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## Features


### General Description

The Han-Brid® series allows the connection of a data interface and a power supply in a single space saving connector. This means that it is now possible to provide data transmission and power to devices in a single bus structure. This hybrid connector family includes provision for connection of a max. 50 V, 10 A power supply together with a range of inserts for connection of a variety of data protocols and transmission medias:

- Han-Brid® F.O. for plastic (POF) or for HCS®\* optical fibre
- Han-Brid® Cu for shielded twisted pair
- Han-Brid® Quintax 3 A for Coax cable with large diameter
- Han-Brid® Quintax 3 A for shielded 4 or 8 wire bus systems (2 pair STP)
- Han-Brid® RJ45 C for Ethernet application
- Han-Brid® USB / Firewire for fast data transmission

Han-Brid® inserts fit into the standard plastic as well as metal hoods and housings with seal of the Han® 3 A series offering a degree of protection IP 65 according to DIN EN 60 529. For harsher environments Han® 3 HPR hoods and housings with a degree of protection of IP 68 can be used.

## Power supply

- Han D® male and female with standard crimp contacts (Order crimp contacts separately)
- Rated current 10 A
- Rated voltage 50 V
- termination side 0.14 - 2.5 mm<sup>2</sup>
- Approval 

## Data interfaces

### Han-Brid® F.O.

- Is suitable for all HP Versatile Link (Horizontal Package) transmitters and receivers
- Data rates: Standard 12 Mbit/s, suitable for all common fieldbus systems
- Insert allows integration of HP standard contacts for POF and HCS®\* fibres
- Temperature range -40 °C ... +70 °C

### Han-Brid® Cu

- For termination of a shielded twisted pair
- Insert for 2x Han D® male or female contacts
- Connection of the shield by means of shielding plate and fixing clamps
- Connection of the device side can be realized either by a printed circuit board as a modular version or as part of the appliance PCB
- Insert for bulkhead mounted housing or the coupling housing are always equipped with a screening spring

### Bus Terminator

- Active bus terminator in male and female version
- Standard Han® 3 A hoods and housings
- Power supply to the termination network via electrical contacts of Han-Brid®
- Integrated, galvanically separated DC/DC converter 24 V / 5 V

### Han-Brid® Quintax 3 A

- Possibility to terminate shielded four/eight wires conductors (2 pair STP)
- Possibility to terminate Coax cable with large diameter
- Suitable for all 4-wire bus systems
- Suitable for shielded cable conductor diameter 3 – 9.5 mm
- Transmission of shielding separately from the hood's ground
- Connections are carried out acc. to DIN EN 50 173, Cat. 5
- Temperature range -40 °C ... +70 °C

### Han-Brid® RJ45 C

- Suitable for standard RJ 45 Plug and Jack, shielded version
- Connections provided for conductors acc. to DIN EN 50 173, Cat. 5
- Termination from the device side is carried out via a PCB, two versions are possible: modular version or as part of the appliance PCB
- Assembly with standard tools
- Insert for 2 Han-D® male or female contacts offers the combination with electrical bus connector
- Rated current 10 A
- Rated voltage 24 V
- termination side 0.14 - 2.5 mm²

### Han-Brid® USB

- Insert for all Han® 3 A hoods and housings
- Hood with glued sealing
- Simple and low-cost termination via insert of a patch cable
- Strain-relief via cable tie

### Han-Brid® FireWire

- Insert for all Han® 3 A hoods and housings
- Hood with glued sealing
- Simple and low-cost termination via insert of a patch cable
- Strain-relief via cable tie
- Compatible to IEEE 1394

### Han® 4 A SC

- Suitable with housings, size Han® 3 A including versions Han® M, Han® EMV and Han® HPR
- Degree of protection up to IP 68
- For fibre optic SC contacts; up to 4 SC contacts per connector
- For 1 mm POF
- For Multimode fibre 50 - 62.5 / 125 µm and Single-mode fibre 9 / 125 µm
- Full ceramic sleeves for a minimal insertion loss

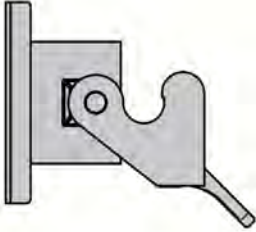
\* HCS® = Hard Clad Silica (is registered trade mark of the SpecTran Corporation)

## Overview (Sample: Han-Brid® Cu)

Thermoplastic  
 09 20 003 0320 (light grey)  
 09 20 003 0327 (black)

Metal  
 09 20 003 0301

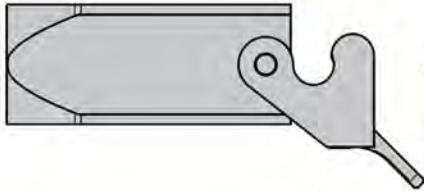
EMC  
 09 62 003 0301



Thermoplastic  
 19 20 003 0720 (light grey)  
 19 20 003 0727 (black)

Metal  
 19 20 003 1750

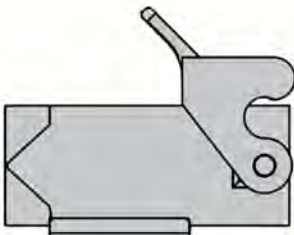
EMC  
 19 62 003 1750



Thermoplastic  
 19 20 003 0220 (light grey)  
 19 20 003 0227 (black)

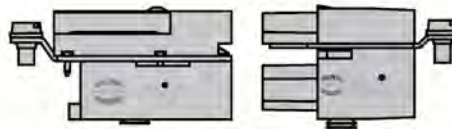
Metal  
 19 20 003 1250

EMC  
 19 62 003 1250



Device side  
 09 12 006 2611  
 09 12 006 2695  
 09 12 006 2694

Cable side  
 09 12 006 3111



Thermoplastic  
 19 20 003 0423 (light grey)  
 19 20 003 0426 (black)

Metal  
 19 20 003 1443

EMC  
 19 62 003 1443



Device side  
 09 12 006 2701  
 09 12 006 2795  
 09 12 006 2794

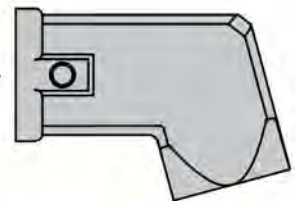
Cable side  
 09 12 006 3001



Thermoplastic  
 19 20 003 0623 (light grey)  
 19 20 003 0627 (black)

Metal  
 19 20 003 1643

EMC  
 19 62 003 1643



Han-Brid

Overview (Sample: Han-Brid® RJ45 C)

Thermoplastic  
 09 20 003 0320 (light grey)  
 09 20 003 0327 (black)

Metal  
 09 20 003 0301

EMC  
 09 62 003 0301

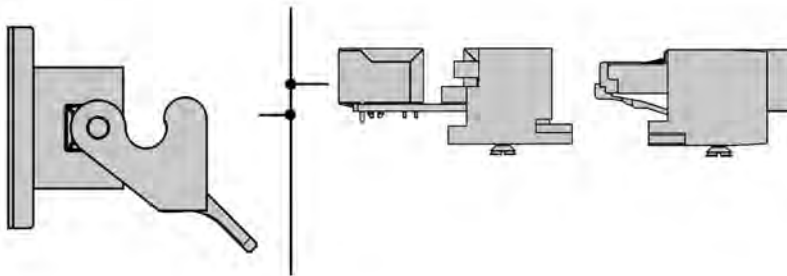
Device side  
 09 12 003 2770  
 09 12 003 2774  
 09 12 003 2776

Cable side  
 09 12 003 3011  
 09 12 003 3021  
 09 12 003 3031

Thermoplastic  
 19 20 003 0423 (light grey)  
 19 20 003 0427 (black)

Metal  
 09 20 003 1443

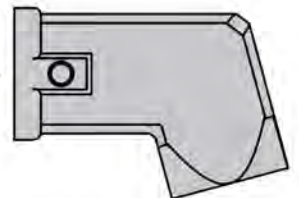
EMC  
 19 62 003 1443



Thermoplastic  
 19 20 003 0623 (light grey)  
 19 20 003 0627 (black)

Metal  
 19 20 003 1643

EMC  
 19 62 003 1643



## Features

- For termination of a shielded twisted pair
- Insert for 2x Han D® male or female contacts
- Connection of the shield by means of shielding plate and fixing clamps
- Connection of the device side can be realized either by a printed circuit board as a modular version or as part of the appliance PCB
- Insert for bulkhead mounted housing or the coupling housing are always equipped with a screening spring
- Active bus terminator in standard Han® 3 A hoods and housings
- Power supply to the termination network via electrical contacts of Han-Brid®
- Integrated, galvanically separated DC/DC converter 24 V / 5 V

## Technical characteristics

Contacts	2, 6
Electrical data acc. to IEC 61984	<b>10 A 50 V 0.8 kV 3</b>
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (hoods/housings)	thermoplastic, metal

## Specifications and approvals

IEC 61984



Number of contacts

2

50 V  
10 A  
+ 4 electrical contacts 10 A + option for PE




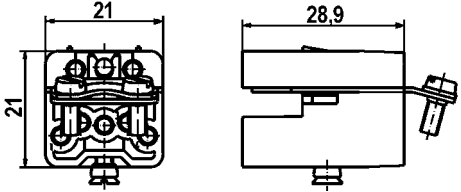

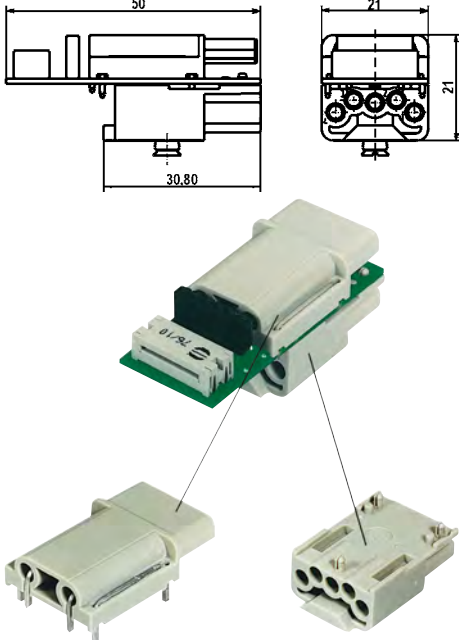
Identification	Part number		Drawing Dimensions in mm
	male	female	
Han-Brid®, Hybrid field bus connector, device side	09 12 006 2611		<p>Also available as single parts: 09 12 002 2611 Upper part, loaded 09 12 002 3011 Upper part, unloaded 09 12 004 3011 Lower part, unloaded</p>
Han-Brid®, Hybrid field bus connector, cable side		09 12 006 3111	<p>Contact arrangement (view from termination side)</p>

Number of contacts

2

50 V  
10 A  
+ 4 electrical contacts 10 A + option for PE



Identification	Part number		Drawing Dimensions in mm
	male	female	
Han-Brid®, Hybrid field bus connector, cable side  	09 12 006 3001		
Han-Brid®, Hybrid field bus connector, device side  		09 12 006 2701	 <p>Also available as single parts: 09 12 002 2701 Upper part, loaded 09 12 002 3101 Upper part, unloaded 09 12 004 3101 Lower part, unloaded</p>

Han-Brid



Number of contacts

6

50 V  
10 A  
+ 4 electrical contacts 10 A + option for PE



Identification	Part number		Drawing Dimensions in mm
	male	female	
Han-Brid®, Bus terminator, Plastic hoods/housings	09 12 006 2691	09 12 006 2791	
Han-Brid®, Bus terminator, Hoods/Housings, metal	09 12 006 2692	09 12 006 2792	
Han-Brid®, Panel feed through, with cage clamp	09 12 006 2695	09 12 006 2795	
Han-Brid®, Coupling / Panel feed through	09 12 006 2694	09 12 006 2794	<p>X= Cutting off the fin allows the use in cable to cable housings.</p>

Han-Brid

## Features

- Is suitable for all HP Versatile Link (Horizontal Package) transmitters and receivers
- Data rates: Standard 12 Mbit/s, suitable for all common field-bus systems
- Insert allows integration of HP standard contacts for POF and HCS® fibres

## Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	<b>10 A 50 V 0.8 kV 3</b>
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures	-40 °C ... 70 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

## Specifications and approvals

IEC 61984


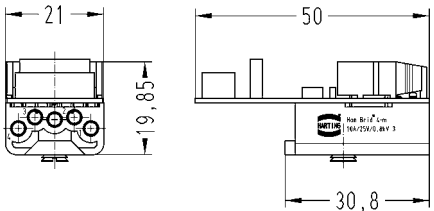

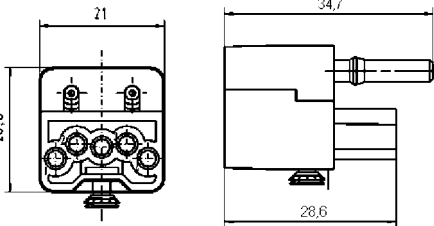

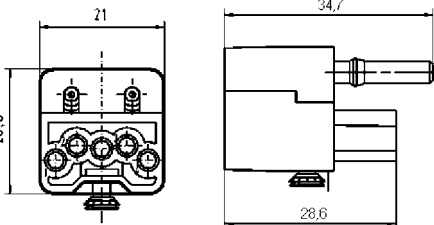

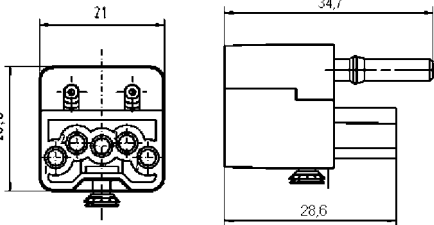


Number of contacts

# 2

50 V  
10 A  
+ 4 electrical contacts 10 A + option for PE



Identification	Part number		Drawing Dimensions in mm
	male	female	
<p>Han-Brid®, Hybrid field bus connector, device side, F.O. (f) + Han D® (m), with PCB</p> 	09 12 004 2611		 <p>Contact arrangement (view from termination side) Also available as single parts: 09 12 004 3011 Lower part, unloaded</p>
<p>Han-Brid®, Hybrid field bus connector, cable side, F.O. (m) + Han D® (f), for POF</p> 		09 12 004 2711	 <p>09 12 004 3111 unloaded</p>
<p>Han-Brid®, Hybrid field bus connector, cable side, F.O. (m) + Han D® (f), for POF crimpless</p> 		09 12 004 2713	 <p>09 12 004 3113 unloaded</p>
<p>Han-Brid®, Hybrid field bus connector, cable side, F.O. (m) + Han D® (f), for HCS® fibre</p> 		09 12 004 2716	 <p>09 12 004 3116 unloaded</p>

Number of contacts

# 2

50 V  
10 A  
+ 4 electrical contacts 10 A + option for PE



Identification	Part number		Drawing Dimensions in mm
	male	female	
Han-Brid®, Hybrid field bus connector, cable side, F.O. (m) + Han D® (m), for POF	09 12 004 2601		<p>09 12 004 3001 unloaded</p>
for POF			
Han-Brid®, Hybrid field bus connector, cable side, with F.O. contacts, F.O. (m) + Han D® (m), for POF crimpless	09 12 004 2603		<p>09 12 004 3003 unloaded</p>
Han-Brid®, Hybrid field bus connector, cable side, F.O. (m) + Han D® (m), for HCS® fibre	09 12 004 2606		<p>09 12 004 3006 unloaded</p>
Han-Brid®, Hybrid field bus connector, device side, F.O. (f) + Han D® (f), with PCB		09 12 004 2701	<p>Also available as single parts: 09 12 004 3101 Lower part, unloaded</p>

Han-Brid

## Features

- Possibility to terminate shielded four/eight wires conductors (2 pair STP)
- Possibility to terminate Coax cable with large diameter
- Suitable for all 4-wire bus systems
- Suitable for shielded cable conductor diameter 3 – 9.5 mm
- Transmission of shielding separately from the hood's ground
- Connections are carried out acc. to EN 50173, Cat. 5

## Technical characteristics

Contacts	1
Insulation resistance	≥10 <sup>10</sup> Ohm
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

## Specifications and approvals

IEC 61984  
IEC 60664-1



## Details

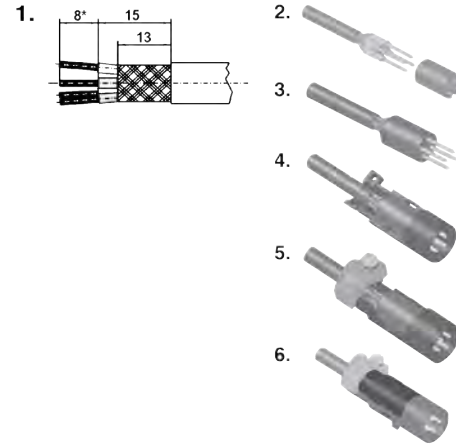
**Crimping tools** see chapter 90

## Details

### Remarks on the crimp technique

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

### Assembly instructions



1. Strip cable acc. to drawing 1 and fold the shielding over the cable.
2. Crimp Han D® contacts onto the wires.
3. Insert Han D® contacts into corresponding cavities of insulator until they are snapped in.
4. Fit the insert including the cable into the opened shielded bushing. The coding pin of the shielded bushing has to meet the groove of the insulator.
5. Clamp the tilt over the shielding onto the cable by means of the special clamp (small opening for cable diameter of 3 - 6 mm, large opening for cable diameter of 6 - 9.5 mm).
6. Check the wiring. Close the shielded bushing with the cover and insert it into the corresponding cavity of the Quintax Module as usual.

Number of contacts

# 1

+ shielding + 2 power contacts



Identification	Wire cross section (mm <sup>2</sup> )	Part number		Drawing Dimensions in mm																					
		male	female																						
Han-Brid®, Han-Quintax® insert, Crimp terminal 		09 15 003 3001	09 15 003 3101																						
Han D®, Crimp contact, gold plated contacts, contact resistance ≤3 mOhm 	0.14–0.37 0.5 0.75 1 1.5 2.5	09 15 000 6124 09 15 000 6123 09 15 000 6125 09 15 000 6122 09 15 000 6121 09 15 000 6126	09 15 000 6224 09 15 000 6223 09 15 000 6225 09 15 000 6222 09 15 000 6221 09 15 000 6226	 <table border="1"> <thead> <tr> <th>Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.14-0.37 mm<sup>2</sup> AWG 26-22</td> <td>0.9 mm</td> <td>8 mm</td> </tr> <tr> <td>0.5 mm<sup>2</sup> AWG 20</td> <td>1.1 mm</td> <td>8 mm</td> </tr> <tr> <td>0.75 mm<sup>2</sup> AWG 18</td> <td>1.3 mm</td> <td>8 mm</td> </tr> <tr> <td>1 mm<sup>2</sup> AWG 18</td> <td>1.45 mm</td> <td>8 mm</td> </tr> <tr> <td>1.5 mm<sup>2</sup> AWG 16</td> <td>1.75 mm</td> <td>8 mm</td> </tr> <tr> <td>2.5 mm<sup>2</sup> AWG 14</td> <td>2.25 mm</td> <td>6 mm</td> </tr> </tbody> </table>	Wire gauge	∅	Stripping length	0.14-0.37 mm <sup>2</sup> AWG 26-22	0.9 mm	8 mm	0.5 mm <sup>2</sup> AWG 20	1.1 mm	8 mm	0.75 mm <sup>2</sup> AWG 18	1.3 mm	8 mm	1 mm <sup>2</sup> AWG 18	1.45 mm	8 mm	1.5 mm <sup>2</sup> AWG 16	1.75 mm	8 mm	2.5 mm <sup>2</sup> AWG 14	2.25 mm	6 mm
Wire gauge	∅	Stripping length																							
0.14-0.37 mm <sup>2</sup> AWG 26-22	0.9 mm	8 mm																							
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0.75 mm <sup>2</sup> AWG 18	1.3 mm	8 mm																							
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1.5 mm <sup>2</sup> AWG 16	1.75 mm	8 mm																							
2.5 mm <sup>2</sup> AWG 14	2.25 mm	6 mm																							

Han-Brid

## Features

- Shielding bus separate from housing potential
- Suitable for the transmission of sensitive signals (e.g. bus signals)
- The four pole Han® Quintax contact is suitable for Ethernet Cat. 5e and PROFIBUS when diagonally wiring of the data pairs

## Technical characteristics

Electrical data acc. to IEC 61984	<b>10 A 50 V 0.8 kV 3</b>
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Material (insert)	zinc alloy
Material (contact)	copper alloy

## Specifications and approvals

IEC 60664-1  
IEC 61984


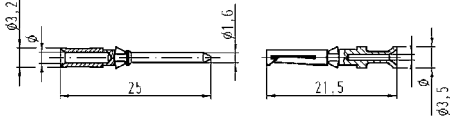

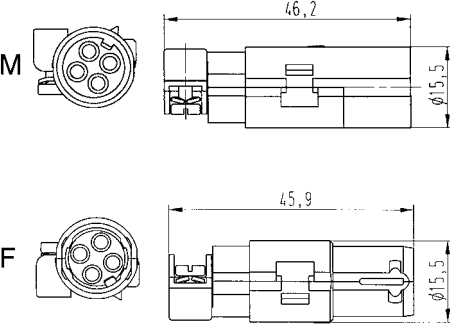


## Details

**Crimping tools** see chapter 90

### Remarks on the crimp technique

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

Identification	Wire cross section (mm²)	Part number		Drawing Dimensions in mm																					
		male	female																						
Han D® Crimp contact, gold plated contacts, contact resistance ≤3 mOhm  	0.14–0.37	09 15 000 6124	09 15 000 6224	 <table border="1" data-bbox="1042 1440 1493 1597"> <thead> <tr> <th>Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.14-0.37 mm² AWG 26-22</td> <td>0.9 mm</td> <td>8 mm</td> </tr> <tr> <td>0.5 mm² AWG 20</td> <td>1.1 mm</td> <td>8 mm</td> </tr> <tr> <td>0.75 mm² AWG 18</td> <td>1.3 mm</td> <td>8 mm</td> </tr> <tr> <td>1 mm² AWG 18</td> <td>1.45 mm</td> <td>8 mm</td> </tr> <tr> <td>1.5 mm² AWG 16</td> <td>1.75 mm</td> <td>8 mm</td> </tr> <tr> <td>2.5 mm² AWG 14</td> <td>2.25 mm</td> <td>6 mm</td> </tr> </tbody> </table>	Wire gauge	∅	Stripping length	0.14-0.37 mm² AWG 26-22	0.9 mm	8 mm	0.5 mm² AWG 20	1.1 mm	8 mm	0.75 mm² AWG 18	1.3 mm	8 mm	1 mm² AWG 18	1.45 mm	8 mm	1.5 mm² AWG 16	1.75 mm	8 mm	2.5 mm² AWG 14	2.25 mm	6 mm
	Wire gauge	∅	Stripping length																						
	0.14-0.37 mm² AWG 26-22	0.9 mm	8 mm																						
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	1 mm² AWG 18	1.45 mm	8 mm																						
1.5 mm² AWG 16	1.75 mm	8 mm																							
2.5 mm² AWG 14	2.25 mm	6 mm																							
0.5	09 15 000 6123	09 15 000 6223																							
0.75	09 15 000 6125	09 15 000 6225																							
1	09 15 000 6122	09 15 000 6222																							
1.5	09 15 000 6121	09 15 000 6221																							
2.5	09 15 000 6126	09 15 000 6226																							
Han-Quintax® contact, 4 + shielding, for Han D® crimp contacts   <p>Please order crimp contacts separately.</p>		09 15 004 3013	09 15 004 3113																						

50 V  
5 A

## Technical characteristics

Electrical data acc. to IEC 61984	<b>5 A 50 V 0.8 kV 3</b>
Rated current	5 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0


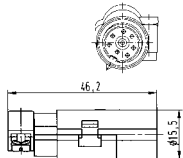
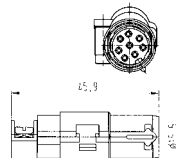

## Technical characteristics

Material (insert) polycarbonate

## Specifications and approvals

IEC 61984  
IEC 60664-1



Identification	Wire cross section (mm²)	Part number		Drawing Dimensions in mm												
		male	female													
Han-Modular®, Han-Quintax® High Density contact, 8 + shielding, for Han® D-Sub contacts    Please order contacts separately.		09 15 008 3013	09 15 008 3113	M  F 												
Han® D-Sub crimp contact, turned contacts  	0.09–0.25 0.13–0.33 0.25–0.52	09 67 000 7576 09 67 000 5576 09 67 000 8576	09 67 000 7476 09 67 000 5476 09 67 000 8476	<table border="1"> <thead> <tr> <th>Wire gauge</th> <th>max. insulation diameter</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.09-0.25 mm²</td> <td>1.7</td> <td>4 mm</td> </tr> <tr> <td>0.13-0.33 mm²</td> <td>1.7</td> <td>4 mm</td> </tr> <tr> <td>0.25-0.52 mm²</td> <td>1.7</td> <td>4 mm</td> </tr> </tbody> </table>	Wire gauge	max. insulation diameter	Stripping length	0.09-0.25 mm²	1.7	4 mm	0.13-0.33 mm²	1.7	4 mm	0.25-0.52 mm²	1.7	4 mm
Wire gauge	max. insulation diameter	Stripping length														
0.09-0.25 mm²	1.7	4 mm														
0.13-0.33 mm²	1.7	4 mm														
0.25-0.52 mm²	1.7	4 mm														



## Technical characteristics

Electrical data acc. to IEC 61984	<b>10 A 50 V 0.8 kV 3</b>
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Material (insert)	zinc alloy
Material (contact)	copper alloy

## Specifications and approvals


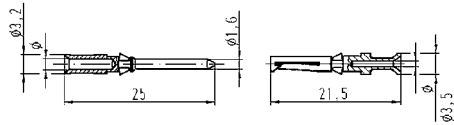

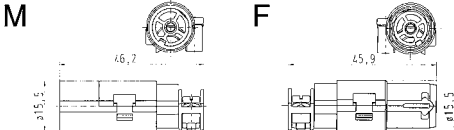
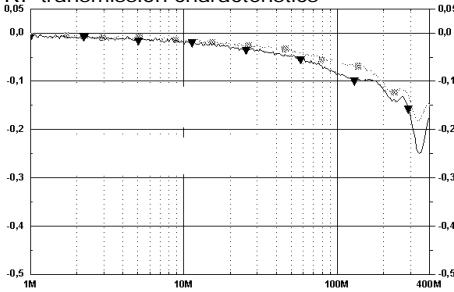
IEC 60664-1  
IEC 61984

## Details

**Crimping tools** see chapter 90

### Remarks on the crimp technique

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

Identification	Wire cross section (mm <sup>2</sup> )	Part number		Drawing Dimensions in mm																					
		male	female																						
Han D®, Crimp contact, gold plated contacts, contact resistance ≤3 mOhm  	0.14–0.37	09 15 000 6124	09 15 000 6224	 <table border="1" data-bbox="1038 1223 1493 1379"> <thead> <tr> <th>Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.14-0.37 mm<sup>2</sup> AWG 26-22</td> <td>0.9 mm</td> <td>8 mm</td> </tr> <tr> <td>0.5 mm<sup>2</sup> AWG 20</td> <td>1.1 mm</td> <td>8 mm</td> </tr> <tr> <td>0.75 mm<sup>2</sup> AWG 18</td> <td>1.3 mm</td> <td>8 mm</td> </tr> <tr> <td>1 mm<sup>2</sup> AWG 18</td> <td>1.45 mm</td> <td>8 mm</td> </tr> <tr> <td>1.5 mm<sup>2</sup> AWG 16</td> <td>1.75 mm</td> <td>8 mm</td> </tr> <tr> <td>2.5 mm<sup>2</sup> AWG 14</td> <td>2.25 mm</td> <td>6 mm</td> </tr> </tbody> </table>	Wire gauge	∅	Stripping length	0.14-0.37 mm <sup>2</sup> AWG 26-22	0.9 mm	8 mm	0.5 mm <sup>2</sup> AWG 20	1.1 mm	8 mm	0.75 mm <sup>2</sup> AWG 18	1.3 mm	8 mm	1 mm <sup>2</sup> AWG 18	1.45 mm	8 mm	1.5 mm <sup>2</sup> AWG 16	1.75 mm	8 mm	2.5 mm <sup>2</sup> AWG 14	2.25 mm	6 mm
	Wire gauge	∅	Stripping length																						
	0.14-0.37 mm <sup>2</sup> AWG 26-22	0.9 mm	8 mm																						
	0.5 mm <sup>2</sup> AWG 20	1.1 mm	8 mm																						
	0.75 mm <sup>2</sup> AWG 18	1.3 mm	8 mm																						
	1 mm <sup>2</sup> AWG 18	1.45 mm	8 mm																						
1.5 mm <sup>2</sup> AWG 16	1.75 mm	8 mm																							
2.5 mm <sup>2</sup> AWG 14	2.25 mm	6 mm																							
0.5	09 15 000 6123	09 15 000 6223																							
0.75	09 15 000 6125	09 15 000 6225																							
1	09 15 000 6122	09 15 000 6222																							
1.5	09 15 000 6121	09 15 000 6221																							
2.5	09 15 000 6126	09 15 000 6226																							
Coaxial contact, 1 + shielding, for Han D® crimp contacts, 75 Ohm  		09 15 001 3013	09 15 001 3113	 <b>RF transmission characteristics</b>  <p> <span style="display: inline-block; width: 10px; height: 10px; background-color: #ccc; border: 1px solid black;"></span> 75 Ohm cable  <span style="display: inline-block; width: 10px; height: 10px; border-bottom: 1px solid black;"></span> 75 Ohm cable with Han D® Coax                 </p>																					
	Please order crimp contacts separately.																								

## Technical characteristics

Electrical data acc. to IEC 61984	<b>16 A 50 V 0.8 kV 3</b>
Rated current	16 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Material (insert)	zinc alloy
Material (contact)	copper alloy

## Specifications and approvals


IEC 61984  
IEC 60664-1


## Details

**Crimping tools** see chapter 90

### Remarks on the crimp technique

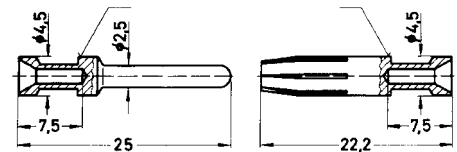
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Identification	Wire cross section (mm <sup>2</sup> )	Part number	
		male	female
Han E <sup>®</sup> , Crimp contact, gold plated contacts, contact resistance ≤1 mOhm  	0.14–0.37	09 33 000 6117	09 33 000 6217
	0.5	09 33 000 6122	09 33 000 6222
	0.75	09 33 000 6115	09 33 000 6215
	1	09 33 000 6118	09 33 000 6218
	1.5	09 33 000 6116	09 33 000 6216
	2.5	09 33 000 6123	09 33 000 6223
	4	09 33 000 6119	09 33 000 6221
	5.5	09 33 000 6139	09 33 000 6239

Coaxial contact,  
1 + shielding,  
for Han E<sup>®</sup> crimp contacts,  
50 Ohm  
  
  
  
 Please order crimp contacts separately.

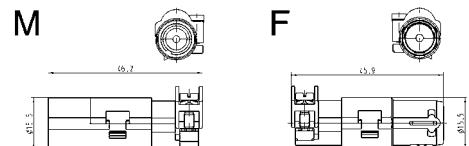
09 15 001 3023 09 15 001 3123

Drawing  
Dimensions in mm



Identification	Wire gauge	Stripping length
no groove	0.14-0.37 mm <sup>2</sup> AWG 26-22	7.5 mm
no groove	0.5 mm <sup>2</sup> AWG 20	7.5 mm
1 groove*	0.75 mm <sup>2</sup> AWG 18	7.5 mm
1 groove	1 mm <sup>2</sup> AWG 18	7.5 mm
2 grooves	1.5 mm <sup>2</sup> AWG 16	7.5 mm
3 grooves	2.5 mm <sup>2</sup> AWG 14	7.5 mm
wide groove	3 mm <sup>2</sup> AWG 12	7.5 mm
no groove	4 mm <sup>2</sup> AWG 12	7.5 mm

\* on the back crimp collar



Han E <sup>®</sup> Coax with RG 213 cable (2.5 mm <sup>2</sup> )	200 MHz	500 MHz	1.0 GHz	1.2 GHz	1.5 GHz	2.0 GHz	2.5 GHz
Return loss [dB]	23.8	21.1	>18.7	>17.7	>16.4	>14.1	>12.0
Attenuation [dB]	0.07	0.11	0.17	0.2	<0.23	<0.53	<2.0

Han-Brid

## Features

- Suitable for standard RJ 45 Plug and Jack, shielded version
- Connections are carried out acc. to EN 50173, Cat. 5
- Connection of the device side can be realized either by a printed circuit board as a modular version or as part of the appliance PCB
- Assembly with standard tools
- Insert for 2 Han-D® male or female contacts offers the combination with electrical bus connector

## Technical characteristics

Contacts	1 x RJ45
Electrical data acc. to IEC 61984	<b>10 A 24 V 0.8 kV 3</b>
Rated current	10 A
Rated voltage	24 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

## Specifications and approvals


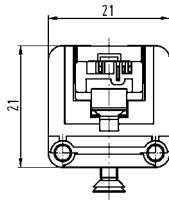
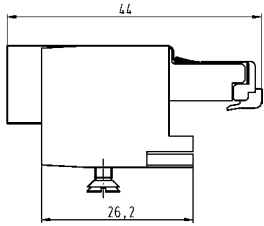

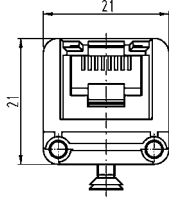
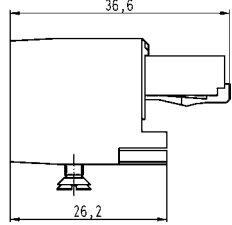

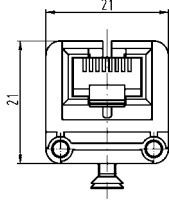
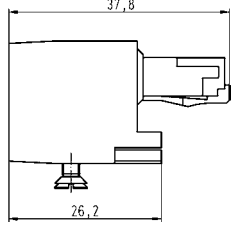

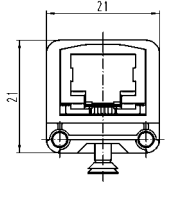
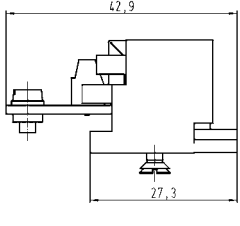

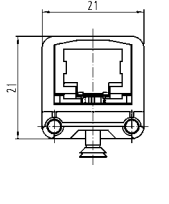
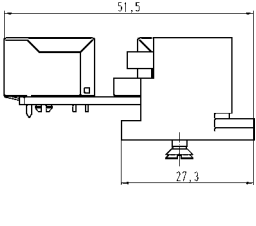
IEC 61984




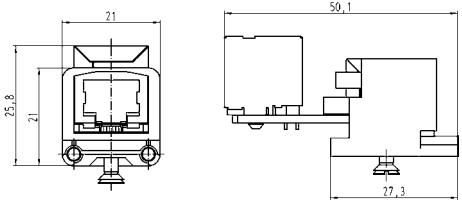
Number of contacts

## 1 x RJ45

24 V  
10 A  
+ 2 electrical contacts 10 A

Identification	Part number		Drawing	
	male	female	Dimensions in mm	
Han-Brid®, Hybrid network connector, with RJ Industrial  	09 12 003 3011			
Han-Brid®, Hybrid network connector, with Stewart RJ45  	09 12 003 3021			
Han-Brid®, Hybrid network connector, with HIROSE RJ45  	09 12 003 3031			
Han-Brid®, Hybrid network connector, Panel feed through, with 4 pole terminal block  		09 12 003 2770		
Han-Brid®, Hybrid network connector, Panel feed through, straight  		09 12 003 2774		

Han-Brid

Identification	Part number		Drawing Dimensions in mm
	male	female	
<p>Han-Brid®, Hybrid network connector, Panel feed through, angled</p> 		09 12 003 2776	

50 V  
1 A  
+ USB

### Features

- Insert for all Han® 3 A hoods with glued sealing
- Simple and cost effective termination by plug in patch cable
- Cable tie strain relief


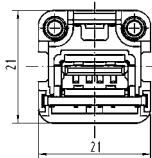
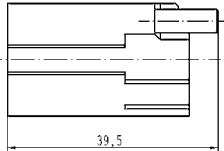

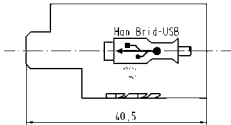
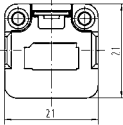
### Technical characteristics

Electrical data acc. to IEC 61984	<b>1 A 50 V 0.8 kV 3</b>
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

### Specifications and approvals

IEC 60664-1  
IEC 61984



Identification	Part number		Drawing	
	male	female	Dimensions in mm	
Han-Brid®, USB, device side, contact resistance ≥4 mOhm  	09 12 001 2794		 	
Han-Brid®, USB, cable side, contact resistance ≥4 mOhm  		09 12 001 3091	 	

50 V  
1 A  
+ FireWire

### Features

- Insert for all Han® 3 A hoods with glued sealing
- Simple and cost effective termination by plug in patch cable
- Cable tie strain relief
- Compatibel to IEEE 1394


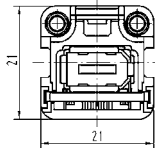
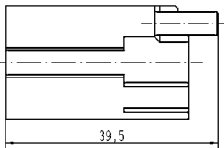

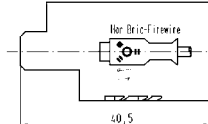
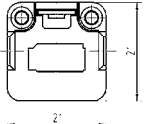
### Technical characteristics

Electrical data acc. to IEC 61984	<b>1 A 50 V 0.8 kV 3</b>
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

### Specifications and approvals

IEC 60664-1  
IEC 61984



Identification	Part number		Drawing	
	male	female	Dimensions in mm	
Han-Brid®, FireWire, device side, contact resistance ≥4 mOhm  	09 12 001 2774			
Han-Brid®, FireWire, cable side, contact resistance ≥4 mOhm  		09 12 001 3071		

## Features

- Suitable with housings, size Han® 3 A including versions Han® M, Han® EMV and Han® HPR
- Degree of protection up to IP 68
- Suitable for HARTING SC contacts
- For Multimode fibre 50 - 62.5 / 125 µm and Singlemode fibre 9 / 125 µm
- Full ceramic sleeves for a minimal insertion loss
- 1 mm POF

## Technical characteristics

Contacts	4
Insulation resistance	≥10 <sup>10</sup> Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

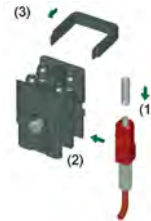
## Specifications and approvals



## Details

### Assembly instructions

Female module

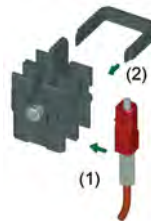


Assemble the SC contact

- ① Push the centering ferrule (included in delivery) on the SC contact
- ② Push the SC contact from the side into the relevant insert
- ③ Push the spring clip over the contact body.

### Assembly instructions

Male module



Assemble the SC contact

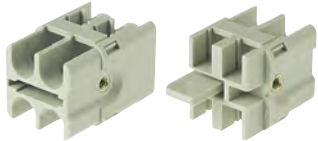
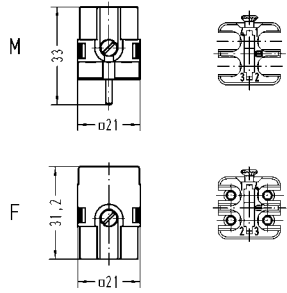

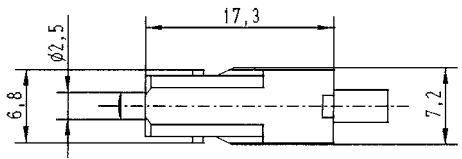
- ① Push the SC contact from the side into the relevant insert
- ② Push the spring clip over the contact body.



Number of contacts

# 4



Identification	Part number		Drawing Dimensions in mm
	male	female	
Han® SC module, for F.O.    Please order contacts separately.	09 20 004 4701	09 20 004 4711	  Contact arrangement (view from termination side) The female inserts are equipped with centering ferrules. 4 ferrules are included in delivery range.
SC contact    for GI fibre 50/125 µm or 62.5/125 µm ceramic ferrule	20 10 125 5211	20 10 125 5211	
SC contact for single mode fibre 9/125 µm	20 10 125 5220	20 10 125 5220	
SC contact for SI fibre (HCS®) 200/230 µm	20 10 230 5211	20 10 230 5211	
SC contact, with crimp technique, for 1 mm POF	20 10 001 5211	20 10 001 5211	
SC contact, with quick assembly, for 1 mm POF	20 10 001 5217	20 10 001 5217	

## Features

- Metal hoods/housings for industrial applications
- with glued seal

## Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Flammability (hoods/housings) acc. to UL 94	V 0
Flammability (locking lever) acc. to UL 94	V 0
Flammability (seal) acc. to UL 94	V 0
Protection class acc. to UL 50	NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP44 / IP67 is achieved with seal screw 09 20 000 9918
Material (hoods/housings)	zinc die-cast
Surface (hoods/housings)	powder-coated
Colour (hoods/housings)	RAL 7037 (grey)
Material (locking lever)	steel, zinc-plated
Material (seal)	NBR


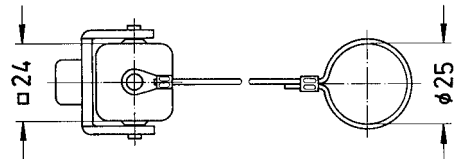

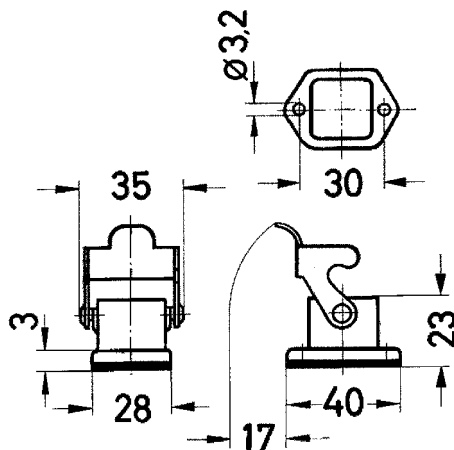

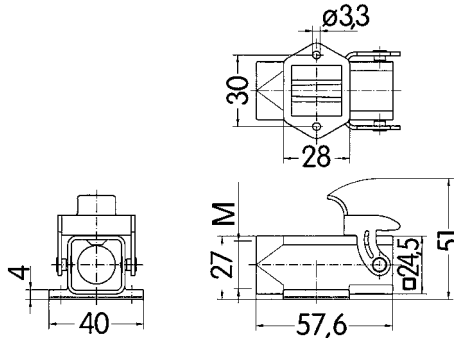

## Specifications and approvals




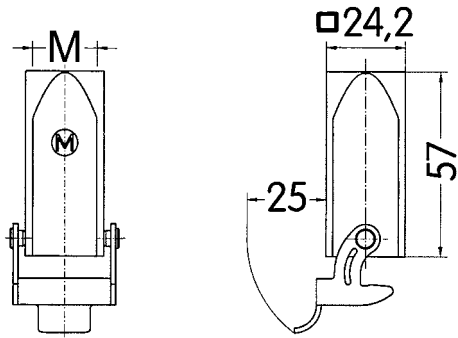

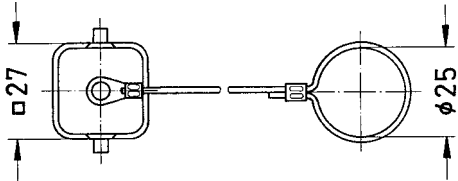

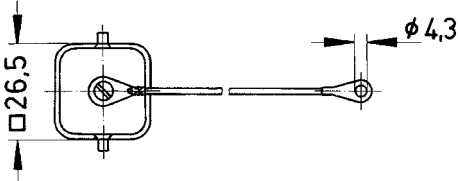

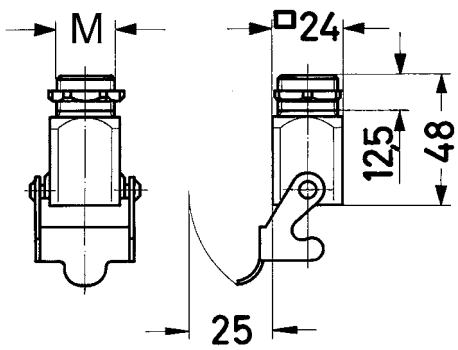
Metal hoods/housings for industrial applications  
double locking lever

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han A® , Hoods, for Han-Brid®, top entry, with glued sealing	1xM20	19 20 003 1443	
Han A® , Hoods, for Han-Brid®, side entry, with glued sealing	1xM20	19 20 003 1643	
Han A® , Hood with integrated cable gland, for Han-Brid®, top entry, with glued sealing	6...12 mm	19 20 003 1423	
Han A® , Hood with integrated cable gland, top entry, with glued sealing	6...12 mm	19 20 003 1425	

Han-Brid

Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han A®, Protection cover for hoods, for mounted male insert or for mounted Han-Brid® insert, metal, with securing flex</p> 		09 20 003 5422	
<p>Han A®, Bulkhead mounted housings, straight</p> 		09 20 003 0301	 <p>Panel cut out 22 x 22 mm</p>
<p>Han A®, Surface mounted housings, top entry, open bottom</p> 	1xM20	19 20 003 1250	 <p>Panel cut out 22 x 22 mm</p>
<p>Han A®, Surface mounted housings, top entry, bottom closed</p> 	1xM20	19 20 003 1252	

Han-Brid

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han A®, Cable to cable housings, top entry 	1xM20	19 20 003 1750	
Han A®, Protection cover for cable to cable housings, for mounted female insert or for mounted Han-Brid® insert, metal, with securing flex, with sealing 		09 20 003 5427	
Han A®, Protection cover for housings, for mounted female insert or for mounted Han-Brid® insert, metal, with securing flex, with sealing 		09 20 003 5425	
Han A®, Screw mounted housings, top entry 	1xM20	19 20 003 1150	

Han-Brid

## Features

- Plastic hoods/housings for industrial applications
- with glued seal

## Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Flammability (hoods/housings) acc. to UL 94	V 0
Flammability (locking lever) acc. to UL 94	V 0
Flammability (seal) acc. to UL 94	V 0
Protection class acc. to UL 50	NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP44 / IP67 is achieved with seal screw 09 20 000 9918
Material (hoods/housings)	polycarbonate
Colour (hoods/housings)	RAL 7032 (light grey), RAL 9005 (black)
Material (locking lever)	polyamide
Colour (locking lever)	RAL 7032 (light grey), RAL 9005 (black)
Material (seal)	NBR


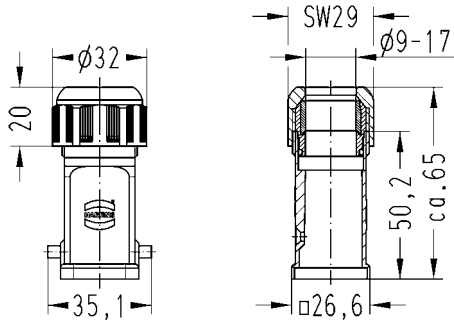

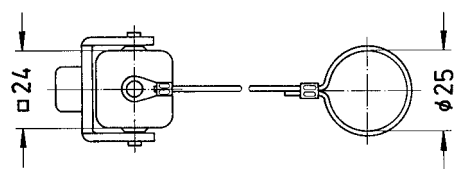

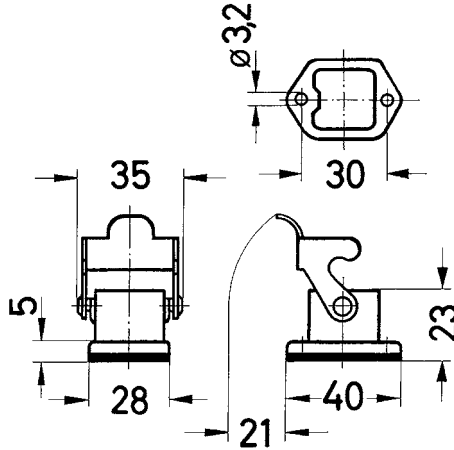

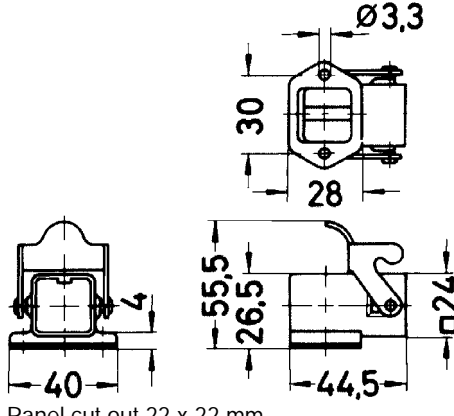
## Specifications and approvals

ⓄGL

Plastic hoods/housings for industrial applications  
double locking lever


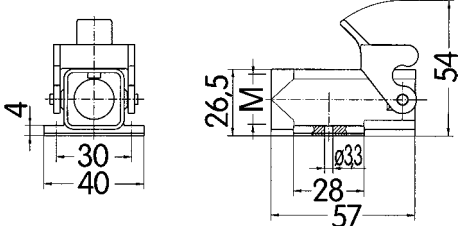

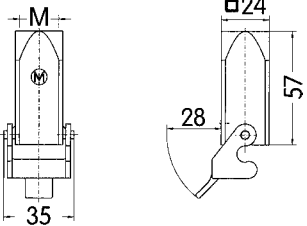

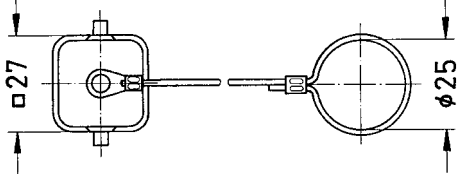

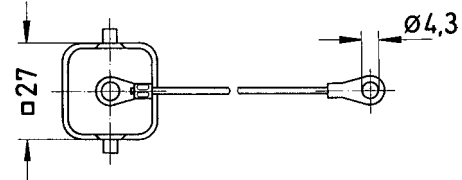
Identification	Cable entry	Part number	Drawing Dimensions in mm
Han A® , Hoods, for Han-Brid®, top entry, with glued sealing	1xM20	19 20 003 0423	
Han A® , Hoods, for Han-Brid®, top entry, with glued sealing, black	1xM20	19 20 003 0426	
Han A® , Hoods, for Han-Brid®, side entry, with glued sealing	1xM20	19 20 003 0623	
Han A® , Hoods, for Han-Brid®, side entry, with glued sealing, black	1xM20	19 20 003 0626	


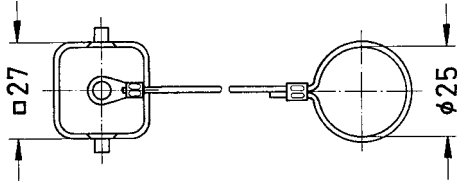


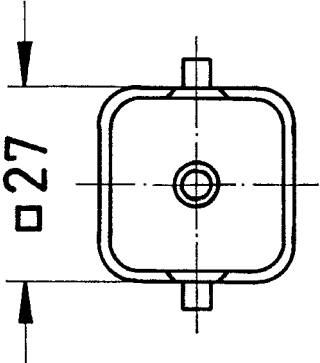
Han-Brid

Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han A®, Hood with integrated cable gland, top entry, with glued sealing</p> 	<p>9...17 mm</p>	<p>19 20 003 0413</p>	
<p>Han A®, Protection cover for hoods, for mounted male insert or for mounted Han-Brid® insert, plastic, with securing flex</p> 		<p>09 20 003 5442</p>	
<p>Han A®, Bulkhead mounted housings, straight</p> 		<p>09 20 003 0320</p>	 <p>Panel cut out 22 x 22 mm</p>
<p>Han A®, Bulkhead mounted housings, angled</p> 		<p>09 20 003 0820</p>	 <p>Panel cut out 22 x 22 mm</p>

Han-Brid



Identification	Cable entry	Part number	Drawing Dimensions in mm
Han A® , Bulkhead mounted housings, straight, black  Han A® , Bulkhead mounted housings, angled, black		09 20 003 0327  09 20 003 0827	
Han A® , Surface mounted housings, top entry  	1xM20	19 20 003 0220	 <p>Panel cut out 22 x 22 mm</p>
Han A® , Surface mounted housings, top entry, black	1xM20	19 20 003 0227	
Han A® , Cable to cable housings, top entry  	1xM20	19 20 003 0720	
Han A® , Cable to cable housings, top entry, black	1xM20	19 20 003 0727	
Han A® , Protection cover for cable to cable housings, for mounted female insert, plastic, with sealing, with securing flex  		09 20 003 5447	
Han A® , Protection cover for housings, for mounted female insert, plastic, with sealing, with securing flex  		09 20 003 5445	

Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han A®, Protection cover for housings, for mounted female insert, plastic, with sealing, with securing flex, black</p> 		09 20 003 5449	
<p>Han A®, Protection cover for housings, for mounted female insert or for mounted Han-Brid® insert, plastic, with sealing</p> 		09 20 003 5408	
<p>Han A®, Protection cover, for mounted female insert or for mounted Han-Brid® insert, plastic, with sealing, black</p> 		09 20 003 5409	

Han-Brid

## Features

- Hoods/Housings for higher environmental requirements
- with glued seal

## Technical characteristics


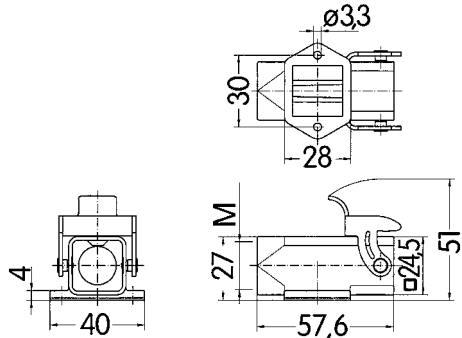

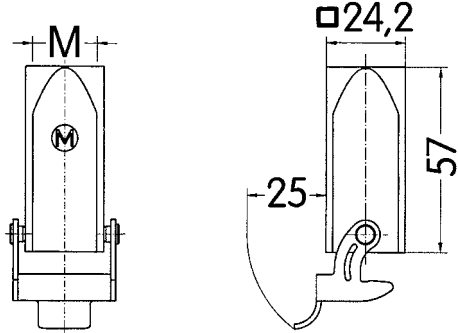
Limiting temperatures	-40 °C ... 125 °C
Flammability (locking lever) acc. to UL 94	V 0
Protection class acc. to UL 50	NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP65 / IP67
Corrosion resistance	ASTM B117-09 (500 h)
Material (hoods/housings)	zinc die-cast
Surface (hoods/housings)	powder-coated
Colour (hoods/housings)	RAL 9005 (black)
Material (locking lever)	stainless steel
Material (seal)	FPM

## Specifications and approvals



Hoods/Housings for higher environmental requirements  
double locking lever

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han® M, Hoods, top entry, with glued sealing	1xM20	19 37 003 1443	
Han® M, Hoods, side entry, with glued sealing	1xM20	19 37 003 1643	
Han- Brid Han® M, Bulkhead mounted housings, straight		09 37 003 0301	<p>Panel cut out 22 x 22 mm</p>

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han® M, Surface mounted housings, top entry  	1xM20	19 37 003 1250	 <p>Panel cut out 22 x 22 mm</p>
Han® M, Cable to cable housings, top entry  	1xM20	19 37 003 1750	

## Features

- Hoods/Housings for higher EMC requirements
- with glued seal


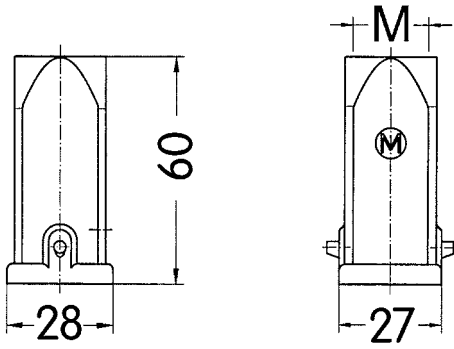

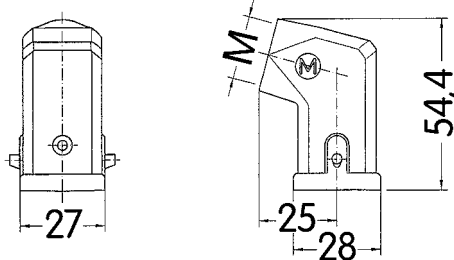

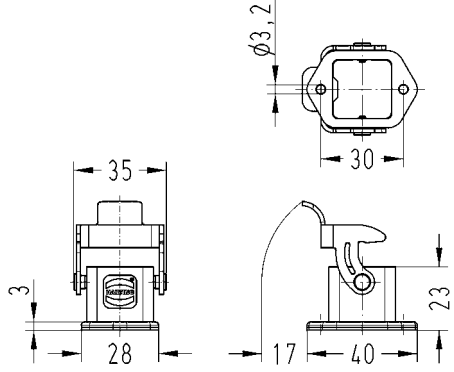
## Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Flammability (locking lever) acc. to UL 94	V 0
Protection class acc. to UL 50	NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP44 / IP67 is achieved with seal screw 09 20 000 9918
Material (hoods/housings)	zinc die-cast
Surface (hoods/housings)	unpainted, electrical conductive
Material (locking lever)	steel, zinc-plated
Material (seal)	NBR

## Specifications and approvals


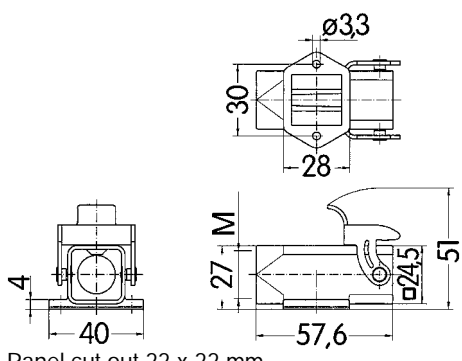

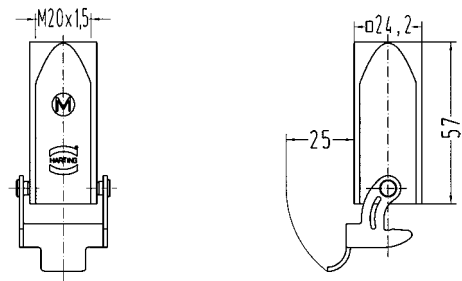
ⓂGL

Hoods/Housings for higher EMC requirements  
double locking lever

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han® EMV, Hoods, top entry, with glued sealing 	1xM20	19 62 003 1443	
Han® EMV, Hoods, side entry, with glued sealing 	1xM20	19 62 003 1643	
Han® EMV, Bulkhead mounted housings, straight 		09 62 003 0301	 <p>Panel cut out 22 x 22 mm</p>

Han-Brid



Identification	Cable entry	Part number	Drawing Dimensions in mm
Han® EMV, Surface mounted housings, top entry  	1xM20	19 62 003 1250	 <p>Panel cut out 22 x 22 mm</p>
Han® EMV, Cable to cable housings, top entry  	1xM20	19 62 003 1750	

Han-  
Brid



## Features

- Han-INOX® hoods/housings for higher corrosion requirements
- with glued seal

## Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Flammability (locking lever) acc. to UL 94	V 0
Protection class acc. to UL 50	NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP44 / IP67 is achieved with seal screw 09 20 000 9918, IP65 / IP67
Material (hoods/housings)	stainless steel
Surface (hoods/housings)	unpainted
Material (locking lever)	stainless steel
Material (seal)	NBR
Material (screwing)	stainless steel


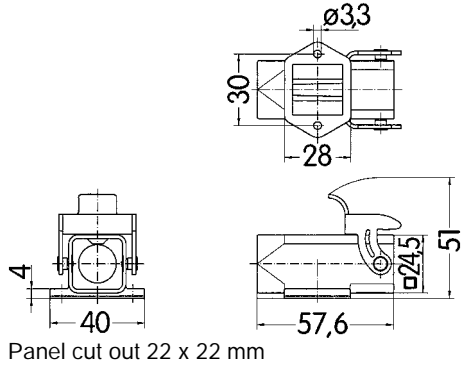

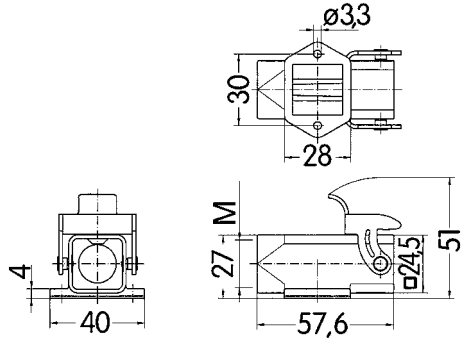

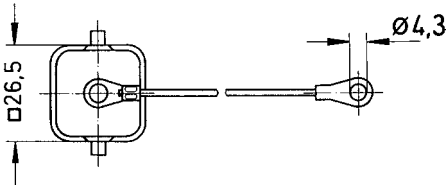

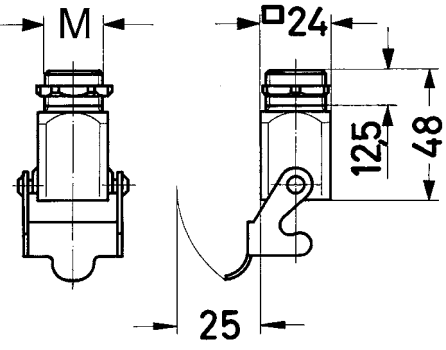
## Specifications and approvals



Hoods/Housings for aggressive environmental requirements  
double locking lever

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han-INOX®, Hoods, top entry, with glued sealing	1xM20	19 44 003 1443	
Han-INOX®, Hoods, side entry, with glued sealing	1xM20	19 44 003 1643	
Han-INOX®, Protection cover for hoods, for mounted male insert or for mounted Han-Brid® insert, metal, with securing flex		19 44 003 5422	
Han-INOX®, Bulkhead mounted housings, straight		19 44 003 0301	<p>Panel cut out 22 x 22 mm</p>

Han-Brid

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han-INOX®, Bulkhead mounted housings, angled 		19 44 003 0801	 <p>Panel cut out 22 x 22 mm</p>
Han-INOX®, Surface mounted housings, side entry 	1xM20	19 44 003 1250	
Han-INOX®, Protection cover for housings, for mounted female insert or for mounted Han-Brid® insert, metal, with securing flex 		19 44 003 5425	
Han-INOX®, Screw mounted housings, top entry Range of delivery: 1x M20 stainless steel screw nut 	1xM20	19 44 003 1150	

Han-Brid

## Features

- Hoods/Housings for harsh environmental requirements
- Highly EMC resistant
- Screw locking M4
- 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 (RAL 9005)


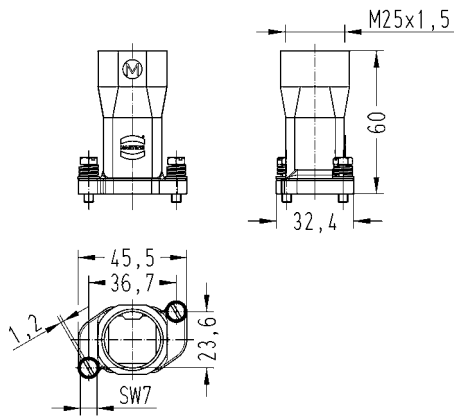
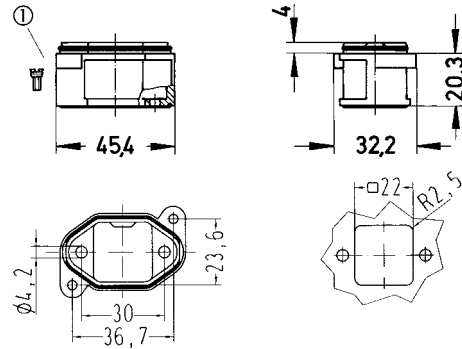
## Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Protection class acc. to UL 50	NEMA 4/12, NEMA type 4/4X/12
Degree of protection acc. to IEC 60529	IP69K
Degree of protection acc. to IEC 60529	IP65 / IP68
Tightening torque (locking)	2 Nm
Corrosion resistance	ASTM B117-09 (500 h)
Material (hoods/housings)	zinc die-cast
Surface (hoods/housings)	powder-coated, chromated
Colour (hoods/housings)	RAL 9005 (black)
Material (seal)	NBR
Material (screwing)	stainless steel


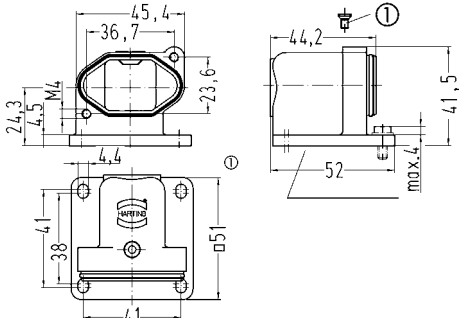

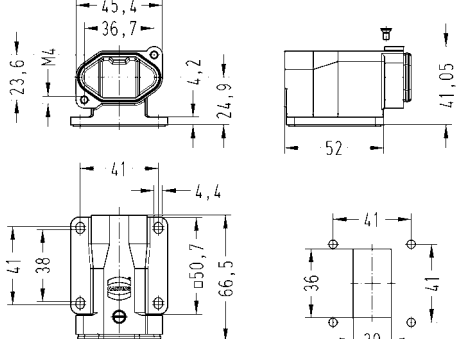

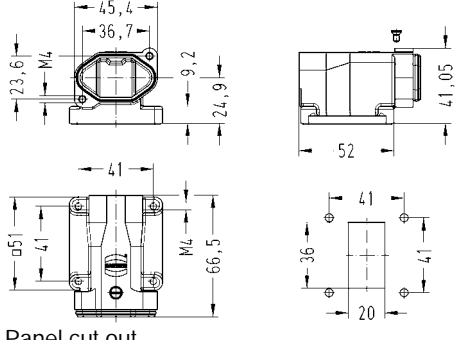
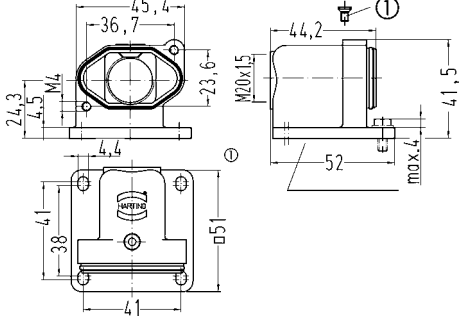
## Specifications and approvals




Hoods/Housings for harsh environmental requirements

Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han® HPR, Hoods, with sealing screw, top entry, toggle locking</p> <p>Han® HPR, Hoods, with sealing screw, top entry, screw locking</p> 	<p>1xM20</p> <p>1xM20 1xM25</p>	<p>19 40 703 0400</p> <p>19 40 703 0410 19 40 703 0411</p>	
<p>Han® HPR, Bulkhead mounted housings, with sealing screw, toggle locking</p> <p>Han® HPR, Bulkhead mounted housings, with sealing screw, screw locking</p>		<p>09 40 703 0301</p> <p>09 40 703 0311</p>	 <p>Panel cut out 21.3 x 21.3 mm</p> <p>① sealing screw</p>

Han-Brid

Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han® HPR, Bulkhead mounted housings, angled, with sealing screw, screw locking</p> 		09 40 703 0950	 <p>Panel cut out 21.3 x 21.3 mm ① sealing screw</p>
<p>Han® HPR, Bulkhead mounted housings, angled, screw locking, long version, feed through hole for fixing screws</p> 		09 40 703 0951	 <p>Panel cut out</p>
<p>Han® HPR, Bulkhead mounted housings, angled, screw locking, long version, tapped blind hole for fixing screws</p> 		09 40 703 0953	 <p>Panel cut out</p>
<p>Han® HPR, Surface mounted housings, angled, with sealing screw, top entry, screw locking, bottom closed</p>	1xM20	19 40 703 0950	 <p>① sealing screw</p>

Han-Brid


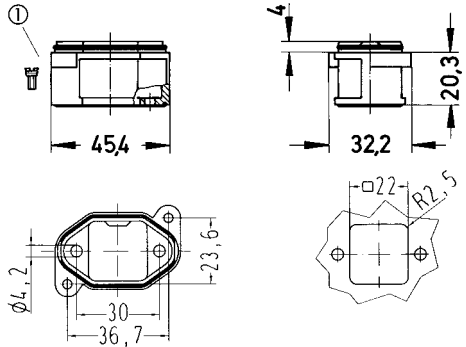

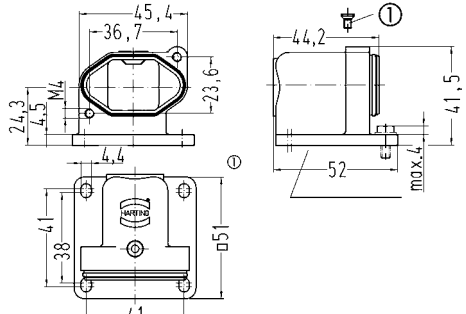

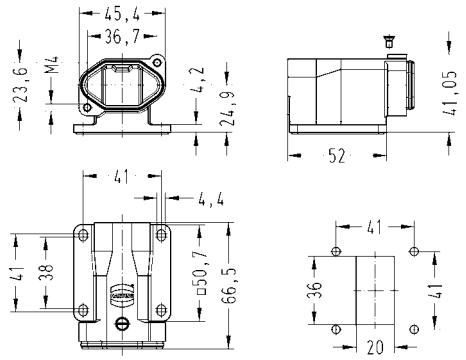

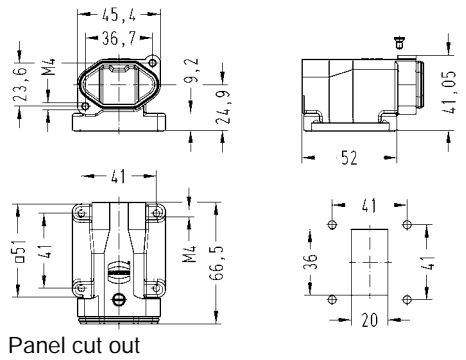
Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han® HPR, Surface mounted housings, angled, with sealing screw, top entry, screw locking, long version with closed bottom and feed through hole for fixing screws</p>	<p>1xM25</p>	<p>19 40 703 0951</p>	<p>Panel cut out</p>
<p>Han® HPR, Surface mounted housings, angled, with sealing screw, top entry, screw locking, long version with closed bottom and tapped blind hole for fixing screws</p>	<p>1xM25</p>	<p>19 40 703 0953</p>	<p>Panel cut out</p>
<p>Han® HPR, Cover for housings, toggle locking</p>		<p>09 40 703 5401</p>	
<p>Han® HPR, Cover for housings, toggle locking, with securing flex</p>		<p>09 40 703 5402</p>	
<p>Han® HPR, Cover for housings, screw locking</p>		<p>09 40 703 5411</p>	
<p>Han® HPR, Cover for housings, screw locking, with securing flex</p>		<p>09 40 703 5412</p>	
<p>Han® HPR, Dust protection cover, plastic</p> 		<p>09 40 003 5406</p>	


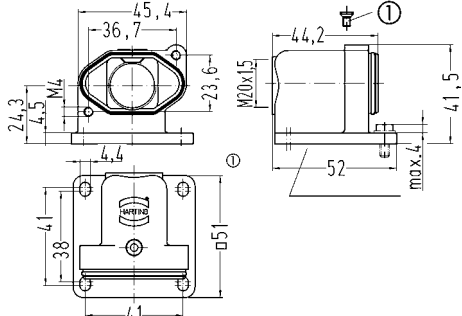

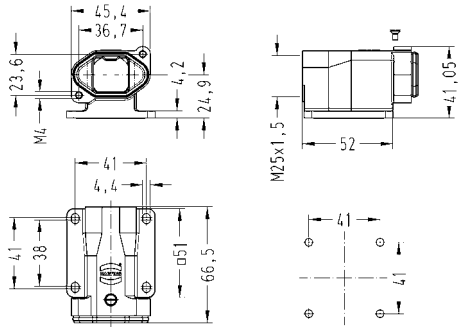

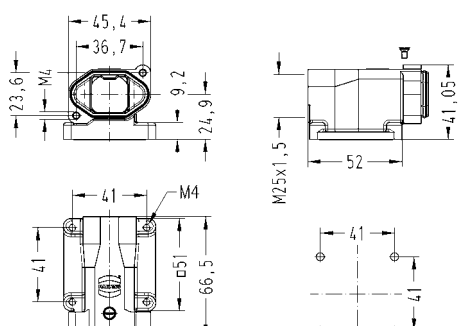
Hoods/Housings for harsh environmental requirements

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han® HPR, Hoods, with sealing screw, top entry, toggle locking	1xM20	19 40 003 0400	
Han® HPR, Hoods, with sealing screw, top entry, screw locking	1xM20 1xM25	19 40 003 0410 19 40 003 0411	
Han® HPR, Bulkhead mounted housings, with sealing screw, toggle locking		09 40 003 0301	

Han-Brid




Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han® HPR, Bulkhead mounted housings, with sealing screw, screw locking</p> 		09 40 003 0311	 <p>Panel cut out 21.3 x 21.3 mm ① sealing screw</p>
<p>Han® HPR, Bulkhead mounted housings, angled, with sealing screw, screw locking</p> 		09 40 003 0950	 <p>Panel cut out 21.3 x 21.3 mm ① sealing screw</p>
<p>Han® HPR, Bulkhead mounted housings, angled, screw locking, long version, feed through hole for fixing screws</p> 		09 40 003 0951	 <p>Panel cut out</p>
<p>Han® HPR, Bulkhead mounted housings, angled, with sealing screw, screw locking, long version, tapped blind hole for fixing screws</p> 		09 40 003 0953	 <p>Panel cut out</p>

Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han® HPR, Surface mounted housings, angled, with sealing screw, top entry, screw locking, bottom closed</p> 	<p>1xM20</p>	<p>19 40 003 0950</p>	 <p>① sealing screw</p>
<p>Han® HPR, Surface mounted housings, angled, with sealing screw, top entry, screw locking, long version</p>  <p>with closed bottom and feed through hole for fixing screws</p>	<p>1xM25</p>	<p>19 40 003 0951</p>	 <p>Panel cut out</p>
<p>Han® HPR, Surface mounted housings, angled, with sealing screw, top entry, screw locking, long version</p>  <p>with closed bottom and tapped blind hole for fixing screws</p>	<p>1xM25</p>	<p>19 40 003 0953</p>	 <p>Panel cut out</p>
<p>Han® HPR, Cover for housings, toggle locking</p> <p>Han® HPR, Cover for housings, toggle locking, with securing flex</p> <p>Han® HPR, Cover for housings, screw locking</p> <p>Han® HPR, Cover for housings, screw locking, with securing flex</p>		<p>09 40 003 5401</p> <p>09 40 003 5402</p> <p>09 40 003 5411</p> <p>09 40 003 5412</p>	

Han-Brid



Identification	Cable entry	Part number	Drawing Dimensions in mm
<p>Han® HPR, Dust protection cover, plastic</p> 		<p>09 40 003 5406</p>	