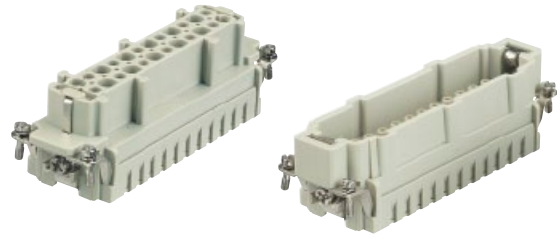
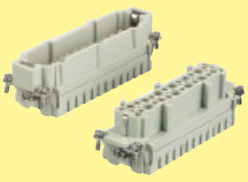
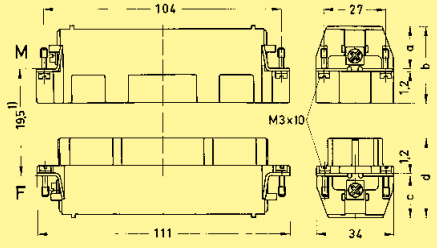
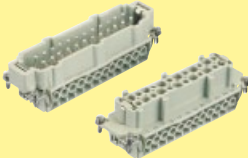
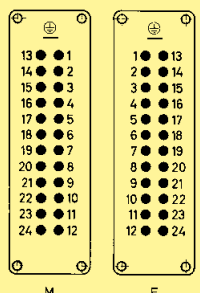
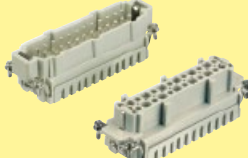
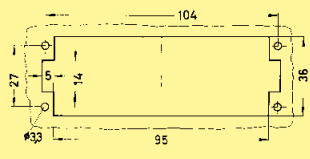
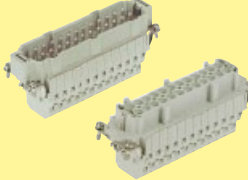


Number of contacts

24 +



Inserts

Identification	Series	Part number		Drawing	Dimensions in mm																				
		Male insert (M)	Female insert (F)																						
<p>Crimp terminal</p> <p>Order crimp contacts separately (see Technical characteristics on page 03.03)</p> 	Han E®	09 33 024 2602	09 33 024 2702	 <p>1) Distance for contact max. 21 mm</p> <table border="1"> <thead> <tr> <th></th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>Han E® screw</td> <td>18</td> <td>33</td> <td>18</td> <td>35</td> </tr> <tr> <td>Han® ES / Han E® crimp</td> <td>19</td> <td>34</td> <td>19</td> <td>36</td> </tr> <tr> <td>Han® ESS</td> <td>34</td> <td>49</td> <td>32</td> <td>49</td> </tr> </tbody> </table>		a	b	c	d	Han E® screw	18	33	18	35	Han® ES / Han E® crimp	19	34	19	36	Han® ESS	34	49	32	49	
	a	b	c	d																					
Han E® screw	18	33	18	35																					
Han® ES / Han E® crimp	19	34	19	36																					
Han® ESS	34	49	32	49																					
<p>Screw terminal with wire protection</p> 	Han E®	09 33 024 2601	09 33 024 2701	<p>Contact arrangement view from termination side</p> 																					
<p>Cage-clamp terminal</p> 	Han® ES	09 33 024 2616	09 33 024 2716	<p>Panel cut out</p> 																					
<p>Cage-clamp terminal two terminals per contact</p> 	Han® ESS	09 33 024 2672	09 33 024 2772																						

Han E/EE

Features

- Available in different termination techniques
 - Han E® Crimp terminal
 - Han E® Screw terminal
 - Han® ES Cage-clamp terminal
 - Han® ESS Cage-clamp terminal
 - Han® EE Crimp terminal
 - Han® EEE Crimp terminal
- Han E® covers a wide range of cross core sections
- Wire protection for Han E® screw

Specifications

DIN EN 60 664-1
DIN EN 61 984

Approvals



Inserts

Number of contacts 6, 10, 16, 24, 32 (2x 16),
48 (2x 24) + PE

Electrical data

acc. to EN 61 984 **16 A 500 V 6 kV 3**
 Rated current 16 A
 Rated voltage 500 V
 Rated impulse voltage 6 kV
 Pollution degree 3
 Pollution degree 2 also 16 A 400/690 V 6 kV 2

Rated voltage

acc. to UL/CSA 600 V
 Insulation resistance $\geq 10^{10} \Omega$
 Material polycarbonate
 Limiting temperatures -40 °C ... +125 °C
 Flammability acc. to UL 94 V 0
 Mechanical working life
 - mating cycles ≥ 500

Contacts

Material copper alloy
 Surface - hard-gold plated 2 μm Au over 3 μm Ni
 Surface - hard-silver plated 3 μm Ag
 Contact resistance $\leq 1 \text{ m}\Omega$
 Crimp terminal - min 0.14 mm² / AWG 26
 Crimp terminal - max 4 mm² / AWG 12
 Screw terminal - min 0.14 mm² / AWG 26
 Screw terminal - max 2.5 mm² / AWG 14
 Tightening/test torque 0.5 Nm
 Stripping length 7 mm

Hoods/Housings

Material aluminium die-cast
 Surface powder-coated
 Locking element Han-Easy Lock®
 Flammability acc. to UL 94 V 0
 Hoods/Housings seal NBR
 Limiting temperatures -40 °C ... +125 °C
 Degree of protection acc. to DIN EN 60 529
 for coupled connector IP 65

Further selection of hoods/housings see chapter 30 / chapter 31

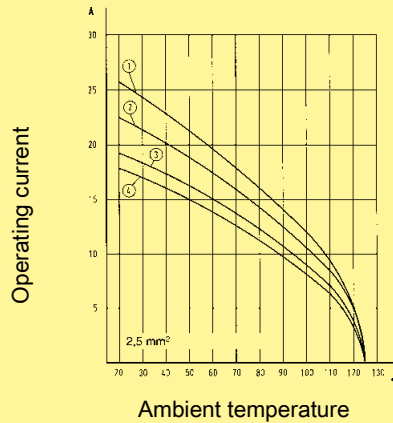
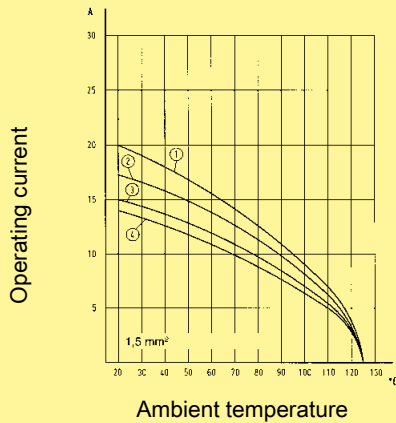
Accessories

Crimping tools chapter 99
 Cable clamps chapter 40
 Coding of hoods/housings chapter 40
 Label acc. to CSA-approval chapter 40
 Han-Snap® chapter 11
 Assembly plates for test connector chapter 40
 Special insert fixing screws chapter 40

Current carrying capacity

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

Measuring and testing techniques according to DIN EN 60 512-5



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

Han E/EE

Identification	Wire gauge (mm²)	Male contact	Female contact	Drawing	Dimensions in mm																										
Crimp contacts																															
Power contacts				<table border="1"> <thead> <tr> <th>Identification</th> <th>Wire gauge</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>no groove</td> <td>0.14-0.37 mm²</td> <td>AWG 26-22</td> </tr> <tr> <td>no groove</td> <td>0.5 mm²</td> <td>AWG 20</td> </tr> <tr> <td>1 groove*</td> <td>0.75 mm²</td> <td>AWG 18</td> </tr> <tr> <td>1 groove</td> <td>1 mm²</td> <td>AWG 18</td> </tr> <tr> <td>2 grooves</td> <td>1.5 mm²</td> <td>AWG 16</td> </tr> <tr> <td>3 grooves</td> <td>2.5 mm²</td> <td>AWG 14</td> </tr> <tr> <td>wide groove</td> <td>3 mm²</td> <td>AWG 12</td> </tr> <tr> <td>no groove</td> <td>4 mm²</td> <td>AWG 12</td> </tr> </tbody> </table> <p>* on the back crimp collar</p>	Identification	Wire gauge	Stripping length	no groove	0.14-0.37 mm²	AWG 26-22	no groove	0.5 mm²	AWG 20	1 groove*	0.75 mm²	AWG 18	1 groove	1 mm²	AWG 18	2 grooves	1.5 mm²	AWG 16	3 grooves	2.5 mm²	AWG 14	wide groove	3 mm²	AWG 12	no groove	4 mm²	AWG 12
Identification	Wire gauge	Stripping length																													
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3 grooves	2.5 mm²	AWG 14																													
wide groove	3 mm²	AWG 12																													
no groove	4 mm²	AWG 12																													
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																												
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																												
Relay contact silver plated	0.75-1	09 33 000 6109																													
	1.5	09 33 000 6110																													
	2.5	09 33 000 6111																													
F.O. contacts																															
for 1 mm plastic fibre		20 10 001 3311	20 10 001 3321																												
Coding pin for crimp inserts only			09 33 000 9954	<p>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.</p>																											

03 03

Crimp contacts 0.14 ... 0.37 mm² only used with BUCHANAN crimping tool

Stock items in bold type