

Contents	Page
Han E®	Han 03.3
Han® ES/ES Press/ESS	Han 03.13
Han® ES Press plug-in jumpers	Han 03.29
Han® EE	Han 03.31
Han® EEE.....	Han 03.38
Contacts	Han 03.41

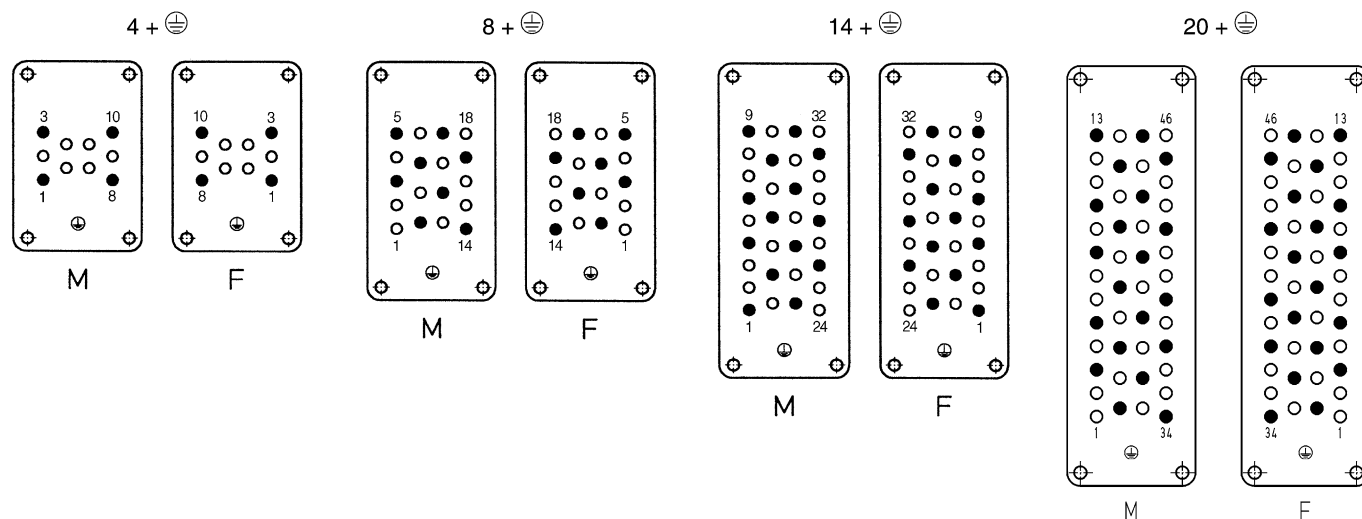
Han E/
EE

Han E/
EE

The connector series Han® EE equipped with all contacts may be used for voltages up to 500 V ~ pollution degree 3. A modified contact loading arrangement permits use up to 1000 V ~ pollution degree also in pollution degree 3. Fully equipped connectors may also be used up to 1000 V ~ but in a lower pollution degree. See chapter 00. According to IEC 61984 connectors should not be coupled or decoupled under electrical load.

690 V Pollution degree 3

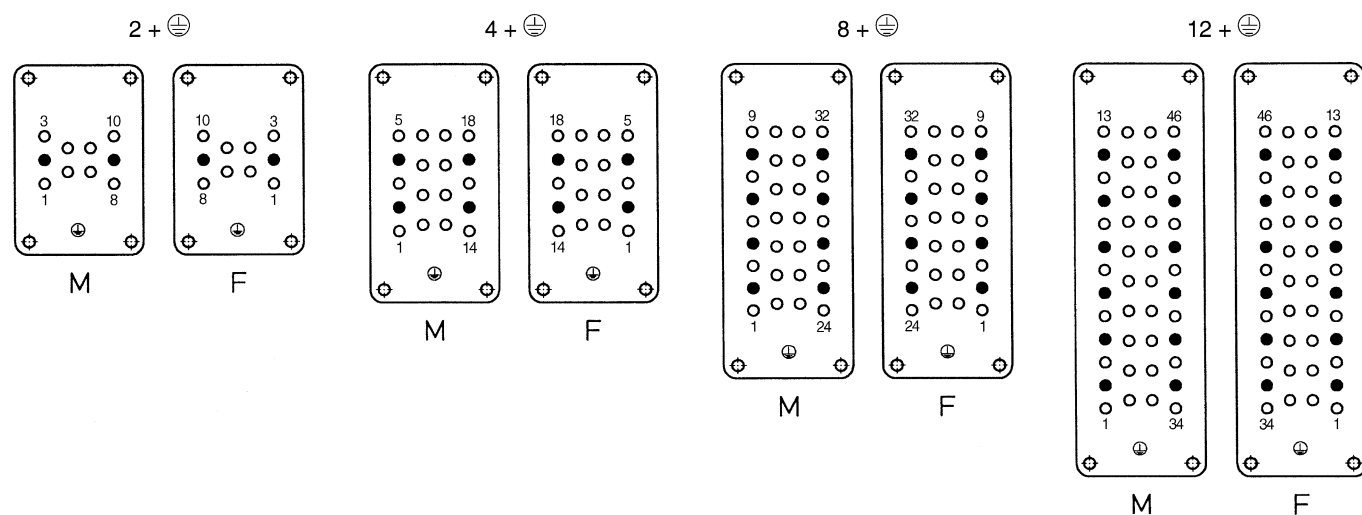
Contact arrangement view from termination side



• Working contact ○ Without contact M - Male insert F - Female insert

1000 V Pollution degree 3

Contact arrangement view from termination side



• Working contact ○ Without contact M - Male insert F - Female insert

Features

- Covers a wide range of cross-sections
- Screw termination with wire protection

Technical characteristics

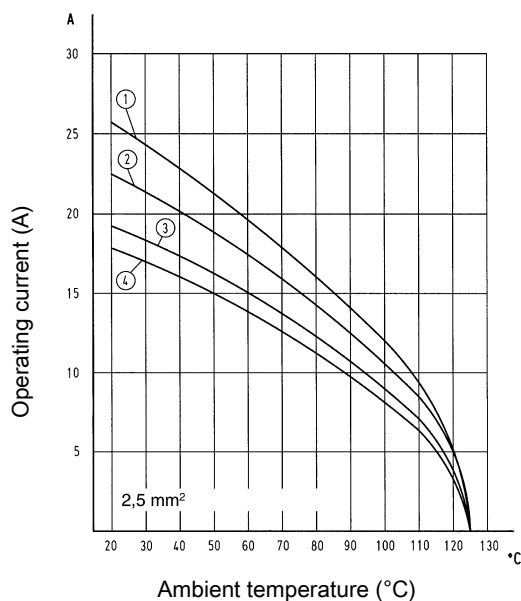
Number of contacts	6, 10, 16, 24, 32, 48
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Rated voltage acc. to CSA	600 V
Insulation resistance	$>10^{10} \Omega$
Contact resistance	$\leq 1 \text{ m}\Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles	≥ 500
Material (insert)	Polycarbonate (PC)
Colour (insert)	RAL 7032 (pebble grey)
Material (contacts)	Copper alloy
Material flammability class acc. to UL 94	V-0
RoHS	compliant with exemption, compliant

Derating

Current carrying capacity

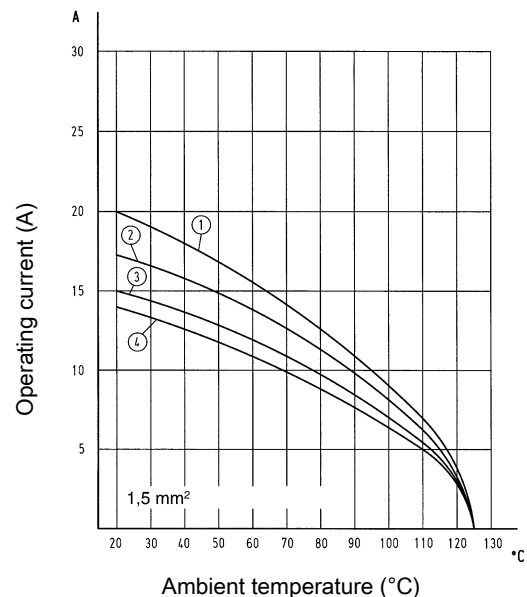
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the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

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



- ① Han® 6 E
- ② Han® 10 E
- ③ Han® 16 E Han® 32 E
- ④ Han® 24 E Han® 48 E

Derating



- ① Han® 6 E
- ② Han® 10 E
- ③ Han® 16 E Han® 32 E
- ④ Han® 24 E Han® 48 E

Specifications and approvals

EN 60664-1
IEC 61984
UL 1977 ECBT2.E235076
UL 2237 PVVA2.E318390
CSA-C22.2 No. 182.3 PVVA8.E318390
DNV GL

Details

Internal use in the switch cabinet in conjunction with Han-Snap® (see chapter Han 11)

Suitable for hoods/housings of series Han® B, Han® M, Han® EMC, Han® HPR, Han® Easy Hood (see chapter Han 31)

Tightening torque 0.5 Nm

Tightening torque PE screw 1.2 Nm

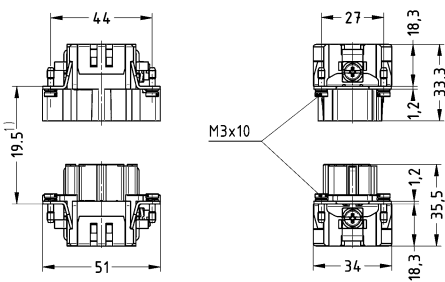
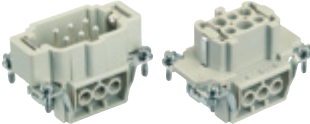
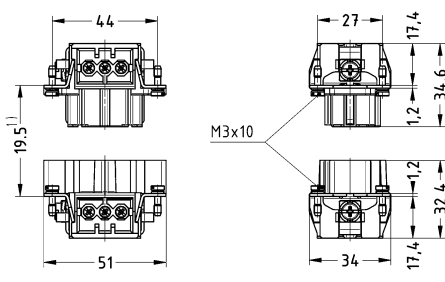
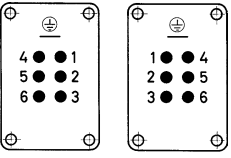
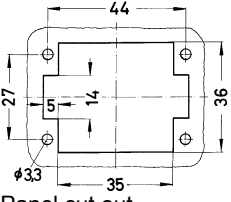


Number of contacts

6+

16 A 500 V 6 kV 3

Han E/
EE

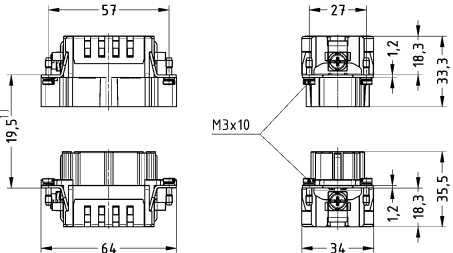
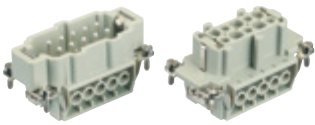
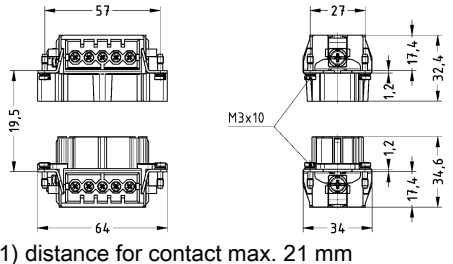
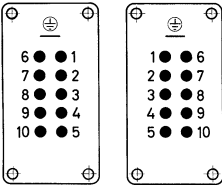
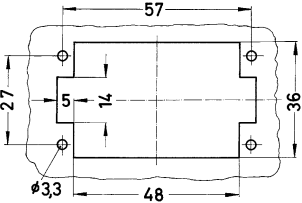
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 33 006 2602	09 33 006 2702	 1) distance for contact max. 21 mm
Han E®, Screw termination, With wire protection, Contact surface: Silver plated 	0.75 ... 2.5	09 33 006 2601	09 33 006 2701	 1) distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out

Number of contacts

10+

16 A 500 V 6 kV 3

Han E/
EE

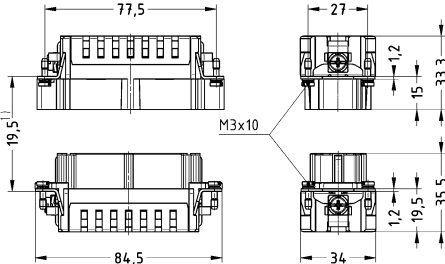
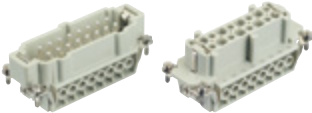
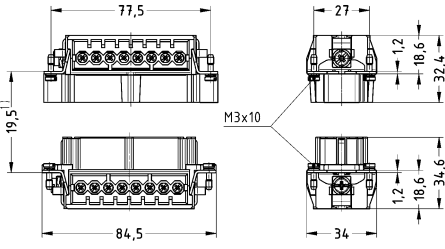
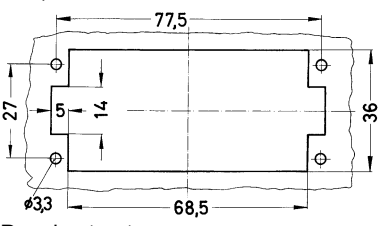
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 33 010 2602	09 33 010 2702	 1) distance for contact max. 21 mm
Han E®, Screw termination, With wire protection, Contact surface: Silver plated 	0.75 ... 2.5	09 33 010 2601	09 33 010 2701	 1) distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out



Number of contacts

16+

16 A 500 V 6 kV 3

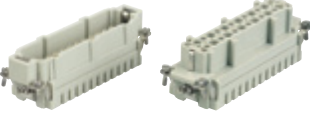
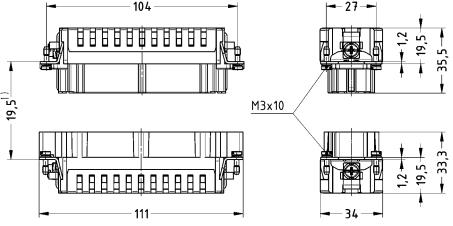
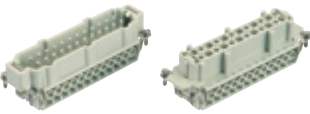
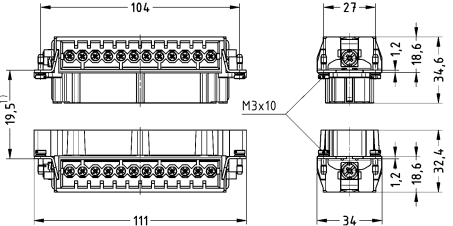
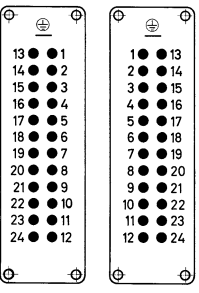
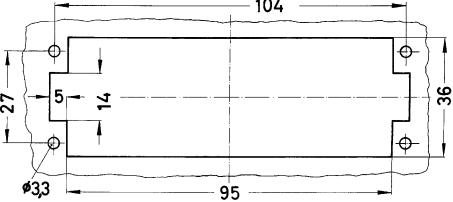
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 33 016 2602	09 33 016 2702	 1) distance for contact max. 21 mm
Han E®, Screw termination, With wire protection, Contact surface: Silver plated 	0.75 ... 2.5	09 33 016 2601	09 33 016 2701	 1) distance for contact max. 21 mm 9 ● 1 10 ● 2 11 ● 3 12 ● 4 13 ● 5 14 ● 6 15 ● 7 16 ● 8 M 1 ● 9 2 ● 10 3 ● 11 4 ● 12 5 ● 13 6 ● 14 7 ● 15 8 ● 16 F Contact arrangement (view from termination side)  Panel cut out

Number of contacts

24+

16 A 500 V 6 kV 3

Han E/
EE

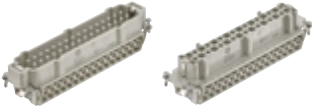
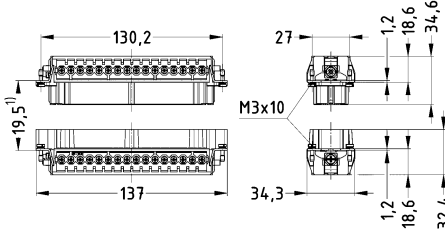
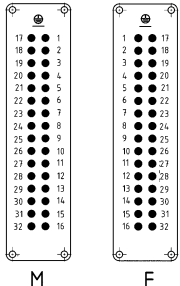
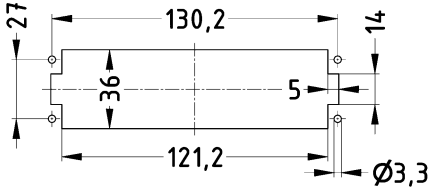
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 33 024 2602	09 33 024 2702	 1) distance for contact max. 21 mm
Han E®, Screw termination, With wire protection, Contact surface: Silver plated 	0.75 ... 2.5	09 33 024 2601	09 33 024 2701	 1) distance for contact max. 21 mm  Contact arrangement (view from termination side)  Panel cut out



Number of contacts

32+

16 A 500 V 6 kV 3

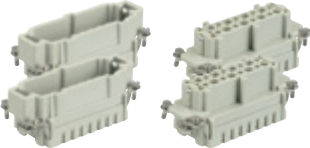
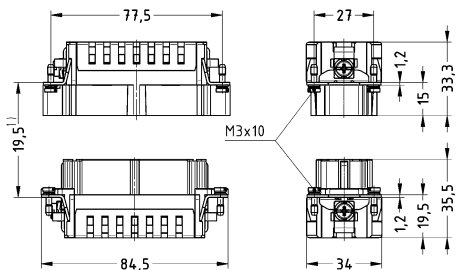
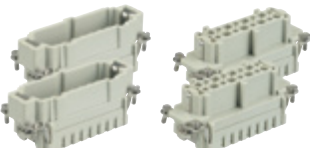
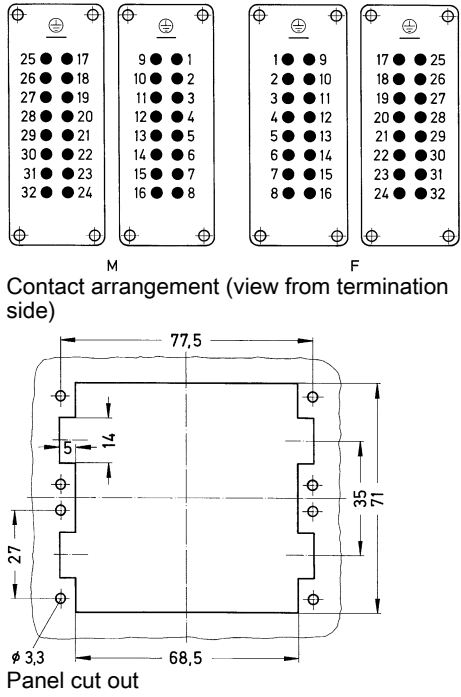
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Screw termination, With wire protection, Contact surface: Silver plated 	0.75 ... 2.5	09 33 032 2601	09 33 032 2701	 1) distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out

Number of contacts

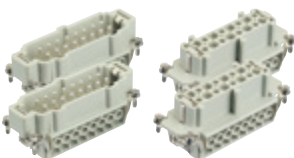
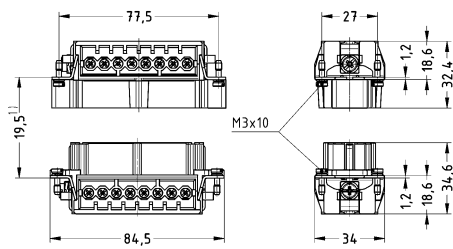
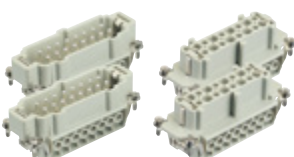
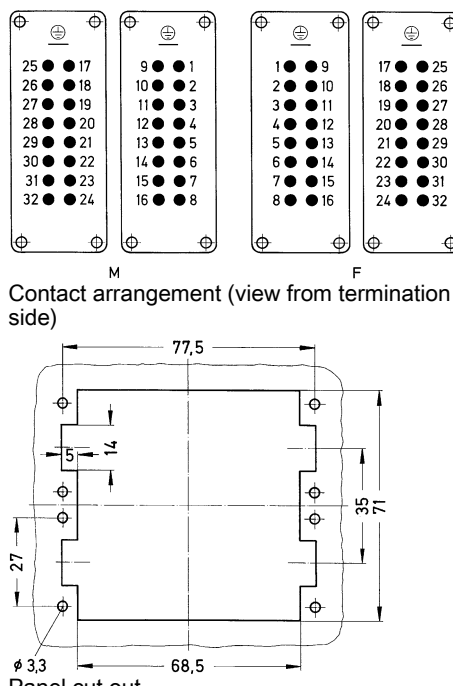
32+

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Crimp termination, 1 ... 16  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 33 016 2602	09 33 016 2702	 1) distance for contact max. 21 mm
Han E®, Continuing marking, Crimp termination, 17 ... 32  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 33 016 2612	09 33 016 2712	 Panel cut out

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Screw termination, With wire protection, 1 ... 16 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.75 ... 2.5	09 33 016 2601	09 33 016 2701	 1) distance for contact max. 21 mm
Han E®, Continuing marking, Screw termination, With wire protection, 17 ... 32 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.75 ... 2.5	09 33 016 2611	09 33 016 2711	 Contact arrangement (view from termination side)

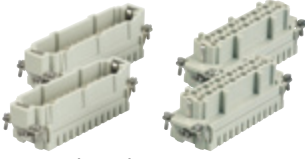
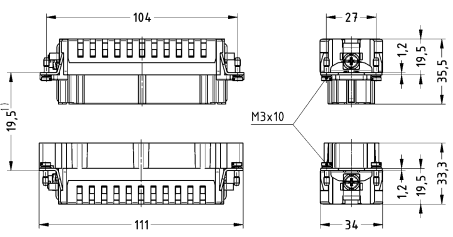
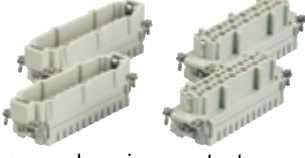
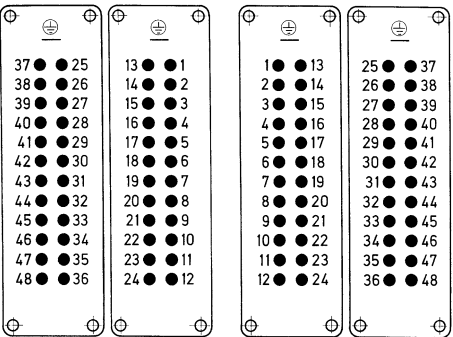
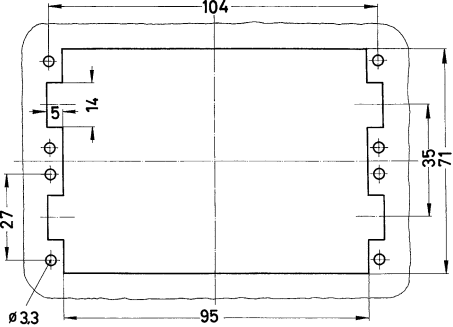
Han
03
·
10

Number of contacts

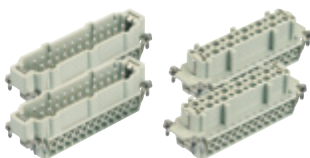
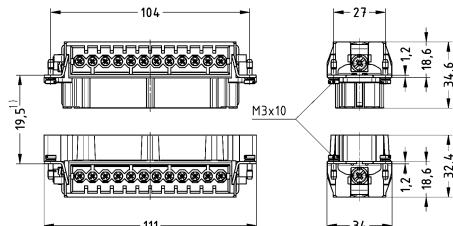
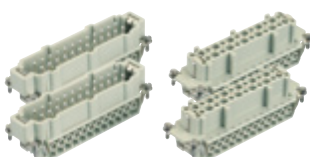
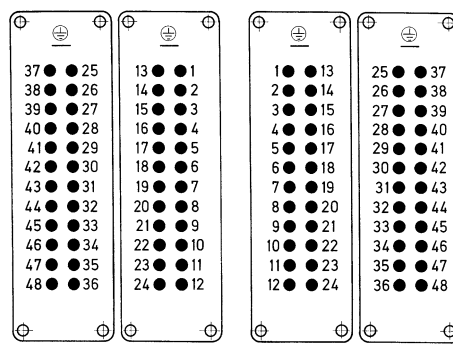
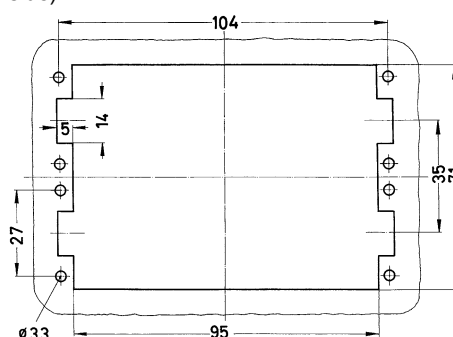
48+

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Crimp termination, 1 ... 24  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 33 024 2602	09 33 024 2702	 1) distance for contact max. 21 mm
Han E®, Continuing marking, Crimp termination, 25 ... 48  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 33 024 2612	09 33 024 2712	 M F Contact arrangement (view from termination side)  Panel cut out

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E®, Screw termination, With wire protection, 1 ... 24 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.75 ... 2.5	09 33 024 2601	09 33 024 2701	 1) distance for contact max. 21 mm
Han E®, Continuing marking, Screw termination, With wire protection, 25 ... 48 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.75 ... 2.5	09 33 024 2611	09 33 024 2711	 Contact arrangement (view from termination side)  Panel cut out

Features

- Rapid termination technology without tools for a time saving assembly and for optimal processreliability
- Vibration-proved
- Han® ES Press: Easy bridging functionality of contacts by means of plug-in jumpers directly on the connector
- Han® ES Press: Fast realisation of potential multiplication as well as star and delta bridges
- Han® ESS: two termination points per contact

Technical characteristics

Number of contacts	6, 10, 16, 24, 32, 48
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Rated voltage acc. to CSA	600 V
Insulation resistance	$>10^{10} \Omega$
Contact resistance	$\leq 3 \text{ m}\Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles	≥ 500
Material (insert)	Polycarbonate (PC)
Colour (insert)	RAL 7032 (pebble grey)
Material (contacts)	Copper alloy
Material flammability class acc. to UL 94	V-0
RoHS	compliant with exemption, compliant

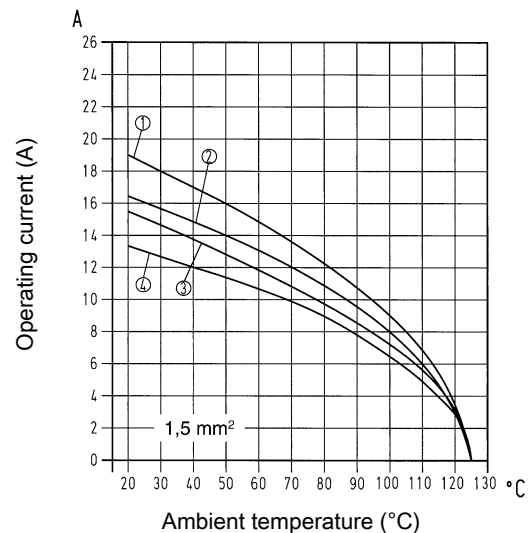
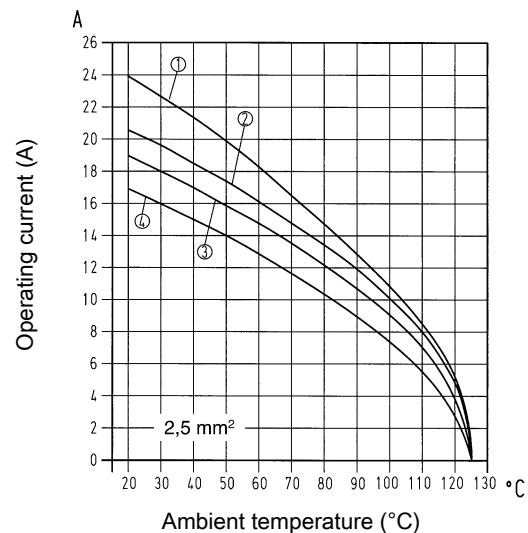
Derating

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® ES

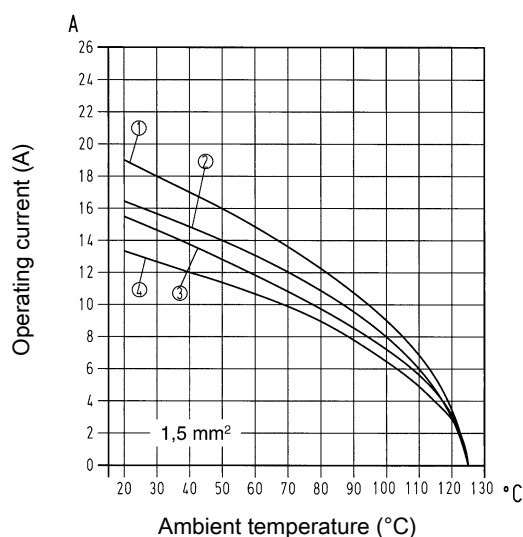
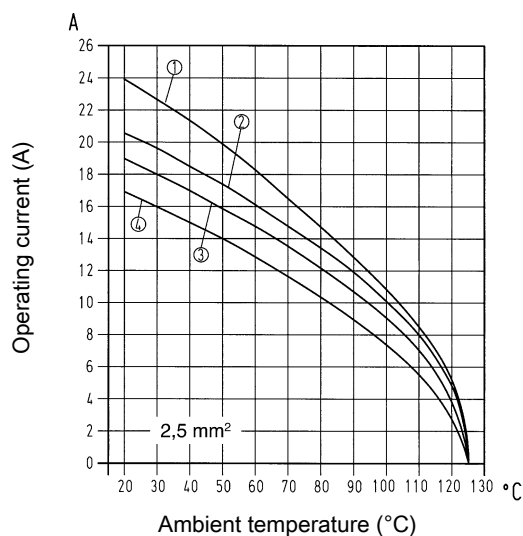


- ① Han® 6 ES
- ② Han® 10 ES
- ③ Han® 16 ES Han® 32 ES
- ④ Han® 24 ES Han® 48 ES

Derating

Han E/
EE

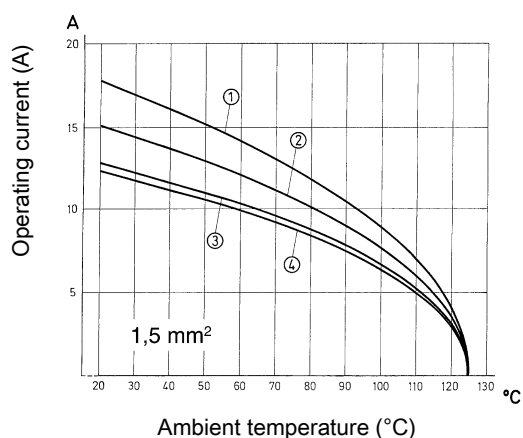
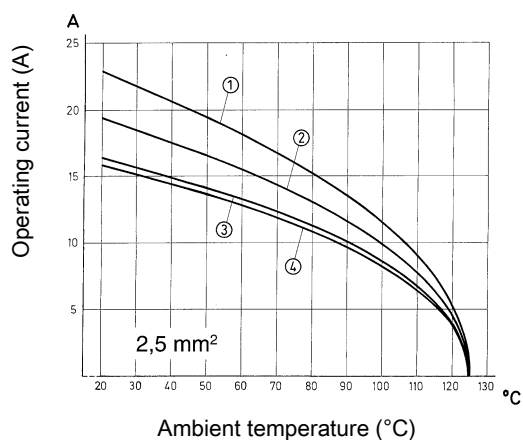
Han® ES Press



- ① Han® 6 ES Press
- ② Han® 10 ES Press
- ③ Han® 16 ES Press Han® 32 ES Press
- ④ Han® 24 ES Press Han® 48 ES Press

Derating

Han® ESS



- ① Han® 6 ESS
- ② Han® 10 ESS
- ③ Han® 16 ESS Han® 32 ESS
- ④ Han® 24 ESS Han® 48 ESS

Specifications and approvals

EN 60664-1
IEC 61984
UL 1977 ECBT2.E235076
UL 2237 PVVA2.E318390
CSA-C22.2 No. 182.3 PVVA8.E318390
DNV GL
CSA-C22.2 No. 182.3 ECBT8.E235076

Details

Internal use in the switch cabinet in conjunction with Han-Snap® (see chapter Han 11)

Suitable for hoods/housings of series Han® B, Han® M, Han® EMC, Han® HPR, Han® Easy Hood (see chapter Han 31)

Tightening torque 0.5 Nm

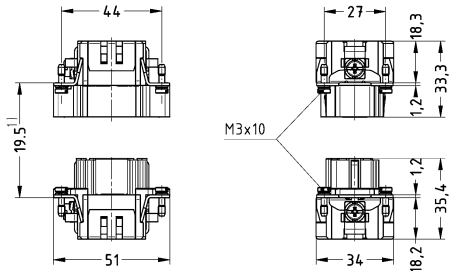
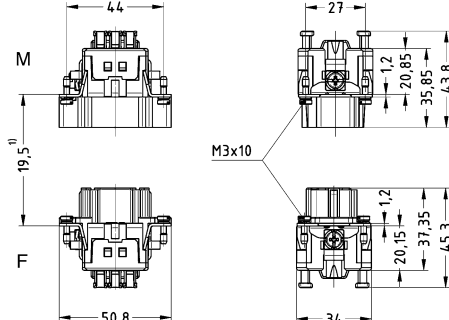
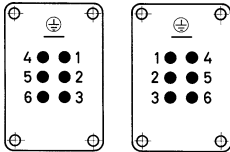
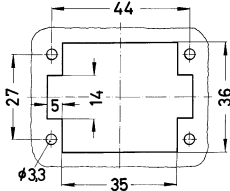
Tightening torque PE screw 1.2 Nm

Number of contacts

6+

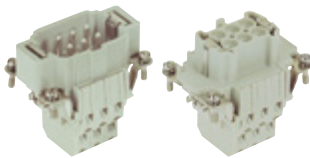
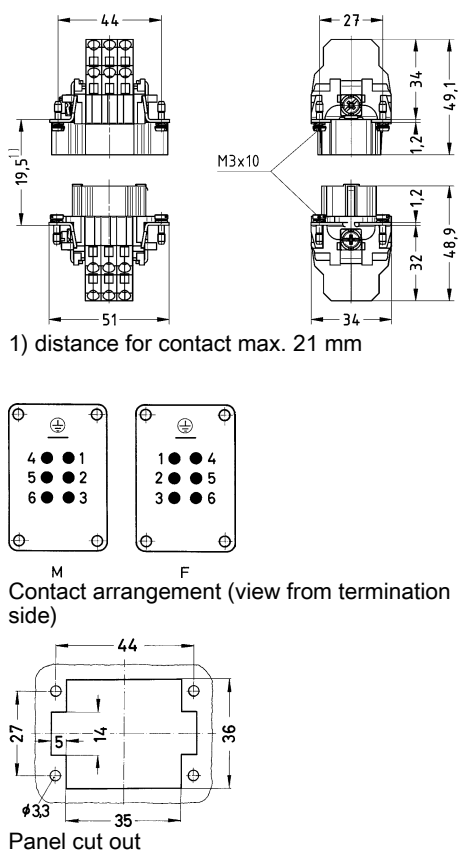
16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES, Cage-clamp termination, Contact surface: Silver plated 	0.14 ... 2.5	09 33 006 2616	09 33 006 2716	 1) distance for contact max. 21 mm
Han® ES Press, Cage-clamp termination, Contact surface: Silver plated  Blue slide for hoods/housings high construction only	0.14 ... 2.5	09 33 006 2648	09 33 006 2748	 Distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out



Han E/
EE

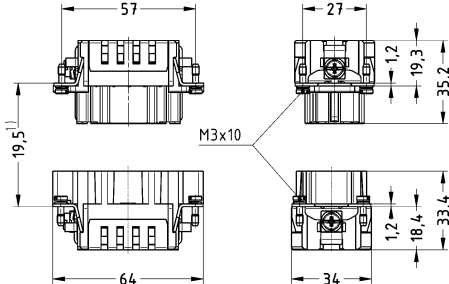
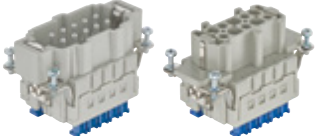
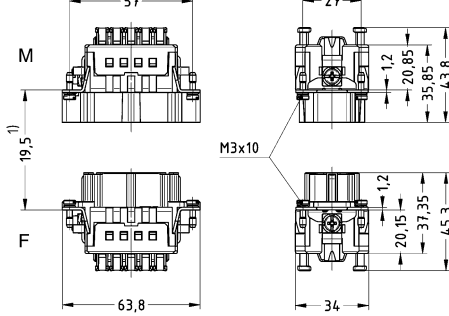
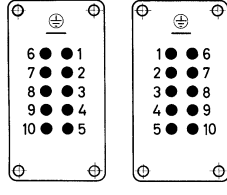
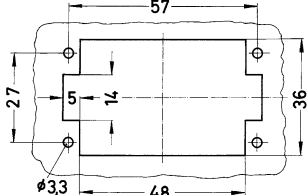
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ESS, Cage-clamp termination, Contact surface: Silver plated  two terminations per contact for hoods/housings high construction only	0.14 ... 2.5	09 33 006 2672	09 33 006 2772	 1) distance for contact max. 21 mm Panel cut out

Number of contacts

10+

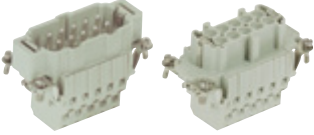
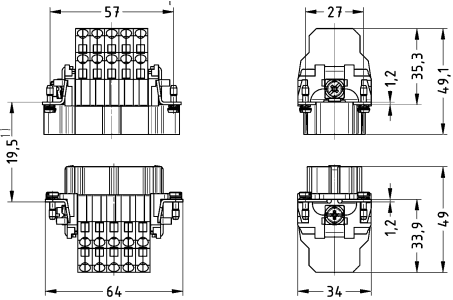
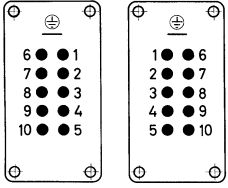
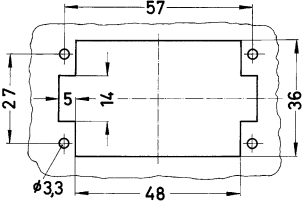
16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES, Cage-clamp termination, Contact surface: Silver plated 	0.14 ... 2.5	09 33 010 2616	09 33 010 2716	 1) distance for contact max. 21 mm
Han® ES Press, Cage-clamp termination, Contact surface: Silver plated  Blue slide for hoods/housings high construction only	0.14 ... 2.5	09 33 010 2648	09 33 010 2748	 Distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out



Han E/
EE

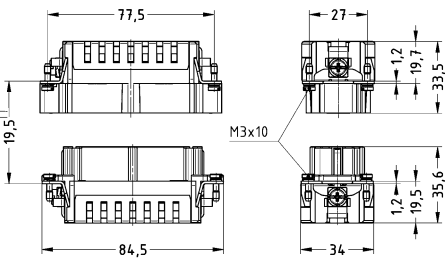
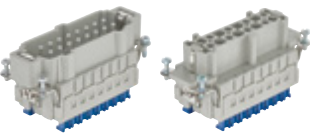
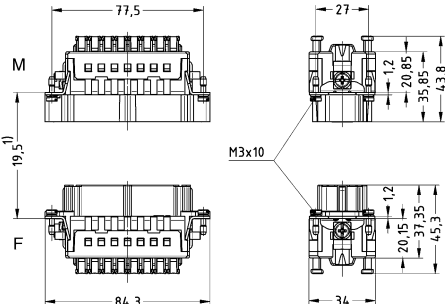
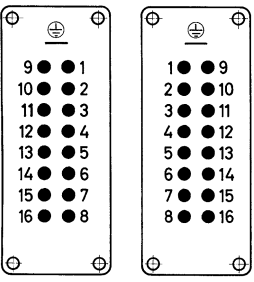
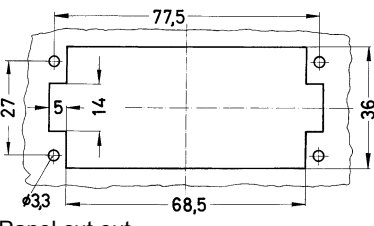
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ESS, Cage-clamp termination, Contact surface: Silver plated  two terminations per contact for hoods/housings high construction only	0.14 ... 2.5	09 33 010 2672	09 33 010 2772	 1) distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out

Number of contacts

16+

16 A 500 V 6 kV 3

Han E/
EE

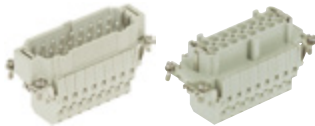
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES, Cage-clamp termination, Contact surface: Silver plated 	0.14 ... 2.5	09 33 016 2616	09 33 016 2716	 1) distance for contact max. 21 mm
Han® ES Press, Cage-clamp termination, Contact surface: Silver plated  Blue slide for hoods/housings high construction only	0.14 ... 2.5	09 33 016 2648	09 33 016 2748	 Distance for contact max. 21 mm  M F Contact arrangement (view from termination side)  Panel cut out



Han E/
EE

Identification	Conductor cross-section (mm²)	Part number	
		Male	Female

Han® ESS,
Cage-clamp termination,
Contact surface:
Silver plated



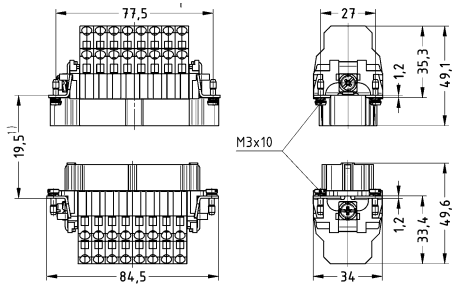
two terminations per contact
for hoods/housings high construction only

0.14 ... 2.5

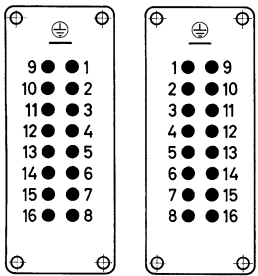
09 33 016 2672

09 33 016 2772

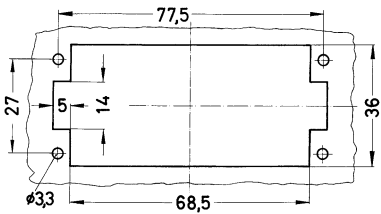
Drawing
(dimensions in mm)



1) distance for contact max. 21 mm



M F
Contact arrangement (view from termination side)



Panel cut out

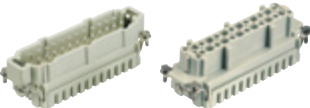
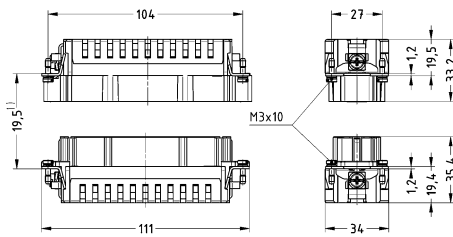
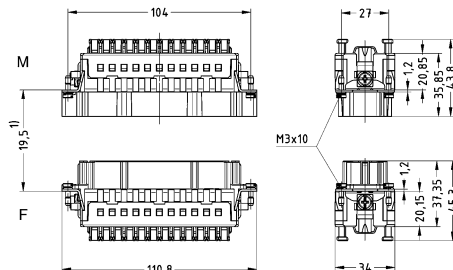
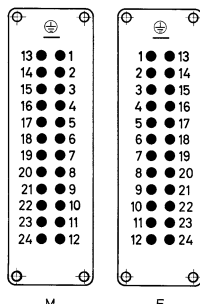
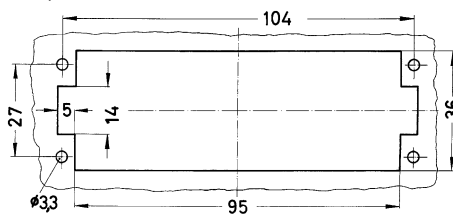


Number of contacts

24+

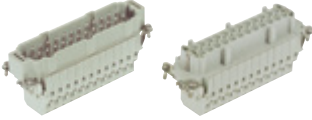
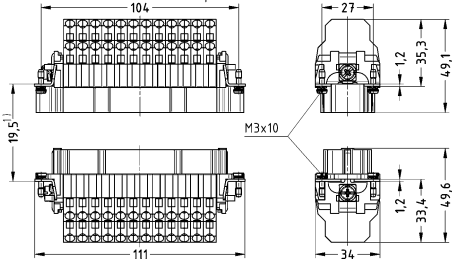
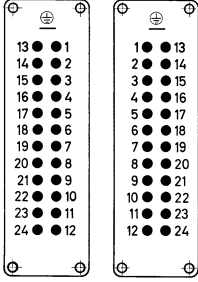
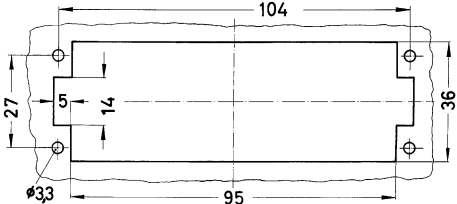
16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES, Cage-clamp termination, Contact surface: Silver plated 	0.14 ... 2.5	09 33 024 2616	09 33 024 2716	 1) distance for contact max. 21 mm
Han® ES Press, Cage-clamp termination, Contact surface: Silver plated  Blue slide for hoods/housings high construction only	0.14 ... 2.5	09 33 024 2648	09 33 024 2748	 Distance for contact max. 21 mm  Contact arrangement (view from termination side)  Panel cut out



Han E/
EE

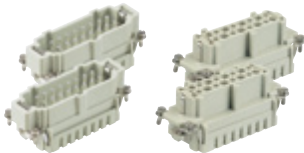
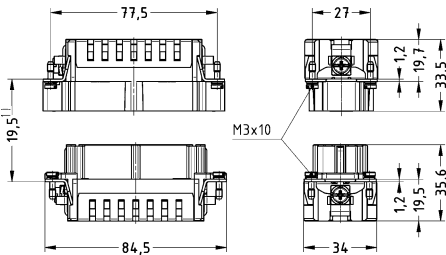
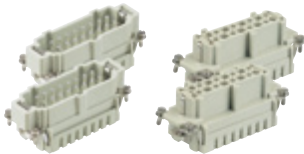
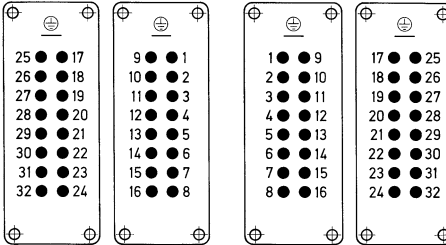
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ESS, Cage-clamp termination, Contact surface: Silver plated  two terminations per contact for hoods/housings high construction only	0.14 ... 2.5	09 33 024 2672	09 33 024 2772	 1) distance for contact max. 21 mm  Contact arrangement (view from termination side)  Panel cut out

Number of contacts

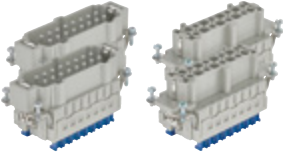
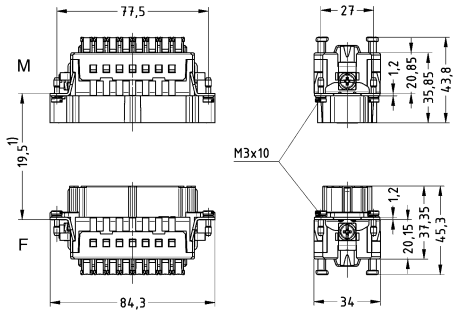
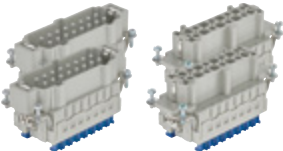
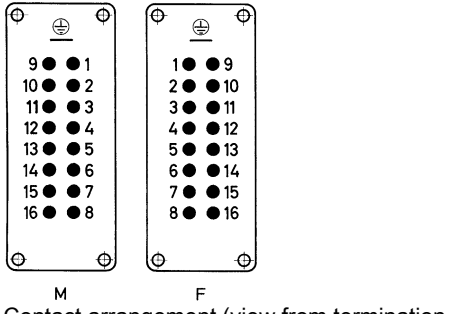
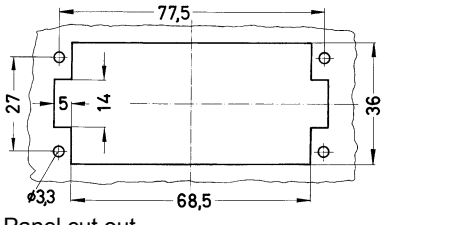
32+ 

16 A 500 V 6 kV 3

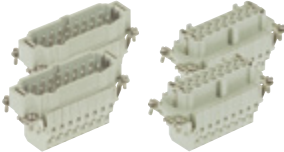
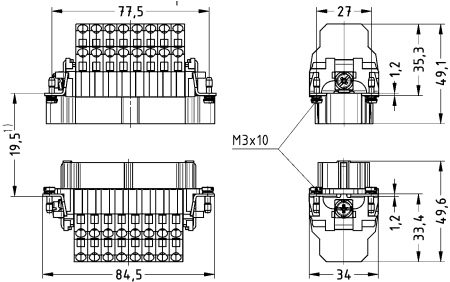
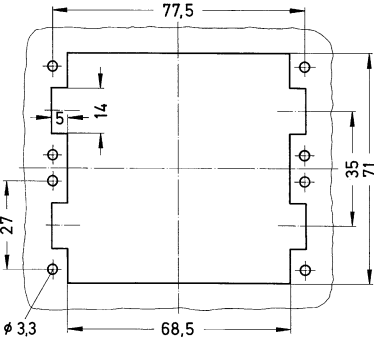
Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES, Cage-clamp termination, 1 ... 16 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 016 2616	09 33 016 2716	 1) distance for contact max. 21 mm
Han® ES, Continuing marking, Cage-clamp termination, 17 ... 32 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 016 2626	09 33 016 2726	 1) distance for contact max. 21 mm

Han E/
EE

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES Press, Cage-clamp termination, 1 ... 16 Contact surface: Silver plated  Blue slide for hoods/housings high construction only You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 016 2648	09 33 016 2748	 Distance for contact max. 21 mm
Han® ES Press, Continuing marking, Cage-clamp termination, 17 ... 32 Contact surface: Silver plated  Blue slide for hoods/housings high construction only You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 016 2688	09 33 016 2788	 Contact arrangement (view from termination side)  Panel cut out

Han
03
·
24

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ESS, Cage-clamp termination, 1 ... 16 Contact surface: Silver plated  two terminations per contact for hoods/housings high construction only You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 016 2672	09 33 016 2772	 1) distance for contact max. 21 mm 9 10 11 12 13 14 15 16 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 1 2 3 4 5 6 7 8 M 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 F Contact arrangement (view from termination side)  Panel cut out

Han E/
EE

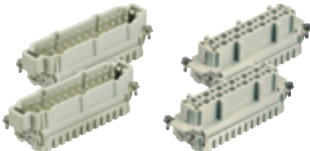
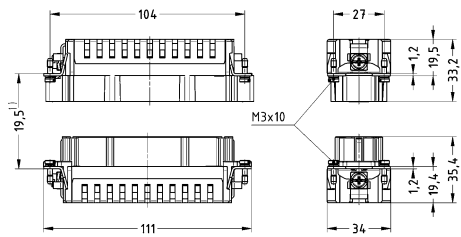
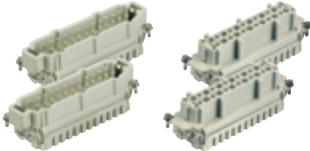
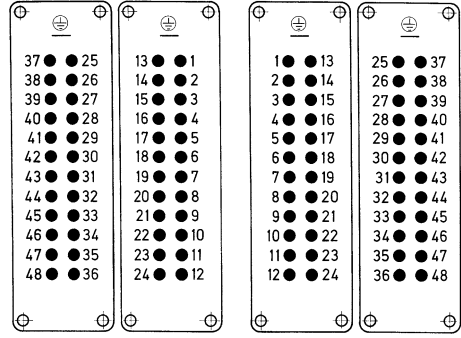
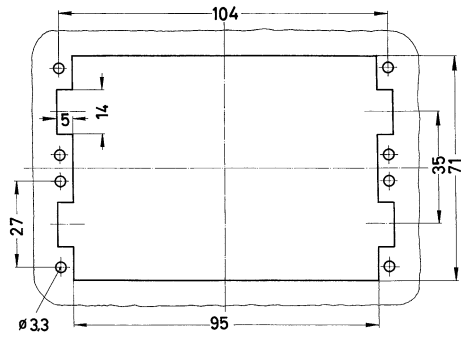


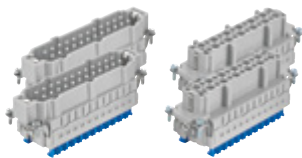
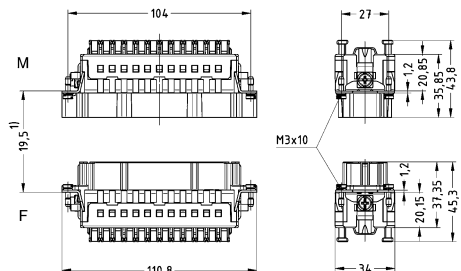
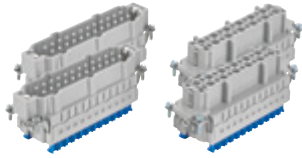
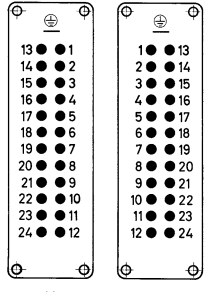
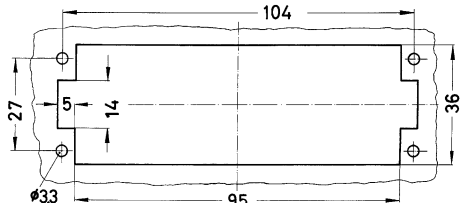
Number of contacts

48+

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES, Cage-clamp termination, 1 ... 24 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 024 2616	09 33 024 2716	 1) distance for contact max. 21 mm
Han® ES, Continuing marking, Cage-clamp termination, 25 ... 48 Contact surface: Silver plated  You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 024 2626	09 33 024 2726	 M F Contact arrangement (view from termination side)  Panel cut out

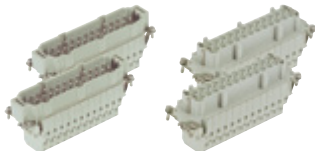
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® ES Press, Cage-clamp termination, 1 ... 24 Contact surface: Silver plated  Blue slide for hoods/housings high construction only You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 024 2648	09 33 024 2748	 Distance for contact max. 21 mm
Han® ES Press, Continuing marking, Cage-clamp termination, 25 ... 48 Contact surface: Silver plated  Blue slide for hoods/housings high construction only You need two inserts for a complete assembly!	0.14 ... 2.5	09 33 024 2688	09 33 024 2788	 Contact arrangement (view from termination side)  Panel cut out

Han E/
EEHan
03
·
27



Han E/
EE

Han® ESS,
Cage-clamp termination,
1 ... 24
Contact surface:
Silver plated



two terminations per contact
for hoods/housings high con-
struction only
You need two inserts for a com-
plete assembly!

Conductor
cross-section
(mm²)

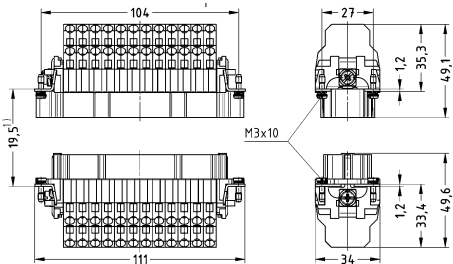
0.14 ... 2.5

Part number
Male Female

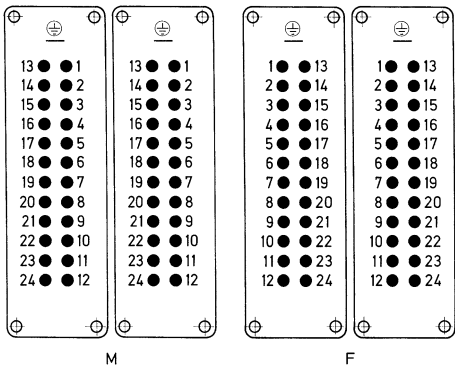
09 33 024 2672

09 33 024 2772

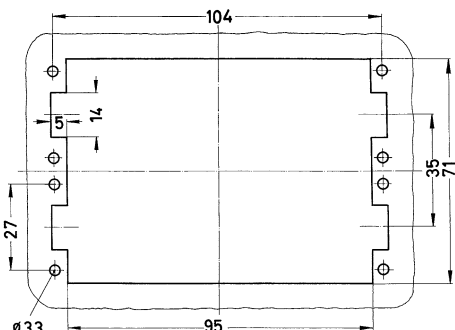
Drawing
(dimensions in mm)



1) distance for contact max. 21 mm

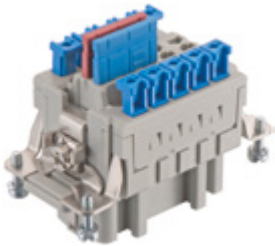


Contact arrangement (view from termination
side)



Panel cut out

16 A 500 V 6 kV 3



Han E/
EE

Technical characteristics

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	$>10^{10} \Omega$
Contact resistance	$\leq 1 \text{ m}\Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles	≥ 5
Material (contacts)	Copper alloy
Material (accessories)	Polyamide (PA)

Technical characteristics

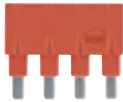
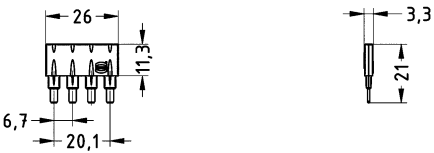
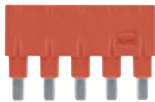
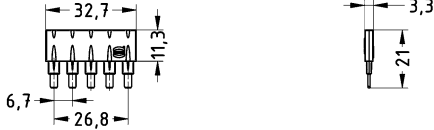
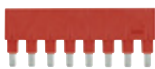
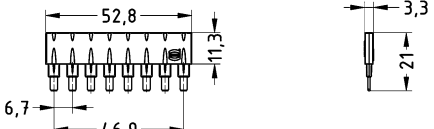
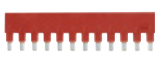
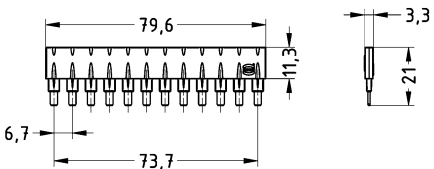
Colour (accessories)	RAL 3018 (strawberry red), RAL 5012 (light blue), RAL 5004 (black blue)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Details

When using plug-in jumpers within Han® ES Press hoods of high construction must be used.

Identification		Part number	Drawing (dimensions in mm)
Han® ES Press, Plug-in jumper, 2x 1, Transverse, Contact surface: Tin plated		Black Blue Red 09 33 000 9822 09 33 000 9821 09 33 000 9820	
Han® ES Press, Plug-in jumper, 1x 2, Longitudinal, Contact surface: Tin plated		Black Blue Red 09 33 000 9852 09 33 000 9841 09 33 000 9830	
Han® ES Press, Plug-in jumper, 1x 3, Longitudinal, Contact surface: Tin plated		Black Blue Red 09 33 000 9853 09 33 000 9842 09 33 000 9831	

Han E/
EE

Identification			Part number	Drawing (dimensions in mm)	
Han® ES Press, Plug-in jumper, 1x 4, Longitudinal, Contact surface: Tin plated		Black Blue Red	09 33 000 9854 09 33 000 9843 09 33 000 9832		
Han® ES Press, Plug-in jumper, 1x 5, Longitudinal, Contact surface: Tin plated		Black Blue Red	09 33 000 9855 09 33 000 9844 09 33 000 9833		
Han® ES Press, Plug-in jumper, 1x 8, Longitudinal, Contact surface: Tin plated		Black Blue Red	09 33 000 9858 09 33 000 9847 09 33 000 9836		
Han® ES Press, Plug-in jumper, 1x 12, Longitudinal, Contact surface: Tin plated		Black Blue Red	09 33 000 9862 09 33 000 9851 09 33 000 9840		

Han
03
·
30

Features

- Higher density of crimping contacts
- Coded insert
- Gold and silver contacts available

Technical characteristics

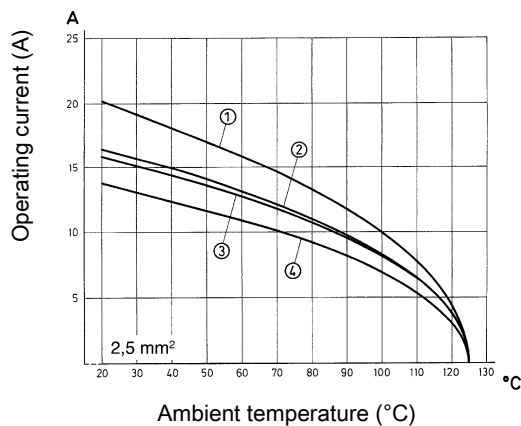
Number of contacts	10, 18, 32, 46, 64, 92
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Rated voltage acc. to CSA	600 V
Insulation resistance	$>10^{10} \Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles	≥ 500
Material (insert)	Polycarbonate (PC)
Colour (insert)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Derating

Current carrying capacity

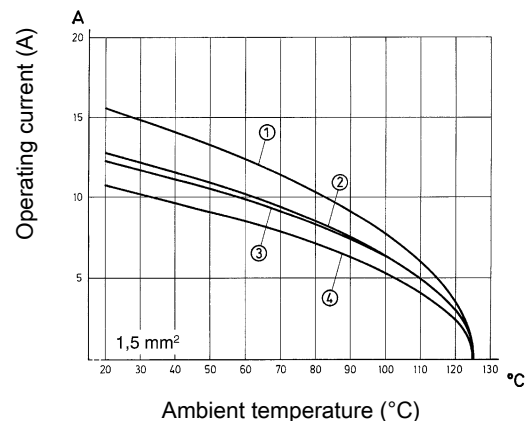
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the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

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



- ① Han® 10 EE
- ② Han® 18 EE
- ③ Han® 32 EE Han® 64 EE
- ④ Han® 46 EE Han® 92 EE

Derating



- ① Han® 10 EE
- ② Han® 18 EE
- ③ Han® 32 EE Han® 64 EE
- ④ Han® 46 EE Han® 92 EE

Specifications and approvals

EN 60664-1
IEC 61984
UL 1977 ECBT2.E235076
UL 2237 PVVA2.E318390
CSA-C22.2 No. 182.3 PVVA8.E318390
DNV GL

Details

Internal use in the switch cabinet in conjunction with Han-Snap® (see chapter Han 11)

Suitable for hoods/housings of series Han® B, Han® M, Han® EMC, Han® HPR, Han® Easy Hood (see chapter Han 31)

Tightening torque 0.5 Nm

Tightening torque PE screw 1.2 Nm

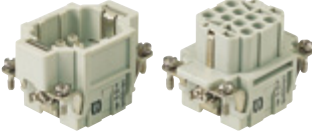
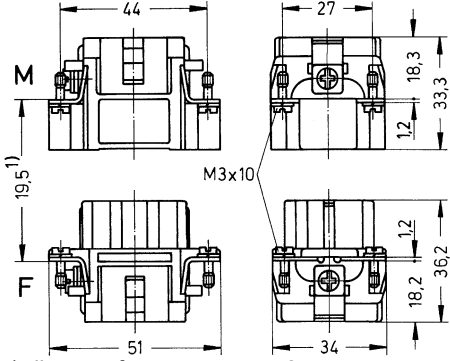
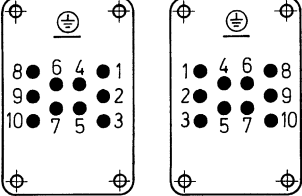
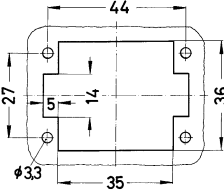


Number of contacts

10+

16 A 500 V 6 kV 3

Han E/
EE

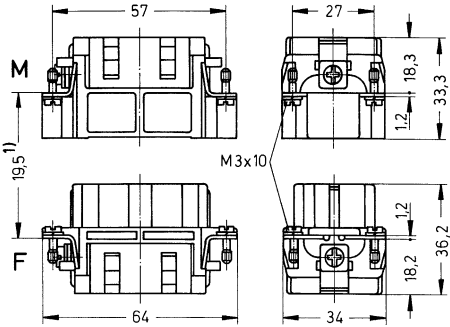
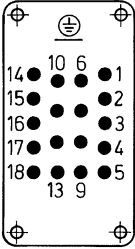
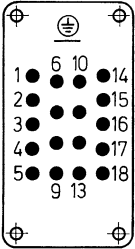
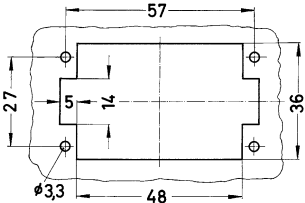
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EE, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 32 010 3001	09 32 010 3101	  M F Contact arrangement (view from termination side)  Panel cut out

Number of contacts

18+ 

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EE, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 32 018 3001	09 32 018 3101	 1) distance for contact max. 21 mm   M F Contact arrangement (view from termination side)  Panel cut out

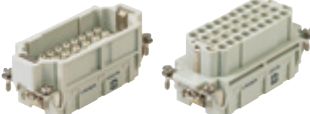
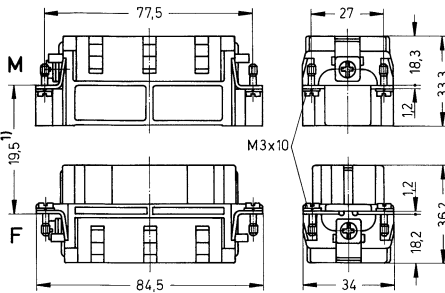
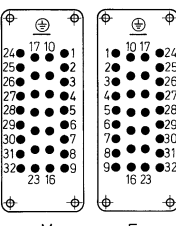
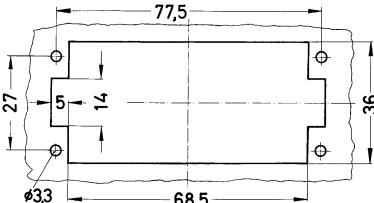


Number of contacts

32+

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EE, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 32 032 3001	09 32 032 3101	  Contact arrangement (view from termination side)  Panel cut out

Han
03
·
34

Number of contacts

46+

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EE, Crimp termination Please order crimp contacts separately.	0.14 ... 4	09 32 046 3001	09 32 046 3101	1) distance for contact max. 21 mm Contact arrangement (view from termination side) Panel cut out

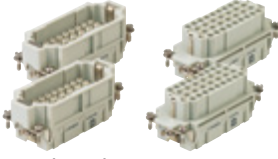
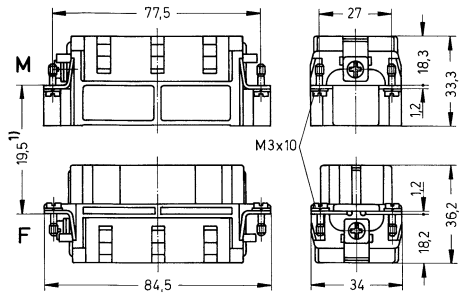
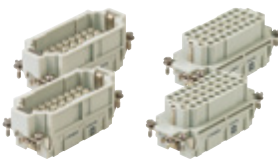
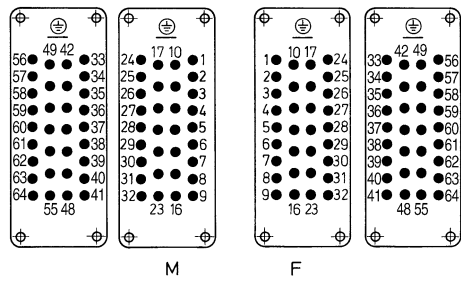
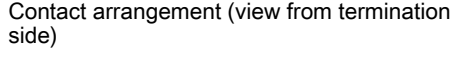
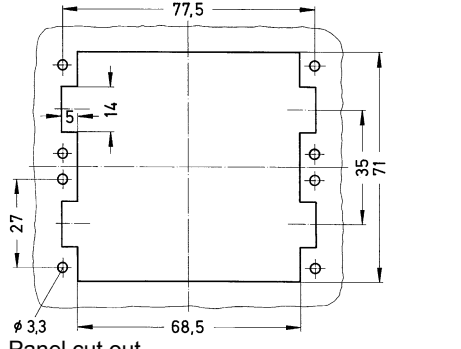


Number of contacts

64+

16 A 500 V 6 kV 3

Han E/
EE

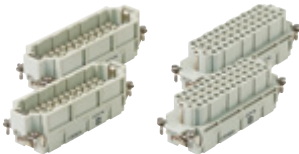
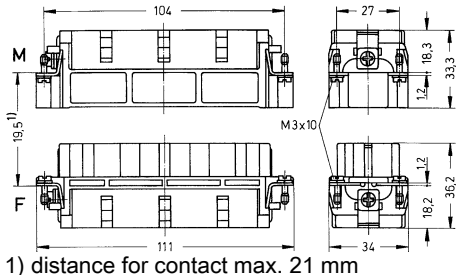
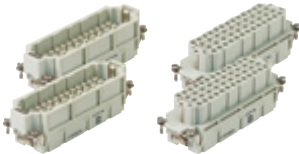
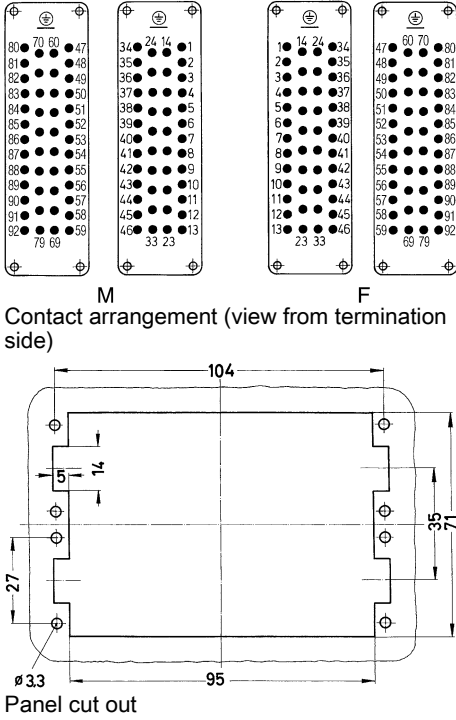
Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EE, Crimp termination, 1 ... 32  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 32 032 3001	09 32 032 3101	 1) distance for contact max. 21 mm
Han® EE, Continuing marking, Crimp termination, 33 ... 64  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 32 032 3011	09 32 032 3111	 1) distance for contact max. 21 mm
				 Contact arrangement (view from termination side)  Panel cut out



Number of contacts

92+

16 A 500 V 6 kV 3

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EE, Crimp termination, 1 ... 46  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 32 046 3001	09 32 046 3101	 1) distance for contact max. 21 mm
Han® EE, Continuing marking, Crimp termination, 47 ... 92  Please order crimp contacts separately. You need two inserts for a complete assembly!	0.14 ... 4	09 32 046 3011	09 32 046 3111	 Panel cut out

Features

- Highest density of crimping contacts
- Coded insert
- Gold and silver contacts available

Technical characteristics

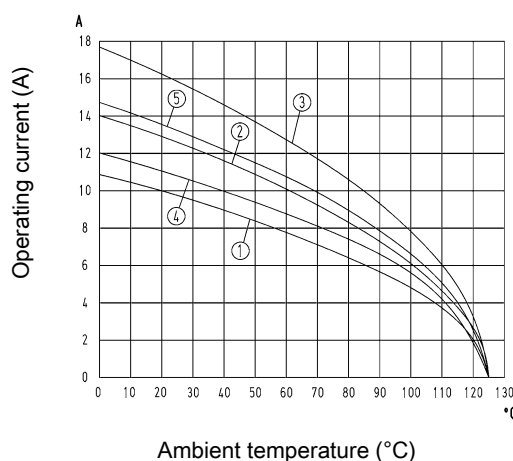
Number of contacts	40, 64
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	$>10^{10} \Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles	≥ 500
Material (insert)	Polycarbonate (PC)
Colour (insert)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

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® 64 EEE / 1.5 mm²
- ② Han® 64 EEE / 2.5 mm²
- ③ Han® 64 EEE / 4 mm²
- ④ Han® 40 EEE / 1.5 mm²
- ⑤ Han® 40 EEE / 2.5 mm²

Specifications and approvals

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

Details

Internal use in the switch cabinet in conjunction with Han-Snap® (see chapter Han 11)

Suitable for hoods/housings of series Han® B, Han® M, Han® EMC, Han® HPR, Han® Easy Hood (see chapter Han 31)

Tightening torque 0.5 Nm

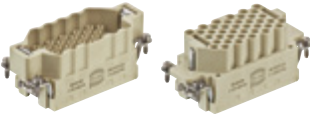
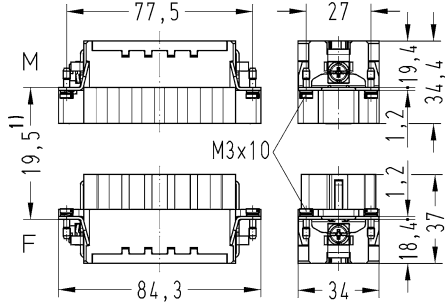
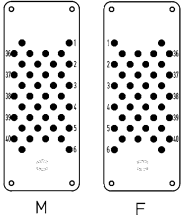
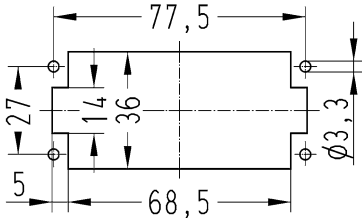
Tightening torque PE screw 1.2 Nm

Number of contacts

40+ 

16 A 500 V 6 kV 3

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han® EEE, Crimp termination  Please order crimp contacts separately.	0.14 ... 4	09 32 040 3001	09 32 040 3101	 1) distance for contact max. 21 mm  Contact arrangement (view from termination side)  Panel cut out

Number of contacts

64+ 

16 A 500 V 6 kV 3

Han E/
EE

Identification

Conductor cross-section (mm²)

Part number

Male Female

Drawing
(dimensions in mm)

Han® EEE,
Crimp termination

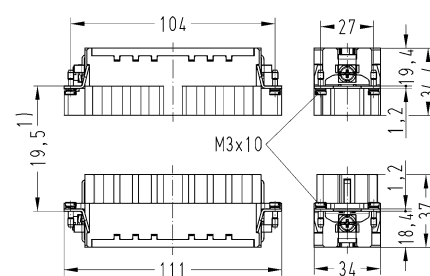


Please order crimp contacts separately.

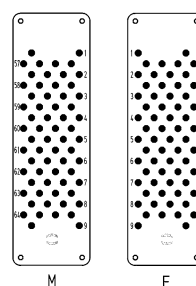
0.14 ... 4

09 32 064 3001

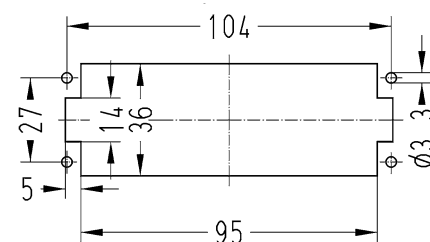
09 32 064 3101



1) distance for contact max. 21 mm



Contact arrangement (view from termination side)



Panel cut out

Technical characteristics

Contact resistance	≤1 mΩ
Material (contacts)	Copper alloy
Material (accessories)	Thermoplastic
RoHS	compliant with exemption

Specifications and approvals

EN 60664-1
IEC 61984

Details

Crimping tools see chapter Han 90

Remarks on the crimp technique

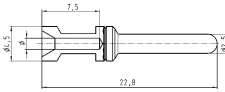
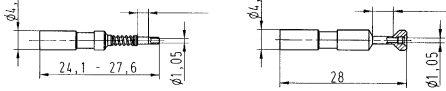
The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Coding pin

Use of the coding pin prevents incorrect mating to other connectors of the same type. The male pin should be omitted from the opposing cavity in the male insert.

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)																											
		Male	Female																												
Han E®, Crimp contact, Contact surface: Silver plated	0.14 ... 0.37	09 33 000 6127	09 33 000 6227																												
	0.5	09 33 000 6121	09 33 000 6220																												
	0.75	09 33 000 6114	09 33 000 6214																												
	1	09 33 000 6105	09 33 000 6205																												
	1.5	09 33 000 6104	09 33 000 6204																												
	2.5	09 33 000 6102	09 33 000 6202																												
	3	09 33 000 6106	09 33 000 6206																												
	4	09 33 000 6107	09 33 000 6207																												
Han E®, Crimp contact, Contact surface: Gold plated	0.14 ... 0.37	09 33 000 6117	09 33 000 6217																												
	0.5	09 33 000 6122	09 33 000 6222																												
	0.75	09 33 000 6115	09 33 000 6215																												
	1	09 33 000 6118	09 33 000 6218																												
	1.5	09 33 000 6116	09 33 000 6216																												
	2.5	09 33 000 6123	09 33 000 6223																												
	4	09 33 000 6119	09 33 000 6221																												
					<table><tr><th colspan="2">Conductor cross-section</th><th>Identification</th></tr><tr><td>0.14-0.37 mm²</td><td>AWG 26-22</td><td>no groove</td></tr><tr><td>0.5 mm²</td><td>AWG 20</td><td>no groove</td></tr><tr><td>0.75 mm²</td><td>AWG 18</td><td>1 groove*</td></tr><tr><td>1 mm²</td><td>AWG 18</td><td>1 groove</td></tr><tr><td>1.5 mm²</td><td>AWG 16</td><td>2 groove</td></tr><tr><td>2.5 mm²</td><td>AWG 14</td><td>3 groove</td></tr><tr><td>3 mm²</td><td>AWG 12</td><td>wide groove</td></tr><tr><td>4 mm²</td><td>AWG 12</td><td>no groove</td></tr></table> * on the back crimp collar Stripping length 7.5 mm	Conductor cross-section		Identification	0.14-0.37 mm²	AWG 26-22	no groove	0.5 mm²	AWG 20	no groove	0.75 mm²	AWG 18	1 groove*	1 mm²	AWG 18	1 groove	1.5 mm²	AWG 16	2 groove	2.5 mm²	AWG 14	3 groove	3 mm²	AWG 12	wide groove	4 mm²	AWG 12
Conductor cross-section		Identification																													
0.14-0.37 mm²	AWG 26-22	no groove																													
0.5 mm²	AWG 20	no groove																													
0.75 mm²	AWG 18	1 groove*																													
1 mm²	AWG 18	1 groove																													
1.5 mm²	AWG 16	2 groove																													
2.5 mm²	AWG 14	3 groove																													
3 mm²	AWG 12	wide groove																													
4 mm²	AWG 12	no groove																													

Han E/
EE

Identification	Conductor cross-section (mm²)	Part number		Drawing (dimensions in mm)												
		Male	Female													
Han E®, Crimp contact, Relay contact, Contact surface: Silver plated 	0.75 ... 1 1.5 2.5	09 33 000 6109 09 33 000 6110 09 33 000 6111		 <table><tr><th>Conductor cross-section</th><th>Ø</th><th>Stripping length</th></tr><tr><td>0.75-1 mm² AWG 18</td><td>1.45 mm</td><td>7.5 mm</td></tr><tr><td>1.5 mm² AWG 16</td><td>1.75 mm</td><td>7.5 mm</td></tr><tr><td>2.5 mm² AWG 14</td><td>2.25 mm</td><td>7.5 mm</td></tr></table>	Conductor cross-section	Ø	Stripping length	0.75-1 mm² AWG 18	1.45 mm	7.5 mm	1.5 mm² AWG 16	1.75 mm	7.5 mm	2.5 mm² AWG 14	2.25 mm	7.5 mm
Conductor cross-section	Ø	Stripping length														
0.75-1 mm² AWG 18	1.45 mm	7.5 mm														
1.5 mm² AWG 16	1.75 mm	7.5 mm														
2.5 mm² AWG 14	2.25 mm	7.5 mm														
FO contact, for 1 mm plastic fibre 		20 10 001 3311	20 10 001 3321	 Crimp zone												
Han E®, Han® EE, Han® EEE, Coding pin  for crimp inserts only With loss of one contact			09 33 000 9954	