

Features

- Compact connector based on size 3 A with a current carrying capacity of 100 A
- Space saving design due to an angled male-male version
- IP20 protected male and female contact according to IEC 60 529
- Field wiring possible without special tools due to axial screw termination technology
- 16 coding options with separate coding pins

Description

- To ensure the specified protection measures according to IEC 61 140 and IEC 60 364 are the following important directions to adhere strictly:
- The described connectors are connectors without breaking capacity (COC) according to IEC 61 984 and are not deemed to be engaged or disengaged in normal use when live or under load
- Use only the following listed hoods and housings for the Han® Q 1/0 Axial Screw Protected male and female inserts:

Hood

Part number	Series
19 20 003 1440	Han® 3A – Metal (grey)
19 20 003 0420	Han® 3A – Plastic (grey)
19 20 003 0427	Han® 3A – Plastic (black)
19 37 003 1440	Han® 3M – Metal (black)
19 20 003 1446	Han® 3M – Metal (red)

Housings bulkhead mounting

Part number	Series
09 20 003 0301	Han® 3A – Metal (grey)
09 20 003 0320	Han® 3A – Plastic (grey)
09 20 003 0327	Han® 3A – Plastic (black)
09 37 003 0301	Han® 3M – Metal (black)

Hood cable to cable

Part number	Series
19 20 003 1750	Han® 3A – Metal (grey)
19 20 003 0720	Han® 3A – Plastic (grey)
19 20 003 0727	Han® 3A – Plastic (black)
19 37 003 1750	Han® 3M – Metal (black)

Grey = RAL 7032 / Black = RAL 9005 / Red = RAL 3000

- Only cables with protection class 2 shall be used
- The axial screw termination is suitable for fine stranded wires according to DIN EN 60228 class 5. Deviating cable assemblies have to be tested separately
- For the assembly within housings bulkhead mounting are the described installation conditions of the type sheets to adhere (see type sheet 09 12 001 2651 and 09 12 001 2751)
- For the connection of the conductor into the axial screw contact use hex-head with SW4

Available
February 2017

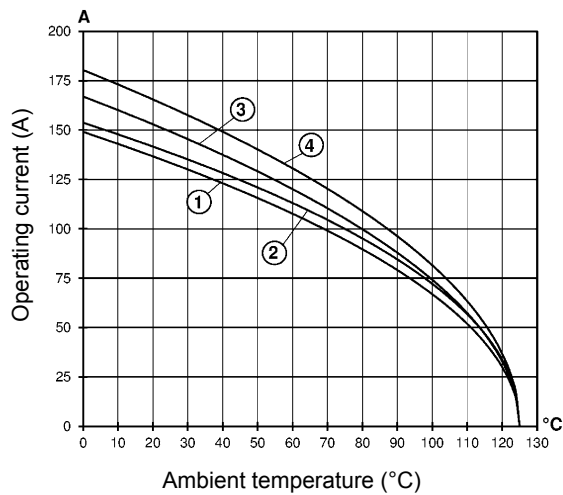
For „non standard applications“ we can manufacture designs to match your requirements. Please discuss requirements with us.



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 according to IEC 60 512-2


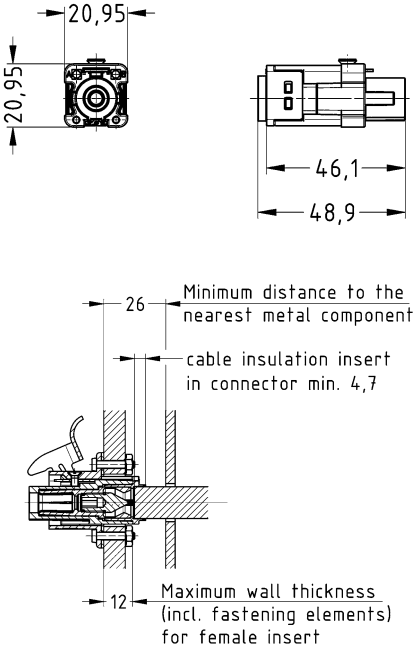

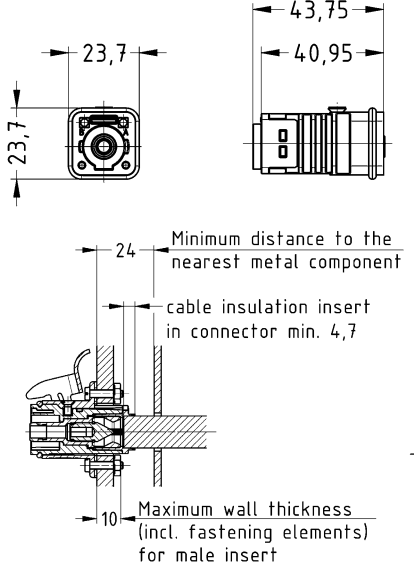

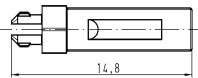



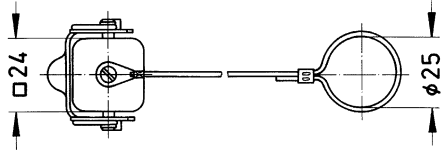


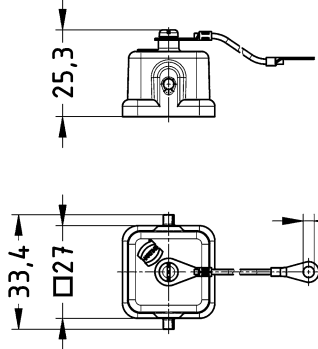

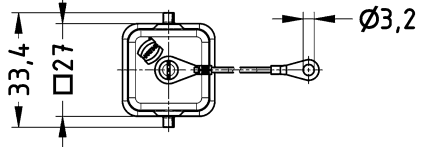
Male-male insert / Female insert / Female bushing M12:



- ① Wire cross section AWG 6
- ② Wire cross section 16 mm²
- ③ Wire cross section AWG 4
- ④ Wire cross section 25 mm²

Technical characteristics

Specifications	IEC 60 664-1 IEC 61 984
Inserts	
Contacts	1/0
Electrical data acc. to IEC 61 984	
Rated current	100 A
Rated voltage	400 V
Rated impulse voltage	6 kV
Polution degree	3
Insulation resistance	$\geq 10^{10} \Omega$
Material inserts	polycarbonate / polyamide
Material sealing	NBR
Limiting temperatures	-40 °C ... +125 °C
Flammability acc. to UL 94	V 0
Mating cyles	≥ 500
Contacts	
Material	copper alloy
Surface	silver plated
<u>Powercontacts</u>	
Contact resistance	$\leq 0.3 \text{ m}\Omega$
Axial screw termination	
- mm ²	16 ... 25 mm ²
- AWG	6 ... 4
max. insulation diameter	max. 13.4 mm
Stripping length	10 mm
max. torque	16 mm ² = 6 Nm 25 mm ² = 7 Nm
Housing (male-male insert)	
Material housing	Metal
Material sealing	NBR
Limiting temperatures	-40 °C ... +125 °C
Protection degree acc. to DIN EN 60 529 for coupled connector	IP65
Locking element	steel, zinc-plated
Lever type	lever, metal
Female Bushing	
Material	copper alloy
Surface	silver plated
Contact resistance	$\leq 0.3 \text{ m}\Omega$
Tightening Torque	10 Nm
Wrench size	SW 14

Indetification	Part number	Drawing	Dimensions in mm
<p>Han® Q 1/0 Female insert</p> <p>For usage in hoods, bulkhead mounted housings and cable to cable housings (see listing at description) with IP65 / IP67 fixing screw</p> 	<p>09 12 001 2751</p>	 <p>20,95</p> <p>20,95</p> <p>46,1</p> <p>48,9</p> <p>26 Minimum distance to the nearest metal component</p> <p>cable insulation insert in connector min. 4,7</p> <p>12 Maximum wall thickness (incl. fastening elements) for female insert</p>	
<p>Han® Q 1/0 Male insert</p> <p>For usage in hoods, bulkhead mounted housing and cable to cable housings (see listing at description) with IP65 / IP67 fixing screw</p> 	<p>09 12 001 2651</p>	 <p>23,7</p> <p>23,7</p> <p>43,75</p> <p>40,95</p> <p>24 Minimum distance to the nearest metal component</p> <p>cable insulation insert in connector min. 4,7</p> <p>10 Maximum wall thickness (incl. fastening elements) for male insert</p>	
<p>Coding element, plastic</p> <p>Range of delivery: 20 pieces per frame</p> 	<p>09 12 000 9924</p>	 <p>14,8</p>	

Indetification	Part number	Drawing	Dimensions in mm
<p>Han® M Protection cover for hoods, for female inserts, metal, with securing flex</p> 	09 37 003 5401		
<p>Han® M Protection cover for hoods, for male inserts, metal, with securing flex</p> 	09 37 003 5402		
<p>Han® M Protection cover for housings, for mounted female inserts, metal, with securing flex</p> 	09 37 003 5405		
<p>Han® M Protection cover for housings, for mounted male inserts, metal, with securing flex</p> 	09 37 003 5406		

Indetification	Part number	Drawing	Dimensions in mm
<p>Flange gasket Han® 3 A NBR</p>	<p>09 20 000 9991</p>		
<p>Fixing screw IP65 / IP67, for Han® 3 A M3</p> 	<p>09 20 000 9918</p>		
<p>Torque set, for High Current axial screw contact, incl. reversing blade (SW 4.0 + SW 5.0), Moment of torque: 5 - 14 Nm Range of delivery: High quality metal box, Variable tightening torque tool Torque Vario®- STplus, Setting tool: torque-setter, HARTING-optimised interchangeable blades hexagonal blades SW4, HARTING-optimised interchangeable blades hexagonal blades SW5</p> 	<p>09 99 000 0833</p>		