

| Contents   | Page             |
|--|------------------|
| Han® K 3/0.....                                    | <b>Han 14.4</b>  |
| Han® K 3/2.....                                    | <b>Han 14.6</b>  |
| Hoods/Housings for Han® K 3/0, Han® K 3/2 .....    | <b>Han 14.8</b>  |
| Han® HC Modular 250.....                           | <b>Han 14.11</b> |
| Hoods/Housings for Han® HC Modular 250 .....       | <b>Han 14.13</b> |
| Han® HC Modular 350.....                           | <b>Han 14.24</b> |
| Hoods/Housings for Han® HC Modular 350 .....       | <b>Han 14.29</b> |
| Han® M hoods/housings for Han® HC Modular 350..... | <b>Han 14.47</b> |
| Han® HC Modular 650.....                           | <b>Han 14.50</b> |
| Hoods/Housings for Han® HC Modular 650 .....       | <b>Han 14.53</b> |
| Han® 24 HPR EasyCon.....                           | <b>Han 14.60</b> |
| Han® 24 HPR EasyCon - Accessories .....            | <b>Han 14.70</b> |
| Han® 48 HPR .....                                  | <b>Han 14.72</b> |

Han  
HC

Han  
14  
: 1

## Assembly instructions

Remarks on the axial screw termination see chapter 00

Step 1: The outer diameter of the cable must not exceed 19.5 mm.

Strip the cable by 19 mm.

Insert the cable through hood.

Step 2: Press the Han HC contact on the cable strand and apply tightening torque according table 1 by using a tightening torques tool. Take care that all cable strands fit completely inside the contact termination cavity. During assembling adhere the cable and the contact to minimise axial movement or twisting.

Step 3: Move the perforated plate across the HC contacts.

Step 4: Fit frame onto the hexagon shape of the HC contact. Coding can be arranged by turning the contact within 60° steps. Bolt the frame together with perforated plate.

Step 5: Push back the packet inside the good.

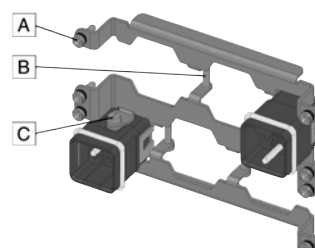
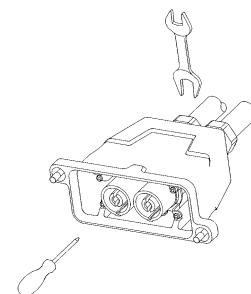
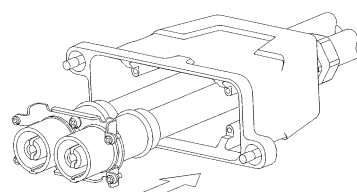
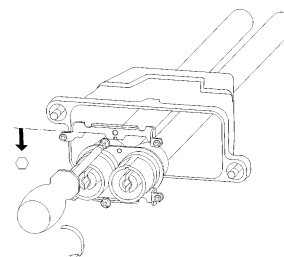
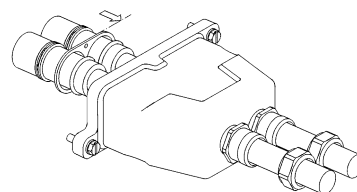
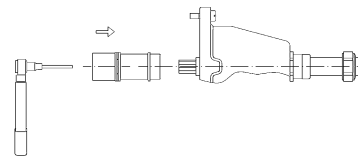
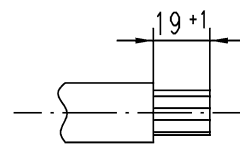
Step 6: Tighten the four M3 (tightening torque 0.5 Nm) screws and the cable gland according manufacturer recommendation.

During the assembly of the frame for 4 poles the following tightening torques have to be taken into consideration:

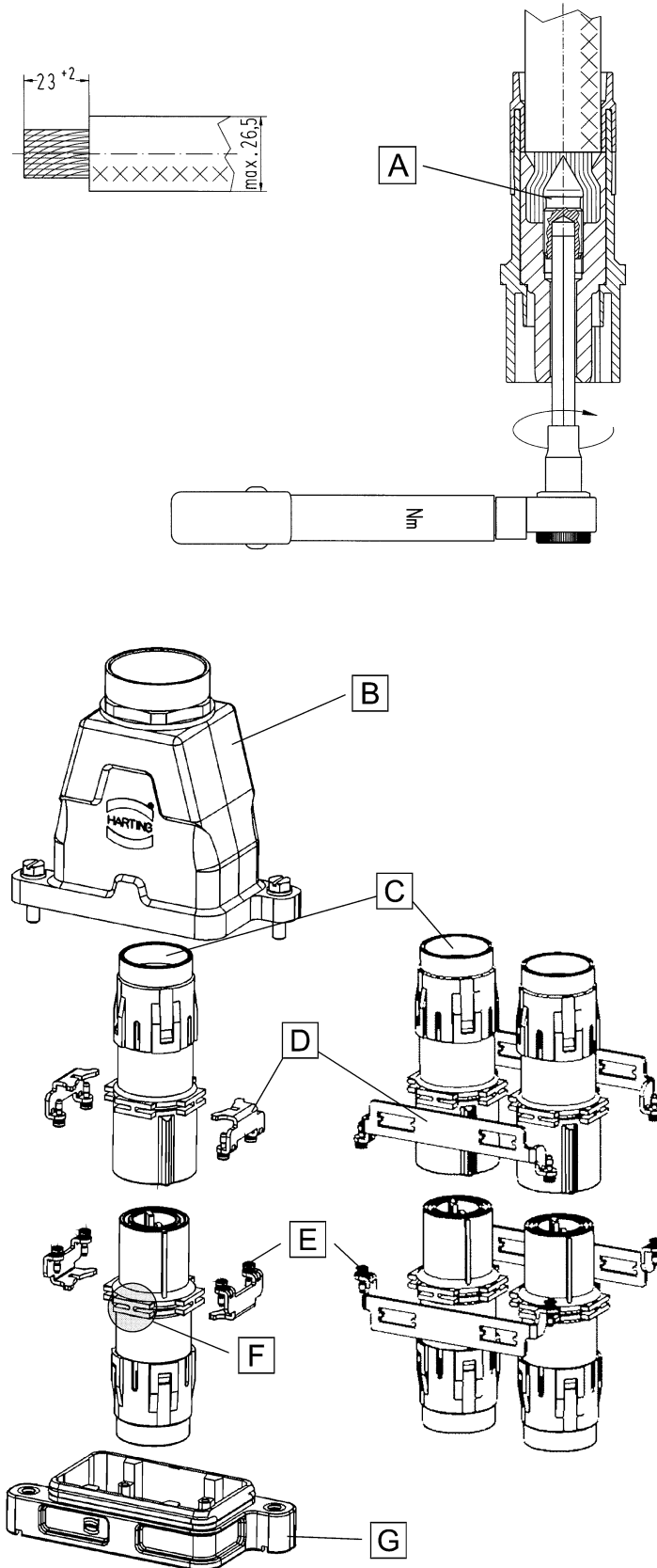
A = 0.5 Nm

B = 1.5 Nm

C = 0.25 Nm



Assembly instructions



1. Strip cable to 23+2 mm.

2. Push conductor through the cable gland and the housing. Push the stripped end of the conductor into the termination entry of the module until the insulation touches the contact.

3. To tighten the axial screw, a hexagonal wrench size 8 is needed. Insert the hexagonal wrench on the mating side of the contact. At the same time, push the conductor over the axial screw. The locking screw has to be tightened with the recommended tightening torque that is determined by the conductor's cross section.

4. Once the modules are terminated, they are mounted into the housing by using two metal frames (tightening torque of the fixing screws = 0.5 Nm). The modules have 4 pegs formed by 2 parallel ribs (each peg shapes like a "H"). Each rib takes 1 pole frame, where the lateral link has to go into the relief of the frame. The 2 pole frames have 2 cutouts on the wall which get fitted to the "H"-shaped pegs (see figure). The heads of the screws have to face the mating direction of the module. Coding can be established by rotating the contact by 90 degrees. Therefore it is important that the corresponding modules are assembled in the correct position otherwise mating is not possible.

5. After assembling the modules in the housing, the tightening torque of the locking screw can be checked and corrected if necessary.

6. After final assembly of the contacts, the user should ensure that the cable is adequately strain relieved to protect the contact from radial stress.

A - Axial screw, B - Hood, C - Termination entry, D - Frame, E - Fixing screws, F - parallel ribs with H-shape, G - Housings bulkhead mounting,

## Features

- The ideal connector for transmission of high currents requiring little space
- The vertical and angled versions offer solutions for almost all applications
- The angled versions offer a space-saving 90° cable wiring

## Technical characteristics

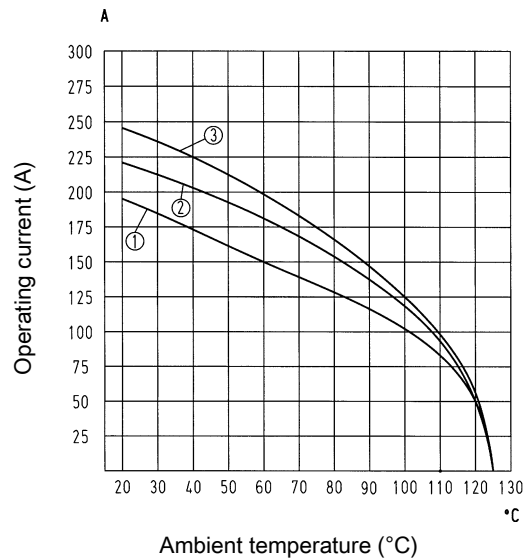
|   |                            |
|---|----------------------------|
| Number of contacts                        | 3                          |
| Rated current                             | 200 A                      |
| Rated voltage conductor-earth             | 1150 V                     |
| Rated voltage conductor-conductor         | 2000 V                     |
| Rated impulse voltage                     | 8 kV                       |
| Pollution degree                          | 3                          |
| Rated current acc. to UL                  | 200 A                      |
| Rated current acc. to CSA                 | 160 A                      |
| Rated voltage acc. to UL                  | 600 V                      |
| Rated voltage acc. to CSA                 | 600 V                      |
| Insulation resistance                     | $>10^{10} \Omega$          |
| Contact resistance                        | $\leq 0.2 \text{ m}\Omega$ |
| Limiting temperature                      | -40 ... +125 °C            |
| Mating cycles                             | $\geq 500$                 |
| Material (insert)                         | Polycarbonate (PC)         |
| Colour (insert)                           | RAL 7032 (pebble grey)     |
| Material (contacts)                       | Copper alloy               |
| Material flammability class acc. to UL 94 | V-0                        |
| RoHS                                      | compliant with exemption   |

## Derating

### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



- ① Conductor cross-section 35 mm<sup>2</sup>
- ② Conductor cross-section 50 mm<sup>2</sup>
- ③ Conductor cross-section 70 mm<sup>2</sup>

## Specifications and approvals

EN 60664-1  
IEC 61984  
UL 1977 ECBT2.E235076  
CSA-C22.2 No. 182.3 ECBT8.E235076  
DNV GL

## Details

**ATTENTION!** Only to be used with special Han® 24 HPR hoods and housings!

### Remarks on the axial screw technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

**Hex key (A/F 5)** see chapter Han 90


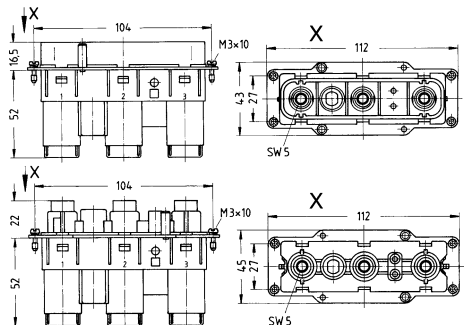

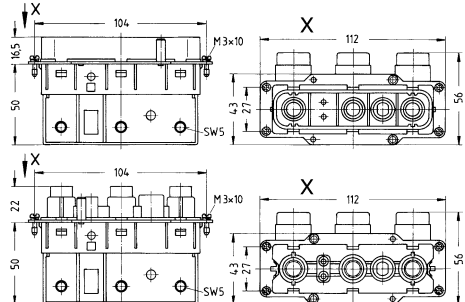
Number of contacts

3

200 A 1.150/2.000 V 8 kV 3



Han  
HC

| Identification   | Conductor cross-section (mm <sup>2</sup> ) | Part number    |                | Drawing (dimensions in mm)   |
|--|--|----------------|----------------|--|
|  |  | Male           | Female         |  |
| <p>Han-Com®, Han® K 3/0, Straight, Axial screw termination, Contact surface: Silver plated</p>  | 35 ... 70                                  | 09 38 005 2621 | 09 38 005 2721 |  <p>Distance for contact max. 21 mm<br/>Stripping length 22 mm<br/>Tightening torque 8 Nm @ 35 mm<sup>2</sup>, 9 Nm @ 50 mm<sup>2</sup>, 10 Nm @ 70 mm<sup>2</sup></p>   |
| <p>Han-Com®, Han® K 3/0, Angled, Axial screw termination, Contact surface: Silver plated</p>  | 35 ... 70                                  | 09 38 005 2622 | 09 38 005 2722 |  <p>Distance for contact max. 21 mm<br/>Stripping length 22 mm<br/>Tightening torque 8 Nm @ 35 mm<sup>2</sup>, 9 Nm @ 50 mm<sup>2</sup>, 10 Nm @ 70 mm<sup>2</sup></p> |

## Features

- The ideal connector for transmission of high currents requiring little space
- The vertical and angled versions offer solutions for almost all applications
- The angled versions offer a space-saving 90° cable wiring

## Technical characteristics

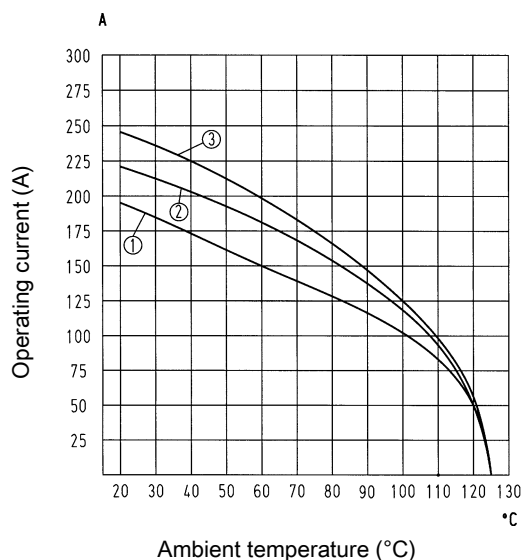
|   |                                |
|---|--------------------------------|
| Number of contacts                        | 3                              |
| Additional contacts                       | + 2 additional signal contacts |
| Rated current                             | 200 A                          |
| Rated voltage conductor-earth             | 1150 V                         |
| Rated voltage conductor-conductor         | 2000 V                         |
| Rated impulse voltage                     | 8 kV                           |
| Pollution degree                          | 3                              |
| Rated current (signal)                    | 16 A                           |
| Rated voltage (signal)                    | 400 V                          |
| Rated impulse voltage (signal)            | 6 kV                           |
| Pollution degree (signal)                 | 3                              |
| Rated current acc. to UL                  | 200 A                          |
| Rated current acc. to UL (signal)         | 16 A                           |
| Rated current acc. to CSA                 | 160 A                          |
| Rated current acc. to CSA (signal)        | 16 A                           |
| Rated voltage acc. to UL                  | 600 V                          |
| Rated voltage acc. to UL (signal)         | 600 V                          |
| Rated voltage acc. to CSA                 | 600 V                          |
| Rated voltage acc. to CSA (signal)        | 600 V                          |
| Insulation resistance                     | >10 <sup>10</sup> Ω            |
| Contact resistance                        | ≤0.2 mΩ                        |
| Contact resistance, signal area           | ≤1 mΩ                          |
| Limiting temperature                      | -40 ... +125 °C                |
| Mating cycles                             | ≥500                           |
| Material (insert)                         | Polycarbonate (PC)             |
| Colour (insert)                           | RAL 7032 (pebble grey)         |
| Material (contacts)                       | Copper alloy                   |
| Material flammability class acc. to UL 94 | V-0                            |
| RoHS                                      | compliant with exemption       |

## Derating

### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



- ① Conductor cross-section 35 mm<sup>2</sup>
- ② Conductor cross-section 50 mm<sup>2</sup>
- ③ Conductor cross-section 70 mm<sup>2</sup>

## Specifications and approvals

EN 60664-1  
IEC 61984  
UL 1977 ECBT2.E235076  
CSA-C22.2 No. 182.3 ECBT8.E235076  
DNV GL

## Details

ATTENTION! Only to be used with special Han® 24 HPR hoods and housings!

### Remarks on the axial screw technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

**Hex key (A/F 5)** see chapter Han 90


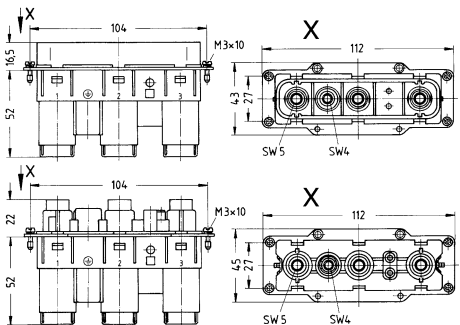

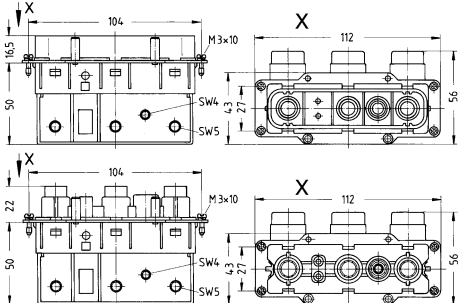
**Hex key (A/F 4) for PE contact** see chapter Han 90

Number of contacts

3+

200 A 1.150/2.000 V 8 kV 3  
 16 A 400 V 6 kV 3  
 + 2 additional signal contacts

Han  
 HC

| Identification  | Conductor cross-section (mm <sup>2</sup> )           | Part number    |                | Drawing (dimensions in mm)  |
|---|--|----------------|----------------|---|
|   |  | Male           | Female         |   |
| Han-Com®,<br>Han® K 3/2,<br>Straight,<br>Axial screw termination / screw termination,<br>Contact surface:<br>Silver plated<br> | 35 ... 70,<br>0.5 ... 2.5<br>Signal,<br>16 ... 35 PE | 09 38 005 2601 | 09 38 005 2701 |  <p>Distance for contact max. 21 mm<br/>                     Stripping length 22 mm<br/>                     Tightening torque 8 Nm @ 35 mm<sup>2</sup>, 9 Nm @ 50 mm<sup>2</sup>, 10 Nm @ 70 mm<sup>2</sup><br/>                     Signal contacts: Stripping length 7 mm,<br/>                     Tightening torque 0.5 Nm<br/>                     PE contact: Stripping length 14 mm, Tightening torque 6 Nm</p>   |
| Han-Com®,<br>Han® K 3/2,<br>Angled,<br>Axial screw termination / screw termination,<br>Contact surface:<br>Silver plated<br> | 35 ... 70,<br>0.5 ... 2.5<br>Signal,<br>16 ... 35 PE | 09 38 005 2602 | 09 38 005 2702 |  <p>Distance for contact max. 21 mm<br/>                     Stripping length 22 mm<br/>                     Tightening torque 8 Nm @ 35 mm<sup>2</sup>, 9 Nm @ 50 mm<sup>2</sup>, 10 Nm @ 70 mm<sup>2</sup><br/>                     Signal contacts: Stripping length 7 mm,<br/>                     Tightening torque 0.5 Nm<br/>                     PE contact: Stripping length 14 mm, Tightening torque 6 Nm</p> |

## Features

- Hoods/housings for harsh outdoor environments
- Metal hoods and housings with excellent corrosion resistance
- Corrosion resistance ASTM B117-09 (500 h)
- Excellent EMC characteristics
- Screw locking M6
- Field of application: for external electrical interconnections in vehicles, in highly demanding environments and wet areas, as well as for sensitive interconnections that have to be shielded
- Distinguishing feature: colour-coded black, internal seal

## Technical characteristics

|  |  |
|--|--|
| Limiting temperature                   | -40 ... +125 °C                            |
| Tightening torque (screw locking)      | 4 Nm                                       |
| Degree of protection acc. to IEC 60529 | IP65, IP68, IP69 / IPX9K acc. to ISO 20653 |
| Type rating acc. to UL 50 / UL 50E     | 4, 4X, 12                                  |
| Material (hood/housing)                | Aluminium die-cast, Corrosion resistant    |
| Surface (hood/housing)                 | Powder-coated                              |
| Colour (hood/housing)                  | RAL 9005 (jet black)                       |
| Material (seal)                        | NBR  |
| Material (locking)                     | Stainless steel                            |
| RoHS                                   | compliant, compliant with exemption        |

## Specifications and approvals


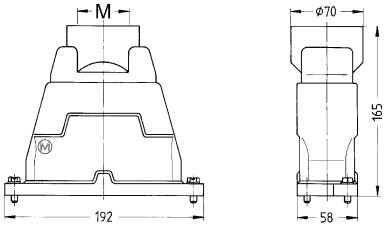

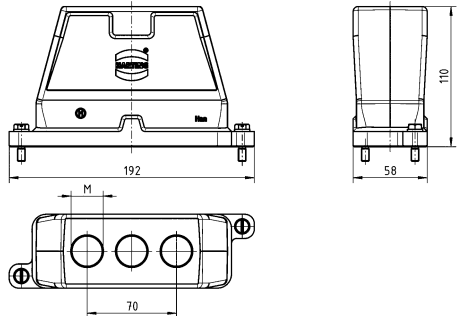

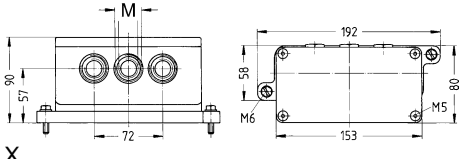

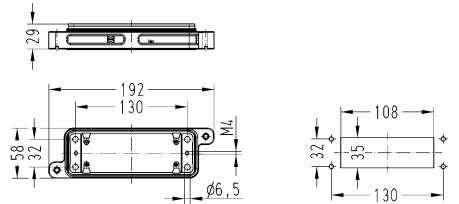
UL 1977 ECBT2.E235076  
 CSA-C22.2 No. 182.3 ECBT8.E235076  
 DNV GL





Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification  | Cable entry                      | Part number                              | Drawing<br>(dimensions in mm)  |
|---|----------------------------------|--|--|
| <p>Han® HPR,<br/>Hood,<br/>Special type,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>       | <p>1x M63</p>                    | <p>19 40 024 0420</p>                    |    |
| <p>Han® HPR,<br/>Hood,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>                       | <p>3x M25<br/>3x M25, 1x M20</p> | <p>19 40 024 0461<br/>19 40 024 0471</p> |  |
| <p>Han® HPR,<br/>Hood,<br/>Special type,<br/>Angled entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | <p>3x M25</p>                    | <p>19 40 024 0631</p>                    |  |
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>                  |                                  | <p>09 40 024 0311</p>                    |  |



Han  
HC

Identification

Cable entry

Part number

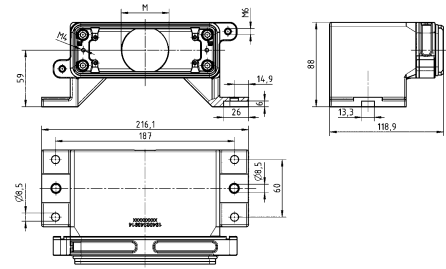
Drawing  
(dimensions in mm)

Han® HPR,  
Surface mounted housing,  
Horizontal version,  
Top entry,  
IP65,  
IP68,  
IP69 / IPX9K acc. to ISO 20653



1x M50  
3x M25  
3x M25, 1x M20

19 40 024 0914  
19 40 024 0931  
19 40 024 0971

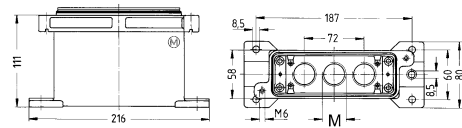


Han® HPR,  
Surface mounted housing,  
Top entry,  
IP65,  
IP68,  
IP69 / IPX9K acc. to ISO 20653



3x M25  
3x M25, 1x M20

19 40 024 1231  
19 40 024 1271



Han  
14  
·  
10

## Features

- Contacts for fine stranded wire
- Low mating forces
- Suitable for HPR® hoods and housings

## Technical characteristics

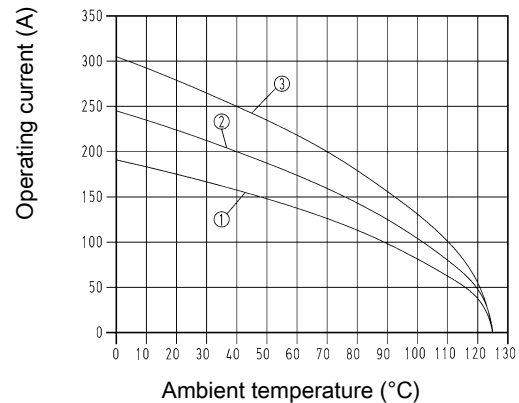
|   |                                     |
|---|-------------------------------------|
| Rated current                             | 250 A                               |
| Rated voltage                             | 2000 V                              |
| Rated impulse voltage                     | 12 kV                               |
| Pollution degree                          | 3                                   |
| Insulation resistance                     | >10 <sup>10</sup> Ω                 |
| Contact resistance                        | ≤0.3 mΩ                             |
| Limiting temperature                      | -40 ... +125 °C                     |
| Mating cycles                             | ≥500                                |
| Wire outer diameter                       | ≤18 mm                              |
| Material (insert)                         | Polycarbonate (PC)                  |
| Colour (insert)                           | RAL 7032 (pebble grey)              |
| Material (contacts)                       | Copper alloy                        |
| Material flammability class acc. to UL 94 | V-0                                 |
| RoHS                                      | compliant, compliant with exemption |

## Derating

### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



- ① Conductor cross-section 35 mm<sup>2</sup>
  - ② Conductor cross-section 50 mm<sup>2</sup>
  - ③ Conductor cross-section 70 mm<sup>2</sup>
- 4 contacts in Han® 24 HPR

## Specifications and approvals

EN 60664-1  
IEC 61984  
EN 50124-1  
DNV GL

## Details

**Removal tool** 09 99 000 0332 see chapter Han 90

For more technical details (i.e. number of crimping operations or crimping position) see eCatalogue


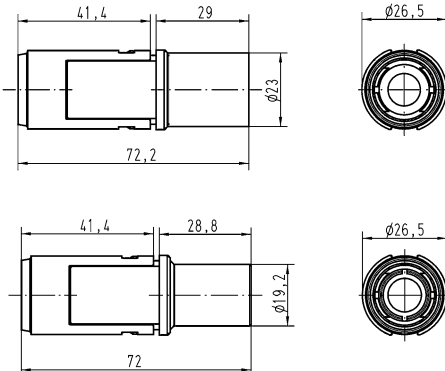

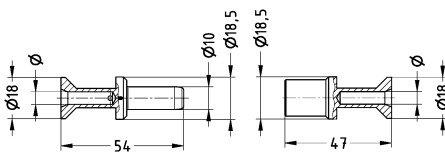

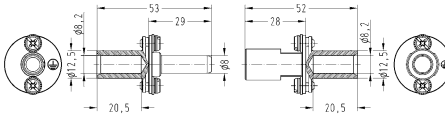
**Crimping tools** see chapter Han 90

### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

250 A 2.000 V 12 kV 3

Han  
HC

| Identification  | Conductor cross-section (mm <sup>2</sup> ) | Part number  |  | Drawing (dimensions in mm)   |
|---|--|--|--|--|
|   |  | Male   | Female   |  |
| Han® HC Modular, 250, Crimp termination<br><br>Please order crimp contacts separately. | 10 ... 70                                  | 09 11 001 3021   | 09 11 001 3121   |    |
| TC 250, Crimp contact, Contact surface: Silver plated<br>                            | 10<br>16<br>25<br>35<br>50<br>70           | 09 11 000 6184<br>09 11 000 6185<br>09 11 000 6126<br>09 11 000 6127<br>09 11 000 6128<br>09 11 000 6129 | 09 11 000 6284<br>09 11 000 6285<br>09 11 000 6226<br>09 11 000 6227<br>09 11 000 6228<br>09 11 000 6229 |  |
| TC 250, PE contact, Crimp termination, Contact surface: Silver plated<br>            | 16<br>35                                   | 09 11 000 6190<br>09 11 000 6104   | 09 11 000 6290<br>09 11 000 6204   |  |

| Conductor cross-section | Tool identification | Stripping length A | Ø        |
|-------------------------|---------------------|--------------------|----------|
| 10 mm <sup>2</sup>      | 6                   | 22 mm              | 4.3 mm   |
| 16 mm <sup>2</sup>      | 8                   | 22 mm              | 5.5 mm   |
| 25 mm <sup>2</sup>      | 10                  | 22 mm              | 7 mm     |
| 35 mm <sup>2</sup>      | 12                  | 22 mm              | 8.45 mm  |
| 50 mm <sup>2</sup>      | 14                  | 22 mm              | 10.25 mm |
| 70 mm <sup>2</sup>      | 16                  | 22 mm              | 11.75 mm |

for stranded wire according to IEC 60 228 Class 5

Crimp zone acc. to DIN 46235

## Features

- Hoods/housings for harsh outdoor environments
- Metal hoods and housings with excellent corrosion resistance
- Corrosion resistance ASTM B117-09 (500 h)
- Excellent EMC characteristics
- Screw locking M6
- Field of application: for external electrical interconnections in vehicles, in highly demanding environments and wet areas, as well as for sensitive interconnections that have to be shielded

## Technical characteristics

|  |   |
|--|---|
| Limiting temperature                   | -40 ... +125 °C   |
| Tightening torque (screw locking)      | 4 Nm  |
| Degree of protection acc. to IEC 60529 | IP65, IP68, IP69 / IPX9K acc. to ISO 20653                      |
| Type rating acc. to UL 50 / UL 50E     | 4, 4X, 12   |
| Material (hood/housing)                | Aluminium die-cast, Corrosion resistant                         |
| Surface (hood/housing)                 | Powder-coated   |
| Colour (hood/housing)                  | RAL 9005 (jet black)  |
| Material (seal)                        | NBR   |
| Material (locking)                     | Stainless steel   |
| Material (accessories)                 | Metal, Aluminium die-cast, Stainless steel, Aluminium compliant |
| RoHS                                   |   |

Han  
HC

## Specifications and approvals


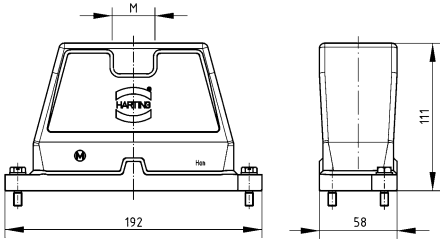

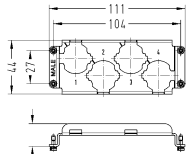

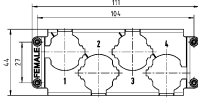
UL 1977 ECBT2.E235076  
 CSA-C22.2 No. 182.3 ECBT8.E235076  
 DNV GL




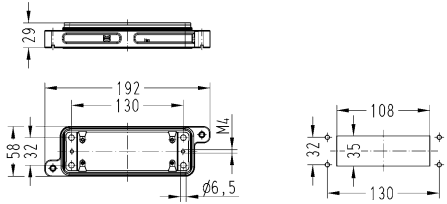

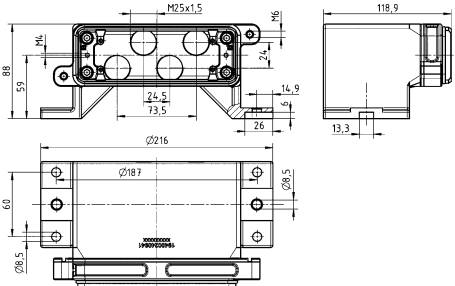
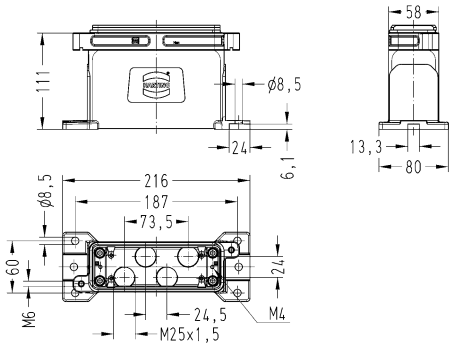


Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC


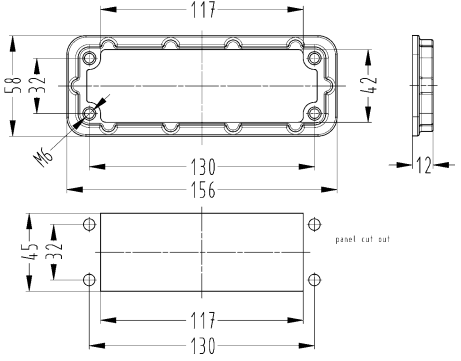

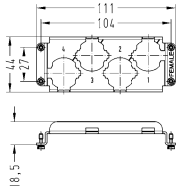

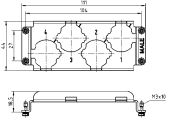
| Identification  | Cable entry      | Part number                      | Drawing (dimensions in mm)   |
|---|------------------|----------------------------------|--|
| Han <sup>®</sup> HPR,<br>Hood,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br> | 4x M20<br>4x M25 | 19 40 024 0473<br>19 40 024 0474 |    |
| Han <sup>®</sup> HPR,<br>Frame,<br>for male inserts,<br>4x Han <sup>®</sup> HC Modular 250<br><br>     |                  | 09 11 000 9925                   | <br>Tightening torque Fixing screws M3: 0.5 Nm  |
| Han <sup>®</sup> HPR,<br>Frame,<br>for female inserts,<br>4x Han <sup>®</sup> HC Modular 250<br><br>   |                  | 09 11 000 9942                   | <br>Tightening torque Fixing screws M3: 0.5 Nm |

Hoods/housings for harsh outdoor environments  
Screw locking

| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm)  |
|---|-------------|----------------|--|
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    |             | 09 40 024 0311 |    |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | 4x M25      | 19 40 024 0941 |   |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   | 4x M25      | 19 40 024 1242 |  |



Han  
HC

| Identification   | Cable entry | Part number    | Drawing<br>(dimensions in mm)  |
|--|-------------|----------------|--|
| Mounting frames,<br>Han® HPR,<br>Thread M6                            |             | 09 40 000 9955 |    |
| Han® HPR,<br>Frame,<br>for female inserts,<br>4x Han® HC Modular 250  |             | 09 11 000 9926 |  <p>Tightening torque Fixing screws M3: 0.5 Nm</p>   |
| Han® HPR,<br>Frame,<br>for male inserts,<br>4x Han® HC Modular 250  |             | 09 11 000 9941 |  <p>Tightening torque Fixing screws M3: 0.5 Nm</p> |



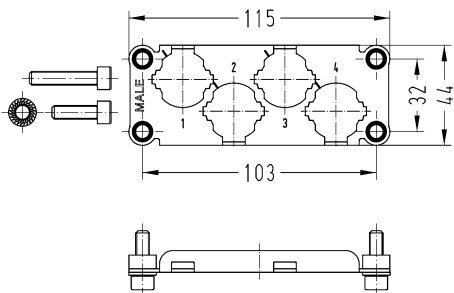
Han  
14  
·  
16





Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC




| Identification  | Cable entry              | Part number                              | Drawing<br>(dimensions in mm)  |
|---|--------------------------|--|--|
| <p>Han® HPR,<br/>Hood,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   | <p>2x M40<br/>4x M25</p> | <p>19 40 016 0471<br/>19 40 016 0478</p> |  |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>4x Han® HC Modular 250,<br/>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x washer SK S6</p>  |                          | <p>09 11 000 9937</p>                    |  <p>Tightening torque Fixing screws M6: 10 Nm</p> |

Han  
14  
·  
17




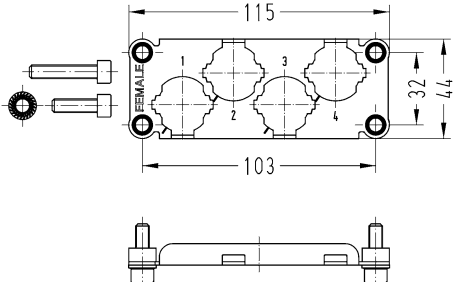
Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm) |
|---|-------------|----------------|-------------------------------|
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>Enlarged,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    |             | 09 40 016 0368 |                               |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | 4x M25      | 19 40 016 0978 |                               |
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M6</p>    |             | 09 40 000 9956 |                               |

Han  
14  
·  
18


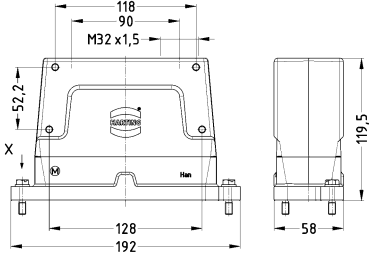

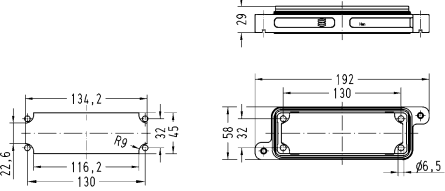

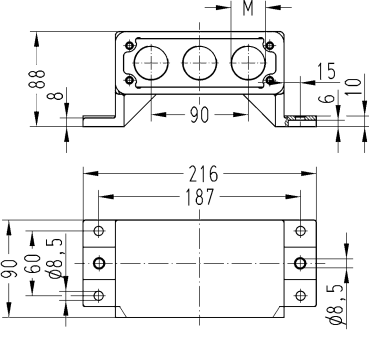

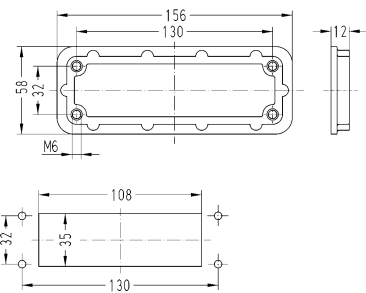


| Identification  | Cable entry | Part number           | Drawing<br>(dimensions in mm)   |
|---|-------------|-----------------------|---|
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>4x Han® HC Modular 250,<br/>Pack contents:<br/>4x cheese-head screw M6 x 30,<br/>4x washer SK S6</p>  |             | <p>09 11 000 9938</p> |  <p>Tightening torque Fixing screws M6: 10 Nm</p> |


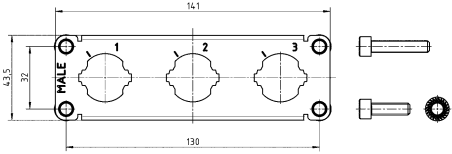

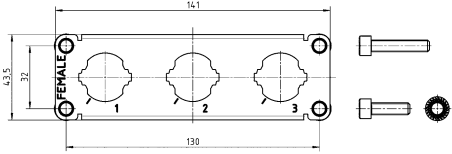


Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification   | Cable entry   | Part number           | Drawing<br>(dimensions in mm)   |
|--|---------------|-----------------------|---|
| <p>Han® HPR,<br/>Hood,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    | <p>3x M32</p> | <p>19 40 024 0468</p> |                         |
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>Enlarged,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |               | <p>09 40 024 0368</p> |                        |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  <p>Bulkhead mounted housing 09 40 024 0368 not included, please order separately</p> | <p>3x M32</p> | <p>19 40 024 0968</p> |                       |
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M6</p>   |               | <p>09 40 000 9904</p> |  <p>Panel cut out</p> |


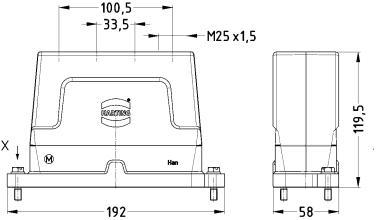

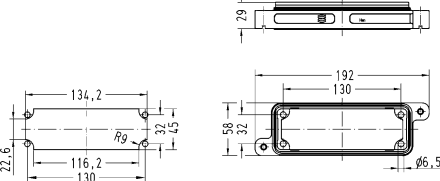

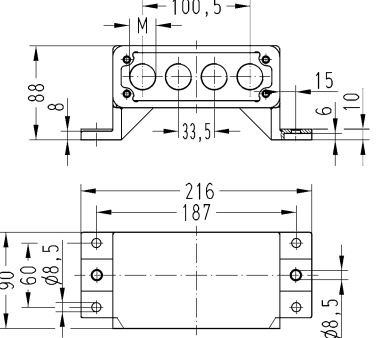

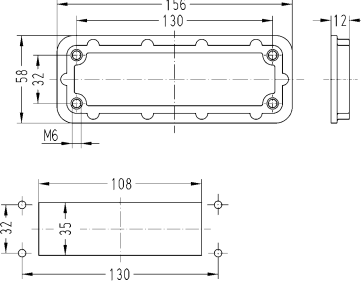



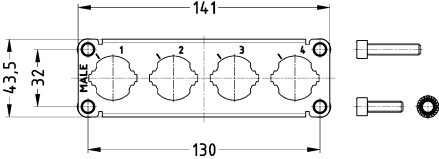

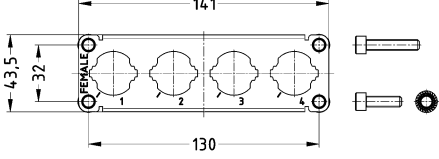
| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm)  |
|---|-------------|----------------|--|
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>3x Han® HC Modular 250,<br/>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x washer SK S6</p>    |             | 09 11 000 9931 |  <p>Tightening torque Fixing screw M6: 10 Nm</p> |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>3x Han® HC Modular 250,<br/>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x washer SK S6</p>  |             | 09 11 000 9932 |  <p>Tightening torque Fixing screw M6: 10 Nm</p> |



Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification   | Cable entry | Part number    | Drawing<br>(dimensions in mm)   |
|--|-------------|----------------|---|
| <p>Han® HPR,<br/>Hood,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    | 4x M25      | 19 40 024 0478 |                         |
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>Enlarged,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |             | 09 40 024 0368 |                        |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  <p>Bulkhead mounted housing 09 40 024 0368 not included, please order separately</p> | 4x M25      | 19 40 024 0978 |                       |
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M6</p>   |             | 09 40 000 9904 |  <p>Panel cut out</p> |

| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm)  |
|---|-------------|----------------|--|
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>4x Han® HC Modular 250,<br/>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x washer SK S6</p>    |             | 09 11 000 9927 |  <p>Tightening torque Fixing screws M6: 10 Nm</p> |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>4x Han® HC Modular 250,<br/>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x washer SK S6</p>  |             | 09 11 000 9928 |  <p>Tightening torque Fixing screws M6: 10 Nm</p> |

Han  
HC

Han  
14  
·  
23

## Features

- Contacts for fine stranded wire
- Low mating forces
- Suitable for HPR® hoods and housings
- UL approvals for axial-screw and screw termination

## Technical characteristics

|   |                                     |
|---|-------------------------------------|
| Rated current                             | 350 A                               |
| Rated voltage                             | 2000 V                              |
| Rated impulse voltage                     | 12 kV                               |
| Pollution degree                          | 3                                   |
| Insulation resistance                     | >10 <sup>10</sup> Ω                 |
| Contact resistance                        | ≤0.3 mΩ, ≤0.2 mΩ                    |
| Limiting temperature                      | -40 ... +125 °C                     |
| Mating cycles                             | ≥500                                |
| Wire outer diameter                       | ≤22 mm, ≤19.5 mm                    |
| Material (insert)                         | Polycarbonate (PC), Polyamide (PA)  |
| Colour (insert)                           | RAL 7032 (pebble grey)              |
| Material (contacts)                       | Copper alloy                        |
| Material flammability class acc. to UL 94 | V-0                                 |
| RoHS                                      | compliant, compliant with exemption |

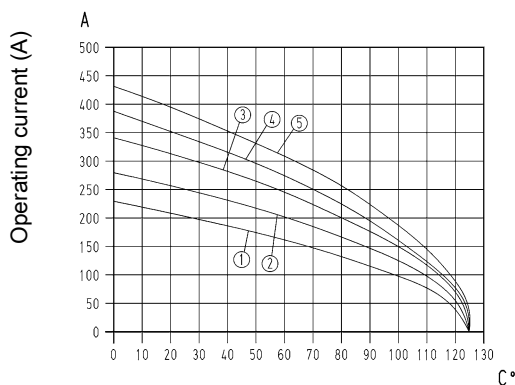
## Derating

### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2

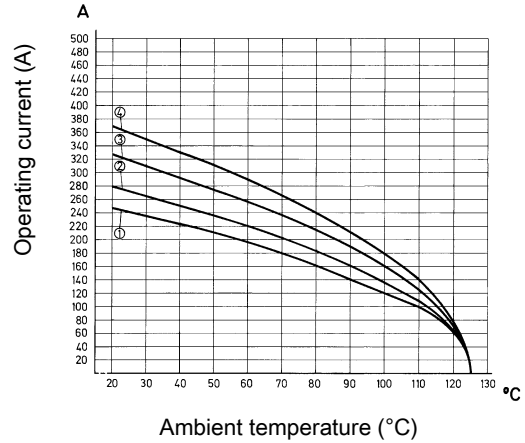
Crimp termination



- ① Conductor cross-section 35 mm<sup>2</sup>
  - ② Conductor cross-section 50 mm<sup>2</sup>
  - ③ Conductor cross-section 70 mm<sup>2</sup>
  - ④ Conductor cross-section 95 mm<sup>2</sup>
  - ⑤ Conductor cross-section 120 mm<sup>2</sup>
- Three contacts in Han® 24 HPR

## Derating

Axial screw termination  
Screw termination



- ① Conductor cross-section 50 mm<sup>2</sup>
  - ② Conductor cross-section 70 mm<sup>2</sup>
  - ③ Conductor cross-section 95 mm<sup>2</sup>
  - ④ Conductor cross-section 120 mm<sup>2</sup>
- Three contacts in Han® 24 HPR

## Specifications and approvals

EN 60664-1  
IEC 61984  
DNV GL  
UL 1977 ECBT2.E235076

## Details

Electrical data up to 350 A 4000 V 18 kV 3 by using a hexagonal adapter and the HARTING cable gland, in order to realise the clearance and creepage distance.

Contact resistance crimp contact: ≤ 0.3 mOhm

Contact resistance screw contact: ≤ 0.2 mOhm

Contact resistance axial screw contact: ≤ 0.2 mOhm

### Remarks on the axial screw technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Hex key (A/F 5) see chapter Han 90

For more technical details (i.e. number of crimping operations or crimping position) see eCatalogue

Crimping tools see chapter Han 90


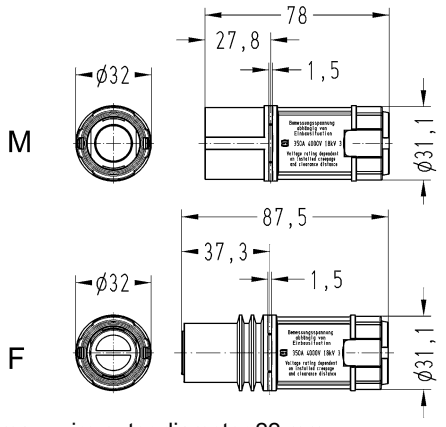

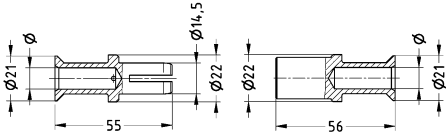
### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.


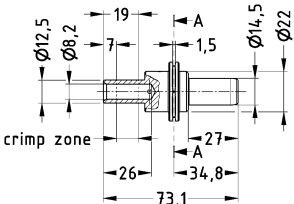
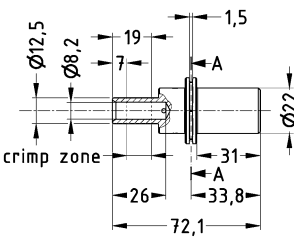


350 A 2.000 V 12 kV 3

Han  
HC

| Identification  | Conductor cross-section (mm <sup>2</sup> ) | Part number  |  | Drawing (dimensions in mm)   |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
|---|--|--|--|--|-------------------------|---|------------------|--------------------|---|-------|--------------------|-----|-------|--------------------|----|-------|--------------------|------|-------|--------------------|------|-------|---------------------|------|-------|
|   |  | Male   | Female   |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| Han® HC Modular, 350, Crimp termination<br><br>Please order crimp contacts separately. | 25 ... 120                                 | 09 11 001 3001   | 09 11 001 3101   |  <p>max. wire outer diameter 22 mm</p>  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| TC 350, Crimp contact, Contact surface: Silver plated<br>                            | 25<br>35<br>50<br>70<br>95<br>120          | 09 11 000 6139<br>09 11 000 6140<br>09 11 000 6141<br>09 11 000 6142<br>09 11 000 6143<br>09 11 000 6144 | 09 11 000 6239<br>09 11 000 6240<br>09 11 000 6241<br>09 11 000 6242<br>09 11 000 6243<br>09 11 000 6244 |  <table border="1" data-bbox="997 1310 1444 1500"> <thead> <tr> <th>Conductor cross-section</th> <th>ø</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>25 mm<sup>2</sup></td> <td>7</td> <td>26 mm</td> </tr> <tr> <td>35 mm<sup>2</sup></td> <td>8.2</td> <td>26 mm</td> </tr> <tr> <td>50 mm<sup>2</sup></td> <td>10</td> <td>28 mm</td> </tr> <tr> <td>70 mm<sup>2</sup></td> <td>11.5</td> <td>28 mm</td> </tr> <tr> <td>95 mm<sup>2</sup></td> <td>13.5</td> <td>30 mm</td> </tr> <tr> <td>120 mm<sup>2</sup></td> <td>15.5</td> <td>24 mm</td> </tr> </tbody> </table> <p>for stranded wire according to IEC 60 228 Class 5<br/>for stranded wire according to IEC 60228 Class 5<br/>Crimp zone acc. to DIN 46235</p> | Conductor cross-section | ø | Stripping length | 25 mm <sup>2</sup> | 7 | 26 mm | 35 mm <sup>2</sup> | 8.2 | 26 mm | 50 mm <sup>2</sup> | 10 | 28 mm | 70 mm <sup>2</sup> | 11.5 | 28 mm | 95 mm <sup>2</sup> | 13.5 | 30 mm | 120 mm <sup>2</sup> | 15.5 | 24 mm |
| Conductor cross-section   | ø  | Stripping length   |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| 25 mm <sup>2</sup>  | 7  | 26 mm  |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| 35 mm <sup>2</sup>  | 8.2  | 26 mm  |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| 50 mm <sup>2</sup>  | 10   | 28 mm  |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| 70 mm <sup>2</sup>  | 11.5                                       | 28 mm  |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| 95 mm <sup>2</sup>  | 13.5                                       | 30 mm  |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |
| 120 mm <sup>2</sup>   | 15.5                                       | 24 mm  |  |  |                         |   |                  |                    |   |       |                    |     |       |                    |    |       |                    |      |       |                    |      |       |                     |      |       |


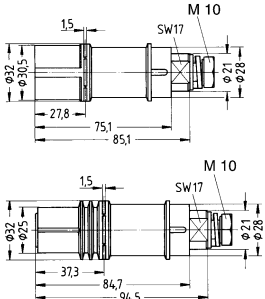

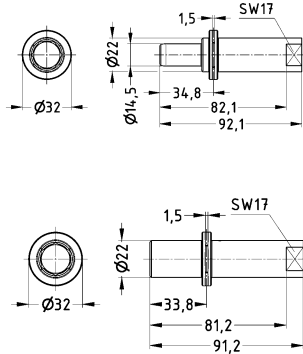
Han  
HC

| Identification   | Conductor cross-section (mm <sup>2</sup> ) | Part number    |                | Drawing (dimensions in mm)  |
|--|--|----------------|----------------|---|
|  |  | Male           | Female         |   |
| TC 350,<br>PE contact,<br>Crimp termination,<br>Contact surface:<br>Silver plated<br> | 35   | 09 11 000 6172 | 09 11 000 6272 |   |

Han  
14  
·  
26


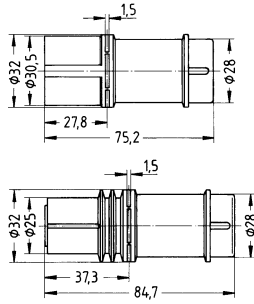

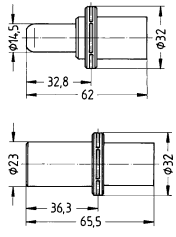
350 A 2.000 V 12 kV 3

Han  
HC

| Identification   | Conductor cross-section (mm <sup>2</sup> ) | Part number    |                | Drawing (dimensions in mm)  |
|--|--|----------------|----------------|---|
|  |  | Male           | Female         |   |
| <p>Han® HC Modular, 350, Screw termination, Contact surface: Silver plated</p>  | 120  | 09 11 001 2655 | 09 11 001 2755 |  <p>Tightening torque 14 Nm<br/>Cable shoe ≤ 120 mm<sup>2</sup><br/>Please ensure to hold up the contact with a wrench size 17 to apply the tightening torque</p>   |
| <p>TC 350, PE contact, Screw termination, Contact surface: Silver plated</p>  | 120  | 09 11 000 6158 | 09 11 000 6258 |  <p>Tightening torque 14 Nm<br/>Cable shoe ≤ 120 mm<sup>2</sup><br/>Please ensure to hold up the contact with a wrench size 17 to apply the tightening torque</p> |

350 A 2.000 V 12 kV 3

Han  
HC

| Identification   | Conductor cross-section (mm <sup>2</sup> ) | Part number                      |                                  | Drawing (dimensions in mm)   |                 |    |    |    |    |     |    |    |    |    |    |    |
|--|--|----------------------------------|----------------------------------|--|-----------------|----|----|----|----|-----|----|----|----|----|----|----|
|  |  | Male                             | Female                           |  |                 |    |    |    |    |     |    |    |    |    |    |    |
| <p>Han® HC Modular, 350, Axial screw termination, Contact surface: Silver plated</p>  | 35 ... 70<br>95 ... 120                    | 09 11 001 2651<br>09 11 001 2652 | 09 11 001 2751<br>09 11 001 2752 |  <p><b>Tightening torque</b></p> <table border="1"> <tr> <td>mm<sup>2</sup></td> <td>35</td> <td>50</td> <td>70</td> <td>95</td> <td>120</td> </tr> <tr> <td>Nm</td> <td>8</td> <td>10</td> <td>12</td> <td>14</td> <td>16</td> </tr> </table> <p>max. wire outer diameter 19.5 mm<br/>Stripping length 19...20 mm</p> | mm <sup>2</sup> | 35 | 50 | 70 | 95 | 120 | Nm | 8  | 10 | 12 | 14 | 16 |
| mm <sup>2</sup>  | 35   | 50                               | 70                               | 95   | 120             |    |    |    |    |     |    |    |    |    |    |    |
| Nm   | 8  | 10                               | 12                               | 14   | 16              |    |    |    |    |     |    |    |    |    |    |    |
| <p>TC 350, PE contact, Axial screw termination, Contact surface: Silver plated</p>  | 35 ... 70                                  | 09 11 000 6156                   | 09 11 000 6256                   |  <p><b>Tightening torque</b></p> <table border="1"> <tr> <td>mm<sup>2</sup></td> <td>35</td> <td>50</td> <td>70</td> </tr> <tr> <td>Nm</td> <td>8</td> <td>10</td> <td>12</td> </tr> </table> <p>Stripping length 19...20 mm</p>   | mm <sup>2</sup> | 35 | 50 | 70 | Nm | 8   | 10 | 12 |    |    |    |    |
| mm <sup>2</sup>  | 35   | 50                               | 70                               |  |                 |    |    |    |    |     |    |    |    |    |    |    |
| Nm   | 8  | 10                               | 12                               |  |                 |    |    |    |    |     |    |    |    |    |    |    |

Han  
14  
·  
28

## Features

- Hoods/housings for harsh outdoor environments
- Metal hoods and housings with excellent corrosion resistance
- Corrosion resistance ASTM B117-09 (500 h)
- Excellent EMC characteristics
- Screw locking M6
- Field of application: for external electrical interconnections in vehicles, in highly demanding environments and wet areas, as well as for sensitive interconnections that have to be shielded
- Distinguishing feature: colour-coded black, internal seal

## Technical characteristics

|  |  |
|--|--|
| Limiting temperature                   | -40 ... +125 °C                            |
| Tightening torque (screw locking)      | 4 Nm                                       |
| Degree of protection acc. to IEC 60529 | IP65, IP68, IP69 / IPX9K acc. to ISO 20653 |
| Type rating acc. to UL 50 / UL 50E     | 4, 4X, 12                                  |
| Material (hood/housing)                | Aluminium die-cast, Corrosion resistant    |
| Surface (hood/housing)                 | Powder-coated                              |
| Colour (hood/housing)                  | RAL 9005 (jet black)                       |
| Material (seal)                        | NBR  |
| Material (locking)                     | Stainless steel                            |
| Material (accessories)                 | Aluminium die-cast, Metal                  |
| RoHS                                   | compliant, compliant with exemption        |

## Specifications and approvals


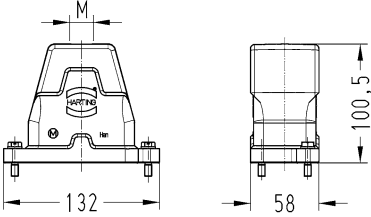

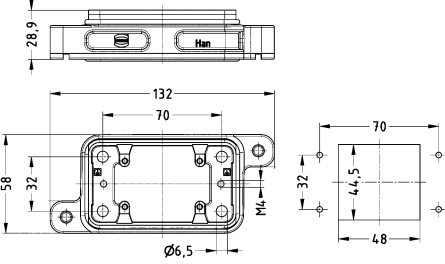

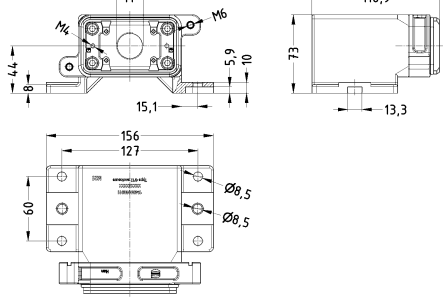

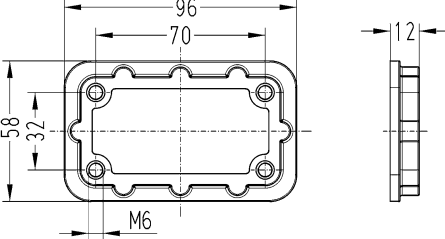
UL 1977 ECBT2.E235076  
 CSA-C22.2 No. 182.3 ECBT8.E235076  
 DNV GL




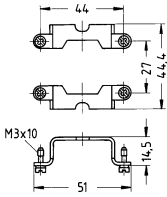

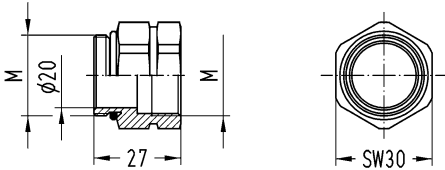


Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification  | Cable entry      | Size | Part number                      | Drawing<br>(dimensions in mm)  |
|---|------------------|------|----------------------------------|--|
| Han® HPR,<br>Hood,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br>   | 1x M25<br>1x M32 |      | 19 40 006 0411<br>19 40 006 0412 |    |
| Han® HPR,<br>Bulkhead mounted housing,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br>                                     |                  |      | 09 40 006 0311                   |   |
| Han® HPR,<br>Surface mounted housing,<br>Horizontal version,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br> | 1x M25<br>1x M40 |      | 19 40 006 0911<br>19 40 006 0913 |  |
| Mounting frames,<br>Han® HPR,<br>Thread M6<br><br>   |                  |      | 09 40 000 9901                   |  |


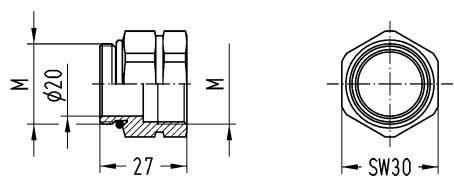


| Identification   | Cable entry | Size       | Part number                      | Drawing (dimensions in mm)   |
|--|-------------|------------|----------------------------------|--|
| <p>Han® HPR, Frame, for male inserts, for female inserts, 1x Han® HC Modular 350</p>            |             |            | 09 11 000 9951                   |  <p>Tightening torque Fixing screws M3: 0.5 Nm</p> |
| <p>Hexagonal adapter, With O-ring</p>  <p>to reach the electrical data up to 4000 V 18 kV 3</p> |             | M25<br>M32 | 19 36 000 5134<br>19 36 000 5135 |   |







| Identification   | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)  |
|--|-------------|------|----------------|--|
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p> |             | M25  | 19 36 000 5134 |  |


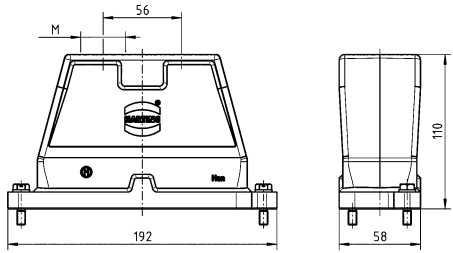

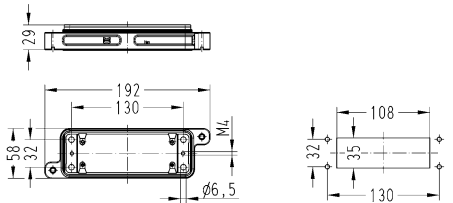

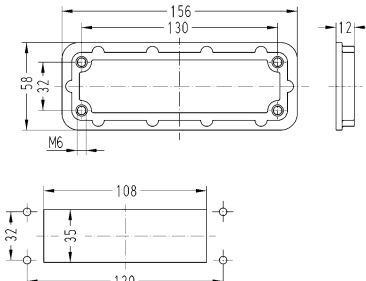

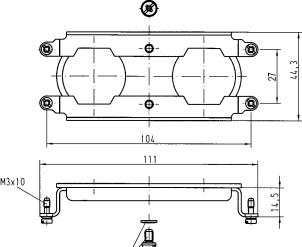
Han  
HC

Han  
14  
·  
33




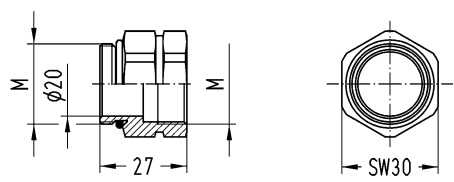
Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification  | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)   |
|---|-------------|------|----------------|---|
| Han® HPR,<br>Hood,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br>         | 2x M32      |      | 19 40 024 0432 |   |
| Han® HPR,<br>Bulkhead mounted housing,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br> |             |      | 09 40 024 0311 |    |
| Mounting frames,<br>Han® HPR,<br>Thread M6<br><br>   |             |      | 09 40 000 9904 |  <p>Panel cut out</p>   |
| Han® HPR,<br>Frame,<br>for male inserts,<br>for female inserts,<br>2x Han® HC Modular 350<br><br>  |             |      | 09 11 000 9956 |  <p>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |

Han  
14  
·  
34


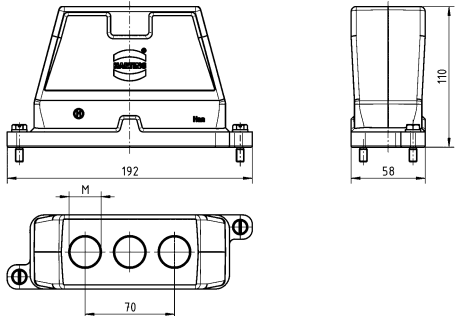

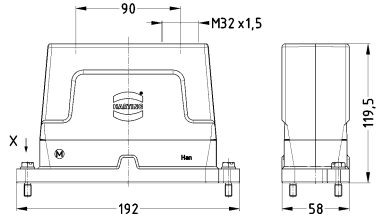

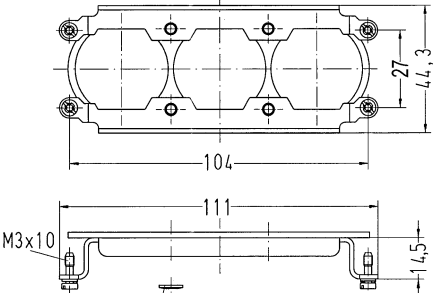


| Identification   | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)  |
|--|-------------|------|----------------|--|
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p> |             | M32  | 19 36 000 5135 |  |




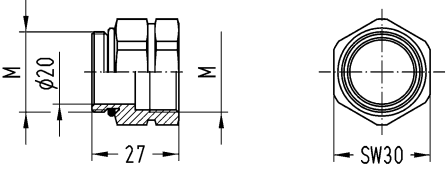
Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification  | Cable entry | Size | Part number    | Drawing (dimensions in mm)  |
|---|-------------|------|----------------|---|
| <p>Han® HPR,<br/>Hood,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>                           | 3x M25      |      | 19 40 024 0461 |    |
| <p>Han® HPR,<br/>Hood,<br/>Top entry,<br/>High construction,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | 3x M32      |      | 19 40 024 0467 |   |
| <p>Han® HPR,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>3x Han® HC Modular 350</p>                     |             |      | 09 11 000 9963 |  <p>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |



Han  
HC





| Identification   | Cable entry | Size               | Part number                              | Drawing<br>(dimensions in mm)   |
|--|-------------|--------------------|--|---|
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p> |             | <p>M25<br/>M32</p> | <p>19 36 000 5134<br/>19 36 000 5135</p> |  |

Han  
14  
·  
37


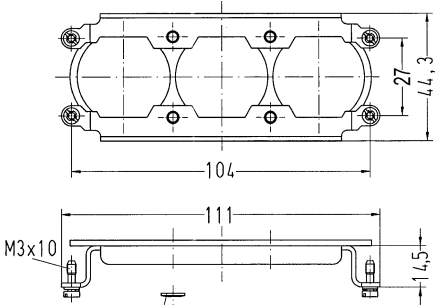

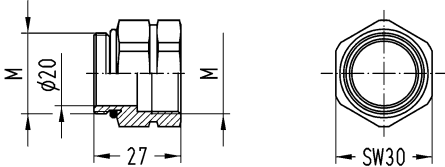


Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC


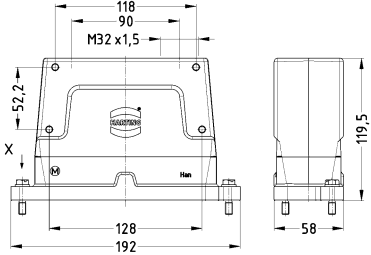

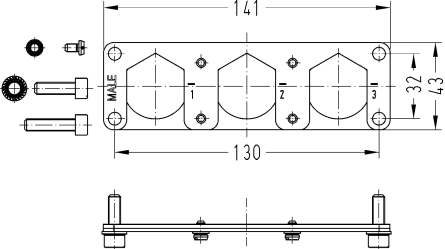

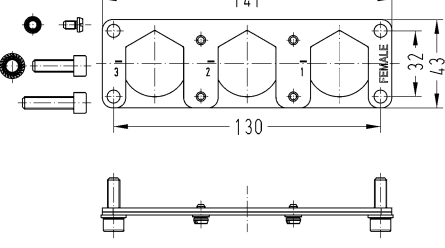

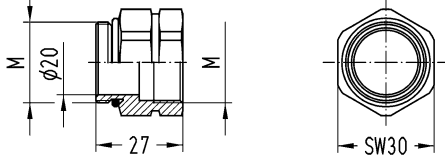
| Identification  | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm) |
|---|-------------|------|----------------|-------------------------------|
| Han® HPR,<br>Bulkhead mounted housing,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br>                                       |             |      | 09 40 024 0311 |                               |
| Han® HPR,<br>Surface mounted housing,<br>Horizontal version,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br> | 3x M25      |      | 19 40 024 0931 |                               |
| Han® HPR,<br>Surface mounted housing,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br>                        | 3x M25      |      | 19 40 024 1231 |                               |
| Mounting frames,<br>Han® HPR,<br>Thread M6<br><br>   |             |      | 09 40 000 9904 | <p>Panel cut out</p>          |



| Identification  | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)   |
|---|-------------|------|----------------|---|
| <p>Han® HPR,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>3x Han® HC Modular 350</p>     |             |      | 09 11 000 9963 |  <p>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p> |             | M25  | 19 36 000 5134 |    |

Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC


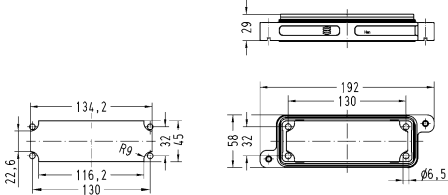

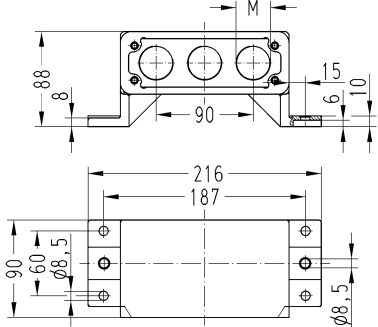

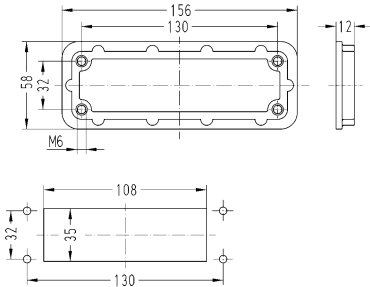
| Identification  | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)   |
|---|-------------|------|----------------|---|
| <p>Han® HPR,<br/>Hood,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   | 3x M32      |      | 19 40 024 0468 |   |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>3x Han® HC Modular 350,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>    |             |      | 09 11 000 9957 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>3x Han® HC Modular 350,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>  |             |      | 09 11 000 9958 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p>  |             | M32  | 19 36 000 5135 |   |

Han  
14  
·  
40




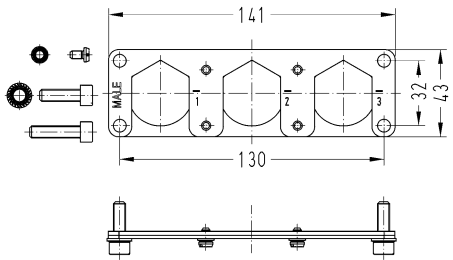

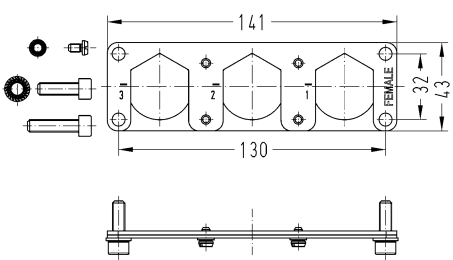
Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification   | Cable entry | Part number    | Drawing<br>(dimensions in mm)   |
|--|-------------|----------------|---|
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>Enlarged,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |             | 09 40 024 0368 |                         |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  <p>Bulkhead mounted housing 09 40 024 0368 not included, please order separately</p> | 3x M32      | 19 40 024 0968 |                        |
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M6</p>   |             | 09 40 000 9904 |  <p>Panel cut out</p> |




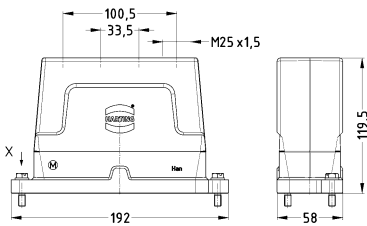

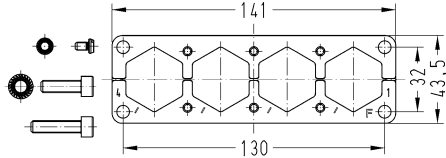

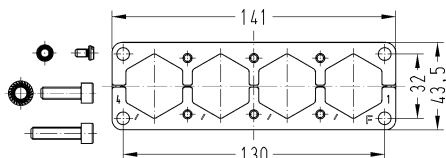
Han  
HC

| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm)   |
|---|-------------|----------------|---|
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>3x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>     |             | 09 11 000 9957 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>3x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>  |             | 09 11 000 9958 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |

Han  
14  
·  
42


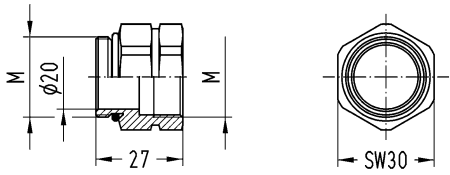
Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification   | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)   |
|--|-------------|------|----------------|---|
| <p>Han® HPR,<br/>Hood,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    | 4x M25      |      | 19 40 024 0478 |   |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>4x Han® HC Modular 350,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x heat shrink tube</p>    |             |      | 09 11 000 9964 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>4x Han® HC Modular 350,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x heat shrink tube</p>  |             |      | 09 11 000 9965 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |



Han  
HC


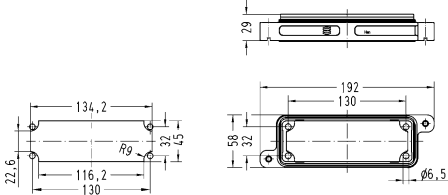

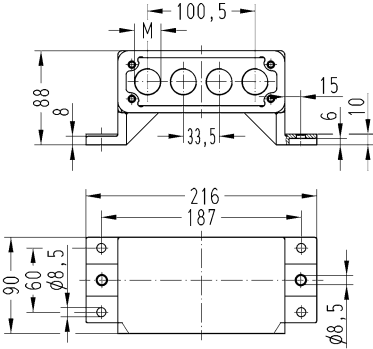

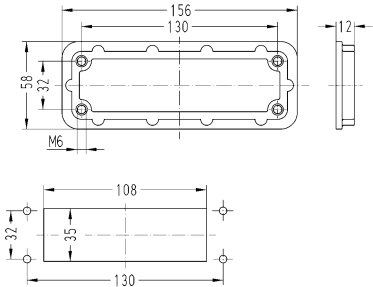
| Identification   | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)  |
|--|-------------|------|----------------|--|
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p> |             | M25  | 19 36 000 5134 |  |

Han  
14  
·  
44


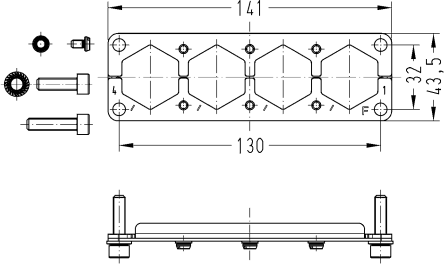

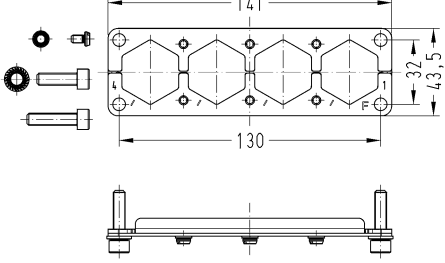


Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification   | Cable entry | Part number    | Drawing<br>(dimensions in mm)   |
|--|-------------|----------------|---|
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>Enlarged,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |             | 09 40 024 0368 |                         |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  <p>Bulkhead mounted housing 09 40 024 0368 not included, please order separately</p> | 4x M25      | 19 40 024 0978 |                        |
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M6</p>   |             | 09 40 000 9904 |  <p>Panel cut out</p> |

Han  
HC

| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm)  |
|---|-------------|----------------|--|
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>4x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x heat shrink tube</p>      |             | 09 11 000 9964 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>4x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x heat shrink tube</p>  |             | 09 11 000 9965 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |

Han  
14  
·  
46



## Features

- Hoods/housings for rough environments
- Metal hoods and housings with excellent corrosion resistance
- Corrosion resistance ASTM B117-09 (500 h)
- Locking lever made of high-quality stainless steel

## Technical characteristics

|  |                      |
|--|----------------------|
| Limiting temperature                   | -40 ... +125 °C      |
| Degree of protection acc. to IEC 60529 | IP65                 |
| Type rating acc. to UL 50 / UL 50E     | 4, 4X, 12            |
| Material (hood/housing)                | Aluminium die-cast   |
| Surface (hood/housing)                 | Powder-coated        |
| Colour (hood/housing)                  | RAL 9005 (jet black) |
| Material (seal)                        | FPM                  |
| Material (locking)                     | Stainless steel      |
| Material (accessories)                 | Metal                |
| RoHS                                   | compliant            |

## Specifications and approvals

UL 1977 ECBT2.E235076  
 CSA-C22.2 No. 182.3 ECBT8.E235076  
 DNV GL




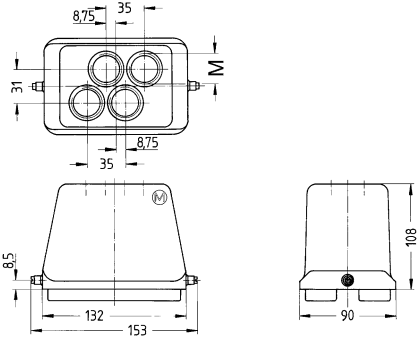

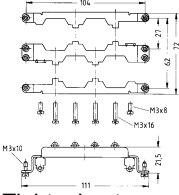
Han  
 HC

Han  
 14  
 ·  
 47



Hoods/housings for rough environments  
Single locking lever


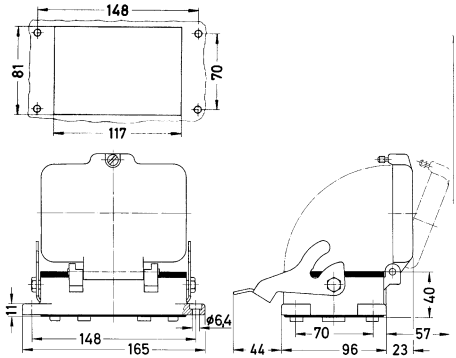

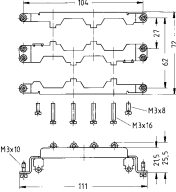
Han  
HC

| Identification   | Cable entry   | Part number<br>High construction | Drawing<br>(dimensions in mm)  |
|--|---------------|----------------------------------|--|
| <p>Han® M,<br/>Hood,<br/>Top entry,<br/>IP65</p>    | <p>4x M25</p> | <p>19 37 048 0401</p>            |    |
| <p>Han® M,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>4x HC 350 contacts + 2x Han® Q 5/0 in<br/>a hood</p>  |               | <p>09 11 000 9954</p>            |  <p>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque Fixing screws Han® Q 5/0:<br/>0.25 Nm<br/>Tightening torque Cross-tying screws 1.5 Nm</p> |



Hoods/housings for rough environments  
Single locking lever

Han  
HC

| Identification   | Part number<br>Low construction | Drawing<br>(dimensions in mm)  |
|--|---------------------------------|--|
| <p>Han® M,<br/>Bulkhead mounted housing,<br/>With thermo-plastic cover,<br/>IP65</p>    | <p>09 37 048 0301</p>           |    |
| <p>Han® M,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>4x HC 350 contacts + 2x Han® Q 5/0 in a bulkhead mounted<br/>housing</p>  | <p>09 11 000 9955</p>           |  <p>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque Fixing screws Han® Q 5/0: 0.25 Nm<br/>Tightening torque Cross-tying screws 1.5 Nm</p> |

## Features

- Contacts for fine stranded wire
- Low mating forces
- Suitable for HPR® hoods and housings
- UL approvals for axial-screw and screw termination

## Technical characteristics

|   |   |
|---|---|
| Rated current                             | 650 A   |
| Rated voltage                             | 4000 V  |
| Rated impulse voltage                     | 18 kV   |
| Pollution degree                          | 3   |
| Insulation resistance                     | >10 <sup>10</sup> Ω                             |
| Contact resistance                        | ≤0.3 mΩ, ≤0.2 mΩ                                |
| Limiting temperature                      | -40 ... +125 °C                                 |
| Mating cycles                             | ≥500  |
| Wire outer diameter                       | ≤27 mm, ≤32 mm @ 240 mm <sup>2</sup> , ≤26.5 mm |
| Material (insert)                         | Polycarbonate (PC), Polyamide (PA)              |
| Colour (insert)                           | RAL 7032 (pebble grey)                          |
| Material (contacts)                       | Copper alloy                                    |
| Material flammability class acc. to UL 94 | V-0   |
| RoHS                                      | compliant, compliant with exemption             |

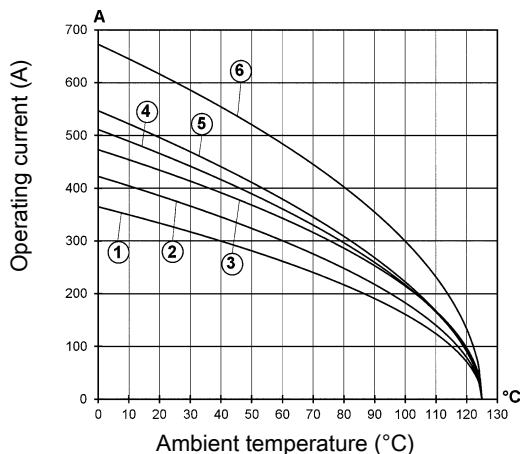
## Derating

### Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2

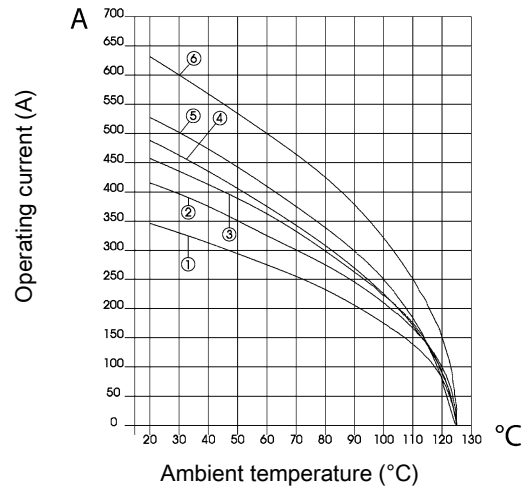
Crimp termination



- Conductor cross-section
- ① 70 mm<sup>2</sup>
  - ② 95 mm<sup>2</sup>
  - ③ 120 mm<sup>2</sup>
  - ④ 150 mm<sup>2</sup>
  - ⑤ 185 mm<sup>2</sup>
  - ⑥ 240 mm<sup>2</sup>
- Three contacts in Han® 24 HPR

## Derating

Screw termination / axial screw termination



- Conductor cross-section
- ① 70 mm<sup>2</sup>
  - ② 95 mm<sup>2</sup>
  - ③ 120 mm<sup>2</sup>
  - ④ 150 mm<sup>2</sup>
  - ⑤ 185 mm<sup>2</sup>
  - ⑥ 240 mm<sup>2</sup>
- Three contacts in Han® 24 HPR

## Specifications and approvals

EN 60664-1  
IEC 61984  
DNV GL  
UL 1977 ECBT2.E235076

## Details

Contact resistance crimp contact: ≤ 0.3 mΩ

Contact resistance screw contact: ≤ 0.2 mΩ

Contact resistance axial screw contact: ≤ 0.2 mΩ

### Remarks on the axial screw technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Hex key (A/F 8) see chapter Han 90

For more technical details (i.e. number of crimping operations or crimping position) see eCatalogue


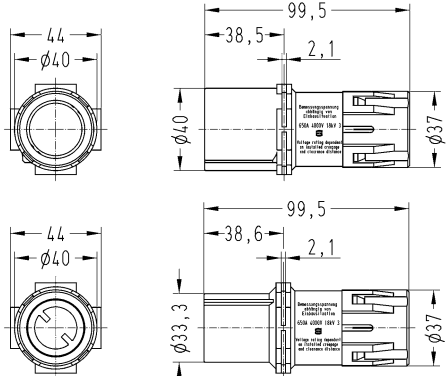

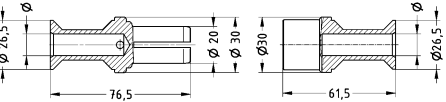
Crimping tools see chapter Han 90

### Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.


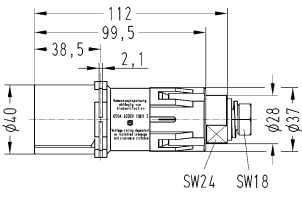
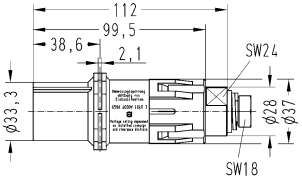

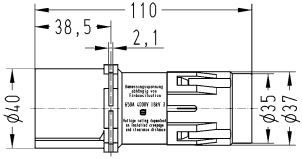
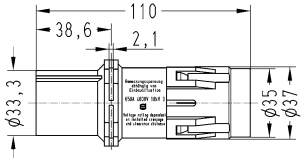
650 A 4.000 V 18 kV 3

Han  
HC

| Identification  | Conductor cross-section (mm <sup>2</sup> ) | Part number  |  | Drawing (dimensions in mm)   |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
|---|--|--|--|--|-------------------------|---|------------------|--------------------|------|-------|--------------------|------|-------|---------------------|------|-------|---------------------|----|-------|---------------------|----|-------|---------------------|------|-------|
|   |  | Male   | Female   |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| Han® HC Modular, 650, Crimp termination<br> <p>Please order crimp contacts separately.</p> | 70 ... 240                                 | 09 11 001 3012   | 09 11 001 3112   |  <p>max. wire outer diameter 70...185 mm<sup>2</sup>: 27 mm<br/>max. wire outer diameter 240 mm<sup>2</sup>: 32 mm</p>  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| TC 650, Crimp contact, Contact surface: Silver plated<br>                                | 50<br>70<br>95<br>120<br>150<br>185<br>240 | 09 11 000 6561<br>09 11 000 6161<br>09 11 000 6162<br>09 11 000 6163<br>09 11 000 6164<br>09 11 000 6165<br>09 11 000 6168 | 09 11 000 6261<br>09 11 000 6262<br>09 11 000 6263<br>09 11 000 6264<br>09 11 000 6265<br>09 11 000 6268 |  <table border="1"> <thead> <tr> <th>Conductor cross-section</th> <th>ø</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>70 mm<sup>2</sup></td> <td>11.5</td> <td>42 mm</td> </tr> <tr> <td>90 mm<sup>2</sup></td> <td>13.5</td> <td>42 mm</td> </tr> <tr> <td>120 mm<sup>2</sup></td> <td>15.5</td> <td>42 mm</td> </tr> <tr> <td>150 mm<sup>2</sup></td> <td>17</td> <td>42 mm</td> </tr> <tr> <td>185 mm<sup>2</sup></td> <td>19</td> <td>42 mm</td> </tr> <tr> <td>240 mm<sup>2</sup></td> <td>21.5</td> <td>46 mm</td> </tr> </tbody> </table> <p>for stranded wire according to IEC 60 228 Class 5<br/>Crimp zone acc. to DIN 46235</p> | Conductor cross-section | ø | Stripping length | 70 mm <sup>2</sup> | 11.5 | 42 mm | 90 mm <sup>2</sup> | 13.5 | 42 mm | 120 mm <sup>2</sup> | 15.5 | 42 mm | 150 mm <sup>2</sup> | 17 | 42 mm | 185 mm <sup>2</sup> | 19 | 42 mm | 240 mm <sup>2</sup> | 21.5 | 46 mm |
| Conductor cross-section   | ø  | Stripping length   |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| 70 mm <sup>2</sup>  | 11.5                                       | 42 mm  |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| 90 mm <sup>2</sup>  | 13.5                                       | 42 mm  |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| 120 mm <sup>2</sup>   | 15.5                                       | 42 mm  |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| 150 mm <sup>2</sup>   | 17   | 42 mm  |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| 185 mm <sup>2</sup>   | 19   | 42 mm  |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |
| 240 mm <sup>2</sup>   | 21.5                                       | 46 mm  |  |  |                         |   |                  |                    |      |       |                    |      |       |                     |      |       |                     |    |       |                     |    |       |                     |      |       |

650 A 4.000 V 18 kV 3

Han  
HC

| Identification   | Conductor cross-section (mm <sup>2</sup> ) | Part number                      |                                  | Drawing (dimensions in mm)  |                 |    |    |     |     |     |    |    |    |    |    |    |
|--|--|----------------------------------|----------------------------------|---|-----------------|----|----|-----|-----|-----|----|----|----|----|----|----|
|  |  | Male                             | Female                           |   |                 |    |    |     |     |     |    |    |    |    |    |    |
| <p>Han® HC Modular, 650, Screw termination, Contact surface: Silver plated</p>          | 240  | 09 11 001 2675                   | 09 11 001 2775                   |   <p>Tightening torque 16 ... 18 Nm<br/>Cable shoe ≤ 240 mm<sup>2</sup><br/>Please ensure to hold up the contact with a wrench size 24 to apply the tightening torque</p>  |                 |    |    |     |     |     |    |    |    |    |    |    |
| <p>Han® HC Modular, 650, Axial screw termination, Contact surface: Silver plated</p>  | 70 ... 120<br>150 ... 185                  | 09 11 001 2671<br>09 11 001 2672 | 09 11 001 2771<br>09 11 001 2772 |   <p>Tightening torque</p> <table border="1"> <thead> <tr> <th>mm<sup>2</sup></th> <th>70</th> <th>95</th> <th>120</th> <th>150</th> <th>185</th> </tr> </thead> <tbody> <tr> <td>Nm</td> <td>12</td> <td>14</td> <td>16</td> <td>17</td> <td>18</td> </tr> </tbody> </table> <p>Stripping length 23 ... 25 mm<br/>max. wire outer diameter 26.5 mm</p> | mm <sup>2</sup> | 70 | 95 | 120 | 150 | 185 | Nm | 12 | 14 | 16 | 17 | 18 |
| mm <sup>2</sup>  | 70   | 95                               | 120                              | 150   | 185             |    |    |     |     |     |    |    |    |    |    |    |
| Nm   | 12   | 14                               | 16                               | 17  | 18              |    |    |     |     |     |    |    |    |    |    |    |

Han  
14  
·  
52

## Features

- Hoods/housings for harsh outdoor environments
- Metal hoods and housings with excellent corrosion resistance
- Corrosion resistance ASTM B117-09 (500 h)
- Excellent EMC characteristics
- Screw locking M6
- Field of application: for external electrical interconnections in vehicles, in highly demanding environments and wet areas, as well as for sensitive interconnections that have to be shielded
- Distinguishing feature: colour-coded black, internal seal

## Technical characteristics

|  |  |
|--|--|
| Limiting temperature                   | -40 ... +125 °C                            |
| Tightening torque (screw locking)      | 4 Nm                                       |
| Degree of protection acc. to IEC 60529 | IP65, IP68, IP69 / IPX9K acc. to ISO 20653 |
| Type rating acc. to UL 50 / UL 50E     | 4, 4X, 12                                  |
| Material (hood/housing)                | Aluminium die-cast, Corrosion resistant    |
| Surface (hood/housing)                 | Powder-coated                              |
| Colour (hood/housing)                  | RAL 9005 (jet black)                       |
| Material (seal)                        | NBR  |
| Material (locking)                     | Stainless steel                            |
| Material (accessories)                 | Metal, Aluminium die-cast                  |
| RoHS                                   | compliant with exemption, compliant        |

## Specifications and approvals


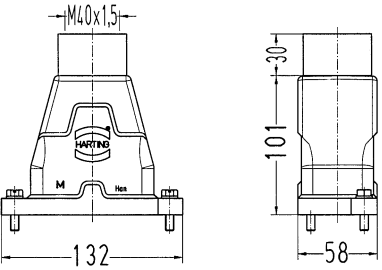

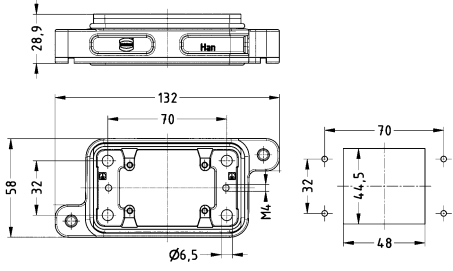

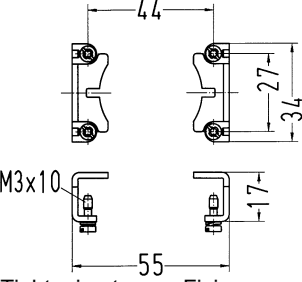
UL 1977 ECBT2.E235076  
 CSA-C22.2 No. 182.3 ECBT8.E235076  
 DNV GL





Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC


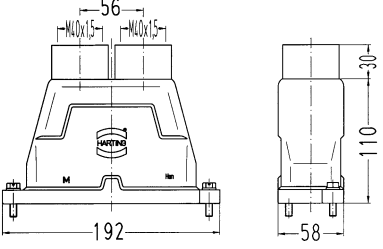

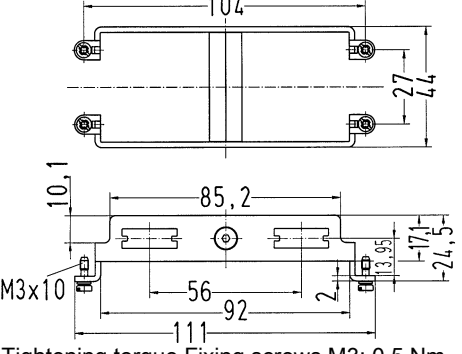
| Identification   | Cable entry   | Part number           | Drawing (dimensions in mm)   |
|--|---------------|-----------------------|--|
| <p>Han® HPR,<br/>Hood,<br/>With adapter,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | <p>1x M40</p> | <p>19 40 006 0418</p> |    |
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>             |               | <p>09 40 006 0311</p> |   |
| <p>Han® HPR,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>1x Han® HC Modular 650</p>              |               | <p>09 11 000 9971</p> |  <p>Tightening torque Fixing screws M3: 0.5 Nm</p> |

Han  
14  
·  
54




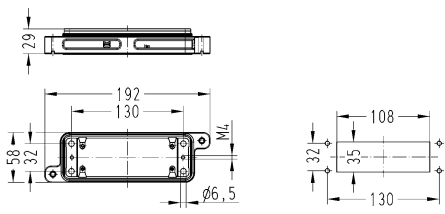


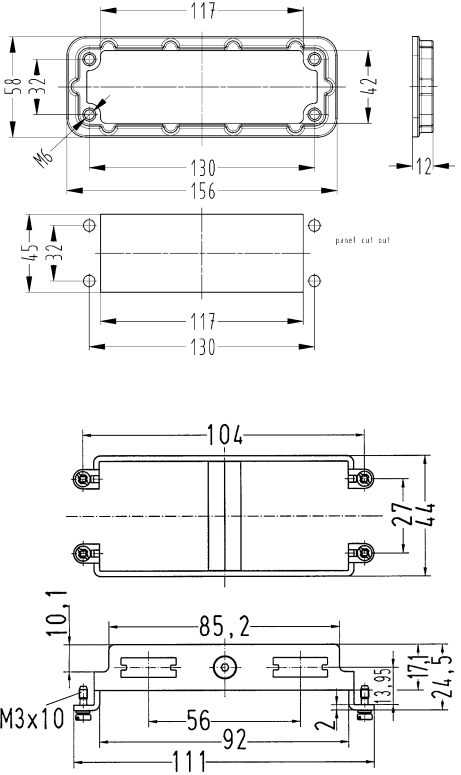
Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification   | Cable entry   | Part number           | Drawing<br>(dimensions in mm)  |
|--|---------------|-----------------------|--|
| <p>Han® HPR,<br/>Hood,<br/>With adapter,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | <p>2x M40</p> | <p>19 40 024 0438</p> |    |
| <p>Han® HPR,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>2x Han® HC Modular 650</p>              |               | <p>09 11 000 9972</p> |  <p>M3x10<br/>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque M4: 1.5 Nm</p> |

Hoods/housings for harsh outdoor environments  
Screw locking


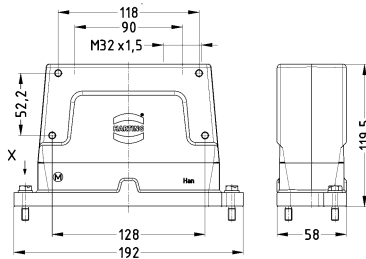

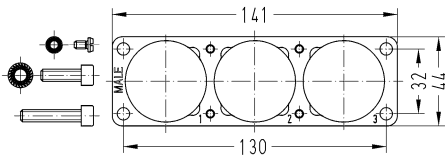

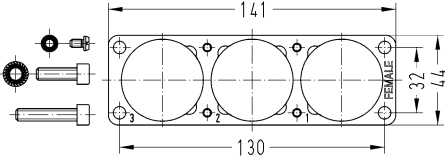

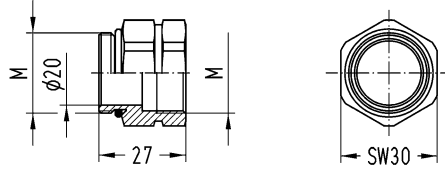
Han  
HC

| Identification   | Part number  | Drawing<br>(dimensions in mm)  |
|--|--|--|
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   | <p>09 40 024 0311</p>                              |    |
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M6</p> <br><br><p>Han® HPR,<br/>Frame,<br/>for male inserts,<br/>for female inserts,<br/>2x Han® HC Modular 650</p>  | <p>09 40 000 9955</p><br><br><p>09 11 000 9972</p> |  <p>Tightening torque Fixing screws M3: 0.5 Nm<br/>Tightening torque M4: 1.5 Nm</p> |




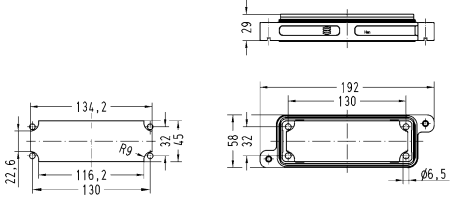

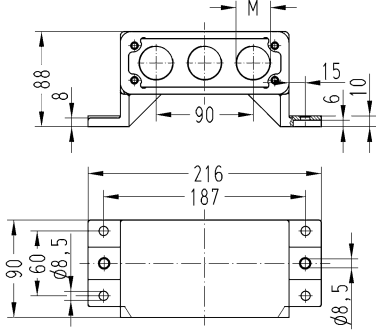

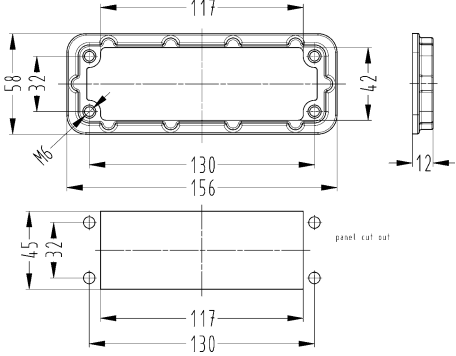
Hoods/housings for harsh outdoor environments  
Screw locking


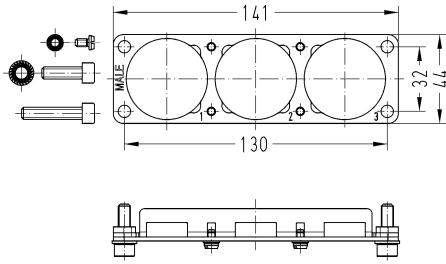

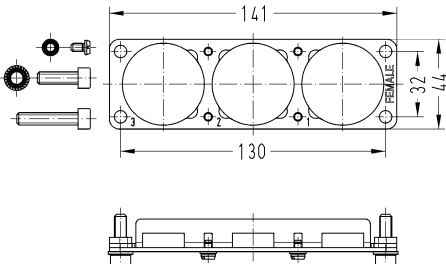

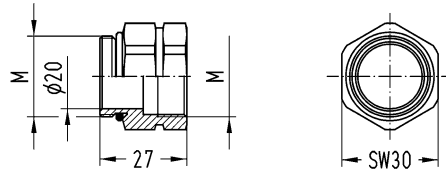
Han  
HC

| Identification  | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)   |
|---|-------------|------|----------------|---|
| <p>Han® HPR,<br/>Hood,<br/>Enlarged,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   | 3x M32      |      | 19 40 024 0468 |   |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>3x Han® HC Modular 650,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>    |             |      | 09 11 000 9973 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>3x Han® HC Modular 650,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>  |             | M32  | 19 36 000 5135 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p>  |             |      |                |   |

Hoods/housings for harsh outdoor environments  
Screw locking

Han  
HC

| Identification  | Cable entry | Size | Part number    | Drawing (dimensions in mm)   |
|---|-------------|------|----------------|--|
| Han® HPR,<br>Bulkhead mounted housing,<br>Enlarged,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br>  |             |      | 09 40 024 0368 |    |
| Han® HPR,<br>Surface mounted housing,<br>Horizontal version,<br>Enlarged,<br>Top entry,<br>IP65,<br>IP68,<br>IP69 / IPX9K acc. to ISO 20653<br><br><br>Bulkhead mounted housing<br>09 40 024 0368 not included,<br>please order separately | 3x M32      |      | 19 40 024 0968 |   |
| Mounting frames,<br>Han® HPR,<br>Thread M6<br><br>   |             |      | 09 40 000 9955 |  |

| Identification   | Cable entry | Size | Part number    | Drawing<br>(dimensions in mm)   |
|--|-------------|------|----------------|---|
| <p>Han® HPR enlarged,<br/>Frame,<br/>for male inserts,<br/>3x Han® HC Modular 650,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>     |             |      | 09 11 000 9973 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Han® HPR enlarged,<br/>Frame,<br/>for female inserts,<br/>3x Han® HC Modular 650,<br/>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>  |             |      | 09 11 000 9974 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Hexagonal adapter,<br/>With O-ring</p>  <p>to reach the electrical data up to<br/>4000 V 18 kV 3</p>   |             | M32  | 19 36 000 5135 |   |

## Features

- Hoods/Housings for higher EMC requirements
- Easy assembly due to split hood and surface mounted housing
- Many assembly possibilities due to separate assembly panels
- External termination of PE termination on hood and surface mounted housing
- Ideal motor/drive connector for transportation sector
- Secure and a visible connection of screening braid of shielded cables

## Technical characteristics

|  |   |
|--|---|
| Limiting temperature                   | -40 ... +125 °C   |
| Mating cycles                          | ≥500  |
| Tightening torque (screw locking)      | 4 Nm  |
| Degree of protection acc. to IEC 60529 | IP65, IP68, IP69 / IPX9K acc. to ISO 20653                |
| Type rating acc. to UL 50 / UL 50E     | 4, 4X, 12   |
| Material (hood/housing)                | Aluminium die-cast, Corrosion resistant                   |
| Surface (hood/housing)                 | Powder-coated   |
| Colour (hood/housing)                  | RAL 9005 (jet black)                                      |
| Material (seal)                        | NBR   |
| Material (locking)                     | Stainless steel   |
| Material (accessories)                 | Stainless steel, Metal, Zinc die-cast, Aluminium die-cast |
| RoHS                                   | compliant   |

## Specifications and approvals

UL 1977 ECBT2.E235076  
 CSA-C22.2 No. 182.3 ECBT8.E235076  
 DNV GL


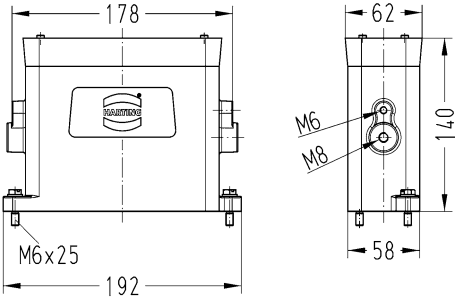

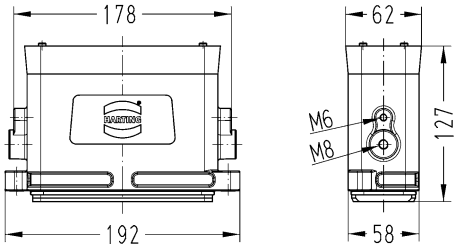

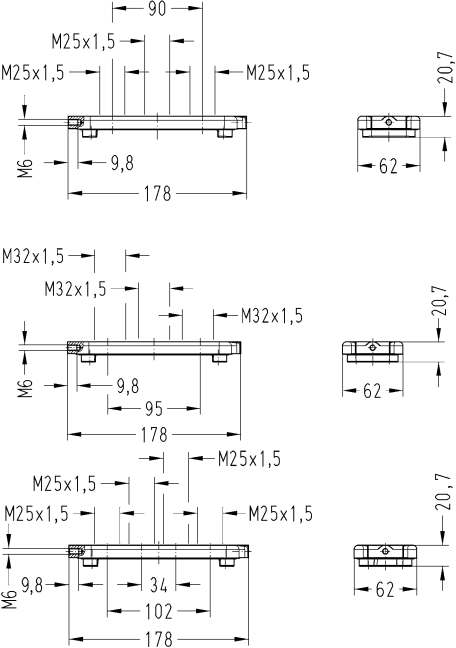


## Details


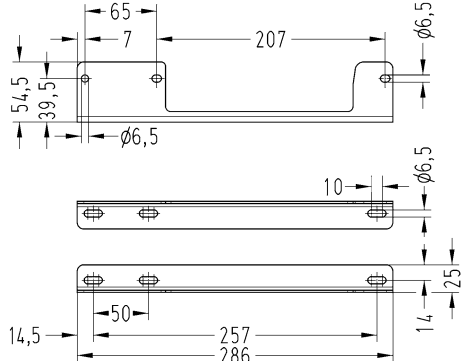

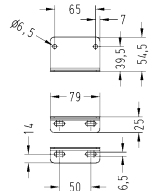

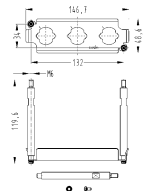

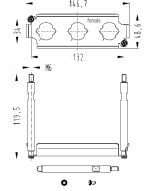
**Insertion / Removal tool** 09 99 000 0334 for shielding clamps  
 see chapter Han 90

Hoods/housings for harsh outdoor environments  
Screw locking


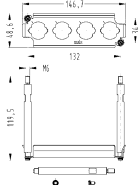

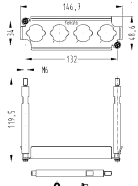

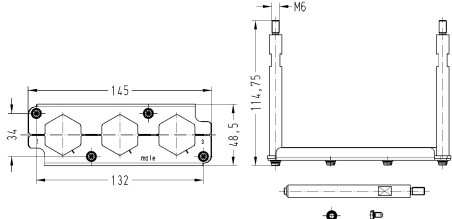

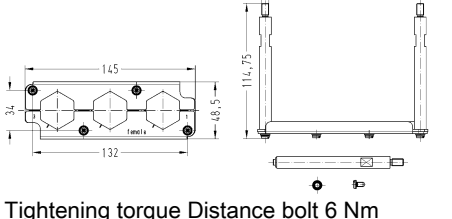

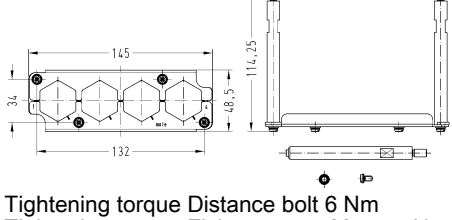
Han  
HC

| Identification   | Cable entry                | Conductor cross-section (mm <sup>2</sup> ) | Part number  | Drawing (dimensions in mm)   |
|--|----------------------------|--|--|--|
| <p>Han® HPR EasyCon,<br/>Hood,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |                            |  | 09 40 024 0451                                     |  <p>Tightening torque Cover locking 6 Nm<br/>Tightening torque External PE 15 Nm</p>   |
| <p>Han® HPR EasyCon,<br/>Surface mounted housing,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    |                            |  | 09 40 024 0951                                     |  <p>Tightening torque Cover locking 6 Nm<br/>Tightening torque External PE 15 Nm</p> |
| <p>Han® HPR EasyCon,<br/>Mounting cover,<br/>for surface mounted housings,<br/>for hoods,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  | 3x M25<br>3x M32<br>4x M25 |  | 19 40 024 9901<br>19 40 024 9903<br>19 40 024 9902 |    |


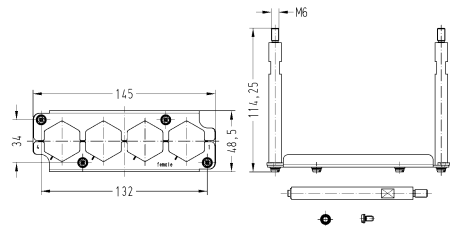

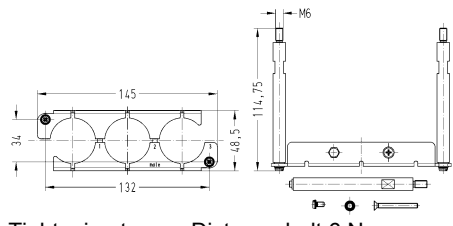

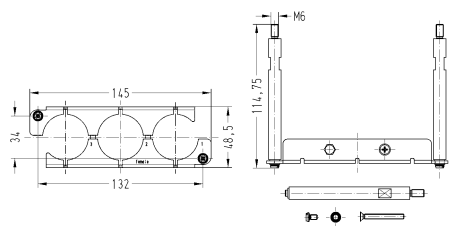

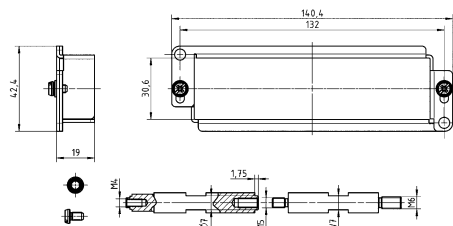
Han  
HC

| Identification   | Cable entry | Conductor cross-section (mm <sup>2</sup> ) | Part number    | Drawing (dimensions in mm)  |
|--|-------------|--|----------------|---|
| <p>Han® HPR EasyCon, Mounting panel, Long version, for hoods, for surface mounted housings,<br/>Pack contents:<br/>6x M6 screw,<br/>6x washer SK S6</p>             |             |  | 09 40 000 9925 |  <p>Tightening torque Fixing screws M6: 6 Nm</p>  |
| <p>Han® HPR EasyCon, Mounting panel, Short version, for hoods, for surface mounted housings,<br/>Pack contents:<br/>4x M6 screw,<br/>4x washer SK S6</p>           |             |  | 09 40 000 9926 |  <p>Tightening torque Fixing screws M6: 6 Nm</p>  |
| <p>Han® HPR EasyCon, Frame, for male inserts, 3x Han® HC Modular 250,<br/>Pack contents:<br/>2x distance bolt (SW 7),<br/>2x M4 screw,<br/>2x washer SK S4</p>    |             |  | 09 40 024 9901 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |
| <p>Han® HPR EasyCon, Frame, for female inserts, 3x Han® HC Modular 250,<br/>Pack contents:<br/>2x distance bolt (SW 7),<br/>2x M4 screw,<br/>2x washer SK S4</p>  |             |  | 09 40 024 9902 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |

Han  
14  
·  
62


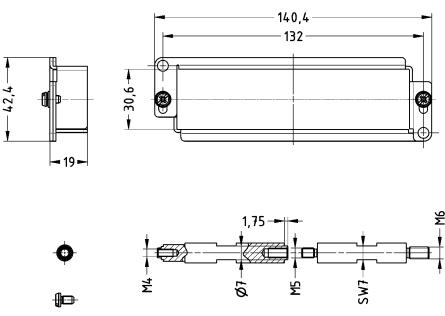

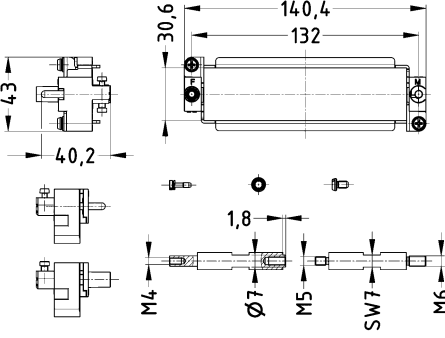

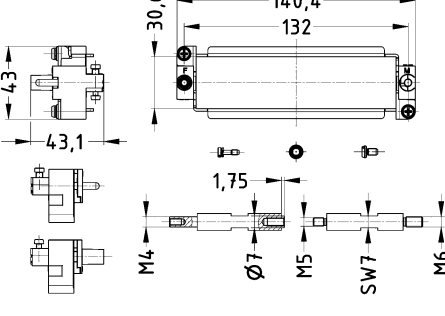
| Identification  | Cable entry | Conductor cross-section (mm <sup>2</sup> ) | Part number    | Drawing (dimensions in mm)  |
|---|-------------|--|----------------|---|
| <p>Han® HPR EasyCon, Frame, for male inserts, 4x Han® HC Modular 250,</p> <p>Pack contents:<br/>2x distance bolt (SW 7),<br/>2x M4 screw,<br/>2x washer SK S4</p>                              |             |  | 09 40 024 9903 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p>   |
| <p>Han® HPR EasyCon, Frame, for female inserts, 4x Han® HC Modular 250,</p> <p>Pack contents:<br/>2x distance bolt (SW 7),<br/>2x M4 screw,<br/>2x washer SK S4</p>                           |             |  | 09 40 024 9904 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p>   |
| <p>Han® HPR EasyCon, Frame, for male inserts, 3x Han® HC Modular 350,</p> <p>Pack contents:<br/>2x distance bolt (A/F 7),<br/>4x M4 screw,<br/>4x washer SK S4</p>                           |             |  | 09 40 024 9911 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |
| <p>Han® HPR EasyCon, Frame, for female inserts, 3x Han® HC Modular 350,</p> <p>Pack contents:<br/>2x distance bolt (A/F 7),<br/>4x M4 screw,<br/>4x washer SK S4</p>                         |             |  | 09 40 024 9912 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |
| <p>Han® HPR EasyCon, Frame, for male inserts, 4x Han® HC Modular 350,</p> <p>Pack contents:<br/>2x distance bolt (A/F 7),<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x heat shrink tube</p>  |             |  | 09 40 024 9913 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p> |

Han  
HC


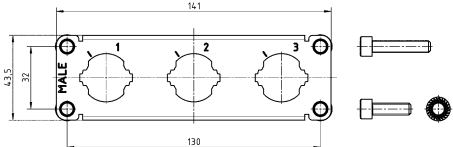

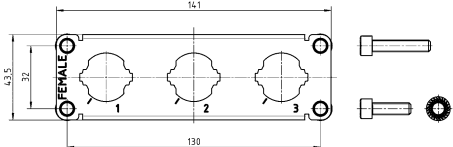

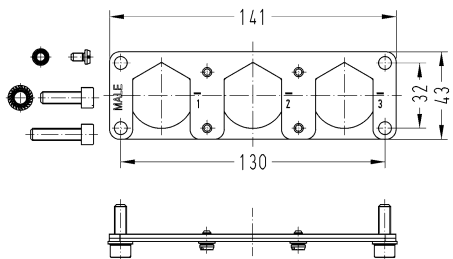

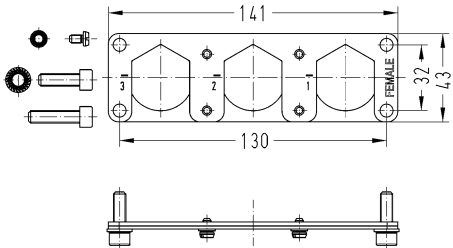
| Identification  | Cable entry | Conductor cross-section (mm <sup>2</sup> ) | Part number    | Drawing (dimensions in mm)   |
|---|-------------|--|----------------|--|
| <p>Han® HPR EasyCon, Frame, for female inserts, 4x Han® HC Modular 350,</p> <p>Pack contents:<br/>2x distance bolt (A/F 7),<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x heat shrink tube</p>                |             |  | 09 40 024 9914 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm</p>                                    |
| <p>Han® HPR EasyCon, Frame, for male inserts, 3x Han® HC Modular 650,</p> <p>Pack contents:<br/>2x distance bolt (A/F 7),<br/>2x M4 screw,<br/>2x washer SK S4,<br/>2x M4 countersunk screw</p>             |             |  | 09 40 024 9921 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm<br/>Tightening torque M4: 1.5 Nm</p>   |
| <p>Han® HPR EasyCon, Frame, for female inserts, 3x Han® HC Modular 650,</p> <p>Pack contents:<br/>2x distance bolt (A/F 7),<br/>2x M4 screw,<br/>2x washer SK S4,<br/>2x M4 countersunk screw</p>          |             |  | 09 40 024 9922 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm<br/>Tightening torque M4: 1.5 Nm</p> |
| <p>Han® HPR EasyCon, Frame, for up to 8 single modules, A ... H,</p> <p>Pack contents:<br/>2x M4/M5 distance bolts (A/F 7),<br/>2x M5/M6 distance bolts (A/F 7),<br/>4x M4 screw,<br/>4x washer SK S4</p>  |             |  | 09 40 024 9931 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm<br/>Tightening torque M4: 1.5 Nm</p> |

Han  
14  
·  
64




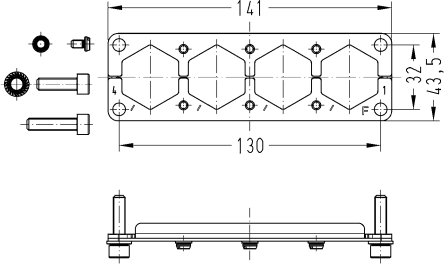

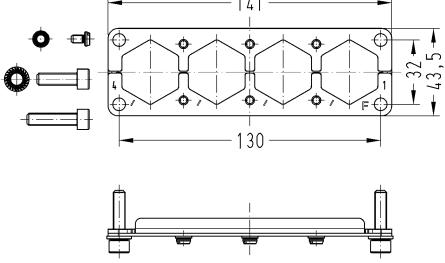

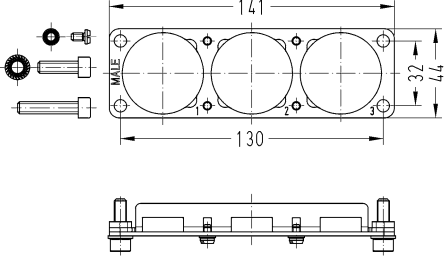

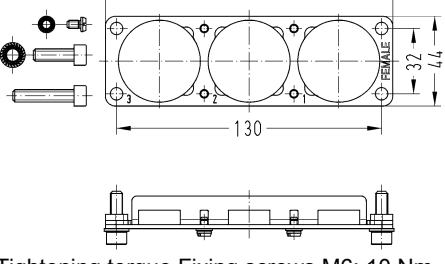
| Identification   | Cable entry | Conductor cross-section (mm <sup>2</sup> )                            | Part number    | Drawing (dimensions in mm)   |
|--|-------------|---|----------------|--|
| <p>Han® HPR EasyCon, Frame, for up to 8 single modules, a ... h,</p> <p>Pack contents:<br/>2x M4/M5 distance bolts (A/F 7),<br/>2x M5/M6 distance bolts (A/F 7),<br/>4x M4 screw,<br/>4x washer SK S4</p>   |             |   | 09 40 024 9932 |  <p>Tightening torque Distance bolt 6 Nm<br/>Tightening torque Fixing screws M4: 1.5 Nm<br/>Tightening torque M4: 1.5 Nm</p> |
| <p>Han® HPR EasyCon, Frame, for up to 8 single modules, A ... H,</p> <p>Pack contents:<br/>1x male PE adapter,<br/>1x female PE adapter,<br/>2x M4/M5 distance bolts (A/F 7),<br/>2x M5/M6 distance bolts (A/F 7),<br/>2x M3 screw,<br/>2x M4 screw,<br/>2x washer SK S4</p>  |             | 4 ... 10 PE terminal power side,<br>1 ... 2.5 PE terminal signal side | 09 40 024 9933 |   |
| <p>Han® HPR EasyCon, Frame, for up to 8 single modules, a ... h,</p> <p>Pack contents:<br/>1x male PE adapter,<br/>1x female PE adapter,<br/>2x M4/M5 distance bolts (A/F 7),<br/>2x M5/M6 distance bolts (A/F 7),<br/>2x M3 screw,<br/>2x M4 screw,<br/>2x washer SK S4</p>  |             | 4 ... 10 PE terminal power side,<br>1 ... 2.5 PE terminal signal side | 09 40 024 9934 |    |




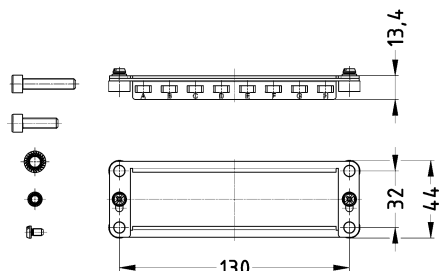

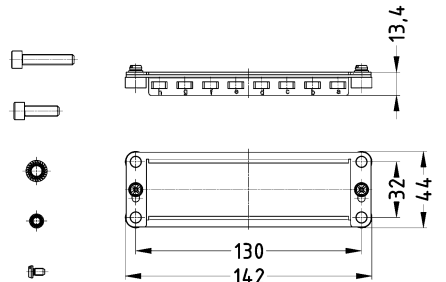

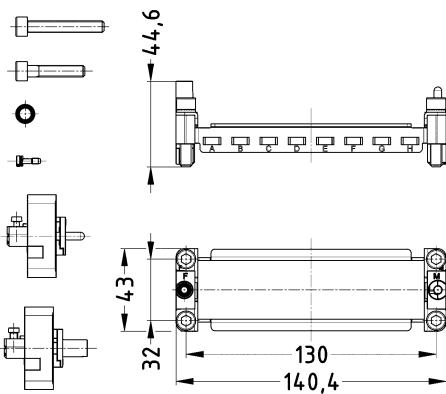

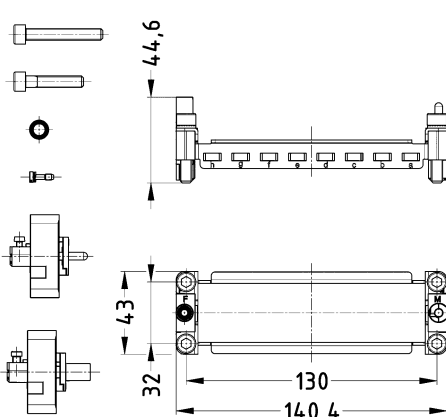
| Identification   | Conductor cross-section (mm <sup>2</sup> ) | Part number    | Drawing (dimensions in mm)  |
|--|--|----------------|---|
| <p>Han® HPR enlarged, Frame, for male inserts, 3x Han® HC Modular 250,</p> <p>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x washer SK S6</p>    |  | 09 11 000 9931 |  <p>Tightening torque Fixing screw M6: 10 Nm</p>  |
| <p>Han® HPR enlarged, Frame, for female inserts, 3x Han® HC Modular 250,</p> <p>Pack contents:<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x washer SK S6</p>    |  | 09 11 000 9932 |  <p>Tightening torque Fixing screw M6: 10 Nm</p>  |
| <p>Han® HPR enlarged, Frame, for male inserts, 3x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>    |  | 09 11 000 9957 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged, Frame, for female inserts, 3x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>  |  | 09 11 000 9958 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |



Han  
HC

| Identification  | Conductor cross-section (mm <sup>2</sup> ) | Part number    | Drawing (dimensions in mm)  |
|---|--|----------------|---|
| <p>Han® HPR enlarged, Frame, for male inserts, 4x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x heat shrink tube</p>      |  | 09 11 000 9964 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>   |
| <p>Han® HPR enlarged, Frame, for female inserts, 4x Han® HC Modular 350,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25,<br/>4x heat shrink tube</p>  |  | 09 11 000 9965 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged, Frame, for male inserts, 3x Han® HC Modular 650,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>                             |  | 09 11 000 9973 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Han® HPR enlarged, Frame, for female inserts, 3x Han® HC Modular 650,</p> <p>Pack contents:<br/>4x M4 screw,<br/>4x washer SK S4,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 25</p>                           |  | 09 11 000 9974 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |

Han  
14  
·  
68


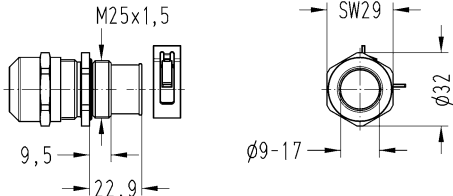
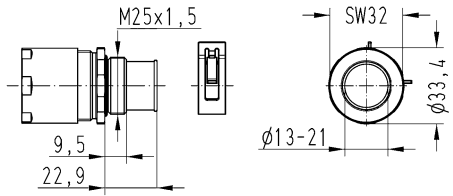
| Identification   | Conductor cross-section (mm <sup>2</sup> )                         | Part number    | Drawing (dimensions in mm)  |
|--|--|----------------|---|
| <p>Han® HPR enlarged, Frame, for up to 8 single modules, A ... H,</p> <p>Pack contents:<br/>2x M4 screw,<br/>2x washer SK S4,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 30,<br/>4x washer SK S6</p>                                 |  | 09 11 000 9935 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>   |
| <p>Han® HPR enlarged, Frame, for up to 8 single modules, a ... h,</p> <p>Pack contents:<br/>2x M4 screw,<br/>2x washer SK S4,<br/>4x cheese-head screw M6 x 20,<br/>4x cheese-head screw M6 x 30,<br/>4x washer SK S6</p>                                |  | 09 11 000 9936 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p>  |
| <p>Han® HPR enlarged, Frame, for up to 8 single modules, A ... H,</p> <p>Pack contents:<br/>1x male PE adapter,<br/>1x female PE adapter,<br/>2x M3 screw,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 30,<br/>4x cheese-head screw M6 x 40</p>  | 4 ... 10 PE terminal power side, 1 ... 2.5 PE terminal signal side | 09 11 024 9933 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |
| <p>Han® HPR enlarged, Frame, for up to 8 single modules, a ... h,</p> <p>Pack contents:<br/>1x male PE adapter,<br/>1x female PE adapter,<br/>2x M3 screw,<br/>4x washer SK S6,<br/>4x cheese-head screw M6 x 30,<br/>4x cheese-head screw M6 x 40</p>  | 4 ... 10 PE terminal power side, 1 ... 2.5 PE terminal signal side | 09 11 024 9934 |  <p>Tightening torque Fixing screws M6: 10 Nm<br/>Tightening torque Screws M4: 1.5 Nm</p> |


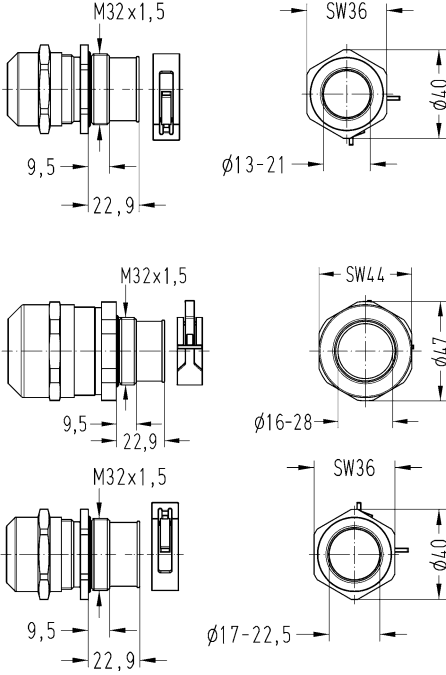

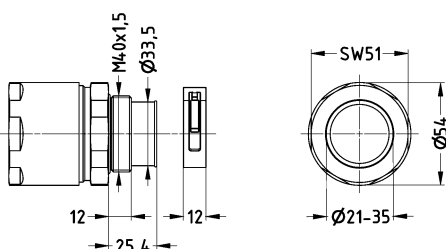
## Features

- Secure and a visible connection of screening braid of shielded cables

## Technical characteristics

|  |                                     |
|--|-------------------------------------|
| Limiting temperature                   | -40 ... +100 °C                     |
| Degree of protection acc. to IEC 60529 | IP65 / IP68                         |
| Material (seal)                        | EPDM                                |
| Material (cable glands)                | Brass                               |
| Material (clamping ring)               | Polyamide (PA)                      |
| Surface (accessories)                  | Nickel plated                       |
| RoHS                                   | compliant with exemption, compliant |

| Identification  | Size       | Clamping range (mm)   | Part number                      | Drawing (dimensions in mm)  |
|---|------------|-----------------------|----------------------------------|---|
| Han® HPR EasyCon,<br>Cable gland,<br>EMC version,<br>10 Nm,<br>IP65 / IP68<br> | M25<br>M25 | 9 ... 17<br>13 ... 21 | 19 00 000 5013<br>19 00 000 5019 | <br> |

| Identification  | Size                               | Clamping range (mm)  | Part number  | Drawing (dimensions in mm)   |
|---|------------------------------------|--|--|--|
| <p>Han® HPR EasyCon, Cable gland, EMC version, 20 Nm, IP65 / IP68</p>  | <p>M32<br/>M32<br/>M32</p>         | <p>13 ... 21<br/>16 ... 28<br/>17 ... 22.5</p>               | <p>19 00 000 5014<br/>19 00 000 5022<br/>19 00 000 5015</p>                    |    |
| <p>Han® HPR EasyCon, Cable gland, EMC version, IP65 / IP68</p>       | <p>M25<br/>M40<br/>M40<br/>M50</p> | <p>17 ... 22.5<br/>16 ... 28<br/>21 ... 35<br/>21 ... 35</p> | <p>19 00 000 5025<br/>19 00 000 5031<br/>19 00 000 5032<br/>19 00 000 5034</p> |  |

## Features

- Hoods/housings for harsh outdoor environments
- Metal hoods and housings with excellent corrosion resistance
- Corrosion resistance ASTM B117-09 (500 h)
- Excellent EMC characteristics
- Vibration resistant acc. to IEC 61373 category 1B (Category 2 possible with usage of M6 distance bolts)

## Technical characteristics

|  |  |
|--|--|
| Limiting temperature                   | -40 ... +125 °C                            |
| Tightening torque (screw locking)      | 4 Nm                                       |
| Degree of protection acc. to IEC 60529 | IP65, IP68, IP69 / IPX9K acc. to ISO 20653 |
| Material (hood/housing)                | Aluminium die-cast, Corrosion resistant    |
| Surface (hood/housing)                 | Powder-coated                              |
| Colour (hood/housing)                  | RAL 9005 (jet black)                       |
| Material (seal)                        | NBR  |
| Material (locking)                     | Stainless steel                            |
| Material (accessories)                 | Aluminium, Metal                           |
| RoHS                                   | compliant                                  |

## Specifications and approvals

IEC 61373 Category 1 Class B  
DNV GL




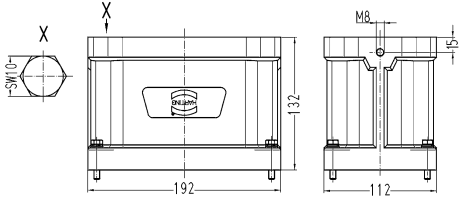

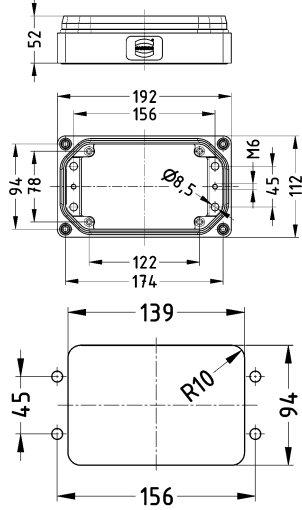
Han  
HC

Han  
14  
·  
72


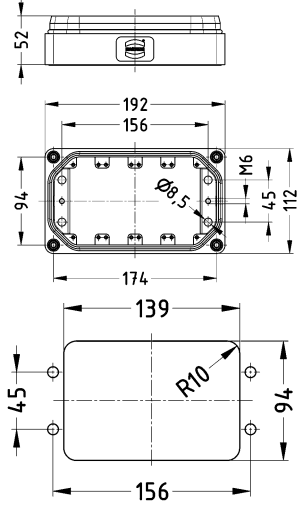

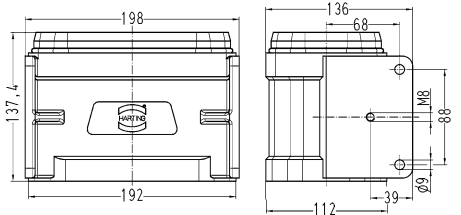

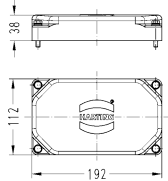

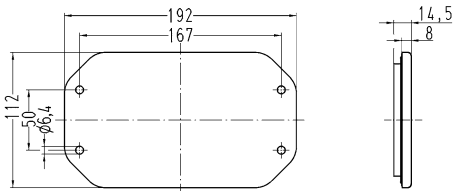


Hoods/housings for harsh outdoor environments  
Screw locking


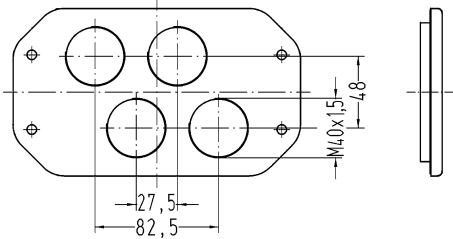

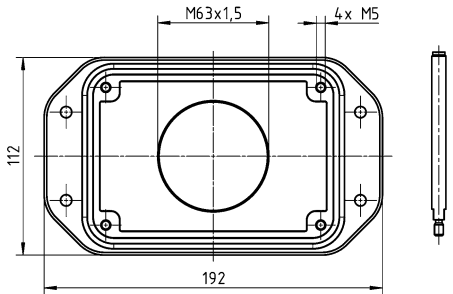

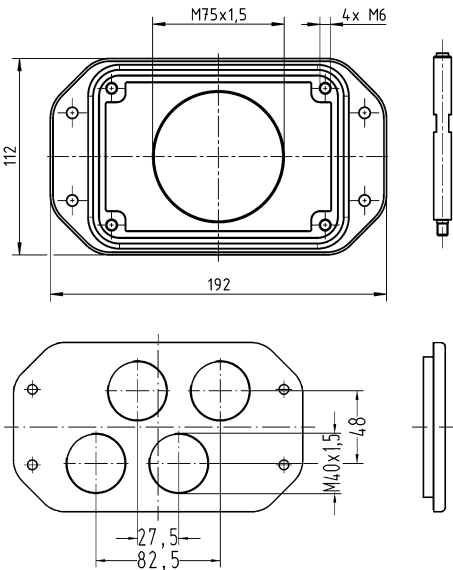
Han  
HC

| Identification  | Cable entry | Part number    | Drawing<br>(dimensions in mm)  |
|---|-------------|----------------|--|
| <p>Han® HPR,<br/>Hood,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>         |             | 09 40 048 0451 |                        |
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>  |             | 09 40 048 0311 |  <p>Panel cut out</p> |


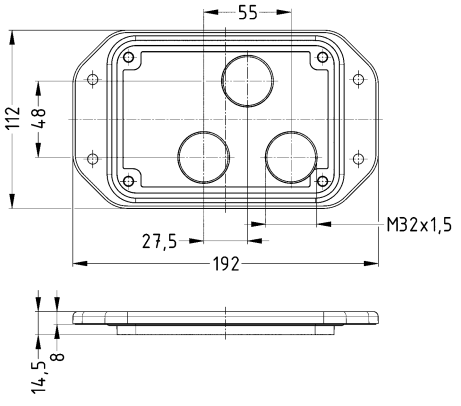

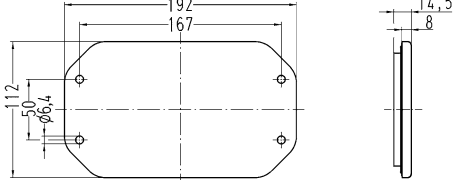

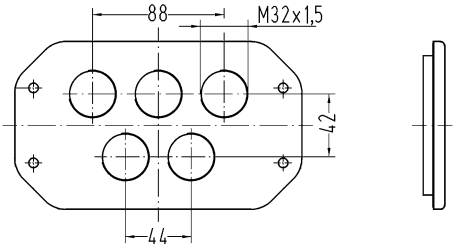
Han  
HC

| Identification   | Cable entry | Part number    | Drawing<br>(dimensions in mm)   |
|--|-------------|----------------|---|
| <p>Han® HPR,<br/>Bulkhead mounted housing,<br/>for 4 standard inserts - size 16 B,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |             | 09 40 048 0331 |  <p>Panel cut out</p> |
| <p>Han® HPR,<br/>Surface mounted housing,<br/>Horizontal version,<br/>Top entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>   |             | 09 40 048 0951 |                      |
| <p>Han® HPR,<br/>Protection cover,<br/>for bulkhead mounted housings,<br/>for surface mounted housings,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p>    |             | 09 40 048 5401 |                     |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M5,<br/>Without cable entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>  |             | 09 40 048 9803 |                     |


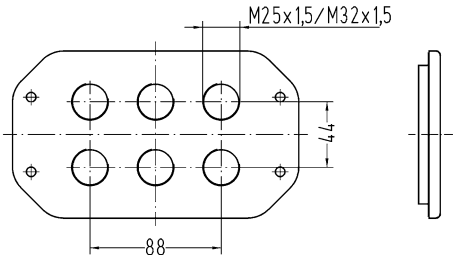
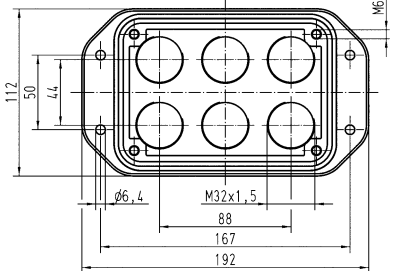

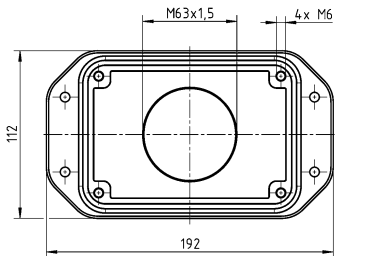

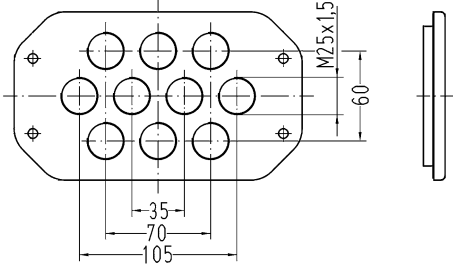
Han  
14  
·  
74

| Identification  | Cable entry              | Part number                              | Drawing<br>(dimensions in mm)  |
|---|--------------------------|--|--|
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M5,<br/>for male inserts,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>      | <p>4x M40</p>            | <p>19 40 048 9801</p>                    |    |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M5,<br/>One entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>            | <p>1x M63<br/>1x M75</p> | <p>19 40 048 9826<br/>19 40 048 9825</p> |    |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M5,<br/>for female inserts,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>  | <p>4x M40</p>            | <p>19 40 048 9901</p>                    |  |

Han  
HC


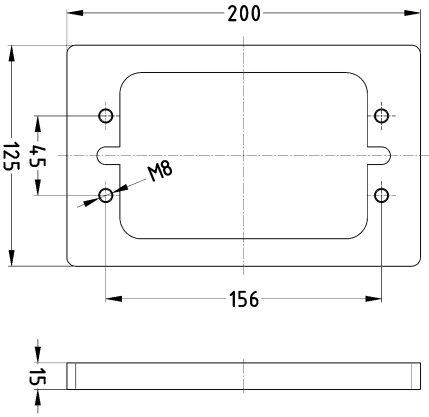
| Identification   | Cable entry   | Part number           | Drawing<br>(dimensions in mm)  |
|--|---------------|-----------------------|--|
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M5,<br/>3 cable entries,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>        | <p>3x M32</p> | <p>19 40 048 9902</p> |    |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M6,<br/>Without cable entry,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>  |               | <p>09 40 048 9801</p> |    |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M6,<br/>5 cable entries,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>      | <p>5x M32</p> | <p>19 40 048 9812</p> |  |

Han  
14  
·  
76

| Identification  | Cable entry              | Part number                              | Drawing<br>(dimensions in mm)  |
|---|--------------------------|--|--|
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M6,<br/>6 cable entries,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>     | <p>6x M25<br/>6x M32</p> | <p>19 40 048 9820<br/>19 40 048 9822</p> |   |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M6,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>                        | <p>1x M63</p>            | <p>19 40 048 9824</p>                    |   |
| <p>Han® HPR,<br/>Mounting cover,<br/>Distance bolt M6,<br/>10 cable entries,<br/>IP65,<br/>IP68,<br/>IP69 / IPX9K acc. to ISO 20653</p> <p>Pack contents:<br/>4 distance pieces,<br/>4x M6 screw,<br/>4 washers</p>  | <p>10x M25</p>           | <p>19 40 048 9860</p>                    |    |



Han  
HC

| Identification  | Cable entry | Part number           | Drawing<br>(dimensions in mm)  |
|---|-------------|-----------------------|--|
| <p>Mounting frames,<br/>Han® HPR,<br/>Thread M8</p>  |             | <p>09 40 000 9965</p> |  |

Han  
14  
·  
78


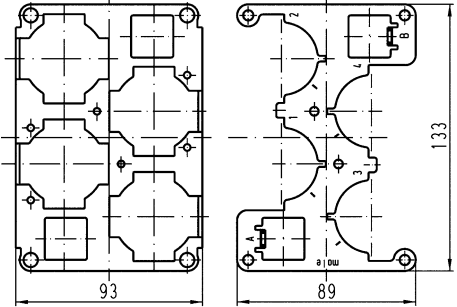

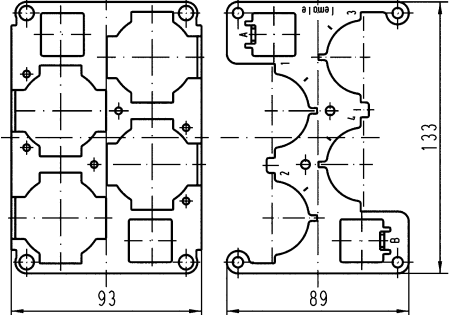

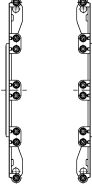
| Identification  | Part number    |        | Drawing<br>(dimensions in mm) |
|---|----------------|--------|-------------------------------|
|   | Male           | Female |                               |
| Han® HPR,<br>Frame,<br>for male inserts,<br>6x Han® HC Modular 350                                  | 09 40 048 9806 |        |                               |
| Han® HPR,<br>Frame,<br>for male inserts,<br>5x Han® HC Modular 350 + 1x Han® HC Modu-<br>lar 350 PE | 09 40 048 9809 |        |                               |
| Han® HPR,<br>Frame,<br>for male inserts,<br>4x HC 350 contacts + 2x Han® Q 5/0                      | 09 40 048 9810 |        |                               |
| Han® HPR,<br>Frame,<br>for male inserts,<br>10x Han® HC Modular 350                                 | 09 40 048 9860 |        |                               |

Han  
HC

| Identification  | Part number |                | Drawing<br>(dimensions in mm) |
|---|-------------|----------------|-------------------------------|
|   | Male        | Female         |                               |
| Han® HPR,<br>Frame,<br>for female inserts,<br>6x Han® HC Modular 350                                  |             | 09 40 048 9906 |                               |
| Han® HPR,<br>Frame,<br>for female inserts,<br>5x Han® HC Modular 350 + 1x Han® HC Modu-<br>lar 350 PE |             | 09 40 048 9909 |                               |
| Han® HPR,<br>Frame,<br>for female inserts,<br>4x HC 350 contacts + 2x Han® Q 5/0                      |             | 09 40 048 9910 |                               |
| Han® HPR,<br>Frame,<br>for female inserts,<br>10x Han® HC Modular 350                                 |             | 09 40 048 9960 |                               |

Han  
14  
·  
80



| Identification  | Part number    |                | Drawing<br>(dimensions in mm)  |
|---|----------------|----------------|--|
|   | Male           | Female         |  |
| <p>Han® HPR,<br/>Frame,<br/>for male inserts,<br/>4x HC 650 contacts + 2x Han® Q 5/0</p>   | 09 40 048 9811 |                |    |
| <p>Han® HPR,<br/>Frame,<br/>for female inserts,<br/>4x HC 650 contacts + 2x Han® Q 5/0</p>   |                | 09 40 048 9911 |   |
| <p>Han® HPR,<br/>Frame,<br/>for 4 standard inserts - size 16 B</p>  <p>Suitable for hoods and surface mounted housings in conjunction with cover 09 40 048 9803/19 40 048 9801/19 40 048 9901 only</p> | 09 40 048 9912 | 09 40 048 9912 |  |

Han  
HC

Han  
14  
·  
81