Description of the Han-Modular® system

The Han-Modular® series is designed for combining different transmission media in one connector. The multifaceted system of inserts, contacts, frames, hoods and housings as well as accessories fulfils individual customer requirements. The customer can choose between more than 100 different modules. These are suitable for different transmission media and cover various termination techniques.



Modules + **Hinged frame** + **Hoods/ Housings** → **Han-Modular® Connectors**



The patented Han-Modular® hinged frame enables the configuration of all modules in the well-accepted Han® hoods and housings. Further additional solutions are available, e.g. suitable docking frames for drawer units. Individual customer requirements can be realised by means of the Han-Modular® series. Combining various transmission media in one single connector results in lower expenditures in installation time and production downtime. Space savings and cost savings are further benefits. The easy extension possibilities secure the ideal solution for an actual as well as future safe design.

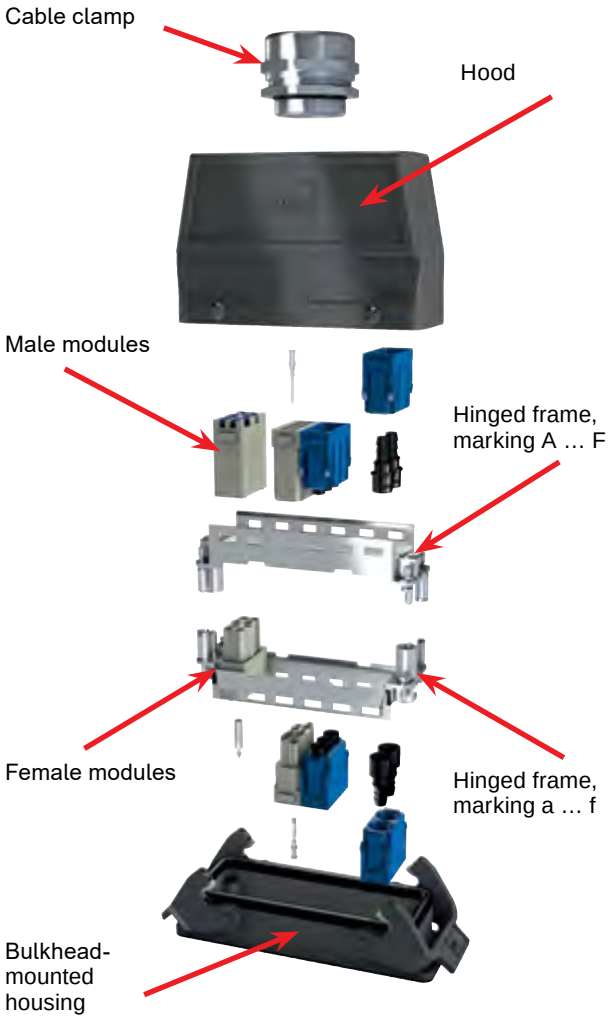
Highlights

- **Combination of different connectors to one unit**
- **Shorter installation times**
- **Important space saving**
- **Save money for components as well as for the whole industrial site**
- **Future safe design due to easy extensions**

Technical characteristics

Specifications / approvals	DIN EN 61984 DIN EN 60664-1 File No. E235076 File No. 61754 - 14 HH
PE system (hinged frame) - Signal side - Power side	2 leading PE contacts 0.5 … 2.5 mm² 4 … 10 mm² (10 mm² with crimp tool 09 99 000 0374)
Limiting temperatures*	- 40 °C … + 125 °C
Flammability acc. to UL 94	V0
Working life - Standard version - HMC version	 > 500 mating cycles > 10,000 mating cycles
Material - Hinged frames - Modules - Contacts	 zinc die cast polycarbonate copper alloy

System description

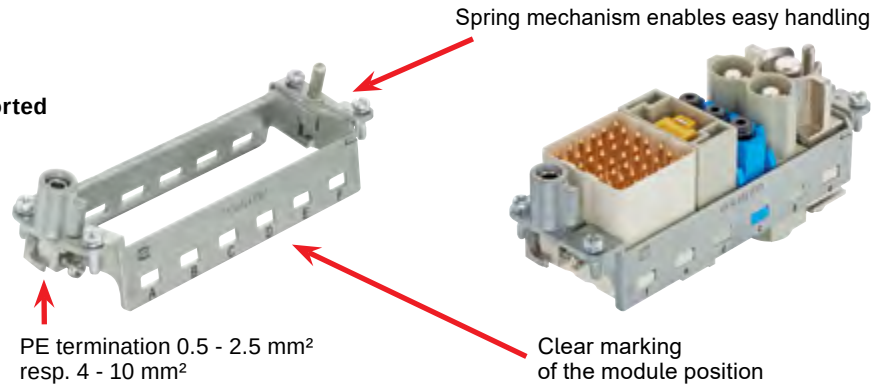


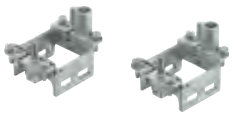
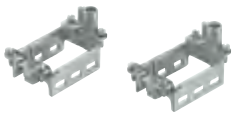
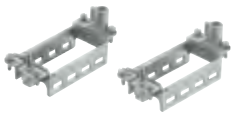
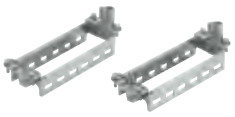
* Some modules have a lower limiting temperature (i.e. pneumatic, optical as well as data transmission modules)

Hinged Frames Plus

New Hinged Frames Plus – Established products even better

- **Suitable for more than 100 different modules**
- **Quick and easy assembly supported by an audible “Click”**
- **Very high mechanical stability**
- **No tools for insertion and removal**
- **2 leading PE contacts**



Size	Hinged frames 6 B	Hinged frames 10 B	Hinged frames 16 B	Hinged frames 24 B
				
Number of modules	for 2 modules	for 3 modules	for 4 modules	for 6 modules
Standard version (A … F)	09 14 006 0361	09 14 010 0361	09 14 016 0361	09 14 024 0361
Standard version (a … f)	09 14 006 0371	09 14 010 0371	09 14 016 0371	09 14 024 0371
Han® HMC version (A … F)	09 14 206 0361	09 14 210 0361	09 14 216 0361	09 14 224 0361
Han® HMC version (a … f)	09 14 206 0371	09 14 210 0371	09 14 216 0371	09 14 224 0371

Accessories

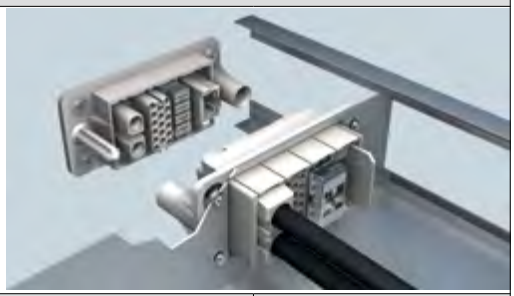
Size	PE terminal extension (cable shoe 16 mm²)	Coding element Han® 6 B - 24 B	Guide pins / bushes Han® 6 B - 24 B	Han® 10 A frame for 1 module
				
Hint	for hoods/housings high construction only	6 codings	16 codings	
Part number	09 14 000 9912	09 14 000 9901	Male: 09 14 000 9908 Female: 09 14 000 9909	09 14 000 0304

* for pneumatic, optical as well as small contacts (≤ 5 A) guide pins and bushes are recommended

Docking frame

Docking frame

- Docking connector for drawer systems
- Robust, leading guide pins and bushes
- Cost saving polycarbonate frames
- Compatible with HMC up to 10,000 mating cycles
- Large tolerance compensation of ± 2 mm play (float mount with M4 adapter plate 09 14 000 9936)



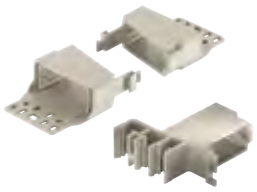
Size	Docking frames 6 B	Docking frames 10 B	Docking frames 16 B	Docking frames 24 B
				
Number of modules	for 2 modules	for 3 modules	for 4 modules	for 6 modules
Dimensions	65.8 x 33 mm	79.3 x 45 mm	94 x 45 mm	123.4 x 45 mm
float mounting (A … F)	09 14 006 1701	09 14 010 1701	09 14 016 1701	09 14 024 1701
fix mounting (a … f)	09 14 006 1711	09 14 010 1711	09 14 016 1711	09 14 024 1711

Han-Modular® Hoods/Housings

Han-Modular® Hoods/Housings

	Han-Modular® Compact	Han-Modular® Twin	Han-Modular® Eco	Han-Modular® Eco
Hoods/Housings type Number of modules PE termination	Metal hoods/housings IP65 1 module 0.5 … 10 mm²	Metal hoods/housings IP65 2 modules 0.5 … 10 mm²	Plastic hoods/housings IP65 1 module without PE	Plastic hoods/housings IP65 1 module Pin 1 = PE
				
Hoods - Carrier hoods - Hood side entry M25 - Hood top entry M25 - Hood top entry M32 - Cover	 09 14 001 0311 19 14 001 0501 19 14 001 0401 19 14 001 0402 09 14 001 5402	 09 14 002 0311 19 14 002 0501 19 14 002 0401 19 14 002 0402	09 14 001 0420	09 14 001 0421
Housings - Bulkhead-mounted housing - Cable to cable housing - Cover	 09 14 001 0301 19 14 001 0701 09 14 001 5401	 09 14 002 0301 19 14 002 0702 09 14 002 5401	09 14 001 0320 09 14 001 0720	09 14 001 0321 09 14 001 0721
Coding elements	09 14 000 997x	09 14 000 993x	09 14 000 9929	09 14 000 9929

Han-Modular® Hoods/Housings

	Han-Eco®	Han-*Yellock*®	Han-INOX®	Module clamp
Hoods/Housings type Locking element Field of application Number of modules	Plastic hoods/housings IP65 Plastic levers Industrial applications 3, 4, 5, 7 modules	Metal hoods/housings IP65 Press-button Industrial applications 2, 4 modules	Stainless steel hoods/housings IP65 Stainless steel levers Process industry 3 modules	Plastic mounting frame IP20 Snap locking within switch cabinet 1 module
				 09 14 000 0312
Part numbers	19 41 …	11 …	19 44 310 …	09 14 000 0313

Hoods/housings for hinged frame

	Han® B	Han® EMC	Han® M	Han® HPR
Hoods/Housings type Locking element Field of application	Metal hoods/housings IP65 Han-Easy Lock® Industrial applications	Metal hoods/housings IP65 Han-Easy Lock® shielded connections	Metal hoods/housings IP65 Stainless steel levers Outdoor applications	Metal hoods/housings IP68 Screw locking Rail technology
Sizes: - Han® 6 B for 2 modules - Han® 10 B for 3 modules - Han® 16 B for 4 modules - Han® 24 B for 6 modules				
Part numbers	09 30 … / 19 30 …	09 62 … / 19 62 …	09 37… / 19 37…	09 40 … / 19 40 …

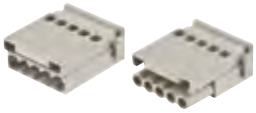
Hoods/housings for hinged frame

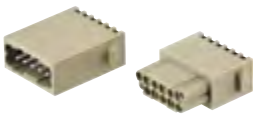
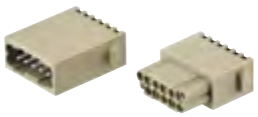
	Han® HMC	Han-Snap®	Grip panel	Docking frame
Hoods/Housings type Locking element Field of application	Metal hoods/housings IP65 Han-Easy Lock® up to 10,000 mating cycles	Plastic adapter IP20 Snap locking within switch cabinet	Metal mounting frame IP20 Screw locking within switch cabinet	Metal frame IP20 without locking for drawer systems
Sizes: - Han® 6 B for 2 modules - Han® 10 B for 3 modules - Han® 16 B for 4 modules - Han® 24 B for 6 modules				
Part numbers	09 30 2 … / 19 30 2 …	09 33 …	09 00 0xx 56 …	09 30 0xx 1704

For more details and part numbers refer to catalogue “Industrial Connectors Han®” as well as the HARTING eCatalogue

		Han® 200 A Axial Module	Han® 200 A PE Module	Han® 100 A Axial Module	Han® PE Module
100 - 200 A					
	Number of contacts Electrical data Termination type	1* 200 A / 1000 V Axial screw termination	1 x PE* 200 A Axial screw termination	1* 100 A / 1000 V Axial screw termination	1 x PE 100 A Axial screw termination
	Cross-section	40 … 70 mm²	40 … 70 mm²	16 … 35 mm²	16 … 35 mm²
	Male module (M)	09 14 001 2662	09 14 001 2667	09 14 002 2651	09 14 001 2633
	Female module (F)	09 14 001 2762	09 14 001 2767	09 14 002 2751	09 14 001 2733
	Cross-section	25 … 40 mm²	25 … 40 mm²	10 … 25 mm²	10 … 25 mm²
	Male module (M)	09 14 001 2663	09 14 001 2668	09 14 002 2653	09 14 001 2632
	Female module (F)	09 14 001 2763	09 14 002 2768	09 14 002 2753	09 14 001 2732

		Han® 70 A Axial module	Han® 70 A Hybrid module	Han® 40 A Axial module	Han® C Axial module
40 - 70 A					
	Number of contacts Electrical data Termination type	2 70 A / 1000 V Axial screw termination	1 + (4 x Han E®) 70 A / 1000 V Axial screw termination	2 40 A / 1000 V Axial screw termination	3 40 A / 690 V Axial screw termination
	Cross-section	14 … 22 mm²	14 … 22 mm²	6 … 10 mm²	6 … 10 mm²
	Male module (M)	09 14 002 2647	09 14 005 2647	09 14 002 2602	09 14 003 2602
	Female module (F)	09 14 002 2742	09 14 005 2742	09 14 002 2702	09 14 003 2702
	Cross-section	6 … 16 mm²	6 … 16 mm²	2.5 … 8 mm²	2.5 … 8 mm²
	Male module (M)	09 14 002 2646	09 14 005 2646	09 14 002 2601	09 14 003 2601
	Female module (F)	09 14 002 2741	09 14 005 2741	09 14 002 2701	09 14 003 2701

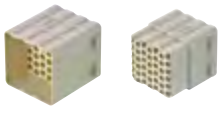
		Han E® Quick Lock module	Han® EE Quick Lock module	Han® ES module	Han E® screw module
16 A					
	Number of contacts Electrical data Termination type Cross-section	6 16 A / 500 V Quick Lock termination 0.5 … 2.5 mm²	8 16 A / 400 V Quick Lock termination 0.5 … 2.5 mm²	5 16 A / 400 V Cage clamp termination 0.14 … 2.5 mm²	5 16 A / 230/400 V Screw termination 0.5 … 2.5 mm²
	Male module (M)	09 14 006 2633	09 14 008 2633	09 14 005 2616	09 14 005 2601
	Female module (F)	09 14 006 2733	09 14 008 2733	09 14 005 2716	09 14 005 2701

		Han DD® Quick Lock module	Han DD® Quick Lock module		
≤ 10 A					
	Number of contacts Electrical data Termination type Cross-section	12, silver plated 10 A / 250 V Quick Lock termination 0.25 … 1.5 mm²	12, gold plated 10 A / 250 V Quick Lock termination 0.25 … 1.5 mm²		
	Male module (M)	09 14 012 2632	09 14 012 2634		
	Female module (F)	09 14 012 2732	09 14 012 2734		

	Hexagonal drivers	with grip	Bit 1/4''	Adapter 3/8''	Hexagonal torque set
Axial screw termination					
	2 mm (40 A)	09 99 000 0313	09 99 000 0369		09 99 000 0834
	2.5 mm (70 A)		09 99 000 0375		09 99 000 0834
	4 mm (100 A)	09 99 000 0363		09 99 000 0370	09 99 000 0833
	5 mm (200 A)	09 99 000 0364		09 99 000 0371	09 99 000 0833

* Double module, requires two places in the frame

Power and Signal Modules – Crimp termination

PE		Han® PE module (Including crimp contact for earthing)			
	Number of contacts Cross-section Termination type	1 x PE 35 mm² Crimp termination, Han® HC	1 x PE 25 mm² Crimp termination, Han® HC	1 x PE 16 mm² Crimp termination, Han® HC	
	Male module (M)	09 14 001 3074	09 14 001 3073	09 14 001 3072	
	Female module (F)	09 14 001 3174	09 14 001 3173	09 14 001 3172	
70 - 200 A		Han® 200 A Crimp module	Han® 100 A Crimp module	Han® 100 A Single module	Han® 70 A Crimp module
					
	Number of contacts Electrical data Cross-section Termination type	1* 200 A / 1000 V 25 … 70 mm² Crimp termination, Han® HC	2* 100 A / 1000 V 10 … 35 mm² Crimp termination, Han® HC	1 100 A / 830 V 10 … 35 mm² Crimp termination, Han® HC	2 70 A / 1000 V 6 … 25 mm² Crimp termination, Han® HC
	Male module (M)	09 14 001 3001	09 14 002 3051	09 14 001 3031	09 14 002 3041
	Female module (F)	09 14 001 3101	09 14 002 3151	09 14 001 3131	09 14 002 3141
40 A		Han® 40 A Crimp module	Han® C module	Han® CC module	Han® CD module
					
	Number of contacts Electrical data Cross-section Termination type	2 40 A / 1000 V 1.5 … 10 mm² Crimp termination, Han® C	3 40 A / 690 V 1.5 … 6 mm² Crimp termination, Han® C	4 40 A / 830 V 1.5 … 6 mm² Crimp termination, Han® C	3 + 4 40 A + 10 A / 830 V 0.14 … 6 mm² Crimp, Han® C + Han D®
	Male module (M)	09 14 002 3002	09 14 003 3001	09 14 004 3041	09 14 007 3001
	Female module (F)	09 14 002 3102	09 14 003 3101	09 14 004 3141	09 14 007 3101
16 A		Han E® module	Han® EE module	Han® EEE module	Han E® Protected module
					
	Number of contacts Electrical data Cross-section Termination type	6 16 A / 500 V 0.14 … 4 mm² Crimp termination, Han E®	8 16 A / 400 V 0.14 … 4 mm² Crimp termination, Han E®	20* 16 A / 500 V 0.14 … 4 mm² Crimp termination, Han E®	6 16 A / 830 V 0.14 … 4 mm² Crimp termination, Han E®
	Male module (M)	09 14 006 3001	09 14 008 3001	09 14 020 3001	09 14 006 3041
	Female module (F)	09 14 006 3101	09 14 008 3101	09 14 020 3101	09 14 006 3141
≤ 10 A		Han DD® module	Han® DDD module	Han DD® Quad module	Han® High Density module
					
	Number of contacts Electrical data Cross-section Termination type	12 10 A / 250 V 0.14 … 2.5 mm² Crimp termination, Han D®	17 10 A / 150 V 0.14 … 2.5 mm² Crimp termination, Han D®	42* 10 A / 150 V 0.14 … 2.5 mm² Crimp termination, Han D®	25 4 A / 50 V 0.08 … 0.52 mm² Crimp termination, D-Sub
	Male module (M)	09 14 012 3002	09 14 017 3001	09 14 042 3001	09 14 025 3001
	Female module (F)	09 14 012 3102	09 14 017 3101	09 14 042 3101	09 14 025 3101
High Voltage		Han® HV module 40 A	Han® HV module 16 A	Han® HV single module	
					
	Number of contacts Electrical data Cross-section Termination type	2* 40 A / 2900/5000 V 1.5 … 10 mm² Crimp termination, Han® C	2* 16 A / 2900/5000 V 0.14 … 4 mm² Crimp termination, Han E®	2 16 A / 2500 V 0.14 … 4 mm² Crimp termination, Han E®	
	Male module (M)	09 14 002 3023	09 14 002 3021	09 14 002 3025	
	Female module (F)	09 14 002 3123	09 14 002 3121	09 14 002 3125	

* Double module, requires two places in the frame

Data Transfer Modules

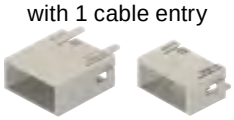
Han® RJ45 module

Han® RJ45 module	for patch cable	for IDC	for patch cable	for IDC and preLink
- 8 contacts - cat. 6_A - 10 Gbit/s				
Part numbers	Male module (M) 09 14 001 4623	Male module (M) 09 14 001 4623	Female module (F) 09 14 001 4721	Female module (F) 09 14 001 4722
	Adapter for patch cable: 09 14 000 9966	RJ Industrial IDC: 09 45 400 1560		RJ45 female IDC: 09 14 545 1561
	Patch cable cat. 6: 09 47 474 71xx			RJ45 female preLink: 09 14 008 4720

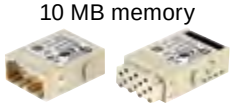
Han-Quintax® Modules

	Han-Quintax®	Han® High Density Quintax	Han D® Coax	Han E® Coax
Quintax modul				
Number of contacts	2 x 4*	2 x 8*	2 x Coax*	2 x Coax*
Male module (M)	09 14 002 3001	09 14 002 3001	09 14 002 3001	09 14 002 3001
Female module (F)	09 14 002 3101	09 14 002 3101	09 14 002 3101	09 14 002 3101
Insert (Cable Ø ≤ 9.5 mm)				
Data rate Electrical data Cross-section Termination type	100 Mbit/s (cat. 5e) 10 A / 50 V 0.14 … 2.5 mm² Crimp termination, Han D®	100 Mbit/s (cat. 5e) 5 A / 50 V 0.09 … 0.52 mm² Crimp termination, D-Sub	≤ 500 Mhz / 75 Ω 10 A / 50 V 0.14 … 2.5 mm² Crimp termination, Han D®	≤ 500 Mhz / 50 Ω 16 A / 50 V 0.14 … 4 mm² Crimp termination, Han E®
Male insert (M)	09 15 004 3013	09 15 008 3013	09 15 001 3013	09 15 001 3023
Female insert (F)	09 15 004 3113	09 15 008 3113	09 15 001 3113	09 15 001 3123
PE shielding termination	*Optional shielding termination to the hinged frame with the aid of Han-Quintax® metal adapter 09 14 000 9915*			

Han® GigaBit – Han® MegaBit Modules

	Han® GigaBit module	Han® MegaBit module	Han® MegaBit module	Han® Shielded Module
		with 2 cable entries	with 1 cable entry	
Adapter Module				
Male module (M)	09 14 001 3011	09 14 001 3011	09 14 001 3011	09 14 001 3011
Female module (F)	09 14 001 3111	09 14 001 3111	09 14 001 3111	09 14 001 3111
Insert (Cable Ø ≤ 14 mm)				
Number of contacts Data rate Electrical data Cross-section Termination type Shielding termination	8 10 Gbit/s (cat. 6_A) 5 A / 50 V 0.09 … 0.52 mm² Crimp termination, D-Sub Crimp flange	2 x 4 2 x 100 Mbit/s (cat. 5e) 10 A / 50 V 0.14 … 2.5 mm² Crimp termination, Han D® 2 x crimp flange	8 1 Gbit/s (cat. 5e) 10 A / 50 V 0.14 … 2.5 mm² Crimp termination, Han D® Crimp flange	20 4 A / 32 V 0.09 … 0.52 mm² Crimp termination, D-Sub Crimp flange
Male insert (M)	09 14 008 3011	09 14 008 3016	09 14 008 3021	09 14 020 3013
Female insert (F)	09 14 008 3111	09 14 008 3116	09 14 008 3121	09 14 020 3113
	with PE shielding termination	with PE shielding termination	with PE shielding termination	
Male insert (M)	09 14 008 3012	09 14 008 3017	09 14 008 3022	
Female insert (F)	09 14 008 3112	09 14 008 3117	09 14 008 3122	

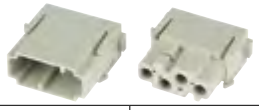
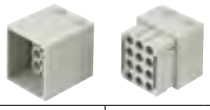
Serial Bus Modules

	Han® D-Sub module	Han® USB module	Han® FireWire module	Han® ID CAN module
				10 MB memory
				
Number of contacts Data rate Electrical data Cross-section Termination type	9 + shielding 12 Mbit/s (Profibus) 5 A / 50 V 0.09 … 0.52 mm² Crimp termination, D-Sub	8 5 Gbit/s (USB 3.0) 1 A / 50 V USB patch cable	6 400 Mbit/s (IEEE 1394a) 1 A / 50 V FireWire patch cable	7 1 Mbit/s (CAN bus) 24 V 0.13 … 1.5 mm² Cage clamp termination
Male module (M)	09 14 009 3001	09 14 001 4601	09 14 001 4611	09 80 015 0100
Female module (F)	09 14 009 3101	09 14 001 4703	09 14 001 4711	09 80 115 0200

* Double module, requires two places in the frame

Modules for different Media

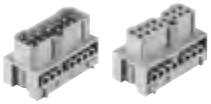
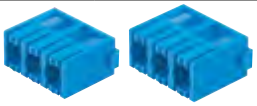
Coaxial Modules

	Han® Multi Module (for D-Sub coaxial contacts)		Han® Multi Module (for DIN 41626 coaxial contacts)	
				
Number of contacts	4	4	12*	12*
Male module (M)	09 14 004 4501	09 14 004 4501	09 14 012 4501	09 14 012 4501
Female module (F)	09 14 004 4513	09 14 004 4513	09 14 012 4512	09 14 012 4512
Coaxial contacts (≤ 2 GHz)				
Impedance Coaxial cable Termination type	75 Ω RG179, RG187 Crimp /crimp termination	50 Ω RG174, RG188, RG316 Crimp /crimp termination	75 Ω RG179, RG187 Solder /crimp termination	50 Ω RG174, RG188, RG316 Solder /crimp termination
Male contact	09 69 282 5230	09 69 282 5140	09 14 000 6221	09 14 000 6211
Female contact	09 69 182 5230	09 69 182 5140	09 14 000 6121	09 14 000 6111

Optical Modules

	Han® LC module	Han® SC module	Han® Multi module	Han® Multi module
				
Number of contacts	6	4	4	12*
Male module (M)	09 14 006 4701	09 14 004 4701	09 14 004 4501	09 14 012 4501
Female module (F)	09 14 006 4711	09 14 004 4711	09 14 004 4512	09 14 012 4512
Contacts				
1 mm POF		20 10 001 5211	Male: 20 10 001 4211	Male: 20 10 001 4211
			Female: 20 10 001 4221	Female: 20 10 001 4221
1 mm POF Fast assembly termination		20 10 001 5217		
SI-Fibre 200 / 230 µm Multi-Mode		20 10 230 5211	Male: 20 10 230 4211	Male: 20 10 230 4211
			Female: 20 10 230 4221	Female: 20 10 230 4221
GI-Fibre 50-62,5 / 125 µm Multi-Mode	20 10 125 8211	20 10 125 5211	Male: 20 10 125 4212	Male: 20 10 125 4212
			Female: 20 10 125 4222	Female: 20 10 125 4222
GI-Fibre 9 / 125 µm Single-Mode	20 10 125 8220	20 10 125 5220		

Further Modules

	Han-Eco® Monoblock	Han-Eco® PE module	Han® Dummy module	Han® Pneumatic module metal
Field of application	for Han-Eco® hoods/housings only	for Han-Eco® hoods/housings only	to fill-up empty module places	
				
Number of contacts Electrical data Cross-section Termination type	10, 14, 20, 28 + PE 16 A / 500 V 0.5 … 2.5 mm² Screw termination	1 x PE 1.5 … 16 mm² Screw termination		3 3, 4, 6 mm
Male module (M)	19 41 0xx 2601	19 41 001 2600	09 14 000 9950	09 14 003 3501
Female module (F)	19 41 0xx 2701	19 41 001 2700		09 14 003 3501

Contacts for pneumatic modules

	Pneumatic contacts (max. 10 bar)			Adapter
For tube outer diameter				
Tube-Ø	6 mm OD	4 mm OD	3 mm OD	for Han® C contacts
Male contact	09 14 000 6356	09 14 000 6354	09 14 000 6353	Male: 09 14 000 6391
Female without shut-off	09 14 000 6456	09 14 000 6454	09 14 000 6453	Female: 09 14 000 6491
Female with shut-off	09 14 000 6466	09 14 000 6464	09 14 000 6463	
For tube inner diameter				
Tube-Ø	6 mm ID	4 mm ID	3 mm ID	
Male contact	09 14 000 6306	09 14 000 6304	09 14 000 6303	
Female without shut-off	09 14 000 6406	09 14 000 6404	09 14 000 6403	
Female with shut-off	09 14 000 6416	09 14 000 6414	09 14 000 6413	

* Double module, requires two places in the frame