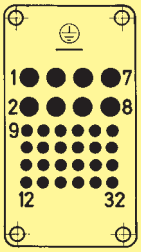
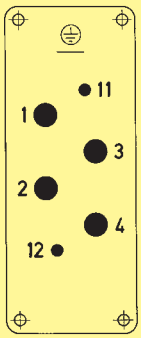
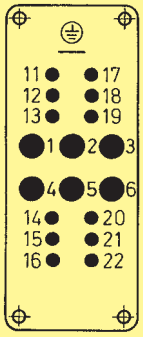
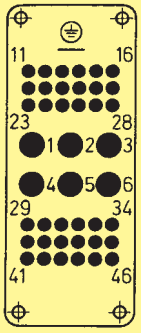
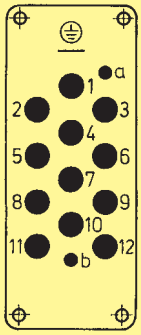
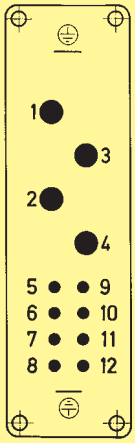
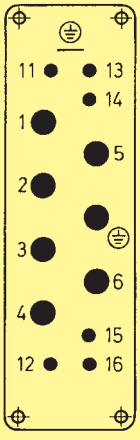
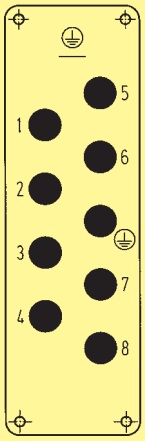
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Han-Com®

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Assembly details for Han® K 6/6 and K 8/0	05.35

Size	Description				
B					
10					
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24					
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32	**suitable for 2 inserts of size 16 B**				
48	**suitable for 2 inserts of size 24 B**				

Han Com

Summary

Type	Technical characteristics								Suitable Han® Hoods/ Housings
	Power area				Signal area				
	Number of pins	A	V~	Termination	Number of pins	A	V~	Termination	Size
Han® K 4/0	4+PE	80	830	screw	–	–	–	–	16 B, 32 B
4/2	4+PE	80	830	screw	2	16	400	screw	16 B, 32 B
4/8	4+PE	80	400	screw	8	16	400	screw	24 B, 48 B
6/6	6+PE	100	690	screw	6	16	400	screw	24 B, 48 B
8/0	8+PE	100	690	screw	8	–	–	–	24 B, 48 B
6/12	6+PE	40	690	screw	12	10	230/400	screw	16 B, 32 B
6/36	6+PE	40	690	crimp	36	10	160	crimp	16 B, 32 B
8/24	8+PE	16	230/400	crimp	24	10	160	crimp	10 B
12/2	12+PE	40	690	crimp	2	10	250	crimp	16 B, 32 B

Type identification

Han® K 6/12

- Number of signal contacts
- Number of power contacts
- Series Han® K / Han-Com®
- Industrial connectors Han®

Identification of contact position

– Han® K connectors in the power area from 1 to ...
in the signal area from 11 to …

– Han® K 4/8 and Han® K 8/24 consecutively from 1 to …

– Han® K 12/2 in the power area from 1 to 12
in the signal area with “a” and “b”

Comment for users

For the combination of several circuits in one cable and/or e.g. one connector the following standards are valid

VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Approvals

Inserts

Number of contacts	8 / 24 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**16 A 230/400 V 4 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Signal area	**10 A 160 V 2.5 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
- Pollution degree 2 also	10 A 250 V 4 kV 2
Working voltage acc. to UL/CSA	600 V / 300 V
Test voltage U_{rms}	3 kV / 2 kV
Insulation resistance	≥ 10^{10} Ω
Material	Polyamide
Limiting temperatures	- 40 °C / +125 °C
Flammability acc. to UL 94	HB
Mechanical working life	
- Mating cycles	≥ 500

Contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
- hard-gold plated	2 µm Au over 3 µm Ni
Contact resistance	≤ 1 mΩ / 3 mΩ
Crimp terminal	
- mm²	0.5 - 4 mm² / 0.14 - 2.5 mm²
- AWG	20 - 12 / 25 - 14

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

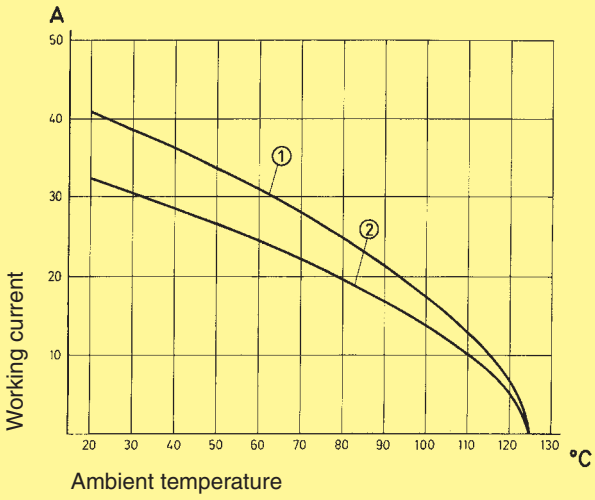
Accessories

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
PCB-adapter	chapter 40

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

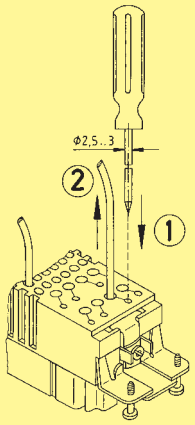
Control and test procedures according to DIN IEC 60 512-3.



① Wire gauge: 4 mm²
② Wire gauge: 2.5 mm²

Removal of Power Contacts (Han E® contacts)

① Push cross-slotted screwdriver (size 0 acc. to DIN 5260) in the relevant hole of the contact until it reaches the bottom.
② Withdraw the crimped contact from the insert.



Removal of Signal Contacts (Han D® contacts)

Description see removal tool chapter 99

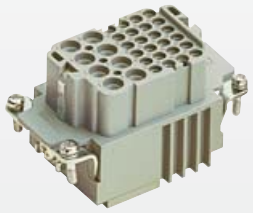
Han® K 8/24

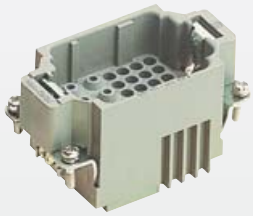
Size 10 B

400/160 V
16/10 A

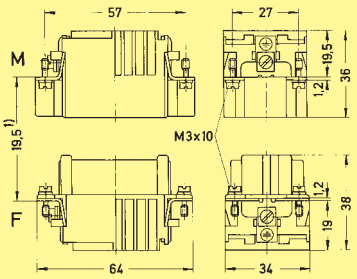
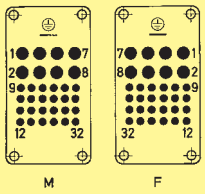
Number of contacts

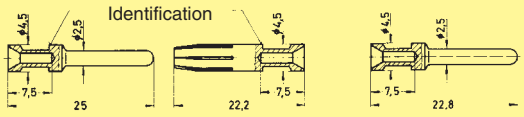
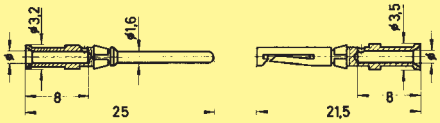
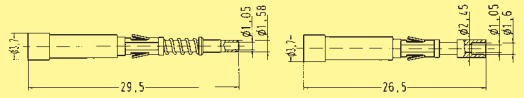
8/24 + ⏚





Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Crimp terminal Order crimp contacts separately	Han® K 8/24	**09 38 032 3001**	**09 38 032 3101**	 [1] Distance for contact max. 21 mm Contact arrangement View from termination side 	

Identification	Wire gauge (mm²)	Part No. Male contacts	Part No. Female contacts	Drawing	Dimension in mm
Crimp contacts Power contacts				Operating contact Identification Relay contact 	
silver plated	0.5	**09 33 000 6121**	**09 33 000 6220**		
	0.75	**09 33 000 6114**	**09 33 000 6214**		
	1.0	**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**		
	4.0	**09 33 000 6107**	**09 33 000 6207**		
gold plated	0.5	**09 33 000 6122**	**09 33 000 6222**		
	0.75	**09 33 000 6115**	**09 33 000 6215**		
	1.0	**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**		
	4.0	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			
Signal contact	0.14-0.37	**09 15 000 6104**	**09 15 000 6204**		
	0.5	**09 15 000 6103**	**09 15 000 6203**		
silver plated	0.75	**09 15 000 6105**	**09 15 000 6205**		
	1.0	**09 15 000 6102**	**09 15 000 6202**		
	1.5	**09 15 000 6101**	**09 15 000 6201**		
	2.5	**09 15 000 6106**	**09 15 000 6206**		
gold plated	0.14-0.37	**09 15 000 6124**	**09 15 000 6224**		
	0.5	**09 15 000 6123**	**09 15 000 6223**		
	0.75	**09 15 000 6125**	**09 15 000 6225**		
	1.0	**09 15 000 6122**	**09 15 000 6222**		
	1.5	**09 15 000 6121**	**09 15 000 6221**		
	2.5	**09 15 000 6126**	**09 15 000 6226**		
FOC contacts for 1 mm plastic fibre		**20 10 001 3211**	20 10 001 3221		

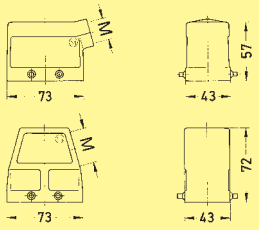
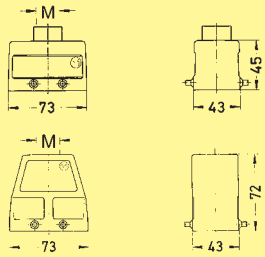
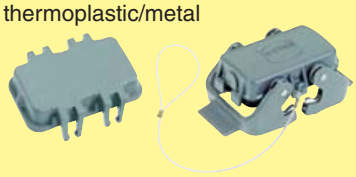
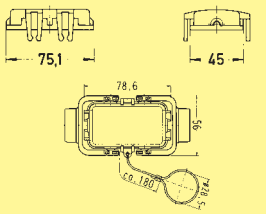
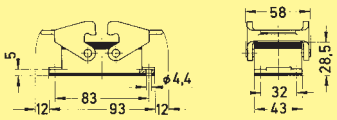
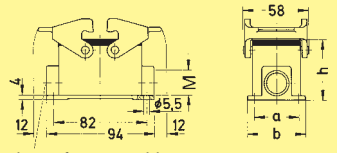
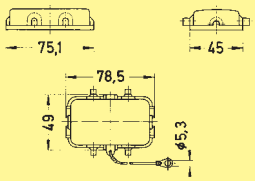
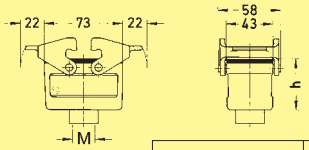
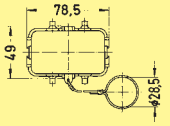
Identification	Wire gauge		ø	Stripping length
no groove	0.5 mm²	AWG 20	1.10 mm	7.5 mm
1 groove*	0.75 mm²	AWG 18	1.30 mm	7.5 mm
1 groove	1.0 mm²	AWG 18	1.45 mm	7.5 mm
2 grooves	1.5 mm²	AWG 16	1.75 mm	7.5 mm
3 grooves	2.5 mm²	AWG 14	2.25 mm	7.5 mm
no groove	4.0 mm²	AWG 12		7.5 mm

* on the back crimp collar

Wire gauge		ø	Stripping length
0.14-0.37 mm²	AWG 26-22	0.90 mm	8 mm
0.5 mm²	AWG 20	1.10 mm	8 mm
0.75 mm²	AWG 18	1.30 mm	8 mm
1.0 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

Stock items in bold type

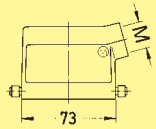
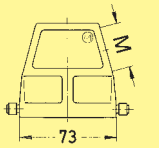
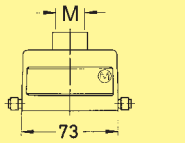
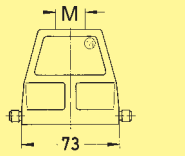
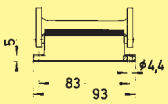
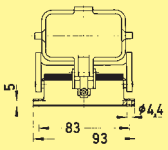
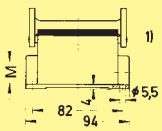
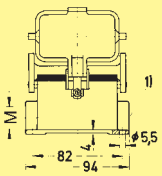
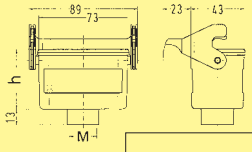
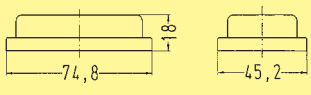
Han Com

	Identification	Part No. Low construction	Part No. High construction	M	Drawing	Dimensions in mm
Hoods	**Hoods** side-entry 	**19 30 010 1520** **19 30 010 1521**	**19 30 010 0527**	20 25 32		
Hoods	**Hoods** top-entry 	**19 30 010 1420** **19 30 010 1421**	**19 30 010 0427**	20 25 32		
Hoods	**Protection covers** for hoods thermoplastic/metal 	09 30 010 5401 **09 30 010 5423**				
Housings	**Housing** bulkhead mounting 	**09 30 010 0301**		–	Panel cut out 60 x 35 mm 	
Housings	**Housings** surface mounting  1 side-entry 2 side-entries	**19 30 010 1230** **19 30 010 1231** **19 30 010 1270**	**19 30 010 0231** **19 30 010 0271** **19 30 010 0272**	20 25 20 25 32	 Blind way for one cable entry	
Housings	**Protection covers** for housings bulkhead/surface mounting thermoplastic/metal 	**09 30 010 5407** **09 30 010 5425**				
Housings	**Hoods** cable to cable 	19 30 010 1730	19 30 010 0736 **19 30 010 0737**	20 25 32		
Housings	**Protection cover** for hoods cable to cable metal 	09 30 010 5427				

	a	b	h
Low construction	40	52	54
High construction	45	57	81

	h
Low construction	47.5
High construction	74.5

Stock items in bold type

Identification	Part No. Low construction	Part No. High construction	M	Drawing	Dimensions in mm
Hoods					
Hoods side-entry	**19 30 010 1540**		20		
	19 30 010 1541		25		
		19 30 010 0547	32		
Hoods top-entry	**19 30 010 1440**		20		
	19 30 010 1441		25		
		19 30 010 0447	32		
Housings					
Housings bulkhead mounting	**09 30 010 0305**		–	Panel cut out 60 x 35 mm 	
	with thermo-plastic cover **09 30 010 0303**		–		
	with metal cover **09 30 010 0318**		–		
Housings surface mounting 1 side-entry	**19 30 010 1250**		20		
2 side-entries	**19 30 010 1290**	**19 30 010 0291** **19 30 010 0292**	20 25 32		
1 side-entry	with thermo-plastic cover 19 30 010 1255		20		
2 side-entries	with thermo-plastic cover **19 30 010 1295**	with thermo-plastic cover **19 30 010 0296** 19 30 010 0297	20 25 32		
	with metal cover 19 30 010 2295	with metal cover **19 30 010 7296**	20 25	[1] Blind way for one cable entry	
Hoods cable to cable	**19 30 010 1750**	**19 30 010 0756** 19 30 010 0757	20 25 32		
Dust protection cover	**09 30 010 5406**				

	a	b	h
Low construction	40	52	54
High construction	45	57	81

	h
Low construction	47.5
High construction	74.5

Han Com

Stock items in bold type

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Approvals

Inserts

Number of contacts	4 / 2 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**80 A 830 V 8 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
– Pollution degree 2 also	80 A 1000 V 8 kV 2
Signal area	**16 A 400 V 6 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
– Pollution degree 2 also	16 A 400/690 V 6 kV 2
Working voltage acc. to UL/CSA	600 V / 300 V
Insulation resistance	≥ 10^{10} Ω
Material	Polycarbonate
Limiting temperatures	- 40 °C / +125 °C
Flammability acc. to UL 94	V 0
Mechanical working life	
- Mating cycles	≥ 500

Contacts

Power contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 0.3 mΩ
Screw terminal	
- Wire gauge[1)]	1.5 - 16 mm²
- AWG	16 - 6

- Tightening torque

mm²	1.5	2.5	4	6	10	16
Nm	1.2	2	3	3	3	3

Signal contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 1 mΩ
Screw terminal	
- Wire gauge[1)]	0.5 - 2.5 mm²
- AWG	20 - 14
- Tightening torque	0.5 Nm

In accordance with the appropriate regulations a wire-end sleeve has to be used at clamps without wire protection (s. p. 00.12).

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

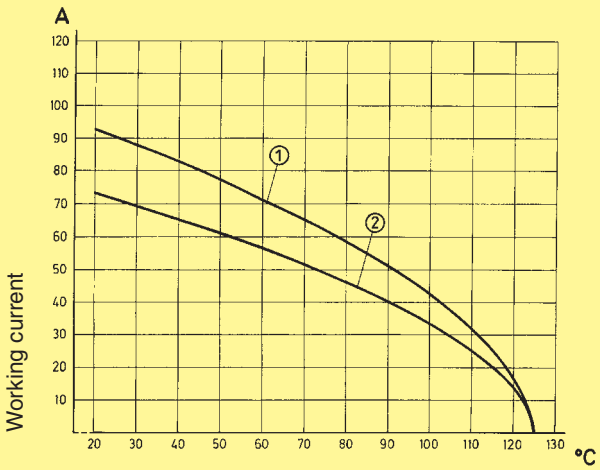
Accessories

Cable clamps	chapter 40
Coding of hoods/housings	chapter 40
Label acc. to CSA-approval	chapter 40
Han-Snap®	chapter 11

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



Ambient temperature

① Wire gauge: 16 mm²
② Wire gauge: 10 mm²

[1)] geometrical diameter

Number of contacts

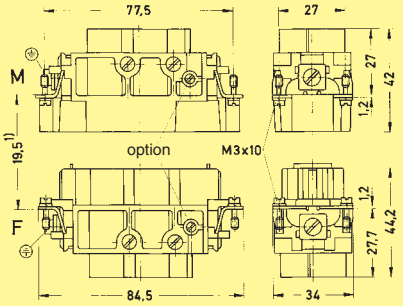
4/0, 4/2 + ⏚





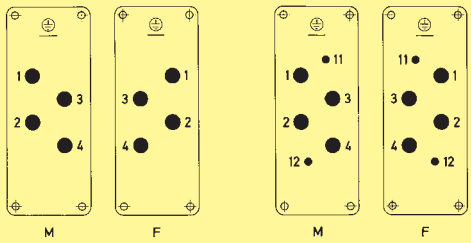
Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Screw terminal	Han® K 4/0	**09 38 006 2611**	**09 38 006 2711**		
	Han® K 4/2	**09 38 006 2601**	**09 38 006 2701**		



1) Distance for contact max. 21 mm

Contact arrangement View from termination side



Han® K 4/0 Han® K 4/2

Hoods/Housings from page 05.22 onwards

Stock items in bold type

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Approvals

Inserts

Inserts	6 / 12 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**40 A 690 V 8 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Signal area	**10 A 230/400 V 4 kV 3**
Working current	
Working voltage conductor – ground	
Working voltage conductor – conductor	
Rated impulse voltage	
Pollution degree	
Working voltage acc. to UL/CSA	600 V / 300 V
Insulation resistance	≥ 10^{10} Ω
Material	Polycarbonate
Limiting temperatures	- 40 °C / +125 °C
Flammability acc. to UL 94	V 0
Mechanical working life	
- Mating cycles	≥ 500

Contacts

Power contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 0.5 mΩ
Screw terminal	
- Wire gauge[1)]	2.5 - 10 mm²
- AWG	14 - 8

- Tightening torque

mm²	2.5	4	6	10
Nm	1.5	1.5	2	2

- Stripping length

mm²	2.5	4	6	10
mm	5^{+1}	5^{+1}	8^{+1}	8^{+1}

Max. insulation diameter Ø = 5 mm

Signal contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 3 mΩ
Screw terminal	
- Wire gauge[1)]	0.2 - 2.5 mm²
- AWG	24 - 14
- Tightening torque	0.8 Nm

In accordance with the appropriate regulations a wire-end sleeve has to be used at clamps without wire protection (s. p. 00.12).

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
Hoods/Housings seal	NBR
Limiting temperatures	- 40 °C / +125 °C
Degree of protection acc. to DIN 40 050 for coupled connector	IP 65
Further selection of hoods/housings	chapter 30 / chapter 31

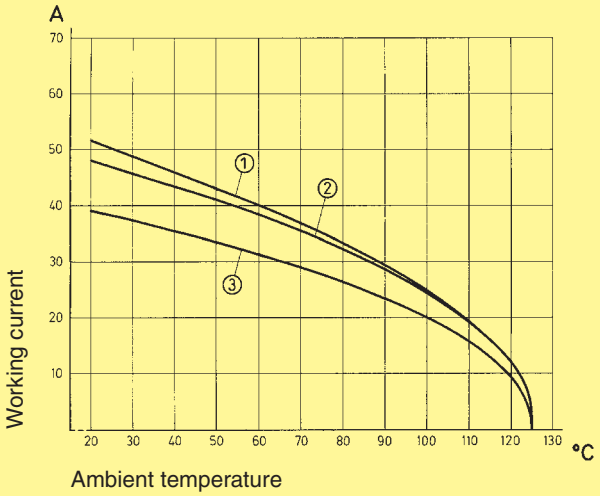
Accessories

Cable clamps	chapter 40
Coding of hoods/housings	chapter 40
Label acc. to CSA-approval	chapter 40
Han-Snap®	chapter 11

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



Ambient temperature

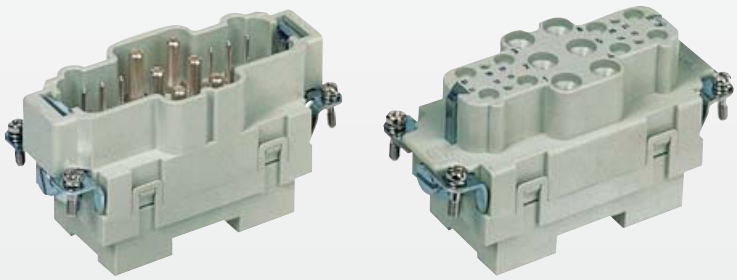
① Wire gauge: 10 mm²
② Wire gauge: 6 mm²
③ Wire gauge: 4 mm²

Han Com

[1)] geometrical diameter

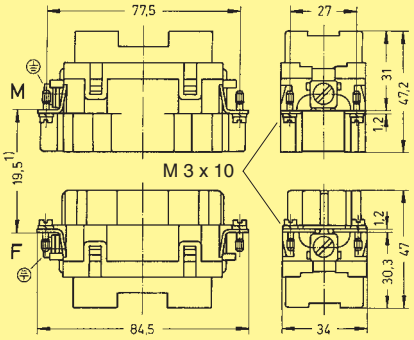
Number of contacts

6/12 + ⏚



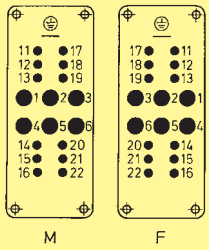
Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Screw terminal	Han® K 6/12	**09 38 018 2601**	**09 38 018 2701**		



1) Distance for contact max. 21 mm

Contact arrangement View from termination side



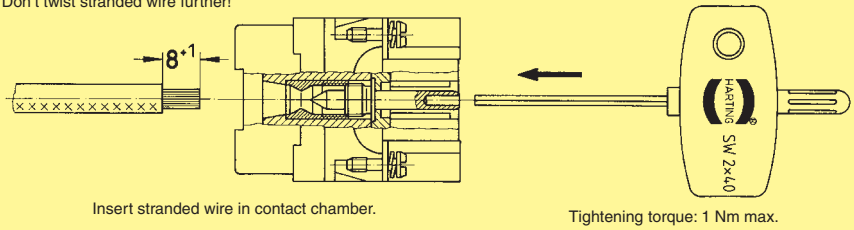
Screwdriver for axial setscrew		**09 99 000 0313**			



Working instructions for axial setscrew

For stranded wire 2.5 ... 10 mm² fine wire
(superfine wire 2.5 ... 6 mm²)
Don't twist stranded wire further!

Example: Male insert



Insert stranded wire in contact chamber.

During tightening of the lock nut, hold stranded wire in position.

Tightening torque: 1 Nm max.

Hoods/Housings from page 05.22 onwards

Stock items in bold type

Specifications	DIN VDE 0627 DIN VDE 0110 DIN EN 61 984
Approvals	,

Inserts

Number of contacts	6 / 36 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**40 A 690 V 8 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Signal area	**10 A 160 V 2,5 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
- Pollution degree 2 also	10 A 250 V 4 kV 2
Working voltage acc. to UL/CSA	600 V / 300 V
Test voltage U_{rms}	3 kV / 2 kV
Insulation resistance	≥ 10^{10} Ω
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-silver plated	3 µm Ag
- hard-gold plated	2 µm Au over 3 µm Ni
Contact resistance	≤ 0.3 mΩ / 3 mΩ
Crimp terminal	
- mm²	1.5 - 6 mm² / 0.14 - 2.5 mm²
- AWG	16 - 10 / 26 - 14
Max. insulation	
- Power contacts	ø = 5 mm

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

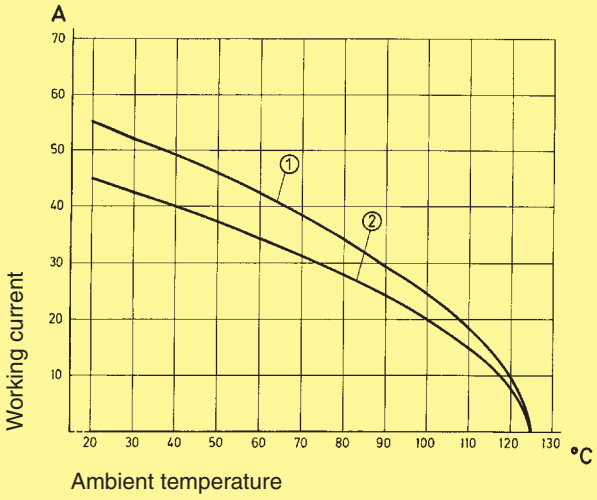
Accessories

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
PCB-Adapter	chapter 40

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



① Wire gauge: 6 mm²
② Wire gauge: 4 mm²

Removal of Power Contacts (Han® C contacts)

Description see removal tool chapter 99

Number of contacts

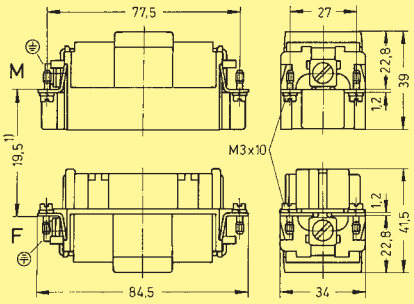
6/36 + ⏚





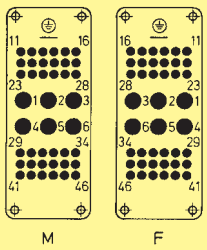
Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Crimp terminal Order crimp contacts separately	Han® K				
	6/36	**09 38 042 3001**	**09 38 042 3101**		

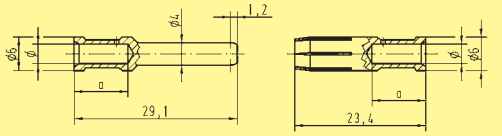


1) Distance for contact max. 21 mm

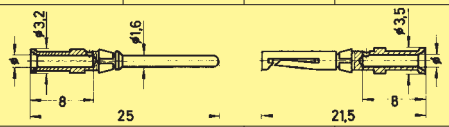
Contact arrangement
View from termination side



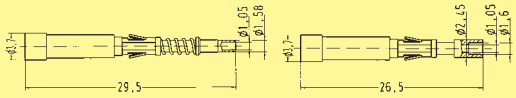
Identification	Wire gauge (mm²)	Part No. Male contacts	Part No. Female contacts	Drawing	Dimensions in mm
Crimp contacts Power contacts					
silver plated	1.5	**09 32 000 6104**	**09 32 000 6204**		
	2.5	**09 32 000 6105**	**09 32 000 6205**		
	4.0	**09 32 000 6107**	**09 32 000 6207**		
	6.0	**09 32 000 6108**	**09 32 000 6208**		
Signal contacts	0.14-0.37	**09 15 000 6104**	**09 15 000 6204**		
	0.5	**09 15 000 6103**	**09 15 000 6203**		
	0.75	**09 15 000 6105**	**09 15 000 6205**		
silver plated	1.0	**09 15 000 6102**	**09 15 000 6202**		
	1.5	**09 15 000 6101**	**09 15 000 6201**		
	2.5	**09 15 000 6106**	**09 15 000 6206**		
	0.14-0.37	**09 15 000 6124**	**09 15 000 6224**		
	0.5	**09 15 000 6123**	**09 15 000 6223**		
	0.75	**09 15 000 6125**	**09 15 000 6225**		
gold plated	1.0	**09 15 000 6122**	**09 15 000 6222**		
	1.5	**09 15 000 6121**	**09 15 000 6221**		
	2.5	**09 15 000 6126**	**09 15 000 6226**		
FOC contacts for 1 mm plastic fibre		**20 10 001 3211**	20 10 001 3221		



Wire gauge		ø	Stripping length
1.5 mm²	AWG 16	1.75 mm	9 mm
2.5 mm²	AWG 14	2.25 mm	9 mm
4.0 mm²	AWG 12	2.85 mm	9.5 mm
6.0 mm²	AWG 10	3.5 mm	9.5 mm



Wire gauge		ø	Stripping length
0.14-0.37 mm²	AWG 26-22	0.90 mm	8 mm
0.5 mm²	AWG 20	1.10 mm	8 mm
0.75 mm²	AWG 18	1.30 mm	8 mm
1.0 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



Hoods/Housings from page 05.22 onwards

Stock items in bold type

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Approvals

Inserts

Number of contacts	12 / 2 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**40 A 690 V 8 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Signal area	**10 A 250 V 4 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Working voltage acc. to UL/CSA	600 V / 300 V
Insulation resistance	≥ 10^{10} Ω
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-silver plated	3 µm Ag
- hard-gold plated	2 µm Au over 3 µm Ni
Contact resistance	≤ 0.3 mΩ / 3 mΩ
Crimp terminal	
- mm²	1.5 - 6 mm² / 0.14 - 2.5 mm²
- AWG	16 - 10 / 26 - 14

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

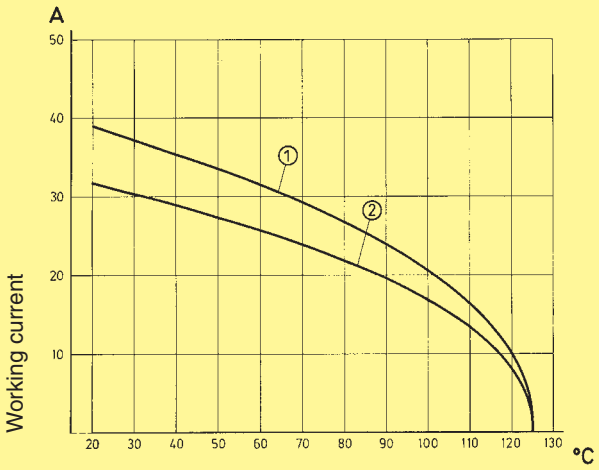
Accessories

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

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



① Wire gauge: 6 mm²
② Wire gauge: 4 mm²

Removal of Power Contacts (Han® C contacts)

Description see removal tool chapter 99

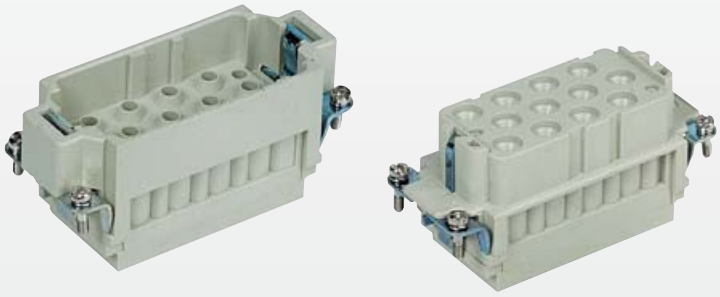
Han® K 12/2 (12 HsC)

Size 16 B

690/250 V
40/10 A

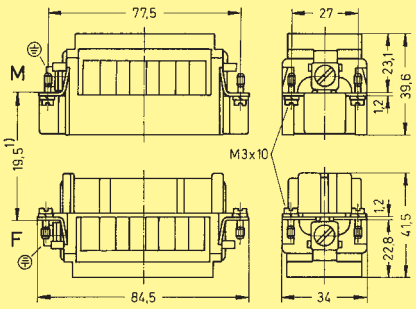
Number of contacts

12/2 + ⏚



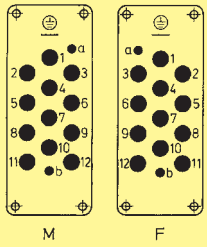
Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Crimp terminal Order crimp contacts separately	Han® K				
	12/2	**09 32 012 3001**	**09 32 012 3101**		

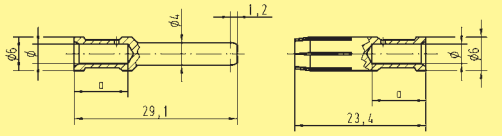


1) Distance for contact max. 21 mm

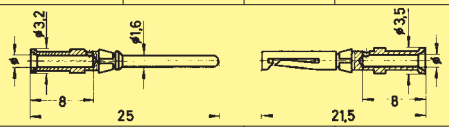
Contact arrangement
View from termination side



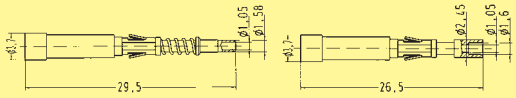
Identification	Wire gauge (mm²)	Part No. Male contacts	Part No. Female contacts	Drawing	Dimensions in mm
Crimp contacts Power contacts					
silver plated	1.5	**09 32 000 6104**	**09 32 000 6204**		
	2.5	**09 32 000 6105**	**09 32 000 6205**		
	4.0	**09 32 000 6107**	**09 32 000 6207**		
	6.0	**09 32 000 6108**	**09 32 000 6208**		
Signal contacts	0.14-0.37	**09 15 000 6104**	**09 15 000 6204**		
	0.5	**09 15 000 6103**	**09 15 000 6203**		
	0.75	**09 15 000 6105**	**09 15 000 6205**		
silver plated	1.0	**09 15 000 6102**	**09 15 000 6202**		
	1.5	**09 15 000 6101**	**09 15 000 6201**		
	2.5	**09 15 000 6106**	**09 15 000 6206**		
	0.14-0.37	**09 15 000 6124**	**09 15 000 6224**		
	0.5	**09 15 000 6123**	**09 15 000 6223**		
	0.75	**09 15 000 6125**	**09 15 000 6225**		
gold plated	1.0	**09 15 000 6122**	**09 15 000 6222**		
	1.5	**09 15 000 6121**	**09 15 000 6221**		
	2.5	**09 15 000 6126**	**09 15 000 6226**		
FOC contacts for 1 mm plastic fibre		**20 10 001 3211**	20 10 001 3221		



Wire gauge		ø	Stripping length
1.5 mm²	AWG 16	1.75 mm	9 mm
2.5 mm²	AWG 14	2.25 mm	9 mm
4.0 mm²	AWG 12	2.85 mm	9.5 mm
6.0 mm²	AWG 10	3.5 mm	9.5 mm



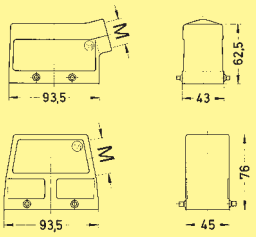
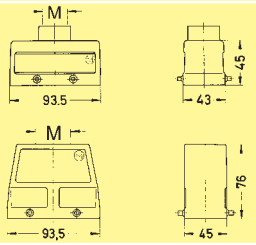
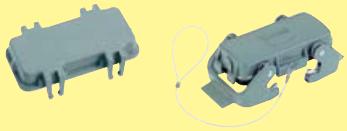
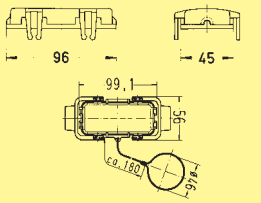
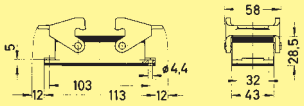
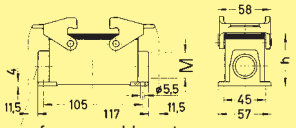
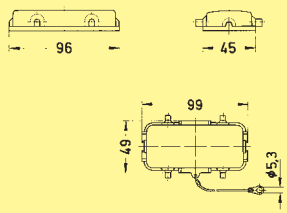
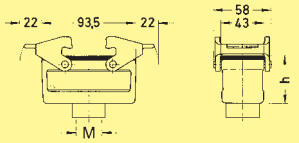
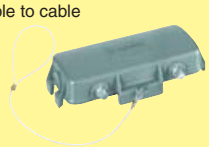
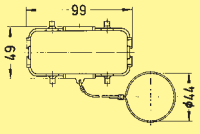
Wire gauge		ø	Stripping length
0.14-0.37 mm²	AWG 26-22	0.90 mm	8 mm
0.5 mm²	AWG 20	1.10 mm	8 mm
0.75 mm²	AWG 18	1.30 mm	8 mm
1.0 mm²	AWG 18	1.45 mm	8 mm
1.5 mm²	AWG 16	1.75 mm	8 mm
2.5 mm²	AWG 14	2.25 mm	6 mm



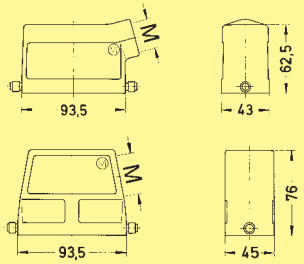
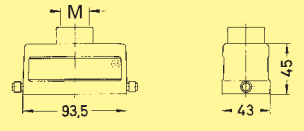
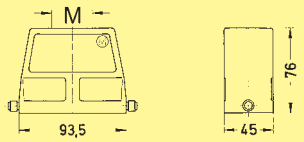
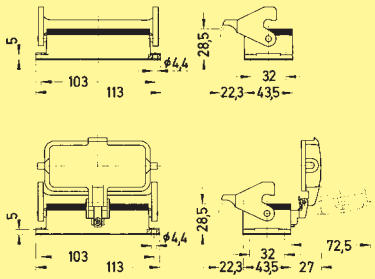
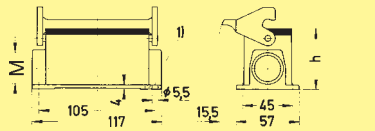
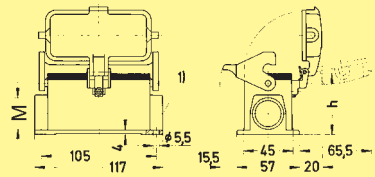
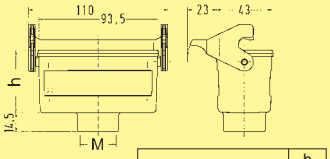
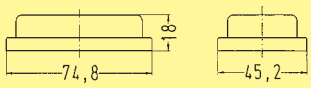
Han Com

Stock items in bold type

Standard Hoods/Housings with 2 levers on the housing — Size 16 B

	Identification	Part No. Low construction	Part No. High construction	M	Drawing	Dimensions in mm
Hoods	**Hoods** side-entry 	**19 30 016 1521** **19 30 016 1522**	**19 30 016 0527** **19 30 016 0528**	25 32 32 40		
Hoods	**Hoods** top-entry 	**19 30 016 1421** 19 30 016 1422	**19 30 016 0427** **19 30 016 0428**	25 32 32 40		
Hoods	**Protection covers** for housings thermoplastic/metal 	09 30 016 5401 **09 30 016 5422**				
Housings	**Housing** bulkhead mounting 	**09 30 016 0301**		–	Panel cut out 82 x 35 mm 	
Housings	**Housings** surface mounting 1 side-entry 	**19 30 016 1231**	**19 30 016 0232**	25 32		
Housings	2 side-entries	**19 30 016 1271**	**19 30 016 0271** **19 30 016 0272** 19 30 016 0273	25 32 40	Blind way for one cable entry h: Low construction 56; High construction 81	
Housings	**Protection covers** for housings bulkhead mounting thermoplastic/metal 	**09 30 016 5405** **09 30 016 5425**				
Housings	**Hoods** cable to cable 	**19 30 016 1731**	**19 30 016 0736** 19 30 016 0737	25 32	 h: Low construction 47.5; High construction 78.5	
Housings	**Protection cover** for hoods cable to cable metal 	09 30 016 5426				

Stock items in bold type

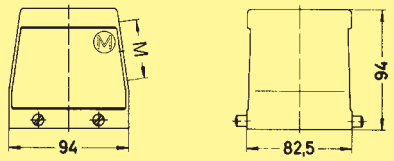
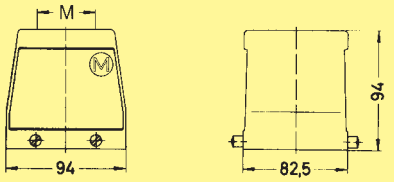
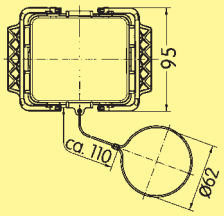
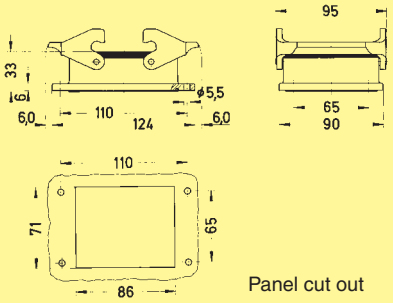
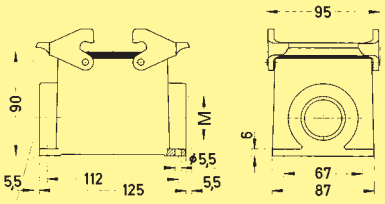
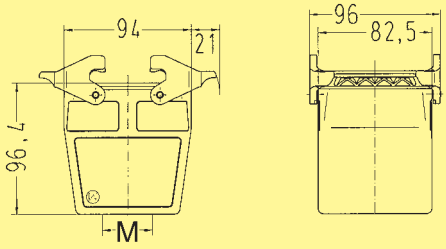
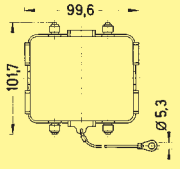
Identification	Part No. Low construction	Part No. High construction	M	Drawing	Dimensions in mm
Hoods					
Hoods side-entry	**19 30 016 1541** 19 30 016 1542		25 32		
		19 30 016 0547 19 30 016 0548	32 40		
Hoods top-entry	**19 30 016 1441** **19 30 016 1442**		25 32		
		19 30 016 0447 19 30 016 0448	32 40		
Housings					
Housings bulkhead mounting	**09 30 016 0307** with thermo-plastic cover **09 30 016 0306** with metal cover **09 30 016 0318**		– – –	Panel cut out 82 x 35 mm 	
Housings surface mounting 1 side-entry	**19 30 016 1251**	**19 30 016 0252**	25 32		
2 side-entries	**19 30 016 1291**	**19 30 016 0291** **19 30 016 0292**	25 32		
1 side-entry	with thermo-plastic cover **19 30 016 1256**		25		
2 side-entries	with thermo-plastic cover **19 30 016 1296**	with thermo-plastic cover **19 30 016 0297**	25 32	[1] Blind way for one cable entry	
2 side-entries	with metal cover 19 30 016 2296	with metal cover 19 30 016 7297	25 32		
Hoods cable to cable	**19 30 016 1751**	**19 30 016 0757**	25 32		
Dust protection cover	**09 30 016 5406**				

	h
Low construction	56
High construction	81

	h
Low construction	47.5
High construction	78.5

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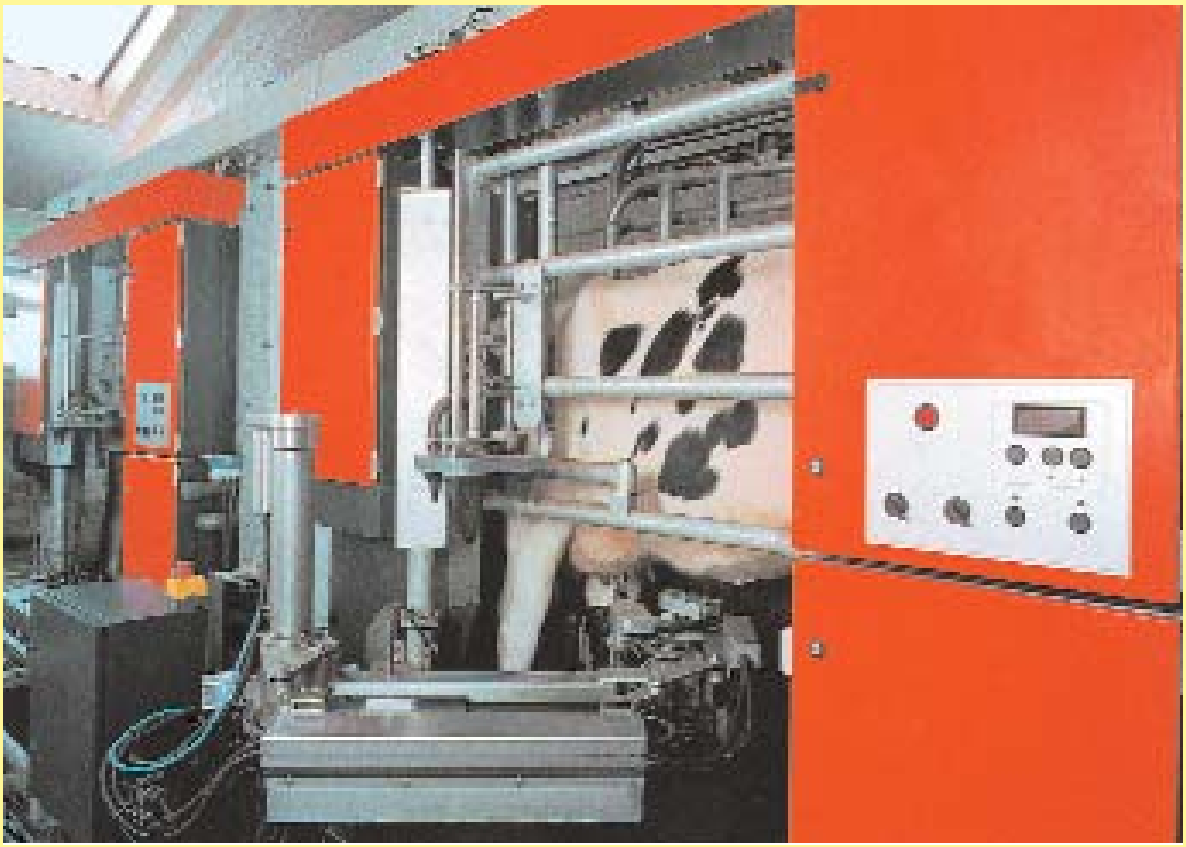
Stock items in bold type

Identification		Part No.	M	Drawing	Dimensions in mm
Hoods	Hoods side-entry	**19 30 032 0527** **19 30 032 0528** 19 30 032 0529	32 40 50		
	Hoods top-entry	**19 30 032 0427** 19 30 032 0428 19 30 032 0429	32 40 50		
	Protection cover for hoods	**09 30 032 5420**	–		
Housings	Housing bulkhead mounting	**09 30 032 0301**	–	 Panel cut out	
	Housings surface mounting	**19 30 032 0232** 19 30 032 0272 **19 30 032 0273**	1 x 32 2 x 32 2 x 40	 Blind way for one cable entry	
	Hoods cable to cable	19 30 032 0738	2 x 40		
	Protection covers for housings	**09 30 032 5425**	–		

Han Com

Stock items in bold type





Automatic milking chambers
PROLION, Holding N.V., Netherlands

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Approvals

Inserts

Number of contacts	4 / 8 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**80 A 400 V 6 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
- Pollution degree 2 also	80 A 400/690 V 6 kV 2
Signal area	**16 A 400 V 6 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Working voltage acc. to UL/CSA	600 V / 600 V
Insulation resistance	≥ 10^{10} Ω
Material	Polyamide
Limiting temperatures	- 40 °C / +125 °C
Flammability acc. to UL 94	HB
Mechanical working life	
- Mating cycles	≥ 500

Contacts

Power contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 0.3 mΩ
Screw terminal	
- Wire gauge[1)]	1.5 - 16 mm²
- AWG	16 - 6

- Tightening torque

mm²	1.5	2.5	4	6	10	16
Nm	1.2	2	3	3	3	3

Signal contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 1 mΩ
Screw terminal	
- Wire gauge[1)]	0.5 - 2.5 mm²
- AWG	20 - 14
- Tightening torque	0.5 Nm

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

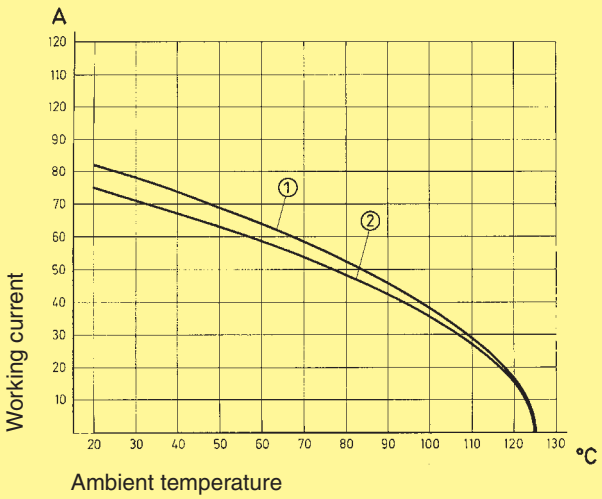
Accessories

Cable clamps	chapter 40
Coding of hoods/housings	chapter 40
Label acc. to CSA-approval	chapter 40
Han-Snap®	chapter 11

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.

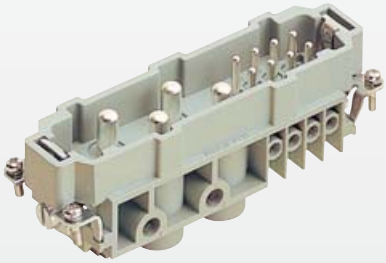


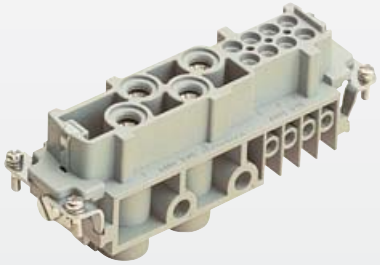
① Wire gauge: 16 mm²
② Wire gauge: 10 mm²

[1)] geometrical diameter

Number of contacts

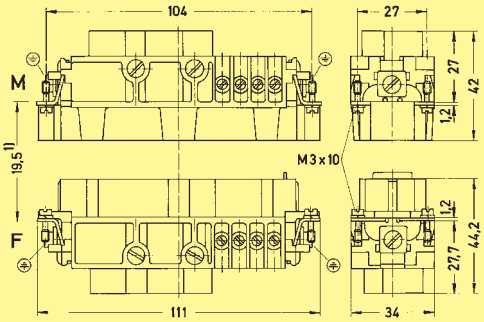
4/8 + ⏚





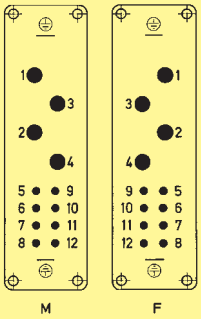
Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Screw terminal	Han® K				
	4/8	**09 38 012 2601**	**09 38 012 2701**		



1) Distance for contact max. 21 mm

Contact arrangement View from termination side



Hoods/Housings from page 05.32 onwards

Stock items in bold type

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Approvals

Inserts

Number of contacts	6 / 6 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**100 A 690 V 8 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
– Pollution degree 2 also	100 A 1000 V 8 kV 2
Signal area	**16 A 400 V 6 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
Working voltage acc. to UL/CSA	600 V / 300 V
Insulation resistance	≥ 10^{10} Ω
Material	Polycarbonate
Limiting temperatures	- 40 °C / +125 °C
Flammability acc. to UL 94	V 0
Mechanical working life	
- Mating cycles	≥ 500

Contacts

Power contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 0.5 mΩ
Screw terminal	
- Wire gauge[1)]	16 - 35 mm²
- AWG	5 - 2

- Tightening torque

mm²	16	25	35
Nm	6	7	8

Signal area

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 3 mΩ
Screw terminal	
- Wire gauge[1)]	0,2 - 2,5 mm²
- AWG	24 - 13
- Tightening torque	0,8 Nm

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

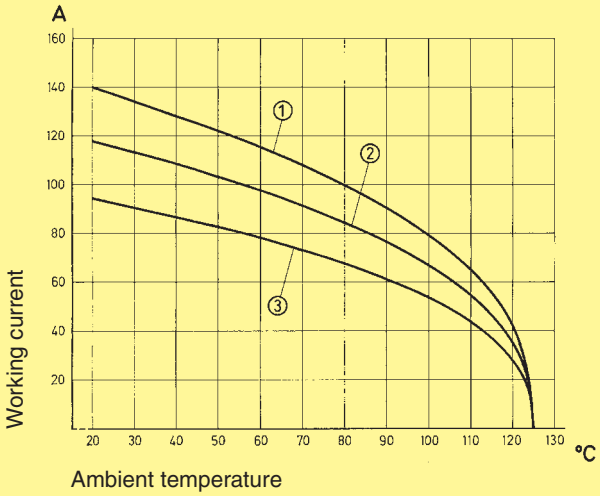
Accessories

Cable clamps	chapter 40
Coding of hoods/housings	chapter 40
Label acc. to CSA-approval	chapter 40
Han-Snap®	chapter 11

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



① Wire gauge: 35 mm²
② Wire gauge: 25 mm²
③ Wire gauge: 16 mm²

Han Com

[1)] geometrical diameter

Number of contacts

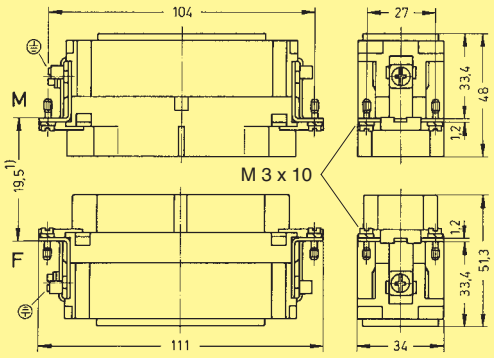
6/6 + ⏚





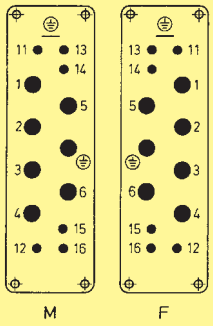
Inserts

Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Screw terminal	Han® K 6/6	**09 38 012 2651**	**09 38 012 2751**		

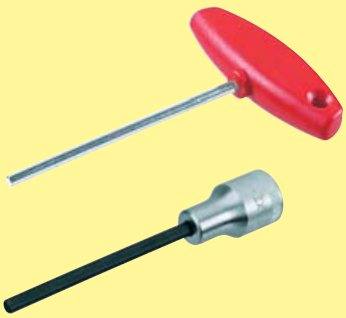


1) Distance for contact max. 21 mm

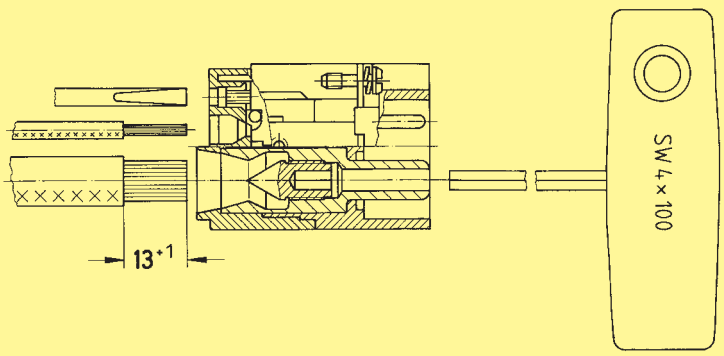
Contact arrangement
View from termination side



Hex Key SW 4 for axial setscrew				
with grip			**09 99 000 0363**	
adapter 3/8"			**09 99 000 0370**	



Working instructions
for axial setscrew



Termination details see page 05.35

Stock items in bold type

Specifications

DIN VDE 0627
DIN VDE 0110
DIN EN 61 984

Inserts

Number of contacts	8 + PE
Electrical data acc. to DIN EN 61 984	
Power area	**100 A 690 V 8 kV 3**
Working current	
Working voltage	
Rated impulse voltage	
Pollution degree	
– Pollution degree 2 also	100 A 1000 V 8 kV 2
Insulation resistance	≥ 10^{10} Ω
Material	Polycarbonate
Limiting temperatures	- 40 °C / +125 °C
Flammability acc. to UL 94	V 0
Mechanical working life	
- Mating cycles	≥ 500

Contacts

Power contacts

Material	copper alloy
Surface	
- hard-silver plated	3 µm Ag
Contact resistance	≤ 0.5 mΩ
Screw terminal	
- Wire gauge[1)]	10 - 25 mm²
- AWG	7 - 3

- Tightening torque

mm²	10	16	25
Nm	6	6	7

Hoods/Housings

Material	die cast aluminium
Surface	powder-coated RAL 7037
Locking element	Han-Easy Lock®
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	chapter 30 / chapter 31

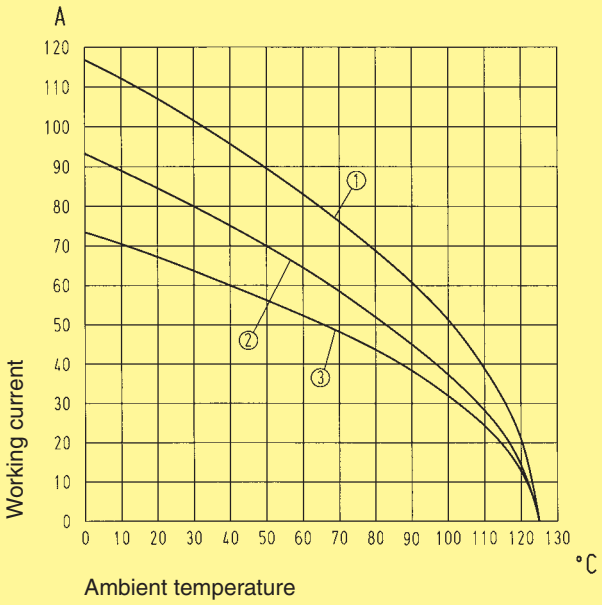
Accessories

Cable clamps	chapter 40
Coding of hoods/housings	chapter 40
Label acc. to CSA-approval	chapter 40
Han-Snap®	chapter 11

Current carrying capacity

The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60 512-3.



① Wire gauge: 25 mm²
② Wire gauge: 16 mm²
③ Wire gauge: 10 mm²

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[1)] geometrical diameter

Number of contacts

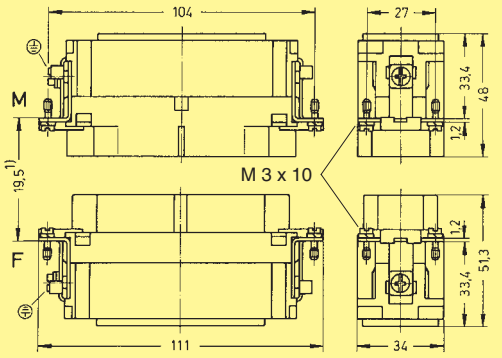
8/0 + ⏚





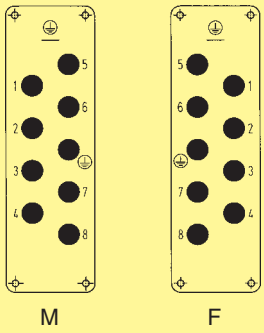
Inserts

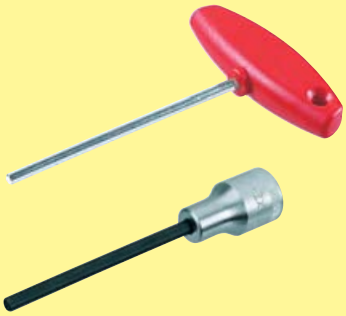
Identification	Series	Part No. Male insert (M)	Part No. Female insert (F)	Drawing	Dimensions in mm
Screw terminal	Han® K 8/0	**09 38 008 2653**	**09 38 008 2753**		



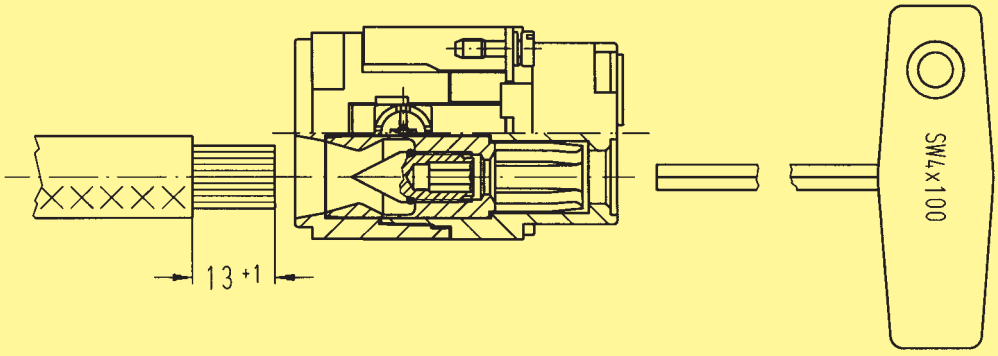
1) Distance for contact max. 21 mm

Contact arrangement
View from termination side



Hex Key SW 4 for axial setscrew with grip			**09 99 000 0363**	
adapter 3/8"			**09 99 000 0370**	

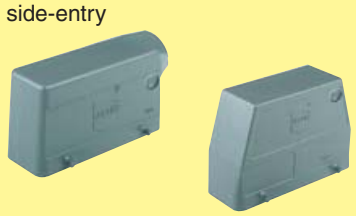
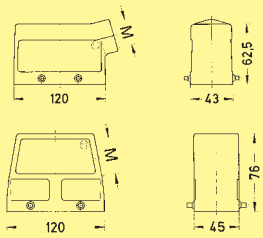
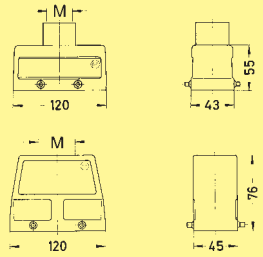
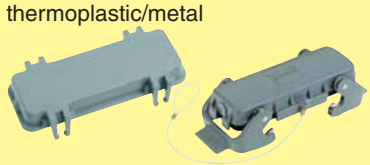
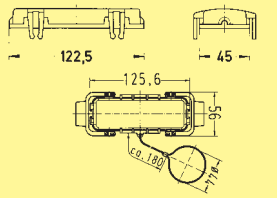
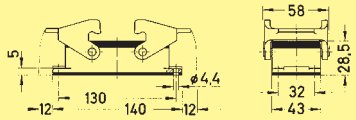
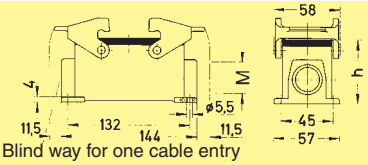
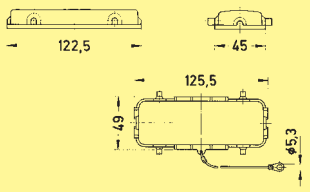
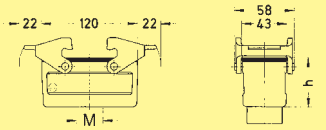
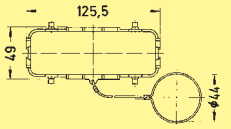
Working instructions
for axial setscrew



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Termination details see page 05.35

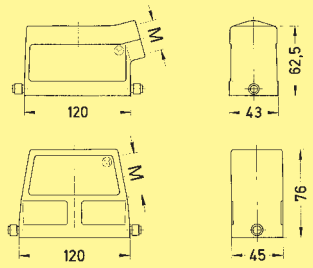
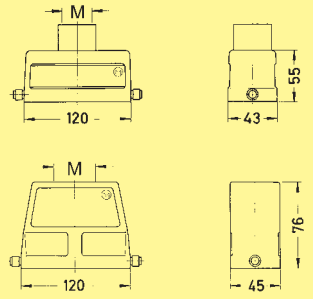
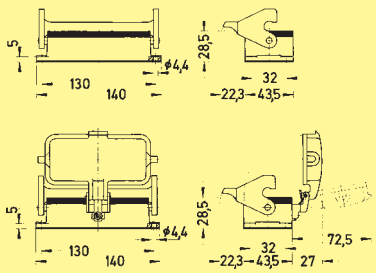
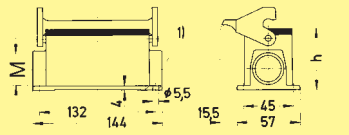
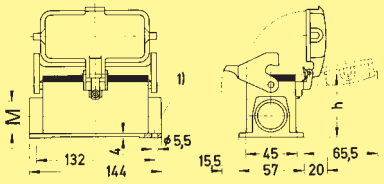
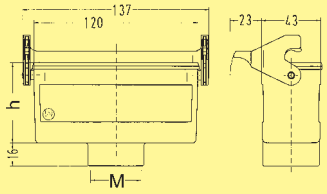
Stock items in bold type

	Identification	Part No. Low construction	Part No. High construction	M	Drawing	Dimensions in mm
Hoods	**Hoods** side-entry 	**19 30 024 1521** **19 30 024 1522**	 **19 30 024 0527** **19 30 024 0528**	25 32 32 40		
Hoods	**Hoods** top-entry 	**19 30 024 1422**	**19 30 024 0427** **19 30 024 0428**	32 40		
Hoods	**Protection covers** for hoods thermoplastic/metal 	**09 30 024 5401** **09 30 024 5422**				
Housings	**Housing** bulkhead mounting 	**09 30 024 0301**		–	Panel cut out 108 x 35 mm 	
Housings	**Housings** surface mounting 1 side-entry  2 side-entries	**19 30 024 1231** **19 30 024 1271**	**19 30 024 0232** **19 30 024 0272** 19 30 024 0273	25 32 25 32 40	 Blind way for one cable entry	
Housings	**Protection covers** for housings bulkhead/surface mounting thermoplastic/metal 	**09 30 024 5405** **09 30 024 5425**				
Housings	**Hoods** cable to cable 	19 30 024 1732	**19 30 024 0737** 19 30 024 0738	32 40		
Housings	**Protection cover** for hoods metal 	09 30 024 5426				

	h
Low construction	56
High construction	81

	h
Low construction	57.5
High construction	78.5

Stock items in bold type

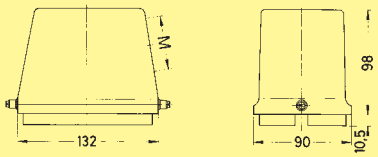
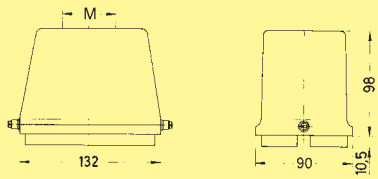
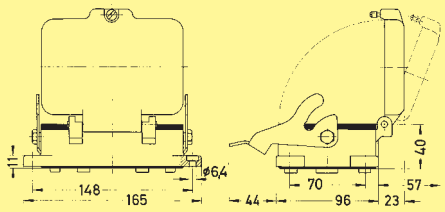
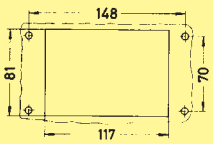
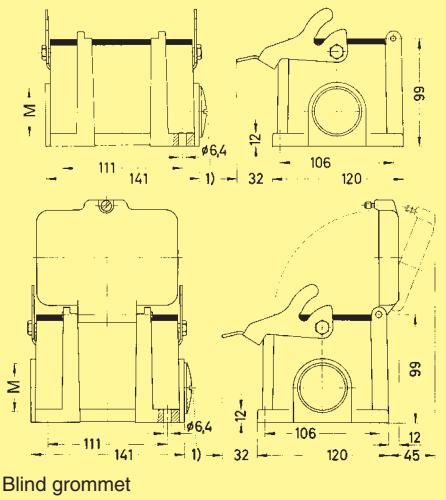
Identification	Part No. Low construction	Part No. High construction	M	Drawing	Dimensions in mm
Hoods					
Hoods side-entry	**19 30 024 1541** **19 30 024 1542**	 **19 30 024 0547** 19 30 024 0548	25 32 32 40		
Hoods top-entry	**19 30 024 1442**	**19 30 024 0447** 19 30 024 0448	32 40		
Housings					
Housings bulkhead mounting	**09 30 024 0307** with thermo-plastic cover **09 30 024 0304** with metal cover **09 30 024 0318**		– – –	Panel cut out 108 x 35 mm 	
Housings 1 side-entry	19 30 024 1251	**19 30 024 0292**	25		
2 side-entries	19 30 024 1291		25 32		
1 side-entry	with thermoplastic cover 19 30 024 1256		25		
2 side-entries	with thermoplastic cover **19 30 024 1296**	with thermoplastic cover **19 30 024 0297**	25 32		
2 side-entries	with metal cover **19 30 024 2296**	19 30 024 7297	25 32	[1] Blind way for one cable entry	
Hoods cable to cable	**19 30 024 1752**	19 30 024 0757	32		

	h
Low construction	56
High construction	81

	h
Low construction	57.5
High construction	78.5

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Stock items in bold type

Identification	Part No.	M	Drawing	Dimensions in mm
Hoods				
Hoods side-entry	**19 30 048 0548** 19 30 048 0549	40 50		
Hoods top-entry	19 30 048 0448 19 30 048 0449	40 50		
Housings				
Housings bulkhead mounting	with thermo-plastic cover **09 30 048 0301** with metal cover **09 30 048 0317**	– –	 Panel cut out 	
Housings surface mounting 2 side-entries	19 30 048 0292 19 30 048 0293 with thermo-plastic cover **19 30 048 0298**	2 x 32 2 x 40 2 x 40		

1) Blind grommet

Stock items in bold type

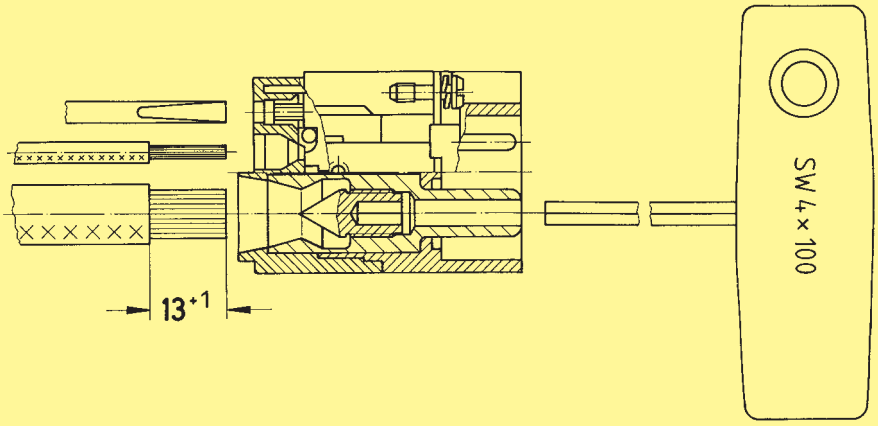
Description	Drawing	Dimensions in mm

Note:

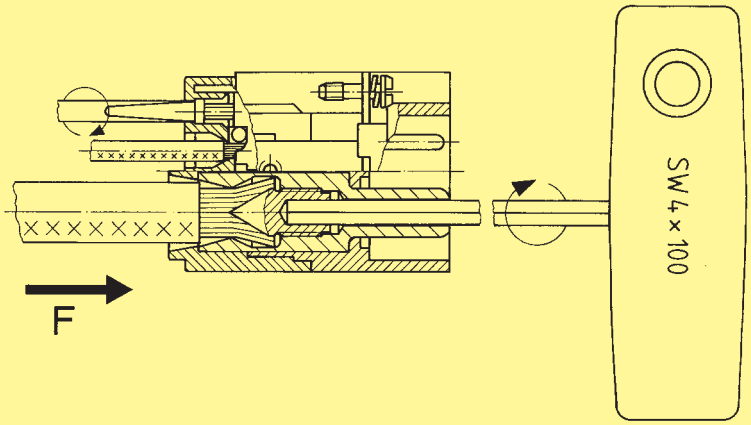
for Han® K 6/6:
The signal contacts are suitable for stranded wire up to 2.5 mm² and the power contacts for stranded wire from 16 to 35 mm².

for Han® K 8/0:
The power contacts are suitable for stranded wire from 10 to 25 mm².

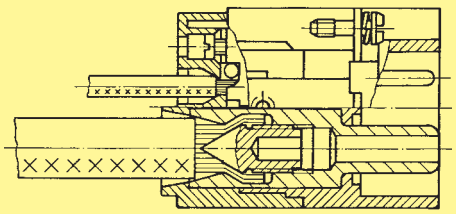
1. Strip insulation from stranded wire
   10 mm for signal contacts
   13 mm for power contacts.
   Insert stranded wire into contact chamber until insulation is flush with contact.



2. Signal contacts: Tighten screw termination with screw driver (3.5 mm blade).
   Power contacts: Hold the stranded wire in position and secure by 4 x 100 hexagonal driver from the mating side with a force given on pages 05.28 and 05.30.



3. Complete connection.



The male insert is shown. The same method is applicable for female inserts.

Notes