

728-019 to 159
728-263 to 342
728-408/410

162

Heavy Duty Connectors Han-Modular®



Certified according to DIN ISO 9001
in design/development, production,
installation and servicing

Company Profile



The best connections world-wide - connect with quality - specify HARTING

HARTING Elektronik GmbH was founded in 1945 and is 100 % privately owned.

Approximately 1,700 people are employed worldwide including 150 engineers and more than 100 sales engineers who provide the daily interface with our customers.

HARTING with its 16 subsidiaries in Europe, North America and Asia is today one of the world's leading connector manufacturers.

All the company's manufacturing plants, with the exception of Plant 1 in Espelkamp, have been built within the last ten years.

State of the art CAD-Systems are used both in the R & D department and the tool making department in order to bring new products to the market in the most efficient way.

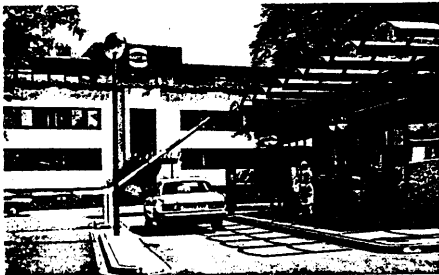
It is HARTING's philosophy that the target of permanent zero defect production is only achievable by the integration of fully automatic in-line inspection processes.

The implementation of the above quality philosophy and associated processes are documented according to DIN ISO 9001 in the Quality Assurance Manual.

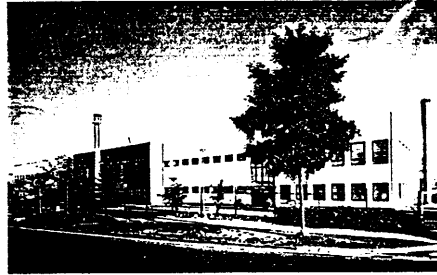
In total approximately 60 quality control personnel are employed. The majority of these engineers and technicians are trained and certified by the German (DCQ) or Swiss (SAQ) quality organisations. The divisions electronic connectors, heavy duty connectors Han® and solenoids are certified according to DIN ISO 9001 for design/R & D, production, assembly and customer service.

The dedication to quality and the ability to deliver on a "Just in Time" basis have led to the development of strong relationships with leading original equipment manufacturers on the world market.

HARTING is the market leader in several of its product ranges.



Germany - Plant 1 Espelkamp



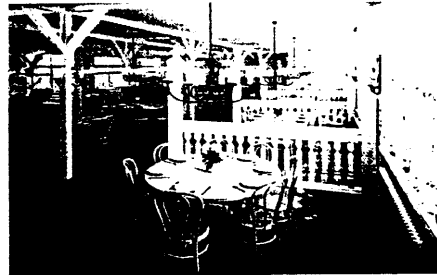
Germany - Plant 2 Espelkamp



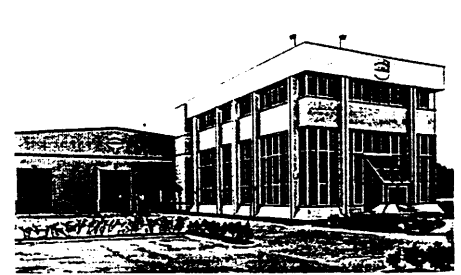
Germany - Plant 3 Espelkamp



France - Sales and marketing



Espelkamp - Staff Cafeteria



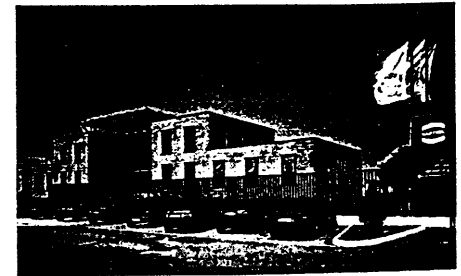
United Kingdom - Production, sales and marketing



Switzerland - Production plant



Hong Kong - Production, sales and marketing



Italy - Sales and marketing

Han-Modular®

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Economic and Reliable Connections

Specifications

VDE 0110 table 4, concerning
clearances and creepage-
distances

VDE 0627 Connectors

Note

**Connectors should not be coupled
and decoupled under electrical load.
Connectors of the same or different
series being mounted side by side
may be protected against incorrect
mating by the use of coding options.**

Approvals

UL, CSA, SEV for inserts and
hoods/housings

Han M hoods/housings for harsh
environmental requirements
·DET NORSKE VERITAS (DNV)

Han U hoods/housings
for intrinsically safe plant

State mining board
BVS-certification no. T 6365

CERCHAR-France
"MS 83.9011 U"

SABS
South African Bureau of Standards



Certified according to DIN ISO 9001
in design/development, production,
installation and servicing

Terminations

- Screw terminal
- Crimp terminal
- Solder terminal

Inserts

- Leading protective ground
- Polarised for correct mating
- Interchangeability of male and female
inserts in hoods and housings
- Captive fixing screws
- Can be used with hoods and
housings, or for rack and panel
applications
- Compact design
- Power and signal contacts of different
media in one connector

Hoods/Housings

- Standard Hoods/Housings IP 65
- Hoods/Housings for harsh
environmental requirements IP 65
- Hoods/Housings for intrinsically safe
plant
- Degree of protection IP 65
- Pressure tight housings IP 68
- EMC Hoods/Housings
- Electrical connection with protective
ground
- High mechanical strength and
vibration-resistance ensured by
locking levers
- Spring-loaded and lockable covers
in shockproof thermoplastic or metal

Accessories

- Extensive range of cable protection
and sealing accessories
- Protective covers available

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

HARTING-heavy duty connectors
incorporate the latest design features
and provide the assurance of high quality
and reliability with economy.

Sales Department
HARTING-Components

General information

It is the user's responsibility to check
whether the components illustrated in
this catalogue comply with different regu-
lations from those stated in special fields
of application which we are unable to
foresee.

We reserve the right to modify designs in
order to improve quality, keep pace with
technological advancement or meet par-
ticular requirements in production.

This catalogue must not be used in any
form or manner without our prior appro-
val in writing (Copyright Law, Fair Trading
Law, Civil Code).
We are bound by the German version
only.

Description of the Han-Modular® system

The **Han-Modular®** series is a new system of inserts designed to meet the specific requirements of individual customers. In close cooperation with potential users a range of modular inserts have been developed allowing the simple assembly of custom designed complete connectors which meet the diverse requirements encountered by today's designers.

Han-Modular® is a logical development of the **Han-Com®** series which already offers the combination of power and signal circuits in one connector.

The individual modules of this series now allow the integration of **electrical, optical and gaseous** signal and power connections in one connector assembly.

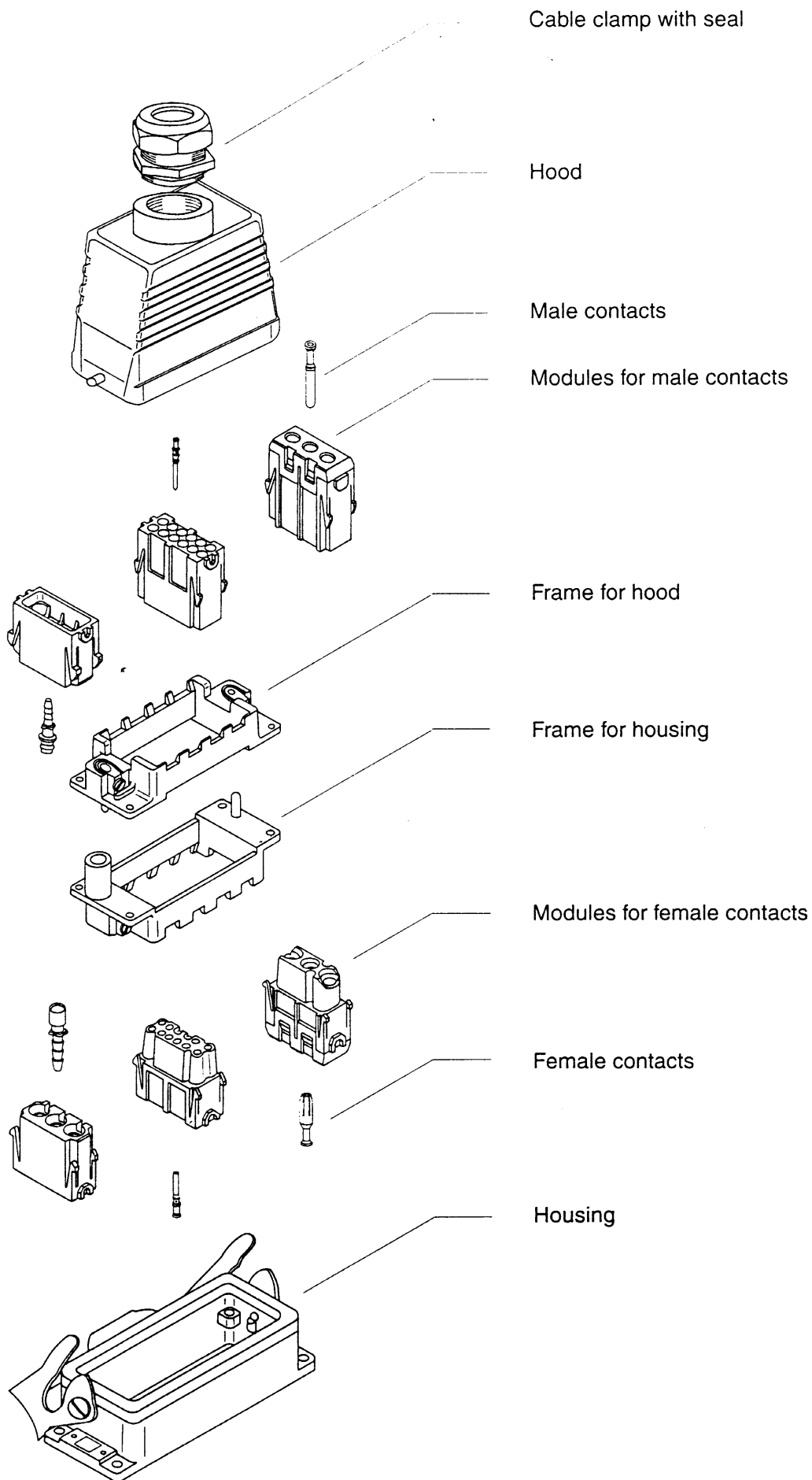
The pneumatic contacts are also suitable for the connection of liquid media. However it must be stated that a combination of electrical and liquid connections in one connector is not allowed according to VDE regulations.

The individual contacts used in this system are all from existing well proven ranges and it is possible to use combinations of 2 to 12 modules depending on the size of the hoods and housings chosen.

The basic modules snap into a mounting frame and can be exchanged separately at any time.

Advantages:

- ☐ Custom designs can be simply assembled
- ☐ Optimum solutions can be reached
- ☐ Stock can be minimized



Summary

1. Frame

Frame for	Suitable Han®-B-hoods/housings size
2 modules	6
3 modules	10
4 modules	16
6 modules	24
2 x 4 modules	32
2 x 6 modules	48

2. Modules

Type	Medium	Termination	Working current [A]		Working voltage [V ~]
Han C-module	electric	crimp	40		400 / 690
Han E-module	electric	crimp	16		500
Han DD-module - for signal contacts - for 1 mm POF* contacts	electric	crimp	10		250
	fibre optics	crimp			
Han Multicontact-module - for coaxial contacts (50 Ω) - for high voltage contacts (1.0 kV) - for FOC GI-fibre - for FOC 1 mm POF* contacts	electric	crimp/solder	1.5		50
	electric	solder	1.5		1000
	fibre optics	glue			
	fibre optics	crimp/glue			
			Working pressure		Tube termination ID [mm]
			[bar]	[psi]	
Han Pneumatic-module	air and liquid media	plug	8	116	1.6; 3.0 and 4.0

* POF = Polymer Optical Fibre

Features

- ☐ Grounding system according to VDE
- ☐ Torsion-rigid die cast zinc frame
- ☐ one part frame
- ☐ Modules can only be snapped in polarized to guarantee correct orientation
- ☐ Alternatively use of male and female modules within one frame
- ☐ Frames are usable in standard hoods/housings
- ☐ Alphabetical marking of module positions

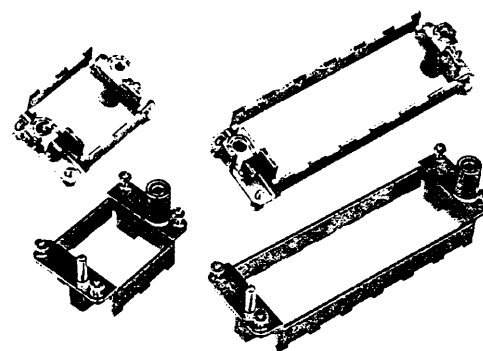
Technical characteristics

Termination gauge for the PE-wire

Power side: 4 - 6 mm² / AWG 12 - AWG 10

Signal side: 1 - 2.5 mm² / AWG 18 - AWG 14

Material: die cast zinc alloy



Frames

Identification	Part No. for Hood / Housing ²⁾		Drawing	Dimensions in mm
	Marking: A ... F	Marking: a ... f		
Frame for 2 modules	09 14 006 0301	09 14 006 0311		
Frame for 3 modules	09 14 010 0301	09 14 010 0311		
Frame for 4 modules	09 14 016 0301	09 14 016 0311		
Frame for 6 modules	09 14 024 0301	09 14 024 0311		

¹⁾ Distance for electrical and FOC contacts max. 21 mm; for pneumatic contacts max. 20.5 mm

²⁾ Frames can be used either in hood or housing, but two different markings must be used for one connector

Features

- ☐ 3 contacts (40 A) for power circuits
- ☐ Male insert with additional protection collar
- ☐ Polarization of module
- ☐ Crimp termination

Technical characteristics

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals

Inserts

Number of contacts	3
Working current	40 A
Working voltage	400 / 690 V ~
Pollution degree	3 (C)
Material	Polycarbonate
Insulation resistance	$\geq 10^{10} \Omega$
Temperature range	- 40 °C + 125 °C
Flammability acc. to UL 94	V 0
Mechanical working life	
- mating cycles	≥ 500

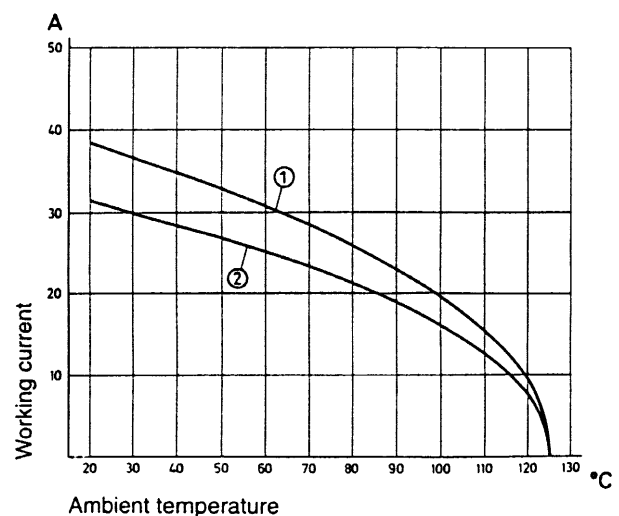
Contacts

Material	copper alloy
Surface	
- hard-silver plated	5 μm Ag
Contact resistance	$\leq 0.3 \text{ m}\Omega$
Crimp terminal	
- mm^2	1.5 - 6 mm^2
- AWG	16 - 10

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 512-3.



① 24 B hood/housing with 6 modules; wire gauge: 6.0 mm^2

② 24 B hood/housing with 6 modules; wire gauge: 4.0 mm^2

Number of contacts

3

Han® C-module



Identification

Part No.

Male insert (M)

Female insert (F)

Drawing

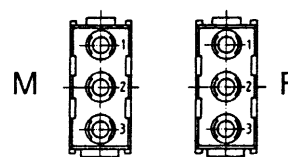
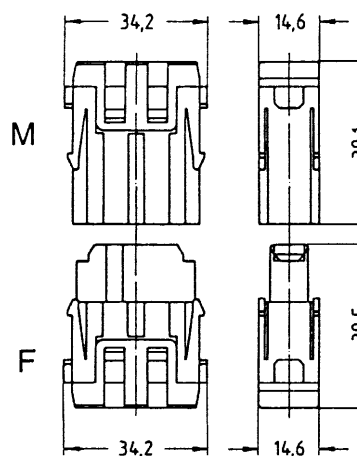
Dimensions in mm

Crimp terminal

Order contacts separately

09 14 003 3001

09 14 003 3101



Contact arrangement view from termination side

Identification

Wire gauge
(mm²)

Part No.

Male contacts

Female contacts

Drawing

Dimensions in mm

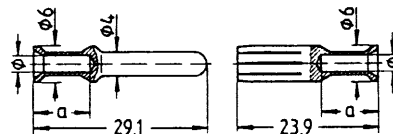
Crimp contacts

Power contacts

silver
plated



09 32 000 6104	09 32 000 6204
09 32 000 6105	09 32 000 6205
09 32 000 6107	09 32 000 6207
09 32 000 6108	09 32 000 6208



ø	Wire gauge		a
1.75	1.5 mm²	AWG 16	9
2.25	2.5 mm²	AWG 14	9
2.85	4 mm²	AWG 12	9.6
3.5	6 mm²	AWG 10	9.6

Features

- ☐ 6 contacts (16 A) for power circuits
- ☐ Male insert with additional protection collar
- ☐ Polarization of module
- ☐ Crimp termination
- ☐ Contacts with silver and gold plated surface

Technical characteristics

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals

Inserts

Number of contacts	6
Working current	16 A
Working voltage	500 V ~
Pollution degree	3 (C)
Material	Polycarbonate
Insulation resistance	$\geq 10^{10} \Omega$
Temperature range	- 40 °C + 125 °C
Flammability acc. to UL 94	V0
Mechanical working life	
- mating cycles	≥ 500

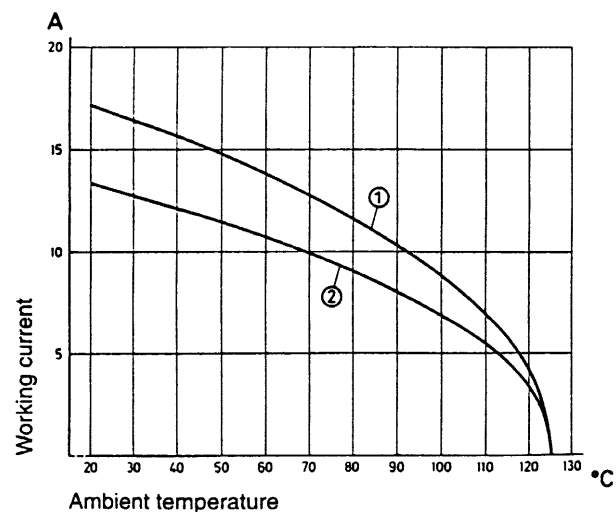
Contacts

Material	copper alloy
Surface	
- hard-silver plated	3 μm Ag
- hard-gold plated	2 μm Au over 3 μm Ni
Contact resistance	$\leq 1 \text{ m}\Omega$
Crimp terminal	
- mm ²	0.5 - 4 mm ²
- AWG	20 - 12

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 512-3.



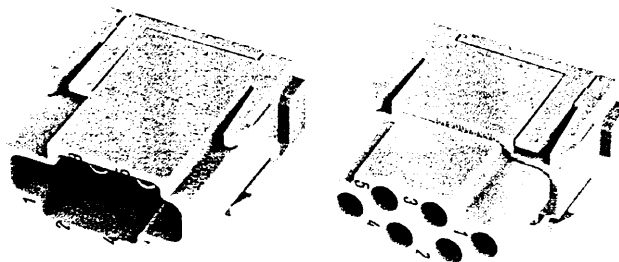
① 24 B hood/housing with 6 modules; wire gauge: 2.5 mm²

② 24 B hood/housing with 6 modules; wire gauge: 1.5 mm²

Number of contacts

6

Han® E-module



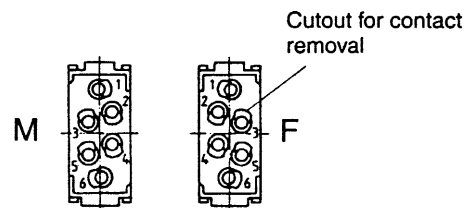
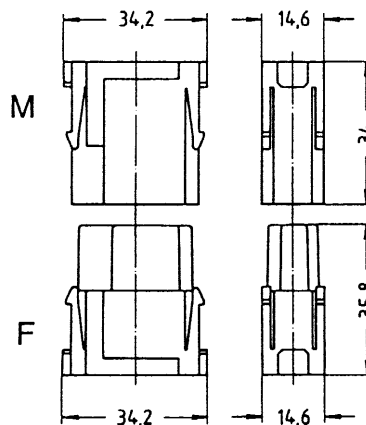
Identification Part No. Male insert (M) Female insert (F) Drawing Dimensions in mm

Crimp terminal

Order contacts separately

09 14 006 3001

09 14 006 3101



Contact arrangement View from termination side

Identification

Wire gauge
(mm²)

Male contacts

Part No.

Female contacts

Drawing

Dimensions in mm

Crimp contacts

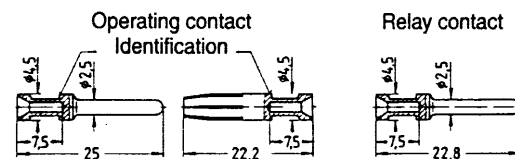
Power contact

silver plated



0.5
0.75
1.0
1.5
2.5
3.0
4.0

09 33 000 6121	09 33 000 6220
09 33 000 6114	09 33 000 6214
09 33 000 6105	09 33 000 6205
09 33 000 6104	09 33 000 6204
09 33 000 6102	09 33 000 6202
09 33 000 6106	09 33 000 6206
09 33 000 6107	09 33 000 6207



gold plated



0.5
0.75
1.0
1.5
2.5
4.0

09 33 000 6122	09 33 000 6222
09 33 000 6115	09 33 000 6215
09 33 000 6118	09 33 000 6218
09 33 000 6116	09 33 000 6216
09 33 000 6123	09 33 000 6223
09 33 000 6119	09 33 000 6221

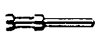
Crimp contact identification

Identification	Wire gauge		Stripping length
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3.0 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Relay contact

silver plated



0.75
1.0
1.5
2.5

09 33 000 6109
09 33 000 6110
09 33 000 6111

Features

- ☐ 12 contact chambers for
 - Signal contacts (10 A)
 - FOC contacts for 1 mm plastic fibre
- ☐ Male insert with additional protection collar
- ☐ Polarization of module
- ☐ Crimp termination
- ☐ Signal contacts with silver respectively gold plated surface
- ☐ Alternatively use of male and female modules within one frame
- ☐ Contact spacing enables the use of pcb-adaptors (see page 06.36)

Technical characteristics

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals

Inserts

Number of contacts	12
Working current	10 A
Working voltage	250 V ~
Pollution degree	3 (C)
Material	Polycarbonate
Insulation resistance	$\geq 10^{10} \Omega$
Temperature range	- 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	$\leq 3 \text{ m}\Omega$
Crimp terminal	
- mm^2	0.14 - 2.5 mm^2
- AWG	26 - 14

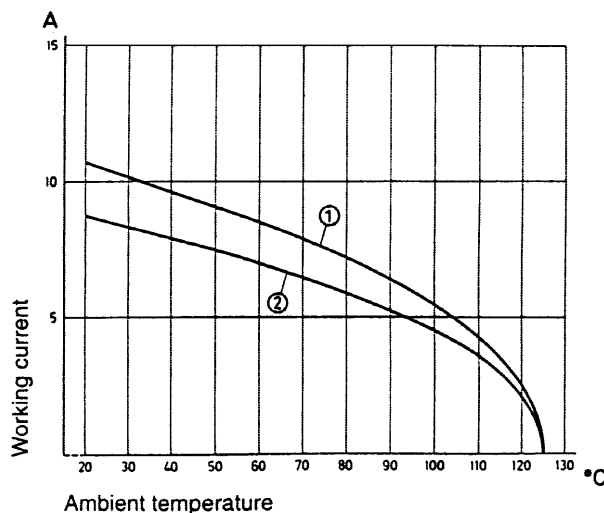
Locking clip

Material	non-corroding spring steel
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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 512-3.



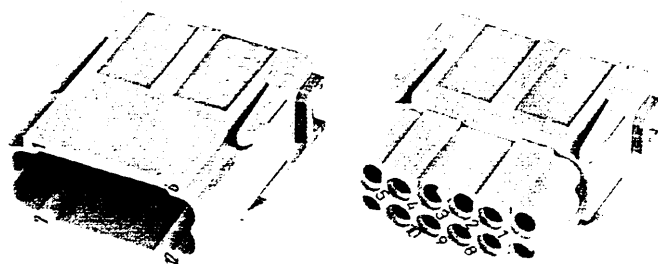
① 24 B hood/housing with 6 modules; wire gauge: 1.5 mm^2

② 24 B hood/housing with 6 modules; wire gauge: 1.0 mm^2

Number of contacts

12

Han® DD-module



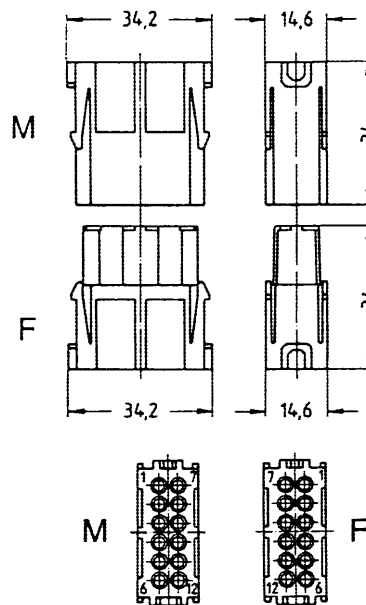
Identification	Part No.		Drawing	Dimensions in mm
	Male insert (M)	Female insert (F)		

Crimp terminal

Order contacts separately

09 14 012 3001

09 14 012 3101



Contact arrangement View from termination side

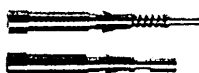
Identification	Wire gauge (mm²)	Part No.		Drawing	Dimensions in mm
		Male contacts	Female contacts		
Crimp contacts	0.14-0.37	09 15 000 6104	09 15 000 6204		
	0.5	09 15 000 6103	09 15 000 6203		
	0.75	09 15 000 6105	09 15 000 6205		
	1.0	09 15 000 6102	09 15 000 6202		
	1.5	09 15 000 6101	09 15 000 6201		
	2.5	09 15 000 6106	09 15 000 6206		
silver 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		
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		

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

FOC contacts
for 1 mm plastic fibre

20 10 001 3211 20 10 001 3221

Cable see catalogue
"Fibre Optic Data Link Systems"



Features

- ☐ 4 contact chambers for
 - Coaxial contacts
 - FOC contacts
 - High voltage contacts
- ☐ Male insert with additional protection collar
- ☐ Polarization of module

Technical characteristics

Specifications

DIN VDE 0627
DIN VDE 0110

Approvals

Inserts

Number of contacts	4
Pollution degree	3 (C)
Material	Polycarbonate
Insulation resistance	$\geq 10^{10} \Omega$
Temperature range	- 40 °C + 125 °C
Flammability acc. to UL 94	V 0
Mechanical working life	
- mating cycles	≥ 500

Contacts

Coaxial contact	
- Material	copper alloy
- Contact surface	2.5 μm / 0.8 μm Au over 4 μm Ni
hard-gold plated	50 Ω
- Impedance	
- Contact resistance	
centre conductor	$\leq 10 \text{ m}\Omega$
outer conductor	$\leq 3 \text{ m}\Omega$
- max. working current	1.5 A
- Working voltage	50 V ~

High voltage

- Material	copper alloy
- Contact surface	1.3 μm Au over 4 μm Ni
- Contact resistance	max. 3.0 $\text{m}\Omega$
- Max. working current	1.5 A
- Working voltage	1000 V ~

FOC contact²⁾

- Fibre type	glass fibre (GI)
- Attenuation	< 1.5 dB

FOC contact²⁾

- Fibre type	polymer optical fibre
- Attenuation	< 2.5 dB

Contact arrangement

according to table below:

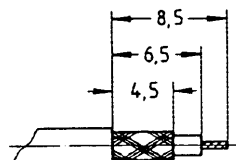
Contacts	Male insert (M) 09 14 004 4501	Female insert (F) ¹⁾ 09 14 004 4512
Coaxial contacts	Female contacts	Male contacts
High voltage contacts	Female contacts	Male contacts
FOC contacts	Male contacts	Female contacts

Coaxial contacts

usable for the cables listed below:

Cable group 2 flexible wires	Shell $\varnothing$ mm	Screening $\varnothing$ mm	Dielectric $\varnothing$ mm	Internal wire $\varnothing$ mm	Hexagonal crimp Spanner width
RG 174 / U	2.5	2.0	1.5	0.48	3.25
RG 188 A / U	2.6	2.0	1.5	0.54	3.25
RG 316 / U	2.5	2.0	1.5	0.54	3.25

Stripping description:



¹⁾ Due to the closed entry design of female insert the upper part has to be removed by screw driver (7 mm) before extracting the contacts

²⁾ See catalogue „Fibre Optic Data Link Systems“

Number of contacts

4



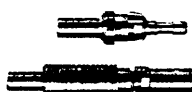
Han® Multicontact-module

Identification	Part No.		Drawing	Dimensions in mm
	Male insert (M)	Female insert (F)		
Multicontact-module				
Order contacts separately	09 14 004 4501		M	
		09 14 004 4512	F	

Identification	Part No.		Drawing	Dimensions in mm
	Male contacts	Female contacts		
Coaxial contacts ¹⁾ for straight solder and/or crimp terminations	09 03 000 6160	09 03 000 6260		
			For cable group 2 flexible wires (see remarks on page 06.18)	

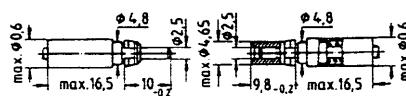
Identification	Part No.		Drawing	Dimensions in mm
	Male contacts	Female contacts		
High voltage contacts ¹⁾ for straight solder terminations 1000 V	09 03 000 6140	09 03 000 6240		
			wire gauge max. 0.5 mm ²	

FOC contacts according to DIN 41 626 part 3¹⁾
for GI-fibre
50/125 µm
62.5/125 µm



on request

on request



for 1 mm POF²⁾

¹⁾ See contact arrangement page 06.18

²⁾ POF = Polymer Optical Fibre

Features

- ☐ 3 contacts for transmission of gaseous and liquid media
- ☐ Termination of 1.6 mm, 3 mm and 4 mm ID-tubes
- ☐ Tubing sizes in module mixable
- ☐ Stable plastic construction of contacts
- ☐ Removal of tubes from already assembled pneumatic contacts is possible
- ☐ Female contacts with/without shut off
- ☐ Shut off principle:
In open position of connector the spring integrated in female contact is active, thus the O-ring of valve seals the opening of passage.
During the mating step, when the defined depth of immersion is reached, the male contact presses on the valve head and moves it to the termination side against the spring tension, so that the passage opens.

Technical characteristics

Specifications

Approvals

Inserts

Number of contacts	3
Colour	blue
Material	Polycarbonate
Temperature range	- 40 °C + 80 °C
Flammability acc. to UL 94	V 0
Mechanical working life - mating cycles	≥ 500

Contacts

Material	Delrin Acetal
Colour	black
Tube termination - Internal diameter (ID):	1.6 mm / 1/16" 3.0 mm 4.0 mm / 1/8"
Working pressure	vacuum up to 8 bar / 116 psi

Sealing

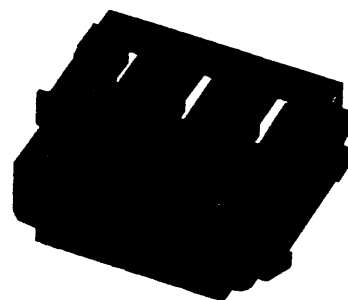
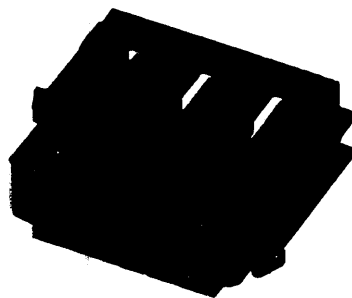
Material	Buna-N
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Shut off valve

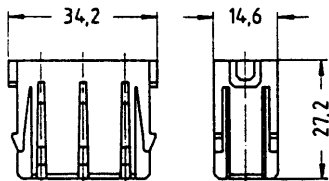
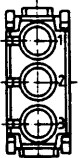
Material	Polypropylene
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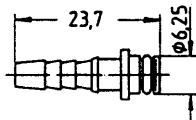
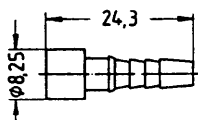
Number of contacts

3



Han® Pneumatic-module

Identification	Part No.		Drawing	Dimensions in mm
	Male insert (M)	Female insert (F)		
Pneumatic-module ¹⁾ Order contacts separately (male and female inserts are identical)	09 14 003 4501	09 14 003 4501		

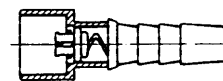
Identification	Part No.		Contact arrangement View from mating side	
	Male contacts	Female contacts	Drawing	Dimensions in mm
Contacts without shut off ¹⁾				
for tube internal diameter				
1.6 mm	09 14 000 6151	09 14 000 6251		
3.0 mm	09 14 000 6152	09 14 000 6252		
4.0 mm	09 14 000 6153	09 14 000 6253		
			male contact	female contact



Contacts with shut off¹⁾

shut off principle: see page 06.20

for tube internal diameter		
1.6 mm	—	09 14 000 6256
3.0 mm	—	09 14 000 6257
4.0 mm	—	09 14 000 6258



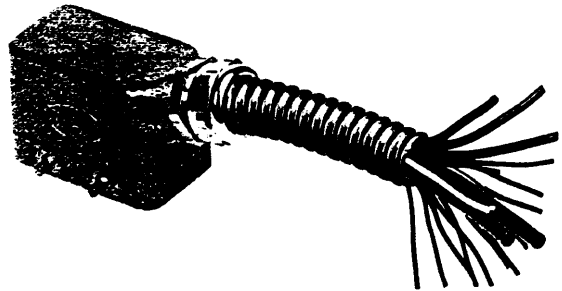
female contact
with shut off
in closed position

¹⁾ Assembly of contacts before module is fixed into the frame

The integration of several electrical wires with different gauges; optical control lines and/or air tubes in one connector

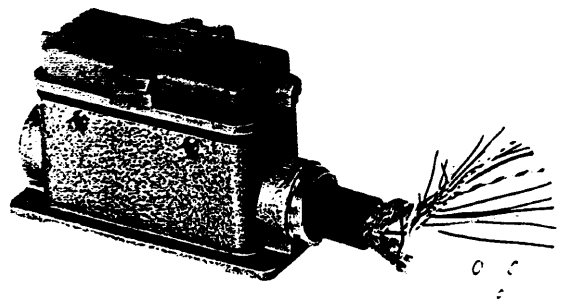
Protective tube

- ☐ Single wires have more space to move
- ☐ Ideal for short-run production
- ☐ Easy maintenance/service



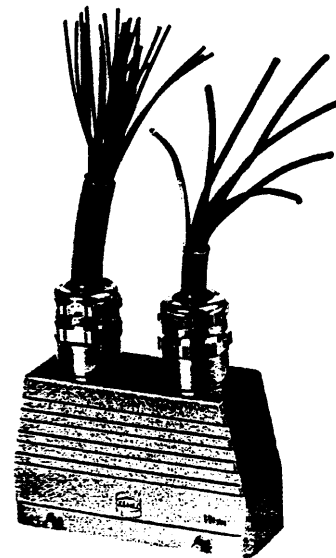
Special cable

- ☐ Optimal solution for large-scale production
- ☐ Professional design



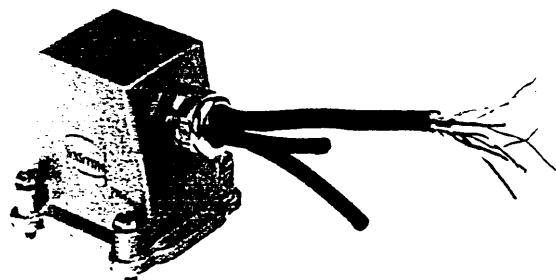
Hood with several cable entries (see page 06.34)

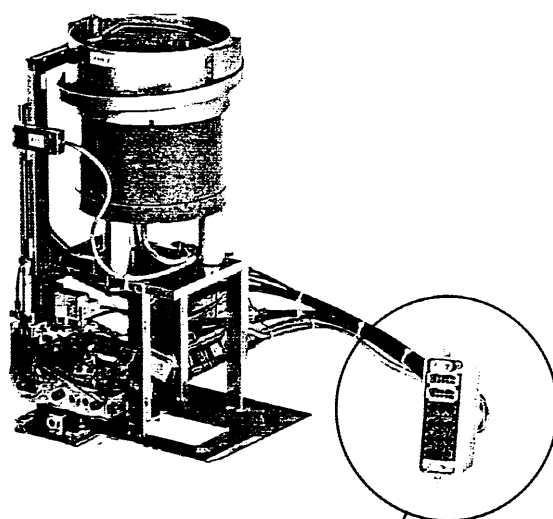
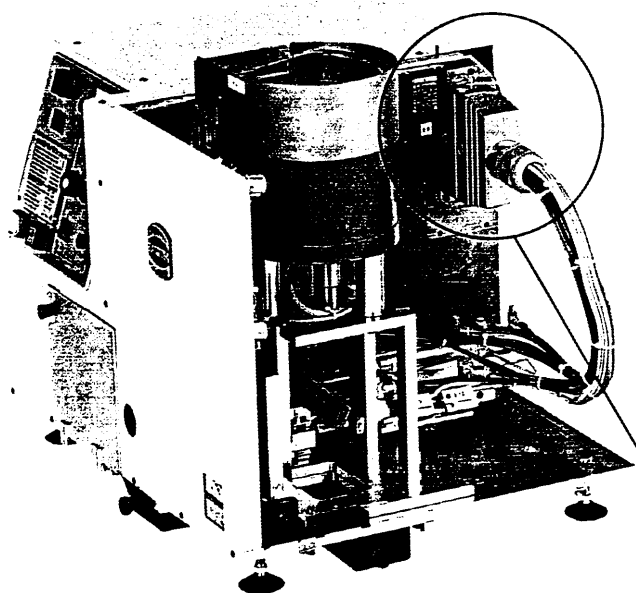
- ☐ Single wires are less expensive than special wires
- ☐ Easy maintenance/service



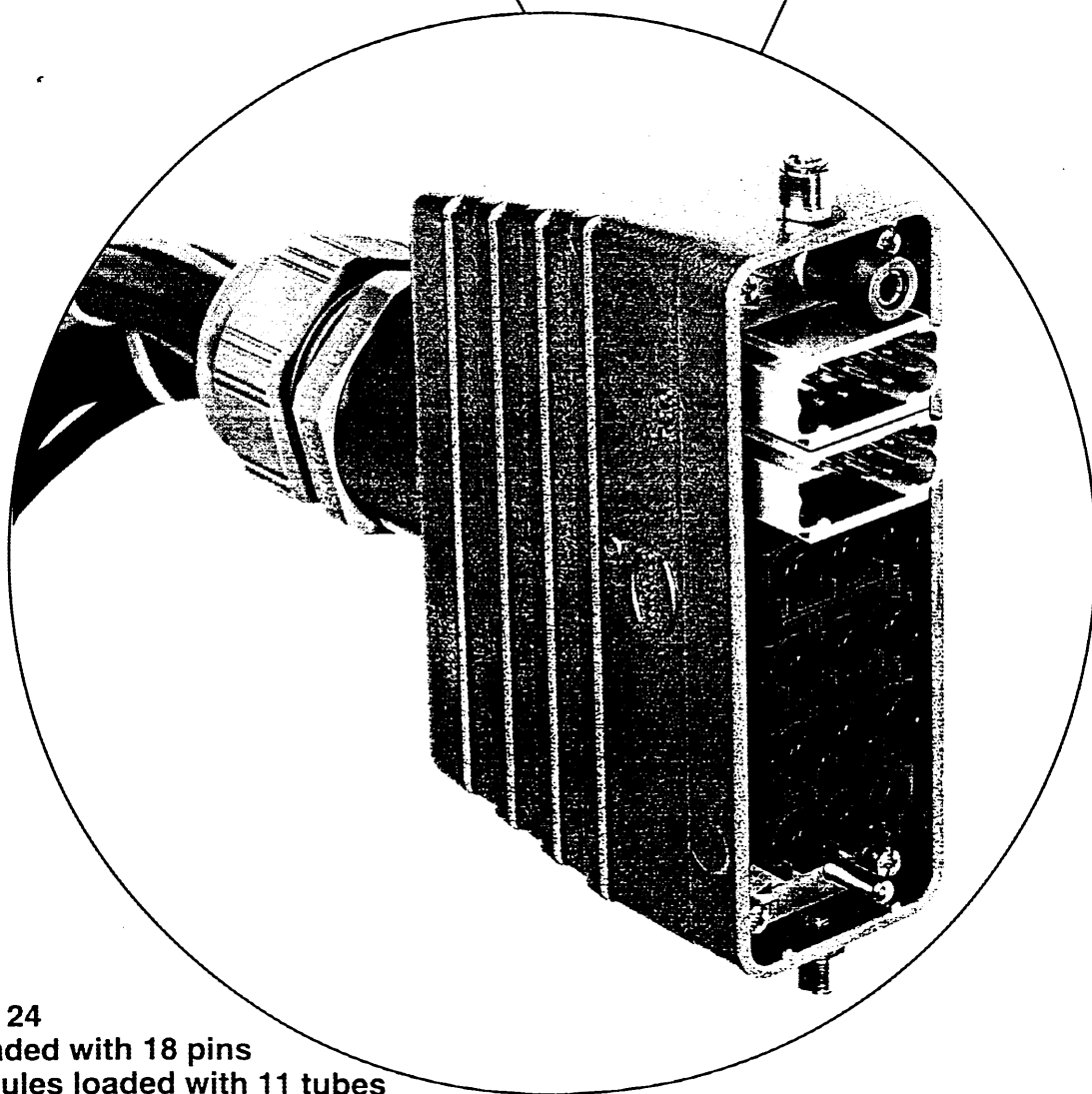
Cable sealing with several cable inlets

- ☐ Ideal for wires/tubes with approximately similar wire gauges
- ☐ Easy maintenance/service





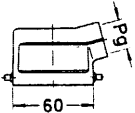
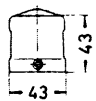
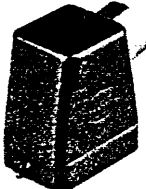
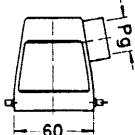
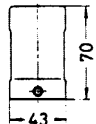
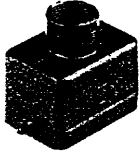
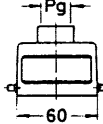
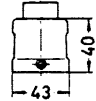
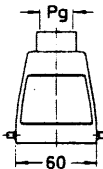
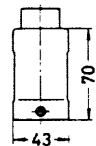
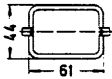
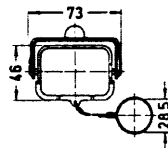
Automatic Crimping Machine TK
with change unit -E- and change unit -D-
connected with **Han-Modular®**



Han-Modular® size 24
• 2 DD modules loaded with 18 pins
• 4 Pneumatic modules loaded with 11 tubes

Standard Hoods/Housings with 1 lever on the housing for 2 modules



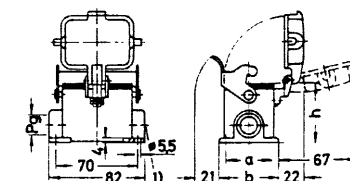
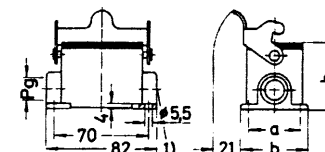
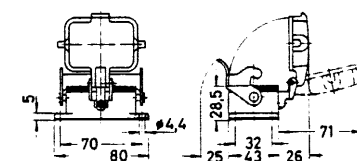
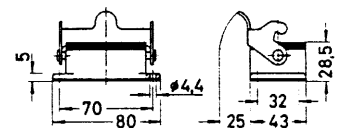
Identification	Part No.		Pg	Drawing	Dimensions in mm
	Low construction	High construction			
Hoods side-entry		09 30 006 1540	13,5		
		09 30 006 1541	16		
		09 30 006 0542	21		
		09 30 006 0543	29		
Hoods top-entry		09 30 006 1440	13,5		
		09 30 006 1441	16		
		09 30 006 0442	21		
		09 30 006 0443	29		
Protection covers metal		09 30 006 5401			
		09 30 006 5423			

Standard Hoods/Housings with 1 lever on the housing for 2 modules



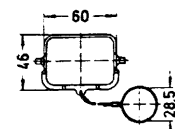
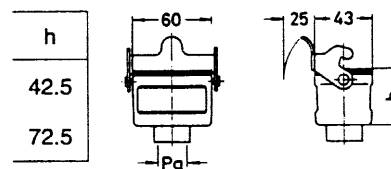
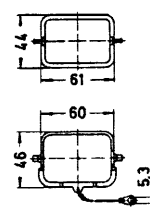
Identification	Part No.		Pg	Drawing	Dimensions in mm
	Low construction	High construction			
Housings bulkhead mounting 	09 30 006 0301				
	with thermo-plastic cover 09 30 006 0302				
	with metal cover 09 30 006 0318				
Housings surface mounting 	1 side-entry	09 30 006 1251	16		
	2 side-entry	09 30 006 1291	16 21		
		with thermo-plastic cover			
	1 side-entry	09 30 006 1256	16		
		with metal cover			
		09 30 006 2256	16		
	2 side-entry	with thermo-plastic cover 09 30 006 1296	16 21		
		with thermo-plastic cover			
		09 30 006 0297	16 21		
	2 side-entry	with metal cover 09 30 006 2296	16 21		
		with metal cover			
		09 30 006 2297	16 21		
Protection covers metal 		09 30 006 5404			
		09 30 006 5425			
Hoods cable to cable 		09 30 006 1750	16 21		
		09 30 006 0752			
Protection cover metal 		09 30 006 5427			

Panel cut out 48 x 35 cm



1) Blind way for one cable entry

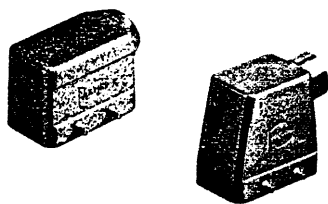
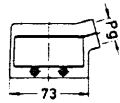
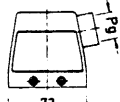
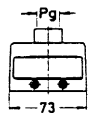
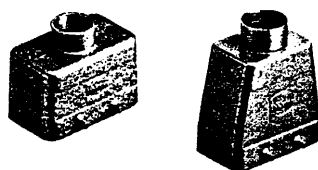
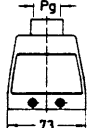
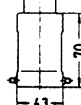
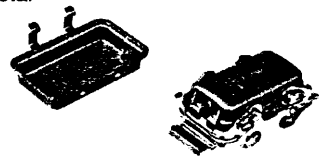
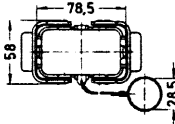
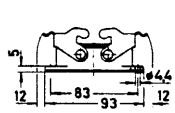
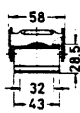
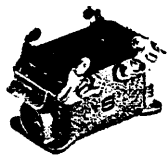
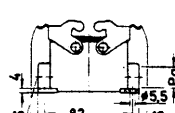
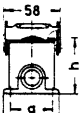
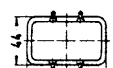
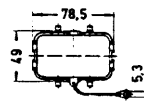
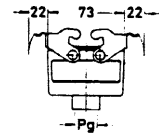
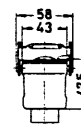
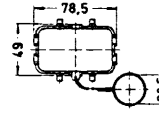
	a	b	h
Low construction	40	52	54
High construction	45	57	74



For further selection of hoods/housings see catalogue Heavy Duty Connectors

Standard Hoods/Housings with 2 levers on the housing for 3 modules



Identification		Part No.		Pg	Drawing	Dimensions in mm											
Hoods	Hoods side-entry	Low construction	High construction														
		09 30 010 1521		16													
			09 30 010 0522	21													
			09 30 010 0523	29													
	Hoods top-entry	09 30 010 1421		16													
			09 30 010 0422	21													
			09 30 010 0423	29													
	Protection covers metal	09 30 010 5401															
		09 30 010 5423															
	Housing bulkhead mounting	09 30 010 0301															
Housings	Housings surface mounting	1 side-entry	09 30 010 1231	09 30 010 0232	16	Panel cut out 60 x 35  											
		2 side-entry	09 30 010 1271	09 30 010 0272	21												
				09 30 010 0273	29	Blind way for one cable entry <table><tr><td></td><td>a</td><td>b</td><td>h</td></tr><tr><td>Low construction</td><td>40</td><td>52</td><td>54</td></tr><tr><td>High construction</td><td>45</td><td>57</td><td>74</td></tr></table>  		a	b	h	Low construction	40	52	54	High construction	45	57
		a	b	h													
	Low construction	40	52	54													
	High construction	45	57	74													
	Protection covers metal	09 30 010 5407															
		09 30 010 5425															
	Hood cable to cable	09 30 010 1731		16													
	Protection cover metal	09 30 010 5427															

Standard Hoods/Housings with 1 lever on the housing for 3 modules



Identification		Part No.		Pg	Drawing	Dimensions in mm
		Low construction	High construction			
Hoods	Hoods side-entry	09 30 010 1541		16		
			09 30 010 0542	21		
			09 30 010 0543	29		
	Hoods top-entry	09 30 010 1441		16		
			09 30 010 0442	21		
			09 30 010 0443	29		
Housings	Housings bulkhead mounting	09 30 010 0305			Panel cut out 60 x 35	
		with thermo-plastic cover 09 30 010 0303				
		with metal cover 09 30 010 0318				
	Housings surface mounting	1 side-entry	09 30 010 1251	16		
		2 side-entry	09 30 010 1291	16		
		1 side-entry	with thermo-plastic cover 09 30 010 1256	16		
		2 side-entry	with thermo-plastic cover 09 30 010 1296	16		
		2 side-entry	with metal cover 09 30 010 2296	16		
	Hood cable to cable	09 30 010 1751		16		

" Blind way for one cable entry

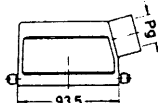
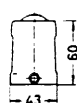
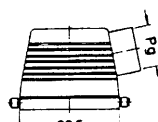
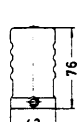
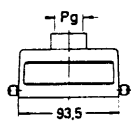
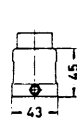
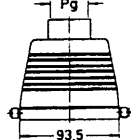
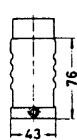
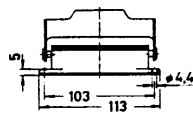
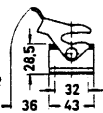
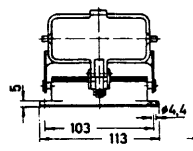
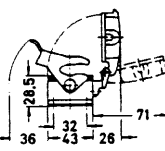
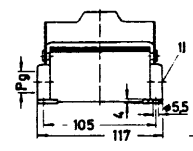
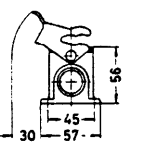
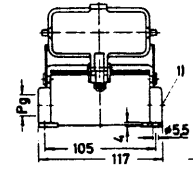
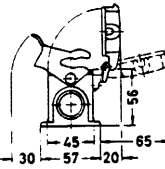
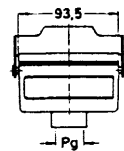
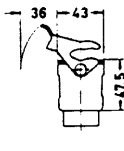
Standard Hoods/Housings with 2 levers on the housing for 4 modules



Identification		Part No.		Pg	Drawing	Dimensions in mm
		Low construction	High construction			
Hoods	Hoods side-entry	09 30 016 1520		21		
			09 30 016 0520 09 30 016 0521	21 29		
	Hoods top-entry	09 30 016 1420		21		
			09 30 016 0420 09 30 016 0421	21 29		
Protection covers	metal	09 30 016 5401				
		09 30 016 5422				
	Housing bulkhead mounting	09 30 016 0301				
Housings	Housings surface mounting 1 side-entry	09 30 016 1230	09 30 016 0230 09 30 016 0231	21 29		
	2 side-entry	09 30 016 1270	09 30 016 0270 09 30 016 0271	21 29		
	Protection covers metal	09 30 016 5405				
		09 30 016 5425				
Hoods	Hoods cable to cable	09 30 016 1730	09 30 016 0730 09 30 016 0731	21 21 29		
	Protection cover metal	09 30 016 5426				

Standard Hoods/Housings with 1 lever on the housing for 4 modules

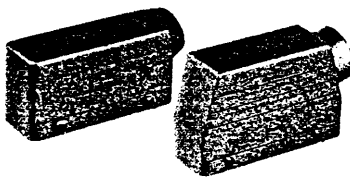
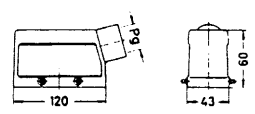
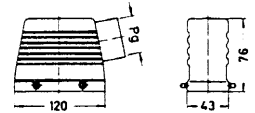
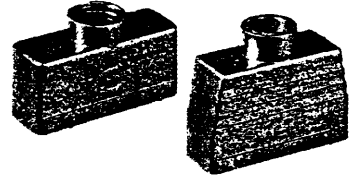
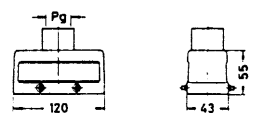
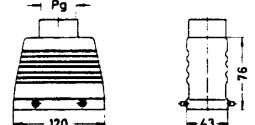
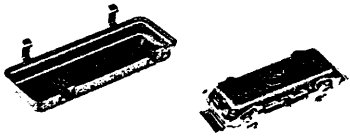
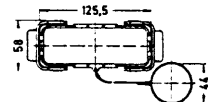
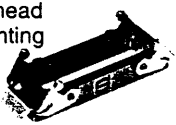
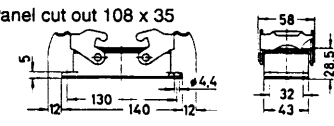
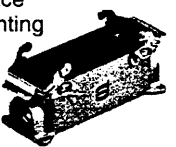
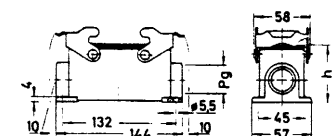
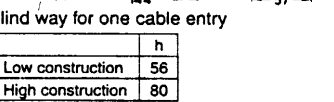
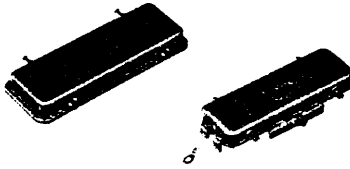
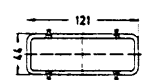
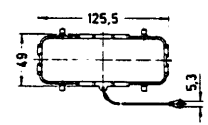
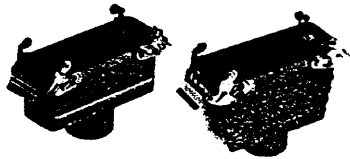
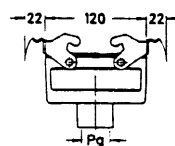
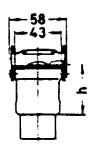
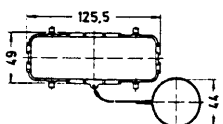


Identification		Part No.		Pg	Drawing	Dimensions in mm	
		Low construction	High construction				
Hoods	Hoods side-entry	09 30 016 1540	09 30 016 0540 09 30 016 0541	21 21 29	 	93,5 43 60	
					 	93,5 43 76	
	Hoods top-entry	09 30 016 1440	09 30 016 0440 09 30 016 0441	21 21 29	 	93,5 43 45	
					 	93,5 43 76	
Housings	bulkhead mounting	09 30 016 0307	with thermo-plastic cover 09 30 016 0306		Panel cut out 82 x 35		
		with metal cover 09 30 016 0318		 	103 113 36 32 43		
	surface mounting	1 side-entry 09 30 016 1250	2 side-entry 09 30 016 1290	with thermo-plastic cover 09 30 016 1255	21 21 21 21	 	103 113 36 32 43 28 71
		2 side-entry 09 30 016 1295	with thermo-plastic cover 09 30 016 2295		 	105 117 30 45 57 56	
2 side-entry				 	105 117 30 45 57 20 65		
Hood cable to cable		09 30 016 1750			21	 	93,5 36 43 47,5

For further selection of hoods/housings see catalogue Heavy Duty Connectors Han-Com®

Standard Hoods/Housings with 2 levers on the housing for 6 modules



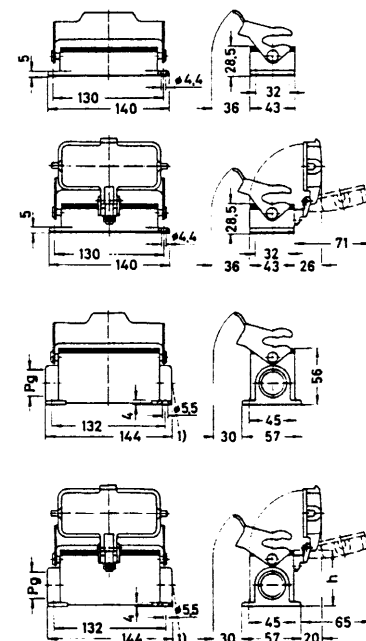
Identification		Part No.		Pg	Drawing	Dimensions in mm
Hoods	Hoods side-entry		Low construction	High construction		
		09 30 024 1520			21	
				09 30 024 0520 09 30 024 0521	21 29	
Hoods	Hoods top-entry		Low construction	High construction		
		09 30 024 1421			29	
				09 30 024 0420 09 30 024 0421	21 29	
Protection covers	Protection covers metal		Low construction	High construction		
		09 30 024 5401				
		09 30 024 5422				
Housings	Housings bulkhead mounting		Low construction	High construction		
		09 30 024 0301				
Housings	Housings surface mounting		Low construction	High construction		
		1 side-entry 09 30 024 1230		09 30 024 0230 09 30 024 0231	21 29	
		2 side-entry 09 30 024 1270		09 30 024 0270 09 30 024 0271	21 29	
Housings	Protection covers metal		Low construction	High construction		
		09 30 024 5405				
		09 30 024 5425				
Hoods	Hoods cable to cable		Low construction	High construction		
		09 30 024 1731			21	
				09 30 024 0730 09 30 024 0731	21 29	
Protection cover	Protection cover metal		Low construction	High construction		
		09 30 024 5426				
						

Standard Hoods/Housings with 1 lever on the housing for 6 modules



Identification		Part No.		Pg	Drawing	Dimensions in mm
		Low construction	High construction			
Hoods	Hoods side-entry	09 30 024 1540		21		
			09 30 024 0540 09 30 024 0541	21 29		
	Hoods top-entry	09 30 024 1441		29		
			09 30 024 0440 09 30 024 0441	21 29		
Housings	Housings bulkhead mounting	09 30 024 0307				
		with thermo-plastic cover 09 30 024 0304				
		with metal cover 09 30 024 0318				
	Housings surface mounting	1 side-entry 09 30 024 1250 2 side-entry 09 30 024 1290		21 21		
Housings		1 side-entry 09 30 024 1255 2 side-entry 09 30 024 1295	with thermo-plastic cover 09 30 024 0295 09 30 024 0296	21 21 29		
		2 side-entry 09 30 024 2295	with metal cover	21		
	Hood cable to cable	09 30 024 1751		29		

Panel cut out 108 x 35 mm



"Blind way for one cable entry

	h
Low construction	56
High construction	80

Standard Housings with 2 levers on the housing for 8 modules



Identification

Size

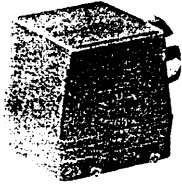
Part No.

Pg

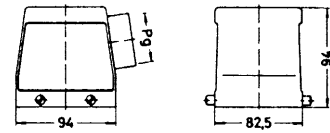
Drawing

Dimensions in mm

Hoods
side-entry

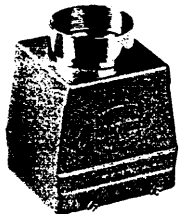


32	09 30 032 0521	29
32	09 30 032 0522	36
32	09 30 032 0523	42

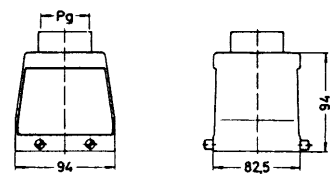


Hoods

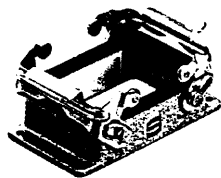
Hoods
top-entry



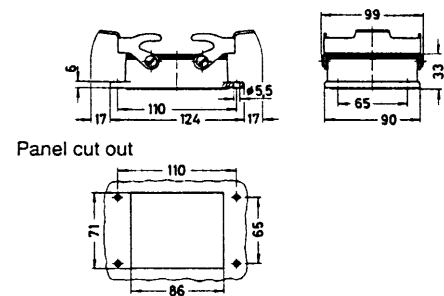
32	09 30 032 0421	29
32	09 30 032 0422	36



Housing
bulkhead mounting

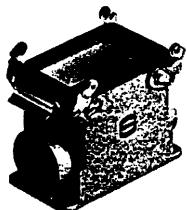


32	09 30 032 0301	-
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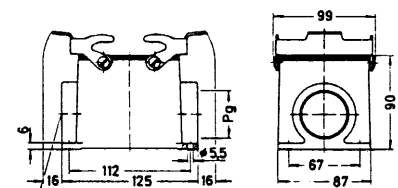


Housings
surface mounting

Housings

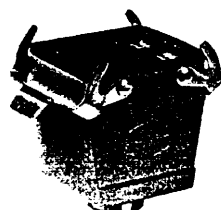


1 side-entry	32	09 30 032 0231	29
	32	09 30 032 0232	36
2 side-entry	32	09 30 032 0271	29
	32	09 30 032 0272	36

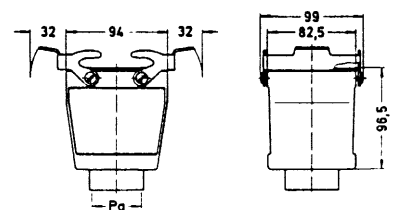


Blind way for one cable entry

Hood
cable to cable



32	09 30 032 0732	36
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Standard Hoods/Housings with 1 lever on the housing for 12 modules



Identification	Size	Part No.	Pg	Drawing	Dimensions in mm
Hoods side-entry	48	09 30 048 0540	29		
	48	09 30 048 0541	36		
	48	09 30 048 0542	42		
Hoods top-entry	48	09 30 048 0440	29		
	48	09 30 048 0441	36		
	48	09 30 048 0442	42		
Housings bulkhead mounting	48	with thermo-plastic cover 09 30 048 0301			
	48	with metal cover 09 30 048 0317			
Housings surface mounting	48	09 30 048 0290	29		
	48		36		
	48	09 30 048 0295	29		
	48		36		
		with thermo-plastic cover			
		09 30 048 0296			

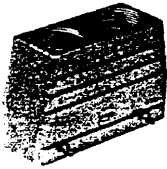
"Blind way

Hoods for Special Applications



Identification

Hoods
top entry



Size

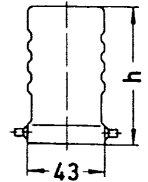
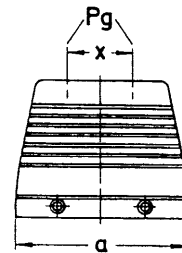
Part No.

Pg

Drawing

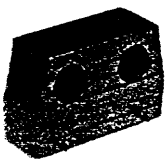
Dimensions in mm

10	09 30 010 0460	2x13.5
16	09 30 016 0459	2 x 16
16	09 30 016 0462	2 x 21
24	09 30 024 0462	2 x 21
24	09 30 024 0461	2 x 29

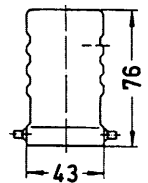
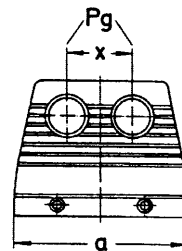


Size	a	h	x	Pg
10	73	72	20	2x13.5
16	93.5	76	36	2x16
16	93.5	76	36	2x21
24	120	76	52	2x21
24	120	76	48	2x29

Hoods
angled entry

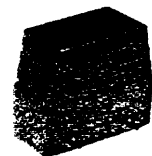


16	09 30 016 0663	2 x 21
24	09 30 024 0663	2 x 21

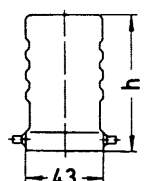
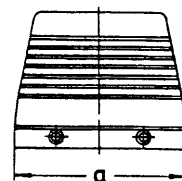
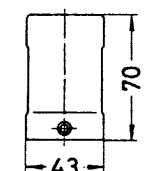
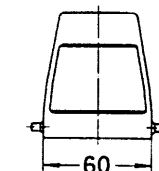


Size	a	x	Pg
16	93.5	36	2 x 21
24	120	56	2 x 21

Hoods
without entries
for customer drillings



6	09 30 006 0801	—
10	09 30 010 0801	—
16	09 30 016 0801	—
24	09 30 024 0801	—



Size	a	h
10	73	72
16	93.5	76
24	120	76

Housings

6	Page 06.25	—
10	Page 06.26	—
16	Page 06.28	—
24	Page 06.30	—

Identification

Part No.

Pg

Drawing

Dimensions in mm

Universal cable protection metal



09 00 000 5083
09 00 000 5084
09 00 000 5085

09 00 000 5086
09 00 000 5087
09 00 000 5088
09 00 000 5089

09 00 000 5090
09 00 000 5091
09 00 000 5092
09 00 000 5093

09 00 000 5094
09 00 000 5095
09 00 000 5096
09 00 000 5097

09 00 000 5098
09 00 000 5099

13.5
13.5
13.5

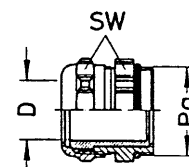
16
16
16
16

21
21
21
21

29
29
29
29

36
36

SW	min.	D max.
22	6.5	9.5
22	7	10.5
22	9	13
24	6.5	9.5
24	7	10.5
24	9	13
24	11.5	15.5
30	7	10.5
30	9	13
30	11.5	15.5
30	14	18
40	14	18
40	17	21
40	20	25
40	24	28
50	29	34
50	32	36



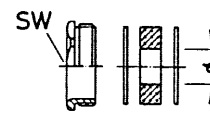
Cable sealing metal with normal seal for Standard Hoods/Housings



09 00 000 5114
09 00 000 5115
09 00 000 5116
09 00 000 5117
09 00 000 5146
09 00 000 5119

13.5
16
21
29
36
42

SW	ø
20	13
22	15
28	20
37	29
47	36
54	42



Cable sealing metal with multiple seal

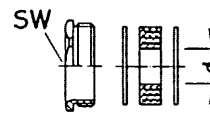
for Standard Hoods/Housings



09 00 000 5014
09 00 000 5015
09 00 000 5016
09 00 000 5017
09 00 000 5018
09 00 000 5019

13.5
16
21
29
36
42

SW	min.	ø max.
20	7.5	12.5
22	7.5	15
28	10	19
37	18	27
47	24	33
54	30	39



Protective tube sealing

metal

on request

plastic

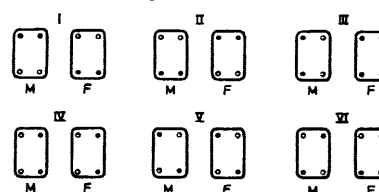
on request

Coding system with code bushes

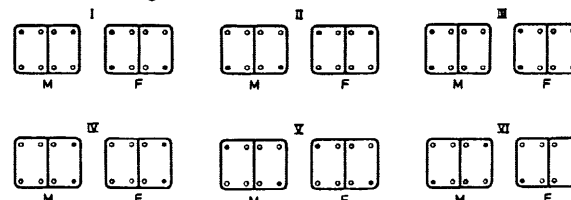


09 14 000 9901¹⁾

for hoods/housings with one frame



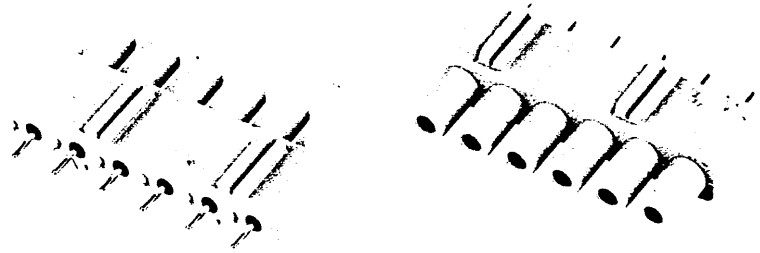
for hoods/housings with two frames



● Code bushes
○ Normal mounting screw

M – Male connector
F – Female connector

¹⁾ Order 4 pieces for one connector



Han pcb-adapter

Identification

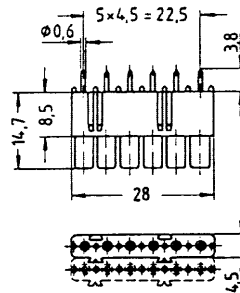
Part No.

Drawing

Dimensions in mm

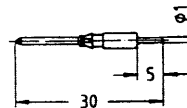
Adapter (contacts included)
can be used in combination with:
Han DD-Module
Han K 8 / 24
Han K 6 / 36
Han DD

0916 000 9905



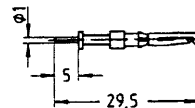
Han DD adapter contacts male contacts

09 15 000 6191



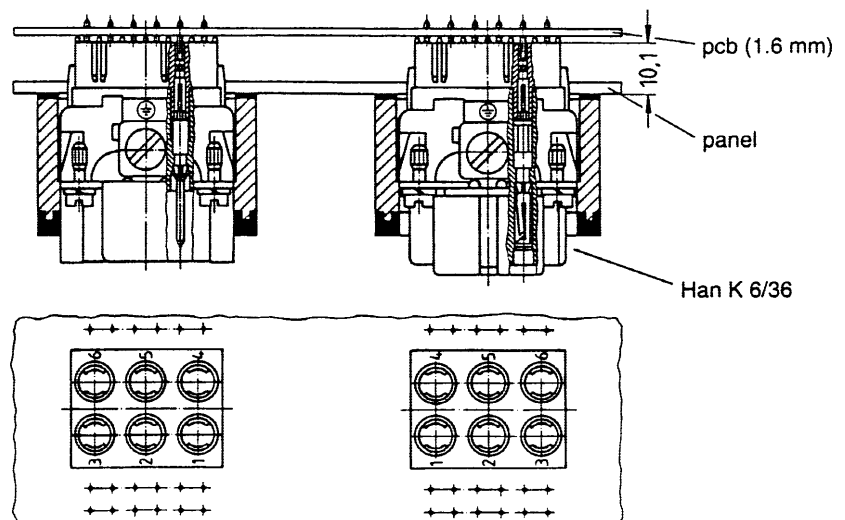
female contacts

09 15 000 6291



Application

The pcb-adapter is used to terminate control and data lines via pcb to the above mentioned connector inserts.



Summary Han Crimping tools



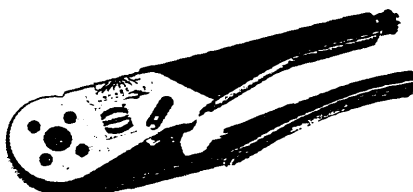
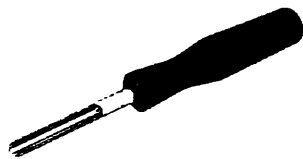
Identification		mm ²	AWG	Part No.																	
Crimp contacts				Crimping tool										Crimping tool depth adjustment gauge		Contact removal tool					
Series				09 99 000 0001	09 99 000 0110	09 99 000 0300	09 99 000 0303	09 99 000 0307	09 99 000 0314	Automatic crimping machine TK	09 99 000 0194	20 99 000 1032	20 99 000 1033	09 99 000 0006	09 99 000 0007	09 99 000 0008	09 99 000 0009	09 99 000 0125	09 99 000 0203	20 99 001 1032	20 99 002 1032
Han C-module	Power contacts	1.5	16	x				x	x							x					
	Han C 09 32	2.5	14	x				x	x							x					
		4.0	12	x			x	x	x				x								
		6.0	10				x	x									x				
Han DD-module	Signal contacts	0.14	26	x ³⁾	x	x			x ³⁾										x ³⁾		
	Han D 09 15	0.25	24	x ³⁾	x	x			x ³⁾									x			
		0.37	22	x	x	x			x	x								x			
		0.5	20	x	x	x			x	x					x						
		0.75	18	x	x	x			x	x					x						
		1.0	18	x	x	x			x	x					x						
		1.5	16	x	x	x			x	x						x					
		2.5	14	x					x	x					x						
Han E-module	FOC contacts											x								x	
	1 mm POF (.32x1)																				
	Power contacts	0.5	20	x	x	x			x	x					x						
	Han E 09 33	0.75	18	x	x	x			x	x					x						
		1.0	18	x	x	x			x	x					x						
		1.5	16	x	x	x			x	x						x					
Multicontact-module		2.5	14	x	x	x			x	x						x					
		4.0	12	x					x	x			x								
	Coaxial contacts										x										
	FOC contacts, POF (DIN 41 626)											x ¹⁾	x ¹⁾								x

Identification		Part No.																	
Locator		09 99 000 0308		x				x	x										
	Han C	09 99 000 0304					x												
Han D		09 99 000 0311		x					x										
		09 99 000 0301				x													
Han E		09 99 000 0111			x														
		09 99 000 0310		x					x										
		09 99 000 0302				x													
		09 99 000 0112		x															
FOC contacts (DIN 41 626)		20 99 000 1036									x ²⁾								

1) both tools are necessary

2) to adjust female contact, only

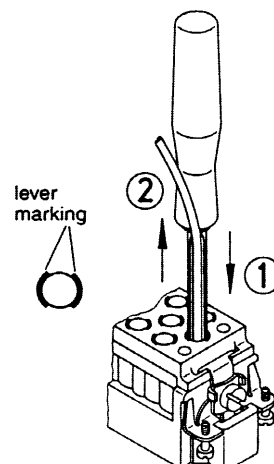
3) for wire gauge 0.14 mm² and 0.25 mm² use only male contact 09 15 000 6107 respectively female contact 09 15 000 6207

Identification	Part No.	Drawing	Dimensions in mm
BUCHANAN- crimping tool	09 99 000 0001	Wire gauge 1.5 - 4 mm ²	  order separately
Locator	09 99 000 0308		
Crimping tool depth adjustment gauge	09 99 000 0008	Wire gauge 1.5 + 2.5 mm ² ø 1.80	
	09 99 000 0006	4 mm ² ø 2.00	
HARTING- crimping tool	09 99 000 0303	Wire gauge 4 - 6 mm ²	
Locator as spare part	09 99 000 0304	Locator is supplied with the tool	
HARTING- pneumatic crimping tool	09 99 000 0307		  order separately
Crimping tool depth adjustment gauge	09 99 000 0008	Wire gauge 1.5 + 2.5 mm ² ø 1.80	
	09 99 000 0006	4 mm ² ø 2.00	
	09 99 000 0009	6 mm ² ø 2.40	
Locator	09 99 000 0308		
Table fixing and foot switch for pneumatic crimping tool	09 99 000 0309		
Removal tool for crimp contacts			
Removal tool	09 99 000 0305		

A removal tool is necessary to remove the contacts.

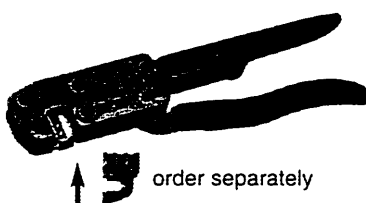
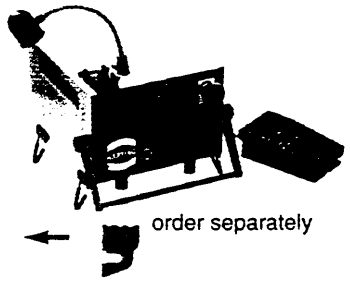
For each „C“ contact cavity, the location of the internal locking levers are marked on the wiring side with two black arcs. The sides of the tool must be first properly aligned thus edges of the tool catch both levers simultaneously and then inserted until a stop is noticeable ①.

Once it has been inserted, the tool **must not** be turned. The wire together with the tool can then be pulled out from the wiring side of the insert ②.



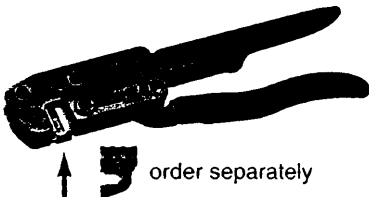
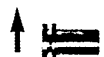
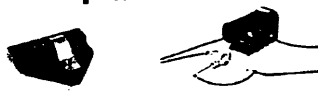
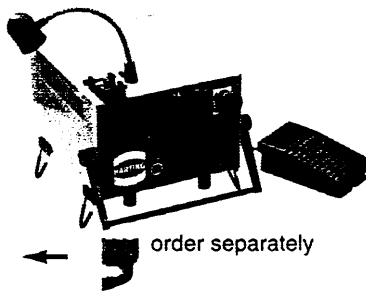
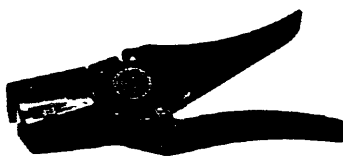
Crimping tools Signal contacts (Han D 09 15 . . .)



Identification	Part No.	Drawing	Dimensions in mm
HARTING- crimping tool	09 99 000 0110	Wire gauge 0.14 - 1.5 mm ²	
Locator	09 99 000 0111		 order separately
HARTING- crimping tool	09 99 000 0300	Wire gauge 0.14 - 1.5 mm ²	
Locator as spare part	09 99 000 0301	Locator is supplied with the tool	
BUCHANAN- crimping tool	09 99 000 0001	Wire gauge 0.37 - 2.5 mm ²	
Locator	09 99 000 0311		 order separately
Crimping tool depth adjustment gauge	09 99 000 0125 09 99 000 0007 09 99 000 0008	Wire gauge 0.37 mm ² ø 1.30 0.5-1 + 2.5 mm ² ø 1.55 1.5 mm ² ø 1.80	
For FOC contact: Crimping tool Crimping tool depth adjustment gauge	20 99 000 1032 20 99 001 1032	ø 1.45	
HARTING- pneumatic crimping tool	09 99 000 0314		
Locator	09 99 000 0311		 order separately
Crimping tool depth adjustment gauge	09 99 000 0125 09 99 000 0007 09 99 000 0008	Wire gauge 0.37 mm ² ø 1.30 0.5-1 + 2.5 mm ² ø 1.55 1.5 mm ² ø 1.80	 
Table fixing and foot switch for pneumatic crimping tool	09 99 000 0309		
HARTING- semi-automatic crimping device			
Main drive foot-operated 220 V/50 Hz	09 99 000 0246	Wire gauge 0.14 - 1.5 mm ²	 order separately
Crimping head	09 99 000 0254		
Locator	09 99 000 0111		
Insertion tool for crimp contacts	09 99 000 0059		
Removal tool for crimp contacts (also for FOC contact)			 .. 0012
Removal tool	09 99 000 0012		 .. 0004
Replacement-tip of removal tool	09 99 000 0004		 .. 0052
Removal tool	09 99 000 0052		

For crimp contacts with wires of less than 0.75 mm² it is recommended that an insertion tool is used. Contacts should be inserted from the wiring side and pushed down until a positive locking is achieved.

A removal tool is necessary if contacts are to be replaced in the insert. It is inserted from the mating face and pushed over the contact until a stop is noticeable. Additional pressure unlocks the contact and pushes it out of the wiring side. In case of the removal tool (.. 0052) the unlocking process is achieved by pressure on the central rod.

Identification	Part No.	Drawing	Dimensions in mm
HARTING- crimping tool	09 99 000 0110	Wire gauge 0.5 - 2.5 mm ²	
Locator	09 99 000 0112		 order separately
HARTING- crimping tool	09 99 000 0300	Wire gauge 0.5 - 2.5 mm ²	
Locator as spare part	09 99 000 0302	Locator is supplied with the tool	
BUCHANAN- crimping tool	09 99 000 0001	Wire gauge 0.5 - 4 mm ²	
Locator	09 99 000 0310		
Crimping tool depth adjustment gauge	09 99 000 0007 09 99 000 0008 09 99 000 0006	Wire gauge 0.5 - 1 mm ² ø 1.55 1.5 - 2.5 mm ² ø 1.80 4 mm ² ø 2.00	 order separately
HARTING- pneumatic crimping tool	09 99 000 0314		
Locator	09 99 000 0310		
Crimping tool depth adjustment gauge	09 99 000 0007 09 99 000 0008 09 99 000 0006	Wire gauge 0.5 - 1 mm ² ø 1.55 1.5 - 2.5 mm ² ø 1.80 4 mm ² ø 2.00	 order separately
Table fixing and foot switch for pneumatic crimping tool	09 99 000 0309		
HARTING- semi-automatic crimping device			
Main-drive foot-operated 220 V/50 Hz	09 99 000 0246	Wire gauge 0.5 - 2.5 mm ²	
Crimping head	09 99 000 0254		
Locator	09 99 000 0112		 order separately
Insertion tool for crimp contacts	09 99 000 0059		 For crimp contacts wires of less than 0.75 mm ² it is recommended that an insertion tool is used. Contacts should be inserted from the wiring side and pushed down until a positive locking is achieved.
Crimp contact removal for Han E-module	09 99 000 0319		 A removal tool is necessary if contacts are to be replaced in the insert. The tool is inserted from the wiring side until a stop is noticeable (see page 06.15). The wire with the crimp contact can then be pulled out from the same side of the insert.
Stripping tool	09 99 000 0159		 For wires from 0.5 to 4.0 mm ²

Identification

Part No.

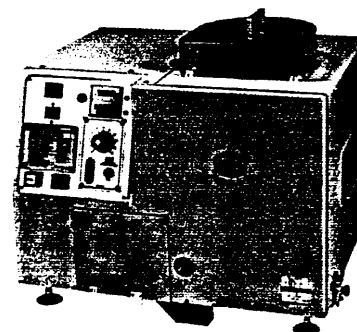
Drawing

Dimensions in mm

HARTING-
automatic crimping machine TK

- Power supply 230 V, 50 Hz
- Compressed air connection 6 bar

09 98 000 6000



Change unit – E –
for contacts 09 33

09 98 000 6002

Crimping tool depth adjustment gauge

09 98 600 6331
09 98 600 6332
09 98 600 6333
09 98 600 6334
09 98 600 6335

Wire gauge
0.5 - 1 mm² ø 1.55
AWG 16 ø 1.60
AWG 14 ø 1.70
1.5 + 2.5 mm² ø 1.80
3 + 4 mm² ø 2.00

Change unit – D –
for contacts 09 15

09 98 000 6001

Crimping tool depth adjustment gauge

09 98 600 6328
09 98 600 6329
09 98 600 6330
09 98 600 6331
09 98 600 6332
09 98 600 6334

Wire gauge
0.25 - 0.37 mm² ø 1.00
0.37 mm² ø 1.30
AWG 14 ø 1.45
0.5-1 + 2.5 mm² ø 1.55
AWG 16 ø 1.60
1.5 mm² ø 1.80

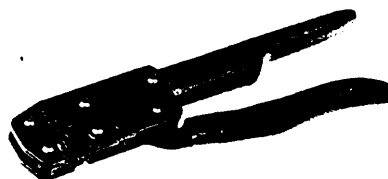
Crimping tools for contacts of Han Multicontact-module



Identification	Part No.	Drawing	Dimensions in mm
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HARTING-
crimping tool
for coaxial contacts

09 99 000 0194



Use the middle crimping jaws

BUCHANAN-
crimping tool
for FOC contacts (1 mm POF)

20 99 000 1032

Crimping tool depth
adjustment gauge $\varnothing$ 1.8 mm

20 99 002 1032



Note: This tool is only for FOC contacts

HARTING-
crimping tool
for FOC contacts (1 mm POF)
width 3.0 mm

20 99 000 1033



Removal tool
for contacts
(see footnote on page 06.18)

09 99 000 0174



order separately



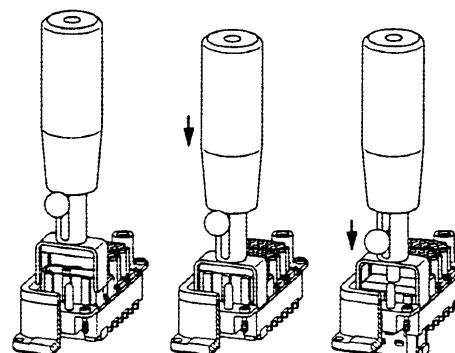
Removal jacket

09 99 000 0320



Removal tool
for modules

09 99 000 0318



List of part numbers



Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
09 00 000 5014	06.35	09 15 000 6121	06.17	09 30 010 1541	06.27	09 30 024 1290	06.31	09 98 000 6000	06.41
09 00 000 5015	06.35	09 15 000 6122	06.17	09 30 010 1731	06.26	09 30 024 1295	06.31	09 98 000 6001	06.41
09 00 000 5016	06.35	09 15 000 6123	06.17	09 30 010 1751	06.27	09 30 024 1421	06.30	09 98 000 6002	06.41
09 00 000 5017	06.35	09 15 000 6124	06.17	09 30 010 2296	06.27	09 30 024 1441	06.31	09 98 600 6328	06.41
09 00 000 5018	06.35	09 15 000 6125	06.17	09 30 010 5401	06.26	09 30 024 1520	06.30	09 98 600 6329	06.41
09 00 000 5019	06.35	09 15 000 6126	06.17	09 30 010 5407	06.26	09 30 024 1540	06.31	09 98 600 6330	06.41
09 00 000 5083	06.35	09 15 000 6191	06.36	09 30 010 5423	06.26	09 30 024 1731	06.30	09 98 600 6331	06.41
09 00 000 5084	06.35	09 15 000 6201	06.17	09 30 010 5425	06.26	09 30 024 1751	06.31	09 98 600 6332	06.41
09 00 000 5085	06.35	09 15 000 6202	06.17	09 30 010 5427	06.26	09 30 024 2295	06.31	09 98 600 6333	06.41
09 00 000 5086	06.35	09 15 000 6203	06.17	09 30 016 0230	06.28	09 30 024 5401	06.30	09 98 600 6334	06.41
09 00 000 5087	06.35	09 15 000 6204	06.17	09 30 016 0231	06.28	09 30 024 5405	06.30	09 98 600 6335	06.41
09 00 000 5088	06.35	09 15 000 6205	06.17	09 30 016 0270	06.28	09 30 024 5422	06.30		
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09 00 000 5119	06.35	09 30 006 0318	06.25	09 30 016 0663	06.34	09 30 048 0295	06.33	09 99 000 0110	06.40
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		09 30 006 0443	06.24	09 30 016 0731	06.28	09 30 048 0301	06.33	09 99 000 0111	06.39
		09 30 006 0542	06.24	09 30 016 0801	06.34	09 30 048 0317	06.33	09 99 000 0112	06.40
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