape width 19 mm, all colours

Article No.	Article Description	QTY
3740P 1	BAG(11)INSUL.TAPE 12MMX10M VDE	1
3740P 2	BAG(11)INSUL.TAPE 19MMX25M VDE	1



Coroplast Insulating Tape

- Tested in compliance with VDE 0340/DIN 40633-K10
- Temperature resistant up to max. 90°C
- Dielectric strength 6 KV
- Soft PVC foil 0.1 mm thickness

Article No.	Article Description	QTY
3746 1	COROPL.RO(10M)0,10X15MM BLACK	20
3746 2	COROPL.RO(10M)0,10X15MM RED	20
3746 3	COROPL.RO(10M)0,10X15MM GREEN	20
3746 4	COROPL.RO(10M)0,10X15MM BLUE	20
3746 5	COROPL.RO(10M)0,10X15MM YELLOW	20
3746 6	COROPL.RO(10M)0,10X15MM WHITE	20
3746 7	COROPL.RO(10M)0,10X15MM GREY	20
3746 8	COROPL.RO(10M)0,10X15MM BROWN	20
3746 20	COROP.RO(10M)0,15X15MM GRE/YEL	20
3746 30	CO.RO(10M)0,10X30MM LIGHT GREY	20
3746 50	CO.RO(10M)0,10X50MM LIGHT GREY	e 12



Fabric Tape

- Cellular fabric with particularly tear strength, very high contact adhesion
- Used as original equipment on VW vehicles for bundling cables (cable harnesses)
- For reinforcing and protecting edges, e.g. coverings in motor vehicles



Article No.	Article Description	QTY
3741 19 50	RO(50M) FABRIC TAPE 19MM BLACK	1

Adhesive Tape - Fleece

- For manually made vehicle interior cable harnesses (VW original)
- 19 mm width, anti-noise, abrasion-proof PET fleece 0.30 thickness, with a natural rubber glue
- Adaptable, tear-proof, resistant to aging, strong adhesive and can be torn by hand
- Temperature resistant up to +105°C



Article No.	Article Description	QTY
3741 18 15	RO(15M)FLE.ADH.TAPE BLACK 19MM	e 16
3741 18 25	RO(25M)FLE.ADH.TAPE BLACK 19MM	e 16
3741 9 15	RO(15M)FLE.ADH.TAPE BLACK 9MM	e 35

Self-Vulcanising Tape

- Equivalent to MTL 1-3825
- Self-melting shrinking tape 0.5 mm thickness
- For connecting and sealing numerous insulating and cable materials, particularly at junctions, housings etc.
- As steam diffusion barrier on at pipes, hoses etc.
- Ideal as corrosion protection tape
- Extremely ductile and pliant, elongation at break 600%
- Spec. resistance 1013 Ohm
- Temperature resistance: -40°C to +90°C



Article No.	Article Description	QTY
3743 19	RO(10)VULCANIS.TAPE 19MM BLACK	1
3743 25	RO(10M)VULCANI.TAPE 25MM BLACK	1
3743 38	RO(10M)VULCANI.TAPE 38MM BLACK	1

Silicone Plaster Red /Black Each 3m

- High quality silicone plaster, independently cold-welded
- Forms a waterproof, UV-resistant, thermally resilient and airtight seal
- Ideal insulation in automotive electrical engineering
- Temperature resistant from -45°C to +200°C, short-term to 260°C
- Voltage-proof min 15 KV / mm
- Breadth: 25 mm



Article No.	Article Description	QTY
3791 50 19	PCK(2)SILIC PLAS R/BL 25 MM 3M	1

Insulated rubber drape

- Tested in accordance with VDE 0680/1
- Insulation in accordance with DIN EN 60903
- Largely tear and puncture resistant
- Specially suited to outside use

Technical Data

Art.-No.	Thickness mm	B mm	L mm	B
4997 130 130	1.0	130.0	130.0	
4997 250 350	1.0	250.0	350.0	
4997 500 500	1.0	500.0	500.0	
4997 600 600	1.0	600.0	600.0	
4997 10001000	1.0	1,000.0	1,000.0	
4997 12001200	1.0	1,200.0	1,200.0	



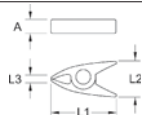
Article No.	Article Description	QTY
4997 250 350	RUB.TOWELS 1X 250X350MM	1
4997 500 500	RUB.TOWELS 1X 500X500MM	1
4997 600 600	RUB.TOWELS 1X 600X600MM	1
4997 10001000	RUB.TOWELS 1X 1000X1000MM	1
4997 12001200	RUB.TOWELS 1X 1200X1200MM	1

Insulated plastic clamp, small

- Insulated as per DIN EN 60900
- Extra short style
- With inserted steel spring
- For clamping drapes
- Made from plastic

Technical Data

Art.-No.	A mm	L1 mm	L2 mm	L3 mm
4997 480	15.0	80.0	44.0	10.0



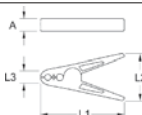
Article No.	Article Description	QTY
4997 4 80	PLASTIC CLAMP SMALL 80MM	1

Insulated plastic clamp, large

- Insulated as per DIN EN 60900
- Long style
- With inserted steel spring
- For clamping drapes
- Made from plastic

Technical Data

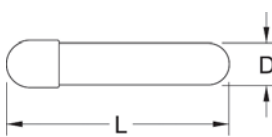
Art.-No.	A mm	L1 mm	L2 mm	L3 mm
4997 4 160	16.0	160.0	94.0	27.0



Article No.	Article Description	QTY
4997 4 160	PLASTIC CLAMP BIG 160MM	1

Insulating sleeve

- Dipped insulation as per DIN EN 60900
- For insulating cable ends and individual conductors
- Made from tough elastic insulating material
- With cross-section Cover Conical

Technical Data			
Art.-No.	D mm	L mm	
4997 6 10 75	17.5	80.0	
4997 6 20 100	26.0	100.0	
4997 6 30 120	35.0	115.0	



Article No.	Article Description	QTY
4997 6 10 75	SELF CLAMP SLEEVE 10X75MM	1
4997 6 20 100	SELF CLAMP SLEEVE 20X100MM	1
4997 6 30 120	SELF CLAMP SLEEVE 30X120MM	1

Meter grommet

- Dipped insulation as per DIN EN 60900
- For insulating individual conductors
- Conical
- Made from tough elastic insulating material

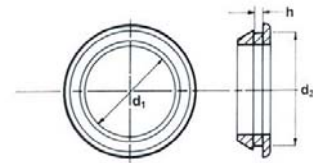
Technical Data			
Art.-No.	D mm	L mm	
4997 6 1 10 80	12.0	80.0	
4997 6 2 10 80	12.0	80.0	
4997 6 3 10 80	12.0	80.0	



Article No.	Article Description	QTY
4997 6 110 80	CO. SLEEVE #1 10X80MM	1
4997 6 210 80	CO. SLEEVE #2 10X80MM	1
4997 6 310 80	CO. SLEEVE #3 10X80MM	1

Grommets, One-sided

- Material: black PVC
- For protecting wires, cables and tubing passing through metal plates
- Snaps in quickly and cleanly



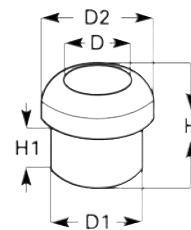
Article No.	Article Description	QTY
3780 10	GROMMET PVC 10MM	g 100
3780 11	GROMMET PVC 11MM	g 100
3780 12	GROMMET PVC 12MM	g 100
3780 14	GROMMET PVC 14MM	g 100
3780 16	GROMMET PVC 16MM	g 100
3780 18	GROMMET PVC 18MM	g 100
3780 20	GROMMET PVC 20MM	g 100
3780 22	GROMMET PVC 22MM	g 100
3780 26	GROMMET PVC 26MM	g 100
3780 28	GROMMET PVC 28MM	g 100

Technical Data

Art. No.	d2 mm	d1 mm	h mm
3780 10	10	6	1.5
3780 11	11	7	1.5
3780 12	12	8	1.5
3780 14	14	10	1.5
3780 16	16	12	1.5
3780 18	18	14	1.5
3780 20	20	16	1.5
3780 22	22	18	1.5
3780 26	26	22	1.5
3780 28	28	24	1.5

Cable Feed Glands, One-Sided

- Protect wires, cables and hoses when passing through metal plates
- Material: black NBR (nitrile-butadiene-rubber)



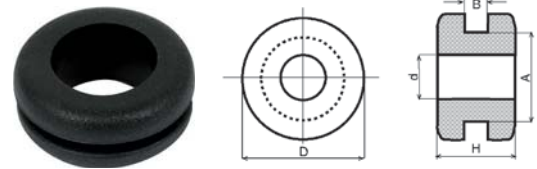
Article No.	Article Description	QTY
3780 1 14	CABLE FEED GLANDS ONE-SIZ 14MM	g 100
3780 1 16	CABLE FEED GLANDS ONE-SIZ 16MM	g 100
3780 1 18	CABLE FEED GLANDS ONE-SIZ 18MM	g 100
3780 1 20	CABLE FEED GLANDS ONE-SIZ 20MM	g 100

Technical Data

Art.-no.	D mm	D1 mm	D2 mm	H mm	H1 mm
3780 1 14	6	10	14	12	8
3780 1 16	8	11,5	16	13	9
3780 1 18	10	14	18	15	10
3780 1 20	12	17	20	17	11

Grommets, Double-Sided

- Material: black PVC
- For protecting wires, cables and tubing passing through metal plates
- Snaps in quickly and cleanly



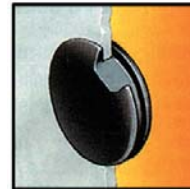
Article No.	Article Description	QTY
3785 6	GROMMET DOUBLE-SIDED 6MM/1,5	g 100
3785 9	GROMMET DOUBLE-SIDED 9MM/1	g 100
3785 10	GROMMET DOUBLE-SIDED 10MM/2	g 100
3785 11	GROMMET DOUBLE-SIDED 11MM/1	g 100
3785 12	GROMMET DOUBLE-SIDED 12MM/1,5	g 100
3785 19	GROMMET DOUBLE-SIDED 19,5MM/4	g 100
3785 21	GROMMET DOUBLE-SIDED 21MM/4	g 100
3785 21 1	GROMMET DOUBLE-SIDED 21MM/2	g 100
3785 24	GROMMET DOUBLE-SIDED 24MM/3	w 100
3785 30	GROMMET DOUBLE-SIDED 30MM/3,5	w 100
3785 31	GROMMET DOUBLE-SIDED 31MM/1,5	w 100

Technical Data

Art. No.	d mm	A mm	D mm	H mm	B mm
3785 6	4	6	10	5.5	1.5
3785 9	6	9	12	5	1
3785 10	6	10	14	8	2
3785 11	8	11	14	6	1
3785 12	10	12	17	7	1.5
3785 19	12	19.5	23	10	4
3785 21	16	21	28	10	4
3785 21 1	16	21	28	8	2
3785 24	15.5	24	32	9.5	3
3785 30	25	30	36	11	3.5
3785 31	21	31	38	11	1.5

Sealing Plug

- Material: black PVC
- Ideal for closing holes in metal sheets
- Acid-resistant
- Temperature resistant from -40°C to +135°C, temporary up to +150°C
- For max. sheet metal thickness of (h): 1.6 mm



Article No.	Article Description	QTY
3781 47	SEALING PLUG PVC 4.7MM	g 100
3781 64	SEALING PLUG PVC 6.4MM	g 100
3781 80	SEALING PLUG PVC 8.0MM	g 100
3781 95	SEALING PLUG PVC 9.5MM	g 100
3781 115	SEALING PLUG PVC 11.5MM	g 100
3781 125	SEALING PLUG PVC 12.5MM	g 100
3781 149	SEALING PLUG PVC 14.9MM	g 100
3781 155	SEALING PLUG PVC 15.5MM	20
3781 190	SEALING PLUG PVC 19.0MM	20
3781 200	SEALING PLUG PVC 20.0MM	20
3781 225	SEALING PLUG PVC 22.5MM	15
3781 254	SEALING PLUG PVC 25.4MM	10
3781 320	SEALING PLUG PVC 32.0MM	10
3781 382	SEALING PLUG PVC 38.2MM	20
3781 515	SEALING PLUG PVC 51.5MM	10

Technical Data

Art. No.	d2 mm	d1 mm	D mm
3781 47	4.7	9.3	9.3
3781 64	6.4	9.5	9.5
3781 80	8.0	10.6	14.2
3781 95	9.5	12.8	15.4
3781 115	11.5	15.5	17.0
3781 125	12.5	15.5	18.7
3781 149	14.9	18.4	20.3
3781 155	15.5	19.0	22.0
3781 190	19.0	22.1	25.5
3781 200	20.0	21.1	25.5
3781 225	22.5	27.0	28.4
3781 254	25.4	28.3	32.0
3781 320	32.0	35.4	38.2
3781 382	38.2	42.7	43.3
3781 515	51.5	52.6	57.5

Car Body - Plug

- Material: black thermoplastic rubber
- Quick fit
- Every size is suitable for many plate thicknesses
- Temperature resistant from -40°C to +130°C, short term up to 150°C



Article No.	Article Description	QTY
3783 10	BODY PLUG 10MM	g 100
3783 12	BODY PLUG 12MM	g 100
3783 14	BODY PLUG 14MM	g 100
3783 16	BODY PLUG 16MM	g 100
3783 18	BODY PLUG 18MM	g 100
3783 20	BODY PLUG 20MM	g 100
3783 22	BODY PLUG 22MM	20
3783 25	BODY PLUG 25MM	20
3783 30	BODY PLUG 30MM	g 100

Technical Data

Art. No.	For hole-Ø mm	h mm
3783 10	10	0.8 - 2.0
3783 12	12	0.8 - 2.0
3783 14	14	0.8 - 2.0
3783 16	16	0.8 - 2.0
3783 18	18	0.8 - 2.0
3783 20	20	0.8 - 2.0
3783 22	22	0.8 - 2.0
3783 25	25	0.8 - 2.0
3783 30	30	0.8 - 2.0

Spade Extraction Tool for Cable Connectors **ECO**

Technical Data

Art.-No.	Spade widthx Web width mm	For use with contactants	For use on vehicles
3795 1	4.7 x 0.8	Flat male contacts Junior-Power-Timer Standard-Power-Timer 2.8/3.3 mm, Junior-Timer	Passenger cars: BMW, VW/Audi, Opel, Ford, Daimler, Peugeot, Porsche, Skoda, Seat, Saab, Jaguar u.a. Trucks: Daimler, Deutz, Fendt Volvo, construction and agricultural machines
3795 2	4.5 x 0.7	Various channel entry widths in housing	Passenger cars: Opel, VW/Audi, Daimler, Ford
3795 3	5.0 x 0.9	Flat male contacts Junior-Power-Timer Standard-Power-Timer 5.8/6.3 mm VF-contacts 6.3	Passenger cars: BMW, VW/Audi, Opel, Ford Peugeot, Porsche, Daimler, Skoda, Seat u.a. Trucks: Deutz, Kässbohrer, MAN, construction and agricultural machines
3795 4	4.7 x 0.8	Standard-Power-Timer Junior-Power-Timer with asymmetric snap-in pin 2.8 mm	Passenger cars: VW/Audi, Opel, Renault, Skoda, Ford, Saab Truck: Iveco, Renault
3795 5	3.0 x 0.5	Flat male contact Micro-Timer II and III, DBGM	PKW: VW/Audi, Porsche, Opel, Daimler, Skoda, Seat, BMW, Saab, Ford, Jaguar, Renault Truck: MAN, Renault, Volvo
3795 6	4.6 x 0.8	Flat male contacts Junior-Power-Timer Standard-Power-Timer 1.5 and 2.8 mm	Passenger cars: BMW, VW/Audi, Opel, Ford, Daimler, Peugeot, Porsche, Skoda, Seat, Saab, Jaguar Truck: Daimler, Deutz, Fendt,



Article No.	Article Description	QTY
3795 1	1 ECO SPADE TOOL	1
3795 2	2 ECO SPADE TOOL	1
3795 3	3 ECO SPADE TOOL	1
3795 4	4 ECO SPADE TOOL	1
3795 5	5 ECO SPADE TOOL	1
3795 6	6 ECO SPADE TOOL	1

Hook Extraction Tool for Cable Connectors **ECO**

Technical Data

Art. No.	Web width mm	For use with contactants	For use on vehicles
3795 13	1.9 x 1.0	secondary locking	Passenger cars: Ford, Porsche, Jaguar, VW/Audi, Opel



Article No.	Article Description	QTY
3795 13	13 ECO HOOK EXTRACTION TOOL	1

Flat-Pin Tools for Cable Connectors **ECO**

Technical Data

Art. No.	Web width mm	For use with contacts	For use on vehicles
3795 7	1.8 x 1.0	Flat male contacts in housing with release channel 1.6 mm wide Ducon, Junior-Power-Timer	Passenger cars: BMW, Ford, Honda, Daimler, Opel, Porsche, Saab, Skoda, Seat, Toyota, VW/Audi, Jaguar Trucks: Atlas, Fendt, Iveco, Scania
3795 8	3.0 x 1.0	For detaching secondary locks Positive lock connector 6.3	Passenger cars: Ford, Daimler, Opel, VW/Audi, Peugeot, Jaguar
3795 9	1.0 x 1.0	Modu IV, Micro-Timer I, soldered round male connectors Metri Pack Sleeves 150 and 280	Passenger cars: Ford, Daimler, Opel, Peugeot, VW/Audi, Jaguar, Fiat, Mazda



Article No.	Article Description	QTY
3795 7	7 ECO FLAT-PIN TOOL	1
3795 8	8 ECO FLAT-PIN TOOL	1
3795 9	9 ECO FLAT-PIN TOOL	1

Pin-Type Tool for Cable Connectors **ECO**

Technical Data

Art. No.	Sleeve length x Ø x wall thickness mm	For use with contacts	For use on vehicles
3795 10	30 x 3.30 x 0.30	Circular contacts 1.6 mm Universal-MATE-N-LOK	Passenger cars: VW/Audi, BMW, Porsche, Daimler, Opel Trucks: Atlas, John-Deere, Kässbohrer, MAN, Daimler, Renault, Scania, Buses, Construction and agricultural machinery
3795 11	33 x 4.40 x 0.30	Circular contacts 2.5 mm	Passenger cars: BMW, Porsche, Skoda, Seat, Daimler, Saab, Jaguar, Trucks: Fendt, John-Deere, MAN, Daimler
3795 12	30 x 5.00 x 0.30	Circular contacts 3.5 mm 140 MATE-N-LOK	Passenger cars: VW/Audi, BMW, Daimler, Opel Trucks: DAF, Iveco, Kässbohrer, MAN, Daimler, Scania, Volvo, Buses, Construction and agricultural machinery



Article No.	Article Description	QTY
3795 10	10 ECO PIN-TYPE TOOL	1
3795 11	11 ECO PIN-TYPE TOOL	1
3795 12	12 ECO PIN-TYPE TOOL	1

Set of Extraction Tools **ECO**

- For releasing electronic plugs
- 13-part in plastic case Art. No. 4415 12 25 1 with VAROsoft contoured lining Art. No.9026 718

Article No.	Article Description	QTY
3795 90	ECO-SET EXTRACT.TOOL UNIVERSAL	1

Contents:

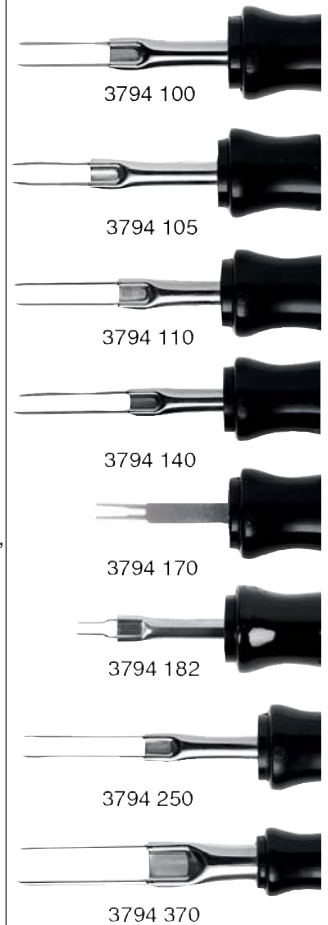
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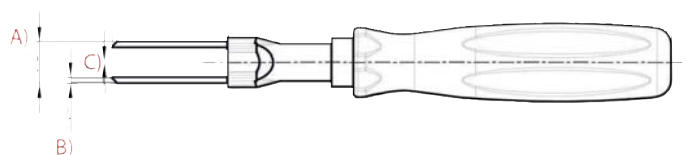
Spade Extraction Tools for Cable Connectors

Technical Data

Art. No.	Spade width x web width mm	For use with contacts	For use on vehicles
3794 100	4.7 x 0.8	Flat male contacts Junior-Power-Timer Standard-Power-Timer 2.8/3.3 mm, Junior-Timer	Passenger cars: BMW, VW/Audi, Opel, Ford, Daimler, Peugeot, Porsche, Skoda, Seat, Saab, Jaguar and more Truck: Daimler, Deutz, Fendt Volvo, construction and agricultural machinery
3794 105	4.5 x 0.7	Various channel entry widths in housing	Passenger cars: Opel, VW/Audi, Daimler, Ford Truck: Scania
3794 110	5.0 x 0.9	Flat male contacts Junior-Power-Timer Standard-Power-Timer 5,8/6,3 mm VF-contacts 6.3	Passenger cars: BMW, VW/Audi, Opel, Ford Peugeot, Porsche, Daimler, Skoda, Seat and more Truck: Deutz, Kässbohrer, MAN, construction and agricultural machinery
3794 140	4.7 x 0.8	Standard-Power-Timer Junior-Power-Timer with asymmetrical catch lugs 2.8 mm	Passenger cars: VW/Audi, Opel, Renault, Skoda, Ford, Saab Truck: Iveco, Renault
3794 170	3.0 x 0.5	Flat male contacts Micro-Timer II and III, DBGM	Passenger cars: VW/Audi, Porsche, Opel, Daimler, Skoda, Seat, BMW, Saab, Ford, Jaguar, Renault Truck: MAN, Renault, Volvo
3794 182	2.9 x 0.55	Flat male contacts with two asymmetrical catch lugs	Passenger cars: VW/Audi, Ford
3794 250	4.6 x 0.8	Flat male contacts Junior-Power-Timer Standard-Power-Timer 1,5 und 2,8 mm	Passenger cars: BMW, VW/Audi, Opel, Ford, Daimler, Peugeot, Porsche, Skoda, Seat, Saab, Jaguar and more LKW: Daimler, Deutz, Fendt, Volvo
3794 370	10.0 x 1.5	Flat male contacts 7.9 mm Maxi-Power-Timer, DGBM	Passenger cars: Daimler, BMW, Porsche, Opel, VW/Audi, Ford Truck: Volvo



Article No.	Article Description	QTY
3794 100	SPADE TOOL 100	1
3794 105	SPADE TOOL 105	1
3794 110	SPADE TOOL 110	1
3794 140	SPADE TOOL 140	1
3794 170	SPADE TOOL 170	1
3794 182	SPADE TOOL 182	1
3794 250	SPADE TOOL 250	1
3794 370	SPADE TOOL 370	1



Flat-Pin Tools for Cable Connectors

Technical Data

Art. No.	Web width mm	For use with contacts	For use on vehicles
3794 400	1.6 x 1.0	Flat male contacts in housing with release channel 1.6 mm wide Ducon, Junior-Power-Timer	Passenger cars: BMW, Ford, Honda, Daimler, Opel, Porsche, Saab, Skoda, Seat, Toyota, VW/Audi, Jaguar and more Truck: Atlas, Fendt, Iveco, Scania
3794 410	1.9 x 1.0	Flat male contacts in housing with release channel 1.9 mm wide Standard-Timer 5.8 mm	Passenger cars: BMW, Daimler, Ford, Opel VW/Audi, Porsche, Jaguar and more Truck: MAN
3794 420	2.7 x 1.0	Flat male contacts in housing with release channel 2.8 mm wide Fastin-Faston 2,8 Fastin-Faston 4,8 Fastin-Faston 6,3 Flat male connector decade plug, housings for female connectors	Passenger cars: Daimler, BMW, Peugeot, Porsche, Jaguar, Opel, VW/Audi, Ford Trucks and commercial vehicles
3794 425	3.0 x 1.0	For detaching secondary locks Positive lock connectors 6.3	Passenger cars: Ford, Daimler, Opel, VW/Audi, Peugeot, Jaguar
3794 592	0.6 x 1.0		Passenger cars: Opel, Peugeot
3794 595	1.0 x 1.0	Modu IV, Micro-Timer I, soldered round male connectors, Metri Pack sleeves 150 and 280	Passenger cars: Ford, Daimler, Opel, Peugeot VW/Audi, Jaguar, Fiat, Mazda



3794 400



3794 410



3794 420



3794 425



3794 592



3794 595

Article No.	Article Description	QTY
3794 400	FLAT PIN TOOL 400	1
3794 410	FLAT PIN TOOL 410	1
3794 420	FLAT PIN TOOL 420	1
3794 425	FLAT PIN TOOL 425	1
3794 592	FLAT PIN TOOL 592	1
3794 595	FLAT PIN TOOL 595	1

Hook Extraction Tool for Cable Connectors

Technical Data

Art. No.	Web width mm	For use with contacts	For use on vehicles
3794 910	1.6 x 1.0	Secondary lock	Passenger cars: Ford, Porsche, Jaguar, VW/Audi, Opel



3794 910

Article No.	Article Description	QTY
3794 910	HOOK EXTRACTION TOOL 910	1

Pin-Type Extraction Tool for Cable Connectors

Technical Data

Art. No.	Sleeve length x Ø x wall thickness mm	For use with contacts	For use on vehicles
3794 765	30 x 3.30 x 0.20	Round contacts 1.6 mm Universal-MATE-N-LOK	Passenger cars: VW/Audi, BMW, Porsche, Daimler, Opel Truck: Atlas, John-Deere, Kässbohrer, MAN, Daimler, Renault, Scania, busses, construction and agricultural machinery
3794 795	33 x 4.40 x 0.20	Round contacts 2.5 mm	Passenger cars: BMW, Porsche, Skoda, Seat, Daimler, Saab, Jaguar, Truck: Fendt, John-Deere, MAN, Daimler
3794 805	30 x 5.00 x 0.20	Round contacts 3.5 mm 140 MATE-N-LOK	Passenger cars: VW/Audi, BMW, Daimler, Opel Truck: DAF, Iveco, Kässbohrer, MAN, Daimler, Scania, Volvo, busses, construction and agricultural machinery
3794 815	34 x 6.50 x 0.20	Round contacts 4.0 mm ABS	Truck: DAF, Iveco, Kässbohrer, MAN, Daimler, Scania, Volvo, busses, construction and agricultural machinery



Article No.	Article Description	QTY
3794 765	PIN-TYPE TOOL 765	1
3794 765 1	REPLAC.SLEEVE F.PIN-TYPE T.765	1
3794 795	PIN-TYPE TOOL 795	1
3794 795 1	REPLAC.SLEEVE F.PIN-TYPE T.795	1
3794 805	PIN-TYPE TOOL 805	1
3794 805 1	REPLAC.SLEEVE F.PIN-TYPE T.805	1
3794 815	PIN-TYPE TOOL 815	1
3794 815 1	REMOV.SLEEVE F.PIN-TYPET.815	1
3794 815 2	MOUNT.SLEEVE F.PIN-TYPET.815	1

Set of Extraction Tools

Article No.	Article Description	QTY
3794 1	EXTRACTION TOOL UNIVERSAL CASE	1
3794 2	EXTRACTION TOOL SET CASE BMW	1
3794 3	EXTRACTION TOOL SET CASE FORD	1
3794 4	EX.TOOL SET CASE MERCEDES-BENZ	1
3794 5	EXTRACTION TOOL SET CASE OPEL	1
3794 9	EXTRACTION TOOL SET CASE VW	1

Contents, part no. 3794 1:

- ID-No. 100, 170, 250, 410, 425, 450, 595, 765, 795, 910

Contents, part no. 3794 2:

- ID-No. 110, 170, 182, 250, 400, 420, 425, 765, 795, 805

Contents, part no. 3794 3:

- ID-No. 100, 102, 112, 250, 410, 420, 425, 460, 595, 910

Contents, part no. 3794 4:

- ID-No. 110, 170, 240, 320, 326, 370, 400, 425, 765, 910

Contents, part no. 3794 5:

- ID-No. 110, 140, 170, 195, 400, 410, 425, 592, 765, 910

Contents, part no. 3794 9:

- ID-No. 100, 105, 140, 170, 182, 370, 400, 425, 430, 765



Unlocking Tool with Changer System **FÖRCH*******

- Unlocking tool for precise removal of electronic pins from the connector ranges MKR / MKS and VKR / VKS (for commercial vehicle range, art. no.: 9000 3704 5)
- Ergonomically shaped unlocking handle for optimum handling
- Changer system with the possibility to insert different blades
- Very high quality design, precise cut in OEM quality



Technical Data	
Handle (Art.-no. 3794 60)	
Weight:	approx. 26 g
Shaft shank:	Ø 5.2 mm
Surface:	steel, bronzed
Blade MKR / MKS (Art.-no. 3794 60 1)	
Weight:	approx. 10 g
Material:	spring steel
Blade distance:	3.10 mm
Blade VKR (Art.-no. 3794 60 2)	
Weight:	approx. 10 g
Material:	spring steel
Blade distance:	4.70 mm
Top of pipe VKS (Art.-no. 3794 60 3)	
Weight:	approx. 10 g
Material:	stainless steel
Internal pipe diameter:	4.00 mm
Fully recyclable:	RoHS (2002/95/EG)

Article No.	Article Description	QTY
3794 60	UNLOCKING TOOL BASIC GRIP 5*	1
3794 60 1	UNLOCKING BLADE MKR/MKS 5*	1
3794 60 2	UNLOCKING BLADE VKR 5*	1
3794 60 3	UNLOCKING TOP OF PIPE VKS 5*	1



Basic Crimping Pliers PEW 12 FORCH****

- special crimping pliers for crimping nearly all current crimp connectors with a core cross-section from 0,08 – 95 mm²
- guarantees exact, solderless, electrical connections
- parallel crimp jaws
- high crimping force due to effective force transfer
- adjustable crimping pressure
- with ratchet operation and emergency release
- effortless handling due to ergonomic centre of gravity
- single and two-handed operation possible
- exchangeable crimp dies available - see art.-no. 3790 70 ...
- multiple combinations possible



Your Advantage / Benefit

- crimping with OEM quality
- wide range of applications
- perfect handling
- optimal leverage
- low grip width

Application

- in electrical installations
- automotive electrical repairs
- vehicle and trailer construction



Article No.	Article Description	QTY
3790 70	BASIC CRIMPING PLIERS PEW12 5*	1

(Continued on next page)

Dies for basic crimping pliers PEW 12 **FÖRCH*******



- Accessoires for basic crimping pliers PEW 12

Art.-No. 3790 70 32: suitable for art.-no. 3705 4 4 1 – 3705 4 12 10

Art.-No. 3790 70 33: suitable for art.-no. 3705 4 5 16 – 3705 4 12 250

Art.-No. 3790 70 45: suitable for various articles of AGR 3703 / 3704

Art.-No. 3790 70 45 1: suitable for various articles of AGR 3703 / 3704

Art.-No. 3790 70 50: suitable for various articles of AGR 3703 / 3704

Art.-No. 3790 70 50 1: suitable for various articles of AGR 3703 / 3704

Art.-No. 3790 70 60: suitable for various articles of AGR 3700 / 3709

Art.-No. 3790 70 60 3: suitable for various articles of AGR 3702

Art.-No. 3790 70 60 6: suitable for various articles of AGR 3702, especially for Art.-No. 3702 842

Art.-No. 3790 70 71: suitable for turned contacts 0.14 to 4.0 mm²

Art.-No. 3790 70 71 1: connector adapter suitable for turned contacts of types such as Harting, Ilme, HTS and similar

Art.-No. 3790 70 100: Crimping die for coaxial connectors, cable RG58/59 and RG62 / 71

Art.-No. 3790 70 159: Crimping die for coaxial connectors, cable RG58, RG174, RG316 and RG188

Art.-No. 3790 70 699: suitable for TE ABS /EBS plug and socket contacts, Art.-No. 3833 24 14, 3833 24 16, 3833 24 18 and 3833 24 20

Art.-No. 3790 70 730: suitable for TE MATE-N-LOK contacts, Art.-No. 3704 638, 3704 639, 3704 648 and 3704 649

Art.-No. 3790 70 742: suitable for various articles of AGR 3703/3704

Art.-No. 3790 70 745: suitable for various article of AGR 3703/3704, especially for angle plug Art.-No. 3704 663 and 3704 664

Art.-No. 3790 70 773: suitable for TE Super-Seal contacts up to 1.5 mm² / Art.-No. 3704 627 and 3704 613 (Art.-No. Assortment: 9000 37 18)

Article No.	Article Description	QTY
3790 70 32	PEW12 DIES 032 CRIMP.PLIERS 5*	1
3790 70 33	PEW12 DIES 033 CRIMP.PLIERS 5*	1
3790 70 45	PEW12 DIES 045 CRIMP.PLIERS 5*	1
3790 70 45 1	PEW12 CONTACT FOR 045 5*	1
3790 70 50	PEW12 DIES 050 CRIMP.PLIERS 5*	1
3790 70 50 1	PEW12 CONTACT ADAPTER F.050 5*	1
3790 70 60	PEW12 DIES060 C-CRIMP. 5*	1
3790 70 60 3	PEW12 DIES 060-3 OVAL-CRIMP 5*	1
3790 70 60 6	PEW12 DIES060-6 OVAL CRIMP 5*	1

Article No.	Article Description	QTY
3790 70 71	PEW12 DIES 071 V-CRIMP 5*	1
3790 70 71 1	PEW12 CONTACT ADAPTER F.071 5*	1
3790 70 100	PEW12 DIES 100 COAX.CRIMP 5*	1
3790 70 159	PEW12 DIES 159 COAX.CRIMP 5*	1
3790 70 699	PEW12 DIES 699 O-F CRIMP 5*	1
3790 70 730	PEW12 DIES 730 F-CRIMP MNL 5*	1
3790 70 742	PEW12 DIES742 90° F-CRIMP 5*	1
3790 70 745	PEW12 DIES745 90° F-CRIMP 5*	1
3790 70 773	PEW12-GESENK773 SUPER-SEAL 5*	1

Related Products

- Crimp terminals without insulation
Art.-No. 3705 4 4 1 – 3705 4 12 10



- Electronics: spade
AGR 3704



(Abbildung zeigt eine kleine Auswahl aus unserem Steckersortiment)

- Crimp terminals without insulation
Art.-No. 3705 4 5 16 – 3705 4 12 250



- Heat shrinkable cable connector
AGR 3702



Crimping Pliers f. Plug Connector Commmerc. Vehicle



- High-quality crimping pliers for optimum assembly of connectors for commercial vehicles (range: Art.-no. 9000 3704 5)
- For connector ranges MKR / MKS 0.35 - 2.5 mm² and VKR / VKS 0.5 - 2.5 mm²
- Perfectly cut crimp profile for highest precision of workmanship
- Linear hub enables optimum crimping results
- Contact positioning with insulation stop plate
- Comfortable to use as it has automatic opening mechanism
- Handles are ergonomically shaped
- Low operating forces
- Interchangeable tool, only the basic handle is required

Technical Data	
Surfaces:	bronzed
Length tool head / basic grip:	approx. 65 / 150mm
Wide tool head / basic grip:	approx. 37 / 65 mm
Weight tool head / basic tool:	approx. 115 / 210g
Contact type:	MKR / MKS – VKR / VKS
Fully recyclable:	RoHS (2002/95/EG)

Article No.	Article Description	QTY
3790 60 1	W-HEAD MKR/S 0,35-1,5MM ² 5*	1
3790 60 2	W-HEAD MKR/S+VKS 0,5-2,5MM ² 5*	1
3790 60 3	W-HEAD VKR 0,5-2,5MM ² 5*	1
3790 60	CRIM PLIERS BASIC GRIP CS10 5*	1



Automatic Cable Connector Crimping Pliers

- Double crimping in one operation
- Quick pressure adjustment
- Does not open until required pressure is reached

Technical Data

Art. No. Application range

3790 1	Insulated cable connectors 0.75 - 6.0 mm ²
3790 2	Uninsulated cable connectors 0.75 - 6.0 mm ²
3790 20	Uninsulated cable connectors 0.1 - 1.5 mm ²

Article No.	Article Description	QTY
3790 1	CRIMP TOOL FOR INSULATED CNCTR	1
3790 2	CRIMP TOOL FOR UN-INSUL. CNCTR.	1
3790 20	PLIERS F UNINSUL CON.0.1-1.5MM	1



3790 1



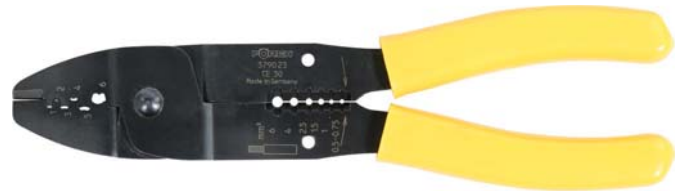
3790 2



3790 20

Crimping Pliers for Uninsulated Plugs

- For crimping of non-insulated contacts in original quality
- With 6 crimp profiles of 0.5 - 6.0 mm² cable cross section
- High quality and exact crimp profile for good crimping between contact plugs and lead
- Optimum forged cutting edge to separate cables
- Stripping function for lead cross section 0.5 - 6.0 mm²
- Handles are plastic coated

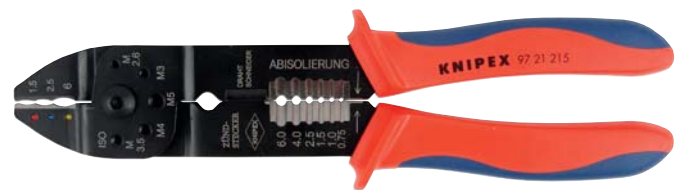


Technical Data

Surfaces:	bronzed
Material thickness:	3 mm
Length:	approx. 225 mm
Width:	approx. 60 mm
Weight:	approx. 200 g
Crimp height and breadth:	depends on manual force
Fully recyclable:	RoHS (2002/95/EG)

Crimping tongs for insulated plug-in contacts

- for cutting cables and stripping wires
- crimping of insulated cable lugs and plug connectors in the cross sections 0.75 – 6.00 mm² and #178;
- with threaded hose for trimming threaded copper pins with M2.6; M3; M3.5; M4 and M5
- screwed joint for high stability and even operation
- 2-component handle for tireless work



Technical Data

Material:	special steel, high-strength
Surface:	burnished
Material thickness:	4 mm
Length:	230 mm
Width:	approx. 60 mm
Weight:	290 g
Crimping height and width:	depends on hand strength

Article No.	Article Description	QTY
3790 24	CRI.TONG.INSU.PROFI 0.75-6MM ²	1 s

Crimping Pliers

- With cable cutter and stripping mechanism
- Screw cutter with thread M 2.6 - M 5



3790 10



3790 11



3790 21

Article No.	Article Description	QTY
3790 10	CRIMP PLIERS UNIVERSAL	1 s
3790 11	CRIMP PLIERS INSULATED 900	1 z
3790 21	CRIMP PLIERS UNINSULATED 700	1

Technical Data

Art. No. Application range

3790 10	Insulated and Uninsulated cable connector
3790 11	Insulated cable connector 0.75 - 6.0 mm ²
3790 21	Uninsulated cable connector 0.75 - 6.0 mm ²

Crimping pliers set

- With 5 replaceable jaws
- Crimping inserts can be changed quickly without tools
- Ratchet mechanism



Article No.	Article Description	QTY
3790 13	CRI.PLIE.SET W. 5PAIRS OF JAWS	1

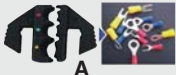
Your Advantage / Benefit

- Universal and practical tool for the craftsman
- Ergonomic 2K handle
- With emergency release and forced opening
- Good transmission ratio > little effort required

Application

A: Insulated cable lugs

- AWG 22 – 18/16 – 14/12 – 10
- DIN 0.5 – 1.0/1.5 – 2.5/4 – 6 mm



B: Closed, non-insulated cable lugs

- AWG 20 – 18/16 – 14/12 – 10/8
- DIN 1.5/2.5 / 6 / 10 mm
- JIS 1.25 / 2 / 5.5 / 8 mm



C: Open, non-insulated cable lugs

- AWG 22 – 18/16 – 14/12 – 10
- DIN 0.5 – 1.0/1.5 – 2.5/4 – 6 mm



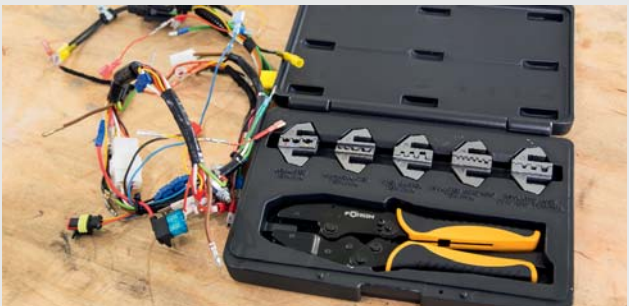
D: Small, insulated wire-end ferrules

- AWG 22 – 18/16 – 14/12 – 10
- DIN 0.5 / 0.75 / 1.0 / 1.5 / 2.5 / 4.0 mm



F: Large, insulated wire-end ferrules

- AWG 10 / 8 / 6
- DIN 6.0 / 10.0 / 16.0 mm



Related Products

- Wire Stripper ERGO-matric **FÖRCH** Art.-No. 3790 32



- Set of Multicore Cable End, non-insulated Art.-No. 3719 3711



Replacement Blades

Article No.	Article Description	QTY
3790 13 1	REPLACEMENT BLADES A.F.3790 13	1
3790 13 2	REPLACEMENT BLADES B.F.3790 13	1
3790 13 3	REPLACEMENT BLADES C.F.3790 13	1
3790 13 4	REPLACEMENT BLADES D.F.3790 13	1
3790 13 5	REPLACEMENT BLADES F.F.3790 13	1



Wire Stripper ERGO-matric FORCH*****

- For fast and precise stripping of flexible and rigid cable
- No damage to the wires
- Optimum blade geometry for a robust and long-lasting use
- Ergonomic grip design with a protective function for cable cutter (no risk of injury)
- Fully automatic Adaption to single-, multi- and fine-wired conductor with PVC insulation and a variety of special insulation in entire capacity range from 0.03 to 10.0 mm²
- Metal clamping jaws for reduced war
- With recessed cable cutter for copper and Aluminium conductors, multi-wired to 10.0 mm² and single-wired to 6.0 mm²
- Length stop easily adjustable and replaceable
- Replaceable blade head



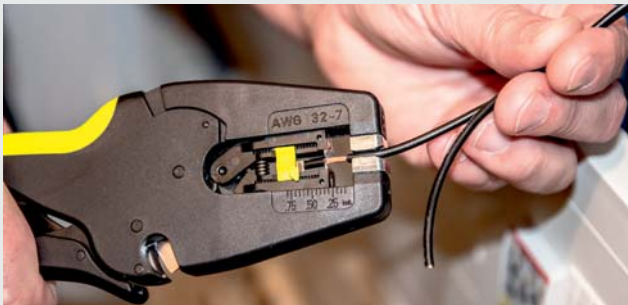
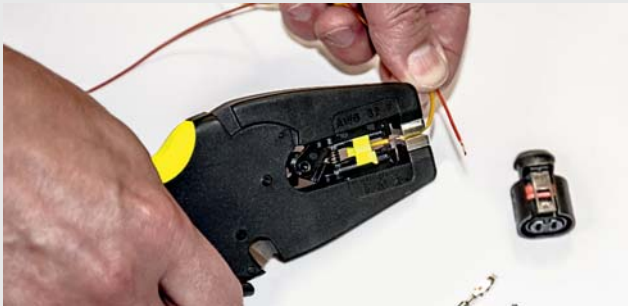
Article No.	Article Description	QTY
3790 32	WIRE STRIPPER ERGO-MATIC 5*	1
3790 32 1	PAIR REPL.BLADES F.WIRE STRIP.	1
3790 32 2	LENGTH STOP F.WIRE STRIPPER	1

Your Advantage / Benefit

- Ergonomic and energy-saving stripping
- Very fast and precise handling by fully automatic adaption to the cable
- Stripped of a plurality of conductor insulation in the range from 0.03 - 10 mm²
- Recessed cable cutter for safe use
- Durable and robust cutter head

Application

- In electrical installation
- Wiring of control cabinets
- General maintenance and repair work
- Automotive electrical



Related products

- Multi Core Cable 13 x 1.5
Art.-No. 3723 13 15



- Cable FLRY
Art.-No. 3725 05



- Set of Multicore Cable End, Non-insulated
Art.-No. 3719 3711



Multicore Cable End Crimping Pliers square **FÖRCH**★★★★

- Automatic square-end crimping tool with side insertion
- Ergonomic designed 2 component grip with high Translation for effort-less crimping
- 4 profiled large crimping surface for a lower contact resistance
- Approx. 20 % reduced average effort compared to competitive products
- Targeted and defined casting of the multicore cable end sleeve by geometric exact crimping shape, improves the conductance junction

Your Advantage / Benefit

- Ergonomic and energy-saving stripping
- Very fast and precise handling by fully automatic adaptation to the cable
- Stripped of a plurality of conductor insulation in the range from 0.03 - 10 mm²
- Recessed cable cutter for safe use
- Durable and robust cutter head



3790 14



3790 15

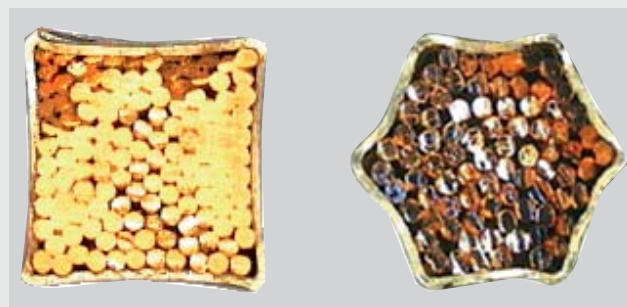
Technical Data

Art.-No.:	3790 14	3790 15
Material:	Blued tool steel	Blued tool steel
Length:	180 mm	180 mm
Weight:	380 g	380 g
Cross section:	0,08 – 16,0 mm ²	0,08 – 10,0 mm ²
Crimping profile:	Square	Hexagonal

Article No.	Article Description	QTY
3790 14	CABL.E.CRIMP.PLIERS SQUARE 5*	1
3790 15	CABL.E.CRIMP.PLIERS HEX.5*	1

Application

- In electrical installation
- Wiring of control cabinets
- General maintenance and repair work
- Automotive electrical



Related products

- **Multi Core Cable 13 x 1.5**
Art.-No. 3723 13 15



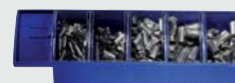
- **Cable FLRY**
Art.-No. 3725 05



- **Wire Stripper ERGO-matric**
Art.-No. 3790 32



- **Set of Multicore Cable End, Non-insulated**
Art.-No. 3719 3711



Wire e.sl.cr.tool Square front infeed **FÖRCH*******

- Automatic square crimping pliers with front infeed
- Art.-No. 3790 16**
- For cross-sections 0.08 – 16 mm²
- Art.-No. 3790 17**
- For cross-sections 0.08 – 10 mm² front infeed and side infeed up to 2.5 mm²
 - Ergonomically designed 2-component handle with high reduction ratio for fatigue-free crimping
 - 4 profiled large crimp areas for low transmission resistance
 - Targeted, defined forming of the wire end sleeves as a result of geometrically precise crimp shape, which improves conductivity in the contact
 - Simple to use in restricted areas
 - Self-setting adjustment to the desired wire end sleeve size

Technical Data		
Art.-No.:	3790 16	3790 17
Material:	Blued tool steel	Blued tool steel
Length:	190 mm	190 mm
Weight:	475 g	475 g
Cross section:	0,08 – 16,0 mm ²	0,08 – 10,0 mm ²
Side infeed:	-	Up to max. 2.5 mm ²
Crimping profile:	Square	Square

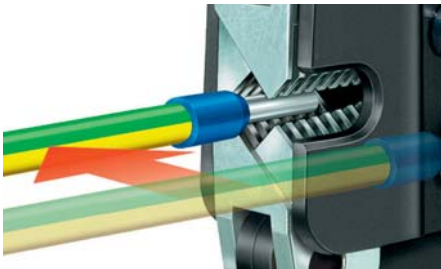
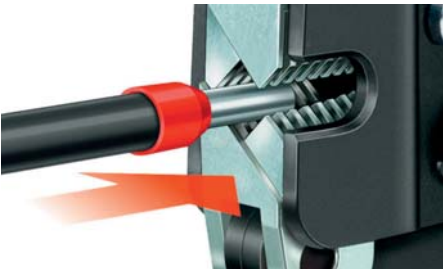


3790 16



3790 17

Article No.	Article Description	QTY
3790 16	WIRE E.SL.CR.T.SQUARE FRONT 5*	1
3790 17	WIRE E.SL.CR.T.SQUARE FRONT 5*	1



Automatic Wire Stripper with Wire Cutter

- Adjusts automatically to conductor cross-section
- With adjustable length stop (8-12 mm)
- Easily accessible wire cutter (up to max. 2 mm dia.)

Technical Data

Cable cross-section: 0.2 - 6 mm²

Article No.	Article Description	QTY
3790 31	AUTOMATIC WIRE STRIPPER/CUTTER	1



Automatic Wire Stripper

- Automatically adjusts cutting depth to insulation thickness
- Strips in one operation without damaging the conductor
- With wire cutter and spring for an exact cable guidance
- With crimping mechanism for insulated and uninsulated conductor end sleeves

Technical Data

Cable cross-section: 0.13-6.0 mm²

Article No.	Article Description	QTY
3790 3	AUTOMATIC WIRE STRIPPERS	1 z



Multicore Cable End Pliers with Lock System

- Locking device for correct and complete crimping
- Crimping form in compliance with DIN 46228

Technical Data

Art. No.	Crimping range	Length	Crimping direction
3790 5	0.5 - 2.5 mm ²	200 mm	front and sidewise
3790 6	4 - 16 mm ²	200 mm	sidewise

Article No.	Article Description	QTY
3790 5	MULT.C.END PL.W.LOC.DE.0.5-2.5	1
3790 6	MULTI.C.END PL.W.LOCK.DEV.4-16	1



Multicore Cable End Pliers

Technical Data

Crimping range: 0.5 - 16 mm²
Crimping direction: lengthwise

Article No.	Article Description	QTY
3790 4	MULTICORE CABLE END PLIERS 143	1 s



Electronic Super Knips Knipex **FÖRCH*******

- Precision pliers for fine cutting operations, such as in electronics and precision engineering
- Ground, very sharp cutting edges without bevel for flush cutting
- Precisely shaped tips cut even flat-lying wires from Ø 0.2 mm
- Joint with stainless steel rivet
- Cutting edges additionally induction-hardened
- Extremely easy cutting for fatigue-free work
- With opening spring and opening limiter
- INOX – stainless steel
- Cutting edge hardness approx. 54 HRC

Art.-No. 4010 125 1 5:

- Cutting edge additionally induction-hardened, cutting edge hardness approx. 64 HRC
- Also suitable for cutting glass fibre cables (fibre optic)

Article No.	Article Description	QTY
4010 125 5	ELECTR.SUPER KNIPS 125MM 5*	1 s
4010 125 1 5	ELECTR.SUPER KNIPS1 125MM 5*	1 s



4010 125 5



4010 125 1 5

Electro-Multifunctional Pliers **FÖRCH*******

- Ergonomic anti-slip soft handle
- 3 functions: cutting, stripping, pressing
- Inductively hardened precision cutting for finest wires
- Stripping of 1.5 mm² to 2.5 mm² for single and stranded wires

Article No.	Article Description	QTY
4010 190 5	ELEC.SIDE/INS.PLIER 190MM 5*	1 s



Electrician's Needle Nosed Pliers

- 4 functions: gripping, cutting, stripping, crimping
- Strips conductors from 1.5 mm² to 2.5 mm²

Article No.	Article Description	QTY
3790 160	ELEC.NEEDLE-NOS./INS.PL. 160MM	1 s



Electrician’s Cable Knife

- Working range Ø 8 - 28 mm
- With hook blade
- Spare blade inside the handle
- Especially for cables moist atmospheres
- Dimensions: LxWxH 170 x 30 x 20 mm
- Weight: 87 g

Article No.	Article Description	QTY
3790 53	ELECTR.CABLE KNIFE NO.28H	1



Electrician’s Cable Jacket Remover

Part No. 3790 49:

- For fast and simple removal of jacket on all common coaxial cable Ø 4.8 – 7.5 mm, including PVC-Flex 3 x 0.75 mm²
- With 5 -20 mm length scale
- Length 100 mm
- Ø 15 mm
- Weight: 23 g

Part No. 3790 50:

- Inner blade for removing jacket on cables with Ø 8 - 13 mm and stripping insulation from conductors with sizes of 0.2 - 4.0 mm²
- No adjustment required
- With longitudinal cutter and stripping mechanism
- Length 125 mm
- Ø 25 mm
- Weight: 48.5 g

Article No.	Article Description	QTY
3790 49	CABLE JACKET REMOVER	1
3790 50	CABLE JACKET REMOVER NO.15	1



Circuit Breakers Standard 1170

- Single-pole, thermal-type automotive circuit breakers, miniature design with coloured manual release and reset button
- With quick release mechanism and independent trip for reliable switching
- Can be plugged into automotive flat fuse holders
- For fusing vehicle electrical systems and devices in cars, trucks, buses, boats and construction machines
- Pushbutton for switching electric circuit on and off
- Ideal for installation and repair of electrical systems
- Saves fuses when searching for short-circuits

Art. No. 3817V 91:

- 7-piece in VAROsoft system tray



Article No.	Article Description	QTY
3817V 91	CIR.BREAK.SET STAND.1170 12/24V	1
3817 5	CIRCUIT BREAKER STAND.1170 5A	1
3817 7 5	CIRCUIT BREAKER STAND.1170 7.5A	1
3817 10	CIRCUIT BREAKER STAND.1170 10A	1
3817 15	CIRCUIT BREAKER STAND.1170 15A	1
3817 20	CIRCUIT BREAKER STAND.1170 20A	1
3817 25	CIRCUIT BREAKER STAND.1170 25A	1
3817 30	CIRCUIT BREAKER STAND.1170 30A	1

Contents Art. No. 3817V 91:

Article No.	Art. Description	Quantity
3817 5	CIRCUIT BREAKER STAND.1170 5A	1
3817 7 5	CIRCUIT BREAKER STAND.1170 7.5A	1
3817 10	CIRCUIT BREAKER STAND.1170 10A	1
3817 15	CIRCUIT BREAKER STAND.1170 15A	1
3817 20	CIRCUIT BREAKER STAND.1170 20A	1
3817 25	CIRCUIT BREAKER STAND.1170 25A	1
3817 30	CIRCUIT BREAKER STAND.1170 30A	1

Technical Data

Rated voltage:	12 / 24 Volt
Dimensions:	52 x 10 x 22 mm

Caution:

The reset button may not be blocked. Reset button and manual release may only be used during current-free state!

Automatic Safety Devices with Safety Latches 1170

- Shock and vibration resistant due to the safety latches
- Small, unipolar, thermal automatic circuit breaker with coloured manual release and reset button
- Reliable switching behaviour due to the spring-loaded snap mechanism and restricted trip-free mechanism
- Can be plugged into the car's flat push-in fuse holder
- Protection of electrical systems and devices in cars, trucks, buses, boats and construction machinery
- Circuit can be closed and separated by pressing a button
- Ideal for installation and repair work on electrical appliances
- Saves fuses when looking for short circuits

Art. No. 3817V 95:

- 7 pieces in VAROsoft system insert



Article No.	Article Description	QTY
3817V 95	CIR.BREAK.SET 1170 12/24	1
3817 3 5	CIRCUIT BREAKER 1170 3A	1
3817 4 5	CIRCUIT BREAKER 1170 4A	1
3817 5 5	CIRCUIT BREAKER 1170 5A	1
3817 6 5	CIRCUIT BREAKER 1170 6A	1
3817 7 5 5	CIRCUIT BREAKER 1170 7.5A	1
3817 8 5	CIRCUIT BREAKER 1170 8A	1
3817 10 5	CIRCUIT BREAKER 1170 10A	1
3817 15 5	CIRCUIT BREAKER 1170 15A	1
3817 20 5	CIRCUIT BREAKER 1170 20A	1
3817 25 5	CIRCUIT BREAKER 1170 25A	1
3817 30 5	CIRCUIT BREAKER 1170 30A	1

Contents Art. No. 3817V 95:

Article No.	Art. Description	Quantity
3817 5 5	CIRCUIT BREAKER 1170 5A	1
3817 7 5 5	CIRCUIT BREAKER 1170 7.5A	1
3817 10 5	CIRCUIT BREAKER 1170 10A	1
3817 15 5	CIRCUIT BREAKER 1170 15A	1
3817 20 5	CIRCUIT BREAKER 1170 20A	1
3817 25 5	CIRCUIT BREAKER 1170 25A	1
3817 30 5	CIRCUIT BREAKER 1170 30A	1

Technical Data

Nominal voltage:	12 / 24 volt
Dimension:	52 x 10 x 22 mm

Warning:

- The reset button must not be blocked. Reset button and manual release must only be used when the power is disconnected!

Plug-In Socket 1-Fold for Automatic Safety Devices

- Suitable for safety devices 1616 and 1170
- 1 x flat plug 6.3 x 0.8 mm
- 1 x clamping connection 6-32 x 6 UNC
- Suitable for surface assembly or on profile rail



Article No.	Article Description	QTY
3817 1	PLUG-IN-SOCK 1FOLD FOR AUTO SD	1

Link Bar for Plug-In Socket

- Cu- bar tin-plated for fitting tyres
- 12 connections with Ø 4.3 mm
- With constriction as pre-determined breaking point



Article No.	Article Description	QTY
3707 10	LINK BAR FOR PLUG-IN SO 155X10	1

Circuit Breakers Standard 1616

- Single-pole, thermal-type automotive circuit breakers, miniature design with coloured manual release and reset button
- With quick release mechanism and independent trip for reliable switching
- Can be plugged into automotive flat fuse holders
- For fusing vehicle electrical systems and devices in cars, trucks, buses, boats and construction machines
- Pushbutton for switching electric circuit on and off
- Ideal for installation and repair of electrical systems
- Saves fuses when searching for short-circuits

Art. No. 3817V 92

- 7-piece VAROsoft system tray

Article No.	Article Description	QTY
3817V 92	SM CIRCUIT BREAKER 1616	1
3817 5 1	CIRCUIT BREAKER STAND.1616 5A	1
3817 7 5 1	CIRCUIT BREAKER STAND.1616 7.5A	1
3817 10 1	CIRCUIT BREAKER STAND.1616 10A	1
3817 15 1	CIRCUIT BREAKER STAND.1616 15A	1
3817 20 1	CIRCUIT BREAKER STAND.1616 20A	1
3817 25 1	CIRCUIT BREAKER STAND.1616 25A	1
3817 30 1	CIRCUIT BREAKER STAND.1616 30A	1

Contents Art. No. 3817V 92:

Article No.	Article Description	Quantity
3817 5 1	CIRCUIT BREAKER STAND.1616 5A	1
3817 7 5 1	CIRCUIT BREAKER STAND.1616 7.5A	1
3817 10 1	CIRCUIT BREAKER STAND.1616 10A	1
3817 15 1	CIRCUIT BREAKER STAND.1616 15A	1
3817 20 1	CIRCUIT BREAKER STAND.1616 20A	1
3817 25 1	CIRCUIT BREAKER STAND.1616 25A	1
3817 30 1	CIRCUIT BREAKER STAND.1616 30A	1



Technical Data

Rated voltage:	12 / 24 Volt
Dimensions:	36 x 6 x 20 mm

Caution:

The reset button may not be blocked. Reset button and manual release may only be used during current-free state!

Circuit Breaker Mini 1626

- Single-pole, thermal-type automotive circuit breaker, miniature design coloured manual release and reset button
- With quick release mechanism and independent trip for reliable switching
- Can be plugged into automotive flat fuse holders
- For fusing vehicle electrical systems and devices in cars, trucks, buses, boats and construction machines
- Pushbutton for switching electric circuit on and off
- Ideal for installation and repair of electrical systems
- Saves fuses when searching for short-circuits

Art. No. 3817V 94:

- 7-part in VAROsoft system tray

Article No.	Article Description	QTY
3817V 94	CIRCUIT BREAK.MINI 1626 12/24V	1
3817 5 3	CIRCUIT BREAKER MINI 1626 5A	1
3817 7 5 3	CIRCUIT BREAKER MINI 1626 7.5A	1
3817 10 3	CIRCUIT BREAKER MINI 1626 10A	1
3817 15 3	CIRCUIT BREAKER MINI 1626 15A	1
3817 20 3	CIRCUIT BREAKER MINI 1626 20A	1
3817 25 3	CIRCUIT BREAKER MINI 1626 25A	1
3817 30 3	CIRCUIT BREAKER MINI 1626 30A	1

Contents Art. No. 3817V 94:

Article No.	Article Description	Quantity
3817 5 3	CIRCUIT BREAKER MINI 1626 5A	1
3817 7 5 3	CIRCUIT BREAKER MINI 1626 7.5A	1
3817 10 3	CIRCUIT BREAKER MINI 1626 10A	1
3817 15 3	CIRCUIT BREAKER MINI 1626 15A	1
3817 20 3	CIRCUIT BREAKER MINI 1626 20A	1
3817 25 3	CIRCUIT BREAKER MINI 1626 25A	1
3817 30 3	CIRCUIT BREAKER MINI 1626 30A	1



Technical Data

Rated voltage:	12 / 24 Volt
Dimension:	37 x 7 x 13 mm

Caution:

The reset button may not be blocked. Reset button and manual release may only be used during current-free state!

Circuit Breaker Set Standard 12 / 24 V Automotive

- 14-piece in plastic case Art. No. 4415 14 16 1 with VAROsoft system tray Art. No. 9026 91 and Art. No. 9026 92

Article No.	Article Description	QTY
3817 90	CIRC.BREAKER SET STAND.12/24V	1

Contents:

Article No.	Article Description	Quantity
3817 5	CIRCUIT BREAKER STAND.1170 5A	1
3817 5 1	CIRCUIT BREAKER STAND.1616 5A	1
3817 7 5	CIRCUIT BREAKER STAND.1170 7.5A	1
3817 7 5 1	CIRCUIT BREAKER STAND.1616 7.5A	1
3817 10	CIRCUIT BREAKER STAND.1170 10A	1
3817 10 1	CIRCUIT BREAKER STAND.1616 10A	1
3817 15	CIRCUIT BREAKER STAND.1170 15A	1
3817 15 1	CIRCUIT BREAKER STAND.1616 15A	1
3817 20	CIRCUIT BREAKER STAND.1170 20A	1
3817 20 1	CIRCUIT BREAKER STAND.1616 20A	1
3817 25	CIRCUIT BREAKER STAND.1170 25A	1
3817 25 1	CIRCUIT BREAKER STAND.1616 25A	1
3817 30	CIRCUIT BREAKER STAND.1170 30A	1
3817 30 1	CIRCUIT BREAKER STAND.1616 30A	1
4415 14 16 1	EMPTY CASE SIZE B	1



Circuit Breaker Set Standard/Mini 12/24 V Autom.

- 15-piece in plastic case Art. No. 4415 15 16 1 with VAROsoft system tray Art. No. 9026 92

Article No.	Article Description	QTY
3817 95	CIR.BREAK.SET STAND/MINI12/24V	1

Contents:

Article No.	Article Description	Quantity
3810 99	BLADE FUSE - TESTER	1
3817 5 1	CIRCUIT BREAKER STAND.1616 5A	1
3817 5 3	CIRCUIT BREAKER MINI 1626 5A	1
3817 7 5 1	CIRCUIT BREAKER STAND.1616 7.5A	1
3817 7 5 3	CIRCUIT BREAKER MINI 1626 7.5A	1
3817 10 1	CIRCUIT BREAKER STAND.1616 10A	1
3817 10 3	CIRCUIT BREAKER MINI 1626 10A	1
3817 15 1	CIRCUIT BREAKER STAND.1616 15A	1
3817 15 3	CIRCUIT BREAKER MINI 1626 15A	1
3817 20 1	CIRCUIT BREAKER STAND.1616 20A	1
3817 20 3	CIRCUIT BREAKER MINI 1626 20A	1
3817 25 1	CIRCUIT BREAKER STAND.1616 25A	1
3817 25 3	CIRCUIT BREAKER MINI 1626 25A	1
3817 30 1	CIRCUIT BREAKER STAND.1616 30A	1
3817 30 3	CIRCUIT BREAKER MINI 1626 30A	1
4415 14 16 1	EMPTY CASE SIZE B	1



Blade Fuses Standard



Article No.	Article Description	QTY
3810 01	BLADE FUSE STD 1A	f 100
3810 2	BLADE FUSE STD 2A	f 100
3810 3	BLADE FUSE STD 3A	f 100
3810 5	BLADE FUSE STD 5A	f 100
3810 75	BLADE FUSE STD 7.5A	f 100
3810 10	BLADE FUSE STD 10A	f 100
3810 15	BLADE FUSE STD 15A	f 100
3810 20	BLADE FUSE STD 20A	f 100
3810 25	BLADE FUSE STD 25A	f 100
3810 30	BLADE FUSE STD 30A	f 100
3810 40	BLADE FUSE STD 40A	f 100

Technical Data

Art. No.	Colour
3810 1	black
3810 2	grey
3810 3	violet
3810 5	beige
3810 75	brown
3810 10	red
3810 15	blue
3810 20	yellow
3810 25	nature
3810 30	green
3810 40	orange

Maxi Blade Fuses



Article No.	Article Description	QTY
3809 20	MAXI BLADE FUSE 20A	20
3809 30	MAXI BLADE FUSE 30A	20
3809 40	MAXI BLADE FUSE 40A	20
3809 50	MAXI BLADE FUSE 50A	20
3809 60	MAXI BLADE FUSE 60A	20
3809 70	MAXI BLADE FUSE 70A	20
3809 80	MAXI BLADE FUSE 80A	20
3809 100	MAXI BLADE FUSE 100A	20

Technical Data

Art. No.	Colour
3809 20	yellow
3809 30	green
3809 40	orange
3809 50	red
3809 60	blue
3809 70	brown
3809 80	natural
3809 100	violet

Mini Blade Fuses



Article No.	Article Description	QTY
3808 2	MINI BLADE FUSE 2A	g 50
3808 3	MINI BLADE FUSE 3A	g 50
3808 4	MINI BLADE FUSE 4A	g 50
3808 5	MINI BLADE FUSE 5A	g 50
3808 75	MINI BLADE FUSE 7.5A	g 50
3808 10	MINI BLADE FUSE 10A	g 50
3808 15	MINI BLADE FUSE 15A	g 50
3808 20	MINI BLADE FUSE 20A	g 50
3808 25	MINI BLADE FUSE 25A	g 50
3808 30	MINI BLADE FUSE 30A	g 50

Technical Data

Art. No.	Colour
3808 2	grey
3808 3	violet
3808 4	pink
3808 5	beige
3808 75	brown
3808 10	red
3808 15	blue
3808 20	yellow
3808 25	natural
3808 30	green

Micro Blade Fuses



Article No.	Article Description	QTY
3814 2	MICRO BLADE FUSE 2A	g 50
3814 3	MICRO BLADE FUSE 3A	g 50
3814 4	MICRO BLADE FUSE 4A	g 50
3814 5	MICRO BLADE FUSE 5A	g 50
3814 7 5	MICRO BLADE FUSE 7.5A	g 50
3814 10	MICRO BLADE FUSE 10A	g 50
3814 15	MICRO BLADE FUSE 15A	g 50
3814 20	MICRO BLADE FUSE 20A	g 50
3814 25	MICRO BLADE FUSE 25A	g 50
3814 30	MICRO BLADE FUSE 30A	g 50

Technical Data

Art. No.	Colour
3814 2	grey
3814 3	violet
3814 4	rosa
3814 5	beige
3814 75	brown
3814 10	red
3814 15	blue
3814 20	yellow
3814 25	natural
3814 30	green

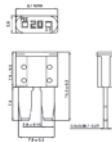
Blade Fuses Micro II

- for new generation for US vehicles /FIAT



Article No.	Article Description		QTY
3814 5 2	BLADE FUSE MICRO II	5A	g 50
3814 7 5 2	BLADE FUSE MICRO II	7,5A	g 50
3814 10 2	BLADE FUSE MICRO II	10 A	g 50
3814 15 2	BLADE FUSE MICRO II	15 A	g 50
3814 20 2	BLADE FUSE MICRO II	20 A	g 50
3814 25 2	BLADE FUSE MICRO II	25 A	g 50
3814 30 2	BLADE FUSE MICRO II	30 A	g 50

Technical Data	
Art.-No.	Colour
3814 5 2	beige
3814 7 5 2	brown
3814 10 2	red
3814 15 2	blue
3814 20 2	yellow
3814 25 2	nature
3814 30 2	green



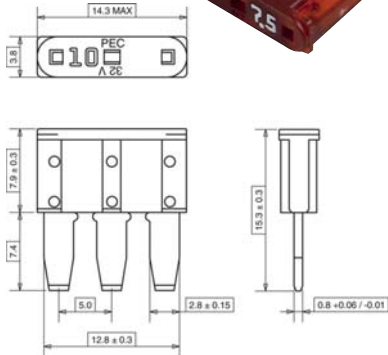
Blade Fuse Micro III

- for new generation of US vehicles



Article No.	Article Description		QTY
3814 5 3	BLADE FUSE MICRO III	5A	g 50
3814 7 5 3	BLADE FUSE MICRO III	7,5A	g 50
3814 10 3	BLADE FUSE MICRO III	10A	g 50
3814 15 3	BLADE FUSE MICRO III	15A	g 50

Technical Data	
Art.-No.	Colour
3814 5 2	beige
3814 7 5 2	brown
3814 10 2	red
3814 15 2	blue

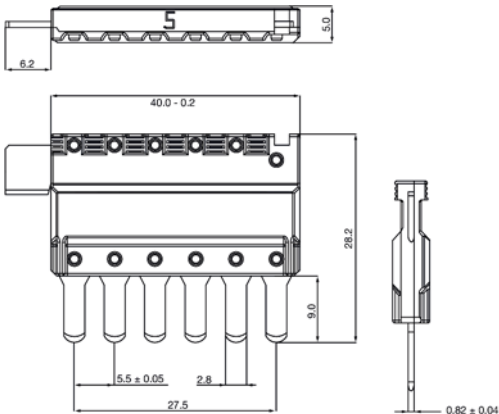


Flat Plug-in Fuse Micro VI

- For the new generation of Mercedes-Benz vehicles

Article No.	Article Description		QTY
3814 5 6	BLADE FUSE MICRO VI	5A	5
3814 7 5 6	FUSE MICRO VI	7.5A	5

Technical Data	
Art.-No.	Colour
3814 5 6	beige
3814 7 5 6	brown



Automotive Fuses, Assortment

- 2A - 30A = 576 pieces
- 1x Fuse removal tool

Article No.	Article Description	QTY
9000 381	ASSORTMENT AUTOMOTIVE FUSES	1
9000R 381	TRAY AUTOMOTIVE FUSES	1

Contents:

Article No.	Article Description	Quantity
3810 1	BLADE FUSE REMOVAL TOOL	1
3810 2	BLADE FUSE STD 2A	25
3810 3	BLADE FUSE STD 3A	25
3810 5	BLADE FUSE STD 5A	25
3810 75	BLADE FUSE STD 7.5A	25
3810 10	BLADE FUSE STD 10A	50
3810 15	BLADE FUSE STD 15A	50
3810 20	BLADE FUSE STD 20A	25
3810 25	BLADE FUSE STD 25A	25
3810 30	BLADE FUSE STD 30A	25
3811 5	AUTO.FUSE 5A YELLOW	50
3811 8	AUTO.FUSE 8A WHITE	50
3811 16	AUTO.FUSE 16A RED	50
3811 25	AUTO.FUSE 25A BLUE	50
3812 2	GLASS FUSE 2A 5.0X20	20
3812 5 5	GLASS FUSE 5A 5.0X20	20
3812 10	GLASS FUSE 10A 6.3X32	20
3812 15	GLASS FUSE 15A 6.3X32	20
3812 20	GLASS FUSE 20A 6.3X32	20



Blade Fuses in Assortment

- 2A - 40A = 257 pieces
- 1x Fuse removal tool

Article No.	Article Description	QTY
9000 3810	ASSORTMENT BLADE FUSES STD	1
9000R 3810	TRAY BLADE FUSES	1

Contents:

Article No.	Article Description	Quantity
3810 1	BLADE FUSE REMOVAL TOOL	1
3810 2	BLADE FUSE STD 2A	25
3810 3	BLADE FUSE STD 3A	25
3810 5	BLADE FUSE STD 5A	25
3810 75	BLADE FUSE STD 7.5A	25
3810 10	BLADE FUSE STD 10A	25
3810 15	BLADE FUSE STD 15A	25
3810 20	BLADE FUSE STD 20A	25
3810 25	BLADE FUSE STD 25A	25
3810 30	BLADE FUSE STD 30A	25
3810 40	BLADE FUSE STD 40A	25
3815 3810	STAND.BLADE FUSE HOLD.W.CUTTER	5
3815 3810 2	BLADE FUSE HOLDER+CNCTR 6.3MM	2



Blade Fuse Removal Tool

Article No.	Article Description	QTY
3810 1	BLADE FUSE REMOVAL TOOL	5



Blade Fuse - Tester

- For the easy testing of blade fuses in fuse boxes or dismantled condition
- With removal tool
- Green colour on display = fuse is functional

Article No.	Article Description	QTY
3810 99	BLADE FUSE - TESTER	e 10



Maxi Blade Fuse Holders

- For Maxi blade fuses AGR 3809
- Can be connected together to form rows of fuses of same type

Art. No. 3815 3809:

- Crimp cable Connection for 4 - 6 mm² cable

Art. No. 3815 3809 1:

- Transparent cover for fuse holder 3815 3809

Art. No. 3815 3809 2:

- With 9.5 mm blades, usage up to 70 A

Art. No. 3815 3809 2 1:

- Transparent Cover for fuse holder Art No. 3815 3809 2 and 3815 3809 3

Art. No. 3815 3809 3:

- With Connection screw M5



Article No.	Article Description	QTY
3815 3809	PLUG-IN MAXI BLADE FUSE HOLDER	z 50
3815 3809 1	COV.F.PLUG-IN MAX.BLADE F.HOL.	z 50
3815 3809 2	MAXI BLADE FUSE HOLDER	z 50
3815 3809 2 1	COVER F.MAXI BLADE FUSE HOLDER	z 50
3815 3809 3	MAXI BLADE FUSE HOLD.W.SCRW PL	z 50

Standard Blade Fuse Holders

- For blade fuses AGR 3810

Part No. 3815 3810:

- With cutting lugs for quick installation without stripping insulation

Article No.	Article Description	QTY
3815 3810	STAND.BLADE FUSE HOLD.W.CUTTER	z 50



Plug-In Type Standard Blade Fuse Holders

- For standard blade fuses AGR 3810
- Blade fuse holders can be connected together to form rows of fuses of same type

Art. no. 3815 3800:

- With 6.3 mm blades

- Transparent cover

Art. no. 3815 3810 1:

- With permanent cable connections 1.5 mm²

Art. no. 3815 3810 2:

- With 6.3 mm blades

Art. no. 3815 3810 7:

- With 6.3 mm blades

- Transparent cover

Art. no. 3815 3820:

- With crimp cable connectors for cable up to 2.5 mm²

- Gasket and black cover

- 2 contacts

Art. no. 3703 8 6 and 3703 8 6 2:

- Replacement contacts for 3815 3820



Article No.	Article Description	QTY
3815 3800	BLADE FUSE HOLD.STD CPL W CNTR	z 50
3815 3810 1	BLADE FUSE HOLDER+CABLE	z 50
3815 3810 2	BLADE FUSE HOLDER+CNCTR 6.3MM	z 50
3815 3810 7	BLADE FUSE HOLDER STD 6.3MM	z 50
3815 3820	BLADE FUSE HOLDER STD WATERPR.	z 50
3703 8 6	BLADE FUSE HOL.UNI F630 0.5MM ²	100
3703 8 6 2	BLADE FUSE HOL.UNI F630 4-6MM ²	100

Waterproof Blade Fuse Holders

- Flame retarding rubber

Part No. 3815 3808:

- For Mini blade fuses AGR 3808
- Cable cross-section: 3.0 mm²
- Cable length: approx. 25 cm per side
- Safety class: IP 54

Part No. 3815 3808 2:

- For Mini blade fuses AGR 3808
- Cable cross-section: 2.5 mm²
- Cable length: approx. 12 cm per side
- Safety class: IP 55 only with cover Art. No. 3815 3808 2 1
- For standard blade fuses AGR 3810
- Cable cross-section: 1.5 mm²
- Cable length: approx. 25 cm per side
- Safety class: IP 56

Part No. 3815 3810 5:

- For standard blade fuses AGR 3810
- Cable cross-section: 2.5 mm²
- Cable length: approx. 25 cm per side
- Safety class: IP 56

Part No. 3815 3814:

- For standard blade fuses AGR 3814
- Cable cross-section: 1.5 mm²
- Cable length: approx. 13 cm per side
- Safety class: IP 55

Part No. 3815 3814 2:

- For standard blade fuses AGR 3814
- Cable cross-section: 2.5 mm²
- Cable length: approx. 13 cm per side
- Safety class: IP 55



3815 3808



3815 3808 2



3815 3808 2 1



3815 3810 4



3815 3810 5



3815 3814



3815 3814 2

Article No.	Article Description	QTY
3815 3808	MINI BL FUSE HOLD.WATERPR.3MM ²	z 50
3815 3810 4	MINI BL FUSE HOLD.WA.PR.2.5MM ²	z 50
3815 3810 5	COVER F.BLADE FUSE HOLD.2.5MM ²	z 50
3815 3808 2	STD BL FUSE HOLD.WATERP.1.5MM ²	z 50
3815 3808 2 1	STD BL FUSE HOLD.WATERP.2.5MM ²	z 50
3815 3814 2	STD BL FU.HOLD.MIC.WA.P.1.5MM ²	z 50
3815 3814	STD BL FU.HOLD.MIC.WA.P.2.5MM ²	z 50

Power Distributor with Fuse Holder

- No cutting of cables necessary to connect new units
- Is being plugged instead of a fuse in order to connect further units
- The separated circuits are protected by two fuses, which are connected to the black casing
- Cable cross section: 1.3 mm² / max. 15 ampere
- Cable length: 100 mm with crimp connector

Art.-No. 3815 3810 6:

- For standard flat fuses

Art.-No. 3815 3808 6:

- For mini flat fuses

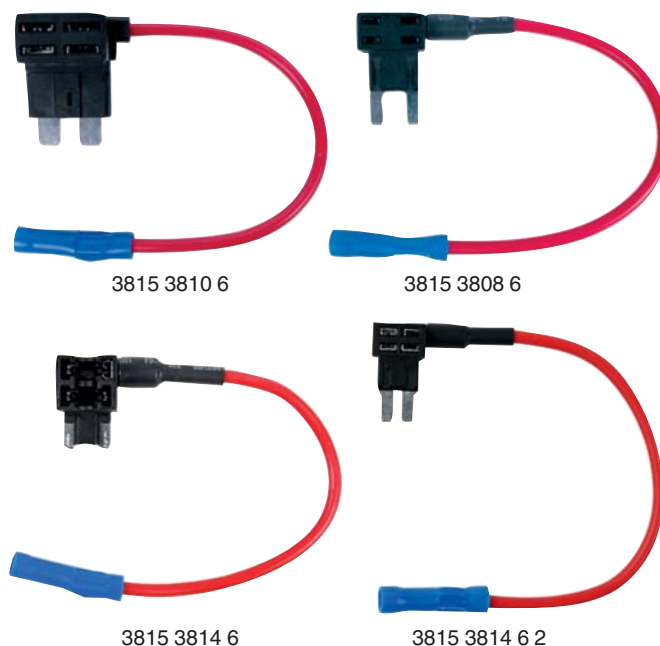
Art.-No. 3815 3814 6:

- For micro flat fuses

Art.-No. 3815 3814 6 2:

- for micro II flat fuses
- for additional current circuit max. 10 A

Article No.	Article Description	QTY
3815 3810 6	POWER DISTR.F.STANDARD FUSES	ü 10
3815 3808 6	POWER DISTR.F.MINI-FUSES	ü 10
3815 3814 6	POWER DISTR.F.MICRO FUSES	ü 10
3815 3814 6 2	POWER DISTR.F.MICRO II FUSES	ü 10



Melting Fuses

- Made of plastic

Article No.	Article Description	QTY
3811 5	AUTO.FUSE 5A YELLOW	100
3811 8	AUTO.FUSE 8A WHITE	100
3811 10	AUTO.FUSE 10A GREEN	100
3811 16	AUTO.FUSE 16A RED	100
3811 25	AUTO.FUSE 25A BLUE	100



Fuse Holder for Melting Fuses

- With bayonet lock
- Up to max. 25A
- With screw connectors for cables up to 4 mm²

Article No.	Article Description	QTY
3815 3811	AUTO FUSE HOLDER	z 50



Glass Fuses

- Suitable for 12V and 24V
- Quick

Article No.	Article Description	QTY
3812 05 5	GLASS FUSE 0.5A 5.0X20	z 50
3812 1 5 20	GLASS FUSE 1A 5.0X20	z 50
3812 1 6 5 20	GLASSICHERUNG 1,6A 5,0X20	z 50
3812 2	GLASS FUSE 2A 5.0X20	z 50
3812 2 6	GLASS FUSE 2A 6.3X32	z 50
3812 3 5	GLASS FUSE 3A 5.0X20	z 50
3812 5 5	GLASS FUSE 5A 5.0X20	z 50
3812 5 6	GLASS FUSE 5A 6.3X32	z 50
3812 10	GLASS FUSE 10A 6.3X32	z 50
3812 10 5	GLASS FUSE 10A 5.0X20	z 50
3812 10 7	GLASS FUSE 10A 7.0X32	z 50
3812 15	GLASS FUSE 15A 6.3X32	z 50
3812 15 5	GLASS FUSE 15A 5.0X20	z 50
3812 16	GLASS FUSE 16A 6.3X32	z 50
3812 20	GLASS FUSE 20A 6.3X32	z 50
3812 20 5	GLASS FUSE 20A 5.0X20	z 50
3812 25 6	GLASS FUSE 25A 6.3X32	z 50



Fuse Holder for Glass Fuses

- With bayonet lock
- For fuses with dimensions of 5 x 20 mm
- With screw connectors for cables up to 4 mm²

Article No.	Article Description	QTY
3815 3812	GLASS FUSE HOLDER 20MM	z 50



Buzz-Bar Fuses

Article No.	Article Description	QTY
3813 30	BUZZ BAR FUSE 40X10 30A	g 50
3813 40	BUZZ BAR FUSE 40X10 40A	g 50
3813 50	BUZZ BAR FUSE 40X10 50 A	g 50
3813 60	BUZZ BAR FUSE 40X10 60A	g 50
3813 80	BUZZ BAR FUSE 40X10 80A	g 50
3813 100	BUZZ BAR FUSE 40X10 100A	g 50

(Length x Width mm / Amperes)

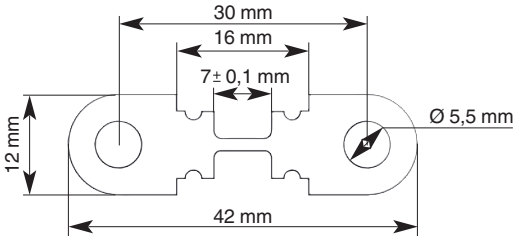


MIDI Blade Safety

- For VAG group

Article No.	Article Description	QTY
3819 30 2	MIDI BLADE SAFETY 42X12 30A	üg 50
3819 40 2	MIDI BLADE SAFETY 42X12 40A	üg 50
3819 50 2	MIDI BLADE SAFETY 42X12 50A	üg 50
3819 60 2	MIDI BLADE SAFETY 42X12 60A	üg 50
3819 80 2	MIDI BLADE SAFETY 42X12 80A	üg 50
3819 110 2	MIDI BLADE SAFETY 42X12 110A	üg 50
3819 150 2	MIDI BLADE SAFETY 42X12 150A	üg 50
3819 175 2	MIDI BLADE SAFETY 42X12 175A	üg 50

(length x width mm / amps)



Block Fuses

PGR 3806:

- Height 45 mm

PGR 3807:

- Height 30 mm

PGR 3816:

- Height 27 mm

PGR 3818:

- Height 16 mm

Article No.	Article Description	QTY
3806 30	BLOCK FUSE TYPE"B" 30A PINK	10
3806 40	BLOCK FUSE TYPE"B" 40A GREEN	10
3806 50	BLOCK FUSE TYPE"B" 50A RED	10
3806 60	BLOCK FUSE TYPE"B" 60A YELLOW	10
3806 70	BLOCK FUSE TYPE"B" 70A BLUE	10
3806 80	BLOCK FUSE TYPE"B" 80A BLACK	10
3806 100	BLOCK FUSE TYPE"B" 100A BLUE	10
3806 120	BLOCK FUSE TYPE"B" 120A WHITE	10
3806 140	BLOCK FUSE TYPE"B" 140A DK RED	10
3807 20	BLOCK FUSE TYPE"AS" 20A LT BLUE	10
3807 30	BLOCK FUSE TYPE"AS" 30A PINK	10
3807 40	BLOCK FUSE TYPE"AS" 40A GREEN	10
3807 50	BLOCK FUSE TYPE"AS" 50A RED	10
3807 60	BLOCK FUSE TYPE"AS" 60A YELLOW	10
3807 80	BLOCK FUSE TYPE"AS" 80A BLACK	10
3807 100	BLOCK FUSE TYPE"AS" 100A BLUE	10
3816 20	BLOCK FUSE TYPE"J" 20A LT BLUE	10
3816 25	BLOCK FUSE TYPE"J" 25A WHITE	10
3816 30	BLOCK FUSE TYPE"J" 30A PINK	10
3816 40	BLOCK FUSE TYPE"J" 40A GREEN	10
3816 50	BLOCK FUSE TYPE"J" 50A RED	10
3816 60	BLOCK FUSE TYPE"J" 60A YELLOW	10
3818 20	BLOCK FU.TYPE"JLP" 20A LT BLUE	10
3818 25	BLOCK FU.TYPE"JLP" 25A WHITE	10
3818 30	BLOCK FUSE TYPE"JLP" 30A PINK	10
3818 40	BLOCK FUSE TYPE"JLP" 40A GREEN	10
3818 50	BLOCK FUSE TYPE"JLP" 50A RED	10
3818 60	BLOCK FUSE TYPE"JLP" 60A YELLOW	10
3818 1 15	BLOCK FU.TYPE"JM" 15A GREY	10
3818 1 20	BLOCK FUSE TYPE"JM" 20A H-BLUE	10
3818 1 25	BLOCK FUSE TYPE"JM" 25A WHITE	10
3818 1 30	BLOCK FUSE TYPE"JM" 30A PINK	10
3818 1 40	BLOCK FUSE TYPE"JM" 40A GREEN	10



3806



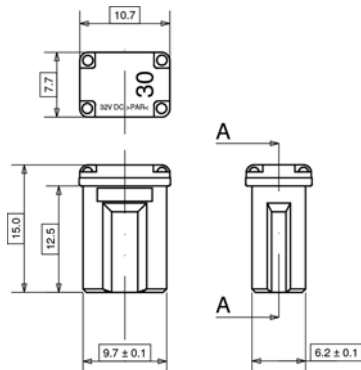
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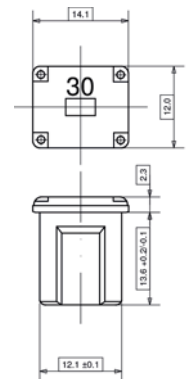
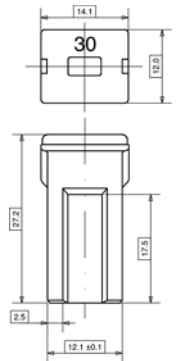
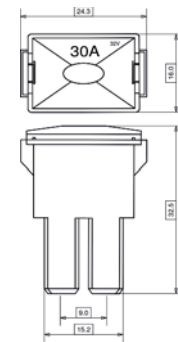
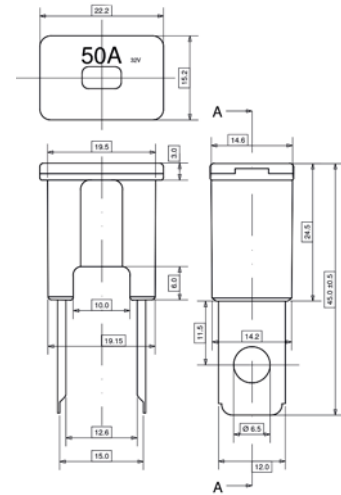
3816



3818 1



3818



Type CF Block Fuse

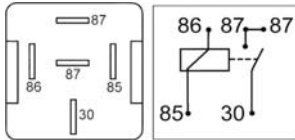
- Fuse directly to battery terminal on M8 threaded bolt and M8 insulated nut
- Complies with ISO 8820-6
- Fuse element visible through transparent viewing window
- Durable ceramic body
- **Mandatory use of M8 insulated nut**



Article No.	Article Description	QTY
3816 50 1	BLOCK FUSE TYPE CF 50A	10
3816 75 1	BLOCK FUSE TYPE CF 75A	10
3816 100 1	BLOCK FUSE TYPE CF 100A	10
3816 125 1	BLOCK FUSE TYPE CF 125A	10
3816 150 1	BLOCK FUSE TYPE CF 150A	10
3816 175 1	BLOCK FUSE TYPE CF 175A	10
3816 200 1	BLOCK FUSE TYPE CF 200A	10
3816 250 1	BLOCK FUSE TYPE CF 250A	10
3816 300 1	BLOCK FUSE TYPE CF 300A	10
3816 8	INS.NUT R M 8 F.BLOCK FUSE.CF	10

Relay

- Double make contact relay
- With holder

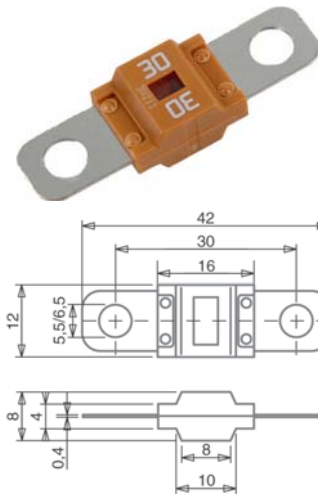


Article No.	Article Description	QTY
3841 1 12 5 30	RELAY MINI 12V 5POL. 2X20 A	1
3841 1 24 5 20	RELAY MINI 24V 5POL. 2X10 A	1



Blade Fuse - Midi

- Usable for passenger cars, trucks, agricultural machines, busses, construction vehicles and truck campers
- Replaces old strip-type fuses
- Stability under heat (UL 94-V0)
- Visible fuse-element
- Extremely robust
- For BMW, Mercedes, Volvo



Article No.	Article Description	QTY
3819 30	MIDI BLADE FUSE 30A	5
3819 40	MIDI BLADE FUSE 40A	5
3819 50	MIDI BLADE FUSE 50A	5
3819 60	MIDI BLADE FUSE 60A	5
3819 70	MIDI BLADE FUSE 70A	5
3819 80	MIDI BLADE FUSE 80A	5
3819 100	MIDI BLADE FUSE 100A	5
3819 125	MIDI BLADE FUSE 125A	5
3819 150	MIDI BLADE FUSE 150A	5
3819 200	MIDI BLADE FUSE 200A	5

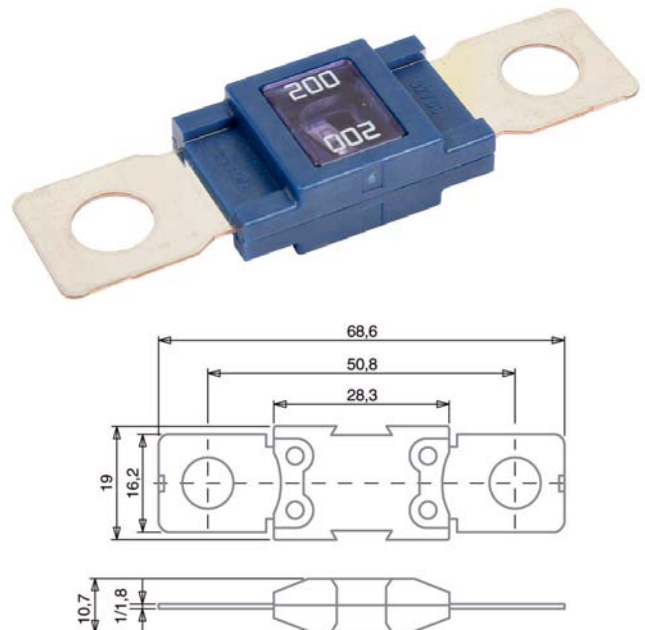
Technical Data

Art. No.	Colours	Ampere	Volt
3819 30	orange	30 A	58 V
3819 40	green	40 A	58 V
3819 50	red	50 A	58 V
3819 60	yellow	60 A	58 V
3819 70	brown	70 A	58 V
3819 80	white	80 A	58 V
3819 100	blue	100 A	58 V
3819 125	pink	125 A	58 V
3819 150	grey	150 A	58 V
3819 200*	violet	200 A	32 V

* thermoplastic transparent housing

Blade Fuse - Mega

- Usable for passenger cars, trucks, agricultural machines, busses, construction vehicles and truck campers
- Replaces old strip-type fuses
- Thermoplastic transparent housing
- Stability under heat (UL 94-V0)
- Visible fuse-element
- Extremely robust
- For Alfa Romeo, Audi, BMW, Fiat, Jaguar, Lancia, Renault



Article No.	Article Description	QTY
3819 100 1	MEGA BLADE FUSE 100A	5
3819 125 1	MEGA BLADE FUSE 125A	5
3819 150 1	MEGA BLADE FUSE 150A	5
3819 175 1	MEGA BLADE FUSE 175A	5
3819 200 1	MEGA BLADE FUSE 200A	5
3819 225 1	MEGA BLADE FUSE 225A	5
3819 250 1	MEGA BLADE FUSE 250A	5
3819 300 1	MEGA BLADE FUSE 300A	5
3819 400 1	MEGA BLADE FUSE 400A	5
3819 500 1	MEGA BLADE FUSE 500A	5

Technical Data

Art. No.	Colours	Ampere	Volt
3819 100 1	yellow	100 A	32 V
3819 125 1	green	125 A	32 V
3819 150 1	orange	150 A	32 V
3819 175 1	white	175 A	32 V
3819 200 1	blue	200 A	32 V
3819 225 1	beige	225 A	32 V
3819 250 1	pink	250 A	32 V
3819 300 1	grey	300 A	32 V
3819 400 1*	violet	400 A	32 V
3819 500 1*	brown	500 A	32 V

* Fuse-element not visible

Midi Blade Fuses in Assortment

- 30A - 200A = 50 pieces

Contents:

Article No.	Article Description	Quantity
3819 30	MIDI BLADE FUSE 30A	5
3819 40	MIDI BLADE FUSE 40A	5
3819 50	MIDI BLADE FUSE 50A	5
3819 60	MIDI BLADE FUSE 60A	5
3819 70	MIDI BLADE FUSE 70A	5
3819 80	MIDI BLADE FUSE 80A	5
3819 100	MIDI BLADE FUSE 100A	5
3819 125	MIDI BLADE FUSE 125A	5
3819 150	MIDI BLADE FUSE 150A	5
3819 200	MIDI BLADE FUSE 200A	5

Article No.	Article Description	QTY
9000 3819	ASSORTMENT BLADE FUSES MIDI	1
9000R 3819	TRAY BLADE FUSES MIDI	1



Mega Blade Fuses in Assortment

- 100A - 500A = 50 pieces

Contents:

Article No.	Article Description	Quantity
3819 100 1	MEGA BLADE FUSE 100A	5
3819 125 1	MEGA BLADE FUSE 125A	5
3819 150 1	MEGA BLADE FUSE 150A	5
3819 175 1	MEGA BLADE FUSE 175A	5
3819 200 1	MEGA BLADE FUSE 200A	5
3819 225 1	MEGA BLADE FUSE 225A	5
3819 250 1	MEGA BLADE FUSE 250A	5
3819 300 1	MEGA BLADE FUSE 300A	5
3819 400 1	MEGA BLADE FUSE 400A	5
3819 500 1	MEGA BLADE FUSE 500A	5

Article No.	Article Description	QTY
9000 3819 1	ASSORTMENT BLADE FUSES - MEGA	1
9000R 3819 1	TRAY BLADE FUSES - MEGA	1



Fuse Holder - Midi/Mega

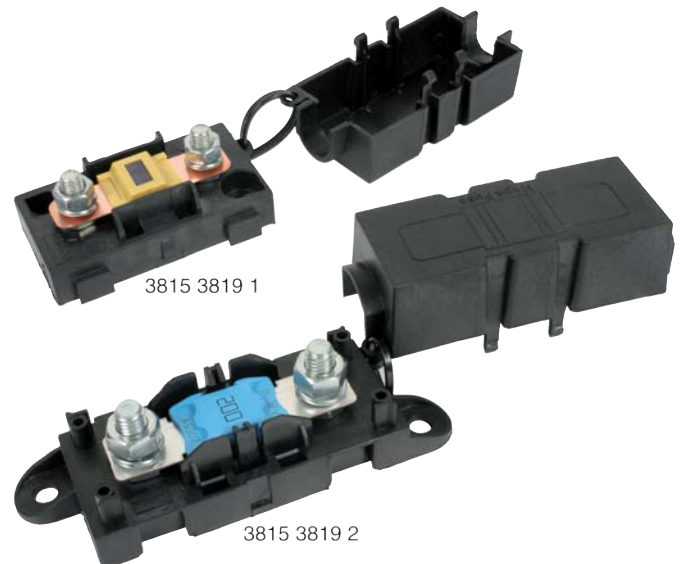
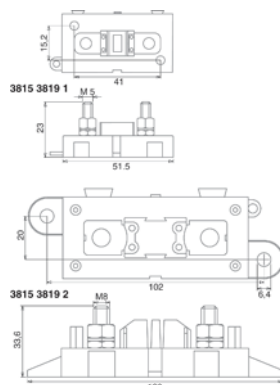
- Housing made of polyamide, glass fibre reinforced (PA 6.6 GF-30)
- Connection pins for Multi-Block-Configuration
- Extended plug system (slot and spring principle)

Art. No. 3815 3819 1:

- Suitable for flat-fuses
- Fuses up to 200A
- M5 threaded bolts, hex nuts and lock washer
- Fuses not included in delivery

Art. No. 3815 3819 2:

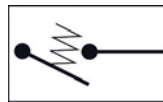
- Ideal for batteries and generator-protective use or areas with very big cable cross-sections
- Fuses up to 500A
- M8 threaded bolts, hex nuts and lock washer
- Fuses not included in delivery



Article No.	Article Description	QTY
3815 3819 1	MIDI FUSE HOLDER	1
3815 3819 2	MEGA FUSE HOLDER	1

Foot Switch

- Universal
- Non-actuated position "OFF"
- Contacts: 2 screw terminals
- Fixation: 2 x 4.2 mm dia. holes, spacing 38 mm
- Max. load: 4.5 Amperes



Article No.	Article Description	QTY
3842 1	FOOT SWITCH	1

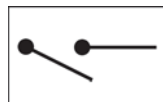
Pull Switch



Article No.	Article Description	QTY
3842 2	PULL SWITCH WITH 2 CONNECTORS	1

Rotary Switch

- On/Off switch function
- Contacts: 4 blade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions: Dia. 12.5 mm
- Clamping range: 8 mm
- Protection class: IP 53
- Max. load: 180 Watt 12VAC 15 Amperes 24VAC~ 7.5 Amperes



Article No.	Article Description	QTY
3842 12 3	ROTARY SWITCH 12V	1
3842 24 3	ROTARY SWITCH 24V	1

Toggle Switch with Screw Terminals

- Contacts: Screw terminals
- Max. load: 25 Amperes
- Type mount: Built-in
- Installation dimensions: dia. 12.5 mm
- Clamping range: 6 mm

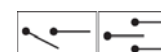
Article No.	Article Description	QTY
3842 4 1	TOGGLE SWITCH -ON/OFF SCR-TER.	1
3842 4 2	TOGGLE SWITCH -ON/OFF/ON S.CO.	1
3842 4 4	WATERPROOF CAP	10



Toggle Switch with Blade Terminals

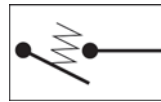
- Contacts: Spade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions: dia. 12.5 mm
- Clamping range: 10 mm
- Max. load: 25 Amperes

Article No.	Article Description	QTY
3842 4 4	WATERPROOF CAP	10
3842 5 1	TOGGLE SWITCH -ON/OFF BLAD TE.	1
3842 5 2	TOGGLE SWITCH -ON/OFF/ON BL.T.	1



Toggle Switch with Long Lever Arm

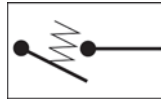
- Contacts: Spade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions: dia. 12.5 mm
- Clamping range: 6 mm
- Max. load: 5 Amperes



Article No.	Article Description	QTY
3842 5 3	TOGGLE SWITCH SPADE TERMINAL	1

Toggle Switch with Spring Return

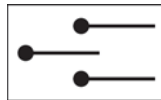
- For universal application, spring loaded
- Contacts: blade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions: 36 mm x 18 mm
- Max. load: 5 Amperes



Article No.	Article Description	QTY
3842 6	TOGGLE SWITCH SPADE TERMINAL	1

Rocker-type Switch

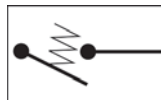
- For universal application
- Contacts: Spade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions: 36 mm x 18 mm
- Max. load: 5 Amperes



Article No.	Article Description	QTY
3842 6 1	ROCKER SWITCH ON/OFF/ON	1

Starter Button

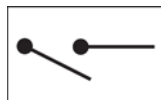
- For universal application
- Button: Black
- Contacts: Spade terminals
- Type mount: Built-in
- Installation dimensions: 22.5 mm
- Clamping range: 10 mm
- Max. load: 12.5 Amperes



Article No.	Article Description	QTY
3842 7	STARTER BUTTON	1

Key-Operated Switch, Metal

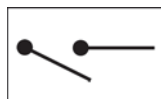
- On/Off function
- Contacts: Spade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions: 19.5 mm
- Clamping range: 17mm
- Max. load: 12 Volt: 15 Ampere



Article No.	Article Description	QTY
3842 8	KEY SWITCH METAL	1

Key-Operated Switch, Plastic

- On/Off function
- Black PVC housing
- Dia. 30 mm for limited spaces
- Total length: 48 mm
- Contacts: Spade terminals 6.35 mm
- Type mount: Built-in
- Installation dimensions 22.5 mm
- Clamping range: 4 mm
- Max. load:
 - 12 Volt: 17.5 Amperes
 - 24 Volt: 10.0 Amperes
 - 80 Volt: 8.0 Amperes



Article No.	Article Description	QTY
3842 8 1	KEY SWITCH PLASTIC 12/24V	1

Battery Cut-off Switch, Single Pole, M8

- Contacts: 2 x M8, hole interval: 33 mm
- With waterproof cap
- Fixation: 2 x dia. 6.2 mm, hole interval: 37.5 mm
- Max. load: 500 Amperes within 5 seconds

Article No.	Article Description	QTY
3842 9	BATTERY CUTOFF 100A/24V	1
3842 9 1	SPARE KEY BATTERY CUTOFF	1
3842 9 2	CHAIN FOR BATTERY KEY 12CM	1



Battery Cut-off Switch, Single Pole, M10

- **Without advance switch-off of AC generator**
- Contacts: 2 x M 10, hole interval: 65 mm
- Fixation: 2 x dia. 8.5 mm, hole interval: 65 mm
- Max. load: 250 Amperes / 24 Volt, 2500 Amperes within 5 seconds

Article No.	Article Description	QTY
3842 10	BATTERY CUTOFF 2XM10	1



Battery Cut-off Switch, Single Pole, M10/M6

- **Without advance switch-off of AC generator**
- Operating power circuit connected to main power circuit
- Contacts: 2 x M 10, hole interval: 65 mm + 1x M6
- Fixation: 2 x dia. 8.5 mm, hole interval: 65 mm
- Max. load: 450 Amperes / 24 Volt, 4500 Amperes within 5 seconds

Article No.	Article Description	QTY
3842 10 1	BATTERY CUTOFF 2XM10/1XM6	1



Battery Cut-off Switch, Single Pole, M10/6.35mm

- **Without advance switch-off of AC generator**
- Operating power circuit separated from main power circuit
- Contacts: 2 x M 10, hole interval: 65 mm + 2 spade connectors 6.35 mm
- Fixation: 2 x dia. 8.5 mm, hole interval: 65 mm
- Max. load: 450 Amperes / 24 Volt, 4500 Amperes within 5 seconds

Article No.	Article Description	QTY
3842 10 2	BATT.CUTOFF 2XM10/2XM10/2X6.3	1



Male Connector Type 'Y'

- For rechargeable batteries
- Application: Lift trucks, trucks

Article No.	Article Description	QTY
3825 60 0	MALE CNCTR PLAST.TYPE Y YELLOW	1
3825 60 1	FEM.CNCTR.PLASTIC TYPE Y BLACK	1
3825 60 5	FEM.CNCTR.PLASTIC TYPE P BLACK	1
3825 60 6	MALE CNCTR.PLAST TYPE P BLACK	1



Battery Terminal Clamp Puller

- Two-armed
- Ideal for pulling small parts such as battery terminals, plates, gears, ball bearings etc.



Article No.	Article Description	QTY
4800 2 65	2-ARM-PULLER 65X65MM	1

Terminal Post Cleaning Brush

Article No.	Article Description	QTY
4928 1	BAT.TERM.POST CLEANING BRUSH	1



Battery Acid Pump

- Continuous pumping ensures that car battery is filled with acid or distilled water
- With a hose shut-off valve
- Prevents overfilling battery
- Length of filler tube 70 cm
- Taper dia. 30-70 cm

Article No.	Article Description	QTY
4928 6	BATTERY ACID PUMP	1



Battery Acid Filler

Article No.	Article Description	QTY
4928 11	BATTERY ACID FILLER	1



Battery Acid Tester

Article No.	Article Description	QTY
5439 1	AUTO BATTERY HYDROMETER	1



Distilled Water

- According to VDE standard 0510

Article No.	Article Description	QTY
6710 0256	DISTILLED WATER 1L	e 12
6710 0258	DISTILLED WATER 20L	1

Suitable spout:

20l: 6000 0025



Battery Refilling Bottle

Art. No. 4928 4:

- For refilling of batteries on difficultly accessible areas

Art. No. 4928 7 and 4928 7 1:

- Insert filler tube into the battery cell opening, for further water flow create pressure
- Filling procedure stops automatically if air supply ends

Article No.	Article Description	QTY
4928 4	SPRAYING BOTTLE 500ML	1
4928 7	BATTERY-REFILLING BOTTLE 1L	1
4928 7 0	REPL.CAP F.B-REFILLING BOTT.1L	1
4928 7 1	BATTERY-REFILLING BOTTLE 2L	1
4928 7 2	REPL.CAP F.B-REFILLING BOTT.2L	1



Chemicals - Protective Gloves, PVC

- Resistant to most acids, alkaline solutions, salt solutions and oils in general
- Very good abrasion resistance
- Inner velour finish from 100% cotton
- Material thickness: approx. 1.2 mm
- Length: approx. 350mm
- Protection against mechanical dangers according to DIN EN 388 against bacteriological contamination according to DIN EN 374 / 2 and against chemical dangers according to DIN EN 374 / 3



Technical Data	
Standard:	EN 388
Abrasion resistance:	4
Cut resistance:	1
Tear resistance:	2
Puncture resistance:	1

Article No.	Article Description	QTY
5405 54 8	CHEMICAL PROTEC. GLOVES PVC 8	12
5405 54 9	CHEMICAL PROTEC. GLOVES PVC 9	12
5405 54 10	CHEMICAL PROTEC. GLOVES PVC 10	12
5405 54 11	CHEMICAL PROTEC. GLOVES PVC 11	12



Rubber Apron, Black

- Resistant to battery acid
- With neck and side straps, integrated eyelets, textile reinforced, industrial quality
- Dimensions: 80 x 100 cm

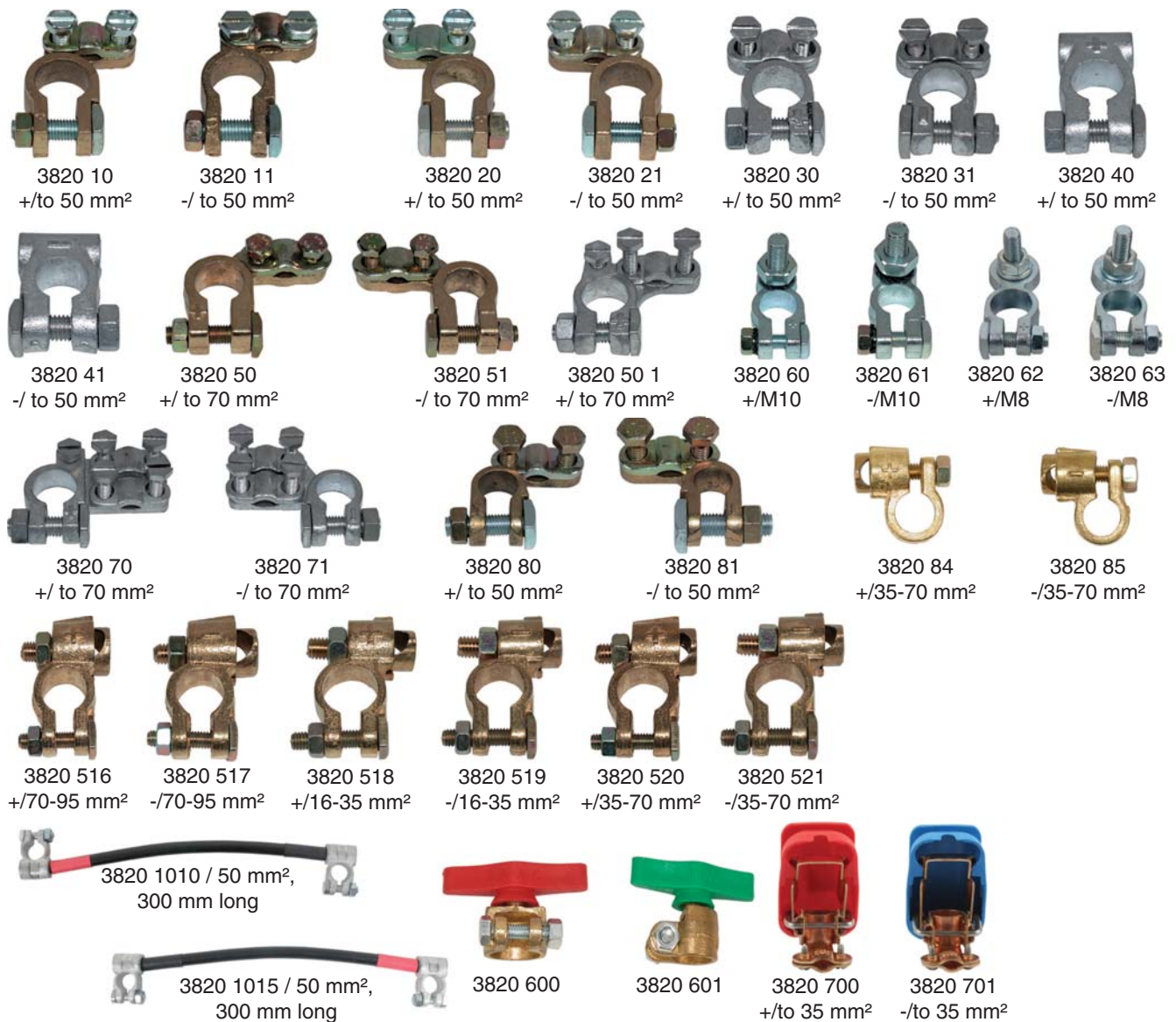
Article No.	Article Description	QTY
4928 9	RUBBER APRON BLACK	1



Battery Terminals

Article No.	Article Description	QTY
3820 10	BATTERY TERMINALS RIGHT + 10	ü 10
3820 11	BATTERY TERMINALS RIGHT - 11	ü 10
3820 20	BATTERY TERMINALS LEFT + 20	ü 10
3820 21	BATTERY TERMINALS LEFT - 21	ü 10
3820 30	BATTERY TERMINALS STRAIGHT +30	ü 10
3820 31	BATTERY TERMINALS STRAIGHT -31	ü 10
3820 40	BATTERY TERMINALS + 40	ü 10
3820 41	BATTERY TERMINALS - 41	ü 10
3820 50	BAT.TERM.TR.+ WITHO.L.CNCTR.50	ü 10
3820 51	BATTERY TERMIN. TRUCK - 0.L	ü 10
3820 50 1	BAT.TERM.TRICK.+ WITH.L.CNCTR.	5
3820 60	BATTERY TERMINALS MAN + M10	ü 10
3820 61	BATTERY TERMINALS MAN - M10	ü 10
3820 62	BATTERY TERMINALS MAN + M8	ü 10
3820 63	BATTERY TERMINALS MAN - M8	ü 10
3820 70	BATTERY TERMINALS BÜSSING + 70	5
3820 71	BATTERY TERMINALS BÜSSING - 71	5

Article No.	Article Description	QTY
3820 80	BATTERY TERMIN.FIAT +CLIP POLE	ü 10
3820 81	BATTERY TERMIN.FIAT -CLIP POLE	ü 10
3820 84	BATTERY TERMIN.DIESEL/PKW +	5
3820 85	BATTERY TERMIN.DIESEL/PKW -	5
3820 516	BATTERY TERMINALS 95QMM +	ü 10
3820 517	BATTERY TERMINALS 95QMM -	ü 10
3820 518	BATTERY TERMINALS VEHICLE +	ü 10
3820 519	BATTERY TERMINALS VEHICLE -	ü 10
3820 520	BATTERY TERMINALS DIESEL/TRU.+	ü 10
3820 521	BATTERY TERMINALS DIESEL/TRU.-	ü 10
3820 600	BATTERY TERM.W.TURN.HA.RED MS+	5
3820 601	BATT.TERM.W.TURN.HA.GREEN MS-	5
3820 700	BATTERY-QUICK CONNECTOR +	1
3820 701	BATTERY-QUICK CONNECTOR -	1
3820 1010	BATTERY BRIDGE F1010-50-300MM	1
3820 1015	BATTERY BRIDGE F1015-50-300MM	1



Battery Caps

- Material: ethylene propylene diene-monomer rubber (EPDM)
- Max. cable Ø 17 mm
- Max. cable cross section 70 mm
- Dimensions (L x W x H): 50 x 35 x 20 mm

Article No.	Article Description	QTY
3820 801	BATTERY CAPS RED + RIGHT	10
3820 802	BATTERY CAPS BLACK - RIGHT	10
3820 803	BATTERY CAPS RED + LEFT	10
3820 804	BATTERY CAPS BLACK - LEFT	10
3820 805	BATTERY CAPS RED + STRAIGHT	10
3820 806	BATTERY CAPS BLACK - STRAIGHT	10

Right



3820 801

Right



3820 802

Left



3820 803

Left



3820 804

Straight



3820 805

Straight



3820 806

Ground Straps

Article No.	Article Description	QTY
3821 200	GROUND STRAP WITH TERM.200MM	e 10
3821 250	GROUND STRAP WITH TERM.250MM	e 10
3821 300	GROUND STRAP WITH TERM.300MM	e 10
3821 350	GROUND STRAP WITH TERM.350MM	e 10
3822 200	GROUND STRAP WITHOU.TERM.200MM	e 10
3822 250	GROUND STRAP WITHOU.TERM.250MM	e 10
3822 300	GROUND STRAP WITHOU.TERM.300MM	e 10
3822 350	GROUND STRAP WITHOU.TERM.350MM	e 10
3822 10	RO(10M)GROUND STRAP	1

Technical Data

Material:	copper 16 mm ²
Width:	approx. 20 mm
Drilling-Ø:	10.5 mm



Battery Charging Clips

Article No.	Article Description	QTY
3823 25	BATTERY CHARGING CLIP 25AMP +	e 10
3823 25 1	BATTERY CHARGING CLIP 25AMP -	e 10



Crocodile Clips

- For testing instruments etc.

Article No.	Article Description	QTY
3823 3 1	CROCODILE CLIP 5A RED	e 10
3823 3 2	CROCODILE CLIP 5A BLACK	e 10



Welding Protector

- Not necessary to disconnect battery during welding or charging
- Prevents damages to automotive electronics (e.g. ABS, airbag, etc.)
- Saves time - no need to reprogramme car clock, radio or other accessories
- With visible LED display
- Range 12-24V
- Voltage reversal not possible due to optional connection to +/-

Article No.	Article Description	QTY
3825 90	WELDING PROTECTOR	1



Voltage Surge Protector GP12 / GP24

- For permanent installation in vehicles
- Simply connect to positive and negative pole of battery
- Permanently suppresses voltage surges in vehicle electric system
- Prevents damage to automotive electronic circuitry (e.g. ABS, airbags, fuel injection, radio, etc.) from voltage surges
- Prevents light bulbs from burning out prematurely due to voltage surges
- Protection when jump starting
- Voltage reversal not possible due to optional connection to +/-

Article No.	Article Description	QTY
3825 12	VOLTAGE SURGE PROTECTOR GP 12V	1
3825 24	VOLTAGE SURGE PROTECTOR GP 24V	1



Starter Cables

- Tested according to DIN 72553
- Flexible copper cable according to DIN 72551
- With fully insulated clamps
- 16 mm² for petrol engine up to 2500 cm³
- 25 mm² for petrol engine up to 5500 cm³ and for diesel engine up to 3000 cm³
- 35 mm² for petrol engine up to 7000 cm³ and for diesel engine up to 4000 cm³
- Overvoltage protection prevents voltage surges and damage to automotive electronics such as ABS, airbags, ignition, telephone etc.

Technical Data

Art. No.	Version	Length
3825 16	Without overvoltage protection 220A plastic clamps	3 m
3825 25	Without overvoltage protection 350A plastic clamps	3.5 m
3825 25 1	With overvoltage protection 350A plastic clamps	3.5 m
3825 35	Workshop starter cable without overvoltage 600A sheet steel clamps, cast inlet	4.5 m
3825 35 1	Workshop starter cable with overvoltage protection 600A sheet steel clamps, cast inlet both-sided contact of clamps due to connection band	4.5 m

Article No.	Article Description	QTY
3825 16	STARTER CABLE 16QMM	1
3825 25	STARTER CABLE 25QMM	1
3825 25 1	START.CABLE W.OVERV.PROT.25QMM	1
3825 35	STARTER CABLE 35QMM	1
3825 35 1	START.CABLE W.OVERV.PROT.35QMM	1



3825 16



3825 25



3825 25 1



3825 35



3825 35 1

Motorbike Starter Cable

- Starter cable for starter batteries of small design, e.g. in motorbikes, snow mobiles or jet skis
- Optimum contact of the clamps with the battery terminals
- Also safe for use in hard to reach places
- Safe contact of the main starter cable is guaranteed
- Protective sleeves and fully insulated clamps prevent unwanted contact with the chassis
- The kit can also be used for changing the battery due to its easy handling (data backup in the vehicle)
- High quality silicon cables for flexible use

Technical Data

Cable cross section:	5.2 mm ²
Cable length:	1.2 m
Capacity:	5 seconds start - 15 seconds wait
Power consumption:	short-term 80 A
Contact:	Ø 10 mm
Clamp opening:	max. 22 mm

Article No.	Article Description	QTY
3791 50 22	MOTORBIKE STARTER CABLE RE/BLA	1



Jump Leads AL/CU *ECO*

- According to DIN 72553
- Aluminium cable with copper coating
- With fully insulated plastic pliers
- Fewer bending cycles compared to copper cables
- Lighter weight than pure copper cables
- 16 mm² for petrol engines up to 2500 cm³
- 25 mm² for petrol engines up to 5500 cm³ and for diesel engines up to 3000 cm³
- 35 mm² for petrol engines up to 7000 cm³ and for diesel engines up to 4000 cm³
- Over-voltage protection suppresses voltage peaks and therefore prevents possible damage to the car's electrics e.g. ABS, air bags, ignition, telephone etc.



3825N 16



3825N 25



3825N 25 1



3825N 35



3825N 35 1

Technical Data

Art. No.	Design	Length	Actual cross section	Performance as CU	Weight
3825N 16	without over-voltage protection	3.0 m	25 mm ²	16 mm ²	1.00 kg
3825N 25	without over-voltage protection	3.5 m	42 mm ²	25 mm ²	1.95 kg
3825N 25 1	with over-voltage protection	3.5 m	42 mm ²	25 mm ²	1.95 kg
3825N 35	without over-voltage protection	4.5 m	54 mm ²	35 mm ²	2.89 kg
3825N 35 1	with over-voltage protection	4.5 m	54 mm ²	35 mm ²	2.89 kg

Article No.	Article Description	QTY
3825N 16	JUMP LEADS AL/CU 16MM ² ECO	1
3825N 25	JUMP LEADS AL/CU 25MM ² ECO	1
3825N 25 1	JUMP LEADS PRO AL/CU 25MM ² ECO	1
3825N 35	JUMP LEADS AL/CU 35MM ² ECO	1
3825N 35 1	JUMP LEADS PRO AL/CU 35MM ² ECO	1

Starter Cable for Commercial Vehicles

- Rugged starter cable for commercial vehicles and machinery
- With fully insulated clamps and flexible cables
- Cable cross section 50 mm²

Technical Data

Art. No.	Version	Length
3825 50 1	without overvoltage protection 600A sheet steel clamps with 2 cast pole inserts both sides connected due to connecting band	5 m
3825 50	with overvoltage protection two individual conductors which are connected every 80 cm with clamps 1000A fully cast angled brass clamps in glass fibre reinforced armoured housing professional design in a rugged cloth bag	7 m

Article No.	Article Description	QTY
3825 50 1	START.CABLE F.COM.VEH.50MM ² 5M	1
3825 50	START.CABLE F.COM.VEH.50MM ² 7M	1



3825 50 1



3825 50

PVC Battery Cable

Temperature resistance:

- Stationary use -30°C to +70°C
- Mobile use +5°C to +70°C

Article No.	Article Description	QTY
3822 10 1	RI(25M)BATT.KABEL SCHW. 10MM ²	1
3822 10 2	RI(25M)BATT.KABEL ROT 10MM ²	1
3822 16	RI(25M)BATT.CABLE BLACK 16QMM	1
3822 16 1	RI(25M)BATT.CABLE RED 16QMM	1
3822 25	RI(25M)BATT.CABLE BLACK 25 QMM	1
3822 25 1	RI(25M)BATT.CABLE RED 25 QMM	1
3822 35	RI(25M)BATT.CABLE BLACK 35 QMM	1
3822 35 1	RI(25M)BATT.CABLE RED 35 QMM	1
3822 50	RI(25M)BATT.CABLE BLACK 50 QMM	1
3822 50 1	RI(25M)BATT.CABLE RED 50 QMM	1
3822 70	RI(25M)BATT.CABLE BL.70MM	1
3822 70 1	RI(25M)BATT.CABLE RED 70MM	1
3822 95	RI(25M)BATT.CABLE BLACK 95MM	1
3822 95 1	RI(25M)BATT.CABLE RED 95MM	1



Battery Clips

Article No.	Article Description	QTY
3825 35 8	BATTERY CLIPS BRASS 100A	1
3825 35 9	BATTERY CLIPS BRASS RED 1000A	1
3825 35 10	BATTERY CLIP.BRASS BLACK 1000A	1
3825 35 11	BATTERY CLIPS BRASS RED 1000A	1
3825 35 20	BATTERY CLIPS SHEET RED 40A	1
3825 35 21	BATTERY CLIPS SHEET BLACK 40A	1
3825 35 22	BATTERY CLIPS SHEET RED 60A	1
3825 35 23	BATTERY CLIPS SHEET BLACK 60A	1
3825 35 24	BATTERY CLIPS SHEET RED 120A	1
3825 35 25	BATTERY CLIPS SHEET BLACK 120A	1
3825 35 30	BATTERY CLIPS BRASS RED 500A	1
3825 35 31	BATTERY CLIPS BRASS BLACK 500A	1



3825 35 8
L = 170mm



3825 35 9
L = 170mm



3825 35 10
L = 170mm



3825 35 11
L = 170mm



3825 35 20
L = 80mm



3825 35 21
L = 80mm



3825 35 22
L = 120mm



3825 35 23
L = 120mm



3825 35 24
L = 160mm



3825 35 25
L = 160mm



3825 35 30
L = 170mm



3825 35 31
L = 170mm

Smart Booster X7 500 A, 12 V

- Lightweight, compact battery starter with boost function
- Highly efficient lithium polymer cells (LiPo) with a nominal capacity of 15,000 mAh
- Suitable for all 12 V petrol and diesel vehicles up to 3,000 cc
- **Compatible adapter cable Art.-No. 5439 15 1:**
(not included) Please note manufacturer's instructions for maintaining the vehicle voltage to ensure data protection. Switch off any consumers in the vehicle (e.g. interior lighting) and disconnect the vehicle battery within 30 seconds of turning on the Smart Booster
- **Caution:** The starting process may not be carried out for longer than 3 seconds, observe rest periods of 30 seconds between starting attempts.



5439 15



5439 15 2

5439 15 1

Technical Data

Battery type:	Lithium battery
Rated capacity:	15,000 mAh
Continuous output:	250 A
Peak output:	max. 500 A
Charging time:	Max. 6 h
Waiting time until next attempt:	30 sec
Battery performance/service life:	approx. 1,000 cycles
Overheating protection:	Yes
Reverse polarisation protection:	Yes
Protection against voltage peaks:	Yes
Optimum ambient temperature for starting aid:	-20 to 50 °C
Ambient temperature during charging:	0 to 30 °C
Cable length / cable diameter:	320 mm/Ø 6 mm
Battery charger input:	100–240 VAC, 50/60 Hz
Battery charger output:	15 V DC/1 A
12 V output/data backup:	12 V/10 A
USB outlet:	5 V/2 A
Dimensions (LxWxH):	181.3 × 95 × 40.3 mm
Weight without cable:	607 g

Your Advantage / Benefit

- Boost function for starting vehicles, even with low battery voltage or disconnected battery
- Protection against voltage peaks, short circuits and polarity with an acoustic warning signal and digital display
- LED work light/warning light/SOS
- Charging status shown on the LCD display
- Powerbank: USB output 5 V/2 A for charging external devices such as smartphones, MP3 players, cameras etc.
- 12 V/10 A DC output for data backup via OBD adapter cable (sold separately) and for charging external devices
- Charging possible in vehicles via adapter cable for cigarette lighter
- Automatic shut-off
- Protective cap for connection ports

Application



Delivery includes:

- 1 × jump lead
- 1 × mains charging cable
- 1 × charging cable for connecting the starting device to the cigarette lighter in the vehicle
- 1 × 3-in-1 mobile phone adapter

Starter device JSG 1,000 Ampere 12 Volt

- LCD battery-charging status with function display
- Up to 10 starting aids with one battery charge
- Spark, undervoltage, reverse polarisation and overheating protection
- Automatic shut-off
- Side LED working light
- Front LED warning light
- USB 2.0 – Outlet with 5 V / 2,100 mA
- Protective caps for plug openings

Technical Data

Battery type:	Lithium battery
Rated capacity:	9,000 mA
Continuous output:	405 A
Peak output:	max. 1,000 A
Charging time:	max. 18 h
Wait.time until next attempt:	30 sec
Number of start.aides at 15 °C and fully charged battery:	10
Number of start.aides at -12 °C and fully charged battery:	5
Battery performance / service life:	500 – 800 cycles
Overheating protection:	yes
Reverse polarisation protection:	yes
Overcharge protection:	yes
Back current protection:	yes
Ambient temperature for start.aid:	-20 to +45 °C
Ambient storage temperature:	-20 to +35 °C
Cable length / cable diameter:	570 mm / Ø 16 mm ²
IP protection class	20
Battery charger input:	100 – 240 VAC, 50/60 Hz
Battery charger output:	13,2 V DC, 1 A
Charging cable length:	approx. 150 cm
12 V outlet:	yes
USB outlet:	5 V, 2.100 mA
Dimensions (L x W x H):	201 x 98 x 250 mm
Weight without cable:	2.2 kg



Article No.	Article Description	QTY
5439 98	START.DEVICE JSG9000 1000A 12V	1

Scope of delivery:

- 1 mains charger
- cigarette lighter 1 mains charger for connecting the starter device to the vehicle's
- OBD II cable
- 4-in-1 Mobile Phone Adapter



	12 V Quad, Scooters, Motorcycle		12 V Gasoline						12 V Diesel			
			4- cylinder bis 1.600 cm³		4- cylinder 1.500 cm³ bis 2.500 cm³		4 und 6 cylinder 2.500 cm³ bis 4.000 cm³		4 und 6 cylinder 1.400 cm³ bis 6.000 cm³		4 und 6 cylinder 6.000 cm³ bis 9.000 cm³	
Model	Fully discharged battery	50 % charged battery	Tief entladene Batterie	50 % charged battery	Tief entladene Batterie	50 % charged battery	Fully discharged battery	50 % charged battery	Fully discharged battery	50 % charged battery	Fully discharged battery	50 % charged battery
JPR 4500 (Max. Power 600 A)	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	No	OK

■ JPR has enough power to start the vehicle

■ JPR can give boot support, depending the state of the receiver battery

■ JPR has not enough power to start the vehicle

Starter device JSG 1,000 Ampere 24 Volt

- LCD battery-charging status with function display
- Up to 10 starting aids with one battery charge
- Spark, undervoltage, reverse polarisation and overheating protection
- Automatic shut-off
- Side LED working light
- Front LED warning light
- Protective caps for plug openings
- For commercial vehicles up to 13,000 cm³

Technical Data

Battery type:	Lithium battery
Rated capacity:	9,000 mAh
Continuous output:	405 A
Peak output:	max. 1,000 A
Charging time:	max. 18 h
Waiting time until next attempt:	30 sec.
Number of start. aides at 15 °C and fully charged battery:	10
Number of start. aides at -12 °C and fully charged battery:	5
Battery performance / service life:	500 – 800 Zyklen
Overheating protection:	yes
Reverse polarisation protection:	yes
Overcharge protection:	yes
Back current protection:	yes
Ambient temperature for start. aid:	-20 to +45 °C
Ambient storage temperature:	-20 to +35 °C
Cable length / cable diameter:	500 mm / Ø 16 mm ²
IP protection class:	20
Battery charger input:	100 – 240 VAC, 50/60 Hz
Batter charger output:	25,2 V DC, 1 A
Charging cable length:	approx. 150 cm
12 V outlet::	yes
USB outlet:	5 V, 2.100 mA
Dimensions (L x W x H):	201 x 98 x 250 mm
Weight without cable:	2.8 kg



Article No.	Article Description	QTY
5439 101	START.DEVICE JSG9000 1000A 24V	1

Scope of delivery:

- 1 mains charger
- 1 mains charger for connecting the starter device to the vehicle's cigarette lighter
- OBD II cable
- 4-in-1 Mobile Phone Adapter



Start-Booster 1700 A, 12 V

- Portable, boost device independent of the mains for 12 V vehicle systems etc.
- Ddeal solution for jump starts and voltage maintenance
- With LED display showing the state of charge of the device's battery
- Alternative source of energy when changing the battery by connecting to the cigarette lighter, so that saved data on radio, on-board computers, clock etc. is not lost
- Electrical and electronic components are protected due to protection against voltage peaks

Technical Data

Voltage:	12 V, 1700 A
Battery capacity:	16 Ah
Starting power:	680 A
Weight:	approx. 10.4 kg
Recharging:	230 V
Charging current:	12 V, 1.5 A
Automatic charging device:	yes
12 V jump start cable/charging cable:	yes
High performance brass clamp:	no
Charging voltage:	max. 14.9 V
Battery life at 50 % discharge:	approx. 400 cycles
Jump start cable, copper (diameter):	25 mm ²
Cable length:	130 cm
Protection against voltage peaks:	yes
Specially coated cables:	yes
Integrated trolley:	no
Fuse:	no
Spare fuse:	no
Alarmin case of wrong polarity:	no
On-/Off-switch:	no
Battery (quantity):	1
IP protection class:	42
Charging time:	approx. 10 hrs.
Dimensions H x B x T:	300 x 300 x 13 mm



Article No.	Article Description	QTY
5439 1700	START-BOOSTER 1700 12V	1
5439 65 1	ADAPTER CABLE CIG.LIGHT.130CM	1
5439 65 3	MAINS CABLE 12-220V 1.5A	1

Scope of delivery:

- 1 x mains cable 220/ 12 V
- 1 x adapter cable to connect the start booster with cigarette lighter in the vehicle

Start-Booster Trolley 2600 A, 12 V

- Portable, boost device independent of the mains for 12 V vehicle systems etc.
- Ideal solution for jump starts and voltage maintenance
- With analogue display showing the state of charge of the device's battery
- Alternative source of energy when changing the battery by connecting to the cigarette lighter, saved data on radio, on-board computers, clock etc. are not lost
- Acoustic and visual alarm in the event of reverse connection
- Electrical and electronic components are protected due to protection against voltage peaks

Technical Data	
Voltage:	12 V
Maximum performance	2600 A
Battery capacity:	26 Ah
Starting performance:	925 A
Weight:	approx. 13.9 kg
Re-charging:	230 V
Charging current:	12 V 4 A
Automatic charging unit:	yes
12V jump lead / charging cables:	yes
High performance brass clamp:	yes
Charging voltage:	max. 14.9 V
Battery life,	
At 50% discharge:	approx. 400 cycles
Start cable, copper (cross-section):	25 mm ²
Cable length:	180 cm
Protection against voltage peaks:	yes
Specially jacketed cables:	yes
Integrated trolley:	yes
Safety:	500 A
Additional safety:	no
Alarm in event of reverse polarity:	yes
On/off switch:	yes
Battery (number):	1
IP safety class:	42
Charging time:	approx. 7 hrs.
Dimension H x W x D:	530 x 350 x 280 mm



Article No.	Article Description	QTY
5439 2600	START-BOOSTER TROLLEY 2600 12V	1

Scope of delivery:

- 1 x mains cable 220/ 12 V
- 1 x adapter cable to connect the start booster with cigarette lighter in the vehicle



Replacement fuse Art.-No. 5439 3400 8910 on the rear side of the housing

Start-Truck Trolley 3400 A, 12/24 V

- Portable, boost device independent of the mains for 12 V and 24 V vehicle systems etc.
- Ideal solution for jump starts and voltage maintenance
- With analogue display showing the state of charge of the device's battery
- Alternative source of energy when changing the battery by connecting to the cigarette lighter, saved data on radio, on-board computers, clock etc. are not lost
- Acoustic and visual alarm in the event of reverse connection
- Electrical and electronic components are protected due to protection against voltage peaks

Technical Data

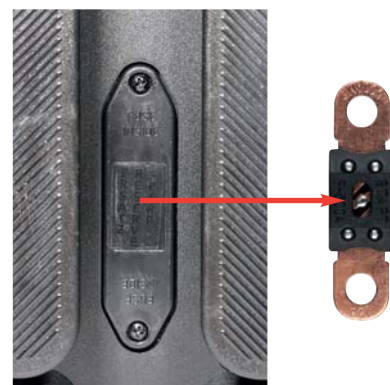
Voltage:	12/24 V
Maximum performance:	3,400/ 1,700 A
Battery capacity:	2 × 16 Ah
Starting performance:	1,360/680 A
Weight:	approx. 20.6 kg
Re-charging:	230 V
Charging current:	12 V, 4 A
Automatic charging unit:	yes
12V jump lead / charging cables:	yes
High performance brass clamp:	yes
Charging voltage:	max. 14.9 V
Battery life,	
At 50% discharge:	approx. 400 cycles
Start cable, copper (cross-section):	50 mm ²
Cable length:	180 cm
Protection against voltage peaks:	yes
Specially jacketed cables:	yes
Integrated trolley:	yes
Safety:	500 A
Additional safety:	yes
Alarm in event of reverse polarity:	yes
On/off switch:	yes
Battery (number):	2
IP safety class:	42
Charging time:	approx. 8 hrs.
Dimension H × W × D:	530 × 350 × 280 mm



Article No.	Article Description	QTY
5439 3400	START-TRUCK TROLLEY3400 12/24V	1
5439 3400 8910	FUSE F.5439 3400 500 A	1

Scope of delivery:

- 1 x home charger 220/12 V
- 1 x adapter cables to connect start truck with the cigarette lighter in the vehicle
- 1 x replacement fuse



Replacement fuse Art.-No. 5439 3400 8910 on the rear side of the housing

Starter Device Small 12V, 600A

- A transportable 12 V voltage source independent of the mains
- Ideal gadget to start a vehicle with a low battery
- Start the motor without mains connection
- Can also be used to hold data saved in the vehicle when the battery is disconnected
- Fully insulated terminal clamps
- Overload and short circuit protection
- Reverse connection protection
- Cable cross section: 25 mm, length 65 cm
- Service life 1000 cycles (at max. 50% discharge)
- Dimensions: 270 x 230 x 100 mm
- Weight: 8 kg



Article No.	Article Description	QTY
5439 90	STARTER DEVICE SMALL 12V 600A	1

Scope of delivery:

- 1x mains charger 220/12V

Starter Device Mini 12V, 1600A

- A transportable 12 V voltage source independent of the mains
- Ideal gadget to start a vehicle with a low battery
- Start the motor without mains connection
- Can also be used to hold data saved in the vehicle when the battery is disconnected
- Fully insulated terminal clamps
- Overload and short circuit protection
- Reverse connection protection
- Cable cross section: 35 mm, length 90 cm
- Service life 1000 cycles (at max. 50% discharge)
- Current: 1600 A
- Weight: 16 kg



Article No.	Article Description	QTY
5439 91	STARTER DEVICE MINI 12V 1600A	1

Scope of delivery:

- 1x mains charger 220/12V

Starter Device Mini 12 / 24 V 2,400 A

- Mains-independent transportable 12/24 V voltage source
- Ideal gadget to start a vehicle with a low battery
- Start the motor without mains connection
- Can also be used to hold data saved in the vehicle when the battery is disconnected
- Fully insulated terminal clamps
- Overload and short circuit protection
- Reverse connection protection
- Electronical protection
- Battery capacity: 4 x 16 Ah
- Product life 1,000 cycles (at max 50 % discharge)
- Cable cross section: 50 mm², length: 140 cm
- Starting current:
 - 12 V: 2,400 A
 - 24 V: 1,200A



Article No.	Article Description	QTY
5439 92	STARTER DEV. MIDI 12/24V 2400A	1

Scope of delivery:

- 1x mains charger 220/12V

Automatic Battery Charger and Starter 724E, 12/24V

- Automatic battery charger and starter, mobile, switchable for 12 and 24 Volt systems
- With remote control

Advantages:

- Starter with automatic monitoring to prevent voltage surges
- Fully automatic charging programme allow batteries to be charged without supervision
- Electronic circuitry protection allows charging without removing battery
- Manual charging programme also available for charging completely discharged batteries. However this programme requires supervision
- CE approved

Technical Data	
Power connection:	230 Volt, 50/60 Hz
For batteries:	12 Volt and 24 Volt, from 45 Ah to 675 Ah
Initial current:	Adjustable from 400 A – 700 A
Charging current:	Adjustable from 10 A – 45 A, characteristic curve W2 (WU)
Fuse:	20 A
Dimension(H x W x D):	780 x 360 x 280 cm
Weight:	30 kg

Article No.	Article Description	QTY
5439 724	GS724E START/CHARG.12/24V AUT.	1



Battery charger Batium ESB

High-quality, high-performance battery chargers for daily, heavy duty workshop use. Rugged steel housing. Full metal tongs for years of trouble-free use. Perfect for acid, calcium and gel batteries.

- Fully automatic, charging without monitoring
- Batium-Charging system: 100% full charge for all batteries
- Intelligent charging system may further invite precisely at this point in current interruptions when the power was out
- **Forced Charge:** enables loading, even if the battery is deeply discharged (very low voltage)
- Protection of on-board electronics against voltage spikes
- Charging without disconnecting the battery
- Protection against reverse polarity or wrong voltage battery
- Current and voltage free reconnecting the battery terminals

ESB 0712 Battery Charger 6/12 V

Technical Data

Voltage:	230 V 50/60 Hz
Power:	105 Watt
For batteries:	6 - 12 Volt
Charging levels:	3 A / 7 A (effective 11 A)
Dimensions:	28 x 20 x 12 cm
Weight:	approx. 4.2 kg
Ideally for 15 - 130 Ah batteries	

Article No.	Article Description	QTY
5439 712	ESB 0712 BATT.CHARGER 6/12V	1



ESB 1524 Battery Charger 6/12/24 V

The **ESB 1524** also features **SOS Recovery**:

- This feature also allows highly discharged and even sulphated batteries to be recharged over a 24 hour period in 8 out of 10 cases using a special regeneration programme (providing they are in good technical condition and not actually defective).

Technical Data

Voltage:	230 V 50/60 Hz
Power:	450 Watt
For batteries:	6 - 12 - 24 Volt
Charging levels:	7 A / 10 A / 15 A (effective 22 A)
Dimensions:	30.5 x 20 x 13 cm
Weight:	approx. 8.5 kg
Ideally for 35 - 225 Ah batteries	

Article No.	Article Description	QTY
5439 1524	ESB 1524 BATT.CHARGER 6/12/24V	1



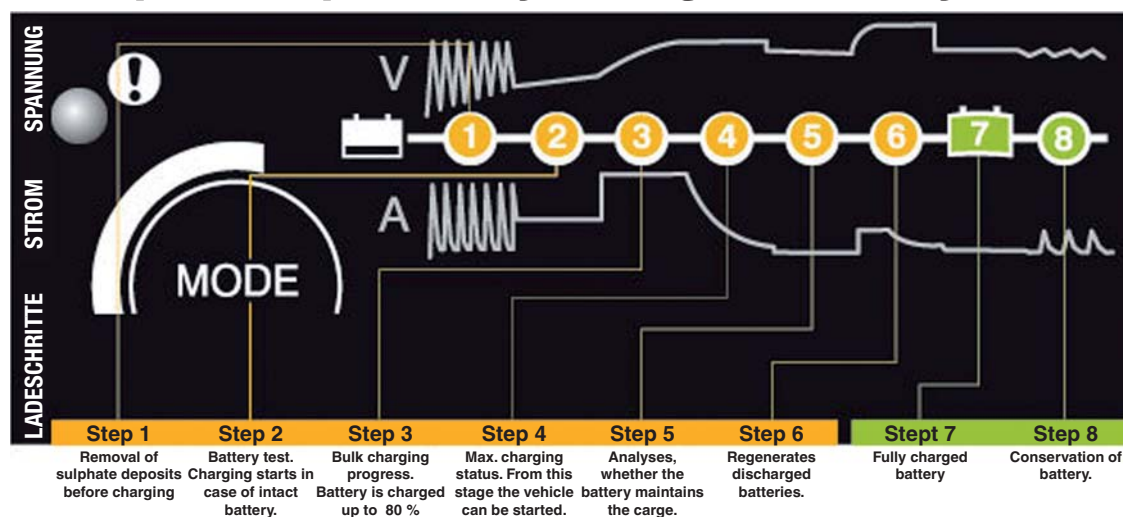
Charging Time Overview

Device type	Battery size							... charge up to ready statust
	2 Ah	8 Ah	20 Ah	60 Ah	100 Ah	225 Ah	500 Ah	
MXS 3.8	2 hrs	8 hrs	5 hrs	15 hrs	25 hrs	-	-	30 mins.
MXS 5.0	2 hrs	8 hrs	4 hrs	12 hrs	23 hrs	-	-	20 mins.
MXS 7.0	-	-	3 hrs	8 hrs	12 hrs	25 hrs	-	10 mins.
MXS 10.0	-	-	2 hrs	6 hrs	10 hrs	22 hrs	-	8 mins.
MXS 25.0	-	-	-	2 hrs	3 hrs	7 hrs	16 hrs	3 mins.
MXT 4.0	-	2 hrs	5 hrs	14 hrs	20 hrs	-	-	35 mins.
MXT 14.0	-	-	-	4 hrs	5 hrs	13 hrs	28 hrs	10 mins.
MXTX 40 at 12 V	-	-	2 hrs	3 hrs	4 hrs	8 hrs	12 hrs	2 mins.
MXTX 70 at 12 V	-	-	-	1 hrs	2 hrs	4 hrs	8 hrs	2 mins.

Charging time (hrs.) in relation to the battery size (A):

■ recommended ■ possible ■ not recommended

8 steps to a perfectly charged battery



Battery Charger MXS 3.8

- 12Volt
- High frequency charging device with 4-phase automatic charging performance IUoUp
- Without voltage peaks – batteries from 1.2 to 85 Ah can be charged when connected without damaging the electronics of the vehicle (motor-control)
- Pulse trickle charging keeps batteries from 1.2 to 130 Ah on standby to 95%-100%
- The device can permanently be connected to the battery
- With fully insulated battery clips
- Charging steps: 1-2-3-4-5-6-7

Technical Data	
Voltage:	220 - 240 V AC; 50 - 60 Hz
Charging voltage:	14.4 V or 14.7 V, nominal 12 V
Reverse current:	1.3 mA (corresponds to approx. 1 A/month, when device is connected to the battery, but not connected to mains connection)
Charging current:	0.8 or alternatively 3.8 A
Battery capacity:	1.2 to 130 Ah
Dimensions LxWxH:	165 x 61 x 38 mm
Protective system:	IP 65 (splash and dust-proof)
Weight:	0.6 kg
Battery types:	open, maintenance-free AGM, GEL and lead-calcium battery

Article No.	Article Description	QTY
5439 110	BATTERY CHARGER MXS 3.6 12V	1

Included in delivery:

- Storage bag
- Alligator cable



Battery Charger MXS 5.0

- 12 Volt
- High frequency charging device with 8-phase automatic charging performance IUoUp
- Without voltage peaks – batteries from 1.2 to 110 Ah can be charged when connected without damaging the electronics of the vehicle (motor-control)
- Pulse trickle charging keeps batteries from 1.2 to 160 Ah on standby to 95-100%
- The device can permanently be connected to the battery
- RECOND is a special mode where total discharged batteries can be reset to full capacity
- With fully insulated battery clips
- Charging steps: 1-2-3-4-5-6-7-8



Technical Data

Voltage:	220 - 240 V AC; 50 - 60 Hz
Charging voltage:	14.4 V or 14.7 V, nominal 12 V
Reverse current:	1.3 mA (corresponds to approx. 1 A/Monat, when the device is connected to the battery, but not connected to mains connection)
Charging current:	0.8 or alternatively 5.0 A
Battery capacity:	1.2 to 160 Ah
Dimensions LxWxH:	168 x 65 x 38 mm
Protective system:	IP 65 (splash and dust-proof)
Weight:	0.6 kg
Battery types:	open, maintenance-free AGM, GEL and lead-calcium battery



Article No.	Article Description	QTY
5439 116	BATTERY CHARGER MXS 5.0 12V	1

Included in delivery:

- Storage bag
- Alligator cable

Battery Charger MXS 7.0

- 12Volt
- High frequency charging device with 8-phase automatic charging performance IUoUp
- Without voltage peaks – batteries from 14 to 150 Ah can be charged when connected without damaging the electronic of the vehicle (motor-control)
- Pulse trickle charging keeps batteries from 14 to 225 Ah on standby to 95%-100%
- The device can permanently be connected to the battery
- SUPPLY is a special mode, which allows the device to be used as mains adapter for the equipment when the battery is dismantled (radiocode)
- RECOND is a special mode to reactivate total discharged batteries and to bring them back to full capacity
- The device can permanently be connected to the battery
- With fully insulated battery clips
- Charging steps: 1-2-3-4-5-6-7-8



Technical Data

Voltage:	220 - 240 V AC, 50 - 60 Hz
Charging voltage:	13.6 V - 14.4 V, 14.7 V, 16 V, nominal 12 V
Reverse current:	< 3 mA (corresponds to approx. 1 Ah/month, when device is connected to the battery, but not connected to mains connection)
Charging current:	max. 7 A
Battery capacity:	14 to 225 Ah
Dimensions LxWxH:	191 x 89 x 48 mm
Protective system:	IP 65 (splash and dust-proof)
Weight:	0.8 kg
Battery types:	open, maintenance-free, AGM, GEL and lead-calcium battery

Article No.	Article Description	QTY
5439 111	BATTERY CHARGER MXS 7.0 12V	1

Included in delivery:

- Storage bag
- Alligator cable

Battery Charger MXS 10

- 12 volt
- High frequency device with 8-tier fully automatic charging characteristic IUoUp
- No voltage peaks - batteries from 20 to 200 Ah may be charged when connected without damaging the vehicle's electrics (engine control)
- Pulse trickle charging
- The device may be connected to the battery for a long period of time
- SUPPLY is a special mode in which the device can be used as a mains device when the battery is removed (radio code)
- RECOND is a special mode in which deeply discharged batteries are resuscitated and brought back to full capacity
- With fully insulated charging clips
- Temperature-compensated, removable sensor
- Charging steps: 1-2-3-4-5-6-7-8

Article No.	Article Description	QTY
5439 117	BATTERY CHARGER MXS 10	1

Scope of delivery:

- Storage bag
- Quick contact cable

Technical Data

Voltage:	220 - 240 V AC, 50 - 60 Hz
Charging voltage:	13.6 V - 14.4 V, 14.7 V, 15 V nominal 12 V
Back current:	1.3 mA (that means around 1 Ah/month, when the device is connected to the battery, but not the mains)
Charging current:	max. 10 A
Battery capacity:	20 to 300 Ah
Dimensions LxWxH:	195 x 93 x 50 mm
Safety class:	IP 65 (splash and dust resistant)
Weight:	0.8 kg
Types of battery:	open, maintenance-free, AGM, GEL and lead-calcium

Multi XS 25000 Battery Charger

- 12Volt
- High frequency charging device with 8-phase automatic charging performance IUoUp
- Without voltage peaks – batteries from 50 to 500 Ah can be charged when connected without damaging the electronic of the vehicle (motor-control)
- SUPPLY is a special mode, which allows the device to be used as a mains adapter for the equipment when the battery is dismantled (radiocode)
- RECOND is a special mode to reactivate deep discharged batteries and to bring them back to full capacity
- Pulse trickle charging keeps batteries from 50 to 100 Ah on standby to 95%-100%
- The device can permanently be connected to the battery
- Charging steps: 1-2-3-4-5-6-7-8

Article No.	Article Description	QTY
5439 112	MULTI XS 25000 12V BAT.CHARGER	1



Technical Data

Voltage:	220 - 240 V AC; 50 - 60 Hz
Charging voltage:	13.6 V - 14.4 V, 14.7 V, 16 V, nominal 12 V
Reverse current:	< 2.3 mA (corresponds to approx 2.3 A/month, when the device is connected to the battery, but not connected to mains connection)
Charging current:	max. 25 A
Battery capacity:	50 to 500 Ah
Dimensions LxWxH:	233 x 128 x 64 mm
Protective system:	IP 44
Weight:	1.4 kg
Battery types:	all lead batteries e.g. open, maintenance-free AGM, GEL and lead-calcium battery

Multi XS 25000 HH Battery Charger

- 12Volt
- Perfect for use in garages: Batteries often have an inadequate charging condition, mainly due to short distance journeys and high standby currents, also garage stays can deteriorate the charging condition further Diagnosis: frequent starting and switched on electrics diminish voltage
- Any car can be charged during repairs or service
- With safe bracket at the auto-hoist
- 6 m charging cable, the device can be unhinged from the bracket for work aside the auto-hoist (e.g. diagnosis) and attached to the side window of the vehicle
- Charging steps: 1-2-3-4-5-6-7-8

Technical Data

Voltage:	220 - 240 V AC; 50 - 60 Hz
Charging voltage:	13.6 V - 14.4 V, 14.7 V, 16 V, nominal 12 V
Reverse current:	< 2.3 mA (corresponds to approx. 2.3 Ah/month, when the device is connected to the battery, but not connected to mains connection)
Charging current:	max. 25 A
Battery capacity:	50 to 500 Ah
Dimensions LxWxH:	233 x 128 x 64 mm
Protective system:	IP 44
Weight:	1.4 kg
Battery types:	all types of batteries e.g. open, maintenance-free AGM, GEL and lead-calcium battery

Article No.	Article Description	QTY
5439 113	MULTI MXS25000 BA.CHAR.DEV.12V	1



Multi XT 4000 Battery Charger

- 24 Volt
- High frequency charging device with 8-phase automatic charging performance IUoIUUp
- Without voltage peaks – batteries from 14 to 225 Ah can be charged when connected without damaging the electronic of the vehicle (motor-control)
- RECOND is a special mode to reactivate deep discharged batteries and to bring them back to full capacity
- Pulse trickle charging keeps batteries from 14 to 225 Ah on standby to 95%-100%
- The device can permanently be connected to the battery
- Charging steps: 1-2-3-4-5-6-7-8

Technical Data

Voltage:	220 - 240 V AC; 50 - 60 Hz
Charging voltage:	26.4 V - 29.4 V, 31.4 V, nominal 24 V
Reverse current:	< 2.3 mA (corresponds to approx. 2.3 Ah/month, when the device is connected to the battery, but not connected to mains connection)
Charging current:	max. 4 A
Battery capacity:	14 to 225 Ah
Dimensions LxWxH:	191 x 89 x 48 mm
Protective system:	IP 65
Weight:	0.8 kg
Battery types:	open, maintenance-free AGM, GEL and lead-calcium battery

Article No.	Article Description	QTY
5439 114	MULTI XT 4000 BAT.CHAR.DEV.24V	1



Multi XT 14000 Battery Charger

- 24 Volt
- High frequency charging device with 8-phase automatic charging performance IUoIUUp
- Without voltage peaks – batteries from 28 to 300 Ah can be charged when connected without damaging the electronic of the vehicle (motor-control)
- SUPPLY is a special mode, which allows the device to be used as a mains adapter for the equipment when the battery is dismantled (radiocode)
- RECOND is a special mode to reactivate deep discharged batteries and to bring them back to full capacity
- Pulse trickle charging keeps batteries from 28 to 500 Ah on standby to 95%-100%
- The device can permanently be connected to the battery
- Charging steps: 1-2-3-4-5-6-7-8

Technical Data	
Voltage:	220 - 240 V AC; 50 - 60 Hz
Charging voltage:	26.4 V - 29.4 V, 31.4 V, nominal 24 V
Reverse current:	< 2.3 mA (corresponds to approx. 2.3 A/month, when the device is connected to the battery, but not connected to mains connection)
Charging current:	max. 14 A
Battery capacity:	28 to 300 Ah
Dimesions LxWxH:	233 x 128 x 64 mm
Protective system:	IP 44
Weight:	1.4 kg
Battery types:	open, maintenance-free AGM, GEL and lead-calcium battery



Article No.	Article Description	QTY
5439 115	MULTI XT14000 BAT.CHAR.DEV.24V	1

Battery charger MXTS 40 12 / 24 V

- 12 / 24 volts
- High-frequency charger with 8-stage fully automatic charging characteristic IUoUp
- Without voltage peaks – batteries from 10 to 1200 Ah can be charged when connected without damaging the vehicle electronics (engine management system)
- Pulse trickle charging
- The device can be permanently connected to the battery
- SUPPLY is a special mode, in which the device can be used as a power supply unit for the equipment when the battery is removed (radio code)
- RECOND is a special mode, in which deeply discharged batteries are revived and returned to full capacity
- The device can be permanently connected to the battery
- With fully insulated battery clips
- Temperature-compensated
- Charging stages: 1-2-3-4-5-6-7-8



Technical Data

Voltage:	220 – 240 AC, 50 – 60 Hz
Charging voltage:	13.6 V – 15.8 V nominal 12 V 24 V 27.2 V – 31.6 V nominal 24 V
Charging current:	12 V selectable with 10, 20, 30, 40 A 24 V selectable with 5, 10, 15, 20 A
Battery capacity	10 – 1200 Ah
Dimensions L x W x H:	254 x 160 x 87 mm
Protection type:	IP 20
Weight:	1.3 kg (without charging cable)
Battery types:	open, maintenance-free, AGM, EFB and lead/calcium
Cable length:	approx. 2.5 m

Article No.	Article Description	QTY
5439 118	BATT.CHARGER MXTS 40 12/24V	1

Battery charger MXTS 70 12 / 24 V

- 12 / 24 Volt
- Hochfrequenzladegerät mit 8-stufiger vollautomatischer Ladecharakteristik IUoUp
- ohne Spannungsspitzen – Batterien von 20 bis 1.500 Ah können im angeschlossenen Zustand geladen werden, ohne dass Schäden an der Fahrzeugelektronik (Motorsteuerung) auftreten
- Pulserhaltungsladung
- das Gerät kann dauerhaft an der Batterie angeschlossen werden
- SUPPLY ist ein spezieller Modus, in dem das Gerät als Netzgerät für die Ausrüstung verwendet werden kann, wenn die Batterie ausgebaut ist (Radiocode). Max. 70 A für 30 Sek. bei 12 V
- RECOND ist ein spezieller Modus, in dem tief entladene Batterien wiederbelebt und zur vollen Kapazität zurückgeführt werden
- das Gerät kann dauerhaft an der Batterie angeschlossen werden
- mit voll isolierten Ladezangen
- Temperaturkompensiert
- Ladeschritte: 1-2-3-4-5-6-7-8



Technical Data

Voltage:	220 – 240 AC, 50 – 60 Hz
Chargin voltage:	13.6 V – 15.8 V nominal 12 V 24 V 27.2 V – 31.6 V nominal 24V
Charging current:	12 V selectable with 10, 20, 30, 40 A und 50 A 24 V selectable with 10, 20, 30, 40 A und 50 A
Battery capacity:	10 – 1,200 Ah
Dimensions L x W x H:	254 x 160 x 87 mm
Protection type:	IP 20
Weight:	3.3 kg (without charging cable)
Battery types:	open, maintenance-free AGM, EFB
Cable length:	approx. 5 m

Article No.	Article Description	QTY
5439 119	BATT.CHARGER MXTS 70 12/24V	1

Battery Charger Acctiva Easy 12V

- Charges batteries fully automatically and gently up to their maximum capacity
- Charging or charge maintenance made from conventional lead-acid, lead-calcium/silver or AGM/MF batteries as well as maintenance free lead-gel batteries without the need to disconnect from the vehicle electrical system
- Test function for start ability and generator operability
- Battery charge status display via bar chart on the display
- Charging of reverse charged batteries possible
- Based on inverter technology

Technical Data

Nominal charging voltage:	12 V
Max. charging current (arith.):	4 A
Max. charging current (effective):	6 A
Max. battery capacity:	3 - 200 Ah
Supply voltage +/- 15%:	100 - 240 V
Max. power voltage:	48 W
Final charge voltage:	13.5 - 14.4 V
Charge characteristics:	IUoU
Dimensions (LxWxH):	119 x 72 x 52 mm
Cable length:	1.95 m

Article No.	Article Description	QTY
5439 200	BATT.CHARGER AUTO.ACC.EASY 12V	1

Included in delivery:

Battery charger 12V – 4A, cable with clamps, cable with car plug, power cable extension 3m, wall bracket, case



Battery Charger Acctiva Easy 12/24V

- Charges batteries fully and automatically and until they reach their maximum capacity
- Charging or discharging of conventional lead-acid, lead-calcium / silver or fleece batteries (AGM, MF), as well as maintenance-free lead-gel batteries without disconnecting from the vehicle's power supply
- Test function for starting capability and light machine function
- Battery charge level display using bar chart on the display
- Charging of deeply discharged batteries possible
- Based on inverter technology

Technical Data

Charging nominal voltage:	12/24 V
Max. charging current (effective):	4 A / 2.5 A
Max. battery capacity:	12 V: 2 - 135 Ah 24 V: 1.5 - 90 Ah
Mains voltage +/- 15%:	230 V
Max power consumption:	36 W / 43 W
End charge voltage:	12 V: 13.5 - 14.4 V 24 V: 27 - 28.8 V
Charging characteristic:	IUoU
Dimensions (LxWxH):	119 x 72 x 52 mm
Length charger cable:	1.95 m



Article No.	Article Description	QTY
5439 200 6	BATT.CHARG.AUTO.ACC.EASY12/24V	1

Scope of delivery:

- Charging cables with clamps

Battery Charger Acctiva Easy 6/12V

- Charges batteries fully automatically and gently up to their maximum capacity
- Charging or charge maintenance made from conventional lead-acid, lead-calcium/silver or AGM/MF batteries as well as maintenance free lead-gel batteries without the need to disconnect from the vehicle electrical system
- Test function for start ability and generator operability
- Battery charge status display via bar chart on the display
- Charging of reverse charged batteries possible
- Based on inverter technology

Technical Data

Nominal charging voltage:	6/12 V
Max. charging current (arith.):	3 A / 2 A
Max. charging current (effective):	4 A / 3 A
Max. battery capacity:	6 V: 2 - 135 Ah 12 V: 1.5 - 100 Ah
Supply voltage +/- 15%:	230 V
Max. power input:	18 W / 24 W
Final charge voltage:	6 V: 6.75 - 7.2 V 12 V: 13.5 - 14.4 V
Charge characteristics:	IUoU
Dimensions (LxWxH):	119 x 72 x 52 mm
Cable length:	1.95 m



Article No.	Article Description	QTY
5439 200 3	BATT.CHARG.AUTO.ACC.EASY 6/12V	1

Included in delivery:

Battery charger 6/12V - 4A, cable with clamps, cable with car plug

Battery Charger Acctiva Standard 12V

- To charge and retain the charge of all lead starter batteries (lead-acid, lead-calcium, Ca/Ca, lead-silver, gel, AGM, EFB, MF, Hybrid)
- Based on inverter technology
- Short circuit protection, reverse polarity protection, safety shut-down
- Charging of deeply discharged batteries possible

Application:

- Workshop, showrooms

Technical Data

Charging voltage:	12 V
Max. charging current:	10 A
Max. battery capacity:	36 - 180 Ah
Mains voltage +/- 15% :	230 V
Charging characteristic:	IUoU
Dimension (LxWxH):	188 x 142 x 70
Weight:	1 kg



Article No.	Article Description	QTY
5439 200 7	BATT.CHARG.AUTO.ACC. 12-10 12V	1

Scope of delivery:• Charging cable with clamps

Battery Charger Acctiva Multicharger 12 V

- Charging or discharging of conventional lead-acid, lead-calcium / silver or fleece batteries (AGM, MF), as well as maintenance-free lead-gel batteries
- Different types of batteries with different charging levels can be charged at the same time
- Each charging circuit can be used for tests and charging
- Battery charge level display using bar chart on the display
- Charging of deeply discharged batteries possible
- Compact size due to primary switched mode power electronics
- Based on inverter technology, all processes are micro-processor controlled
- Easy to wall mount

Technical Data

Charging voltage:	12 V
Max. charging current:	4 A
Max. battery capacity:	3 - 110 Ah
Mains voltage +/- 15% :	230 V
Charging characteristic:	IUoU
Dimension (LxWxH):	584 x 288 x 98 mm
Weight:	7.1 kg



Article No.	Article Description	QTY
5439 200 8	BATT.CHARG.AUTO.ACC.MULTI. 12V	1

Battery Charger Acctiva Professional 35A

- Self-detecting pre-selection of battery voltage at 6 V, 12 V and 24 V
- Charging and recharging or charge preservation of conventional lead-acid, lead-calcium / silver or fleece batteries (AGM, MF) as well as maintenance-free lead-gel batteries without disconnecting the vehicle's power supply
- Fully automatic charging using Plug & charge
- Simple user interface and highest operational safety with the animated graphic display. All functions and charging data can be clearly set and read on the display
- Absolute safety for vehicles, power supply and battery due to electronics safety, short circuit protection, electronic reverse polarity protection, safety shut-down and thermal overload protection
- Based on inverter technology
- Charging and mains cables can be plugged in
- Sturdy, compact housing for flexible use in the workshop
- Edge protection to ensure stability and protection from paint damage

Application:

- **Charging:** automatic charging and buffering of parallel loads during limited service time
- **Diagnosis and software update:** the buffer mode provides the parallel loads with energy during the diagnosis and software updates. the battery charging system delivers up to 35 amps of electricity
- **Battery change:** the back-up mode preserves the user settings in the vehicle when the battery is changed
- **Power supply mode:** guarantees an external power supply with the support of the battery
- **Refresh mode:** regenerates deeply discharged batteries
- **Application:** In the workshop for cars, trucks, buses, motorbikes, replacement vehicles, construction machines and agricultural machines



Technical Data

Charging nominal voltage:	6 V / 12 V / 24 V
Charging current:	35 A
Battery capacity:	3-350 Ah
Max power consumption:	1120 W
End charge voltage:	7.2 - 28.8 V
Mains voltage +/- 15% :	230 V
Charging characteristic:	IUoU / IU
Dimensions (LxWxH):	247 x 162 x 88 mm
Weight:	2.0 kg

Article No.	Article Description	QTY
5439 200 5	BAT.CHARG.AUTO.ACCT.PROF.35A	1
5439 200 5 1	WAND HOLDER FACCTI.PROF.35A	1
5439 200 5 2	MAINS CABLE 5M ACCTI.PROF.35A	1

Scope of delivery:

- Charging cable 2.5 m with clamps, mains cable 2m, edge protection

Battery Charger Acctiva Professional Flash

- Charging/re-charging or charge maintenance made from conventional lead-acid, lead-calcium/silver or AGM/MF batteries as well as maintenance free lead-gel batteries without the need to disconnect from the vehicle electrical system
- Charging of reverse charged batteries possible
- All functions (battery capacity, nominal voltage, service function, FSV/buffer function) can be easily set on the display
- All current charge data (charge current, charge voltage, charged Ah) are shown on the display
- Electronic inverse-polarity protection, thermal overload protection safety shutdown, power surge protection
- Integrated USB-interface
- Based on inverter technology
- No loss of data when dismantling the battery (e.g. radio, clock etc.) replaces the battery temporarily as power supply unit
- Refresh-characteristics, weak, used or sulphated batteries can be regenerated with this function (de-sulphating)
- Microprocessor controlled battery charger with fast charge function



Technical Data

Nominal charging voltage:	12 V
Max. charge current / max. boots current:	50 / 70 A
Max. battery capacity:	10 - 250 Ah
Supply voltage +/- 15%:	230 - 240 V
Max. power input:	1230 W
Final charge voltage:	13.5 - 16.2 V
Charge characteristics:	IUoU / IUoU / IU
Dimensions (LxWxH):	315 x 200 x 110 mm
Weight:	5 kg
Cable length:	5 m

Article No.	Article Description	QTY
5439 200 2	BAT.CHARG.AUTO.ACCT.PROF.FLASH	1

Included in delivery:

Battery charger 12V, cable 5 m with all-insulated clamps pluggable, power cable 5 m pluggable, USB interface

Battery Charger Acctiva Seller

- Especially suitable for the use in showrooms and vehicle presentations
- Universally for automotive batteries such as conventional lead-acid, lead calcium/silver or fleece batteries (AGM, MF) as well as maintenance-free lead-gel batteries
- Based on inverter technology
- Reverse battery protection, overload protection and safety shut-down
- Fan-less, prevents disturbing noises in the showroom
- Plug & Charge
- Power supply from the device and not from the battery; battery is protected and no constant discharging and charging necessary

Fields of application:

- Showrooms, vehicle presentations and new vehicle collection



Technical Data

Charging voltage	12 V
Max. charging current	30 A
Max. batterie capacity	44-300 Ah
Mains voltage $\pm 15\%$	230 V (50/60Hz)
Charger characteristics	IUoU phase of power supply/ phase of maintenance
Dimension (LxWxH)	270 x 168 x 100 mm
Weight	2.4 kg

Article No.	Article Description	QTY
5439 200 4	BATTERY CHARGER ACCTIVA SELLER	1

Included in delivery:

- Power supply device 12V, charging cable with clamps 2.5 m pluggable, power cable 5 m pluggable, edge protection

Current releases and recommendations for Fronius battery chargers

Manufacturer / Product	Acctiva Easy 5439 200/ 5439 200 3/ 5439 200 6	Acctiva Professional Flash 5439 200 2	Acctiva Seller 5439 200 4	Acctiva Professional 35A 5439 200 5	Acctiva Standard 5439 200 7
Porsche AG	X	X	X	X	
Mercedes Benz	X	X		X	
Smart	X	X		X	
Maybach	X	X		X	
Hyundai	X	X		X	
Renault		X		X	X
Renault Truck					
Opel	X	X	X	X	
Mercedes Benz Lkw				X	
Unimog				X	
EvoBus				X	
MAN Truck & Bus				X	
Neoplan Bus				X	

More OEM- References: Audi, VW, Skoda, Seat, Bugatti, Bentley, Lamborghini, BMW, BMW Motorrad, KTM, Ducati, ...

Battery Charger 12V 750mA

- 2-level automatic charging system 12 V / 750 mA
- Charging up to approx. 14 V > automatic switch into retention mode
- 2 colour LED display (charging/retention)
- Fully insulated bike/car clamps and cigarette lighter plug
- Battery saving long term connection, also for maintenance free bat-teries



Article No.	Article Description	QTY
5439 64	BATTERY MAIN CHARG 6/12V 800MA	1

Battery Maintenance Charger 6/12 V / 300 mA

- 1-tier automatic charging system 6/12 V / 300 mA
- Charging up to approx. 13.8 V ; automatic switch into preservation mode
- 2-colour LED display (charging / polarity)
- Long-term connection that saves the battery, also for maintenance-free batteries (gel and lead batteries) 1.5 - 40 Ah



Article No.	Article Description	QTY
5439 71	BATTERY MAIN CHARG 6/12V 300MA	1

Battery Tester BT 12V

- 12 Volt
- Voltmeter 7 - 15 V
- Easy menu guidance
- Cold start current (CCA) 200-1500A according to standard
- Standard: DIN, EN, SAE, IEC
- Battery types: standard / SLI/URLA/GEL/AGM



Article No.	Article Description	QTY
5439 23	BATTERY TESTER BT 12V	1

Battery Test Device Argus AA500PWP

- Digital battery tester with printer
 - 12 Volt
 - Suitable for all lead acid batteries
 - Electronics safe
 - Voltage and temperature compensated
 - Static load test on vehicle
 - In standby bag
- 3 measuring results:**
- Charging status (temperature compensated)
 - Remaining lifespan of battery
 - Static load test on vehicle



Article No.	Article Description	QTY
5439 100	BATT.TEST DEV. ARGUS AA500 PWP	1
5439 100 1	THERMAL PAPER F.BAT.CHAR.ARGUS	e 12

Included in delivery:

- 2x thermal paper

Cigarette Lighter Tester 12/24 Volt

- For a quick and precise test at 12 and 24 V of the cigarette lighter sockets in the cockpit, rear seat and boot
- The testing of the cigarette lighter socket is part of the extensive electric check at the vehicle inspection;
- Suitable for car, commercial vehicle, motorbike and standard plugs
- Function testing:
voltage present = LED illuminated
voltage absent = LED does not illuminate
polarity OK = LED green light polarity
not OK = LED red light



Article No.	Article Description	QTY
3791 8	CIGARETTE LIGHTER TESTER	1

Data Back-Up Adapter with OBD-II Connection

- Prevents the loss of electronic car data when removing or changing the vehicle's battery (e.g. encoding in radios, clocks, navigation systems etc.)
 - The connection is made directly with the vehicle's diagnostics socket
 - Power supply is via a SOS starter (art. no. 5439 65) or similar
 - Built-in fuse in cable
- warning: This cable is not a jump lead!**



Article No.	Article Description	QTY
5439 62	DATA BACK-UP ADAPTER W. OBD-II	1

Battery Test Device InTech 15

- Vehicle battery test device 12 V
- Market-leading technology due to patented conductivity measuring methods
- Very good menu navigation to quickly set up the device
- Easily understood diagnosis using the display with 3 LEDs
- Quick diagnosis, even with deeply discharged batteries
- Detects cell defects, short circuits, ageing and open power circuits of the battery
- Testing of 12 V starter and charging systems with volt meter
- Approved and recommended by most large battery manufacturers (Varta, Banner, Bären, Fiamm, Exide, Oerlikon, Sonnenschein)

Technical Data

Application:	12 V starter batteries (Nass/ AGM)
Standards:	EN, DIN, SAE, IEC, (JIS)
Working areas:	200 – 900 A EN/SAE and 120 – 550 A DIN/IEC
Display:	4 digits, LCD and 3 LED
Cable length:	40 cm
Voltmeter:	5,5 – 19,99 V
Power supply:	via battery being tested from 5.5 V



Article No.	Article Description	QTY
5439 130	BATTERY TEST DEVICE INTECH 15	1

Battery Test Device MDX 335 P

- Vehicle battery test device 12 V with printer
- Market-leading technology due to patented conductivity technology
- Special diagnosis software for each type of battery (Nass, AGM, AGM Spiral and GEL)
- Absolute operational safety
- Very clear menu navigation with 5 buttons
- Easy to read 5-digit backlit LCD display
- Optimal menu sequence, battery test with subsequent starter motor and charging system tests possible
- Integrated reverse polarity protection
- Voltmeter mode, starter motor and generator test with analysis
- Quick diagnosis, even with deeply discharged batteries of 1 V
- Detects cell defects, short circuits, ageing and open circuits of the battery
- Process to remove detected surface voltage
- Print-out header may be customised (company address etc.)
- Menu available in 19 languages
- Approved and recommended by most of the large battery manufacturers (VARTA - BANNER - BÄREN - FIAMM - EXIDE - OERLIKON - SONNENSCHNEIN)

Technical Data

Application:	12 V starter batteries car, transporter (Nass / AGM / GEL)
Standards:	EN, DIN, SAE, IEC and CCA
Test areas:	100-900 (CCA, EN, SAE) and 100-550 (DIN, IEC)
Display:	LCD test display
Temperature equalisation:	will be requested at the test
Cable length:	53,3 cm
Voltmeter:	0.9 – 16.0 VDC ± 0.05 VDC
Power supply:	using 9 V battery, alkaline is recommended (Art.-no. 3880 9)
Power supply printer:	using tested battery
Housing material:	acid-proof ABS plastic
Dimensions L/W/H:	23,0 / 10,2 / 6,5 cm
Weight:	499 g

Article No.	Article Description	QTY
5439 131	BATTERY TEST DEVICE MDX-335P	1
5439 131 1	THERMAL PAPER F.MDX 300-600	e 5



Battery Test Device MDX 645 P / 655 P

- Vehicle battery test device with printer
- Especially for cars, motorbikes, trucks (6 / 12 volt and 24 volt charging systems)
- Market-leading technology due to patented conductivity technology
- Absolute operational safety
- Special diagnosis software for each type of battery (Nass, AGM, AGM Spiral and GEL)
- Extra long cable for using in the vehicle (MDX 655 P)
- Extended menu-controlled user interface for a complete analysis of the charging system (starter motor and generator test) (MDX 655 P)
- Very clear menu navigation with 5 buttons
- Easy to read 5-digit backlit LCD display
- Integrated reverse polarity protection
- Internal memory for test results with analysis
- "new battery" mode determines when new batteries are required
- Opportunity to update as cables are interchangeable and there is a SD card slot
- Integrated voltmeter mode and rapid test for quality controls
- Quick diagnosis, even with deeply discharged batteries of 1V
- Detects cell defects, short circuits, ageing and open circuits of the battery
- Process to remove detected surface voltage
- Print-out with date and time
- Print-out header may be customised (company address etc.)
- User interface available in 24 languages
- Approved and recommended by most of the large battery manufacturers (VARTA - BANNER - BÄREN - FIAMM - EXIDE - OERLIKON - SONNENSCHNEIN)



Technical Data

Application:	car, motorbike, truck (6 / 12 V and 24 V charging systems)
Battery types:	Nass, AGM, AGM Spiral, Gel
Standards:	EN, DIN, SAE, IEC and JIS
Test areas:	100-2000 (EN, SAE) 100-1200 (DIN, IEC) in steps of 5 and JIS according to part numbers
Display:	illuminated, 5-lined LCD display for text and graphics
Temperature equalisation:	will be requested at the test
Cable length:	122 cm / 305 cm (655P)
Clamping area:	1.0 – 30.0 volt
Power supply:	using 6 internal batteries, alkaline is recommended (Art.-no. 3880 15 1)
Power supply printer:	using tested battery
Housing material:	acid-proof ABS plastic
Dimensions L/W/H:	27.0 x 10.0 x 5.0 cm
Weight:	771 g

Article No.	Article Description	QTY
5439 132	BATTERY TEST DEVICE MDX-645P	1
5439 133	BATTERY TEST DEVICE MDX-655P	1
5439 131 1	THERMAL PAPER F.MDX 300-600	e 5

Hybrid Vehicle Battery System Tester HYB-1000

- Diagnosis device for hybrid traction batteries and their 12 V on-board batteries
- Safe to use, no contact with the HV system
- Communication is via the EOBD interface
- No HV training required
- Easy to use menu navigation
- Reading out and resetting fault codes of the vehicle's own high voltage system
- Real time data flowchart in driving test
- Problematic batteries and cells are detected before the traction battery system fails
- Displays when conductance is too low and when there are corrosion and connection problems between the cells
- Additional display of the functional capability of the traction battery in a bar chart
- IR printer optional for documentation (customer information)
- Possibility to update via the SD card slot **Further displays:**
- Between highest and lowest value
- Average battery pack temperature
- Temperature range min and max between the battery packs



Technical Data

Toyota:	Prius Gen.I / II and Camry
Lexus:	LS 600H
Honda:	Civic Gen. II
Ford:	Escape Gen. I
GM:	Malibu
indicator A155:	184 x 64 pixels, backlight display
display CVG:	LED
power supply:	6 AA batteries, alkaline recommended (art. no. 3880 15 1)
language:	English
housing material:	ABS - plastic with Santoprene coating
dimensions A155 L/W/H:	23.8 / 10.0 / 6.3 cm
dimension CVG L/W/H:	22,6 / 5,0 / 3,8 cm
Weight:	2,3 kg

Article No.	Article Description	QTY
5439 134	VEH.BATT. SYSTEM TEST.HYB-1000	1

Scope of delivery:

- Wireless communications module A 155
- Wireless convergence module CVG (can be rotated by 180° OBD plug)
- 1.2 m long battery test cable (two-wire kelvin clamps)
- Tool bag A156

Multimeter UT 30 B

- Multiple measuring device for electricity, current, resistor, capacity, diodes, transistor and continuity checks (withut acoustic signal)
- Compact design
- In VAROsoft tool deposit

Technical Data	
Display:	3 1/2 digits, digit size 13 mm
Resistor:	200 Ohm - 20 m Ohm
DC current:	200 µA - 10 A
DC/AC current:	200 mV - 500 V
Dimensions:	L 130 X W 75 X H 36 mm
Weight:	150 g

Article No.	Article Description	QTY
3791 11	MULTIMETER UT30B	1
3791 25	PAIR TEST.CABLE F.MULTIMETER	1

- Included in delivery:
- 2x measuring cable
 - 1x Art. No. 3880 9 battery E-Block 9V



Multi-functional Test Device “Power Probe III”

- Clamping area: 12 -24 V
- Voltage level and polarity are indicated in the display
- Additionally the device has a dis-connectible signal tone as a further means of diagnosis (a positive or negative current can be delivered over the top)
- The Power Probe can check the continuity using the additional test cable
- Bad ground contacts may be carried out without performing voltage drop tests
- The 6 m long cable (that can be extended further) enables audits throughout the entire vehicle
- 2 integrated LEDs at the top provide light to the point being tested
- Integrated safety switch
- Weight: 1.25 kg

Article No.	Article Description	QTY
4910 450200	MULTI FUNCTIONAL TEST DEVICE	1

Scope of delivery:

- Multi-functional test lamp with test probe, 6 m cable and additional 6 m extension cable
- Exchange adapter for the cigarette lighter, storage box



Tester Switch 12 - 24 Volt

- To operate electrical components e.g. radiator fan motors, window lift motor, electric fuel pumps, relays, lamps, etc.
- Immediate continuity test of e.g. switches, relays, diodes, fuses, wiring harness etc.
- Fast finding of short circuits, short circuit protection, no application of fuses
- Immediate detection of bad ground closure
- Fast check of electrical systems in vehicle, no search for grounds
- Immediate self test at the power switch
- Suitable for polarity determination and for lighting test of trailer
- With 6 meter long cable



Technical Data

Operating voltage:	12 Volt	24 Volt
Connection charging rate	6 mA	12 mA
Current entry:	8 A	8 A
Peak voltage: (not connected)	5 Volt	10,5 Volt

Article No.	Article Description	QTY
5439 172	TESTER SWITCH 12 - 24 VOLT	1

Application:

1. Component test
 2. Self test
 3. Polarity determination
 4. Continuity test
- Green display = continuity
 - No display = no continuity
 - Green = negative voltage
 - Red = positive voltage
 - No display = open contact
 - Red display = test can be continued



Clip-on Ammeter with LCD Display

- Measurement of AC and DC voltage, continuity test, diode test, resistance measuring possible
- Digital miniature clip-on ammeter with legible LCD display and a bargraph display
- Manual or automatic measurement of range makes various and safe work possible
- Quick analogue bargraph-display with 42 steps, automatic display of functions and symbols
- Exceedance display: display shows 'OL' when more than 4000 V are measured
- In case of too low working voltage of the battery the display shows the battery symbol
- In high-quality transport bag

Technical Data	
Voltage range DC/AC:	0,1 V bis 600 V
Current range DC/AC:	0,01 A bis 400 A
Continuity test, acoustic:	Continuity-signal < 40 Ohm
Resistance measuring:	0,1 Ohm to 400 Ohm
Environmental condition:	Installation categories II
Environmental protection class:	2 altitude < 2000 m
Working temperature:	0 to +40°C, < 80% rel. h, non-condensing
Storage temperature:	-10° to +60°C, < 70% rel. h, without battery
Max. voltage:	600 V rms (between adapters and earth)
Operation:	Dual-slope-Verfahren
Scanning:	2x/sec. for digital data 20x/sec. for analogue bargraph
Display:	3 3/4 digits LC-Display with max. display 3999
Polarity display:	automatic display “ _ ”
Automatic switch off:	after 30 mins.
Overvoltage category:	Cat IV 600 V IEC 1010-1
Protection class:	IP 44
Clip opening:	max. Kabel-Ø 28 mm
Power supply:	2x Art. No. 3880 15 3 Batterie VARTA Alkaline 1.5 V
DimensionWxD:	194 x 72 x 35 mm
Weight:	200 g (with batteries)



Article No.	Article Description	QTY
3791 30	CLIP-ON AMMETER TV 216	1

- Included in delivery:
- 2x measuring leads
 - 2x Art. No. 3880 15 3 batterie VARTA Alkaline 1.5 V

Clamp-on Ammeter TV 216N

- Digital clamp meter with wide range of functions
- For measurement functions see Technical Data
- Universally applicable
- Large, back-lit, easy-to-read display
- Automatic and manual selection of measurement range
- Comfortable, safe operation
- LED measuring point illumination
- Compact design



Technical Data	
Display:	LCD with 4 Digits
Overvoltage category:	CAT III 600 V
Dimensions:	210×75×35 mm
Weight:	280 g
Power supply:	3x Alkaline Batteries AAA
Diode test:	test current ~ 1 mA, test voltage ~ 3.3 V
Continuity test:	warning tone under 30 Ω
DC voltage:	600 mV, 6 V, 60 V, 600 V
DC current:	60 A, 600 A
AC voltage:	600 mV, 6 V, 60 V, 600 V, 40–400 Hz
AC current:	60 A, 600 A, 40–400 Hz
Resistance:	600 Ω, 6 kV, 60 kΩ, 600 kΩ, 6 MΩ, 60 MΩ
DC / AC accuracy:	±3.0% + 10 Digits
DC / AC highest resolution:	10 mA
~V accuracy:	±1.5% + 10 Digits up to 600 mV / ±1.2% + 5 Digits up to 60 V / ±1.5% + 10 Digits up to 600 V
~V highest resolution	100 mV
~V input resistance:	10 MΩ
-V accuracy:	±0.8% + 3 Digits up to 60 V / ±1.0% + 5 Digits up to 600 V
-V input resistance:	10 MΩ
Frequency measurement of clamp:	600 Hz, 1 kHz, >1 A AC RMS
Frequency measurement of clamp, accuracy:	±1.5% + 5 Digits up to 1 kHz
Frequency measurement of clamp, highest resolution:	100 mHz
Frequency measurement of socket:	600 Hz, 6 kHz, 10 kHz, >0.2 V AC RMS
Frequency measurement of socket, accuracy:	±1.5% + 5 Digits up to 10 kHz
Frequency measurement of socket, highest resolution:	100 mHz
Sampling rate:	10–95% ±3.0% > 1 A AC RMS
Sampling frequency of frequency range:	10 Hz–1 kHz
Sampling rate of capacitance measurement:	up to 60 mF
Resistance, accuracy:	±1.2% + 2 Digits up to 6 MΩ / ±2.0% + 5 Digits up to 60 MΩ
Resistance, highest resolution:	100 mΩ
Diode test, resolution	1 mV

Article No.	Article Description	QTY
3791 30 1	CLAMP-ON AMMETER TV 216N	1

- Scope of delivery:
- 1x clamp-on ammeter
 - 1x storage bag
 - 1x set of test leads
 - 1x instruction manual
 - 3x Art.-No. 3880 15 3: alkaline battery, Micro / AAA 1.5 V

Digital Multimeter F71

- Digital „hand-held multimeter“
- Perfect for determining voltage or resistance values during dialogue acceptance
- Firmly mounted measuring leads, therefore no searching for the correct plug socket
- Automatic measuring range selection
- Continuity test with acoustic signal
- Lighting of the measuring point
- Automatic shut-off
- „Hold function“: Hold data
- NCV: contactless detection of live wires (AC)
- Powered by 2 x 1.5 V AAA batteries (Art.-No. 3880 15 3) (not included in delivery)



Technical Data

LCD display:	3 1/2 digits (1.999 digits)
Sampling rate:	3/s
Measurement category:	600 V CAT III
Protection class:	IEC 1010-1
Protection type:	IP 44
Working temperature:	0–40 °C / ≤ 80 % RH
Voltage DC / AC	
maximum resolution:	600 V / 0,1 mV DC / 1 mV AC
Current DC / AC	
maximum resolution:	200 mA / 0,1 µA
Resistance / maximum resolution:	20 MΩ / 0,1 Ω
Continuity test:	yes, ≤ 50 Ω
Diode test:	yes, test current approx. 1 mA
Input polarity:	automatic notification / -
Safety:	F250 mA / 600 V
Power supply:	Art. No. 3791 75 1
Dimensions (H x W x D):	2x 1,5 V Typ AAA / Art. No. 3880 15 3
Weight:	131 x 61 x 28 mm
	approx. 170 g (incl. batteries)

Article No.	Article Description	QTY
3791 71	DIGITAL MULTIMETER F71	1
3791 75 1	FUSE F250 MA 600V	1

Scope of delivery:

- 1x digital multimeter F71
- 1x operating manual

Technical data subject to change.
Availability subject to country specific rules and regulations.

Your Advantage / Benefit

- Digital multimeter with compact dimensions
- Easy-to-read display; illumination possible
- The measuring point can be lit by integrated LEDs
- Modern design with impact protection
- Measurement storage

Application

- Contactless detection of live wires (AC)
- Automatic measuring range selection
- Thanks to firmly mounted measuring leads, the device can be used immediately, and improper connections are prevented



Digital Multimeter F72

- Digital standard multimeter
- All common measuring functions for the automotive industry – V, Ω , A, diodes, transit
- Temperature measurement with or without sensors
- Ergonomic design with impact protection cover
- Automatic measuring range selection
- Automatic shut-off
- „Hold function“: Hold data
- „Max. deflection function“
- Continuity test with acoustic signal
- Powered by 9 V block battery (Art.-No. 3880 9) (not included in delivery)



Technical Data

LCD Display:	3 1/2-digits (1,999 digits)
Sampling rate:	3/s
Measurement category:	600 V CAT III
Protection class:	IEC 1010-1
Protection type:	IP 40
Working temperature:	0 – 40 °C / ≤ 80 % RH
Voltage DC / AC / maximum resolution:	600 V / 0.1 mV DC / 1 mV AC
Current DC / AC / maximum resolution:	10 A / 0.1 μ A
Resistance / maximum resolution:	20 M Ω / 0.1 Ω
Continuity test:	yes, ≤ 10 Ω
Diode test:	yes, test current approx. 1 mA
Temperature measurement / maximum resolution:	- 20 °C to +260 °C / 1 °C
Input polarity:	Automatic notification / -
Fuses:	F250 mA / 600 V and F10 A / 600 V
Fuse F250 mA / 600 V:	Art.-No. 3791 75 1
Fuse F10 A / 600 V:	Art.-No. 3791 75 2
Power supply:	9 V Batterie / Art.-No. 3880 9
Dimensions, (H x W x D):	150 x 75 x 45 mm
Weight:	approx. 220 g (with battery)

Article No.	Article Description	QTY
3791 72	DIGITAL MULTIMETER F72	1
3791 75	TEMP.SENSOR K-40-260°C	1
3791 75 1	FUSE F250 MA 600V	1
3791 75 2	FUSE F10 A 600V	1
3791 75 72	PAIR-TEST CABLE FOR DMM F72	1

Scope of delivery:

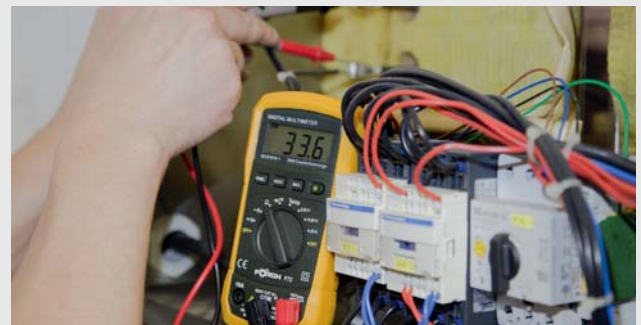
- 1x digital multimeter F72
- 1x operating manual
- 1x Art.-No. 3791 75: Temperature sensor K
- 1x Art.-No. 3791 75 72: Pair of test cables

Your Advantage / Benefit

- Ideal for simple measuring and testing
- Easy operation
- Small and handy
- Easily readable and well-lit display
- Power saving mode
- Measurement storage

Application

- All standard measuring functions of the automotive industry
- With sensor-based temperature measuring system
- Automatic measuring range selection



Digital Multimeter F73

- Digital professional multimeter
- For all standard measurement applications in cars/commercial vehicles and the electronics industry
- Measuring functions: V, Ω , current up to 10 A, capacities, frequencies incl. %, temperatures
- Automatic and manual measuring range selection
- "Hold function": Hold data
- "Min/max. deflection function"
- NCV: contactless detection of live wires AC
- Ergonomic design with impact protection cover
- Continuity test with acoustic signal
- Power supply from a 9 V block battery (Art.-No. 3880 9) (not included in delivery)



Technical Data

LCD display:	3 3/4-digits (3,999 digits)
Sampling rate digital display:	3/s
Sampling rate bar graph:	30/s
Measurement category:	1,000 V CAT III / 600 V CAT IV
Protection class:	IEC 1010-1
Protection type:	IP 40
Working temperature:	0 - 40 °C / ≤80 % RH
Voltage DC / AC / maximum resolution:	max 750 V AC / 1.000 V DC / 0,1 mV
Current DC / AC / maximum resolution:	10 A / 0,1 μ A
Resistance / maximum resolution:	40 M Ω / 0,1 Ω
Continuity test:	yes, ≤60 Ω
Diode test:	yes, test current approx. 1 mA
Transistormessung:	yes, 10 μ A / Vce 2.8 V
Capacity measurement / maximum resolution:	4,000 μ F / 0.01 nF
Frequency measurement / maximum resolution:	9,999 MHz / 0,001 Hz
Temperature measurement / maximum resolution	- 20 °C to +260 °C / 1 °C
Input polarity:	automatic notification / -
Fuses:	F400 mA / 1,000 V: Art.-No. 3791 75 4 Fuse F10 A / 1,000 V: Art.-No. 3791 75 3
Power supply:	9 V Battery / Art.-No. 3880 9
Dimension (H x W x D):	190 x 92 x 55
Weight:	382 g (with battery)

Article No.	Article Description	QTY
3791 73	DIGITAL MULTIMETER F 73	1
3791 75	TEMP.SENSOR K-40-260°C	1
3791 75 3	FUSE F10 A 1000V	1
3791 75 4	FUSE F400 MA 1000V	1
3791 75 73	PAIR TEST CABLE FOR DMM F73	1

Your Advantage / Benefit

- Digital multimeter in a modern design
- Impact protection cover for tough conditions
- Large display with lighting
- Analogue bar graph display
- Measurement storage
- Power saving mode

Application

- Automatic measuring range selection for safety of use
- Contactless detection of live wires AC
- Transistor measurements possible via plug-in sockets
- With sensor-based temperature measuring system



Scope of delivery:

- 1 x digital multimeter F73
- 1x operating manual
- 1x Art.-No. 3791 75: Temperature sensor K
- 1x Art.-No. 3791 75 73: Pair of test cables
- 1 x transistor measurement attachment



Digital Multimeter F76 *ECO*

- Digital standard multimeter
- All common measuring functions
- Ergonomic design
- Impact-resistant casing
- Manual selection of measuring range
- „Hold“ function / Data hold
- Continuity test with acoustic signal



Technische Daten	
LCD display:	3 1/2 digits (1,999 digits)
Sampling rate:	3/s
Measurement category:	600 V CAT III
Protection class:	IEC 61010-1
Protection type:	IP 20
Working temperature:	0–40 °C/≤80% RH
Voltage DC/AC/maximum resolution:	600 V/0.1 mV DC/100 mV AC
DC current/maximum resolution:	10 A / 0.1 µA
Resistance/maximum resolution:	20 MΩ/0.1 Ω
Continuity test:	yes, ≤ 100 Ω
Diode test:	yes, test current approx. 1 mA
Input polarity:	Automatic notification / -
Fuses:	F250 mA / 600 V and F10 A / 600 V
Fuse F250 mA / 600 V:	Art.-No. 3791 75 1
Fuse F10 A / 600 V:	Art.-No. 3791 75 2
Power supply:	9 V battery / Art.-No. 3880 9
Dimensions, (H x W x D):	150 x 75 x 45 mm
Weight:	approx. 220 g (incl. batteries)

Article No.	Article Description	QTY
3791N 76	DIGITAL MULTIMETER F 76 ECO	1
3791 75 1	FUSE F250 MA 600V	1
3791 75 2	FUSE F10 A 600V	1
3791 75 72	PAIR-TEST CABLE FOR DMM F72	1

Delivery includes:

- 1x DMM F76
- 1x operating manual
- 1x Art.-No. 3791 75 72: Pair of test cables
- 1x 9 V battery

Digital Multimeter MetraHit World

- 3 6/7 digit TRMS* digital multimeter with analogue bar graph
- Measured value is adapted using automatic / manual selection of measuring range
- Patented automatic socket lock that prevents test leads being incorrectly connected and the incorrect test size being selected
- Duty cycle measurement of 5V square-wave signals
- Accurate temperature measurement (probes optional)
- Capacity diodes and speed measurement (RPM sensor optional)
- Measurement storage of the indicated value
- MIN / MAX function for long-term observations
- Rubber sleeve offers protection from knocks and falls
- Rubber material and supports provide a safe hold on vibrating surfaces
- DKD calibration certificate



Technical Data	
Digital display:	3 6/7 digits (± 6000 digits) / 3 measurements/s
Analogue display:	LCD scale with indicator / 30 measurements
Power supply:	2 x 1.5V Mignon cells art. no. 3885 15 1
Safety fuse up to 600mA:	1.6A / 1000V switching capacity 10kA
Safety fuse up to 10 A:	10A / 1000V switching capacity 30kA
Protection class	II IEC/EN 61010-1:2001 VDE 0411-1:2002
Test category:	1000V CATIII / 600V CATIV
Nominal voltage:	1000V
EMV:	EN 61326-1: 2006 class B
Operational temperature:	-10°C to +50°C
Protection type:	housing IP 40, sockets IP 20 / EN 60529
Measurements:	84 mm x 195 mm x 35 mm
Weight:	approx. 350 g w. batteries
Test functions:	V, A, Ohm, continuity check, diode test, °C/°F, Hz/%, RpM, F
Resolution:	100 μ V, 100 mOhm, 10 μ A, 10 pF, 0.1 Hz, 0.1°C

Article No.	Article Description	QTY
3791 80	MULTIMETER METRAHIT WORLD	1

Scope of delivery:

- DMM MetraHit World, standard test cables, rubber protective cover, calibration document/instruction manual

*TRMS, (True Root Mean Square): Actual value (in electrical engineering the root mean square of a time-dependant physical quantity) that correctly measures and displays sinusoidal and non-sinusoidal signals for voltage and actual measurements.



Digital Multimeter MetraPort 40 S

- Special 4 ¾ digit precision multimeter with analogue scale for the automotive service, schools and training centres
- Large backlight display with tilting technology for best reading ability
- Automatic shut-down when display is closed
- Truly effective measurement TRMS* V and A / AC up to 10kHz
- Direct current measurement 10 nA to 10 A using a wire socket with resettable fuse (circuit breaker)
- When measuring with current sensor pliers, the current value is calculated using adjustable transmission and displayed in amps
- Automatic and manual range selection
- Value is saved and MIN / MAX registered
- Temperature measurements with different thermo elements (optional)
- Capacity and diode reading
- Frequency and duty cycle testing on 2 to 5 volt square-wave signals
- Speed reading using inductive sensor (optional)
- DKD calibration certificate



Technical Data	
Digital display	4 ¾ digits (±31000 digits) / 2 measurements
Analogue display:	LCD scale with indicator / 20 measurements
Power supply:	2 x 1.5V Mignon cells art. no. 3885 15 1
Fuse area 300µA - 10A:	resettable circuit breaker 15A/240VAC/50VDC, additional slow blow fuse in series for the circuit breakers 16A/500V switching capacity 1.5 kA/500V
Protection class:	II IEC/EN 61010-1:2001 VDE 0411-1:2002
Test category:	300V CAT II
EMV:	EN 61326-1: 2006 class B
Operational temperature:	-10°C to +50°C
Protection type:	housing IP 40, sockets IP 20
Measurements:	146 mm x 118 mm x 44 mm
Weight:	approx. 450 g w. batteries
Test functions:	V, A, Ohm, continuity check, diode test , °C/°F, Hz/%, RpM, F
Resolution:	10 µV, 10 nA, 10 mOhm, 0.01 Hz, 0.1°C, 10 pF

Article No.	Article Description	QTY
3791 82	MULTIMETER METRAPORT 40S	1

Scope of delivery:

- DMM MetraPort 40S, standard test cables, calibration document/instruction manual

*TRMS, (True Root Mean Square): Actual value (in electrical engineering the root mean square of a time-dependant physical quantity) that correctly measures and displays sinusoidal and non-sinusoidal signals for voltage and actual measurements.

Hybrid/E-Car Measurement Kit

- Basic measuring system case for hybrid, electric and fuel cell vehicles
- Incl. test accessories for working on high-voltage intrinsically safe systems
- 4 3/7 digit (± 30000 digits) digital multimeter with insulation testing and low ohmic reading
- Backlight LCD display
- Compact milliohmimeter / 4 wire circuit according to Kelvin
- Insulation tester / mega ohm tester 50V, 100V, 250V & 500V
- High value digital multimeter with voltage and temperature reading (probe optional)
- Multi-functional data logger (data storage) for up to 1200 test values
- Choice of automatic or manual test range
- Incl. charging device for the 3 NiMH batteries to guarantee optimum operational conditions
- DKD calibration certificate to reduce the operational costs when installing in ISO 9000 quality systems
- Foam insert with empty compartments for subsequent assembly with test accessories (Kelvin probes, DusPol tester)



Technical Data

Display:	4 3/7 digits (± 30000 digits)
Fuse mOhm:	1.6 A/1000V switching capacity 10kA
Protection class:	II IEC/EN 61010-1:2001 VDE 0411-1:2002
Test category:	II
Operating voltage:	600V
EMV:	EN 61326-1:2006 class B
Operating temperature:	-10°C to +50°C
Protection type:	housing IP 54, sockets IP 20
Dimensions:	84 x 195 x 35 mm
Weight without sleeve:	approx. 420 g with batteries
Test functions:	V, mOhm 1A(4L), mOhm(4L), Ohm(2L) continuity testing diode testing, MOhm 50, 100, 250, 500V, Hz, °C/°F
Power supply:	3x NiMH battery 1.2V 2000 mAh

Article No.	Article Description	QTY
9003 3791 1000	VAROBOXX HYBRID/E-CAR MESS.SET	1

Hybrid/E-Car Measurement Kit Individual Parts



Article No.	Article Description	QTY
3791 81	MULTIMETER METRAHIT 27I H+ECAR	1
3791 81 1 1	KELVIN CLAMP SET	1
3791 81 1 2	PCK(2)PROBE W. FUSE 500MA R/B	1
3791 81 1 20	FUSE 500MA 1KV	1
3791 81 1 3	KELVIN PROBE SET	1
3791 81 1 4	PCK(2)PROBE W.SPRING BUSH R/BL	1
3791 50 9	PCK(2)MEASURING LEAD RED/BLACK	1
3791 80 2	SAFETY DEVICE 1.6A Z109C	1

HV Safety 2000

- **Active insulation resistant measuring by means of integrated test voltage generator:** To test the insulation resistance of a vehicle, a voltage test must be applied from outside. This voltage must lie in the range of the battery voltage of the E-vehicle. HV Safety 2000 automatically and safely generates the necessary voltage without endangering the operator. The complete test is also provided in the test report.
- **Potential equalisation measurement as per UNECE R100:** After concluding the work - e.g. changing spare parts - the high voltage must once again be restored, without any errors. The potential equalisation measurement is defined in the UNECE R100 standard for testing the HV vehicle's safety. HV Safety 2000 supports this measurement with the prescribed current of 1 A.
- **Standard multi-meter functions:** HV Safety 2000 fulfils all the functions of a digital voltmeter: diode, resistance, capacity and voltage measurement. The measurements are displayed on your PC screen in an easy-to-read format. In this way, the workshop will not need to use so many measuring devices.
- **Electricity supply via USB port:** No additional electricity supply or battery is needed. The device is always ready-to-use, including the generation of high voltage for the insulation resistance measurement and the 1 Amp of electricity for measurement as per UNECE R100.



3791 90 2000



3791 90 2000 1

Article No.	Article Description	QTY
3791 90 2000	HV SAFETY 2000	1
3791 90 2000 1	HV SAFETY 2000 TRAINING CHEST	1

Training case, HV Safety 2.000

- The training case provides a safe training environment for all users
- menu-controlled measurement of the operating voltage with continuous documentation
- Active insulation resistance measurement by means of an integrated voltage testing generator
- Integrated voltmeter of up to 1,000 V
- Potential equalisation measurement as per UNECE R100
- Standard multi-meter functions
- Diagnosis and measurement performed
- Electricity supply via USB port
- May be calibrated for reproducible precision

Digital Multimeter MetraHit 2+

- 3 6/7 digit TRMS* digital multimeter for electrical installation
- Backlight digital display with additional analogue scale
- Measured value is adapted using automatic / manual selection of measuring range
- Patented automatic socket lock that prevents test leads being incorrectly connected and the incorrect test size being selected
- Accurate temperature measurement (probes optional)
- Automatic power save function after 10 mins
- Capacity diodes and speed measurement
- Measurement storage of the indicated value
- MIN / MAX function for long-term observation
- Rubber sleeve, in neon green signal colour, offers protection from knocks and falls
- DKD calibration certificate



Technical Data

Digital display:	3 6/7 digits (± 6000 digits) / 2 measurements
Analogue display:	LCD display with pointers / 20 measurements
Power supply:	2 x 1.5V Mignon cells art. no. 3885 15 1
Safety fuse up to 600mA:	1.6A / 1000A switching capacity 10kA at 1kV~
Safety fuse up to 10A:	10A / 1000V switching capacity 30kA at 1kV
Safety class:	II IEC/EN 61010-1:2001 VDE 0411-1:2002
Measurement category:	600V CATIII
Test voltage:	5.2kV~ according to IEC 61010-1/EN61010-1
EMV:	EN 61326-1: 2006 class B
Operational temperature:	-10°C to +50°C
Protection type:	housing IP 40, sockets IP 20 / EN 60529
Measurements:	84 mm x 195 mm x 35 mm
Test functions:	V, A, Ohm, continuity test, diode test, °C, Hz
Resolution:	100 μ V, 100 mOhm, 10 μ A, 0,1°C, 0,1Hz

Article No.	Article Description	QTY
	MULTIMETER METRAHIT 2+	1

Scope of delivery:

- DMM MetraHit2+, standard test cables, rubber protective sleeve, calibration document / instruction manual

*TRMS, (True Root Mean Square): Actual value (in electrical engineering the root mean square of a time-dependant physical quantity) that correctly measures and displays sinusoidal and non-sinusoidal signals for voltage and actual measurements.

Equipment Multimeter

Hit-Clip with Velcro and Magnetic Fastening Set

- Advantage: both hands on the test object
- Suitable for MetraHit World, 2+, H+E CAR



Article No.	Article Description	QTY
3791 80 5	HIT-CLIP W.VEL+MAGN. FAST. SET	1

Safety Devices, 10A

- Fuse for MetraHit, World und2+

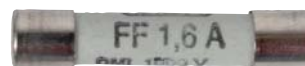
Article No.	Article Description	QTY
3791 80 1	SAFETY DEVICE 10A Z109L	1



Safety Device, 1.6A

- Fuse for MetraHit World, 2+, H+E Car

Article No.	Article Description	QTY
3791 80 2	SAFETY DEVICE 1.6A Z109C	1



Hit-Bag Bum Bag for MetraHit+MetraPort-Devices

- To keep the multimeter safe
- Suitable for MetraHit World, 2+, H+E CAR and 40S

Article No.	Article Description	QTY
3791 80 6	HITBAG BUM BAG	1



Surface Temperature Sensor TF400

- Fast-reacting surface temperature sensor with large contact surface
- Sensor element: K (NiCr-Ni)
- Length sensor element / sensor: 280 / 130 mm
- Temperature range: -50° to +400°C
- Transient constant water/air 2 sec.
- Suitable for MetraHit World, 2+ and MetraPort 40S

Article No.	Article Description	QTY
3791 82 2	SURFACE TEMPERAT. SENSOR TF400	1



Insert for Digital Multimeter

- High quality VAROiBOXX with VaroSoft insert for keeping the high quality multimeter and its accessories safe, suitable for: **Art. no. 3791 21 1:**
- Multimeter UT52 **Art. no. 3791 80:**
- Multimeter MetraHit World **Art. no. 3791 81:**
- Multimeter MetraHit 271 H+E Car **Art. no. 3791 82:**
- Multimeter MetraPort 40S **Art. no. 3791 85:**
- Multimeter MetraHit 2+

Article No.	Article Description	QTY
9007 3791 80	VAROiBOXX+INSERT F. MULTIMETER	1



AC / DC Pliers Ammeter

Art.-no. 3791 82 11:

- AC/DC pliers ammeter 125/1,250 A (max. 1,800 A)
- Resolution 100 mA
- Plier opening Ø 32 mm
- High precision (to 1%)
- Automatic zero balance
- Automatic switch-off
- State-of-the-art reverb effect for precise current measuring
- Suitable for MetraHit World, 2+, MetraPort 40S

Art.-Nr. 3791 82 12:

- AC/DC pliers ammeter 30 A
- Particularly suitable for measuring quiescent current
- Resolution 100 mA
- Plier opening Ø 25 mm
- High precision to 1%
- Automatic zero balance
- Automatic switch-off
- State-of-the-art reverb effect for precise current measuring
- Suitable for MetraHit World, 2+, MetraPort 40S



Article No.	Article Description	QTY
3791 82 11	PLIERS AMMETER CP1800 AC/DC	1
3791 82 12	PLIERS AMMETER CP 30 AC/DC	1

Technical Data		
	3791 82 11	3791 82 12
Measuring range:	125 A / 1250 A	30 A
Resolution:	100 mA / 500 mA	1 mA
Surge current handling capacity(60s):	2000 A	500 A
Gain drift:	± 0,1 5 v. MW / °C	± 0,01 % v. MW / °C
Transmission factor:	10 mV/A: 1 mV/A	100 mV/A
General precision:	± 1 % v. MW ± 100/500 mA	± 1 % v. MW ± 2 mA
Frequency range:	DC bis 20 kHz (-1 dB)	DC to 20 kHz (-1 dB)
Phase angle error:	< 2°	< 2°
Load impedance:	> 100 kΩ und ≤ 100 pF	> 100 kΩ and≤ 100 pF
Conductor effect:	± 1 %	± 1 %
Measuring category:	300 V CAT III	300 V CAT III
Output line:	1,5 m	1,5 m
Weight:	320 g	320 g
DimensionHxWxT in mm:	200 x 74 x 25	194 x 74 x 25
Plier opening:	Ø 32 mm	Ø 25 mm
Automatic switch-off:	after approx. 10 min.	after approx. 10 min.
Battery:	9 V E- Block (Art.-no.: 3880 9)	9 V E- block (Art.-no.: 3880 9)
Battery service life:	approx. 30 h	approx. 30 h

Test Equipment Set PMS 4

Article No.	Article Description	QTY
3791 9	TEST EQUIPMENT SET PMS 4	1
3791 9 1	CLAMP PROBE BLACK	1 z
3791 9 2	CLAMP PROBE RED	1 z
3791 9 3	PROBE BLACK	1 w
3791 9 4	PROBE RED	1 w
3791 9 5	ALLIGATOR CLIP BLACK	1 w
3791 9 6	ALLIGATOR CLIP RED	1 w
3791 9 7	MEASURING LEAD 1000MM BLACK	1 g
3791 9 8	MEASURING LEAD 1000MM RED	1 g



Art. No. 3791 9:

- 2x clamp probes
- 2x probes
- 2x alligator clip
- 2x measuring lead

Test Cables and Probes Set, 92 Pieces

- For use with commercial multimeters
- For checking all circuits and loads
- Perfect tool for maintenance work on car electrics



Article No.	Article Description	QTY
3791 40	MEAS.CABL./TEST PROBE SET 92PC	1

Contents:

- 72x test cables (= 36 pairs of test cable male / female)
- 2x 5k-Ohm potentiometer (variable resistance)
- 2x LED-stroboscope
- 2x SRS-connections
- 2x tap clamps
- 2x standard probes / sensors
- 2x needle-shaped probes / sensors
- 2x connection pieces (1 socket to 1 plug)
- 4x connection pieces (1 socket to 1 plug)

Technical data subject to change.
Availability subject to country specific rules and regulations.

Car Test Accessories 1 / Starter Kit

- High quality testing tool for professional fault-finding in automotive electrics
- Starter kit with 2 test prods Back Probes Red / Black, 2 angled needle test prods Back Probes Red / Black, 2 silicone test prods OF-OR Red / Black
- Temperature resistant silicone cables that guarantee a high degree of flexibility
- Extra thin and long test prods, specially designed for automotive electrical work
- Angled test probes for hard to reach test areas

Article No.	Article Description	QTY
3791 50	CAR TEST ACCESS.I STARTER KIT	1

Scope of delivery:

- 2 test prods back probes Red / Black
- 2 angled needle test probes back probes Red / Black
- 2 silicone test cables OF-OR Red / Black



Car Test Accessories 2 / Basic Kit

- Contents as per starter kit (art. no. 3791 50)
- Additional 2 high quality "crocodile clips" to securely hold battery terminals
- 2 mini test probes for "back probing" of very small cable entries, incl. piercing attachment for piercing very thin leads
- Comes with a tool bag to complete the set

Article No.	Article Description	QTY
3791 51	CAR TEST ACCESS.II BASIS KIT	1

Scope of delivery:

- 2 test prods back probes Red / Black
- 2 angled needle test probes Red / Black
- 2 silicone test cables OF-OR Red / Black
- 2 crocodile clips Red / Black
- 2 back probes with piercer Red / Black
- 1 tool bag



Car Test Accessories Uni Basic Kit

- Universal test kit with newest generation of cable piercers
- Exact adjustment enabled by optimally designed counter holder
- The "piercing needle" is fed into the cable with precision due to an innovative one-handed screw application and this means that the signal or voltage is perfectly tapped
- Ideal for well insulated, tough cables of up to 4 mm
- High quality silicone plaster for optimum insulation
- Everything can be tidied away in a sturdy plastic box

Article No.	Article Description	QTY
3791 51 1	CAR TEST ACCESS. UNI BASIC KIT	1

Scope of delivery:

- 2 screw piercers R / Sz with silicone plasters ROT
- 2 test prods back probes R / Sz
- 2 mini test probes back probes R / SZ

- 2 silicone test leads OF-OR R/SZ

Availability subject to country specific rules and regulations.



Car Test Accessories 3 / Professional Basic Kit

- Basic professional range in case

Article No.	Article Description	QTY
3791 52	CAR TEST ACC.III BAS.KIT-PORFI	1
3791 50 2	PCK(2)TEST BACK PROBES	1
3791 50 3	PCK(2)CROCODILE CLIPS R/BL	1
3791 50 4	CABLE PIERCER RED/BLACK	1
3791 50 7	PCK(2)MINI TEST PROBES RED/BLA	1
3791 50 9	PCK(2)MEASURING LEAD RED/BLACK	1
3791 50 10	PCK(2)MEASU. LEAD OF-OF RE/BLA	1
3791 50 13	PCK(2)4MM ADAPTER RED/BLACK	1
3791 50 15	FUSE HOLDER RED 10A	1
3791 50 15 1	SAFETY DEV. 10A F. FUSE HOLDER	1
3791 50 16	PCK(2)MULTI CLIP RED/BLACK	1

Content Art.-No. 3791 52:

- Art. no. 3791 50 2: 2 extra thin and long test probes, specifically designed for electrical work on motor vehicles
- Art. no. 3791 50 3: 2 high-quality "crocodile clips" for a firm grip on the battery terminals
- Art. no. 3791 50 4: 2 cable piercers for quick and direct contact in the cable
- Art. no. 3791 50 7: 2 mini probes for "back probing" on very small cable entries
- Art. no. 3791 50 9: 2 silicone test leads 1.2 m with straight and angled connection
- Art. no. 3791 50 10: 2 silicone test leads 1.2 m with straight connectors
- Art. no. 3791 50 13: 2 adapters 4 mm / 4 mm to extend the test cables
- Art. no. 3791 50 15: 1 fuse holder incl. fuse for adaptation
- Art. no. 3791 50 15 1: 1 fuse (10A)
- Art. no. 3791 50 16: 2 multi clips with various insert connectors
 - narrow tongue for small contacts
 - nail bed for flex with thin wires
 - large contact for thick, tough cables
- Art. no. 3791 52 1/2/3/4/5/6/7/8/9/10/11/12/13/14 : 1 Y-cable to "log in" and "select bypass" between male and female contact



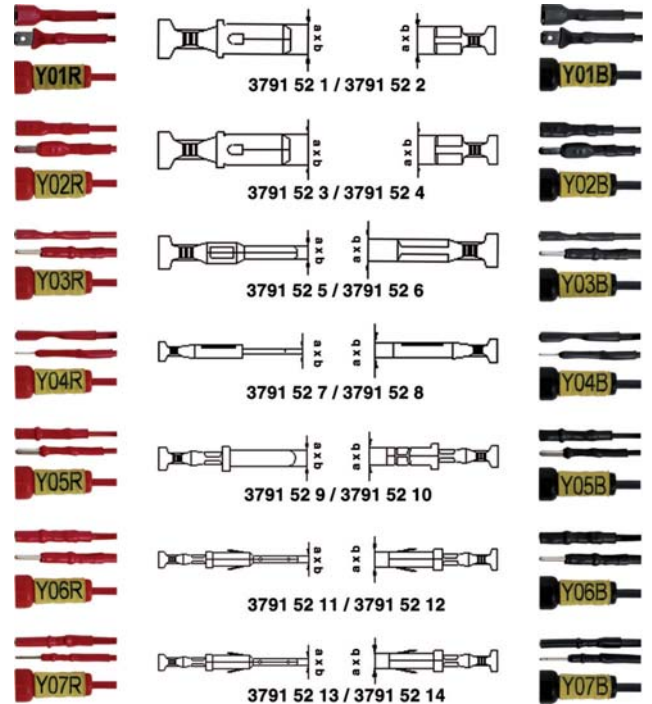
Y-leads for Base Kit Professional /Basic Diagnosis



Technical Data

Art.-no.	Test cable Description		Length		Size
			mm		mm
3791 52 1	Y01R	flat: pin /socket	240	a x b:	4.8 x 0.5
3791 52 2	Y01B	flat: pin /socket	240	a x b:	4.8 x 0.5
3791 52 3	Y02R	flat: pin /socket	240	a x b:	2.8 x 0.8
3791 52 4	Y02B	flat: pin /socket	240	a x b:	2.8 x 0.8
3791 52 5	Y03R	flat: pin /socket	240	a x b:	1.2 x 0.5
3791 52 6	Y03B	flat: pin /socket	240	a x b:	1.2 x 0.5
3791 52 7	Y04R	flat: pin /socket	240	a x b:	0.63 x 0.63
3791 52 8	Y04B	flat: pin /socket	240	a x b:	0.63 x 0.63
3791 52 9	Y05R	round: pin /socket	240	Ø	2.5
3791 52 10	Y05B	round: pin /socket	240	Ø	2.5
3791 52 11	Y06R	round: pin /socket	240	Ø	1.5
3791 52 12	Y06B	round: pin /socket	240	Ø	1.5
3791 52 13	Y07R	round: pin /socket	240	Ø	1.0
3791 52 14	Y07B	round: pin /socket	240	Ø	1.0

Article No.	Article Description	QTY
3791 52 1	Y-LEAD .Y01R FC4,8/0,5/M-F/RED	1
3791 52 2	Y-LEAD .Y01B FC4,8/0,5/M-F/BL	1
3791 52 3	Y-LEAD .Y02R FC2,8/0,8/M-F/RED	1
3791 52 4	Y-LEAD .Y02B FC2,8/0,8/M-F/BL	1
3791 52 5	Y-LEAD .Y03R FC1,3/0,5/M-F/RED	1
3791 52 6	Y-LEAD .Y03B FC1,3/0,5/M-F/BL	1
3791 52 7	Y-LEAD .Y04R FC0,63/M-F RED	1
3791 52 8	Y-LEAD .Y04B FC0,63/M-F BLACK	1
3791 52 9	Y-LEAD .Y05R RC2,5/ M-F RED	1
3791 52 10	Y-LEAD .Y05B RC2,5/ M-F BLACK	1
3791 52 11	Y-LEAD .Y06R RC1,5/ M-F RED	1
3791 52 12	Y-LEAD .Y06B RC1,5/ M-F BLACK	1
3791 52 13	Y-LEAD .Y07R RC1,0/ M-F RED	1
3791 52 14	Y-LEAD .Y07B RC1,0/ M-F BLACK	1



Car Test Accessories 5 / Master Diagnosis

- Master diagnostics range in large case with storage opportunities for multimeter or "power probe"

Article No.	Article Description	QTY
3791 54	CAR TEST ACC. MASTER-DIAGNOSIS	1
3791 50 1	PCK(2)T-ADAPTER RED/BLACK	1
3791 50 2	PCK(2)TEST BACK PROBES	1
3791 50 3	PCK(2)CROCODILE CLIPS R/BL	1
3791 50 4 1	CABLE PIERCER RED	1
3791 50 5 2	LONG CABLE PIERCER BLACK	1
3791 50 6	PCK(2)BACK PROBES 4 COLOUR	1
3791 50 8	PCK(2)ANGLED TEST PROBES R/BLA	1
3791 50 9	PCK(2)MEASURING LEAD RED/BLACK	1
3791 50 12	CABLE DRUM 6M BLACK	1
3791 50 18	TOOL BAG	1

contains art. no. 3791 54

- Art. no. 3791 50 1: 4 T-adapter red / black, so that 2 diagnostic cables can be converted into a Y-cable
- Art. no. 3791 50 2: 2 extra thin and long test probes, specifically designed for electrical work on motor vehicles
- Art. no. 3791 50 3: 2 high-quality "crocodile clips" for a firm grip on the battery terminals
- Art. no. 3791 50 4 1: 1 short red cable piercer for quick and direct contact in the cable
- Art. no. 3791 50 5 2: 1 long black cable piercer for quick and direct contact in the cable
- Art. no. 3791 50 6: 4 extra thin and long test probes, specifically designed for electrical work on motor vehicles
- Art. no. 3791 50 8: 2 angled test probes for measuring points that are not easily accessible
- Art. no. 3791 50 9: 2 silicone test leads 1.2 m with a straight and angled connection
- Art. no. 3791 50 12: black cable drum for quick and secure extension (6 m)
- Art. no. 3791 50 18: tool bag
- Art. no. 3791 54 1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18: car-specific test leads for 300 individual uses



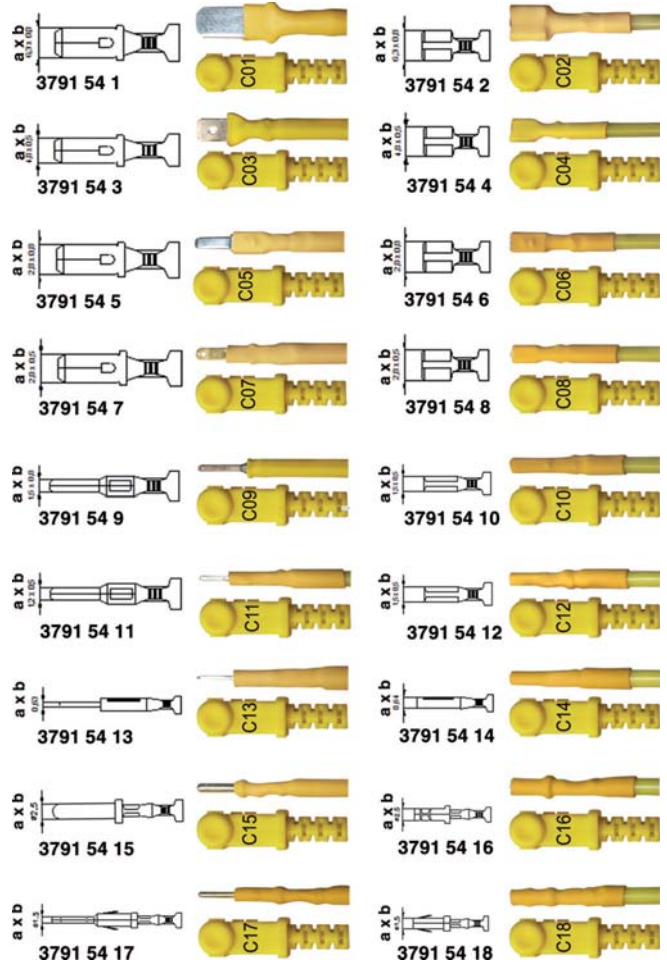
Car Test Accessories 5 / Test Leads



Technical Data

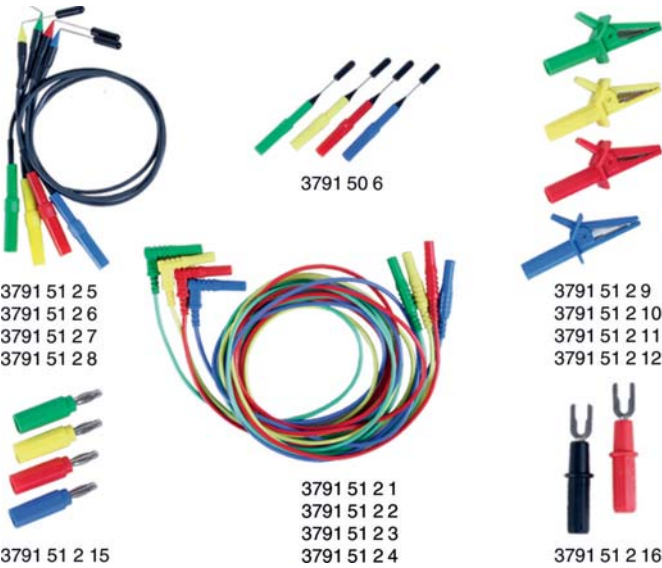
Art.-no.	Test cable	Description	Length mm	Size mm
3791 54 1	C01	flat / pin	350	a x b: 6.3 x 0.8
3791 54 2	C02	flat / socket	350	a x b: 6.3 x 0.8
3791 54 3	C03	flat / pin	350	a x b: 4.8 x 0.5
3791 54 4	C04	flat / socket	350	a x b: 4.8 x 0.5
3791 54 5	C05	flat / pin	350	a x b: 2.8 x 0.8
3791 54 6	C06	flat / socket	350	a x b: 2.8 x 0.8
3791 54 7	C07	flat / pin	350	a x b: 2.8 x 0.5
3791 54 8	C08	flat / socket	350	a x b: 2.8 x 0.5
3791 54 9	C09	flat / pin	350	a x b: 1.5 x 0.8
3791 54 10	C10	flat / socket	350	a x b: 1.5 x 0.8
3791 54 11	C11	flat / pin	350	a x b: 1.2 x 0.5
3791 54 12	C12	flat / socket	350	a x b: 1.2 x 0.5
3791 54 13	C13	flat / pin	350	a x b: 0.63 x 0.63
3791 54 14	C14	flat / socket	350	a x b: 0.63 x 0.63
3791 54 15	C15	round / pin	350	Ø 2.5
3791 54 16	C16	round / socket	350	Ø 2.5
3791 54 17	C17	round / pin	350	Ø 1.5
3791 54 18	C18	round / socket	350	Ø 1.5

Article No.	Article Description	QTY
3791 54 1	TEST LEAD DIA. C01 FC 6,3/0,8M	1
3791 54 2	TEST LEAD DIA. C02 FC 6,3/0,8F	1
3791 54 3	TEST LEAD DIA. C03 FC 4,8/0,5M	1
3791 54 4	TEST LEAD DIA. C04 FC 4,8/0,5F	1
3791 54 5	TEST LEAD DIA. C05 FC 2,8/0,8M	1
3791 54 6	TEST LEAD DIA. C06 FC 2,8/0,8F	1
3791 54 7	TEST LEAD DIA. C07 FC 2,8/0,5M	1
3791 54 8	TEST LEAD DIA. C08 FC 2,8/0,5F	1
3791 54 9	TEST LEAD DIA. C09 FC 1,5/0,8M	1
3791 54 10	TEST LEAD DIA. C10 FC 1,5/0,8F	1
3791 54 11	TEST LEAD DIA. C11 FC 1,2/0,5M	1
3791 54 12	TEST LEAD DIA. C12 FC 1,2/0,5F	1
3791 54 13	TEST LEAD DIA. C13 FC 0,63 M	1
3791 54 14	TEST LEAD DIA. C14 FC 0,63 F	1
3791 54 15	TEST LEAD DIA. C15 RC 2,5 M	1
3791 54 16	TEST LEAD DIA. C16 RC 2,5 F	1
3791 54 17	TEST LEAD DIA. C17 RC 1,5 M	1
3791 54 18	TEST LEAD DIA. C18 RC 1,5 F	1



SCOPE-KIT 4-channel vehicle testing accessories

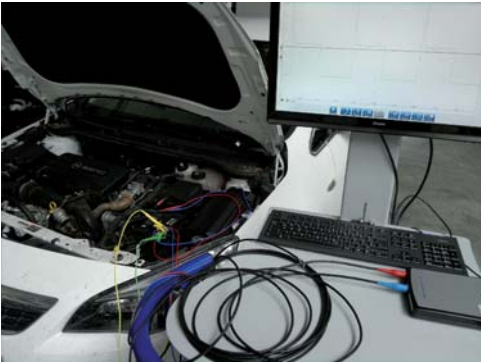
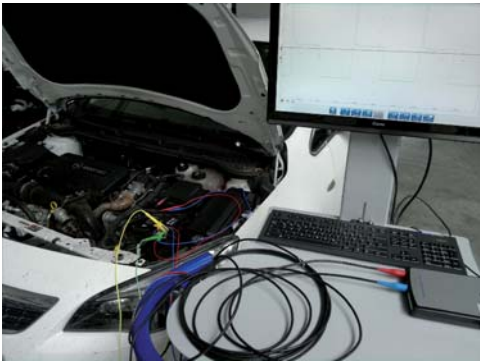
- High quality testing for professional error detection in vehicle electronics
- Ideally suited for use with oscilloscopic images on test devices
- 22-part set
- Same colour combination of test probes, test leads, crocodile clamps and safety adapters
- Temperature-resistant silicone lead that ensures a high degree of flexibility
- Extra fine and long test probes, specially designed for vehicle electronics
- Double silicone coating and multiple twisted copper wires with a total length of 2 m



Article No.	Article Description	QTY
3791 51 2	CAR TEST ACC. 4CANAL SCOPE KIT	1

Contents:

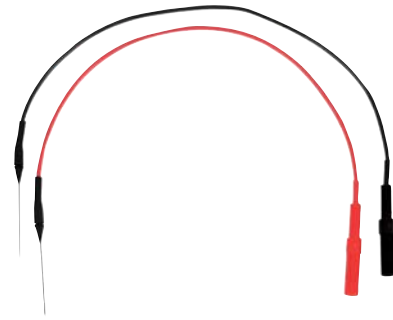
- 1x silicone test lead 2 m OF-OR, yellow
- 1x silicone test lead 2 m OF-OR, green
- 1x silicone test lead 2 m OF-OR, blue
- 1x silicone test lead 2 m OF-OR, red
- 1x back probe angled, yellow
- 1x Art. no. 3791 51 2 6: back probe angled, green
- 1x Art. no. 3791 51 2 7: back probe angled, blue
- 1x Art. no. 3791 51 2 8: back probe angled, red
- 1x Art. no. 3791 51 2 9: crocodile clamp, yellow
- 1x Art. no. 3791 51 2 10: crocodile clamp, green
- 1x Art. no. 3791 51 2 11: crocodile clamp, blue
- 1x Art. no. 3791 51 2 12: crocodile clamp, red
- 4x Art. no. 3791 51 2 15: safety adapter, yellow/green/blue/red
- 2x Art. no. 3791 51 2 16: safety cable shoe adapter, red/black
- 4x art. no. 3791 50 6: back probes yellow/green/blue/red



Mini Test Probes

- For back probing very small cable entries
- Straight
- Length of the point 31 mm
- Cross section of the point 0.7mm
- 2-tone

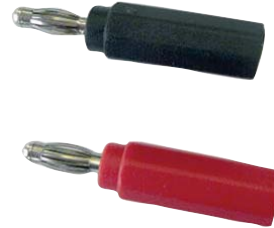
Article No.	Article Description	QTY
3791 50 8 1	PCK(2)TEST PROB. MINI STR.R/BL	1



Safety Adapter 4 mm Red /Black

- For tapping signals and voltage securely
- Safety socket 4 mm

Article No.	Article Description	QTY
3791 50 14	PCK(2)4MM SAFETY ADAPER RE/BLA	1



Cable Reel 6 m, Red

- Cable reel for quick and secure extension (6 m)
- Plug and socket 4 mm

Article No.	Article Description	QTY
3791 50 11	CABLE DRUM 6M RED	1



NFZ Test Accessories Cable Drum Dual 30 m

- 30 cable drum especially for use in commercial vehicles
- DUAL lead with 2 "drum-end" safety sockets and 2 safety plugs at the end of the cable
- Plug and socket 4 mm

Article No.	Article Description	QTY
3791 50 21	NFZ TEST ACC. CAB.DU. DUAL 30M	1



Red / Black Screw Piercer with Silicon Plaster

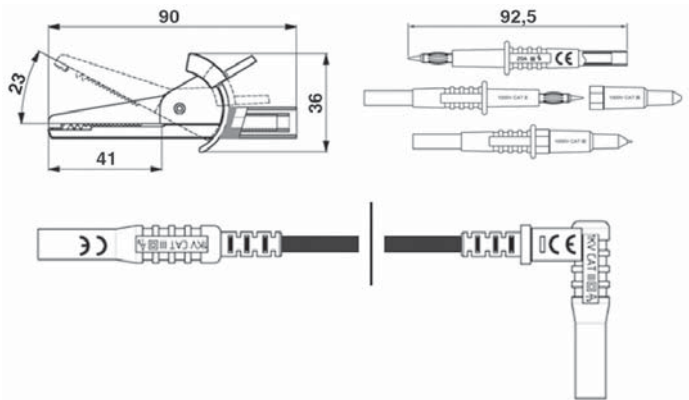
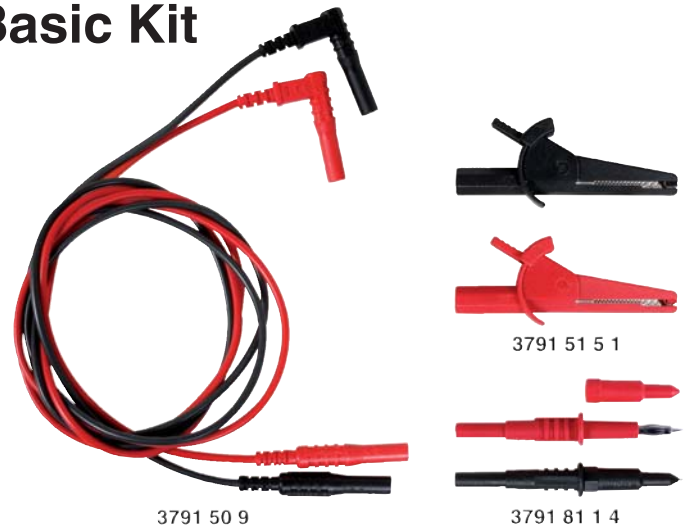
- Screw-in piercer for precise tapping of signals and voltage
- Ideal for well insulated and tough cables up to 4 mm
- Incl. high quality silicone plaster, and of course cold-welded



Article No.	Article Description	QTY
3791 50 20	PCK(2)SREW PIERC. R/BL SIL.PLA	1

Electric Test Accessories Basic Kit

- Basic kit for electricians, 1000V CAT III
- Test accessories comply with standard
- Inserts and test leads comply with EN 61010-031
- Sturdy, nickel-plated test probes with spring bush for safe contact in 4 mm holes
- Tip to penetrate insulation or oxide layers
- Double-insulated, temperature-resistant, 1.2 m long silicon cables that guarantee a high degree of flexibility
- Fully insulated crocodile clips 30 A with specially shaped 22 mm jaws providing safe contact of large cross sections and even fine wires



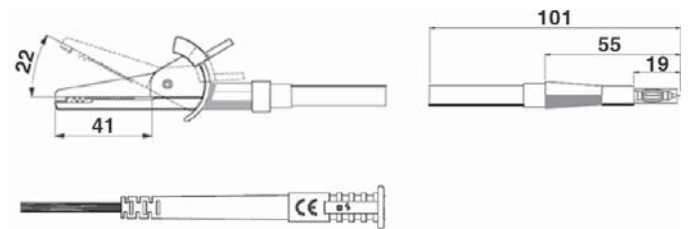
Article No.	Article Description	QTY
3791 51 5	ELECTRIC TEST ACCES. BASIC KIT	1

Scope of delivery:

- 2x test probes with red / black spring bush
- 2x red / black crocodile clips
- 2x red / black silicone cables

Electric Test Accessories Fuse Kit

- Protected test kit for electrical installation and maintenance
- Protects the user and the test device when taking a measurement of high-energy mains
- “Additional insurance” for insulation
- Integrated performance fuses that also safely shut down in the kA range in the event of short circuits
- Attachments and test leads comply with EN 61010-031
- Nickel-coated spring bush test probes with sliding protective sleeve to ensure safe use
- Bent (not detachable), double-insulated, temperature resistant, 1.2 m long silicone cables that guarantee a high degree of flexibility
- Fully insulated crocodile clips 30 A with specially shaped 22 mm jaws for safe contact of not only large cross sections, but also fine wires



Article No.	Article Description	QTY
3791 51 6	ELECTRIC TEST ACCES. FUSE KIT	1

Scope of delivery:

- 2 X protected, screw-on test prods with red / black bent silicon cables
- 2 x red / black screw-on crocodile clips
- 2 x screw-in test prods with red / black sliding sleeve
- 1 x fuse tester art. no. 3791 51 6 5
- 2 x fuse 500 mA | art no. 3791 81 2 2

Electric Test Accessories Professional Kit

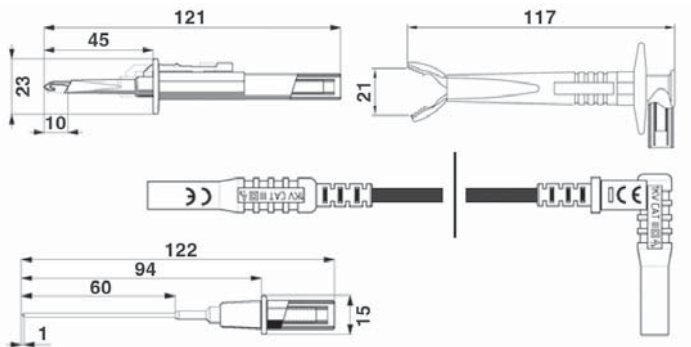
- Electric test accessories professional kit with 3 special and safe applications
- Flexible, 60 mm long fully insulated needle probes, ideal to test in hard to reach areas (e.g. in control cabinets in low-lying test locations)
- Jaws for safe and hands-free connection with cords, wires or pins
- Safety clamp-type test probe with insulated grasping claws that open wide for making contact with large test area
- Hands-free testing makes it easier to operate the device and improves safety
- Double-insulated, temperature-resistant, 1.2 m long silicone leads
- Attachments and test leads comply with EN 61010-031



Article No.	Article Description	QTY
3791 51 7	ELECTRIC TEST ACCESS. PROFIT KIT	1

Scope of delivery:

- 2 x red / black sprung hooks
- 2 red / black grabbers
- 2 red / black needle test probes
- 2 red / black silicon cables



Proximity Type Voltage Tester

- Voltage tester with LED pocket lamp function makes tests in dark rooms without risk possible
- Reliably detects AC voltages at cable connections, cable drums, sockets, switches, junction boxes, etc.
- Voltage tester detects cable discontinuities, faults in switches, burnt-out fuses, defective bulbs in chains of lights etc. without any direct metallic contact
- Test probe illuminates when voltage is applied



Technical Data

Display:	LED, red
Measuring range:	120 – 1000 V AC
Response characteristics:	from approx. 4 mm
Protection class:	IP 44
Overvoltage category:	CAT III 1000 V
Safety standard:	EN 61010
Dimensions LxW:	160 x 25 mm
Weight:	45 g
Power supply:	2x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V

Article No.	Article Description	QTY
3791 60	PROX.VOLTAGE TESTER 110	1

Included in delivery:

- 2x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V

Proximity Type Magnet Tester

- Voltage tester with LED pocket lamp function
- Magnetic field tester for testing all magnetic fields in pneumatic and hydraulic systems
- Test probe illuminates without metallic having contact with the magnetic field e.g. activated magnetic coil in magnetic valve
- Tester reacts to 3-phase, DC and permanent magnets, in motor vehicle and commercial vehicle range, plumbing and heating sector as well as numerous industrial branches



Function check:

- Remove the test magnet from the clip on magnetic field tester and hold it against the tip of the tester, which then illuminates
- If the test lamp does not illuminate, replace the batteries
- The built-in pocket lamp can be switched by turning the cap

Technical Data

Display:	LED, red
Measuring range:	all magnetic fields
Response characteristics:	from approx. 4 mm
Protection class:	IP 44
Overvoltage category:	CAT II 1000 V
Safety standard:	IEC/EN 61010-1
Dimension LxW:	160 x 25 mm
Weight:	45 g
Power supply:	2x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V

Article No.	Article Description	QTY
3791 6	PROX.MAGNETIC FIELD TEST.130	1

Included in delivery:

- 2x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V

AC voltage tester

- Contact-free, easy to use voltage tester - Offers safety while locating electrical fields
- Contact-free detection of voltage-conducting leads, from 24 VAC to 1000 VAC
- Pinpoints electrical voltage in cables, sockets, lamp-holders and fuses
- Finds line interruptions in wires and cables
- Very high sensitivity for tracking cables at greater depths (Zoom)
- Easily visible LED-signalling to display electrical current with separate on/off button
- Robust, impact-resistant high-quality housing



Technical Data

Display:	optical red
Voltage range:	24 VAC - 1000 VAC
Frequency:	50 ... 60Hz
Excess voltage category:	CAT III - 1000V (non-condensing)
Flashlight:	yes
Operating temperature:	-10°C ... 50°C
DimensionBxHxT:	158 x 21 x 25 mm
Weight:	48 g

Article No.	Article Description	QTY
3791 24 1000	VOLTAGE TESTER AC	1

Scope of delivery:

- 1 x voltage tester
- 2 x batteries, type AAA micro 1.5 V

Continuity and Line Tester

- Universal continuity and line tester
- Optical and acoustic continuity testing
- Contact-free voltage testing
- Single-pole phase testing
 - pocket lamp function with LED technology with up to 80 hrs illumination time
 - due to insulation the tester detects voltages and exactly shows them until power interruption

Technical Data	
Continuity test:	optical 0 ~ 20 Ohm acoustic 0 ~ 250 Ohm
Test voltage:	4,5 V
Test current:	optical ~ 10 mA acoustic ~ 2 mA
Strength of voltage:	400 V
Overvoltage category:	CAT II 690 V
Safety standard:	EN 61010
Protection class:	IP 44
Power supply:	3x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V
Dimension LxWxH:	120 x 60 x 30 mm

Article No.	Article Description	QTY
3791 35	CONTINUITY TESTER 20	1

- Included in delivery:
- 3x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V



Wire Finder Set 26, with LED Pocket Lamp

- Finds electrical leads in the wall and in cable routes, also contact-less or no stripping of insulation
- Detects pairs of leads of telephone systems
- Detects safety sensors of alarm and fire alarm systems
- Detects network leads
- Locates metallic water and heating tubes
- Lead finding under plaster of all metallic leads
- Detection of unloaded leads also at big distances
- Transfer of transmitter signals with alligator clips or with modular plug
- Integrated LED pocket lamp
- Sleeve for one earphone for works in noisy rooms
- Voltage-stable up to 400 V
- Stepless adjustment of sensitivity
- Sound can be switched (continuous or alternating)

Technical Data

Display:	acoustic
Power supply:	2 x 9 V
Dimension:	230 x 55 x 23 mm (receiver) 55 x 57 x 23 mm (transmitter)
Weight:	244 g
Safety standard	IEC/EN 61010-1 (DIN VDE 0411)



Included in delivery:

- 1 x Instruction manual
- 1 x Transmitter
- 1 x Receiver
- 2 x Battery 9 V Block
- 1 x Pouch

Article No.	Article Description	QTY
3791 7	WIRE FINDER SET 26	1

AC voltage tester

- Digital voltage and continuity testing with bar graph and numerical measurement displays
- Voltage tester with the most important nominal voltages
- Automatic alternating current (AC) and direct current (DC) testing
- Automatic range and function selection, direct testing and measurement
- Single-phase testing and rotating flux tests with display of order of phases
- Single-poled phase testing Automatic continuity tester with acoustic signal tone
- Safety self-test (AC warning), from 50V
- Emergency operation without battery
- Integrated measuring point illumination via ultra-bright LED light

Technical Data	
LC-Display/Resolution:	3,5 positions, 1999 digits / 1 V AC/DC numeral display)
Voltage range:	6, 12, 24, 50, 120, 230, 400, 690 V AC/DC
Voltage detection:	automatic
Peak current(AC/DC):	<=(3mA/2,5mA)
Frequency range:	50/60 Hz
Single-poled phase testing /B>	
Voltage range:	100...690 V AC (50/60 Hz)
Continuity test:	Resistance range< 300 kΩ
Test current:	< 5μA
Excess voltage protection:	690 V AC/DC
Rotating flux protection	
Voltage range:	(LED's) 100...400V
Excess voltage category:	CAT II 1000 V
with protective lid:	CAT III - 1000 V / CAT IV 600 V
Protection type:	IP 64
Operating temperature:	-10 °C ... 55 °C
Weight:	230 g
Battery	2x1,5V AAA

Article No.	Article Description	QTY
3791 6 690	VOLTAGE TESTER DIGITAL AC	1

- Scope of delivery:
- 1 x AC digital voltage tester
 - 2 x batteries, type AAA micro 1.5 V
 - protective covers



Voltage Tester LED, 2-Pole

- Universal voltage tester
- Direct and alternating voltage, displays polarity
- Phase sequence indicator
- Phase tester
- Continuity check
- Voltage test with FI/RCD-release test
- Protective conductor test
- Tests its own source of power
 - Tip cover minimizes risk of injury
- With conectible LED as light

Technical Data	
Display:	13 LED's for voltage RX/Ohm and L1/Phase
Control panel:	finger conatct
Nominal voltage range:	automatic measuring range selection voltage 3 – 1,000 V AC / 6 – 1,400 V DC, 0...400 Hz phases 12, 24, 48, 120, 230, 400, 690 and 1,000 V resistance 0 – 500 kOhm with acoustic signal
Phase display:	> 100 V AC
Automatic charge:	Is ~ 30 mA ED(DT) = 30 s
Test current:	< 30 mA In < 3.5 mA
Base charge:	approx. 2 W (at 690 V)
Reaction time:	< 0.1 s
Diode test / resistance change:	0 – 500 kOhm, acoustic signal
Frequence range:	0 – 400 Hz
Continuity test:	0 – 50 kOhm
Temperature range:	-10 °C to +55 °C
Safety standard:	EN 61010
Overvoltage category:	Cat IV 1,000 V
Protection class:	IP 65
Connection lead:	PVC cable
Power supply:	2x Art.-No. 3880 15 3: battery Alkaline Micro 1.5 V
Dimension (L x W x H):	270 x 85 x 30 mm
Length:	920 mm
Weight:	300 g

Article No.	Article Description	QTY
3791 34 2	VOLTAGE TESTER LCD PLUS III	1

Scope of delivery:

- 2x Art.-No. 3880 15 3 Battery Alkaline Micro 1.5 V



Voltage Tester LCD, 2-Pole

- Universal voltage tester
- For testing AC/DC voltage and polarity display
- Displays rotating field direction
- Tests phases
- Continuity testing
- Voltage testing with FI/RCD-trip test
- Tests earthed conductor
 - Tip covering reduces risk of injury
- With LED for lighting

Technical Data	
Display:	LCD 3.5 digits, LCD for phase and rotating field, 4 LEDs for ACV, DCV, Ohm and Data Hold
Control panel:	ON – OFF button, D-H – button finger contact (back side)
Nominal voltage range:	automatic measuring range selection voltage 3 – 1,000 V AC/4 – 1.400 V DC, 0 – 400 Hz resistance 0 – 2,000 Ohm
Acoustic signal:	~ 35 Ohm
Phase display:	> 100 V AC
Automatic load:	Is ~ 30 mA ED(DT) = 30 s
Test current:	~ 30 mA
Frequency range:	0 – 1,000 Hz
Continuity test:	0 – 50 kOhm
Temperature range:	-15 °C to +55 °C
Safety standard:	IEC/EN 61243-3, DIN VDE 0682-401
Overvoltage category:	Cat IV 1,000 V
Protection class:	IP 65
Power supply:	2x Art. No. 3880 15 3 Battery Alkaline Micro 1.5 V
Dimensions (L x W x H):	270 x 85 x 30 mm
Length:	920 mm
Weight:	300 g

Article No.	Article Description	QTY
3791 33 2	VOLTAGE TESTER LCD PLUS III	1

Included in delivery:

- 2x Art. No. 3880 15 3: Battery Alkaline Micro 1.5 V



Digital cable detector

- Universal and flexible cable detection device set with transmitter and receiver
- Contact-free tracking of the transmission signal by the receiver
- Pinpoints electrical cables, fuses, circuit breakers, metal pipes (e.g. heating pipes)
- Line breaks and short circuits in existing installations
- For use either with or without mains current
- High frequency from 125 kHz
- Display of direct and alternating current
- Signal encoding enables max. 7 transmitters and one receiver to be used
- Built-in AC voltage detector
- Permanent AC voltage warning
- Integrated measuring point light
- Easy-to-read, illuminated LC Display

Technical Data	
TX cable tracer:	
Output signal:	125 kHz
Nominal voltage:	12...250V
Measuring range:	12...400V
Frequency range:	0...60Hz
Signal codes:	7 different codes can be set
Excess voltage category:	CATIII - 300V, Pollution rating 2
Electricity supply:	1 x 9V Block, IEC LR6, Alkali
DimensionBxHxT:	68 x 130 x 32 mm
Weight:	200 g
RECV Cable tracer receiver:	
Measuring ranges:	0 ... 0,4 m measuring depth
Single-poled measuring Messung:	0 ... 2 m measuring depth
double-poled measuring:	0 ... 0,5 m measuring depth
Electricity supply:	1 x 9V Block, IEC LR6, Alkali
DimensionBxHxT:	59 x 192 x 37 mm
Weight:	240 g



Article No.	Article Description	QTY
3791 12 250	WIRE FINDER DIGITAL	1

- Scope of delivery:
- 1 x digital cable detector carrying case
 - 1 x TX transmitter
 - 1 x RECV receiver
 - 1 x attachment cable
 - 1 x measuring probe
 - 1 x measuring clamp Batteries

Wire Finder Set 26, with LED Pocket Lamp

Technical Data

Rated voltage range:	6 - 400 V
Voltage display:	6 V, 12 V, 24 V, 50 V, 230 V, 400 V
Safety standard:	IEC/EN61010-1
Over-voltage category:	CAT III 1000 V
TÜV/GS	

Article No.	Article Description	QTY
3791 7	WIRE FINDER SET 26	1



Car Voltage Tester

- Voltage tester for all automotive electrical applications
- Particularly suitable for trouble-shooting on electrical components

Technical Data

Voltage range:	6-48 V
Voltage display:	12, 24, 48 V and polarity
Safety standard:	IEC/EN 61010-1
Cable length:	130 cm
TÜV/GS	

Article No.	Article Description	QTY
3791 2	CAR VOLTAGE TESTER 6-48V	1



Multifunction Tester

- Leitfähigkeit von Glühbirnen, Schaltern, Relais, Kabeln und Leitungen oder Sicherungen etc.
- Überprüfung von Phasen-, Null- und Erdleitern in Steckdosen
- Polaritätsprüfung von Batterien und Halbleitern
- geeignet für 12 V - 250 V Wechselstrom

Article No.	Article Description	QTY
3791 3	VOLTAGE TESTER MULTIFUNCTIONAL	1



Grommets, Double-sided

- Material: black PVC
- For protecting wires, cables and tubing passing through metal plates
- Snaps in quickly and cleanly

Article No.	Article Description	QTY
3791 4	TEST LAMP 6-24V	1
3791 4 1	REPL.LA.24V 5W 8X31MM F.3791 4	e 10



Voltage Tester, Single Pole

- For slotted head screws
- Version DIN 57860 Part 6 and VDE 0680/6 for 150-250 V
- Blade width 3 mm
- Blade thickness 0.5 mm
- Blade length 60 mm

Article No.	Article Description	QTY
4264 3	VOLTAGE TESTER DIN 57860 3MM	1 ü



GS Voltage Tester

- Voltage tester in compliance with VDE 0680/6
- 150-250 V (glow tube not exchangeable)
- Blade width 3 mm

Article No.	Article Description	QTY
4264 31	VOLT.TESTER GS 3MM	1



Xenon Headlamp Bulbs **FÖRCH**★★★★★

- 12V + 24V, 35 W
- 2 designs for all Xenon-systems

Technical Data

ECE/DIN 72061	Socket	Kelvin
D1S	PK32d – 2	4.100
D2S	P32d – 2	4.200
D2R	P32d – 3	4.200

Article No.	Article Description	QTY
3801 0999	12+24V D1S XE.DISC.LAMP 35W 5*	e 4
3801 1000	12+24V D2S XE.DISC.LAMP 35W 5*	e 3
3801 2000	12+24V D2R XE.DISC.LAMP 35W 5*	1

Art.-No. 3801 0999:

- Discharge lamp with integrated ignition device

Art.-No. 3801 1000:

- D2S design
- Ellipse form with lens of the headlight

Art.-No. 3801 2000:

- D2R design
- Complex without lens of the headlight



3801 0999



3801 1000



3801 2000

Xenon Headlights **ECO**

- 12 V + 24 V, 35 W

Technical Data

ECE/DIN 72061	Socket	Kelvin
D1S	PK32d – 2	4.300
D2S	P32d – 2	4.300
D2R	P32d – 3	4.300
D3S	PK32d – 5	4.300
D4S	P32d – 5	4.300

Article No.	Article Description	QTY
3801N 0999	12+24V D1S XE.DISC.LAMP 35WECO	1
3801N 1000	12+24V D2S XE.DISC.LAMP 35WECO	1
3801N 2000	12+24V D2R X DISC LAMP 35W ECO	1
3801N 3000	12+24V D3S X DISC LAMP 35W ECO	1
3801N 4000	12+24V D4S XE.DISC.LAMP 35WECO	1

Art. No. 3801N 0999

- Discharge lamp with integrated ignition unit

Art. No. 3801N 1000

- D2S design
- Use in elliptical headlights with diffusing plate and lens

Art. No. 3801N 2000:

- D2R design
- Use in complexe headlights without diffusing plate and lens

Art. No. 3801N 3000:

- Discharge lamp with integrated ignition unit

Art. No. 3801N 4000:

- Use in elliptical headlights with diffusing plate and lens



3801N 0999



3801N 1000



3801N 2000



3801N 3000



3801N 4000

Halogen Headlamp Bulbs FÖRCH*****

- All FÖRCH halogen bulbs are UV-free

Technical Data

ECE/DIN 72061	Base
H1	P14,5s
H2	X511
H3	PK 22 s
H4	P43t
H7	PX26d
H8	PGJ 19-1
H9	PGJ 19-5
H 11	PGJ 19-2
HB 3	P 20 d
H15	PGJ23t-1
H27/1	PG 13
H27/2	PGJ 13
HIR2	PX22d
HB 4	P 22 d
HB4	P22d

Article No.	Article Description	QTY
3801 1111	12V H1 HALOGEN BULB 55W 5*	e 10
3801 1131	12V H2 HALOGEN BULB 55W 5*	e 10
3801 1121	12V H3 HALOGEN BULB 55W 5*	e 10
3801 1101	12V H4 HALOGEN BULB 60/55W 5*	e 10
3801 1117	12V H7 HALOGEN BULB LIFE55W 5*	e 10
3801 1117 1	12V H7 HALOGEN BULB 55W 5*	e 10
3801 1186	12V H8 HALOGEN BULB 35W 5*	e 10
3801 1187	12V H9 HALOGEN BULB 65W 5*	e 10
3801 1188	12V H10 HALOGEN BULB 42W	e 10
3801 1189	12V H11 HALOGEN BULB 55W 5*	e 10
3801 1115	12V H15 HALOGEN BULB 55/15W	e 10
3801 1190	12V H27/1 HALOGEN BULB 27W	e 10
3801 1191	12V H27/2 HALOGEN BULB 27W	e 10
3801 1176	12V HIR2 HALOGEN BULB 55W	e 10
3801 1177	12V HB3 HALOGEN BULB 60W 5*	e 10
3801 1178	12V HB4 HALOGEN BULB 51W 5*	e 10
3802 1112	24V H1 HALOGEN BULB 70W 5*	e 10
3802 1132	24V H2 HALOGEN BULB 70W 5*	e 10
3802 1122	24V H3 HALOGEN BULB 70W 5*	e 10
3802 1102	24V H4 BULB HALOGEN 75/70W 5*	e 10
3802 1107	24V H4 HAL.BU.H.DUTY 75/70W 5*	e 10
3802 1119	24V H7 HALOGEN BULB 70W 5*	e 10
3802 1119 1	24V H7 HALOGEN BULB HD 70W 5*	e 10
3802 1189	24V H11 HALOGEN BULB 70W	e 10

Art.-No. 3801 1189:

- Application H11 e.g. for Audi A4, BMW 300 series, Mercedes-Benz E-Models, Mercedes-Benz M-Models, Ford Mondeo, Peugeot 406, Renault, VW Phaeton fog-lights and for Ford GM American models, Harley Davidson as dim light.

Art.-No. 3802 1107:

- Heavy-Duty = high resistance to vibration

Art.-No. 3802 1119 1:

- Heavy-Duty = high resistance to vibration



Halogen Headlamp Bulbs **ECO**

- UV-free

Technical Data

ECE/DIN 72061	Base
H1	P14,5s
H3	Pk22s
H4	P43t
H7	PX26d
H8	PGJ19-1
H9	PGJ19-5
H11	PGJ19-2
HB3	P20d
HB4	P22d

Article No.	Article Description	QTY
3801N 1101	12V H4 HALOGEN BULB 60/55W ECO	e 10
3801N 1111	12V H1 HALOGEN BULB 55W ECO	e 10
3801N 1117	12V H7 LONG LIFE BULB 55W ECO	e 10
3801N 1121	12 H3 HALOGEN BULB 55W ECO	e 10
3801N 1186	12V H8 HALOGEN BULB 35W ECO	e 10
3801N 1187	12V H9 HALOGEN BULB 65W ECO	e 10
3801N 1189	12V H11 HALOGEN BULB 55W ECO	e 10
3801N 1177	12V HB3 HALOGEN BULB 60W ECO	e 10
3801N 1178	12V HB4 HALOGEN BULB 51W ECO	e 10
3802N 1102	24V H4 HALOGEN BULB 75/70W ECO	e 10
3802N 1107	24V H4 HD HALOGEN BULB ECO	e 10
3802N 1112	24V H1 HALOGEN BULB 70W ECO	e 10
3802N 1114	24V H1 HD LAMP TL 70W ECO	e 10
3802N 1119	24V H7 HALOGEN BULB 70W ECO	e 10
3802N 1120	24V H7 HD LAMP TL 70W ECO	e 10
3802N 1122	24V H3 HALOGEN BULB 70W ECO	e 10

Art.-No. 3802N 1107:

Heavy-Duty = Max. resistance to vibration



Halogen Headlamp Bulbs 100W **ECO**

- UV free
- Suitable for searchlights and motor rally (not approved in the scope of the road traffic regulation and only applicable with correspondingly designated headlights)

Technical Data

ECE/DIN 72061	Base
H1	P1 4.5 s
H3	Pk 22 s
H4	P 43 t
H7	PX 26 d

Article No.	Article Description	QTY
3801N 100 1	HALOGEN BULB ECO 12V H1 100W	e 10
3801N 100 3	HALOGEN BULB ECO 12V H3 100W	e 10
3801N 100 4	HALOGEN BULB ECO 12V H4 100W	e 10
3801N 100 7	HALOGEN BULB ECO 12V H7 100W	e 10

Halogen Bulbs *ECO.*

- 12 Volt

Technical Data	
ECE/DIN 72061	Base
H1	P14,5s
H3	Pk22s
H4	P43t
H7	PX26d

Article No.	Article Description	QTY
3801J 1111	12V H1 BULB HALOGEN 55W ECO.	10
3801J 1121	12V H3 BULB HALOGEN 55W ECO.	10
3801J 1101	12V H4 BULB HALOG.60/55W ECO.	10
3801J 1117	12V H7 BULB HALOGEN 55W ECO.	10
3802J 1112	24V H1 BULB HALOGEN 70W ECO.	10
3802J 1122	24V H3 BULB HALOGEN 70W ECO.	10
3802J 1102	24V H4 BULB HALOGEN75/70W ECO.	10
3802J 1119	24V H7 BULB HALOGEN 70W ECO.	10



Megalight Headlamp Bulbs

- Up to 30 to 60% more light performance on the road
- Increased range of vision allows earlier recognition of objects and situations

Article No.	Article Description	QTY
3801 1134	12V BULB H4+30% MEGA HA.60/55W	e 10
3801 11134	(DUO PACK X2) 12V MEGA BULB PA	1



3801 1134



3801 11134

VisionPlus Headlamp Bulb

- **Up to 50% more light performance on the road**
- Earlier recognition due to improved range of vision
- Better reflection of road markings and signs
- It is necessary to increase the range of view in front of the car for earlier recognition of obstacles earlier in darkness or bad weather.
- VisionPlus headlamp bulbs from Philips not only produce 50% more light; they also illuminate the road better over a longer distance
- These bulbs provide a beam of light 10-20 m longer than other bulbs, depending on the type of OE bulb installed
- This improved vision, amounting to the length of approximately two cars, can be decisive during emergency braking manoeuvres

Article No.	Article Description	QTY
3801 0001	VISION PLUS DUO PACK H4 +60%	e 5
3801 0002	VISION PLUS DUO PACK H7 +60%	e 5
3801 0003	VISION PLUS DUO PACK H1 +60%	e 5



Superblue Headlamp Bulbs

- Xenon-characteristics with white light
- Better view and greater awareness due to brighter light

Article No.	Article Description	QTY
3801 11111	12V BULB H1 XEN.SUPERBLUE 55W	e 10
3801 11101	12V BULB H4 XEN.SUPERBL.60/55W	e 10
3801 11117	12V BULB H7 XEN.SUPERBLUE 55W	e 10



3801 11111



3801 11101



3801 11117

Asymmetric Bulbs **FÖRCH*******

Technical Data

Art. No.	ECE/DIN 72061	Base
3801 1199	HR2	P45t
3801 1201	R2	P45t
3801 1221	-	P45t
3802 1202	R2	BA20D

Article No.	Article Description	QTY
3801 1199	12V HR2 HALOGEN BULB 45/40W 5*	e 10
3801 1201	12V R2 ASYMM.BULB 45/40W 5*	e 10
3802 1202	24V R2 ASYMM.BULB 55/50W 5*	e 10
3801 1221	12V 35/35W BULB SYMM.BA20D	e 10

Part No. 3801 1199:

This bulb can be used instead of the standard asymmetric bulb R2 12V 45/50W. The change to the HR2-version provides a significantly brighter illumination.



3801 1199

3801 1201/
3802 1202

3801 1221

Halogen Bulbs for Motorbikes

Article No.	Article Description	QTY
3801 1173	12V 35/35W BULB HALOGEN PX43T	e 10
3801 1365	12V 15W BULB P26S	e 10



3801 1173



3801 1365

Tail Lamp and License Plate Bulbs



Article No.	Article Description	QTY
3803 1710	6V 5W BULB TUBUL.35MM SV8.5-8	10
3801 1701	12V 3W BULB TUB.28MM SV6-7.6	10
3801 1711	12V5WBULBSOF.35MMSV8.5-8	10
3801 1721	12V 5W BULB TUBUL.41MM SV8.5-8	10
3801 1735	12V 10W BULB TUB.28MM SV8.5-8	10
3801 1715	12V 10W BULB TUB.28MM SV8.5-8	10
3801 1731	12V 10W BULB TUBU.41MM SV8.5-8	10
3801 1751	12V 18W BULB TUBULAR SV8, 5-8	10
3801 1761	12V 21W BULB TUBULAR SV8 5,5-8	10
3802 1702	24V 3W BULB SOFFITTE SV7-8	10
3802 1712	24V 5W BULB SOF.35MM SV8.5-8	10
3802 1722	24V 5W BULB TUBUL.41MM SV8.5-8	10
3802 1732	24V 10W BULB TUBU.41MM SV8.5-8	10
3802 1752	24V 18W BULB TUBULAR SV 8.5-8	10

(V=Volt/W=Watt/Socket description)

Technical Data

Art.-No.	Ø-Glass bulb	Length
3803 1710	10,5 mm	40,0 mm
3801 1701	7,6 mm	30,0 mm
3801 1711	10,5 mm	38,0 mm
3801 1721	10,5 mm	43,0 mm
3801 1735	9,8 mm	30,0 mm
3801 1715	10,5 mm	38,0 mm
3801 1731	10,5 mm	43,0 mm
3801 1751	13,0 mm	43,0 mm
3801 1761	13,5 mm	44,5 mm
3801 1702	8,0 mm	32,0 mm
3802 1712	10,5 mm	36,0 mm
3802 1722	10,5 mm	43,0 mm
3802 1732	10,5 mm	43,0 mm
3802 1752	13,0 mm	43,0 mm

Tail Lamp and License Plate Bulbs **ECO**



Article No.	Article Description	QTY
3801N 1711	12V 5W BULB TU.35MM SV8.5-8ECO	10
3801N 1731	12V10W BULB TU.41MM SV8.5-8ECO	10
3802N 1712	24V 5W BULB TU.35MM SV8.5-8ECO	10
3801N 1735	12V10W BUL. TUB.28MM SV8.5-8ECO	10

(V=Volt/W=Watt/Socket description)

Technical Data

Ø-Glassbulb	Length
10,5 mm	38 mm
11,0 mm	30 mm
11,0 mm	43 mm
11,0 mm	38 mm

Indicator Bulbs

Article No.	Article Description	QTY
3803 1510	6V 2W BULB PARKING LIGHT BA9S	10
3803 1400	6V 5W BULB SPHERICAL BA15S	10
3803 1410	6V 10W BULB SPHERICAL BA15S	10
3803 1320	6V 21W BULB SPHERICAL BA15S	10
3803 1340	6V 21/5W BULB SPHERICAL BAY15D	10
3801 1227	12V P27/7W BULB SPHER.W2.5X16Q	e 10
3801 1511	12V 2W BULB PARKING LIGHT BA9S	10
3801 1551	12V 2W INDICATOR BULB BA7S	10
3801 1501	12V 4W BULB PARKING LIGHT BA9S	10
3801 1401	12V 5W BULB SPHER BA15S	10
3801 1411	12V 10W BULB SPHERICAL BA15S	10
3801 1311	12V 18W BULB SPHERICAL BA15S	10
3801 1383	12V 21W BULB SPHER.YELL.BAU15S	10
3801 1383 1	12V 21W BULB SPHER.SILV.BAU15S	10
3801 1321	12V 21W BULB SPHERICAL BA15S	10
3801 1341	12V 21/5W BULB SPHERIC.BAY15D	10
3801 1345	12V 21/4W BULB SPHERIC. BAZ15D	10
3802 1512	24V 2W BULB PARKING LIGHT BA9S	10
3802 1552	24V 3W INDICATOR BULB BA7S	10
3802 1502	24V 4W BULB PARKING LIGHT BA9S	10
3802 1402	24V 5W BULB SPHER BA15S	10
3802 1412	24V 10W BULB SPHERICAL BA15S	10
3802 1302	24V 15W BULB SPHERICAL BA 15S	10
3802 1392	24V 15W BULB SPHERICAL BA 15D	10
3802 1312	24V 18W BULB SPHERICAL BA15S	10
3802 1322	24V 21W BULB SPHERICAL BA15S	10
3802 1309	24V 21W BULB NO HD YELL.BAU15S	10
3802 1340	24V 21/4W BULB SPHERIC.BAY15D	10
3802 1342	24V 21/5W BULB SPHERIC.BAY15D	10

(V=Volt/W=Watt/Socket description)



3803 1510

3803 1345

3801 1227

Parking Light Bulbs **ECO**

Article No.	Article Description	QTY
3801N 1501	12V 4W LAMP SPHERI.BA9S ECO	10
3801N 1401	12V 5W LAMP SPHERIC.BA15S ECO	10
3801N 1411	12V 10W LAMP SPHERI.BA15S ECO	10
3801N 1321 1	12V 21W BALL LAMP RED BAW15S	10
3801N 1383	12V 21W SPHER.YEL.CONST.15S ECO	10
3801N 1321	12V 21W LAMP SPHERIC.BA15S ECO	10
3801N 1345	12V 21/4W BULB SPHE.BAZ15D ECO	10
3801N 1341 1	12V 21/5W BALL LAMP RED BAW15D	10
3801N 1341	12V 21/5W BULB SPHE.BAY15D ECO	10
3802N 1502	24V 4W LAMP SPHERI.BA9S ECO	10
3802N 1402	24V 5W LAMP SPHERI.BA15S ECO	10
3802N 1412	24V 10W LAMP SPHERI.BA15S ECO	10
3802N 1309	24V 21W SPHE.YEL.CONST.15S ECO	10
3802N 1322	24V 21W LAMP SPHER.BA15S ECO	10
3802N 1342	24V 21/5W BULB SPHE.BAY15D ECO	10

(V=Volt/W=Watt/Socket description)



3801N 1501

3801N 1345

Heavy Duty Bulbs

- High shock resistance
- Multiple Service life for vehicles with 24V elec. systems (tested at 28V) especially for heavy trucks
- Red base seal for quick identification

Article No.	Article Description	QTY
3802 1506	24V 4W BULB HEAVY DUTY BA9S	10
3802 1406	24V 5W BULB HEAVY DUTY BA15S	10
3802 1416	24V 10W BULB HEAVY DUTY BA15S	10
3802 1326	24V 21W BULB HEAVY DUTY BA15S	10

(V=Volt/W=Watt/base description)



3802 1506

3802 1406/
3802 1416

3802 1326

Heavy Duty Bulbs **ECO**

- High shock resistance
- Multiple Service life for vehicles with 24V elect. systems (tested at 28V) especially for heavy trucks
- Red base seal for quick identification

Article No.	Article Description	QTY
3802N 1506	24V 4W BULB HEAVY D.BA9S ECO	10
3802N 1406	24V 5W BULB HEAVY D.BA15S ECO	10
3802N 1416	24V 10W BULB HEAVY D.BA15S ECO	10
3802N 1326	24V 21W BULB HEAVY D.BA15S ECO	10
3802N 1342 1	24V 21/5W BU.SPH.HD BAY15D ECO	10

(V=Volt/W=Watt/base description)



3802N 1506

3802N 1406

3802N 1416

3802N 1326

3802N 1342 1

Wedge Base Bulbs

Technical Data

Art. No.	Base
3801 1603	W 2 x 4.6 d bulb mat
3801 1624	W 2.1 x 9.5 d bulb orange
3801 1625	W 2.1 x 9.5 d bulb blue

Article No.	Article Description	QTY
3801 1601	12V 1.2W WEDGE BASE BU.W2X4.6D	10
3801 1603	12V 1.2W WEDGE BASE BULB MAT	10
3801 27225	12V 2W WEDGE BASE BU.W2.1X9.5D	10
3801 1604	12V 2.3W WEDGE BASE BU.W2X4.6D	10
3801 1611	12V 3W WEDGE BASE BU.W2.1X9.5D	10
3801 1621	12V 5W WEDGE BASE BU.W2.1X9.5D	10
3801 1624	12V 5W WEDGE BASE BULB ORANGE	10
3801 1625	12V 5W WEDGE BASE BULB BLUE	10
3801 1607	12V 16W WEDGE BAS.BU.W2.1X9.5D	10
3801 1631	12V 21W WEDGE BASE BULB W3X16D	10
3801 1632	12V 21/5W WEDGE BASE BU.W3X16Q	10
3801 1633	12V 21W WEDGE B.B.ORANG.W3X16D	10
3802 1602	24V 1,2W WEDGE BASE BU.W2X4.6D	10
3802 1606	24V 2W WEDGE BASE BULB W2X4.6D	10
3802 27243	24V 2W WEDGE BASE BU.W2.1X9.5D	10
3802 1612	24V 3W WEDGE BASE BU.W2.1X9.5D	10
3802 1622	24V 5W WEDGE BASE BU.W2.1X9.5D	10
3802 1753	24V2.5W WEDGE BA.BUL.W2.1X9.5D	10



Wedge Base Bulbs **ECO**

Article No.	Article Description	QTY
3801N 1601	12V1.2W WED.BAS.BU.W2X4.6D ECO	10
3801N 1611	12V3W WED.BAS.BU.W2.1X9.5D ECO	10
3801N 1624	12V 5W BULB GLASS.ORANGE ECO	10
3801N 1621	12V5W WED.BAS.BU.W2.1X9.5D ECO	10
3802N 1602	24V 1,2W EARULJA W2X4,6D ECOO	10
3802N 1612	24V 3W WE.BAS.BU.W2.1X9.5D ECO	10
3802N 1622	24V 5W WE.BAS.BU.W2.1X9.5D ECO	10
3801N 1631	12V 21W WED.BAS.BU. W3X16D ECO	10
3801N 1632	12V 21/5W WED.BAS.BU.W3X16QECO	10



Plastic Socket Lights 12V

Technical Data

Art.-No.	Sockets	Applications
3801 1640	BX8.5d blue/purple	Renault, Citroen and Peugeot
3801 1609	W2 x 4.6d Kst. grey	Mercedes, Opel
3801 1646	BX8.4d orange	Audi A4, A6, A8, VW-model Opel Astra, Omega
3801 1608	W2 x 4.6d Kst. white	Mercedes
3801 1649	SG8-5.5d black	VW- and Audi-model
3801 1671	B8.3d black	VW/Audi
3801 1641	B8.4d black	VDO, Moto metre
3801 1661	B8.5d black	BMW, Ford, Mercedes, Porsche
3801 1647	BX8.5d light blue	MB D- and E-class, Audi A4, A6, Volvo
3801 1651	B8.7d grey	Ford
3801 1643	B8.4d-12.5 light blue	Porsche, MB-model
3801 1642	BX8.4d olive green	in the current models of all makes
3801 1644	BX8.4d beige	BMW 3 series, 8 series, Audi, MB E-, S- SL-SLK-class, Porsche
3801 1664	B8.5d beige	Opel
3801 1696	EBS R11 turquoise	Volvo
3801 1665	B8.3d white	Audi, Renault
3801 1645	B8.4d white green	VDO, Moto metre
3801 1655	B8.5d green	different model
3801 1695	HRQ black	Fiat, Alfa, Saab

Article No.	Article Description	QTY
3801 1640	12V0.36W BULB PLAS.BASE BX8,5D	10
3801 1609	12V 0.5W BULB GLASS PLST.	10
3801 1646	12V 1.1W BULB PLAS. BASE B8.4D	10
3801 1608	12V 1.2W BULB GLASS PLST.WHITE	10
3801 1649	12V1.2WBULD PLAS.BASE SG8-5.5D	10
3801 1671	12V 1.2W BULB PLAST.BASE B8.3D	10
3801 1641	12V 1.2W BULB PLAST.BASE B8.4D	10
3801 1661	12V 1.2W BULB PLAST.BASE B8.5D	10
3801 1647	12V1.2W BULB PLAST.BASE BX8.5D	10
3801 1651	12V1.2W BULB PLAST.BASE B 8.7D	10
3801 1643	12V1.2W BULB PLA. BA.8.4D-12.5	10
3801 1642	12V1.3W BULB PLAS. BASE BX8.4D	10
3801 1644	12V1.5W BULB PLAS. BASE BX8.4D	10
3801 1664	12V1.5W BULB PLAS. BASE BX8.5D	10
3801 1696	12V 1.8W BULB PLAS.BASE EBSR11	10
3801 1665	12V 2W BULB PLASTIC BASE B8.3D	10
3801 1645	12V 2W BULB PLASTIC BASE B8.4D	10
3801 1655	12V 2W BULB PLASTIC BASE B8.5D	10
3801 1695	14V 1.4W BULB PLASTIC BASE HRQ	10

(V=Volt/W=Watt/Socket description)



Plastic Socket Lights 24V

Technical Data

Art. No.	Sockets	Types of vehicle
3802 1680	KW2x4.6d white	Voith
3802 1682	B8.3 grey	used cars
3802 1662	B8.5d grey	used cars
3802 1678	Bx8.5d brown	Iveco, MAN, MB
3802 1673	EBS N10 beige	Scania, MB 0025443594
3802 1697	EBS R4 yellow	MAN, Volvo, Scania
3802 1672	EBS R6 brown	MAN, Volvo, Scania
3802 1698	EBS R10 matt white	MB
3802 1699	EBS R12 blue	
3802 1693	EBS R11 white green	Volvo interior lighting
3802 1674	EBS P29 green	Webasto oil heating
3802 1676	EBS N7 yellow	MB/VDO
3802 1638	EBS P28 red	MB parts no. A 0005430042
3802 1668	B9 white plastic socket	MB 3075440094
3802 1687	EBS N yellow	
3802 1675	KW2x4.6d-12 yellow	MB 0025441794, Daimler
3802 1677	KW2x4.6d-4 matt grey	MB Actross

Article No.	Article Description	QTY
3802 1680	24V1W BULB PLAST.BASE KW2X4.6D	10
3802 1682	24V 1.2W BULB PLAST.BASE B8.3D	10
3802 1662	24V 1.2W BULB PLAST.BASE B8.5D	10
3802 1678	24V1.2W BULB PLAST.BASE BX8,5D	10
3802 1673	24V1.2W BULB PLAS.BASE EBS-N10	10
3802 1697	24V1.2W BULB PLAST.BASE EBS R4	10
3802 1672	24V1.2W BULB PLAST.BASE EBS R6	10
3802 1698	24V1.2W BULB PLAS.BASE EBS-R10	10
3802 1699	24V1.2W BULB PLAS.BASE EBS-R12	10
3802 1693	24V 1.4W BULB PLAST.BAS.EBSR11	10
3802 1674	24V1.4W BULB PLAST.BASE EBSP29	10
3802 1676	24V1.6W BULB PLAST.BASE EBS N7	10
3802 1638	24V 2W BULB PLAST.BASE EBS-P28	10
3802 1668	24V 2.4W BULB PLASTIC BASE B9	10
3802 1687	28V 3W BULB PLAST.BASE EBS-N	10
3802 1675	28V30MA BU.PLA.BAS.KW2X4,6D-12	10
3802 1677	28V 53MA BU.PLAS.BA.KW2X4,6D-4	10

(V=Volt/W=Watt/Socket description)



Miniature Halogen Bulbs

Technical Data

Art. No.	Base	Application
3801 1836	BA 9 s	Mercedes interior lighting
3801 1837	BA 9 s	BMW interior lighting
3801 1848	BA 9 s	Various
3801 1896	BAX 9 s	Mercedes parking light
3801 1898	B 10 d	Ford, Opel interior lighting
3801 1899	B 10 d	Ford, Opel interior lighting
3802 1895	BAY 9 s	Side turn signals on trucks (e.g. Volvo)



Article No.	Article Description	QTY
3801 1836	12V 5W BULB MINI HALOGEN BA9S	10
3801 1837	12V 10W BULB MINI HALOGEN BA9S	10
3801 1848	12V 20W BULB MINI HALOGEN BA9S	10
3801 1849	12V 21W BULB MINI HALOGE.BAX9S	10
3801 1850	12V 21W BULB MINI HALOGE.BAY9S	10
3801 1896	12V 6W BULB MINI HALOGEN BAX9S	10
3801 1898	12V 3W BULB MINI HALOGEN B10D	10
3801 1899	12V 5W BULB MINI HALOGEN B10D	10
3802 1895	24V 21W BULB MINI HALOG. BAY9S	10

Halogen Miniature Lights **ECO**

Article No.	Article Description	QTY
3801N 1896	12V 6W BULB MINI-HAL.BAX9S ECO	10

(V=Volt/W=Watt/Socket description)

Spare Bulb Boxes

Article No.	Article Description	QTY
3804 12 4	BULB SET IN PLASTIC BOX 12V H4	1
3804 12 7	BULB SET IN PLASTIC BOX 12V H7	1
3804 12 1 7	BULB SET IN PLAS.BOX 12V H1+H7	1
3804 24 4	BULB SET IN PLASTIC BOX 24V H4	1
3804 24 1 7	BULB SET IN PLAS.BOX 24V H1+H7	1
3804 24 7	BULB SET IN PLASIC BOX 24V H7	1

12 Volt

Contents Part No. 3804 12 4:

- H4-bulb, spherical bulb 21W, 21/5W, 4W and 5W, tubular bulb 5W, ceramic fuses 8A and 16A, blade fuses 7.5A and 15A

Contents Part No. 3804 12 7:

- H7-bulb, spherical bulb 21W, 21W yellow, 21/5W, 4W and 5W, tubular bulb 5W, wedge base bulb 5W, blade fuses 10 and 15A

Contents Part No. 3804 12 17:

- H1 and H7-bulb, spherical bulb 21W, 21W yellow, 21/5W, tubular bulb 5W, wedge base bulb 5W, blade fuses 10 and 15A

24 Volt

Contents Part No. 3804 24 4:

- H4-bulb, ball bulb 21W, 21/5W, 4W and 10W, tubular bulb 5W, ceramic fuses 8A and 16A

Contents Part No. 3804 24 1 7:

- H1 bulb, H7 bulb, spherical bulbs 2x 4W, 2x 10W, 6x 21W, 2x tubular bulb 10W, blade fuses 2x 10A, 2x 15A, 2x 20A, 2x 25A

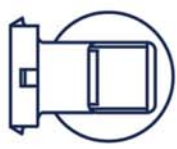
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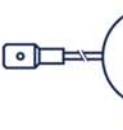
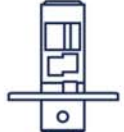
- 3x H7 bulb, spherical bulbs 3x 21W, 1x 21/5W, 2x 5W and 2x 10W 2x tubular bulb 10

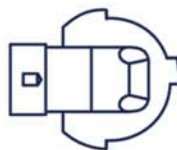
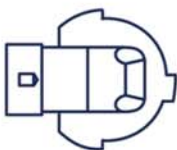


Summary of bases

										
										
BA 7s	BA 9s	BAX 9s	BAY 9s	B 8,3d (BAX 10s)	BX 8,5d B 8,5d	BX 8,4d B 8,4d	B 8,0-12 (EBSR)	B 10d	EY 10 (E 10)	PX 13,5s

							
							
BA 15s	BAU 15s	BA 15d	BAY 15d	BAZ 15d	BA 20s	BA 20d	PGJ 19

							
							
PG 13	PGJ 13	P 14,5s	PK 22s	P 26s	PX 26d	P 32d	PK 32d

					
					
P 20d	P 22d	P 43t	PX 43t	PX 45t	P 29t (PX 29t)

								
								
G 4	SV 7	SV 8,5	W 2x4,6d	W 2,1x9,5d	W 2,5x16	W 3x16d	W 3x16q	X 511

Bulb Package 12V H 4 / H 1 **FÖRCH**★★★★

Article No.	Article Description	QTY
3804P 3	12V BULB PACKAGE H4/H1 300	1

Contents:

- 10 x Art.-Nr. 3801 1101 Headlamp bulbs H 4 60/55W
- 10 x Art.-Nr. 3801 1111 Headlamp bulbs H 1 55W
- 50 x Art.-Nr. 3801 1321 Turn-brake light bulbs 21W
- 40 x Art.-Nr. 3801 1341 Brake and tail light bulbs 21/5W
- 30 x Art.-Nr. 3801 1401 Tail lamp and licence-plate bulbs, ball 5W
- 30 x Art.-Nr. 3801 1411 Tail lamp and licence-plate bulbs, ball 10W
- 40 x Art.-Nr. 3801 1501 Parking light bulbs , ball 4W
- 30 x Art.-Nr. 3801 1601 Display lamp bulbs, wedge base 1,2W
- 20 x Art.-Nr. 3801 1611 Display lamp bulbs, wedge base 3W
- 40 x Art.-Nr. 3801 1621 Display lamp bulbs, wedge base 5W



Bulb Package 12V 200-piece **ECO**

Article No.	Article Description	QTY
3801P 200	PK(200)12V LAMP PACKAGE ECO	1

Contents:

- 40x Art. No. 3801N 1321 Turn-brake light bulbs ECO 12V 21W BA15S
- 30x Art. No. 3801N 1341 Brake and tail light bulbs ECO 12V 21/5W BA15D
- 10x Art. No. 3801N 1383 Turn-brake light bulbs ECO yellow 12V 21W BAU15S
- 20x Art. No. 3801N 1401 Tail lamp and licence-plate bulbs ECO 12V 5W BA15S
- 10x Art. No. 3801N 1411 Tail lamp and licence-plate bulbs ECO 12V 10W BA15S
- 10x Art. No. 3801N 1501 Parking light bulbs ECO 12V 4W BA9S
- 10x Art. No. 3801N 1601 Wedge base bulbs ECO 12V 1,2W W2x4,6D
- 50x Art. No. 3801N 1621 Wedge base bulbs ECO 12V 5W W2,1x9,5D
- 20x Art. No. 3801N 1711 Licence-plate and tail lamps ECO 12V 5W 35 mm SV8,5-8



Halogen Headlamp Bulbs 12 V **ECO**.

Article No.	Article Description	QTY
3801P 100	PK(100)12V HALOGEN BULBS ECO.	1

Contents:

- 20x Art. No. 3801J 1101 Halogen headlamp bulbs ECO Punkt 12V H4
- 60x Art. No. 3801J 1117 Halogen headlamp bulbs ECO Punkt 12V H7
- 10x Art. No. 3801J 1111 Halogen headlamp bulbs ECO Punkt 12V H1
- 10x Art. No. 3801J 1121 Halogen headlamp bulbs ECO Punkt 12V H3



Bulb Package 24V H 4 **FÖRCH*******

Article No.	Article Description	QTY
3804P 4	24V BULP PACKAGE H4 200	1

Contents:

- 10 x Art.-Nr. 3802 1102 Scheinwerferlampe H 4 75/70W
- 30 x Art.-Nr. 3802 1322 Blink- und Bremslichtlampe 21W
- 30 x Art.-Nr. 3802 1402 Schlußlicht- und Kennzeichenlampe, Kugel 5W
- 30 x Art.-Nr. 3802 1422 Schlußlicht- und Kennzeichenlampe, Kugel 10W
- 20 x Art.-Nr. 3802 1722 Schlußlicht- und Kennzeichenlampe, Soffitte 5W
- 20 x Art.-Nr. 3802 1732 Schlußlicht- und Kennzeichenlampe, Soffitte 10W
- 30 x Art.-Nr. 3802 1512 Standlichtlampe, Kugel 2W
- 30 x Art.-Nr. 3802 1502 Standlichtlampe, Kugel 4W



Light Set 24 V **ECO**

“Therefore, more light means fewer accidents”

- High resistance to vibration
- Multiple product life of vehicles with 24 V (tested at 28 V) in particular for heavy load vehicles
- Recognisable in the red socket kit

Contents:

Article No.	Article Description	QTY
3802N 1326	24V 21W BULB HEAVY D.BA15S ECO	50
3802N 1406	24V 5W BULB HEAVY D.BA15S ECO	50
3802N 1416	24V 10W BULB HEAVY D.BA15S ECO	50



Article No.	Article Description	QTY
3802P 150	PK(150)24V LIGHT SET ECO	1

Halogen Headlight Bulbs 24 V **ECO**.

- UV-free
- Pack of 100 pieces

Contents:

Article No.	Article Description	QTY
3802J 1102	24V H4 BULB HALOGEN75/70W ECO.	20
3802J 1119	24V H7 BULB HALOGEN 70W ECO.	50
3802J 1122	24V H3 BULB HALOGEN 70W ECO.	30

Article No.	Article Description	QTY
3802P 100 1	PK(100)24V HALOGEN BULBS ECO.	1



Automotive Bulb Cabinet

- Robust metal version, powder-coated with lockable Plexiglas door
- With pre-punched foam plastic inlet for spherical and tubular bulbs as well as for automotive bulb tester
- Dimensions H 5 mm x W 470 mm x D 160 mm

Part No. 3805 12:

- With 300 automotive bulbs, contents same as bulb package Part No. 3804P3

Part No. 3805 24:

- With 300 automotive bulbs, contents same as bulb package Part No. 3804 P4



Article No.	Article Description	QTY
3805 1	BULB CABINET EMPTY INCL. TESTER	1
3805 12	12V BULB CABINET FILLED	1
3805 24	24V BULB CABINET FILLED	1
3801P 300 1	12V BULB CABINET FILLED ECO	1

Automotive Special Bulbs in Assortment 12V

- 128 parts
- in practical assortment box
- Every special bulb is immediately accessible
- Assembly with smallest parts

Art.-No. 3801 1696:

- suitable for dashboard illumination at VW T 4



Contents:

Article No.	Article Description	QTY
3801 1603	12V 1,2W LAMPE GLASS.MATT	10
3801 1608	12V 1,2W LAMPE GLASS.KST-S.	10
3801 1609	12V 0,5W LAMPE GLASS.KST-S.	10
3801 1624	12V 5W LAMPE ORANGE W2,1X9,5D	5
3801 1641	12V 1,2W LAMPE KST-SOCK.B8,4D	10
3801 1644	12V1,5W LAMPE KST-SOCK.BX 8,4D	5
3801 1645	12V 2W LAMPE KST-SOCK.B8,4D	10
3801 1651	12V 1,2W LAMPE KST-SOCK.B8,7D	10
3801 1661	12V 1,2W LAMPE KST-SOCK.B8,5D	10
3801 1665	12V 2W LAMPE KST-SOCK.B8,3D	10
3801 1671	12V 1,2W LAMPE KST-SOCK.B8,3D	10
3801 1695	14V 1,4W LAMPE KST-SOCKEL HRQ	5
3801 1696	12V 1,8W LAMPE KST-SOCK.EBSR11	5
3801 1735	12V 10W LAMPE SOFFITTE SV8,5-8	10
3801 1836	12V 5W LAMPE MINI-HALOGEN BA9S	2
3801 1837	12V 10W LAMPE MINI-HALOG. BA9S	2
3801 1898	12V 3W LAMPE MINI-HALOGEN B10D	2
3801 1899	12V 5W LAMPE MINI-HALOGEN B10D	2
Article No.	Article Description	QTY
9000 3801 1	ASSORT.12VSPEC.LAMPS.AUTOMOT.	1
9000R 3801 1	TICK 12V SPEC.LAMPS.AUTOMOT.	1

Technical Data:

Art.-No.	Base	Application
3801 1603	W 2x4,6d	Mercedes
3801 1608	W 2x4,6d weiß	Mercedes
3801 1609	W 2x4,6d	Opel, Mercedes
3801 1624	W 2,1x9,5d	Side turn signal Mercedes, Opel
3801 1641	B 8,4d	VDO, Moto Meter
3801 1644	BX 8,4d	BMW 3er, 8er, Audi, MB E-, S-, SL-, SLK-Klasse, Porsche
3801 1645	B 8,4d	VDO, Moto Meter
3801 1651	B 8,7d	Ford
3801 1661	B 8,5d	BMW, Ford, Mercedes, Porsche
3801 1665	B 8,5d	Audi, Renault
3801 1671	B 8,3d	VW, Audi
3801 1695	HRQ	Fiat, Alfa, Saab
3801 1696	EBS	Volvo
3801 1735	Soffite 11 x 30	Japanese interior
3801 1836	Halogen Ba 9s	Mercedes interior
3801 1837	Halogen Ba 9s	BMW interior
3801 1898	Halogen B 10d	Opel, Ford
3801 1899	Halogen B 10d	Opel, Ford

Plastic Bulbs 24V in Product Range

• 90 pieces

Contents:

Article No.	Article Description	QTY
3802 1638	24V 2W BULB PLAST.BASE EBS-P28	5
3802 1662	24V 1.2W BULB PLAST.BASE.B8.5D	5
3802 1668	24V 2.4W BULB PLASTIC BASE B9	5
3802 1672	24V1.2W BULB PLAST.BASE EBS R6	5
3802 1673	24V1.2W BULB PLAS.BASE EBS-N10	5
3802 1674	24V1.4W BULB PLAST.BASE EBSP29	5
3802 1675	28V30MA BU.PLA.BAS.KW2X4,6D-12	5
3802 1676	24V1.6W BULB PLAST.BASE EBS N7	5
3802 1677	28V 53MA BU.PLAS.BA.KW2X4,6D-4	5
3802 1678	24V1.2W BULB PLAST.BASE BX8,5D	5
3802 1680	24V1W BULB PLAST.BASE KW2X4.6D	5
3802 1682	24V 1.2W BULB PLAST.BASE B8.3D	5
3802 1687	28V 3W BULB PLAST.BASE EBS-N	5
3802 1693	24V 1.4W BULB PLAST.BAS.EBSR11	5
3802 1697	24V1.2W BULB PLAST.BASE EBS R4	5
3802 1698	24V1.2W BULB PLAS.BASE EBS-R10	5
3802 1699	24V1.2W BULB PLAS.BASE EBS-R12	5



Article No.	Article Description	QTY
9000 3802	PLASTIC BULB 24V IN PROD.RANGE	1
9000R 3802	INTRAY PLASTIC BULB 24V	1

Splash-Proof Cable Connector Boxes

- With replaceable screw terminals



Article No.	Article Description	QTY
3835 6 6	CABLE CNCTR.BOX SC.TERM 6/6	1
3835 8 6	CABLE CNCTR.BOX SC.TERM 8/6	1
3835 16 10	CABLE CNCT.BOX SC.TERM. 16/10	1

Technical Data

Art. No.	Number of poles	Cable width mm ²	L x W x H mm
3835 6 6	6-pole	6.0	120 x 69 x 34
3835 8 6	8-pole	6.0	120 x 69 x 34
3835 16 10	16-pole	10.0	137 x 90 x 50

Water Protected Cable Connector Boxes

- With 6.3 mm spade connectors



Article No.	Article Description	QTY
3836 8	CABLE CNST.BOX SPADE CON.8POLE	1
3836 8 1	CABLE CNCT.BOX SPADE CO.12POLE	1
3836 12	CABLE CNCT.BOX SPADE CO.12POLE	1

Technical Data

Art. No.	Number of poles	L x W x H mm
3836 8	8-pole, 8 double spade connectors	120 x 69 x 34
3836 8 1	8-pole, 8 double spade connectors	137 x 90 x 50
3836 12	16-pole, 8 double spade connectors 4 triple-in connectors	127 x 100 x 42

Cable Connector Boxes -GGVS/ADR, Unassembled

- Bakelite shell with aluminium cover, water-protected
- Design with 4 inputs and outputs

Technical Data

Connection thread:	4x hole ø 18.5 mm
Seal:	2 x clamping brackets
Type of protection:	IP 54 (with seal)
Fixing ø:	2x 5,5 mm
Gap ø:	100 mm
Dimensions L x W x H:	151 x 93 x 55 mm

Article No.	Article Description	QTY
3837 2	CABLE CONN.BOX. 4E/A UNASS.ADR	1

Accessories: Art. No. 3837 1 11:

- Cable gland SZ PG 11 (reaming from PG 11 to PG 13.5)

Art. No. 3837 1 13 5:

- Cable gland SZ PG 13,5

Art. No. 3837 8 32:

- KVD plug insert 8/32 or

Art. No. 3837 16 48:

- Cable connector boxes plug insert 16/48



Cable Connector Boxes - GGVS/ADR, Assembled

- Polyamide shell with aluminium cover, water-protected
- Design with 4 inputs and outputs

Technical Data

Type of assembly:	flat plug connection
Number of poles:	12
Number of connections:	76
Connection technology:	8x4 + 3x8 + 1x20
Connection thread:	4x M20x1,5 alternatively also PG 13.5
Seal:	4 x screws A2 4x20
Protection type:	IP 69K
Fixing ø:	2x 5,5 mm
Gap ø:	150 mm
Dimensions L x W x H:	158 x 99 x 63 mm

Article No.	Article Description	QTY
3837 3	CABLE CONN. BOXES 4E/A ASS.ADR	1

Scope of delivery:

- 2x seal shutters M20
- 2x neoprene seal ring
- 1x multiple seal insert
- 2x sealing discs
- 1x Art. No. 3837 12 76 KVD plug insert 12/76



Cable Connector Boxes -GGVS/ADR, Unassembled

- Bakelite shell with aluminium cover, water-protected
- Design with 8 inputs and outputs

Technical Data

Connection thread:	4x holes ø 18.5 mm 4x holes ø 23.0 mm
Seal:	2 x clamping brackets
Type of protection:	IP 69K
Fixing ø:	2x 5.5 mm
Gap ø:	100 mm
Dimensions L x W x H:	190 x 135 x 80 mm



Article No.	Article Description	QTY
3837 5	CABLE CONN.BOX. 8E/A UNASS.ADR	1

Accessory:

Art. No. 3837 1 11:

- Cable gland SZ PG 11 (drilling of PG 11 on PG 13.5)

Art. No. 3837 1 13 5:

- Cable gland SZ PG 13.5

Art No. 3837 14 56:

- KVD plug insert 14/56 or

Art. No. 3837 28 84:

- Cable connector boxes plug insert 28/84 or

Art. No. 3837 28 112:

- Cable connector boxes plug insert 28/112

Cable Connector Boxes - GGVS/ADR, Assembled

- Polyamide shell with aluminium cover, water-protected
- Design with 16 inputs and outputs

Technical Data

Type of assembly:	flat plug connection
Number of poles:	16
Number of connections:	112
Connection technology:	8x4 + 4x8 + 2x14 + 1x20
Connection thread:	10xPG 9 + 5x PG 13,5 1x PG 16
Seal:	2x clamping brackets 4x 4x20 screws A2
Protection type:	IP 69K
Fixing ø:	4x 5.5 mm
Gap ø:	110/65 mm
Dimensions L x W x H:	167 x 157 x 99 mm



Article No.	Article Description	QTY
3837 7	CABLE CONN.BOXES 16E/A ASS.ADR	1

Scope of delivery:

- 4x seal shutters PG 9
- 2x seal shutters PG 13.5
- 1x seal shutters PG 16
- 1x multiple seal insert
- 8x seal rings
- 1x art. no. 3837 16 112 KVD plug insert 16/112

Standard Cable Connector Boxes, Assembled

- Polyamide shell with aluminium cover, water-protected
- Design with 4 inputs and outputs

Technical Data

Type of assembly:	flat plug connection
Number of poles:	8
Number of connections:	32
Connection technology:	8x4
Connection thread:	4 x cable bushing
Inlet ø:	1x9.5 / 1x7 + 1x5.0 mm
Outlet ø:	1x9.5 / 1x7 + 1x5.0 mm
Seal:	2 x clamping brackets
Type of protection:	IP 54
Fixing ø:	2x5.5 mm
Gap ø:	90 mm
Dimensions L x B x H:	150 x 93 x 45 mm



Article No.	Article Description	QTY
3837 1	CABLE CONNECTOR BOXES 4E/A ASS	1

Scope of delivery:

- 2x cable bushing 1 hole 9.5 mm
- 2x cable bushing 2 hole 7.0 + 5.0 mm
- 1x Art. No. 3837 8 32 KVD plug insert 8/32

Standard Cable Connector Boxes, Unassembled

- Bakelite shell with aluminium cover, water-protected
- Design with 6 inputs / outputs

Technical Data

Connection thread:	6 x cable bushings
Lock:	2 x clamping brackets
Type of protection:	IP 54 (with seal)
Fixing ø:	2x5.5 mm
Gap ø:	100 mm
Dimensions L x W x H:	151 x 93 x 55 mm



Article No.	Article Description	QTY
3837 4	CABLE CONN. BOXES 6E/A UNASS.	1

Accessories:

Art. No. 3837 7 1:

- Cable bushing 7 mm

Art. No. 3837 9 1:

- Cable bushing 9.5 mm

Art. No. 3837 13 1:

- Cable bushing 13 mm

Art. No. 3837 20:

- Small dummy sleeve

Art. No. 3837 8 32:

- KVD plug insert 8/32 or

Art. No. 3837 16 48:

- KVD plug insert 16/48

Standard Cable Connector Boxes, Unassembled

- Bakelite shell with aluminium cover, water-protected
- Design with 8 inputs and outputs

Technical Data

Connection thread:	8 x cable bushings
Lock:	2 x clamping brackets
Type of protection:	IP 54 (with seal)
Fixing ø:	2x5.5 mm
Gap ø:	100 mm
Dimensions L x W x H:	190 x 135 x 80 mm

Article No.	Article Description	QTY
3837 6	CABLE CONN. BOXES 8E/A UNASS.	1

Accessory:

Art. No. 3837 17 1:

- Cable bushing 17 mm

Art. No. 3837 21:

- Large dummy sleeve

Art. No. 3837 7 1:

- Cable bushing 7 mm

Art. No. 3837 9 1:

- Cable bushing 9.5 mm

Art. No. 3837 13 1:

- Cable bushing 13 mm

Art. No. 3837 20:

- Small dummy sleeve

Art. No. 3837 14 56:

- Cable connector boxes plug insert 14/56 or

Art. No. 3837 28 84:

- Cable connector boxes plug insert 28/84 or

Art. No. 3837 28 112:

- Cable connector boxes plug insert 28/112



Cable Connector Boxes Plug Insert 8/32

- Made from plastic with tin-plated flat pin connectors 6.3x 0.8mm

Technical Data

Number of poles:	8
Number of connections:	32
Connection technology:	8 x 4
Dimensions L x W x H:	76 x 31 x 24 mm

Article No.	Article Description	QTY
3837 8 32	CABLE CONN.BOX. PLUG INS. 8/32	1



Cable Connector Boxes Plug Insert 12/76

- Made from plastic with tin-plated flat pin connectors 6.3x 0.8mm
- With 2 bridges

Technical Data

Number of poles:	12
Number of connections:	76
Connection technology:	8x4 + 3x8 + 1x20
Dimensions L x W x H:	76 x 31 x 47 mm

Article No.	Article Description	QTY
3837 12 76	CABLE CONN.BOX. PLUG INS.12/76	1

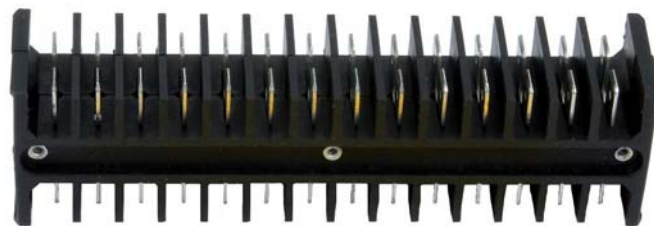


Cable Connector Boxes Plug Insert 14/56

- Made from plastic with tin-plated flat pin connectors 6.3x 0.8mm

Technical Data

Number of poles:	14
Number of connections::	56
Connection technology:	14 x 4
Dimensions L x W x H:	120 x 31 x 23 mm



Article No.	Article Description	QTY
3837 14 56	CABLE CONN.BOX. PLUG INS.14/56	1

Cable Connector Boxes Plug Insert 16/48

- Made from plastic with tin-plated flat pin connectors 6.3x 0.8mm

Technical Data

Number of poles:	16
Number of connections:	48
Connection technology:	8 x 4 + 8 x 2
Dimensions L x W x H:	76 x 31 x 35 mm



Article No.	Article Description	QTY
3837 16 48	CABLE CONN.BOX. PLUG INS.16/48	1

Cable Connector Boxes Plug Insert 16/112

- Made from plastic with tin-plated flat pin connectors 6.3x 0.8mm
- With 4 bridges

Technical Data

Number of poles:	16
Number of connections:	112
Connection technology:	8x4 + 4x8 + 2x14 + 1x20
Dimensions L x W x H:	138 x 31 x 48 mm



Article No.	Article Description	QTY
3837 16 112	CABLE CON.BOX. PLUG INS.16/112	1

Cable Connector Boxes Plug Insert 28/84

- Made from plastic with tin-plated flat pin connectors 6.3x 0.8mm

Technical Data

Number of poles:	28
Number of connections:	84
Connection technology:	14 x 4 + 14 x 2
Dimensions L x W x H:	120 x 31 x 35 mm



Article No.	Article Description	QTY
3837 28 84	CABLE CONN.BOX. PLUG INS.28/84	1

Cable Connector Boxes Plug Insert 28/112

- Made from plastic with tin-plated flat pin connectors 6.3 x 0.8mm

Technical Data

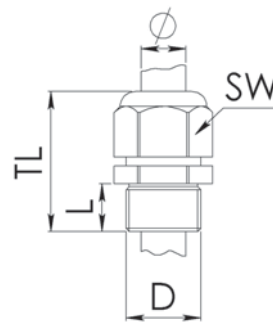
Number of poles:	28
Number of connections:	112
Connection technology:	28 x 4
Dimensions L x W x H:	120 x 31 x 48 mm



Article No.	Article Description	QTY
3837 28 112	CABLE CON.BOX. PLUG INS.28/112	1

Cable Gland PG, Black

- PG thread locking nuts made from polyamide with GGVS approval / construction part number TÜ.EGG.020-95
- Neoprene sealing ring for hermetic sealing
- Colour: black, RAL 9005 / UV resistant
- **Protection class according to EN 60 529:** IP 68 to 5 bar
- **Flame resistance:** glow wire test 750°C according to EN 60695-2-11
- **Operating temperature:** -20°C to +80°C
- **Chemical resistance:** alcohol, ether, petrol, ester, grease, oils, fluorocarbon, ketones
- **Applications:**
 - car body, machine, apparatus and equipment construction
 - measurement, control regulation technology,
 - building installation



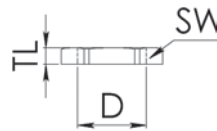
Article No.	Article Description	QTY
3837 1 7	CABLE GLAND PG 7 BLACK	10
3837 1 9	CABLE GLAND PG 9 BLACK	10
3837 1 11	CABLE GLAND PG 11 BLACK	10
3837 1 13 5	CABLE GLAND PG 13.5 BLACK	10
3837 1 16	CABLE GLAND PG 16 BLACK	10
3837 1 21	CABLE GLAND PG 21 BLACK	10

Technical Data

D	L mm	ø mm	SW mm	TL mm
PG 7	8	1.5 - 5	15	32
PG 9	8	2 - 6	19	36
PG 11	8	2 - 7	22	38
PG 13.5	9	4 - 9	24	41
PG 16	10	6 - 12	27	44
PG 21	11	9 - 16	33	49

Locking Nuts PG, Black

- PG thread locking nuts made from polyamide, glass fibre reinforced
- Colour: black, RAL 9005 / UV resistant
- **Operating temperature:** -20°C to +100°C
- **Chemical resistance:** alcohol, ether, petrol, benzol | ester, grease, oils, fluorocarbon, ketones



Article No.	Article Description	QTY
3837 1 1 7	LOCKING NUTS PG 7 BLACK	10
3837 1 1 9	LOCKING NUTS PG 9 BLACK	10
3837 1 1 11	LOCKING NUTS PG 11 BLACK	10
3837 1 1 13 5	LOCKING NUTS PG 13.5 BLACK	10
3837 1 1 16	LOCKING NUTS PG 16 BLACK	10
3837 1 1 21	LOCKING NUTS PG 21 BLACK	10

Technical Data

D	AF mm	TL mm
PG 7	19	5
PG 9	22	5
PG 11	24	5
PG 13.5	27	5
PG 16	30	5
PG 21	36	5

Cable Support Sleeves

- Made from chloroprene rubber (neoprene)
- Operating temperature: -45°C to +100°C
- Stability: 50 +/- 5 Shore
- Acid and abrasion resistant
- Resistant to oils and grease
- Various inlet diameters



3837 7 1



3837 9 1



3837 13 1



3837 17 1



3837 20



3837 21

Article No.	Article Description	QTY
3837 7 1	CABLE SUPPORT SLEEVE 7MM	2
3837 9 1	CABLE SUPPORT SLEEVE 9.5MM	2
3837 13 1	CABLE SUPPORT SLEEVE 13MM	2
3837 17 1	CABLE SUPPORT SLEEVE 17MM	1
3837 20	SMAL DUMMY SLEEVE	2
3837 21	LARGE DUMMY SLEEVE	2

Technical Data

L mm	ø mm
42	7
42	9.5
42	13
42	17
6	0
6	0

Spiral Cable 12 V 7-Pin

- According to ISO 1724 (ISO 1185)
- For connecting towing vehicle with trailer or semi-trailer
- Completely assembled with aluminium plug
- Cable: 6 x 1.0 mm + 1 x 1.5 mm



Article No.	Article Description	QTY
3830 12 10	SPIRAL CABLE 7PIN ALUPL.SC.12V	1
3830 12 11	SPIRAL CABLE 7PIN ALUPL.LC.12V	1

Technical Data			
Art. No.	Coil Ø	Material	Work length
3830 12 10	40 mm	polyurethane (PU)	3000 mm
3830 12 11	90 mm	polyamide (PA)	3000 mm

Spiral Cable 12 V 7-Wire

- Without plug
- Suitable for 12 V and 24 V
- 200 mm long ends to process, both sides
- Cable: 6 x 1.0 mm² + 1 x 1.5 mm²



Article No.	Article Description	QTY
3830 12 24 10	SPIRAL CABLE 7WIR.SC 12-24V 3M	1
3830 12 24 11	SPIRAL CABLE 7WIR.LC 12-24V 3M	1

Technical Data			
Art. No.	Coil Ø	Material	Work length
3830 12 24 10	40 mm	polyurethane (PU)	3000 mm
3830 12 24 11	90 mm	polyamide (PA)	3000 mm

Plugs and Sockets 12V, 7-Pole

- 7-Pin with screw connection
- Socket supplied without protective cap (Part No. 3830 12 9)

Article No.	Article Description	QTY
3830 12 1	PLUG ALUMINIUM 7-POLE 12V	1
3830 12 2	PLUG PLASTIC 7-POLE 12V	1
3830 12 3	SOCKET ALUMINIUM 7-POLE 12V	1
3830 12 4	SOCKET PLASTIC 7-POLE 12V	1



3830 12 1



3830 12 2



3830 12 3



3830 12 4

Socket with Switch-Off Contact 12V

- With switch-off contact for rear fog light
- 7-pin with screw connection
- Socket supplied without protective cap (Part No. 3830 12 9)

Article No.	Article Description	QTY
3830 12 5	SOCK.ALU 7-POLE 12V SWITCH OFF	1
3830 12 6	SOCK.PL.7-POLE 12V SWITCH OFF	1



Protection Cap for 12V Socket

Article No.	Article Description	QTY
3830 12 9	PREDECTIVE CAP FOR 12V SOCKET	1



Plugs and Sockets 12V

- 13-pin, with screw connection
- Sockets delivered with protective cap (3830 12 9)

Part No. 3831 12 3:

- With switch-off contact for rear fog bulb

Article No.	Article Description	QTY
3831 12 1	PLUG PLASTIC 13-POLE 12V	1
3831 12 2	SOCKET PLASTIC 13-POLE 12V	1
3831 12 3	SOCK.PLA.13-POLE12V SWITCH OFF	1



