



# AE

INDUSTRIES

AE INDUSTRIES

EDITION 2025

YOUR INVISIBLE PARTNER

Consignment, VMI/CMI, Order Fulfillment and Product Management





## Products

AE Industries offers a complete program for the automotive, DIY and technical installation aftermarket.

- **Truck, car & trailer**  
Sockets & plugs, wiring kits, junction boxes, adapters, lighting & reflectors, hose clamps, trailer nets, air spirals, trailer parts
- **Car battery**  
Terminals & clamps, booster cables, mass connection strips, circuit breakers
- **Wire & cable**  
Battery, ignition and speaker cable, single and multi core wire
- **Screws, bolts & nuts**
- **Wire bundling and protective systems**  
Cable ties & straps, heat shrink sleeve, braided and insulation sleeve, corrugated tube, spiral wrap, tapes
- **Terminals & housing**  
Insulated and non-insulated terminals & lugs, splices, terminals blocks, solder connectors, open barrel terminals & housing, waterproof housing
- **EV products**

- **Fuses & fuse holders**  
Blade, cartridge, bolt-on, ceramic, glass
- **Relays**
- **Switches**  
Switches, pilot lights, buzzers
- **Tools**  
Mechanical tools for crimping, stripping and cutting, multi-tools, sets with a selection of terminals
- **Assortment kits**

## Skilled people

- For quality throughout the entire customer liaising process.
- Product management team for product QA.
  - Sales team to listen closely to customer needs.
  - Logistics manager and warehouse team for the right products at the right time in the right packaging.
  - Graphics department for advice on custom packaging.
  - Friendly accounting department for the right delivery and paperwork at the right time and place.

## Professional packing

We aim to pack your shipment to see it safely to its final destination. From the type of cargo and mode of transportation to the amount of time in transit etc.: our packing experts know what they are doing. All precautions are taken to ensure cargo reaches its destination undamaged.

## Packing and repacking benefits

- Hassle-free logistics
- Ordering your complete products in one go
- One supplier for all of your products
- Use of your own part numbers

## AE Industries

has been an ISO certified company since 1996. We custom-pack your orders in cooperation with the sheltered workshop. We have been a learning company for several years now.



# AE INDUSTRIES YOUR INVISIBLE PARTNER

Our products are manufactured in the Far East and Europe, warehoused in Breda (the Netherlands) and delivered on short lead times. Special requests for private label and customer specific packaging are handled by our own packing facility. We lead the way in the industry by repacking our products into your packaging for a truly hassle-free logistics experience.

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Plugs & Sockets

Lighting

Battery

Hose Clamps

Screws, Bolts & Nuts

Wire & Cable

Bundling & Protection

EV Products

Insulated Terminals

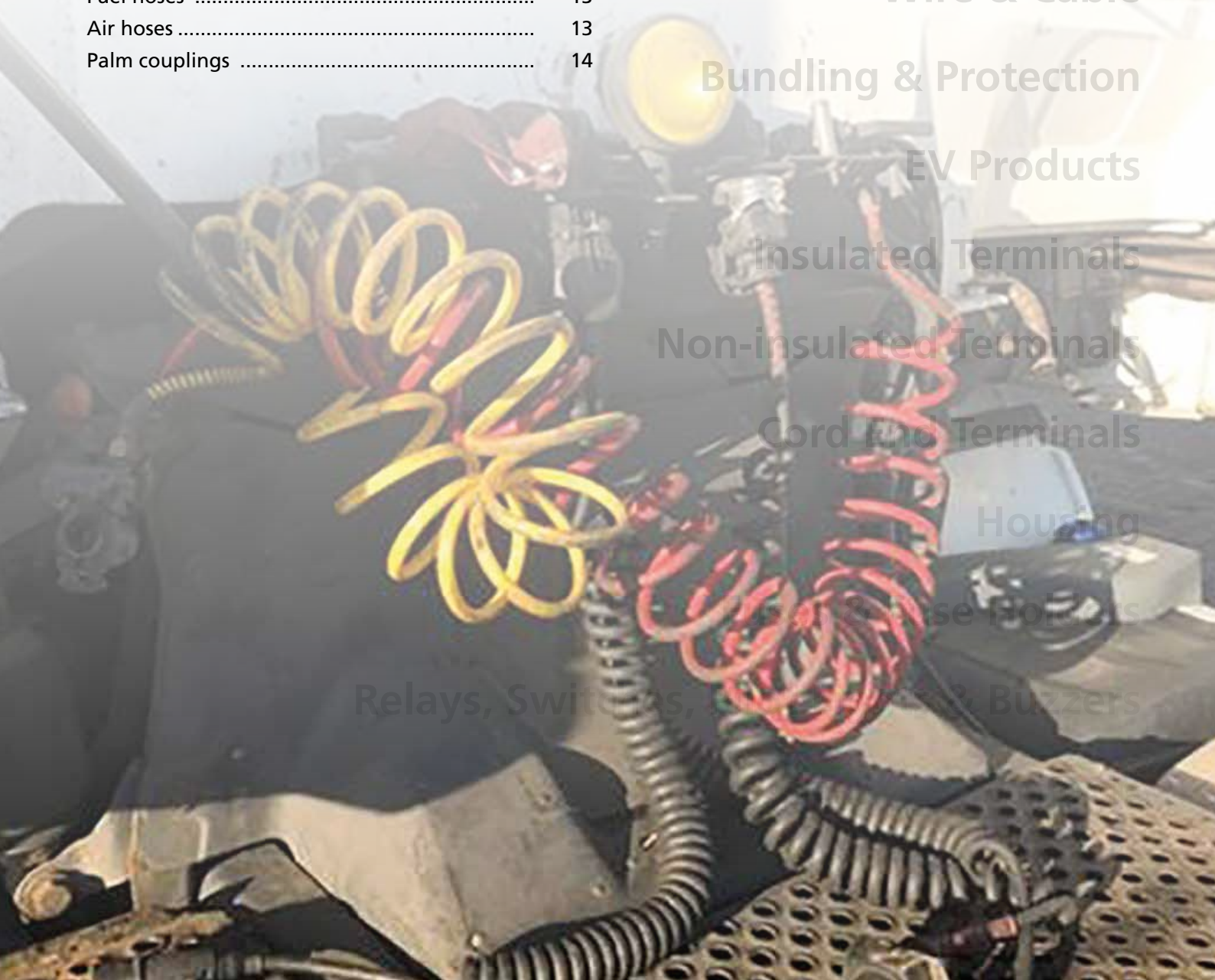
Non-insulated Terminals

Cord End Terminals

Housing

Case Holders

Relays, Switches, Buzzer





## Coupling

Part nr.	Description
TP0013	Towball straight, M22 x 55 mm, 1500 kg
TP0017	Towball angled, galvanized, D17.2/S210, 3500 kg, E8 approved
TP0017-4	Towball angled, black, D17.2/S350, 3500 kg, E11 approved
TP0017-2	Towball two-fold version, galvanized, 3500 kg, E-approved
TP0017-3	Towball two-fold version, black, 3500 kg, E-approved
TP0045	Towball coupling square, 50 mm, 750 kg, with opening for cylinder lock
TP0022	Towball coupling square, 60 mm, 750 kg, with opening for cylinder lock
TP0031	Towball coupling square, 70 mm, 750 kg, with opening for cylinder lock
TP0046	Towball coupling round, 50 mm, 750 kg, with opening for cylinder lock
TP0030	Towball coupling round, 60 mm, 750 kg, with opening for cylinder lock
TP0023	Towball coupling round, 70 mm, 750 kg, with opening for cylinder lock
TP0051	Towball coupling round, 40/45/50 mm, 2300 kg braked, adaptorset included
TP0052	Towball coupling round, 45/46 mm, 3000 kg braked, EM300A
TP0048	Towball coupling round, 50/51 mm, 3000 kg braked, EM300B
TP0047	Towball coupling square, 60 mm, 1300 kg braked, with opening for cylinder lock
TP0037	Universal towball coupling round, 40/45/50 mm, 3000 kg braked, adaptor set included
TP0050	Universal towball coupling round, 40/50 mm, 2000 kg braked, can be used with adaptor set TP0074
TP0074	Adaptor set for TP0050, 35/45 mm: 2000 kg braked, 45/50 mm: 2200 kg braked



TP0013



TP0017



TP0017-4



TP0045 50 mm  
TP0022 60 mm  
TP0031 70 mm



TP0046 50 mm  
TP0030 60 mm  
TP0023 70 mm



TP0051  
adaptor set included



TP0052 45/46 mm  
TP0048 50/51 mm



TP0047



TP0037  
adaptor set included



TP0050  
can be used with adaptor  
set TP0074



TP0017-2



TP0017-3



TP0074  
for use with TP0050



TP0007



THD001



TP0012



TP0044

Part nr.	Description
TP0007	Towball cap with ring, rubber
THD001	Towball cap, PVC
TP0012	Towball cap with lock and key, chrome-plated PVC
TP0044	Tow ball cap with ring, PVC
TP0021	Mounting bracket for socket, PVC with metal ring, 122 x 77 mm, Ø ring 36 mm
TP0021-1	Mounting bracket for socket, metal, 130 x 65 mm
TP0036	Socket cover, flexible PVC
TP0039	Plug holder, metal
PDDB001	Parking socket for 12V 13 pole (ISO 11446) plugs, nylon



TP0021



TP0021-1



TP0036



TP0039



PDDB001

## Winches

Part nr.	Description
TP0080	Winch cable with hook, 10 mtr x Ø 8 mm
TP0081	Handwinch 545 kg, band 8,5 mtr x 50 mm, with hook, CE approved
TP0082	Handpuller 1814 kg (2 tons max), with cable and hook, cable length 90 cm x Ø 4 mm, CE approved
TP0083	Handpuller 3628 kg (4 tons max), with cable and hook, cable length 1,20 m x Ø 4 mm, CE approved



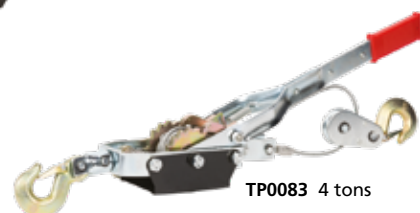
TP0080



TP0082 2 tons



TP0081



TP0083 4 tons



## Safety



TP0001 1,0 mtr  
TP0001-1 1,5 mtr

Part nr.	Description
TP0001	Breakaway cable with carabiner, length 1,0 mtr, black
TP0001-1	Breakaway cable with carabiner, length 1,5 mtr, black
TP0041	PVC safety cable, length 25 cm, white
TP0002	Auxiliary coupling with slit, galvanized
TP0002Z	Black auxiliary coupling with slit
TP0005	Auxiliary coupling with spring, galvanized
TP0053	Auxiliary coupling with plug holder, galvanized, 750 kg
TP0054	Auxiliary coupling with strip, galvanized



TP0041



TP0002

TP0002Z



TP0005



TP0053



TP0054

## Anti-theft

Part nr.	Description
TP0004	Discus lock with 2 keys, Ø 70 mm
TP0004-1	Discus lock keyed alike, Ø 70 mm
TP0018	Discus lock with 2 keys, Ø 90 mm
TP0019	Cylinder lock for towball coupling, with 2 keys
TP0008	Coupling hitch lock, 110 x 110 mm, galvanized
TP0009	Coupling hitch lock, bag model, galvanized
TP0012	Towball cap with lock and key, chrome-plated PVC
TP0027	Coupling hitch lock, universal egg model, Ø 50 mm, with 2 keys
TP0084	Universal wheel clamp, 18-25 cm, with 2 keys
TP0025	Universal coupling hitch lock, with 2 keys
TP0024	Coupling hitch lock, divisible



TP0004 Ø 70 mm  
TP0018 Ø 90 mm

TP0004-1 Ø 70 mm



TP0019



TP0008



TP0009



TP0012



TP0027



TP0084



TP0025



TP0024

## Jockey wheels

Part nr.	Description	Max. static load	Max. dynamic load
TP0006	Jockey wheel Ø 48 mm, metal rim, solid rubber tire 200 x 50 mm	150 kg	90 kg
TP0015	Jockey wheel Ø 60 mm, metal rim, solid rubber tire 200 x 60 mm, with 30 mm flange	400 kg	250 kg
TP0028	Jockey wheel Ø 48 mm, metal rim, air tire 260 x 85 mm	150 kg	90 kg
TP0055	Jockey wheel Ø 35 mm, metal rim, solid rubber tire 170 x 45 mm	300 kg	150 kg
TP0056	Jockey wheel Ø 60 mm, metal rim, solid rubber tire 220 x 65 mm	300 kg	150 kg
TP0057	Jockey wheel Ø 48 mm, PVC rim, solid rubber tire 200 x 50 mm	300 kg	150 kg
TP0058	Jockey wheel Ø 48 mm, PVC rim, air tire 260 x 85 mm	150 kg	90 kg



## Axes & spare wheels



Part nr.	Description
TP0076	Axis jockey wheel, 90 mm
TP0077	Axis jockey wheel, 120 mm
TP0011	Spare wheel, metal rim, solid rubber tire, 200 x 50 mm
TP0014	Spare wheel, metal rim, air tire, 260 x 85 mm
TP0059	Spare wheel, PVC rim, air tire, 260 x 85 mm
TP0060	Spare wheel, metal rim, solid rubber tire, 200 x 60 mm

## Clamps

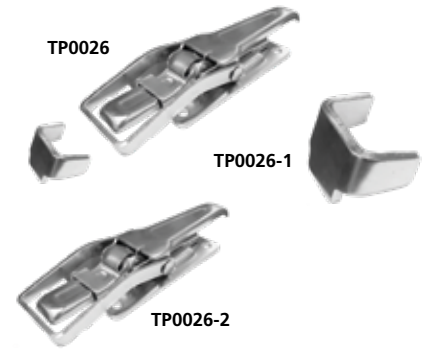
Part nr.	Description
TP0003	Jockey wheel clamp, Ø 48 mm
TP0062	Jockey wheel clamp, Ø 35 mm
TP0075	Jockey wheel clamp, Ø 60 mm
TP0079	Clamp holder, set of 2 pcs, Ø 60/70 mm





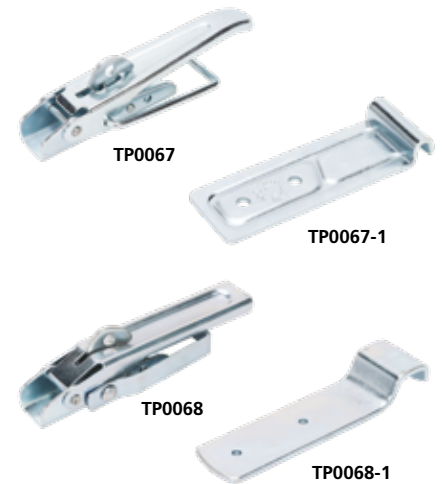
### Hinges & latches

Part nr.	Description
TP0026	Tailgate latch Tico with counterpart, 275 x 80 mm, plate 152 x 80 mm, hole distance 45 mm
TP0026-1	Counterpart for TP0026-2
TP0026-2	Tailgate latch Tico, 275 x 80 mm, plate 152 x 80 mm, hole distance 45 mm



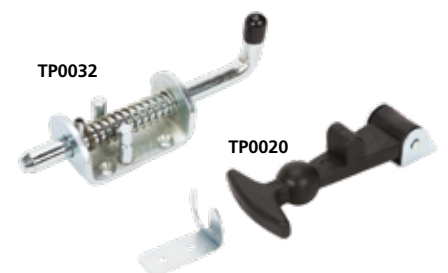
Part nr.	Description
TP0033	Left board latch no. 0, left
TP0034	Right board latch no. 0, right
TP0063	Screw-on eyelet nr. 0, 90 x 60 mm
TP0064	Screw-on eyelet nr. 1, 120 x 70 mm

Part nr.	Description
TP0067	Trailer latch, 210 x 45 mm
TP0067-1	Counterpart for TP0067
TP0068	Trailer latch, 205 x 45 mm
TP0068-1	Counterpart for TP0068



Part nr.	Description
TP0065	Trailer hinge, 320 x 56 x 16 mm, hole 16 mm
TP0078	Trailer hinge, 220 x 56 x 16 mm, hole 16 mm
TP0066	Weld-on hinge post, 15 mm
TP0069	Drop catch weld-on
TP0070	Drop catch threaded, screw size M12 x 24 mm

Part nr.	Description
TP0032	Springbolt with cap, 165 x 76 x 39 mm
TP0020	Bonnet fastener with counterpart

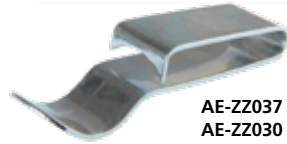


## Support

Part nr.	Description
TP0016	Prop stand 48 mm, length 700 mm
TP0061	Prop stand 48 mm, adjustable length 420 - 750 mm
TP0042	Corner steady
TP0038	Corner steady feet, with metal pin, set of 4 pcs



## Chassis clamps



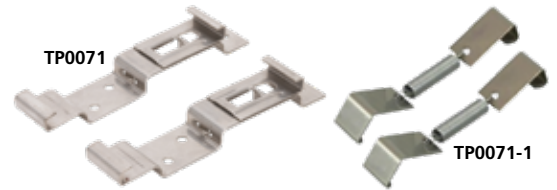
- Zink plated steel
- DIN EN-10132-1 (cold-rolled steel strip)
- DIN EN-10132-4 (spring steel)

AE-ZZ037 28 mm  
 AE-ZZ030 43 mm  
 AE-ZZ046 52 mm

Part nr.	Length mm	Width mm	Height mm
AE-ZZ037	28,0	15,0	5,5
AE-ZZ030	43,0	22,0	5,0
AE-ZZ046	52,0	12,0	5,0

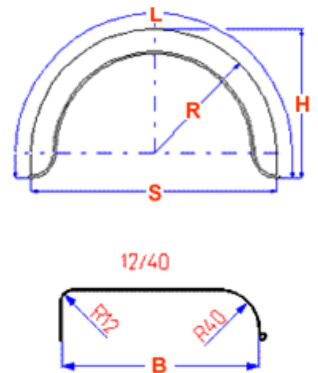
## Number plate clamps

Part nr.	Description
TP0071	Number plate clamps, set of 2 pcs
TP0071-1	Set of 2 clamps for repair shop plates



## Mudguards

Part nr.	Description	Inch	B mm	L mm	H mm	R mm	S mm
TPM0001	Mudguard round HR2280	14/15	220	1285	415	400	800
TPM0008	Mudguard round HR1968	12/13	190	1060	330	340	680
TPM0010	Mudguard round HR2075	14	200	1210	390	375	750
TPM0002	Mudguard angular HMHR1960	12	190	900	280	-	600
TPM0003	Mudguard angular HMHR1966	12	190	1060	340	-	660
TPM0004	Mudguard angular HMHR2075	14	200	1150	350	-	750
TPM0005	Tandem mudguard round THRD22155	-	220	2040	375	375	1550
TPM0006	Tandem mudguard angular THMHRD21152	-	210	1980	400	-	1520
TPM0007	Tandem mudguard angular THMHRD23152	-	230	1980	400	-	1520



TPM0001 22 x 80 cm  
 TPM0008 19 x 68 cm  
 TPM0010 20 x 75 cm

TPM0002 19 x 60 cm  
 TPM0003 19 x 66 cm  
 TPM0004 20 x 75 cm



TPM0005 22 x 155 cm



TPM0006 21 x 152 cm  
 TPM0007 23 x 152 cm

### Securing cargo

Part nr.	Description
TP0100	Cargo bar, aluminum, adjustable 2350-2720 mm
TP0029-1	Lashing eye single, 105 x 105 mm, stainless steel, with spring, pulling force appr. 800 daN
TP0072	Lashing eye single, 95 x 100 mm, with spring, pulling force appr. 800 daN
TP0040	Lashing eye tourniquet with spring, 65 x 15 mm
TP0073	Screw-on rope hook, 50 x 13 mm
TP0073-1	Screw-on rope hook, 72 x 20 mm, 5 mm holes spaced 20 mm



TP0100



TP0029-1



TP0072



TP0040



TP0073  
TP0073-1

### Trailer nets

Part nr.	Size/color	Material	Mesh size
TN0001	1,5 x 2,2 m, green	PP yarn, Ø 3 mm	45 x 45 mm
TN0002	1,5 x 2,7 m, green	PP yarn, Ø 3 mm	45 x 45 mm
TN0003	2,0 x 3,0 m, green	PP yarn, Ø 3 mm	45 x 45 mm
TN0004	2,5 x 4,5 m, green	PP yarn, Ø 3 mm	45 x 45 mm
TN0005	2,5 x 3,5 m, green	PP yarn, Ø 3 mm	45 x 45 mm
TN0011	2,5 x 1,6 m, green		fine-meshed
TN0012	3,0 x 2,0 m, green		fine-meshed
TN0013	4,5 x 2,5 m, green		fine-meshed
ER0001	26 cm, green	Elastic rope, Ø 8 mm	



45x45 mm mesh  
With black elastic rope Ø 5 mm



ER0001



Fine-meshed  
With black elastic rope Ø 6 mm





## Fuel hoses

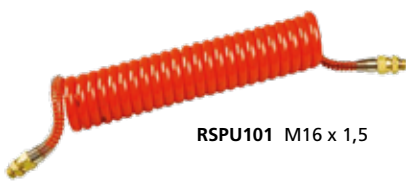
Part nr.	Description
BZS03065	Petrol hose 3 x 6 mm, length 5 m
BZS04075	Petrol hose 4 x 7 mm, length 5 m
BZS05095	Petrol hose 5 x 9 mm, length 5 m
BZS06105	Petrol hose 6 x 10 mm, length 5 m
BZS07105	Petrol hose 7 x 10 mm, length 5 m
BZS08125	Petrol hose 8 x 12 mm, length 5 m
BZS10145	Petrol hose 10 x 14 mm, length 5 m
BZS12175	Petrol hose 12 x 17 mm, length 5 m

**BZS03065** 3 x 6 mm  
**BZS04075** 4 x 7 mm  
**BZS05095** 5 x 9 mm  
**BZS06105** 6 x 10 mm  
**BZS07105** 7 x 10 mm  
**BZS08125** 8 x 12 mm  
**BZS10145** 10 x 14 mm  
**BZS12175** 12 x 17 mm

## Air hoses

### Coiled air hose, polyurethane

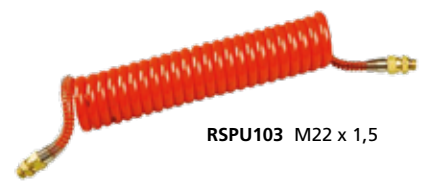
Part nr.	Description
RSPU101	Red polyurethane with galvanized steel connection support, inner diameter 50 mm, outer diameter 75 mm Working length 4 mtrs, hose size 8 x 2 x 12 mm, connection M16 x 1,5
RSPU102	Yellow polyurethane with galvanized steel connection support, inner diameter 50 mm, outer diameter 75 mm Working length 4 mtrs, hose size 8 x 2 x 12 mm, connection M16 x 1,5
RSPU103	Red polyurethane with galvanized steel connection support, inner diameter 50 mm, outer diameter 75 mm Working length 4 mtrs, hose size 8 x 2 x 12 mm, connection M22 x 1,5
RSPU104	Yellow polyurethane with galvanized steel connection support, inner diameter 50 mm, outer diameter 75 mm Working length 4 mtrs, hose size 8 x 2 x 12 mm, connection M22 x 1,5
RSPU109	Black polyurethane with yellow PVC connection support, inner diameter 50 mm, outer diameter 75 mm Working length 4 mtrs, hose size 8 x 2 x 12 mm, connection M16 x 1,5
RSPU110	Black polyurethane with red PVC connection support, inner diameter 50 mm, outer diameter 75 mm Working length 4 mtrs, hose size 8 x 2 x 12 mm, connection M16 x 1,5



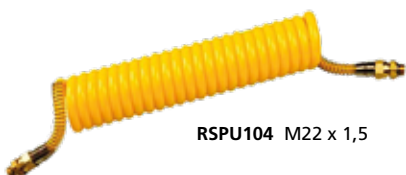
RSPU101 M16 x 1,5



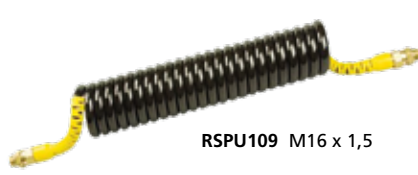
RSPU102 M16 x 1,5



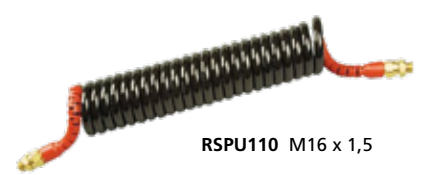
RSPU103 M22 x 1,5



RSPU104 M22 x 1,5



RSPU109 M16 x 1,5



RSPU110 M16 x 1,5

## Coiled air hose, polyamide

Part nr.	Description
RSPA556	Black polyamide with red PVC connection support, inner diameter 90 mm, outer diameter 115 mm Working length 4 mtrs, hose size 12 x 9 mm, connection M18 x 1,5
RSPA557	Black polyamide with yellow PVC connection support, inner diameter 90 mm, outer diameter 115 mm Working length 4 mtrs, hose size 12 x 9 mm, connection M18 x 1,5
RSPA558	Black polyamide with black PVC connection support, inner diameter 90 mm, outer diameter 115 mm Working length 4 mtrs, hose size 12 x 9 mm, connection M18 x 1,5



RSPA556



RSPA557



RSPA558



**RSPU092**  
Black polyurethane air pressure gun, incl. T-piece  
Working length 4,5 mtrs  
Hose size 8 x 6 mm  
Max. pressure 10 Bar

Also available

## Palm couplings

- Working pressure: 8 Bar
- Max. pressure: 13 Bar

Part nr.	Description
RSPU603	Coupling with valve M16 red
RSPU204	Coupling with valve M22 red
RSPU601	Coupling without valve M16 red
RSPU201	Coupling without valve M22 red
RSPU604	Coupling with valve M16 yellow
RSPU203	Coupling with valve M22 yellow
RSPU602	Coupling without valve M16 yellow
RSPU202	Coupling without valve M22 yellow



**RSPU603** with valve  
**RSPU204** with valve  
**RSPU601**  
**RSPU201**

**RSPU604** with valve  
**RSPU203** with valve  
**RSPU602**  
**RSPU202**



with valve



without valve

## Truck & Trailer Parts

### Plugs & Sockets

250V Plugs & sockets .....	16
12V Plugs & sockets .....	16
12V Towbar wiring kits .....	20
12V Adaptors & adaptor cables .....	22
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Lighting

Battery

Hose Clamps

Screws, Bolts & Nuts

Wire & Cable

Bundling & Protection

EV Products

Insulated Terminals

Non-insulated Terminals

Cord End Terminals

Housing

Fuses & Fuse Holders

Relays, Switches, Pilot Lights & Buzzers

Tools



### 250V Plugs & sockets - 2 Poles

PLUGS & SOCKETS

Part nr.	Description
AE-ZZ001	2 Pole rubber plug, earthed, 250V-16A, CE approved, IP44
AE-ZZ004	2 Pole rubber socket with protective cap, earthed, 250V-16A, CE approved, IP44
AE-ZZ211	2 Pole PVC plug, regular and pin earthed, 250V-16A, CE approved, IP20
AE-ZZ214	2 Pole PVC socket with protective cap, pin earthed, 250V-16A, CE approved, IP20



### 12V Plugs - 7 Poles

Part nr.	Description
PL07P001BRASS	7 Pole N type nylon plug, screw contacts, brass pins, ISO 1724, IP54
PL07P001NP	7 Pole N type nylon plug, screw contacts, nickel plated pins, ISO 1724, IP54
PL07P002BRASS	7 Pole N type aluminum plug, screw contacts, brass pins, ISO 1724, IP54
PL07P002NP	7 pole N type aluminum plug, screw contacts, nickel plated pins, ISO 1724, IP54



## 12V Sockets - 7 Poles

Part nr.	Description
SC07P002	7 Pole N type aluminum socket, screw contacts, with FCO (foglight cut-off), brass pins, ISO 1724, IP54
SC07P002NP	7 Pole N type aluminum socket, screw contacts, with FCO (foglight cut-off), nickel plated pins, ISO 1724, IP54
SC07P001BRASS	7 Pole N type nylon socket, screw contacts, brass pins, ISO 1724, IP54
SC07P001NP	7 Pole N type nylon socket, screw contacts, nickel plated pins, ISO 1724, IP54
SC07P003BRASS	7 Pole N type nylon socket, screw contacts, with FCO (foglight cut-off), brass pins, ISO 1724, IP54
SC07P003NP	7 Pole N type nylon socket, screw contacts, with FCO (foglight cut-off), nickel plated pins, ISO 1724, IP54
SC07P004	7 Pole N type nylon socket, screw contacts, with micro FCO (foglight cut-off), nickel plated pins, ISO 1724, IP54
SC07P012	7 Pole N type aluminum socket, screw contacts, brass pins, ISO 1724, IP54
PL07P003	7 Pole N type nylon coupling socket with clamp, screw contacts, brass pins, ISO 1724, IP54



### 12V Plugs & sockets - 7 Poles

This 7 pole 12V plug system, compliant with ISO 1724/ISO 3732 S, is the most frequently used system for electrical connections between traction vehicle and trailer with 12V vehicle electric system. The system is mainly used for applications with average requirements. This auxiliary system differs from the normal system by white housing, contact inserts and non-interchangeable contact arrangement.

- Load-carrying capacity: Max. 15A at 12V
- Cable cross section: Max 1 x 2,5 mm<sup>2</sup>, max. 2 x 1,5 mm<sup>2</sup>
- Permissible temperature range: -25 °C to 70 °C ambient temperature

Part nr.	Description
SC07P005	7 Pole black nylon S type socket with light grey cover, ISO 3732
PL07P005	7 Pole light grey nylon S type plug with screw type strain relief, ISO 3732
SC07P006	7 Pole black nylon S type socket with light grey cover, screw type strain relief and trailer fitting, ISO 3732



SC07P005



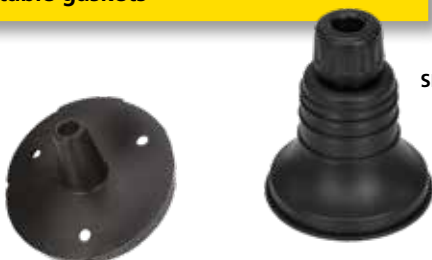
PL07P005



SC07P006



#### Suitable gaskets



SDT001

SDT003

Pin	Color	Wire	Description
1	Yellow	1,5 mm <sup>2</sup>	Reversing lights
2	Blue	2,5 mm <sup>2</sup>	Spare
3	White or grey	2,5 mm <sup>2</sup>	Common earth, except for pin 6
4	Green	2,5 mm <sup>2</sup>	+12V permanent
5	Brown	1,5 mm <sup>2</sup>	Spare
6	Red	2,5 mm <sup>2</sup>	+12V via ignition switch
7	Black	2,5 mm <sup>2</sup>	Earth for pin 6



## 12V Plugs - 13 Poles

Part nr.	Description
PL13P001	13 Pole nylon plug with strain relief, M3 screw contacts, ISO 11446, IP54, wire outlet Ø 9,15 mm
PL13P002	7+6 Pole nylon "WeSt" multi-plug, M3 screw contacts, NEN 6120, IP54



PL13P001



PL13P002 "WeSt"

## 12V Sockets - 13 Poles

Part nr.	Description
SC13P001	13 Pole plastic socket, screw contacts, nickel plated pins, ISO 11446, IP54
SC13P003	7+6 Pole plastic "WeSt" socket, M3 screw contacts, with micro FCO (foglight cut-off), nickel plated pins, NEN 6120, IP54
SC13P005	13 Pole plastic socket with PVC gasket, screw contacts, with FCO (foglight cut-off), nickel plated pins, ISO 11446, IP54
SC13P006	13 Pole plastic socket with PVC gasket, screw contacts, with micro FCO (foglight cut-off), nickel plated pins, ISO 11446, IP54



SC13P001

SC13P003 "WeSt"  
micro FCOSC13P005  
FCO  
With PVC gasketSC13P006  
micro FCO  
With PVC gasket

### 12V Towbar wiring kits - 7 Poles

Part nr.	Strands	Length	Remarks
THKS07P001	7 x 0,75 mm <sup>2</sup>	1,50 mtr	ISO 1724
THKS07P001FCO	8 x 0,75 mm <sup>2</sup>	1,50 mtr	With foglight cut-off ISO 1724
THKS07P002	7 x 0,75 mm <sup>2</sup>	2,0 mtrs	ISO 1724
THKS07P002FCO	8 x 0,75 mm <sup>2</sup>	2,0 mtrs	With foglight cut-off ISO 1724
THKS07P101	7 x 0,5 mm <sup>2</sup>	1,5 mtr	With mounting plate ISO 1724 <b>WITHOUT MOUNTING MATERIALS AND RUBBER GASKET</b>
THKS07P102	7 x 0,5 mm <sup>2</sup>	2 mtrs	With mounting plate ISO 1724 <b>WITHOUT MOUNTING MATERIALS AND RUBBER GASKET</b>



THKS07P001



THKS07P001FCO



THKS07P002



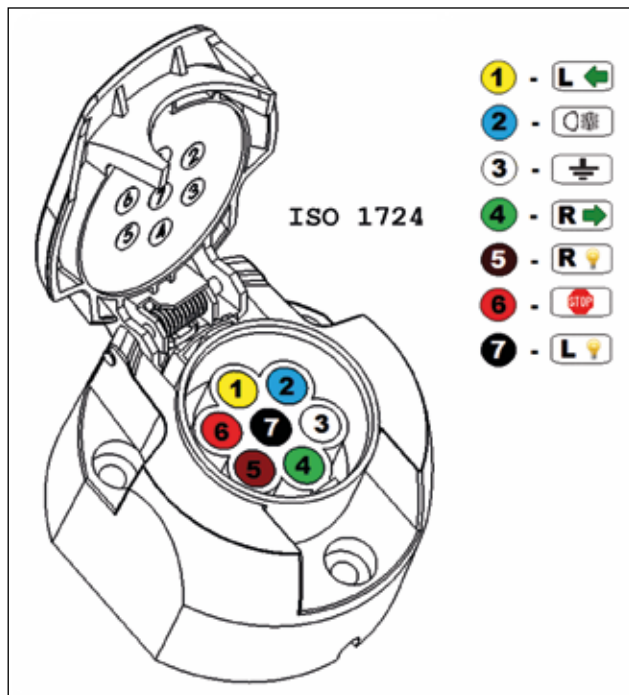
THKS07P002FCO



THKS07P101

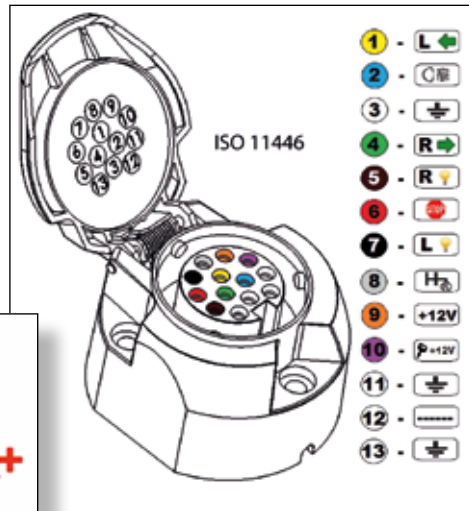
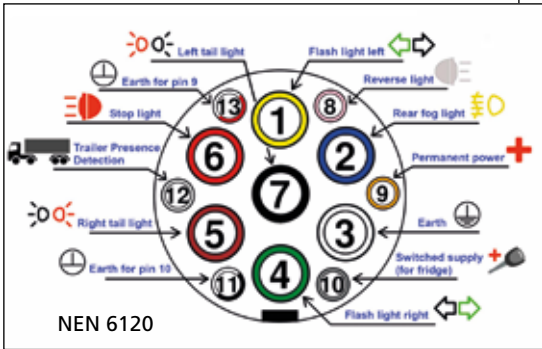


THKS07P102



Unless otherwise stated,  
all wire harnesses are  
supplied with

- waterproof cap
- fasteners & clips
- flexible rubber gasket



Unless otherwise stated, all wire harnesses are supplied with  
 - waterproof cap  
 - fasteners & clips  
 - flexible rubber gasket

## 12V Towbar wiring kits - 13 Poles



Part nr.	Strands	Length	Remarks
THKS13P001	11 x 0,5 mm <sup>2</sup> 1 x 0,75 mm <sup>2</sup>	1,5 mtr	ISO 11446
THKS13P001FCO	12 x 0,5 mm <sup>2</sup> 1 x 0,75 mm <sup>2</sup>	1,5 mtr	With foglight cut-off ISO 11446
THKS13P002	11 x 0,5 mm <sup>2</sup> 1 x 0,75 mm <sup>2</sup>	2,0 mtrs	ISO 11446
THKS13P002FCO	12 x 0,5 mm <sup>2</sup> 1 x 0,75 mm <sup>2</sup>	2,0 mtrs	With foglight cut-off ISO 11446
THKS13P003FCO	9 x 0,75 mm <sup>2</sup> 4 x 1,5 mm <sup>2</sup>	1,5 mtr	7+6 Pole "WeSt" socket Separate green wires included With foglight cut-off NEN 6120
THKS13P004FCO	9 x 0,75 mm <sup>2</sup> 4 x 1,5 mm <sup>2</sup>	2,0 mtrs	7+6 Pole "WeSt" socket Separate green wires included With foglight cut-off NEN 6120
THKS13P101	13 x 0,5 mm <sup>2</sup>	1,5 mtr	With mounting plate ISO 11446 <b>WITHOUT MOUNTING MATERIALS AND RUBBER GASKET</b>
THKS13P102	13 x 0,5 mm <sup>2</sup>	2,0 mtrs	With mounting plate ISO 11446 <b>WITHOUT MOUNTING MATERIALS AND RUBBER GASKET</b>
THKS13P240FCO	9 x 0,75 mm <sup>2</sup>	2,4 mtrs	With foglight cut-off ISO 11446 <b>WITHOUT RUBBER GASKET</b>





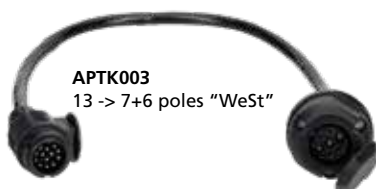
### 12V Adaptors

Part nr.	Poles		Description
	Car	Trailer	
AP13S071	13	7	Adaptor 13/7, nickel plated pins, ISO 1724 & 11446, IP54
AP13S072	13	7	Micro adaptor 13/7, nickel plated pins, ISO 1724 & 11446, IP54
AP13S073	7	13	Short adaptor 7/13, nickel plated pins, ISO 1724 & 11446, IP54
AP13S074	13	7+6 "WeSt"	Adaptor 13/7+6, nickel plated pins, ISO 11446 & NEN 6120, IP54
AP13S075	7	13	Short adaptor 7/13, brass pins, ISO 1724 & 11446, IP54
AP13S076	13	7	Micro adaptor 13/7, brass pins, ISO 1724 & 11446, IP54



### 12V Adaptor cables

Part nr.	Poles		Description
	Car	Trailer	
APTK001	7+6 "WeSt"	13	Adaptor wiring kit 7+6/13, length 0,7 mtr, ISO 11446 & NEN 6120, IP54
APTK002	13	7	Adaptor wiring kit 13/7, length 0,7 mtr, ISO 1724 & 11446, IP54
APTK003	13	7+6 "WeSt"	Adaptor wiring kit 13/7+6, length 0,7 mtr, ISO 11446 & NEN 6120, IP54
APTK004	7	13	Adaptor wiring kit 7/13, length 0,7 mtr, ISO 1724 & 11446, IP54





ADTK022



ADTK014



ADTK015



ADTK016

## 12V Spiral & straight coils

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK022	7 Pole Plastic	6 x 1 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	PUR	25 ± 5 mm	35 ± 5 mm	3,2 mtrs ± 50 mm	3,5 mtrs ± 50 mm	ISO 1724 1 x socket 1 x plug
ADTK014	13 Pole Nylon	12 x 0,5 mm <sup>2</sup> 1 x 1 mm <sup>2</sup>	TPU			3 mtrs	4 mtrs	ISO 11446
ADTK015	7 Pole Aluminum	6 x 0,75 mm <sup>2</sup> 1 x 1 mm <sup>2</sup>	TPU	25 ± 5 mm	35 ± 5 mm	3,5 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 1724
ADTK016	7 Pole Nylon	6 x 0,75 mm <sup>2</sup> 1 x 1 mm <sup>2</sup>	TPU	25 ± 5 mm	35 ± 5 mm	3,5 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 1724
ADTK017	7 Pole Aluminum	7 x 0,5 mm <sup>2</sup>	TPU	-	-	3 mtrs		ISO 1724
ADTK018	7 Pole Nylon	7 x 0,5 mm <sup>2</sup>	PVC	-	-	3 mtrs		ISO 1724 1 x socket 1 x plug



ADTK017



ADTK018

### 12V Accessories

PLUGS & SOCKETS

#### Testers

- Suitable for caravan or trailer
- For simple testing 12V trailer lights
- Needs a 9V battery (not included)

Part nr.	Description
TES0601	7 pole plug tester
TES0602	plug tester set, with adapter short from 13 to 7 pins and adapter contra from 7 to 13 pins
TES0603	13 pole plug tester



TES0601



TES0602



TES0603

#### Plug holders & socket cover



TP0039  
Plug holder  
For 7 or 13 pole plugs



TP0036  
Socket cover



PDDB001  
Parking socket  
For ISO 11446 plugs

#### Rubber gaskets & mounting brackets



TP0021

TP0021-1

Part nr.	Description
SDT001	Universal PVC gasket for 7 or 13 pole sockets, round, long and narrow nozzle, cable Ø 8,0-8,8 mm
SDT002	PVC gasket for 7 or 13 pole sockets, 2 straight sides, short and wide nozzle, cable Ø 8,0-8,8 mm
SDT003	Nylon (PA6) gasket for 7 or 13 poles sockets, round, with washer, rubber and nut, cable Ø 13-14 mm
SDT004	PVC gasket for 7 or 13 pole sockets, 2 straight sides, cable Ø 8,5-9,8 mm (nozzle can be cut down)
SDT005	PVC gasket with double nozzle for 7 or 13 pole sockets, 2 straight sides, cable Ø 7-7,2 mm and 8-8,2 mm
TP0021	Mounting bracket for 7 or 13 pole socket, PVC with metal ring, 122 x 77 mm, Ø ring 36 mm
TP0021-1	Mounting bracket for 7 or 13 pole socket, metal, 130 x 65 mm



SDT001



SDT002



SDT003



SDT004



SDT005



## 24V Plugs & sockets - 7 Poles S & N type



502021



502011

S type aluminum		
Part nr.	Description	Contacts
502021	Aluminum S type socket ISO 3731	Screw
502011	Aluminum S type plug ISO 3731	Screw



502023



24PL007

S type nylon		
Part nr.	Description	Contacts
502023	Nylon S type socket ISO 3731	Screw
24PL007	Nylon S type plug ISO 3731	Screw



502020



502010

N type aluminum		
Part nr.	Description	Contacts
502020	Aluminum N type socket ISO 1185	Screw
502010	Aluminum N type plug ISO 1185	Screw
502010SP	Aluminum N type plug with metal spring cable support ISO 1185	Screw



502010SP



502022



24PL006

N type nylon		
Part nr.	Description	Contacts
502022	Nylon N type socket ISO 1185	Screw
24PL006	Nylon N type plug ISO 1185	Screw
502012	Metal N type Europlug Black coated layer "Members" Anti-static and spark free ISO 1185	6,3 Tab



502012

Also available



24SDT001  
Seal for S & N type sockets  
For cable Ø 18,0

### 24V Plugs & sockets - 5 (ABS), 7 (EBS) & 15 Poles

#### 5 Poles ABS

Part nr.	Description	Contacts	Wire Size
24SC001	5 Pole ABS socket ISO 7638-1	Screw	2 x 4 mm <sup>2</sup> 3 x 1,5 mm <sup>2</sup>
24PL001	5 Pole ABS plug ISO 7638-1	Screw	2 x 4 mm <sup>2</sup> 3 x 1,5 mm <sup>2</sup>



**24SC001**  
5 pole ABS  
Screw contacts



**24PL001**  
5 pole ABS  
Screw contacts



**24SC002**  
7 pole EBS  
Screw contacts





**24PL002**  
7 pole EBS  
Screw contacts

#### 7 Poles EBS

Part nr.	Description	Contacts	Wire Size
24SC002	7 Pole EBS socket ISO 7638-1	Screw	2 x 4 mm <sup>2</sup> 5 x 1,5 mm <sup>2</sup>
24PL002	7 Pole EBS plug ISO 7638-1	Screw	2 x 4 mm <sup>2</sup> 5 x 1,5 mm <sup>2</sup>

#### 15 Poles

Part nr.	Description	Contacts	Wire Size
24SC003	15 Pole socket ISO 12098	Screw	3 x 2,5 mm <sup>2</sup> 12 x 1,5 mm <sup>2</sup>
24PL003	15 Pole plug ISO 12098	Screw	3 x 2,5 mm <sup>2</sup> 12 x 1,5 mm <sup>2</sup>



**24SC003**  
15 pole  
Screw contacts



**24PL003**  
15 pole  
Screw contacts

Also available



**PDDB002**  
Parking socket  
For ISO 12098/7638-1 plugs  
ADR

## 24V Spiral coils - 15 -> 2x7 Poles

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK004	15 pole 13 connection, ISO 12098 7 pole N type, aluminum, ISO 1185 7 pole S type, aluminum, ISO 3731	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	
ADTK005	15 Pole 13 connection, ISO 12098 7 Pole N type, nylon, ISO 1185 7 Pole S type, nylon, ISO 3731	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	
ADTK006	15 Pole 13 connection, ISO 12098 7 Pole N type, nylon, ISO 1185 7 Pole S type, nylon, ISO 3731	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Moulded plugs



## 24V Spiral coils - 5 (ABS), 7 (EBS) & 15 Poles

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK007	5 Pole ABS, nylon	2 x 4 mm <sup>2</sup> 3 x 1,5 mm <sup>2</sup>	TPU	20 ± 5 mm	40 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ABS ISO 7638-1
ADTK008	7 Pole EBS, nylon	2 x 4,0 mm <sup>2</sup> 5 x 1,5 mm <sup>2</sup>	TPU	20 ± 5 mm	40 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	EBS ISO 7638-1
ADTK708	7 Pole EBS, nylon	2 x 2,5 mm <sup>2</sup> 5 x 1,0 mm <sup>2</sup>	TPU	20 ± 5 mm	40 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	EBS ISO 7638-1
ADTK020	15 Pole, nylon, ADR	12 x 1,5 mm <sup>2</sup> 3 x 2,5 mm <sup>2</sup>	TPU	20 ± 5 mm	40 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ADR ISO 12098

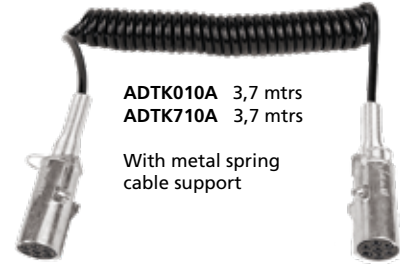




### 24V Spiral coils - 2x7 Poles



ADTK010 3,7 mtrs



ADTK010A 3,7 mtrs  
ADTK710A 3,7 mtrs

With metal spring cable support

#### N type aluminum

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK010	7 Pole N type, aluminum	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 1185
ADTK010A	7 Pole N type, aluminum	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Metal spring cable support ISO 1185
ADTK710A	7 Pole N type, aluminum	6 x 0,75 mm <sup>2</sup> 1 x 1,0 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Metal spring cable support ISO 1185



ADTK012 3,7 mtrs  
ADTK712 3,7 mtrs

#### N type nylon

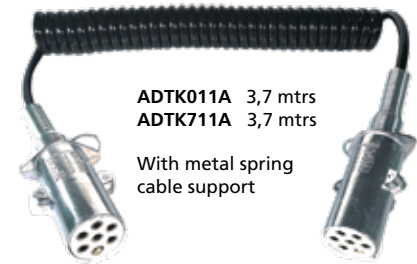
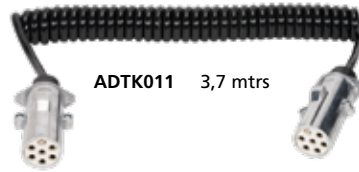
Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK012	7 Pole N type, nylon	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 1185
ADTK712	7 Pole N type, nylon	6 x 0,75 mm <sup>2</sup> 1 x 1,0 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 1185



ADTK012B 3,7 mtrs

#### N type moulded

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK012B	7 Pole N type, nylon	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Moulded plugs ISO 1185



## S type aluminum

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK011	7 Pole S type, aluminum	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 3731
ADTK011A	7 Pole S type, aluminum	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Metal spring cable support ISO 3731
ADTK711A	7 Pole S type, aluminum	6 x 0,75 mm <sup>2</sup> 1 x 1,0 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Metal spring cable support ISO 3731



ADTK013 3,7 mtrs  
ADTK713 3,7 mtrs

## S type nylon

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK013	7 Pole S type, nylon	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 3731
ADTK713	7 Pole S type, nylon	6 x 0,75 mm <sup>2</sup> 1 x 1,0 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	ISO 3731



## S type moulded

Part nr.	Plugs	Strands	Coil	Inner Ø	Outer Ø	Working length	Max. perm. length	Remarks
ADTK011D	7 Pole S type, nylon	6 x 1,0 mm <sup>2</sup> 1 x 1,5 mm <sup>2</sup>	TPU	27 ± 5 mm	38 ± 5 mm	3,7 mtrs ± 50 mm	4 mtrs ± 50 mm	Moulded plugs ISO 3731

### 24V Coils - 2 Poles

- For power transmission to charge a battery or to power a trailer, a tailgate, a fridge motor, etc.

Part nr.	Plugs	Strands	Coil	Working length	Max. perm. length	Remarks
ADTK501	2 Nylon Rema plugs Nickel plated brass pins	2 x 35 mm <sup>2</sup>	TPU	3 mtrs	4 mtrs ± 50 mm	Spiral coil



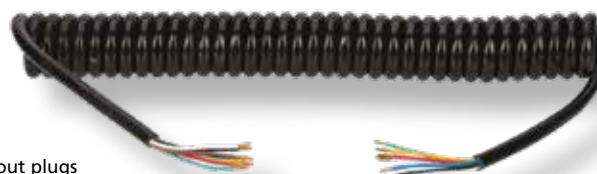
### 24V Rema plug & socket

- For power transmission to charge a battery or to power a trailer, a tailgate, a fridge motor, etc.

Part nr.	Plugs	Housing	Pins
AE-ZZ009	2 Pole starter socket SW5 24V	Black	Copper
AE-ZZ015	2 Pole starter plug SW-4 24V	Black	Copper



Also available



**SPKA350**  
TPU spiral cable without plugs  
12-24V

Strands: 6 x 0,75 + 1 x 1,0 mm<sup>2</sup>  
Working length 3,5 mtrs

## 24V Special applications - 2 & 12 Poles



**24PL009**  
12 Pole rubberized break-proof metal plug  
For cable Ø 24,0 mm  
Silver plated solder contacts  
Nato Stock no. 5935-12-188-1750  
IP67, IPX7 protection  
VG 96923 B1-12P / MS75020-1

**24PL008**  
For cable Ø 17,0 mm  
Nato Stock no. 5935-12-350-1294  
VG 96923 B2-12P / MS75020-1



**24SC006**  
12 Pole break-proof metal socket  
For cable Ø 23,5  
Silver plated solder contacts  
With cap and M6 mounting kit  
Nato Stock no. 5935-12-128-1833  
IP67, IPX7 protection  
VG 96923 A-12S / MS75021-2



**24SC009**  
Socket contact with surrounding spring  
Silver plated crimp/solder contact  
For max. 50 mm<sup>2</sup> cable  
Spare part for 24SC007 / 24SC008  
Nato Stock no. 5999-12-335-5654  
VG 96917 S50



**24SC007**  
2 Pole break-proof metal socket  
For max. 50 mm<sup>2</sup> cable  
Silver plated crimp/solder contacts  
With screw cap  
Nato Stock no. 5935-12-308-5019  
IP54, IPX4, IPX7 protection  
VG 96917 A002



**24SC008**  
2 Pole reinforced composite socket  
For max. 35 mm<sup>2</sup> cable  
Silver plated crimp/solder contacts  
With rubber cap  
IP54, IPX4, IPX7 protection  
VG 96917



**24PL014**  
Plug contact  
Silver plated crimp/solder contact  
For max. 35 mm<sup>2</sup> cable  
Spare part for 24PL010 / 24PL012 / PL02P001  
Nato Stock no. 5999-12-187-6686  
VG 96917 P35



**24PL010**  
2 Pole waterproof break-proof metal plug  
For max. 35 mm<sup>2</sup> cable  
Silver plated crimp/solder contacts  
With rubberized metal screw ring  
Length 120 mm  
IP54, IPX4, IPX7 protection  
VG 96917 E001B



**PL02P001**  
2 Pole break-proof metal sealing plug  
For max. 35 mm<sup>2</sup> cable  
Silver plated crimp/solder contacts  
IP54, IPX4, IPX7 protection  
VG 96917

**24PL015**  
For max. 50 mm<sup>2</sup> cable  
Spare part for 24PL011 / 24PL013 / 24PL016  
VG 96917

**24PL011**  
For max. 50 mm<sup>2</sup> cable  
VG 96917



**24PL016**  
2 Pole rubberized break-proof metal plug  
Silver plated crimp/solder contacts  
For max. 50 mm<sup>2</sup> cable  
IP54, IPX4, IPX7 protection  
VG 96917



**24PL012**  
2 Pole reinforced composite plug  
For max. 35 mm<sup>2</sup> cable  
Silver plated crimp/solder contacts  
IP54, IPX4, IPX7 protection  
VG 96917



**24SC011**  
2 Pole rubberized break-proof metal coupler  
Silver plated contacts  
For 24PL010 / 011 / 012 / 013  
Without screw caps  
IP54, IPX4, IPX7 protection  
VG 96917

**24PL013**  
For max. 50 mm<sup>2</sup> cable



### 6-24V Applications

PLUGS & SOCKETS

SC01P001



SC01P004



SC01P004-1



SC01P005



SC01P012-1

SC01P012



SC01P020



SC01P030



APTK009



SC01P013



APTK106



Single sockets		
Part nr.	Description	Remarks
SC01P001	DIN standard built-in socket for standard plugs	6,3 mm tab connection 12-24V, 16A
SC01P004	Built-in break proof metal socket Universal and norm socket Fastening by hexagon nut	Screw connection 6-24V, 16A ISO 4165
SC01P004-1	Built-in DIN standard socket for standard and universal plugs Metal housing Fastening by hexagon nut	6,3 mm tab connection Mounting hole Ø 18 mm Inner Ø 12 mm 24V, 16A
SC01P005	Built-in socket with slotted housing Universal and norm socket	Screw connection 12-24V, 20A DIN EN ISO 4165
SC01P012	Built-in socket for standard plugs Panel mounted, fastening by hexagon nut	6,3 mm tab connection Mounting hole Ø 27,8 mm Inner Ø 12 mm 12-24V, 20A with 2,5 mm <sup>2</sup> cable, 16A with 1,5 mm <sup>2</sup> cable
SC01P012-1	Built-in socket for standard plugs Panel mounted, fastening by clamp sleeve	6,3 mm tab connection Mounting hole Ø 27,8 mm Inner Ø 12 mm 12-24V, 20A with 2,5 mm <sup>2</sup> cable, 16A with 1,5 mm <sup>2</sup> cable
SC01P013	Surface-mounted socket for standard and universal plugs Dust- and splash-proof	6,3 mm tab connection Inner Ø 12 mm 12-24V, 16A DIN EN ISO 4165
SC01P020	Built-in socket for standard plugs Plastic housing Easy to build in	6,3 mm tab connection 12V, 10A
SC01P030	Built-in socket for standard plugs Plastic housing Easy to build in	6,3 mm tab connection 12-24V, 10A
APTK009	Socket with flat cable	Cable length 1,8 mtrs 12-24V, 8A
APTK106	Surface-mounted socket for universal plugs	6,3 mm tab connection Inner Ø 12 mm 12-24V, 20A with 2,5 mm <sup>2</sup> cable, 16A with 1,5 mm <sup>2</sup> cable

Multi-sockets		
Part nr.	Description	Remarks
APTK007	Twin socket connector with universal plug	Cable length 0,25 mtr Inner Ø 12 mm 12-24V, 2 x 8A
APTK012	Triple socket connector with universal plug	Inner Ø 12 mm 12-24V, 3 x 5A
APTK010	Triple socket (2 x power, 1 x USB) with universal plug	Cable length 1,5 mtrs Inner Ø 12 mm 12V -> 5V, 1000mA
APTK109	Triple socket with universal plug	Inner Ø 12 mm 2 x 1,5 mm <sup>2</sup> cable, length 2 mtrs 12-24V, 16A
APTK111	Triple built-in socket for universal plugs	6,3 mm tab connection Inner Ø 12 mm 12-24V, 16A DIN EN ISO 4165
APTK108	Triple surface-mounted socket for universal plugs	Inner Ø 12 mm 12-24V, 20A with 2,5 mm <sup>2</sup> cable, 16A with 1,5 mm <sup>2</sup> cable



Plugs		
Part nr.	Description	Remarks
PL01P001	Universal plug for cigarette lighter, with glass fuse	Screw terminal for 2,5 mm <sup>2</sup> 12-24V, 16A
PL01P004	Universal safety plug for cigarette lighter, with glass fuse	Screw terminal for 2,5 mm <sup>2</sup> 12-24V, 8A
PL01P002	Standard plug for DIN ISO 4165 sockets	Screw terminals 12-24V, 15A
PL01P005	90° Universal plug for cigarette lighter and DIN ISO 4165 sockets	Wire size max 1,5 mm <sup>2</sup> 12-24V, 7,5A
PL01P006	DIN-socket adaptor for DIN ISO 4165 sockets	Inner Ø 21 mm 12-24V, 8A

Appliance cable		
Part nr.	Description	Remarks
APTK107	Appliance cable with universal safety plug and straight DC connector	2 x 0,75 mm <sup>2</sup> cable, length 2 mtrs 12-24V, 8A



Adaptor		
Part nr.	Description	Remarks
APTK013	AC/DC adaptor	Input AC 100~240V, 1,8A Output DC 12V, 5A



Extension cables		
Part nr.	Description	Remarks
APTK006	Extension cable with universal safety plug and socket	Cable length 0,6 to 3 mtrs 12-24V, 8A
APTK014	Extension cable with universal safety plug and fracture proof socket for standard and universal plugs	Cable length 4 mtrs 12-24V, 8A DIN EN ISO 4165
APTK015	Extension cable with standard plug for DIN ISO 4165 sockets	Cable length 0,25 mtr 12-24V, 8A

USB		
Part nr.	Description	Remarks
SC01P009	Built-in USB socket with protective cap	12-24V in 5V, 2,1A out
SC01P010	Surface-mounted power USB socket With integrated power voltage converter For charging and operating devices that are suitable for charging by 5V USB, like mobile/smart phones, sat navs and digital cameras	With 15 cm 0,5 mm <sup>2</sup> cable connection 8-34V in 5V, 3A out
APTK016	USB cable with 2A universal safety plug, for charging and operating devices that are suitable for charging by 5V USB	Cable length 1,8 mtrs Input 12V Output 5V, 1000mA
APTK011	Micro USB cable	Cable length 1,8 mtrs <b>3A out, not suitable for charging mobile phones</b>
APTK010	Triple socket (2 x power, 1 x USB) with universal plug	Cable length 1,5 mtrs Inner Ø 12 mm 12V -> 5V, 1000mA



## 6-24V Applications - 2 & 3 Pole plugs & sockets

### PL02P004

2 Pole aluminum plug  
Screw terminals  
With cap nut for cable Ø 6-10 mm  
6-24V, 30A  
DIN 14690



### PL02P004SEAL

Seal for PL02P004  
Cable Ø 6-12 mm

## 2 Poles

### SC02P001

2 Pole aluminum socket  
With ring tongue connection M3  
Screw contacts  
With seal in cap nut  
6-24V, 30A  
DIN 14690



### SC02P001SEAL

Gasket for SC02P001  
Cable Ø 6-12 mm

## 3 Poles

### AE-ZZ006

3 Pole plastic socket  
2 x 6,3 and 1 x 4,8 mm tab contacts  
6-24V



### AE-ZZ005

3 Pole plastic plug  
2 x 6,3 and 1 x 4,8 mm tab contacts  
Protection type IP54  
6-24V, 16A@24V (1,5 mm<sup>2</sup>) or 25A@24V (2,5 mm<sup>2</sup>)



### SC03P001

3 Pole plastic trailer socket  
Screw connection M3  
6-24V  
ISO 1185 / ISO 3731



### PL03P008

3 Pole plastic trailer plug  
Screw connection M3  
6-24V  
ISO 1185 / ISO 3731





## Junction boxes

PLUGS & SOCKETS



**JB06P001**  
1x6 Pole CBL junction box



**JB08P001**  
2x4 Pole CBL junction box



**JB08P002**  
4x2 Pole CBL junction box



**JB06P002**  
1x6 Pole junction box



**JB08P004**  
2x8 Pole junction box



**AE-ZZ002**  
2x8 Pole junction box



**AE-ZZ031**  
2x8 Pole junction box interior

Part nr.	Poles	Connection	Dimensions	IP	Remarks
JB06P001	1x6	Terminal block	125 x 73 x 32 mm		
JB08P001	2x4	Terminal blocks	125 x 73 x 32 mm		
JB08P002	4x2	Tab connectors 6,3x0,8	125 x 73 x 32 mm		
JB06P002	1x6	Screw contacts	120 x 70 x 30 mm		With rubber grommets and metal lid with clamps
JB08P004	2x8	Tab connectors 6,3x0,8	125 x 80 x 35 mm		Plastic lid with clamps
AE-ZZ002	2x8	Tab connectors 6,3x0,8	145 x 95 x 35 mm		PA housing, aluminum lid with clamps
AE-ZZ031	2x8	Tab connectors 6,3x0,8	87 x 31 x 23 mm		

# Truck & Trailer Parts

## Plugs & Sockets

### Lighting

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Battery

Hose Clamps

Screws, Bolts & Nuts

Wire & Cable

Bundling & Protection

EV Products

Insulated Terminals

Non-insulated Terminals

Cord End Terminals

Housing

Fuses & Fuse Holders

Relays, Switches, Pilot Lights & Buzzers

Tools

Accessories

## Rear lights - LED

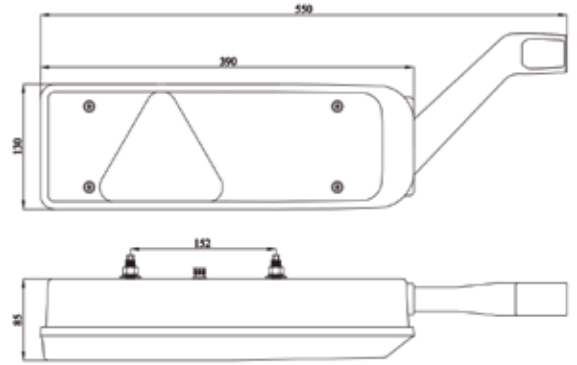


LTL1834 right  
LTL1835 left

LED



PG plug



Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1834	Right		PG plug	LED	LED		△	✓	✓	✓	✓	✓	✓	ECE E9
LTL1835	Left		PG plug	LED	LED		△	✓	✓	✓	✓	✓	✓	ECE E9

TP0085



TP0086



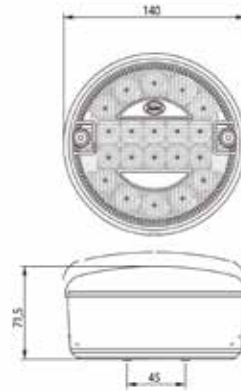
TP0085 left  
TP0086 right

LED  
Dimensions 210 x 157 mm

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
TP0085	Left	12V		LED			△	✓	✓	✓	✓			ECE
TP0086	Right	12V		LED			△	✓	✓		✓		✓	ECE



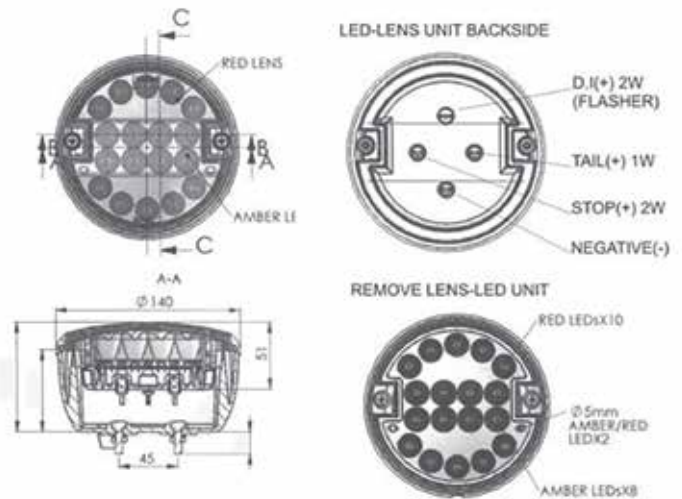
**LTL1846**  
LED  
Red/amber lens  
Waterproof



Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1846	Universal	9-33V		LED				✓	✓		✓			ECE E4



**LTL1847**  
LED  
Red/amber lens  
Waterproof

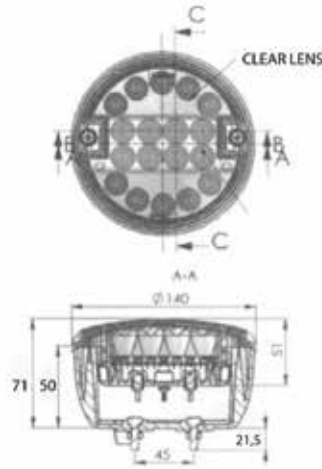
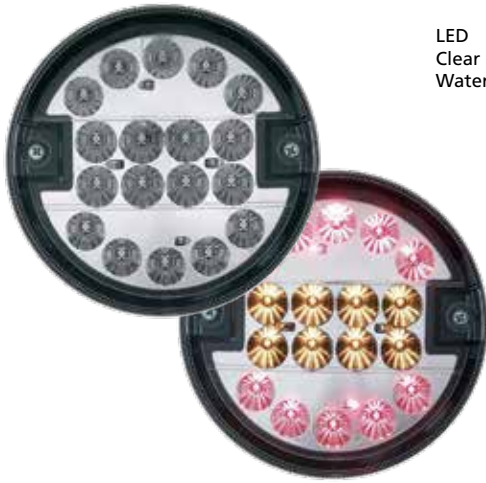


Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1847	Universal	9-33V		LED				✓	✓		✓			ECE E11

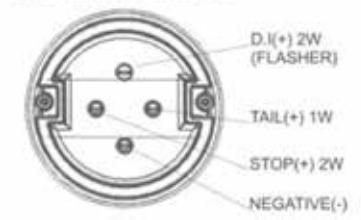


**LTL1849**

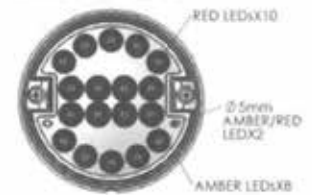
LED  
Clear lens  
Waterproof



LED-LENS UNIT BACKSIDE

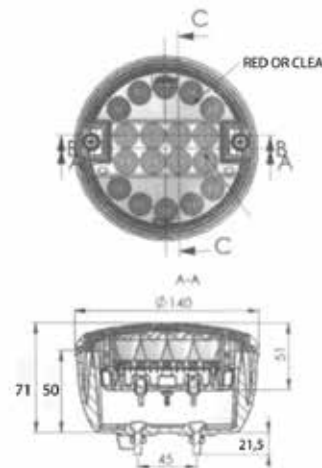


REMOVE LENS-LED UNIT

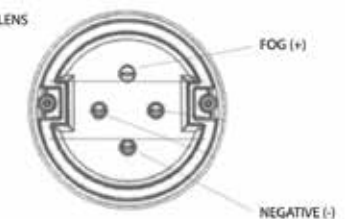


Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1849	Universal	9-33V		LED				✓	✓		✓			ECE E11

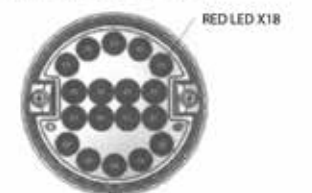
**LTL1848 fog light**  
LED  
Red lens  
Waterproof



LED-LENS UNIT BACKSIDE



REMOVE LENS-LED UNIT

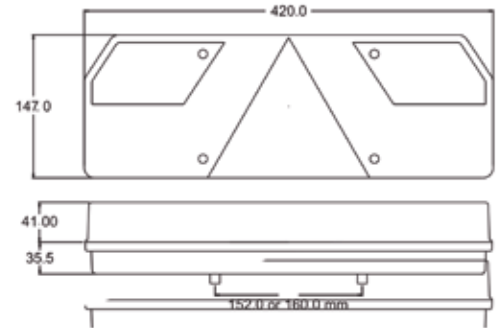


Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1848	Universal	9-33V		LED									✓	ECE E11

# Rear lights - Bulb

LT5002 right  
 LTL1872 right lens  
 LT5003 left  
 LTL1873 left lens

**Europoint Type**  
 Bulbs: 1xP21/5W, 4xP21W, 3xR5W



LIGHTING



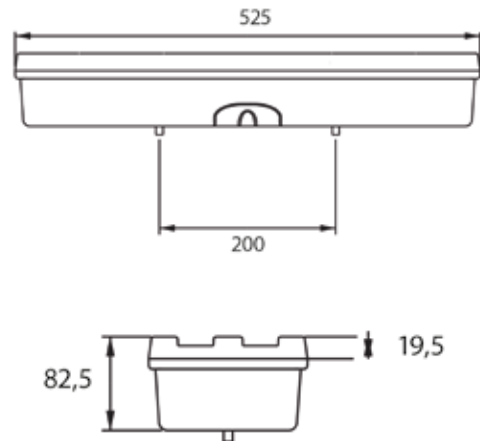
Grommet

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT5002	Right	24V	Grommet	Bulb		✓	△	✓	✓	✓	✓		✓	ECE E2
LTL1872	Right lens													
LT5003	Left	24V	Grommet	Bulb		✓	△	✓	✓	✓	✓		✓	ECE E2
LTL1873	Left lens													



LT5006 right  
 bulbs 4xP21W, 2xR10W  
 LT5007 left  
 bulbs 4xP21W, 3xR10W

**Mercedes Type**



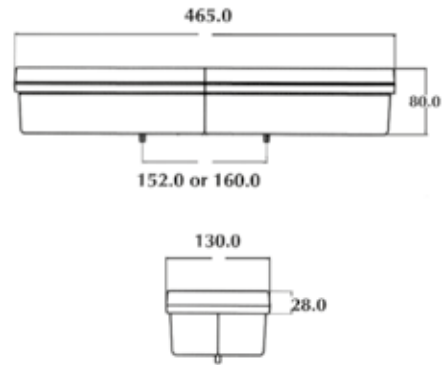
Grommet

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT5006	Right	24V	Grommet	Bulb		✓	✓	✓	✓	✓	✓		✓	ECE E2
LT5007	Left	24V	Grommet	Bulb		✓	✓	✓	✓	✓	✓	✓	✓	ECE E2



LT5004 right  
bulbs: 4xP21W, 3xR5W  
LT5005 left  
bulbs: 4xP21W, 4xR5W

Volvo Type

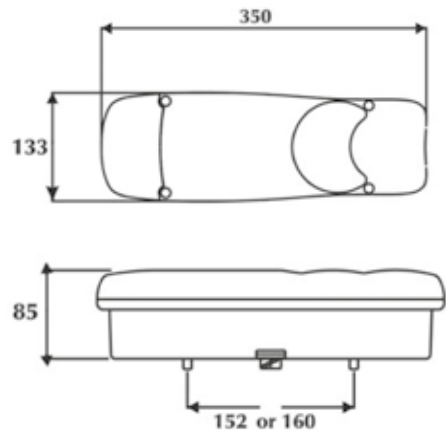


Grommet

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT5004	Right		Grommet	Bulb		✓	✓	✓	✓	✓	✓		✓	ECE E2
LT5005	Left		Grommet	Bulb		✓	✓	✓	✓	✓	✓	✓	✓	ECE E2

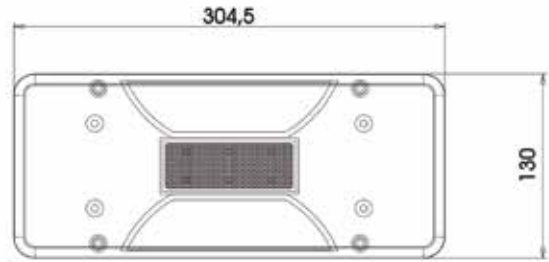
LT5008 right  
LT5009 left

L5 Type  
Bulbs: 4xP21W, 3xR10W



Grommet

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT5008	Right	24V	Grommet	Bulb			✓	✓	✓	✓	✓		✓	ECE E2
LT5009	Left	24V	Grommet	Bulb			✓	✓	✓	✓	✓	✓	✓	ECE E2

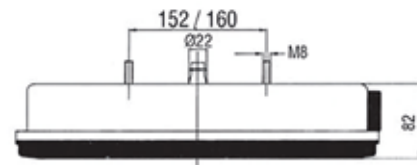
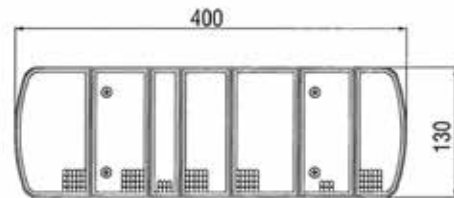


LTL1867 right  
LTL1852 left  
LTL1843 lens  
  
Iveco Daily Type (new model)  
Bulbs: 3xP21W, 2xR5W



Grommet

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1867	Right		Grommet	Bulb			✓	✓	✓	✓	✓			ECE E2
LTL1852	Left		Grommet	Bulb			✓	✓	✓		✓		✓	ECE E2
LTL1843	Universal lens for LTL1867 and LTL1852													



LTL1853 right  
LTL1854 left  
LTL1871 lens  
  
Bulbs: 4xP21W, 3xR5W



Grommet

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1853	Right		Grommet	Bulb		✓		✓	✓	✓	✓	✓	✓	ECE E9
LTL1854	Left		Grommet	Bulb		✓		✓	✓	✓	✓	✓	✓	ECE E9
LTL1871	Universal lens for LTL1853 and LTL1854													

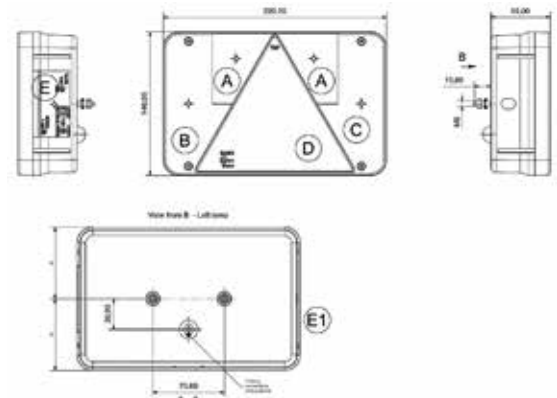




LT5001-10 left  
 LT5001-10-S left lens  
 LT5001-13 right  
 LT5001-13-S right lens

Dimensions 104 x 194 mm  
 Bulbs: 12V 1xP21/5W, 2xP21W, 1xR5W (not included)

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT5001-10	Left	12V		Bulb				✓	✓		✓	✓	✓	ECE
LT5001-10-S	Left lens													
LT5001-13	Right	12V		Bulb				✓	✓	✓	✓	✓		ECE
LT5001-13-S	Right lens													



LT5800-10 left  
 LT5800-10-S left lens  
 LT5800-13 right  
 LT5800-13-S right lens

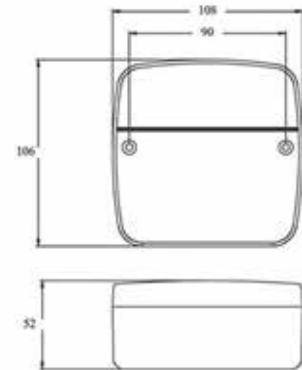
Dimensions 220 x 140 mm  
 Bulbs: 12V 1xP21/5W, 3xP21W (not included)

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT5800-10	Left	12V		Bulb			△	✓	✓		✓	✓	✓	ECE
LT5800-10-S	Left lens													
LT5800-13	Right	12V		Bulb			△	✓	✓	✓	✓	✓		ECE
LT5800-13-S	Right lens													



**LTL1859**

Bulbs: 2xC18W 1xC5W



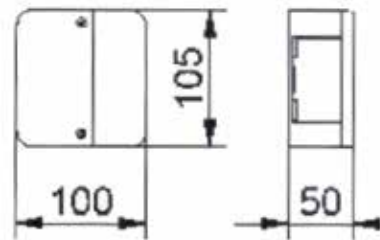
LIGHTING

Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1859	Universal			Bulb				✓	✓		✓	✓		ECE E2



**LT3002** light  
**LT3003** lens

Dimensions 100 x 105 mm  
Bulbs: 1xP21/5W, 1xP21W (not included)

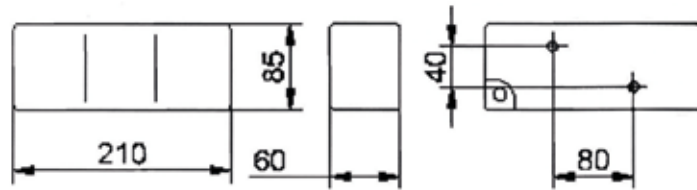


Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT3002	Universal	12V		Bulb				✓	✓		✓			ECE E3
LT3003	Lens													



LT8100 light  
LT8100-S lens

Tractor rear light  
Dimensions 210 x 85 mm  
Bulbs: 1xP21/5W, 2xP21W (not included)

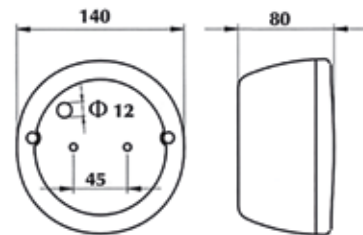


Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT8100	Universal	12V		Bulb				✓	✓		✓			ECE E3
LT8100-S	Lens													



LTL1861

Bulbs: 2xP21W, 1xR5W



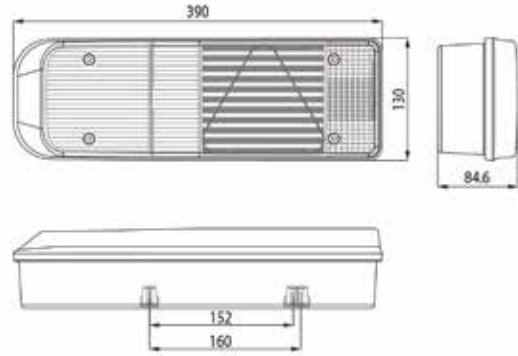
Part nr.	Mounting side	Rating	Connection	Light source	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1861	Universal			Bulb				✓	✓		✓	✓		ECE E2

LTL1863 right  
 LTL1864 right lens  
 LTL1865 left  
 LTL1866 left lens

Bulbs 3xP21W, 1xPY21W, 2xR5W  
 Can be connected to the junctionbox with a  
 2500 mm Trailight cable



PG plug



LIGHTING

Part nr.	Mounting side	Rating	Connection	Marker light	Outline marker	Side marker	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LTL1863	Right		PG plug	Bulb			Δ	✓	✓	✓	✓	✓	✓	ECE E9
LTL1864	Right lens													
LTL1865	Left		PG plug	Bulb			Δ	✓	✓	✓	✓	✓	✓	ECE E9
LTL1866	Left lens													



## Trailer boards



LT250490 magnetic kit  
Bulbs included

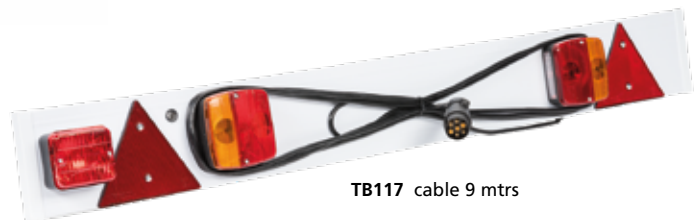


TB112-L LED

Part nr.	Rating	Connection	Cable	Dimensions	Reflector	Stop	Tail	Reverse	Direction indicator	Number plate	Fog	Approval
LT250490	12V	7 pole plug	7,5 mtrs			✓	✓		✓	✓		ECE
TB112-L	12V	7 pole plug	6 mtrs	1220 mm	△	✓	✓		✓		✓	ECE
TB114	12V	7 pole plug	6 mtrs	1200 x 140 mm	△	✓	✓		✓		✓	ECE
TB117	12V	7 pole plug	9 mtrs	1200 x 140 mm	△	✓	✓		✓		✓	ECE
TB116-B	12V	7 pole plug	7,5 mtrs	Adjustable 1400 - 2100 mm	△	✓	✓		✓			ECE



TB114 cable 6 mtrs  
Bulbs included



TB117 cable 9 mtrs  
Bulbs included

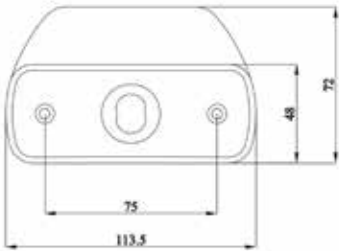


TB116-B adjustable  
Bulbs included

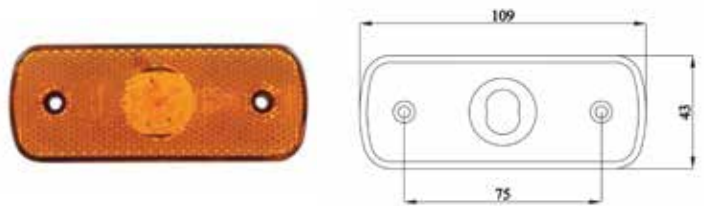
## Marker & outline marker lights - LED



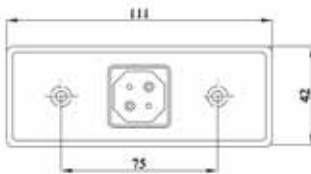
**LTL1001 side**  
Waterproof  
With 250 mm Trailight cable



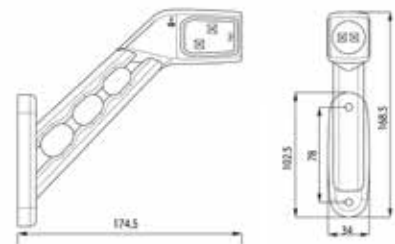
**LTL1002 side**  
Waterproof  
With 500 mm Trailight click cable



**LTL1003 front**  
**LTL1004 rear**  
Waterproof



**LTL1005 left**  
**LTL1006 right**



Part nr.	Position	Rating	Light source	Connection	Waterproof	Approval
LTL1001	Side	24V	LED	With 250 mm Trailight cable		ECE E9
LTL1002	Side	24V	LED	With 500 mm Trailight cable		ECE E9
LTL1003	Front	12V	LED	Socket		ECE E9
LTL1004	Rear	12V	LED	With cable		ECE E9
LTL1005	Left	24V	Red-clear-amber LEDs	1500 mm Trailight cable	✓	ECE E4
LTL1006	Right	24V	Red-clear-amber LEDs	1500 mm Trailight cable	✓	ECE E4

## Marker & outline marker lights - Bulb



LT906



LT912



LT910



LT911

LT906 side with reflector  
 LT912 rear  
 LT910 front with reflector  
 LT911 front

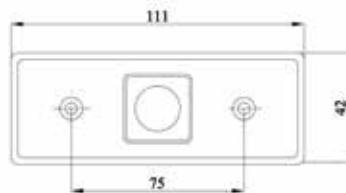
Bulb (12V C5W, 38 mm) not included

Part nr.	Position	Rating	Light source	Connection	Dimensions	Reflector	Approval
LT906	Side	12V	Bulb	Grommet	65 x 60 mm	✓	ECE E3
LT912	Rear	12V	Bulb	Grommet	65 x 60 mm		ECE E3
LT910	Front	12V	Bulb	Grommet	65 x 60 mm	✓	ECE E3
LT911	Front	12V	Bulb	Grommet	65 x 60 mm		ECE E3
LT913	Side	12-24V	Bulb	L socket			ECE E9
LT914	Side	12-24V	Bulb	L socket			ECE E9
LT915	Side	24V	Bulb	Socket			ECE E9
LT916	Side	12-24V	Bulb	Integrated ttr cable connector			ECE E9



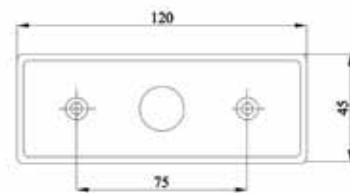
LT913

Bulb W3W (T10) not included



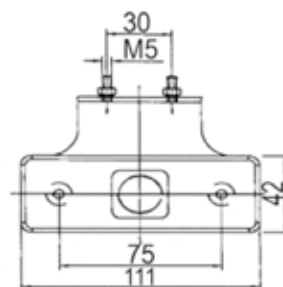
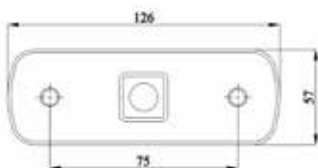
LT914

Bulb W3W (T10) not included



LT915

Bulb W3W (T10) not included



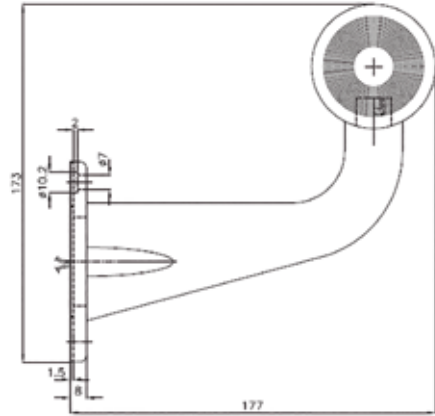
LT916

Bulb W3W (T10) not included





**LT56**  
Bulb (R5W - BA15s) not included



**LT901**  
Bulb (12V C5W, 38 mm) not included



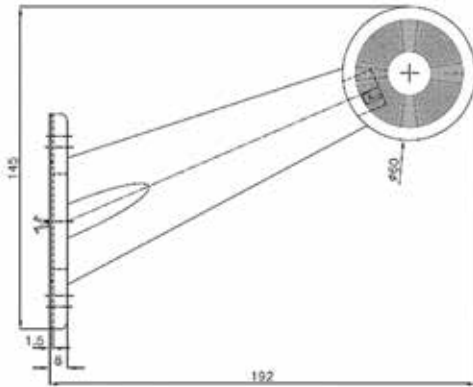
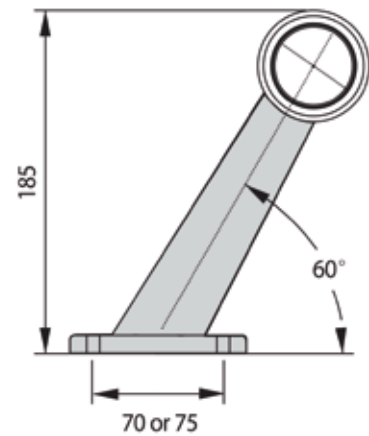
**LT57020**  
Bulb (12V C5W, 38 mm) not included

Part nr.	Position	Rating	Light source	Connection	Dimensions	Approval	Remarks
LT56	Universal	12V	Bulb		173 x 177 mm, 90°	ECE R7	Rubber
LT901	Universal	12V	Bulb		65 x 60 mm	ECE E3	With mounting bracket
LT57020	Universal	12V	Bulb		115 x 45 mm	ECE E4	With rubber mounting bracket



LT919

Bulb (R5W) not included



LT55

Bulb (R5W - BA15s) not included

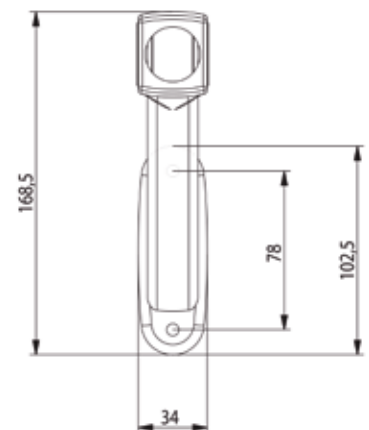
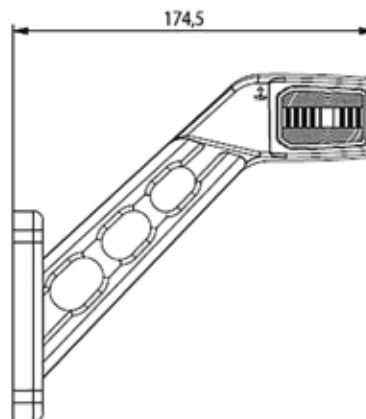


Part nr.	Position	Rating	Light source	Connection	Dimensions	Approval	Remarks
LT919	Universal		Bulb	With cable	185 mm, 60°	ECE E2	Red-clear lenses
LT55	Universal		Bulb		145 x 192 mm, 30°	ECE R7	
LT917	Left		Bulb	1500 mm Trailight click cable	168,5 x 174,5 mm	ECE E9	
LT918	Right		Bulb	1500 mm Trailight click cable	168,5 x 174,5 mm	ECE E9	



LT917 left  
LT918 right

Bulb (R4W - BA15s) included

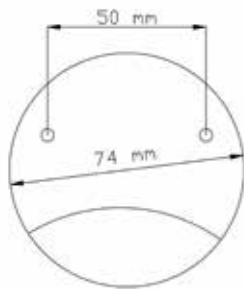


# Interior lights

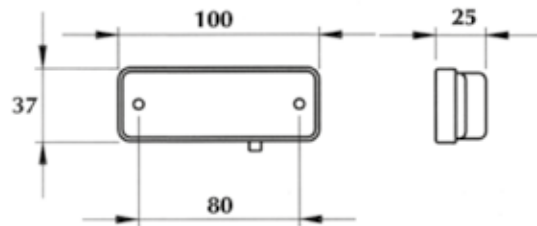


LTL1014 clear  
LTL1015 red

Bulb 1x C5W

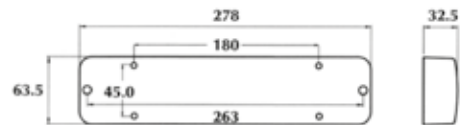


LT920  
Clear lens  
Bulb 1x C5W  
With switch



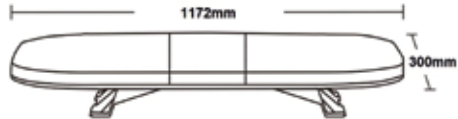
LTL1020

With fluorescent tube 24V / 6W  
With reverse polarity protection



Part nr.	Rating	Light source	Lens	Dimensions	Remarks
LTL1014		Bulb C5W	Clear	Ø 74 mm	
LTL1015		Bulb C5W	Red	Ø 74 mm	
LT920		Bulb C5W	Clear	100 x 37 mm	With switch
LTL1020	24V/6W	Fluorescent tube	Clear	278 x 63,5 mm	Reverse polarity protection

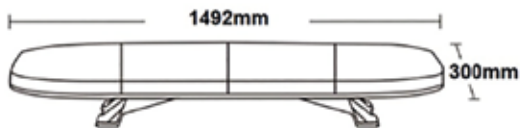
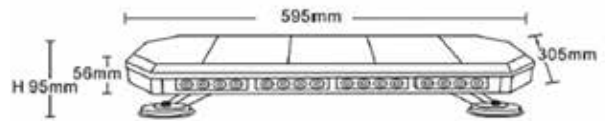
## Emergency lights - LED mini bars



LTBLK0008 with 8 flashing patterns



LTBLK0002 with 1 flashing pattern



LTBLK0009 with 8 flashing patterns



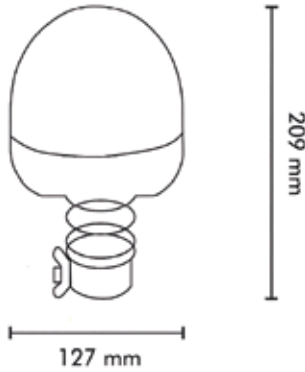
Part nr.	LEDs	Rating	Mounting	Cable	Dimensions	Protection	Approval
LTBLK0002	56 pcs amber	12-24V	Magnetic base, with plug	3 mtrs spiral with plug	95 x 595 x 305 mm	IP67	ECE R65 / ECE R10
LTBLK0008	144 pcs amber	12-24V	Screw base	3 mtrs	300 x 1172 mm	IP66	ECE R65 / ECE R10
LTBLK0009	144 pcs amber	12-24V	Screw base	3 mtrs	300 x 1492 mm	IP66	ECE R65 / ECE R10

## Emergency lights - Warning beacons



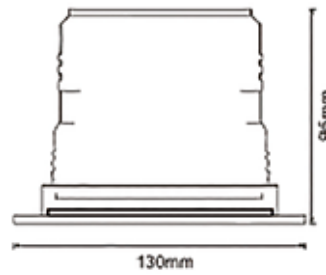
LTL1406-ALR  
LED

Reverse polarity protection



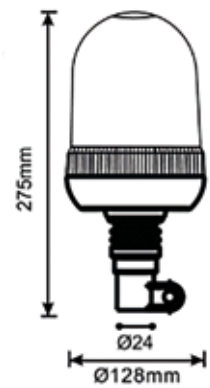
LTL0009-ALR  
LED

Reverse polarity protection



LTL2283-C  
Halogen

Reverse polarity protection



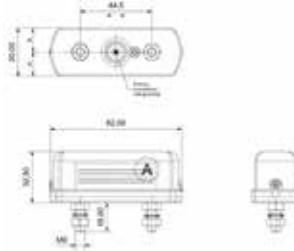
Part nr.	Light source	Rating	Mounting	Cable	Dimensions	Protection	Approval
LTL1406-ALR	Amber lens, 8 LEDs	12-24V	Rubber flexible base		127 x 209 mm	IP66	ECE R65 / ECE R10
LTL2283-C	Amber lens, H1 bulb	12-24V	Flexible base		128 x 275 mm	IP65	ECE R65 / ECE R10
LTL0009-ALR	Amber lens, 40 LEDs	12-24V	Micro magnetic base	3 mtrs spiral with plug	130 x 95 mm	IP66	ECE R65 / ECE R10

## Number plate lights

LIGHTING

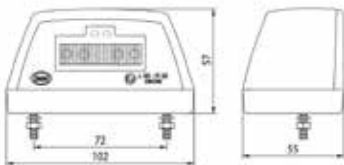


LT802 12V



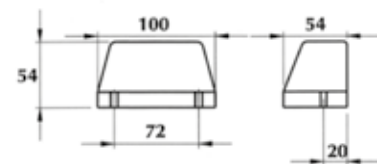
LT804 12V

Part nr.	Light source	Rating	Dimensions	Protection	Approval	Remarks
LT802	Bulb 12V R10W (not included)	12V	82 x 32,5 x 30 mm	IP66/68	ECE	
LT804	Bulb 12V R10W (not included)	12V	50 x 96 mm	IP66/68	ECE E3	
LT805	LED	24V	102 x 57 x 55 mm		ECE E2	
LT806	Bulb R5W (not included)	24V	100 x 54 x 54 mm			Cable not included
LT807	LED	12V	100 x 55 x 57 mm		ECE E2	
LT808	LED	24V	100 x 55 x 57 mm		ECE E2	
LT809	Bulb R5W (not included)	24V	100 x 55 x 57 mm			

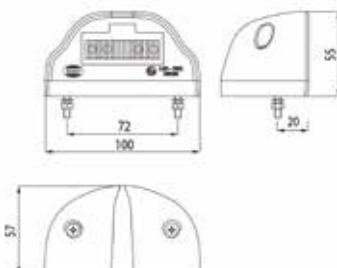


LT805 24V

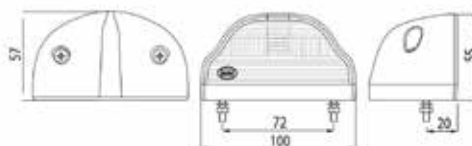
LT806 24V



LT807 12V  
LT808 24V



LT809 24V

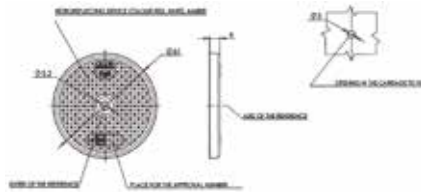




# Reflectors



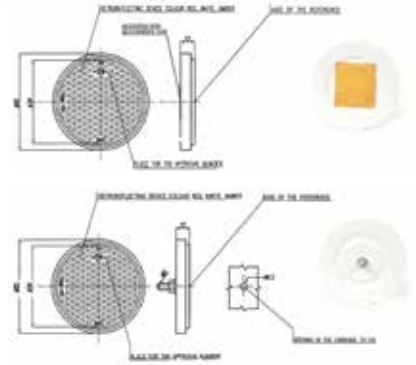
**Screw mount:**  
845 amber  
843 red  
841 clear



**Adhesive:**  
27P amber  
28P red  
29P clear

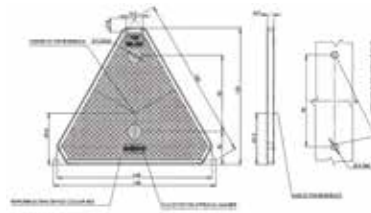


**With bolt:**  
27 amber  
28 red  
29 clear

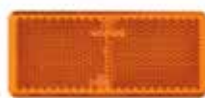


Part nr. clear	Part nr. red	Part nr. amber	Mounting	Dimensions	Approval
841	843	845	Screw (1 x M5 hole)	Ø 61 mm	ECE E20 3R
29P	28P	27P	Adhesive	Ø 74 mm (85 mm incl. frame)	ECE E20 3R
29	28	27	Bolt (1 x M6)	Ø 74 mm (85 mm incl. frame)	ECE E20 3R
LT038			Adhesive	Ø 79 mm	ECE E20 3R
	839		Screw (2 x M5 hole)	143 x 125 mm	ECE E20 3R
847	849	851	Screw (2 x M4 hole)	96 x 42 mm	ECE E20 3R
846	848	850	Adhesive	96 x 42 mm	ECE E20 3R

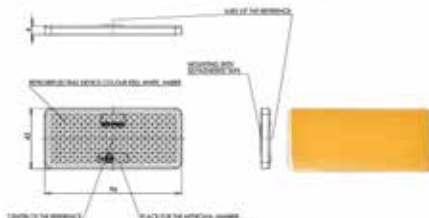
**Screw mount**  
839 red



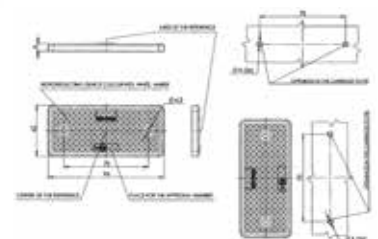
**Adhesive:**  
LT038 clear



**Adhesive:**  
850 amber  
848 red  
846 clear



**Screw mount:**  
851 amber  
849 red  
847 clear



## Work lights

Part nr.	Lumen	Light source	Cable	Rating	Light distribution	IP protection	Approval
LTL0077	1430 Lm	9 LEDs	0,3 mtr	12-24V	Work light/flood	IP67	ECE R10
LTL0065		1 H3 bulb				IP67	
LTL0081	2100 Lm	16 LEDs	0,3 mtr	12-24V	Work light/flood	IP67	ECE R10
LTL2205	570 Lm	6 LEDs	0,4 mtr	12-24V	Work light/flood	IP67	ECE R10
LTL0076	1430 Lm	9 LEDs	0,3 mtr	12-24V	Work light/flood	IP67	ECE R10

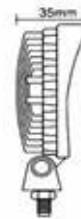
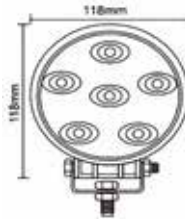
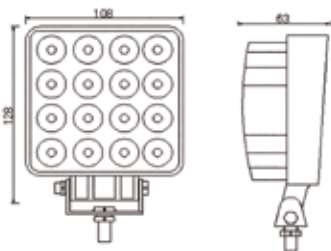
LTL0077



LTL0065



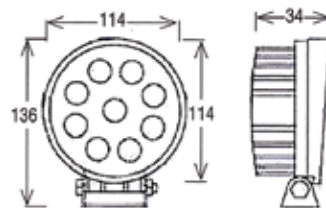
LTL0081



LTL2205

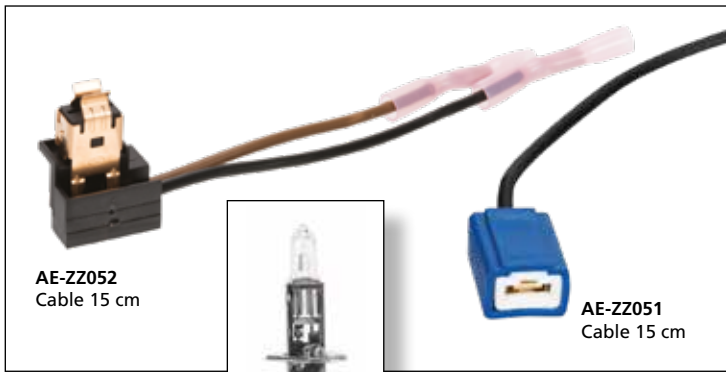


LTL0076



# Bulb sockets

LIGHTING

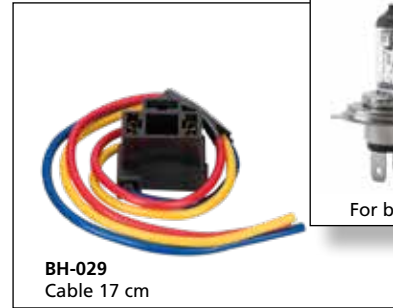


**AE-ZZ052**  
Cable 15 cm

**AE-ZZ051**  
Cable 15 cm

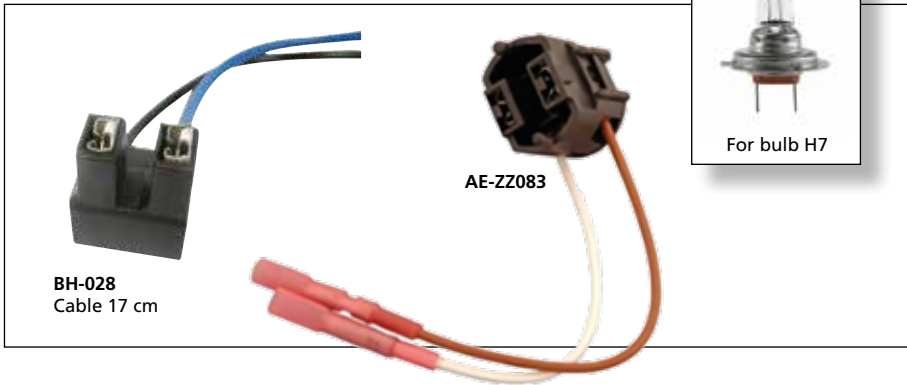


For bulb H1



**BH-029**  
Cable 17 cm

For bulb H4



**BH-028**  
Cable 17 cm

**AE-ZZ083**



For bulb H7



**AE-ZZ200**  
Cable 2,5 mm<sup>2</sup>/14AWG, 15 cm  
Resists up to 80 °C



For bulb HB3



For bulb H9

**AE-ZZ033**  
Cable 27,5 cm



For bulb HB4

**AE-ZZ201**  
Cable 2,5 mm<sup>2</sup>/14AWG, 15 cm  
Resists up to 300 °C



**AE-ZZ080**  
Cable 20 cm



For bulb H11



**AE-ZZ081**  
Cable 20 cm

For bulb H8, H11, H16 and  
H27W1, H27W2





Truck & Trailer Parts

Plugs & Sockets

Lighting

**Battery**

Hose Clamps

Screws, Bolts & Nuts

Wire & Cable

Bundling & Protection

VE Products

Insulated Terminals

Non-Insulated Terminals

Control Terminal

Housing

Wipe Holders

Relays, Switches, Pilot Lights & Buzzer

Terminals .....	62
Adaptors .....	64
Caps .....	64
Mass connection .....	65
Booster cables .....	67
Battery clamps .....	68
Circuit breakers .....	70



## Battery terminals, adaptors & caps

BATTERY

Battery terminals		
Part nr. POS	Part nr. NEG	Description
ACPK003P-8	ACPK003N-8	Zinc coated die-cast brass Nautical Type terminal, with M8 bolt and wing nut fastening, 12-24V
ACPK002P-10	ACPK002N-10	Zinc coated die-cast brass Nautical Type terminal, with M10 bolt and nut fastening, 12-24V, 1000A
ACPK102P-10	ACPK102N-10	Zinc coated die-cast brass Nautical Type terminal, with M10 metal bearing (no bolt) and nut fastening, 12-24V
ACPK010P	ACPK010N	Zinc coated die-cast brass Industrial Type terminal, with M10 bolt fastening, 12-24V
ACPK014P	ACPK014N	Zinc coated die-cast brass Industrial Type terminal, with M12 bolt fastening, 12-24V
ACPK002P-12	ACPK002N-12	Terminal for Henschel-MAN, DAF trucks and tractors, with M12 bolt and nut fastening, 12-24V
ACPK004P	ACPK004N	Renault Type terminal, M8 fastening to wire
ACPK035P	ACPK036N	Zinc coated die-cast brass terminal, 3x M6 fastening to wire, 18 mm <sup>2</sup> , 12-24V
ACPK001P	ACPK001N	Zinc coated die-cast brass heavy "T" Alpha Type terminal, 10-50 mm <sup>2</sup> , 12-24V
ACPK022P	ACPK022N	Die-cast brass reinforced straight Alpha Type terminal with alloy plate, 10-70 mm <sup>2</sup> , 12-24V
ACPK037P	ACPK037N	Die-cast brass straight Alpha Type terminal, for 16-25 mm <sup>2</sup> cable, 12-24V
ACPK005P	ACPK005N	Die-cast brass standard Alpha Type terminal for European cars, 10-35 mm <sup>2</sup> , 12V
ACPK008P	ACPK008N	Die-cast brass small Alpha Type terminal for Japanese cars, 10-35 mm <sup>2</sup> , 12V
ACPK012P	ACPK012N	Die-cast brass heavy Alpha Type terminal, 10-70 mm <sup>2</sup> , 12-24V
ACPK009P	ACPK009N	Die-cast brass reinforced Alpha Type terminal with alloy plate, 10-50 mm <sup>2</sup> , 12-24V
ACPK017P	ACPK017N	Zinc coated die-cast brass Alpha Type terminal with double plates, 10-50 mm <sup>2</sup> , 12-24V
ACPKCUBE101		Terminal for use with CubeOTO fuse, with insulating washer and self-fastening nut, matching caps available
ACPKCUBE201		Terminal for use with CubeOTO fuse, use in combination with insulation nut CF-M8 (not included)
QLAKR01	QLAKB01	Copper plated steel terminal with quick release polypropylene cover, resistance appr. 0,12 µΩ at 10A, certified to be safe up to 800A, fits to all SAE and DIN standard 12V batteries
QLAK001		Set of QLAKR01 and QLAKB01 terminals
ACPK102SW		Copper plated zinc alloy Swan Type terminal. Switch off power by turning green knob Remove knob for anti-theft function. For 6, 12 or 24V top post batteries



ACPK003P-8  
ACPK003N-8



ACPK002P-10  
ACPK002N-10



ACPK102P-10  
ACPK102N-10



ACPK010P  
ACPK010N



ACPK014P  
ACPK014N



ACPK002P-12  
ACPK002N-12



ACPK004P  
ACPK004N



ACPK035P  
ACPK036N



ACPK001P  
ACPK001N



ACPK022P  
ACPK022N



ACPK037P  
ACPK037N



ACPK005P  
ACPK005N



ACPK008P  
ACPK008N



ACPK012P  
ACPK012N



ACPK009P  
ACPK009N



ACPK017P  
ACPK017N



ACPKCUBE101

CF-M8

ACPKCUBE201

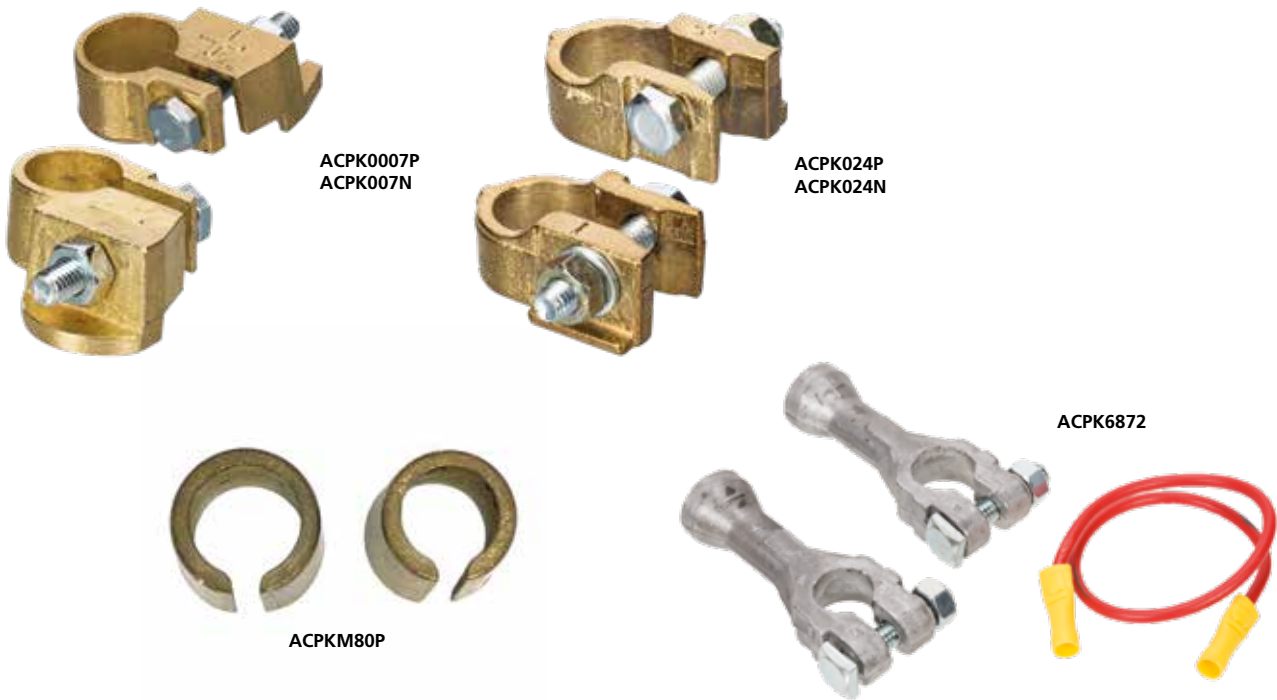


QLAKR01 Red (pos)  
QLAKB01 Blue (neg)  
QLAK001 Set



ACPK102SW

Battery adaptors		
Part nr. POS	Part nr. NEG	Description
ACPK007P	ACPK007N	Die-cast brass Ford battery adaptor
ACPK024P	ACPK024N	Die-cast brass Ford battery adaptor
	ACPKM80P	Brass adaptor set (+/-) for adapting Japanese to standard battery poles
	ACPK6872	Adaptor kit to convert top post batteries to side terminal batteries Ground cable extension lead included



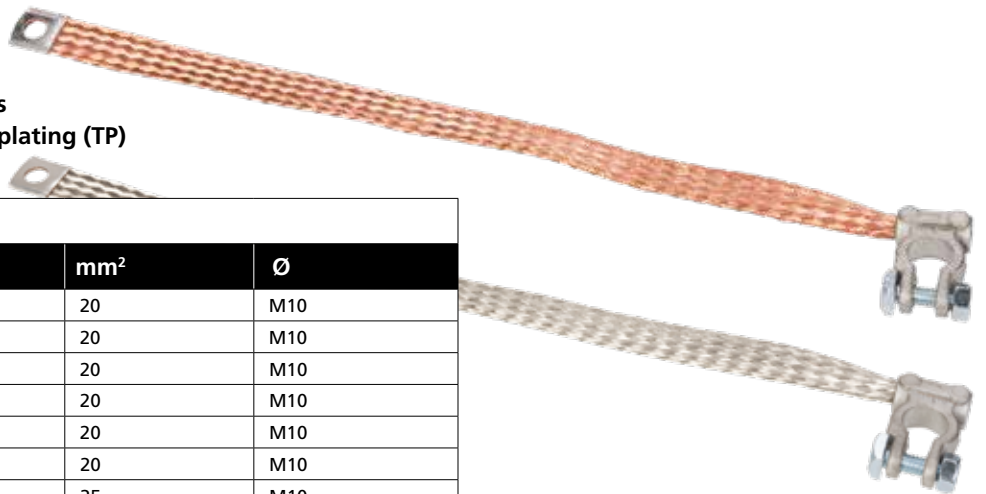
Terminal caps		
Part nr. POS	Part nr. NEG	Description
ADKA001R	ADKA001B	Terminal cap for ACPK010, ACPK014 and ACPK022, 500A
ADKA002R	ADKA002B	Terminal cap right elbow for ACPK010 and ACPK014
ADKA003R	ADKA003B	Terminal cap left elbow for ACPK010 and ACPK014



# Mass connection

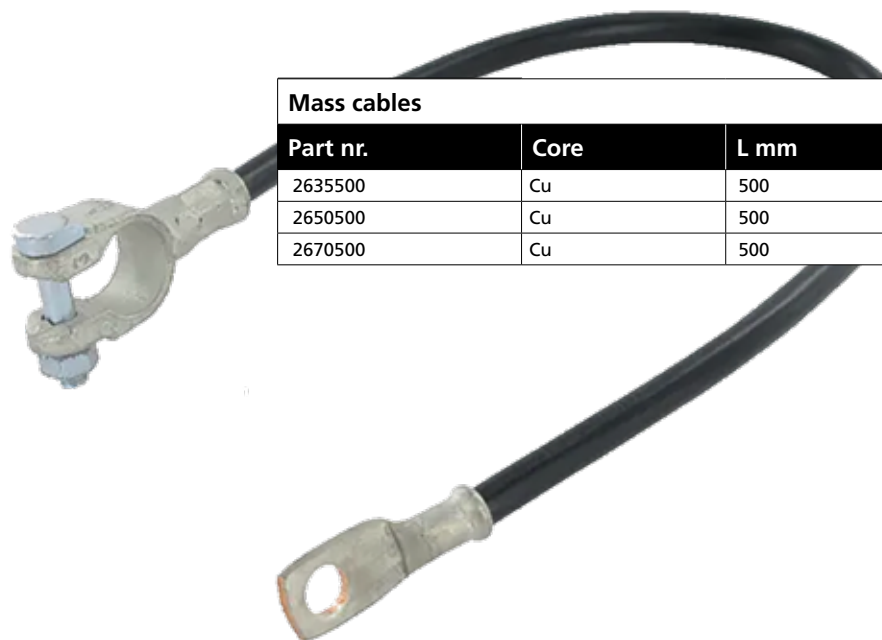


- Suitable for larger cars and vans
- Available with and without tin plating (TP)

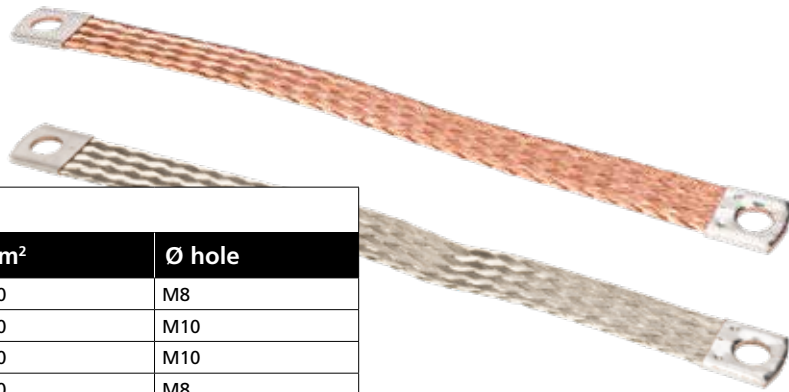


BATTERY

Battery mass strips			
Part nr.	L mm	mm <sup>2</sup>	Ø
MS20.180.212010	180	20	M10
MS20.250.212010	250	20	M10
MS20.300.212010	300	20	M10
MS20.320.212010	320	20	M10
MS20.350.212010	350	20	M10
MS20.500.212010	500	20	M10
MS25.200.21205	200	25	M10
MS25.200.21205TP	200	25	M10
MS25.250.21205	250	25	M10
MS25.250.21205TP	250	25	M10
MS25.300.21205	300	25	M10
MS25.300.21205TP	300	25	M10
MS25.350.21205	350	25	M10
MS25.350.21205TP	350	25	M10
MS25.400.21205	400	25	M10
MS25.400.21205TP	400	25	M10
MS25.500.21205	500	25	M10
MS25.500.21205TP	500	25	M10
MS25.600.21205	600	25	M10
MS25.600.21205TP	600	25	M10
MS50.500.212010	500	50	M10
MS50.500.21205TP	500	50	M5



Mass cables				
Part nr.	Core	L mm	mm <sup>2</sup>	Ø lug hole mm
2635500	Cu	500	35	10
2650500	Cu	500	50	10
2670500	Cu	500	70	10



**Mass connection strips**

Part nr.	L mm	mm <sup>2</sup>	Ø hole
MVS10.180.008	180	10	M8
MVS10.180.010	180	10	M10
MVS10.200.010TP	200	10	M10
MVS10.210.008	210	10	M8
MVS10.210.010	210	10	M10
MVS10.280.008	280	10	M8
MVS10.280.008TP	280	10	M8
MVS10.400.008	400	10	M8
MVS10.400.008TP	400	10	M8
MVS10.400.010	400	10	M10
MVS16.150.010	150	16	M10
MVS16.200.010	200	16	M10
MVS16.250.010	250	16	M10
MVS20.200.010	200	20	M10
MVS20.250.010	250	20	M10
MVS25.150.010	150	25	M10
MVS25.200.010TP	200	25	M10
MVS25.250.010	250	25	M10
MVS25.250.010TP	250	25	M10
MVS25.300.010	300	25	M10
MVS25.300.010TP	300	25	M10
MVS25.350.010	350	25	M10
MVS25.350.010TP	350	25	M10
MVS25.400.010	400	25	M10
MVS25.400.010TP	400	25	M10
MVS25.450.010	450	25	M10
MVS25.450.010TP	450	25	M10
MVS25.500.010	500	25	M10
MVS25.500.010TP	500	25	M10
MVS50.300.010	300	50	M10

Also available



**MKRMS001**  
 Earth clamping ring  
 With tab terminal connection  
 Inner Ø 18,3 mm, outer Ø 26 mm



## Booster cables

Part nr.	Description
STKA001	Fully insulated copper clad steel clamps, 16 mm <sup>2</sup> copper core, 220A, with device for electronic protection, in round zipper bag, length 3 mtrs
STKA002	Fully insulated copper clad steel clamps, 25 mm <sup>2</sup> copper core, 360A, with device for electronic protection, in round zipper bag, length 3,5 mtrs
STKA003	Half insulated zinc clad steel clamps, 35 mm <sup>2</sup> copper core, 400A, in round zipper bag, length 5 mtrs
STKA210	Half-insulated zinc clad steel clamps, 3,64 mm <sup>2</sup> CCA core, 100A, in round zipper bag, length 2,5 mtrs
STKA211	Half-insulated zinc clad steel clamps, 6,64 mm <sup>2</sup> CCA core, 150A, in round zipper bag, length 3 mtrs
STKA212	Half-insulated zinc clad steel, 16 mm <sup>2</sup> CCA core, 300A, in round zipper bag, length 2,3 mtrs
STKA213	Half-insulated zinc clad steel clamps, 25 mm <sup>2</sup> CCA core, 400A, in round zipper bag, length 2,5 mtrs
STKA214	Half-insulated zinc clad steel clamps, 35 mm <sup>2</sup> CCA core, 500A, in round zipper bag, length 3,5 mtrs
STKA215	Fully insulated brass clamps, 50 mm <sup>2</sup> copper core, 600A, in case, length 4,5 mtrs
STKA217	Half-insulated zinc clad steel clamps, 70 mm <sup>2</sup> , copper core, 1000A, in round zipper bag, length 4,5 mtrs

BATTERY



**STKA001**  
With device for electronic protection



**STKA002**  
With device for electronic protection



**STKA003**



**STKA210** 100A 2,5 mtrs  
**STKA211** 150A 3 mtrs  
**STKA212** 300A 2,3 mtrs



**STKA213**



**STKA214**



**STKA215**



**STKA217**

### Round zipper bag and case

The zipper bag and case are customizable upon request. Please contact our Sales Department for more information



## Battery clamps

Alligator clips - insulated		
Part nr. POS	Part nr. NEG	Description
ACLK001R	ACLK001B	Nickel plated steel with vinyl insulation, 5A, 4 mm <sup>2</sup>
ACLK011R	ACLK011B	Nickel plated steel with vinyl insulation, 3A, 0,5-1,0 mm <sup>2</sup>
ACLK111R	ACLK111B	Nickel plated steel with vinyl insulation, 20A, 1,5 mm <sup>2</sup>



ACLK001R  
ACLK001B



ACLK011R  
ACLK011B



ACLK111R  
ACLK111B

Alligator clips - Non-insulated	
Part nr.	Description
AC001	Nickel plated steel, 5A, 4 mm <sup>2</sup>
ACLK002	Nickel plated steel, 50A, 5 mm <sup>2</sup>



AC001



ACLK002

Battery clamps		
Part nr. POS	Part nr. NEG	Description
ACLK003R	ACLK003B	Zinc plated steel with PVC insulation, 40A, 4-6 mm <sup>2</sup>
ACLK004R	ACLK004B	Zinc plated steel with PVC insulation, 60A, 4-6 mm <sup>2</sup>
ACLK005R	ACLK005B	Zinc plated steel with PVC insulation, 90A, 4-10 mm <sup>2</sup>
ACLK006R	ACLK006B	Zinc plated steel with PVC insulation, 120A, 10-25 mm <sup>2</sup>
ACLK007P	ACLK007N	Zinc plated steel with full PP plastic insulation, 125A, 10-16 mm <sup>2</sup>
ACLK008R	ACLK008B	Die-cast brass with PP HD insulation, bent mouth and braided copper mass strip, 800A, 35-50 mm <sup>2</sup>
ACLK108R	ACLK108B	Die-cast brass with PP HD insulation and bent mouth, 800A, 35-50 mm <sup>2</sup>
ACLK208R	ACLK208B	Die-cast brass with full PP HD insulation and bent mouth, 800A, 35-50 mm <sup>2</sup>
ACLK308R	ACLK308B	Die-cast brass with full PP HD insulation, bent mouth and braided copper mass strip, 800A, 35-50 mm <sup>2</sup>
ACLK009R	ACLK009B	Zinc plated steel with PVC insulation, 400A, 35-50 mm <sup>2</sup>
ACLK209R	ACLK209B	Die-cast brass with PVC-160 insulation, 350A, 25 mm <sup>2</sup>
ACLK010R	ACLK010B	Zinc plated steel with full PVC insulation, 120A, 16-25 mm <sup>2</sup>
ACLK210R	ACLK210B	Die-cast brass with full Lupolen 3010-D insulation, 350A, 16-25 mm <sup>2</sup>
ACLK211R	ACLK211B	Die-cast brass with PVC insulation and braided copper mass strip, 600A, 35-50 mm <sup>2</sup>
ACLK014R	ACLK014B	Die-cast brass with PVC insulation, 200A, 10-16 mm <sup>2</sup>
ACLK015R	ACLK015B	Die-cast brass with PVC insulation, 400A, 25-35 mm <sup>2</sup>
ACLK016R	ACLK016B	Die-cast brass with PVC insulation, 500A, 35-50-70 mm <sup>2</sup>
BLKL001P	BLKL001N	Zinc plated steel with PVC insulation and braided copper mass strip, 500A, 35-50 mm <sup>2</sup>
BLKL101P	BLKL101N	Die-cast brass with full PP HD insulation and bent mouth, 650A, 25-35 mm <sup>2</sup>



ACLK003R  
ACLK003B



ACLK004R  
ACLK004B



ACLK005R  
ACLK005B



**ACLK006R**  
**ACLK006B**



**ACLK007P**  
**ACLK007N**



**ACLK008R**  
**ACLK008B**  
With braided copper mass strip



**ACLK108R**  
**ACLK108B**



**ACLK208R**  
**ACLK208B**



**ACLK308R**  
**ACLK308B**  
With braided copper mass strip



**ACLK009R**  
**ACLK009B**



**ACLK209R**  
**ACLK209B**



**ACLK010R**  
**ACLK010B**



**ACLK210R**  
**ACLK210B**



**ACLK211R**  
**ACLK211B**  
With braided copper mass strip



**ACLK014R**  
**ACLK014B**



**ACLK015R**  
**ACLK015B**



**ACLK016R**  
**ACLK016B**



**BLKL001P**  
**BLKL001N**  
With braided copper mass strip



**BLKL101P**  
**BLKL101N**

### Circuit breakers

- Helps prevent battery drain when storing & repairing cars/trucks



KEY001

BATTERY

Part nr.	Housing	Rating	Contacts	IP	Remarks
STAS001		500A@12-24V peak 100A@12-24V continuous	M8 screw contacts, copper	IP43	Light duty With removable key and rubber cover
KEY001					Spare key for STAS001
STAS002		800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 14,7 mm		With 2 keys Key removable in Off-position
STAS003		800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 14,7 mm		With waterproof rubber covers Key removable in Off-position
STAS004		800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 24,2 mm		Key removable in Off-position
STAS005		800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 24,2 mm		With waterproof rubber covers Key removable in Off-position
STAS006	Zinc	800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 25 mm		Red T-handle not removable
STAS007	Zinc, white paint coating	800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 25 mm		Red T-handle not removable
STAS008	Zinc, white paint coating	800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts, copper Length 32 mm		Red T-handle not removable
STAS009	Zinc, white paint coating	800A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts Length 32 mm		Black T-handle not removable
STAS010		100A@12-24V continuous	M10 screw contacts and 6.4 mm tab contacts, copper		With waterproof rubber covers Key removable in Off-position
STAS011		1500A@12V DC cranking 450A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts Length 31 mm	IP56	Heavy duty, dual circuit, ignition protected
STAS012		1500A@12V DC cranking 450A@12V DC intermittent 300A@12V DC continuous	M10 screw contacts Length 31 mm	IP56	Heavy duty, dual circuit, ignition protected Removable key



STAS001



STAS002  
with 2 keys



STAS003



STAS004



STAS005



STAS006



STAS007



STAS008



STAS009



STAS010



STAS011



STAS012





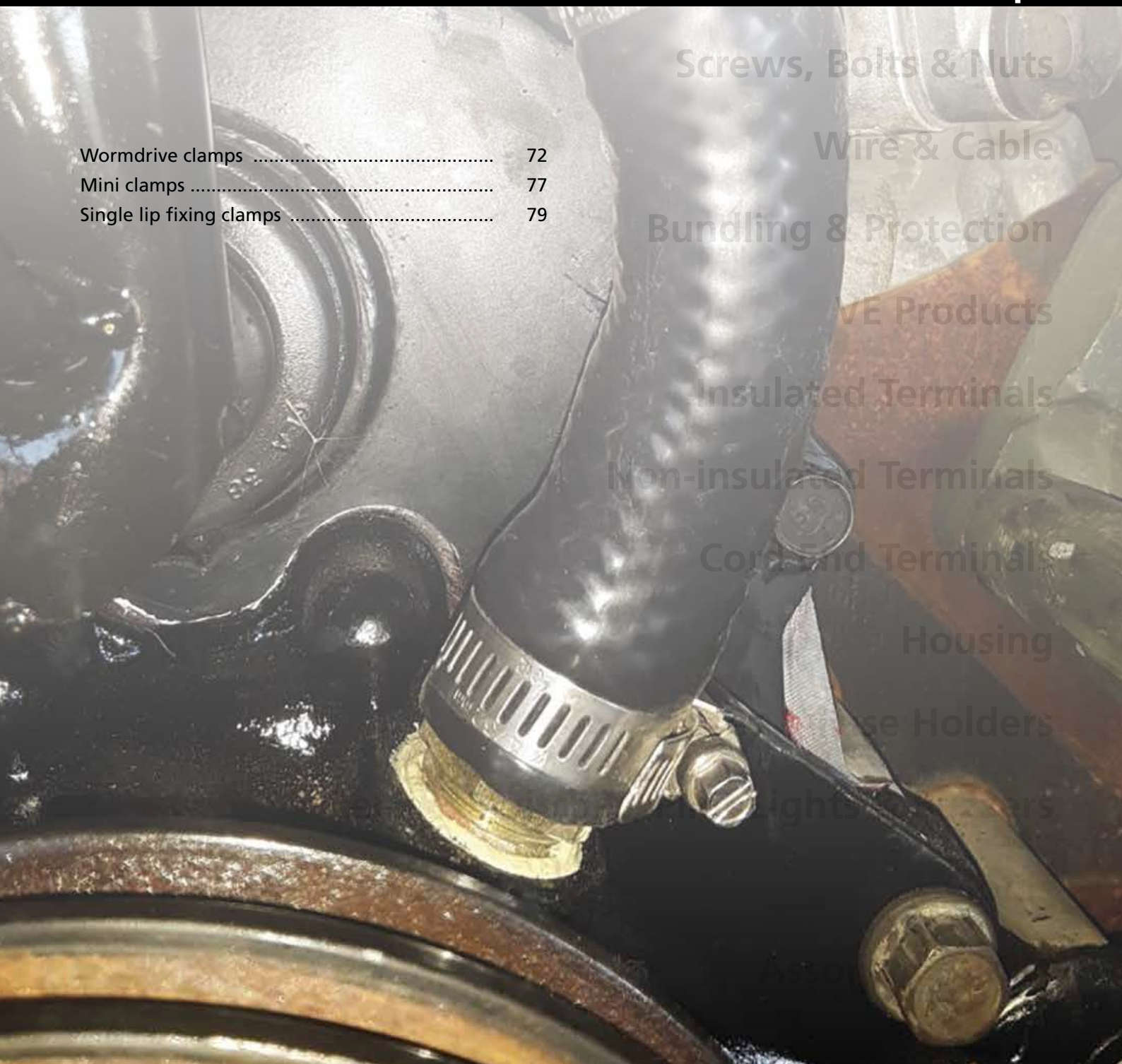
Truck & Trailer Parts

Plugs & Sockets

Lighting

Battery

## Hose Clamps



Screws, Bolts & Nuts

Wire & Cable

Bundling & Protection

VE Products

Insulated Terminals

Non-insulated Terminals

Cord and Terminals

Housing

Case Holders

Light Covers

Wormdrive clamps .....	72
Mini clamps .....	77
Single lip fixing clamps .....	79



## Wormdrive clamps - ST series W1

This strong wormdrive clamp is suitable for high torque loads and complies with standard SS 2298. This clamp is not only very robust, but it will also last much longer compared to classic electroplating protection. The band with rolled-up edges ensures perfect clamping on the hose without damaging it. The compact screw and ratchet assembly and also the housing made from a drawn tube make this clamp highly torsion-resistant. The hexagonal head C7 allows standard tools to be used for mounting and removal.

- **Material:** Mild steel, all parts zinc plated
- **Fastening:** 7 mm hex head
- **Industry recommendations:** Agricultural applications, automotive industry and aftermarket, industrial sector hardware, DIY
- **Quality assurance:** SS 2298, DIN 3017-1

HOSE CLAMPS

Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
BHC1-0814	8 - 14	3,0	9,0	0,5 - 1	50
BHC1-1117	11 - 17	3,0	9,0	0,5 - 1	50
BHC1-1320	13 - 20	3,0	9,0	0,5 - 1	50
BHC1-1525	15 - 25	5,0	12,0	0,5 - 1	50
BHC1-1929	19 - 29	5,0	12,0	0,5 - 1	50
BHC1-2232	22 - 32	5,0	12,0	0,5 - 1	50
BHC1-2638	26 - 38	5,0	12,0	0,5 - 1	50
BHC1-3244	32 - 44	5,0	12,0	0,5 - 1	50
BHC1-3850	38 - 50	5,0	12,0	0,5 - 1	50
BHC1-4456	44 - 56	5,0	12,0	0,5 - 1	50
BHC1-5065	50 - 65	5,0	12,0	0,5 - 1	50
BHC1-5875	58 - 75	5,0	12,0	0,5 - 1	50
BHC1-6885	68 - 85	5,0	12,0	0,5 - 1	10
BHC1-7795	77 - 95	5,0	12,0	0,5 - 1	10
BHC1-87112	87 - 112	5,0	12,0	0,5 - 1	10
BHC1-104138	104 - 138	5,0	12,0	0,5 - 1	10
BHC1-130165	130 - 165	5,0	12,0	0,5 - 1	10
BHC1-155180	155 - 180	5,0	12,0	0,5 - 1	10
BHC1-175205	175 - 205	5,0	12,0	0,5 - 1	10
BHC1-200231	200 - 231	5,0	12,0	0,5 - 1	10
BHC1-226256	226 - 256	5,0	12,0	0,5 - 1	10

### Hose clamp ST series W1 assortment

**ASS-HCST001**  
77 pcs - 10 compartments  
incl. tool



1 x screw driver

- 12 x BHC1-0814
- 13 x BHC1-1117
- 13 x BHC1-1320
- 10 x BHC1-1525
- 10 x BHC1-1929
- 7 x BHC1-2232
- 7 x BHC1-2638
- 4 x BHC1-3244



## Wormdrive clamps - G series W4/A2

This clamp complies with standard SS 2298. It is only produced in stainless steel 300 series. This clamp is equipped with a stamped band with rolled-up edges, which allow perfect clamping on the hose without damaging it. This clamp will withstand high torsional levels and does not deform under the axial and radial forces that occur during clamping. The hexagonal head C7 allows standard tools to be used for mounting and removal.

- **Material:** Stainless steel 300 series
- **Fastening:** 7 mm hex head
- **Industry recommendations:** Agricultural applications, automotive industry and aftermarket, industrial sector hardware, marine, oil, gas and food sectors and applications where higher corrosion resistance is required
- **Quality assurance:** SS 2298, DIN 3017-1



Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
BHC4-814	8 - 14	3,0	9,0	0,5 - 1	50
BHC4-1117	11 - 17	3,0	9,0	0,5 - 1	50
BHC4-1320	13 - 20	3,0	9,0	0,5 - 1	50
BHC4-1525	15 - 25	5,0	12,0	0,5 - 1	50
BHC4-1929	19 - 29	5,0	12,0	0,5 - 1	50
BHC4-2232	22 - 32	5,0	12,0	0,5 - 1	50
BHC4-2638	26 - 38	5,0	12,0	0,5 - 1	50
BHC4-3244	32 - 44	5,0	12,0	0,5 - 1	50
BHC4-3850	38 - 50	5,0	12,0	0,5 - 1	50
BHC4-12040060	40 - 60	5,0	12,0	0,5 - 1	50
BHC4-4456	44 - 56	5,0	12,0	0,5 - 1	50
BHC4-5065	50 - 65	5,0	12,0	0,5 - 1	50
BHC4-5875	58 - 75	5,0	12,0	0,5 - 1	10
BHC4-6885	68 - 85	5,0	12,0	0,5 - 1	10
BHC4-7795	77 - 95	5,0	12,0	0,5 - 1	10
BHC4-87112	87 - 112	5,0	12,0	0,5 - 1	10
BHC4-104138	104 - 138	5,0	12,0	0,5 - 1	10
BHC4-130165	130 - 165	5,0	12,0	0,5 - 1	10
BHC4-155180	155 - 180	5,0	12,0	0,5 - 1	10
BHC4-175205	175 - 205	5,0	12,0	0,5 - 1	10
BHC4-200231	200 - 231	5,0	12,0	0,5 - 1	10
BHC4-226256	226 - 256	5,0	12,0	0,5 - 1	10
BHC4-251282	251 - 282	5,0	12,0	0,5 - 1	10
BHC4-277307	277 - 307	5,0	12,0	0,5 - 1	10
BHC4-302325	302 - 325	5,0	12,0	0,5 - 1	10
BHC4-321350	321 - 350	5,0	12,0	0,5 - 1	10
BHC4-346375	346 - 375	5,0	12,0	0,5 - 1	10
BHC4-396425	396 - 425	5,0	12,0	0,5 - 1	10
BHC4-421450	421 - 450	5,0	12,0	0,5 - 1	10

### Wormdrive clamps - DD series W2 (12 mm)

This wormdrive clamp has a 12 mm wide band. It is manufactured in compliance with the European Standard DIN 3017-1, ensuring that the hose joins the connecting pipe end in a perfect tight fit. The band is pressed, non-perforated, folded up at the edges and has smooth inner surface. This allows the avoidance of hose damage. This clamp resists large torsional forces well and is not deformed due to the axial and radial forces acting during tightening.

- **Material:** Chrome steel AISI 430 (band & house), zinc plated screw
- **Fastening:** 7 mm hex head
- **Industry recommendations:** Agricultural applications, automotive industry and aftermarket, industrial sector hardware, DIY
- **Quality assurance:** DIN 3017-1

Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
BHC2-12016025	16 - 25	5,0	12,0	0,5 - 1	50
BHC2-12020032	20 - 32	5,0	12,0	0,5 - 1	50
BHC2-12025040	25 - 40	5,0	12,0	0,5 - 1	50
BHC2-12032050	32 - 50	5,0	12,0	0,5 - 1	50
BHC2-12040060	40 - 60	5,0	12,0	0,5 - 1	50
BHC2-12050070	50 - 70	5,0	12,0	0,5 - 1	50
BHC2-12060080	60 - 80	5,0	12,0	0,5 - 1	50
BHC2-12070090	70 - 90	5,0	12,0	0,5 - 1	10
BHC2-12080100	80 - 100	5,0	12,0	0,5 - 1	10
BHC2-12090110	90 - 110	5,0	12,0	0,5 - 1	10
BHC2-12100120	100 - 120	5,0	12,0	0,5 - 1	10
BHC2-12110130	110 - 130	5,0	12,0	0,5 - 1	10
BHC2-12120140	120 - 140	5,0	12,0	0,5 - 1	10
BHC2-12130150	130 - 150	5,0	12,0	0,5 - 1	10
BHC2-12140160	140 - 160	5,0	12,0	0,5 - 1	10
BHC2-12150170	150 - 170	5,0	12,0	0,5 - 1	10
BHC2-12160180	160 - 180	5,0	12,0	0,5 - 1	10
BHC2-12170190	170 - 190	5,0	12,0	0,5 - 1	10
BHC2-12180200	180 - 200	5,0	12,0	0,5 - 1	10
BHC2-12190210	190 - 210	5,0	12,0	0,5 - 1	10
BHC2-12200220	200 - 220	5,0	12,0	0,5 - 1	10
BHC2-12210230	210 - 230	5,0	12,0	0,5 - 1	10



## Wormdrive clamps - D series W2 (9 mm)

The band of this clamp is 9 mm wide, manufactured in compliance with the European Standard DIN 3017-1. This standard guarantees that the hose joins the connecting pipe end in a perfect tight fit. The band is pressed, non-perforated, folded up at the edges and has smooth inner surface. This allows the avoidance of hose damage. This wormdrive clamp resists large torsional forces well and is not deformed due to the radial and axial forces during fixing.

- **Material:** Chrome steel AISI 430 (band & house), zinc plated screw
- **Fastening:** 7 mm hex head
- **Industry recommendations:** Designed for the automotive aftermarket to comply with DIN 3017-1. Also suited for other applications where space or weight is restricted in e.g. agriculture applications, the industrial sector, hardware and DIY.
- **Quality assurance:** DIN 3017-1



Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
MHC2-09008012	8 - 12	3,0	9,0	0,5 - 1	50
MHC2-09010016	10 - 16	3,0	9,0	0,5 - 1	50
MHC2-09012020	12 - 20	3,0	9,0	0,5 - 1	50
MHC2-09016025	16 - 25	3,0	9,0	0,5 - 1	50
MHC2-09020032	20 - 32	3,0	9,0	0,5 - 1	50
MHC2-09025030	25 - 30	3,0	9,0	0,5 - 1	50
MHC2-09032050	32 - 50	3,0	9,0	0,5 - 1	50
MHC2-09040060	40 - 60	3,0	9,0	0,5 - 1	50
MHC2-09050070	50 - 70	3,0	9,0	0,5 - 1	50
MHC2-09060080	60 - 80	3,0	9,0	0,5 - 1	50
MHC2-09070090	70 - 90	3,0	9,0	0,5 - 1	10
MHC2-09080100	80 - 100	3,0	9,0	0,5 - 1	10
MHC2-09090110	90 - 110	3,0	9,0	0,5 - 1	10
MHC2-09100120	100 - 120	3,0	9,0	0,5 - 1	10
MHC2-09110130	110 - 130	3,0	9,0	0,5 - 1	10
MHC2-09120140	120 - 140	3,0	9,0	0,5 - 1	10
MHC2-09130150	130 - 150	3,0	9,0	0,5 - 1	10
MHC2-09140160	140 - 160	3,0	9,0	0,5 - 1	10
MHC2-09150170	150 - 170	3,0	9,0	0,5 - 1	10
MHC2-09160180	160 - 180	3,0	9,0	0,5 - 1	10
MHC2-09170190	170 - 190	3,0	9,0	0,5 - 1	10
MHC2-09180200	180 - 200	3,0	9,0	0,5 - 1	10
MHC2-09190210	190 - 210	3,0	9,0	0,5 - 1	10
MHC2-09200220	200 - 220	3,0	9,0	0,5 - 1	10

## Wormdrive clamps - D series W4/A2 (9 mm)

The band of this clamp is 9 mm wide, manufactured in compliance with the European Standard DIN 3017-1. This standard guarantees that the hose joins the connecting pipe end in a perfect tight fit. The band is pressed, non-perforated, folded up at the edges and has smooth inner surface. This allows the avoidance of hose damage. This wormdrive clamp resists large torsional forces well and is not deformed due to the radial and axial forces during fixing.

- **Material:** Stainless steel 300 series
- **Fastening:** 7 mm hex head
- **Industry recommendations:** Used in the marine, oil, gas and food sectors, as well as agricultural, hardware and industrial sectors, where higher corrosion resistance is required, but space and/or weight are at a premium
- **Quality assurance:** DIN 3017-1



HOSE CLAMPS

Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
MHC4-09008012	8 - 12	3,0	9,0	0,5 - 1	50
MHC4-09010016	10 - 16	3,0	9,0	0,5 - 1	50
MHC4-09012020	12 - 20	3,0	9,0	0,5 - 1	50
MHC4-09016025	16 - 25	3,0	9,0	0,5 - 1	50
MHC4-09020032	20 - 32	3,0	9,0	0,5 - 1	50
MHC4-09025040	25 - 40	3,0	9,0	0,5 - 1	50
MHC4-09032050	32 - 50	3,0	9,0	0,5 - 1	50
MHC4-09040060	40 - 60	3,0	9,0	0,5 - 1	50
MHC4-09050070	50 - 70	3,0	9,0	0,5 - 1	50
MHC4-09060080	60 - 80	3,0	9,0	0,5 - 1	50
MHC4-09070090	70 - 90	3,0	9,0	0,5 - 1	10
MHC4-09080100	80 - 100	3,0	9,0	0,5 - 1	10
MHC4-09090110	90 - 110	3,0	9,0	0,5 - 1	10
MHC4-09100120	100 - 120	3,0	9,0	0,5 - 1	10
MHC4-09110130	110 - 130	3,0	9,0	0,5 - 1	10
MHC4-09120140	120 - 140	3,0	9,0	0,5 - 1	10
MHC4-09130150	130 - 150	3,0	9,0	0,5 - 1	10
MHC4-09140160	140 - 160	3,0	9,0	0,5 - 1	10
MHC4-09150170	150 - 170	3,0	9,0	0,5 - 1	10
MHC4-09160180	160 - 180	3,0	9,0	0,5 - 1	10
MHC4-09170190	170 - 190	3,0	9,0	0,5 - 1	10
MHC4-09180200	180 - 200	3,0	9,0	0,5 - 1	10
MHC4-09190210	190 - 210	3,0	9,0	0,5 - 1	10
MHC4-09200220	200 - 220	3,0	9,0	0,5 - 1	10



## Mini clamps - M series W1 (9 mm)

This hose clamp is for a small clamping range and equipped with a short bolt, making it perfectly suitable to clamp hoses with thin walls, such as fuel hoses.

It is often called fuel hose clamp. The rounded edge prevents the clamp from shearing into the hose.

- **Material:** W1: mild steel, all parts zinc plated
- **Fastening:** M4 screw (7 mm hex head)
- **Industry recommendations:** Ideal for small bore hoses with relatively low pressures, where little clamping force is required. Used in low pressure applications such as a fuel line
- **Quality assurance:** DIN 3017-1

Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
MJU1-09007009	7 - 9	1,0	9,0	0,5 - 1	50
MJU1-09008010	8 - 10	1,0	9,0	0,5 - 1	50
MJU1-09009011	9 - 11	1,0	9,0	0,5 - 1	50
MJU1-09010012	10 - 12	1,0	9,0	0,5 - 1	50
MJU1-09011013	11 - 13	1,0	9,0	0,5 - 1	50
MJU1-09012014	12 - 14	1,0	9,0	0,5 - 1	50
MJU1-09013015	13 - 15	1,0	9,0	0,5 - 1	50
MJU1-09014016	14 - 16	1,0	9,0	0,5 - 1	50
MJU1-09015017	15 - 17	1,0	9,0	0,5 - 1	50
MJU1-09016018	16 - 18	1,0	9,0	0,5 - 1	50
MJU1-09017019	17 - 19	1,0	9,0	0,5 - 1	50
MJU1-09018020	18 - 20	1,0	9,0	0,5 - 1	50



## Mini clamps - M series W4/A2 (9 mm)

This hose clamp is for a small clamping range and equipped with a short bolt, making it perfectly suitable to clamp hoses with thin walls. such as fuel hoses.

It is often called fuel hose clamp. The rounded edge prevents the clamp from shearing into the hose.

- **Material:** W4/A2: stainless steel 300 series
- **Fastening:** M4 screw (7 mm hex head)
- **Industry recommendations:** Ideal for small bore hoses with relatively low pressures, where little clamping force is required. Used in low pressure applications such as a fuel line
- **Quality assurance:** DIN 3017-1

Part nr.	Adjustment mm	Max. advised torque Nm	Band width mm	Band thickness mm	Packed
MJU4-09007009	7 - 9	1,0	9,0	0,5 - 1	50
MJU4-09008010	8 - 10	1,0	9,0	0,5 - 1	50
MJU4-09009011	9 - 11	1,0	9,0	0,5 - 1	50
MJU4-09010012	10 - 12	1,0	9,0	0,5 - 1	50
MJU4-09011013	11 - 13	1,0	9,0	0,5 - 1	50
MJU4-09012014	12 - 14	1,0	9,0	0,5 - 1	50
MJU4-09013015	13 - 15	1,0	9,0	0,5 - 1	50
MJU4-09014016	14 - 16	1,0	9,0	0,5 - 1	50
MJU4-09015017	15 - 17	1,0	9,0	0,5 - 1	50
MJU4-09016018	16 - 18	1,0	9,0	0,5 - 1	50
MJU4-09017019	17 - 19	1,0	9,0	0,5 - 1	50
MJU4-09018020	18 - 20	1,0	9,0	0,5 - 1	50



## Single lip fixing clamps - SL series W1 (13 mm)

Fixing clamps affix hoses, pipes and cables to their proper places. It is also known as duct clamp. The rubber part of the band absorbs vibration and prevents cable damage, while having an added insulating effect. This clamp may also be used without the rubber lining, e.g. when they are intended to conduct electricity

- **Material:** Mild steel, all parts zinc plated
- **Lining:** Rubber, shore hardness 65 °C ± 5 °C
- **Fastening:** M6 screw
- **Industry recommendations:** Mainly used on air, fluid, gas and steam lines and also suitable for low pressure hydraulic applications. The absence of a screw mechanism allows these clips to be useful on extremely small hoses
- **Quality assurance:** DIN 2768-vL



Part nr.	Min Ø	Max Ø	Band width mm	Fastening	Packed
MPC1-13045006	3,20	4,80	13,0	M6	50
MPC1-13055008	4,80	6,40	13,0	M6	50
MPC1-13075010	6,40	7,90	13,0	M6	50
MPC1-13085011	7,90	9,50	13,0	M6	50
MPC1-13095012	9,50	11,10	13,0	M6	50
MPC1-13115014	11,10	12,70	13,0	M6	50
MPC1-13125015	12,70	14,30	13,0	M6	50
MPC1-13135016	14,30	15,90	13,0	M6	50
MPC1-13145017	15,90	17,50	13,0	M6	50
MPC1-13155018	17,50	19,00	13,0	M6	50
MPC1-13165019	19,00	20,60	13,0	M6	50
MPC1-13175020	20,60	22,20	13,0	M6	50
MPC1-13185021	22,20	23,80	13,0	M6	50
MPC1-13195022	23,80	25,40	13,0	M6	50
MPC1-13205023	25,40	27,00	13,0	M6	50
MPC1-13215024	27,00	28,60	13,0	M6	50
MPC1-13245027	28,60	30,20	13,0	M6	50
MPC1-13265029	30,20	31,80	13,0	M6	50
MPC1-13275030	31,80	33,30	13,0	M6	50
MPC1-13285031	33,30	34,90	13,0	M6	50
MPC1-13295032	34,90	36,50	13,0	M6	10
MPC1-13345037	36,50	38,10	13,0	M6	10
MPC1-13395042	38,10	41,00	13,0	M6	10

## Single lip fixing clamps - SL series W5/A4 (13 mm)

Fixing clamps affix hoses, pipes and cables to their proper places. It is also known as duct clamp. The rubber part of the band absorbs vibration and prevents cable damage, while having an added insulating effect. This clamp may also be used without the rubber lining, e.g. when they are intended to conduct electricity

- **Material:** Stainless steel AISI 316
- **Lining:** Rubber, shore hardness 65 °C ± 5 °C
- **Fastening:** M6 screw
- **Industry recommendations:** Mainly used on air, fluid, gas and steam lines and also suitable for low pressure hydraulic applications. The absence of a screw mechanism allows these clips to be useful on extremely small hoses
- **Quality assurance:** DIN 2768-vL



HOSE CLAMPS

Part nr.	Min Ø	Max Ø	Band width mm	Fastening	Packed
MPC5-13045006	3,20	4,80	13,0	M6	50
MPC5-13055008	4,80	6,40	13,0	M6	50
MPC5-13075010	6,40	7,90	13,0	M6	50
MPC5-13085011	7,90	9,50	13,0	M6	50
MPC5-13095012	9,50	11,10	13,0	M6	50
MPC5-13115014	11,10	12,70	13,0	M6	50
MPC5-13125015	12,70	14,30	13,0	M6	50
MPC5-13135016	14,30	15,90	13,0	M6	50
MPC5-13145017	15,90	17,50	13,0	M6	50
MPC5-13155018	17,50	19,00	13,0	M6	50
MPC5-13165019	19,00	20,60	13,0	M6	50
MPC5-13175020	20,60	22,20	13,0	M6	50
MPC5-13185021	22,20	23,80	13,0	M6	50
MPC5-13195022	23,80	25,40	13,0	M6	50
MPC5-13205023	25,40	27,00	13,0	M6	50
MPC5-13215024	27,00	28,60	13,0	M6	50
MPC5-13245027	28,60	30,20	13,0	M6	50
MPC5-13265029	30,20	31,80	13,0	M6	50
MPC5-13275030	31,80	33,30	13,0	M6	50
MPC5-13285031	33,30	34,90	13,0	M6	50
MPC5-13295032	34,90	36,50	13,0	M6	10
MPC5-13345037	36,50	38,10	13,0	M6	10
MPC5-13395042	38,10	41,00	13,0	M6	10
MPC5-13605065*	60,50	65,00	13,0	M6	1

\* Without rubber

## Truck & Trailer Parts

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## Screws, Bolts & Nuts

## Wire & Cable

## Bundling & Protection

## VE Products

## Insulated Terminals

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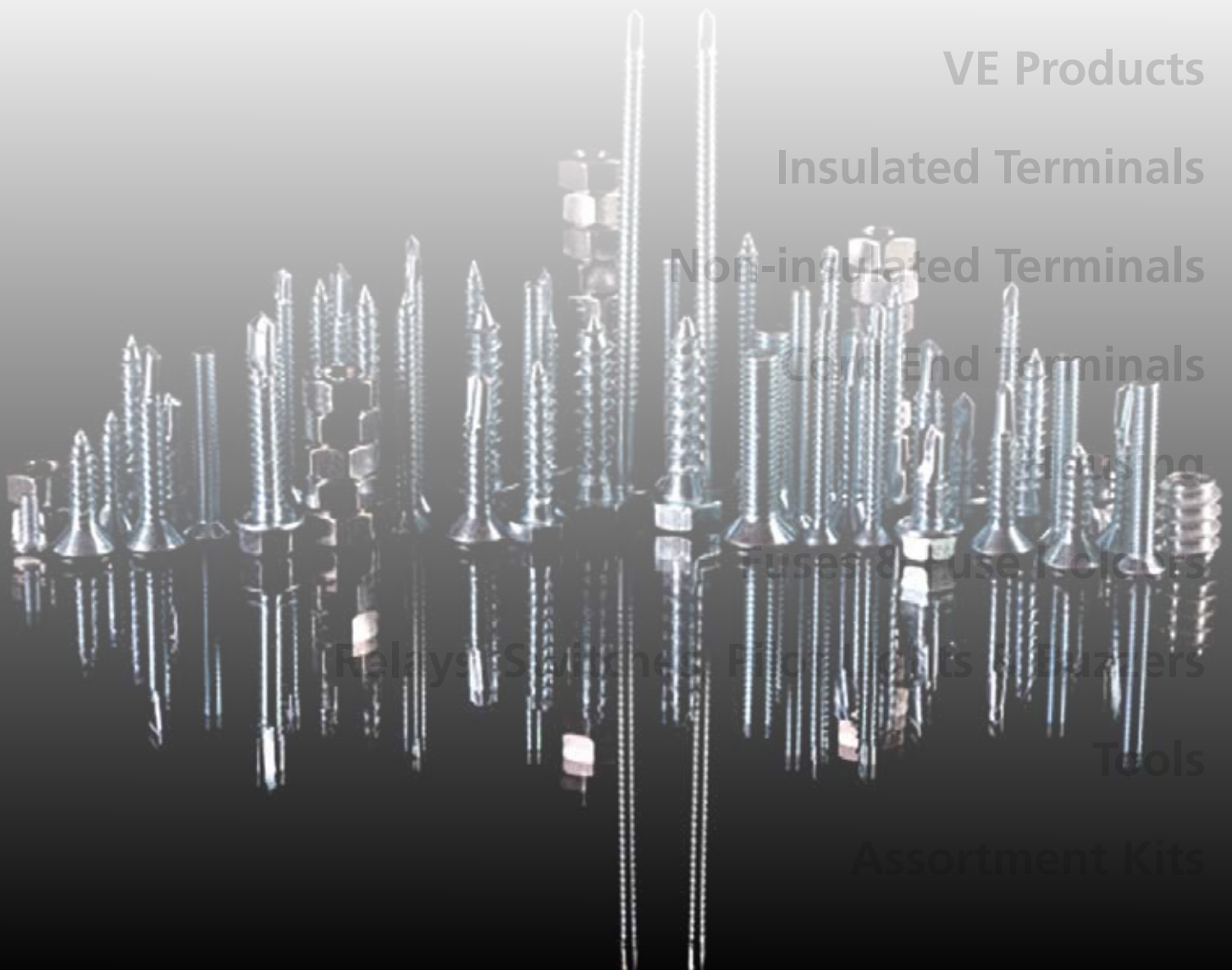
## Wiring

## Fuses & Fuse Holders

## Relays, Switches, Probes & Buzzers

## Tools

## Assortment Kits





## Self-drilling screws\*

- Sheet thread
- Zinc plated
- Pan head
- Phillips drive
- DIN 7504N, ISO 15481

Part nr.	Size	Head Ø	For sheet metal	Packed
S0336.01.16520	3,5 x 13 mm	6,9 mm	0,7 - 2,25 mm	200
S0336.01.20720	3,9 x 16 mm	7,5 mm	0,7 - 2,4 mm	200
S0336.01.20920	3,9 x 19 mm	7,5 mm	0,7 - 2,4 mm	200
S0336.01.28720	4,2 x 16 mm	8,2 mm	1,75 - 3 mm	200
S0336.01.28920	4,2 x 19 mm	8,2 mm	1,75 - 3 mm	200
S0336.01.36720	4,8 x 16 mm	9,5 mm	1,75 - 4 mm	200
S0336.01.37120	4,8 x 25 mm	9,5 mm	1,75 - 4 mm	200



## Tapping screws\*

- Sheet thread
- Zinc plated
- Pan head
- Phillips drive
- DIN 7981, ISO 7049

Part nr.	Size	Head Ø	Packed
S0332.01.28720	4,2 x 16 mm	8,2 mm	200
S0332.01.28920	4,2 x 19 mm	8,2 mm	200
S0332.01.36720	4,8 x 16 mm	9,5 mm	200
S0332.01.36920	4,8 x 19 mm	9,5 mm	200
S0332.01.37120	4,8 x 25 mm	9,5 mm	200



## Machine screws\*

- Metric thread
- Zinc plated
- Pan head
- Phillips drive
- DIN 7985, ISO 7045

Part nr.	Size	Head Ø	Packed
S1632.01.40701	M5 x 16 mm	10 mm	200
S1632.01.41001	M5 x 20 mm	10 mm	200
S1632.01.41601	M5 x 40 mm	10 mm	200



## Tapping screws\*

- Sheet thread
- Blackened
- Pan head
- Phillips drive
- DIN 968

Part nr.	Size	Head Ø	Packed
S0335.09.20920	3,9 x 19 mm	10,0 mm	100
S0335.09.28720	4,2 x 16 mm	10,0 mm	100
S0335.09.28920	4,2 x 19 mm	10,0 mm	50
S0335.09.36720	4,8 x 16 mm	11,5 mm	50
S0335.09.36920	4,8 x 19 mm	11,5 mm	50
S0335.09.37120	4,8 x 25 mm	11,5 mm	50



## Tapping screws\*

- Sheet thread
- Blackened
- Truss head
- Phillips drive
- DIN 968C

Part nr.	Size	Packed
S3645.60.35016	3,5 x 16 mm	200
S3645.60.39019	3,9 x 19 mm	200
S3645.60.42016	4,2 x 16 mm	200
S3645.60.42019	4,2 x 19 mm	200
S3645.60.48016	4,8 x 16 mm	200
S3645.60.48019	4,8 x 19 mm	200
S3645.60.48025	4,8 x 25 mm	200



## Tapping screws\*

- Sheet thread
- Blackened
- Pan head
- Cross recessed
- DIN7981-CH

Part nr.	Size	Packed
S3640.00.42016	4,2 x 16 mm	200
S3640.00.42019	4,2 x 19 mm	200
S3640.00.48016	4,8 x 16 mm	200
S3640.00.48019	4,8 x 19 mm	200
S3640.00.55016	5,5 x 16 mm	200
S3640.00.55025	5,5 x 25 mm	200



\* Other sizes are available on request

## Hex bolts

- Full metric thread
- Zinc plated
- Strength class 8.8
- DIN 933, ISO 4017

Part nr.	Size	Packed
S1840.11.40701	M5 x 16 mm	500
S1840.11.41001	M5 x 20 mm	500
S1840.11.48301	M6 x 10 mm	500
S1840.11.48701	M6 x 16 mm	500
S1840.11.49001	M6 x 20 mm	500
S1840.11.49101	M6 x 25 mm	500
S1840.11.49201	M6 x 30 mm	500
S1840.11.49601	M6 x 40 mm	200
S1840.11.60701	M8 x 16 mm	200
S1840.11.61001	M8 x 20 mm	200
S1840.11.61101	M8 x 25 mm	200
S1840.11.61201	M8 x 30 mm	200
S1840.11.61601	M8 x 40 mm	200
S1840.11.61901	M8 x 50 mm	200
S1840.11.62001	M8 x 60 mm	200
S1840.11.69001	M10 x 20 mm	200
S1840.11.69101	M10 x 25 mm	200
S1840.11.69201	M10 x 30 mm	200
S1840.11.69601	M10 x 40 mm	100
S1840.11.69901	M10 x 50 mm	100
S1840.11.73601	M12 x 40 mm	100
S1840.11.73901	M12 x 50 mm	100



SCREWS, BOLTS & NUTS

## Carriage bolts with nut\*

- Metric thread
- Zinc plated
- Strength class 4.8
- DIN603/555, ISO 8677/4034

Part nr.	Size	Head Ø	Packed
S1990.01.40701	M5 x 16 mm	13,5 mm	200
S1990.01.41001	M5 x 20 mm	13,5 mm	200
S1990.01.41601	M5 x 40 mm	13,5 mm	200
S1990.01.49201	M6 x 30 mm	16,5 mm	200
S1990.01.61601	M8 x 40 mm	20,6 mm	200



## Washers\*

- Zinc plated
- DIN 125-A, ISO 7089

Part nr.	Size	Thread	Packed
S4010.01.00401	4,3 x 9 x 0,8 mm	M4	250
S4010.01.00501	5,3 x 10 x 1,0 mm	M5	100
S4010.01.00601	6,4 x 12 x 1,6 mm	M6	100
S4010.01.00801	8,4 x 16 x 1,6 mm	M8	100
S4010.01.01001	10,5 x 20 x 2,0 mm	M10	100
S4010.01.01201	13,0 x 24 x 2,5 mm	M12	100



## Large washers\*

- Zinc plated

Part nr.	Size	Thread	Packed
S4021.01.00501	5,2 x 20 x 1,0 mm	M5	250
S4021.01.00601	6,4 x 25 x 1,0 mm	M6	100
S4021.01.00605	6,4 x 20 x 1,25 mm	M6	250
S4021.01.00603	6,4 x 30 x 1,25 mm	M6	100
S4021.01.00801	8,4 x 25 x 1,0 mm	M8	100
S4021.01.00803	8,4 x 30 x 1,25 mm	M8	100
S4021.01.00806	8,4 x 20 x 1,25 mm	M8	250
S4021.01.01002	10,5 x 30 x 1,25 mm	M10	100
S4021.01.01202	13,0 x 30 x 1,25 mm	M12	100



## Spring lock washers\*

- Zinc plated
- DIN 127-BB

Part nr.	Size	Thread	Packed
S4030.01.00501	5,1 x 9,2 x 1,2 mm	M5	100
S4030.01.00601	6,1 x 11,8 x 1,6 mm	M6	100
S4030.01.00801	8,1 x 14,8 x 2,0 mm	M8	100
S4030.01.01001	10,2 x 18,1 x 2,2 mm	M10	100



## Sealing washers\*

- Copper
- DIN 7603-A

Part nr.	Size	Packed
S6030.00.60010	6 x 10 x 1,0 mm	100
S6030.00.80012	8 x 12 x 1,0 mm	100
S6030.00.80014	8 x 14 x 1,0 mm	100
S6030.01.00014	10 x 14 x 1,0 mm	100
S6030.01.00016	10 x 16 x 1,0 mm	100
S6030.11.20016	12 x 16 x 1,5 mm	100
S6030.11.20018	12 x 18 x 1,5 mm	100
S6030.11.40020	14 x 20 x 1,5 mm	100
S6030.11.60022	16 x 22 x 1,5 mm	100
S6030.11.80024	18 x 24 x 1,5 mm	50
S6030.21.60022	16 x 22 x 2,0 mm	50



\* Other sizes are available on request

## Hex nuts\*

- Zinc plated
- Strength class 8
- DIN 934/ISO 4032

Part nr.	Size	Packed
S3511.01.00401	M4 x 3,2 mm	250
S3511.01.00501	M5 x 4 mm	250
S3511.01.00601	M6 x 5 mm	250
S3511.01.00701	M7 x 5,5 mm	250
S3511.01.00801	M8 x 6,5 mm	250
S3511.01.01001	M10 x 8 mm	250
S3511.01.01201	M12 x 10 mm	100



## Hex lock nuts with nylon insert\*

- Zinc plated
- Strength class 8
- DIN 985/ISO 10511

Part nr.	Size	Packed
S3531.01.00501	M5 x 5 mm	250
S3531.01.00601	M6 x 6 mm	250
S3531.01.00801	M8 x 8 mm	250
S3531.01.01001	M10 x 10 mm	200
S3531.01.01201	M12 x 12 mm	200



## Hex dome nuts\*

- Zinc plated
- Strength class 6
- DIN 1587

Part nr.	Size	Packed
S3541.01.00501	M5 x 10 mm	200
S3541.01.00601	M6 x 12 mm	200
S3541.01.00801	M8 x 15 mm	200
S3541.01.01001	M10 x 18 mm	100
S3541.01.01201	M12 x 22 mm	100





## Speednuts

- Zinc plated

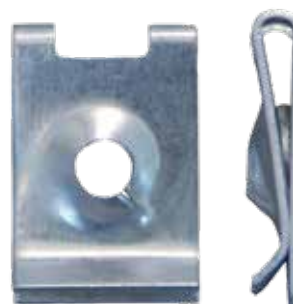
Part nr.	Hole Ø	Size	Packed
S3565.02.16001	3,5 mm	17 x 11 mm	100
S3565.02.28201	4,2 mm	17 x 11 mm	100
S3565.02.36201	4,8 mm	20 x 13 mm	100
S3565.02.44501	5,5 mm	24 x 15 mm	100
S3565.02.52501	6,3 mm	25 x 15 mm	100



## Speednuts

- Zinc plated

Part nr.	Hole Ø	Size	Packed
S8229.30.35001	3,5 mm	16,5 x 11 mm	100
S8229.30.39001	3,9 mm	16,5 x 11 mm	100
S8229.30.42001	4,2 mm	16,5 x 11 mm	100
S8229.30.48001	4,8 mm	16,5 x 11 mm	100
S8229.30.55001	5,5 mm	20,8 x 13 mm	100
S8229.30.63002	6,3 mm	24,8 x 16 mm	100
S8229.30.65001	6,5 mm	26,35 x 16 mm	100



## Cotter pins\*

- Zinc plated
- DIN 94

Part nr.	Size	Packed
S4935.00.16032	1,6 x 32 mm	250
S4935.00.20040	2,0 x 40 mm	250
S4935.00.25040	2,5 x 40 mm	250
S4935.00.32040	3,2 x 40 mm	200
S4935.00.35040	3,5 x 40 mm	250
S4935.00.40032	4,0 x 32 mm	250
S4935.00.40050	4,0 x 50 mm	200
S4935.00.50050	5,0 x 50 mm	200



\* Other sizes are available on request

## Number plate bolt\*

Machine screw (metric thread, zinc plated, cylinder head, phillips drive)  
With nut, washer and spacer



Part nr.	Size	Packed
S8200.40.60020	M6 x 20 mm	100

## Number plate screws\*

Tapping screw (sheet thread, zinc plated, pan head, phillips drive)



Part nr.	Size	Packed
S8200.80.48016	4,8 x 16 mm	100
S8200.80.48020	4,8 x 19 mm	100
S8200.80.55019	5,5 x 19 mm	100

## Number plate screw\*

Tapping screw (sheet thread, zinc plated, pan head, phillips drive)  
With captive ring



Part nr.	Size	Packed
S8202.10.55016	5,5 x 16 mm	100

## Number plate screw\*

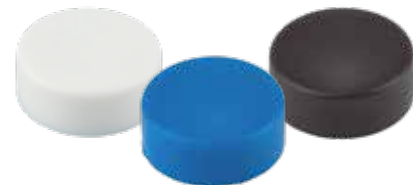
Self-drilling screw (sheet thread, zinc plated, pan head, phillips drive)



Part nr.	Size	Packed
S8202.10.50016	5,0 x 16 mm	100

## Nylon caps

Suitable for cylinder head number plate bolts



Part nr.	Size	Color	Packed
S8201.90.00001	Inner Ø 11 mm	white	100
S8201.90.00003	Inner Ø 11 mm	blue	100
S8201.90.00012	Inner Ø 11 mm	black	100

## Nylon caps

Suitable for pan head number plate screws



Part nr.	Size	Color	Packed
S8201.80.00011	Inner Ø 9 mm	white	100
S8201.80.00002	Inner Ø 9 mm	blue	100
S8201.80.00012	Inner Ø 9 mm	black	100
S8201.80.00004	Inner Ø 9 mm	yellow	100

\* Other sizes are available on request

## Truck & Trailer Parts

### Plugs & Sockets

### Lighting

### Battery

### Hose Clamps

### Screws, Bolts & Nuts

## Wire & Cable

### Bundling & Protection

### W/E Products

### Insulated Terminals

### Non-Insulated Terminals

### Crimp End Terminals

### Housing

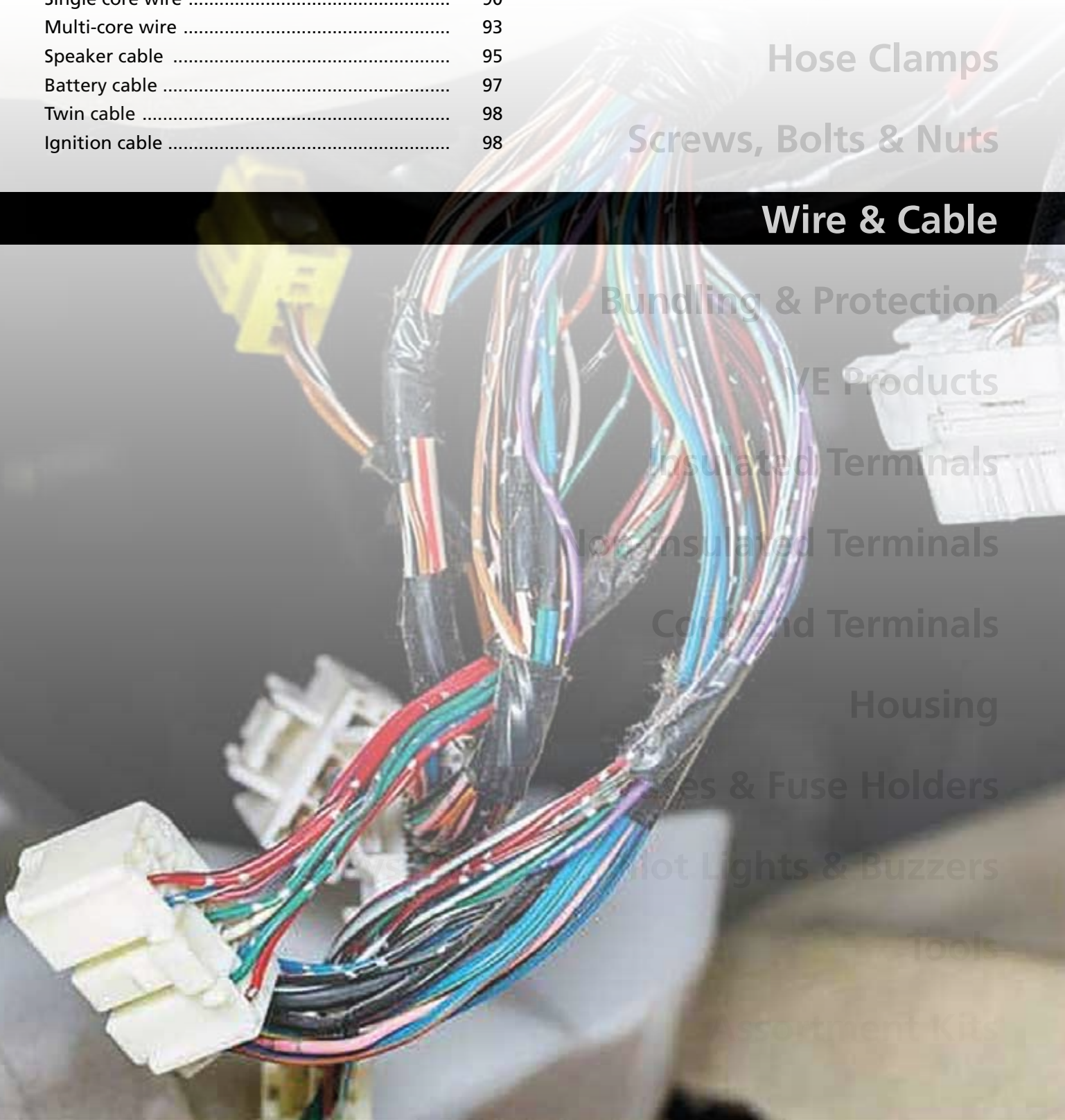
### Fuses & Fuse Holders

### Spot Lights & Buzzers

### Tools

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Ignition cable .....	98



### Single core wire (FLRY-B)

Designed for low voltage installations in motor vehicles.

Automobile cable (FL) with reduced thickness of insulation (R), with PVC insulation (Y) and irregularly twisted strands (B).

- Conductor: Copper wire (Class 5)
- Insulation: PVC T2
- Bending radius: 4 x D
- Test voltage: 1000V
- Rated voltage: 60V
- Temperature rating: -40 °C ~ 105 °C
- Quality assurance: DIN/ISO 6722

Reel							
Part nr. without trace color	Wire size mm <sup>2</sup>	Nominal conductor construction (wires x mm <sup>2</sup> )	Max conductor resistance (Ohm/km)	Outer cable Ø (mm)	Min. insulation thickness (mm)	Color insulation	Mtrs/reel
PE0050Z500RL	0,5	17 x 0,19	37,1	1,6	0,22	black	500
PE0075Z500RL	0,75	27 x 0,19	24,7	1,9	0,24	black	500
PE0100Z500RL	1,0	35 x 0,19	18,5	2,1	0,24	black	500
PE0150Z500RL	1,5	31 x 0,24	12,7	2,4	0,24	black	500
PE0250Z500RL	2,5	54 x 0,24	7,6	3,0	0,28	black	500
PE0075Z100RL	0,75	27 x 0,19	24,7	1,9	0,24	black	100
PE0100Z100RL	1,0	35 x 0,19	18,5	2,1	0,24	black	100
PE0250Z100RL	2,5	54 x 0,24	7,6	3,0	0,28	black	100
PE0400Z100RL	4,0	84 x 0,24	4,7	3,7	0,32	black	100
PE0600Z50RL	6,0	130 x 0,24	3,1	4,3	0,32	black	50

Most sizes are available in black (Z), blue (B), brown (BR), green (GR), grey (GRS), orange (O), pink (PK), purple (V), red (R), white (W) and yellow (G). For available trace colors, please contact our Sales Department





Spool							
Part nr. without trace color	Wire size mm <sup>2</sup>	Nominal conductor construction (wires x mm <sup>2</sup> )	Max conductor resistance (Ohm/km)	Outer cable Ø (mm)	Min. insulation thickness (mm)	Color insulation	Mtrs/spool
PE0050Z100SP	0,5	17 x 0,19	37,1	1,6	0,22	black	100
PE0075Z100SP	0,75	27 x 0,19	24,7	1,9	0,24	black	100
PE0100Z100SP	1,0	35 x 0,19	18,5	2,1	0,24	black	100
PE0150Z100SP	1,5	31 x 0,24	12,7	2,4	0,24	black	100
PE0250Z100SP	2,5	54 x 0,24	7,6	3,0	0,28	black	100
PE0400Z100SP	4,0	84 x 0,24	4,7	3,7	0,32	black	100
PE0600Z100SP	6,0	130 x 0,24	3,1	4,3	0,32	black	100
PE0100Z50SP	1,0	35 x 0,19	18,5	2,1	0,24	black	50
PE0250Z50SP	2,5	54 x 0,24	7,6	3,0	0,28	black	50
PE0400Z50SP	4,0	84 x 0,24	4,7	3,7	0,32	black	50
PE0600Z50SP	6,0	130 x 0,24	3,1	4,3	0,32	black	50

Most sizes are available in black (Z), blue (B), brown (BR), green (GR), grey (GRS), orange (O), pink (PK), purple (V), red (R), white (W) and yellow (G). For available trace colors, please contact our Sales Department



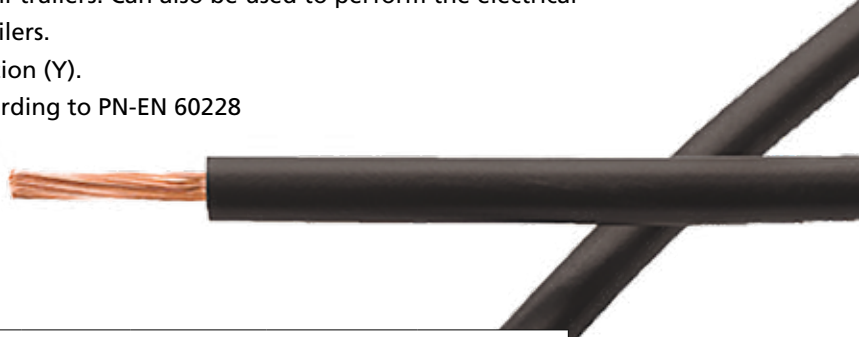


## Single core cable (FLY)

For low voltage electrical connections in trailers and semi-trailers. Can also be used to perform the electrical installation in road vehicles, to connect vehicles with trailers.

Cable with copper strand conductor (FL) and PVC insulation (Y).

- Conductor: Copper wire (Class 5) according to PN-EN 60228
- Insulation: PVC T11
- Bending radius: 4 x D
- Rated voltage: 24V
- Temperature rating: -40 °C ~ 90 °C
- Quality assurance: ISO 6722



Reel							
Part nr. without trace color	Wire size mm <sup>2</sup>	Nominal conductor construction (wires x mm <sup>2</sup> )	Max conductor resistance (Ohm/km)	Outer cable Ø (mm)	Nominal insulation thickness (mm)	Color insulation	Mtrs/reel
W701100501-10	0,5	16 x 0,193	39,0	2,1	0,6	black	10
W701101501-10	1,5	48 x 0,193	13,3	2,7	0,6	black	10
W701106001-10	6,0	120 x 0,245 or 78 x 0,290	3,3	4,8	0,6	black	10
W701110001-10	10,0	313 x 0,193	1,91	6,3	0,8	black	10
W701116001-5	16,0	512 x 0,193	1,21	7,4	0,8	black	5
W701125001-5	25,0	836 x 0,193	0,78	9,4	1,0	black	5
W701135001-5	35,0	1140 x 0,192	0,554	11,7	1,2	black	5
W701150001-5	50,0	1558 x 0,192	0,386	13,7	1,4	black	5

## Single core cable (H01N2-D)

For direct connection of welding machines with electrode holder.

Manufactured according to harmonized norm (H) at rated voltage 100/100V (01) with chloroprene rubber insulation (N2) and wire of normal flexure (D).

- Conductor: Copper wire (with plastic foil separator)
- Insulation: Chloroprene rubber EM5
- Bending radius: 4 x D
- Test voltage: 1000V
- Rated voltage: 100/100V
- Temperature rating: -35 °C ~ 80 °C
- Quality assurance: PN-EN-50525-2-81



Reel							
Part nr. without trace color	Wire size mm <sup>2</sup>	Nominal conductor construction (wires x mm <sup>2</sup> )	Max conductor resistance (Ohm/km)	Outer cable Ø (mm)	Nominal insulation thickness (mm)	Color insulation	Mtrs/reel
W704116001-10	16,0	512 x 0,193	1,21	8,9	2,0	black	10
W704125001-10	25,0	836 x 0,193	0,78	10,1	2,0	black	10
W704135001-10	35,0	1140 x 0,192	0,554	11,4	2,0	black	10
W704150001-10	50,0	1558 x 0,192	0,386	13,2	2,2	black	10
W704170001-10	70,0	1995 x 0,20	0,272	16,0	2,4	black	10

## Multi-core wire (FLRY-Y) - Round cable

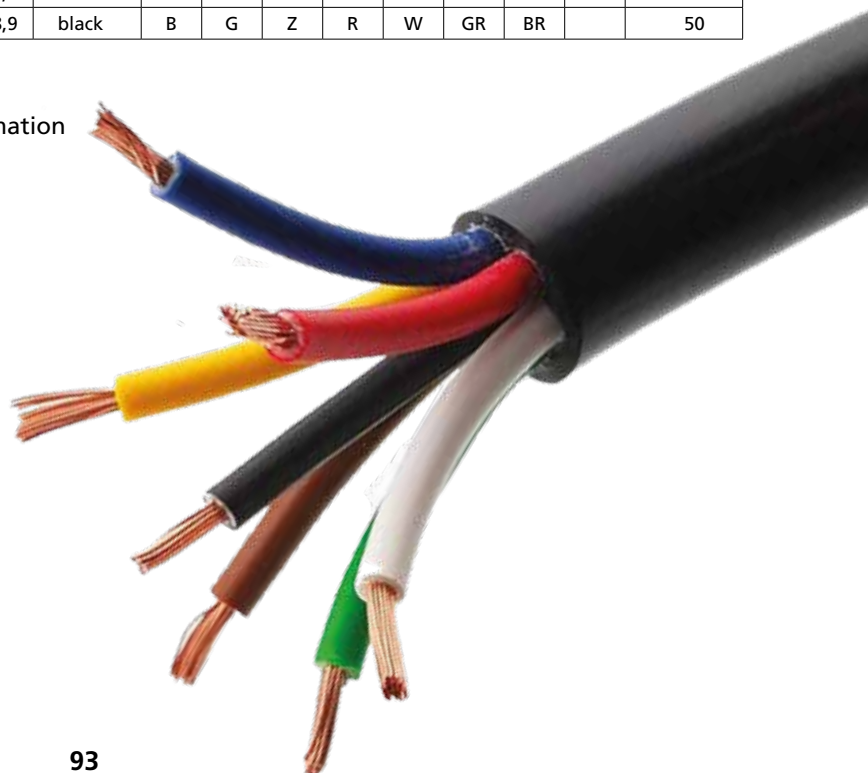
For usage in all kinds of trailers and semi-trailers.

Low voltage automobile cable (FL) with reduced thickness of insulation (R) and PVC coating and insulation (YY)

- Conductor: Copper wire (Class 5)
- Insulation: PVC T2
- Coating: Special PVC
- Bending radius: 4 x D
- Test voltage: 1000V
- Rated voltage: 60V
- Temperature rating: -40 °C ~ 105 °C
- Quality assurance: DIN/ISO 6722

Reel													
Part nr.	Wire size mm <sup>2</sup>	Number of cores	Outer cable Ø (mm)	Color coating	Core color								Mtrs/reel
					blue	yellow	black	red	white	green	brown	grey	
PER20075BG100RL*	0,75	2	5,1	black	B	G							100
PER20100ZR100RL*	1,00	2	5,5	black			Z	R					100
PER20150ZW50RL	1,50	2	6,1	black			Z		W				50
PER20250ZW50RL	2,50	2	7,3	black			Z		W				50
PER30100ZGRR100RL*	1,00	3	5,8	black			Z	R		GR			100
PER30150ZGRR100RL*	1,50	3	6,5	black			Z	R		GR			100
PER40075BRGRRW100RL*	0,75	4	5,9	black				R	W	GR	BR		100
PER40100BRGRRW50RL	1,00	4	6,4	black				R	W	GR	BR		50
PER40150BRGRRW50RL	1,50	4	7,1	black				R	W	GR	BR		50
PER50075BRGRSRWG100RL*	0,75	5	6,4	black		G		R	W		BR	GRS	100
PER50100BRGRSRWG50RL	1,00	5	7,0	black		G		R	W		BR	GRS	50
PER50150BRGRSRWG50RL	1,50	5	7,8	black		G		R	W		BR	GRS	50
PER70075ZBBRGRRWG100RL*	0,75	7	7,0	black	B	G	Z	R	W	GR	BR		100
PER70100ZBBRGRRWG50RL	1,00	7	8,0	black	B	G	Z	R	W	GR	BR		50
PER70150ZBBRGRRWG50RL	1,50	7	8,9	black	B	G	Z	R	W	GR	BR		50

\* Also available on 25 and/or 50 mtr reels  
Please contact our Sales department for more information



## Multi-core wire (H05VV-F) - Round cable

General purpose conductor cable.

Manufactured according to harmonized norm (H) at rated voltage 300/500V (05) with poliviny chloride insulation (VV) and stranded copper wire (F).

- Conductor: Copper wire (Class 5) according to PN-EN 60228
- Insulation: Poliviny chloride T12
- Coating: Poliviny chloride TM2
- Bending radius: 4 x D (permanent placement) or 6 x D (free movement)
- Test voltage: 2000V
- Rated voltage: 300/500V
- Temperature rating: -40 °C ~ 70 °C
- Quality assurance: PN-EN-50525-2-11



Reel

Part nr. without trace color	Wire size mm <sup>2</sup>	Number of cores	Outer cable Ø (mm)	Nominal coating thickness (mm)	Nominal insulation thickness (mm)	Color coating	Mtrs/reel
W706201501-10	1,50	2	7,3	0,8	0,7	black	10
W706301501-10	1,50	3	7,9	0,9	0,7	black	10
W706401501-10	1,50	4	8,9	1,0	0,7	black	10
W706501501-10	1,50	5	9,9	1,1	0,7	black	10
W706701501-10	1,50	7	10,8	1,2	0,7	black	10
W706801501-10	1,50	8	11,6	1,2	0,7	black	10

WIRE & CABLE

## Multi-core wire (YLYp-S) - Flat cable

Cable with PVC insulation (Y) of bare copper strand conductor (L), PVC coating (Y), flat (p), automotive (S)

- Conductor: Copper wire (Class 5)
- Insulation: PVC T11
- Coating: PVC TM5
- Rated voltage: 24V
- Temperature rating: -40 °C ~ 90 °C
- Quality assurance: ISO 6722

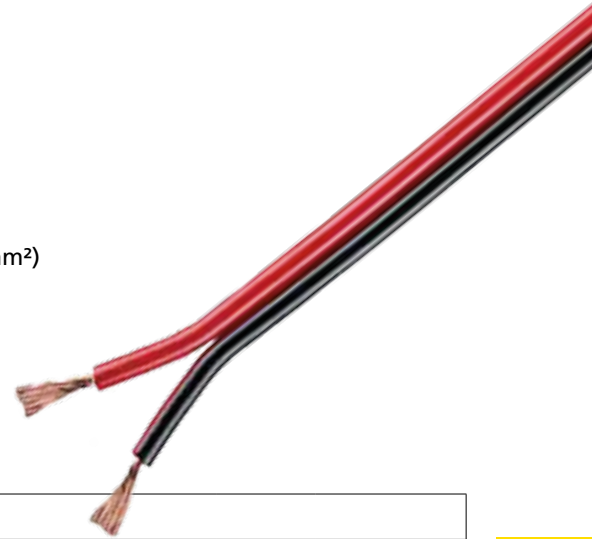
Reel

Part nr.	Wire size mm <sup>2</sup>	Number of cores	Outer cable Ø (mm)	Color coating	Core color		Mtrs/reel
					black	red	
PEF20075ZR100RL	0,75	2	3,5 x 5,6	black	Z	R	100
PEF20100ZR100RL	1,00	2	3,5 x 5,6	black	Z	R	100
PEF20150ZR100RL	1,50	2	3,8 x 6,6	black	Z	R	100
PEF20150ZR50RL	1,50	2	3,8 x 6,6	black	Z	R	50
PEF20250ZR50RL	2,50	2	5,2 x 8,2	black	Z	R	50



## Speaker cable (NYFAZ)

- Conductor: Electrolytic red copper CU ETP 1
- Insulation: PVC type TM2
- Max. operating voltage: 300V
- Operating temperature: -15 ~ 70 °C
- Quality assurance: EN 60228 – EN 50525 (2x 0,5 mm<sup>2</sup>)  
EN 50525 (2x 0,75, 2x 1,00, 2x 1,50 and 2x 2,50 mm<sup>2</sup>)  
CEI 20-20 / CEI 20-29 (2x 4,00 mm<sup>2</sup>)



### Spool

Part nr.	Wire size mm <sup>2</sup>	Nominal conductor construction (wires x mm <sup>2</sup> )	Max. conductor resistance (Ohm/km)	Outer cable (mm)	Min. insulation thickness (mm)	Core color		Mtrs/spool
						black	red	
LS2X0050ZR100SP	2 x 0,50	16 x 0,20	39,00	1,9 x 3,9	0,5	Z	R	100
LS2X0075ZR100SP	2 x 0,75	24 x 0,20	26,00	2,2 x 4,5	0,5	Z	R	100
LS2X0100ZR100SP	2 x 1,00	32 x 0,20	19,50	2,5 x 5,2	0,6	Z	R	100
LS2X0150ZR100SP	2 x 1,50	30 x 0,25	13,30	2,9 x 6,0	0,6	Z	R	100
LS2X0250ZR100SP	2 x 2,50	50 x 0,25	7,60	3,6 x 7,4	0,7	Z	R	100
LS2X0400ZR100SP	2 x 4,00	56 x 0,25	4,95	4,1 x 8,6	0,7	Z	R	100

WIRES &amp; CABLE





**ST-700**  
Self-adjusting cutter/stripper  
0,25 - 4,0 mm<sup>2</sup>



**ST-731**  
Multi-function wire stripper  
0,25 - 6,0 mm<sup>2</sup>



**LK-22A**  
Wire cutter for copper and aluminum wire  
Up to 25 mm<sup>2</sup>



**LK-38A**  
Wire cutter for copper and aluminum wire  
Up to 35 mm<sup>2</sup>



**LK-60A**  
Wire cutter for copper and aluminum wire  
Up to 50 mm<sup>2</sup>



**LK-38B**  
Cable scissors for copper wire  
Up to 35 mm<sup>2</sup>  
Blades made of 420 J2 stainless steel  
With spring to automatically open the scissors



**ST-50**  
6½" Wire stripper  
0,5 - 4,0 mm<sup>2</sup>



**LY-700E**  
6½" Wire stripper  
0,5 - 10,0 mm<sup>2</sup>



**ST-801**  
4.4" Multi-function plier/wire stripper  
Network cable stripper (K5) for cross cut or straight cut  
Wire stripper (high carbon steel):  
0,05 - 0,5 mm<sup>2</sup>  
Plier: free size  
With 2 spare blades and 1 spare screw



**ST-800**  
4.4" Multi-function plier/wire stripper  
Network cable stripper (K5) for cross cut or straight cut  
Wire stripper (high carbon steel):  
0,5 - 6,0 mm<sup>2</sup>  
Plier: free size  
With 2 spare blades and 1 spare screw

## Tools for wire & cable



## Battery cable

- Conductor: Annealed copper strands (Class 6)
- Insulation conductor: PVC, natural
- Outer insulation: NBR PVC, RAL 3000 (red), RAL 9005 (black)
- Bending radius: 10 x D for fixed layings
- Quality assurance: IEC 60811-1-1 (insulating and sheath materials, common test methods)  
IEC 60288 (conductor of insulated cables)  
IEC 62230 (electric cable, spark test method)  
IEC 60060-1 (high voltage test techniques)
- Operating rating: 0,6 ~ 1kV
- Test rating: 3,5kV
- Operating temperature: -40 °C ~ 70 °C
- Flame spread: IEC 60332-1-2



### Reel\*

Part nr.	Wire size	Max conductor resistance (Ohm/km)	Outer Ø cable (mm)	Weight cable (kg/km)	Color insulation	Mtrs/reel
PE1000Z010RL	10 mm <sup>2</sup>		7,9	134	black	10
PE1000R010RL	10 mm <sup>2</sup>		7,9	134	red	10
PE1000Z050RL	10 mm <sup>2</sup>		7,9	134	black	50
PE1000R050RL	10 mm <sup>2</sup>		7,9	134	red	50
PE1600Z010RL	16 mm <sup>2</sup>	1,210	9,2	191	black	10
PE1600R010RL	16 mm <sup>2</sup>	1,210	9,2	191	red	10
PE1600Z050RL	16 mm <sup>2</sup>	1,210	9,2	191	black	50
PE1600R050RL	16 mm <sup>2</sup>	1,210	9,2	191	red	50
PE2500Z010RL	25 mm <sup>2</sup>	0,780	10,4	274	black	10
PE2500R010RL	25 mm <sup>2</sup>	0,780	10,4	274	red	10
PE2500Z050RL	25 mm <sup>2</sup>	0,780	10,4	274	black	50
PE2500R050RL	25 mm <sup>2</sup>	0,780	10,4	274	red	50
PE3500Z010RL	35 mm <sup>2</sup>	0,544	11,3	376	black	10
PE3500R010RL	35 mm <sup>2</sup>	0,544	11,3	376	red	10
PE3500Z050RL	35 mm <sup>2</sup>	0,544	11,3	376	black	50
PE3500R050RL	35 mm <sup>2</sup>	0,544	11,3	376	red	50
PE5000Z010RL	50 mm <sup>2</sup>	0,386	13,1	531	black	10
PE5000R010RL	50 mm <sup>2</sup>	0,386	13,1	531	red	10
PE5000Z050RL	50 mm <sup>2</sup>	0,386	13,1	531	black	50
PE5000R050RL	50 mm <sup>2</sup>	0,386	13,1	531	red	50
PE7000Z010RL	70 mm <sup>2</sup>	0,272	15,3	737	black	10
PE7000R010RL	70 mm <sup>2</sup>	0,272	15,3	737	red	10
PE7000Z025RL	70 mm <sup>2</sup>	0,272	15,3	737	black	25
PE7000R025RL	70 mm <sup>2</sup>	0,272	15,3	737	red	25
PE9500Z010RL	95 mm <sup>2</sup>	0,206	17,4	965	black	10
PE9500R010RL	95 mm <sup>2</sup>	0,206	17,4	965	red	10
PE9500Z025RL	95 mm <sup>2</sup>	0,206	17,4	965	black	25
PE9500R025RL	95 mm <sup>2</sup>	0,206	17,4	965	red	25



\* Please see our EV Products section for orange battery cable

## Twin cable

- Conductor: Plain copper strands (Class 6)
- Insulation: Special PVC, red/black
- Outer insulation: Transparent PVC
- Rated voltage: 0,6 ~ 1kV
- Test voltage: 4kV
- Operating temperature: -40 °C ~ 70 °C
- Installation temperature: -5 °C ~ 50 °C
- Quality assurance: IEC 60228 (strands)



WIRE & CABLE

Reel								
Part nr.	Wire size mm <sup>2</sup>	Nominal conductor construction (wires x mm <sup>2</sup> )	Outer cable (mm)	Insulation thickness	Number of cores	Core colors		Mtrs/spool
						Black	Red	
PE20400ZR050SP	4,0	186 x 0,16	0,7	5,8 x 12,1	2	Z	R	50
PE20600ZR050SP	6,0	192 x 0,19	0,8	6,3 x 12,5	2	Z	R	50
PE21000ZR050SP	10,0	301 x 0,2	0,9	7,6 x 16	2	Z	R	50
PE21600ZR050SP	16,0	476 x 0,2	0,9	8,7 x 18,2	2	Z	R	50
PE22500ZR025SP	25,0	721 x 0,2	1,1	10 x 10,8	2	Z	R	25
PE23500ZR025SP	35,0	1015 x 0,2	1,1	11,4 x 23,8	2	Z	R	25
PE25000ZR025SP	50,0	1463 x 0,2	1,4	13,85 x 28,7	2	Z	R	25

## Ignition cable

- Conductor: Bare copper
- Insulation: PVC
- Rated voltage: 600V
- Withstands voltage spark: 3 kV/0,15 sec
- Temperature rating: -30 °C ~ 105 °C



Reel				
Part nr.	Wire size	Color jacket	Color insulation	Mtrs/ reel
IC0150Z030RL	1,5 mm <sup>2</sup>	black	white	30
IC0150R030RL	1,5 mm <sup>2</sup>	red	white	30

Truck & Trailer Parts

Plugs & Sockets

Lighting

Battery

Hose Clamps

Screws, Bolts & Nuts

Wire & Cable

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## Bundling & Protection

EV Products

Insulated Terminals

Non-insulated Terminals

Cord End Terminals

Housing

Fuses & Fuse Boxes

Plays, Switches, Pilot Lights, Crimpers

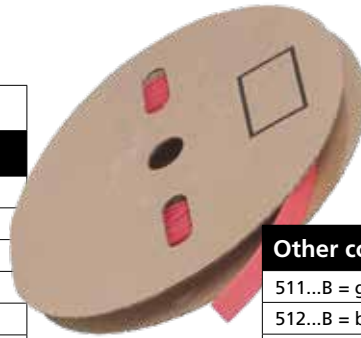


## Heat shrink sleeve - Single wall 2:1



- Shrink ratio: 2:1
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Dielectric strength:  $\geq 25$  kV/mm
- Flammability: VW - 1

Reel				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/reel
512001B	<sup>3</sup> / <sub>64</sub>	1,1 ± 0,20	0,5	200
512002B	<sup>1</sup> / <sub>16</sub>	1,5 ± 0,20	0,65	200
512003B	<sup>3</sup> / <sub>32</sub>	2,5 ± 0,20	1,0	200
512004B	<sup>1</sup> / <sub>8</sub>	3,0 ± 0,20	1,3	200
512005B	<sup>3</sup> / <sub>16</sub>	5,0 ± 0,20	2,3	100
512006B	<sup>1</sup> / <sub>4</sub>	6,5 ± 0,20	3,0	100
512007B	<sup>3</sup> / <sub>8</sub>	9,5 ± 0,30	4,5	100
512008B	<sup>1</sup> / <sub>2</sub>	12,5 ± 0,30	6,0	100
512009B	<sup>5</sup> / <sub>8</sub>	15,5 ± 0,40	7,5	100
512010B	<sup>3</sup> / <sub>4</sub>	19,0 ± 0,50	9,0	100
512011B	1	26,0 ± 0,50	12,5	50
512012B	1 <sup>1</sup> / <sub>2</sub>	36,5 ± 1,00	17,5	50
512013B	2	$\geq 50,0$	25,0	25
512014B	3	$\geq 70,0$	35,0	25
512015B	4	$\geq 100,0$	50,0	25



Other color part nr.
511...B = grey
512...B = black
513...B = green/yellow
514...B = blue
515...B = clear
516...B = white
517...B = red
518...B = yellow
519...B = green
521...B = brown
522...B = orange*
523...B = violet

BUNDLING & PROTECTION

Box				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/box
512001BB	<sup>3</sup> / <sub>64</sub>	1,1 ± 0,20	0,5	15
512002BB	<sup>1</sup> / <sub>16</sub>	1,5 ± 0,20	0,65	15
512003BB	<sup>3</sup> / <sub>32</sub>	2,5 ± 0,20	1,0	13
512004BB	<sup>1</sup> / <sub>8</sub>	3,0 ± 0,20	1,3	12
512005BB	<sup>3</sup> / <sub>16</sub>	5,0 ± 0,20	2,3	11
512006BB	<sup>1</sup> / <sub>4</sub>	6,5 ± 0,20	3,0	10
512007BB	<sup>3</sup> / <sub>8</sub>	9,5 ± 0,30	4,5	7
512008BB	<sup>1</sup> / <sub>2</sub>	12,5 ± 0,30	6,0	6
512009BB	<sup>5</sup> / <sub>8</sub>	15,5 ± 0,40	7,5	5
512010BB	<sup>3</sup> / <sub>4</sub>	19,0 ± 0,50	9,0	5
512011BB	1	26,0 ± 0,50	12,5	4

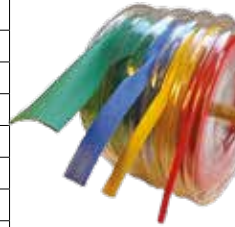


Other color part nr.
511...BB = grey
512...BB = black
513...BB = green/yellow
514...BB = blue
515...BB = clear
516...BB = white
517...BB = red
518...BB = yellow
519...BB = green
521...BB = brown
522...BB = orange*



\* Please see our EV Products section for stock in orange SW 2:1 shrink sleeve

Blister				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/blister
212001BL	$\frac{3}{64}$	1,1 ± 0,20	0,5	2
212002BL	$\frac{1}{16}$	1,5 ± 0,20	0,65	2
212003BL	$\frac{3}{32}$	2,5 ± 0,20	1,0	2
212004BL	$\frac{1}{8}$	3,0 ± 0,20	1,3	2
212005BL	$\frac{3}{16}$	5,0 ± 0,20	2,3	2
212006BL	$\frac{1}{4}$	6,5 ± 0,20	3,0	2
212007BL	$\frac{3}{8}$	9,5 ± 0,30	4,5	2
212008BL	$\frac{1}{2}$	12,5 ± 0,30	6,0	2
212009BL	$\frac{5}{8}$	15,5 ± 0,40	7,5	2
212020BL	$\frac{3}{4}$	19,0 ± 0,50	9,0	2



Other color part nr.
Not available in grey
212...BL = black
Not available in green/yellow
214...BL = blue
215...BL = clear
216...BL = white
217...BL = red
218...BL = yellow
219...BL = green
Not available in brown
Not available in orange

Pieces 1.22 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
512001BS	$\frac{3}{64}$	1,1 ± 0,20	0,5	200
512002BS	$\frac{1}{16}$	1,5 ± 0,20	0,65	200
512003BS	$\frac{3}{32}$	2,5 ± 0,20	1,0	200
512004BS	$\frac{1}{8}$	3,0 ± 0,20	1,3	150
512005BS	$\frac{3}{16}$	5,0 ± 0,20	2,3	100
512006BS	$\frac{1}{4}$	6,5 ± 0,20	3,0	50
512007BS	$\frac{3}{8}$	9,5 ± 0,30	4,5	50
512008BS	$\frac{1}{2}$	12,5 ± 0,30	6,0	30
512009BS	$\frac{5}{8}$	15,5 ± 0,40	7,5	30
512010BS	$\frac{3}{4}$	19,0 ± 0,50	9,0	30
512011BS	1	26,0 ± 0,50	12,5	20
512012BS	1 1/2	36,5 ± 1,00	17,5	10



Other color part nr.
Not available in grey
512...BS = black
513...BS = green/yellow
514...BS = blue
515...BS = clear
516...BS = white
517...BS = red
518...BS = yellow
519...BS = green
Not available in brown
522...BS = orange*

BUNDLING &amp; PROTECTION

Pieces 1.00 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
512001BM	$\frac{3}{64}$	1,1 ± 0,20	0,5	50
512002BM	$\frac{1}{16}$	1,5 ± 0,20	0,65	50
512003BM	$\frac{3}{32}$	2,5 ± 0,20	1,0	50
512004BM	$\frac{1}{8}$	3,0 ± 0,20	1,3	50
512005BM	$\frac{3}{16}$	5,0 ± 0,20	2,3	50
512006BM	$\frac{1}{4}$	6,5 ± 0,20	3,0	50
512007BM	$\frac{3}{8}$	9,5 ± 0,30	4,5	25
512008BM	$\frac{1}{2}$	12,5 ± 0,30	6,0	25
512009BM	$\frac{5}{8}$	15,5 ± 0,40	7,5	25
512010BM	$\frac{3}{4}$	19,0 ± 0,50	9,0	25
512011BM	1	26,0 ± 0,50	12,5	25
512012BM	1 1/2	36,5 ± 1,00	17,5	10
512013BM	2	≥ 50,0	25,0	10



Other color part nr.
511...BM = grey
512...BM = black
513...BM = green/yellow
514...BM = blue
515...BM = clear
516...BM = white
517...BM = red
518...BM = yellow
519...BM = green
521...BM = brown
Not available in orange



\* Please see our EV Products section for stock in orange SW 2:1 shrink sleeve



Pieces 10 cm				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
512001BZ	$\frac{3}{64}$	1,1 ± 0,20	0,5	10
512002BZ	$\frac{1}{16}$	1,5 ± 0,20	0,65	10
512003BZ	$\frac{3}{32}$	2,5 ± 0,20	1,0	10
512004BZ	$\frac{1}{8}$	3,0 ± 0,20	1,3	10
512005BZ	$\frac{3}{16}$	5,0 ± 0,20	2,3	10
512006BZ	$\frac{1}{4}$	6,5 ± 0,20	3,0	10
512007BZ	$\frac{3}{8}$	9,5 ± 0,30	4,5	10
512008BZ	$\frac{1}{2}$	12,5 ± 0,30	6,0	10
512009BZ	$\frac{5}{8}$	15,5 ± 0,40	7,5	10
512010BZ	$\frac{3}{4}$	19,0 ± 0,50	9,0	10
512011BZ	1	26,0 ± 0,50	12,5	10
512012BZ	1 $\frac{1}{2}$	36,5 ± 1,00	17,5	10



**Other color part nr.**

Only available in black

Pieces 10 cm				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
512001BP	$\frac{3}{64}$	1,1 ± 0,20	0,5	100
512002BP	$\frac{1}{16}$	1,5 ± 0,20	0,65	100
512003BP	$\frac{3}{32}$	2,5 ± 0,20	1,0	100
512004BP	$\frac{1}{8}$	3,0 ± 0,20	1,3	100
512005BP	$\frac{3}{16}$	5,0 ± 0,20	2,3	100
512006BP	$\frac{1}{4}$	6,5 ± 0,20	3,0	100
512007BP	$\frac{3}{8}$	9,5 ± 0,30	4,5	100
512008BP	$\frac{1}{2}$	12,5 ± 0,30	6,0	100
512009BP	$\frac{5}{8}$	15,5 ± 0,40	7,5	100
512010BP	$\frac{3}{4}$	19,0 ± 0,50	9,0	100
512011BP	1	26,0 ± 0,50	12,5	100
512012BP	1 $\frac{1}{2}$	36,5 ± 1,00	17,5	100



**Other color part nr.**

Not available in grey

512...BP = black

Not available in green/yellow

514...BP = blue

515...BP = clear

516...BP = white

517...BP = red

518...BP = yellow

519...BP = green

Not available in brown

Not available in orange

Coil (Ø 115 mm)				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/coil
512003Q	$\frac{3}{32}$	2,5 ± 0,20	1,0	10
512004Q	$\frac{1}{8}$	3,0 ± 0,20	1,3	10
512005Q	$\frac{3}{16}$	5,0 ± 0,20	2,3	10
512006Q	$\frac{1}{4}$	6,5 ± 0,20	3,0	10
512007Q	$\frac{3}{8}$	9,5 ± 0,30	4,5	10
512008Q	$\frac{1}{2}$	12,5 ± 0,30	6,0	10
512009Q	$\frac{5}{8}$	15,5 ± 0,40	7,5	10
512010Q	$\frac{3}{4}$	19,0 ± 0,50	9,0	10
512011Q	1	26,0 ± 0,50	12,5	10



**Other color part nr.**

Only available in black

Coil (Ø 115 mm)				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/coil
512003Y	$\frac{3}{32}$	2,5 ± 0,20	1,0	25
512004Y	$\frac{1}{8}$	3,0 ± 0,20	1,3	25
512005Y	$\frac{3}{16}$	5,0 ± 0,20	2,3	25
512006Y	$\frac{1}{4}$	6,5 ± 0,20	3,0	25
512007Y	$\frac{3}{8}$	9,5 ± 0,30	4,5	25
512008Y	$\frac{1}{2}$	12,5 ± 0,30	6,0	25
512009Y	$\frac{5}{8}$	15,5 ± 0,40	7,5	25
512010Y	$\frac{3}{4}$	19,0 ± 0,50	9,0	25
512011Y	1	26,0 ± 0,50	12,5	25

Other color part nr.

Only available in black



### Heat shrink sleeve SW 2:1 assortments

#### ADSWC-005

590 pcs (length 50, 100, 150 and 200 mm) - 10 compartments

Single wall 2:1 in black, red, white, blue and yellow

5 x 20 pcs 1,2 > 0,6 mm  
 5 x 20 pcs 1,6 > 0,8 mm  
 5 x 20 pcs 2,4 > 1,2 mm  
 5 x 20 pcs 3,2 > 1,6 mm  
 5 x 10 pcs 4,8 > 2,4 mm  
 5 x 10 pcs 6,4 > 3,2 mm  
 5 x 6 pcs 9,5 > 4,8 mm  
 5 x 5 pcs 12,7 > 6,4 mm  
 5 x 4 pcs 19,1 > 8,5 mm  
 5 x 3 pcs 25,4 > 12,7 mm



#### ADSWB-001

170 pcs (length 100 mm) - 6 compartments

Single wall 2:1 in black

60 pcs 1,2 > 0,6 mm  
 40 pcs 2,4 > 1,2 mm  
 30 pcs 3,2 > 1,6 mm  
 20 pcs 4,8 > 2,4 mm  
 10 pcs 6,4 > 3,2 mm  
 10 pcs 9,5 > 4,8 mm

Box with euro hangtab



#### SSB DISPLAY001

Blue metal display with scissors on chain  
 With 6 boxes of 2:1 single wall heat shrink sleeve

1 x 512004BB  
 1 x 512005BB  
 1 x 512006BB  
 1 x 512007BB  
 1 x 512008BB  
 1 x 512010BB

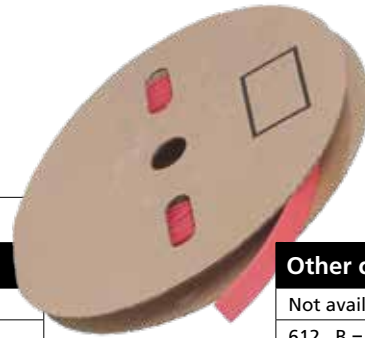


- Display can be used both hanging and standing
- Available in blue (standard) or the RAL-color of your choice. Please contact our Sales department for more information

## Heat shrink sleeve - Single wall 3:1



- Shrink ratio: 3:1
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Dielectric strength:  $\geq 25$  kV/mm
- Flammability: VW - 1



Reel				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/reel
612001B	1/16	1,5	0,5	200
612002B	1/8	3,0	1,0	200
612003B	3/16	4,5	1,5	100
612004B	1/4	6,0	2,0	100
612005B	3/8	9,0	3,0	100
612006B	1/2	12,0	4,0	100
612007B	5/8	15,0	5,0	100
612008B	3/4	18,0	6,0	100
612009B	1	24,0	8,0	50
612010B	1 1/4	30,0	10,0	50
612011B	1 1/2	39,0	13,0	50

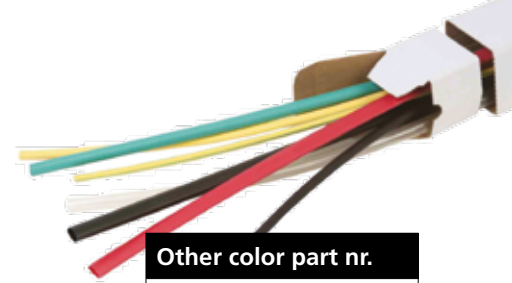
Other color part nr.
Not available in grey
612...B = black
613...B = green/yellow
614...B = blue
615...B = clear
616...B = white
617...B = red
Not available in yellow
Not available in green
Not available in brown
Not available in orange

BUNDLING & PROTECTION

Box				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/box
612001BB	1/16	1,5	0,5	15
612002BB	1/8	3,0	1,0	12
612003BB	3/16	4,5	1,5	11
612004BB	1/4	6,0	2,0	10
612005BB	3/8	9,0	3,0	7
612006BB	1/2	12,0	4,0	6
612007BB	5/8	15,0	5,0	5
612008BB	3/4	18,0	6,0	5
612009BB	1	24,0	8,0	4



Other color part nr.
Only available in black


**Other color part nr.**

Not available in grey
612...BS = black
Not available in green/yellow
614...BS = blue
615...BS = clear
616...BS = white
617...BS = red
618...BS = yellow
619...BS = green
Not available in brown
Not available in orange

**BUNDLING &  
PROTECTION**

Pieces 1.22 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
612001BS	1/16	1,5	0,5	200
612002BS	1/8	3,0	1,0	150
612003BS	3/16	4,5	1,5	100
612004BS	1/4	6,0	2,0	50
612005BS	3/8	9,0	3,0	50
612006BS	1/2	12,0	4,0	30
612007BS	5/8	15,0	5,0	30
612008BS	3/4	18,0	6,0	30
612009BS	1	24,0	8,0	20
612010BS	1 1/4	30,0	10,0	20
612011BS	1 1/2	39,0	13,0	10

Pieces 1.00 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
612001BM	1/16	1,5	0,5	50
612002BM	1/8	3,0	1,0	50
612003BM	3/16	4,5	1,5	50
612004BM	1/4	6,0	2,0	50
612005BM	3/8	9,0	3,0	25
612006BM	1/2	12,0	4,0	25
612007BM	5/8	15,0	5,0	25
612008BM	3/4	18,0	6,0	25
612009BM	1	24,0	8,0	10
612010BM	1 1/4	30,0	10,0	10
612011BM	1 1/2	39,0	13,0	10

**Other color part nr.**

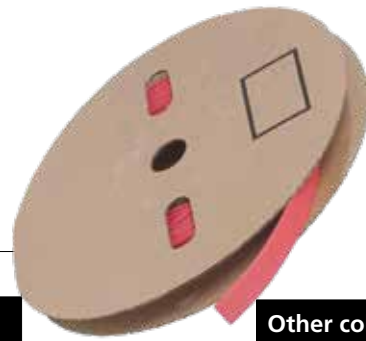
Only available in black



## Heat shrink sleeve - Dual wall 3:1



- Shrink ratio: 3:1 with hot melt adhesive
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Dielectric strength:  $\geq 25$  kV/mm
- Flammability: VW - 1

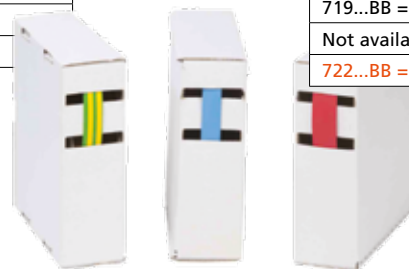


Reel				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/reel
712001B	1/8	3,2	1,0	200
712002B	3/16	4,8	1,6	100
712003B	1/4	6,4	2,1	100
712004B	5/16	7,9	2,6	100
712005B	3/8	9,5	3,2	50
712006B	1/2	12,7	4,2	25
712007B	5/8	15,4	5,1	25
712008B	3/4	19,1	6,4	25
712009B	1	25,4	8,4	25
712010B	1 1/4	30,0	10,0	25
712011B	1 1/2	39,0	13,0	25
712012B	2	50,0	16,0	25
712013B	2 1/2	64,0	21,3	25

Other color part nr.
Not available in grey
712...B = black
Not available in green/yellow
714...B = blue
715...B = clear
716...B = white
717...B = red
718...B = yellow
719...B = green
Not available in brown
722...B = orange*

Box				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/box
712001BB	1/8	3,2	1,0	5,0
712002BB	3/16	4,8	1,6	4,0
712003BB	1/4	6,4	2,1	3,5
712004BB	5/16	7,9	2,6	3,0
712005BB	3/8	9,5	3,2	3,0
712006BB	1/2	12,7	4,2	2,5
712007BB	5/8	15,4	5,1	2,5
712008BB	3/4	19,1	6,4	2,0
712009BB	1	25,4	8,4	1,5

Other color part nr.
Not available in grey
712...BB = black
Not available in green/yellow
714...BB = blue
715...BB = clear
716...BB = white
717...BB = red
718...BB = yellow
719...BB = green
Not available in brown
722...BB = orange*



\* Please see our EV Products section for stock in orange DW 3:1 shrink sleeve



## Pieces 1.22 m

Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
712001BS	1/8	3,2	1,0	100
712002BS	3/16	4,8	1,6	60
712003BS	1/4	6,4	2,1	40
712004BS	5/16	7,9	2,6	30
712005BS	3/8	9,5	3,2	20
712006BS	1/2	12,7	4,2	15
712007BS	5/8	15,4	5,1	15
712008BS	3/4	19,1	6,4	10
712009BS	1	25,4	8,4	10
712010BS	1¼	30,0	10,0	10
712011BS	1½	39,0	13,0	10
712012BS	2	50,0	16,0	10
712013BS	2½	64,0	21,3	10
712014BS	3	75,0	25,0	10
712015BS	4	100,0	34,0	10
712016BS	5	126,0	42,0	10



## Other color part nr.

Not available in grey
712...BS = black
Not available in green/yellow
714...BS = blue
715...BS = clear
716...BS = white
717...BS = red
718...BS = yellow
719...BS = green
Not available in brown
722...BS = orange*

## Pieces 10 cm

Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
712001BZ	1/8	3,2	1,0	10
712002BZ	3/16	4,8	1,6	10
712003BZ	1/4	6,4	2,1	10
712004BZ	5/16	7,9	2,6	10
712005BZ	3/8	9,5	3,2	10
712006BZ	1/2	12,7	4,2	10
712007BZ	5/8	15,4	5,1	10
712008BZ	3/4	19,1	6,4	10
712009BZ	1	25,4	8,4	10

## Other color part nr.

Only available in black



BUNDLING &amp; PROTECTION

## Pieces 10 cm

Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
712001BP	1/8	3,2	1,0	50
712002BP	3/16	4,8	1,6	50
712003BP	1/4	6,4	2,1	50
712004BP	5/16	7,9	2,6	50
712005BP	3/8	9,5	3,2	50
712006BP	1/2	12,7	4,2	50
712007BP	5/8	15,4	5,1	25
712008BP	3/4	19,1	6,4	25
712009BP	1	25,4	8,4	25



## Other color part nr.

Not available in grey
712...BP = black
Not available in green/yellow
714...BP = blue
715...BP = clear
716...BP = white
717...BP = red
718...BP = yellow
719...BP = green
Not available in brown
Not available in orange



\* Please see our EV Products section for stock in orange DW 3:1 shrink sleeve

## Heat shrink sleeve DW 3:1 assortments

### ADDWC-002

87 pcs (length 100 mm) - 6 compartments



Dual wall 3:1 with adhesive liner in black, red and clear

- 3 x 10 pcs 2,4 > 0,8 mm
- 3 x 7 pcs 3,2 > 1,0 mm
- 3 x 5 pcs 4,8 > 1,6 mm
- 3 x 4 pcs 6,4 > 2,0 mm
- 3 x 2 pcs 9,5 > 3,0 mm
- 3 x 1 pcs 12,7 > 4,0 mm

Box with euro hangtab

### SSB DISPLAY002

Blue metal display with scissors on chain  
With 6 boxes of 3:1 dual wall heat shrink sleeve



- 1 x 712001BB
- 1 x 712003BB
- 1 x 712005BB
- 1 x 712006BB
- 1 x 712008BB
- 1 x 712009BB

- Display can be used both hanging and standing
- Available in blue (standard) or the RAL-color of your choice. Please contact our Sales department for more information

### ADDWB-002

87 pcs (length 100 mm) - 6 compartments



Dual wall 3:1 with adhesive liner in black

- 30 pcs 2,4 > 0,8 mm
- 21 pcs 3,2 > 1,0 mm
- 15 pcs 4,8 > 1,6 mm
- 12 pcs 6,4 > 2,0 mm
- 6 pcs 9,5 > 3,0 mm
- 3 pcs 12,7 > 4,0 mm

Box with euro hangtab

## Heat shrink sleeve - Dual wall 3:1 medium wall thickness



- Shrink ratio: 3:1 with EVA adhesive
- RoHS compliant, halogen free
- Waterproof, moisture protection
- Abrasion and impact resistance
- Dielectric strength:  $\geq 20$  kV/mm

### Pieces 1.22 m - medium wall thickness

Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
912003BS	5/16	8,0	2,0	10
912004BS	1/2	12,0	3,0	10
912005BS	5/8	16,0	5,0	10
912006BS	7/8	22,0	6,0	10
912007BS	1 1/8	28,0	6,0	10
912008BS	1 1/4	33,0	8,0	10
912009BS	1 1/2	40,0	12,0	5
912010BS	2 3/16	55,0	16,0	5
912011BS	2 1/2	65,0	19,0	5
912012BS	3	75,0	22,0	5
912013BS	3 3/4	95,0	25,0	5
912014BS	4 1/2	115,0	34,0	5
912015BS	5 1/2	140,0	42,0	5
912115BS	6 1/4	160,0	50,0	5
912016BS	7 1/8	180,0	58,0	5



Other color part nr.

Only available in black

## Heat shrink sleeve - Dual wall 4:1



- Shrink ratio: 4:1 with hot melt adhesive
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Dielectric strength: > 25 kV/mm
- Flammability: VW - 1



Other color part nr.

Only available in black

Reel				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/reel
812001B	3/16	4,0	1,0	200
812002B	1/4	6,0	1,5	100
812003B	5/16	8,0	2,0	100
812004B	1/2	12,0	3,0	25
812005B	5/8	16,0	4,0	25
812006B	3/4	20,0	5,0	25
812007B	1	24,0	6,0	25
812008B	1 1/4	32,0	8,0	25
812009B	1 1/2	40,0	10,0	25
812010B	2 1/16	52,0	13,0	25

BUNDLING & PROTECTION

Box				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/box
812001BB	3/16	4,0	1,0	5,0
812002BB	1/4	6,0	1,5	3,5
812003BB	5/16	8,0	2,0	3,0
812004BB	1/2	12,0	3,0	2,5
812005BB	5/8	16,0	4,0	2,5
812006BB	3/4	20,0	5,0	2,0
812007BB	1	24,0	6,0	1,5



Other color part nr.

Only available in black

Pieces 1.22 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
812001BS	3/16	4,0	1,0	60
812002BS	1/4	6,0	1,5	40
812003BS	5/16	8,0	2,0	30
812004BS	1/2	12,0	3,0	20
812005BS	5/8	16,0	4,0	15
812006BS	3/4	20,0	5,0	10
812007BS	1	24,0	6,0	10
812008BS	1 1/4	32,0	8,0	5
812009BS	1 1/2	40,0	10,0	5
812010BS	2 1/16	52,0	13,0	5

Other color part nr.

Not available in grey  
712...BS = black  
Not available in green/yellow  
714...BS = blue  
715...BS = clear  
716...BS = white  
717...BS = red  
718...BS = yellow  
719...BS = green  
Not available in brown  
Not available in orange



Pieces 1.00 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
812001BM	$\frac{3}{16}$	4,0	1,0	50
812002BM	$\frac{1}{4}$	6,0	1,5	50
812003BM	$\frac{5}{16}$	8,0	2,0	50
812004BM	$\frac{1}{2}$	12,0	3,0	50
812005BM	$\frac{5}{8}$	16,0	4,0	25
812006BM	$\frac{3}{4}$	20,0	5,0	25
812007BM	1	24,0	6,0	25
812008BM	$1\frac{1}{4}$	32,0	8,0	25



**Other color part nr.**

Only available in black

### Empty display for heat shrink sleeve

- Display can be used both hanging and standing
- Available in blue (standard) or the RAL-color of your choice. Please contact our Sales department for more information

1506073

Blue metal display with scissors on chain, for 6 boxes of heat shrink sleeve (not included)



### Tools for heat shrink sleeve



**MJ-300**  
Heat gun\*  
with micro-flame



**90-51773**  
Universal lighter gas (butane)  
200 ml



**MJ-600**  
Flameless heat gun\*

\* Heat guns are supplied with **empty** lighter

## Cable ties - 1000 Pcs/bag



- Flammability: UL 94 V-2
- Features: Not resistant to mineral acids and oxidizing agents  
Designed for indoor applications  
Rounded edges to avoid cable damage
- Stock: Natural and black



Part nr.	Color	L mm	W mm	Bundle Ø mm	Tensile str. kgf
KB8024B	Black	75	2,5	2 ~ 16	11
KB8024N	Natural	75	2,5	2 ~ 16	11
KB10025B	Black	100	2,5	2 ~ 24	11
KB10025N	Natural	100	2,5	2 ~ 24	11
KB14025B	Black	135	2,5	2 ~ 35	11
KB14025N	Natural	135	2,5	2 ~ 35	11
KB16025B	Black	160	2,5	2 ~ 42	11
KB16025N	Natural	160	2,5	2 ~ 42	11
KB20025B	Black	200	2,5	2 ~ 55	11
KB20025N	Natural	200	2,5	2 ~ 55	11
KB14036B	Black	140	3,5	3 ~ 36	20
KB14036N	Natural	140	3,5	3 ~ 36	20

Part nr.	Color	L mm	W mm	Bundle Ø mm	Tensile str. kgf
KB20036B	Black	200	3,5	3 ~ 55	20
KB20036N	Natural	200	3,5	3 ~ 55	20
KB12048B	Black	140	4,5	3 ~ 33	28
KB12048N	Natural	140	4,5	3 ~ 33	28
KB16048B	Black	160	4,5	3 ~ 38	28
KB16048N	Natural	160	4,5	3 ~ 38	28
KB18848B	Black	180	4,5	3 ~ 45	28
KB18848N	Natural	180	4,5	3 ~ 45	28
KB20048B	Black	200	4,5	3 ~ 51	28
KB20048N	Natural	200	4,5	3 ~ 51	28

BUNDLING & PROTECTION





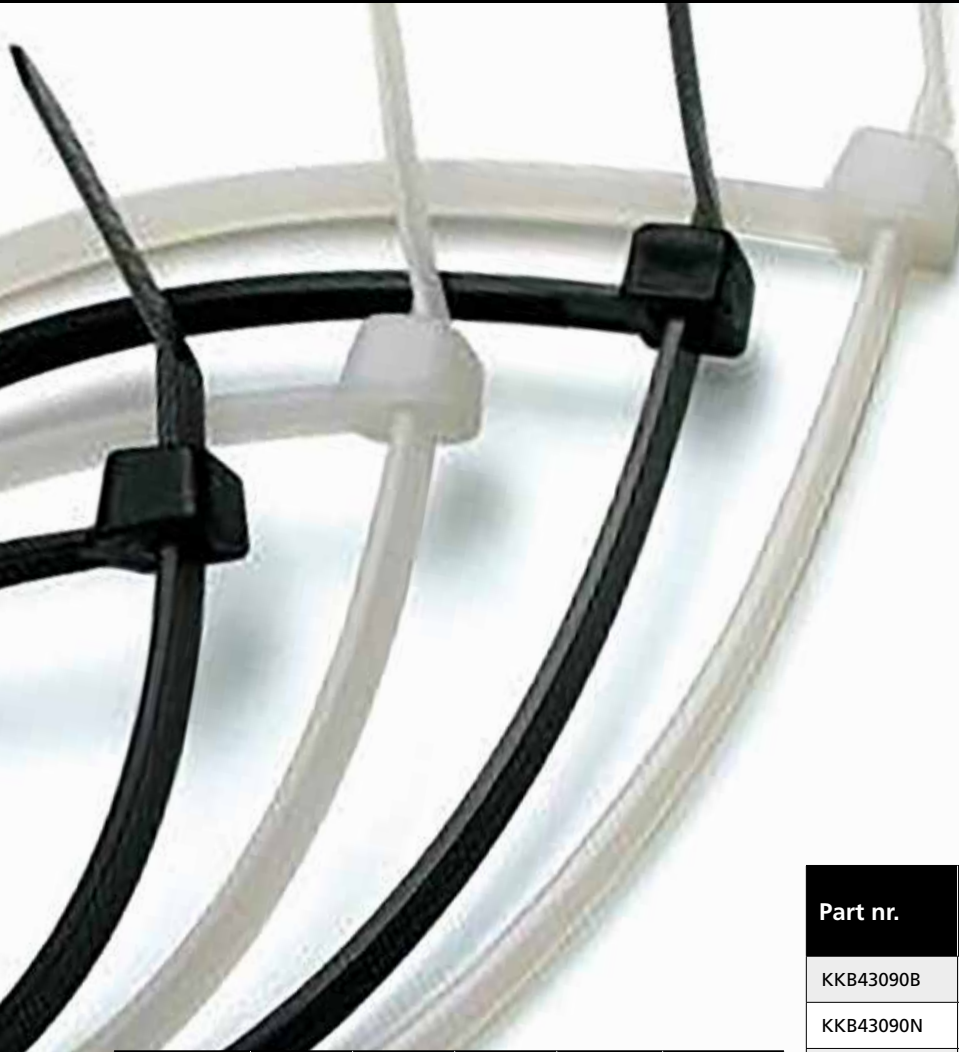
### Cable ties - 100 Pcs/bag



- Material: PA66
- Flammability: UL 94 V-2
- Features: Not resistant to mineral acids and oxidizing agents  
Designed for indoor applications  
Rounded edges to avoid cable damage
- Stock: Black and natural

Part nr.	Color	L mm	W mm	Bundle Ø mm	Tensile str. kgf
KKB8024B	Black	75	2,5	2 ~ 16	11
KKB8024N	Natural	75	2,5	2 ~ 16	11
KKB10025B	Black	100	2,5	2 ~ 24	11
KKB10025N	Natural	100	2,5	2 ~ 24	11
KKB14025B	Black	135	2,5	2 ~ 35	11
KKB14025N	Natural	135	2,5	2 ~ 35	11
KKB16025B	Black	160	2,5	2 ~ 42	11
KKB16025N	Natural	160	2,5	2 ~ 42	11
KKB20025B	Black	200	2,5	2 ~ 55	11
KKB20025N	Natural	200	2,5	2 ~ 55	11
KKB14036B	Black	140	3,5	3 ~ 36	20
KKB14036N	Natural	140	3,5	3 ~ 36	20
KKB20036B	Black	200	3,5	3 ~ 55	20
KKB20036N	Natural	200	3,5	3 ~ 55	20
KKB29236B	Black	280	3,5	3 ~ 80	20
KKB29236N	Natural	280	3,5	3 ~ 80	20
KKB37036B	Black	360	3,5	5 ~ 103	20
KKB37036N	Natural	360	3,5	5 ~ 103	20
KKB12048B	Black	140	4,5	3 ~ 33	28
KKB12048N	Natural	140	4,5	3 ~ 33	28
KKB16048B	Black	160	4,5	3 ~ 38	28
KKB16048N	Natural	160	4,5	3 ~ 38	28

Part nr.	Color	L mm	W mm	Bundle Ø mm	Tensile str. kgf
KKB18848B	Black	180	4,5	3 ~ 45	28
KKB18848N	Natural	180	4,5	3 ~ 45	28
KKB20048B	Black	200	4,5	3 ~ 51	28
KKB20048N	Natural	200	4,5	3 ~ 51	28
KKB25048B	Black	250	4,5	5 ~ 68	28
KKB25048N	Natural	250	4,5	5 ~ 68	28
KKB28048B	Black	280	4,5	5 ~ 76	28
KKB28048N	Natural	280	4,5	5 ~ 76	28
KKB30048B	Black	300	4,5	5 ~ 80	28
KKB30048N	Natural	300	4,5	5 ~ 80	28
KKB36848B	Black	360	4,5	5 ~ 101	28
KKB36848N	Natural	360	4,5	5 ~ 101	28
KKB39048B	Black	380	4,5	5 ~ 110	28
KKB39048N	Natural	380	4,5	5 ~ 110	28
KKB43048B	Black	430	4,5	5 ~ 123	28
KKB43048N	Natural	430	4,5	5 ~ 123	28



Part nr.	Color	L mm	W mm	Bundle Ø mm	Tensile str. kgf
KKB15076B	Black	180	7,5	5 ~ 44	65
KKB15076N	Natural	180	7,5	5 ~ 44	65
KKB20076B	Black	200	7,5	5 ~ 48	65
KKB20076N	Natural	200	7,5	5 ~ 48	65
KKB25076B	Black	240	7,5	5 ~ 62	65
KKB25076N	Natural	240	7,5	5 ~ 62	65
KKB29276B	Black	280	7,5	5 ~ 76	65
KKB29276N	Natural	280	7,5	5 ~ 76	65
KKB36876B	Black	360	7,5	5 ~ 101	65
KKB36876N	Natural	360	7,5	5 ~ 101	65
KKB45076B	Black	450	7,5	20 ~ 130	65
KKB45076N	Natural	450	7,5	20 ~ 130	65
KKB54076B	Black	540	7,5	20 ~ 160	65
KKB54076N	Natural	540	7,5	20 ~ 160	65
KKB75076B	Black	750	7,5	32 ~ 222	65
KKB75076N	Natural	750	7,5	32 ~ 222	65

Part nr.	Color	L mm	W mm	Bundle Ø mm	Tensile str. kgf
KKB43090B	Black	430	9,0	20 ~ 118	80
KKB43090N	Natural	430	9,0	20 ~ 118	80
KKB53090B	Black	550	9,0	20 ~ 160	80
KKB53090N	Natural	550	9,0	20 ~ 160	80
KKB77590B	Black	780	9,0	20 ~ 235	80
KKB77590N	Natural	780	9,0	20 ~ 235	80
KKB92090B	Black	920	9,0	40 ~ 280	80
KKB92090N	Natural	920	9,0	40 ~ 280	80
KKB122090B	Black	1220	9,0	40 ~ 375	80
KKB122090N	Natural	1220	9,0	40 ~ 375	80
KKB153090B	Black	1330	9,0	40 ~ 409	80
KKB153090N	Natural	1330	9,0	40 ~ 409	80
KKB230130B	Black	250	12,5	10 ~ 62	120
KKB230130N	Natural	250	12,5	10 ~ 62	120
KKB480130B	Black	500	12,5	10 ~ 140	120
KKB480130N	Natural	500	12,5	10 ~ 140	120
KKB730130B	Black	750	12,5	40 ~ 222	120
KKB730130N	Natural	750	12,5	40 ~ 222	120
KKB1030130B	Black	1000	12,5	40 ~ 300	120
KKB1030130N	Natural	1000	12,5	40 ~ 300	120



Please see our EV Products section for orange cable ties (100 pcs/bag)

1503043

Blue metal display for 5 sizes of cable ties (not included)



### Nylon cable ties assortments

- Displays can be used both hanging and standing
- Available in blue (standard) or the RAL-color of your choice. Please contact our Sales department for more information

**KKB DISPLAY**  
1000 pcs

Blue metal display 1503043 with 5 sizes of nylon cable ties:

- 200 x KKB10025B
- 200 x KKB14036B
- 200 x KKB20048B
- 200 x KKB30048B
- 200 x KKB36848B



**LY-600A**  
For tightening and cutting nylon cable ties 2,4 - 4,8 mm width  
Thickness up to 1,45 mm  
Adjustable



**LY-600T**  
For tightening and cutting nylon cable ties 2,2 - 4,8 mm width  
Thickness up to 1,6 mm  
Adjustable

### Tools for nylon cable ties



**LY-600L**  
For tightening and cutting nylon cable ties up to 13 mm width  
Thickness up to 1,5 mm  
Adjustable

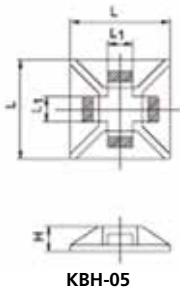
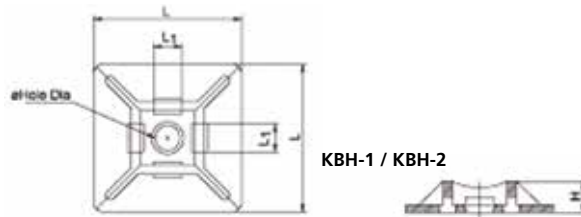


**KBT-5A**  
For tightening and cutting nylon cable ties up to 12 mm width  
Thickness up to 2,3 mm  
With safe stop

## Adhesive tie mounts



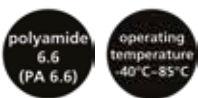
- Nylon 6.6 with quality adhesive
- Available in black (UV resistant) and natural
- Cable ties can be inserted from any of the 4 ways: no need for orientation of the tie
- Flammability: UL 94 V-2



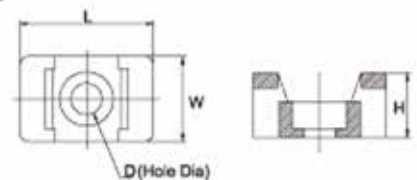
Part nr.	Color	Size	H	L1	Ø Hole	Packed
KBH-05Z	UV black	12,7 x 12,7	3,2	3,2	-	100
KBH-05	natural	12,7 x 12,7	3,2	3,2	-	100
KBH-1Z	UV black	19,0 x 19,0	4,4	4,0	3,5	100
KBH-1	natural	19,0 x 19,0	4,4	4,0	3,5	100
KBH-2Z	UV black	27,7 x 27,7	5,3	5,3	5,7	100
KBH-2	natural	27,7 x 27,7	5,3	5,3	5,7	100

BUNDLING & PROTECTION

## Saddle tie mounts



- Nylon 6.6 with quality adhesive
- Available in black (UV resistant)
- Flammability: UL 94 V-2



Part nr.	Color	Size	H	Ø Hole (D)	Tie width	Packed
KBH-3Z	UV black	14,9 x 9,5	7,2	3,7	4,8	100
KBH-4Z	UV black	14,9 x 9,5	7,2	4,5	4,8	100
KBH-5Z	UV black	21,9 x 15,9	9,7	4,5	7,6	100
KBH-6	natural	21,9 x 15,9	9,7	5,0	7,6	100
KBH-6Z	UV black	21,9 x 15,9	9,7	5,0	7,6	100

### Thomas & Betts cable ties



- Nylon (PA66) with stainless steel locking device
- Halogen and silicone free
- Available in black (UV resistant) and natural
- Operating temperature:
  - 60 °C ~ 85 °C (natural)
  - 60 °C ~ 105 °C (black)
- Flammability: UL 94 V-2
- Standards: UL E49405, GL, Lloyd's, BVQ



Part nr.	Color	L mm	W mm	Max. bundle mm	Min. Str. in kgs	Pcs/bag
TY-23 m	natural	92	2,40	16,00	8,1	1000
TY-23 mx	UV black	92	2,40	16,00	8,1	1000
TY-232 m	natural	203	2,40	50,00	8,1	1000
TY-232 mx	UV black	203	2,40	50,00	8,1	1000
TY-234 m	natural	356	2,40	102,00	8,1	1000
TY-234 mx	UV black	356	2,40	102,00	8,1	1000
TY-24 m	natural	140	3,60	29,00	18,0	1000
TY-24 mx	UV black	140	3,60	29,00	18,0	1000
TY-242 m	natural	208	3,60	50,00	18,0	1000
TY-242 mx	UV black	208	3,60	50,00	18,0	1000
TY-26 m	natural	284	3,60	76,00	18,0	1000
TY-26 mx	UV black	284	3,60	76,00	18,0	1000
TY-244 m	natural	368	3,60	103,00	18,0	1000
TY-244 mx	UV black	368	3,60	103,00	18,0	1000
TY-25 m	natural	186	4,80	45,00	22,5	1000
TY-25 mx	UV black	186	4,80	45,00	22,5	1000
TY-253 m	natural	290	4,80	78,00	22,5	1000
TY-253 mx	UV black	290	4,80	78,00	22,5	1000
TY-28 m	natural	361	4,80	102,00	22,5	1000
TY-28 mx	UV black	361	4,80	102,00	22,5	1000
TY-272 m	natural	223	6,90	50,00	54,4	500
TY-272 mx	UV black	223	6,90	50,00	54,4	500
TY-27 m	natural	340	6,90	90,00	54,4	500
TY-27 mx	UV black	340	6,90	90,00	54,4	500
TY-29 m	natural	771	6,90	229,00	54,4	500
TY-29 mx	UV black	771	6,90	229,00	54,4	500



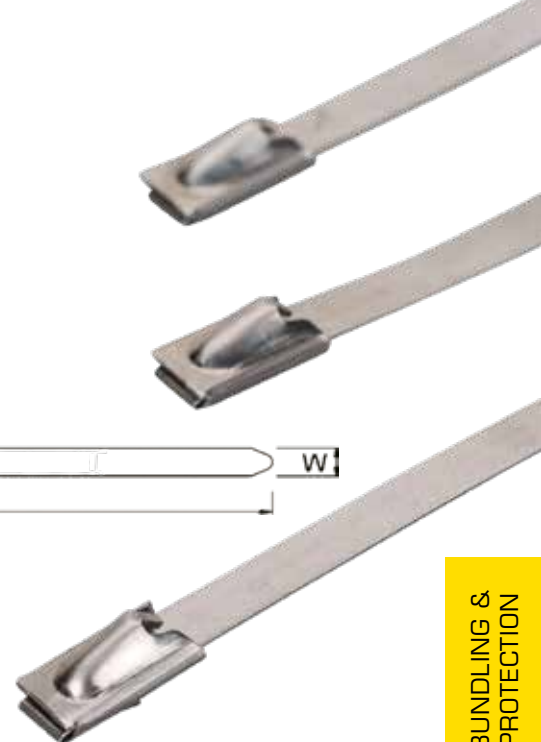
## Steel cable ties - 304 Stainless steel



- Speedy application
- Unflammable
- Flexible head design easily flexes around tubing or bundled wiring
- Excellent resistance to harsh corrosive and salt water environments, acids, chemicals and radiation exposure, temperature extremes, food processing and vibrating equipment
- Suitable for automotive, electronic, oil & gas, marine, construction, industry



Part nr.	L mm	W mm	Min. Str. in kgs	Pcs/bag
KKB13045RVS	129	4,45	46	100
KKB20045RVS	200	4,45	46	100
KKB30045RVS	300	4,45	46	100
KKB37045RVS	370	4,45	46	100
KKB52045RVS	520	4,45	46	100
KKB68045RVS	680	4,45	46	100
KKB84045RVS	840	4,45	46	100
KKB20080RVS	197	7,96	114	100
KKB30080RVS	300	7,96	114	100
KKB37080RVS	368	7,96	114	100
KKB50080RVS	500	7,96	114	100
KKB680080RVS	680	7,96	114	100
KKB84080RVS	840	7,96	114	100
KKB102080RVS	1.020	7,96	114	100



BUNDLING & PROTECTION

### Tools for stainless steel cable ties



**EPCT0017**  
 For tightening and cutting stainless steel cable ties 4,5 - 7,9 mm width  
 Thickness up to 0,25 mm  
 Adjustable for 4 levels of bundling pressure  
 With safety stop

Spare parts available (please see our Tools section on page 293)

**NOT SUITABLE FOR COATED CABLE TIES**



**EPCT0021**  
 For tightening and cutting stainless steel cable ties 4,6 - 12 mm width  
 Thickness up to 0,3 mm

### Spiral wrap



- Excellent electrical and physical properties
- Abrasion resistant
- Flexible and low smoke generating
- No dioxin in case of burning
- Halogen free and durable
- Flame resistant



Part nr.	Color	Bundle mm	Inner Ø mm	Outer Ø mm	Width	Mtrs/reel
SW-02	natural	1 - 5	1,3 ± 0,2	2,5 ± 0,2	3 ± 1	25
SW-02Z	black	1 - 5	1,3 ± 0,2	2,5 ± 0,2	3 ± 1	25
SW-03	natural	1,5 - 8	2,0 ± 0,2	3,0 ± 0,2	4 ± 1	25
SW-03Z	black	1,5 - 8	2,0 ± 0,2	3,0 ± 0,2	4 ± 1	25
SW-04	natural	4 - 10	2,8 ± 0,2	4,0 ± 0,2	5 ± 1	25
SW-04Z	black	4 - 10	2,8 ± 0,2	4,0 ± 0,2	5 ± 1	25
SW-06	natural	7 - 70	4,8 ± 0,2	6,0 ± 0,2	7 ± 1	25
SW-06Z	black	7 - 70	4,8 ± 0,2	6,0 ± 0,2	7 ± 1	25
SW-08	natural	8 - 80	6,7 ± 0,2	8,0 ± 0,2	11 ± 1	25
SW-08Z	black	8 - 80	6,7 ± 0,2	8,0 ± 0,2	11 ± 1	25
SW-09	natural	10 - 100	8,7 ± 0,2	10,0 ± 0,2	11 ± 1	25
SW-09Z	black	10 - 100	8,7 ± 0,2	10,0 ± 0,2	11 ± 1	25
SW-12	natural	12 - 120	10,6 ± 0,3	12,0 ± 0,3	13 ± 1	25
SW-12Z	black	12 - 120	10,6 ± 0,3	12,0 ± 0,3	13 ± 1	25
SW-14	natural	14 - 140	12,5 ± 0,3	14,0 ± 0,3	14 ± 1	25
SW-14Z	black	14 - 140	12,5 ± 0,3	14,0 ± 0,3	14 ± 1	25
SW-15	natural	16 - 160	14,5 ± 0,4	16,0 ± 0,3	15 ± 1	25
SW-15Z	black	16 - 160	14,5 ± 0,4	16,0 ± 0,3	15 ± 1	25
SW-18	natural	18 - 180	16,0 ± 0,4	18,0 ± 0,4	16 ± 1	25
SW-18Z	black	18 - 180	16,0 ± 0,4	18,0 ± 0,4	16 ± 1	25
SW-20	natural	20 - 200	17,8 ± 0,5	20,0 ± 0,5	17 ± 1	25
SW-20Z	black	20 - 200	17,8 ± 0,5	20,0 ± 0,5	17 ± 1	25
SW-22	natural	22 - 220	20,0 ± 0,5	22,0 ± 0,5	19 ± 1	25
SW-22Z	black	22 - 220	20,0 ± 0,5	22,0 ± 0,5	19 ± 1	25
SW-24	natural	24 - 240	23,0 ± 0,5	24,8 ± 0,5	20 ± 1	25
SW-24Z	black	24 - 240	23,0 ± 0,5	24,8 ± 0,5	20 ± 1	25
SW-25	natural	25 - 250	22,6 ± 0,5	25,0 ± 0,5	21 ± 1	25
SW-25Z	black	25 - 250	22,6 ± 0,5	25,0 ± 0,5	21 ± 1	25
SW-28	natural	28 - 280	25,4 ± 0,5	28,0 ± 0,5	22 ± 1,5	25
SW-28Z	black	28 - 280	25,4 ± 0,5	28,0 ± 0,5	22 ± 1,5	25
SW-30	natural	30 - 300	27,4 ± 0,8	30,0 ± 0,8	23 ± 1,5	25
SW-30Z	black	30 - 300	27,4 ± 0,8	30,0 ± 0,8	23 ± 1,5	25

BUNDLING & PROTECTION

## Expandable braided sleeve



- Polyester protection sleeve for application in wire harnesses, where tough and durable protection is required
- UV resistant and anti-abrasion
- Cutting tool: Hot knife
- Flammability: VW-1
- Certificate: UL, halogen free



Spool*			
Part nr.	Nom. size mm	Bundle range mm	Mtrs/spool
EBS-003BK	3	1 - 6	1000
EBS-003BK-20*	3	1 - 6	20
EBS-006BK	6	3 - 9	500
EBS-006BK-20*	6	3 - 9	20
EBS-008BK	8	5 - 16	350
EBS-010BK	10	7 - 19	350
EBS-010BK-15*	10	7 - 19	15
EBS-012BK	12	8 - 24	300
EBS-012BK-15*	12	8 - 24	15
EBS-015BK	15	10 - 27	250
EBS-015BK-10*	15	10 - 27	10
EBS-020BK	20	14 - 30	200
EBS-025BK	25	18 - 35	200
EBS-025BK-5*	25	18 - 35	5
EBS-030BK	30	20 - 50	150
EBS-040BK	40	30 - 60	100
EBS-040BK-5*	40	30 - 60	5
EBS-045BK	45	35 - 75	100
EBS-050BK	50	40 - 80	100
EBS-064BK	64	45 - 105	100
EBS-076BK	76	60 - 120	100



\* Packed without spool in plastic bag

BUNDLING & PROTECTION



Box*			
Part nr.	Nom. size mm	Bundle range mm	Mtrs/box
EBSB-003BK	3	1 - 6 mm	10
EBSB-006BK	6	3 - 9 mm	10
EBSB-008BK	8	5 - 16 mm	10
EBSB-010BK	10	7 - 19 mm	10
EBSB-012BK	12	8 - 24 mm	8
EBSB-015BK	15	10 - 27 mm	8
EBSB-020BK	20	14 - 30 mm	8
EBSB-025BK	25	18 - 35 mm	5
EBSB-030BK	30	20 - 50 mm	5
EBSB-040BK	40	30 - 60 mm	5
EBSB-045BK	45	35 - 75 mm	5
EBSB-050BK	50	40 - 80 mm	3

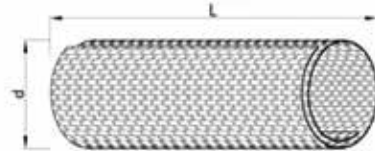


\* Please see our EV Products section for orange braided sleeve

## Non-expandable self-closing braided wrap



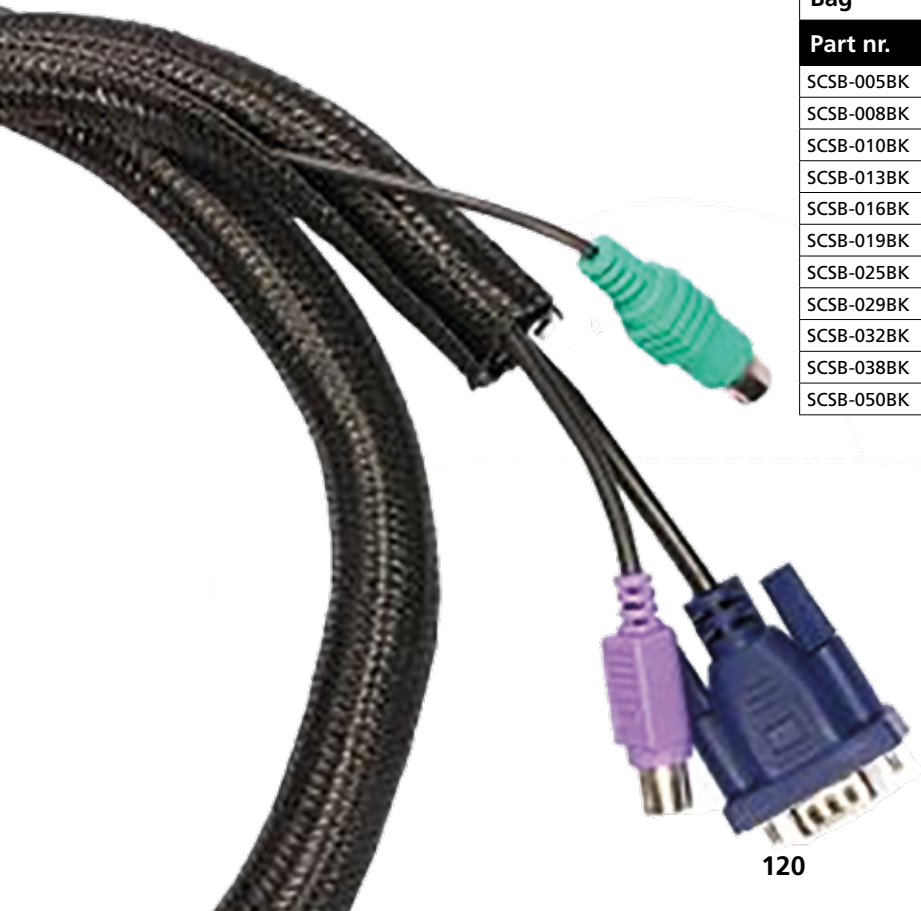
- Slit-open, polyester protection sleeve for use over wire harnesses, to provide a tough and durable protection
- Cutting tool: Hot knife
- Flammability: VW-1
- Certificate: UL, halogen free



Spool			
Part nr.	Inner Ø mm	Max. Ø bundle	Mtrs/spool
SCS-005BK	5	6	100
SCS-008BK	8	9	100
SCS-010BK	10	11	100
SCS-013BK	13	14	50
SCS-016BK	16	17	50
SCS-019BK	19	20	25
SCS-025BK	25	27	25
SCS-029BK	29	31	25
SCS-032BK	32	34	25
SCS-038BK	38	40	25
SCS-050BK	50	52	25



BUNDLING & PROTECTION



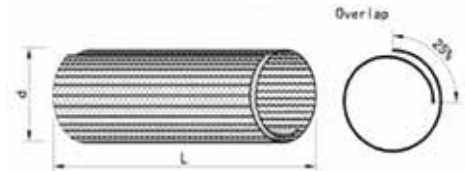
Bag			
Part nr.	Inner Ø mm	Max. Ø bundle	Mtrs/bag
SCSB-005BK	5	6	10
SCSB-008BK	8	9	10
SCSB-010BK	10	11	10
SCSB-013BK	13	14	10
SCSB-016BK	16	17	8
SCSB-019BK	19	20	8
SCSB-025BK	25	27	8
SCSB-029BK	29	31	5
SCSB-032BK	32	34	5
SCSB-038BK	38	40	5
SCSB-050BK	50	52	5



## Expandable self-closing braided wrap



- Slit-open, polyester protection sleeve for use over wire harnesses, to provide a tough and durable protection.
- Cutting tool: Hot knife
- Flammability: VW - 1
- Certificate: UL, halogen free



Spool			
Part nr.	Inner Ø mm	Max. Ø bundle	Mtrs/spool
SCW-003BK	3	4	200
SCW-006BK	5	6	200
SCW-009BK	10	11	100
SCW-013BK	13	14	50
SCW-016BK	16	17	50
SCW-019BK	19	20	25
SCW-025BK	25	26	25
SCW-032BK	32	33	25
SCW-038BK	38	40	25
SCW-050BK	50	52	25



Bag			
Part nr.	Inner Ø mm	Max. Ø bundle	Mtrs/bag
SCWB-003BK	3	4	10
SCWB-006BK	5	6	10
SCWB-009BK	10	11	10
SCWB-013BK	13	14	10
SCWB-016BK	16	17	8
SCWB-019BK	19	20	8
SCWB-025BK	25	26	8
SCWB-032BK	32	33	5
SCWB-038BK	38	40	5
SCWB-050BK	50	52	5





### Corrugated tube - PP



- Flexible and flame-retardant polypropylene tube
- Suitable for insulation use in automotive electronics, with excellent electrical and physical properties, including excellent acid fastness and corrosion resistance
- Great shape permanence to heat and enormous cold impact strength
- Bending stable
- Excellent chemical resistance

#### Closed\*

Part nr.	Nominal size	Inner Ø mm	Outer Ø mm	Mtrs/reel
CCT06-100	6	6 ± 0,3	9 ± 0,3	100
CCT07-100	7	7 ± 0,3	10 ± 0,3	100
CCT09-100	9	9 ± 0,3	13 ± 0,3	100
CCT10-100	10	10 ± 0,3	14 ± 0,3	100
CCT11-100	11	11 ± 0,3	15 ± 0,3	100
CCT12-100	12	12 ± 0,3	16 ± 0,3	100
CCT13-100	13	13 ± 0,3	17 ± 0,3	100
CCT16-050	16	16 ± 0,3	20 ± 0,3	50
CCT19-050	19	19 ± 0,3	23 ± 0,3	50
CCT22-025	22	22 ± 0,3	27 ± 0,3	25
CCT23-025	23	23 ± 0,3	28 ± 0,3	25
CCT25-025	25	25 ± 0,3	30 ± 0,3	25
CCT26-025	26	26 ± 0,3	31 ± 0,3	25
CCT28-025	28	28 ± 0,3	34 ± 0,3	25
CCT30-025	30	30 ± 0,3	36 ± 0,3	25
CCT32-025	32	32 ± 0,3	38 ± 0,3	25
CCT35-025	35	35 ± 0,3	40 ± 0,3	25
CCT40-025	40	40 ± 0,3	45 ± 0,3	25



#### Slit\*

Part nr.	Nominal size	Inner Ø mm	Outer Ø mm	Mtrs/reel
PCT04-500	4	4,8 ± 0,4	6,4 ± 0,4	500
PCT06-100	6	6,0 ± 0,3	9,9 ± 0,3	100
PCT07-100	7	7,0 ± 0,3	10,0 ± 0,3	100
PCT09-100	9	9,0 ± 0,3	13,0 ± 0,3	100
PCT10-100	10	10,0 ± 0,3	14,0 ± 0,3	100
PCT11-100	11	11,0 ± 0,3	15,0 ± 0,3	100
PCT12-100	12	12,0 ± 0,3	16,0 ± 0,3	100
PCT13-100	13	13,0 ± 0,3	17,0 ± 0,3	100
PCT16-050	16	16,0 ± 0,3	20,0 ± 0,3	50
PCT19-050	19	19,0 ± 0,3	23,0 ± 0,3	50
PCT22-025	22	22,0 ± 0,3	27,0 ± 0,3	25
PCT23-025	23	23,0 ± 0,3	28,0 ± 0,3	25
PCT25-025	25	25,0 ± 0,3	30,0 ± 0,3	25
PCT26-025	26	26,0 ± 0,3	31,0 ± 0,3	25
PCT28-025	28	28,0 ± 0,3	34,0 ± 0,3	25
PCT30-025	30	30,0 ± 0,3	36,0 ± 0,3	25
PCT32-025	32	32,0 ± 0,3	38,0 ± 0,3	25
PCT35-025	35	35,0 ± 0,3	40,0 ± 0,3	25
PCT40-025	40	40,0 ± 0,3	45,0 ± 0,3	25



\* Please see our EV Products section for orange corrugated tube

## Corrugated tube - PP/PA



- Flexible and flame-retardant PP/PA tube
- Suitable for insulation use in automotive electronics, with excellent electrical and physical properties, including excellent acid fastness and corrosion resistance
- Great heat resistance and super cold impact strength
- Bending stable
- Excellent chemical resistance

Closed					
Part nr.	Nominal size	Inner Ø mm	Outer Ø mm	Thickness mm	Mtrs/reel
CGT08-100	8	8,0 ± 0,3	12,0 ± 0,3	≥ 0,25	100
CGT10-100	10	10,0 ± 0,3	14,0 ± 0,3	≥ 0,25	100
CGT13-100	13	13,0 ± 0,3	17,0 ± 0,3	≥ 0,27	100
CGT14-100	14	14,0 ± 0,3	18,0 ± 0,3	≥ 0,27	100
CGT17-050	17	17,0 ± 0,3	21,0 ± 0,3	≥ 0,27	50
CGT22-050	22	22,0 ± 0,3	27,0 ± 0,3	≥ 0,30	50
CGT30-025	30	30,0 ± 0,3	36,0 ± 0,3	≥ 0,35	25



BUNDLING & PROTECTION

Dual wall					
Part nr.	Nominal size	Inner Ø mm	Outer Ø mm	Thickness mm	Mtrs/reel
2PCT09-025	9	8,9 ± 0,3	13,8 ± 0,3	≥ 0,25	25
2PCT13-025	13	12,8 ± 0,3	18,7 ± 0,3	≥ 0,25	25
2PCT22-025	22	20,0 ± 0,3	25,8 ± 0,3	≥ 0,25	25
2PCT25-025	25	24,8 ± 0,3	31,4 ± 0,3	≥ 0,25	25
2PCT32-025	32	31,4 ± 0,3	41,9 ± 0,3	≥ 0,25	25
2PCT44-025	44	43,3 ± 0,3	54,5 ± 0,3	≥ 0,25	25



### Insulation sleeving - On reel



- Non-shrinkable PVC insulation sleeving on reel
- Suitable for insulation use in automotive electronics, terminal lugs, small electrical parts, lead wires of motors and transformers
- Available in black and clear
- Flammability: UL 94 VW-1
- Certificate: UL 224, halogen free, ASTM D2671 / ASTM D638
- Oil resistance: Class 01 (all colors except clear)
- Max. V, rms: 600



Reel					
Part nr. black	Part nr. clear	Nominal size	Inner Ø mm	Wall thickness	Mtrs/reel
IS111	IS111CL	2,0	2,0 ± 0,15	0,50 ± 0,10	50
IS112	IS112CL	2,5	2,5 ± 0,15	0,50 ± 0,10	50
IS113	IS113CL	3,0	3,0 ± 0,15	0,50 ± 0,10	50
IS114	IS114CL	3,5	3,5 ± 0,15	0,50 ± 0,10	50
IS001	IS001CL	4,0	4,0 ± 0,15	0,50 ± 0,10	50
IS002	IS002CL	5,0	5,0 ± 0,15	0,50 ± 0,10	50
IS003	IS003CL	6,0	6,0 ± 0,15	0,50 ± 0,10	50
IS115	IS115CL	7,0	7,0 ± 0,15	0,50 ± 0,10	50
IS004	IS004CL	8,0	8,0 ± 0,15	0,50 ± 0,10	50
IS116	IS116CL	9,0	9,0 ± 0,15	0,50 ± 0,10	50
IS116-25		9,0	9,0 ± 0,15	0,50 ± 0,10	25
IS005	IS005CL	10,0	10,0 ± 0,15	0,50 ± 0,10	50
IS117	IS117CL	11,0	11,0 ± 0,15	0,50 ± 0,10	50
IS117-25		11,0	11,0 ± 0,15	0,50 ± 0,10	25
IS006	IS006CL	12,0	12,0 ± 0,15	0,50 ± 0,10	50
IS118	IS118CL	13,0	13,0 ± 0,15	0,50 ± 0,10	50
IS119	IS119CL	14,0	14,0 ± 0,15	0,50 ± 0,10	50
IS120	IS120CL	15,0	15,0 ± 0,15	0,50 ± 0,10	50
IS120-25		15,0	15,0 ± 0,15	0,50 ± 0,10	25
IS009	IS009CL	16,0	16,0 ± 0,15	0,70 ± 0,10	50
IS009-25		16,0	16,0 ± 0,15	0,70 ± 0,10	25
IS121	IS121CL	17,0	17,0 ± 0,15	0,70 ± 0,10	50
IS122	IS122CL	18,0	18,0 ± 0,15	0,75 ± 0,10	50
IS123	IS123CL	19,0	19,0 ± 0,15	0,75 ± 0,10	50
IS124	IS124CL	20,0	20,0 ± 0,15	0,75 ± 0,10	50
IS124-25		20,0	20,0 ± 0,15	0,75 ± 0,10	25
IS125	IS125CL	25,0	25,0 ± 0,15	0,75 ± 0,10	50
IS126	IS126CL	30,0	30,0 ± 0,15	1,00 ± 0,10	50
IS127	IS127CL	35,0	35,0 ± 0,15	1,00 ± 0,10	50
IS128	IS128CL	40,0	40,0 ± 0,15	1,00 ± 0,10	50

## PVC tape

- Material: Plasticized PVC with rubber based adhesive
- Thickness: 0,1 mm
- Tensile strength: > 5 kg/25 mm
- Elongation: > 100%



Standard packing units, 15 or 19 mm x 10 m x 0,1 mm

Part nr. 15 mm	Part nr. 19 mm	Color	Rolls/wrap
IST15BL	IST19BL	blue	10
IST15BR	IST19BR	brown	10
IST15YE	IST19YE	yellow	10
IST15GS	IST19GS	grey	10
IST15RD	IST19RD	red	10
IST15GR*	IST19GR	green	10
IST15WH	IST19WH	white	10
IST15BK*	IST19BK*	black	10
IST15GY	IST19GY	green/yellow	10



Sets of 5 pcs, 15 or 19 mm x 10 m x 0,1 mm

Part nr. 15 mm	Part nr. 19 mm	Color
IST15ASS01	IST19ASS01	1x black, 1x red, 1x green, 1x blue, 1x yellow
IST15ASS02BK*	IST19ASS02BK*	5x black
IST15ASS02WH	IST19ASS02WH	5x white

\* New stock, please check the new datasheet on our website

## Duct tape

- Tensile strength: 90N/25 mm
- Peel strength at 180 °C: 10N/25 mm
- Mesh: 35
- Width: 50 mm
- Length: 25 m per roll
- Thickness: 0,18 mm
- Operating temperature: -30 °C ~ 80 °C



Part nr.	Color	Rolls/wrap
DT355025E	white	10

## Self-fusing tape

- Material: PIB insulation rubber
- Width: 19 mm
- Tensile strength: 2,0-2,3 MPa
- Elongation at break: 700-900%



Part nr.	Liner	Color	Thickness	Length	Rolls/wrap
SFT001	PP synthetic release liner	black	0,75 mm	10,0 m	10
SFT002	PP synthetic release liner	black	0,75 mm	9,1 m	10
SFT003	PP synthetic release liner	black	0,5 mm	10,0 m	10

## Aluminum tape

- Adhesive strength: 9,0N/25mm
- Tensile strength: 100N/25mm
- Width: 50 mm
- Length: 50 m per roll
- Thickness: 0,05 mm
- Maximum temperature: 120 °C

Part nr.	Color	Rolls/wrap
AT725SE	aluminum	10

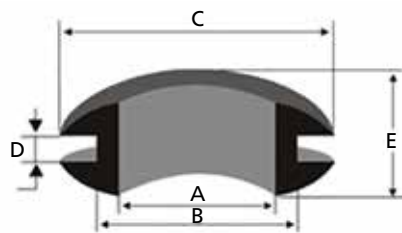


BUNDLING & PROTECTION



## Grommets

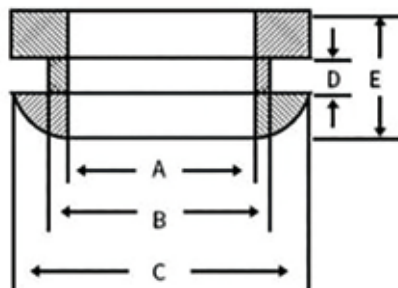
- Material: Rubber
- Secure wires and cables when passing through a panel hole
- Keeping them secure while protecting them from abrasions, cuts and snags
- Also protect wires and cables from liquid and dust ingress



### Open grommets

Part nr.	A Ø mm	B Ø mm	C Ø mm	D mm	E mm
HD190050P18	4	7	10	1,6	7
HD190050P316	5	8	12	1,6	7
HD190025P14	7	9	15	2	6,5
HD190025P516	8	10	16	2	6,6
HD190010P38	10	12	17	2	7,2
HD190010P12	10	14	18	1,6	9
HD190010P2564	12	15	22	2,5	10
HD190005P58	18	22	27	2,5	9
HD190005P1116	16	23	28	1,8	8

BUNDLING &  
PROTECTION



### Blanking grommets

Part nr.	A Ø mm	B Ø mm	C Ø mm	D mm	E mm
HD1700BLGP15	12	15	20	1,5	4,0
HD1700BLGP17	13	17	24	1,5	4,5
HD1700BLGP20	15	20	29	2,0	6,0
HD1700BLGP22	18	22	30	3,0	7,0
HD1700BLGP25	20	25	32	2,0	7,0
HD1700BLGP27	22	27	34	2,0	7,0
HD1700BLGP30	25	30	36	3,0	8,0
HD1700BLGP32	26	32	44	2,0	7,0
HD1700BLGP35	30	35	46	2,0	8,0
HD1700BLGP40	32	40	47	2,5	7,0

Grommets assortment kits

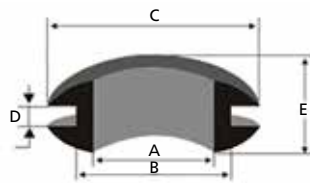


- 50 st 3,18 x 6,35 mm
- 50 st 4,76 x 7,94 mm
- 35 st 6,35 x 9,53 mm
- 25 st 7,94 x 11,11 mm
- 20 st 9,53 x 12,70 mm
- 10 st 12,70 x 15,88 mm
- 10 st 9,92 x 16,67 mm
- 5 st 15,88 x 22,23 mm
- 5 st 17,46 x 25,40 mm

Sizes A x B (see drawing)

**HD190210KC**

210 pcs - 9 compartments  
Open grommets



**HD170120BG**

120 pcs - 10 compartments  
Blanking grommets

- 20 x HD1700BLGP15
- 20 x HD1700BLGP17
- 15 x HD1700BLGP20
- 15 x HD1700BLGP22
- 10 x HD1700BLGP25
- 10 x HD1700BLGP27
- 10 x HD1700BLGP30
- 10 x HD1700BLGP32
- 5 x HD1700BLGP35
- 5 x HD1700BLGP40





Truck & Trailer Parts

Plugs & Sockets

Lighting

Battery

Hose Clamps

Screws, Bolts & Nuts

Wire & Cable

Bundling & Protection

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Braided sleeve .....	137
Battery cable .....	138
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## EV Products

Insulated Terminals

Non-insulated Terminals

Cord End Terminals

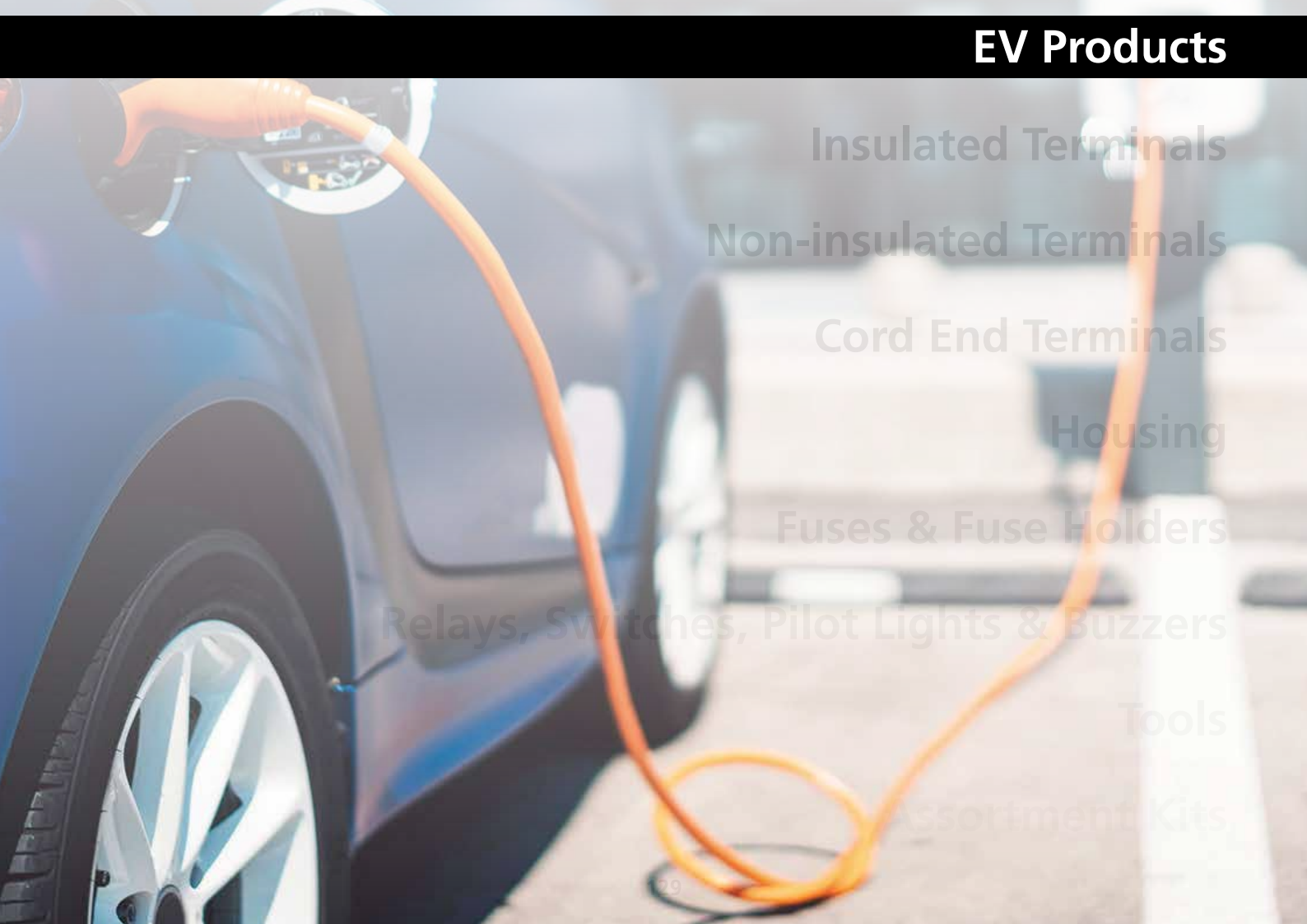
Housing

Fuses & Fuse Holders

Relays, Switches, Pilot Lights & Buzzers

Tools

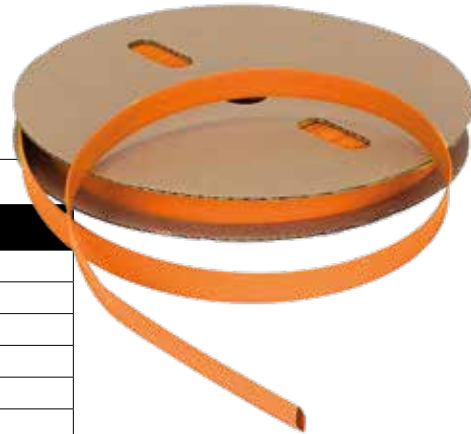
Assortment Kits



## Heat shrink sleeve - Single wall 2:1



- Shrink ratio: 2:1
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Flammability: VW-1



Reel				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/reel
522001B	<sup>3</sup> / <sub>64</sub>	1,1 ± 0,20	0,5	200
522002B	<sup>1</sup> / <sub>16</sub>	1,5 ± 0,20	0,65	200
522003B	<sup>3</sup> / <sub>32</sub>	2,5 ± 0,20	1,0	200
522004B	<sup>1</sup> / <sub>8</sub>	3,0 ± 0,20	1,3	200
522005B	<sup>3</sup> / <sub>16</sub>	5,0 ± 0,20	2,3	100
522006B	<sup>1</sup> / <sub>4</sub>	6,5 ± 0,20	3,0	100
522007B	<sup>3</sup> / <sub>8</sub>	9,5 ± 0,30	4,5	100
522008B	<sup>1</sup> / <sub>2</sub>	12,5 ± 0,30	6,0	100
522009B	<sup>5</sup> / <sub>8</sub>	15,5 ± 0,40	7,5	100
522010B	<sup>3</sup> / <sub>4</sub>	19,0 ± 0,50	9,0	100
522011B	1	26,0 ± 0,50	12,5	50
522012B	1½	36,5 ± 1,00	17,5	50
522013B	2	50,8	25,4	25
522014B	3	76,2	38,1	25
522015B	4	101,6	50,8	25

EV PRODUCTS

Box				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/box
522001BB	<sup>3</sup> / <sub>64</sub>	1,1 ± 0,20	0,5	15
522002BB	<sup>1</sup> / <sub>16</sub>	1,5 ± 0,20	0,65	15
522003BB	<sup>3</sup> / <sub>32</sub>	2,5 ± 0,20	1,0	13
522004BB	<sup>1</sup> / <sub>8</sub>	3,0 ± 0,20	1,3	12
522005BB	<sup>3</sup> / <sub>16</sub>	5,0 ± 0,20	2,3	11
522006BB	<sup>1</sup> / <sub>4</sub>	6,5 ± 0,20	3,0	10
522007BB	<sup>3</sup> / <sub>8</sub>	9,5 ± 0,30	4,5	7
522008BB	<sup>1</sup> / <sub>2</sub>	12,5 ± 0,30	6,0	6
522009BB	<sup>5</sup> / <sub>8</sub>	15,5 ± 0,40	7,5	5
522010BB	<sup>3</sup> / <sub>4</sub>	19,0 ± 0,50	9,0	5
522011BB	1	26,0 ± 0,50	12,5	4

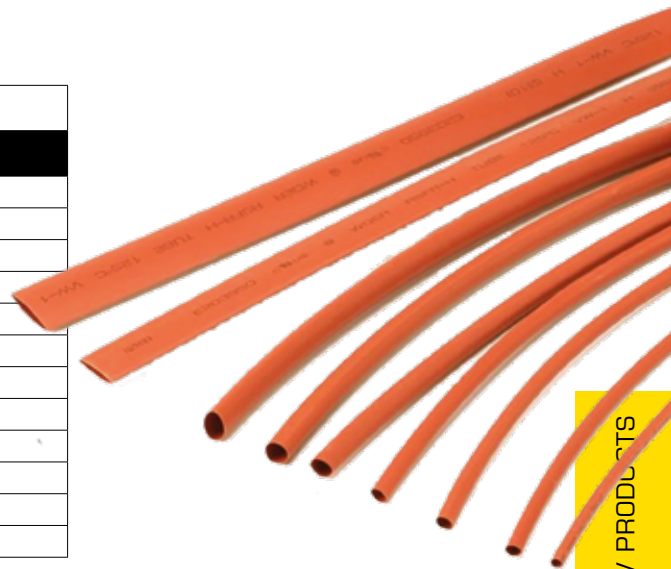


## Heat shrink sleeve - Single wall 2:1



- Shrink ratio: 2:1
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Flammability: VW-1

Pieces 1.22 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
522001BS	<sup>3</sup> / <sub>64</sub>	1,1 ± 0,20	0,5	200
522002BS	<sup>1</sup> / <sub>16</sub>	1,5 ± 0,20	0,65	200
522003BS	<sup>3</sup> / <sub>32</sub>	2,5 ± 0,20	1,0	200
522004BS	<sup>1</sup> / <sub>8</sub>	3,0 ± 0,20	1,3	150
522005BS	<sup>3</sup> / <sub>16</sub>	5,0 ± 0,20	2,3	100
522006BS	<sup>1</sup> / <sub>4</sub>	6,5 ± 0,20	3,0	50
522007BS	<sup>3</sup> / <sub>8</sub>	9,5 ± 0,30	4,5	50
522008BS	<sup>1</sup> / <sub>2</sub>	12,5 ± 0,30	6,0	30
522009BS	<sup>5</sup> / <sub>8</sub>	15,5 ± 0,40	7,5	30
522010BS	<sup>3</sup> / <sub>4</sub>	19,0 ± 0,50	9,0	30
522011BS	1	26,0 ± 0,50	12,5	20
522012BS	1½	36,5 ± 1,00	17,50	10



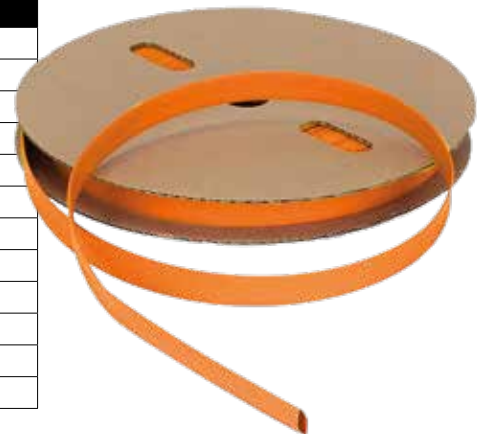


## Heat shrink sleeve - Dual wall 3:1



- Shrink ratio: 3:1 with adhesive liner
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Flammability: VW-1

Reel				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/reel
722001B	1/8	3,0	1,0	200
722002B	3/16	4,8	1,6	100
722003B	1/4	6,4	2,1	100
722004B	5/16	7,9	2,6	100
722005B	3/8	9,5	3,2	50
722006B	1/2	12,7	4,2	25
722007B	5/8	15,4	5,1	25
722008B	3/4	19,1	6,4	25
722009B	1	25,4	8,4	25
722010B	1 1/4	30,0	10,0	25
722011B	1 1/2	39,0	13,0	25
722012B	2	50,0	16,0	25



Box				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Mtrs/box
722001BB	1/8	3,0	1,0	5,0
722002BB	3/16	4,8	1,6	4,0
722003BB	1/4	6,4	2,1	3,5
722004BB	5/16	7,9	2,6	3,0
722005BB	3/8	9,5	3,2	3,0
722006BB	1/2	12,7	4,2	2,5
722007BB	5/8	15,4	5,1	2,5
722008BB	3/4	19,1	6,4	2,0
722009BB	1	25,4	8,4	1,5

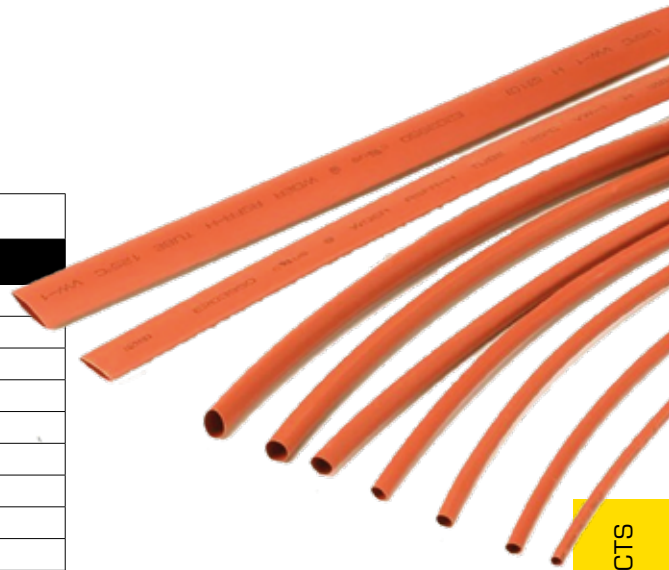


## Heat shrink sleeve - Dual wall 3:1



- Shrink ratio: 3:1 with adhesive liner
- UL and RoHS compliant, halogen free
- Excellent acid fastness and corrosion resistance
- Flammability: VW-1

Pieces 1.22 m				
Part nr.	Inch	Before Ø in mm	After Ø in mm	Pcs/bag
722001BS	1/8	3,0	1,0	100
722002BS	3/16	4,8	1,6	60
722003BS	1/4	6,4	2,1	40
722004BS	5/16	7,9	2,6	30
722005BS	3/8	9,5	3,2	20
722006BS	1/2	12,7	4,2	15
722007BS	5/8	15,4	5,1	15
722008BS	3/4	19,1	6,4	10
722009BS	1	25,4	8,4	10



EV PRODUCTS

### Tools for heat shrink sleeve



MJ-300  
Heat gun\*  
With micro-flame



90-51773  
Universal lighter gas (butane)  
200 ml



MJ-600  
Flameless heat gun\*

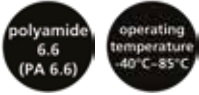
\* Heat guns are supplied with **empty** lighter

### Also available

1506073  
Blue metal display for six boxes of shrink sleeve (not included)  
With scissors on chain



## Cable ties - 100 Pcs/bag



- Flammability: UL 94 V-2 (V-0 available)
- Standards: UL E75050, Lloyd's, GL 59425-08HH, MIL-23190D
- Stock: Orange
- Complete range, stable quality and low insertion

Part nr.	Color	L mm	W mm	Bundle Ø mm	Min. str. in kgrs	Part nr.	Color	L mm	W mm	Bundle Ø mm	Min. str. in kgrs
KKB8024OR	Orange	75	2,5	2 ~ 16	11	KKB15076OR	Orange	180	7,5	5 ~ 44	65
KKB10025OR	Orange	100	2,5	2 ~ 24	11	KKB20076OR	Orange	200	7,5	5 ~ 48	65
KKB14025OR	Orange	135	2,5	2 ~ 35	11	KKB25076OR	Orange	240	7,5	5 ~ 62	65
KKB16025OR	Orange	160	2,5	2 ~ 42	11	KKB29276OR	Orange	280	7,5	5 ~ 76	65
KKB20025OR	Orange	200	2,5	2 ~ 55	11	KKB36876OR	Orange	360	7,5	5 ~ 101	65
KKB14036OR	Orange	140	3,5	3 ~ 36	20	KKB45076OR	Orange	450	7,5	20 ~ 130	65
KKB20036OR	Orange	200	3,5	3 ~ 55	20	KKB54076OR	Orange	540	7,5	20 ~ 160	65
KKB29236OR	Orange	280	3,5	3 ~ 80	20	KKB75076OR	Orange	750	7,5	32 ~ 222	65
KKB37036OR	Orange	360	3,5	5 ~ 103	20	KKB43090OR	Orange	430	9,0	20 ~ 118	80
KKB12048OR	Orange	140	4,5	3 ~ 33	28	KKB53090OR	Orange	550	9,0	20 ~ 160	80
KKB16048OR	Orange	160	4,5	3 ~ 38	28	KKB77590OR	Orange	780	9,0	20 ~ 235	80
KKB18848OR	Orange	180	4,5	3 ~ 45	28	KKB92090OR	Orange	920	9,0	40 ~ 280	80
KKB20048OR	Orange	200	4,5	3 ~ 51	28	KKB122090OR	Orange	1220	9,0	40 ~ 375	80
KKB25048OR	Orange	250	4,5	5 ~ 68	28	KKB153090OR	Orange	1330	9,0	40 ~ 409	80
KKB28048OR	Orange	280	4,5	5 ~ 76	28	KKB230130OR	Orange	250	12,5	10 ~ 62	120
KKB30048OR	Orange	300	4,5	5 ~ 80	28	KKB480130OR	Orange	500	12,5	10 ~ 140	120
KKB36848OR	Orange	360	4,5	5 ~ 101	28	KKB730130OR	Orange	750	12,5	40 ~ 222	120
KKB39048OR	Orange	380	4,5	5 ~ 110	28	KKB1030130OR	Orange	1000	12,5	40 ~ 300	120
KKB43048OR	Orange	430	4,5	5 ~ 123	28						

### Tools for nylon cable ties



**LY-600A**  
For tightening and cutting nylon  
cable ties 2,4 - 4,8 mm width  
Thickness up to 1,45 mm  
Adjustable



**LY-600L**  
For tightening and cutting nylon  
cable ties up to 13 mm width  
Thickness up to 1,5 mm  
Adjustable



**LY-600T**  
For tightening and cutting nylon  
cable ties 2,2 - 4,8 mm width  
Thickness up to 1,6 mm  
Adjustable



**KBT-5A**  
For tightening and cutting nylon  
cable ties up to 12 mm width  
Thickness up to 2,3 mm  
With safe stop

### Also available



**1503043**  
Blue metal display for 5 sizes  
of cable ties (not included)

### Corrugated tube - PP



- Flexible and flame-retardant polypropylene tube
- Suitable for insulation use in automotive electronics, with excellent electrical and physical properties, including excellent acid fastness and corrosion resistance
- Great shape permanence to heat and enormous cold impact strength
- Bending stable
- Excellent chemical resistance

Closed				
Part nr.	Nominal size	Inner Ø mm	Outer Ø mm	Mtrs/reel
CCTE06-100	6,0	6,0 ± 0,3	9,0 ± 0,3	100
CCTE09-100	9,0	9,0 ± 0,3	13,0 ± 0,3	100
CCTE11-100	11,0	11,0 ± 0,3	15,0 ± 0,3	100
CCTE13-100	13,0	13,0 ± 0,3	17,0 ± 0,3	100
CCTE16-050	16,0	16,0 ± 0,3	20,0 ± 0,3	50
CCTE19-050	19,0	19,0 ± 0,3	23,0 ± 0,3	50
CCTE20-100	20,0	20,0 ± 0,3	24,0 ± 0,3	100
CCTE20-025	20,0	20,0 ± 0,3	24,0 ± 0,3	25
CCTE25-025	25,0	25,0 ± 0,3	30,0 ± 0,3	25
CCTE28-050	28,0	28,0 ± 0,3	34,0 ± 0,3	50
CCTE28-025	28,0	28,0 ± 0,3	34,0 ± 0,3	25
CCTE30-050	30,0	30,0 ± 0,3	36,0 ± 0,3	50
CCTE30-025	30,0	30,0 ± 0,3	36,0 ± 0,3	25
CCTE32-050	32,0	32,0 ± 0,3	38,0 ± 0,3	50
CCTE32-025	32,0	32,0 ± 0,3	38,0 ± 0,3	25
CCTE35-050	35,0	35,0 ± 0,3	40,0 ± 0,3	50
CCTE35-025	35,0	35,0 ± 0,3	40,0 ± 0,3	25



EV PRODUCTS

Slit				
Part nr.	Nominal size	Inner Ø mm	Outer Ø mm	Mtrs/reel
PCTE06 - 100	6,0	6,0 ± 0,3	9,0 ± 0,3	100
PCTE09 - 100	9,0	9,0 ± 0,3	13,0 ± 0,3	100
PCTE11 - 100	11,0	11,0 ± 0,3	15,0 ± 0,3	100
PCTE13 - 100	13,0	13,0 ± 0,3	17,0 ± 0,3	100
PCTE16 - 050	16,0	16,0 ± 0,3	20,0 ± 0,3	50
PCTE19 - 050	19,0	19,0 ± 0,3	23,0 ± 0,3	50
PCTE22 - 025	20,0	22,0 ± 0,3	27,0 ± 0,3	25
PCTE25 - 025	25,0	25,0 ± 0,3	30,0 ± 0,3	25
PCTE28 - 025	28,0	28,0 ± 0,3	34,0 ± 0,3	25
PCTE30 - 025	30,0	30,0 ± 0,3	36,0 ± 0,3	25
PCTE32 - 025	32,0	32,0 ± 0,3	38,0 ± 0,3	25
PCTE35 - 025	35,0	35,0 ± 0,3	40,0 ± 0,3	25
PCTE40 - 025	40,0	40,0 ± 0,3	45,0 ± 0,3	25





## Expandable braided sleeve



- Polyester protection sleeve for application in wire harnesses, where tough and durable protection is required
- UV resistant and anti-abrasion
- Cutting tool: Hot knife
- Flammability: VW-1
- Certificate: UL, halogen free

Reel			
Part nr.	Nom. size mm	Bundle range mm	Mtrs/reel
EBS-003OR	3	1 - 6 mm	1000
EBS-006OR	6	3 - 9 mm	500
EBS-008OR	8	5 - 16 mm	350
EBS-010OR	10	7 - 19 mm	350
EBS-012OR	12	8 - 24 mm	300
EBS-015OR	15	10 - 27 mm	250
EBS-020OR	20	14 - 30 mm	200
EBS-025OR	25	18 - 35 mm	200
EBS-030OR	30	20 - 50 mm	150
EBS-040OR	40	30 - 60 mm	100
EBS-045OR	45	35 - 75 mm	100
EBS-050OR	50	40 - 80 mm	100
EBS-064OR	64	45 - 105 mm	100
EBS-076OR	76	64 - 120 mm	100



Box			
Part nr.	Nom. size mm	Bundle range mm	Mtrs/box
EBSB-003OR	3	1 - 6 mm	10
EBSB-006OR	6	3 - 9 mm	10
EBSB-008OR	8	5 - 16 mm	10
EBSB-010OR	10	7 - 19 mm	10
EBSB-012OR	12	8 - 24 mm	8
EBSB-015OR	15	10 - 27 mm	8
EBSB-020OR	20	14 - 30 mm	8
EBSB-025OR	25	18 - 35 mm	5
EBSB-030OR	30	20 - 50 mm	5
EBSB-040OR	40	30 - 60 mm	5
EBSB-045OR	45	35 - 75 mm	5
EBSB-050OR	50	40 - 80 mm	3

### Battery cable

- **Conductor:** Annealed copper strands (Class 6)
- **Insulation conductor:** PVC
- **Outer insulation:** NBR PVC, RAL 2008 (orange)
- **Bending radius:** 10 x D for fixed layings
- **Quality assurance:** IEC 60811-1-1 (insulating and sheath materials, common test methods)  
IEC 60288 (conductor of insulated cables)  
IEC 62230 (electric cable, spark test method)  
IEC 60060-1 (high voltage test techniques)
- **Operating rating:** 0,6 ~ 1kV
- **Test rating:** 3,5kV
- **Operating temperature:** -40 °C ~ 70 °C
- **Flame spread:** IEC 60332-1-2

Reel						
Part nr.	Wire size	Max conductor resistance (Ohm/km)	Outer Ø cable (mm)	Weight cable (kg/km)	Color insulation	Mtrs/ reel
PE7000E050RL	70 mm <sup>2</sup>	0,272	15,30	737	orange	50
PE9500E050RL	95 mm <sup>2</sup>	0,206	17,40	965	orange	50

Spool						
Part nr.	Wire size	Max conductor resistance (Ohm/km)	Outer Ø cable (mm)	Weight cable (kg/km)	Color insulation	Mtrs/ spool
PE1000E050SP	10 mm <sup>2</sup>		7,90	134	orange	50
PE1600E050SP	16 mm <sup>2</sup>	1,210	9,20	191	orange	50
PE2500E050SP	25 mm <sup>2</sup>	0,780	10,40	274	orange	50
PE3500E050SP	35 mm <sup>2</sup>	0,544	11,30	376	orange	50
PE5000E050SP	50 mm <sup>2</sup>	0,386	13,10	531	orange	50



## Bolt-on fuses - evOTO series EV27-M4\*



- Meets international specs, complies to ISO 8820-8 and other standards
- Ceramic tube, laser marked, silica sand filled
- Rigid Ni-plated copper alloy connections
- M4 connection holes, spaced 45 mm
- Maximum torque 2.1 Nm  $\pm$  0.2 Nm
- Breaking capacity: 2.000A at 450Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV27-001-M4	1	450	M4
EV27-005-M4	5	450	M4

## Bolt-on fuses - evOTO series EV27-M5\*



- Meets international specs, complies to ISO 8820-8 and other standards
- Ceramic tube, laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M5 connection holes, spaced 53,5mm
- Maximum torque 4.5Nm  $\pm$  1 Nm
- Breaking capacity: 20.000A at 500Vdc (450Vdc)



Part nr.	Rating (A)	Rating (V)	Holes
EV27-015-M5	15	500	M5
EV27-020-M5	20	500	M5
EV27-030-M5	30	500	M5
EV27-040-M5	40	500	M5
EV27-050-M5	50	450	M5

## Bolt-on fuses - evOTO series EV28-M6\*



- Meets international specs, complies to ISO 8820-8 and other standards
- Ceramic tube, laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M6 connection holes, spaced 60 mm
- Maximum torque 9.0 Nm  $\pm$  1.0 Nm
- Breaking capacity: 20.000A at 500Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV28-060-M6	60	500	M6
EV28-070-M6	70	500	M6
EV28-080-M6	80	500	M6
EV28-100-M6	100	500	M6
EV28-125-M6	125	500	M6

\* All evOTO fuses are available per piece

### Bolt-on fuses - evOTO series EV29-M8\*



- Meets international specs, complies to ISO 8820-8 and other standards
- UP tube, closed with epoxy resin laser marked, silica sand filled
- Rigid copper alloy connections
- M8 connection holes, spaced 74,8mm
- Maximum torque 12Nm ± 1 Nm
- Breaking capacity: 16.000A at 500Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV29-150-M8	150	500	M8
EV29-175-M8	175	500	M8
EV29-200-M8	200	500	M8
EV29-225-M8	225	500	M8
EV29-250-M8	250	500	M8
EV29-300-M8	300	500	M8

### Bolt-on fuses - evOTO series EV29-M8HR\*



- Meets international specs, complies to ISO 8820-8 and other standards
- UP tube, closed with epoxy resin laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M8 connection holes, spaced 74,8mm
- Maximum torque 12Nm ± 1Nm
- Breaking capacity: 30.000A at 500Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV29-350-M8	350	500	M8
EV29-400-M8	400	500	M8
EV29-450-M8	450	500	M8
EV29-500-M8	500	500	M8

### Bolt-on fuses - evOTO series EV29-M10\*



- Meets international specs, complies to ISO 8820-8 and other standards
- UP tube, closed with epoxy resin laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M10 connection holes, spaced 80mm
- Maximum torque 16Nm ± 1Nm
- Breaking capacity: 30.000A at 500Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV29-600-M10	600	500	M10
EV29-700-M10	700	500	M10
EV29-800-M10	800	500	M10
EV29-900-M10	900	500	M10
EV29-1000-M10	1000	500	M10

\* All evOTO fuses are available per piece





# Insulated Terminals

Non-insulated Terminals

Cord End Terminals

Housing

Fuses & Fuse Holders

Relays, Switches, Pilot Lights & Buzzers

Tools

Assortment Kits

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**RoHS**  
COMPLIANT

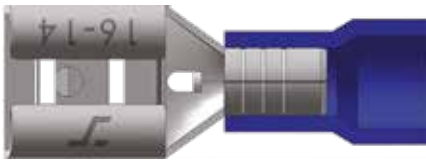
## Features

- Heat resistant
- Cold resistant
- Exceptional insulation performance

## Insulation

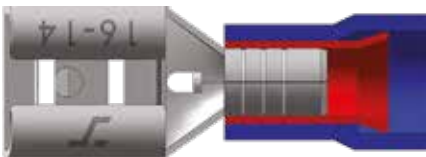
- Vinyl (PVC): operating temp. -10 °C ~75 °C
- Nylon (PA): operating temp. -40 °C ~105 °C, halogen free

## Standard Execution

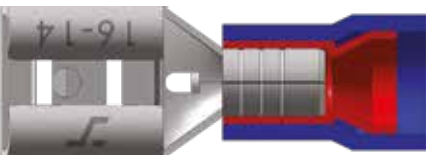


## Copper Sleeve

- Straight copper sleeve tin plated (PVC only)



- Easy entry copper sleeve tin plated



## Explanation part nr.

1 Type qualification	
(R)B	Standard
(R)E	Easy entry

2 Insulation execution	
F	Flared (half insulated)
L	Fully insulated

3 Insulation type	
V	Vinyl (PVC)
N	Nylon

4 Copper sleeve	
D	With Copper sleeve
No indication = Without	

5 Type indication	
DF	Disconnect Female
DM	Disconnect Male

6 Wire size mm <sup>2</sup>	
1.25	0,5 - 1,5 mm <sup>2</sup>
2	1,5 - 2,5 mm <sup>2</sup>
5.5	4 - 6 mm <sup>2</sup>

7 Tab size	
110	2,8 x 0,5 / 0,8
187	4,8 x 0,5 / 0,8
250	6,3 x 0,8
312	8,0 x 0,8
375	9,4 x 1,2

## Example:

RBFVDDM 2-250						
RB	F	V	D	DM	2	250
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

INSULATED TERMINALS

## Insulated terminal types



INSULATED TERMINALS

\* These terminals are packed per 1000 pcs as follows:  
 1 large, **labeled** bag contains 10 small, **unlabeled** bags of 100 pcs (10x100).  
 The small bags of 100 pcs can be purchased separately.

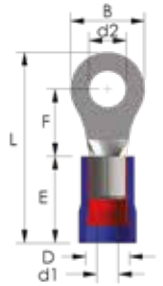
## PVC ring terminals - Standard



Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFV 1.25-3	3,2	5,5	5,0	17,5	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-M3	3,7	6,6	6,3	19,4	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-3.5L	3,7	8,0	7,0	20,8	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-4	4,3	6,6	6,3	19,4	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-5	5,3	8,0	7,0	20,8	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-6	6,4	11,8	11,0	26,7	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-8	8,4	11,8	11,0	26,7	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-10	10,5	13,6	13,9	30,5	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFV 2-S3.3	3,2	6,6	4,7	17,8	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-S3	3,7	6,6	6,3	19,5	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-4	4,3	8,5	7,8	21,8	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-5S	5,3	8,5	7,8	21,8	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-5	5,3	9,6	7,3	22,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-6	6,4	11,8	11,0	26,9	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-8	8,4	11,8	11,0	26,9	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-10	10,5	13,6	13,6	30,5	10,0	4,8	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	RBFV 5.5-3	3,7	7,2	6,1	22,7	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-S4	4,3	7,2	6,1	22,7	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-4	4,3	9,5	8,9	26,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-5	5,3	9,5	8,9	26,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-6	6,4	12,0	10,5	29,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-8	8,4	15,0	13,5	34,0	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-10	10,5	15,0	13,5	34,0	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-12	13,0	19,2	16,0	38,6	13,0	6,7	3,4	10 x 100	✓

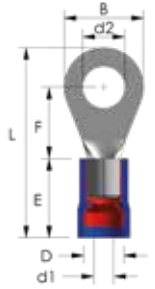
INSULATED TERMINALS

## PVC ring terminals - Straight copper sleeve



Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBFVD 1.25-3	3,2	5,5	5,0	17,5	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-M3	3,7	6,6	6,3	19,4	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-4	4,3	6,6	6,3	19,4	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-5	5,3	8,0	7,0	20,8	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-6	6,4	11,6	11,0	26,7	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-8	8,4	11,6	11,0	26,7	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-10	10,5	13,6	13,9	30,5	10,0	4,3	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBFVD 2-S3.3	3,2	6,6	4,7	17,8	10,0	5,0	2,3	10 x 100	
	RBFVD 2-S3	3,7	6,6	6,3	19,5	10,0	5,0	2,3	10 x 100	
	RBFVD 2-4	4,3	8,5	7,8	21,8	10,0	5,0	2,3	10 x 100	
	RBFVD 2-5	5,3	9,5	7,3	22,0	10,0	5,0	2,3	10 x 100	
	RBFVD 2-6	6,4	12,0	11,0	23,9	10,0	5,0	2,3	10 x 100	
	RBFVD 2-8	8,4	12,0	11,0	26,9	10,0	5,0	2,3	10 x 100	
	RBFVD 2-10	10,5	13,6	13,6	30,5	10,0	5,0	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	RBFVD 5.5-3	3,7	7,2	6,1	22,7	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-4	4,3	9,5	8,9	26,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-5	5,3	9,5	8,9	26,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-6	6,4	12,0	10,5	29,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-8	8,4	15,0	13,5	34,0	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-10	10,5	15,0	13,5	34,0	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-12	13,0	19,2	16,0	38,6	13,0	6,8	3,4	10 x 100	

## PVC ring terminals - Easy Entry copper sleeve



Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVD 1.25-3DIN	3,2	6,0	6,0	19,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-M3DIN	3,7	6,0	6,0	19,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-4DIN	4,3	8,0	7,0	21,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-5DIN	5,3	10,0	8,0	23,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-6DIN	6,5	11,0	10,0	25,5	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-8DIN	8,4	14,0	12,0	29,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-10DIN	10,5	18,0	14,0	33,0	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	REFVD 2-S3.3DIN	3,2	6,0	6,0	19,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-S3DIN	3,7	6,0	6,0	19,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-4DIN	4,3	8,0	7,0	21,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-5DIN	5,3	10,0	9,0	24,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-6DIN	6,5	11,0	11,0	26,5	10,0	5,0	2,3	10 x 100	
	REFVD 2-8DIN	8,4	14,0	12,0	29,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-10DIN	10,5	18,0	13,5	32,5	10,0	5,0	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	REFVD 5.5-4DIN	4,3	8,0	8,0	25,0	13,0	6,7	3,4	10 x 100	
	REFVD 5.5-5DIN	5,3	10,0	9,0	27,0	13,0	6,7	3,4	10 x 100	
	REFVD 5.5-6DIN	6,5	11,0	9,5	28,0	13,0	6,7	3,4	10 x 100	
	REFVD 5.5-8DIN	8,4	14,0	13,0	33,0	13,0	6,7	3,4	10 x 100	
	REFVD 5.5-10DIN	10,5	18,0	15,0	37,0	13,0	6,7	3,4	10 x 100	
	REFVD 5.5-12DIN	13,0	18,0	15,0	37,0	13,0	6,7	3,4	10 x 100	

INSULATED TERMINALS

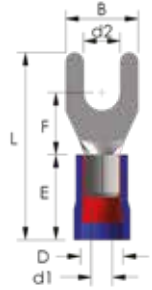


## PVC spade terminals - Standard



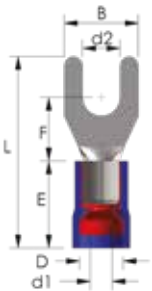
Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFV 1.25-B3A	3,3	5,7	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-YS3A	3,8	6,4	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-YS4A	4,4	6,4	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-S4A	4,4	7,2	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-5A	5,4	8,1	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFV 1.25-6A	6,5	9,5	6,0	21,0	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFV 2-B3A	3,3	5,7	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-YS3A	3,8	6,4	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-S3A	3,8	7,2	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-YS4A	4,4	6,4	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-S4A	4,4	7,2	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-5A	5,4	8,1	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
	RBFV 2-S5A	5,4	9,3	6,5	21,0	10,0	4,8	2,3	10 x 100	✓
RBFV 2-6A	6,5	12,0	11,0	27,0	10,0	4,8	2,3	10 x 100	✓	
12~10 AWG 4~6 mm <sup>2</sup>	RBFV 5.5-3A	3,8	8,3	7,0	25,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-S4A	4,4	8,3	7,0	25,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-4LA	4,4	9,0	7,0	25,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-5A	5,4	9,0	7,0	25,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-6A	6,5	12,0	12,0	31,5	13,0	6,7	3,4	10 x 100	✓
	RBFV 5.5-8A	8,5	14,0	11,5	30,5	13,0	6,7	3,4	10 x 100	✓

## PVC spade terminals - Straight copper sleeve



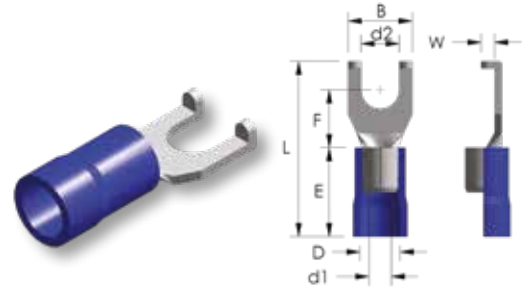
Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVD 1.25-B3A	3,3	5,7	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-YS3A	3,8	6,4	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-YS4A	4,4	6,4	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-S4A	4,4	7,2	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-5A	5,4	8,1	6,3	21,0	10,0	4,3	1,7	10 x 100	
	RBFVD 1.25-6A	6,5	9,5	6,0	21,0	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVD 2-YS3A	3,8	6,4	6,5	21,0	10,0	5,0	2,3	10 x 100	
	RBFVD 2-YS4A	4,4	6,4	6,5	21,0	10,0	5,0	2,3	10 x 100	
	RBFVD 2-S4A	4,4	7,2	6,5	21,0	10,0	5,0	2,3	10 x 100	
	RBFVD 2-5A	5,4	8,1	6,5	21,0	10,0	5,0	2,3	10 x 100	
	RBFVD 2-6A	6,5	12,0	11,0	27,0	10,0	5,0	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBFVD 5.5-3A	3,8	8,3	7,0	25,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-S4A	4,4	8,3	7,0	25,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-5A	5,4	9,0	7,0	25,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-6A	6,5	12,0	12,0	31,5	13,0	6,8	3,4	10 x 100	
	RBFVD 5.5-8A	8,5	14,0	11,5	30,5	13,0	6,8	3,4	10 x 100	

## PVC spade terminals - Easy Entry copper sleeve



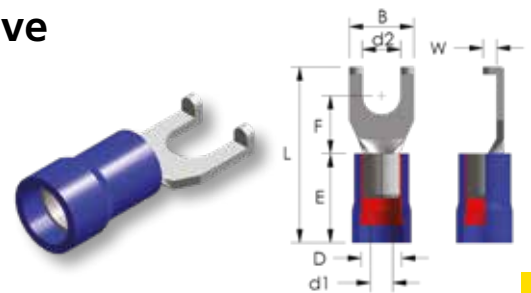
Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVD 1.25-B3A	3,3	5,7	6,3	21,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-YS3A	3,8	6,4	6,3	21,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-YS4A	4,4	6,4	6,3	21,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-S4A	4,4	7,2	6,3	21,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-5A	5,4	8,1	6,3	21,0	10,0	4,3	1,7	10 x 100	
	REFVD 1.25-6A	6,5	9,5	6,0	21,0	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	REFVD 2-YS3A	3,8	6,0	6,5	21,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-YS4A	4,4	6,0	6,5	21,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-5A	5,4	8,1	6,5	21,0	10,0	5,0	2,3	10 x 100	
	REFVD 2-6A	6,5	12,0	11,0	27,0	10,0	5,0	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	REFVD 5.5-S4A	4,4	8,3	7,0	25,5	13,0	6,8	3,4	10 x 100	
	REFVD 5.5-5A	5,4	9,0	7,0	25,5	13,0	6,8	3,4	10 x 100	
	REFVD 5.5-6A	6,5	12,0	12,0	31,5	13,0	6,8	3,4	10 x 100	
	REFVD 5.5-8A	8,5	14,0	22,5	30,5	13,0	6,8	3,4	10 x 100	

## PVC flange terminals - Standard



Wire range	Part nr.	d2	B	F	L	E	D	d1	W	Packed	UL
16~14 AWG	BFV 2-4B	4,3	7,2	6,5	19,7	10,0	4,5	2,3	1,5	10 x 100	✓
1,5~2,5 mm <sup>2</sup>	BFV 2-5B	5,3	8,5	7,3	20,5	10,0	4,5	2,3	1,5	10 x 100	✓

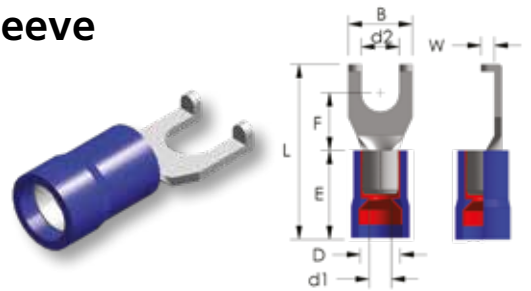
## PVC flange terminals - Straight copper sleeve



Wire range	Part nr.	d2	B	F	L	E	D	d1	W	Packed	UL
16~14 AWG	BFVD 2-4B	4,3	7,2	6,5	21,2	10,0	5,1	2,3	1,5	10 x 100	
1,5~2,5 mm <sup>2</sup>	BFVD 2-5B	5,3	8,5	7,3	22,0	10,0	5,1	2,3	1,5	10 x 100	

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## PVC flange terminals - Easy Entry copper sleeve



Wire range	Part nr.	d2	B	F	L	E	D	d1	W	Packed	UL
16~14 AWG	EFVD 2-4B	4,3	7,2	6,5	19,7	10,0	5,0	2,3	1,5	10 x 100	
1,5~2,5 mm <sup>2</sup>	EFVD 2-5B	5,3	8,5	7,3	20,5	10,0	5,0	2,3	1,5	10 x 100	

## PVC hook terminals - 0° Standard



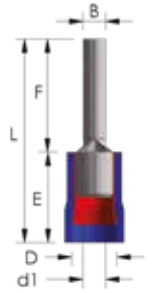
Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	BFV 1.25-4X	4,3	8,0	7,0	20,5	10,0	4,1	1,7	10 x 100	✓
	BFV 1.25-5X	5,3	8,0	7,0	20,0	10,0	4,1	1,7	10 x 100	✓
	BFV 1.25-6X	6,5	11,6	11,1	25,8	10,0	4,1	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	BFV 2-6X	6,5	12,0	11,0	26,0	10,0	4,5	2,3	10 x 100	✓
	BFV 5.5-4X	4,3	9,5	8,3	25,0	12,5	6,5	3,4	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	BFV 5.5-6X	6,5	12,0	10,5	28,0	12,5	6,5	3,4	10 x 100	✓
	BFV 5.5-8X	8,4	15,0	13,7	32,4	12,5	6,5	3,4	10 x 100	✓

## INSULATED TERMINALS PVC pin terminals - Standard



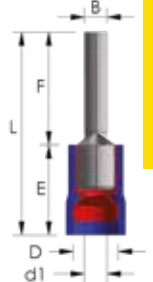
Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	BFVPC 1.25-F7	1,9	7,5	17,5	10,0	4,1	1,7	10 x 100	
	RBFVPC 1.25-F9	1,9	9,0	19,0	10,0	4,2	1,7	10 x 100	
	RBFVPC 1.25-F10	1,9	10,0	20,0	10,0	4,2	1,7	10 x 100	
	RBFVPC 1.25	1,9	12,0	22,0	10,0	4,2	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	BFVPC 2-F7	1,9	8,5	18,5	10,0	4,5	2,3	10 x 100	
	RBFVPC 2-F9	1,9	9,0	19,0	10,0	4,8	2,3	10 x 100	✓
	RBFVPC 2	1,9	12,0	22,0	10,0	4,8	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	RBFVPC 5.5	2,8	14,0	27,0	13,0	6,7	3,4	10 x 100	✓

## PVC pin terminals - Straight copper sleeve



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDPC 1.25-F9	1,9	9,0	18,8	10,0	4,3	1,7	10 x 100	
	RBFVDPC 1.25-F10	1,9	10,0	19,8	10,0	4,3	1,7	10 x 100	
	RBFVDPC 1.25	1,9	12,0	21,8	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVDPC 2-F9	1,9	9,0	18,8	10,0	4,8	2,3	10 x 100	
	RBFVDPC 2	1,9	12,0	21,8	10,0	4,8	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDPC 5.5	2,8	14,0	26,0	13,0	6,7	3,4	10 x 100	

## PVC pin terminals - Easy Entry copper sleeve



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Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVDPC 1.25-F9	1,9	9,0	18,8	10,0	4,3	1,7	10 x 100	
	REFVDPC 1.25-F10	1,9	10,0	19,8	10,0	4,3	1,7	10 x 100	
	REFVDPC 1.25	1,9	12,0	21,8	10,0	4,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	REFVDPC 2-F9	1,9	9,0	18,8	10,0	5,0	2,3	10 x 100	
	REFVDPC 2-F10	1,9	10,0	19,8	10,0	5,0	2,3	10 x 100	
	REFVDPC 2	1,9	12,0	21,8	10,0	5,0	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	REFVDPC 5.5	2,8	14,0	26,0	13,0	6,7	3,4	10 x 100	



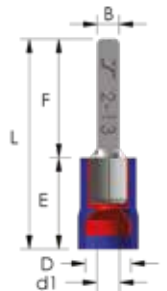
## PVC blade terminals - Standard



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVPC 1.25-PF10	2,3	10,0	19,8	10,0	4,0	1,7	10 x 100	
	RBFVPC 1.25-PF11	3,0	11,0	20,8	10,0	4,0	1,7	10 x 100	
	RBFVPC 1.25-PF14	2,4	14,0	23,8	10,0	4,0	1,7	10 x 100	
	RBFVPC 1.25-P	2,2	18,0	27,8	10,0	4,0	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVPC 2-PF9	2,8	9,0	18,8	10,0	4,8	2,3	10 x 100	✓
	RBFVPC 2-PF10	2,3	10,0	19,8	10,0	4,8	2,3	10 x 100	✓
	RBFVPC 2-PF13	2,4	13,0	22,8	10,0	4,8	2,3	10 x 100	✓
	RBFVPC 2-P	2,2	18,0	27,8	10,0	4,8	2,3	10 x 100	✓
12~10 AWG	RBFVPC 5.5-PF10	2,8	10,0	23,0	13,0	6,7	3,4	10 x 100	✓
4~6 mm <sup>2</sup>	RBFVPC 5.5-P	4,5	18,0	31,0	13,0	6,7	3,4	10 x 100	✓

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## PVC blade terminals - Easy Entry copper sleeve



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVDPC 1.25-PF10	2,3	10,0	19,8	10,0	4,2	1,7	10 x 100	
	REFVDPC 1.25-PF11	3,0	11,0	20,8	10,0	4,2	1,7	10 x 100	
	REFVDPC 1.25-PF14	2,4	14,0	23,8	10,0	4,2	1,7	10 x 100	
	REFVDPC 1.25-P	2,2	18,0	27,8	10,0	4,2	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	REFVDPC 2-PF9	2,8	9,0	18,8	10,0	5,0	2,3	10 x 100	
	REFVDPC 2-PF10	2,3	10,0	19,8	10,0	5,0	2,3	10 x 100	
	REFVDPC 2-PF13	2,4	14,0	23,8	10,0	5,0	2,3	10 x 100	
	REFVDPC 2-P	2,2	18,0	27,8	10,0	5,0	2,3	10 x 100	
12~10 AWG	REFVDPC 5.5-PF10	2,8	10,0	23,0	13,0	6,8	3,4	10 x 100	
4~6 mm <sup>2</sup>	REFVDPC 5.5-P	4,5	18,0	31,0	13,0	6,8	3,4	10 x 100	

## PVC butt connectors - Standard



Wire range	Part nr.	L	D	d	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBFVC 1.25	26,0	4,3	1,9	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBFVC 2	26,0	4,8	2,5	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	RBFVC 5.5	27,0	6,3	3,6	10 x 100	
8 AWG 8 mm <sup>2</sup>	RBFVC 8	35,5	8,5	4,5	10 x 100	

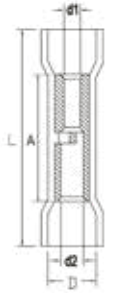
## PVC butt connectors - Easy Entry copper sleeve



Wire range	Part nr.	L	D	d	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	REFVDC 1.25	24,5	4,5	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	REFVDC 2	24,5	5,0	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	REFVDC 5.5	29,5	6,6	3,4	10 x 100	

## PVC butt connectors - Step down

- vinyl  
(PVC)
- electro  
tin  
plated
- copper
- operating  
temperature  
-10°C-75°C
- 600V  
max
- blue: 19A  
yellow: 27A  
red: 48A  
blue: 70A  
max
- RoHS  
compliant



Wire range	Part nr.	d1	d2	D	L	Packed	UL
16-14 to 22-18 AWG 1,5-2,5 to 0,5-1,0 mm <sup>2</sup>	BFVC 2-1.25	1,7	2,3	4,5	26,0	10 x 100	
12-10 to 16-14 AWG 4-6 to 1,5-2,5 mm <sup>2</sup>	BFVC 5.5-2	2,3	3,4	6,5	31,0	10 x 100	
8 to 12-10 AWG 8 to 4-6 mm <sup>2</sup>	BFVC 8-5.5	3,4	4,5	8,5	35,7	10 x 100	
6 to 8 AWG 14 to 8 mm <sup>2</sup>	BFVC 14-8	4,5	5,9	10,5	45,0	10 x 100	

## PVC parallel connectors - Standard

- vinyl  
(PVC)
- electro  
tin  
plated
- copper
- operating  
temperature  
-10°C-75°C
- 600V  
max
- red: 19A  
blue: 27A  
yell.: 48A  
max
- RoHS  
compliant



Wire range	Part nr.	L	D	d	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	BFVP 1.25	18,0	4,1	1,6	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	BFVP 2	18,0	4,5	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	BFVP 5.5	21,0	6,5	3,6	10 x 100	

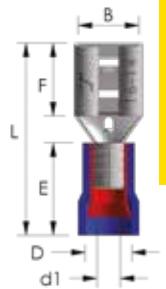
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## PVC female disconnectors - Standard



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDF 1.25-110A5	2,8x0,5	3,2	6,5	18,8	10,0	3,5	1,7	10 x 100	
	RBFVDF 1.25-110A8	2,8x0,8	3,2	6,5	18,8	10,0	3,5	1,7	10 x 100	
	RBFVDF 1.25-187A5	4,8x0,5	5,0	6,4	19,2	10,0	3,5	1,7	10 x 100	
	RBFVDF 1.25-187A8	4,8x0,8	5,0	6,4	19,2	10,0	3,5	1,7	10 x 100	
	RBFVDF 1.25-250A	6,3x0,8	6,6	7,2	20,8	10,0	3,5	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVDF 2-110A5	2,8x0,5	3,2	6,5	19,2	10,0	4,1	2,3	10 x 100	
	RBFVDF 2-110A8	2,8x0,8	3,2	6,5	19,2	10,0	4,1	2,3	10 x 100	
	RBFVDF 2-187A5	4,8x0,5	5,0	6,4	19,2	10,0	4,1	2,3	10 x 100	
	RBFVDF 2-187A8	4,8x0,8	5,0	6,4	19,2	10,0	4,1	2,3	10 x 100	
	RBFVDF 2-250A	6,3x0,8	6,6	7,2	20,8	10,0	4,1	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDF 2-312A	8,0x0,8	8,2	10,2	23,0	10,0	4,1	2,3	10 x 100	
	RBFVDF 5.5-250A	6,3x0,8	6,6	7,2	23,8	13,0	5,6	3,4	10 x 100	
	RBFVDF 5.5-375A	9,5x1,2	10,0	12,0	28,6	13,0	5,6	3,4	10 x 100	

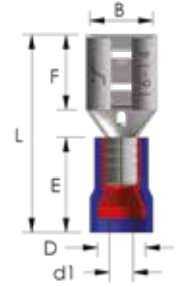
## PVC female disconnectors - Straight copper sleeve



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Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDDF 1.25-110A5	2,8x0,5	3,1	6,5	18,8	10,0	3,9	1,7	10 x 100	✓
	RBFVDDF 1.25-110A8	2,8x0,8	3,1	6,5	18,8	10,0	3,9	1,7	10 x 100	✓
	RBFVDDF 1.25-187A5	4,8x0,5	5,0	6,4	19,2	10,0	3,9	1,7	10 x 100	✓
	RBFVDDF 1.25-187A8	4,8x0,8	5,0	6,4	19,2	10,0	3,9	1,7	10 x 100	✓
	RBFVDDF 1.25-250A	6,3x0,8	6,6	7,2	20,8	10,0	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVDDF 2-110A5	2,8x0,5	3,1	6,5	19,2	10,0	4,7	2,3	10 x 100	✓
	RBFVDDF 2-110A8	2,8x0,8	3,1	6,5	19,2	10,0	4,7	2,3	10 x 100	✓
	RBFVDDF 2-187A5	4,8x0,5	5,0	6,4	19,2	10,0	4,7	2,3	10 x 100	✓
	RBFVDDF 2-187A8	4,8x0,8	5,0	6,4	19,2	10,0	4,7	2,3	10 x 100	✓
	RBFVDDF 2-250A	6,3x0,8	6,6	7,2	20,8	10,0	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDDF 2-312A	8,0x0,8	8,2	10,2	23,5	10,0	4,7	2,3	10 x 100	
	RBFVDDF 5.5-250A	6,3x0,8	6,6	7,2	23,8	13,0	6,3	3,4	10 x 100	✓
	RBFVDDF 5.5-375A	9,4x1,2	9,8	12,0	28,6	13,0	6,3	3,4	10 x 100	

## PVC female disconnectors - Easy Entry copper sleeve



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVDDF 1.25-110A5	2,8x0,5	3,1	6,5	18,8	10,0	3,9	1,7	10 x 100	✓
	REFVDDF 1.25-110A8	2,8x0,8	3,1	6,5	18,8	10,0	3,9	1,7	10 x 100	✓
	REFVDDF 1.25-187A5	4,8x0,5	5,0	6,4	19,2	10,0	3,9	1,7	10 x 100	✓
	REFVDDF 1.25-187A8	4,8x0,8	5,0	6,4	19,2	10,0	3,9	1,7	10 x 100	✓
	REFVDDF 1.25-250A	6,3x0,8	6,6	7,2	20,8	10,0	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	REFVDDF 2-110A5	2,8x0,5	3,1	6,5	19,2	10,0	4,7	2,3	10 x 100	✓
	REFVDDF 2-110A8	2,8x0,8	3,1	6,5	19,2	10,0	4,7	2,3	10 x 100	✓
	REFVDDF 2-187A5	4,8x0,5	5,0	6,4	19,2	10,0	4,7	2,3	10 x 100	✓
	REFVDDF 2-187A8	4,8x0,8	5,0	6,4	19,2	10,0	4,7	2,3	10 x 100	✓
	REFVDDF 2-250A	6,3x0,8	6,6	7,2	20,8	10,0	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	REFVDDF 2-312A	8,0x0,8	8,2	10,2	23,5	10,0	4,7	2,3	10 x 100	✓
	REFVDDF 5.5-250A	6,3x0,8	6,6	7,2	23,8	13,0	6,3	3,4	10 x 100	✓
	REFVDDF 5.5-375A	9,4x1,2	9,8	12,0	28,6	13,0	6,3	3,4	10 x 100	

## PVC female disconnectors - Standard



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBLVDF 1.25-110A5	2,8x0,5	3,2	6,5	19,0	10,5	3,5	1,7	10 x 100	
	RBLVDF 1.25-110A8	2,8x0,8	3,2	6,5	19,0	10,5	3,5	1,7	10 x 100	
	RBLVDF 1.25-187A5	4,8x0,5	5,0	6,4	19,0	10,5	3,5	1,7	10 x 100	
	RBLVDF 1.25-187A8	4,8x0,8	5,0	6,4	19,0	10,5	3,5	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBLVDF 2-110A5	2,8x0,5	3,2	6,5	19,0	10,5	4,3	2,3	10 x 100	
	RBLVDF 2-110A8	2,8x0,8	3,2	6,5	19,0	10,5	4,3	2,3	10 x 100	
	RBLVDF 2-187A5	4,8x0,5	5,0	6,4	21,8	10,5	4,3	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBLVDF 2-187A8	4,8x0,8	5,0	6,4	21,8	10,5	4,3	2,3	10 x 100	
	RBLVDF 5.5-250A	6,3x0,8	6,6	7,2	23,8	10,9	5,6	3,4	10 x 100	

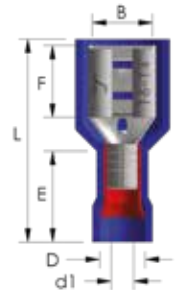


## PVC female disconnectors - Standard



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBLVDF 1.25-250A	6,3x0,8	6,6	7,2	22,8	10,5	3,5	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBLVDF 2-250A	6,3x0,8	6,6	7,2	22,0	10,5	4,3	2,3	10 x 100	

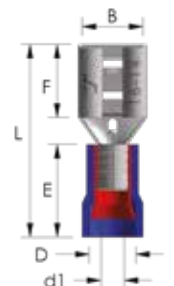
## PVC female disconnectors - Straight copper sleeve



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBLVDDF 1.25-110A5	2,8x0,5	3,1	6,5	19,0	10,5	3,9	1,7	10 x 100	✓
	RBLVDDF 1.25-110A8	2,8x0,8	3,1	6,5	19,0	10,5	3,9	1,7	10 x 100	✓
	RBLVDDF 1.25-187A5	4,8x0,5	5,0	6,4	20,5	10,5	3,9	1,7	10 x 100	✓
	RBLVDDF 1.25-187A8	4,8x0,8	5,0	6,4	20,5	10,5	3,9	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBLVDDF 2-110A5	2,8x0,5	3,1	6,5	19,0	10,5	4,7	2,3	10 x 100	✓
	RBLVDDF 2-110A8	2,8x0,8	3,1	6,5	19,0	10,5	4,7	2,3	10 x 100	✓
	RBLVDDF 2-187A5	4,8x0,5	5,0	6,4	20,5	10,5	4,7	2,3	10 x 100	✓
	RBLVDDF 2-187A8	4,8x0,8	5,0	6,4	20,5	10,5	4,7	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	RBLVDDF 5.5-250A	6,3x0,8	6,6	7,2	23,5	13,0	6,3	3,4	10 x 100	✓
	RBLVDDF 5.5-375A	9,5x1,2	9,8	12,0	30,0	13,0	6,3	3,4	10 x 100	✓

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## PVC female disconnectors - Straight copper sleeve



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBLVDDF 1.25-250A	6,3x0,8	6,6	7,2	21,8	10,5	3,9	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBLVDDF 2-250A	6,3x0,8	6,6	7,2	21,8	10,5	4,7	2,3	10 x 100	

## PVC female disconnectors - Easy Entry copper sleeve

- vinyl (PVC)
- electro tin plated
- brass
- operating temperature -10°C-75°C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RELVDDF 1.25-110A5	2,8x0,5	3,1	6,5	19,0	10,5	3,9	1,7	10 x 100	✓
	RELVDDF 1.25-110A8	2,8x0,8	3,1	6,5	19,0	10,5	3,9	1,7	10 x 100	✓
	RELVDDF 1.25-187A5	4,8x0,5	5,0	6,4	20,5	10,5	3,9	1,7	10 x 100	✓
	RELVDDF 1.25-187A8	4,8x0,8	5,0	6,4	20,5	10,5	3,9	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RELVDDF 2-110A5	2,8x0,5	3,1	6,5	19,0	10,5	4,7	2,3	10 x 100	✓
	RELVDDF 2-110A8	2,8x0,8	3,1	6,5	19,0	10,5	4,7	2,3	10 x 100	✓
	RELVDDF 2-187A5	4,8x0,5	5,0	6,4	20,5	10,5	4,7	2,3	10 x 100	✓
	RELVDDF 2-187A8	4,8x0,8	5,0	6,4	20,5	10,5	4,7	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	RELVDDF 5.5-250A	6,3x0,8	6,6	7,2	23,8	13,0	6,3	3,4	10 x 100	✓
	RELVDDF 5.5-375A	9,5x1,2	9,8	12,0	30,0	13,0	6,3	3,4	10 x 100	

## PVC female disconnectors - Easy Entry copper sleeve

- vinyl (PVC)
- electro tin plated
- brass
- operating temperature -10°C-75°C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	REOVDDF 1.25-250A	6,3x0,8	6,6	7,2	21,8	10,5	3,9	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	REOVDDF 2-250A	6,3x0,8	6,6	7,2	21,8	10,5	4,7	2,3	10 x 100	✓

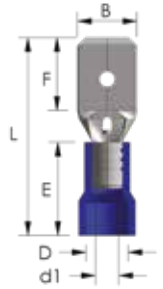
## PVC female disconnectors - Easy Entry copper sleeve

- vinyl (PVC)
- electro tin plated
- brass
- operating temperature -10°C-75°C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant



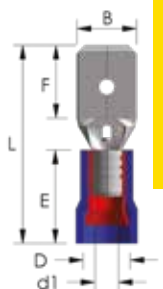
Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RELVDDF 1.25-250A	6,3x0,8	6,6	7,2	21,8	10,5	3,9	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RELVDDF 2-250A	6,3x0,8	6,6	7,2	21,8	10,5	4,7	2,3	10 x 100	

## PVC male disconnectors - Standard



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDM 1.25-110A5	2,8x0,5	2,8	7,6	18,7	10,0	3,5	1,7	10 x 100	
	RBFVDM 1.25-110A8	2,8x0,8	2,8	6,6	18,7	10,0	3,5	1,7	10 x 100	
	RBFVDM 1.25-187A5	4,8x0,5	4,8	7,6	19,2	10,0	3,5	1,7	10 x 100	
	RBFVDM 1.25-187A8	4,8x0,8	4,8	6,6	19,2	10,0	3,5	1,7	10 x 100	
	RBFVDM 1.25-250	6,3x0,8	6,3	7,6	20,8	10,0	3,5	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVDM 2-110A5	2,8x0,5	2,8	7,6	18,7	10,0	4,3	2,3	10 x 100	
	RBFVDM 2-110A8	2,8x0,8	2,8	6,6	18,7	10,0	4,3	2,3	10 x 100	
	RBFVDM 2-187A5	4,8x0,5	4,8	7,6	19,2	10,0	4,3	2,3	10 x 100	
	RBFVDM 2-187A8	4,8x0,8	4,8	6,6	19,2	10,0	4,3	2,3	10 x 100	
	RBFVDM 2-250	6,3x0,8	6,3	7,5	20,8	10,0	4,3	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDM 5.5-250	6,3x0,8	6,3	7,5	24,0	13,0	5,6	3,4	10 x 100	

## PVC male disconnectors - Straight copper sleeve

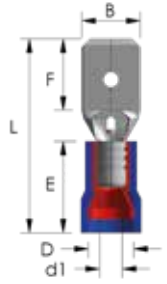


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Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDDM 1.25-110A5	2,8x0,5	2,8	7,6	18,7	10,0	3,9	1,7	10 x 100	✓
	RBFVDDM 1.25-110A8	2,8x0,8	2,8	6,6	18,7	10,0	3,9	1,7	10 x 100	✓
	RBFVDDM 1.25-187A5	4,8x0,5	4,8	7,6	19,2	10,0	3,9	1,7	10 x 100	✓
	RBFVDDM 1.25-187A8	4,8x0,8	4,8	6,6	19,2	10,0	3,9	1,7	10 x 100	✓
	RBFVDDM 1.25-250	6,3x0,8	6,3	7,6	20,8	10,0	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVDDM 2-110A5	2,8x0,5	2,8	7,6	18,7	10,0	4,7	2,3	10 x 100	✓
	RBFVDDM 2-110A8	2,8x0,8	2,8	6,6	18,7	10,0	4,7	2,3	10 x 100	✓
	RBFVDDM 2-187A5	4,8x0,5	4,8	7,6	19,2	10,0	4,7	2,3	10 x 100	✓
	RBFVDDM 2-187A8	4,8x0,8	4,8	6,6	19,2	10,0	4,7	2,3	10 x 100	✓
	RBFVDDM 2-250	6,3x0,8	6,3	7,6	20,8	10,0	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDDM 5.5-250	6,3x0,8	6,3	7,6	24,0	13,0	6,3	3,4	10 x 100	✓

## PVC male disconnectors - Easy Entry copper sleeve

- vinyl  
(PVC)
- electro  
tin  
plated
- brass
- operating  
temperature  
-10°C-75°C
- 300V  
max
- red: 10A  
blue: 15A  
yell.: 24A  
max
- RoHS  
compliant

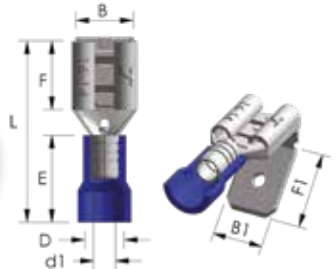


Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVDDM 1.25-110A5	2,8x0,5	2,8	7,6	18,7	10,0	3,9	1,7	10 x 100	✓
	REFVDDM 1.25-110A8	2,8x0,8	2,8	6,6	18,7	10,0	3,9	1,7	10 x 100	✓
	REFVDDM 1.25-187A5	4,8x0,5	4,8	7,6	19,2	10,0	3,9	1,7	10 x 100	✓
	REFVDDM 1.25-187A8	4,8x0,8	4,8	6,6	19,2	10,0	3,9	1,7	10 x 100	✓
	REFVDDM 1.25-250	6,3x0,8	6,3	7,6	20,8	10,0	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	REFVDDM 2-110A5	2,8x0,5	2,8	7,6	18,7	10,0	4,7	2,3	10 x 100	✓
	REFVDDM 2-110A8	2,8x0,8	2,8	6,6	18,7	10,0	4,7	2,3	10 x 100	✓
	REFVDDM 2-187A5	4,8x0,5	4,8	7,6	19,2	10,0	4,7	2,3	10 x 100	✓
	REFVDDM 2-187A8	4,8x0,8	4,8	6,6	19,2	10,0	4,7	2,3	10 x 100	✓
	REFVDDM 2-250	6,3x0,8	6,3	7,6	20,8	10,0	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	REFVDDM 5.5-250	6,3x0,8	6,3	7,6	24,0	13,0	6,3	3,4	10 x 100	✓

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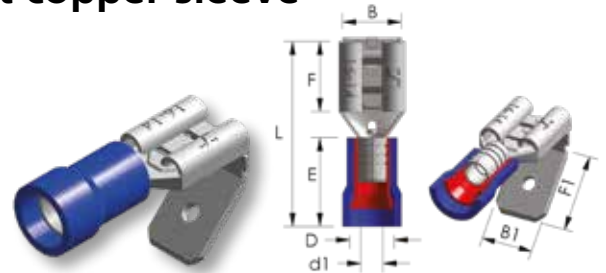
## PVC piggy back disconnectors - Standard

- vinyl  
(PVC)
- electro  
tin  
plated
- brass
- operating  
temperature  
-10°C-75°C
- 300V  
max
- red: 10A  
blue: 15A  
yell.: 24A  
max
- RoHS  
compliant



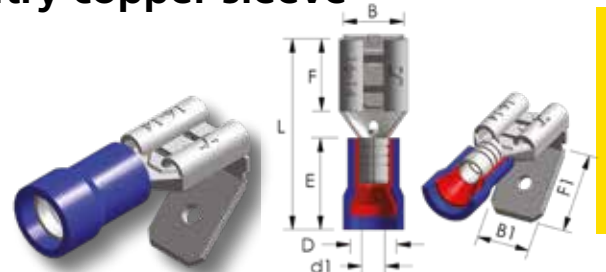
Wire range	Part nr.	tab	B	B1	F	F1	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDFM 1.25-250A	6,3x0,8	6,7	6,4	8,0	8,2	21,0	10,0	3,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVDFM 2-250B	6,3x0,8	6,7	6,4	8,0	8,2	21,0	10,0	4,1	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDFM 5.5-250A	6,3x0,8	6,7	6,4	8,0	8,2	24,5	13,0	5,6	3,4	10 x 100	

## PVC piggy back disconnectors - Straight copper sleeve



Wire range	Part nr.	tab	B	B1	F	F1	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBFVDDFM 1.25-250A	6,3x0,8	6,7	6,4	8,0	8,2	21,0	10,0	3,8	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBFVDDFM 2-250B	6,3x0,8	6,7	6,4	8,0	8,2	21,0	10,0	4,7	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	RBFVDDFM 5.5-250A	6,3x0,8	6,7	6,4	8,0	8,2	24,5	13,0	6,2	3,4	10 x 100	✓

## PVC piggy back disconnectors - Easy Entry copper sleeve



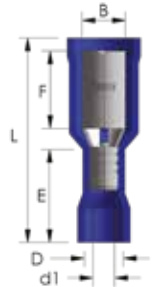
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Wire range	Part nr.	tab	B	B1	F	F1	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	REFVDDFM 1.25-250A	6,3x0,8	6,7	6,4	8,0	8,2	21,0	10,0	3,8	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	REFVDDFM 2-250B	6,3x0,8	6,7	6,4	8,0	8,2	21,0	10,0	4,7	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	REFVDDFM 5.5-250A	6,3x0,8	6,7	6,4	8,0	8,2	24,5	13,0	6,2	3,4	10 x 100	✓



## PVC female bullet disconnectors - Standard

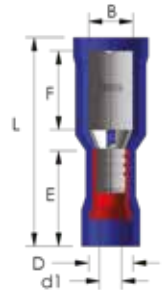
- vinyl (PVC)**
- electro tin plated**
- brass**
- operating temperature -10°C-75°C**
- 300V max**
- red: 10A  
blue: 15A  
yell.: 24A max**
- RoHS compliant**



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBCVGF 1.25-5	3,9	7,3	24,5	10,5	3,4	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBCVGF 2-5	3,9	7,3	24,5	10,5	4,1	2,3	10 x 100	
	RBCVGF 2-7	4,9	7,3	25,5	10,5	4,1	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	RBCVGF 5.5-7	4,9	7,3	28,0	13,7	5,6	3,4	10 x 100	

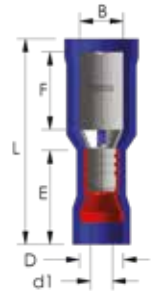
## PVC female bullet disconnectors - Straight copper sleeve

- vinyl (PVC)**
- electro tin plated**
- brass**
- operating temperature -10°C-75°C**
- 300V max**
- red: 10A  
blue: 15A  
yell.: 24A max**
- RoHS compliant**



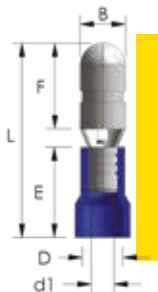
Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	RBCVDGF 1.25-5	3,9	7,3	24,5	10,5	3,9	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	RBCVDGF 2-5	3,9	7,3	24,5	10,5	4,7	2,3	10 x 100	✓
	RBCVDGF 2-7	4,9	7,3	24,5	10,5	4,7	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	RBCVDGF 5.5-7	4,9	7,3	28,5	13,7	6,3	3,4	10 x 100	✓

## PVC female bullet disconnectors - Easy Entry copper sleeve



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RECVDGF 1.25-5	3,9	7,3	24,5	10,5	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RECVDGF 2-5	3,9	7,3	24,5	10,5	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	RECVDGF 5.5-7	4,9	7,3	28,5	13,7	6,3	3,4	10 x 100	✓

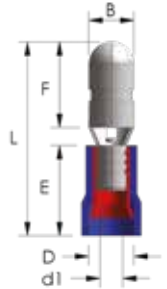
## PVC male bullet disconnectors - Standard



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVGM 1.25-5	4,0	9,0	21,5	10,0	3,3	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RBFVGM 2-5	4,0	9,0	21,5	10,0	4,1	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RBFVGM 5.5-7	5,0	9,0	25,0	13,0	5,6	3,4	10 x 100	

## PVC male bullet disconnectors - Straight copper sleeve

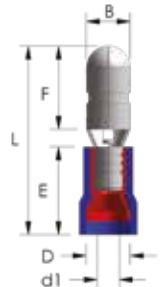
- vinyl (PVC)**
- electro tin plated**
- brass**
- operating temperature -10°C-75°C**
- 300V max**
- red: 10A  
blue: 15A  
yell.: 24A max**
- RoHS compliant**



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RBFVDGM 1.25-5	4,0	9,0	21,5	10,0	3,9	1,7	10 x 100	✓
16~14 AWG	RBFVDGM 2-5	4,0	9,0	21,5	10,0	4,7	2,3	10 x 100	✓
1,5~2,5 mm <sup>2</sup>	RBFVDGM 2-7	5,0	9,0	22,5	10,0	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	RBFVDGM 5.5-7	5,0	9,0	25,0	13,0	6,3	3,4	10 x 100	✓

## PVC male bullet disconnectors - Easy Entry copper sleeve

- vinyl (PVC)**
- electro tin plated**
- brass**
- operating temperature -10°C-75°C**
- 300V max**
- red: 10A  
blue: 15A  
yell.: 24A max**
- RoHS compliant**



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	REFVDGM 1.25-5	4,0	9,0	21,2	10,0	3,9	1,7	10 x 100	✓
16~14 AWG	REFVDGM 2-5	4,0	9,0	21,5	10,0	4,7	2,3	10 x 100	✓
1,5~2,5 mm <sup>2</sup>	REFVDGM 2-7	5,0	9,0	22,5	10,0	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	REFVDGM 5.5-7	5,0	9,0	25,0	13,0	6,3	3,4	10 x 100	✓

INSULATED TERMINALS

## PVC insulated assortments

### HI310552BC

552 pcs - 19 compartments  
incl. tool

1 x 10" ratchet crimper HJ561  
1 x die set DSQIA  
1 x insulation tape  
50 x cable tie (2,5 x 100 mm)

14 x REFVD 1.25-M3DIN  
13 x REFVD 1.25-4DIN  
13 x REFVD 1.25-5DIN  
12 x REFVD 2-53DIN  
12 x REFVD 2-4DIN  
12 x REFVD 2-5DIN  
25 x REFVD 2-6DIN  
13 x REFVD 5.5-4DIN  
12 x REFVD 5.5-5DIN

25 x REFVDC 1.25  
25 x REFVDC 2

25 x REFVDDF 1.25-250A  
25 x RELVDDF 1.25-250A  
25 x REFVDDM 1.25-250  
25 x REFVDDF 2-250A  
25 x RELVDDF 2-250A  
25 x REFVDDM 2-250  
12 x REFVDDF 5.5-250A  
12 x REFVDDM 5.5-250

25 x RECVDGF 1.25-5  
25 x REFVDGM 1.25-5  
25 x RECVDGF 2-5  
25 x REFVDGM 2-5

25 x REFVDDFM 1.25-250A  
25 x REFVDDFM 2-250B

## Professional kit



Also available without terminals



### HI310052BC

52 pcs - 19 compartments

1 x 10" ratchet crimper HJ561  
1 x die set DSQIA  
1 x insulation tape  
50 x cable tie (2,5 x 100 mm)

### AD-101

61 pcs - 11 compartments  
incl. tool

1 x multi-tool

10 x BFV 1.25-3  
4 x BFV 1.25-4  
10 x BFV 2-3  
4 x BFV 2-4

10 x BFV 1.25-3A  
10 x BFV 2-3A

2 x BFVC 1.25  
2 x BFVC 2

2 x BFVDF 1.25-250A  
2 x BFVDM 1.25-250  
2 x BFVDF 2-250A  
2 x BFVDM 2-250



### AD-002

307 pcs - 18 compartments  
incl. tool

1 x multi-tool

20 x BFV 1.25-4  
20 x BFV 1.25-5  
20 x BFV 2-4  
20 x BFV 2-5  
20 x BFV 2-6  
10 x BFV 5.5-8

20 x BFV 1.25-B3A  
20 x BFV 2-YS4A

10 x BFVC 1.25  
10 x BFVC 2  
6 x BFVC 5.5

20 x BFVDF 1.25-110A8  
20 x BFVDM 1.25-110A8  
20 x BFVDF 1.25-250A  
20 x BFVDM 1.25-250  
20 x BFVDF 2-187A8  
20 x BFVDM 2-187A8  
10 x BFVDF 5.5-250A



### AD-006

541 pcs - 19 compartments  
incl. tool



- 1 x multi-tool
- 30 x B 1-SD
- 8 x B 5.5-SD
- 52 x BFV 1.25-3
- 30 x BFV 1.25-5
- 40 x BFV 2-S3.3
- 30 x BFV 2-4
- 30 x BFV 2-5
- 30 x BCVGF 1.25-5
- 30 x BFVGM 1.25-5
- 30 x BFVDF 1.25-250A
- 30 x BFVDM 1.25-250
- 30 x BFVDF 2-187A5
- 30 x BFVDM 2-187A5
- 30 x BFVDF 2-250A
- 40 x BFV 1.25-B3A
- 30 x BFV 2-YS4A
- 20 x BFVC 1.25
- 20 x BFVC 2

### AD-008

361 pcs - 13 compartments  
incl. tool

- 1 x crimping tool
- 30 x ECVDGF 1.25-5
- 30 x EFVDGM 1.25-5
- 30 x BFV 1.25-5
- 30 x BFV 1.25-6
- 30 x BFV 2-4
- 30 x EFVDDF 2-187A5
- 30 x EFVDDM 2-187A5
- 50 x BFV 1.25-B3A
- 30 x BFV 2-YS4A
- 30 x BFVC 1.25
- 20 x BFVC 2
- 20 x BFVC 5.5



### AD-009

1000 pcs - 14 compartments



- 100 x BFV 1.25-5
- 50 x BFV 5.5-8
- 50 x BFV 1.25-YS4A
- 100 x BFV 2-YS4A
- 100 x BFVC 1.25
- 100 x BFVC 2
- 50 x ELVDDF 1.25-250A
- 50 x EFVDDF 1.25-250A
- 100 x EFVDDM 1.25-250
- 50 x ELVDDF 2-250A
- 50 x EFVDDF 2-250A
- 100 x EFVDDM 2-250
- 50 x BFVDF 5.5-250A
- 50 x BFVDM 5.5-250

### WS-00004

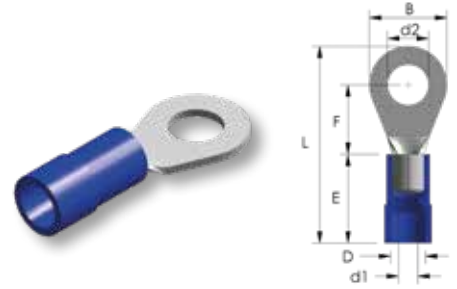
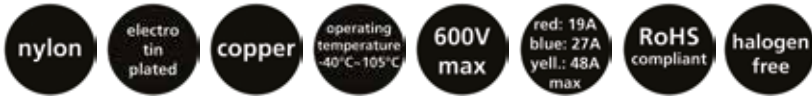
100 pcs

- 10 x RBFV 1.25-6
- 10 x RBFV 2-4
- 10 x RBFV 1.25-YS4A
- 10 x RBFV 2-YS4A
- 10 x RBFV 2-5A
- 7 x RBFVC 1.25
- 7 x RBFVC 2
- 6 x RBFVDDF 2-250A
- 6 x RBFVDDM 2-250
- 6 x RBCVDGF 1.25-5
- 6 x RBFVDGM 1.25-5
- 6 x RBCVDGF 2-7
- 6 x RBFVDGM 2-7





## Nylon ring terminals - DIN 46237 Brazed Seam

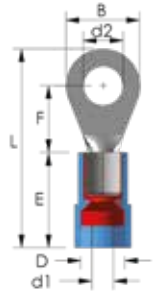
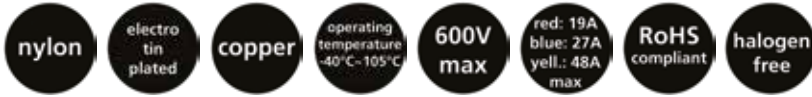


Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	EFN 1.25-3DINBS	3,2	6,0	6,3	19,7	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-M3DINBS	3,7	6,0	6,3	19,7	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-4DINBS	4,3	8,0	7,3	21,7	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-5DINBS	5,3	10,0	8,3	23,7	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-6DINBS	6,5	11,0	10,3	26,2	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-8DINBS	8,4	14,0	12,3	29,7	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-10DINBS	10,5	18,0	14,3	33,7	10,7	3,9	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	EFN 2-S3.3DINBS	3,2	6,0	6,3	19,7	10,7	4,5	2,3	10 x 100	✓
	EFN 2-S3DINBS	3,7	6,0	6,3	19,7	10,7	4,5	2,3	10 x 100	✓
	EFN 2-4DINBS	4,3	8,0	7,3	21,7	10,7	4,5	2,3	10 x 100	✓
	EFN 2-5DINBS	5,3	10,0	8,8	24,7	10,7	4,5	2,3	10 x 100	✓
	EFN 2-6DINBS	6,5	11,0	11,3	27,2	10,7	4,5	2,3	10 x 100	✓
	EFN 2-8DINBS	8,4	14,0	12,3	29,7	10,7	4,5	2,3	10 x 100	✓
	EFN 2-10DINBS	10,5	18,0	13,8	33,2	10,7	4,5	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	EFN 5.5-4DINBS	4,3	8,0	8,3	25,0	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-5DINBS	5,3	10,0	9,3	26,7	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-6DINBS	6,5	11,0	10,3	27,7	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-8DINBS	8,4	14,0	13,3	32,7	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-10DINBS	10,5	18,0	15,3	36,7	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-12DINBS	13,0	18,0	15,3	36,7	12,7	6,4	3,4	10 x 100	✓

INSULATED TERMINALS

## Nylon DIN ring terminals - Easy Entry copper sleeve

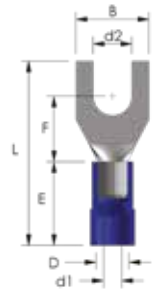
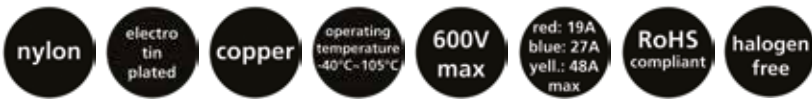
- Conductor size according to DIN 46234



Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	EFND 1.25-3DIN	3,2	6,0	6,3	19,7	10,7	4,4	1,7	10 x 100	
	EFND 1.25-4DIN	4,3	8,0	7,3	21,7	10,7	4,4	1,7	10 x 100	
	EFND 1.25-5DIN	5,3	10,0	8,3	23,7	10,7	4,4	1,7	10 x 100	
	EFND 1.25-6DIN	6,4	11,0	10,3	26,2	10,7	4,4	1,7	10 x 100	
	EFND 1.25-8DIN	8,5	14,0	12,3	29,7	10,7	4,4	1,7	10 x 100	
	EFND 1.25-10DIN	10,5	18,0	14,3	33,7	10,7	4,4	1,7	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	EFND 2-53.3DIN	3,2	6,0	6,3	19,7	10,7	5,0	2,3	10 x 100	
	EFND 2-53DIN	3,7	6,0	6,3	19,7	10,7	5,0	2,3	10 x 100	
	EFND 2-4DIN	4,3	8,0	7,3	21,7	10,7	5,0	2,3	10 x 100	
	EFND 2-5DIN	5,3	10,0	9,3	24,7	10,7	5,0	2,3	10 x 100	
	EFND 2-6DIN	6,4	11,0	11,3	27,2	10,7	5,0	2,3	10 x 100	
	EFND 2-8DIN	8,5	14,0	12,3	29,7	10,7	5,0	2,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	EFND 2-10DIN	10,5	15,0	13,8	33,2	10,7	5,0	2,3	10 x 100	
	EFND 5.5-4DIN	4,3	8,0	8,3	25,0	12,7	7,0	3,4	10 x 100	
	EFND 5.5-5DIN	5,3	10,0	9,3	26,7	12,7	7,0	3,4	10 x 100	
	EFND 5.5-6DIN	6,4	11,0	10,3	27,7	12,7	7,0	3,4	10 x 100	
	EFND 5.5-8DIN	8,5	14,0	13,3	32,7	12,7	7,0	3,4	10 x 100	
EFND 5.5-10DIN	10,5	18,0	15,3	36,7	12,7	7,0	3,4	10 x 100		

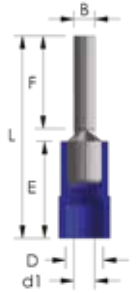
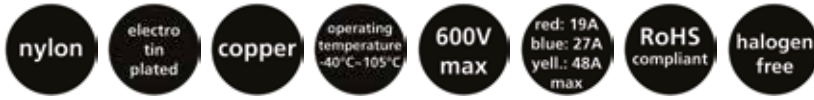
INSULATED TERMINALS

## Nylon spade terminals - DIN 46237 Brazed Seam



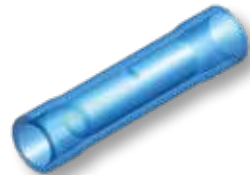
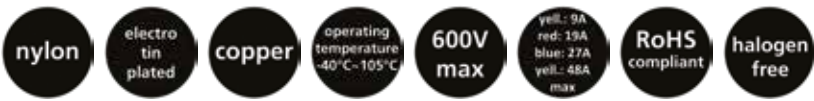
Wire range	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	EFN 1.25-B3ADINBS	3,2	6,0	5,3	19,3	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-YS3ADINBS	3,7	6,0	5,3	19,3	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-YS4ADINBS	4,3	8,0	6,3	21,3	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-5ADINBS	5,3	10,0	7,3	23,3	10,7	3,9	1,7	10 x 100	✓
	EFN 1.25-6ADINBS	6,5	11,0	9,3	25,9	10,7	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	EFN 2-B3ADINBS	3,2	6,0	6,3	19,6	10,7	4,5	2,3	10 x 100	✓
	EFN 2-YS3ADINBS	3,7	6,0	5,3	19,6	10,7	4,5	2,3	10 x 100	✓
	EFN 2-YS4ADINBS	4,3	8,0	6,3	21,6	10,7	4,5	2,3	10 x 100	✓
	EFN 2-5ADINBS	5,3	10,0	8,3	24,6	10,7	4,5	2,3	10 x 100	✓
	EFN 2-6ADINBS	6,5	11,0	10,3	27,1	10,7	4,5	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	EFN 5.5-54ADINBS	4,3	8,0	8,3	23,9	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-5ADINBS	5,3	10,0	9,3	26,1	12,7	6,4	3,4	10 x 100	✓
	EFN 5.5-6ADINBS	6,5	11,0	10,5	27,9	12,7	6,4	3,4	10 x 100	✓
EFN 5.5-8ADINBS	8,4	14,0	13,3	32,3	12,7	6,4	3,4	10 x 100	✓	

## Nylon pin terminals - DIN 46231 Brazed Seam



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG	EFNPC 1.25-F10DINBS	1,9	10,0	20,7	10,7	3,9	1,7	10 x 100	✓
0,5~1,5 mm <sup>2</sup>	EFNPC 1.25DINBS	1,9	12,0	22,7	10,7	3,9	1,7	10 x 100	✓
16~14 AWG	EFNPC 2-F9DINBS	1,9	9,0	19,7	10,7	4,5	2,3	10 x 100	✓
	EFNPC 2-F10DINBS	1,9	10,0	20,7	10,7	4,5	2,3	10 x 100	✓
	EFNPC 2DINBS	1,9	12,0	22,7	10,7	4,5	2,3	10 x 100	✓
1,5~2,5 mm <sup>2</sup>	EFNPC 2-F13DINBS	1,9	13,0	23,7	10,7	4,5	2,3	10 x 100	✓
	EFNPC 5.5-F10DINBS	2,8	10,0	22,7	12,7	6,4	3,4	10 x 100	✓
	EFNPC 5.5DINBS	2,8	12,0	24,7	12,7	6,4	3,4	10 x 100	✓
12~10 AWG	EFNPC 5.5-F13DINBS	2,8	14,0	26,7	12,7	6,4	3,4	10 x 100	✓
	EFNPC 5.5DINBS	2,8	12,0	24,7	12,7	6,4	3,4	10 x 100	✓
4~6 mm <sup>2</sup>	EFNPC 5.5-F13DINBS	2,8	14,0	26,7	12,7	6,4	3,4	10 x 100	✓

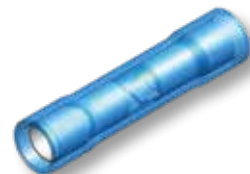
## Nylon butt connectors - Standard



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Wire range	Part nr.	L	D	d	Packed	UL
26~22AWG	BFNC 0.5	20,0	2,3	1,2	10 x 100	
0,2~0,5 mm <sup>2</sup>	BFNC 0.5	20,0	2,3	1,2	10 x 100	
22~16 AWG	BFNC 1.25	25,2	4,1	1,7	10 x 100	
0,5~1,5 mm <sup>2</sup>	BFNC 1.25	25,2	4,1	1,7	10 x 100	
16~14 AWG	BFNC 2	25,2	4,7	2,3	10 x 100	
1,5~2,5 mm <sup>2</sup>	BFNC 2	25,2	4,7	2,3	10 x 100	
12~10 AWG	BFNC 5.5	28,2	6,4	3,4	10 x 100	
4~6 mm <sup>2</sup>	BFNC 5.5	28,2	6,4	3,4	10 x 100	

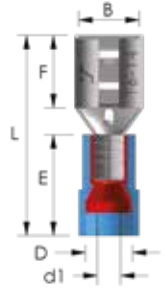
## Nylon butt connectors - Window type



Wire range	Part nr.	L	D	d	Packed	UL
22~16 AWG	EFVDWSCW 1.25	30,0	4,1	1,7	10 x 100	
0,5~1,5 mm <sup>2</sup>	EFVDWSCW 1.25	30,0	4,1	1,7	10 x 100	
16~14 AWG	EFVDWSCW 2	30,0	4,8	2,3	10 x 100	
1,5~2,5 mm <sup>2</sup>	EFVDWSCW 2	30,0	4,8	2,3	10 x 100	
12~10 AWG	EFVDWSCW 5.5	35,0	6,5	3,4	10 x 100	
4~6 mm <sup>2</sup>	EFVDWSCW 5.5	35,0	6,5	3,4	10 x 100	

## Nylon female disconnectors - Easy Entry copper sleeve

- nylon
- electro tin plated
- brass
- operating temperature -40°C-105°C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant
- halogen free

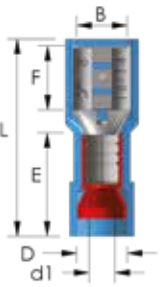


Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	EFNDDF 1.25-110A5	2,8x0,5	3,2	6,5	19,0	10,7	3,9	1,7	10 x 100	✓
	EFNDDF 1.25-110A8	2,8x0,8	3,2	6,5	19,0	10,7	3,9	1,7	10 x 100	✓
	EFNDDF 1.25-187A5	4,8x0,5	5,0	6,4	19,2	10,7	3,9	1,7	10 x 100	✓
	EFNDDF 1.25-187A8	4,8x0,8	5,0	6,4	19,2	10,7	3,9	1,7	10 x 100	✓
	EFNDDF 1.25-250A	6,3x0,8	6,6	7,2	20,8	10,7	3,9	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	EFNDDF 2-110A5	2,8x0,5	3,2	6,4	19,0	10,7	4,7	2,3	10 x 100	✓
	EFNDDF 2-110A8	2,8x0,8	3,2	6,4	19,0	10,7	4,7	2,3	10 x 100	✓
	EFNDDF 2-187A5	4,8x0,5	5,0	6,4	19,2	10,7	4,7	2,3	10 x 100	✓
	EFNDDF 2-187A8	4,8x0,8	5,0	6,4	19,2	10,7	4,7	2,3	10 x 100	✓
	EFNDDF 2-250A	6,3x0,8	6,6	7,2	20,8	10,7	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	EFNDDF 2-312A	8,0x0,8	8,2	10,2	24,5	10,7	4,7	2,3	10 x 100	✓
	EFNDDF 5.5-250A	6,3x0,8	6,6	7,2	23,8	12,7	6,3	3,4	10 x 100	✓
	EFNDDF 5.5-375A	9,4x1,2	9,8	12,0	28,6	12,7	6,3	3,4	10 x 100	✓

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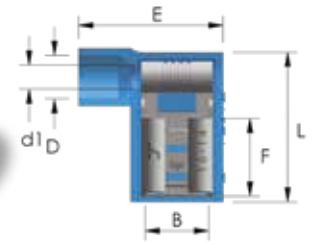
## Nylon female disconnectors - Easy Entry copper sleeve

- nylon
- electro tin plated
- brass
- operating temperature -40°C-105°C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant
- halogen free



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG	ELNDDF 1.25-187A5	4,8x0,5	5,0	6,4	20,0	10,5	4,2	1,7	10 x 100	✓
0,5~1,5 mm <sup>2</sup>	ELNDDF 1.25-187A8	4,8x0,8	5,0	6,4	20,0	10,5	4,2	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	ELNDDF 2-187A5	4,8x0,5	5,0	6,4	20,0	10,5	4,9	2,3	10 x 100	✓
	ELNDDF 2-187A8	4,8x0,8	5,0	6,4	20,0	10,5	4,9	2,3	10 x 100	✓

## Nylon Flag Terminals - Standard



Wire range	Part nr.	tab	B	F	L	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	ELNDFF 1.25-187A5	4,8x0,5	5,0	7,0	15,0	4,7	1,7	10 x 100	
	ELNDFF 1.25-187A8	4,8x0,8	5,0	7,0	15,0	4,7	1,7	10 x 100	
	ELNDFF 1.25-250A	6,3x0,8	6,6	7,2	16,0	4,4	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	ELNDFF 2-187A5	4,8x0,5	5,0	7,0	15,0	5,0	2,3	10 x 100	
	ELNDFF 2-187A8	4,8x0,8	5,0	7,0	15,2	5,0	2,3	10 x 100	
	ELNDFF 2-250A	6,3x0,8	6,6	7,2	16,0	5,0	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	ELNDFF 5.5-250A	6,3x0,8	7,0	7,6	17,5	6,5	3,4	10 x 100	



**MH-1DS**  
Crimping tool for insulated flag terminals  
0,5 - 2,5 mm<sup>2</sup>

**Tools for insulated flag terminals**

### Die set

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



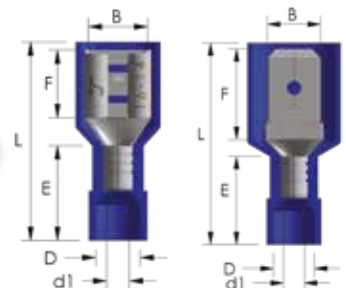
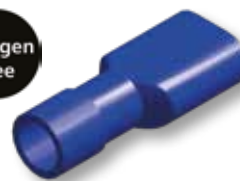
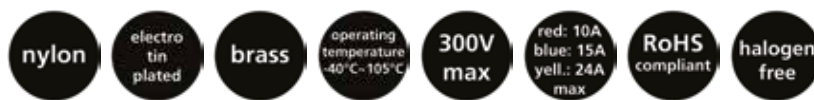
**DSQIA4**  
For insulated flag terminals  
0,5-1,0/1,5-2,5 mm<sup>2</sup>



**MHQIBE**  
(separately available)

INSULATED TERMINALS

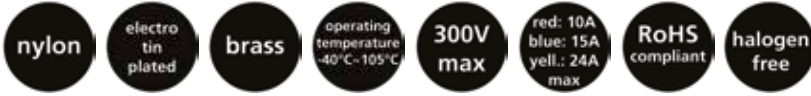
## Nylon female & male disconnectors - Standard



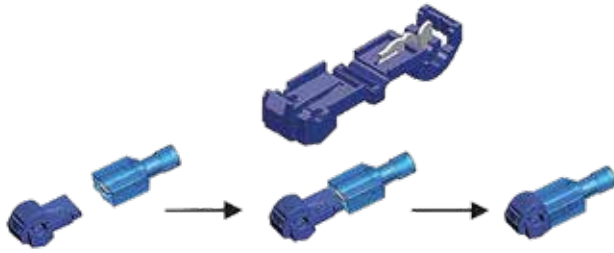
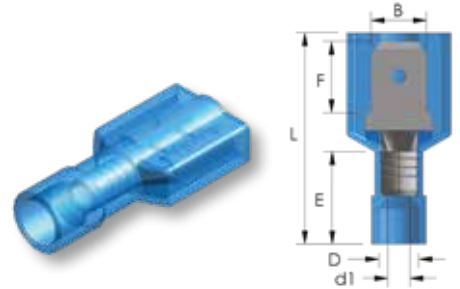
Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	ELNDF 1.25-250A	6,3x0,8	6,6	7,2	21,6	10,3	4,0	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	ELNDF 2-250A	6,3x0,8	6,6	7,2	21,6	10,6	4,5	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	ELNDF 5.5-250A	6,3x0,8	6,6	7,2	22,3	12,1	6,3	3,4	10 x 100	
22-16 AWG 0,5-1,5 mm <sup>2</sup>	ELNDM 1.25-250	6,3x0,8	6,3	7,6	23,5	10,5	4,0	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	ELNDM 2-250	6,3x0,8	6,3	7,6	23,5	10,5	4,5	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	ELNDM 5.5-250	6,3x0,8	6,3	7,6	26,0	12,8	6,5	3,4	10 x 100	



## Nylon male disconnectors - Standard

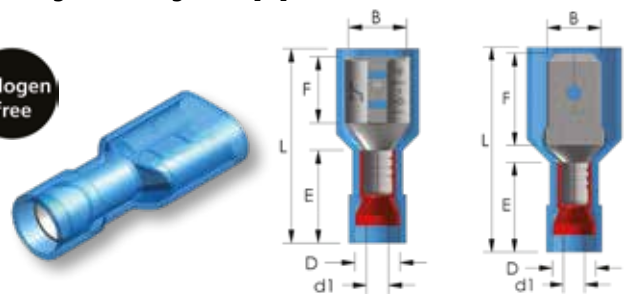
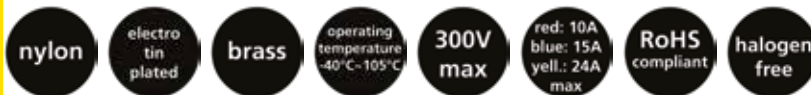


• Counterpart for: 999-1 / 999-5 / 999-3 on page 177



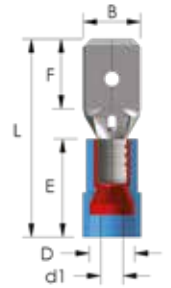
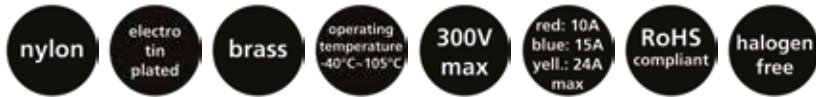
Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	281638 (male)	6,3x0,8	6,3	7,9	24,0	10,5	4,0	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	285638 (male)	6,3x0,8	6,3	7,9	24,0	10,5	4,5	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	289638 (male)	6,3x0,8	6,3	7,9	26,5	12,5	6,5	3,4	10 x 100	✓

## Nylon female & male disconnectors - Easy Entry copper sleeve



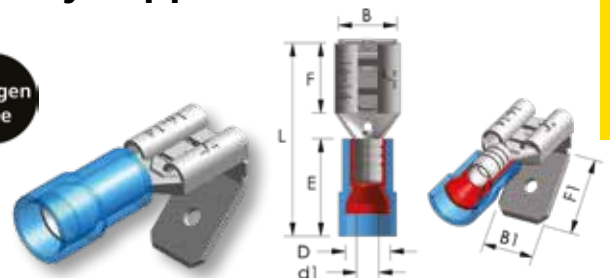
Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22-16 AWG 0,5-1,5 mm <sup>2</sup>	ELNDDF 1.25-250A	6,3x0,8	6,6	7,2	21,2	11,0	4,0	1,7	10 x 100	
16-14 AWG 1,5-2,5 mm <sup>2</sup>	ELNDDF 2-250A	6,3x0,8	6,6	7,2	21,5	11,0	5,0	2,3	10 x 100	
12-10 AWG 4-6 mm <sup>2</sup>	ELNDDF 5.5-250A	6,3x0,8	6,6	7,2	24,2	13,0	6,5	3,4	10 x 100	
22-16 AWG 0,5-1,5 mm <sup>2</sup>	ELNDDM 1.25-250A	6,3x0,8	6,4	7,9	23,5	10,5	4,2	1,7	10 x 100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	ELNDDM 2-250	6,3x0,8	6,4	7,9	23,5	10,5	4,9	2,3	10 x 100	✓
12-10 AWG 4-6 mm <sup>2</sup>	ELNDDM 5.5-250A	6,3x0,8	6,4	7,9	27,0	13,0	6,5	3,4	10 x 100	✓

## Nylon male disconnectors - Easy Entry copper sleeve



Wire range	Part nr.	tab	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	EFNDDM 1.25-110A5	2,8x0,5	2,8	7,6	19,4	10,7	3,8	1,7	10 x 100	✓
	EFNDDM 1.25-110A8	2,8x0,8	2,8	6,6	19,4	10,7	3,8	1,7	10 x 100	✓
	EFNDDM 1.25-187A5	4,8x0,5	4,8	7,6	19,9	10,7	3,8	1,7	10 x 100	✓
	EFNDDM 1.25-187A8	4,8x0,8	4,8	6,6	19,9	10,7	3,8	1,7	10 x 100	✓
	EFNDDM 125-250	6,3x0,8	6,3	6,6	21,7	10,7	3,8	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	EFNDDM 2-110A5	2,8x0,5	2,8	7,6	19,4	10,7	4,7	2,3	10 x 100	✓
	EFNDDM 2-110A8	2,8x0,8	2,8	6,6	19,4	10,7	4,7	2,3	10 x 100	✓
	EFNDDM 2-187A5	4,8x0,5	4,8	7,6	19,9	10,7	4,7	2,3	10 x 100	✓
	EFNDDM 2-187A8	4,8x0,8	4,8	6,6	19,9	10,7	4,7	2,3	10 x 100	✓
	EFNDDM 2-250	6,3x0,8	6,3	7,6	21,7	10,7	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	EFNDDM 5.5-250	6,3x0,8	6,3	7,6	24,0	12,7	6,2	3,4	10 x 100	✓

## Nylon piggy back disconnectors - Easy Entry copper sleeve

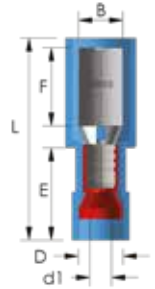


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Wire range	Part nr.	tab	B	B1	F	F1	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	EFNDDFM 1.25-250A	6,3x0,8	6,6	6,4	8,0	8,2	22,0	10,7	3,8	1,7	10 x 100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	EFNDDFM 2-250B	6,3x0,8	6,6	6,4	8,0	8,2	22,0	10,7	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	EFNDDFM 5.5-250A	6,3x0,8	6,6	6,4	8,0	8,2	25,2	12,7	6,2	3,4	10 x 100	✓

## Nylon female bullet disconnectors - Easy Entry copper sleeve

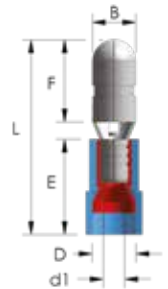
- nylon
- electro tin plated
- brass
- operating temperature -40°C-105°C
- 300V max
- red: 10A blue: 15A yell.: 24A max
- RoHS compliant
- halogen free



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	ECNDGF 1.25-5	3,9	7,3	23,3	9,6	3,8	1,7	10 x 100	
16~14 AWG	ECNDGF 2-5	3,9	7,3	23,3	9,6	4,7	2,3	10 x 100	
1,5~2,5 mm <sup>2</sup>	ECNDGF 2-7	5,0	9,0	23,0	10,5	4,9	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	ECNDGF 5.5-7	5,0	9,0	25,2	13,0	6,5	3,4	10 x 100	✓

## Nylon male bullet disconnectors - Easy Entry copper sleeve

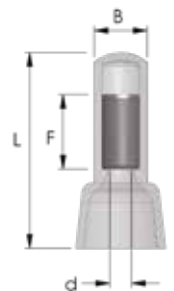
- nylon
- electro tin plated
- brass
- operating temperature -40°C-105°C
- 300V max
- red: 10A blue: 15A yell.: 24A max
- RoHS compliant
- halogen free



Wire range	Part nr.	B	F	L	E	D	d1	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	EFNDGM 1.25-5	4,0	9,0	21,7	10,7	3,8	1,7	10 x 100	✓
16~14 AWG	EFNDGM 2-5	4,0	9,0	22,0	10,7	4,7	2,3	10 x 100	✓
1,5~2,5 mm <sup>2</sup>	EFNDGM 2-7	5,0	9,0	22,0	10,7	4,7	2,3	10 x 100	✓
12~10 AWG 4~6 mm <sup>2</sup>	EFNDGM 5.5-7	5,0	9,0	25,2	12,7	6,2	3,4	10 x 100	✓

## Nylon closed end connectors

- nylon
- electro tin plated
- copper
- operating temperature -40°C-105°C
- 300V max
- RoHS compliant
- halogen free



Wire range	Part nr.	B	F	L	d	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	RB 1-SD	4,8	6,9	19,3	2,8	10 x 100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	RB 2-SD	5,5	6,9	19,8	3,3	10 x 100	
12~10 AWG 4~6 mm <sup>2</sup>	RB 5.5-SD	7,5	7,5	25,5	4,5	10 x 100	

INSULATED TERMINALS

### Die set

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



**DSQIA5**  
For heat shrink & closed end terminals  
0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup>

**MHQIBE**  
(separately available)



**KH-13**  
Crimping tool for heat shrink and closed end terminals  
0,5-6 mm<sup>2</sup>

**Tools for closed end terminals**

**Tools for PVC and Nylon insulated terminals**



**BN-03C**  
Crimping tool for insulated terminals  
0,5-6,0 mm<sup>2</sup>



**BN-05C**  
Crimping tool for insulated terminals  
0,5-6,0 mm<sup>2</sup>



**KH-502**  
Multi-tool for insulated terminals  
0,5-6,0 mm<sup>2</sup>  
Stripping 0,75-6,0 mm<sup>2</sup>



**KH-507**  
Multi-tool for insulated and non-insulated (**brazed seam only**) terminals  
0,5-6,0 mm<sup>2</sup>  
Stripping 0,75-6,0 mm<sup>2</sup>



**MEB-700C**  
Multi-tool for insulated and open barrel terminals  
0,5-6,0 mm<sup>2</sup>  
Stripping 0,75-6,0 mm<sup>2</sup>

INSULATED TERMINALS

### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



**DSQIA**  
For insulated terminals  
0,5-6,0 mm<sup>2</sup>



**DSQIA2**  
For fully insulated female disconnectors  
0,5-6,0 mm<sup>2</sup>

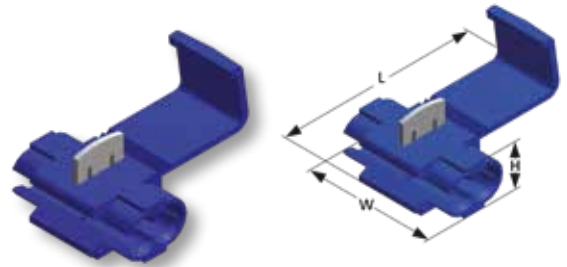


**DSQIA3**  
For miniature insulated terminals  
0,1-1,5 mm<sup>2</sup>



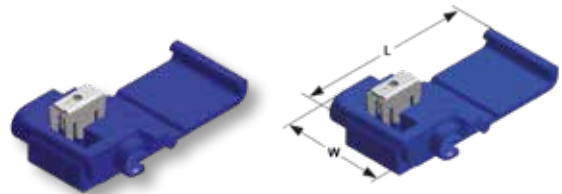
**MHQIBE**  
(separately available)

## Quick splice connectors - Single tab



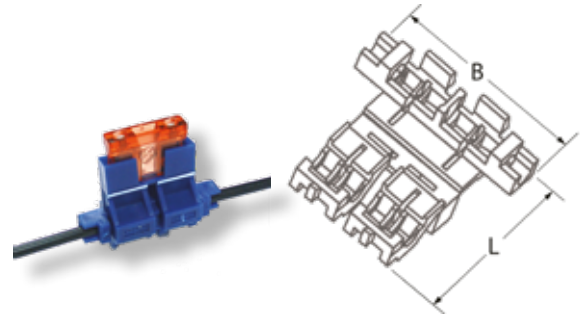
Wire range	Part nr.		W	H	L	Packed	UL
22-18 AWG 0,5-1,0 mm <sup>2</sup>	CL 1.0-TA		20,0	8,0	26,8	100	✓
18-14 AWG 1,0-2,5 mm <sup>2</sup>	CL 2.5-TALB		20,0	8,0	26,8	100	✓
18-14 AWG 1,0-2,5 mm <sup>2</sup>	CL 2.5-TAW		20,0	8,0	26,8	100	✓
12-10 AWG 4-6 mm <sup>2</sup>	CL 5.5-TA		20,0	11,0	35,0	50	✓

## Quick splice connectors - Double tab



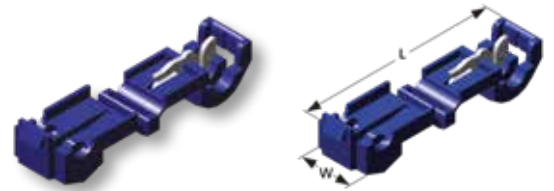
Wire range	Part nr.		W	L	Packed	UL
22-18 AWG 0,5-1,0 mm <sup>2</sup>	OWE 1.25		19,4	33,0	100	
18-16 AWG 0,75-1,5 mm <sup>2</sup>	OWE 1.5		19,4	33,0	100	
18-14 AWG 1,0-2,5 mm <sup>2</sup>	OWE 2		19,4	33,0	100	
18-14/12-10 AWG 0,75-2,5/4-6 mm <sup>2</sup>	OWE 4.0		21,1	33,5	100	

## Quick splice connectors - Fuse holder



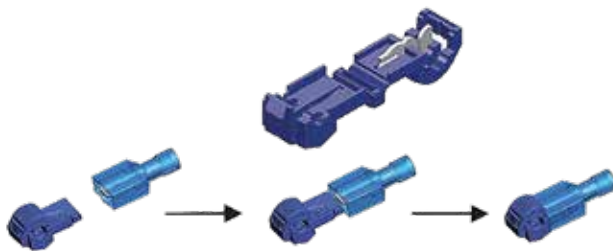
Wire range	Part nr.	B	L	Packed	UL
22~18 AWG 0,5~1,0 mm <sup>2</sup>	CL 1.0-FUSE	36,0	31,0	100	
18~14 AWG 0,75~2,5 mm <sup>2</sup>	CL 2.5-FUSE	35,0	34,0	200	

## Quick splice connectors - T-tap



INSULATED TERMINALS

• Counterpart for: 281638 / 285638 / 289638 on page 172



Wire range	Part nr.	W	L	Packed	UL	
22~18 AWG 0,5~1,0 mm <sup>2</sup>	999-1		9,5	38,0	10 x 100	✓
18~14 AWG 1,0~2,5 mm <sup>2</sup>	999-5		9,5	38,0	10 x 100	✓
12 AWG 4 mm <sup>2</sup>	999-3		9,5	38,0	10 x 100	✓



## Line splice connectors



• RoHS and REACH compliant



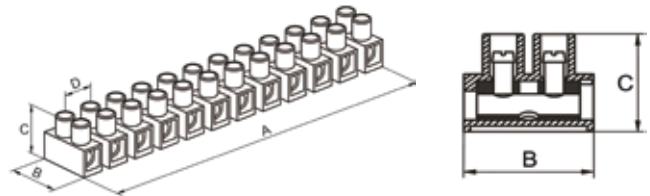
Part nr.	tab	W	L	poles		Packed	UL
401/1	6,3	11,5	27,8	1 -> 1		500	
405/3	6,3	21,0	54,0	1 -> 2		100	
405/4	6,3	20,5	50,0	2 -> 2		100	
401/12*	6,3	11,8	25,8	12 -> 12		20	

INSULATED TERMINALS

## Terminal blocks - 12 Poles



- Material: Nylon (PA)
- Insert: Brass
- Screws: Galvanized steel
- Color: Natural or black (standard)
- Applicable standard: EN 60998-1 & EN 60988-2-1
- PA66: Flame retardant to UL 94 V-2, chemical resistance, pressure and impact resistant
- Operating temperature: -35 °C ~ 120 °C



Part nr.	Wire range mm <sup>2</sup>	Color	Screw	A	B	C	D	Rating	Packed
KSPA-3WH	2,5-4,0	white	M2,5	92,0	15,8	12,8	7,7	3A / 450V	10
KSPA-3BL	2,5-4,0	black	M2,5	92,0	15,8	12,8	7,7	3A / 450V	10
KSPA-4WH	4,0-6,0	white	M3,0	111,0	17,4	13,3	9,3	6A / 450V	10
KSPA-4BL	4,0-6,0	black	M3,0	111,0	17,4	13,3	9,3	6A / 450V	10
KSPA-5WH	6,0-10,0	white	M3,0	128,0	19,7	14,5	10,7	10A / 450V	10
KSPA-5BL	6,0-10,0	black	M3,0	128,0	19,7	14,5	10,7	10A / 450V	10
KSPA-6WH	10,0-12,0	white	M3,5	133,0	22,6	18,0	11,1	15A / 450V	10
KSPA-6BL	10,0-12,0	black	M3,5	133,0	22,6	18,0	11,1	15A / 450V	10
KSPA-8WH	12,0-14,0	white	M4,0	137,0	22,6	18,5	11,4	20A / 450V	10
KSPA-8BL	12,0-14,0	black	M4,0	137,0	22,6	18,5	11,4	20A / 450V	10
KSPA-9WH	16,0	white	M4,0	163,0	23,6	20,5	13,6	30A / 450V	10
KSPA-9BL	16,0	black	M4,0	163,0	23,6	20,5	13,6	30A / 450V	10
KSPA-10WH	25,0	white	M4,0	192,0	30,2	25,0	16,0	60A / 450V	10
KSPA-10BL	25,0	black	M4,0	192,0	30,2	25,0	16,0	60A / 450V	10
KSPA-12WH	35,0	white	M5,0	204,0	36,7	28,3	17,0	80A / 450V	10
KSPA-12BL	35,0	black	M5,0	204,0	36,7	28,3	17,0	80A / 450V	10
KSPA-15WH	40,0	white	M6,0	232,0	39,0	33,0	19,3	100A / 450V	10
KSPA-15BL	40,0	black	M6,0	232,0	39,0	33,0	19,3	100A / 450V	10

INSULATED TERMINALS

## Heat shrink ring terminals

- polyamide adhesive
- electro tin plated
- copper
- operating temperature: -55°C - 125°C
- min. shrink temperature: 180 °C
- 600V max
- red: 19A  
blue: 27A  
yell.: 48A  
max
- RoHS compliant
- waterproof



Wire range	Part nr.	d2	B	L	E	D	d1	Packed	UL
22~18 AWG 0,5~1,5 mm <sup>2</sup>	HS 1.25-4	4,3	8,0	28,0	21,0	4,8	1,7	100	✓
	HS 1.25-5	5,3	9,5	30,0	21,0	4,8	1,7	100	✓
	HS 1.25-6	6,5	11,6	33,0	21,0	4,8	1,7	100	✓
	HS 1.25-8	8,5	11,6	34,0	21,0	4,8	1,7	100	✓
	HS 1.25-10	10,5	13,6	38,0	21,0	4,8	1,7	100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	HS 2-4	4,3	8,5	28,0	21,0	5,8	2,3	100	✓
	HS 2-5	5,3	9,5	30,0	21,0	5,8	2,3	100	✓
	HS 2-6	6,5	12,0	33,0	21,0	5,8	2,3	100	✓
	HS 2-8	8,5	12,0	34,0	21,0	5,8	2,3	100	✓
	HS 2-10	10,5	13,6	38,0	21,0	5,8	2,3	100	✓
12~10 AWG 4~6 mm <sup>2</sup>	HS 5.5-4	4,3	9,5	32,0	25,0	6,8	3,4	100	✓
	HS 5.5-5	5,3	9,5	34,0	25,0	6,8	3,4	100	✓
	HS 5.5-6	6,5	12,0	37,0	25,0	6,8	3,4	100	✓
	HS 5.5-8	8,5	12,0	38,0	25,0	6,8	3,4	100	✓
	HS 5.5-10	10,5	15,0	42,0	25,0	6,8	3,4	100	✓
	HS 5.5-12	12,5	19,2	46,0	25,0	6,8	3,4	100	✓

INSULATED TERMINALS

## Heat shrink ring terminals - DIN

- polyamide adhesive
- electro tin plated
- copper
- operating temperature: -55°C - 125°C
- min. shrink temperature: 180 °C
- 600V max
- red: 19A  
blue: 27A  
yell.: 48A  
max
- RoHS compliant
- waterproof



- Conductor size according to DIN 46234

Wire range	Part nr.	d2	B	L	E	D	d1	Packed	UL
22~18 AWG 0,5~1,5 mm <sup>2</sup>	HS 1.25-4DIN	4,3	8,0	29,0	21,0	4,8	1,7	100	
	HS 1.25-5DIN	5,3	10,0	31,0	21,0	4,8	1,7	100	
	HS 1.25-6DIN	6,5	11,0	33,0	21,0	4,8	1,7	100	
	HS 1.25-8DIN	8,5	14,0	37,0	21,0	4,8	1,7	100	
	HS 1.25-10DIN	10,5	18,0	41,0	21,0	4,8	1,7	100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	HS 2-4DIN	4,3	8,0	29,0	21,0	5,8	2,3	100	
	HS 2-5DIN	5,3	10,0	32,0	21,0	5,8	2,3	100	
	HS 2-6DIN	6,5	11,0	34,0	21,0	5,8	2,3	100	
	HS 2-8DIN	8,5	14,0	37,0	21,0	5,8	2,3	100	
	HS 2-10DIN	10,5	18,0	41,0	21,0	5,8	2,3	100	
12~10 AWG 4~6 mm <sup>2</sup>	HS 5.5-4DIN	4,3	8,0	34,0	25,0	6,8	3,4	100	
	HS 5.5-5DIN	5,3	10,0	36,0	25,0	6,8	3,4	100	
	HS 5.5-6DIN	6,5	11,0	37,0	25,0	6,8	3,4	100	
	HS 5.5-8DIN	8,5	14,0	42,0	25,0	6,8	3,4	100	
	HS 5.5-10DIN	10,5	18,0	46,0	25,0	6,8	3,4	100	
	HS 5.5-12DIN	12,5	18,0	46,0	25,0	6,8	3,4	100	

## Heat shrink spade terminals

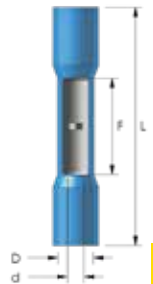
- polyamide adhesive
- electro tin plated
- copper
- operating temperature: 55°C - 125°C
- min. shrink temperature: 180 °C
- 600V max
- red: 19A  
blue: 27A  
yell.: 48A max
- RoHS compliant
- waterproof



Wire range	Part nr.	d2	B	L	E	D	d1	Packed	UL
22-18 AWG	HS 1.25-4A	4,3	8,1	30,0	21,0	4,8	1,7	100	✓
0,5-1,5 mm <sup>2</sup>	HS 1.25-5A	5,3	9,5	30,0	21,0	4,8	1,7	100	✓
16-14 AWG	HS 2-4A	4,3	8,1	30,0	21,0	5,8	2,3	100	✓
1,5-2,5 mm <sup>2</sup>	HS 2-5A	5,3	9,5	30,0	21,0	5,8	2,3	100	✓
12-10 AWG	HS 5.5-4A	4,3	9,0	34,0	25,0	6,8	3,4	100	✓
4-6 mm <sup>2</sup>	HS 5.5-5A	5,3	9,0	34,0	25,0	6,8	3,4	100	✓

## Heat shrink butt connectors

- polyamide adhesive
- electro tin plated
- copper
- operating temperature: 55°C - 125°C
- min. shrink temperature: 180 °C
- 600V max
- white: 9A  
red: 19A  
blue: 27A  
yell.: 48A
- RoHS compliant
- waterproof



Wire range	Part nr.	F	L	D	d	Packed	UL
26-24 AWG 0,25-0,5 mm <sup>2</sup>	HSC 0.5	12,0	28,0	3,2	1,3	100	✓
22-18 AWG 0,5-1,5 mm <sup>2</sup>	HSC 1.25	15,0	35,0	4,8	1,7	100	✓
16-14 AWG 1,5-2,5 mm <sup>2</sup>	HSC 2	15,0	35,0	5,8	2,3	100	✓
12-10 AWG 4-6 mm <sup>2</sup>	HSC 5.5	15,0	41,0	6,8	3,4	100	✓

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### Heat shrink/solder sleeves assortments

**AD-015**  
120 pcs - 18 compartments  
Heat shrink/solder sleeves

15 x CWT-9002  
15 x CWT-9003  
5 x CWT-9004

25 x SGRS-1  
15 x SGRS-2  
10 x SGRS-3  
5 x SGRS-4

15 x HSC 1.25  
15 x HSC 2



**AD-022**  
120 pcs - 18 compartments  
Heat shrink/budget solder sleeves

15 x AET-9002  
15 x AET-9003  
5 x AET-9004

25 x SOEV 2.4  
15 x SOEV 4.0  
10 x SOEV 9.0  
5 x SOEV 15.0

15 x HSC 1.25  
15 x HSC 2



## Heat shrink butt connectors - Duraseal



- Shrink ratio: 2:1
- Dielectric strength (kV/mm): 2,5
- Quality assurance: Lloyd's 65 247 HH 02-93



Wire range	Part nr.	F	L	D	d	Packed	UL
20~18 AWG 1,0~1,5 mm <sup>2</sup>	D406-0001	15,0	31,5	3,7	1,5	100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	D406-0002	15,0	31,5	4,6	2,3	100	✓
12~10 AWG 4~6 mm <sup>2</sup>	D406-0003	15,0	37,5	6,5	3,5	100	✓

### Duraseal/solder sleeves assortment

#### AD-021 120 pcs - 18 compartments Duraseal/solder sleeves

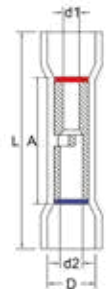
15 x CWT-9002  
15 x CWT-9003  
5 x CWT-9004

25 x SGRS-1  
15 x SGRS-2  
10 x SGRS-3  
5 x SGRS-4

15 x D406-0001  
15 x D406-0002



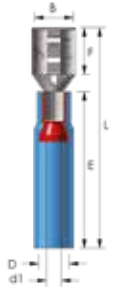
## Heat shrink step down butt connectors



Wire range	Part nr.	Color code	L	A	D	d1	d2	Packed	UL
26~24 to 22~18 AWG 0,25~0,5 to 0,5~1,5 mm <sup>2</sup>	SDC 0.2-1.5	white to red	40	19	6,2	1,37	1,7	100	✓
22~18 to 16~14 AWG 0,5~1,5 to 1,5~2,5 mm <sup>2</sup>	SDC 0.5-2.5	red to blue	40	19	8,0	1,7	2,3	100	✓
16~14 to 12~10 AWG 1,5~2,5 to 4~6 mm <sup>2</sup>	SDC 1.5-6.0	blue to yellow	45	21	9,0	2,3	3,4	100	✓
12~10 to 8 AWG 4~6 to 10 mm <sup>2</sup>	SDC 6.0-10	yellow to red	45	21	11,6	3,4	4,5	100	✓

## Heat shrink female disconnectors

- polyamide adhesive
- electro tin plated
- brass
- operating temperature: 55°C-125°C
- min. shrink temperature: 180 °C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant
- waterproof



Wire range	Part nr.	tab	B	L	E	D	d1	Packed	UL
22-18 AWG	HSFH 1.25-187A8	4,8x0,8	5,2	30,0	21,0	4,8	1,7	100	✓
0,5-1,5 mm <sup>2</sup>	HSFH 1.25-250A	6,3x0,8	6,6	30,0	21,0	4,8	1,7	100	✓
16-14 AWG	HSFH 2-187A8	4,8x0,8	5,2	30,0	21,0	5,8	2,3	100	✓
1,5-2,5 mm <sup>2</sup>	HSFH 2-250A	6,3x0,8	6,6	30,0	21,0	5,8	2,3	100	✓
12-10 AWG	HSFH 5.5-250A	6,3x0,8	6,6	32,0	25,0	6,8	3,4	100	✓
4-6 mm <sup>2</sup>									

## Heat shrink female disconnectors

- polyamide adhesive
- electro tin plated
- brass
- operating temperature: 55°C-125°C
- min. shrink temperature: 180 °C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant
- waterproof



Wire range	Part nr.	tab	B	L	E	D	d1	Packed	UL
22-18 AWG	HSF 1.25-187A8	4,8x0,8	5,2	30,0	21,0	4,8	1,7	100	✓
0,5-1,5 mm <sup>2</sup>	HSF 1.25-250A	6,3x0,8	6,6	30,0	21,0	7,0	1,7	100	✓
16-14 AWG	HSF 2-187A8	4,8x0,8	5,2	30,0	21,0	5,8	2,3	100	✓
1,5-2,5 mm <sup>2</sup>	HSF 2-250A	6,3x0,8	6,6	30,0	21,0	7,0	2,3	100	✓
12-10 AWG	HSF 5.5-250A	6,3x0,8	6,6	32,0	25,0	7,0	3,4	100	✓
4-6 mm <sup>2</sup>									

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## Heat shrink male disconnectors

- polyamide adhesive
- electro tin plated
- brass
- operating temperature: 55°C-125°C
- min. shrink temperature: 180 °C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant
- waterproof

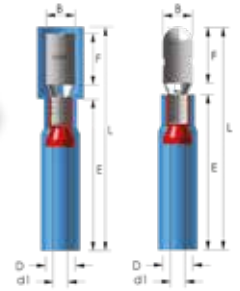


Wire range	Part nr.	tab	B	L	E	D	d1	Packed	UL
22-18 AWG	HSM 1.25-187A8	4,8x0,8	4,8	31,0	21,0	4,8	1,7	100	✓
0,5-1,5 mm <sup>2</sup>	HSM 1.25-250	6,3x0,8	6,3	31,0	21,0	4,8	1,7	100	✓
16-14 AWG	HSM 2-187A8	4,8x0,8	4,8	31,0	21,0	5,8	2,3	100	✓
1,5-2,5 mm <sup>2</sup>	HSM 2-250	6,3x0,8	6,3	31,0	21,0	5,8	2,3	100	✓
12-10 AWG	HSM 5.5-250	6,3x0,8	6,3	35,0	25,0	6,8	3,4	100	✓
4-6 mm <sup>2</sup>									



## Heat shrink female & male bullet disconnectors

- polyamide adhesive
- electro tin plated
- brass
- operating temperature -55°C - 125°C
- min. shrink temperature 180°C
- 300V max
- red: 10A  
blue: 15A  
yell.: 24A max
- RoHS compliant
- waterproof



Wire range	Part nr.	B	L	E	D	d1	Packed	UL
22-16 AWG	HSCF 1.25-5	4,0	32,0	21,0	4,8	1,7	100	✓
0,5-1,5 mm <sup>2</sup>	HSGM 1.25-5	4,0	31,0	21,0	4,8	1,7	100	✓
16-14 AWG	HSCF 2-5	4,0	32,0	21,0	5,8	2,3	100	✓
1,5-2,5 mm <sup>2</sup>	HSGM 2-5	4,0	31,0	21,0	5,8	2,3	100	✓

### HJ600135BC-A1 398 pcs - 19 compartments incl. tool

- 1 x 10" ratchet crimper HJ56I
- 1 x die set DSQIA1
- 1 x die set DSQIA5

- 15 x HSF 1.25-250A
- 15 x HSM 1.25-250
- 10 x HSF 2-250A
- 10 x HSM 2-250

- 25 x HSC 1.25
- 25 x HSC 2
- 15 x HSC 5.5

- 25 x HS 1.25-4
- 25 x HS 1.25-5
- 25 x HS 1.25-6
- 20 x HS 1.25-8
- 25 x HS 1.25-10
- 25 x HS 2-4
- 25 x HS 2-5
- 25 x HS 2-6
- 25 x HS 2-8
- 15 x HS 2-10
- 10 x HS 5.5-4
- 10 x HS 5.5-5
- 10 x HS 5.5-6
- 5 x HS 5.5-8
- 10 x HS 5.5-10

### Professional kit



Heat shrink terminals assortment



INSULATED TERMINALS

### Tools for heat shrink terminals



**KH-13**  
Crimping tool  
For heat shrink and closed end terminals  
0,5-6 mm<sup>2</sup>

### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



**DSQIA1**  
For heat shrink butt connectors  
0,5-6,0 mm<sup>2</sup>



**DSQIA5**  
For heat shrink and closed end terminals  
0,5-6,0 mm<sup>2</sup>

**MHQIBE**  
(separately available)



**Tools for heat shrink terminals and solder sleeves**



**MJ-600**  
Flameless heatgun\*



**MJ-300**  
Heatgun\*  
with micro-flame

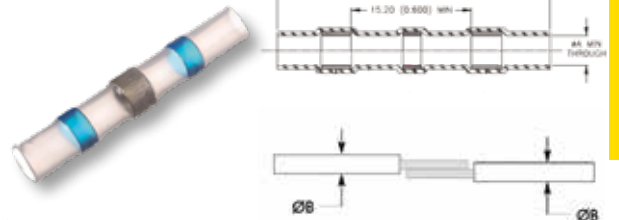


**90-51773**  
Universal lighter gas (butane)  
200 ml

\* Heatguns are supplied with empty lighter

**Solder butt connectors**

- polyolefin
- operating temperature -55°C-125°C
- min. shrink temperature 140 °C
- waterproof

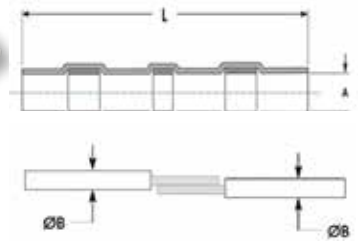


INSULATED TERMINALS

- For tin plated or bare copper stranded wires, rated for at least 85 °C
- Material: Polyolefin tubing with thermoplastic, color coded, adhesive rings
- Shrink ratio: 3:1
- Solder preform: With Flux
- Volume resistivity: < equal length of wire
- Dielectric strength (kV/mm): 20
- Voltage drop: 2mV

Wire range	Part nr.	L	Ø A	Ø B min	Ø B max	Packed	UL
22-18 AWG 0,3-0,8 mm <sup>2</sup>	CWT-9001	26	1,7	0,4	1,7	100	✓
18-14 AWG 0,8-2,0 mm <sup>2</sup>	CWT-9002	42	2,7	1,3	2,7	100	✓
14-12 AWG 2,0-4,0 mm <sup>2</sup>	CWT-9003	42	4,5	1,8	4,5	100	✓
12-10 AWG 4-6 mm <sup>2</sup>	CWT-9004	42	6,0	2,8	6,0	100	✓

## Solder Butt Connectors - RoHS compliant

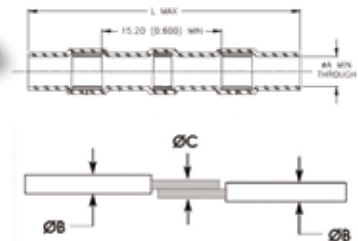


- For tin plated or bare copper stranded wires, rated for at least 85 °C
- Lead free, RoHS compliant
- Material: Polyolefin tubing with thermoplastic, color coded, adhesive rings
- Shrink ratio: 3:1
- Solder preform: With Flux
- Volume resistivity: < equal length of wire
- Dielectric strength (kV/mm): 20
- Voltage drop: 2mV

Wire range	Part nr.	L	Ø A	Ø B min	Ø B max	Packed	UL
22~18 AWG 0,3~0,8 mm <sup>2</sup>	ROHSWT-9001	26	1,7	0,4	1,7	100	
18~14 AWG 0,8~2,0 mm <sup>2</sup>	ROHSWT-9002	42	2,7	1,3	2,7	100	
14~12 AWG 2,0~4,0 mm <sup>2</sup>	ROHSWT-9003	42	4,5	1,8	4,5	100	
12~10 AWG 4~6 mm <sup>2</sup>	ROHSWT-9004	42	6,0	2,8	6,0	100	

INSULATED TERMINALS

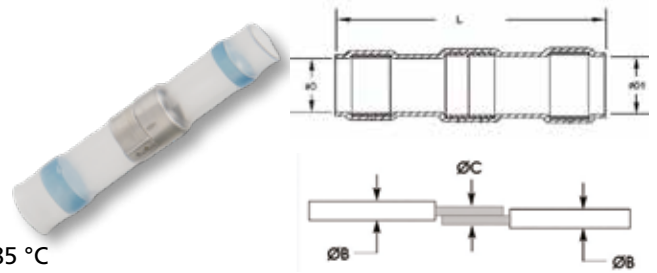
## Solder butt connectors - Budget



- For tin plated or bare copper stranded wires, rated for at least 85 °C
- Material: Polyolefin tubing with thermoplastic, color coded, adhesive rings
- Shrink ratio: 2:1
- Solder preform: With Flux
- Volume resistivity (Ω/cm): ≥ 10<sup>15</sup>
- Dielectric strength (kV/mm): ≥ 25
- Voltage resistant: > 600V

Wire range	Part nr.	L	Ø A	Ø B min	Ø B max Ø C max	Ø C min	Packed	UL
26~24 AWG 0,25~0,5 mm <sup>2</sup>	AET-9001	26 ± 2	1,7	0,4	1,7	0,76	100	✓
22~18 AWG 0,5~1,5 mm <sup>2</sup>	AET-9002	40 ± 2	2,6	1,3	2,6	1,2	100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	AET-9003	40 ± 2	4,5	1,8	4,5	2,0	100	✓
12~10 AWG 4~6 mm <sup>2</sup>	AET-9004	40 ± 2	5,8	2,8	5,8	3,4	100	✓

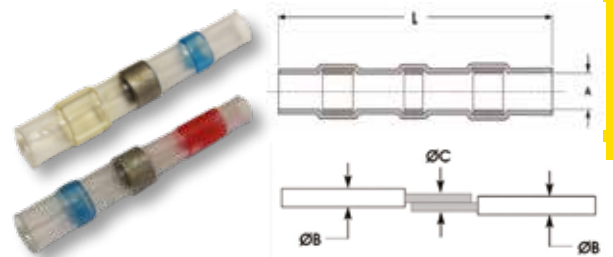
## Solder butt connectors - Duo flux



- For tin plated or bare copper stranded wires, rated for at least 85 °C
- Material: Polyolefin tubing with thermoplastic, color coded, adhesive rings
- Shrink ratio: 3:1
- Solder preform: With Flux
- Volume resistivity: < equal length of wire
- Dielectric strength (kV/mm): > 20
- Voltage resistant: < 2mV

Wire range	Part nr.	L	Ø A	Ø B min	Ø B max Ø C max	Ø C min	Packed	UL
21~17 AWG 0,4~1,0 mm <sup>2</sup>	DCWT-9002	31	2,3	1,5	2,3	1,8	50	
17~14 AWG 1,0~2,5 mm <sup>2</sup>	DCWT-9003	36	4,3	2,0	4,3	2,3	50	
12~10 AWG 3~5 mm <sup>2</sup>	DCWT-9004	42	6,8	3,4	6,8	3,7	50	

## Solder butt connectors - Step down



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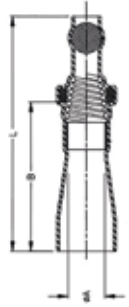
- Material: Heat shrinkable polyolefin tubing with thermoplastic, color coded, adhesive rings
- Shrink ratio: 2:1
- Solder preform: With Flux
- Volume resistivity (Ω/cm): ≥ 10<sup>15</sup>
- Dielectric strength (kV/mm): ≥ 25
- Voltage resistant: > 600V

Wire range	Part nr.	Color code	L	Ø A	Ø B min	Ø B max Ø C max	Ø C min	Packed	UL
22~14 AWG 0,5~2,5 mm <sup>2</sup>	CWT-9003 SD-2	blue to red	40	4,5	1,3	4,5	1,2	100	
22~14 AWG 0,5~2,5 mm <sup>2</sup>	CWT-9003 SD	yellow to blue	40	4,5	1,3	4,5	1,2	100	

## Solder grip end connectors



- Material: Heat shrinkable thermoplastic (PVDF) tubing
- Sealing insert: hot melt adhesive
- Shrink ratio: 3:1
- Conical spring: Square copper wire
- End closure ball: Color coded, tinted glass
- Solder preform: With Flux
- Volume resistivity: < equal length of wire
- Dielectric strength (kV/mm): > 20
- Voltage drop: < 2mV max



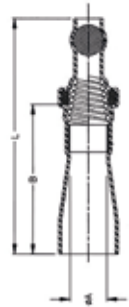
Wire range	Part nr.	L	Ø A	B	Max bundle Ø	Packed	UL
19-13 AWG 0,7-2,4 mm	SGRS-1	38,3	3,6	26,0	3,3	100	
14-12 AWG 2,0-4,0 mm	SGRS-2	37,7	5,0	23,5	4,5	100	
12-8 AWG 3,5-8,0 mm	SGRS-3	45,5	7,5	26,5	7,0	100	
8-6 AWG 7,5-12,0 mm	SGRS-4	45,0	9,4	25,5	9,0	100	

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## Solder grip end connectors - RoHS compliant



- Lead free, RoHS compliant
- Material: Heat shrinkable, thermoplastic (PVDF) tubing
- Sealing insert: hot melt adhesive
- Shrink ratio: 3:1
- Conical spring: Square copper wire
- End closure ball: Color coded, tinted glass
- Solder preform: With Flux
- Volume resistivity: < equal length of wire
- Dielectric strength (kV/mm): > 20
- Voltage drop: < 2mV max



Wire range	Part nr.	L	Ø A	B	Max bundle Ø	Packed	UL
19-13 AWG 0,7-2,4 mm	SGRS-ROHS-1	38,3	3,6	26,0	3,3	100	
14-12 AWG 2,0-4,0 mm	SGRS-ROHS-2	37,7	5,0	23,5	4,5	100	
12-8 AWG 3,5-8,0 mm	SGRS-ROHS-3	45,5	7,5	26,5	7,0	100	
8-6 AWG 7,5-12,0 mm	SGRS-ROHS-4	45,0	9,4	25,5	9,0	100	

## Solder grip end connectors - Budget



- Material: Heat shrinkable, thermoplastic (PVDF) tubing
- Shrink ratio: 3:1 pre-shrunk (appr. 2:1)
- Conical spring: Square copper wire
- End closure ball: Color coded, tinted glass
- Solder preform: With Flux
- Volume resistivity ( $\Omega/\text{cm}$ ):  $\geq 10^{15}$
- Dielectric strength (kV/mm):  $\geq 25$
- Voltage resistant:  $> 600\text{V}$

Wire range	Part nr.	L	$\varnothing A$	B	Max bundle $\varnothing$	Packed	UL
19-13 AWG 0,7-2,4 mm	SOEV 2.4	38	3,6	26	3,3	100	
14-12 AWG 2,0-4,0 mm	SOEV 4.0	38	5,0	26	4,5	100	
12-8 AWG 3,5-8,0 mm	SOEV 9.0	45	7,5	30	7,0	100	
8-6 AWG 7,5-12,0 mm	SOEV 15.0	45	9,4	30	9,0	100	

### Solder sleeve assortments

#### AD-050 200 pcs - 18 compartment solder sleeves

- 50 x CWT-9001
- 50 x CWT-9002
- 50 x CWT-9003
- 50 x CWT-9004



#### AD-052 200 pcs - 18 compartments budget solder sleeves

- 50 x AET-9001
- 50 x AET-9002
- 50 x AET-9003
- 50 x AET-9004



#### AD-051 400 pcs - 18 compartments solder sleeves

- 100 x CWT-9001
- 100 x CWT-9002
- 100 x CWT-9003
- 100 x CWT-9004



#### AD-053 400 pcs - 18 compartments budget solder sleeves

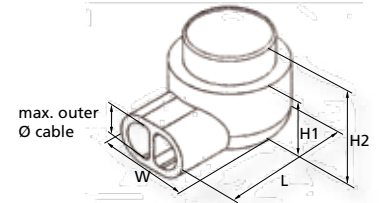
- 100 x AET-9001
- 100 x AET-9002
- 100 x AET-9003
- 100 x AET-9004



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## Waterproof - Gel-filled splice connectors



- Silicone gel is also RoHS compliant
- Material: Brass, tin plated
- Insulation: See dimensions table
- Operating temperature: -30 ~ 70 °C
- Max. temperature: 100 °C
- Waterproof: At 0~95% humidity
- Electrical current: Suitable for 2,5~7,5V AC or DC
- Quality assurance: EU approved

Wire range	Part nr.	Description	W	L	H1	H2	Packed	UL
26~21 AWG 0,4~0,7 mm <sup>2</sup>	CL 510216	Polycarbonate two-wire connector for solid copper cable, max. outer Ø 1,52 mm	8,6	12,0	5,9	8,0	100	
26~19 AWG 0,4~0,9 mm <sup>2</sup>	CL 510217	Polypropylene two-wire connector for solid copper cable, max. outer Ø 2,08 mm	9,8	15,3	5,8	8,4	100	
26~19 AWG 0,4~0,9 mm <sup>2</sup>	CL 510218	Polypropylene two- or three-wire connector for solid copper, air core or filled cable, max outer Ø 2,08 mm	12,3	17,2	5,8	8,2	100	
26~19 AWG 0,4~0,9 mm <sup>2</sup>	CL 510219	Polycarbonate two-wire connector for solid copper, air core or filled cable, max. outer Ø 1,67 mm	12,0	12,8	6,0	8,4	100	
22~14 AWG 0,3~2,0 mm <sup>2</sup>	CL 510220	Nylon two- or three-wire connector for solid copper cable, max. outer Ø 4,0 mm	23,5	24,5	10,4	17,0	20	
24~19 AWG 0,5~0,9 mm <sup>2</sup>	CL 510221	Polycarbonate four-wire (1 full pair) inline connector for solid copper cable, max. outer Ø 3,18 mm	16,4	50,7	9,7	13,0	10	

INSULATED TERMINALS



CL 510216



CL 510217



CL 510218



CL 510219



CL 510220



CL 510221



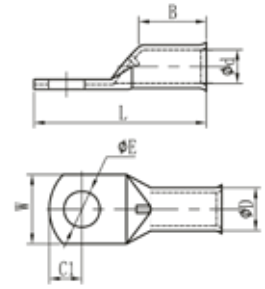
Plugs & Sockets  
 Lighting  
 Battery  
 Hose Clamps  
 Screws, Bolts & Nuts  
 Wire & Cable  
 Bundling & Protection  
 EV Products  
 Insulated Terminals

## Non-insulated Terminals

Cord End Terminals  
 Housing  
 Fuses & Fuse Holders  
 Relays, Switches, Pilot Lights & Buzzers  
 Tools  
 Assortment Kits

GC tube .....	192
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Open barrel strip .....	201
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## Non-insulated GC tube terminals (with bell mouth)



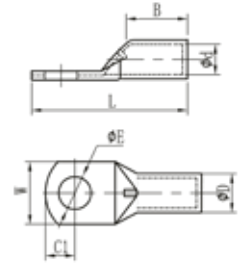
- With inspection hole
- RoHS compliant

Wire size	Part nr.	Ø E	W	L	B	D	d	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	GC 1.5-3*	3,2	8,0	16,0	6,0	3,7	1,8	100	✓
	GC 1.5-4*	4,3	8,0	17,0	6,0	3,7	1,8	100	✓
	GC 1.5-5*	5,3	10,0	19,0	7,0	3,7	1,8	100	✓
	GC 1.5-6*	6,5	10,0	20,0	7,0	3,7	1,8	100	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	GC 2.5-3*	3,2	8,0	17,0	7,0	3,9	2,3	100	✓
	GC 2.5-4*	4,3	8,0	18,0	7,0	3,9	2,3	100	✓
	GC 2.5-5*	5,3	10,0	20,0	7,0	3,9	2,3	100	✓
	GC 2.5-6*	6,5	10,0	20,0	7,0	3,9	2,3	100	✓
	GC 2.5-8*	8,3	12,5	22,5	7,0	4,3	2,3	100	✓
12 AWG 4 mm <sup>2</sup>	GC 4-4*	4,3	10,0	21,0	8,0	4,7	3,0	100	✓
	GC 4-5*	5,3	10,0	22,0	8,0	4,7	3,0	100	✓
	GC 4-6*	6,5	10,0	23,0	8,0	4,7	3,0	100	✓
	GC 4-8*	8,3	12,5	24,0	8,0	4,7	3,0	100	✓
10 AWG 6 mm <sup>2</sup>	GC 6-4*	4,3	10,0	24,6	9,5	5,9	4,0	100	✓
	GC 6-5*	5,3	10,0	24,6	9,5	5,9	4,0	100	✓
	GC 6-6*	6,5	11,0	24,6	9,5	5,9	4,0	100	✓
	GC 6-8*	8,3	12,5	27,3	9,5	5,9	4,0	100	✓
8 AWG 10 mm <sup>2</sup>	GC 6-10*	10,3	15,0	28,3	9,5	6,2	4,0	100	✓
	GC 10-4	4,3	11,0	30,0	13,0	6,6	4,5	100	✓
	GC 10-5	5,3	11,0	30,0	13,0	6,6	4,5	100	✓
	GC 10-6	6,5	11,0	30,0	13,0	6,6	4,5	100	✓
	GC 10-8	8,3	12,5	30,0	13,0	6,6	4,5	100	✓
6 AWG 16 mm <sup>2</sup>	GC 10-10	10,3	16,0	34,1	12,0	6,9	4,5	100	✓
	GC 10-12	12,7	18,0	34,1	12,0	6,9	4,5	100	✓
	GC 16-5	5,3	11,0	30,7	14,0	7,5	5,5	100	✓
	GC 16-6	6,5	11,0	30,7	14,0	7,5	5,5	100	✓
	GC 16-8	8,3	12,5	30,7	13,0	7,5	5,5	100	✓
4 AWG 25 mm <sup>2</sup>	GC 16-10	10,3	16,0	35,9	14,0	7,5	5,5	100	✓
	GC 16-12	12,7	18,0	35,9	13,0	8,1	5,5	100	✓
	GC 25-5	5,3	13,0	32,2	13,0	9,1	6,7	100	✓
	GC 25-6	6,5	13,0	32,2	13,0	9,1	6,7	100	✓
	GC 25-8	8,3	13,0	32,2	13,0	9,1	6,7	100	✓
2 AWG 35 mm <sup>2</sup>	GC 25-10	10,3	16,0	36,9	14,0	9,1	6,7	100	✓
	GC 25-12	12,7	18,0	36,9	13,0	9,1	6,7	100	✓
	GC 25-14	14,8	20,0	38,9	13,0	9,1	6,7	100	✓
	GC 35-5	5,3	16,0	37,6	16,0	11,0	8,6	100	✓
	GC 35-6	6,5	16,0	37,6	16,0	11,0	8,6	100	✓
	GC 35-8	8,3	16,0	37,6	16,0	11,0	8,6	100	✓
	GC 35-10	10,3	16,7	41,5	16,0	11,0	8,6	100	✓
	GC 35-12	12,7	18,0	41,5	16,0	11,0	8,6	100	✓
	GC 35-14	14,8	20,0	43,5	16,0	11,0	8,6	100	✓
	GC 35-16	16,5	23,0	45,5	16,0	11,0	8,6	100	✓

\* Because of their small size, these items can only be produced with straight barrel

Wire size	Part nr.	Ø E	W	L	B	D	d	Packed	UL
1/0 AWG 50 mm <sup>2</sup>	GC 50-5	5,3	18,0	41,0	17,0	12,4	9,5	100	✓
	GC 50-6	6,5	18,0	41,0	17,0	12,4	9,5	100	✓
	GC 50-8	8,3	18,0	41,0	17,0	12,4	9,5	100	✓
	GC 50-10	10,3	18,0	44,0	17,0	12,4	9,5	100	✓
	GC 50-12	12,7	19,0	44,0	17,0	12,4	9,5	100	✓
	GC 50-14	14,8	21,0	52,8	19,0	12,4	9,5	100	✓
	GC 50-16	16,5	23,0	52,8	19,0	12,4	9,5	100	✓
2/0 AWG 70 mm <sup>2</sup>	GC 70-5	5,3	22,5	52,4	21,5	15,0	12,0	50	✓
	GC 70-6	6,3	22,5	52,4	21,5	15,0	12,0	50	✓
	GC 70-8	8,3	22,5	52,4	21,5	15,0	12,0	50	✓
	GC 70-10	10,3	22,5	52,4	21,5	15,0	12,0	50	✓
	GC 70-12	12,7	22,5	52,4	21,5	15,0	12,0	50	✓
	GC 70-14	14,8	22,5	55,0	21,5	15,0	12,0	50	✓
	GC 70-16	16,5	24,0	55,0	20,0	15,0	12,0	50	✓
	GC 70-20	21,0	30,0	70,5	20,0	15,0	12,0	50	✓
3/0 AWG 95 mm <sup>2</sup>	GC 95-6	6,5	25,0	54,7	22,5	17,0	13,4	50	✓
	GC 95-8	8,3	25,0	54,7	22,5	17,0	13,4	50	✓
	GC 95-10	10,3	25,0	54,7	22,5	17,0	13,4	50	✓
	GC 95-12	12,7	25,0	54,7	22,5	17,0	13,4	50	✓
	GC 95-14	14,8	25,0	58,3	22,5	17,0	13,4	50	✓
	GC 95-16	16,8	25,0	58,3	22,5	17,0	13,4	50	✓
4/0 AWG 120 mm <sup>2</sup>	GC 120-8	8,3	27,0	60,0	23,0	19,0	15,0	30	✓
	GC 120-10	10,3	27,0	60,0	23,0	19,0	15,0	30	✓
	GC 120-12	12,7	27,0	60,0	23,0	19,0	15,0	30	✓
	GC 120-14	14,8	27,0	64,0	23,0	19,0	15,0	30	✓
	GC 120-16	16,5	27,0	64,0	23,0	19,0	15,0	30	✓
250/300 kcmil 150 mm <sup>2</sup>	GC 150-8	8,3	30,0	67,0	27,0	21,1	16,5	10	✓
	GC 150-10	10,3	30,0	67,0	27,0	21,2	16,5	10	✓
	GC 150-12	12,7	30,0	67,0	27,0	21,2	16,5	10	✓
	GC 150-14	14,8	30,0	67,0	27,0	21,2	16,5	10	✓
	GC 150-16	16,5	30,0	71,4	27,0	21,2	16,5	10	✓
	GC 150-20	20,9	30,0	71,4	27,0	21,2	16,5	10	✓
300/350 kcmil 185 mm <sup>2</sup>	GC 185-10	10,3	34,0	73,0	30,0	23,0	19,0	4	✓
	GC 185-12	12,7	34,0	73,0	30,0	23,0	19,0	4	✓
	GC 185-14	14,8	34,0	73,0	30,0	23,0	19,0	4	✓
	GC 185-16	16,5	34,0	76,2	30,0	23,0	19,0	4	✓
	GC 185-20	20,9	34,0	76,2	30,0	23,0	19,0	4	✓
400/450 kcmil 240 mm <sup>2</sup>	GC 240-10	10,3	38,0	91,4	38,0	26,5	21,0	5	✓
	GC 240-12	12,7	38,0	91,4	38,0	26,5	21,0	5	✓
	GC 240-14	14,8	38,0	91,4	38,0	26,5	21,0	5	✓
	GC 240-16	16,5	38,0	91,4	38,0	26,5	21,0	5	✓
	GC 240-20	20,9	38,0	91,4	38,0	26,5	21,0	5	✓
300 mm <sup>2</sup>	GC 300-10	10,5	43,0	98,0	42,0	30,0	24,5	6	✓
	GC 300-12	12,7	43,0	98,0	42,0	30,0	24,5	6	✓
	GC 300-14	14,8	43,0	98,0	42,0	30,0	24,5	6	✓
	GC 300-16	16,5	43,0	98,0	42,0	30,0	24,5	6	✓
	GC 300-20	20,9	43,0	98,0	42,0	30,0	24,5	6	✓
400 mm <sup>2</sup>	GC 400-12	12,7	49,0	104,0	44,0	35,0	27,0	1	✓
	GC 400-14	14,8	49,0	104,0	44,0	35,0	27,0	1	✓
	GC 400-16	16,5	49,0	104,0	44,0	35,0	27,0	1	✓
	GC 400-20	20,9	49,0	104,0	44,0	35,0	27,0	1	✓

## Non-insulated GT tube terminals



- With inspection hole
- RoHS compliant

Wire size	Part nr.	Ø E	W	L	B	D	d	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	GT 1.5-3	3,2	8,7	19,0	7,0	4,0	2,4	100	
	GT 1.5-4	4,3	8,7	19,0	7,0	4,0	2,4	100	
	GT 1.5-5	5,3	8,7	19,0	7,0	4,0	2,4	100	
	GT 1.5-6	6,4	10,0	20,0	7,0	4,0	2,4	100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	GT 2.5-4	4,3	8,7	19,0	7,0	4,3	2,7	100	
	GT 2.5-5	5,3	8,7	19,0	7,0	4,3	2,7	100	
	GT 2.5-6	6,4	10,3	21,0	7,0	4,3	2,7	100	
	GT 2.5-8	8,3	12,0	23,0	7,0	4,3	2,7	100	
12 AWG 4 mm <sup>2</sup>	GT 4-4	4,3	8,7	21,5	9,5	4,8	3,1	100	
	GT 4-5	5,3	8,7	21,5	9,5	4,8	3,1	100	
	GT 4-6	6,4	10,3	23,5	9,5	4,8	3,1	100	
	GT 4-8	8,3	12,5	28,5	9,5	4,8	3,1	100	
10 AWG 6 mm <sup>2</sup>	GT 6-4	4,3	10,3	26,0	10,0	5,5	3,8	100	
	GT 6-5	5,3	10,3	26,0	10,0	5,5	3,8	100	
	GT 6-6	6,4	10,3	26,0	10,0	5,5	3,8	100	
	GT 6-8	8,3	13,9	29,0	10,0	5,5	3,8	100	
	GT 6-10	10,5	13,9	29,0	10,0	5,5	3,8	100	
8 AWG 10 mm <sup>2</sup>	GT 10-4	4,3	11,9	27,5	11,5	6,9	4,7	100	
	GT 10-5	5,3	11,9	27,5	11,5	6,9	4,7	100	
	GT 10-6	6,4	11,9	27,5	11,5	6,9	4,7	100	
	GT 10-8	8,3	13,5	30,5	11,5	6,9	4,7	100	
	GT 10-10	10,5	15,0	30,5	11,5	6,9	4,7	100	
	GT 10-12	13,2	17,0	34,0	11,5	6,9	4,7	100	
6 AWG 16 mm <sup>2</sup>	GT 16-5	5,3	12,0	27,5	12,0	7,8	5,6	100	
	GT 16-6	6,4	12,0	27,5	12,0	7,8	5,6	100	
	GT 16-8	8,3	13,5	31,0	12,0	7,8	5,6	100	
	GT 16-10	10,5	16,0	32,0	12,0	7,8	5,6	100	
	GT 16-12	13,2	17,0	37,5	12,0	7,8	5,6	100	
4 AWG 25 mm <sup>2</sup>	GT 25-5	5,3	14,0	34,0	13,5	9,5	7,1	50	
	GT 25-6	6,4	14,0	34,0	13,5	9,5	7,1	50	
	GT 25-8	8,3	14,0	34,0	13,5	9,5	7,1	50	
	GT 25-10	10,5	16,0	37,0	13,5	9,5	7,1	50	
	GT 25-12	13,2	18,0	40,0	13,5	9,5	7,1	50	
	GT 25-14	14,5	21,0	42,0	13,5	9,5	7,1	50	
2 AWG 35 mm <sup>2</sup>	GT 35-6	6,4	16,5	39,0	16,0	11,0	8,2	50	
	GT 35-8	8,3	16,5	39,0	16,0	11,0	8,2	50	
	GT 35-10	10,5	16,5	43,0	16,0	11,0	8,2	50	
	GT 35-12	13,2	18,0	43,0	16,0	11,0	8,2	50	
	GT 35-14	14,5	20,0	48,0	16,0	11,0	8,2	50	
	GT 35-16	16,5	23,0	48,0	16,0	11,0	8,2	50	
1 AWG 40 mm <sup>2</sup>	GT 40-6	6,4	17,0	44,0	17,0	11,2	9,0	20	
	GT 40-8	8,3	17,0	44,0	17,0	11,2	9,0	20	
	GT 40-10	10,5	17,0	44,0	17,0	11,2	9,0	20	
	GT 40-12	13,2	18,0	44,0	17,0	11,2	9,0	20	

NON-INSULATED TERMINALS

Wire size	Part nr.	Ø E	W	L	B	D	d	Packed	UL
1/0 AWG 50 mm <sup>2</sup>	GT 50-6	6,4	18,0	45,0	20,0	12,5	9,5	20	
	GT 50-8	8,3	18,0	45,0	20,0	12,5	9,5	20	
	GT 50-10	10,5	18,0	49,0	20,0	12,5	9,5	20	
	GT 50-12	13,2	18,0	49,0	20,0	12,5	9,5	20	
	GT 50-14	14,5	22,0	54,0	20,0	12,5	9,5	20	
	GT 50-16	16,5	25,0	62,0	20,0	12,5	9,5	20	
	GT 50-20	21,0	30,0	68,0	20,0	12,5	9,5	20	
2/0 AWG 70 mm <sup>2</sup>	GT 70-8	8,3	22,0	47,6	20,0	15,0	11,5	20	
	GT 70-10	10,5	22,0	51,6	20,0	15,0	11,5	20	
	GT 70-12	13,2	22,0	51,6	20,0	15,0	11,5	20	
	GT 70-14	14,5	22,0	62,6	20,0	15,0	11,5	20	
	GT 70-16	16,5	22,0	62,6	20,0	15,0	11,5	20	
	GT 70-20	21,0	30,0	62,6	20,0	15,0	11,5	20	
	3/0 AWG 95 mm <sup>2</sup>	GT 95-8	8,3	25,0	55,8	22,0	17,0	13,5	20
GT 95-10		10,5	25,0	55,8	22,0	17,0	13,5	20	
GT 95-12		13,2	25,0	55,8	22,0	17,0	13,5	20	
GT 95-14		14,5	25,0	66,8	22,0	17,0	13,5	20	
GT 95-16		16,5	25,0	66,8	22,0	17,0	13,5	20	
GT 95-20		21,0	30,0	66,8	22,0	17,0	13,5	20	
4/0 AWG 120 mm <sup>2</sup>		GT 120-8	8,3	29,0	71,5	27,0	20,0	15,6	10
	GT 120-10	10,5	29,0	71,5	27,0	20,0	15,6	10	
	GT 120-12	13,2	29,0	71,5	27,0	20,0	15,6	10	
	GT 120-14	14,5	29,0	71,5	27,0	20,0	15,6	10	
	GT 120-16	16,5	29,0	71,5	27,0	20,0	15,6	10	
	GT 120-20	21,0	29,0	71,5	27,0	20,0	15,6	10	
	250/300 kcmil 150 mm <sup>2</sup>	GT 150-8	8,3	30,6	78,0	32,0	21,0	16,5	10
GT 150-10		10,5	30,6	78,0	32,0	21,0	16,5	10	
GT 150-12		13,2	30,6	78,0	32,0	21,0	16,5	10	
GT 150-14		14,5	30,6	78,0	32,0	21,0	16,5	10	
GT 150-16		16,5	30,6	78,0	32,0	21,0	16,5	10	
GT 150-20		21,0	30,6	78,0	32,0	21,0	16,5	10	
300/350 kcmil 185 mm <sup>2</sup>		GT 185-10	10,5	34,0	84,0	34,0	23,6	18,4	10
	GT 185-12	13,2	34,0	84,0	34,0	23,6	18,4	10	
	GT 185-14	14,5	34,0	84,0	34,0	23,6	18,4	10	
	GT 185-16	16,5	34,0	84,0	34,0	23,6	18,4	10	
	GT 185-20	21,0	34,0	84,0	34,0	23,6	18,4	10	
	400/450 kcmil 240 mm <sup>2</sup>	GT 240-10	10,5	38,5	90,0	37,0	26,4	21,2	5
GT 240-12		13,2	38,5	90,0	37,0	26,4	21,2	5	
GT 240-14		14,5	38,5	90,0	37,0	26,4	21,2	5	
GT 240-16		16,5	38,5	90,0	37,0	26,4	21,2	5	
GT 240-18		19,0	38,5	90,0	37,0	26,4	21,2	5	
GT 240-20		21,0	38,5	90,0	37,0	26,4	21,2	5	
300 mm <sup>2</sup>		GT 300-10	10,5	42,0	96,0	40,0	28,6	23,4	1
	GT 300-12	13,2	42,0	96,0	40,0	28,6	23,4	1	
	GT 300-14	14,5	42,0	96,0	40,0	28,6	23,4	1	
	GT 300-16	16,5	42,0	96,0	40,0	28,6	23,4	1	
	GT 300-20	21,0	42,0	96,0	40,0	28,6	23,4	1	
	400 mm <sup>2</sup>	GT 400-10	10,5	48,0	104,7	37,0	32,8	26,8	1
GT 400-12		13,2	48,0	104,7	37,0	32,8	26,8	1	
GT 400-14		14,5	48,0	104,7	37,0	32,8	26,8	1	
GT 400-16		16,5	48,0	104,7	37,0	32,8	26,8	1	
GT 400-18		18,5	48,0	104,7	37,0	32,8	26,8	1	
GT 400-20		21,0	48,0	104,7	37,0	32,8	26,8	1	



## Non-insulated DIN 46234 Brazed Seam terminals



- Brazed seam
- RoHS compliant



Wire size	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
26~22 AWG 0,1~0,5 mm <sup>2</sup>	DIN 2-0.5B	2,2	5,0	10,0	12,5	4,0	2,2	1,0	1000	✓
	DIN 2.5-0.5B	2,7	5,0	10,0	12,5	4,0	2,2	1,0	1000	✓
	DIN 3-0.5B	3,2	5,0	10,0	12,5	4,0	2,2	1,0	1000	✓
	DIN 3.5-0.5B	3,7	6,0	12,0	15,0	4,0	2,2	1,0	1000	✓
	DIN 4-0.5B	4,3	6,5	12,0	15,2	4,0	2,2	1,0	1000	✓
	DIN 5-0.5B	5,3	8,0	12,0	16,0	4,0	2,2	1,0	1000	✓
22~16 AWG 0,5~1,5 mm <sup>2</sup>	DIN 2.5-1B	2,7	6,0	11,0	14,0	5,0	3,5	1,6	1000	✓
	DIN 3-1B	3,2	6,0	11,0	14,0	5,0	3,5	1,6	1000	✓
	DIN 3.5-1B	3,7	6,0	11,0	14,0	5,0	3,5	1,6	1000	✓
	DIN 4-1B	4,3	8,0	12,0	16,0	5,0	3,5	1,6	1000	✓
	DIN 5-1B	5,3	10,0	13,0	18,0	5,0	3,5	1,6	1000	✓
	DIN 6-1B	6,5	11,0	15,0	20,5	5,0	3,5	1,6	1000	✓
	DIN 8-1B	8,4	14,0	16,0	23,0	5,0	3,5	1,6	1000	✓
	DIN 10-1B	10,5	18,0	18,0	27,0	5,0	3,5	1,6	1000	✓
16~14 AWG 1,5~2,5 mm <sup>2</sup>	DIN 3-2.5B	3,2	6,0	11,0	14,0	5,0	4,1	2,3	1000	✓
	DIN 3.5-2.5B	3,7	6,0	11,0	14,0	5,0	4,1	2,3	1000	✓
	DIN 4-2.5B	4,3	8,0	12,0	16,0	5,0	4,1	2,3	1000	✓
	DIN 5-2.5B	5,3	10,0	14,0	19,0	5,0	4,1	2,3	1000	✓
	DIN 6-2.5B	6,5	11,0	16,0	21,5	5,0	4,1	2,3	1000	✓
	DIN 8-2.5B	8,4	14,0	17,0	24,0	5,0	4,1	2,3	1000	✓
	DIN 10-2.5B	10,5	18,0	18,0	27,0	5,0	4,1	2,3	1000	✓
	DIN 12-2.5B	13,0	19,2	16,0	30,6	5,0	4,1	2,3	1000	✓
12~10 AWG 4~6 mm <sup>2</sup>	DIN 4-6B	4,3	8,0	14,0	18,0	6,0	5,8	3,6	1000	✓
	DIN 5-6B	5,3	10,0	15,0	20,0	6,0	5,8	3,6	1000	✓
	DIN 6-6B	6,5	11,0	16,0	21,5	6,0	5,8	3,6	1000	✓
	DIN 8-6B	8,4	14,0	19,0	26,0	6,0	5,8	3,6	1000	✓
	DIN 10-6B	10,5	18,0	21,0	30,0	6,0	5,8	3,6	1000	✓
	DIN 12-6B	13,0	19,0	26,5	36,0	6,0	5,8	3,6	1000	✓
8 AWG 10 mm <sup>2</sup>	DIN 4-10B	4,3	10,0	16,0	21,0	8,0	7,0	4,5	100	✓
	DIN 5-10B	5,3	10,0	16,0	21,0	8,0	7,0	4,5	100	✓
	DIN 6-10B	6,5	11,0	17,0	22,5	8,0	7,0	4,5	100	✓
	DIN 8-10B	8,4	14,0	20,0	27,0	8,0	7,0	4,5	100	✓
	DIN 10-10B	10,5	18,0	21,0	30,0	8,0	7,0	4,5	100	✓
	DIN 12-10B	13,0	22,0	23,0	34,0	8,0	7,0	4,5	100	✓
6 AWG 16 mm <sup>2</sup>	DIN 5-16B	5,3	11,0	20,0	25,5	10,0	8,5	5,8	100	✓
	DIN 6-16B	6,5	11,0	20,0	25,5	10,0	8,5	5,8	100	✓
	DIN 8-16B	8,4	14,0	22,0	29,0	10,0	8,5	5,8	100	✓
	DIN 10-16B	10,5	18,0	24,0	33,0	10,0	8,5	5,8	100	✓
	DIN 12-16B	13,0	22,0	26,0	37,0	10,0	8,5	5,8	100	✓
4 AWG 25 mm <sup>2</sup>	DIN 5-25B	5,3	12,0	25,0	31,0	11,0	10,8	7,5	100	✓
	DIN 6-25B	6,5	12,0	25,0	31,0	11,0	10,8	7,5	100	✓
	DIN 8-25B	8,4	16,0	25,0	33,0	11,0	10,8	7,5	100	✓
	DIN 10-25B	10,5	18,0	26,0	35,0	11,0	10,8	7,5	100	✓
	DIN 12-25B	13,0	22,0	31,0	42,0	11,0	10,8	7,5	100	✓
	DIN 16-25B	17,0	28,0	35,0	49,0	11,0	10,8	7,5	100	✓

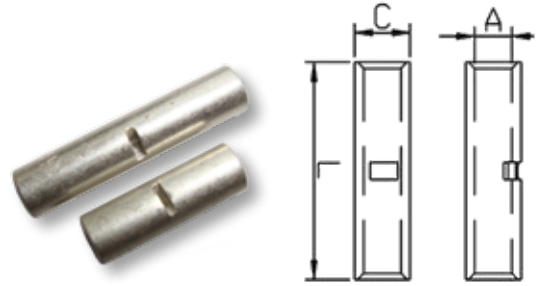
NON-INSULATED TERMINALS

Wire size	Part nr.	d2	B	F	L	E	D	d1	Packed	UL
2 AWG 35 mm <sup>2</sup>	DIN 6-35B	6,5	15,0	26,0	33,5	12,0	12,6	9,0	50	✓
	DIN 8-35B	8,4	16,0	26,0	34,0	12,0	12,6	9,0	50	✓
	DIN 10-35B	10,5	18,0	27,0	36,0	12,0	12,6	9,0	50	✓
	DIN 12-35B	13,0	22,0	31,0	42,0	12,0	12,6	9,0	50	✓
	DIN 16-35B	17,0	28,0	36,0	50,0	12,0	12,6	9,0	50	✓
1/0 AWG 50 mm <sup>2</sup>	DIN 6-50B	6,5	18,0	34,0	43,0	16,0	15,0	11,0	50	✓
	DIN 8-50B	8,4	18,0	34,0	43,0	16,0	15,0	11,0	50	✓
	DIN 10-50B	10,5	18,0	34,0	43,0	16,0	15,0	11,0	50	✓
	DIN 12-50B	13,0	22,0	36,0	47,0	16,0	15,0	11,0	50	✓
	DIN 16-50B	17,0	28,0	40,0	54,0	16,0	15,0	11,0	50	✓
2/0 AWG 70 mm <sup>2</sup>	DIN 6-70B	6,5	22,0	38,0	49,0	18,0	17,5	13,0	50	✓
	DIN 8-70B	8,4	22,0	38,0	49,0	18,0	17,5	13,0	50	✓
	DIN 10-70B	10,5	22,0	38,0	49,0	18,0	17,5	13,0	50	✓
	DIN 12-70B	13,0	22,0	38,0	49,0	18,0	17,5	13,0	50	✓
	DIN 16-70B	17,0	28,0	42,0	56,0	18,0	17,5	13,0	50	✓
3/0 AWG 95 mm <sup>2</sup>	DIN 8-95B	8,4	24,0	42,0	54,0	20,0	20,5	15,0	50	✓
	DIN 10-95B	10,5	24,0	42,0	54,0	20,0	20,5	15,0	50	✓
	DIN 12-95B	13,0	24,0	42,0	54,0	20,0	20,5	15,0	50	✓
	DIN 16-95B	17,0	28,0	44,0	58,0	20,0	20,5	15,0	50	✓
4/0 AWG 120 mm <sup>2</sup>	DIN 8-120B	8,4	24,0	44,0	56,0	22,0	23,0	16,5	25	✓
	DIN 10-120B	10,5	24,0	44,0	56,0	22,0	23,0	16,5	25	✓
	DIN 12-120B	13,0	24,0	44,0	56,0	22,0	23,0	16,5	25	✓
	DIN 16-120B	17,0	28,0	48,0	62,0	22,0	23,0	16,5	25	✓
250/300 kcmil 150 mm <sup>2</sup>	DIN 10-150B	10,5	30,0	50,0	65,0	24,0	26,0	19,0	10	✓
	DIN 12-150B	13,0	30,0	50,0	65,0	24,0	26,0	19,0	10	✓
	DIN 16-150B	17,0	30,0	50,0	65,0	24,0	26,0	19,0	10	✓
300/350 kcmil 185 mm <sup>2</sup>	DIN 10-185B	10,5	36,0	50,0	68,0	28,0	28,8	21,0	10	✓
	DIN 12-185B	13,0	36,0	50,0	68,0	28,0	28,8	21,0	10	✓
	DIN 16-185B	17,0	36,0	50,0	68,0	28,0	28,8	21,0	10	✓
400 kcmil 240 mm <sup>2</sup>	DIN 10-240B	10,5	38,0	56,0	75,0	32,0	32,3	23,5	10	✓
	DIN 12-240B	13,0	38,0	56,0	75,0	32,0	32,3	23,5	10	✓
	DIN 16-240B	17,0	38,0	56,0	75,0	32,0	32,3	23,5	10	✓

### Non-insulated butt connectors



- RoHS compliant

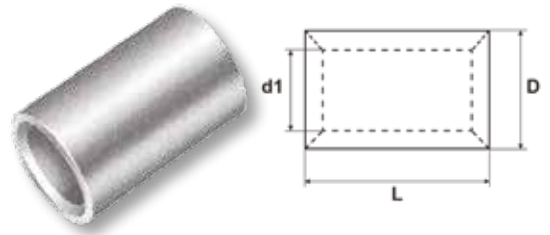


Shorter models						
Wire range	Part nr.	L	A	C	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	BC 1.25	15,0	1,9	3,3	100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	BC 2	15,0	2,3	4,0	100	
12~10 AWG 4~6 mm <sup>2</sup>	BC 5.5	15,0	3,6	5,5	100	
8 AWG 8 mm <sup>2</sup>	C 8	22,5	5,1	7,1	100	
6 AWG 14 mm <sup>2</sup>	C 14	27,5	6,4	9,0	100	
4 AWG 22 mm <sup>2</sup>	C 22	30,5	8,2	11,4	100	
2 AWG 38 mm <sup>2</sup>	C 38	33,5	10,1	13,3	100	
1/0 AWG 60 mm <sup>2</sup>	C 60	36,0	12,0	15,4	50	
2/0 AWG 70 mm <sup>2</sup>	C 70	37,8	14,0	17,4	50	
3/0 AWG 80 mm <sup>2</sup>	C 80	39,5	15,4	19,4	50	
4/0 AWG 100 mm <sup>2</sup>	C 100	39,5	17,6	22,0	40	
250/300 kcmil 150 mm <sup>2</sup>	C 150	55,5	20,9	26,0	5	
300/350 kcmil 180 mm <sup>2</sup>	C 180	58,5	22,0	28,6	4	
400 kcmil 200 mm <sup>2</sup>	C 200	64,5	25,7	32,5	5	
400/450 kcmil 250 mm <sup>2</sup>	C 250	64,5	25,7	32,5	5	
325 mm <sup>2</sup>	C 325	73,5	29,0	37,0	5	

Longer models						
Wire range	Part nr.	L	A	C	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	GT 1.5	16,5	1,9	3,3	100	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	GT 2.5	22,0	2,6	4,0	100	
12 AWG 4 mm <sup>2</sup>	GT 4	25,2	3,5	4,8	100	
10 AWG 6 mm <sup>2</sup>	GT 6	25,2	3,8	5,5	100	
12~10 AWG 4~6 mm <sup>2</sup>	GT 4/6	25,5	3,5	5,2	100	
8 AWG 10 mm <sup>2</sup>	GT 10	30,0	4,5	6,5	100	
6 AWG 16 mm <sup>2</sup>	GT 16	32,5	5,5	7,5	100	
4 AWG 25 mm <sup>2</sup>	GT 25	35,5	7,0	9,5	100	
2 AWG 35 mm <sup>2</sup>	GT 35	40,5	8,5	11,0	100	
1/0 AWG 50 mm <sup>2</sup>	GT 50	40,5	10,0	13,0	25	
2/0 AWG 70 mm <sup>2</sup>	GT 70	45,5	11,5	15,0	25	
3/0 AWG 95 mm <sup>2</sup>	GT 95	50,5	13,5	18,0	25	
4/0 AWG 120 mm <sup>2</sup>	GT 120	65,5	15,0	19,5	25	
250/300 kcmil 150 mm <sup>2</sup>	GT 150	70,5	16,5	22,0	25	
300/350 kcmil 185 mm <sup>2</sup>	GT 185	75,5	19,0	25,0	12	
400/450 kcmil 240 mm <sup>2</sup>	GT 240	80,5	21,0	27,5	6	
300 mm <sup>2</sup>	GT 300	90,5	23,5	30,5	5	
400 mm <sup>2</sup>	GT 400	100,0	27,0	34,0	5	

NON-INSULATED TERMINALS

## Non-insulated parallel connectors



- RoHS compliant

Wire range	Part nr.	d1	D	L	Packed	UL
22~16 AWG 0,5~1,5 mm <sup>2</sup>	P 1.25-L5.0	1,6	3,3	5,0	1000	
22~16 AWG 0,5~1,5 mm <sup>2</sup>	P 1.25-1.95L5.0	1,95	3,3	5,0	1000	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	DP2N-5	2,3	4,0	5,0	1000	
16~14 AWG 1,5~2,5 mm <sup>2</sup>	P 2	2,3	4,0	7,0	1000	
12 AWG 4 mm <sup>2</sup>	P3-5N	2,8	4,2	4,8	1000	
12~10 AWG 4~6 mm <sup>2</sup>	P 5.5	3,6	5,6	7,0	1000	

**Tools for non-insulated tube and brazed seam terminals**

NON-INSULATED  
TERMINALS

**Die sets**  
 For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)  
 See our Tools section (page 282-287) for the complete program



**DSQIB**  
 For non-insulated (brazed seam only) terminals  
 1,5/2,5/6,0/10,0 mm<sup>2</sup>



**MHQIBE**  
 (separately available)



**BN-10**  
Crimping tool for non-insulated (brazed seam only) terminals  
1,5~10,0 mm<sup>2</sup>



**KH-9**  
Crimping tool for non-insulated terminals  
1,5~10,0 mm<sup>2</sup>



**KH-16**  
Crimping tool for non-insulated terminals  
1,5~16,0 mm<sup>2</sup>



**KH-22**  
Crimping tool for non-insulated terminals  
6,0~25,0 mm<sup>2</sup>



**KH-38**  
Crimping tool for non-insulated terminals  
6,0~35,0 mm<sup>2</sup>



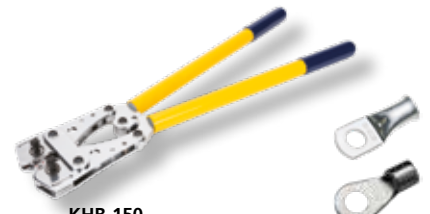
**KHB-50**  
Crimping tool for non-insulated terminals  
6,0~50,0 mm<sup>2</sup>  
HEXAGONAL crimp



**KH-120**  
Crimping tool for non-insulated terminals  
10,0~120,0 mm<sup>2</sup>



**KHB-120**  
Crimping tool for non-insulated terminals  
10,0~120,0 mm<sup>2</sup>  
HEXAGONAL crimp



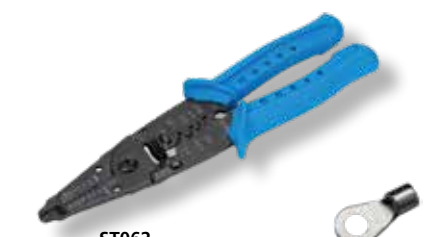
**KHB-150**  
Crimping tool for non-insulated terminals  
25,0~150,0 mm<sup>2</sup>  
HEXAGONAL crimp



**KH-507**  
Multi-tool for insulated and non-insulated (brazed seam only) terminals  
0,5~6,0 mm<sup>2</sup>  
Stripping 0,75~6,0 mm<sup>2</sup>



**MEB-900C**  
Multi-tool for non-insulated (brazed seam only) and open barrel terminals  
0,5~6,0 mm<sup>2</sup>  
Stripping 0,75~6,0 mm<sup>2</sup>



**ST062**  
Multi-tool for Non-insulated (brazed seam only) terminals 0,5~2,5 mm<sup>2</sup>  
Open barrel terminals 0,25~1,5 mm<sup>2</sup>  
Coaxial cable connectors 6,0 mm  
Stripping 0,25~4,0 mm<sup>2</sup>

NON-INSULATED TERMINALS

# Non-insulated open barrel terminals - Strip



	Wire range	Part nr. natural	Part nr. tin plated	Tabsize/ Ø	L	B	Dimple/locking tab	Pcs/roll	UL			
	0,5~1,0	01-001-MS-ZA	01-001-MS-TA	6,3x0,8	28,0	15,8	dimple hole/locking tab	6.000				
	1,0~2,5	01-002-MS-ZA	01-002-MS-TA					5.000	✓			
	2,5~6,0	01-003-MS-ZA	01-003-MS-TA					3.500	✓			
	0,5~1,0	02-010-MS-ZA	02-010-MS-TA	2,8x0,5	14,4	3,8	dimple	15.000	✓			
		02-011-MS-ZA	02-011-MS-TA	2,8x0,8					✓			
	1,0~2,5	02-012-MS-ZA	02-012-MS-TA	4,8x0,5	15,5	5,7		10.000	✓			
		02-013-MS-ZA	02-013-MS-TA	4,8x0,8					✓			
		02-001-MS-ZA	02-001-MS-TA	6,3x0,8					19,0	7,6	8.000	✓
		02-002-MS-ZA	02-002-MS-TA								7.000	✓
2,5~6,0	02-003-MS-ZA	02-003-MS-TA	5.000	✓								
	0,5~1,0	02-005-MS-ZA	02-005-MS-TA	6,3x0,8	19,0	7,6	dimple/locking tab	8.000	✓			
	1,0~2,5	02-007-MS-ZA	02-007-MS-TA					7.000	✓			
	2,5~6,0	02-009-MS-ZA	02-009-MS-TA					4.000	✓			
	0,5~1,0	07-001-MS-ZA	07-001-MS-TA	6,3x0,8	20,0	7,6	dimple/dimple hole	1.500				
	0,75~2,0	07-002-MS-ZA	07-002-MS-TA		19,2	7,6						
	0,5~1,0	10-001-MS-ZA	10-001-MS-TA	6,3x0,8	16,0	7,6	dimple	5.000	✓			
	1,0~2,5	10-002-MS-ZA	10-002-MS-TA		15,5			4.000	✓			
	0,5~1,0	03-002-MS-ZA	03-002-MS-TA	Ø 4,3	22,0	9,5	-	6.000	✓			
		03-003-MS-ZA	03-003-MS-TA	Ø 5,3					✓			
		03-004-MS-ZA	03-004-MS-TA	Ø 6,4					✓			
	1,0~2,5	03-006-MS-ZA	03-006-MS-TA	Ø 4,3					✓			
		03-007-MS-ZA	03-007-MS-TA	Ø 5,3					✓			
		03-008-MS-ZA	03-008-MS-TA	Ø 6,4					✓			
	0,5~0,75	09-001-MS-ZA	09-001-MS-TA	-	6,0	-	-	40.000				
	0,75~2,0	09-002-MS-ZA	09-002-MS-TA									
	1,5~2,5	05-001-MS-ZA	05-001-MS-TA	Ø 3,5	13,2	7,5	-	7.500				
		05-002-MS-ZA	05-002-MS-TA	Ø 4,0	17,8	9,5						
	1,5~2,5	06-001-MS-ZA	06-001-MS-TA	Ø 3,5	17,5	7,1	-	5.000				
		06-002-MS-ZA	06-002-MS-TA	Ø 4,0	17,2	7,0						

NON-INSULATED TERMINALS





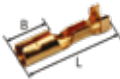


## Non-insulated open barrel terminals - Loose piece



	Wire range	Part nr. natural	Part nr. tin plated	Tabsize/ Ø	L	B	Dimple/locking tab	Packed	UL
	0,5-1,0	L1800-2097		2,8x0,5	20,7	12,0	dimple hole/ locking tab	1.000	
		01-008-ML-ZA	01-008-ML-TA	2,8x0,8	22,5	12,5			✓
		01-006-ML-ZA	01-006-ML-TA	4,8x0,5	21,5	12,0			
		01-001-ML-ZA	01-001-ML-TA	6,3x0,8	28,0	15,8			✓
	1,0-2,5	01-002-ML-ZA	01-002-ML-TA	6,3x0,8	28,0	15,8			✓
	2,5-6,0	01-003-ML-ZA	01-003-ML-TA	6,3x0,8	28,0	15,8			✓
	0,5-1,0	01-007-ML-ZA	01-007-ML-TA	2,8x0,8	12,6	5,6	dimple hole	1.000	
		01-004-ML-ZA	01-004-ML-TA	4,8x0,5	17,5	6,4			✓
	0,75-2,0	01-005-ML-ZA	01-005-ML-TA						
	0,5-1,0	02-010-ML-ZA	02-010-ML-TA	2,8x0,5	14,4	3,8	dimple	1.000	✓
		02-011-ML-ZA	02-011-ML-TA	2,8x0,8					✓
		02-012-ML-ZA	02-012-ML-TA	4,8x0,5	15,5	5,7			✓
		02-013-ML-ZA	02-013-ML-TA	4,8x0,8					✓
		02-001-ML-ZA*	02-001-ML-TA*	6,3x0,8	19,0	7,6			✓
	1,0-2,5	02-014-ML-ZA	02-014-ML-TA	4,8x0,5	15,5	5,7			✓
		02-113-ML-ZA	02-113-ML-TA	4,8x0,8					✓
		02-002-ML-ZA*	02-002-ML-TA*	6,3x0,8	19,0	7,6			✓
	2,5-6,0		02-953-ML-TA	9,5x1,2	27,0	10,8			
	2,5-6,0	02-003-ML-ZA*	02-003-ML-TA*	6,3x0,8	19,0	7,6			✓
	0,5-1,0	L8240-4050	L8240-4050T	2,8x0,5	15,6	3,9	locking tab	1.000	
		02-285-ML-ZA	02-285-ML-TA	2,8x0,5	14,4	4,2			
		02-288-ML-ZA	02-288-ML-TA	2,8x0,8					
		02-485-ML-ZA	02-485-ML-TA	4,8x0,5	15,6	5,7			
		02-488-ML-ZA	02-488-ML-TA	4,8x0,8					
		02-005-ML-ZA*	02-005-ML-TA*	6,3x0,8	19,0	7,6			dimple/ locking tab
	1,0-2,5	02-486-ML-ZA	02-486-ML-TA	4,8x0,5	15,6	5,7	locking tab		
		02-489-ML-ZA	02-489-ML-TA	4,8x0,8					
		02-006-ML-TA	02-006-ML-TA	6,3x0,8	19,0	7,6			
		02-007-ML-ZA*	02-007-ML-TA*	6,3x0,8			dimple/ locking tab	✓	
		02-107-ML-ZA		8,0x0,8	8,9	20,1	locking tab		
		02-954-ML-ZA	02-954-ML-TA	9,5x1,2	27,0	10,8	locking tab		
2,5-6,0	02-009-ML-ZA*	02-009-ML-TA*	6,3x0,8	19,0	7,6	dimple/ locking tab	✓		

\* Pre-rolled

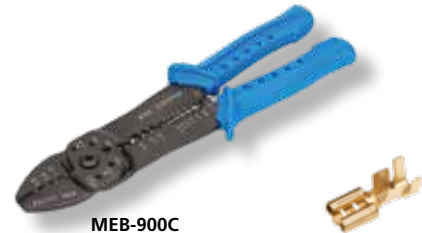
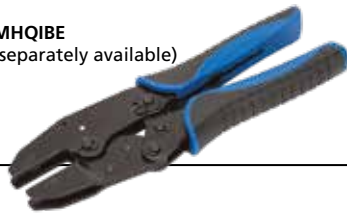
	Wire range	Part nr. natural	Part nr. tin plated	Tabsize/ Ø	L	B	Dimple/locking tab	Packed	UL
	1,0~2,5	07-001-ML-ZA	07-001-ML-TA	6,3x0,8	20,1	7,5	dimple/ dimple hole	1.000	
	0,75~2,0	07-002-ML-ZA	07-002-ML-TA		19,2	7,6			
	0,5~1,0	10-001-ML-ZA	10-001-ML-TA	6,3x0,8	16,0	7,6	dimple		✓
	1,0~2,5	10-002-ML-ZA	10-002-ML-TA		15,5				
				10-004-ML-TA	8,0x0,8	16,5	9,0		locking tab
	0,5~1,0	03-002-ML-ZA	03-002-ML-TA	Ø 4,3	22,0	9,5	-		✓
		03-003-ML-ZA	03-003-ML-TA	Ø 5,3					✓
		03-004-ML-ZA	03-004-ML-TA	Ø 6,4					✓
	1,0~2,5	03-001-ML-ZA	03-001-ML-TA	Ø 3,2	20,0	8,6			✓
		03-005-ML-ZA	03-005-ML-TA	Ø 3,2	22,0	8,0			✓
		03-006-ML-ZA	03-006-ML-TA	Ø 4,3		9,5		✓	
		03-007-ML-ZA	03-007-ML-TA	Ø 5,3	✓				
		03-008-ML-ZA	03-008-ML-TA	Ø 6,4	✓				
		03-009-ML-ZA	03-009-ML-TA	Ø 8,5	28,0	14,0			
		03-021-ML-ZA	03-021-ML-TA	Ø 9,5				✓	
	1,5~2,5	05-001-ML-ZA	05-001-ML-TA	Ø 3,5	13,2	7,5			
		05-002-ML-ZA	05-002-ML-TA	Ø 4,0	17,8	9,5			
	1,5~2,5	06-001-ML-ZA	06-001-ML-TA	Ø 3,5	17,5	7,1			
		06-002-ML-ZA	06-002-ML-TA	Ø 4,0	17,2	7,0			

Tools for open barrel terminals

NON-INSULATED  
TERMINALS



MHQIBE  
(separately available)



MEB-900C  
Multi-tool for non-insulated (**brazed seam only**) & open barrel terminals  
0,5 - 6,0 mm<sup>2</sup>  
Stripping 0,75 - 6,0 mm<sup>2</sup>

## Die sets

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



DSQIC  
For open barrel terminals  
0.5-1.0/1.5-2.5/4.0-6.0 mm<sup>2</sup>



DSQICQ (MIM procedure)  
For open barrel terminals  
0.5-1.0/1.5-2.5/4.0-6.0 mm<sup>2</sup>



DSQIC3  
For open barrel flag terminals  
0.5-1.5/0.5-2.5 mm<sup>2</sup>



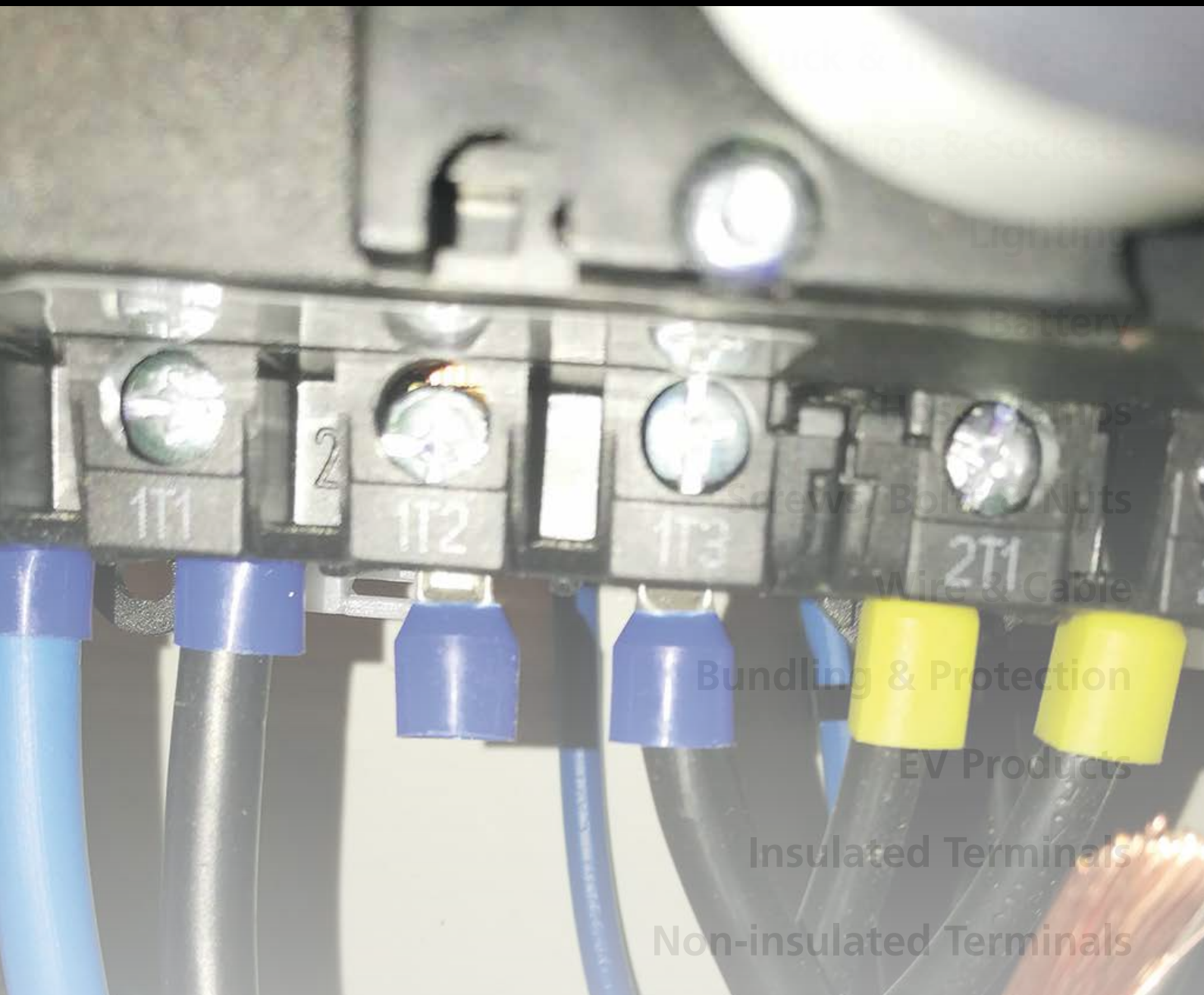
ST062  
Multi-tool for  
Non-insulated (**brazed seam only**) terminals (0,5 - 2,5 mm<sup>2</sup>),  
Open barrel terminals (0,25 - 1,5 mm<sup>2</sup>) and  
Coaxial cable connectors 6,0 mm  
Stripping 0,25 - 4,0 mm<sup>2</sup>

## Non-insulated quick connectors



	Stud hole	Part nr. natural	Part nr. tin plated	Tabsize	L	B	Dimple/ angle	Packed	UL
	brass	50-001-MB-ZA	50-001-MB-TA	6,3 x 0,8	18,0	11,4	dimple holes	1000	
	brass	50-002-MB-ZA	50-002-MB-TA		20,5	9,6	dimple holes		✓
	Ø 2,2		08-101-MB-TA	2,8 x 0,5	5,0	4,45	dimple hole 45°		✓
	Ø 4,2	08-001-MB-ZA	08-001-MB-TA		8,5	8,0			
	Ø 5,2	08-110-MB-ZA	08-110-MB-TA						
	Ø 4,2	08-100-MB-ZA		6,3 x 0,8	8,5	8,0	dimple hole 90°		
	Ø 5,2	90-011-MB-ZA							
	Ø 4,2	08-002-MB-ZA	08-002-MB-TA		11,5	10,0	dimple holes 2 x 45°		
	Ø 5,2		08-012-MB-TA						
	Ø 4,2	08-003-MB-ZA			19,0	8,0	dimple hole		
	Ø 5,2	08-310-MB-ZA							

NON-INSULATED TERMINALS



## Cord End Terminals

Single wire insulated .....	206
Twin wire insulated .....	210
Single wire non-insulated .....	211

Relays, Switches, Pilot Lights & Buzzers

Housing

Fuses & Fuse Holders

Tools

Assortment Kits

## PP cord end terminals DIN 46228/4 - Single wire



- Minimum coating thickness: 3 µm
- Compliant to EU directives: 2002/96/EC (WEEE), 2002/95/EC (ROHS) AND 2003/11/CE
- Part numbers: "T" = Telemechanique, "W" = Weidmüller

Wire range	C	Part nr. "T"	UL	C	Part nr. "W"	UL	C	Part nr. DIN	UL	F	L	C	W	Packed
0,14 mm <sup>2</sup> / 26 AWG		AHBR 0.14N*			AHGRS 0.14N*					6,0	10,0	0,70	1,6	500
		AHBR 0.14L*			AHGRS 0.14L*			8,0	12,0	0,70	1,6	500		
0,25 mm <sup>2</sup> / 24 AWG		AHV 0.25N*			AHB 0.25N*					6,0	10,0	0,75	1,8	500
		AHV 0.25L*			AHB 0.25L*			8,0	12,0	0,75	1,8	500		
		AHG 0.25N*						6,0	10,0	0,75	1,8	500		
0,34 mm <sup>2</sup> / 22 AWG		AHR 0.34N*			AHT 0.34N*					6,0	10,0	0,80	2,0	500
		AHR 0.34L*			AHT 0.34L*			8,0	12,0	0,80	2,0	500		
0,50 mm <sup>2</sup> / 20 AWG		AHW 0.50K*	✓		AHO 0.50K*	✓		AHW 0.50K*	✓	6,0	12,0	1,0	2,6	500
		AHW 0.50N*	✓		AHO 0.50N*	✓		AHW 0.50N*	✓	8,0	14,0	1,0	2,6	500
		AHW 0.50HL*	✓		AHO 0.50HL*	✓		AHW 0.50HL*	✓	10,0	16,0	1,0	2,6	500
0,75 mm <sup>2</sup> / 19 AWG		AHB 0.75K*	✓		AHW 0.75K*	✓		AHGRS 0.75K*	✓	6,0	12,0	1,2	2,8	500
		AHB 0.75N*	✓		AHW 0.75N*	✓		AHGRS 0.75N*	✓	8,0	14,0	1,2	2,8	500
		AHB 0.75HL*	✓		AHW 0.75HL*	✓		AHGRS 0.75HL*	✓	10,0	16,0	1,2	2,8	500
		AHB 0.75L*	✓		AHW 0.75L*	✓		AHGRS 0.75L*	✓	12,0	18,0	1,2	2,8	500
1,00 mm <sup>2</sup> / 18 AWG		AHR 1.00K*	✓		AHG 1.00K*	✓		AHR 1.00K*	✓	6,0	12,0	1,4	3,0	500
		AHR 1.00N*	✓		AHG 1.00N*	✓		AHR 1.00N*	✓	8,0	14,0	1,4	3,0	500
		AHR 1.00HL*	✓		AHG 1.00HL*	✓		AHR 1.00HL*	✓	10,0	16,0	1,4	3,0	500
		AHR 1.00L*	✓		AHG 1.00L*	✓		AHR 1.00L*	✓	12,0	18,0	1,4	3,0	500
1,50 mm <sup>2</sup> / 16 AWG		AHZ 1.50K*	✓		AHR 1.50K*	✓		AHZ 1.50K*	✓	6,0	12,0	1,7	3,5	500
		AHZ 1.50N*	✓		AHR 1.50N*	✓		AHZ 1.50N*	✓	8,0	14,0	1,7	3,5	500
		AHZ 1.50HL*	✓		AHR 1.50HL*	✓		AHZ 1.50HL*	✓	10,0	16,0	1,7	3,5	500
		AHZ 1.50L*	✓		AHR 1.50L*	✓		AHZ 1.50L*	✓	12,0	18,0	1,7	3,5	500
		AHZ 1.50XL*	✓		AHR 1.50XL*	✓		AHZ 1.50XL*	✓	18,0	24,0	1,7	3,5	500
2,50 mm <sup>2</sup> / 14 AWG		AHGRS 2.50N*	✓		AHB 2.50N*	✓		AHB 2.50N*	✓	8,0	14,0	2,2	4,2	500
		AHGRS 2.50K*	✓		AHB 2.50K*	✓		AHB 2.50K*	✓	10,0	16,0	2,2	4,2	500
		AHGRS 2.50HL*	✓		AHB 2.50HL*	✓		AHB 2.50HL*	✓	12,0	18,0	2,2	4,2	500
		AHGRS 2.50L*	✓		AHB 2.50L*	✓		AHB 2.50L*	✓	18,0	24,0	2,2	4,2	500
4,00 mm <sup>2</sup> / 12 AWG		AHO 4.00N*	✓		AHGRS 4.00N*	✓		AHGRS 4.00N*	✓	10,0	17,0	2,8	4,8	500
		AHO 4.00HL*	✓		AHGRS 4.00HL*	✓		AHGRS 4.00HL*	✓	12,0	20,0	2,8	4,8	500
		AHO 4.00L	✓		AHGRS 4.00L	✓		AHGRS 4.00L	✓	18,0	26,0	2,8	4,8	100
6,00 mm <sup>2</sup> / 10 AWG		AHGR 6.00N	✓		AHZ 6.00N	✓		AHG 6.00N	✓	12,0	20,0	3,5	6,3	100
		AHGR 6.00L	✓		AHZ 6.00L	✓		AHG 6.00L	✓	18,0	26,0	3,5	6,3	100
10,00 mm <sup>2</sup> / 8 AWG		AHBR 10.00N	✓		AHCR 10.00N	✓		AHR 10.00N	✓	12,0	22,0	4,5	7,6	100
		AHBR 10.00L	✓		AHCR 10.00L	✓		AHR 10.00L	✓	18,0	28,0	4,5	7,6	100
16,00 mm <sup>2</sup> / 6 AWG		AHCR 16.00N	✓		AHGR 16.00N			AHB 16.00N	✓	12,0	24,0	5,8	8,8	100
		AHCR 16.00L	✓		AHGR 16.00L			AHB 16.00L	✓	18,0	28,0	5,8	8,8	100
25,00 mm <sup>2</sup> / 4 AWG		AHZ 25.00N	✓		AHBR 25.00N	✓		AHG 25.00N	✓	16,0	30,0	7,3	11,2	50
		AHZ 25.00L	✓		AHBR 25.00L	✓		AHG 25.00L	✓	22,0	36,0	7,3	11,2	50
35,00 mm <sup>2</sup> / 2 AWG		AHR 35.00N	✓		AHCR 35.00N	✓		AHR 35.00N	✓	16,0	30,0	8,3	12,7	50
		AHR 35.00HL	✓		AHCR 35.00HL	✓		AHR 35.00HL	✓	18,0	32,0	8,3	12,7	50
		AHR 35.00L	✓		AHCR 35.00L	✓		AHR 35.00L	✓	25,0	39,0	8,3	12,7	50
50,00 mm <sup>2</sup> / 1/0 AWG		AHB 50.00N	✓		AHOG 50.00N	✓		AHB 50.00N	✓	20,0	36,0	10,3	15,0	50
		AHB 50.00L	✓		AHOG 50.00L	✓		AHB 50.00L	✓	25,0	40,0	10,3	15,0	50
70,00 mm <sup>2</sup> / 2/0 AWG		AHG 70.00L			AHG 70.00L			AHG 70.00L		21,0	37,0	13,5	16,0	25
95,00 mm <sup>2</sup> / 3/0 AWG		AHR 95.00L			AHR 95.00L			AHR 95.00L		25,0	44,0	14,5	18,0	25
120,00 mm <sup>2</sup> / 4/0 AWG		AHB 120.00L			AHB 120.00L			AHB 120.00L		27,0	48,0	16,5	20,0	25
150,00 mm <sup>2</sup> / 300 kcmil		AHG 150.00L			AHG 150.00L			AHG 150.00L		32,0	58,0	19,5	23,0	25

\* Also available in 100 pcs bags



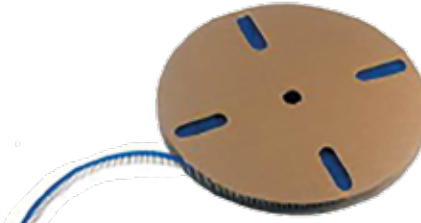


## Cut-strips

Wire range	C	Part nr. "T"	UL	C	Part nr. "W"	UL	C	Part nr. DIN	UL	F	L	C	W	Packed
0,50 mm <sup>2</sup> / 20 AWG		AHW 0.50N STRIP	✓	Orange	AHO 0.50N STRIP	✓		AHW 0.50N STRIP	✓	8,0	14,0	1,0	2,6	10 x 50 pcs
0,75 mm <sup>2</sup> / 19 AWG	Blue	AHB 0.75N STRIP	✓		AHW 0.75N STRIP	✓	Grey	AHGRS 0.75N STRIP	✓	8,0	14,0	1,2	2,8	10 x 50 pcs
1,00 mm <sup>2</sup> / 18 AWG	Red	AHR 1.00N STRIP	✓	Yellow	AHG 1.00N STRIP	✓	Red	AHR 1.00N STRIP	✓	8,0	14,0	1,4	3,0	10 x 50 pcs
1,50 mm <sup>2</sup> / 16 AWG	Black	AHZ 1.50N STRIP	✓	Red	AHR 1.50N STRIP	✓	Black	AHZ 1.50N STRIP	✓	8,0	14,0	1,7	3,5	10 x 50 pcs
2,50 mm <sup>2</sup> / 14 AWG	Grey	AHGRS 2.50N STRIP	✓	Blue	AHB 2.50N STRIP	✓	Blue	AHB 2.50N STRIP	✓	8,0	14,0	2,2	4,2	10 x 50 pcs

## Crimpstar reel

Outer Ø 320 mm, core Ø 23 mm



Wire range	C	Part nr. "T"	UL	C	Part nr. "W"	UL	C	Part nr. DIN	UL	F	L	C	W	Pcs/reel
0,50 mm <sup>2</sup> / 20 AWG		AHW 0.50N CSR	✓	Orange	AHO 0.50N CSR	✓		AHW 0.50N CSR	✓	8,0	14,0	1,0	2,6	4000
0,75 mm <sup>2</sup> / 19 AWG	Blue	AHB 0.75N CSR	✓		AHW 0.75N CSR	✓	Grey	AHGRS 0.75N CSR	✓	8,0	14,0	1,2	2,8	4000
1,00 mm <sup>2</sup> / 18 AWG	Red	AHR 1.00N CSR	✓	Yellow	AHG 1.00N CSR	✓	Red	AHR 1.00N CSR	✓	8,0	14,0	1,4	3,0	3500
1,50 mm <sup>2</sup> / 16 AWG	Black	AHZ 1.50N CSR	✓	Red	AHR 1.50N CSR	✓	Black	AHZ 1.50N CSR	✓	8,0	14,0	1,7	3,5	3000
2,50 mm <sup>2</sup> / 14 AWG	Grey	AHGRS 2.50N CSR	✓	Blue	AHB 2.50N CSR	✓	Blue	AHB 2.50N CSR	✓	8,0	14,0	2,2	4,2	2500



CORD END  
TERMINALS



## HJ601633BC

1663 pcs - 19 compartments  
Insulated single wire cord end terminals  
incl. tool

- 1 x 10" ratchet crimper HJ561
- 1 x die set DSQID
- 1 x die set DSQIF

- |                   |                  |
|-------------------|------------------|
| 150 x AHW 0.50HL  | 75 x AHB 2.50L   |
| 200 x AHW 0.50N   | 60 x AHGR5 4.00N |
| 200 x AHGR5 0.75N | 40 x AHGR5 4.00L |
| 150 x AHGR5 0.75L | 50 x AHG 6.00N   |
| 200 x AHR 1.00N   | 30 x AHG 6.00L   |
| 150 x AHR 1.00L   | 25 x AHR 10.00N  |
| 100 x AHZ 1.50N   | 15 x AHR 10.00L  |
| 75 x AHZ 1.50L    | 25 x AHB 16.00N  |
| 100 x AHB 2.50N   | 15 x AHB 16.00L  |

## Professional kit



Single wire (non-)insulated assortments

## HJ603713BC

3713 pcs - 19 compartments  
insulated and non-insulated single wire cord end terminals  
incl. tool

- 1 x 10" ratchet crimper HJ561
- 1 x die set DSQID
- 1 x die set DSQIF

- |                   |                       |
|-------------------|-----------------------|
| <b>insulated:</b> | <b>non-insulated:</b> |
| 200 x AHO 0.50N   | 500 x AH 0.50         |
| 200 x AHW 0.75N   | 500 x AH 0.75         |
| 200 x AHG 1.00N   | 500 x AH 1.00         |
| 100 x AHR 1.50N   | 500 x AH 1.50         |
| 100 x AHB 2.50N   | 400 x AH 2.50         |
| 60 x AHGR5 4.00N  | 100 x AH 4.00         |
| 50 x AHZ 6.00N    | 100 x AH 6.00         |
| 25 x AHCR 10.00N  | 100 x AH 10.00        |
| 25 x AHGR 16.00N  | 50 x AH 16.00         |

## Professional kit



**ASSAHI-401**  
100 pcs - 4 compartments

- 50 x AHGRS 4.00N
- 20 x AHG 6.00N
- 20 x AHR 10.00N
- 10 x AHB 16.00N



**ASSAHI-501**  
400 pcs - 5 compartments

- 50 x AHW 0.50N
- 100 x AHGRS 0.75N
- 100 x AHR 1.00N
- 100 x AHZ 1.50N
- 50 x AHB 2.50N



Single wire tools



**MHQIBE**  
(separately available)

**Die sets**

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



**DSQID**  
For cord end terminals  
0,5-4,0 mm<sup>2</sup>



**DSQIF**  
For cord end terminals  
6,0-16,0 mm<sup>2</sup>



**DSQIF1**  
For cord end terminals  
25,0-35,0 mm<sup>2</sup>



**92145**  
Crimping tool  
for cord end terminals  
0,08-10,0 mm<sup>2</sup>  
SQUARE crimp



**92146**  
Crimping tool  
for cord end terminals  
0,08-16 mm<sup>2</sup>  
HEXAGONAL crimp



**BN-06WF**  
Crimping tool  
for cord end terminals  
0,5-4,0 mm<sup>2</sup>



**MH-2P**  
Crimping tool  
for cord end terminals  
6,0-16,0 mm<sup>2</sup>

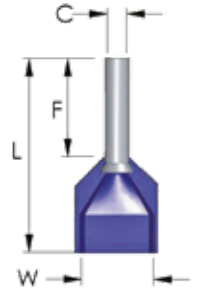


**MH-3P**  
Crimping tool  
for cord end terminals  
25,0-35,0 mm<sup>2</sup>

## PP cord end terminals DIN 46228/4 - Twin wire



- Minimum coating thickness: 3 µm
- Compliant to EU directives: 2002/96/EC (WEEE), 2002/95/EC (ROHS) AND 2003/11/CE
- Part numbers: "T" = Telemechanique, "W" = Weidmüller



Wire range	C	Part nr. "T"	UL	C	Part nr. "W"	UL	C	Part nr. DIN	UL	F	L	C	W	Packed
2 x 0,25 mm <sup>2</sup> 2 x 24 AWG		TAHV 0.25N*			TAHB 0.25N*					8,0	15,0	1,15	3,4	500
2 x 0,34 mm <sup>2</sup> 2 x 22 AWG					TAHT 0.34N*					8,0	15,0	1,15	3,5	500
2 x 0,50 mm <sup>2</sup> 2 x 20 AWG		TAHW 0.50N*	✓		TAHO 0.50N*	✓		TAHW 0.50N*	✓	8,0	15,0	1,4	4,7	500
2 x 0,75 mm <sup>2</sup> 2 x 19 AWG		TAHB 0.75N*	✓		TAHW 0.75N*	✓		TAHGRS 0.75N*	✓	8,0	15,0	1,7	5,0	500
2 x 1,00 mm <sup>2</sup> 2 x 18 AWG		TAHR 1.00N*	✓		TAHG 1.00N*	✓		TAHR 1.00N*	✓	8,0	15,0	1,95	5,4	500
2 x 1,50 mm <sup>2</sup> 2 x 16 AWG		TAHZ 1.50N*	✓		TAHR 1.50N*	✓		TAHZ 1.50N*	✓	8,0	16,0	2,2	6,6	500
2 x 2,50 mm <sup>2</sup> 2 x 14 AWG		TAHGRS 2.50N*	✓		TAHB 2.50N*	✓		TAHB 2.50N*	✓	10,0	18,5	2,8	7,8	250
2 x 4,00 mm <sup>2</sup> 2 x 12 AWG		TAHO 4.00N	✓		TAHGRS 4.00N	✓		TAHGRS 4.00N	✓	12,0	23,0	3,7	8,8	100
2 x 6,00 mm <sup>2</sup> 2 x 10 AWG		TAHGR 6.00N	✓		TAHZ 6.00N			TAHG 6.00N	✓	14,0	26,0	4,8	10,0	100
2 x 10,00 mm <sup>2</sup> 2 x 8 AWG		TAHBR 10.00N	✓		TAHCR 10.00N	✓		TAHR 10.00N	✓	14,0	26,0	6,4	13,0	100
2 x 16,00 mm <sup>2</sup> 2 x 6 AWG		TAHCR 16.00N	✓		TAHGR 16.00N	✓		TAHB 16.00N	✓	14,0	30,0	8,2	18,4	50

\* Also available in 100 pcs bags

### Twin wire assortments

**ASSAHI-402**  
45 pcs - 4 compartments



20 x TAHGRS 4.00N  
10 x TAHG 6.00N  
10 x TAHR 10.00N  
5 x TAHB 16.00N

**ASSAHI-502**  
200 pcs - 4 compartments

50 x TAHGRS 0.75N  
50 x TAHR 1.00N  
50 x TAHZ 1.50N  
50 x TAHB 2.50N



### Twin wire tools

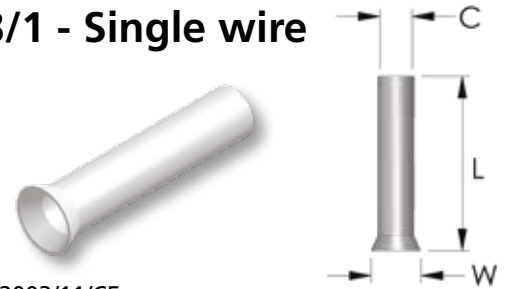


**92145**  
Crimping tool  
for cord end terminals  
Twin wire 2x0,25 - 2x4,0 mm<sup>2</sup>  
SQUARE crimp



**92146**  
Crimping tool  
for cord end terminals  
Twin wire 2x0,25 - 2x6,0 mm<sup>2</sup>  
HEXAGONAL crimp

## Non-insulated cord end terminals DIN 46228/1 - Single wire



- Minimum coating thickness: 3 µm
- Compliant to EU directives: 2002/96/EC (WEEE), 2002/95/EC (ROHS) AND 2003/11/CE

Wire range	Part nr.	L	C	W	Packed	UL
0,14 mm <sup>2</sup>	AH 0.14*	7,0	0,65	1,6	1000	
0,25 mm <sup>2</sup>	AH 0.25K*	5,0	0,75	1,7	1000	
	AH 0.25*	7,0	0,75	1,7	1000	
	AH 0.25L*	10,0	0,75	1,7	1000	
	AH 0.34K*	5,0	0,85	1,8	1000	
0,34 mm <sup>2</sup>	AH 0.34*	7,0	0,85	1,8	1000	
	AH 0.50K*	6,0	1,0	2,1	1000	✓
0,5 mm <sup>2</sup>	AH 0.50K*	8,0	1,0	2,1	1000	✓
	AH 0.50*	10,0	1,0	2,1	1000	✓
	AH 0.75K*	6,0	1,2	2,3	1000	✓
0,75 mm <sup>2</sup>	AH 0.75K*	8,0	1,2	2,3	1000	✓
	AH 0.75*	10,0	1,2	2,3	1000	✓
	AH 0.75HL*	12,0	1,2	2,3	1000	✓
	AH 1.00K*	6,0	1,4	2,5	1000	✓
1,0 mm <sup>2</sup>	AH 1.00K*	8,0	1,4	2,5	1000	✓
	AH 1.00*	10,0	1,4	2,5	1000	✓
	AH 1.00HL*	12,0	1,4	2,5	1000	✓
	AH 1.50K*	7,0	1,7	2,8	1000	✓
1,5 mm <sup>2</sup>	AH 1.50K*	8,0	1,7	2,8	1000	✓
	AH 1.50*	10,0	1,7	2,8	1000	✓
	AH 1.50HL*	12,0	1,7	2,8	1000	✓
	AH 2.50K*	7,0	2,2	3,4	1000	✓
2,5 mm <sup>2</sup>	AH 2.50K*	8,0	2,2	3,4	1000	✓
	AH 2.50*	10,0	2,2	3,4	1000	✓
	AH 2.50HL*	12,0	2,2	3,4	1000	✓
	AH 2.50L*	18,0	2,2	3,4	1000	✓
	AH 4.00K*	9,0	2,8	4,0	1000	✓
4,0 mm <sup>2</sup>	AH 4.00N*	10,0	2,8	4,0	1000	✓
	AH 4.00*	12,0	2,8	4,0	1000	✓
	AH 4.00HL*	15,0	2,8	4,0	1000	✓
	AH 4.00L*	18,0	2,8	4,0	1000	✓

\* Also available in 100 pcs bags

Wire range	Part nr.	L	C	W	Packed	UL
6,0 mm <sup>2</sup>	AH 6.00K*	10,0	3,5	4,7	250	✓
	AH 6.00HL*	12,0	3,5	4,7	250	✓
	AH 6.00*	15,0	3,5	4,7	250	✓
	AH 6.00L*	18,0	3,5	4,7	250	✓
10,0 mm <sup>2</sup>	AH 10.00K*	12,0	4,5	5,8	250	✓
	AH 10.00*	15,0	4,5	5,8	250	✓
	AH 10.00L*	18,0	4,5	5,8	250	✓
16,0 mm <sup>2</sup>	AH 16.00K*	12,0	5,8	7,5	250	✓
	AH 16.00*	15,0	5,8	7,5	250	✓
	AH 16.00HL*	18,0	5,8	7,5	250	✓
	AH 16.00L*	25,0	5,8	7,5	250	✓
25,0 mm <sup>2</sup>	AH 25.00KK*	12,0	7,3	9,5	250	✓
	AH 25.00K*	15,0	7,3	9,5	250	✓
	AH 25.00*	18,0	7,3	9,5	250	✓
	AH 25.00HL*	25,0	7,3	9,5	250	✓
35,0 mm <sup>2</sup>	AH 25.00L*	32,0	7,3	9,5	250	✓
	AH 35.00K	12,0	8,3	11,0	100	✓
	AH 35.00	18,0	8,3	11,0	100	✓
	AH 35.00HL	20,0	8,3	11,0	100	✓
50,0 mm <sup>2</sup>	AH 35.00L	25,0	8,3	11,0	100	✓
	AH 50.00K	18,0	10,3	13,0	100	✓
	AH 50.00	22,0	10,3	13,0	100	✓
	AH 50.00HL	25,0	10,3	13,0	100	✓
70,0 mm <sup>2</sup>	AH 50.00L	32,0	10,3	13,0	100	✓
	AH 70.00	22,0	12,5	15,0	100	
	AH 70.00HL	25,0	12,5	15,0	100	
95,0 mm <sup>2</sup>	AH 70.00L	32,0	12,5	15,0	100	
	AH 95.00HL	25,0	14,5	17,0	50	
120,0 mm <sup>2</sup>	AH 95.00L	32,0	14,5	17,0	50	
	AH 120.00HL	32,0	16,5	19,0	50	
150,0 mm <sup>2</sup>	AH 150.00HL	32,0	18,5	21,0	50	
	AH 150.00L	38,0	18,5	21,0	50	

## HJ602318BC

2318 pcs - 19 compartments  
incl. tool

- 1 x 10" ratchet crimper HJ56I
- 1 x die set DSQID
- 1 x die set DSQIF

- |                 |                 |
|-----------------|-----------------|
| 200 x AH 0.50KK | 200 x AH 1.00HL |
| 200 x AH 0.50K  | 100 x AH 1.50   |
| 200 x AH 0.50   | 100 x AH 2.50   |
| 200 x AH 0.75KK | 40 x AH 4.00    |
| 200 x AH 0.75K  | 30 x AH 6.00    |
| 200 x AH 0.75   | 15 x AH 10.00   |
| 200 x AH 1.00KK | 15 x AH 16.00   |
| 200 x AH 1.00K  | 10 x AH 25.00   |
| 200 x AH 1.00   | 5 x AH 35.00    |

## Professional kit



Non-insulated assortments

## ASSAH-500

2500 pcs - 5 compartments



- 500 x AH 0.25K
- 500 x AH 0.34K
- 500 x AH 0.50KK
- 500 x AH 0.75KK
- 500 x AH 1.00KK

## ASSAH-502

1900 pcs - 5 compartments



- 500 x AH 0.50KK
- 500 x AH 0.75KK
- 400 x AH 1.00KK
- 300 x AH 1.50KK
- 200 x AH 2.50KK

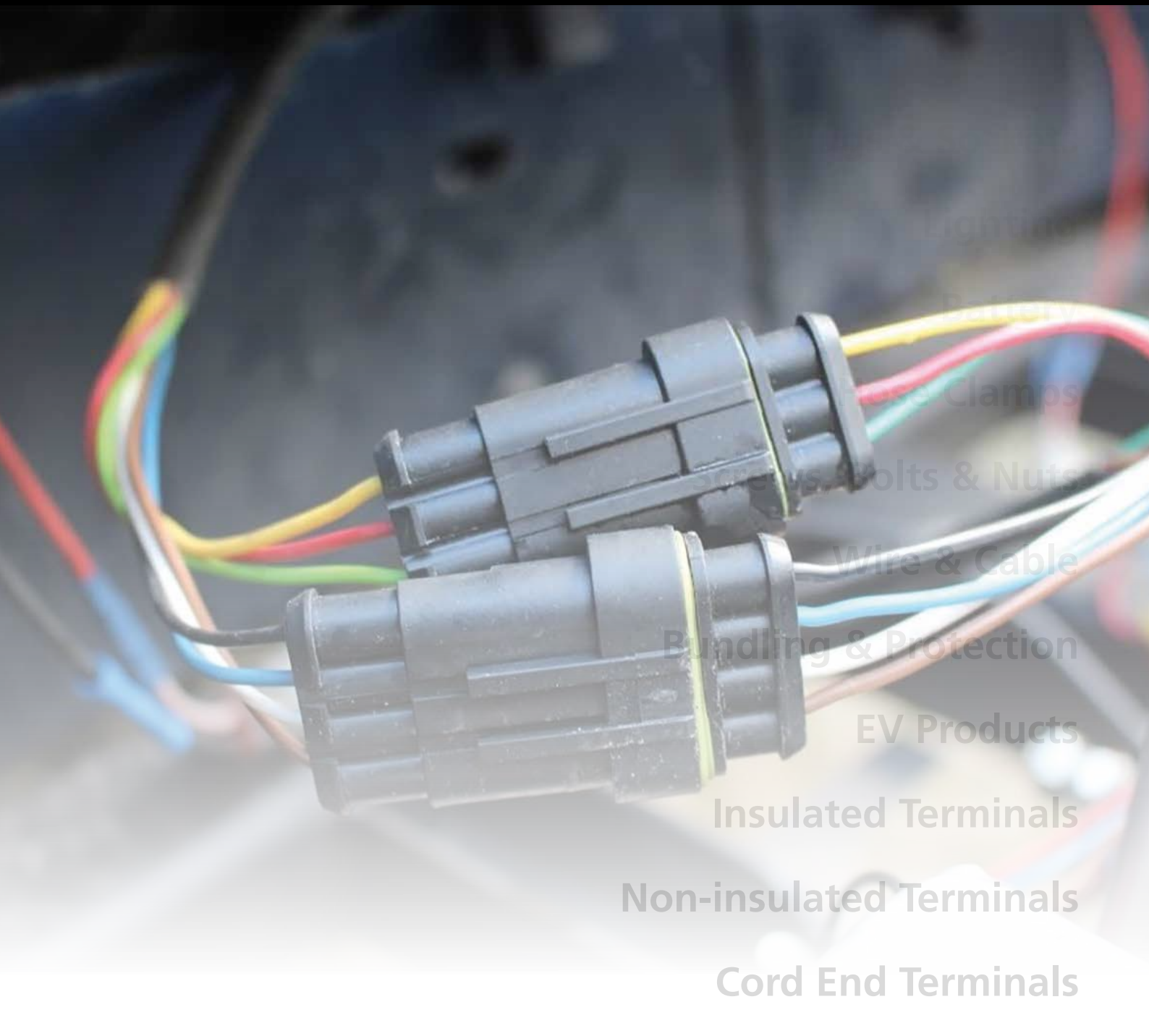
## ASSAH-504

350 pcs - 4 compartments

- 150 x AH 4.00K
- 75 x AH 6.00HL
- 75 x AH 10.00K
- 50 x AH 16.00K







Lighting  
 Relays  
 Clamps  
 Screws, Bolts & Nuts  
 Wire & Cable  
 Bundling & Protection  
 EV Products  
 Insulated Terminals  
 Non-insulated Terminals  
 Cord End Terminals

## Housing

### Fuses & Fuse Holders

### Relays, Switches, Pilot Lights & Buzzers

### Tools

### Assortment Kits

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## Superseal 1.5 connectors

- For wire-to-wire and ECU applications, under hood or any location where sealing is required
- Designed for ease of manual harness assembly and engine mounting
- Sealing reliability proven under harsh conditions
- Resistant to ozone, salts (CaCl<sub>2</sub>-NaCl), gasoline, diesel fuel, brake fluid detergents, anti-freeze coolant, transmission gear lubricant and motor oil
- Waterproofness: Exceeds IEC 529 and DIN 40050 IP67 standards



	Part nr.	Poles	Wire range mm <sup>2</sup>	Wire Ø mm	Color	MOQ
	H282103-1	1				100
	H282104-1	2				100
	H282105-1	3				100
	H282106-1	4				100
	H282107-1	5				100
	H282108-1	6				100
	H282079-2	1				100
	H282080-1	2				100
	H282087-1	3				100
	H282088-1	4				100
	H282089-1	5				100
	H282090-1	6				100
	H282109-1		0,75 - 1,5			100
	H282110-1		0,75 - 1,5			100
	H281934-4			1,2 - 1,6 mm	green	100
	H281934-2			1,7 - 2,4 mm	yellow	100
	H281934-3			2,5 - 3,3 mm	red	100
	H282081-1			cavity plug	red	100

Also available



**Pre-wired, wire size 0,75 mm<sup>2</sup>**

Part nr.	Poles	Description
PUR21051	2	Female housing, pre-wired 200 mm, 0,75 mm <sup>2</sup> , black
PUR21052	3	Female housing, pre-wired 200 mm, 0,75 mm <sup>2</sup> , black
PUR21053	4	Female housing, pre-wired 200 mm, 0,75 mm <sup>2</sup> , black
PUR21029	2	Male housing, pre-wired 200 mm, 0,75 mm <sup>2</sup> , black
PUR21030	3	Male housing, pre-wired 200 mm, 0,75 mm <sup>2</sup> , black
PUR21031	4	Male housing, pre-wired 200 mm, 0,75 mm <sup>2</sup> , black

**Male/female sets**

Part nr.	Poles	Description
H282PC1	1	1 x H282079-2 (F) + 1 x H282103-1 (M) + 1 x H282110-1 + 1 x H282109-1 + 2 x H281934-2
H282PC2	2	1 x H282080-1 (F) + 1 x H282104-1 (M) + 2 x H282110-1 + 2 x H282109-1 + 4 x H281934-2
H282PC3	3	1 x H282087-1 (F) + 1 x H282105-1 (M) + 3 x H282110-1 + 3 x H282109-1 + 6 x H281934-2
H282PC4	4	1 x H282088-1 (F) + 1 x H282106-1 (M) + 4 x H282110-1 + 4 x H282109-1 + 8 x H281934-2
H282PC5	5	1 x H282089-1 (F) + 1 x H282107-1 (M) + 5 x H282110-1 + 5 x H282109-1 + 10 x H281934-2
H282PC6	6	1 x H282090-1 (F) + 1 x H282108-1 (M) + 6 x H282110-1 + 6 x H282109-1 + 12 x H281934-2



**Male sets**

Part nr.	Poles	Description
H282C1	1	1 x H282103-1 (M) + 1 x H282109-1 + 1 x H281934-2
H282C2	2	1 x H282104-1 (M) + 2 x H282109-1 + 2 x H281934-2
H282C3	3	1 x H282105-1 (M) + 3 x H282109-1 + 3 x H281934-2
H282C4	4	1 x H282106-1 (M) + 4 x H282109-1 + 4 x H281934-2
H282C5	5	1 x H282107-1 (M) + 5 x H282109-1 + 5 x H281934-2
H282C6	6	1 x H282108-1 (M) + 6 x H282109-1 + 6 x H281934-2



**Female sets**

Part nr.	Poles	Description
H282P1	1	1 x H282079-2 (F) + 1 x H282110-1 + 1 x H281934-2
H282P2	2	1 x H282080-1 (F) + 2 x H282110-1 + 2 x H281934-2
H282P3	3	1 x H282087-1 (F) + 3 x H282110-1 + 3 x H281934-2
H282P4	4	1 x H282088-1 (F) + 4 x H282110-1 + 4 x H281934-2
H282P5	5	1 x H282089-1 (F) + 5 x H282110-1 + 5 x H281934-2
H282P6	6	1 x H282090-1 (F) + 6 x H282110-1 + 6 x H281934-2



## Tools for Superseal



**MHQIBE**  
(separately available)

### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



**DSQIH2**  
For open-barrel Superseal terminals  
DIN 0,35-0,5/1,5 mm<sup>2</sup>



**DSQIH3**  
For open-barrel Superseal terminals  
DIN 0,75/1,0 mm<sup>2</sup>

### HJ410339BC-H2H3

339 pcs - 22 compartments  
Incl. tool

1 x 8,7" aluminum ratchet crimper HJ43I  
1 x die set DSQIH2  
1 x die set DSQIH3

**Wire seals:**

50 x green seal 1,2~1,6 mm  
50 x yellow seal 1,7~2,4 mm

**Terminals:**

50 x male 0,3~0,5 mm<sup>2</sup>  
50 x female 0,3~0,5 mm<sup>2</sup>  
50 x male 0,75~1,5 mm<sup>2</sup>  
50 x female 0,75~1,5 mm<sup>2</sup>

**Housing:**

4 x 1 pole male housing  
4 x 1 pole female housing  
4 x 2 pole male housing  
4 x 2 pole female housing  
3 x 3 pole male housing  
3 x 3 pole female housing  
3 x 4 pole male housing  
3 x 4 pole female housing  
2 x 5 pole male housing  
2 x 5 pole female housing  
2 x 6 pole male housing  
2 x 6 pole female housing

## Professional kit



### Superseal assortments

### Empty case with tool



### HJ410006BC-H2H3

3 pcs - 22 compartments

1 x 8,7" aluminum ratchet crimper HJ43I  
1 x die set DSQIH2  
1 x die set DSQIH3

### Also available without tool



### HE300350HC

350 pcs - 18 compartments

**Wire seals:**

50 x green seal 1,2~1,8 mm  
50 x yellow seal 1,6~2,4 mm

**Terminals:**

50 x male terminal 0,3~0,5 mm<sup>2</sup>  
50 x female terminal 0,3~0,5 mm<sup>2</sup>  
50 x male terminal 0,85~1,25 mm<sup>2</sup>  
50 x female terminal 0,85~1,25 mm<sup>2</sup>

**Housing:**

6 x 1 pole male housing  
6 x 1 pole female housing  
6 x 2 pole male housing  
6 x 2 pole female housing  
4 x 3 pole male housing  
4 x 3 pole female housing  
4 x 4 pole male housing  
4 x 4 pole female housing  
3 x 5 pole male housing  
3 x 5 pole female housing  
2 x 6 pole male housing  
2 x 6 pole female housing

## Metri-Pack 280 connectors

- Waterproofness: Exceeds IEC 529 and DIN 40050 IP67 standards
- Rated to: maximum 30A continuous
- Temperature range: -40 °C ~ 125 °C
- Low energy, low voltage capability
- Small overall dimensions
- Excellent chemical and abrasion resistance
- Standard ISO 2.8 mm configuration



	Part nr.	Poles	Wire range mm <sup>2</sup>	Wire Ø mm	Color	MOQ
 Housing for male terminals	HMM12811	1				100
	HMM22811	2				100
	HMM32811	3				100
 Housing for female terminals	HFM12821	1				100
	HFM22821	2				100
	HFM32821	3				100
 Male terminal	99-002-ML-TA		1,5 - 2,5			100
 Female terminal	98-002-ML-TA		1,5 - 2,5			100
 Wire seal	H38409-1			1,29 - 1,70	red	100
 Cavity plug	12010300			cavity plug	green	100

## Delphi Weatherpack connectors

- Sealed system specifically designed to withstand exposure to extreme temperatures, chemicals and fluids
- Pin and sleeve configuration to alleviate stress relaxation
- Secondary lock and Connector Position Assurance (CPA) for improved system design
- Dual-locking tangs on terminals help prevent backing out
- Terminal plugging requires no orientation
- Positive locking indexing prevents mismatching of connectors
- Low energy, low voltage capability for vehicle electronics
- Current range: 0 – 20 amps
- Temperature range: -40 °C to 125 °C
- Resistance: < 10mΩ @ 50mV
- Voltage drop: < 3,0mV/amp
- Centerline spacing: 7,7 mm
- Blade width: Pin and sleeve



	Part nr.	Poles	Wire range mm <sup>2</sup>	Wire Ø mm	Color	MOQ
	958-3SWA01MB	1				100
	958-3SWA02MB	2				100
	958-3SWA03MB	3				100
	958-3SWA04MB	4				100
	958-3SWAA04MB	4 (square)				100
	958-3SWA06MB	6				100
	958-3SWA01FB	1				100
	958-3SWA02FB	2				100
	958-3SWA03FB	3				100
	958-3SWA04FB	4				100
	958-3SWAA04FB	4 (square)				100
	958-3SWA06FB	6				100
	958-6879307BS7		0,50 - 0,85			100
	958-6879306BS7		1,25 - 2,0			100
	958-6879356BS7		3,0			100
	958-6879207BS7		0,50 - 0,85			100
	958-6879206BS7		1,25 - 2,0			100
	958-6879256BS7		3,0			100
	1440-1240			1,4 - 1,9	green	100
	1440-1143			2,5 - 3,4	green	100
	1440-1144			2,9 - 3,8	blue	100
	12010300			cavity plug	green	100



**HJ410220BC-H6H7**

220 pcs - 22 compartments  
Incl. tool

- 1 x 8,7" aluminum ratchet crimper HJ431
- 1 x die set DSQIH6
- 1 x die set DSQIH7
- 1 x extraction tool UT012 (also separately available)

- 25 x green seal 1,4~1,9 mm
- 30 x green seal 2,5~3,4 mm
- 25 x blue seal 2,9~3,8 mm

- Terminals:
- 20 x male 0,5~0,85 mm<sup>2</sup>
  - 20 x fem. 0,5~0,85 mm<sup>2</sup>
  - 20 x male 1,25~2,00 mm<sup>2</sup>
  - 20 x fem. 1,25~2,00 mm<sup>2</sup>
  - 20 x male 3 mm<sup>2</sup>
  - 20 x fem. 3 mm<sup>2</sup>

- Housing:
- 3 x 1 pole rec. type male
  - 3 x 1 pole rec. type female
  - 2 x 2 pole rec. type male
  - 2 x 2 pole rec. type female
  - 1 x 3 pole rec. type male
  - 1 x 3 pole rec. type female
  - 1 x 4 pole pin type male
  - 1 x 4 pole pin type female
  - 1 x 4 pole rec. type male
  - 1 x 4 pole rec. type female

**Professional kit**



**Delphi Weatherpack assortments**



Also available without tool



**Tools for Delphi Weatherpack**

**HE290232HC**

232 pcs - 20 compartments

Wire seals:

- 25 x green seal 1,4~1,9 mm
- 30 x green seal 2,5~3,4 mm
- 25 x blue seal 2,9~3,8 mm

Terminals:

- 20 x male 0,5~0,84 mm<sup>2</sup>
- 20 x fem. 0,5~0,84 mm<sup>2</sup>
- 20 x male 1,25~2,00 mm<sup>2</sup>
- 20 x fem. 1,25~2,00 mm<sup>2</sup>
- 20 x male 3 mm<sup>2</sup>
- 20 x fem. 3 mm<sup>2</sup>

Housing:

- 5 x 1 pole rec. type male
- 5 x 1 pole rec. type female
- 3 x 2 pole rec. type male
- 3 x 2 pole rec. type female
- 4 x 3 pole rec. type male
- 4 x 3 pole rec. type female
- 2 x 4 pole pin type male
- 2 x 4 pole pin type female
- 2 x 4 pole rec. type male
- 2 x 4 pole rec. type female

**HOUSING**

**Die sets**

For quick interchangeable ratchet tools MHQIBE, HJ561 or HJ431 (separately available)

See our Tools section (page 282-287) for the complete program



**DSQIH6**  
For open-barrel Delphi Weatherpack terminals  
0,35/0,5-0,8 mm<sup>2</sup>



**DSQIH7**  
For open-barrel Delphi Weatherpack terminals  
1,0-2,0/3,0 mm<sup>2</sup>



**MHQIBE**  
(separately available)

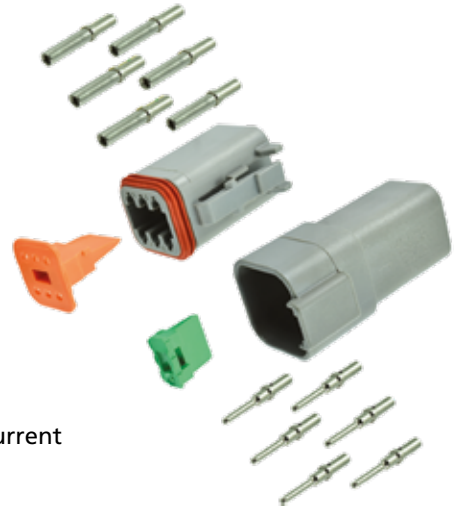


**UT012**  
Terminal release tool for Delphi Weatherpack



## Deutsch connectors - DT series

- Accepts contact size 16 (13A)
- 20-14 AWG
- 2, 3, 4, 6, 8, and 12 cavity arrangements
- In-line, flange, or PCB mount
- Rectangular, thermoplastic housing.
- Grommets and interfacial seals: silicone rubber
- Integrated latch for mating
- Wedgelocks assure contact alignment and retention
- Resistant to most fluids used in industrial applications
- Temperature range: -55 °C to 125 °C continuous at rated current
- Insulation resistance: 1000 megohms minimum at 25 °C
- Dielectric withstanding voltage: current leakage < 2 mA at 1500 V AC



	Part nr.	Poles	Wire range	MOQ
	DT04-2P	2		100
	DT04-3P	3		100
	DT04-4P	4		100
	DT04-6P	6		100
	DT04-08PA	8		100
	DT04-12P	12		100
	DT06-2S	2		100
	DT06-3S	3		100
	DT06-4S	4		100
	DT06-6S	6		100
	DT06-08SA	8		100
	DT06-12S	12		100
	1060-20-0122		0,75-2,0 mm <sup>2</sup> 18~14 AWG	100
	1062-20-0222		0,75-2,0 mm <sup>2</sup> 18~14 AWG	100
	0460-202-16141		0,5-1,5 mm <sup>2</sup> 20~16 AWG	100
	0460-215-16141 (green stripe)		2,0 mm <sup>2</sup> 14 AWG	100
	0462-201-16141		0,5-1,5 mm <sup>2</sup> 20~16 AWG	100
	0462-209-16141 (green stripe)		2,0 mm <sup>2</sup> 14 AWG	100
	DTSEAL		Cavity plug	100



Also available

Pre-wired, wire size 0,75 mm<sup>2</sup>

Part nr.	Poles	Description
PUR367082	2	Female housing, pre-wired 50 cm, black, open-barrel terminals
PUR367083	2	Female housing, pre-wired 300 cm, black, open-barrel terminals
PUR367084	2	Female housing, pre-wired 300 cm, black, solid terminals

#### Male/female sets with open-barrel terminals

Part nr.	Poles	Description
HDTPC2	2	1 x DT04-2P (M) + 1 x DT06-2S (F) + 2 x 1062-20-0222 + 2 x 1060-20-0122
HDTPC3	3	1 x DT04-3P (M) + 1 x DT06-3S (F) + 3 x 1062-20-0222 + 3 x 1060-20-0122
HDTPC4	4	1 x DT04-4P (M) + 1 x DT06-4S (F) + 4 x 1062-20-0222 + 4 x 1060-20-0122
HDTPC6	6	1 x DT04-6P (M) + 1 x DT06-6S (F) + 6 x 1062-20-0222 + 6 x 1060-20-0122
HDTPC8	8	1 x DT04-08PA (M) + 1 x DT06-08SA (F) + 8 x 1062-20-0222 + 8 x 1060-20-0122
HDTPC12	12	1 x DT04-12P (M) + 1 x DT06-12S (F) + 12 x 1062-20-0222 + 12 x 1060-20-0122



#### Male sets with open-barrel terminals

Part nr.	Poles	Description
DT42PC	2	1 x DT04-2P (M) + 2 x 1060-20-0122
DT43PC	3	1 x DT04-3P (M) + 3 x 1060-20-0122
DT44PC	4	1 x DT04-4P (M) + 4 x 1060-20-0122
DT46PC	6	1 x DT04-6P (M) + 6 x 1060-20-0122
DT48PC	8	1 x DT04-08PA (M) + 8 x 1060-20-0122
DT412PC	12	1 x DT04-12P (M) + 12 x 1060-20-0122

#### Female sets with open-barrel terminals

Part nr.	Poles	Description
DT62PC	2	1 x DT06-2S (F) + 2 x 1062-20-0222
DT63PC	3	1 x DT06-3S (F) + 3 x 1062-20-0222
DT64PC	4	1 x DT06-4S (F) + 4 x 1062-20-0222
DT66PC	6	1 x DT06-6S (F) + 6 x 1062-20-0222
DT68PC	8	1 x DT06-08SA (F) + 8 x 1062-20-0222
DT612PC	12	1 x DT06-12S (F) + 12 x 1062-20-0222



## HJ888090BC-K3K4

92 pcs - 18 compartments  
incl. tool

- 1 x 10" carbon steel ratchet crimper HJ56I
- 1 x die set DSQIK3
- 1 x die set DSQIK4
- 1 x extraction tool UT011 (also separately available)

Terminals:  
30 x male 0,5-1,5 mm<sup>2</sup>  
30 x fem. 0,5-1,5 mm<sup>2</sup>

- Housing:
- 5 x 2 pole male housing
  - 5 x 2 pole female housing
  - 3 x 3 pole male housing
  - 3 x 3 pole female housing
  - 2 x 4 pole male housing
  - 2 x 4 pole female housing
  - 2 x 6 pole male housing
  - 2 x 6 pole female housing
  - 1 x 8 pole male housing
  - 1 x 8 pole female housing
  - 1 x 12 pole male housing
  - 1 x 12 pole female housing

## Professional kit



### Deutsch DT assortment



## Die sets

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



**DSQIK3**  
For open-barrel Deutsch terminals (DT series)  
1,0/1,5/2,5 mm<sup>2</sup>



**DSQIK4**  
For open-barrel Deutsch terminals (DT series)  
0,5/1,0/1,5 mm<sup>2</sup>



**DSQIK6**  
For open-barrel Deutsch terminals (DT series)  
1,5/2,5/4,0 mm<sup>2</sup>



**DSQIK8**  
For solid Deutsch terminals (4 indents)  
0,5/1,5/4,0 mm<sup>2</sup>  
MIM procedure



**MHQIBE**  
(separately available)



**UT011**  
Wedge removal/flat tip screw driver combination tool

### Tools for Deutsch

#### ASSAETOOL03

Complete kit consisting of 8,7" carbon steel tool MHQIBE and 6 die sets for open barrel Deutsch terminals: DSQIK1, DSQIK2, DSQIK3, DSQIK4, DSQIK5 and DSQIK6



#### ASSUTR002

Deutsch terminal removal kit with wedge removal/flat tip screw driver combination tool and 6 terminal release tools for contact sizes 20, 16, 14, 12, 8 and 4 gauge



#### ASSAETOOL04

Complete kit, consisting of 8,7" carbon steel tool with die set for 0,5/1,5/4,0 mm<sup>2</sup> solid Deutsch terminals (2 indents), combination wedge removal tool/flat tip screw driver and 3 terminal release tools for contact sizes 20, 16 and 12 gauge

## Deutsch connectors - DTM series

- Accepts contact size 20 (7,5A)
- 22-16 AWG
- 2, 3, 4, 6, 8, and 12 cavity arrangements
- In-line, flange, or PCB mount
- Rectangular, thermoplastic housing
- Grommets and interfacial seals: silicone rubber
- Integrated latch for mating
- Wedgelocks assure contact alignment and retention
- Resistant to most fluids used in industrial applications
- Temperature range: -55 °C to 125 °C continuous at rated current
- Insulation resistance: 1000 megohms minimum at 25 °C
- Dielectric withstanding voltage: current leakage < 2 mA at 1500 V AC



	Part nr.	Poles	Wire range	MOQ
 Housing for male terminals	DTM04-2P	2		100
	DTM04-3P	3		100
	DTM04-4P	4		100
	DTM04-6P	6		100
	DTM04-8P	8		100
	DTM04-12PA	12		100
 Housing for female terminals	DTM06-2S	2		100
	DTM06-3S	3		100
	DTM06-4S	4		100
	DTM06-6S	6		100
	DTM06-8S	8		100
	DTM06-12SA	12		100
 Male terminal Open-barrel	1060-30-0122		0,35-1,5 mm <sup>2</sup> 22-16 AWG	100
 Female terminal Open-barrel	1062-30-0222		0,35-1,5 mm <sup>2</sup> 22-16 AWG	100
 Male terminal Solid	0460-202-20141		0,5 mm <sup>2</sup> 20 AWG	100
 Female terminal Solid	0462-201-20141		0,5 mm <sup>2</sup> 20 AWG	100
 Cavity plug	DTMSEAL		Cavity plug	100

### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ56I or HJ43I (separately available)

See our Tools section (page 282-287) for the complete program



MHQIBE  
(separately available)



DSQIK5  
For open-barrel Deutsch terminals (DTM series)  
0,5/1,0/1,5 mm<sup>2</sup>



DSQIKQ8  
For solid Deutsch terminals (4 indents)  
0,5/1,5/4,0 mm<sup>2</sup>  
MIM procedure

Tools for Deutsch DTM

## Deutsch connectors - DTP series

- Accepts contact size 12 (25A)
- 14-10 AWG
- 2 and 4 cavity arrangements
- In-line, flange, or PCB mount
- Rectangular, thermoplastic housing.
- Grommets and interfacial seals: silicone rubber
- Integrated latch for mating
- Wedgelocks assure contact alignment and retention
- Resistant to most fluids used in industrial applications
- Temperature range: -55 °C to 125 °C continuous at rated current
- Insulation resistance: 1000 megohms minimum at 25 °C
- Dielectric withstanding voltage: current leakage < 2 mA at 1500 V AC



### Tools for Deutsch DTP

	Part nr.	Poles	Wire range	MOQ
 Housing for male terminals	DTP04-2P	2		100
	DTP04-4P	4		100
 Housing for female terminals	DTP06-2S	2		100
	DTP06-4S	4		100
 Male terminal Open-barrel	1060-40-0122		4,0-6,0 mm <sup>2</sup> 12-10 AWG	100
 Female terminal Open-barrel	1062-40-0222		4,0-6,0 mm <sup>2</sup> 12-10 AWG	100
 Male terminal Solid	0460-204-12141		2,0-3,0 mm <sup>2</sup> 14-12 AWG	100
 Female terminal Solid	0462-203-12141		2,0-3,0 mm <sup>2</sup> 14-12 AWG	100
 Cavity plug	DTSEAL		Cavity plug	100

### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ561 or HJ431 (separately available)

See our Tools section (page 282-287) for the complete program



#### DSQIK1

For open-barrel Deutsch terminals (DTP series)  
2,5/4,0 mm<sup>2</sup>



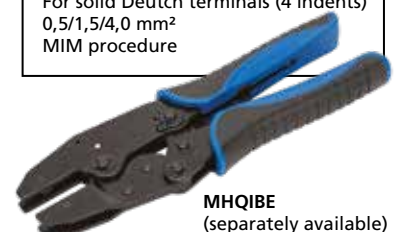
#### DSQIK2

For open-barrel Deutsch terminals (DTP series)  
5,0/6,0 mm<sup>2</sup>



#### DSQIKQ8

For solid Deutsch terminals (4 indents)  
0,5/1,5/4,0 mm<sup>2</sup>  
MIM procedure



MHQIBE (separately available)



## Junior Power Timer connectors

- PA66 housing
- 14-20 AWG (0,5~2,5 mm<sup>2</sup>)
- 2, 3, 4, 5, 6, and 7 cavity arrangements
- Resistant to most fluids used in industrial applications
- Current range: 24V DC maximum operating voltage
- Temperature range: -30 °C to 125 °C (incl. the temperature increase due to working current flow)
- Degree of protection: IP54 according to IEC 529
- Insulation resistance: ≥ 10 megohms at 500V DC
- Dielectric withstanding voltage: ≥ 1000V AC
- Voltage drop: ≤ 3,0mV/amp



	Part nr.	Poles	Wire range mm <sup>2</sup>	Wire Ø mm	Color	MOQ
 Housing for male terminals	5251159	2			black	100
	5251161	3			black	100
	5251162	4			black	100
	5251163	6			black	100
	5251164	7			black	100
 Housing for female terminals	8286572	2			grey	100
	8286578	2			yellow	100
	8275515	2			blue	100
	8286573	2			black	100
	8260085	2			black (w/o 2nd locking)	100
 Housing for female terminals	8275781	3			black (w/o 2nd locking)	100
	5251912	4			black	100
	8275791	5			black	100
	5251913	6			black	100
	5251914	7			black (w/o 2nd locking)	100
 Male terminals	Terminal 10B		0,5~1,0			100
	Terminal 8A		1,5~2,5			100
 Female terminals	Terminal 11B		0,5~1,0			100
	Terminal 9A		1,5~2,5			100
 Wire seals	8289041			1,2~2,1	blue	100
	8289051			2,2~3,0	white	100
	8289221		cavity plug		clear	100
 Covers	5251160	2			black	100
	8808112	3			black	100
	8808141	4			black	100
	8808142	5 or 6			black	100

MHQIBE  
(separately available)



### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ561 or HJ431 (separately available)

See our Tools section (page 282-287) for the complete program



### DSQIL

For JPT receptacle terminals  
0,2-0,5 mm<sup>2</sup> without seal  
0,2-2,5 mm<sup>2</sup> with seal



### DSQIL1

For JPT male terminals  
0,5-2,5 mm<sup>2</sup> with and without seal



## VAG connectors - 1.5 Series

- Polybutylene terephthalate (PBT) housing
- 2, 3, 4, 6, 8, 10 and 14 cavity arrangements
- Protection: IP6K9K dust- and waterproof
- Centerline spacing: 4 mm








	Part nr.	Poles	Wire range mm <sup>2</sup>	Wire Ø mm	Color	MOQ
	HD022A-1.5-11	2			black	100
	HD032A-1.5-11	3			black	100
	HD042A-1.5-11	4			black	100
	HD062A-1.5-11	6			black	100
	HD082A-1.5-11	8			black	100
	HD102B-1.5-11	10			black	100
	HD142A-1.5-11	14			black	100
	HD022A-1.5-21	2			black	100
	HD032A-1.5-21	3			black	100
	HD042A-1.5-21	4			black	100
	HD062A-1.5-21	6			black	100
	HD082A-1.5-21	8			black	100
	HD102B-1.5-21	10			black	100
	HD142A-1.5-21	14			black	100
	DJ615B-1.5*0.8A		0,5~1,0			100
	DJ623-E1.5A		0,5~1,0			100
	HDX023			1,4~1,9	grey	100

## VAG connectors - 3.5 Series

- Polybutylene terephthalate (PBT) housing
- 2, 4, 6, 8, and 10 cavity arrangements
- Protection: IP6K9K dust- and waterproof
- Centerline spacing: 6 mm



	Part nr.	Poles	Wire range mm <sup>2</sup>	Color	MOQ
	HD025A-3.5-11	2		black	100
	HD045A-3.5-11	4		black	100
	HD065A-3.5-11	6		black	100
	HD085B-3.5-11	8		black	100
	HD105A-3.5-11	10		black	100
	HD025A-3.5-21	2		black	100
	HD045A-3.5-21	4		black	100
	HD065A-3.5-21	6		black	100
	HD085B-3.5-21	8		black	100
	HD105A-3.5-21	10		black	100
	DJ615B-2.8*0.8B		1,5-2,5		100
	DJ623-E3.5B		1,5-2,5		100
	HDX001			blue	100

### Tools for VAG

#### Die sets

For quick interchangeable ratchet tools MHQIBE, HJ561 or HJ431 (separately available)

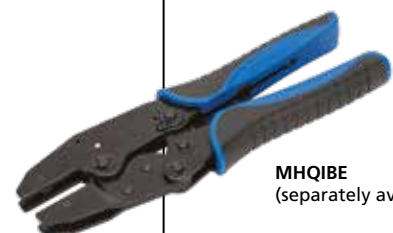
See our Tools section (page 282-287) for the complete program



**DSQIL**  
For VAG receptacle terminals  
0,2-0,5 mm<sup>2</sup> without seal  
0,2-2,5 mm<sup>2</sup> with seal



**DSQIL1**  
For VAG male terminals  
0,5-2,5 mm<sup>2</sup> with and without seal



**MHQIBE**  
(separately available)

## VAG015/1

115 pcs - 15 compartments

**Wire seals:**

25 x wire seal grey

**Terminals:**

25 x male 0,5~1,0 mm<sup>2</sup>

25 x female 0,5~1,0 mm<sup>2</sup>

**Housing:**

5 x 2 pole male housing

5 x 2 pole female housing

4 x 3 pole male housing

4 x 3 pole female housing

4 x 4 pole male housing

4 x 4 pole female housing

3 x 6 pole male housing

3 x 6 pole female housing

2 x 8 pole male housing

2 x 8 pole female housing

2 x 10 pole male housing

2 x 10 pole female housing

Box with euroslot hangtab



**1.5 Series assortment**

## VAG035/1

95 pcs - 14 compartments

**Wire seals:**

25 x wire seal blue

**Terminals:**

25 x male 1,0~2,5 mm<sup>2</sup>

25 x female 1,0~2,5 mm<sup>2</sup>

**Housing:**

4 x 2 pole male housing

4 x 2 pole female housing

2 x 4 pole male housing

2 x 4 pole female housing

2 x 6 pole male housing

2 x 6 pole female housing

1 x 8 pole male housing

1 x 8 pole female housing

1 x 10 pole male housing

1 x 10 pole female housing

Box with euroslot hangtab



**3.5 Series assortment**

## Multi-connectors - Female, for tabsize 6,3 x 0,8 mm

nylon

• Matching terminals:

02-005-ML-TA (tin plated)	02-005-ML-ZA (natural)	0,5 - 1,0 mm <sup>2</sup>
02-007-ML-TA (tin plated)	02-007-ML-ZA (natural)	1,0 - 2,5 mm <sup>2</sup>
02-009-ML-TA (tin plated)	02-009-ML-ZA (natural)	2,5 - 6,0 mm <sup>2</sup>



HF-1\*  
1 pole



HF-3\*  
3 pole



HF-8\*  
8 pole



HF-1Z\*  
1 pole



HF-3Z\*  
3 pole



HF-8Z\*  
8 pole



HF-2\*  
2 pole



HF-4\*  
4 pole



HF-11\*  
11 pole



HF-2Z\*  
2 pole



HF-4Z\*  
4 pole



HF-11Z\*  
11 pole



HF-2T\*  
2 pole



HF-6\*  
6 pole



HF-2TZ\*  
2 pole



HF-6Z\*  
6 pole

HOUSING

\* MOQ 100 pcs

## Multi-connectors - Male, for tabsize 6,3 x 0,8 mm

nylon

• Matching terminals:

01-001-ML-TA (tin plated)	01-001-ML-ZA (natural)	0,5 - 1,0 mm <sup>2</sup>
01-002-ML-TA (tin plated)	01-002-ML-ZA (natural)	1,0 - 2,5 mm <sup>2</sup>
01-003-ML-TA (tin plated)	01-003-ML-ZA (natural)	2,5 - 6,0 mm <sup>2</sup>



HM-1\*  
1 pole



HM-3\*  
3 pole



HM-8\*  
8 pole



HM-1Z\*  
1 pole



HM-3Z\*  
3 pole



HM-8Z\*  
8 pole



HM-2\*  
2 pole



HM-4\*  
4 pole



HM-11\*  
11 pole



HM-2Z\*  
2 pole



HM-4Z\*  
4 pole



HM-11Z\*  
11 pole



HM-2T\*  
2 pole



HM-6\*  
6 pole



HM-2TZ\*  
2 pole



HM-6Z\*  
6 pole

HOUSING

\* MOQ 100 pcs

# Multi-connectors - Female and male, for tabsize 2,8 x 0,5/0,8 mm

nylon



6040-2111\*  
2 poles



6040-6111\*  
6 poles



6040-3111\*  
3 poles



6040-9111\*  
9 poles



6040-4111\*  
4 poles



Matching terminal:  
L8240-4050 (natural)



Matching terminal:  
L1800-2097 (natural)



6030-4991\*  
4 poles



6030-2981\*  
2 poles



6030-6991\*  
6 poles



6030-3991\*  
3 poles



6030-9991\*  
9 poles

HOUSING

\* MOQ 100 pcs



### Insulation sleeves - For open-barrel terminals



**020.010.660\***  
(counterpart: 021.010.660)  
Tabsize 6,3 x 0,8 mm



**021.010.660\***  
(counterpart for 020.010.660)  
Tabsize 6,3 x 0,8 mm



**606202-VL\***  
Ø 3,5/4,0 mm



**606302-VL\***  
Ø 3,5/4,0 mm



**011.101.663\***  
Tabsize 6,3 x 0,8 mm



**PH-1051\***  
(counterpart: 010.101.660)  
Length 18,5 mm  
Width 13,8 mm  
Tabsize 6,3 x 0,8 mm



**PH-1023\***  
Length 25,2 mm  
Width 9,2 mm  
Tabsize 6,3 x 0,8 mm



**PH-1052\***  
(counterpart: 010.101.660)  
Length 18,6 mm  
Width 12,6 mm  
Tabsize 6,3 x 0,8 mm



**PH-1026\***  
Length 25,2 mm  
Width 9,2 mm  
Tabsize 6,3 x 0,8 mm



**011.101.660\***  
(counterpart: 010.101.660)  
Tabsize 6,3 x 0,8 mm



**PH-1060\***  
Length 22,5 mm  
Width 10,5 mm  
Tabsize 6,3 x 0,8 mm



**010.101.660\***  
(counterpart for PH-1051,  
PH-1052 and 011.101.660)  
Tabsize 6,3 x 0,8 mm



**PH-1061\***  
Length 22,5 mm  
Width 10,5 mm  
Tabsize 6,3 x 0,8 mm



**PH-1062\***  
Length 22,5 mm  
Width 10,5 mm  
Tabsize 6,3 x 0,8 mm



**HFK-1\***  
Length 22,4 mm  
Width 9,0 mm  
Tabsize 6,3 x 0,8 mm





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Housing

## Fuses & Fuse Holders

Relays, Switches, Pilot Lights & Buzzers

Tools

Assortment Kits

## Blade fuses - normOTO SBF1500 series



- Meets international specs. complies to RoHS, ISO 8820-3, JASO D612, SAE J1284 and other standards
- Check fuse in fuse block using test points at top of the fuse
- Element visibility from sides, transparent fuse bodies
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Self extinguishing transparent, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and reliable functioning with purpose designed S + Ω element shapes
- Rating marked on top using OCR font



Part nr.	Color	Rating (A)	Rating (V)
SBF1501P	black	1	32
SBF1502P	grey	2	32
SBF1503	violet	3	32
SBF1504	pink	4	32
SBF1505	tan	5	32
SBF1575	brown	7,5	32
SBF1510	red	10	32
SBF1515	blue	15	32
SBF1520	yellow	20	32
SBF1525	natural	25	32
SBF1530	green	30	32
SBF1535	dark green	35	32
SBF1540	orange	40	32

## Blade fuses - normOTO SBF1800 series



- Meets international specs, complies to ISO 8820
- Self extinguishing (UL 94 V-0) 25% GF body materials
- Blade material copper, tin plated
- Application specific, EU developed melting wire
- Suitable for use in low voltage applications up to 80V DC
- Breaking capacity 1000A at 80V DC
- Color coded body materials, rating marked on top using OCR font
- Blade rigidity through robust/sturdy body construction

FUSES & HOLDERS

Part nr.	Color	Rating (A)	Rating (V)
SBF1801P	black	1	80
SBF1802P	grey	2	80
SBF1803	violet	3	80
SBF1804	pink	4	80
SBF1805	tan	5	80
SBF1875	brown	7,5	80
SBF1810	red	10	80
SBF1815	blue	15	80
SBF1820	yellow	20	80
SBF1825	natural	25	80
SBF1830	green	30	80
SBF1840	orange	40	80



## Blade fuses - normOTO SBF1900 series ShoBlo



- Complies with SAE J1284 and general standards
- The built-in miniature LED lights up after the fusing element has interrupted (show-blow)
- Element visibility from sides, transparent fuse bodies
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Self extinguishing transparent, color coded temperature resistive body materials

Part nr.	Color	Rating (A)	Rating (V)
SBF1903	violet	3	32
SBF1904	pink	4	32
SBF1905	tan	5	32
SBF1975	brown	7,5	32
SBF1910	red	10	32
SBF1915	blue	15	32
SBF1920	yellow	20	32
SBF1925	natural	25	32
SBF1930	green	30	32



**normOTO assortments**

**HF020096HA**  
80 pcs - 8 compartments

10 x SBF1503	10 x SBF1515
10 x SBF1505	10 x SBF1520
10 x SBF1575	10 x SBF1525
10 x SBF1510	10 x SBF1530

Box with eurosloot hangtab

**B1-F1000**  
10 pcs

1 x SBF1505	2 x SBF1520
1 x SBF1575	1 x SBF1525
2 x SBF1510	1 x SBF1530
2 x SBF1515	

**B3-BF1000**  
7 pcs - blister

1 x SBF1505
1 x SBF1575
1 x SBF1510
1 x SBF1515
1 x SBF1520
1 x SBF1525
1 x SBF1530

FUSES & HOLDERS





## normOTO fuse holders - Opposed tabs



- 6,3 mm in-line horizontal tab connects
- Open (FH1020 and FH1120) or enclosed (FH1180) tab connects
- Robust bakelite (FH1020) or standard PA66 (FH1120 and FH1180) body material
- Stackable, to create multi-position holder

Part nr.	Description
FH1020	Holder bakelite with horizontal open tabs for SBF1500 and SBF1900 series (1 position)
FH1120	Holder PA66 with horizontal open tabs for SBF1500 and SBF1900 series (1 position)
FH1180	Holder PA66 with horizontal enclosed tabs and mounting brackets for SBF1500 and SBF1900 series (1 position)

## normOTO fuse holder - Parallel tabs



- 6,3 mm parallel vertical tab connects
- Robust standard PA66 GF30 body material
- Translucent white cover optional
- Mounting bracket optional

Part nr.	Description
FH1110	Holder with vertical tabs for SBF1500, SBF1800 and SBF1900 series up to 30A (1 position)
FH1105	Translucent white cover for fuse holder FH1110
FH1101	Body for fuse holder FH1110
CCX130FL	CuZn30, Sn plated contact for fuse holder FH1110
FH1154L	Mounting bracket

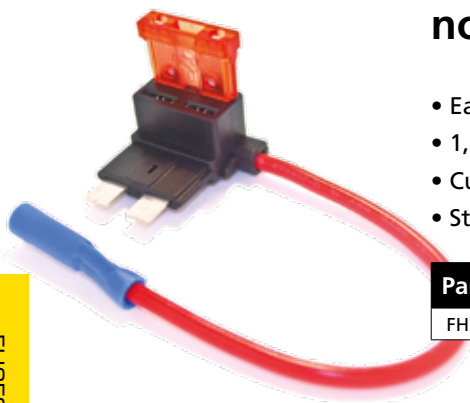


## normOTO fuse holder - Circuit+



- Easily add a protected circuit without splicing
- 1,3 mm<sup>2</sup> (AWG 16) red cable, 120 mm length, with blue butt connector
- CuZn fuse receptacles, Sn plated
- Sturdy body construction, PA66, UL 94 V-0 material

Part nr.	Description
FH1400	Circuit+ holder for SBF1500 and SBF1900 series (2 positions), 1,3 mm <sup>2</sup> red cable



## normOTO fuse holder - Quick splice

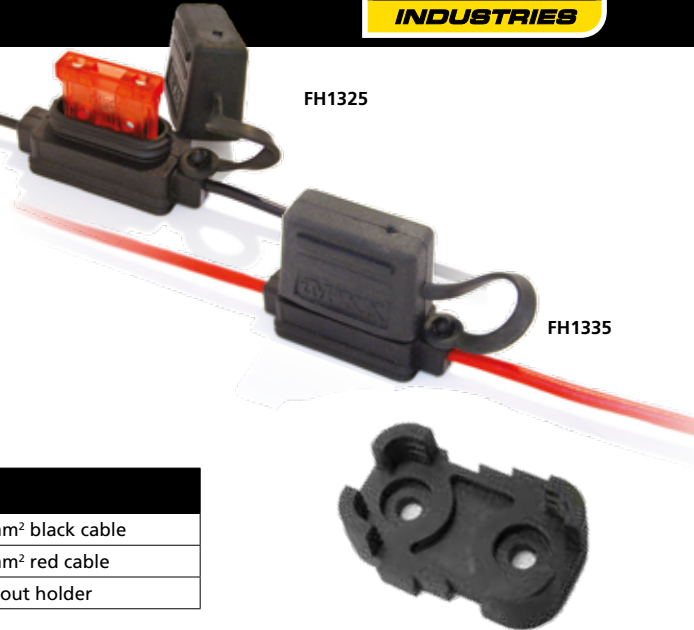
- Economic, easy installation
- No special tools required
- Suits 0,5~1,0 mm<sup>2</sup> (CL 1.0-FUSE) or 0,75~2,5 mm<sup>2</sup> (CL 2.5-FUSE) cable

Part nr.	Description
CL 1.0-FUSE	Holder scotch lock type for SBF1500 and SBF1900 series, direct crimp (1 position)
CL 2.5-FUSE	Holder scotch lock type for SBF1500 and SBF1900 series, direct crimp (1 position)



## normOTO fuse holders - Cable ends

- 1,5 mm<sup>2</sup> black or 2,5 mm<sup>2</sup> red cable, 235 mm each side
- Box-type CuZn33, tin plated fuse receptacles
- Splash waterproof with cover (IP56)
- Self-extinguishing body and cover materials
- Cap included
- Mounting bracket optional



Part nr.	Description
FH1325	Holder for SBF1500 and SBF1900 series up to 20A (1 position), 1,5 mm <sup>2</sup> black cable
FH1335	Holder for SBF1500 and SBF1900 series up to 30A (1 position), 2,5 mm <sup>2</sup> red cable
FH1307	Mounting bracket for FH1325 and FH1335, stackable, supplied without holder



## normOTO fuse holders - PCB

- 2x1 (2-pin) KPH102, Sn plated fuse receptacles (FH1810-2x1)
- 2x4 (8-pin) KPH102, Sn plated fuse receptacles (FH1810-2x4)
- Standard PA66 GF15, UL 94 V-0 body material
- Guiding and Locking pin to stabilize and fix mounting on PCB
- Market conform and compatible PCB hole pattern



Part nr.	Description
FH1810-2x1	Circuit board holder 2x1 pin for SBF1500, SBF1800 and SBF1900 series (1 position)
FH1810-2x4	Circuit board holder 2x4 pin for SBF1500, SBF1800 and SBF1900 series (1 position)

## normOTO fuse holder - With clear cover

- Sn plated receptacles, reeled or loose
- Robust standard PA66 GF30 body material
- Stackable, to create multi-position holder
- Secondary locking of receptacles, using clear cover
- Horizontal insertion of fuse receptacles



Part nr.	Description
FH1130	Holder with clear cover for SBF1500 and SBF1900 series (1 position)

## Normal blade fuse holder - LED indicator

- With LED indicator
- 2,5 mm<sup>2</sup> red cable, 110 mm each side
- With protective cap
- Max. electrical rating 30A - 32V

Part nr.	Description
FH365035	Holder for SBF1500 and SBF1900 series (1 position) up to 30A, LED indicator, 2,5 mm <sup>2</sup> red cable

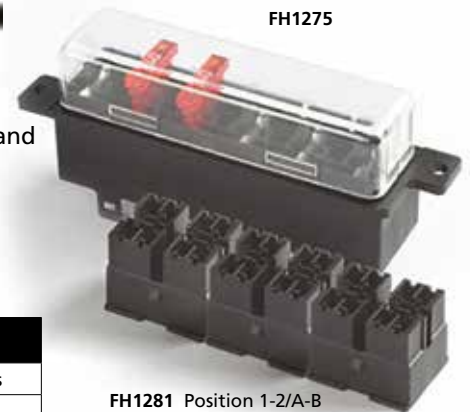




## normOTO fuse holders - Multi-position

### FH1275 and FH1295

- 6,3 mm vertical tabs, 2-in, 2-out per fuse position
- Robust 6 and 8 position holder with clear cover and cover O-ring seal
- Keyed and marked, FH1275: 1 through 6 and A through F and FH1295: 1 through 8 and A through H, connector set for professional wiring interface (use with 6,3 mm faston terminals)
- Secondary lock for the positive lock terminals (optional for use with FH1295)
- Jumper option on component side for easy bus-bar interconnects



FH1275

- FH1281 Position 1-2/A-B
- FH1282 Position 3-4/C-D
- FH1283 Position 5-6/E-F

Part nr.	Description
FH1275	Six-position holder with clear cover and O-ring seal for SBF1500, SBF1800 and SBF1900 series
FH1281	Connector key 1, pos 1-2/A-B for use with FH1275
FH1282	Connector key 2, pos 3-4/C-D for use with FH1275
FH1283	Connector key 3, pos 5-6/E-F for use with FH1275
FH1295	Eight-position holder with clear cover and O-ring seal for SBF1500, SBF1800 and SBF1900 series
FH1281PL	Connector key 1, pos 1-2/A-B for use with FH1295
FH1282PL	Connector key 2, pos 3-4/C-D for use with FH1295
FH1283PL	Connector key 3, pos 5-6/E-F for use with FH1295
FH1284PL	Connector key 4, pos 7-8/G-H for use with FH1295
FH1291	Jumper for use with FH1275 and FH1295
FH1292	Secondary lock for use with FH1295



FH1292

FH1291

FH1295



- FH1281PL Position 1-2/A-B
- FH1282PL Position 3-4/C-D
- FH1283PL Position 5-6/E-F
- FH1284PL Position 7-8/G-H

### K324 and K326

- 6,3 mm horizontal tabs, 1-in, 1-out per fuse position
- Lockable cover with screw closure
- Max. electrical rating 40A - 32V



K326

Part nr.	Description
K324	Four-position holder with clear cover for SBF1500 and SBF1900 series up to 40A
K326	Six-position holder with clear cover for SBF1500 and SBF1900 series up to 40A

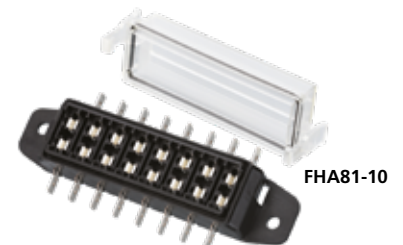


FHA60-10

### FHA40-10, FHA610-10, FHA60-10, FHA600-10 and FHA81-10

- FHA40-10 and FHA60-10 with 6,3 mm vertical tabs
- FHA610-10, FHA600-10 and FHA81-10 with 6,3 mm horizontal tabs and lockable cover with rubber sealer

Part nr.	Description
FHA40-10	Four-position holder with clear cover for SBF1500 and SBF1900 series
FHA610-10	Four-position holder with clear cover for SBF1500 and SBF1900 series
FHA60-10	Six-position holder with clear cover for SBF1500 and SBF1900 series
FHA600-10	Six-position holder with clear cover for SBF1500 and SBF1900 series
FHA81-10	Eight-position holder with clear cover for SBF1500 and SBF1900 series



FHA81-10

## Blade fuses - miniOTO BF7000 series



- Meets international specs, complies to ISO 8820-3, JASO D612, SAE J2077 and other standards
- Check fuse in fuse block using test points at top of the fuse
- Element visibility from sides, transparent fuse bodies
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Self extinguishing transparent, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and reliable functioning with purpose designed S + Ω element shapes
- Rating marked on top using OCR font



Part nr.	Color	Rating (A)	Rating (V)
BF7001P	black	1	32
BF7002P	grey	2	32
BF7003	violet	3	32
BF7004	pink	4	32
BF7005	tan	5	32
BF7075	brown	7,5	32
BF7010	red	10	32
BF7015	blue	15	32
BF7020	yellow	20	32
BF7025	natural	25	32
BF7030	green	30	32

## Blade fuses - miniOTO SBF7900 series ShoBlo



- Complies with SAE J2077 and general standards
- The built-in miniature LED lights up after the fusing element has interrupted (show-blow)
- Element visibility from sides, transparent fuse bodies
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Self extinguishing transparent, color coded temperature resistive body materials

Part nr.	Color	Rating (A)	Rating (V)
SBF7902	grey	2	32
SBF7903	violet	3	32
SBF7904	pink	4	32
SBF7905	tan	5	32
SBF7975	brown	7,5	32
SBF7910	red	10	32
SBF7915	blue	15	32
SBF7920	yellow	20	32
SBF7925	natural	25	32
SBF7930	green	30	32



## miniOTO assortments

**HF030096HA**  
200 pcs - 8 compartments

10 x BF7003      30 x BF7015  
30 x BF7005      30 x BF7020  
30 x BF7075      20 x BF7025  
30 x BF7010      20 x BF7030

Box with euroslot hangtab

**B1-F7000**  
10 pcs

1 x BF7005  
1 x BF7075  
2 x BF7010  
2 x BF7015  
2 x BF7020  
1 x BF7025  
1 x BF7030

**B3-BF7000**  
7 pcs - blister

1 x BF7005  
1 x BF7075  
1 x BF7010  
1 x BF7015  
1 x BF7020  
1 x BF7025  
1 x BF7030

## miniOTO fuse holder - Four-position



- Robust 4 position holder, mounting bracket integrated
- Fuse and relay receptacles Lear and/or Tyco compatible
- Stackable (also to FH7280 micro relay module)
- Optional cover
- Vertical insertion of fuse receptacles
- Combines with micro relay module (3 x 4,8 mm/2 x 6,3 mm), FH7280
- ISO 7588-3 contact layout for FH7280 micro relay module



Part nr.	Description
FH7210	Four-position holder for BF7000 and SBF7900 series
FH7205	black cover for use with FH7210
FH7280	ISO 7588-3 micro relay module (3 x 4,8 mm + 2 x 6,3 mm)

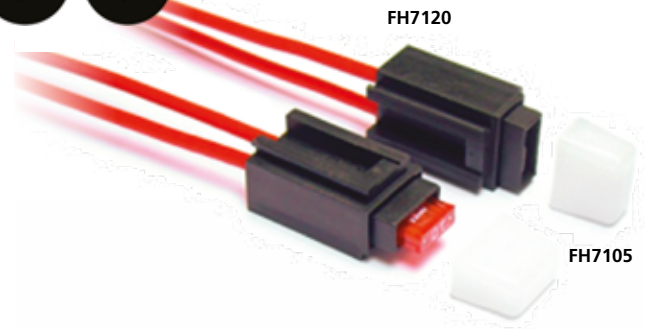
FUSES & HOLDERS

## miniOTO fuse holders - Cable ends



### FH7120

- 2,5 mm<sup>2</sup> red cable, 130 mm each
- Stackable, to create multi-position holder
- CuSn4 fuse receptacles
- Splash waterproof when used with cover (optional)
- UL 94 V-0 body material



### FH7325 and FH7335

- 1,5 mm<sup>2</sup> black or 2,5 mm<sup>2</sup> red cable, 130 mm each side
- Robust black body (PA6 GF30)
- Spring clamp (CuZn33, Sn plated) fuse receptacles
- Clear cover with integral O-ring seal
- Splash waterproof with cover (IP56)

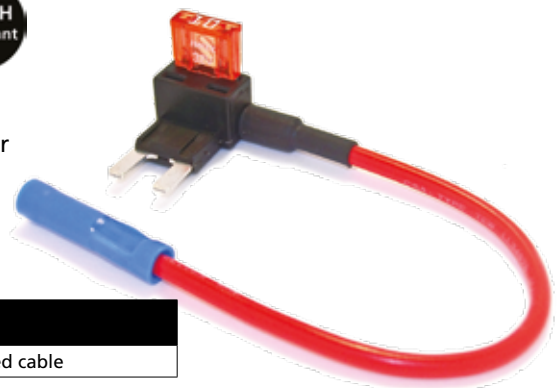


Part nr.	Description
FH7120	Holder for BF7000 and SBF7900 series (1 position), 2,5 mm <sup>2</sup> red cables
FH7105	Translucent white cover for FH7120
FH7101	Body for FH7120, PA6 GF30
FH7325	Holder with cover for BF7000 and SBF7900 series up to 30A (1 position), 1,5 mm <sup>2</sup> black cable
FH7335	Holder with cover for BF7000 and SBF7900 series up to 30A (1 position), 2,5 mm <sup>2</sup> red cable

## miniOTO fuse holder - Circuit+

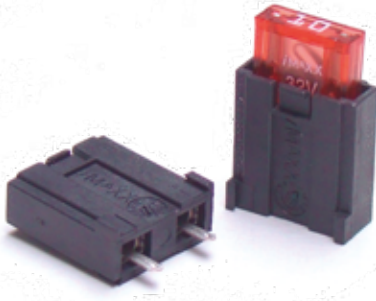


- Easily add a protected circuit without splicing
- 1,3 mm<sup>2</sup> (AWG 16) red cable, 120 mm length, with blue butt connector
- CuZn fuse receptacles, Sn plated
- Sturdy body construction, PA66, UL 94 V-0 material



Part nr.	Description
FH7400	Circuit+ holder for BF7000 and SBF7900 series (2 positions), 1,3 mm <sup>2</sup> red cable

## miniOTO fuse holder - PCB



- 2x1 (2-pin) CuSn tinned fuse receptacles, with integrated contact springs
- Standard PET GF33, UL 94 V-0 body material
- Stackable, to create multi-position holder (pitch 6,0 mm)
- Printed circuit board matching hole 1,5 mm, spacing 8,0 mm

Part nr.	Description
FH7810	Circuit board holder 2x1 pin for BF7000 and SBF7900 series (1 position)

## Mini blade fuse holder - LED indicator

- With LED indicator
- 2,5 mm<sup>2</sup> red cable, 110 mm each side
- With protective cap
- Max. electrical rating 30A - 32V



Part nr.	Description
FH365025	Holder for BF7000 and SBF7900 series (1 position) up to 30A, LED indicator, 2,5 mm <sup>2</sup> red cable

## Blade fuses - miniOTO Low Profile BFLP7000 series



- Meets international specs, complies to ISO 8820-9, JASO and other standards
- Check fuse in fuse block using test points at top of the fuse
- Element visibility from sides, semi transparent fuse bodies
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Rated at 58 Volt
- Color coded body materials
- Rating marked on top using OCR font
- Silver plated blades
- Used in Japanese, American, European and Korean designed vehicles



Part nr.	Color	Rating (A)	Rating (V)
BFLP7002	grey	2	58
BFLP7003	violet	3	58
BFLP7004	pink	4	58
BFLP7005	tan	5	58
BFLP7075	brown	7,5	58
BFLP7010	red	10	58
BFLP7015	blue	15	58
BFLP7020	yellow	20	58
BFLP7025	natural	25	58
BFLP7030	green	30	58

FUSES & HOLDERS



miniOTO Low Profile assortments

**B1-FLP7000**  
10 pcs



- 1 x BFLP7005
- 1 x BFLP7075
- 2 x BFLP7010
- 2 x BFLP7015
- 2 x BFLP7020
- 1 x BFLP7025
- 1 x BFLP7030

**HF350071HA**  
186 pcs - 8 compartments

- 1 x fuse puller AT1000P
- 15 x BFLP7005
- 25 x BFLP7075
- 40 x BFLP7010
- 40 x BFLP7015
- 25 x BFLP7020
- 15 x BFLP7025
- 25 x BFLP7030

Box with euroslot hangtab



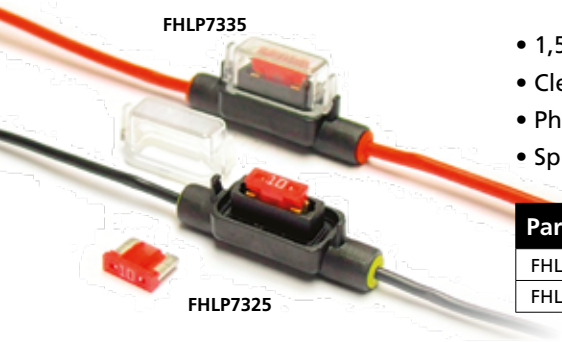
**B3-BFLP7000**  
7 pcs - blister

- 1 x BFLP7005
- 1 x BFLP7075
- 1 x BFLP7010
- 1 x BFLP7015
- 1 x BFLP7020
- 1 x BFLP7025
- 1 x BFLP7030



**miniOTO Low Profile fuse holders - Cable ends**

- 1,5 mm<sup>2</sup> black or 2,5 mm<sup>2</sup> red cable, 135 mm each side
- Clear cover with integrated O-ring seal
- Phosphor bronze CuSn fuse receptacles
- Splash waterproof with cable seals, O-ring seal and clear cover (IP56)



Part nr.	Description
FHLP7325	Holder with cover for BFLP7000 series (1 position), 1,5 mm <sup>2</sup> black cable
FHLP7335	Holder with cover for BFLP7000 series (1 position), 2,5 mm <sup>2</sup> red cable

**miniOTO Low Profile fuse holders - Circuit+**

- Easily add a protected circuit without splicing
- 1,3 mm<sup>2</sup> (AWG 16) red cable, 120 mm length, with blue butt connector
- CuZn fuse receptacles, Sn plated
- Sturdy body construction, PA66, UL 94 V-0 material

Part nr.	Description
FHLP7400	Circuit+ holder for BFLP7000 series (2 positions), 1,3 mm <sup>2</sup> red cable



FUSES & HOLDERS



## Blade fuses - mikrOTO II BF2000 and mikrOTO III BF3000 series

- Meets international specs, complies to ISO 8820-12 (BF2000 series) and ISO 8820-13 (BF3000 series)
- Check fuse in fuse block using test points at top of the fuse
- Element visibility from sides, semi transparent fuse bodies
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Rated at 32 Volt
- Silver plated blades
- Color coded body materials, rating marked on top using OCR font
- Used primarily in North American designed vehicles



Part nr.	Color	Rating (A)	Rating (V)
BF2003	violet	3	32
BF2004	pink	4	32
BF2005	tan	5	32
BF2075	brown	7,5	32
BF2010	red	10	32
BF2015	blue	15	32
BF2020	yellow	20	32
BF2025	natural	25	32
BF2030	green	30	32



Part nr.	Color	Rating (A)	Rating (V)
BF3005	tan	5	32
BF3075	brown	7,5	32
BF3010	red	10	32
BF3015	blue	15	32



**HF510071HA**  
76 pcs - 8 compartments



- 1 x fuse puller AT1000P
- 15 x BF2015
- 5 x BF2005
- 15 x BF2020
- 5 x BF2075
- 10 x BF2025
- 15 x BF2010
- 10 x BF2030

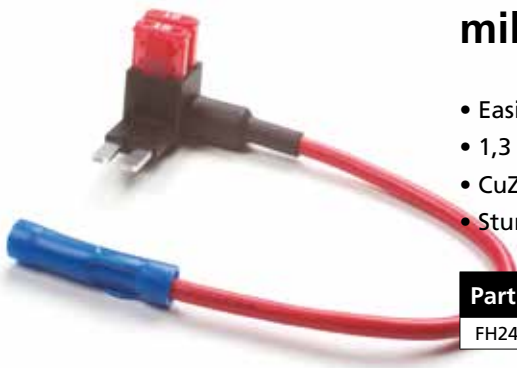
Box with euroslot hangtab

### mikrOTO II assortments

**B3-BF2000**  
7 pcs - blister

- 1 x BF2005
- 1 x BF2075
- 1 x BF2010
- 1 x BF2015
- 1 x BF2020
- 1 x BF2025
- 1 x BF2030





### mikrOTO II fuse holder - Circuit+



- Easily add a protected circuit without splicing
- 1,3 mm<sup>2</sup> (AWG 16) red cable, 120 mm length, with blue butt connector
- CuZn fuse receptacles, Sn plated
- Sturdy body construction, PA66, UL 94 V-0 material

Part nr.	Description
FH2400	Circuit+ holder for BF2000 series (2 positions), 1,3 mm <sup>2</sup> red cable

### mikrOTO II fuse holder - Cable ends



- Meets international specs, complies to ISO 8820-12
- 2,0 mm<sup>2</sup> black or 3,3 mm<sup>2</sup> red cable, 135 mm each side
- CuZn fuse receptacles, Sn plated
- Splash waterproof with cover (IP54)
- Self-extinguishing body and cover materials

Part nr.	Description
FH2325	Holder for BF2000 series up to 20A (1 position), 2,0 mm <sup>2</sup> black cable, 135 mm each side
FH2335	Holder for BF2000 series up to 30A (1 position) 20A, 3,3 mm <sup>2</sup> red cable, 135 mm each side

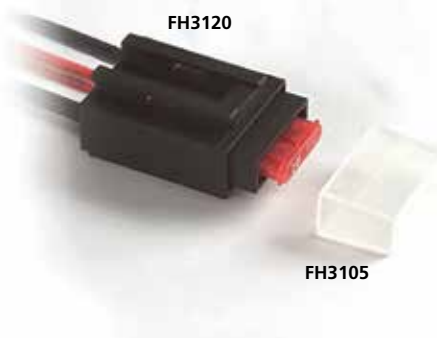


### mikrOTO III fuse holder - Cable ends



- 1 x 2,5 mm<sup>2</sup> red cable and 2 x 1,5 mm<sup>2</sup> black cable, 130mm each
- Stackable, to create multi-position holder
- CuSn4 fuse receptacles
- Splash waterproof when used with cover (optional)
- UL 94 V-0 body material

Part nr.	Description
FH3120	Holder for BF3000 series (1 position), 1 x 2,5 mm <sup>2</sup> red cable and 2 x 1,5 mm <sup>2</sup> black cable
FH3105	Translucent white PP cover for FH3120
FH3101	Body for FH3120, PA6 GF30



## Blade fuses - maxiOTO BF9000 series



- Meets international specs, complies to ISO 8820-3, SAE J1888 and other standards
- Element visibility from side, clear transparent fuse body
- Check fuse in fuse block using semi-protected test points at top of the fuse
- Blade rigidity through robust/sturdy body construction
- Safe and highly reliable/consistent operation with a single piece construction
- Self extinguishing transparent, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and reliable time-delayed functioning with purpose designed element shapes
- Direction insensitive insertion, rating marked in two directions at top, using OCR font

Part nr.	Color	Rating (A)	Rating (V)
BF9020	yellow	20	32
BF9025	grey	25	32
BF9030	green	30	32
BF9040	orange	40	32
BF9050	red	50	32
BF9060	blue	60	32
BF9070	brown	70	32
BF9080	natural	80	32
BF9100	violet	100	32



**HF040024HA**  
20 pcs - 8 compartments

- 2 x BF9020
- 3 x BF9030
- 3 x BF9040
- 3 x BF9050
- 3 x BF9060
- 2 x BF9070
- 2 x BF9080
- 2 x BF9100

Box with euroslot hangtab



maxiOTO assortment

## Blade fuses - maxiOTO compact BF9000-63 series



- Meets international specs, complies to ISO 8820-10
- Element visibility from side, semi-transparent fuse body
- Check fuse in fuse block using test points at top of the fuse
- Safe and highly reliable/consistent operation with a single piece construction
- Color coded body materials with OCR printed rating
- High temperature resistive plastics used for fuse body materials
- Time-delayed functioning with purpose designed element shapes
- Body material PA66 (UL 94 V-2)
- Element material, zinc alloy, silver plated blades



Part nr.	Color	Rating (A)	Rating (V)
BF9020-63	yellow	20	32
BF9025-63	grey	25	32
BF9030-63	green	30	32
BF9035-63	light green	35	32
BF9040-63	orange	40	32
BF9050-63	red	50	32
BF9060-63	blue	60	32

## maxiOTO fuse holders - Crimp connect

- Suits 2,5 - 10 mm<sup>2</sup> cable
- PA66 GF25, UL 94 V-0 body material
- Robust cable interface, ring terminal screw connections
- Stackable, to create multi-position holder
- Clear cover optional



FUSES & HOLDERS

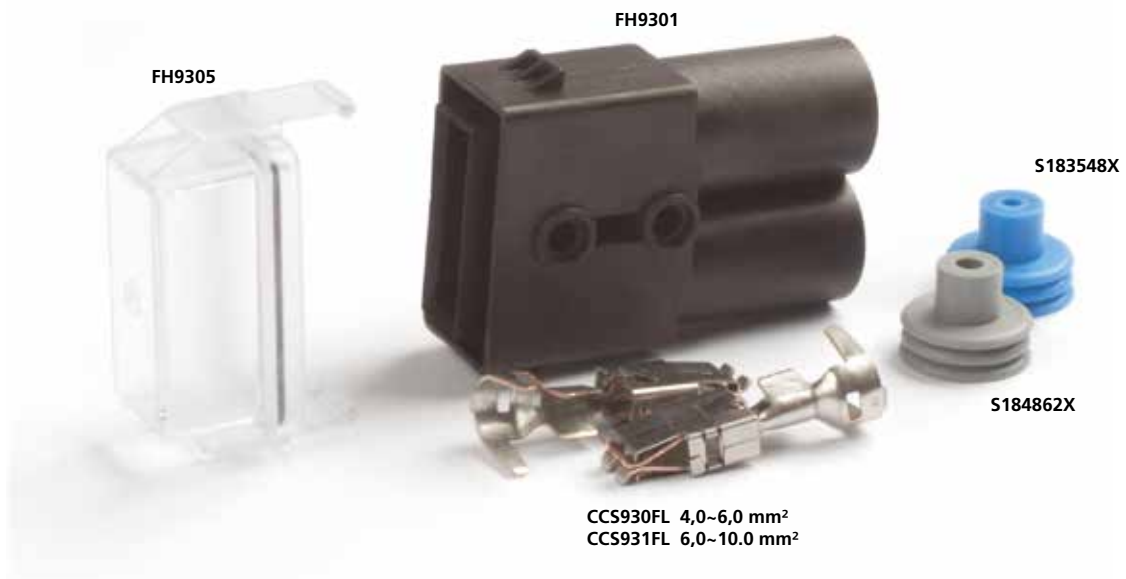
Part nr.	Description
FH9120	Holder for BF9000 series (1 position) PA66 body, screw connect (M5 screws installed)
FH9105	Cover for use with FH9120
FH9100	Holder FH9120 incl. cover FH9105 (packed in bag)

## maxiOTO fuse holder - Splash waterproof



- CiSiNi fuse receptacles, Sn plated 4.0-10 mm<sup>2</sup> (TE-MPT)
- Mountable and stackable, 2 x Ø 4,3 mm holes, to create multi-position holder
- PA66 GF35, UL 94 V-0 self extinguishing body material
- Splash waterproof with cable seals and cover
- Vertical insertion of fuse receptacles

Part nr.	Description
FH93004.0	Holder for BF9000 series, 1 position, wire size 4,0~6,0 mm <sup>2</sup> (complete set in plastic box)
FH9315-A	Holder for BF9000 series, 1 position, wire size 4,0~6,0 mm <sup>2</sup> (10 complete sets in plastic bag)
FH93010.0	Holder for BF9000 series, 1 position, wire size 6,0~10,0 mm <sup>2</sup> (complete set in plastic box)
FH9315-B	Holder for BF9000 series, 1 position, wire size 6,0~10,0 mm <sup>2</sup> (10 complete sets in plastic bag)
FH9301	Body, 1 position, PA66 GF35, UL 94 V-0, black
FH9305	Cover with integrated NBR seal, 1 position, clear PC
CCS930FL	Contact 4,0~6,0 mm <sup>2</sup> , nickel plated brass, use with blue seal
CCS931FL	Contact 6,0~10,0 mm <sup>2</sup> , nickel plated brass, use with grey seal
S183548	Blue seal for cable 2,5~6,0 mm <sup>2</sup> , silicone, Ø 3,1 mm
S184862	Grey seal for cable 6,0~10,0 mm <sup>2</sup> , silicone, Ø 4,4 mm



FH93004.0 1 set  
FH9315-A 10 sets



FH93010.0 1 set  
FH9315-B 10 sets



## maxiOTO fuse holders - PCB



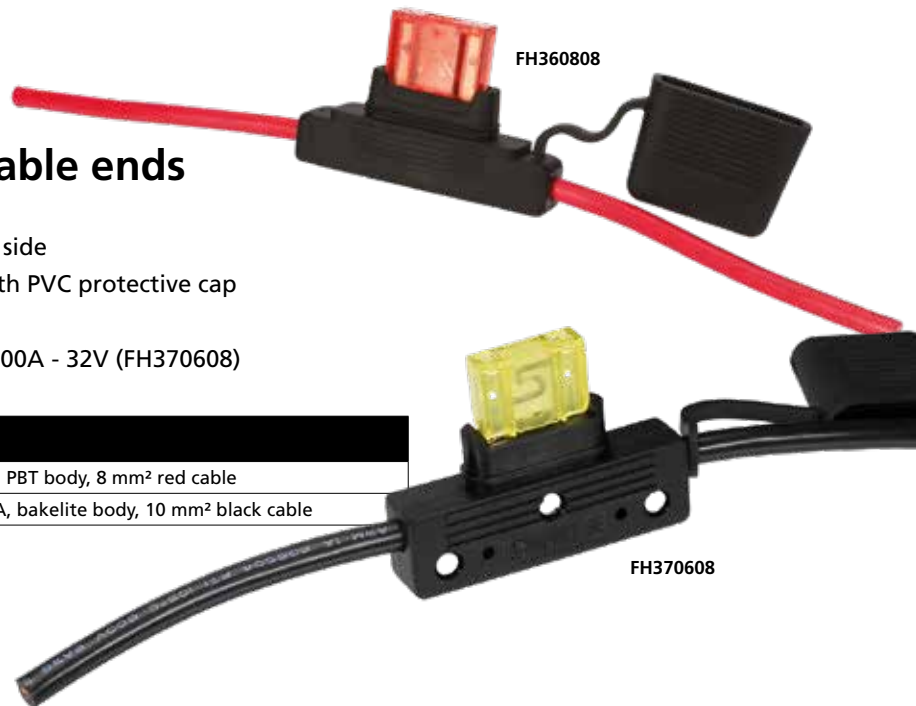
- 2x10 (20-pin) CuZn, Sn plated fuse receptacles
- Standard PA66, UL 94 V-0 body material
- Printed circuit board matching hole 1,75 mm

Part nr.	Description
FH9810-2x10	Circuit board holder 2x10 pin for BF9000 series (1 position)

## Maxi blade fuse holders - Cable ends

- 8 mm<sup>2</sup> red or 10 mm<sup>2</sup> black cable, 200 mm each side
- PBT (FH360808) or bakelite (FH370608) body with PVC protective cap
- Water resistant
- Max. electrical rating 60A - 32V (FH360808) or 100A - 32V (FH370608)

Part nr.	Description
FH360808	Holder for BF9000 series (1 position) up to 60A, PBT body, 8 mm <sup>2</sup> red cable
FH370608	Holder for BF9000 series (1 position) up to 100A, bakelite body, 10 mm <sup>2</sup> black cable



## Maxi blade fuse holder - LED indicator

- With LED indicator
- 8 mm<sup>2</sup> red cable, 110 mm each side
- With protective cap
- Max. electrical rating 60A - 32V

Part nr.	Description
FH365708	Holder for BF9000 series (1 position) up to 60A, LED indicator, 8 mm <sup>2</sup> red cable



HF110278BC  
279 pcs - 19 compartments

## Professional kit

**Fuse holders:**

- 2 x FH1120
- 1 x FH1335
- 1 x FH7315
- 1 x FH9120
- 1 x FH9105

**NormOTO blade fuses:**

- 15 x SBF1575
- 30 x SBF1510
- 30 x SBF1515
- 25 x SBF1520
- 20 x SBF1525
- 25 x SBF1530

**MiniOTO blade fuses:**

- 8 x BF7075
- 25 x BF7010
- 25 x BF7015
- 25 x BF7020
- 10 x BF7025
- 10 x BF7030

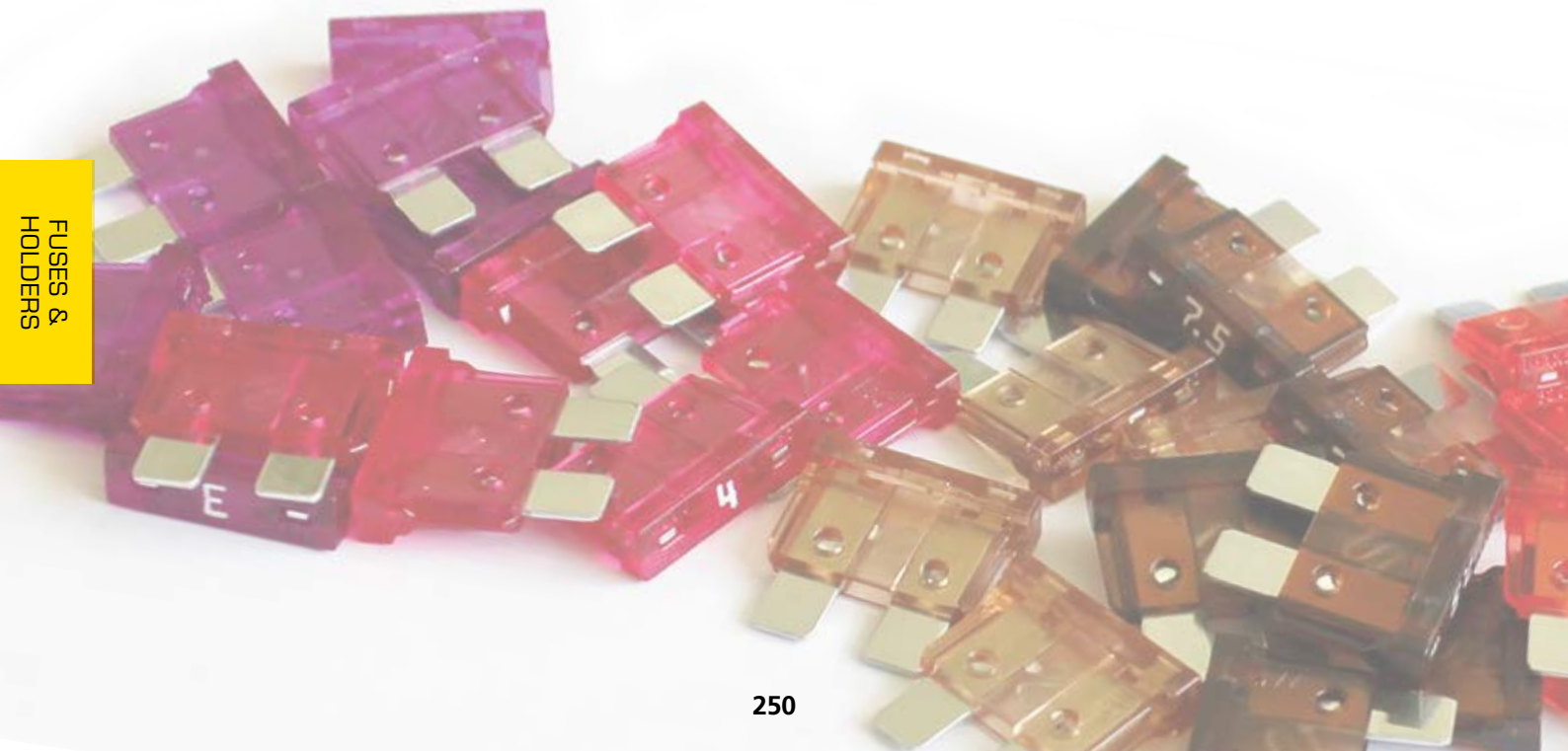
**MaxiOTO blade fuses:**

- 3 x BF9030
- 3 x BF9040
- 8 x BF9050
- 8 x BF9060
- 3 x BF9070



Blade fuse assortment with holders

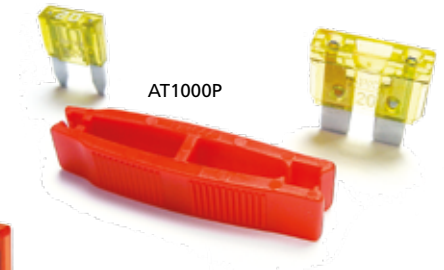
FUSES & HOLDERS



### Tools for blade fuses

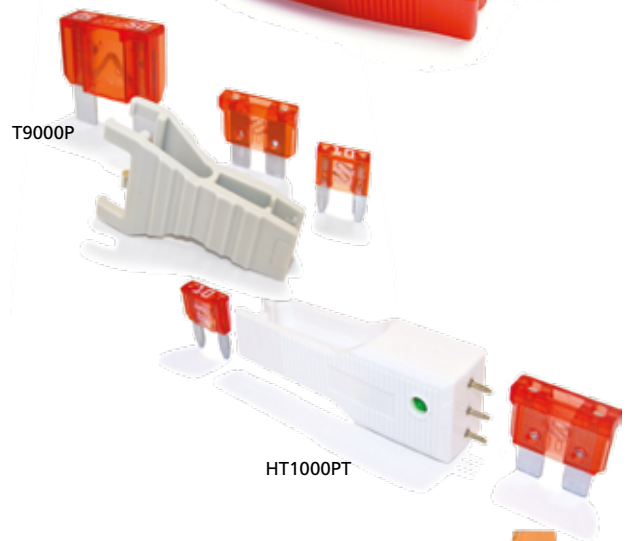
#### AT1000P

- Twin puller for normOTO and miniOTO blade fuses
- Polypropylene (PP) material, red colored
- Dimensions 45 x 10 mm



#### T9000P

- Triple puller for maxiOTO, normOTO and miniOTO blade fuses
- Thermoplastic (UL 94 V-0) material, grey colored
- Dimensions 41,3 x 24,5 mm



#### HT1000PT

- Twin puller and tester for normOTO and miniOTO blade fuses
- Test fuses in or out of the fuse box
- LED lights bright green when the fuse is OK
- Dimensions 55 x 20 mm, color white

#### FP003

- 4-in-1 fuse tester and puller for maxiOTO, normOTO and miniOTO/miniOTO Low Profile fuses
- LED lights bright green when fuse is OK
- Dimensions 70 x 32 mm, color orange



Part nr.	Description
AT1000P	Red fuse puller for normOTO en miniOTO blade fuses, red
T9000P	Grey fuse puller for miniOTO, normOTO en maxiOTO blade fuses
HT1000PT	White fuse puller miniOTO and normOTO blade fuses, tester for normOTO blade fuses
FP003	Adjustable orange fuse puller/tester with LED indicator, for maxiOTO, normOTO and miniOTO/miniOTO Low Profile blade fuses

### Automotive Circuit Breakers - Mini series

- Plastic cover with color code
- Compatible with mini fuse holders
- Meets SAE J553, ISO 10924-3
- Absolute breaking capacity: 2000A@26Vdc
- Interrupt rating: 150A@14Vdc (for 5-10A)  
225A@14Vdc (for 15A)  
300A@14Vdc (for 20A)  
450A@14Vdc (for 25-30A)
- Operating temperature: -40 °C ~ 85 °C
- Storage temperature: -40 °C ~ 125 °C

Automatic reset*			
Part nr.	Color	Rating (A)	Rating (V)
ACBAT0514V1	tan	5	14
ACBAT7514V1	brown	7,5	14
ACBAT1014V1	red	10	14
ACBAT1514V1	blue	15	14
ACBAT2014V1	yellow	20	14
ACBAT2514V1	natural	25	14
ACBAT3014V1	green	30	14



### Automotive Circuit Breakers - Normal series

- UL 94 V-0 thermoplastic body with color code
- Tin plated copper alloy terminals
- Compatible with normal fuse holders
- Meets SAE J553, ISO 10924-4, UL 1500, SAE J1171
- Ignition protected
- Interrupt capacity: 2000A@28Vdc
- Operating temperature: -40 °C ~ 85 °C
- Storage temperature: -40 °C ~ 125 °C

Manual reset**			
Part nr.	Color	Rating (A)	Rating (V)
ACBMN0528V	tan	5	28
ACBMN7528V	brown	7,5	28
ACBMN1028V	red	10	28
ACBMN1528V	blue	15	28
ACBMN2028V	yellow	20	28
ACBMN2528V	natural	25	28
ACBMN3028V	green	30	28



\* **Automatic reset**  
Once the breaker detects overload or short circuit conditions, it will trip to disconnect the circuit. It will reset itself in a few seconds.

\*\* **Manual reset**  
Once the breaker detects overload or short circuit conditions, it will trip to disconnect the circuit. If you want to reset the circuit, you need to push the reset button.



# Cartridge SloBlo fuses - japOTO AS, E, ES and ET series



- Meets international specs, complies to ISO 8820-4, JASO D612 and other standards
- Element visibility from top through transparent cover
- Robust/sturdy body construction
- Self extinguishing, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and controlled time-delayed functioning with purpose designed elements
- Integrated, enduring, Cu-alloy receptacles
- Used in Japanese, European, American and Korean designed vehicles



AS series

AS series			
Part nr.	Color	Rating (A)	Rating (V)
CBF020AS	light blue	20	32
CBF030AS	pink	30	32
CBF040AS	green	40	32
CBF050AS	red	50	32
CBF060AS	yellow	60	32

E series			
Part nr.	Color	Rating (A)	Rating (V)
CBF045E	red	45	32
CBF065E	black	65	32
CBF075E	grey	75	32



E series



ES series

ES series			
Part nr.	Color	Rating (A)	Rating (V)
CBF050ES	red	50	32
CBF060ES	yellow	60	32
CBF080ES	black	80	32

ET series			
Part nr.	Color	Rating (A)	Rating (V)
CBF050ET	red	50	58
CBF060ET	yellow	60	58
CBF070ET	brown	70	58
CBF080ET	black	80	58
CBF100ET	blue	100	58
CBF125ET	pink	125	58
CBF150ET	grey	150	58



ET series

## Cartridge SloBlo fuses - japOTO B series



- Meets international specs, complies to ISO 8820-4, JASO D612 and other standards
- Element visibility from top through transparent cover
- Robust/sturdy body construction
- Self extinguishing, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and controlled time-delayed functioning with purpose designed elements
- Integrated, durable, Cu-alloy blades
- Used in Japanese, European, American and Korean designed vehicles



Part nr.	Color	Rating (A)	Rating (V)
CBF030B	pink	30	32
CBF040B	green	40	32
CBF050B	red	50	32
CBF060B	yellow	60	32
CBF070B	brown	70	32
CBF080B	black	80	32
CBF100B	blue	100	32
CBF120B	white	120	32
CBF140B	dark red	140	32

## Cartridge SloBlo fuses - japOTO D series



- Meets international specs, complies to JASO D612 and other standards
- Element visibility from top through transparent cover
- Robust/sturdy body construction
- Safe and highly reliable operation through ceramic heat sink construction
- Self extinguishing, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and controlled time-delayed functioning with purpose designed elements
- Integrated, durable, Cu-alloy receptacles
- Used in Japanese, European, American and Korean designed vehicles

Part nr.	Color	Rating (A)	Rating (V)
CBF025D	brown	25	32
CBF030D	green	30	32

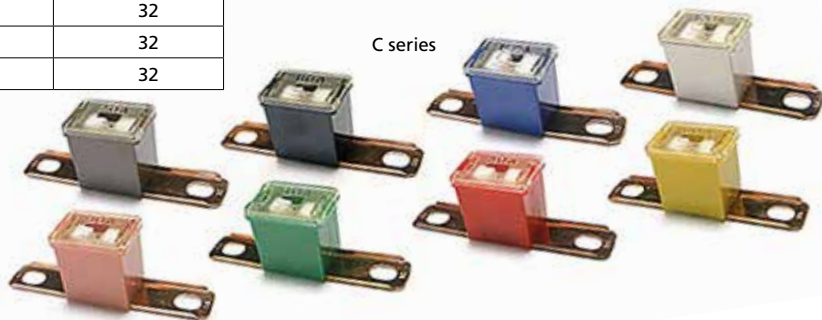


## Cartridge SloBlo fuses - japOTO C and CS series



- Meets international specs, complies to ISO 8820-4, JASO D612 and other standards
- Element visibility from top through transparent cover
- Robust/sturdy body construction
- Self extinguishing, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and controlled time-delayed functioning with purpose designed elements
- Integrated, enduring, Cu-alloy blades
- Used in Japanese, European, American and Korean designed vehicles

C series			
Part nr.	Color	Rating (A)	Rating (V)
CBF030C	pink	30	32
CBF040C	green	40	32
CBF050C	red	50	32
CBF060C	yellow	60	32
CBF070C	brown	70	32
CBF080C	black	80	32
CBF100C	blue	100	32
CBF120C	white	120	32



CS series			
Part nr.	Color	Rating (A)	Rating (V)
CBF030CS	pink	30	32
CBF040CS	green	40	32
CBF050CS	red	50	32
CBF060CS	yellow	60	32
CBF070CS	brown	70	32
CBF080CS	black	80	32
CBF100CS	blue	100	32
CBF120CS	white	120	32
CBF140CS	dark red	140	32



## Cartridge SloBlo fuses - japOTO J, JLP, JM and JMS series



- Meets international specs, complies to ISO 8820-4, JASO D612 and other standards
- Element visibility from top through transparent cover
- Robust/sturdy body construction
- Self extinguishing, color coded body materials
- High temperature resistive plastics used for fuse body materials
- Secure and controlled time-delayed functioning with purpose designed elements
- Integrated, durable, Cu-alloy receptacles
- Used in Japanese, European, American and Korean designed vehicles



J series

J series			
Part nr.	Color	Rating (A)	Rating (V)
CBF020J	light blue	20	32
CBF025J	white	25	32
CBF030J	pink	30	32
CBF040J	green	40	32
CBF050J	red	50	32
CBF060J	yellow	60	32



JLP series

JLP series			
Part nr.	Color	Rating (A)	Rating (V)
CBF020JLP	light blue	20	58
CBF025JLP	white	25	58
CBF030JLP	pink	30	58
CBF040JLP	green	40	58
CBF050JLP	red	50	58
CBF060JLP	yellow	60	58

JM series			
Part nr.	Color	Rating (A)	Rating (V)
CBF015JM	grey	15	32
CBF020JM	light blue	20	32
CBF025JM	white	25	32
CBF030JM	pink	30	32
CBF040JM	green	40	32



JM series



JMS series

JMS series			
Part nr.	Color	Rating (A)	Rating (V)
CBF015JMS	grey	15	32
CBF020JMS	light blue	20	32
CBF025JMS	white	25	32
CBF030JMS	pink	30	32
CBF040JMS	green	40	32
CBF050JMS	red	50	32
CBF060JMS	yellow	60	32

## Bolt-on fuses - midiOTO series OBFMD (32V)



- Meets international specs, complies to ISO 8820-5 standards
- Clear material on one side ensuring element visibility
- PA66 & PSU housing, heat & chemical resistant
- Rigid Sn plated copper alloy blades with amperage indication
- Color coded housing, marked with amperage rating
- M5 connection holes, spaced 30 mm (25-125A),  
M6 connection holes, spaced 30 mm (150-200A)
- Maximum torque 4.5Nm  $\pm$  1 Nm



Part nr. M5 holes	Part nr. M6 holes	Color	Rating (A)	Rating (V)
OBFMD025		black	25	32
OBFMD030		orange	30	32
OBFMD040		green	40	32
OBFMD050		red	50	32
OBFMD060		yellow	60	32
OBFMD070		brown	70	32
OBFMD080		white	80	32
OBFMD100		blue	100	32
OBFMD125		pink	125	32
	OBFMD150	grey	150	32
	OBFMD175	tan	175	32
	OBFMD200	violet	200	32

## Bolt-on fuses - midiOTO series OBFMD(P) (58V)



- Meets international specs, complies to ISO 8820-5, JASO D612 and other standards
- Element visibility through viewing window
- PA66 housing, heat & chemical resistant
- Rigid Sn plated copper alloy blades
- Color coded housing, marked with amperage rating
- M5 connection holes, spaced 30 mm (30-125A)  
M6 connection holes, spaced 30 mm (30-200A)
- Maximum torque 4.5Nm  $\pm$  1 Nm

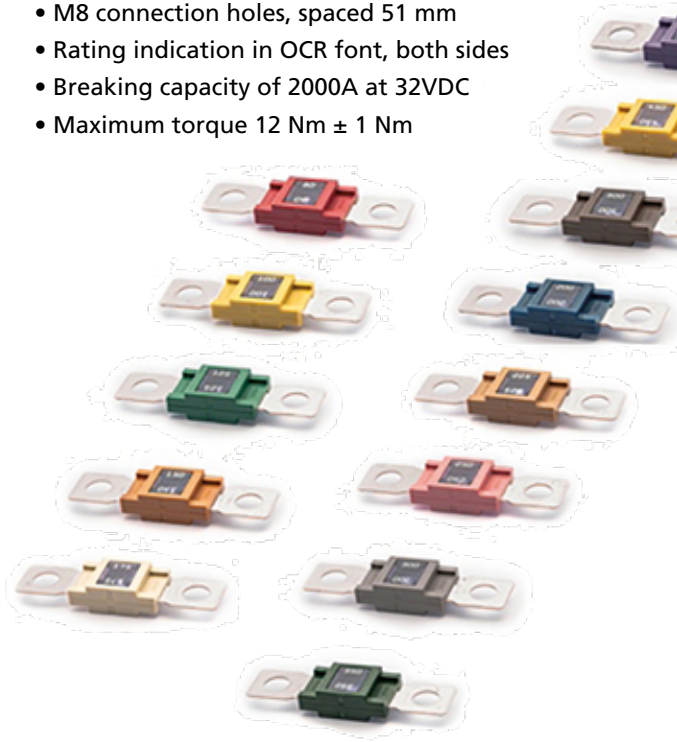


Part nr. M5 holes	Part nr. M6 holes	Color	Rating (A)	Rating (V)
OBFMDP030	OBFMD030M6	orange	30	58
OBFMDP040	OBFMD040M6	green	40	58
OBFMDP050	OBFMD050M6	red	50	58
OBFMDP060	OBFMD060M6	yellow	60	58
OBFMDP070	OBFMD070M6	brown	70	58
OBFMDP080	OBFMD080M6	white	80	58
OBFMDP100	OBFMD100M6	blue	100	58
OBFMDP125	OBFMD125M6	pink	125	58
	OBFMD150M6	grey	150	58
	OBFMD175M6	tan	175	58
	OBFMD200M6	violet	200	58

## Bolt-on fuses - megaOTO series OBFMG (32V)



- Meets international specs, complies to ISO 8820-5, JASO D612 and other standards
- Fusing element with diffusion tin droplet technology
- Element visibility, windows on both sides
- Thermoplastic, heat resistant, color coded housing
- M8 connection holes, spaced 51 mm
- Rating indication in OCR font, both sides
- Breaking capacity of 2000A at 32VDC
- Maximum torque 12 Nm ± 1 Nm



Part nr.	Color	Rating (A)	Rating (V)	Holes
OBFMG080	red	80	32	M8
OBFMG100	yellow	100	32	M8
OBFMG125	green	125	32	M8
OBFMG150	orange	150	32	M8
OBFMG175	white	175	32	M8
OBFMG200	blue	200	32	M8
OBFMG225	tan	225	32	M8
OBFMG250	pink	250	32	M8
OBFMG300	grey	300	32	M8
OBFMG350	dark green	350	32	M8
OBFMG400	purple	400	32	M8
OBFMG450	dark yellow	450	32	M8
OBFMG500	brown	500	32	M8

## Bolt-on fuses - megaOTO series OMGHV (70V)



- Meets international specs, complies to ISO 20934 and other standards
- Rigid tin plated copper blades
- Sturdy riveted thermoplastic color coded housing
- M8 connection holes, spaced 51 mm
- Rating indication in OCR font, both sides
- Breaking capacity of 2500A at 70VDC
- Maximum torque 12 Nm ± 1 Nm



Part nr.	Color	Rating (A)	Rating (V)	Holes
OMGHV080	red	80	70	M8
OMGHV100	yellow	100	70	M8
OMGHV125	green	125	70	M8
OMGHV150	orange	150	70	M8
OMGHV175	white	175	70	M8
OMGHV200	blue	200	70	M8
OMGHV225	tan	225	70	M8
OMGHV250	pink	250	70	M8
OMGHV300	grey	300	70	M8
OMGHV350	dark green	350	70	M8
OMGHV400	purple	400	70	M8
OMGHV450	dark yellow	450	70	M8
OMGHV500	brown	500	70	M8

FUSES & HOLDERS

## midi- and megaOTO fuse holders



### FHMD1

- M5 threaded studs and hex nuts to secure midiOTO fuse
- PA66 GF30, UL 94 V-0 body and cover material
- Standard single position, attached cover
- Stackable, to create multi-position holder
- Overhang in the cover provides improved protection of the terminals



### FHMG1

- M8 threaded studs and hex nuts to secure megaOTO fuse
- PA66 GF30, UL 94 V-0 body and cover material
- Standard single position, attached cover
- Stackable, to create multi-position holder
- Overhang in the cover provides improved protection of the terminals
- The 20 mm cable-entry allows use of cable diameters up to 120 mm



### FHMD4-MG1

- M5 threaded studs and hex nuts to secure 4 midiOTO fuses
- M8 threaded studs and hex nuts to secure 1 megaOTO fuse
- PA66 GF30 UL 94 V-0 body and cover material
- Heavy duty copper buss-bars included
- Robust holder with cover attached
- Overhang in the cover provides improved protection of the terminals



Part nr.	Description
FHMD1	Holder with cover for OBFMD and OBFMD(P) series (1 position) with M5 holes
FHMG1	Holder with cover for OBFMG series (1 position)
FHMD4-MG1	Holder with cover, combi for OBFMD and OBDMD(P) series (4 positions) with M5 holes and OBFMG series (1 position)



## Bolt-on fuses - cubeOTO series OBFMC



- Meets international specs, complies to ISO 8820-6
- Element visibility
- Ceramic body material
- Single bolt fuse type technology, M8 connection
- Integrated, durable Cu-fusing part
- Use insulating nut or equivalent alternative
- New innovative, space saving slow blow fuse series



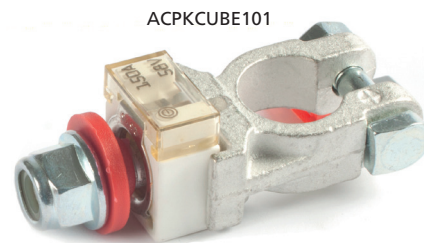
Part nr.	Color	Rating (A)	Rating (V)	Holes
OBFMC050	white	50	58	M8
OBFMC075	white	75	58	M8
OBFMC100	white	100	58	M8
OBFMC125	white	125	58	M8
OBFMC150	white	150	58	M8
OBFMC175	white	175	58	M8
OBFMC200	white	200	58	M8
OBFMC250	white	250	58	M8
OBFMC300	white	300	58	M8
CF-M8	M8 insulation nut			

## cubeOTO fuse holders



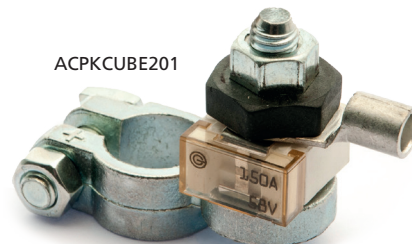
### ACPKCUBE101

- Electrical protection at the most desirable place, on the battery
- Compact design resulting in significant space saving
- Sturdy construction in high quality materials
- Easy assembly
- Designed to prevent rotation of the fuse during assembly
- Optional insulating cover for protection
- Includes application specific insulation washers and self locking nuts



### ACPKCUBE201

- Could substitute Littelfuse 255.1000.0001
- Electrical protection at the most desirable place, on the battery
- Sturdy construction in high quality materials
- Easy assembly
- Designed to prevent rotation of the fuse during assembly
- Use in combination with insulating nut



Part nr.	Description
ACPKCUBE101	Holder for OBFMC series (1 position), with insulation washer and self locking nut
ACPKCUBE201	Holder for OBFMC series (1 position)
CF-M8	M8 insulation nut for use with ACPKCUBE201



## Bolt-on fuses - stripOTO series OMS-P

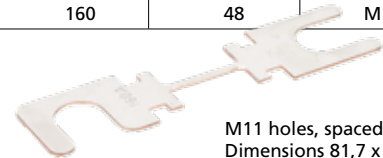


- Complies with VAG standard
- Element visibility
- M6 connection holes, spaced 30 mm
- Dimensions 42 x 12 mm
- Material, pure zinc



Part nr.	Rating (A)	Rating (V)	Holes
OMS-P030	30	32	M6
OMS-P040	40	32	M6
OMS-P050	50	32	M6
OMS-P060	60	32	M6
OMS-P070	70	32	M6
OMS-P080	80	32	M6
OMS-P100	100	32	M6
OMS-P110	110	32	M6
OMS-P125	125	32	M6
OMS-P150	150	32	M6
OMS-P175	175	32	M6

Part nr.	Rating (A)	Rating (V)	Holes
AE-OMSUP80	80	48	M11
AE-OMSUP125	125	48	M11
AE-OMSUP160	160	48	M11



M11 holes, spaced 60 mm  
Dimensions 81,7 x 20 mm

## Bolt-on fuses - stripOTO series OMS-U

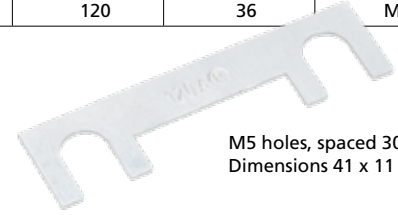


- DIN 72581-2
- Element visibility
- M5 connection holes, spaced 30 mm
- Dimensions 41 x 11 mm
- Easy installation trough U-form connection
- Material, pure zinc



Part nr.	Rating (A)	Rating (V)	Holes
OMS-U030	30	32	M5
OMS-U040	40	32	M5
OMS-U050	50	32	M5
OMS-U060	60	32	M5
OMS-U080	80	32	M5
OMS-U100	100	32	M5

Part nr.	Rating (A)	Rating (V)	Holes
AE-OMSU120	120	36	M5



M5 holes, spaced 30 mm  
Dimensions 41 x 11 mm

FUSES & HOLDERS

## Bolt-on fuses - evOTO series EV27-M4



- Meets international specs, complies to ISO 8820-8 and other standards
- Ceramic tube, laser marked, silica sand filled
- Rigid Ni-plated copper alloy connections
- M4 connection holes, spaced 45 mm
- Maximum torque 2.1 Nm ± 0.2 Nm
- Breaking capacity: 2.000 A at 450 Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV27-001-M4	1	450	M4
EV27-005-M4	5	450	M4

## Bolt-on fuses - evOTO series EV27-M5



- Meets international specs, complies to ISO 8820-8 and other standards
- Ceramic tube, laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M5 connection holes, spaced 53,5 mm
- Maximum torque 4.5Nm ± 1 Nm
- Breaking capacity: 20.000 A at 500 Vdc (450Vdc)



Part nr.	Rating (A)	Rating (V)	Holes
EV27-015-M5	15	500	M5
EV27-020-M5	20	500	M5
EV27-030-M5	30	500	M5
EV27-040-M5	40	500	M5
EV27-050-M5	50	450	M5

## Bolt-on fuses - evOTO series EV28-M6



- Meets international specs, complies to ISO 8820-8 and other standards
- Ceramic tube, laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M6 connection holes, spaced 60 mm
- Maximum torque 9.0 Nm ± 1.0 Nm
- Breaking capacity: 20.000 A at 500 Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV28-060-M6	60	500	M6
EV28-070-M6	70	500	M6
EV28-080-M6	80	500	M6
EV28-100-M6	100	500	M6
EV28-125-M6	125	500	M6

## Bolt-on fuses - evOTO series EV29-M8



- Meets international specs, complies to ISO 8820-8 and other standards
- UP tube, closed with epoxy resin laser marked, silica sand filled
- Rigid copper alloy connections
- M8 connection holes, spaced 74,8 mm
- Maximum torque 12Nm  $\pm$  1 Nm
- Breaking capacity: 16.000 A at 500 Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV29-150-M8	150	500	M8
EV29-175-M8	175	500	M8
EV29-200-M8	200	500	M8
EV29-225-M8	225	500	M8
EV29-250-M8	250	500	M8
EV29-300-M8	300	500	M8

## Bolt-on fuses - evOTO series EV29-M8HR



- Meets international specs, complies to ISO 8820-8 and other standards
- UP tube, closed with epoxy resin laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M8 connection holes, spaced 74,8 mm
- Maximum torque 12Nm  $\pm$  1Nm
- Breaking capacity: 30.000 A at 500 Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV29-350-M8	350	500	M8
EV29-400-M8	400	500	M8
EV29-450-M8	450	500	M8
EV29-500-M8	500	500	M8

## Bolt-on fuses - evOTO series EV29-M10



- Meets international specs, complies to ISO 8820-8 and other standards
- UP tube, closed with epoxy resin laser marked, silica sand filled
- Rigid Sn-plated copper alloy connections
- M10 connection holes, spaced 80 mm
- Maximum torque 16Nm  $\pm$  1Nm
- Breaking capacity: 30.000 A at 500 Vdc



Part nr.	Rating (A)	Rating (V)	Holes
EV29-600-M10	600	500	M10
EV29-700-M10	700	500	M10
EV29-800-M10	800	500	M10
EV29-900-M10	900	500	M10
EV29-1000-M10	1000	500	M10

## ceramicOTO fuses - CERF2000 series



- DIN 72581-1 standard (only for 5-25A fuses)
- Zn fusing element material (5-16A), Cu fusing element material (25-40A)
- Thermoplastic body material

Part nr.	Color	Rating (A)	Rating (V)
CERF2005	yellow	5	32
CERF2008	white	8	32
CERF2016	red	16	32
CERF2025	blue	25	32
CERF2040	black	40	32



### ceramicOTO assortment

**B3-CERF**  
5 pcs - blister

1 x CERF2005  
1 x CERF2008  
1 x CERF2016  
1 x CERF2025  
1 x CERF2040

## ceramicOTO fuse holders



### FH2010

- Quick fit in-line, cable (max 3,0 mm<sup>2</sup>) screw connects
- High temperature resistive bakelite body material
- Bajonet style closing, includes CERF2000 series 8A fuse



### CFB02, CFB04, CFB06, CFB08 and CFB12

- Multi-position fuse box with transparent cover
- With screw connects and 6,3 mm tab



Part nr.	Description
FH2010	Holder for CERF2000 series, bakelite screw connect (1 position) incl. 8A fuse
CFB02	Box for ceramic fuses, 2 positions
CFB04	Box for ceramic fuses, 4 positions
CFB06	Box for ceramic fuses, 6 positions
CFB08	Box for ceramic fuses, 8 positions
CFB12	Box for ceramic fuses, 12 positions

FUSES & HOLDERS

## glassOTO fuses - GLAF4000 (fast acting) and GLAFT4000 (time lag) series 5x20 mm



- Glass tube with copper alloy, nickel plated caps
- IEC 127 Standard sheet II for fast acting fuses, 100mA up to 20A
- IEC 127 Standard sheet III for time lag fuses, 100mA up to 6,3A
- Marked with voltage and current rating
- Cap enclosed solder joints



GLAF4000 series		
Part nr.	Rating (A)	Rating (V)
GLAF4100	0,1	32
GLAF4200	0,2	32
GLAF4250	0,25	32
GLAF4300	0,3	32
GLAF4400	0,4	32
GLAF4500	0,5	32
GLAF4800	0,8	32
GLAF4001	1	32
GLAF4001.25	1,25	32
GLAF4001.6	1,6	32
GLAF4002	2	32
GLAF4002.5	2,5	32
GLAF4003	3,15	32
GLAF4004	4	32
GLAF4005	5	32
GLAF4006	6,3	32
GLAF4008	8	32
GLAF4010	10	32
GLAF4012	12	32
GLAF4015	15	32
GLAF4016	16	32
GLAF4020	20	32

GLAFT4000 series		
Part nr.	Rating (A)	Rating (V)
GLAFT4100	0,1	32
GLAFT4125	0,125	32
GLAFT4160	0,16	32
GLAFT4200	0,2	32
GLAFT4315	0,315	32
GLAFT4400	0,4	32
GLAFT4500	0,5	32
GLAFT4630	0,63	32
GLAFT4800	0,8	32
GLAFT4001	1	32
GLAFT4001.25	1,25	32
GLAFT4001.6	1,6	32
GLAFT4002	2	32
GLAFT4002.5	2,5	32
GLAFT4003	3,15	32
GLAFT4004	4	32
GLAFT4005	5	32
GLAFT4006	6,3	32
GLAFT4008	8	32
GLAFT4010	10	32



## glassOTO fuses - GLAF5000 series 6,3x32 mm



- Glass tube with copper alloy, nickel plated caps
- Marked with voltage and current rating
- Range from 1A up to 50A
- Cap enclosed solder joints



Part nr.	Rating (A)	Rating (V)
GLAF5001	1	32
GLAF5002	2	32
GLAF5002.5	2,5	32
GLAF5003	3	32
GLAF5004	4	32
GLAF5005	5	32
GLAF5006	6	32
GLAF5008	8	32
GLAF5010	10	32
GLAF5015	15	32
GLAF5016	16	32
GLAF5020	20	32
GLAF5025	25	32
GLAF5030	30	32
GLAF5035	35	32
GLAF5040	40	32
GLAF5050	50	32

**B3-GLAF5**  
5 pcs - blister  
6,3x32 mm

1 x GLAF5005  
1 x GLAF5010  
1 x GLAF5015  
1 x GLAF5020  
1 x GLAF5030

### glassOTO assortments

**B3-GLAF4**  
5 pcs - blister  
5x20 mm

1 x GLAF4002  
1 x GLAF4003  
1 x GLAF4005  
1 x GLAF4006  
1 x GLAF4010

FUSES & HOLDERS



Relays 12V .....	268
Relays 24V .....	272
Flashers 12/24V .....	274
Sockets .....	275
Switches .....	276
Pilot lights .....	280
Buzzers .....	280

- Plugs & Sockets
- Lighting
- Battery
- Hose Clamps
- Screws, Bolts & Nuts
- Wire & Cable
- Bundling & Protection
- EV Products
- Insulated Terminals
- Non-insulated Terminals
- Cord End Terminals
- Housing
- Fuses & Fuse Holders

## Relays, Switches, Pilot Lights & Buzzers

Tools

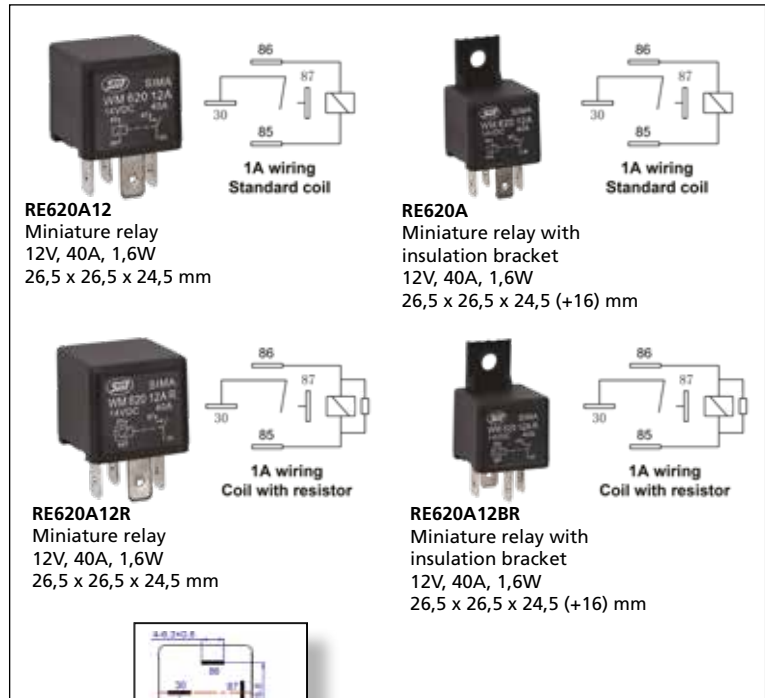
Assortment Kits

## Relays - 12V, 4 pins



**RE686A**  
High power starter relay for trucks  
12V, 120A  
2,4W continuous/4,8W intermittent  
46 x 46 x 45 (+18) mm

**RE686B**  
High power starter relay for trucks  
12V, 200A  
2,4W continuous/4,8W intermittent  
46 x 46 x 45 (+18) mm

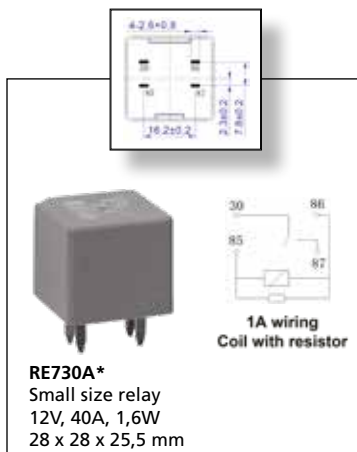


**RE620A12**  
Miniature relay  
12V, 40A, 1,6W  
26,5 x 26,5 x 24,5 mm

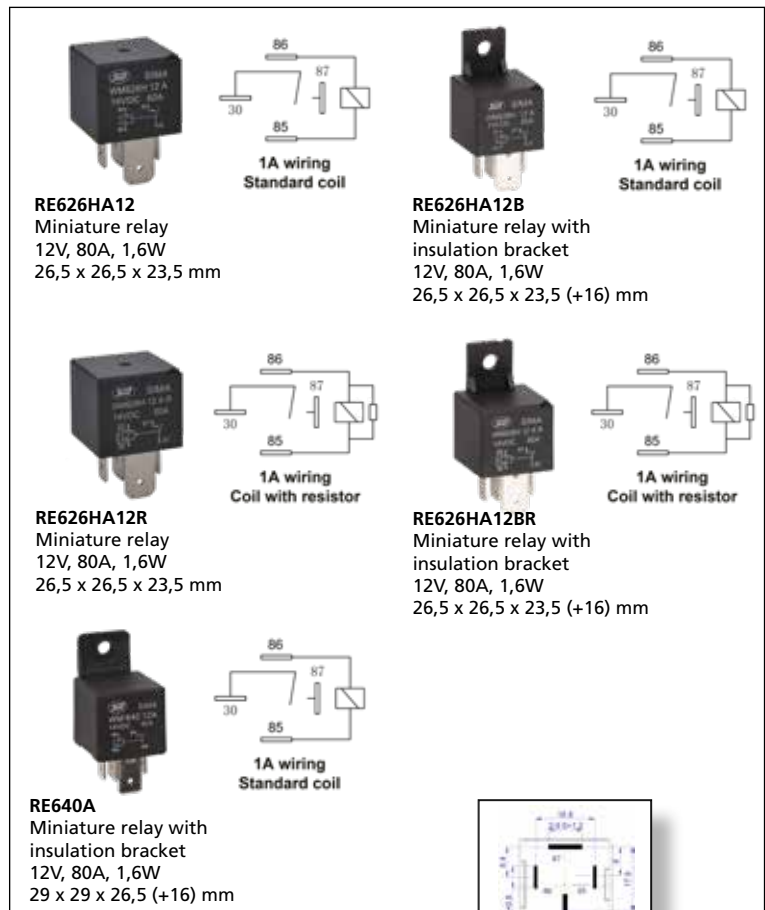
**RE620A**  
Miniature relay with insulation bracket  
12V, 40A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

**RE620A12R**  
Miniature relay  
12V, 40A, 1,6W  
26,5 x 26,5 x 24,5 mm

**RE620A12BR**  
Miniature relay with insulation bracket  
12V, 40A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm



**RE730A\***  
Small size relay  
12V, 40A, 1,6W  
28 x 28 x 25,5 mm



**RE626HA12**  
Miniature relay  
12V, 80A, 1,6W  
26,5 x 26,5 x 23,5 mm

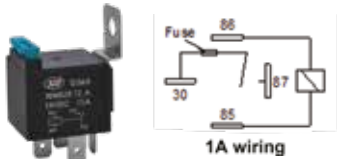
**RE626HA12B**  
Miniature relay with insulation bracket  
12V, 80A, 1,6W  
26,5 x 26,5 x 23,5 (+16) mm

**RE626HA12R**  
Miniature relay  
12V, 80A, 1,6W  
26,5 x 26,5 x 23,5 mm

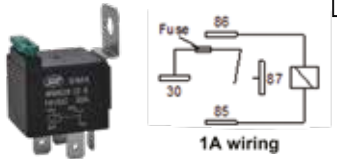
**RE626HA12BR**  
Miniature relay with insulation bracket  
12V, 80A, 1,6W  
26,5 x 26,5 x 23,5 (+16) mm

**RE640A**  
Miniature relay with insulation bracket  
12V, 80A, 1,6W  
29 x 29 x 26,5 (+16) mm

\* RE730A will be replaced by RE734A after stock runs out

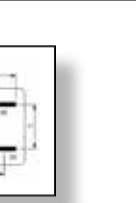


**RE629A15**  
Small size relay with metal bracket and fuse  
12V, 15A, 1,6W  
32 x 26,5 x 23,5 (+16,5) mm




**RE629A**  
Small size relay with metal bracket and fuse  
12V, 30A, 1,6W  
32 x 26,5 x 23,5 (+16,5) mm

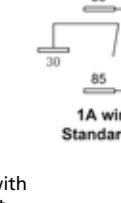
**RE629A25 (25A with fuse) is no longer available**



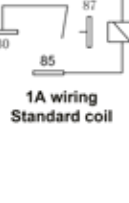
**RE630F12A**  
Miniature relay  
12V, 40A, 1,6W  
28 x 28 x 25,5 mm



**RE630FA12B**  
Miniature relay with insulation bracket  
12V, 40A, 1,6W  
28 x 28 x 25,5 (+16) mm



**RE651A**  
Miniature relay  
12V, 30A, 1,6W  
20,5 x 15,5 x 22,5 mm



**RE651AR**  
Miniature relay  
12V, 30A, 1,6W  
20,5 x 15,5 x 22,5 mm

## Relays - 12V, 5 pins

**RE634A**  
Miniature relay  
12V, 40/30A, 1,6W  
Ø 40 x 37,5 mm

1C wiring  
Standard coil

**RE730B\***  
Small size relay  
12V, 40/30A, 1,6W  
28 x 28 x 25,5 mm

1C wiring  
Coil with resistor

**RE732A**  
Small size relay  
12V, 40/30A, 1,6W  
35,5 x 35,5 x 45,5 mm

1C wiring  
Standard coil

\* RE730B will be replaced by RE734B after stock runs out

**RE62012C**  
Miniature relay  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 mm

1C wiring  
Standard coil

**RE620B**  
Miniature relay with insulation bracket  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

1C wiring  
Standard coil

**RE62012CD**  
Miniature relay  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 mm

1C wiring  
Coil with diode

**RE62012CDGRN**  
Miniature relay  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 mm

1C wiring  
Coil with diode

**RE62012CBD**  
Miniature relay with insulation bracket  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

1C wiring  
Coil with diode

**RE620Q12C**  
Miniature relay  
12V, 40/30A, 1,6W  
35,5 x 35,5 x 45 mm  
Waterproof in combination with SOCKET04 and SOCKET04-5

1C wiring  
Standard coil

**RE62012CR**  
Miniature relay  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 mm

1C wiring  
Coil with resistor


**RE62012CBR**  
Miniature relay with insulation bracket  
12V, 40/30A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

1C wiring  
Coil with resistor

**RE630B**  
Miniature relay with insulation bracket  
12V, 40/30A, 1,6W  
28 x 28 x 25,5 (+16) mm


1C wiring  
Standard coil





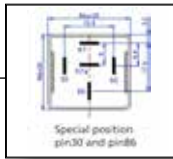

**RE630F12CB**  
Miniature relay with insulation bracket  
12V, 40/30A, 1,6W  
28 x 28 x 25,5 (+16) mm

**1C wiring Standard coil**



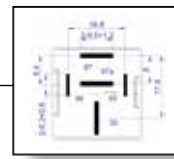
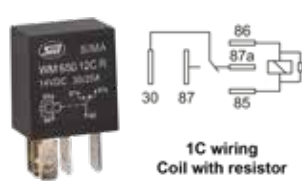
**RE630F12CD**  
Miniature relay  
12V, 40/30A, 1,6W  
28 x 28 x 25,5 mm

**1C wiring Coil with diode**


**RE640B**  
Miniature relay with insulation bracket  
12V, 80/60A, 1,6W  
29 x 29 x 26,5 (+16) mm

**1C wiring Standard coil**


**RE65012CRS\***  
Miniature relay  
12V, 30/25A, 1,6W  
23,5 x 15,5 x 26,5 mm

**1C wiring Coil with resistor**




**RE652A**  
Miniature relay  
12V, 30/20A, 1,6W  
23,2 x 15,5 x 25,5 mm

**1C wiring Standard coil**




**RE651B**  
Miniature relay  
12V, 30/25A, 1,6W  
20,5 x 15,5 x 22,5 mm

**1C wiring Standard coil**



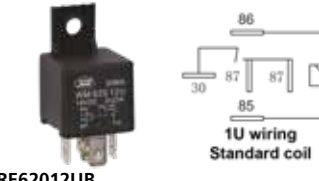
**RE651D**  
Miniature relay  
12V, 35/25A, 1,6W  
20,5 x 15,5 x 22,5 mm

**1C wiring Coil with diode**




**RE62012U**  
Miniature relay  
12V, 2x20A, 1,6W  
26,5 x 26,5 x 24,5 mm

**1U wiring Standard coil**



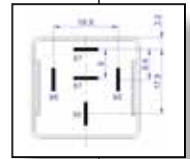
**RE62012UB**  
Miniature relay with insulation bracket  
12V, 2x20A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

**1U wiring Standard coil**




**RE62012UBD**  
Miniature relay with insulation bracket  
12V, 2x20A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

**1U wiring Coil with diode**

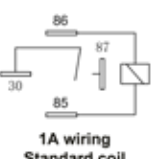


\* RE650 series will be replaced by RE652 series after stock runs out


## Relays - 24V, 4 pins



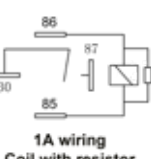
**RE62024A**  
Miniature relay  
24V, 20A, 1,6W  
26,5 x 26,5 x 24,5 mm




1A wiring  
Standard coil



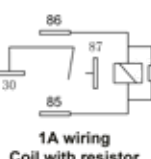
**RE62024AR**  
Miniature relay  
24V, 20A, 1,6W  
26,5 x 26,5 x 24,5 mm




1A wiring  
Coil with resistor



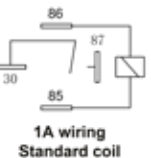
**RE620A24BR**  
Miniature relay with insulation bracket  
24V, 20A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm




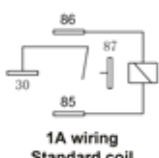
1A wiring  
Coil with resistor



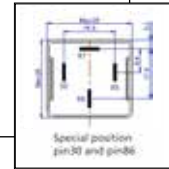
**RE630A**  
Miniature relay with insulation bracket  
24V, 20A, 1,6W  
28 x 28 x 25,5 (+16) mm




1A wiring  
Standard coil

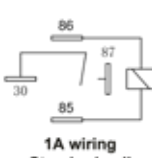



**RE630FA24B**  
Miniature relay with insulation bracket  
24V, 20A, 1,6W  
28 x 28 x 25,5 (+16) mm






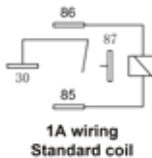
**RE626H24A**  
Miniature relay  
24V, 40A, 1,6W  
26,5 x 26,5 x 23,5 mm



1A wiring  
Standard coil




**RE626HA24B**  
Miniature relay with insulation bracket  
24V, 40A, 1,6W  
26,5 x 26,5 x 23,5 (+16) mm

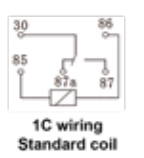


1A wiring  
Standard coil


## Relays - 24V, 5 pins



**RE734C**  
Miniature relay  
24V, 40/30A, 1,6W  
23 x 15,3 x 25,5

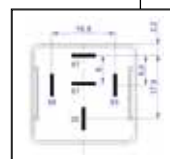


1C wiring  
Standard coil





**RE62024U**  
Miniature relay  
24V, 2x10A, 1,6W  
26,5 x 26,5 x 24,5 mm







**RE62024UB**  
Miniature relay with insulation bracket  
24V, 2x10A, 1,6W  
26,5 x 26,5 x 24,5 (+16) mm

<p><b>RE62024C</b> Miniature relay 24V, 20/15A, 1,6W 26,5 x 26,5 x 24,5 mm</p>	<p>1C wiring Standard coil</p>	<p><b>RE62024CB</b> Miniature relay with insulation bracket 24V, 20/15A, 1,6W 26,5 x 26,5 x 24,5 (+16) mm</p>	<p>1C wiring Standard coil</p>
<p><b>RE62024CD</b> Miniature relay 24V, 20/15A, 1,6W 26,5 x 26,5 x 24,5 mm</p>	<p>1C wiring Coil with diode</p>	<p><b>RE62024CBD</b> Miniature relay with insulation bracket 24V, 20/15A, 1,6W 26,5 x 26,5 x 24,5 (+16) mm</p>	<p>1C wiring Coil with diode</p>
<p><b>RE62024CR</b> Miniature relay 24V, 20/15A, 1,6W 26,5 x 26,5 x 24,5 mm</p>	<p>1C wiring Coil with resistor</p>	<p><b>RE62024CBR</b> Miniature relay with insulation bracket 24V, 20/15A, 1,6W 26,5 x 26,5 x 24,5 (+16) mm</p>	<p>1C wiring Coil with resistor</p>
	<p><b>RE620Q24C</b> Miniature relay 24V, 40/30A, 1,6W 35,5 x 35,5 x 45 mm Waterproof in combination with SOCKET04 and SOCKET04-5</p>		
<p><b>RE626H24CB</b> Miniature relay with insulation bracket 24V, 60/40A, 1,6W 26,5 x 26,5 x 23,5 (+16) mm</p>	<p>1C wiring Standard coil</p>	<p><b>RE630C</b> Miniature relay with insulation bracket 24V, 20/10A, 1,6W 28 x 28 x 25,5 (+16) mm</p>	<p>1C wiring Standard coil</p>


## Relays - 12/24V flashers




**RE010V**  
Flasher relay with bulb failure indication  
12V, 21W~150W  
30,5 x 30,5 x 39 mm




**RE014V**  
Flasher relay with bulb failure indication  
12V, 21W~150W  
30,5 x 30,5 x 30 mm

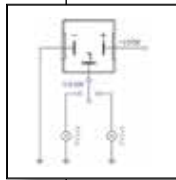



**RE015V**  
Flasher relay with bulb failure indication  
12V, 21W~150W  
30,5 x 30,5 x 30 mm



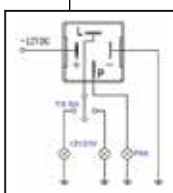



**RE016V**  
Flasher relay with bulb failure indication  
12V, 21W~150W  
30,5 x 30,5 x 30 mm



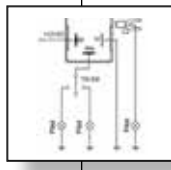





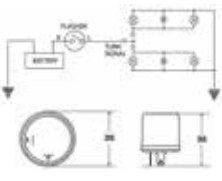
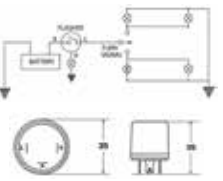
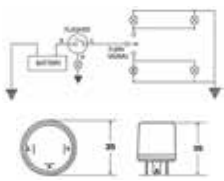
**RE48V**  
Flasher relay with bulb failure indication  
12V, 21W~150W  
30,5 x 30,5 x 30 mm



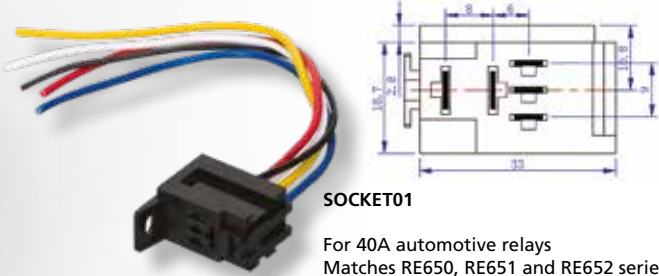


**RE048W**  
Flasher relay with bulb failure indication  
12V, 21W~150W  
30,5 x 30,5 x 30 mm

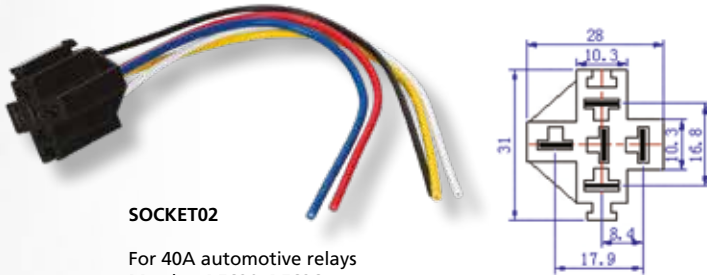


 <p><b>HD12</b> Flasher relay 12V, 1~10, 21W Ø 35 x 35 mm</p>	 <p><b>EG23</b> Flasher relay Separate pilot light output terminal 24V, 1~6, 21W Ø 35 x 35 mm</p>	 <p><b>HD13</b> Flasher relay Separate pilot light output terminal 12V, 1~10, 21W Ø 35 x 35 mm</p>
		

Sockets for automotive relays



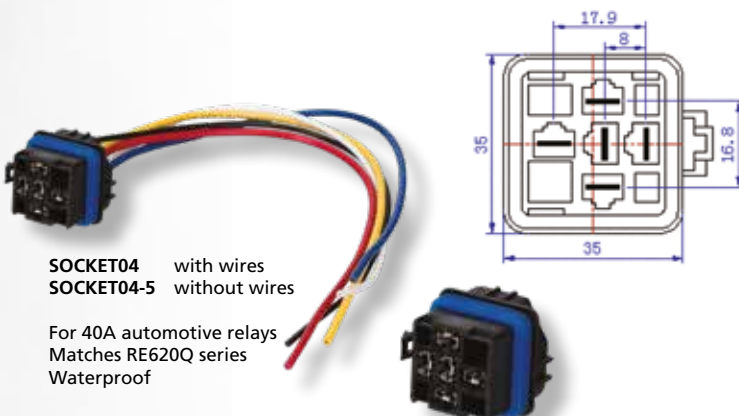
**SOCKET01**  
For 40A automotive relays  
Matches RE650, RE651 and RE652 series  
Stackable



**SOCKET02**  
For 40A automotive relays  
Matches RE620, RE626,  
RE630 and RE634 series  
Stackable



**SOCKET03**  
For 80A automotive relays  
Matches RE626H and RE640 series  
Stackable



**SOCKET04** with wires  
**SOCKET04-5** without wires  
For 40A automotive relays  
Matches RE620Q series  
Waterproof

Sockets 01, 02 and 03 are stackable through male-female slots



## Switches



**AE-ZZ012**  
Toggle switch

On-Off-On  
10A@12V  
3 Screw contacts  
Installation dimension Ø 13 mm



**AE-ZZ114**  
Toggle switch

On-Off-On  
25A@12V  
3 Screw contacts  
Installation dimension Ø 13 mm



**AE-ZZ021**  
Toggle switch

On-Off  
10A@12V  
2 Tab contacts 6,4 mm  
Installation dimension Ø 13 mm



**AE-ZZ118**  
Toggle switch

On-Off-On  
10A@12V  
3 Tab contacts 6,4 mm  
Installation dimension Ø 13 mm



**AE-ZZ119**  
Toggle switch

On-Off-On  
10A@12V  
3 Tab contacts 6,4 mm  
Installation dimension Ø 13 mm



**AE-ZZ227**  
Toggle switch

On-Off  
20A@12V  
2 Tab contacts 6,4 mm  
Installation dimension Ø 13 mm



Toggle switch  
25A@12V  
Screw contacts  
Installation dimension Ø 13 mm



**AE-ZZ134** 2 contacts, On-Off  
**AE-ZZ135** 2 contacts, (On)-Off  
**AE-ZZ136** 3 contacts, (On)-Off-(On)  
**AE-ZZ137** 3 contacts, On-Off-On

Toggle switch with faceplate

25A@12V  
Screw contacts  
Installation dimension Ø 13 mm

**AE-ZZ126** 4 contacts, On-Off  
**AE-ZZ127** 4 contacts, (On)-Off  
**AE-ZZ128** 6 contacts, On-Off-On  
**AE-ZZ129** 6 contacts, (On)-Off-(On)



Toggle switch with bulb

On-Off  
20A@12V  
3 Tab contacts 6,4 mm  
Installation dimension Ø 13 mm

**AE-ZZ120** blue  
**AE-ZZ121** red  
**AE-ZZ122** green



Toggle switch with bulb

On-Off  
12V, 10A  
3 Tab contacts 6,4 mm  
Installation dimension Ø 13 mm

**AE-ZZ123** amber  
**AE-ZZ124** blue  
**AE-ZZ125** green



LED toggle switch

On-Off  
20A@12V  
2 Tab contacts 6,4 mm  
1 Tab contact 6,2 mm  
Installation dimension Ø 13 mm

**AE-ZZ130** amber  
**AE-ZZ131** blue  
**AE-ZZ132** red\*  
**AE-ZZ133** green  
**AE-ZZ149** clear

\* New stock, please check the new datasheet on our website



**AE-ZZ018**  
Brake light switch  
(On)-Off  
10A@12V  
2 Screw contacts



**AE-ZZ040**  
Blocking diode  
  
12-24V  
Tension max 400V max 1A / 75 °C  
Protection type IP54  
2 Tab contacts 6,3 mm  
DIN/ISO 40050



**AE-ZZ027**  
Rotary knob blower switch with  
symbol imprint on the knob  
  
0-1-2-3 (4 positions)  
23A@12V or 12,5A@24V  
5 Tab contacts 6,3 mm  
Protection type IP53  
Installation dimension Ø 12,5 mm



**AE-ZZ070**  
Universal push-pull switch  
  
Off-On-On  
30A fuse@6V or 15A fuse@12V  
5 Screw contacts  
Length mounting stem 9 mm  
Installation dimension Ø 11 mm



**AE-ZZ116**  
Push-pull universal head light switch with  
symbol imprint on the knob  
  
On-Off  
30A@12V  
2 Screw contacts  
Length mounting stem 12 mm  
Installation dimension Ø 13 mm



**AE-ZZ024**  
Push-pull switch with small knob  
  
On-Off  
6A@12V  
2 Screw contacts  
Length mounting stem 19 mm  
Installation dimension Ø 9 mm



**AE-ZZ117**  
Push-pull switch with small knob  
  
On-Off  
6A@12V  
2 Screw contacts  
Length mounting stem 13 mm  
Installation dimension Ø 9 mm



**AE-ZZ025**  
Push-pull switch with small knob  
  
On-Off  
6A@12V  
2 Screw contacts  
Length mounting stem 8 mm  
Installation dimension Ø 9 mm



**AE-ZZ141**  
Push-pull switch  
  
On-Off  
6A@12V  
2 Tab contacts  
Length mounting stem 6,4 mm  
Installation dimension Ø 9 mm



**AE-ZZ032**  
Push-pull switch with small knob  
  
On-Off  
10A@12V or 5A@24V  
2 Screw contacts  
Length mounting stem 12 mm  
Installation dimension Ø 8,5 mm



**AE-ZZ115**  
Push-pull switch with small knob  
  
On-Off  
10A@12V or 5A@24V  
2 Tab contacts 6,3 mm  
Length mounting stem 12 mm  
Installation dimension Ø 8,5 mm



**AE-ZZ028**  
Push-pull switch with small knob  
  
On-Off  
10A@12V or 2,5A@24V  
2 Screw contacts  
Panel thickness 0,5-2 mm  
Installation dimension Ø 8,5 mm



Rocker switch panel combination with bulb

On-Off  
10A@12V  
3 Tab contacts

AE-ZZ105 green  
AE-ZZ106 amber



**AE-ZZ223**  
Rocker switch  
On-Off  
16A@12V  
2 Tab contacts 4,8 mm  
Installation dimension 19 x 13 mm



**AE-ZZ225**  
Rocker switch  
On-Off-On  
16A@12V  
3 Tab contacts 4,8 mm  
Installation dimension 19 x 13 mm



**AE-ZZ224**  
Rocker switch  
On-Off  
16A@12V  
2 Tab contacts 4,8 mm  
Installation dimension Ø 20 mm

LED rocker switch

On-Off  
10A@12V  
3 Tab contacts 4.8 mm  
Installation dimension Ø 20 mm

AE-ZZ215 red  
AE-ZZ216 amber  
AE-ZZ217 green  
AE-ZZ218 blue



LED rocker switch

On-Off  
10A@12V  
3 Tab contacts 4,8 mm  
Installation dimension Ø 20 mm

AE-ZZ219 red  
AE-ZZ220 amber  
AE-ZZ221 green  
AE-ZZ222 blue



**AE-ZZ011**  
Door contact switch

On-(Off)  
5A@12V  
2 Screw contacts  
Installation dimension Ø 18,5 mm



**AE-ZZ150**  
Universal door light switch

On-(Off)  
Copper contacts



**AE-ZZ003**  
Momentary push button switch with waterproof rubber cover  
  
(On)-Off  
20A@12V  
2 Screw contacts  
Installation dimension Ø 23 mm



**AE-ZZ107**  
Push button switch  
  
On-Off  
20A@12V  
2 Screw contacts  
Installation dimension Ø 22,5 mm



**AE-ZZ100**  
Momentary push button switch  
  
(On)-Off  
11A@12V or 2,5A@24V  
2 Tab contacts  
Installation dimension Ø 20 mm



Push button switch  
  
On-Off  
15A@12V  
2 Tab contacts  
Installation dimension Ø 22,5 mm



**AE-ZZ140**  
Push button switch with waterproof rubber cover  
  
On-Off  
60A@12V or 40A@24V  
2 Screw contacts  
Installation dimension Ø 16,5 mm



**AE-ZZ108**  
Push button switch  
  
On-Off  
10A@12V or 5A@24V  
2 Screw contacts  
Installation dimension Ø 22,5 mm

**AE-ZZ138** without rubber cover  
**AE-ZZ139** with waterproof rubber cover



**AE-ZZ226**  
Push button switch  
  
On-Off  
20A@12V  
2 Screw contacts  
Installation dimension Ø 20 mm

**AE-ZZ145**  
Burglar alarm switch with 2 keys  
  
With dust shutter  
Off-On  
2 Screw contacts  
Installation dimension Ø 21,5 mm

**AE-ZZ007**  
Ignition/starter switch with 2 keys  
**AE-ZZ007SL**  
Set of 2 spare keys

**AE-ZZ007SL**

With starter lockout  
0-I-II (3 positions)  
2-25A@12V  
5 Silver plated tab contacts 6,3 mm  
Protection type IP40  
Installation dimension Ø 18,5 mm

**AE-ZZ007**

**Switch covers**



**AE-ZZ148**  
Waterproof rubber cover  
  
For toggle switches with M12 thread  
Length 24,5 mm

Security cover for On-Off toggle switches

**AE-ZZ146** red  
**AE-ZZ147** carbon



### Pilot lights

LED pilot light  
Installation dimension Ø 9 mm  
2 Tab contacts  
12V

AE-ZZ142 amber  
AE-ZZ143 green  
AE-ZZ144 red



Pilot light with colored lens  
Bulb BA9s not included  
Installation dimension Ø 17,2 mm  
2 Screw contacts  
6-24V

AE-ZZ101 amber  
AE-ZZ102 blue  
AE-ZZ103 red  
AE-ZZ104 green



### Buzzers



AE-ZZ041

Signal unit  
70 dB  
12V  
Dimensions 23 (+10,5) x 17 x 15 mm  
Pre-wired 100 mm, AWG 26, black and red



AE-ZZ084

Signal unit  
70 dB, tone pulse  
12-24V  
Dimensions Ø 32 x 30 mm  
Pre-wired black and red



AE-ZZ053

Signal unit  
95 dB, continuous sound  
12-24V  
Dimensions 37/40,5 x 30 mm





Truck & Trailer Parts  
 Plugs & Sockets  
 Lighting  
 Battery  
 Hose Clamps  
 Screws, Bolts & Nuts  
 Wire & Cable  
 Bundling & Protection  
 EV Products  
 Insulated Terminals  
 Non-insulated Terminals

Cord End Terminals  
 Housing

Fuses & Fuse Holders

Relays, Switches, Pilot Lights & Buzzers

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## Tools

Assortment Kits

## Quick interchangeable crimping series

No need to use any other tools, simply change the die set. Compose your own tool sets from the following components:

- Choose from 3 different quick change ratchet tools



MHQIBE  
8,7" carbon steel tool  
No die-set included



HJ43I  
8,7" aluminum tool  
No die-set included



HJ56I  
10" carbon steel tool  
No die-set included

















Notice the difference in weight between the 8,7" carbon steel tool and the aluminum tool. PLEASE NOTE THAT THE ALUMINUM TOOL IS NOT SUITABLE FOR HEAVY DUTY CRIMPING.

• Choose from 43 different die sets

Part nr.	Description	Part nr.	Description
DSQIA	 <p><b>For insulated terminals</b> AWG 22-18/16-14/12-10 0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup></p>	DSQICQ	 <p><b>For open barrel terminals</b> AWG 20-18/16-14/12-10 0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup> MIM procedure</p>
DSQIA1	 <p><b>For heat shrink butt connectors</b> AWG 22-18/16-14/12-10 0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup></p>	DSQIC1	 <p><b>For open barrel terminals</b> AWG 26-24/24-22/22-18 0,1-0,25/0,25-0,5/0,5-1,0 mm<sup>2</sup></p>
DSQIA2	 <p><b>For fully insulated female connectors</b> AWG 22-18/16-14/12-10 0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup></p>	DSQIC3	 <p><b>For open barrel flag terminals</b> AWG 20-14/20-16 0,5-1,5/0,5-2,5 mm<sup>2</sup></p>
DSQIA3	 <p><b>For miniature insulated terminals</b> AWG 26-22/24-18/22-16 0,1-0,5/0,25-1,0/0,5-1,5 mm<sup>2</sup></p>	DSQID	 <p><b>For cord end terminals (small AWG)</b> AWG 22/20/18/16/14/12 0,5/0,75/1,0/1,5/2,5/4,0 mm<sup>2</sup></p>
DSQIA4	 <p><b>For insulated flag terminals</b> AWG 22-18/16-14 0,5-1,0/1,5-2,5 mm<sup>2</sup></p>	DSQIE	 <p><b>For RG type coaxial cable connectors</b> .255/.213/.100/.068/.324" 6,48/5,41/2,54/1,72/8,23 mm RG 58, 59, 62, 6</p>
DSQIA5	 <p><b>For heat shrink &amp; closed end terminals</b> AWG 22-18/16-14/12-10 0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup></p>	DSQIE1	 <p><b>For RG type coaxial cable connectors</b> .255/.187/.068/.213" 6,48/4,75/1,72/5,41 mm RG 58, 59, 62, 174</p>
DSQIB	 <p><b>For non-insulated terminals</b> AWG 20-18/16-14/12-10/8 1,5/2,5/6,0/10,0 mm<sup>2</sup></p>	DSQIE2	 <p><b>For RG type coaxial cable connectors</b> .256/.319/.068/.213" 6,50/8,10/1,72/5,41 mm RG 58, 59, 62, 6</p>
DSQIC	 <p><b>For open barrel terminals</b> AWG 20-18/16-14/12-10 0,5-1,0/1,5-2,5/4,0-6,0 mm<sup>2</sup></p>	DSQIE3	 <p><b>For RG type coaxial cable connectors</b> .043/.068/.100/.137/.213/.255" 1,09/1,72/2,54/3,48/5,41/6,48 mm RG 58, 59, 62, 174 Fiber Optic</p>

Part nr.	Description	Part nr.	Description
DSQIE4	 <p>For RG type coaxial cable connectors            .100/.128/.429"            2,54/3,25/10,9 mm            RG 8, 11, 174, 179, 213</p>	DSQIH6	 <p>For Delphi Weatherpack terminals            AWG 22/20-18            0,35/0,5-0,8/ mm<sup>2</sup></p> 
DSQIE5	 <p>For RG type coaxial cable connectors            .042/.068/.078/.128/.151/.178"            1,07/1,72/1,98/3,25/3,84/4,52 mm            RG 174, 179 Belden, 8218 Fiber Optic</p>	DSQIH7	 <p>For Delphi Weatherpack terminals            AWG 16-14/12            1,0-2,0/3,0 mm<sup>2</sup></p> 
DSQIE6	 <p>For RG type coaxial cable connectors            .100/.213/.319/.360"            2,54/5,41/8,10/9,14 mm            RG 58, 59, 6</p>	DSQIIQ1	 <p>For MC3 solar connectors            AWG 14/12/10            2,5/4,0/6,0 mm<sup>2</sup>            MIM procedure</p>
DSQIF	 <p>For cord-end terminals (medium AWG)            AWG 10/8.0/6.0            6,0/10,0/16,0 mm<sup>2</sup></p>	DSQII2	 <p>For MC4 solar connectors            AWG 14/12/10            2,5/4,0/6,0 mm<sup>2</sup></p>
DSQIF1	 <p>For cord-end terminals (large AWG)            AWG 4/2            25,0/35,0 mm<sup>2</sup></p>	DSQIIQ2	 <p>For MC4 solar connectors            AWG 14/12/10            2,5/4,0/6,0 mm<sup>2</sup>            MIM procedure</p>
DSQIH	 <p>For open barrel terminals &amp; D-Sub, V3.5            AWG 14/22/8.0-6.0            2,5/0,5/8,0-10,0 mm<sup>2</sup></p>	DSQIIQ3	 <p>For Tyco solar connectors            AWG 15-10            1,5/2,5/4,0/6,0 mm<sup>2</sup>            MIM procedure</p>
DSQIH1	 <p>For spark plug connectors            AWG 17            1,0 mm<sup>2</sup></p>	DSQIK1	 <p>For open barrel Deutsch terminals (DTP series)            AWG 14/12            2,5/4,0 mm<sup>2</sup></p> 
DSQIH2	 <p>For Superseal terminals            AWG 22-20/16            DIN 0,35-0,5/1,5 mm<sup>2</sup></p> 	DSQIK2	 <p>For open barrel Deutsch terminals (DTP series)            AWG 12/10            5,0/6,0 mm<sup>2</sup></p> 
DSQIH3	 <p>For Superseal terminals            AWG 18/17            DIN 0,75/1,0 mm<sup>2</sup></p> 	DSQIK3	 <p>For open barrel Deutsch terminals (DT series)            AWG 18/16/14            1,0/1,5/2,5mm<sup>2</sup></p> 



Part nr.	Description	Part nr.	Description
DSQIK4	 <p>For open barrel Deutsch terminals (DT series)</p> <p>AWG 20/18/16 0,5/1,0/1,5 mm<sup>2</sup></p> 	DSQIL1	 <p>For male Junior Power Timer/VAG and Multiple Contact Point terminals with or without seal</p> <p>AWG 20-18/16-14 0,5-1,0/1,5-2,5 mm<sup>2</sup></p> 
DSQIK5	 <p>For open barrel Deutsch terminals (DTM series)</p> <p>AWG 20/18/16 0,5/1,0/1,5 mm<sup>2</sup></p> 	DSQIL2	 <p>For female Junior Timer (0,12-2,5 mm<sup>2</sup>) and Standard Timer (0,2-2,5 mm<sup>2</sup>) terminals</p> <p>AWG 20-18/16/18-16/14 0,5-1,0/1,5/1,0-1,5/2,5 mm<sup>2</sup></p> <p>Suitable for insulation-reduced stranded wires</p>
DSQIK6	 <p>For open barrel Deutsch terminals (DT series)</p> <p>AWG 16/14/12 1,5/2,5/4,0 mm<sup>2</sup></p> 	DSQIL10	 <p>For Standard Power Timer and Multiple Contact Point terminals</p> <p>AWG 24-20/20-18/16-14/12 0,2-0,5/0,5-1,0/1,5-2,5/4,0 mm<sup>2</sup></p> <p>Suitable for insulation-reduced stranded wires</p>
DSQIKQ8	 <p>For solid Deutch terminals (4 indent crimp)</p> <p>AWG 20/16/12 0,5/1,5/4,0 mm<sup>2</sup></p> <p>MIM procedure</p>	DSQIL11	 <p>For female Standard Power Timer terminals with single wire sealing system</p> <p>AWG 20-18/16-14/15-12 0,5-1,0/1,5-2,5/3,0-4,0 mm<sup>2</sup></p>
DSQIL	 <p>For female Junior Power Timer/VAG terminals with or without seal</p> <p>With seal: AWG 24-20/20-18/16-14 0,2-0,5/0,5-1,0/1,5-2,5 mm<sup>2</sup></p> <p>Without seal: AWG 24-20 0,2-0,5 mm<sup>2</sup></p> 		

• Or choose from our pre-filled cases with tool and die sets

### ASSAETOOL02

Complete kit, consisting of 8,7" carbon steel tool MHQIBE and 6 die sets for various terminals:

- DSQIA
- DSQIB
- DSQIC
- DSQID
- DSQIF
- DSQIH



### ASSAETOOL02-1

Kit, consisting of 5 die sets for various terminals:

- DSQIA
- DSQIB
- DSQIC
- DSQID
- DSQIF

No tool included





### ASSAETOOL03

Complete kit, consisting of 8,7" carbon steel tool MHQIBE and 6 die sets for open barrel Deutsch terminals:

- DSQIK1
- DSQIK2
- DSQIK3
- DSQIK4
- DSQIK5
- DSQIK6



### ASSAETOOL04

Complete kit, consisting of 8,7" carbon steel tool with die set for 0,5/1,5/4,0 mm<sup>2</sup> solid Deutsch terminals (2 indents), wedge removal/small screw driver combination tool and 3 terminal release tools (for contact sizes 20, 16 and 12 gauge)



### ASSAETOOL10

Complete kit, consisting of 10" carbon steel tool HJ56I and 6 die sets for various terminals:

- DSQIA
- DSQIB
- DSQIC
- DSQIC1
- DSQIH
- DSQIH1



### ASSAETOOL33

Complete kit, consisting of 8,7" aluminum tool HJ43I and 3 die sets for open barrel terminals:

- DSQIC
- DSQIC1
- DSQIH



### ASSAETOOL60\*

Complete kit, consisting of 8,7" carbon steel tool MHQIBE and 2 die sets for insulated terminals:

DSQIA  
DSQIA3

OR

### ASSAETOOL61\*

Complete kit, consisting of 8,7" carbon steel tool MHQIBE and 2 die sets for open barrel terminals:

DSQIC  
DSQIC1

OR

### ASSAETOOL62\*

Complete kit, consisting of 8,7" carbon steel tool MHQIBE and 2 die sets for open barrel Deutch DT series terminals:

DSQIK3  
DSQIK4

**+** 9086BB\*\*  
Case for a 9" tool and up to 3 die sets



**+**



MHQIBE  
8,7" carbon steel tool

\* It is possible to choose another combination of die sets (up to 3 die sets)  
\*\* This case is also separately available

### ASSAETOOL55

Complete kit, consisting of 8,7" carbon steel tool MHQIBE and 5 die sets for insulated terminals:

DSQIA1  
DSQIA2  
DSQIA3  
DSQIA4  
DSQIA5



We also have available:

### ASSAETOOL CASE

Empty case with space for a 8,7" tool and 5 die sets



The quick interchangeable ratchet tools are also available in our professional assortment kits on pages 296 - 298

### Crimping tools - For insulated terminals



**BN-03C**  
For insulated terminals  
0,5 - 6,0 mm<sup>2</sup>



**BN-05C**  
For insulated terminals  
0,5 - 6,0 mm<sup>2</sup>



**MH-1DS**  
For insulated flag terminals  
0,5 - 2,5 mm<sup>2</sup>



**KH-13**  
For heat shrink and closed end terminals  
0,5-6,0 mm<sup>2</sup>

### Crimping tools - For non-insulated open barrel terminals



**BN-02B**  
For non-insulated open barrel terminals  
0.1-1.0 mm<sup>2</sup>



**BN-03B**  
For non-insulated open barrel terminals  
DOUBLE crimp  
0,5 - 6,0 mm<sup>2</sup>



**BN-06FL**  
For non-insulated open barrel flag terminals  
0,5 - 2,5 mm<sup>2</sup>

## Crimping tools - For non-insulated terminals



**BN-10**  
For non-insulated (**brazed seam only**) terminals  
1,5 - 10,0 mm<sup>2</sup>



**KH-9**  
For non-insulated terminals  
1,5 - 10,0 mm<sup>2</sup>



**KH-16**  
For non-insulated terminals  
1,5 - 16,0 mm<sup>2</sup>



**KH-22**  
For non-insulated terminals  
6,0 - 25,0 mm<sup>2</sup>



**KH-38**  
For non-insulated terminals  
6,0 - 35,0 mm<sup>2</sup>



**KHB-50**  
For non-insulated terminals  
HEXAGONAL crimp  
6,0 - 50,0 mm<sup>2</sup>



**KHB-120**  
For non-insulated terminals  
HEXAGONAL crimp  
10,0 - 120,0 mm<sup>2</sup>



**KH-120**  
For non-insulated terminals  
10,0 - 120,0 mm<sup>2</sup>



**KHB-150**  
For non-insulated terminals  
HEXAGONAL crimp  
25,0 - 150,0 mm<sup>2</sup>



## Crimping tools - For cord end terminals

### For single wire cord end terminals



**BN-06WF**  
For cord-end terminals  
0,5 - 4,0 mm<sup>2</sup>



**MH-2P**  
For cord-end terminals  
6,0 - 16,0 mm<sup>2</sup>



**MH-3P**  
For cord-end terminals  
25,0 - 35,0 mm<sup>2</sup>



### For single and twin wire cord end terminals



**92145**  
For cord-end terminals  
**SQUARE crimp**  
Single wire 0,08 - 10,0 mm<sup>2</sup>  
Twin wire 2x0,25 - 2x4,0 mm<sup>2</sup>



**92146**  
For cord-end terminals  
**HEXAGONAL crimp**  
Single wire 0,08 - 16,0 mm<sup>2</sup>  
Twin wire 2x0,25 - 2x6,0 mm<sup>2</sup>





## Multi-tools - For insulated and non-insulated terminals



**KH-502**  
 Crimping:  
 Insulated terminals  
 0,5 - 6,0 mm<sup>2</sup>  
 Stripping:  
 0,75 - 6,0 mm<sup>2</sup>



**KH-502B**  
 Crimping:  
 Open barrel terminals  
 0,5 - 6,0 mm<sup>2</sup>  
 Stripping:  
 0,75 - 6,0 mm<sup>2</sup>



**KH-507**  
 Crimping:  
 Insulated & non-insulated (**brazed seam only**) terminals  
 0,5 - 6,0 mm<sup>2</sup>  
 Stripping:  
 0,75 - 6,0 mm<sup>2</sup>



**MEB-700C**  
 Crimping:  
 Insulated & open barrel terminals  
 0,5 - 6,0 mm<sup>2</sup>  
 Stripping:  
 0,75 - 6,0 mm<sup>2</sup>



**MEB-900C**  
 Crimping:  
 Non-insulated (**brazed seam only**) &  
 open barrel terminals  
 0,5 - 6,0 mm<sup>2</sup>  
 Stripping:  
 0,75 - 6,0 mm<sup>2</sup>



**ST062**  
 Crimping:  
 Non-insulated terminals (**brazed seam only**): 0,5 - 2,5 mm<sup>2</sup>  
 Open barrel terminals:  
 0,25 - 1,5 mm<sup>2</sup>  
 Coaxial cable connectors: 6 mm  
 Stripping:  
 0,25 - 4,0 mm<sup>2</sup>



## Wire strippers & cutters

### Wire strippers



**ST-700**  
Self-adjusting cutter/stripper  
0,25 - 4,0 mm<sup>2</sup>



**ST-731**  
Wire stripper  
0,25 - 6,0 mm<sup>2</sup>



**ST-50**  
Wire stripper  
0,5 - 4,0 mm<sup>2</sup>



**LY-700E**  
Wire stripper  
0,5 - 10,0 mm<sup>2</sup>



**ST-801**  
Multifunctional pliers/wire stripper  
Network cable stripper (K5) for cross cut or straight cut  
Wire stripper (high carbon steel):  
0,05 - 0,5 mm<sup>2</sup>  
Pliers: free size  
With 2 blades and 1 screw



**ST-800**  
Multifunctional pliers/wire stripper  
Network cable stripper (K5) for cross cut or straight cut  
Wire stripper (high carbon steel):  
0,5 - 6,0 mm<sup>2</sup>  
Pliers: free size  
With 2 blades and 1 screw

### Wire cutters



**LK-22A**  
Wire cutter for copper and aluminum wire  
Up to 25 mm<sup>2</sup>



**LK-38A**  
Wire cutter for copper and aluminum wire  
Up to 35 mm<sup>2</sup>



**LK-60A**  
Wire cutter for copper and aluminum wire  
Up to 50 mm<sup>2</sup>



**LK-38B**  
Cable scissors for copper and aluminum wire  
Up to 35 mm<sup>2</sup>

Blades made of 420 J2 stainless steel  
With safety lock and spring to automatically open the scissors

## Tightening and cutting tools for cable ties



**LY-600A**  
Tightening and cutting cable-ties  
2,4 - 4,8 mm width

Thickness up to 1,45 mm



**LY-600T**  
Tightening and cutting cable-ties  
2,2 - 4,8 mm width

Thickness up to 1,6 mm

### For nylon cable ties



**KBT-5A**  
Tightening and cutting cable-ties  
up to 12,0 mm width

Thickness up to 2,3 mm



**LY-600L**  
Tightening and cutting cable-ties  
up to 13,0 mm width

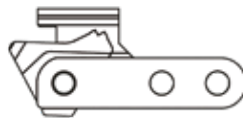
Thickness up to 1,5 mm



**EPCT0017**  
For stainless steel cable ties  
4,5 - 7,9 mm width

Thickness up to 0,25 mm  
Replacement parts available  
Adjustable tension dial for 4 levels of bundling pressure  
Automatic cut-off once required tension is reached

**NOT SUITABLE FOR COATED CABLE TIES**



**EPCT0017-3**  
Replaceable ratchet set  
Replacement recommended  
after 5000 cuts



**EPCT0017-2**  
Replaceable blade  
Replacement recommended  
after 5000 cuts



**EPCT0017-1**  
Replaceable blade seat  
Replacement recommended  
after 10000 cuts

### For stainless steel cable ties



**EPCT0021**  
For stainless steel cable ties  
4,6 - 12 mm width

Thickness up to 0,3 mm  
With semi-auto module for tightening  
and cutting off

## Terminal release tools

Description	Application
Ejection tool for contact sizes Ø 1,5 mm w/dismantling sleeve	BMW, DaimlerChrysler, Fiat, MAN, Opel, Porsche, Seat, Skoda, VW/Audi
Ejection tool for contact sizes Ø 3,5 mm w/dismantling sleeve	BMW, DaimlerChrysler, Fiat, MAN, Opel, Porsche, Seat, Skoda, VW/Audi
Ejection tool for contact sizes Ø 2,3 mm w/dismantling sleeve	Ford, Opel, PSA, Renault
Cable extractor tool for plugs with one release channel 2,8 and 5,8 mm	BMW, DaimlerChrysler, Ford, MAN, Opel, Porsche, PSA, Renault, Seat, Skoda, VW/Audi
Cable extractor tool for Micro Timer II, III contacts Ø 1,6 mm	DaimlerChrysler, Opel, Porsche, PSA, Renault, Saab, Seat, Skoda, VW/Audi
Cable extractor tool for Maxi Power Timer contacts 9,5 mm	DaimlerChrysler, VW/Audi
Cable extractor tool for Pit-Pod contacts	All vehicle makes
Cable extractor tool for Micro Timer I contacts and ABS plug-in housing Ø 1,6 mm	Fiat, Ford, Mazda, Opel, PSA, Renault, Saab, VW/Audi
Cable extractor tool for plugs with two release channels 2,8 and 5,8 mm	BMW, DaimlerChrysler, Fiat, Ford, MAN, Opel, PSA, Renault, Saab, VW/Audi



**ASSUTRT**  
12 pcs universal terminal release tool set in blue case



**ASSUTRT002**  
Deutsch terminal removal kit with wedge removal/flat tip screw driver combination tool and terminal release tools for contact sizes 20, 16, 14, 12, 8 and 4 gauge



**UT012**  
Terminal release tool for Delphi Weatherpack



**UT011**  
Wedge removal/flat tip screw driver combination tool for Deutsch

## Heat guns - For heat shrink sleeve, heat shrink terminals and solder sleeves



**MJ-600**  
Flameless heat gun\*



**MJ-300**  
Heat gun with micro-flame\*



**90-51773**  
Universal lighter gas (butane) 200 ml

\* Heat guns are supplied with empty lighter





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Relays, Switches, Pilot Lights

Tools



## Professional kits - Terminals / fuses / cord end terminals

**HI310552BC** PVC terminals  
552 pcs - 19 compartments  
incl. tool



- 1 x 10" ratchet crimper HJ56I
- 1 x die set DSQIA
- 1 x insulation tape
- 50 x cable tie (2,5 x 100 mm)
- 14 x REFVD 1.25-M3DIN
- 13 x REFVD 1.25-4DIN
- 13 x REFVD 1.25-5DIN
- 12 x REFVD 2-S3DIN
- 12 x REFVD 2-4DIN
- 12 x REFVD 2-5DIN
- 12 x REFVD 2-6DIN
- 13 x REFVD 5.5-4DIN
- 12 x REFVD 5.5-5DIN
- 25 x REFVDDF 1.25-250A
- 25 x RELVDDF 1.25-250A
- 25 x REFVDDM 1.25-250
- 25 x REFVDDF 2-250A
- 25 x RELVDDF 2-250A
- 25 x REFVDDM 2-250
- 12 x REFVDDF 5.5-250A
- 12 x REFVDDM 5.5-250
- 25 x RECVDGF 1.25-5
- 25 x REFVDGM 1.25-5
- 25 x RECVDGF 2-5
- 25 x REFVDGM 2-5
- 25 x REFVDDFM 1.25-250
- 25 x REFVDDFM 2-250B

**HF110278BC** Fuses & fuse holders  
279 pcs - 19 compartments



- Fuse Holders:**
  - 2 x FH1120
  - 1 x FH1335
  - 1 x FH7315
  - 1 x FH9120
  - 1 x FH9105
- NormOTO blade fuses:**
  - 15 x SBF1575
  - 30 x SBF1510
  - 30 x SBF1515
  - 25 x SBF1520
  - 20 x SBF1525
  - 25 x SBF1530
- MiniOTO blade fuses:**
  - 8 x BF7075
  - 25 x BF7010
  - 25 x BF7015
  - 25 x BF7020
  - 10 x BF7025
  - 10 x BF7030
- MaxiOTO blade fuses:**
  - 3 x BF9030
  - 3 x BF9040
  - 8 x BF9050
  - 8 x BF9060
  - 3 x BF9070

**HJ600135BC-A1** Heat shrinkable terminals  
398 pcs - 19 compartments  
incl. tool



- 1 x 10" ratchet crimper HJ56I
- 1 x die set DSQIA1
- 1 x die set DSQIA5
- 15 x HSF 1.25-250A
- 15 x HSM 1.25-250
- 10 x HSF 2-250A
- 10 x HSM 2-250
- 25 x HSC 1.25
- 25 x HSC 2
- 15 x HSC 5.5
- 25 x HS 1.25-4
- 25 x HS 1.25-5
- 25 x HS 1.25-6
- 20 x HS 1.25-8
- 25 x HS 1.25-10
- 25 x HS 2-4
- 25 x HS 2-5
- 25 x HS 2-6
- 25 x HS 2-8
- 15 x HS 2-10
- 10 x HS 5.5-4
- 10 x HS 5.5-5
- 10 x HS 5.5-6
- 5 x HS 5.5-8
- 10 x HS 5.5-10

**HJ603713BC** Cord end terminals (insulated and non-insulated)  
3713 pcs - 19 compartments  
incl. tool



1 x 10" ratchet crimper  
HJ561  
1 x die set DSQID  
1 x die set DSQIF

- |                   |                       |
|-------------------|-----------------------|
| <b>insulated:</b> | <b>non-insulated:</b> |
| 200 x AHO 0.50N   | 500 x AH 0.50         |
| 200 x AHW 0.75N   | 500 x AH 0.75         |
| 200 x AHG 1.00N   | 500 x AH 1.00         |
| 100 x AHR 1.50N   | 500 x AH 1.50         |
| 100 x AHB 2.50N   | 400 x AH 2.50         |
| 60 x AHGRS 4.00N  | 100 x AH 4.00         |
| 50 x AHZ 6.00N    | 100 x AH 6.00         |
| 25 x AHCR 10.00N  | 100 x AH 10.00        |
| 25 x AHGR 16.00N  | 50 x AH 16.00         |

**HJ601633BC** Cord end terminals (insulated)  
1663 pcs - 19 compartments  
incl. tool



1 x 10" ratchet crimper  
HJ561  
1 x die set DSQID  
1 x die set DSQIF

- |                   |                  |
|-------------------|------------------|
| 150 x AHW 0.50HL  | 75 x AHB 2.50L   |
| 200 x AHW 0.50N   | 60 x AHGRS 4.00N |
| 200 x AHGRS 0.75N | 40 x AHGRS 4.00L |
| 150 x AHGRS 0.75L | 50 x AHG 6.00N   |
| 200 x AHR 1.00N   | 30 x AHG 6.00L   |
| 150 x AHR 1.00L   | 25 x AHR 10.00N  |
| 100 x AHZ 1.50N   | 15 x AHR 10.00L  |
| 75 x AHZ 1.50L    | 25 x AHB 16.00N  |
| 100 x AHB 2.50N   | 15 x AHB 16.00L  |

**HJ602318BC** Cord end terminals (non-insulated)  
2318 pcs - 19 compartments  
incl. tool



1 x 10" ratchet crimper  
HJ561  
1 x die set DSQID  
1 x die set DSQIF

- |                 |                 |
|-----------------|-----------------|
| 200 x AH 0.50KK | 200 x AH 1.00HL |
| 200 x AH 0.50K  | 100 x AH 1.50   |
| 200 x AH 0.50   | 100 x AH 2.50   |
| 200 x AH 0.75KK | 40 x AH 4.00    |
| 200 x AH 0.75K  | 30 x AH 6.00    |
| 200 x AH 0.75   | 15 x AH 10.00   |
| 200 x AH 1.00KK | 15 x AH 16.00   |
| 200 x AH 1.00K  | 10 x AH 25.00   |
| 200 x AH 1.00   | 5 x AH 35.00    |

## Professional kits - Waterproof automotive connectors

**HJ410339BC-H2H3 Superseal**  
339 pcs - 22 compartments  
incl. tool



- |   |                           |
|---|---------------------------|
| 1 x 8,7" aluminum ratchet crimper HJ431 | Housing:                  |
| 1 x die set DSQIH2                      | 4 x 1 pole male housing   |
| 1 x die set DSQIH3                      | 4 x 1 pole female housing |
|   | 4 x 2 pole male housing   |
|   | 4 x 2 pole female housing |
| 50 x green seal 1,2~1,6 mm              | 3 x 3 pole male housing   |
| 50 x yellow seal 1,7~2,4 mm             | 3 x 3 pole female housing |
|   | 3 x 4 pole male housing   |
|   | 3 x 4 pole female housing |
| Terminals:                              | 2 x 5 pole male housing   |
| 50 x male 0,3~0,5 mm <sup>2</sup>       | 2 x 5 pole female housing |
| 50 x fem. 0,3~0,5 mm <sup>2</sup>       | 2 x 6 pole male housing   |
| 50 x male 0,75~1,5 mm <sup>2</sup>      | 2 x 6 pole female housing |
| 50 x fem. 0,75~1,5 mm <sup>2</sup>      |                           |

**HJ410220BC-H6H7 Delphi Weatherpack**  
220 pcs 22 compartments  
incl. tool



- |   |                           |
|---|---------------------------|
| 1 x 8,7" aluminum ratchet crimper HJ431               | Housing:                  |
| 1 x die set DSQIH6                                    | 3 x 1 pole male housing   |
| 1 x die set DSQIH7                                    | 3 x 1 pole female housing |
| 1 x extraction tool UT012 (also separately available) | 2 x 2 pole male housing   |
|   | 2 x 2 pole female housing |
| 25 x green seal 1,4~1,9 mm                            | 2 x 3 pole male housing   |
| 30 x green seal 2,5~3,4 mm                            | 1 x 3 pole female housing |
| 25 x blue seal 2,9~3,8 mm                             | 1 x 4 pole male housing   |
|   | 1 x 4 pole female housing |
| Terminals:  | 1 x 4 pole male housing   |
| 20 x male 0,5~0,85 mm <sup>2</sup>                    | 1 x 4 pole female housing |
| 20 x fem. 0,5~0,85 mm <sup>2</sup>                    | 1 x 4 pole male housing   |
| 20 x male 1,25~2,00 mm <sup>2</sup>                   | 1 x 4 pole female housing |
| 20 x fem. 1,25~2,00 mm <sup>2</sup>                   |                           |
| 20 x male 3 mm <sup>2</sup>                           |                           |
| 20 x fem. 3 mm <sup>2</sup>                           |                           |

**HJ888090BC-K3K4 Deutsch DT**  
92 pcs - 19 compartments  
incl. tool



- |   |                            |
|---|----------------------------|
| 1 x 10" carbon steel ratchet crimper HJ561            | Housing:                   |
| 1 x die set DSQIK3                                    | 5 x 2 pole male housing    |
| 1 x die set DSQIK4                                    | 5 x 2 pole female housing  |
| 1 x extraction tool UT011 (also separately available) | 3 x 3 pole male housing    |
|   | 3 x 3 pole female housing  |
|   | 2 x 4 pole male housing    |
|   | 2 x 4 pole female housing  |
|   | 2 x 6 pole male housing    |
|   | 2 x 6 pole female housing  |
|   | 1 x 8 pole male housing    |
| Terminals:  | 1 x 8 pole female housing  |
| 30 x male 0,5~1,5 mm <sup>2</sup>                     | 1 x 12 pole male housing   |
| 30 x fem. 0,5~1,5 mm <sup>2</sup>                     | 1 x 12 pole female housing |



**HE300350HC Superseal**  
350 pcs - 18 compartments



- Wire seals:**  
50 x green seal 1,2~1,6 mm  
50 x yellow seal 1,7~2,4 mm
- Terminals:**  
50 x male 0,3~0,5 mm<sup>2</sup>  
50 x female 0,3~0,5 mm<sup>2</sup>  
50 x male 0,75~1,5 mm<sup>2</sup>  
50 x female 0,75~1,5 mm<sup>2</sup>

- Housing:**  
6 x 1 pole male housing  
6 x 1 pole female housing  
6 x 2 pole male housing  
6 x 2 pole female housing  
4 x 3 pole male housing  
4 x 3 pole female housing  
4 x 4 pole male housing  
4 x 4 pole female housing  
3 x 5 pole male housing  
3 x 5 pole female housing  
2 x 6 pole male housing  
2 x 6 pole female housing

**HE290232HC Delphi Weatherpack**  
232 pcs - 20 compartments



- Wire seals:**  
25 x green seal 1,4~1,9 mm  
30 x green seal 2,5~3,4 mm  
25 x blue seal 2,9~3,8 mm
- Terminals:**  
20 x male 0,5~0,85 mm<sup>2</sup>  
20 x fem. 0,5~0,85 mm<sup>2</sup>  
20 x male 1,25~2,00 mm<sup>2</sup>  
20 x fem. 1,25~2,00 mm<sup>2</sup>  
20 x male 3 mm<sup>2</sup>  
20 x fem. 3 mm<sup>2</sup>

- Housing:**  
5 x 1 pole male housing  
5 x 1 pole female housing  
3 x 2 pole male housing  
3 x 2 pole female housing  
4 x 3 pole male housing  
4 x 3 pole female housing  
2 x 4 pole male housing  
2 x 4 pole female housing  
2 x 4 pole male housing  
2 x 4 pole female housing

**VAG015/1**  
115 pcs - 15 compartments



- Wire seals:**  
25 x wire seal grey
- Terminals:**  
25 x male 0,5~1,0 mm<sup>2</sup>  
25 x female 0,5~1,0 mm<sup>2</sup>

- Housing:**  
5 x 2 pole male housing  
5 x 2 pole female housing  
4 x 3 pole male housing  
4 x 3 pole female housing  
4 x 4 pole male housing  
4 x 4 pole female housing  
3 x 6 pole male housing  
3 x 6 pole female housing  
2 x 8 pole male housing  
2 x 8 pole female housing  
2 x 10 pole male housing  
2 x 10 pole female housing

Box with eurosloot hangtab

**VAG035/1**  
95 pcs - 14 compartments



- Wire seals:**  
25 x wire seal blue
- Terminals:**  
25 x male 1,0~2,5 mm<sup>2</sup>  
25 x female 1,0~2,5 mm<sup>2</sup>

- Housing:**  
4 x 2 pole male housing  
4 x 2 pole female housing  
2 x 4 pole male housing  
2 x 4 pole female housing  
2 x 6 pole male housing  
2 x 6 pole female housing  
1 x 8 pole male housing  
1 x 8 pole female housing  
1 x 10 pole male housing  
1 x 10 pole female housing

Box with eurosloot hangtab

## PVC-insulated terminals

**AD-101**  
61 pcs - 11 compartments  
incl. tool



- 1 x multi-tool
- 10 x BFV 1.25-3
- 4 x BFV 1.25-4
- 10 x BFV 2-3
- 4 x BFV 1.25-4
- 4 x BFV 2-4
- 10 x BFV 1.25-3A
- 10 x BFV 2-3A

**With tool**

- 2 x BFVC 1.25
- 2 x BFVC 2
- 2 x BFVDF 1.25-250A
- 2 x BFVDM 1.25-250
- 2 x BFVDF 2-250A
- 2 x BFVDM 2-250

**AD-002**  
307 pcs - 18 compartments  
incl. tool



- 1 x multi-tool
- 20 x BFV 1.25-4
- 20 x BFV 1.25-5
- 20 x BFV 2-4
- 20 x BFV 2-5
- 20 x BFV 2-6
- 10 x BFV 5.5-8
- 20 x BFV 1.25-B3A
- 20 x BFV 2-YS4A
- 10 x BFVC 1.25
- 10 x BFVC 2
- 6 x BFVC 5.5
- 20 x BFVDF 1.25-110A8
- 20 x BFVDM 1.25-110A8
- 20 x BFVDF 1.25-250A
- 20 x BFVDM 1.25-250
- 20 x BFVDF 2-187A5
- 20 x BFVDM 2-187A5
- 10 x BFVDF 5.5-250A

**AD-006**  
541 pcs - 19 compartments  
incl. tool



- 1 x multi-tool
- 52 x BFV 1.25-3
- 30 x BFV 1.25-5
- 40 x BFV 2-S3.3
- 30 x BFV 2-4
- 30 x BFV 2-5
- 40 x BFV 1.25-B3A
- 30 x BFV 2-YS4A
- 20 x BFVC 1.25
- 20 x BFVC 2
- 30 x B 1-SD
- 8 x B 5.5-SD
- 30 x BCVGF 1.25-5
- 30 x BFVGM 1.25-5
- 30 x BFVDF 1.25-250A
- 30 x BFVDM 1.25-250
- 30 x BFVDF 2-187A5
- 30 x BFVDM 2-187A5
- 30 x BFVDF 2-250A

**AD-008**  
361 pcs - 13 compartments  
incl. tool



- 1 x crimping tool
- 30 x BFV 1.25-5
- 30 x BFV 1.25-6
- 30 x BFV 2-4
- 50 x BFV 1.25-B3A
- 30 x BFV 2-YS4A
- 30 x BFVC 1.25
- 20 x BFVC 2
- 20 x BFVC 5.5
- 30 x ECVDFG 1.25-5
- 30 x EFVDGM 1.25-5
- 30 x EFVDDF 2-187A5
- 30 x EFVDDM 2-187A5



**AD-009**  
1000 pcs - 14 compartments



**Without tool**

- |                    |                       |
|--------------------|-----------------------|
| 100 x BFV 1.25-5   | 50 x ELVDDF 1.25-250A |
| 50 x BFV 5.5-8     | 50 x EFVDDF 1.25-250A |
|                    | 100 x EFVDDM 1.25-250 |
| 50 x BFV 1.25-YS4A | 50 x ELVDDF 2-250A    |
| 100 x BFV 2-S4A    | 50 x EFVDDF 2-250A    |
|                    | 100 x EFVDDM 2-250    |
| 100 x BFVC 1.25    | 50 x BFVDF 5.5-250A   |
| 100 x BFVC 2       | 50 x BFVDM 5.5-250    |

**WS-00004**  
100 pcs



- |                     |                    |
|---------------------|--------------------|
| 10 x RBFV 1.25-6    | 6 x RBFVDDF 2-250A |
| 10 x RBFV 2-4       | 6 x RBFVDDM 2-250  |
| 10 x RBFV 1.25-YS4A | 6 x RBCVDGF 1.25-5 |
| 10 x RBFV 2-YS4A    | 6 x RBFVDGM 1.25-5 |
| 10 x RBFV 2-5A      | 6 x RBCVDGF 2-7    |
| 7 x RBFVC 1.25      | 6 x RBFVDGM 2-7    |
| 7 x RBFVC 2         |                    |

## Solder sleeves & heat shrink butt connectors

**AD-015** Heat shrink/solder sleeves  
120 pcs - 18 compartments



- |               |             |               |
|---------------|-------------|---------------|
| 15 x CWT-9002 | 25 x SGRS-1 | 15 x HSC 1.25 |
| 15 x CWT-9003 | 15 x SGRS-2 | 15 x HSC 2    |
| 5 x CWT-9004  | 10 x SGRS-3 |               |
|               | 5 x SGRS-4  |               |

**AD-021** Duraseal/solder sleeves  
120 pcs - 18 compartments



- |               |             |                |
|---------------|-------------|----------------|
| 15 x CWT-9002 | 25 x SGRS-1 | 15 x D406-0001 |
| 15 x CWT-9003 | 15 x SGRS-2 | 15 x D406-0002 |
| 5 x CWT-9004  | 10 x SGRS-3 |                |
|               | 5 x SGRS-4  |                |

**AD-022** Heat shrink/Budget solder sleeves  
120 pcs - 18 compartments



- |               |               |               |
|---------------|---------------|---------------|
| 15 x AET-9002 | 25 x SOEV 2.4 | 15 x HSC 1.25 |
| 15 x AET-9003 | 15 x SOEV 4.0 | 15 x HSC 2    |
| 5 x AET-9004  | 10 x SOEV 9.0 |               |
|               | 5 x SOEV 15.0 |               |

**AD-050** Solder sleeves  
200 pcs - 18 compartments



- |               |
|---------------|
| 50 x CWT-9001 |
| 50 x CWT-9002 |
| 50 x CWT-9003 |
| 50 x CWT-9004 |

**AD-052** Budget solder sleeves  
200 pcs - 18 compartments



- |               |
|---------------|
| 50 x AET-9001 |
| 50 x AET-9002 |
| 50 x AET-9003 |
| 50 x AET-9004 |

**AD-051** Solder sleeves  
400 pcs - 18 compartments



- |                |
|----------------|
| 100 x CWT-9001 |
| 100 x CWT-9002 |
| 100 x CWT-9003 |
| 100 x CWT-9004 |

**AD-053** Budget solder sleeves  
400 pcs - 18 compartments



- |                |
|----------------|
| 100 x AET-9001 |
| 100 x AET-9002 |
| 100 x AET-9003 |
| 100 x AET-9004 |

### Cord end terminals

**ASSAHI-501**  
400 pcs - 5 compartments



- 50 x AHW 0.50N
- 100 x AHGRS 0.75N
- 100 x AHR 1.00N
- 100 x AHZ 1.50N
- 50 x AHB 2.50N

**ASSAHI-401**  
100 pcs - 4 compartments



- 50 x AHGRS 4.00N
- 20 x AHG 6.00N
- 20 x AHR 10.00N
- 10 x AHB 16.00N

**Single wire**

**Twin wire**

**ASSAHI-502**  
200 pcs - 4 compartments



- 50 x TAHGRS 0.75N
- 50 x TAHR 1.00N
- 50 x TAHZ 1.50N
- 50 x TAHB 2.50N

**ASSAHI-402**  
45 pcs - 4 compartments



- 20 x TAHGRS 4.00N
- 10 x TAHG 6.00N
- 10 x TAHR 10.00N
- 5 x TAHB 16.00N

**ASSAH-500**  
2500 pcs - 5 compartments



- 500 x AH 0.25K
- 500 x AH 0.34K
- 500 x AH 0.50KK
- 500 x AH 0.75KK
- 500 x AH 1.00KK

**Non-insulated**

**ASSAH-502**  
1900 pcs - 5 compartments



- 500 x AH 0.50KK
- 500 x AH 0.75KK
- 400 x AH 1.00KK
- 300 x AH 1.50KK
- 200 x AH 2.50KK

**ASSAH-504**  
350 pcs 4 compartments



- 150 x AH 4.00K
- 75 x AH 6.00HL
- 75 x AH 10.00K
- 50 x AH 16.00K

# Fuses

**HF020096HA**  
80 pcs - 8 compartments



Box with euroslot hangtab

## normOTO

- 10 x SBF1503
- 10 x SBF1505
- 10 x SBF1575
- 10 x SBF1510
- 10 x SBF1515
- 10 x SBF1520
- 10 x SBF1525
- 10 x SBF1530

**B3-BF1000**  
7 pcs - blister



- 1 x SBF1505
- 1 x SBF1575
- 1 x SBF1510
- 1 x SBF1515
- 1 x SBF1520
- 1 x SBF1525
- 1 x SBF1530

**B1-F1000**  
10 pcs



- 1 x SBF1505
- 1 x SBF1575
- 2 x SBF1510
- 2 x SBF1515
- 2 x SBF1520
- 1 x SBF1525
- 1 x SBF1530

**B1-F7000**  
10 pcs



- 1 x BF7005
- 1 x BF7075
- 2 x BF7010
- 2 x BF7015
- 2 x BF7020
- 1 x BF7025
- 1 x BF7030

## miniOTO

**B3-BF7000**  
7 pcs - blister



- 1 x BF7005
- 1 x BF7075
- 1 x BF7010
- 1 x BF7015
- 1 x BF7020
- 1 x BF7025
- 1 x BF7030

**HF030096HA**  
200 pcs - 8 compartments



Box with euroslot hangtab

- 10 x BF7003
- 30 x BF7005
- 30 x BF7075
- 30 x BF7010
- 30 x BF7015
- 30 x BF7020
- 20 x BF7025
- 20 x BF7030

**HF350071HA**  
186 pcs - 8 compartments



Box with euroslot hangtab

## miniOTO Low Profile (LP)

1 x fuse puller  
AT1000P

- 15 x BFLP7005
- 25 x BFLP7075
- 40 x BFLP7010
- 40 x BFLP7015
- 25 x BFLP7020
- 15 x BFLP7025
- 25 x BFLP7030

**B3-BFLP7000**  
7 pcs - blister



- 1 x BFLP7005
- 1 x BFLP7075
- 1 x BFLP7010
- 1 x BFLP7015
- 1 x BFLP7020
- 1 x BFLP7025
- 1 x BFLP7030

**B1-FLP7000**  
10 pcs



- 1 x BFLP7005
- 1 x BFLP7075
- 2 x BFLP7010
- 2 x BFLP7015
- 2 x BFLP7020
- 1 x BFLP7025
- 1 x BFLP7030



**HF510071HA**  
76 pcs - 8 compartments

**mikrOTO II**



Box with euroslot hangtab

- 1 x fuse puller AT1000P
- 5 x BF2005
- 5 x BF2075
- 15 x BF2010
- 15 x BF2015
- 15 x BF2020
- 10 x BF2025
- 10 x BF2030

**B3-BF2000**  
7 pcs - blister



- 1 x BF2005
- 1 x BF2075
- 1 x BF2010
- 1 x BF2015
- 1 x BF2020
- 1 x BF2025
- 1 x BF2030

**HF040024HA**  
20 pcs - 8 compartments

**maxiOTO**



Box with euroslot hangtab

- 2 x BF9020
- 3 x BF9030
- 3 x BF9040
- 3 x BF9050
- 3 x BF9060
- 2 x BF9070
- 2 x BF9080
- 2 x BF9100

**B3-CERF**  
5 pcs - blister



**ceramicOTO**

- 1 x CERF2005
- 1 x CERF2008
- 1 x CERF2016
- 1 x CERF2025
- 1 x CERF2040

**B3-GLAF5**  
5 pcs - blister  
6,3x32 mm

**glassOTO**



- 1 x GLAF5005
- 1 x GLAF5010
- 1 x GLAF5015
- 1 x GLAF5020
- 1 x GLAF5030

**B3-GLAF4**  
5 pcs - blister  
5x20 mm



- 1 x GLAF4002
- 1 x GLAF4003
- 1 x GLAF4005
- 1 x GLAF4006
- 1 x GLAF4010

## Heat shrink sleeve

### ADSWB-001

170 pcs - 6 compartments  
Single wall 2:1  
Black  
Length pcs: 100 mm (17 mtrs total)



60 pcs 1,2 > 0,6 mm  
40 pcs 2,4 > 1,2 mm  
30 pcs 3,2 > 1,6 mm  
20 pcs 4,8 > 2,4 mm  
10 pcs 6,4 > 3,2 mm  
10 pcs 9,5 > 4,8 mm

Box with euroslot hangtab

### ADDWC-002

87 pcs - 6 compartments  
Dual wall 3:1 with adhesive liner  
Black, red and clear  
Length pcs: 100 mm (8,7 mtrs total)



3 x 10 pcs 2,4 > 0,8 mm  
3 x 7 pcs 3,2 > 1,0 mm  
3 x 5 pcs 4,8 > 1,6 mm  
3 x 4 pcs 6,4 > 2,0 mm  
3 x 2 pcs 9,5 > 3,0 mm  
3 x 1 pcs 12,7 > 4,0 mm

Box with euroslot hangtab

### ADSWC-005

590 pcs - 10 compartments  
Single wall 2:1  
Black, red, white, blue and yellow  
Length pcs.: 50, 100, 150 and 200 mm



5 x 20 pcs 1,2 > 0,6 mm  
5 x 20 pcs 1,6 > 0,8 mm  
5 x 20 pcs 2,4 > 1,2 mm  
5 x 20 pcs 3,2 > 1,6 mm  
5 x 10 pcs 4,8 > 2,4 mm  
5 x 10 pcs 6,4 > 3,2 mm  
5 x 6 pcs 9,5 > 4,8 mm  
5 x 5 pcs 12,7 > 6,4 mm  
5 x 4 pcs 19,1 > 8,5 mm  
5 x 3 pcs 25,4 > 12,7 mm

### ADDWB-002

87 pcs - 6 compartments  
Dual wall 3:1 with adhesive liner  
Black  
Length pcs: 100 mm (8,7 mtrs total)



30 pcs 2,4 > 0,8 mm  
21 pcs 3,2 > 1,0 mm  
15 pcs 4,8 > 1,6 mm  
12 pcs 6,4 > 2,0 mm  
6 pcs 9,5 > 3,0 mm  
3 pcs 12,7 > 4,0 mm

Box with euroslot hangtab

### SSB DISPLAY001

Blue metal display with scissors on chain  
With 6 boxes of 2:1 black shrink sleeve



1 x 512004BB  
1 x 512005BB  
1 x 512006BB  
1 x 512007BB  
1 x 512008BB  
1 x 512010BB

### SSB DISPLAY002

Blue metal display with scissors on chain  
With 6 boxes of 3:1 black shrink sleeve



1 x 712001BB  
1 x 712003BB  
1 x 712005BB  
1 x 712006BB  
1 x 712008BB  
1 x 712009BB

### 1506073

Blue metal display with scissors on chain, for 6 boxes of heat shrink sleeve (not included)



- Displays can be used both hanging and standing
- Available in blue (standard) or the RAL-color of your choice. Please contact our Sales department for more information



## Cable ties

**KKB DISPLAY**  
Blue metal display with 5 sizes  
(1000 pcs in total) of black cable  
ties



200 x KKB10025B  
200 x KKB14036B  
200 x KKB20048B  
200 x KKB30048B  
200 x KKB36848B

**1503043**  
Blue metal display for 5 sizes  
of cable ties (not included)



- Displays can be used both hanging and standing
- Available in blue (standard) or the RAL-color of your choice. Please contact our Sales department for more information

## Hose clamps

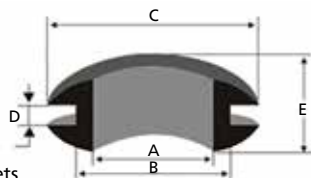
**ASS-HCST001**  
77 pcs - 10 compartments  
incl. tool



1 x screw driver

12 x BHC1-0814  
13 x BHC1-1117  
13 x BHC1-1320  
10 x BHC1-1525  
10 x BHC1-1929  
7 x BHC1-2232  
7 x BHC1-2638  
4 x BHC1-3244

## Grommets



**HD190210KC** Open Grommets  
210 pcs - 9 compartments



50 st 3,18 x 6,35 mm  
50 st 4,76 x 7,94 mm  
35 st 6,35 x 9,53 mm  
25 st 7,97 x 11,11 mm  
20 st 9,53 x 12,70 mm  
10 st 12,70 x 15,88 mm  
10 st 9,92 x 16,67 mm  
5 st 15,88 x 22,23 mm  
5 st 17,46 x 25,40 mm

Sizes A x B (see drawing)

**HD170120BG** Blanking grommets  
120 pcs - 10 compartments



20 x HD1700BLGP15 10 x HD1700BLGP27  
20 x HD1700BLGP17 10 x HD1700BLGP30  
15 x HD1700BLGP20 10 x HD1700BLGP32  
15 x HD1700BLGP22 5 x HD1700BLGP35  
10 x HD1700BLGP25 5 x HD1700BLGP40

## Automotive clips

We have put together a very limited program, consisting only of the 20 most popular universal clips



**VTX-001**  
Toyota OE 9046707201  
PSA OE 6822N2



**VTX-002**  
Mazda OE U3945919



**VTX-003**  
Mazda OE 1309251833  
Ford OE M45556143  
Hyundai OE 8659028000



**VTX-004**  
Toyota OE 9046708217  
Mazda OE KD5351833



**VTX-005**  
Honda OE 91512SM4003



**VTX-006**  
Honda OE 90683SA5003  
Nissan OE 0155301203  
Nissan OE 0155303573  
Nissan OE 9046706153



**VTX-007**  
Toyota OE 5216102030



**VTX-008**  
Nissan OE 0155309611  
Tesla OE 1006521-00-A  
PSA OE 6822N3  
Toyota OE 9046708185



**VTX-009**  
Toyota OE 9046709145



**VTX-010**  
Subaru OE 57728AC090  
Nissan OE 0155309241



**VTX-011**  
Toyota OE 9046705090B1



**VTX-012**  
Honda OE 90687SB0003  
Honda OE 90687SB0013



**VTX-013**  
Honda OE 90684SA50030



**VTX-014**  
Nissan OE 1099830880  
Suzuki OE 0940906319  
Honda OE 90684SA5003  
Toyota OE 5578552020



**VTX-015**  
Subaru OE 909140054  
Honda OE 915035Z3003



**VTX-016**  
Suzuki OE 0940908308T01  
Honda OE 91505SL0003  
Nissan OE 0155301753  
Mitsubishi OE MR720431  
Toyota OE 9046708182



**VTX-017**  
Toyota OE 9046707164  
Fiat OE 71741883  
Honda OE 731555S0004  
Subaru OE 940907332  
Suzuki OE 0940907332000  
Mitsubishi OE MR220501  
Mazda OE 959AK07332



**VTX-018**  
Nissan OE 0155309321  
Mistubishi OE MR328954



**VTX-019**  
Mazda OE BC1D56145  
Ford OE 4327144



**VTX-020**  
Mazda OE MB45556143  
Ford OE W705845S300  
Hyundai OE 8659028000





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