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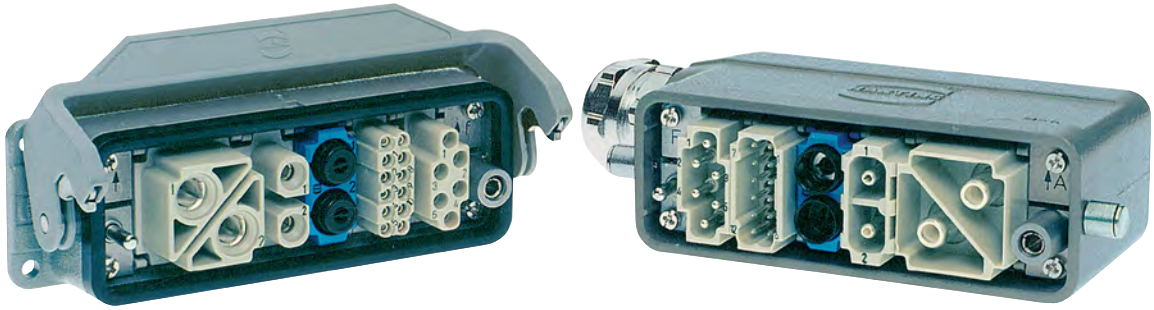
Description of the Han-Modular® system



The Han-Modular® series is designed for combining different transmission media in one connector. The multifaceted system of inserts, contacts, frames, hoods and housings fulfils individual customer requirements. To continuously enable new configurations, the Han-Modular® series growths constantly.

More than 50 different modules for different transmission media are available. These cover various termination techniques. The patented Han-Modular® hinged frame enables the configuration of all modules in the well-accepted Han® hoods and housings size 6B-48B. Further additional solutions are available, e.g. suitable docking frames for drawer units.

Individual customer requirements can be realized. Combining various transmission media in one single connector results in lower expenditures in installation time and production downtime. Space savings and cost savings are further benefits. The easy extension possibilities secure a future safe design.

Product features at a glance

- ❑ Flexible solutions according to specific customer requirements
- ❑ Reduction of installation time and production downtimes
- ❑ Space savings
- ❑ Cost savings
- ❑ Future safe design, easy extension

Assembly details

Summary

Series	Han® 200 A Axial module	Han® 200 A Crimp module	Han® 100 A Axial module	Han® 100 A Crimp module
Number of contacts	1	1	2	2
Modules	Axial screw terminal	Crimp terminal	Axial screw terminal	Crimp terminal
				
Rated current	200 A	200 A	100 A	100 A
Rated voltage	1000 V	1000 V	1000 V	1000 V
Wire gauge	25 … 70 mm²	25 … 70 mm²	10 … 38 mm²	10 … 35 mm²

Series	Han® 100 A Single module	Han® 70 A Axial module	Han® 70 A Crimp module	Han® 70 A Hybrid module
Number of contacts	1	2	2	1 / 4
Modules	Axial screw terminal	Axial screw terminal	Crimp terminal	Axial screw terminal
				
Rated current	100 A	70 A	70 A	70 A / 16 A
Rated voltage	830 V	1000 V	1000 V	1000 V / 400 V
Wire gauge	10 … 35 mm²	6 … 22 mm²	10 … 25 mm²	6 … 22 mm² / 0.14 … 4 mm²

Series	Han® 40 A Axial module	Han® 40 A Crimp module	Han® C Axial module	Han® C module
Number of contacts	2	2	3	3
Modules	Axial screw terminal	Crimp terminal	Axial screw terminal	Crimp terminal
				
Rated current	40 A	40 A	40 A	40 A
Rated voltage	1000 V	1000 V	690 V	690 V
Wire gauge	2.5 … 10 mm²	1.5 … 10 mm²	2.5 … 10 mm²	1.5 … 10 mm²

Series	Han® CC Protected module	Han® CD module	Han® E Quick Lock module	Han E® module
Number of contacts	4	3 / 4	6	6
Modules	Crimp terminal	Crimp terminal	Quick Lock terminal	Crimp terminal
				
Rated current	40 A	40 A / 10 A	16 A	16 A
Rated voltage	830 V	830 V / 830 V	500 V	500 V
Wire gauge	1.5 … 6 mm²	1.5 … 6 mm² / 0.14 … 2.5 mm²	0.5 … 2.5 mm²	0.14 … 4 mm²

Summary

Series	Han E® Screw module	Han E® Protected module	Han® EE Quick Lock module	Han® EE module
Number of contacts	5	6	8	8
Modules	Screw terminal	Crimp terminal	Quick Lock terminal	Crimp terminal
				
Rated current	16 A	16 A	16 A	16 A
Rated voltage	230 / 400 V	830 V	400 V	400 V
Wire gauge	0.5 … 2.5 mm²	0.14 … 4 mm²	0.5 … 2.5 mm²	0.14 … 4 mm²

Series	Han® EEE module	Han® ES module	Han® HV Single module	Han® HV module
Number of contacts	20	5	2	2
Modules	Crimp terminal	Cage-clamp terminal	Crimp terminal	Crimp terminal
				
Rated current	16 A	16 A	16 A	16 A
Rated voltage	500 V	400 V	2500 V	2900 / 5000 V
Wire gauge	0.14 … 4 mm²	0.14 … 2.5 mm²	0.5 … 4 mm²	0.5 … 4 mm²

Series	Han® HV module	Han DD® Quick Lock module	Han DD® module	Han® DDD module
Number of contacts	2	12	12	17
Modules	Crimp terminal	Quick Lock terminal	Crimp terminal	Crimp terminal
				
Rated current	40 A	10 A	10 A	10 A
Rated voltage	2900 / 5000 V	250 V	250 V	160 V
Wire gauge	1.5 … 10 mm²	0.25 … 1.5 mm²	0.14 … 2.5 mm²	0.14 … 2.5 mm²

Series	Han® High Density module	Han® D-Sub module	Han® USB module	Han® FireWire module
Number of contacts	25	9	4	6
Modules	Crimp terminal	Crimp terminal	USB 2.0	IEEE 1394
				
Rated current	4 A	5 A		
Rated voltage	50 V	50 V		
Wire gauge	0.08 … 0.52 mm²	0.08 … 0.52 mm²		

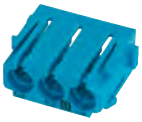
Summary

Series	Han® RJ45 module	Han® GigaBit module	Han® MegaBit module	Han® Shielded module
Number of contacts	8	8	2 x 4	20
Modules	Ethernet Cat. 6 	Ethernet Cat. 6_A 	Ethernet Cat. 5e 	Crimp terminal 

Han-Modular

Series	Han-Quintax® module			
Number of contacts	2			
Modules 				
Contacts	Han-Quintax® contact 4 + shielding 	High Density Quintax contact 8 + shielding 	Han D® Coax contact 1 + shielding  75 Ω	Han E® Coax contact 1 + shielding  50 Ω

Series	Han® Multi module			
Number of contacts	4		12	
Modules  				
Contacts	FOC contacts  Multimode F.O. HCS®* / PCF F.O. 1 mm POF	Coaxial contacts  50 Ω RG 174 75 Ω RG 179 50 Ω RG 58	FOC contacts  Multimode F.O. HCS®* / PCF F.O. 1 mm POF	Coaxial contacts  50 Ω RG 174 75 Ω RG 179

Series	Han® Pneumatic module		Han® SC module	Han® LC module	
Number of contacts	2	3	4	6	
Modules    					
Contacts    	Ø 6.0 mm	Ø 1.6 mm Ø 3.0 mm Ø 4.0 mm	SC contact for GI 50; 62.5 / 125 µm	LC Contact for LWL Multi Mode LC Contact for LWL Single Mode	

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

Features

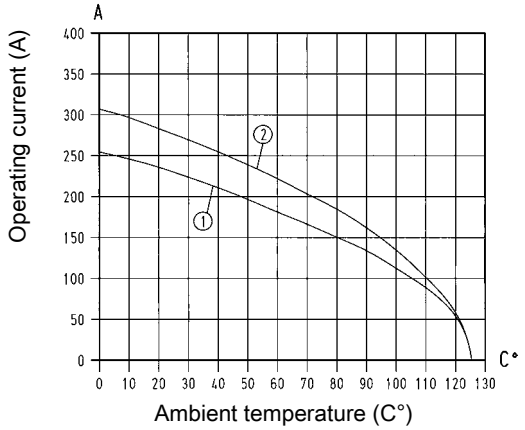
- Crimp- and Axial module are compatible modules
- Contacts can be unlocked from the mating side
- Power module for big wire cross sections up to 70mm²
- Suitable as a 3 + PE connector in a Han® 32 B housing

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 24 B hoods/housings with 3 modules Wire cross section 50 mm²
② 24 B hoods/housings with 3 modules Wire cross section 70 mm²

Technical characteristics

Contacts	1
Electrical data acc. to IEC 61984	**200 A 1000 V 8 kV 3**
Rated current	200 A
Rated voltage	1000 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 5

Specifications and approvals

EN 50124-1
IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

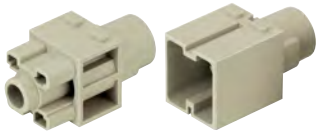
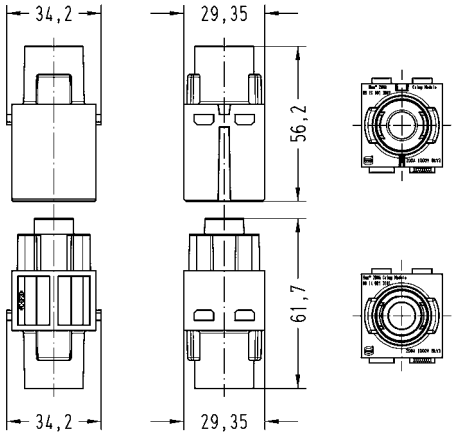
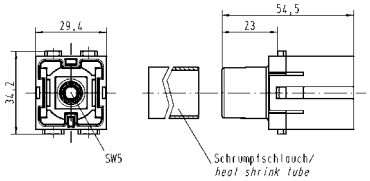
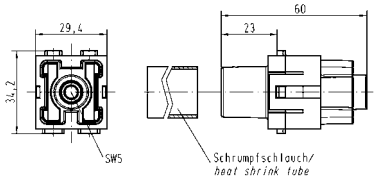
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® 200 A module

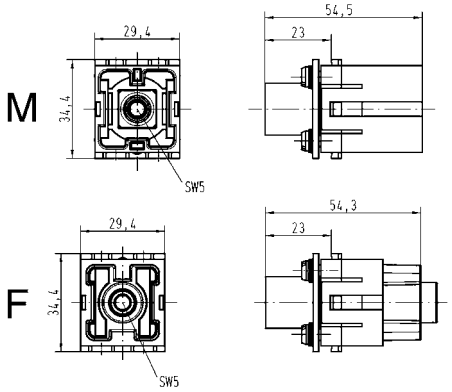
Number of contacts

1

1000 V
200 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 200 A Crimp module, Crimp terminal  Please order crimp contacts separately.		09 14 001 3001	09 14 001 3101	 Removal tool 09 99 000 0820 see chapter 90
Han-Modular®, Han® 200 A Axial module, Axial screw terminal, silver plated contacts, contact resistance ca.0.2 mOhm 	25 – 40 40 – 70	09 14 001 2663 09 14 001 2662	09 14 001 2763 09 14 001 2762	M  F  Hex key with grip 09 99 000 0364 adapter 3/8” 09 99 000 0371 see chapter 90 Stripping length 16 mm

Han® 200 A module

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 200 A PE module, Axial screw terminal, silver plated contacts, contact resistance ca.0.2 mOhm 	25 – 40 40 – 70	09 14 001 2668 09 14 001 2667	09 14 001 2768 09 14 001 2767	 Hex key with grip 09 99 000 0364 adapter 3/8” 09 99 000 0371 see chapter 90 Stripping length 16 mm
Crimp contact, TC 200, silver plated contacts, ... 14 mm contact resistance ≤0.3 mOhm 	25 35 50 70	09 11 000 6120 09 11 000 6121 09 11 000 6122 09 11 000 6123	09 11 000 6220 09 11 000 6221 09 11 000 6222 09 11 000 6223	

Wire gauge	∅	Stripping length A
25 mm²	7	19 mm
35 mm²	8.2	20 mm
50 mm²	10	22.5 mm
70 mm²	11.5	22.5 mm
for stranded wire according to IEC 60 228 Class 5		

Features

- Crimp- and Axial module are compatible modules
- Contacts can be unlocked from the mating side

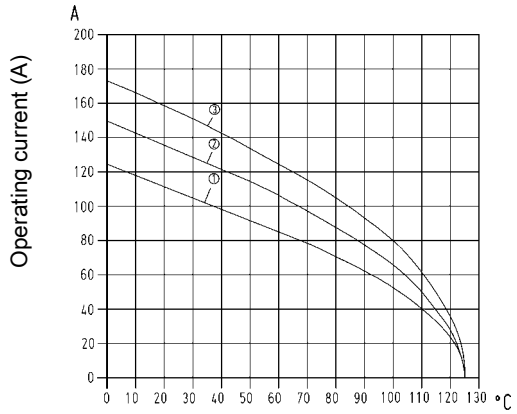
Derating

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 terminal

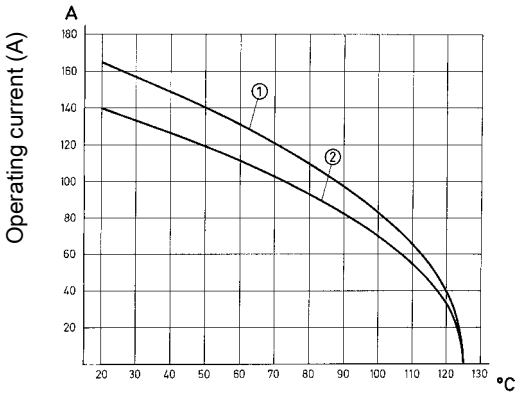


Ambient temperature (C°)

① 24 B hoods/housings with 3 modules Wire cross section 16 mm²
② 24 B hoods/housings with 3 modules Wire cross section 25 mm²
③ 24 B hoods/housings with 3 modules Wire cross section 35 mm²

Derating

Axial screw termination



Ambient temperature (C°)

① 24 B hoods/housings with 3 modules Wire cross section 35 mm²
② 24 B hoods/housings with 3 modules Wire cross section 25 mm²

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**100 A 1000 V 8 kV 3**
Rated current	100 A
Rated voltage	1000 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 4

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

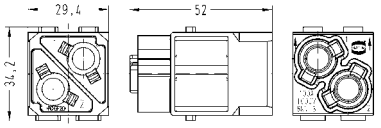
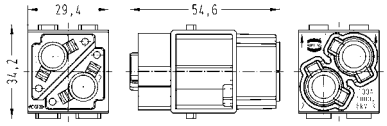
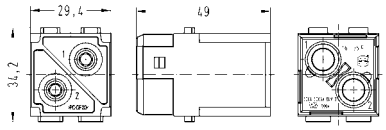
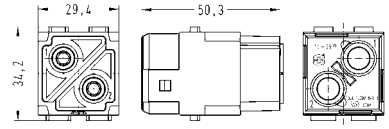
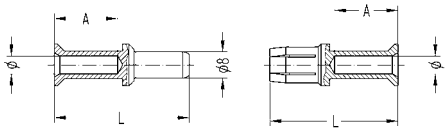
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® 100 A module

Number of contacts

2

1000 V
100 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 100 A Crimp module, Crimp terminal, silver plated contacts  Please order crimp contacts separately.		09 14 002 3051	09 14 002 3151	M  F 
Han-Modular®, Han® 200 A Crimp module, Axial screw terminal, silver plated contacts, contact resistance ≤0.3 mOhm 	10 – 25 16 – 35 38	09 14 002 2653 09 14 002 2651 09 14 002 2650	09 14 002 2753 09 14 002 2751 09 14 002 2750	M  F 
Crimp contact, TC 100, silver plated contacts, contact resistance ≤0.3 mOhm 	10 16 25 35	09 11 000 6114 09 11 000 6116 09 11 000 6125 09 11 000 6135	09 11 000 6214 09 11 000 6216 09 11 000 6225 09 11 000 6235	

Wire gauge	∅	Stripping length A
10 mm²	4.3	19 mm
16 mm²	5.5	19 mm
25 mm²	7	19 mm
35 mm²	8.2	16 mm
for stranded wire according to IEC 60 228 Class 5		

Han® 100 A Single module

Features

- Crimp or axial screw termination available
- Unlock of contacts with a screw driver from mating side
- Connect PE contact with special cable shoe
- Separate axial screw contacts can be terminated without any special tools directly to the wire

Technical characteristics

Contacts	1
Electrical data acc. to IEC 61984	**100 A 830 V 8 kV 3**
Rated current	100 A
Rated voltage	830 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 4

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the axial screw technique

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

Remarks on the crimp technique

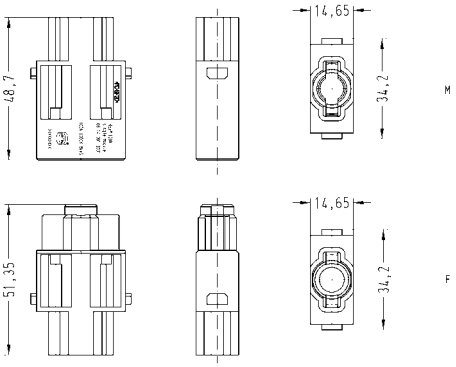
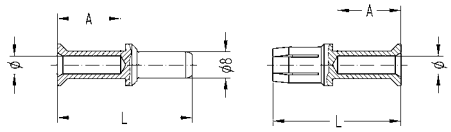
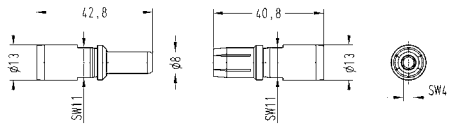
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® 100 A Single module

Number of contacts

1

830 V
100 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 100 A Single module, contact resistance ≤0.3 mOhm  Please order contacts separately.		09 14 001 3031	09 14 001 3131	
Crimp contact, TC 100, silver plated contacts, contact resistance ≤0.3 mOhm 	10 16 25 35	09 11 000 6114 09 11 000 6116 09 11 000 6125 09 11 000 6135	09 11 000 6214 09 11 000 6216 09 11 000 6225 09 11 000 6235	
Axial screw contact, silver plated contacts, contact resistance ≤0.3 mOhm 	10 – 25 16 – 35	09 11 000 6112 09 11 000 6113	09 11 000 6212 09 11 000 6213	

Wire gauge	∅	Stripping length A
10 mm²	4.3	19 mm
16 mm²	5.5	19 mm
25 mm²	7	19 mm
35 mm²	8.2	16 mm
for stranded wire according to IEC 60 228 Class 5		

Stripping length 13 mm

Tightening torque

mm²	10	16	25	35
Nm	6	6	7	8

Features

- For power circuits
- Male inserts with protection collar
- Polarisation of module

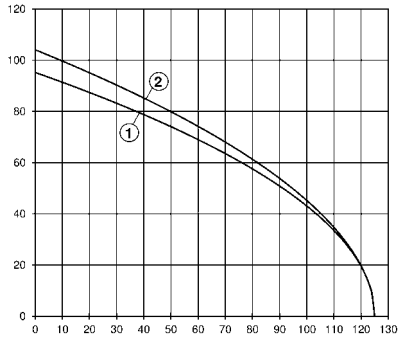
Derating

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

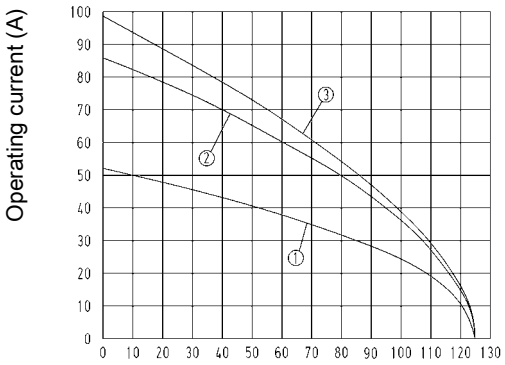
Crimp terminal



① 24 B hoods/housings with 6 modules Wire cross section 16 mm²
② 24 B hoods/housings with 6 modules Wire cross section 25 mm²

Derating

Axial screw termination



① 24 B hoods/housings with 6 modules Wire cross section 6 mm²
② 24 B hoods/housings with 6 modules Wire cross section 16 mm²
③ 24 B hoods/housings with 6 modules Wire cross section 22 mm²

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**70 A 1000 V 8 kV 3**
Rated current	70 A
Rated voltage	1000 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 2.5

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

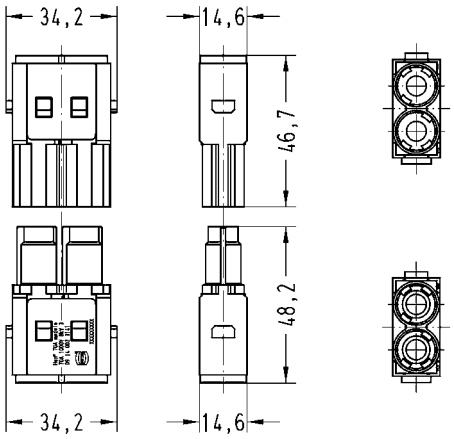
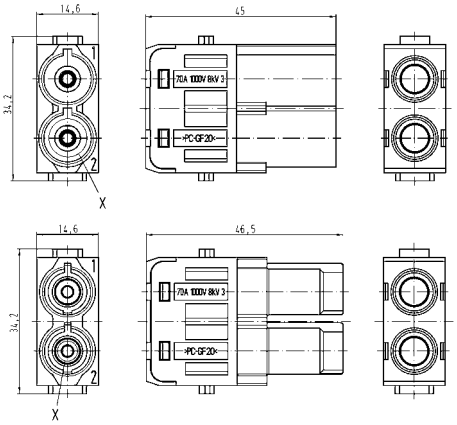
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® 70 A module

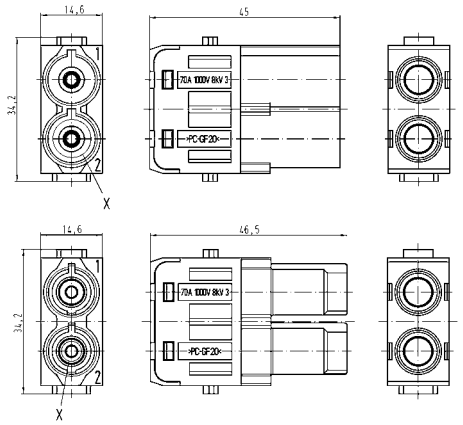
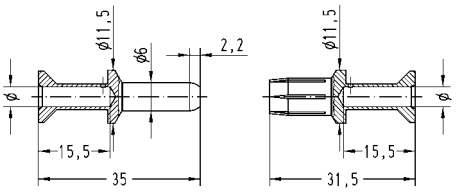
Number of contacts

2

1000 V
70 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 70 A Crimp module, Crimp terminal 		09 14 002 3041	09 14 002 3141	
Han-Modular®, Han® 70 A Axial module, Axial screw terminal, silver plated contacts, contact resistance ≤0.5 mOhm  finger safe	6 – 16 14 – 22	09 14 002 2641 09 14 002 2642		

Han® 70 A module

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 70 A Axial module, Axial screw terminal, silver plated contacts, contact resistance ≤0.5 mOhm 	6 – 16 14 – 22	09 14 002 2646 09 14 002 2647	09 14 002 2741 09 14 002 2742	
Crimp contact, TC 70, silver plated contacts, contact resistance ≤0.5 mOhm 	10 16 25	09 11 000 6131 09 11 000 6132 09 11 000 6133	09 11 000 6231 09 11 000 6232 09 11 000 6233	

Wire gauge	∅	Stripping length A
10 mm²	4.3	15.5 mm
16 mm²	5.5	15.5 mm
25 mm²	7	15.5 mm
for stranded wire according to IEC 60 228 Class 5		

Han® 70 A Hybrid module

Features

- Axial screw termination
- For power circuits
- Male inserts with protection collar
- Polarisation of module

Technical characteristics

Contacts	1/4
Electrical data acc. to IEC 61984	**70 A 1000 V 8 kV 3**
Rated current	70 A
Rated voltage	1000 V
Rated impulse voltage	8 kV
Pollution degree	3
Electrical data, signal	**16 A 400 V 6 kV 3**
Rated current	16 A
Rated voltage	400 V
Rated impulse voltage	6 kV
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 2.5

Specifications and approvals

IEC 60664-1
IEC 61984
GL

Details

Crimping tools see chapter 90

Remarks on the axial screw technique

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

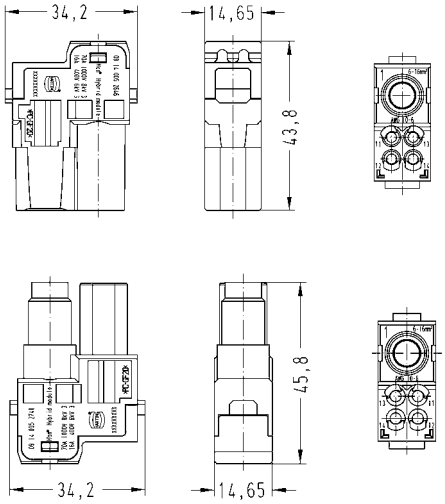
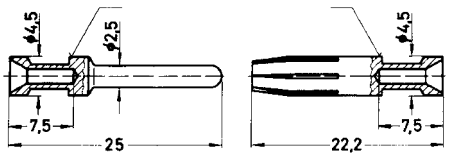
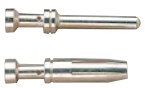
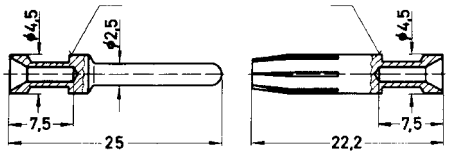
Remarks on the crimp technique

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

Number of contacts

1/4

1000 V / 400 V
70 A/16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han-Modular® 70 A Hybrid module, Axial screw terminal  Please order signal contacts separately.	6 – 16 14 – 22	09 14 005 2646 09 14 005 2647	09 14 005 2741 09 14 005 2742	
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221	 Identification / Wire gauge / Stripping length no groove — 0.14-0.37 mm² AWG 26-22 — 7.5 mm no groove — 0.5 mm² AWG 20 — 7.5 mm 1 groove* — 0.75 mm² AWG 18 — 7.5 mm 1 groove — 1 mm² AWG 18 — 7.5 mm 2 grooves — 1.5 mm² AWG 16 — 7.5 mm 3 grooves — 2.5 mm² AWG 14 — 7.5 mm wide groove — 3 mm² AWG 12 — 7.5 mm no groove — 4 mm² AWG 12 — 7.5 mm * on the back crimp collar
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 3 4	09 33 000 6127 09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6227 09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	 Identification / Wire gauge / Stripping length no groove — 0.14-0.37 mm² AWG 26-22 — 7.5 mm no groove — 0.5 mm² AWG 20 — 7.5 mm 1 groove* — 0.75 mm² AWG 18 — 7.5 mm 1 groove — 1 mm² AWG 18 — 7.5 mm 2 grooves — 1.5 mm² AWG 16 — 7.5 mm 3 grooves — 2.5 mm² AWG 14 — 7.5 mm wide groove — 3 mm² AWG 12 — 7.5 mm no groove — 4 mm² AWG 12 — 7.5 mm * on the back crimp collar

Features

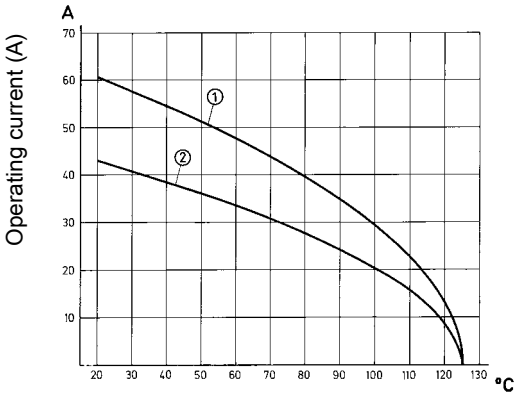
- Crimp or axial screw termination available
- No special tools required for axial-screw termination

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



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 10 mm²
② 24 B hoods/housings with 6 modules Wire cross section 6 mm²

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**40 A 1000 V 8 kV 3**
Rated current	40 A
Rated voltage	1000 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 2

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

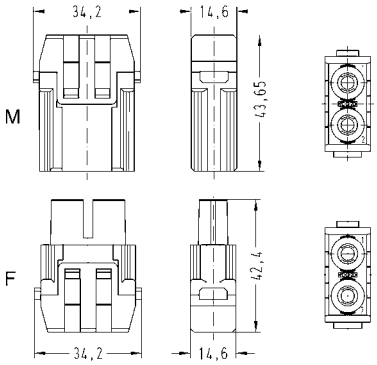
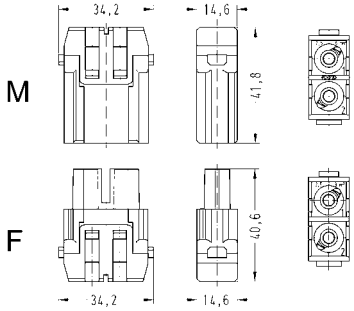
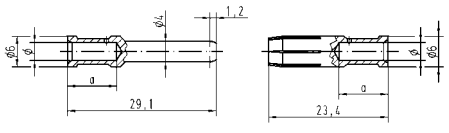
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® 40 A module

Number of contacts

2

1000 V
40 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® 40 A Crimp module, Crimp terminal  Please order crimp contacts separately.		09 14 002 3002	09 14 002 3102	 Contact arrangement (view from termination side)
Han-Modular®, Han® 40 A Axial module, Axial screw terminal, silver plated contacts, contact resistance ≤0.3 mOhm 	2.5 – 8 6 – 10	09 14 002 2601 09 14 002 2602	09 14 002 2701 09 14 002 2702	 Contact arrangement (view from termination side) Stripping length mm² 2,5 4 6 10 mm 5+1 5+1 8+1 11+1 Tightening torque mm² 2,5 4 6 10 Nm 1,5 1,5 2 2
Han® C, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	1.5 2.5 4 6 10	09 32 000 6104 09 32 000 6105 09 32 000 6107 09 32 000 6108 09 32 000 6109	09 32 000 6204 09 32 000 6205 09 32 000 6207 09 32 000 6208 09 32 000 6209	 Wire gauge ⌀ Stripping length 1.5 mm² AWG 16 1.75 9.5 mm 2.5 mm² AWG 14 2.25 9.5 mm 4 mm² AWG 12 2.85 9.5 mm 6 mm² AWG 10 3.5 9.5 mm 10 mm² AWG 8 4.3 12 mm

Features

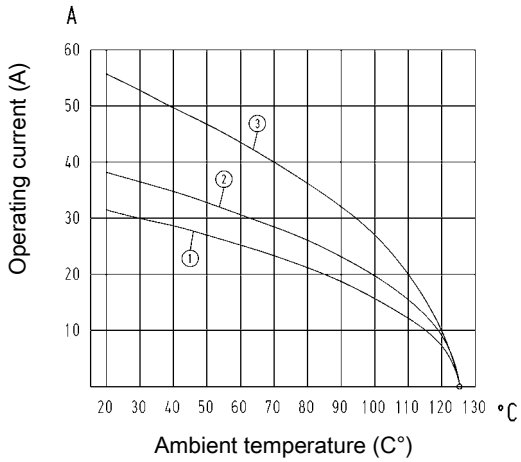
- Standard module for power up to 40 A
- No special tools required for axial-screw termination

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 24 B hoods/housings with 6 modules Wire cross section 4 mm²
② 24 B hoods/housings with 6 modules Wire cross section 6 mm²
③ 24 B hoods/housings with 6 modules Wire cross section 10 mm²

Technical characteristics

Contacts	3
Electrical data acc. to IEC 61984	**40 A 690 V 8 kV 3**
Rated current	40 A
Rated voltage	690 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated current acc. to UL	40 A
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Hex key	SW 2

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

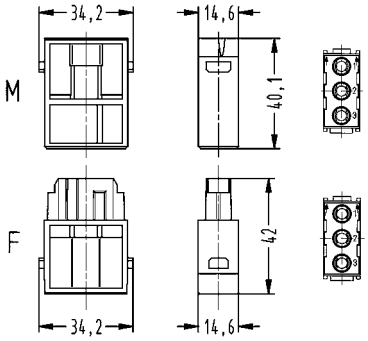
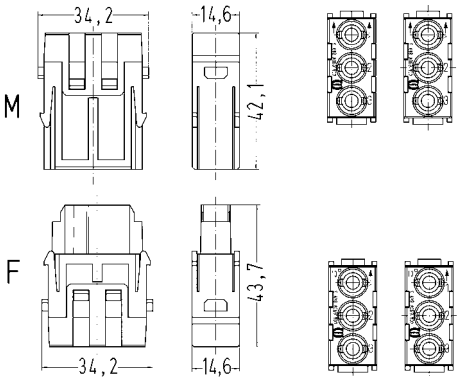
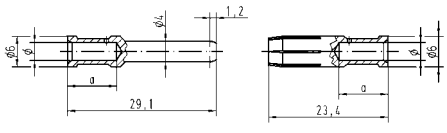
Remarks on the crimp technique

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

Number of contacts

3

690 V
40 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® C module, Crimp terminal  Please order crimp contacts separately.		09 14 003 3001	09 14 003 3101	 Contact arrangement (view from termination side)
Han-Modular®, Han® C module, Axial screw terminal, silver plated contacts, contact resistance ≤0.3 mOhm 	2.5 – 8 6 – 10	09 14 003 2601 09 14 003 2602	09 14 003 2701 09 14 003 2702	 Stripping length mm² 2,5 4 6 10 mm 5+1 5+1 8+1 11+1 Tightening torque mm² 2,5 4 6 10 Nm 1,5 1,5 2 2
Han® C, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	1.5 2.5 4 6 10	09 32 000 6104 09 32 000 6105 09 32 000 6107 09 32 000 6108 09 32 000 6109	09 32 000 6204 09 32 000 6205 09 32 000 6207 09 32 000 6208 09 32 000 6209	 Wire gauge / ∅ / Stripping length 1.5 mm² AWG 16 — 1.75 — 9.5 mm 2.5 mm² AWG 14 — 2.25 — 9.5 mm 4 mm² AWG 12 — 2.85 — 9.5 mm 6 mm² AWG 10 — 3.5 — 9.5 mm 10 mm² AWG 8 — 4.3 — 12 mm

Han® CC Protected module

Features

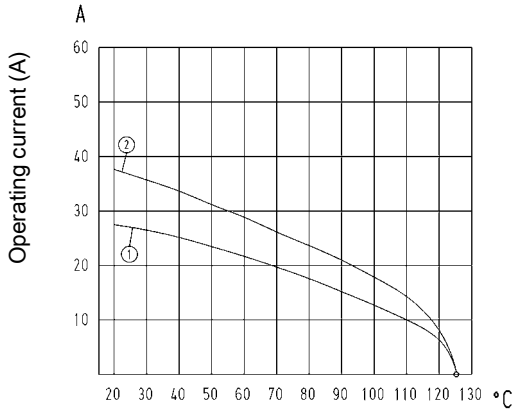
- Suitable for Han® C crimp contacts
- Designed for a high working voltage up to 830 V
- Finger safe male and female contacts
- High density of contacts

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 24 B hoods/housings with 6 modules Wire cross section 4 mm²
② 24 B hoods/housings with 6 modules Wire cross section 6 mm²

Technical characteristics

Contacts	4
Electrical data acc. to IEC 61984	**40 A 830 V 8 kV 3**
Rated current	40 A
Rated voltage	830 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

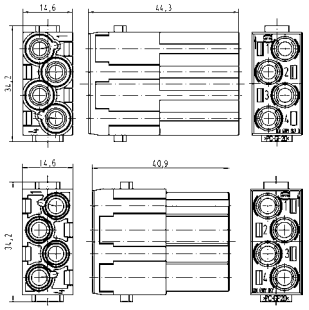
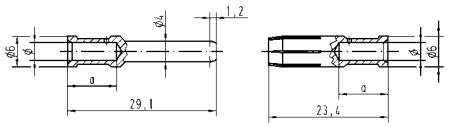
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® CC Protected module

Number of contacts

4

830 V
40 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® CC Protected module, Crimp terminal  Please order crimp contacts separately.		09 14 004 3041	09 14 004 3141	
Han® C, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	1.5 2.5 4 6	09 32 000 6104 09 32 000 6105 09 32 000 6107 09 32 000 6108	09 32 000 6204 09 32 000 6205 09 32 000 6207 09 32 000 6208	 Wire gauge / ∅ / Stripping length 1.5 mm² AWG 16 / 1.75 / 9.5 mm 2.5 mm² AWG 14 / 2.25 / 9.5 mm 4 mm² AWG 12 / 2.85 / 9.5 mm 6 mm² AWG 10 / 3.5 / 9.5 mm 10 mm² AWG 8 / 4.3 / 12 mm

Han-Modular

Features

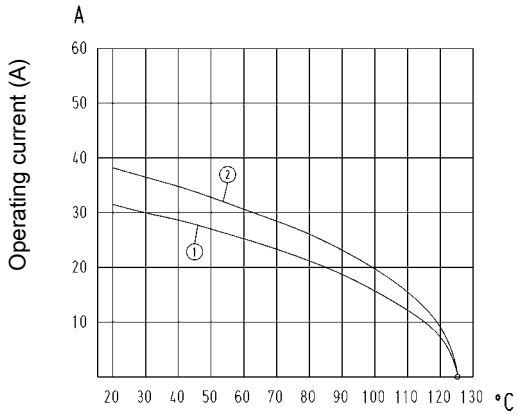
- 3 contacts (40 A) for power circuits and 4 contacts (10 A) for signal circuits
- Ideal as motor drive connector
- Finger safe male and female contacts

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



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 4 mm²
② 24 B hoods/housings with 6 modules Wire cross section 6 mm²

Technical characteristics

Contacts	3/4
Electrical data acc. to IEC 61984	**40 A 830 V 8 kV 3**
Rated current	40 A
Rated voltage	830 V
Rated impulse voltage	8 kV
Pollution degree	3
Electrical data, signal	**10 A 830 V 8 kV 3**
Rated current	10 A
Rated voltage	830 V
Rated impulse voltage	8 kV
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

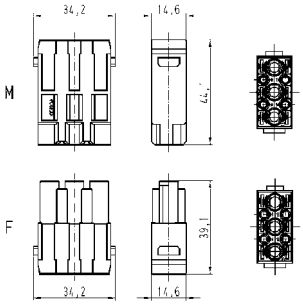
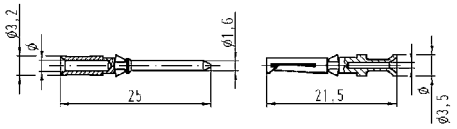
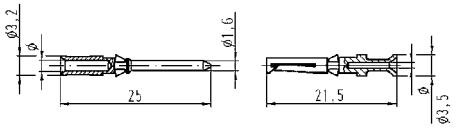
Remarks on the crimp technique

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

Number of contacts

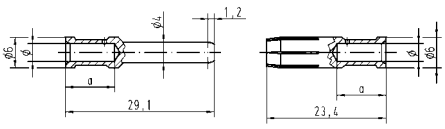
3/4

830 V / 830 V
40 A/10 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® CD module, Crimp terminal  Please order crimp contacts separately.		09 14 007 3001	09 14 007 3101	 Contact arrangement (view from termination side) Max. insulation diameter 5 mm
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	 Wire gauge / ø / 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
Han D®, Crimp contact, silver plated contacts, contact resistance ≤3 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5	09 15 000 6104 09 15 000 6103 09 15 000 6105 09 15 000 6102 09 15 000 6101 09 15 000 6106	09 15 000 6204 09 15 000 6203 09 15 000 6205 09 15 000 6202 09 15 000 6201 09 15 000 6206	 Wire gauge / ø / 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

Han® CD module

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han® C, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm	1.5 2.5 4 6	09 32 000 6104 09 32 000 6105 09 32 000 6107 09 32 000 6108	09 32 000 6204 09 32 000 6205 09 32 000 6207 09 32 000 6208	



Wire gauge		⌀	Stripping length
1.5 mm²	AWG 16	1.75	9.5 mm
2.5 mm²	AWG 14	2.25	9.5 mm
4 mm²	AWG 12	2.85	9.5 mm
6 mm²	AWG 10	3.5	9.5 mm
10 mm²	AWG 8	4.3	12 mm

Features

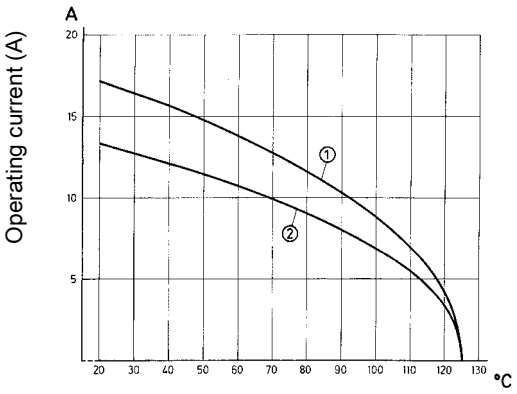
- Standard module for power up to 16 A
- Han-Quick Lock® or Crimp terminal available

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



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 2.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²

Technical characteristics

Contacts	6
Electrical data acc. to IEC 61984	**16 A 500 V 6 kV 3**
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC contacts	≥10000
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
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.

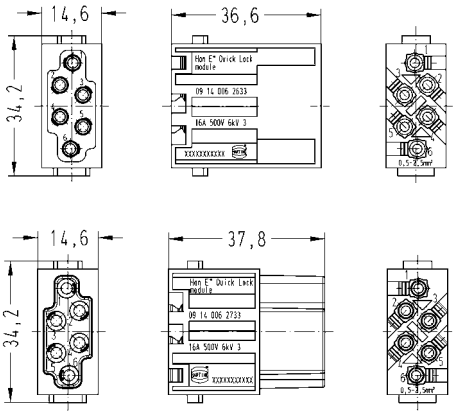
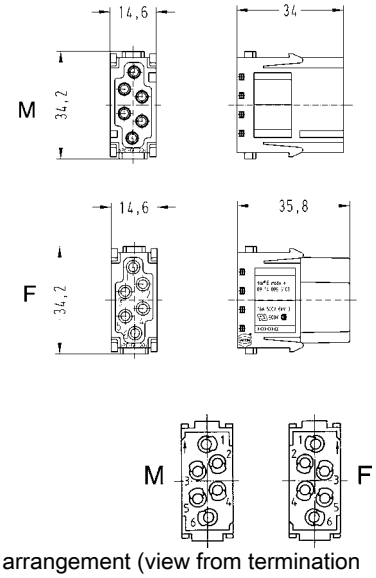
Designed for 10,000 mating cycles (only with Han E® HMC crimp contacts, Han-Modular® Docking frame and Han-Modular® Hinged frame HMC)

Han E® module

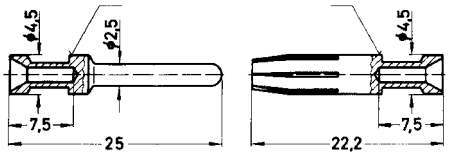
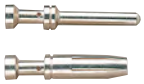
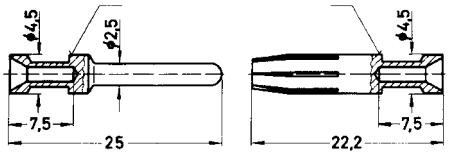
Number of contacts

6

500 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Quick Lock® Han-Modular®, Han E® module, Han-Quick Lock® termination, silver plated contacts, contact resistance ≤1 mOhm 	0.5 – 2.5	09 14 006 2633	09 14 006 2733	 Contact arrangement (view from termination side)
Han-Modular®, Han E® module, Crimp terminal  Please order crimp contacts separately.		09 14 006 3001	09 14 006 3101	 Contact arrangement (view from termination side)

Han E® module

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221	
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 3 4	09 33 000 6127 09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6227 09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Features

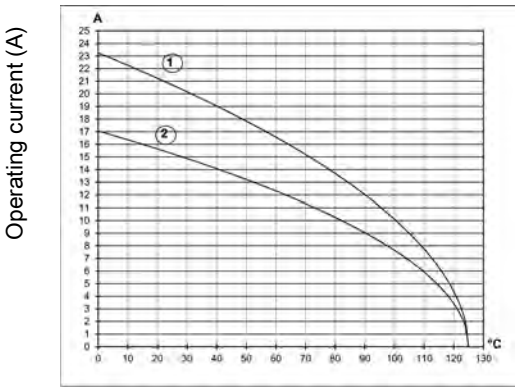
- Screw connection, suitable for all users around the world
- No special tools required
- For flexible and solid conductors from 0.5 to 2.5 mm²
- Additional protection against voltage and accidental contact by a sliding insulation cover which closes automatically during mating

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



Operating current (A)

Ambient temperature (C°)

Technical characteristics

Contacts	5
Electrical data acc. to IEC 61984	**16 A 230/400 V 4 kV 3**
Rated current	16 A
Rated voltage conductor - ground	230 V
Rated voltage conductor - conductor	400 V
Rated impulse voltage	4 kV
Pollution degree	3
Insulation resistance	≥10^{10} 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 (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

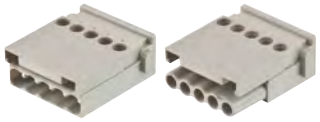
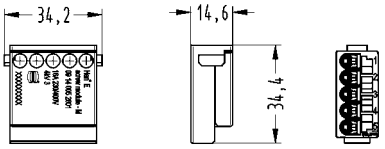
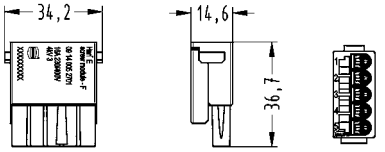
GL

Han® E Screw module

Number of contacts

5

230/400 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han E® module, Screw terminal, silver plated contacts, contact resistance ≤1 mOhm 	0.5 – 2.5	09 14 005 2601	09 14 005 2701	M  F 

Features

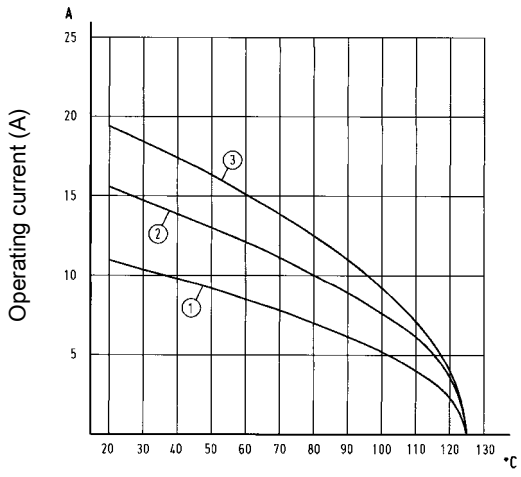
- Suitable for Han E® crimp contacts
- Designed for a high working voltage up to 830 V
- Finger safe male and female contacts

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



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 2.5 mm²
③ 24 B hoods/housings with 6 modules Wire cross section 4 mm²

Technical characteristics

Contacts	6
Electrical data acc. to IEC 61984	**16 A 830 V 8 kV 3**
Rated current	16 A
Rated voltage	830 V
Rated impulse voltage	8 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC contacts	≥10000
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
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.

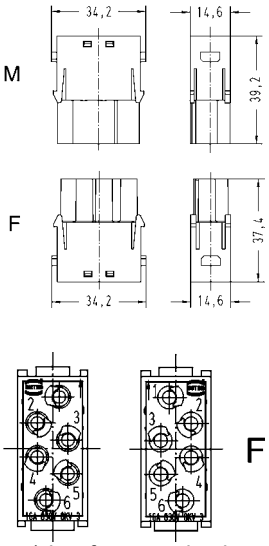
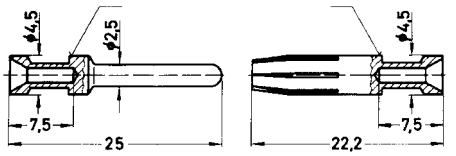
Designed for 10,000 mating cycles (only with Han E® HMC crimp contacts, Han-Modular® Docking frame and Han-Modular® Hinged frame HMC)

Han E® Protected module

Number of contacts

6

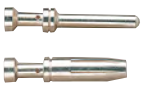
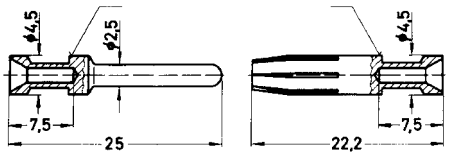
830 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han E® Protected module, Crimp terminal  Please order crimp contacts separately.		09 14 006 3041	09 14 006 3141	 Contact arrangement (view from termination side)
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Han E® Protected module

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 3 4	09 33 000 6127 09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6227 09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Features

- Han-Quick Lock® or Crimp terminal available
- High contact density

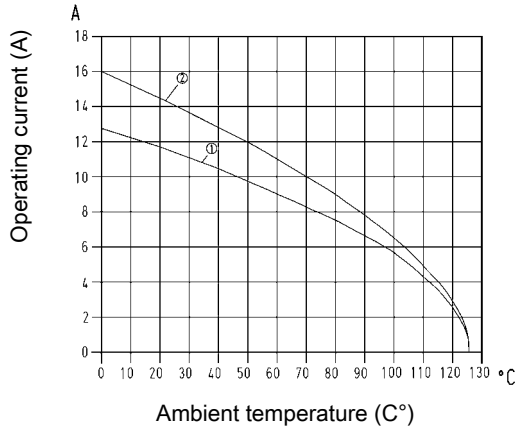
Derating

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

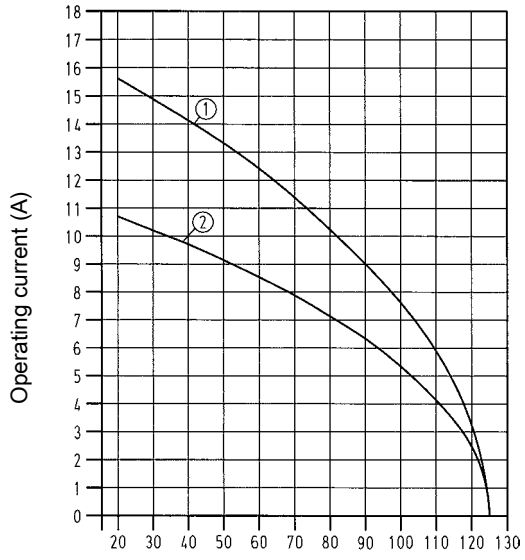
Quick Lock termination



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 2.5 mm²

Crimp terminal



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 2.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²

Technical characteristics

Contacts	8
Electrical data acc. to IEC 61984	**blue slide** **16 A 400 V 6 kV 3** **black slide** **16 A 400 V 6 kV 3** **16 A 400 V 6 kV 3**
Rated current	16 A
Rated voltage	400 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC contacts	≥10000
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
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.

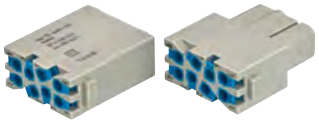
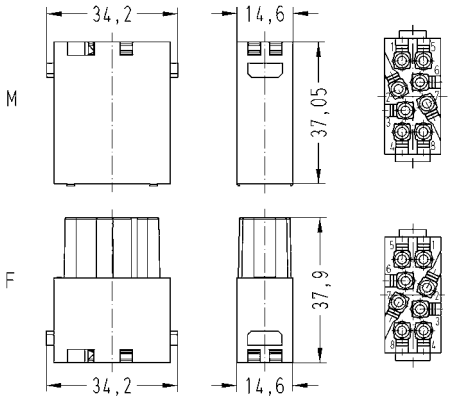
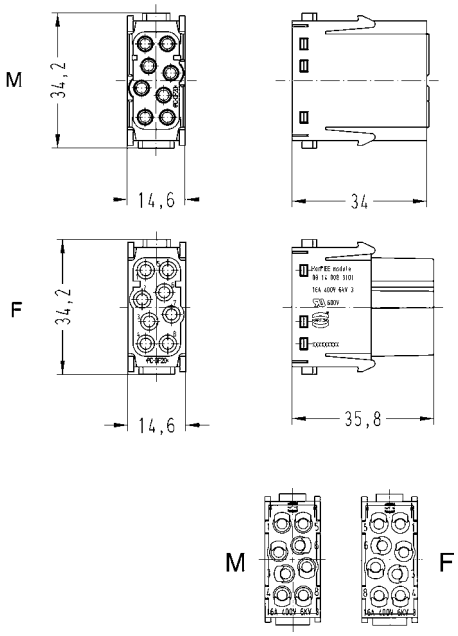
Designed for 10,000 mating cycles (only with Han E® HMC crimp contacts, Han-Modular® Docking frame and Han-Modular® Hinged frame HMC)

Han® EE module

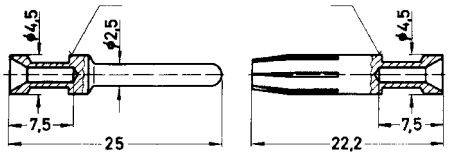
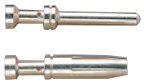
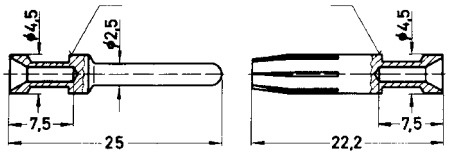
Number of contacts

8

400 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Quick Lock® Han-Modular®, Han® EE module, Han-Quick Lock® termination, blue slide, silver plated contacts, contact resistance ≤1 mOhm 	0.5 – 2.5	09 14 008 2633	09 14 008 2733	 Contact arrangement (view from termination side)
Han-Quick Lock® Han® EE module, Han-Quick Lock® termination, black slide, silver plated contacts, contact resistance ≤1 mOhm	0.25 – 1.5	09 14 008 2634	09 14 008 2734	
Han-Modular®, Han® EE module, Crimp terminal  Please order crimp contacts separately.		09 14 008 3001	09 14 008 3101	 Contact arrangement (view from termination side)

Han® EE module

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221	
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 3 4	09 33 000 6127 09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6227 09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Features

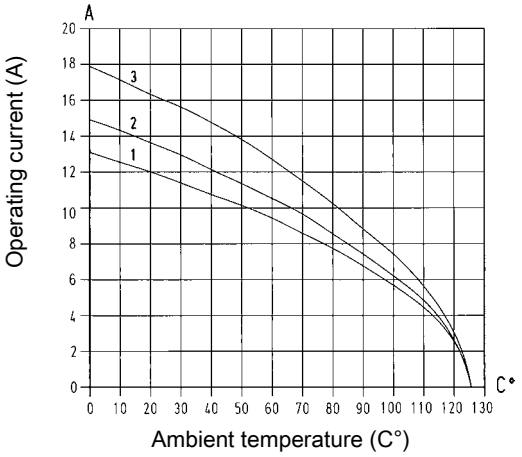
- Suitable for Han E® crimp contacts
- Higher density of crimping contacts
- Standard module for power up to 16 A
- Also suitable as a reliable signal connector

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 24 B hoods/housings with 3 modules Wire cross section 1.5 mm²
② 24 B hoods/housings with 3 modules Wire cross section 2.5 mm²
③ 24 B hoods/housings with 3 modules Wire cross section 4 mm²

Technical characteristics

Contacts	20
Electrical data acc. to IEC 61984	**16 A 500 V 6 kV 3**
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC contacts	≥10000
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

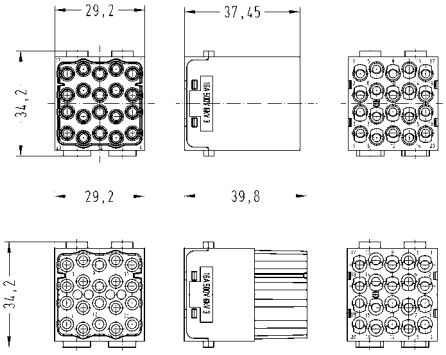
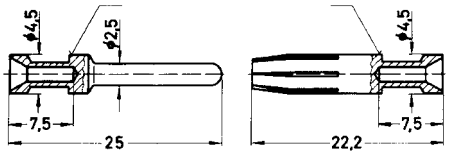
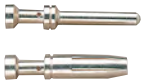
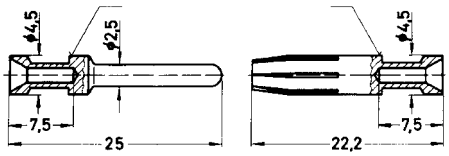
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Designed for 10,000 mating cycles (only with Han E® HMC crimp contacts, Han-Modular® Docking frame and Han-Modular® Hinged frame HMC)

Number of contacts

20

500 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® EEE module, Crimp terminal  Please order crimp contacts separately.		09 14 020 3001	09 14 020 3101	 Contact arrangement (view from termination side)
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221	
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 3 4	09 33 000 6127 09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6227 09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Features

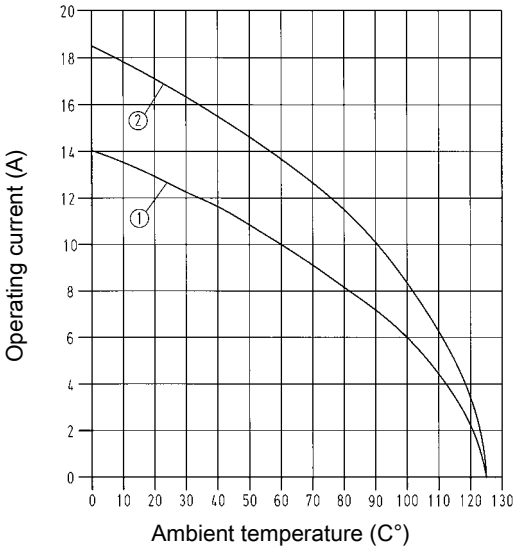
- Reliable cage clamp termination
- No special tools required

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 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 2.5 mm²

Technical characteristics

Contacts	5
Electrical data acc. to IEC 61984	**16 A 400 V 6 kV 3**
Rated current	16 A
Rated voltage	400 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} 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 (contact)	copper alloy

Specifications and approvals

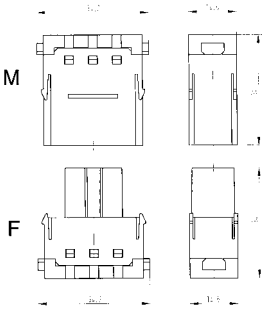
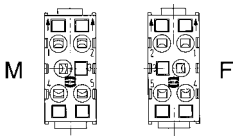
IEC 60664-1
IEC 61984

Han® ES module

Number of contacts

5

400 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® ES module, Cage-clamp terminal, silver plated contacts, contact resistance ≤3 mOhm 	0.14 – 2.5	09 14 005 2616	09 14 005 2716	
Han-Modular®, Han® ES module, Cage-clamp terminal, gold plated contacts, contact resistance ≤3 mOhm	0.14 – 2.5	09 14 005 2617	09 14 005 2717	 Contact arrangement (view from termination side)

Features

- Available in two versions: for Han® C or Han E® crimp contacts
- 2 contacts up to 5000 V
- Insulator out of a voltage resistant teflon material
- Combination of all other modules (pneumatic, signal etc.)

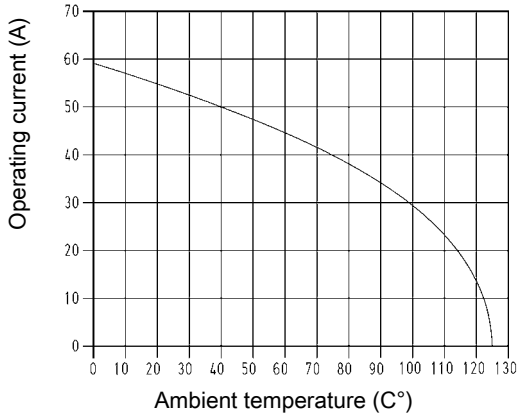
Derating

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.

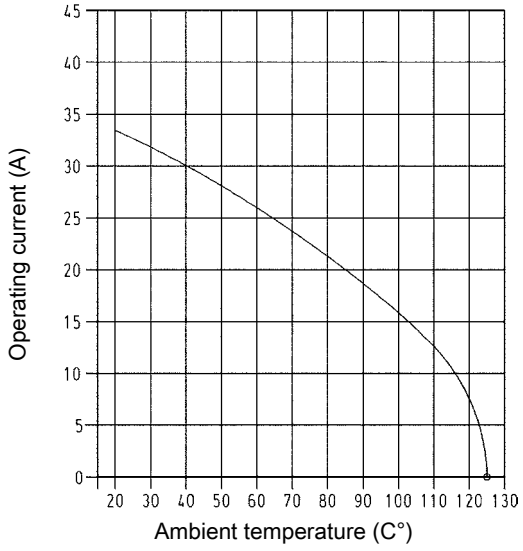
Measuring and testing techniques acc. to IEC 60512-5-2

Han® C Crimp contacts



① 24 B hoods/housings with 3 modules Wire cross section 6 mm²

Han E® crimp contacts



① Housing Han® 16 B with 1 Han® HV module Wire cross section 2.5 mm²

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**40 A 2900/5000 V 15 kV 3** **16 A 2900/5000 V 15 kV 3**
Rated current	40 A, 16 A
Rated voltage conductor - ground	2900 V
Rated voltage conductor - conductor	5000 V
Rated impulse voltage	15 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate/Teflon (PTFE)
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

Specifications and approvals

IEC 61984
IEC 60664-1
IEC 60352-4

Details

Crimping tools see chapter 90

Remarks on the crimp technique

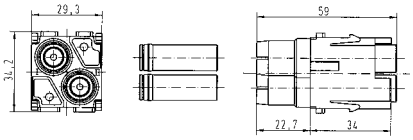
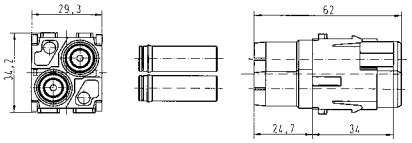
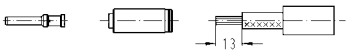
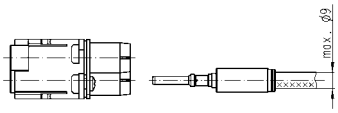
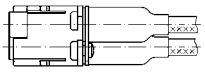
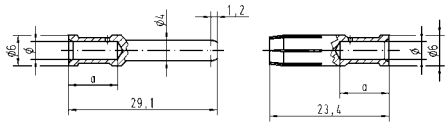
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® HV module

Number of contacts

2

2900/5000 V
40 A

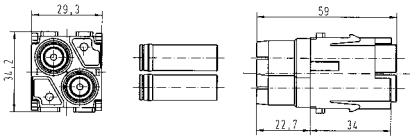
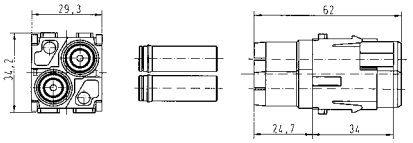
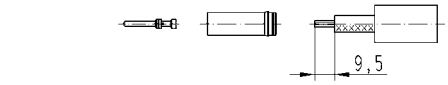
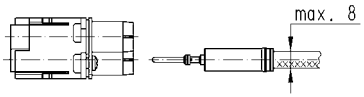
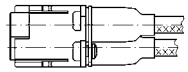
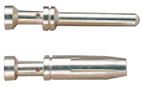
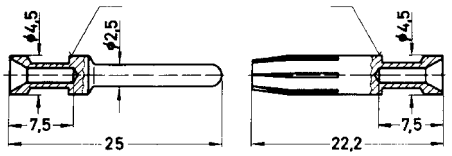
Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® HV module, for Han® C crimp contacts, Crimp terminal ... 9 mm Range of delivery: 1 module, 2 locking sleeves, 2 heat shrink tubes  Please order crimp contacts separately.		09 14 002 3023	09 14 002 3123	M  F  Assembly instructions    Crimp with tool 09 99 000 0888, 09 99 000 0110 or 09 99 000 0377. Snap crimped cable in the insert. Shrink the heat shrink tube over the rear of contact.
Han® C, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	1.5 2.5 4 6 10	09 32 000 6104 09 32 000 6105 09 32 000 6107 09 32 000 6108 09 32 000 6109	09 32 000 6204 09 32 000 6205 09 32 000 6207 09 32 000 6208 09 32 000 6209	 Wire gauge / ∅ / Stripping length 1.5 mm² AWG 16 — 1.75 — 9.5 mm 2.5 mm² AWG 14 — 2.25 — 9.5 mm 4 mm² AWG 12 — 2.85 — 9.5 mm 6 mm² AWG 10 — 3.5 — 9.5 mm 10 mm² AWG 8 — 4.3 — 12 mm

Han® HV module

Number of contacts

2

2900/5000 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® HV module, for Han E® crimp contacts, Crimp terminal Range of delivery: 1 module, 2 locking sleeves, 2 heat shrink tubes  Please order crimp contacts separately.		09 14 002 3021	09 14 002 3121	M  F  Assembly instructions    Crimp with crimping tool 09 99 000 0888 Snap crimped cable in the insert. Shrink the heat shrink tube over the rear of contact.
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.5 0.75 1 1.5 2.5 3 4	09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	 | Identification	Wire gauge		Stripping length
---	---	---	---
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm	 * on the back crimp collar

Features

- Suitable for Han E® crimp contacts
- 2 contacts up to 2500 V
- Insulator out of a voltage resistant teflon material
- Combination of all other modules (pneumatic, signal etc.)

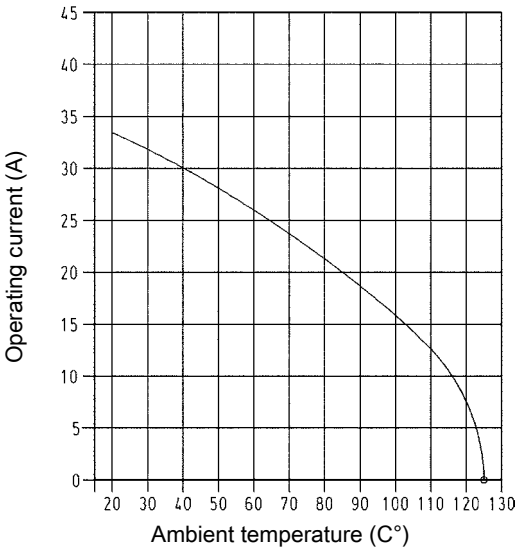
Derating

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

Han E® crimp contacts



① Housing Han® 16 B with 1 Han® HV module Wire cross section 2.5 mm²

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**16 A 2500 V 15 kV 3**
Rated current	16 A
Rated voltage	2500 V
Rated impulse voltage	15 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate/Teflon (PTFE)
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

GL

Details

Crimping tools see chapter 90

Remarks on the crimp technique

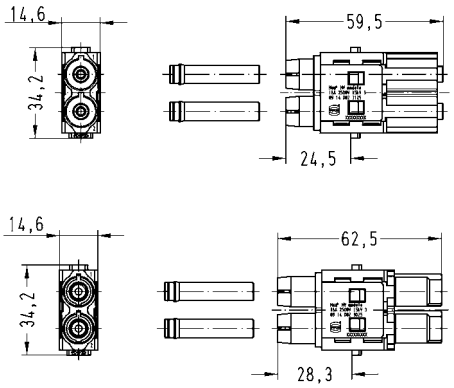
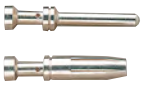
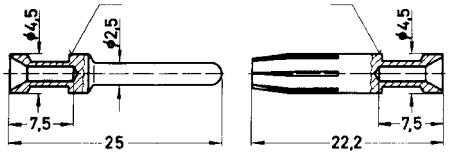
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Han® HV Single module

Number of contacts

2

2500 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® HV module, Crimp terminal Range of delivery: 1 module, 2 locking sleeves, 2 heat shrink tubes  Please order crimp contacts separately.		09 14 002 3025	09 14 002 3125	
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.5 0.75 1 1.5 2.5 3 4	09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Features

- Han-Quick Lock® or Crimp terminal available
- Standard module for signal up to 10 A

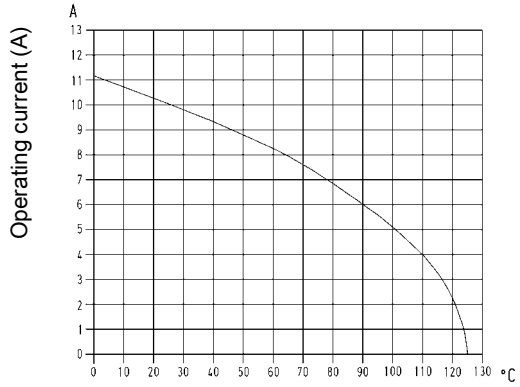
Derating

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

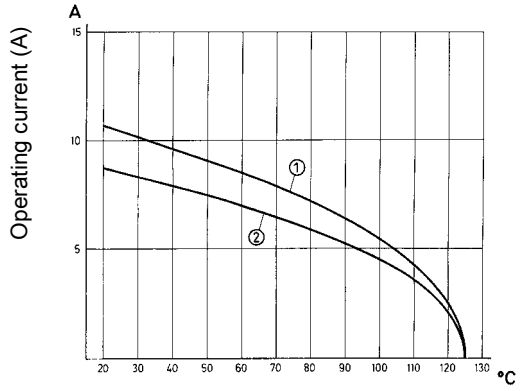
Quick Lock termination



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²

Crimp terminal



Ambient temperature (C°)

① 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 1 mm²

Technical characteristics

Contacts	12
Electrical data acc. to IEC 61984	**black slide** **10 A 250 V 4 kV 3** **10 A 250 V 4 kV 3**
Rated current	10 A
Rated voltage	250 V
Rated impulse voltage	4 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC contacts	≥10000
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
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.

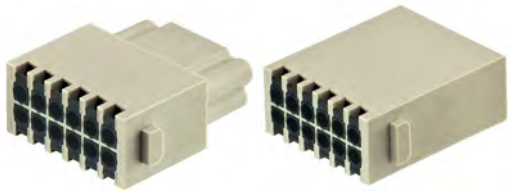
Designed for 10,000 mating cycles (only with Han D® HMC crimp contacts and with Han-Modular® Docking frame)

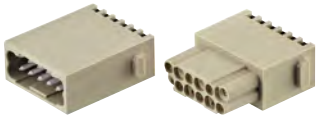
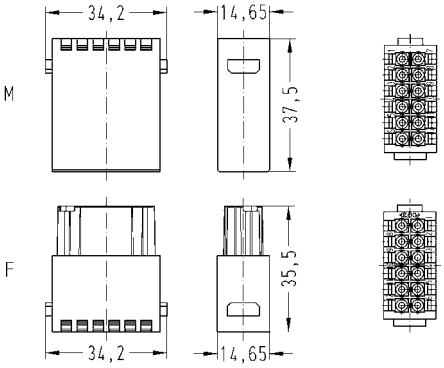
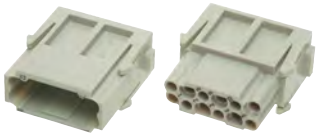
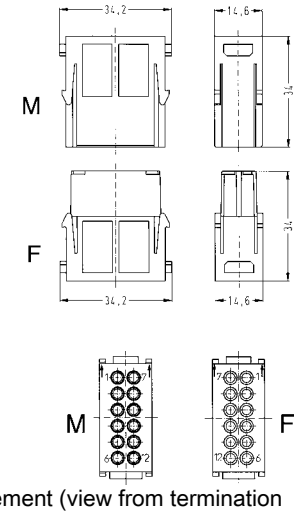
Han DD® module

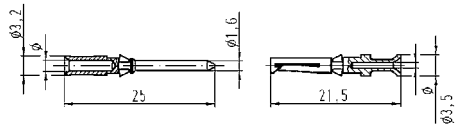
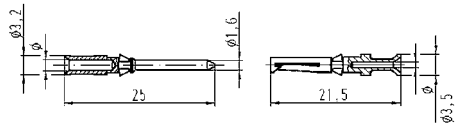
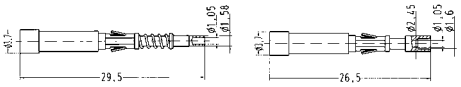
Number of contacts

12+ ⏚

250 V
10 A



Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Quick Lock® Han-Modular®, Han DD® module, Han-Quick Lock® termination, black slide, silver plated contacts, contact resistance ≤3 mOhm 	0.25 – 1.5	09 14 012 2632	09 14 012 2732	 Contact arrangement (view from termination side)
Han-Quick Lock® Han-Modular®, Han DD® module, Han-Quick Lock® termination, black slide, gold plated contacts, contact resistance ≤3 mOhm	0.25 – 1.5	09 14 012 2634	09 14 012 2734	
Han-Modular®, Han DD® module, Crimp terminal  Please order crimp contacts separately.		09 14 012 3001	09 14 012 3101	 Contact arrangement (view from termination side)

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
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	 Wire gauge / ø / 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
Han D®, Crimp contact, silver plated contacts, contact resistance ≤3 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5	09 15 000 6104 09 15 000 6103 09 15 000 6105 09 15 000 6102 09 15 000 6101 09 15 000 6106	09 15 000 6204 09 15 000 6203 09 15 000 6205 09 15 000 6202 09 15 000 6201 09 15 000 6206	 Wire gauge / ø / 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
F.O. contact  for 1 mm plastic fibre		20 10 001 3211	20 10 001 3221	 20 10 001 3211 + 20 10 001 3221

Features

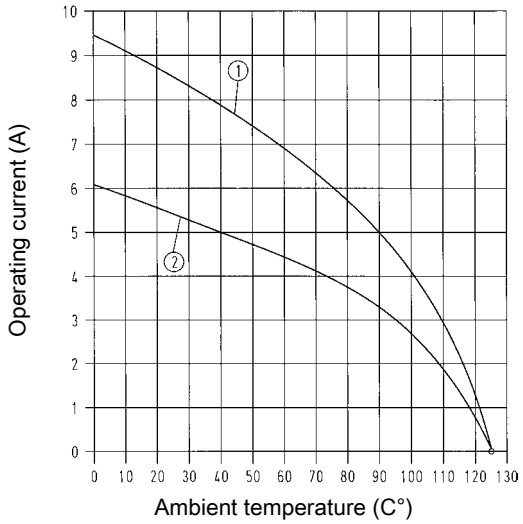
- Suitable for Han D® crimp contacts
- High contact density

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 24 B hoods/housings with 6 modules Wire cross section 1.5 mm²
② 24 B hoods/housings with 6 modules Wire cross section 1 mm²

Technical characteristics

Contacts	17
Electrical data acc. to IEC 61984	**10 A 160 V 2.5 kV 3**
Rated current	10 A
Rated voltage	160 V
Rated impulse voltage	2.5 kV
Pollution degree	3
Rated voltage acc. to UL	250 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC contacts	≥10000
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
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.

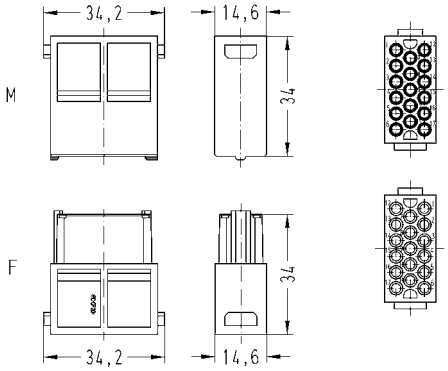
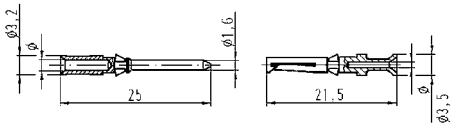
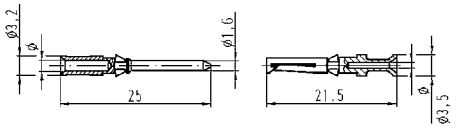
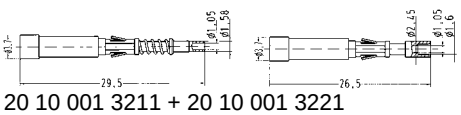
Designed for 10,000 mating cycles (only with Han D® HMC crimp contacts and with Han-Modular® Docking frame)

Han® DDD module

Number of contacts

17

160 V
10 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® DDD module, Crimp terminal  Please order crimp contacts separately.		09 14 017 3001	09 14 017 3101	 Contact arrangement (view from termination side)
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	 Wire gauge / ø / 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
Han D®, Crimp contact, silver plated contacts, contact resistance ≤3 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5	09 15 000 6104 09 15 000 6103 09 15 000 6105 09 15 000 6102 09 15 000 6101 09 15 000 6106	09 15 000 6204 09 15 000 6203 09 15 000 6205 09 15 000 6202 09 15 000 6201 09 15 000 6206	 Wire gauge / ø / 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
F.O. contact  for 1 mm plastic fibre		20 10 001 3211	20 10 001 3221	 20 10 001 3211 + 20 10 001 3221

Features

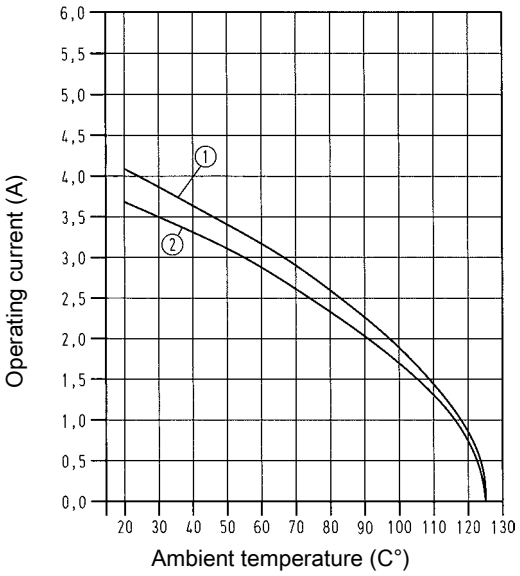
- Suitable for D-Sub crimp contacts
- High contact density

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 24 B hoods/housings with 6 modules; turned contacts Wire cross section 0.5 mm²
② 24 B hoods/housings with 6 modules; stamped contacts Wire cross section 0.5 mm²

Technical characteristics

Contacts	25
Electrical data acc. to IEC 61984	**4 A 50 V 0.8 kV 3**
Rated current	4 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} 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 60664-1
IEC 61984

Details

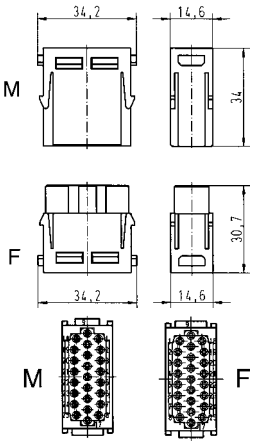
Guide pins and bushes are recommended (see chapter 80).

Han® High Density module

Number of contacts

25

50 V
4 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® High Density module, Crimp terminal  Please order crimp contacts separately.		09 14 025 3001	09 14 025 3101	 Contact arrangement (view from termination side)
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	

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

Han® D-Sub module

Features

- 9-pin D-Sub connector of the Han-Modular® system
- Suitable for the transmission of sensetive signals
- Compatible to crimp, solder or IDC termination

Technical characteristics

Contacts	9
Electrical data acc. to IEC 61984	**5 A 50 V 0.8 kV 3**
Rated current	5 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} 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 (shielding element)	zinc die-cast alloy

Specifications and approvals

IEC 60664-1
IEC 61984

Details

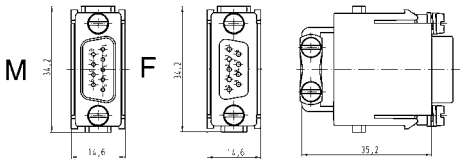
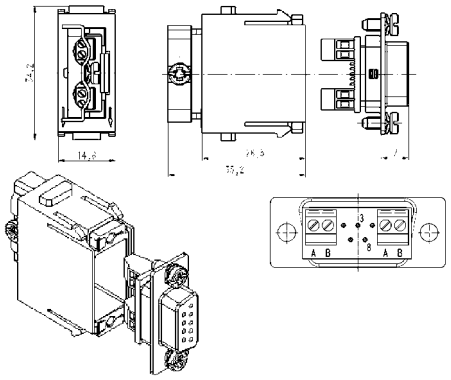
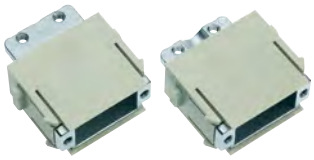
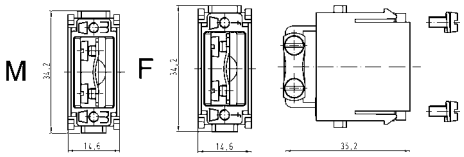
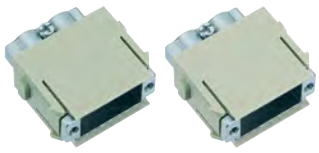
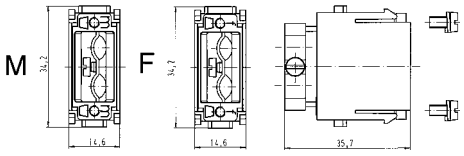
Guide pins and bushes are recommended (see chapter 80).

Han® D-Sub module

Number of contacts

9

50 V
5 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® D-Sub module, Crimp terminal  Please order crimp contacts separately.		09 14 009 3001	09 14 009 3101	
Han-Modular®, Han® D-Sub module, for RS 485-based bus systems with T-functionality, Screw terminal 	0.08 – 0.52		09 14 009 3151	 Contact arrangement (view from termination side) Signal A: Contact no. 8 Signal B: Contact no. 3
Han-Modular®, Adapter module, for one cabel, for 9-pin D-Sub 		09 14 000 9930	09 14 000 9931	
Han-Modular®, Adapter module, for two cabels, for 9-pin D-Sub 		09 14 000 9932	09 14 000 9933	

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
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	

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

Han® USB module

Features

- According to USB 2.0 / USB 3.0 specification
- Simple and cost effective termination by plug in patch cable
- Cable tie strain relief

Technical characteristics

Contacts	4, 8
Electrical data acc. to IEC 61984	**1 A 50 V 0.8 kV 3**
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} 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

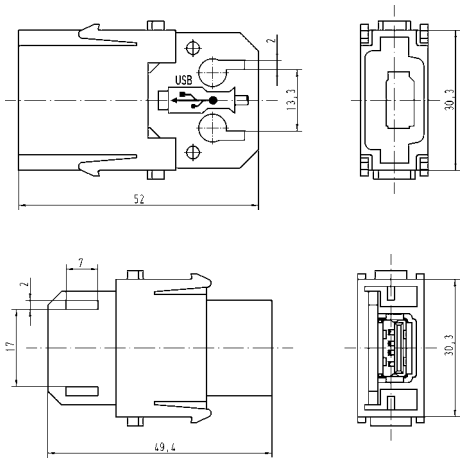
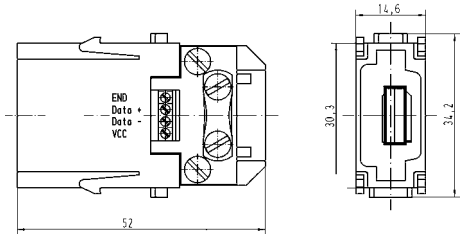
IEC 60664-1
IEC 61984

Han® USB module

Number of contacts

4,8

50 V
1 A

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® USB module, Module for patch cable, USB 2.0 	09 14 001 4601	09 14 001 4701	
Han-Modular®, Han® USB module, Module for screw termination, USB 2.0 	09 14 001 4651		
Han-Modular®, Han® USB module, Module for patch cable, USB 3.0 		09 14 001 4703	

Han® FireWire module

Number of contacts

6

50 V
1 A

Features

- Compatibel to IEEE 1394
- Simple and cost effective termination by plug in patch cable
- Cable tie strain relief

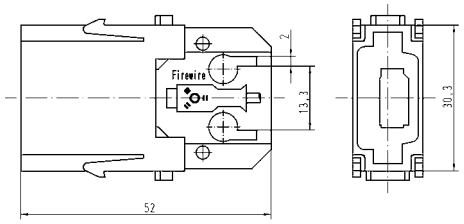
Technical characteristics

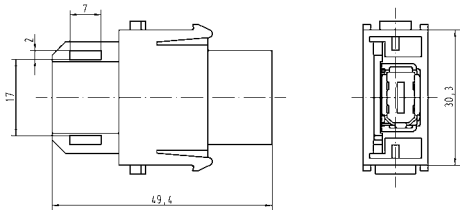
Contacts	6
Electrical data acc. to IEC 61984	**1 A 50 V 0.8 kV 3**
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

Specifications and approvals

IEC 60664-1
IEC 61984

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® FireWire module, Module for patch cable	09 14 001 4611	09 14 001 4711	





Han® RJ45 module, female

Number of contacts

8

50 V
1 A

Features

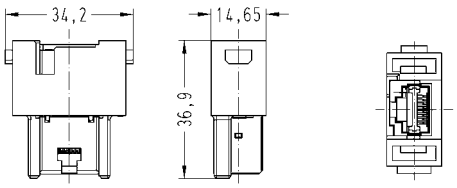
- Single module with standard shielded RJ45 plug and jack
- Cat 6 for all data pairs (all 8 pins)
- RoHS compliant
- Patch cables are assembled/removed without tools

Technical characteristics

Contacts	8
Electrical data acc. to IEC 61984	**1 A 50 V 0.8 kV 3**
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} 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)
Transmission characteristics	Category 6 / Class E up to 250 MHz, according to ISO/IEC 11 801:2002 and EN 50 173-1
Data rate copper	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10000 Mbit/s

Specifications and approvals

IEC 60664-1
IEC 61984

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Han® RJ45 module, Gender changer, for patch cable, Cat. 6	09 14 001 4721	

Han® RJ45 module, male

Number of contacts

8

50 V
1 A

Features

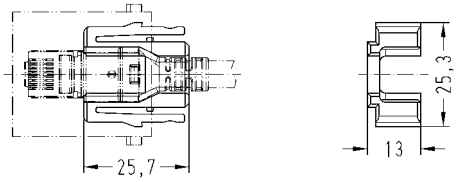
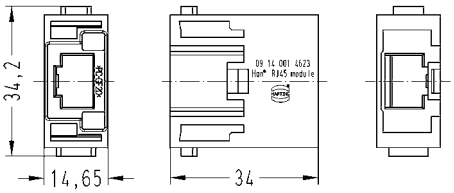
- Single module with standard shielded RJ45 plug and jack
- RoHS compliant
- The RJ45 inserts are protected by a reliable plastic insulator
- Patch cables are assembled/removed without tools

Technical characteristics

Contacts	8
Electrical data acc. to IEC 61984	**1 A 50 V 0.8 kV 3**
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} 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 60664-1
IEC 61984

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Adapter, for patch cable 	09 14 000 9966	
Han-Modular®, Han® RJ45 module, for adapter 	09 14 001 4623	

Han® RJ45 module, male

Number of contacts

8

50 V
1 A

Features

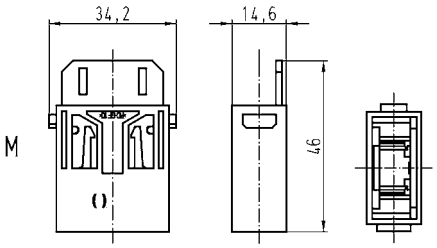
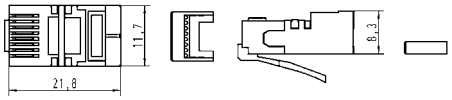
- Single module with standard shielded RJ45 plug and jack
- RoHS compliant
- The RJ45 inserts are protected by a reliable plastic insulator

Technical characteristics

Contacts	8
Electrical data acc. to IEC 61984	**1 A 50 V 0.8 kV 3**
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} 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 60664-1
IEC 61984

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Han® RJ45 module, for crimp inserts 	09 14 001 4622	
Han-Modular®, Insert for Han® RJ45 module, Cat. 5e 	09 12 000 9958	

Han® RJ45 module, male

Number of contacts

4,8

50 V
1 A

Features

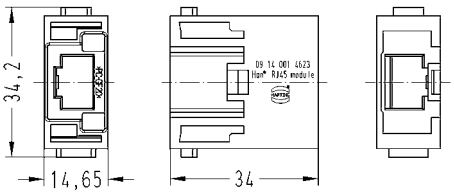
- Single module with standard shielded RJ45 plug and jack
- The RJ45 inserts are protected by a reliable plastic insulator
- 360° shielded contact
- Field assembly without tools possible by means of HARAX® rapid termination in IDC technology
- Gigalink: Field assembly by means of piercing contacts
- Suitable for termination of massive and flexible wires
- Gigalink: Suitable for termination of flexible wires

Technical characteristics

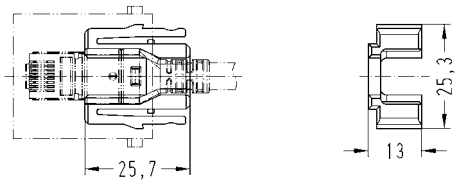
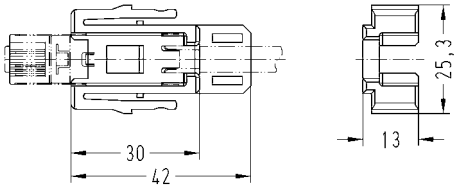
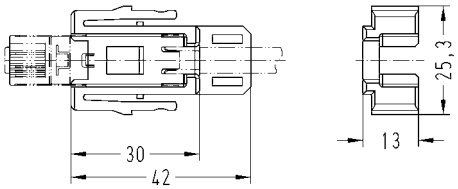
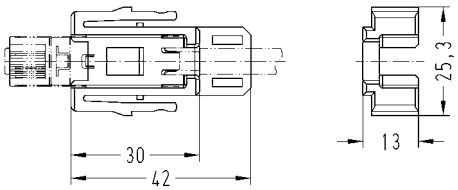
Contacts	8, 4
Electrical data acc. to IEC 61984	**1 A 50 V 0.8 kV 3**
Rated current	1 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Rated voltage acc. to UL	30 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 70 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate, polyamide
Colour (insert)	RAL 7032 (light grey)
Transmission characteristics	Category 6a / Class EA up to 500 MHz, according to ISO/IEC 11 801:2002 and EN 50 173-1, Category 5 / Class D up to 100 MHz, according to ISO/IEC 11 801:2002 and EN 50 173-1, Category 6 / Class E up to 250 MHz, according to ISO/IEC 11 801:2002 and EN 50 173-1
Data rate copper	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10000 Mbit/s

Specifications and approvals

IEC 60664-1
IEC 61984
IEC 60603-7

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Han® RJ45 module, for adapter 	09 14 001 4623	

Han® RJ45 module, male

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Han® RJ Industrial adapter, RJ Industrial RJ45 Gigalink connector set, AWG 28 ... 24, 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10000 Mbit/s, IDC contacts, Cat. 6a 	09 45 400 1520	 Wire outside diameter ≤ 1.05 mm
Han-Modular®, Han® RJ Industrial adapter, RJ Industrial RJ45 connector set, AWG 24 ... 22, 10 Mbit/s, 100 Mbit/s, IDC contacts, Cat. 5 	09 45 400 1100	 Wire outside diameter ≤ 1.6 mm
Han-Modular®, Han® RJ Industrial adapter, RJ Industrial RJ45 connector set, AWG 26, 10 Mbit/s, 100 Mbit/s, IDC contacts, Cat. 5 	09 45 400 1109	 Wire outside diameter ≤ 1.6 mm
Han-Modular®, Han® RJ Industrial adapter, RJ Industrial RJ45 connector set, AWG 27 ... 22, 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10000 Mbit/s, IDC contacts, Cat. 6 	09 45 400 1560	 Wire outside diameter ≤ 1.5 mm

RJ45 patch cable

Features

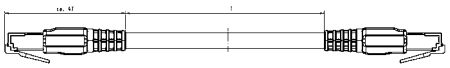
- Locking lever protection for RJ45 connector latch
- Very short plug design in combination with robust bend protection
- RoHS compliant
- Fully EMC screened (aluminium-clad foil and braid)

Technical characteristics

Limiting temperatures	-40 °C ... 80 °C
Limiting temperatures (flexible)	0 °C ... 60 °C
Flammability (cable) acc. to UL 94	flame retardant, halogen-free
Degree of protection acc. to IEC 60529	IP20
Material (cable)	SF/UTP, PUR, PUR Elastomer
Colour (cable)	yellow
Cable type, copper	1:1 EIA/TIA 568 B, 8 poles
Transmission characteristics	Category 5 / Class D up to 100 MHz, according to ISO/IEC 24 702 or ISO/IEC 11 801, Category 5e / Class D up to 100 MHz, according to ISO/IEC 61 935-2
Data rate copper	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s

Specifications and approvals

ISO/IEC 11801
ISO/IEC 24702
ISO/IEC 61935-2

Identification	Cable length	Part number	Drawing Dimensions in mm
RJ45 patch cable, Cat. 5e 	0.2 m	09 47 474 7001	
	0.3 m	09 47 474 7002	
	0.4 m	09 47 474 7003	
	0.5 m	09 47 474 7004	
	0.6 m	09 47 474 7005	
	0.7 m	09 47 474 7006	
	0.8 m	09 47 474 7007	
	0.9 m	09 47 474 7008	
	1 m	09 47 474 7009	
	2 m	09 47 474 7011	
	3 m	09 47 474 7013	
	4 m	09 47 474 7014	
	5 m	09 47 474 7015	
	6 m	09 47 474 7016	
	7 m	09 47 474 7017	
	8 m	09 47 474 7019	
	9 m	09 47 474 7020	
	10 m	09 47 474 7021	
	15 m	09 47 474 7022	
	20 m	09 47 474 7023	
	1.5 m	09 47 474 7010	
	2.5 m	09 47 474 7012	
	7.5 m	09 47 474 7018	

RJ45 patch cable

Features

- Locking lever protection for RJ45 connector latch
- Very short plug design in combination with robust bend protection
- RoHS compliant
- Fully EMC screened (aluminium-clad foil and braid)

Technical characteristics

Limiting temperatures	-40 °C ... 80 °C
Limiting temperatures (flexible)	0 °C ... 60 °C
Flammability (cable) acc. to UL 94	flame retardant, halogen-free
Degree of protection acc. to IEC 60529	IP20
Material (cable)	SF/UTP, PUR
Colour (cable)	yellow
Cable type, copper	1:1 EIA/TIA 568 B, 8 poles
Transmission characteristics	Category 6 / Class E up to 250 MHz, according to ISO/IEC 24 702 or ISO/IEC 11 801, Category 6 / Class E up to 250 MHz, according to ISO/IEC 61 935-2
Data rate copper	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s

Specifications and approvals

ISO/IEC 11801
ISO/IEC 24702
ISO/IEC 61935-2

Identification	Cable length	Part number	Drawing Dimensions in mm
RJ45 patch cable, Cat. 6 	0.2 m 0.3 m 0.4 m 0.5 m 0.6 m 0.7 m 0.8 m 0.9 m 1 m 2 m 3 m 4 m 5 m 6 m 7 m 8 m 9 m 10 m 15 m 20 m 1.5 m 2.5 m 7.5 m	09 47 474 7101 09 47 474 7102 09 47 474 7103 09 47 474 7104 09 47 474 7105 09 47 474 7106 09 47 474 7107 09 47 474 7108 09 47 474 7109 09 47 474 7111 09 47 474 7113 09 47 474 7114 09 47 474 7115 09 47 474 7116 09 47 474 7117 09 47 474 7119 09 47 474 7120 09 47 474 7121 09 47 474 7122 09 47 474 7123 09 47 474 7110 09 47 474 7112 09 47 474 7118	

Han® GigaBit module

Features

- Shielding bus separate from housing potential
- Suitable for the transmission of sensitive signals (e.g. bus signals)
- Usuable for Gigabit Ethernet Cat. 6A

Technical characteristics

Contacts	8
Electrical data acc. to IEC 61984	**5 A 50 V 0.8 kV 3**
Rated current	5 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} 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)
Material (shielding element)	zinc die-cast alloy
Material (outer conductor)	zinc alloy
Surface (outer conductor)	nickel plated contacts

Specifications and approvals

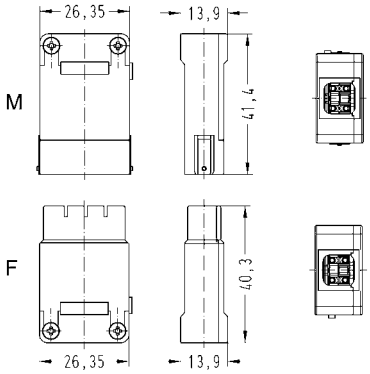
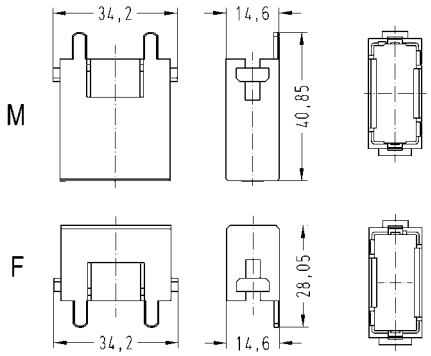
IEC 61984
IEC 60664-1

Han® GigaBit module

Number of contacts

8

50 V
5 A
+ shielding

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® GigaBit Insert, Crimp terminal  Please order crimp contacts separately. Please order the adapter module separately.		09 14 008 3011	09 14 008 3111	 Cable outside diameter 5 ... 12
Han-Modular®, Adapter module 		09 14 001 3011	09 14 001 3111	
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	

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

Han® Shielded module

Features

- Shielding bus separate from housing potential
- Suitable for the transmission of sensitive signals (e.g. bus signals)

Technical characteristics

Contacts	20
Electrical data acc. to IEC 61984	**4 A 32 V 0.8 V 3**
Rated current	4 A
Rated voltage	32 V
Rated impulse voltage	0.8 V
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C -40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy
Material (shielding element)	zinc die-cast alloy
Material (outer conductor)	zinc alloy
Surface (outer conductor)	nickel plated contacts

Specifications and approvals

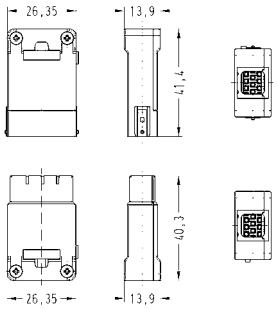
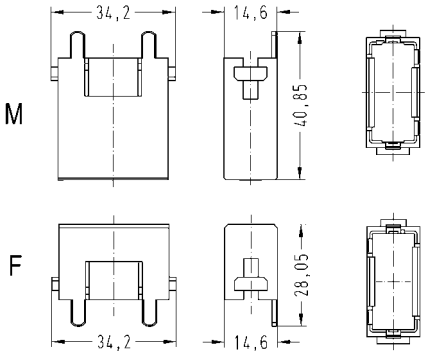
IEC 60664-1
IEC 61984

Han® Shielded module

Number of contacts

20

32 V
4 A
+ shielding

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® Shielded Module insert, Crimp terminal, contact resistance ≤4 mOhm  Please order crimp contacts separately. Please order the adapter module separately.		09 14 020 3013	09 14 020 3113	
Han-Modular®, Adapter module 		09 14 001 3011	09 14 001 3111	
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	

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

Han® MegaBit module

Features

- Shielding bus separate from housing potential
- Usuable for MegaBit Ethernet Cat. 5e
- Suitable for Han B, Han M, Han EMC and Han HPR hoods/ housings, high construction

Technical characteristics

Contacts	2 x 4
Electrical data acc. to IEC 61984	**10 A 50 V 0.8 kV 3**
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C -40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy
Material (shielding element)	zinc die-cast alloy
Material (outer conductor)	zinc alloy
Surface (outer conductor)	nickel plated contacts

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Crimping tools see chapter 90

Remarks on the crimp technique

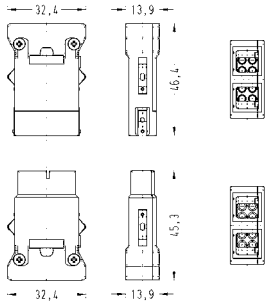
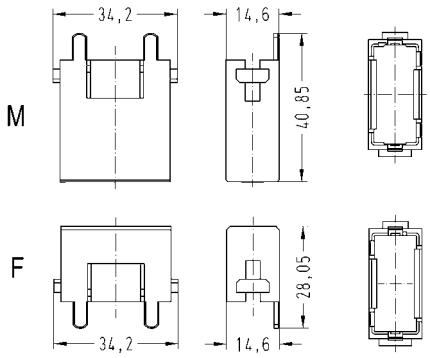
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

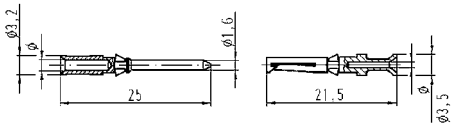
Han® MegaBit module

Number of contacts

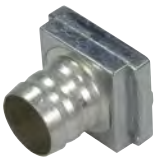
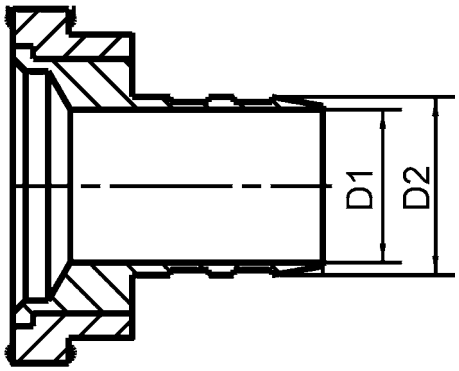
2 x 4

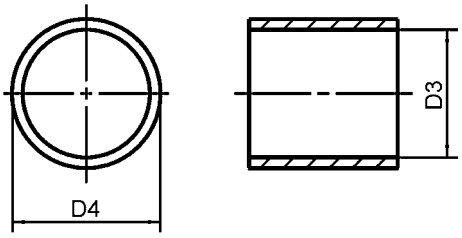
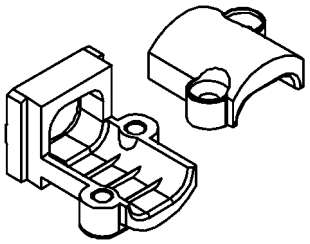
50 V
10 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® MegaBit Insert, Crimp terminal  Please order crimp contacts separately. Please order the adapter module separately.		09 14 008 3016	09 14 008 3116	
Han-Modular®, Han® MegaBit Insert, Crimp terminal, with additional shield connection to the hinged frame  Please order crimp contacts separately. Please order the adapter module separately.		09 14 008 3017	09 14 008 3117	
Han-Modular®, Adapter module 		09 14 001 3011	09 14 001 3111	

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
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	

Wire gauge		ø	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

Identification	D1	D2	Part number	Drawing Dimensions in mm
Crimp flange  HARTING offers to test and define the best crimp flange and ferrule combination for customer specific cables.	3 mm 4 mm 5 mm 6 mm 7 mm 8 mm 9 mm 3.5 mm 4.5 mm 5.5 mm 6.5 mm 7.5 mm 8.5 mm	4 mm 5 mm 6 mm 7 mm 8 mm 9 mm 10 mm 4 mm 5.5 mm 6.5 mm 7.5 mm 8.5 mm 9.5 mm	61 03 000 0062 61 03 000 0064 61 03 000 0066 61 03 000 0067 61 03 000 0069 61 03 000 0071 61 03 000 0072 61 03 000 0063 61 03 000 0065 61 03 000 0166 61 03 000 0068 61 03 000 0070 61 03 000 0165	

Identification	D3	D4	Part number	Drawing Dimensions in mm
Crimp ferrule  HARTING offers to test and define the best crimp flange and ferrule combination for customer specific cables.	5 mm 6 mm 7 mm 8 mm 9 mm 10 mm 11 mm 12 mm 13 mm 5.5 mm 6.5 mm 7.5 mm 8.5 mm 9.5 mm 10.5 mm 11.5 mm 12.5 mm	6 mm 7 mm 8 mm 9 mm 10 mm 11 mm 12 mm 13 mm 14 mm 6.5 mm 7.5 mm 8.5 mm 9.5 mm 10.5 mm 11.5 mm 12.5 mm 13.5 mm	61 03 000 0045 61 03 000 0047 61 03 000 0049 61 03 000 0051 61 03 000 0053 61 03 000 0055 61 03 000 0057 61 03 000 0142 61 03 000 0127 61 03 000 0046 61 03 000 0048 61 03 000 0050 61 03 000 0052 61 03 000 0054 61 03 000 0056 61 03 000 0058 61 03 000 0059	
Cable clamp 5 mm ... 7 mm 			61 03 000 0141	
Cable clamp 7 mm ... 10 mm 			61 03 000 0044	
Cable clamp 10 mm ... 12 mm 			61 03 000 0143	

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

Contacts	2
Electrical data acc. to IEC 61984	**10 A 50 V 0.8 kV 3**
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate, zinc alloy
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy
Material (accessories)	metal

Specifications and approvals

IEC 60664-1
IEC 61984

Details

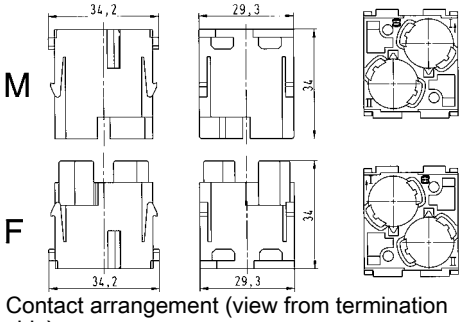
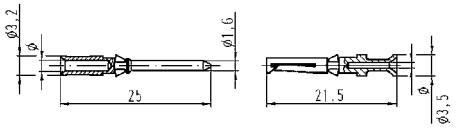
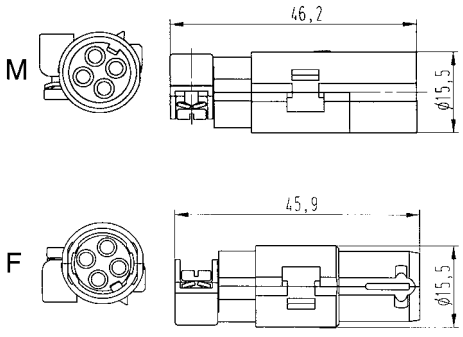
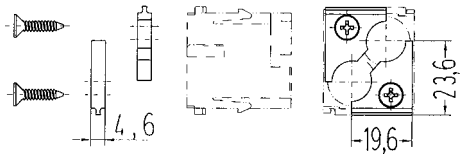
Crimping tools see chapter 90

Remarks on the crimp technique

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

Number of contacts

2

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han-Quintax® module, Crimp terminal 		09 14 002 3001	09 14 002 3101	 Contact arrangement (view from termination side)
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	 Wire gauge / ø / 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
Han-Quintax® contact, 4 + shielding, for Han D® crimp contacts  Please order crimp contacts separately.		09 15 004 3013	09 15 004 3113	
Han-Quintax®, Adapter  optional		09 14 000 9915	09 14 000 9915	

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**5 A 50 V 0.8 kV 3**
Rated current	5 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0

Technical characteristics

Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (accessories)	metal

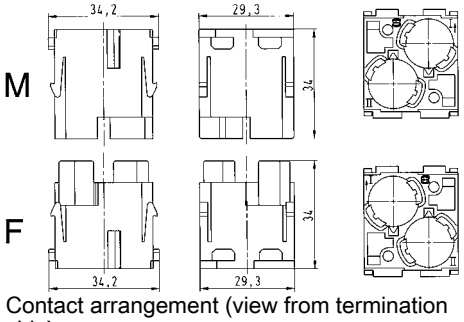
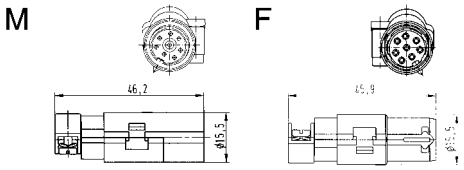
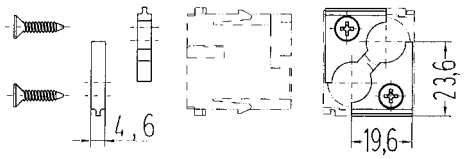
Specifications and approvals

IEC 60664-1
IEC 61984

Han-Quintax® High Density module

Number of contacts

2

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han-Quintax® module, Crimp terminal 		09 14 002 3001	09 14 002 3101	 Contact arrangement (view from termination side)
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	
Han-Quintax®, Adapter  optional		09 14 000 9915	09 14 000 9915	
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	

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

Contacts	2
Electrical data acc. to IEC 61984	**10 A 50 V 0.8 kV 3**
Rated current	10 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate, zinc alloy
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

Details

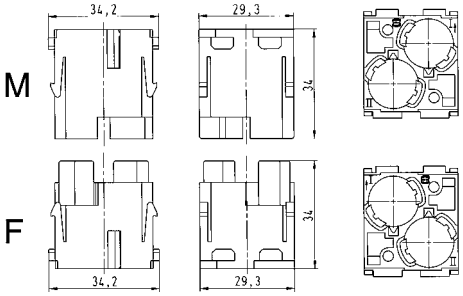
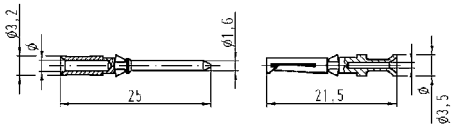
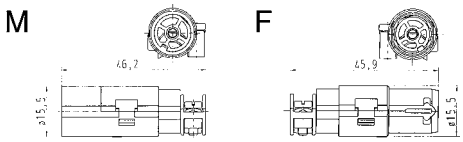
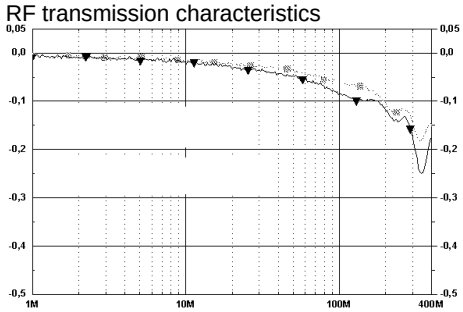
Crimping tools see chapter 90

Remarks on the crimp technique

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

Number of contacts

2

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han-Quintax® module, Crimp terminal 		09 14 002 3001	09 14 002 3101	 Contact arrangement (view from termination side)
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	 Wire gauge / ø / 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
Coaxial contact, 1 + shielding, for Han D® crimp contacts, 75 Ohm  Please order crimp contacts separately.		09 15 001 3013	09 15 001 3113	 RF transmission characteristics  ▩ 75 Ohm cable ▾ 75 Ohm cable with Han D® Coax

Technical characteristics

Contacts	2
Electrical data acc. to IEC 61984	**16 A 50 V 0.8 kV 3**
Rated current	16 A
Rated voltage	50 V
Rated impulse voltage	0.8 kV
Pollution degree	3
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 85 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate, zinc alloy
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

Specifications and approvals

IEC 60664-1
IEC 61984

Details

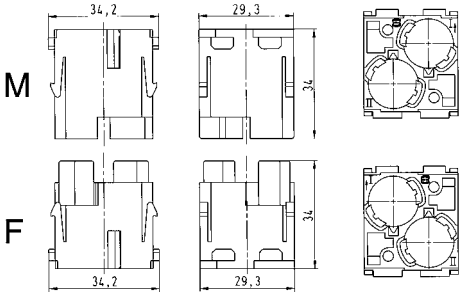
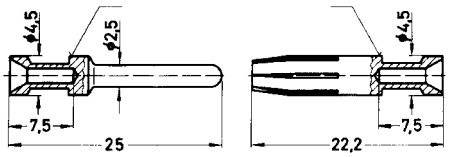
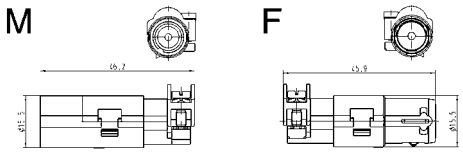
Crimping tools see chapter 90

Remarks on the crimp technique

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

Number of contacts

2

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han-Quintax® module, Crimp terminal 		09 14 002 3001	09 14 002 3101	 Contact arrangement (view from termination side)
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4 5.5	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119 09 33 000 6139	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221 09 33 000 6239	
Coaxial contact, 1 + shielding, for Han E® crimp contacts, 50 Ohm  Please order crimp contacts separately.		09 15 001 3023	09 15 001 3123	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Han E® Coax with RG 213 cable (2.5 mm²)	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

Features

- Suitable for FOC and coaxial contacts acc. to EN 41626 / D-Sub

Technical characteristics

Contacts	4, 12
Electrical data acc. to IEC 61984	**50 V**
Rated voltage	50 V
Rated current	1.5 A
Insulation resistance	≥10^{10} 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 (contact)	copper alloy
Insertion loss	<2.5 dB, <1.5 dB

Specifications and approvals

IEC 60664-1
IEC 61984

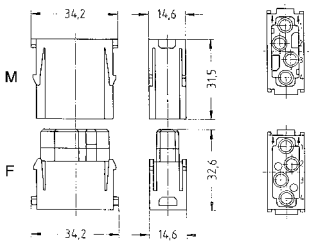
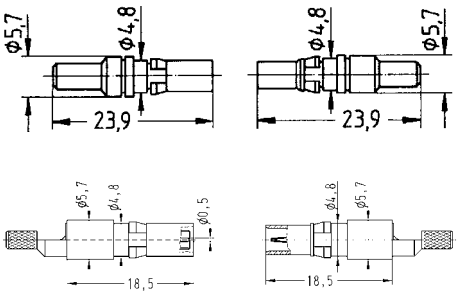
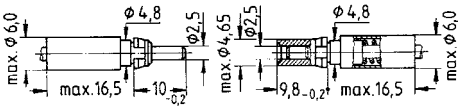
Details

ATTENTION! Guide pins and bushes are prescribed (see chapter 80).

Number of contacts

4

1.5 A

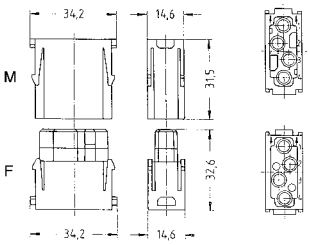
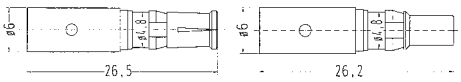
Identification	Impedance	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® Multi module  Please order contacts separately.		09 14 004 4501	09 14 004 4512	 Contact arrangement (view from termination side)
Coaxial contact, Solder / crimp contact, acc. to DIN 41 626, gold plated contacts, contact resistance ≤3 Ohm 	50 Ohm 75 Ohm	09 14 000 6111 09 14 000 6121	09 14 000 6211 09 14 000 6221	 Wires / Shell ∅ mm / Internal wire ∅ mm / Dämpfung db/100 m bei 100MHz, 200MHz, 800MHz 50 Ω RG 174 / U: 2.5 / 0.48 / 84 RG 188 A / U: 2.6 / 0.54 / 29 / 40 RG 316 / U: 2.5 / 0.54 / 40 75 Ω RG 179 B / U: 2.55 / 0.3 / 41 RG 187 A / U: 2.7 / 0.3 / 41
F.O. contact, acc. to DIN 41 626  for 1 mm plastic fibre		20 10 001 4211	20 10 001 4221	
F.O. contact, acc. to DIN 41 626  for GI fibre 50/125 µm or 62.5/125 µm ceramic ferrule		20 10 125 4212	20 10 125 4222	
F.O. contact, acc. to DIN 41 626  for SI fibre (HCS®) 200/230 µm		20 10 230 4211	20 10 230 4221	

Han® Multi module

Number of contacts

4

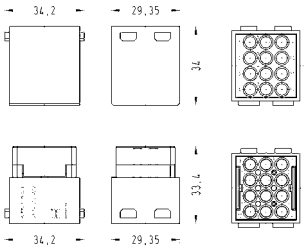
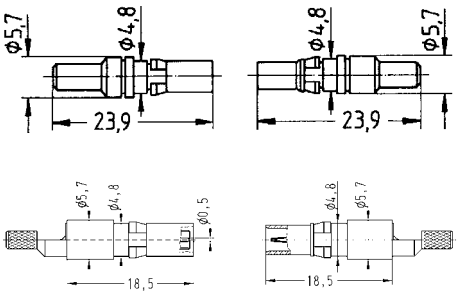
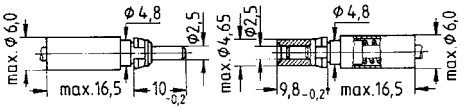
1.5 A

Identification	Impedance	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® Multi module  Please order contacts separately.		09 14 004 4501	09 14 004 4513	 Contact arrangement (view from termination side)
Coaxial contact, Solder / solder contact, acc. to D-Sub, gold plated contacts, contact resistance ≤3 Ohm 	50 Ohm	09 14 000 6215	09 14 000 6115	
Solder / crimp contact, acc. to D-Sub, gold plated contacts 	50 Ohm 75 Ohm	09 69 281 5140 09 69 281 5141 09 69 281 5143 09 69 281 5230	09 69 181 5140 09 69 181 5141 09 69 181 5143 09 69 181 5230	
Crimp / crimp terminal, acc. to D-Sub, gold plated contacts 	50 Ohm 75 Ohm	09 69 282 5140 09 69 282 5230	09 69 182 5140 09 69 182 5230	

Number of contacts

12

50 V
1.5 A

Identification	Impedance	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® Multi module, according to DIN 41 626  Please order contacts separately.		09 14 012 4501	09 14 012 4512	 Contact arrangement (view from termination side)
Coaxial contact, Solder / crimp contact, acc. to DIN 41 626, gold plated contacts, contact resistance ≤3 Ohm 	50 Ohm 75 Ohm	09 14 000 6111 09 14 000 6121	09 14 000 6211 09 14 000 6221	 Wires / Shell ∅ mm / Internal wire ∅ mm / Dämpfung db/100 m bei 100MHz, 200MHz, 800MHz 50 Ω RG 174 / U — 2.5 — 0.48 — 84 RG 188 A / U — 2.6 — 0.54 — 29 — 40 RG 316 / U — 2.5 — 0.54 — 40 75 Ω RG 179 B / U — 2.55 — 0.3 — 41 RG 187 A / U — 2.7 — 0.3 — 41
F.O. contact, acc. to DIN 41 626  for 1 mm plastic fibre		20 10 001 4211	20 10 001 4221	
F.O. contact, acc. to DIN 41 626  for GI fibre 50/125 µm or 62.5/125 µm ceramic ferrule		20 10 125 4212	20 10 125 4222	
F.O. contact, acc. to DIN 41 626  for SI fibre (HCS®) 200/230 µm		20 10 230 4211	20 10 230 4221	

Han® Pneumatic module

Features

- For the transmission of clean and dry compressed air
- Female contacts with / without shut off
- Removal of tubes from pre-assembled pneumatic contacts is possible

Technical characteristics

Contacts	2, 3
Limiting temperatures	-40 °C ... 80 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Material (insert)	polycarbonate
Colour (insert)	blue
Material (seal)	Buna-N
Material (contact)	delrin acetal
Operating pressure	8 bar / 116 psi

Specifications and approvals

Details

Shut off principle:

In the disconnected position the spring integrated in the female contact is active, thus the O-ring of the valve seals the opening of the air-way. During the mating process, when the defined depth of insertion is reached the male contact presses on the valve head and moves it backwards against the spring tension, so that the air-way opens.

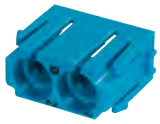
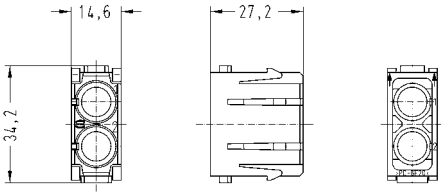
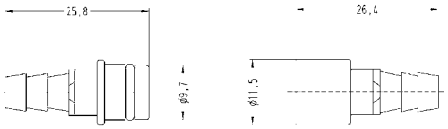
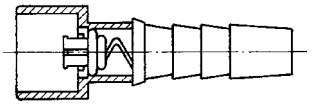
Using of guiding pins in connection with pneumatic modules is imperative.

In addition to this guiding pins guarantee a coding, if pneumatic modules are used exclusively.

Han® Pneumatic module

Number of contacts

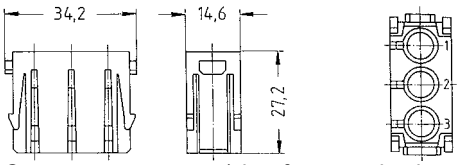
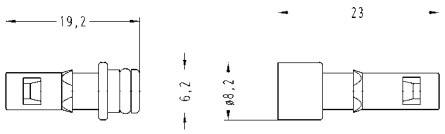
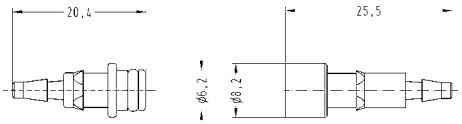
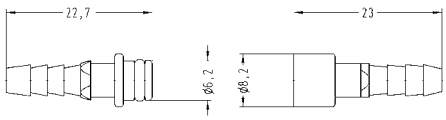
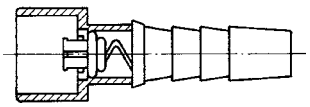
2

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® Pneumatic module  Please order contacts separately. Using of guiding pins is imperative!	09 14 002 4501	09 14 002 4501	 Contact arrangement (view from termination side)
Han-Modular®, Pneumatic contact, without shut off, 6.0 mm / 1/4”	09 14 000 6174	09 14 000 6274	 Male contact Female contact
Han-Modular®, Pneumatic contact, with shut off, polypropylen, 6.0 mm / 1/4” 		09 14 000 6279	 female contact with shut off in closed position

Han® Pneumatic module

Number of contacts

3

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® Pneumatic module  Please order contacts separately. Using of guiding pins is imperative!	09 14 003 4501	09 14 003 4501	 Contact arrangement (view from termination side)
Han-Modular®, Pneumatic contact, without shut off, 1.6 mm / 1/16” 	09 14 000 6151	09 14 000 6251	 Male contact Female contact
Han-Modular®, Pneumatic contact, without shut off, 3.0 mm 	09 14 000 6152	09 14 000 6252	
Han-Modular®, Pneumatic contact, without shut off, 4.0 mm / 1/8” 	09 14 000 6153	09 14 000 6253	
Han-Modular®, Pneumatic contact, with shut off, polypropylen, 1.6 mm / 1/16” 		09 14 000 6256	 female contact with shut off in closed position
Han-Modular®, Pneumatic contact, with shut off, polypropylen, 3.0 mm		09 14 000 6257	
Han-Modular®, Pneumatic contact, with shut off, polypropylen, 4.0 mm / 1/8”		09 14 000 6258	

Han® SC module

Features

- Suitable for HARTING SC contacts
- For GI-Fibre 50 - 62,5 / 125µm

Technical characteristics

Contacts	4
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)
Insertion loss	<0.5 dB

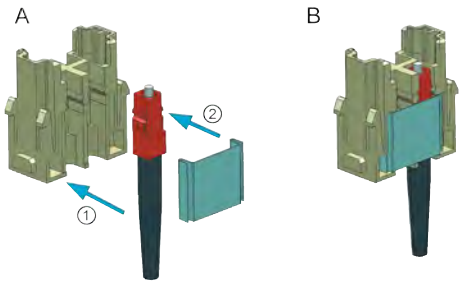
Specifications and approvals

Details

Guide pins and bushes are recommended (see chapter 80).

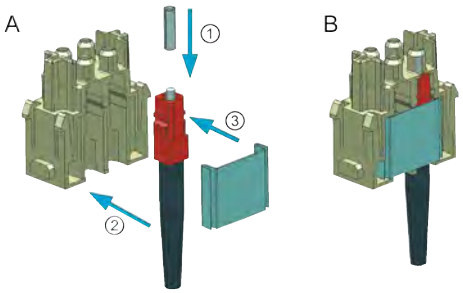
Details

Male module



A) Assemble the SC contact
Push the SC contact from the side into the relevant insert ①
Push the fixing plate from the side over the contacts ②
B) SC contact fixed in the module

Female module

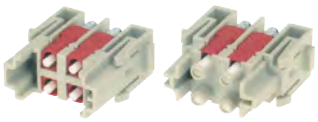
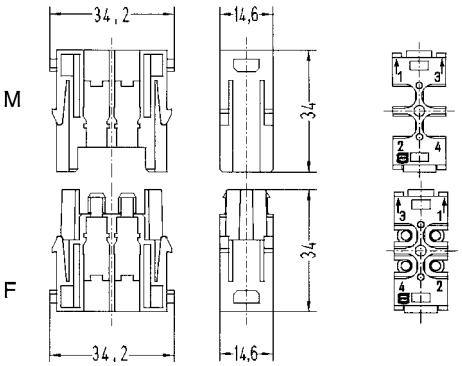
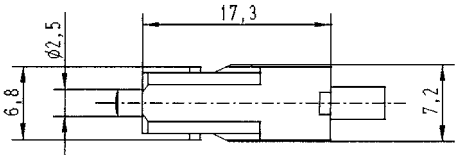
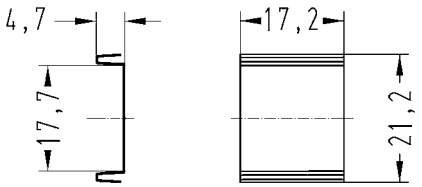


A) Assemble the SC contact
Push the centering ferrule (included in delivery) on the SC contact ①
Push the SC contact from the side into the relevant insert ②
Push the fixing plate from the side over the contacts ③
B) SC contact fixed in the module

Han® SC module

Number of contacts

4

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® SC module, for F.O.  Please order contacts separately.	09 14 004 4701	09 14 004 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 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	
Han-Modular®, Fixing plate, for SC module 	09 14 000 9965	09 14 000 9965	

Han® LC module

Features

- Suitable for HARTING LC contacts
- For GI-Fibre 50 - 62.5 / 125 µm and for single mode fibre

Technical characteristics

Contacts	6
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)

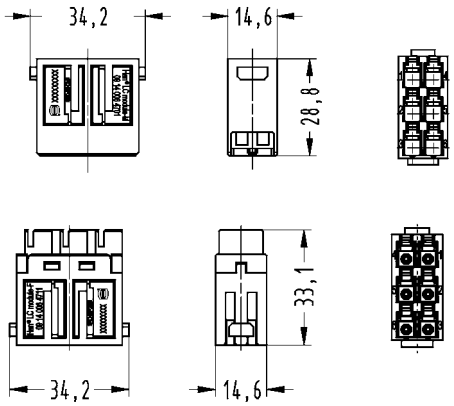
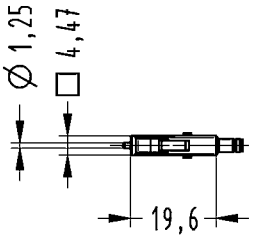
Details

ATTENTION! Guide pins and bushes are prescribed (see chapter 80).

Han® LC module

Number of contacts

6

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han-Modular®, Han® LC module, for F.O.  Please order contacts separately.	09 14 006 4701	09 14 006 4711	
LC contact, for wire gauge up to 3mm max., LWL Multi Mode 	20 10 125 8211	20 10 125 8211	
LC contact, for wire gauge up to 2mm, LWL Multi Mode 	20 10 125 8212	20 10 125 8212	
LC contact, for wire gauge up to 3mm max., LWL Single Mode	20 10 125 8220	20 10 125 8220	
LC contact, for wire gauge up to 2mm, LWL Single Mode	20 10 125 8221	20 10 125 8221	

Han-Modular® Hinged frames

Features

- Pre-leading grounding system according VDE
- Modules can only be assembled polarized
- Alphabetical marking of module position
- High mechanical reliability of modules in case of vibration and impact stress
- No tools necessary to remove modules
- Hinged frames can be used either in hood or housing

Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Mating cycles	≥500
Mating cycles with HMC connectors	≥10000
Material (hoods/housings)	zinc die-cast

Specifications and approvals

IEC 60664-1
IEC 61984

Details

Both different markings must be used for one connector!

Locking element 09 14 000 9960 see accessories in chapter 06

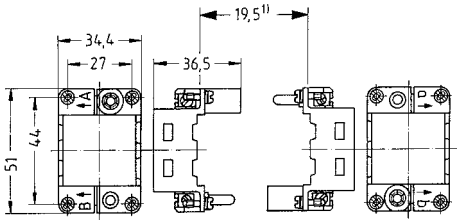
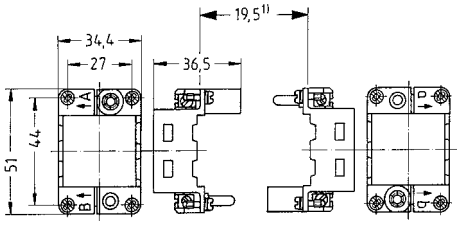
Wire gauge PE (power side) 4 ... 10 mm²

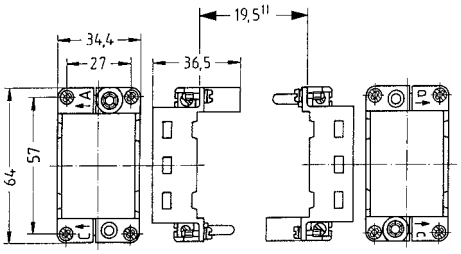
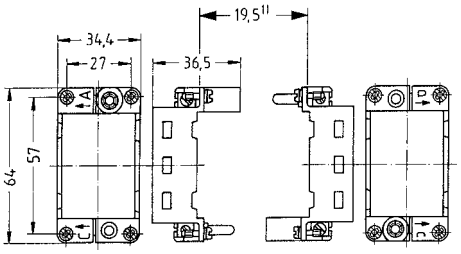
10 mm² only with ferrule crimp tool 09 99 000 0374 (see chapter 90)

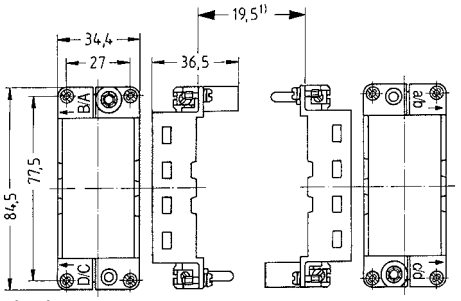
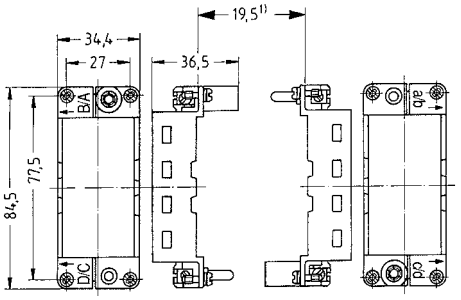
Wire gauge PE (signal side) 1 ... 2.5 mm²

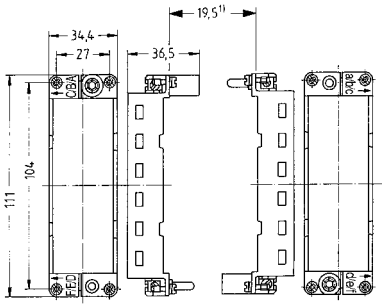
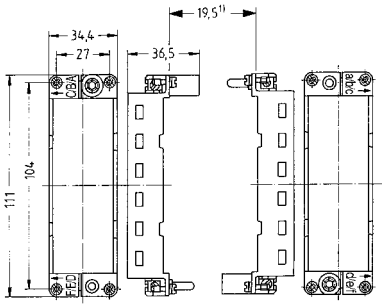
Han-Modular® Hinged frames

Size 6 B

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Hinged frame, for 2 modules, A ... B 	09 14 006 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame, for 2 modules, a ... b 	09 14 006 0313	
Han-Modular®, Hinged frame HMC, for 2 modules, A ... B  Only with Han® Docking frame.	09 14 206 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame HMC, for 2 modules, a ... b  Only with Han® Docking frame.	09 14 206 0313	

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Hinged frame, for 3 modules, A ... C 	09 14 010 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame, for 3 modules, a ... c 	09 14 010 0313	
Han-Modular®, Hinged frame HMC, for 3 modules, A ... C 	09 14 210 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame HMC, for 3 modules, a ... c 	09 14 210 0313	

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Hinged frame, for 4 modules, A ... D 	09 14 016 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame, for 4 modules, a ... d 	09 14 016 0313	
Han-Modular®, Hinged frame HMC, for 4 modules, A ... D 	09 14 216 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame HMC, for 4 modules, a ... d 	09 14 216 0313	

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Hinged frame, for 6 modules, A ... F 	09 14 024 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame, for 6 modules, a ... f 	09 14 024 0313	
Han-Modular®, Hinged frame HMC, for 6 modules, A ... F 	09 14 224 0303	 1) Distance max. 20.5 mm
Han-Modular®, Hinged frame HMC, for 6 modules, a ... f 	09 14 224 0313	

Han-Modular® Docking frames

Features

- Blind mating connector system for drawer systems
- Direct panel mounting without housing
- Very robust design
- Solid pre-leading guide pins and float bushes
- Can be fixed with standard M4 screws
- Suitable for Han-Modular® modules

Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Flammability (hoods/housings) acc. to UL 94	V 0
Mating cycles	≥500
Mating cycles with HMC connectors	≥10000
Degree of protection acc. to IEC 60529	IP20
Material (accessories)	polycarbonate
Tolerance	±2 mm
Lock-in range	±4 mm

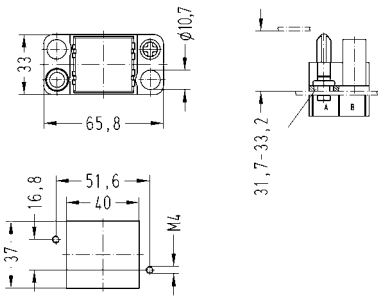
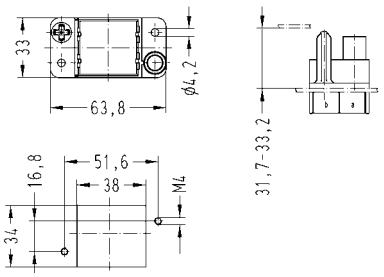
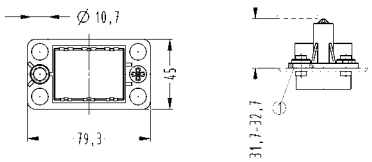
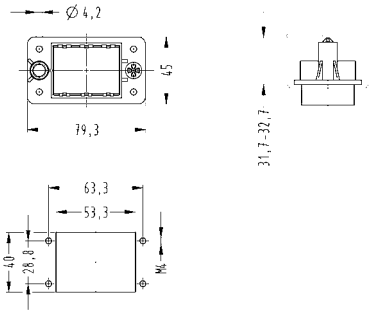
Specifications and approvals

IEC 60664-1
IEC 61984

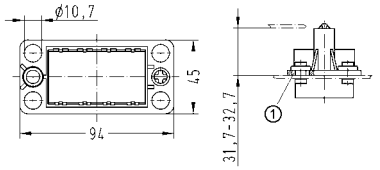
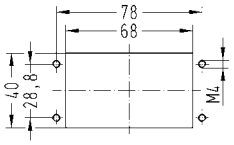
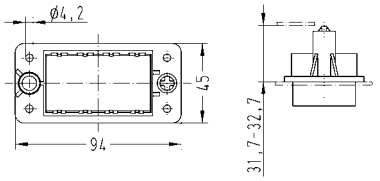
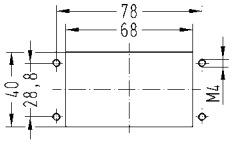
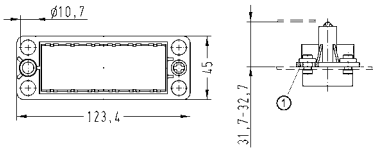
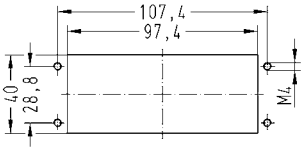
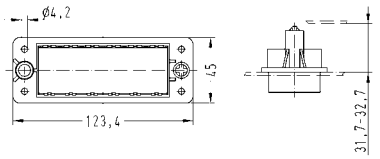
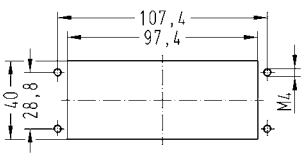
Details

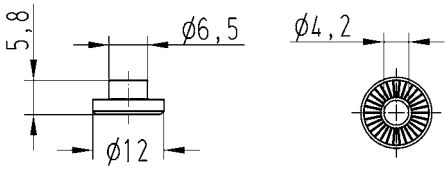
Due the plastic material used in the docking frame without PE, the panel will need to be grounded separately.

Han-Modular® Docking frames

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Docking frame, float mount, for 2 modules, A ... B	09 14 006 1701	  ① floating tolerance ±2 mm Panel cut out
Han-Modular®, Docking frame, fixed, for 2 modules, a ... b	09 14 006 1711	  Panel cut out
Han-Modular®, Docking frame, float mount, for 3 modules, A ... C	09 14 010 1701	  ① floating tolerance ±2 mm
Han-Modular®, Docking frame, fixed, for 3 modules, a ... c	09 14 010 1711	  Panel cut out

Han-Modular® Docking frames

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Docking frame, float mount, for 4 modules, A ... D 	09 14 016 1701	 ① floating tolerance ±2 mm  Panel cut out
Han-Modular®, Docking frame, fixed, for 4 modules, a ... d 	09 14 016 1711	  Panel cut out
Han-Modular®, Docking frame, float mount, for 6 modules, A ... F 	09 14 024 1701	 ① floating tolerance ±2 mm  Panel cut out
Han-Modular®, Docking frame, fixed, for 6 modules, a ... f 	09 14 024 1711	  Panel cut out

Identification	Part number	Drawing Dimensions in mm
Han-Modular®, Float washer, zinc die-cast  to enable the frame to be float mounted using standard M4 fixing screws	09 14 000 9936	

Features

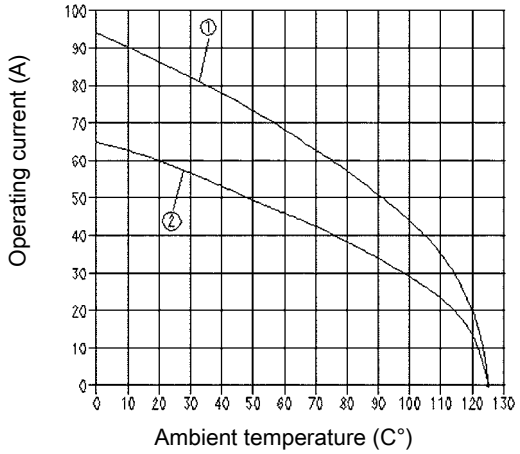
- Robust housing
- Compact design saves space
- Modular structure increases flexibility
- Simple and quick assembly
- Two-part housing

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

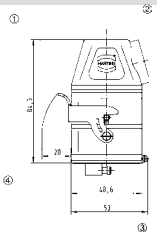


① Han® 40 A Axial module Wire cross section 10 mm²
② Han® C module Wire cross section 6 mm²

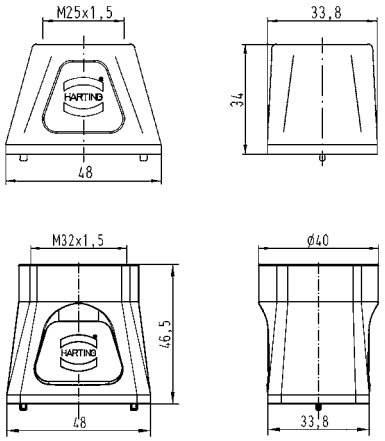
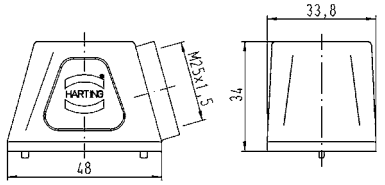
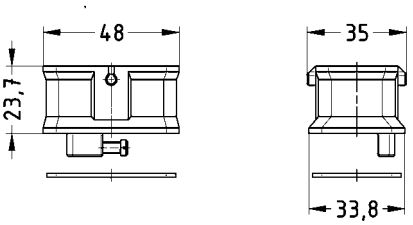
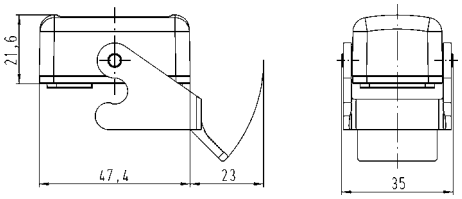
Technical characteristics

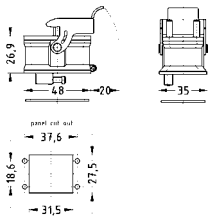
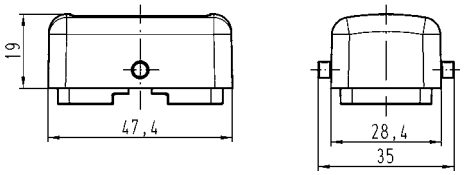
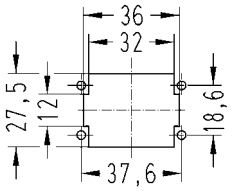
Limiting temperatures	-40 °C ... 125 °C
Flammability (hoods/housings) acc. to UL 94	V 0
Mating cycles	≥500
Tightening torque	1 Nm
Degree of protection acc. to IEC 60529	IP65 in locked position
Material (hoods/housings)	zinc die-cast
Surface (hoods/housings)	nickel plated
Material (locking lever)	stainless steel
Material (seal)	NBR
Material (screwing)	stainless steel

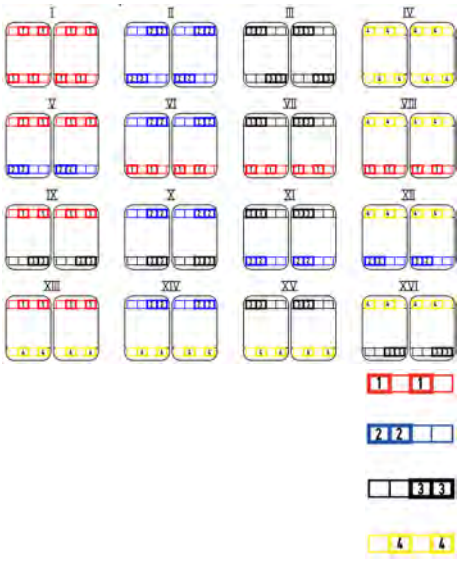
Details



① Hood with side entry
② Cable entry M25
③ Bulkhead mounted housing with locking lever
④ Carrier hood

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han-Modular® Compact, Hoods, top entry Range of delivery: 4 screws are included in the delivery range 	1xM25 1xM32	19 14 001 0401 19 14 001 0402	
Han-Modular® Compact, Hoods, side entry Range of delivery: 4 screws are included in the delivery range 	1xM25	19 14 001 0501	
Han-Modular® Compact, Carrier hood 		09 14 001 0311	 Wire cross section PE contact 10 mm² Stripping length 10 mm Tightening torque 1 Nm
Han-Modular® Compact, Protection covers for carrier hoods, plastic 		09 14 001 5402	

Identification	Part number	Drawing Dimensions in mm
Han-Modular® Compact, Bulkhead mounted housings 	09 14 001 0301	 Wire cross section PE contact 10 mm² Stripping length 10 mm Tightening torque 1 Nm
Han-Modular® Compact, Protection cover for bulkhead mounted housings, plastic 	09 14 001 5401	
Han-Modular® Compact, Fixing bracket 	09 14 000 9947	 Panel cut out

Identification	Part number	Drawing Dimensions in mm
Coding element, 1 (red) 	09 14 000 9971	
Coding element, 2 (blue) 	09 14 000 9972	
Coding element, 3 (black) 	09 14 000 9973	
Coding element, 4 (yellow) 	09 14 000 9974	

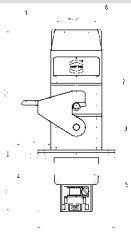
Features

- Robust housing
- Compact design saves space
- Modular structure increases flexibility
- Simple and quick assembly
- Two-part housing

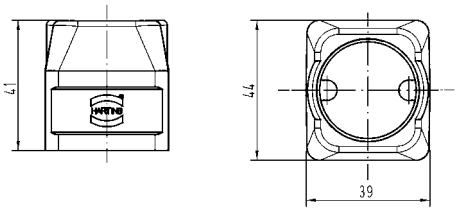
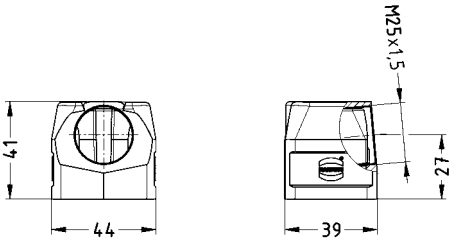
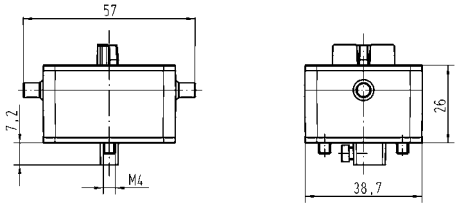
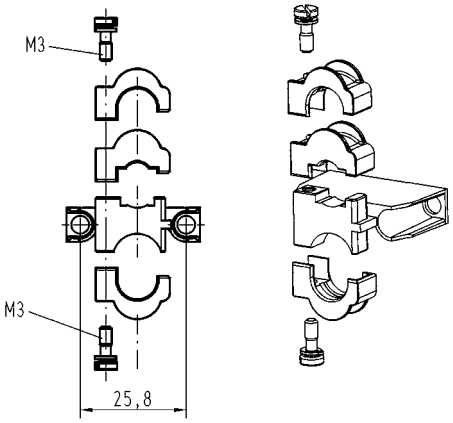
Technical characteristics

Limiting temperatures	-40 °C ... 125 °C
Mating cycles	≥500
Tightening torque	1 Nm
Degree of protection acc. to IEC 60529	IP65
Material (hoods/housings)	aluminium
Surface (hoods/housings)	powder-coated
Colour (hoods/housings)	RAL 7037 (grey)
Material (locking lever)	polycarbonate + stainless steel
Colour (locking lever)	RAL 7037 (grey)
Material (seal)	NBR

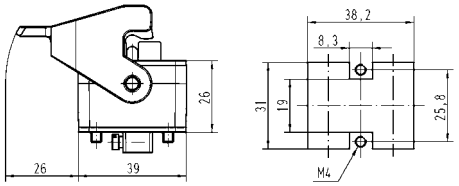
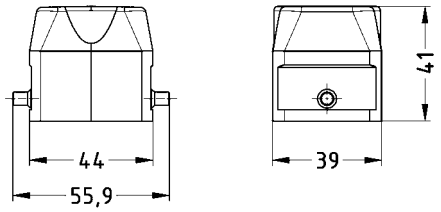
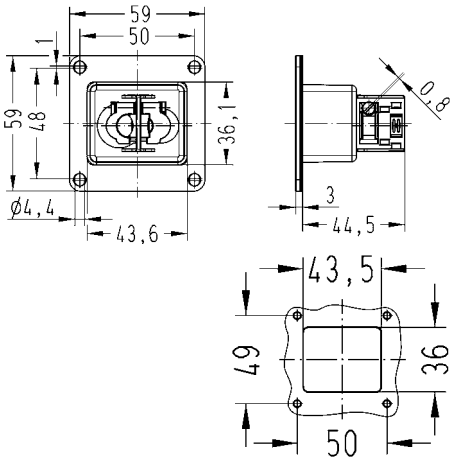
Details



① Hood with top entry
② Carrier hood
③ Bulkhead mounted housing with locking lever
④ Switch board panel
⑤ Panel feed through housings
⑥ Cable entry

Identification	Cable entry	Part number	Drawing Dimensions in mm
Han-Modular® Twin, Hoods, top entry, screw locking 	1xM20 1xM25 1xM32	19 14 002 0400 19 14 002 0401 19 14 002 0402	
Han-Modular® Twin, Hoods, side entry, screw locking 	1xM25	19 14 002 0501	
Han-Modular® Twin, Carrier hood, Han-Easy Lock® 		09 14 002 0311	 Wire cross section PE contact 10 mm² Stripping length 10 mm Tightening torque 1 Nm
Han-Modular® Twin, shielded frame, zinc die-cast 		09 14 000 9924	

double locking lever

Identification	Part number	Drawing Dimensions in mm
Han-Modular® Twin, Bulkhead mounted housings, Han-Easy Lock® 	09 14 002 0301	 Wire cross section PE contact 10 mm² Stripping length 10 mm Tightening torque 1 Nm
Han-Modular® Twin, Protection cover for bulkhead mounted housings, metal, closed 	09 14 002 5401	
Han-Modular® Twin, Panel feed through housings, zinc die-cast, screw locking 	09 14 000 9928	 Panel cut out

Features

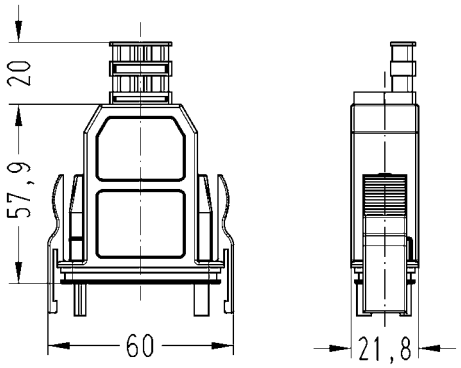
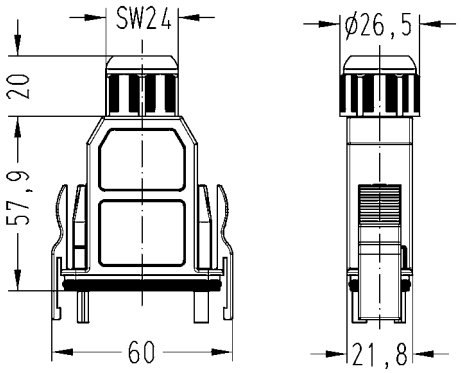
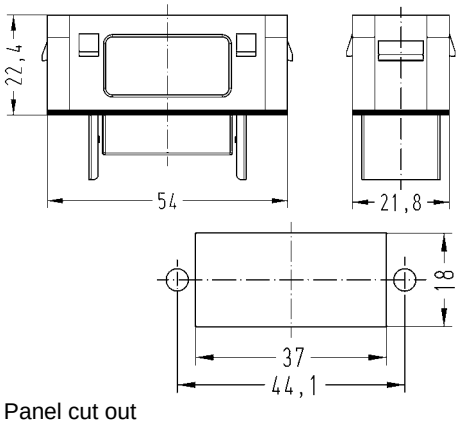
- Suitable for all Han-Modular® single modules
- The variant with PE connection uses pin 1 of the module as PE
- Slim, space saving design
- Low cost plastic hoods and housings

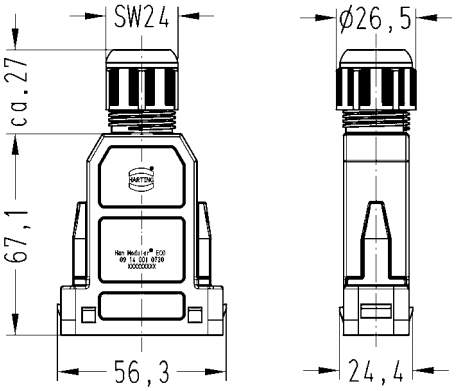
Technical characteristics

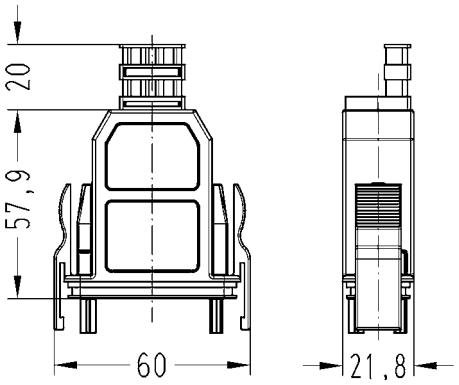
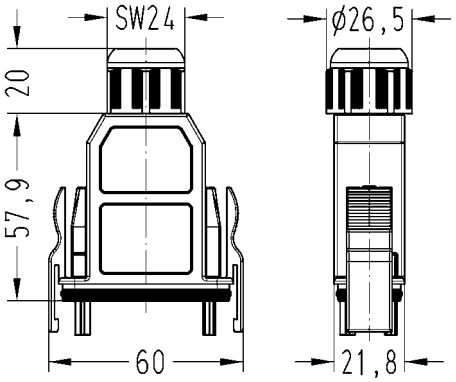
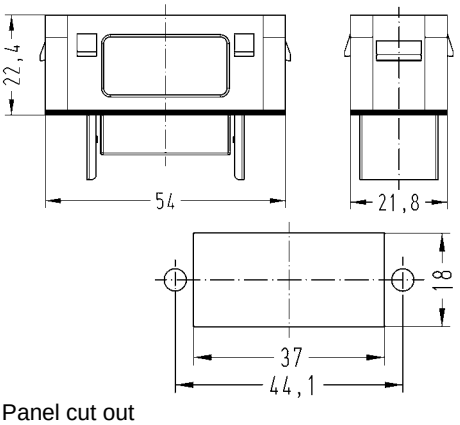
Limiting temperatures	-40 °C ... 85 °C
Flammability (hoods/housings) acc. to UL 94	V 0
Mating cycles	≥500
Degree of protection acc. to IEC 60529	IP20, IP65
Material (hoods/housings)	polycarbonate
Colour (hoods/housings)	RAL 7037 (grey)
Material (seal)	NBR

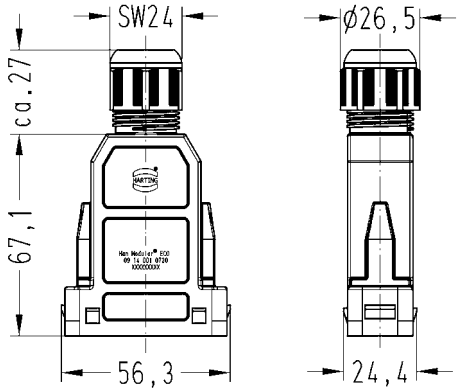
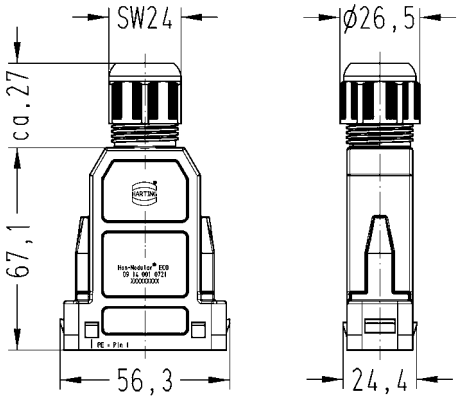
Specifications and approvals

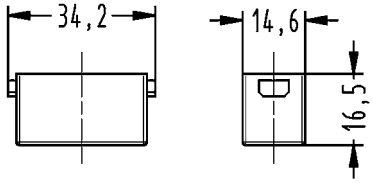
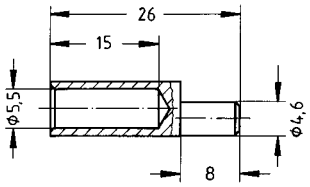
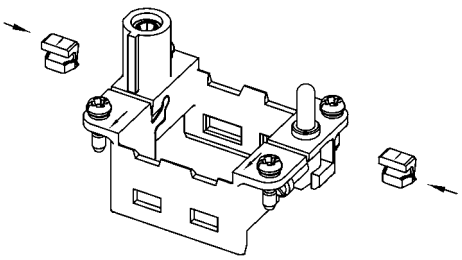
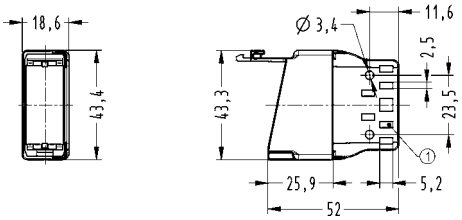
IEC 60664-1
IEC 61984

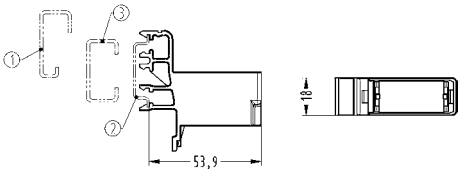
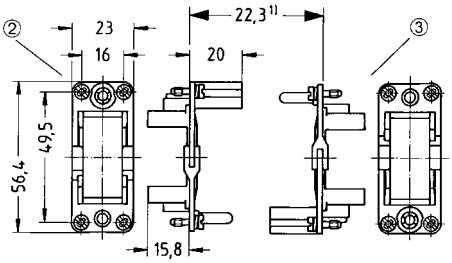
Identification	Clamping range (mm)	Part number	Drawing Dimensions in mm
Han-Modular® ECO, Hoods, IP20, top entry, Han-Snap® locking, without PE 	... 14.65	09 14 001 0422	
Han-Modular® ECO, Hoods, IP65, top entry, Han-Snap® locking, without PE 	6 ... 13	09 14 001 0420	
Han-Modular® ECO, Bulkhead mounted housings, top entry, Han-Snap® locking, without PE 		09 14 001 0320	 Panel cut out

Identification	Clamping range (mm)	Part number	Drawing Dimensions in mm
Han-Modular® ECO, Cable to cable housings, IP20, top entry, Han-Snap® locking, without PE 	... 14.65	09 14 001 0722	
Han-Modular® ECO, Cable to cable housings, IP65, top entry, Han-Snap® locking, without PE 	6 ... 13	09 14 001 0720	
Han-Modular®, Coding element Range of delivery: 8 pieces per frame 		09 14 000 9929	

Identification	Clamping range (mm)	Part number	Drawing Dimensions in mm
Han-Modular® ECO, Hoods, IP20, top entry, Han-Snap® locking, with PE marking (pin 1 = PE) 	... 14.65	09 14 001 0423	
Han-Modular® ECO, Hoods, IP65, top entry, Han-Snap® locking, with PE marking (pin 1 = PE) 	6 ... 13	09 14 001 0421	
Han-Modular® ECO, Bulkhead mounted housings, top entry, Han-Snap® locking, with PE marking (pin 1 = PE) 		09 14 001 0321	 Panel cut out

Identification	Clamping range (mm)	Part number	Drawing Dimensions in mm
Han-Modular® ECO, Cable to cable housings, IP20, top entry, Han-Snap® locking, with PE marking (pin 1 = PE) 	... 14.65	09 14 001 0723	
Han-Modular® ECO, Cable to cable housings, IP65, top entry, Han-Snap® locking, with PE marking (pin 1 = PE) 	6 ... 13	09 14 001 0721	
Han-Modular®, Coding element Range of delivery: 8 pieces per frame 		09 14 000 9929	

Identification	Wire cross section (mm²)	Part number	Drawing Dimensions in mm
Han-Modular®, Han® Dummy module 		09 14 000 9950	
Han-Modular®, Cable shoe, for PE extension  for hoods/housings high construction only	16	09 14 000 9912	 Please use pressing tools for non-insulated cable shoes
Han-Modular®, fixing, for Han-Modular® hinged frames Range of delivery: 20 pieces per frame 		09 14 000 9960	 Ideal to pre-assemble the hinged frames
Han-Modular®, Module locking, with strain relief Range of delivery: 1 Module clamp 		09 14 000 0312	 ① For cable ties with max. 5 mm width

Identification	Wire cross section (mm²)	Part number	Drawing Dimensions in mm
Han-Modular®, Module locking, for rail Range of delivery: 1 Module clamp 		09 14 000 0313	 ① G-rail IEC 60715-G32 ② rail IEC 60715-35 x 7.5 with 1 mm thickness or -35 x 15 with 1.5 mm thickness ③ C-rail IEC 60715-C30
Han-Modular®, Frame, for 1 module, in housing Han® 10 A 		09 14 000 0304	 1 distance max. 23.5 mm 2 hoods 3 housings