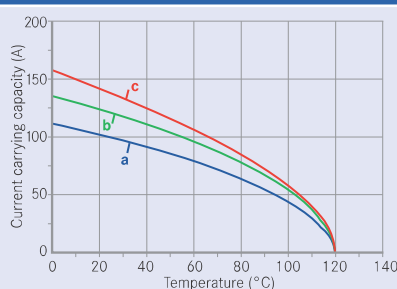


heavy | mate[®] Accessories

- Wallbushing universal port
- Gland bushings
- EMC gland bushings
- Cable seals with cable clamp
- Key pin
- Guide pin / bush
- D-Sub adaptors
- Foam rubber sealing
- Label for CSA regulation
- Wall brackets
- Tolerance compensation system

| General Characteristics | Standard | Value |
|---|-------------------|----------------------------------|
| Number of contacts | | 1 |
| Termination technique | | crimp |
| Wire gauge | | 10 - 25 mm ² (Radsok) |
| Termination technique (wall and cable lug) | | screw |
| Wall thickness | | 1.5 - 6 mm |
| Dimensions of wall cutout | | Ø 31.5 mm ± 0.2 gratfrei |
| Torque when mounting the WBC | | 6Nm ± 3% |
| Mechanical and Electrical Characteristics | | |
| Protection class (side wall to side wall) | IEC 60 529 | IP67 |
| Protection class (Radsokseite) | IEC 60 529 | IP20 |
| Rated voltage | IEC 61140 cl. 6 | ≤ 60V DC / ≤ 25V AC |
| Contact resistance | IEC 60512; test 1 | ≤ 0,2 mOhm |
| Climatical Characteristics | | |
| Upper temperature | IEC 60512-11-9 | +125°C |
| Lower temperature | IEC 60512-11-10 | -40°C |

Derating Curves




| Curve | Wire gauge |
|-------|--------------------|
| a | 10 mm ² |
| b | 16 mm ² |
| c | 25 mm ² |

Pluggable equipotential bonding with Wallbushing universal port

The Wallbushing universal port is a pluggable grounding system. Based on the two patented Wallbushing and Radsok technologies, the Wallbushing universal port enables a practical equipotential bonding, which need not be time consuming hardwired. For this purpose, only standard tools are needed, even for the most one-sided montage. The click |fit technology is furthermore vibration-proofed and VDE approved as a grounding connection.

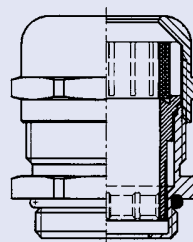
| Description | Part Number | Drawing | Figure |
|--|-------------------|---------|--------|
| Wallbushing Connector universal port | | | |
| Wallbushing Connector universal port 6mm | C360 10D001 002 2 | | |
| Hosings for 6mm Radsok for 10-16mm ² | C360 G01 141 E2 | | |
| Hosings for 6mm Radsok for 25mm ² | C360 G01 341 E2 | | |

| Supplied as | for wire gauge | AWG | Pieces | Part Number | | Figure |
|-----------------------------|----------------|-----|--------|------------------|-----------------|--|
| | | | | Male contact | Female contact | |
| 6 mm Radsok contacts | | | | | | |
| Single contact | 10-16 mm² | | 50 | N02 060 6164 002 | C360 G01 141 E2 |  |
| | 25 mm² | | 50 | N02 060 6165 002 | C360 G01 341 E2 | |

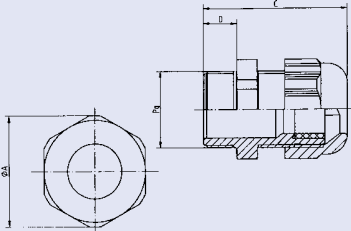

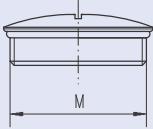

| Tools | | | | |
|-------------------------------------|--|-----------------|---------------|---|
| Description | for wire gauge | Contact locator | Part Number | |
| | | | Crimping dies | Tool |
| Electro hydraulic crimping tool | | | | TE0500 / Klaue Part Number: EK 12042L |
| Crimping dies N02 060 61 64 002 | 10 mm ² 16 mm ² | | | TE0500 – 081 TE0500 – 061 |
| Crimping dies N02 060 61 65 002 | 25 mm ² | | | TE0500 – 041 |
| Further tools see catalogue “Tools” | | | | |

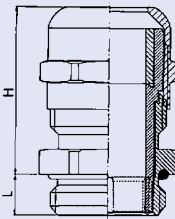

Assembly instructions for metric clamp

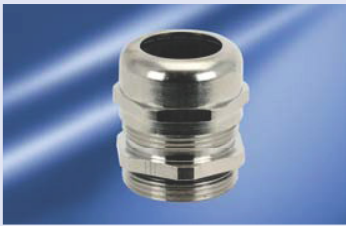
- The cable jacket should be removed as far as the underside of the cable clamping; the wire netting is then to be cut down a little further and subsequently must be formed into a circular rim. The protective jacket can remain attached to the cable provided that it passes through the lower opening of the clamp.
- On assembly, while screwing the cable clamp, the circular rim has to be pushed through and pressed on the fins commutator on the base of the underside and settle into a depression. By doing this the EMC security will remain.



| Description | M | Part Number | Drawing | Figure |
|--|----|-----------------|---------|--------|
| Gland bushing IP54 (Attention: not usable for hoods without stud) | | | | |
| Thermoplast clamp with variable inner diameter 10 Pieces | 20 | VN16 200 0113 X | | |
| Metal with variable inner diameter 10 Pieces | 20 | VN16 200 0114 X | | |
| | 25 | VN16 250 0114 X | | |
| | 32 | VN16 320 0114 X | | |
| | 40 | VN16 400 0114 X | | |
| | 50 | VN16 500 0114 X | | |
| Cable clamp without gasket 5 Pieces | 16 | VN16 160 0102 V | | |
| | 20 | VN16 200 0102 V | | |
| | 25 | VN16 250 0102 V | | |
| | 32 | VN16 320 0102 V | | |
| Cable clamp without gasket 5 Pieces | 20 | VN16 200 0103 V | | |
| | 25 | VN16 250 0103 V | | |
| | 32 | VN16 320 0103 V | | |
| Stud ¹⁾ | 16 | N16 016 0112 1 | | |
| | 20 | N16 020 0112 1 | | |
| | 25 | N16 025 0112 1 | | |
| | 32 | N16 032 0112 1 | | |
| | 40 | N16 040 0112 1 | | |

| Description | Clamping range ø in mm | A in mm | M | Part Number | Drawing | Figure |
|--|--|----------------------------|----------------------------|---|--|---|
| Gland bushing IP67 (Material PA / - 20 °C + 80 °C) | | | | | | |
| Gland bushing with vibration protection 10 Pieces | 4 - 10 6 - 12 9 - 16 10 - 21 16 - 28 | 20 24 28 36 46 | 16 20 25 32 40 | VN16 160 0127 X VN16 200 0127 X VN16 250 0127 X VN16 320 0127 X VN16 400 0127 X |  |  |
| Plugs brass nickel- plated with recess and o-ring 10 Pieces | | | 20 25 32 40 | VN16 020 0113 (1) X VN16 025 0113 (1) X VN16 032 0113 (1) X VN16 040 0113 (1) X |  |  |

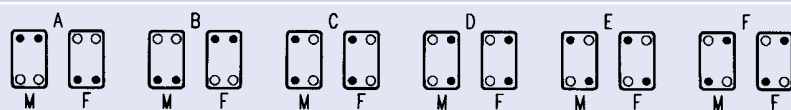
| Description | Clamping range F in mm | H in mm | L in mm | M | Part Number | Drawing | Figure |
|---|---|----------------------------|-------------------------|----------------------------|---|--|---|
| Gland bushing IP68 (Material Chloroprene / - 30 °C + 120 °C) | | | | | | | |
| Gland bushing 10 Pieces | 5,5 - 10 8 - 13 11 - 18 15 - 21 19 - 27 | 22 24 29 30 34 | 5,5 6 7 8 8 | 16 20 25 32 40 | VN16 160 0133 X VN16 200 0133 X VN16 250 0133 X VN16 320 0133 X VN16 400 0133 X |  |  |

| Description | Clamping range F in mm | M | Part Number | Drawing | Figure |
|---|---|----------------------------|---|---------|---|
| EMV gland bushing IP68 (Material CuZn / PA / - 30 °C + 120 °C) | | | | | |
| Gland bushing EMV 10 Pieces | 5,5 - 10 8 - 13 11 - 18 15 - 21 19 - 27 | 16 20 25 32 40 | VN16 160 0126 X VN16 200 0126 X VN16 250 0126 X VN16 320 0126 X VN16 400 0126 X | |  |

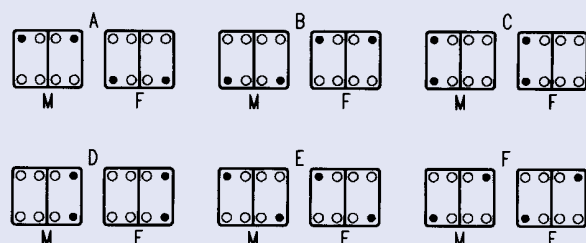
| Description | L | Part Number | Drawing | Figure |
|--|----|---------------------|---------|--------|
| Key pin with lock washer 10 Pieces | | VN17 050 0004 (1) | | |
| Key pin with lock washer 100 Pieces | | VN17 050 0004 (101) | | |
| Guide pin 10 Pieces | | VN13 040 0009 1 X | | |
| Guide pin for inserts heavy mate® F 10 Stück | | VN13 040 0012 1 X | | |
| Guide socket 10 Pieces | | VN13 040 0008 1 X | | |
| Guide socket for inserts heavy mate® F 10 Stück | | VN13 040 0013 1 X | | |
| Locking pin for inserts heavy mate® F 10 Stück | | VN13 040 0014 1 X | | |
| Locking screw for contact inserts heavy mate® D 15, D 25, A 10, A 16 20 Pieces | 23 | VN03 030 0021 | | |
| Locking screw for contact inserts heavy mate® D 40, D 64, E, M, H 20 Pieces | 20 | VN03 030 0020 | | |
| Locking set 10 Pieces | | VN03 030 3000 X | | |

Polarization system with key pin

For housings with one contact insert



For housings with two contact inserts

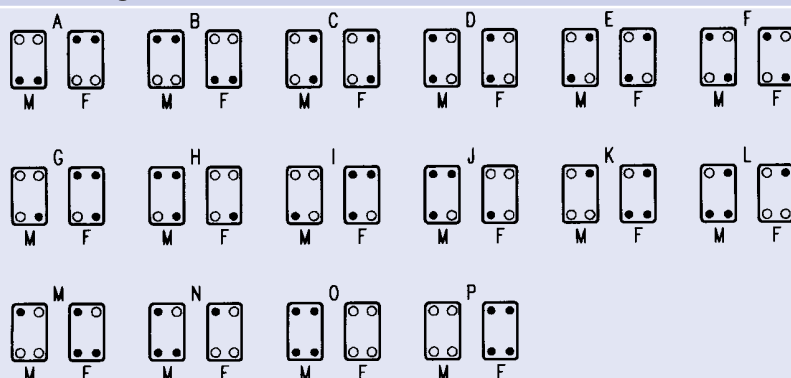


Descriptions

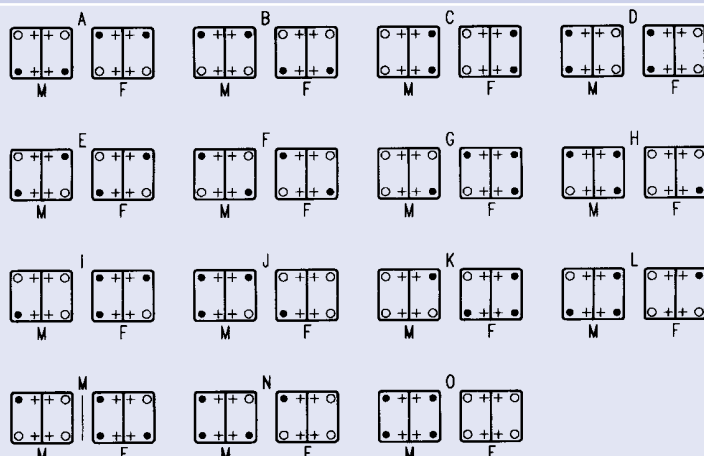
- Key pin
- Locking screw
- M Male insert
- F Female insert

Polarization system with guide pin and guide socket

For housings with one contact insert

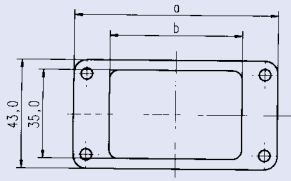

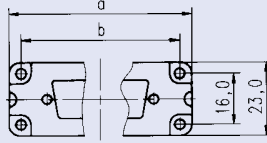

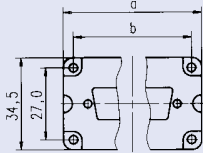

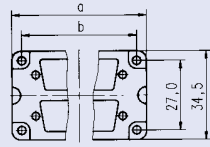




For housings with two contact inserts



Descriptions

- Guide pin
- Guide socket
- + Locking screw
- M Male insert
- F Female insert

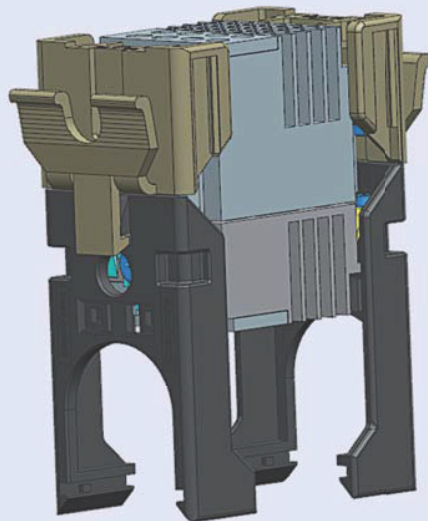
| Description | Size | Part Number | a | b | D-Sub | Drawing | Figure |
|----------------------------------|--------------------------|---|----------------------------------|--------------------------------|---------------------------|--|---|
| Foam rubber sealing 2 mm | 6 10 16 24 | N06 080 0003 1 N06 080 0003 2 N06 080 0003 3 N06 080 0003 4 | 80 93 113 140 | 70 83 103 130 | |  |  |
| Adaptor for D-Sub set metal | 15 25 | C146 N32 015 G2 C146 N32 025 G2 | 57 57 | 49,5 49,5 | 15 25 |  2 x adaptor 4 x M3 x 6,5 8 x M3 x 14 |  |
| Adaptor for D-Sub set single-row | 6 6 10 16 16 | C146 N32 009 G1 C146 N32 015 G1 C146 N32 025 G1 C146 N32 037 G1 C146 N32 050 G1 | 51,5 51,5 64,5 85 85 | 44 44 57 77,5 77,5 | 9 15 25 37 50 |  2 x adaptor 4 x M3 x 6,5 8 x M3 x 14 |  |
| Adaptor for D-Sub set double-row | 6 6 10 16 16 | C146 N33 009 G1 C146 N33 015 G1 C146 N33 025 G1 C146 N33 037 G1 C146 N33 050 G1 | 51,5 51,5 64,5 85 85 | 44 44 57 77,5 77,5 | 9 15 25 37 50 |  2 x adaptor 4 x M3 x 6,5 8 x M3 x 14 |  |
| Label for CSA application | | N07 045 0001 L | | | | |  |

| Description | Part Number | Drawing | Figure |
|---|---------------|---------|--------|
| Cable clamp for contact inserts | | | |
| Frames for shielded cables 6 contacts | N25 033 000 1 | | |
| Frames for shielded cables 10 contacts | N25 046 000 1 | | |
| Frames for shielded cables 16 contacts | N25 066 000 2 | | |
| Frames for shielded cables 24 contacts | N25 093 000 1 | | |
| Cable clamp for housings | | | |
| Frames for shielded cables 10 contacts | N25 061 000 1 | | |
| Frames for shielded cables 16 contacts | N25 082 000 2 | | |
| Frames for shielded cables 24 contacts | N25 108 000 1 | | |
| Frames for shielded cables 24 contacts for shielded modules | N25 108 000 2 | | |

Wall brackets

Accessories for use of heavy|mate® contact inserts without housing, for example on mounting rails in control cabinets.

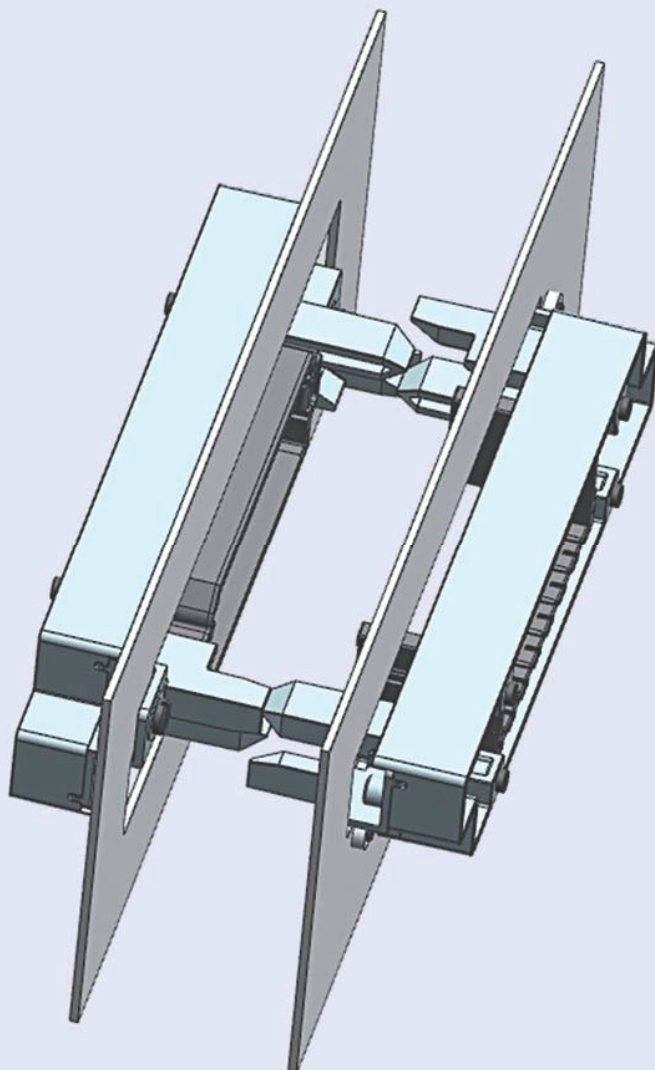
Figure

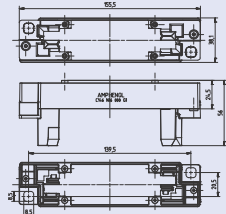

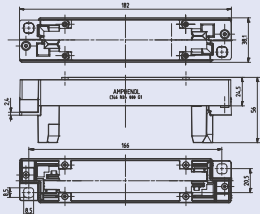



| Description | Part Number | Drawing | Figure |
|-----------------------|---------------|---------|--------|
| Coupling | N09 146 000 6 | | |
| Wall bracket | N09 146 000 7 | | |
| Wall bracket | N09 146 000 8 | | |
| Mounting rail adaptor | N09 146 000 9 | | |

| Characteristics | Applications |
|---|---|
| <ul style="list-style-type: none"> • heavy mate® inserts can be used in blind mate applications • tolerance compensation of 3mm in any direction possible • can be used with module frame & monoblocs • very good price-performance ratio | <ul style="list-style-type: none"> • Motor control centers • Modular UPS • Inverter • Charging stations • Slip rings |

Figure



| Description | Part Number | Drawing | Figure |
|---|-----------------|--|---|
| Frames for tolerance compensation system Size 16 | C146 N16 000 G1 |  |  |
| Frames for tolerance compensation system Size 24 | C146 N24 000 G1 |  |  |