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Description of the Han-Eco® system



Han-Eco® – a new hood and housing series made of thermoplastic material.

Han-Eco® is the ideal solution for applications that do not require the full range of product features offered by the Han® B series of hoods and housings, and users want to take advantage of the weight and cost advantages.

Like the Han® B standard series, the Han-Eco® series is available in the following sizes: 6 B, 10 B, 16 B and 24 B. Depending on size, versions of the hoods with straight or angled entries and housings, bulkhead mounting, can be supplied. The cable exits are available with metric threading, a cable gland is implemented. For housing sizes 6 B and 10 B size of the cable gland is M32, for 16 B and 24 B cable gland M40 is used.

Han-Eco® hoods and housings are made of high-performance plastic that is highly resistant to environmental stress and – in combination with the design – provides very good mechanical stability. When the connector is closed and locked, it provides degree of protection IP 65 as defined in DIN EN 60 529. With seals made of high UV- and ozone-resistant material FPM (Fluororubber) the Han-Eco® hoods and housings are fit for outdoor use. The material also meets demanding flammability requirements of UL 94 Class V 0.

Fast, simple assembly is another outstanding product feature. Click-and-mate design totally eliminates the need for tools during assembly of the Han-Eco® hoods and housings.

The Han-Eco® hoods and housings is compatible with the range of modules from the Han-Modular® series. One extra module fits into the Han-Eco® hoods and housing compared to the equivalent product in the Han® B Standard series. This special feature applies to all four sizes.

A optional PE module has been developed specifically for the Han-Eco® hoods and housings to hold the protective ground conductor.

Advantages:

- Weight reduction combined with mechanical strength
- Fast assembly process without tools
- Highly resistant to environmental stress, suitable for use in outdoor applications
- Complete range of modules from Han-Modular® series usable (with exception of modules with imperative guiding pins [male and female])

Assembly details



Features

- Available in sizes 6 B, 10 B, 16 B and 24 B including integrated cable glands
- Capable for applications according protection class II
- Same panel cut out as Han® B housings, bulkhead mounting
- Optional PE contact module for hold the protective ground conductor
- Not mating compatible with series Han® B
- New hoods/housings series made of thermoplastic material with excellent mechanical properties and high resistance against environmental influence
- Weight and cost optimised
- Quick assembly without screws and tools („click and mate“)
- One extra module fits into the Han-Eco® hoods/housings compared to equivalent size of Han® B series

Technical characteristics

Specifications DIN EN 61 984

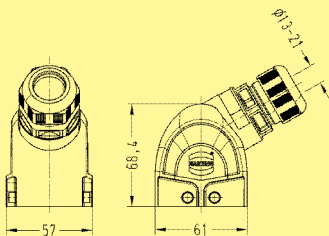
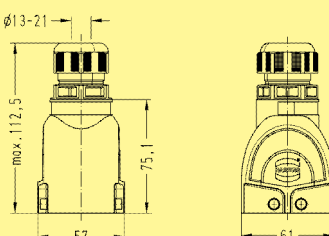
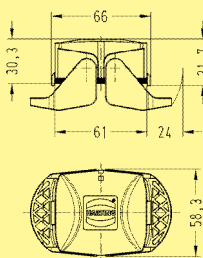
Hoods/Housings

Material	
- Hoods/Housings	Polyamide, fibre-glass reinforced
- Locking element	Polyamide, fibre-glass reinforced
- Hoods/Housings seal	NBR / FPM
Limiting temperatures	-40 °C ... +125 °C
Flammability	
- acc. to UL 94	V 0
- acc. to NFF 16 101 / 16 102	F2 / I3
Degree of protection acc. to DIN EN 60 529 for coupled connector	
	IP 65

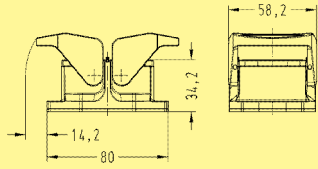
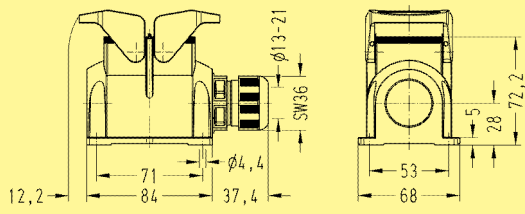
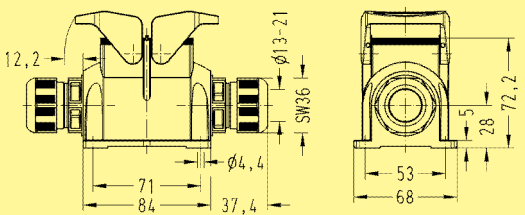
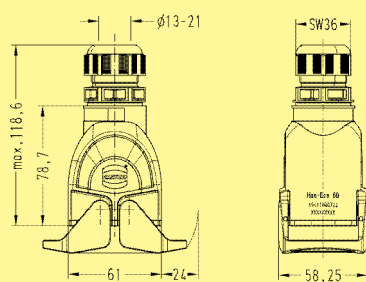
Number of modules

6 B	3 Modules
10 B	4 Modules
16 B	5 Modules
24 B	7 Modules

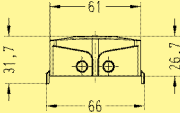
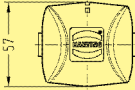
Plastic hoods/housings for industrial applications / 2 lever locking system

Identification	Part number	Cable entry	Drawing	Dimensions in mm
Hood with integrated cable gland side entry 	9 41 106 0522	M32		
Hood with integrated cable gland top entry 	9 41 106 0422	M32		
Protection covers for hoods  with cord 	9 41 006 5406			

Plastic hoods/housings for industrial applications / 2 lever locking system

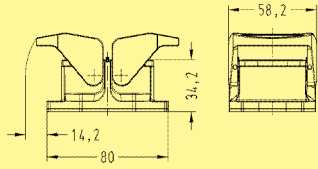
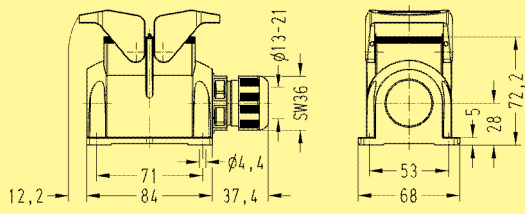
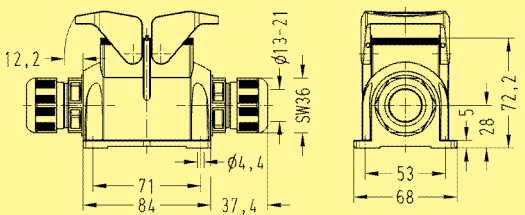
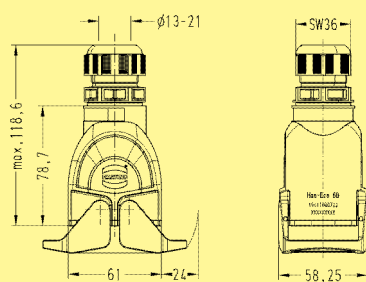
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Housings, bulkhead mounting 	9 41 006 0301 ¹			
Housings, surface mounting, with integrated cable gland side entry 	9 41 106 0232 ¹	M32		
Housings, surface mounting, with integrated cable gland side entries 	9 41 106 0272 ¹	2x M32		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 106 0722 ¹	M32		

Plastic hoods/housings for industrial applications / 2 lever locking system

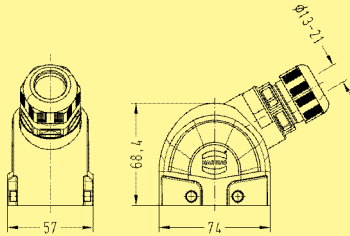
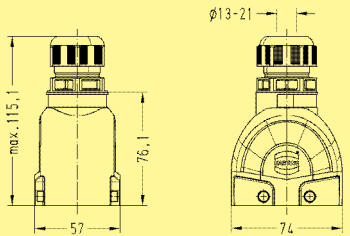
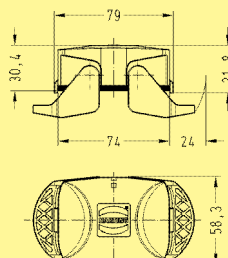
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Protection covers for housings				
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with cord				
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Stock items in bold type

Plastic hoods/housings for outdoor applications / 2 lever locking system

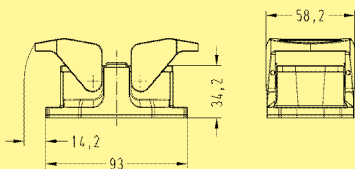
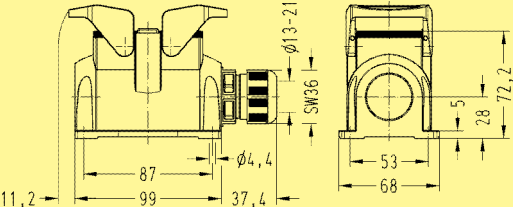
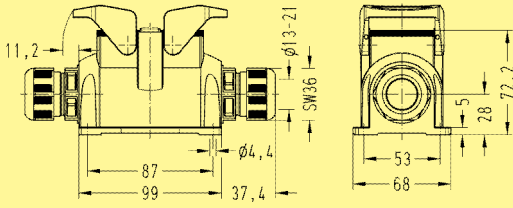
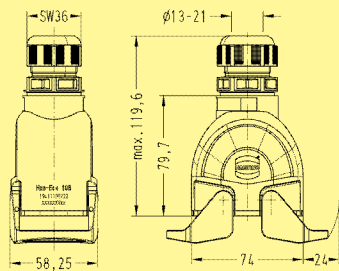
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Housings, bulkhead mounting 	9 41 206 0301 ¹			
Housings, surface mounting, with integrated cable gland side entry 	9 41 306 0232 ¹	M32		
Housings, surface mounting, with integrated cable gland side entries 	9 41 306 0272 ¹	2x M32		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 306 0722 ¹	M32		

Plastic hoods/housings for industrial applications / 2 lever locking system

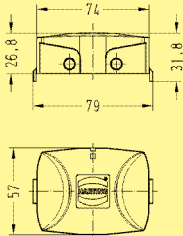
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Hood with integrated cable gland side entry 	9 41 110 0522	M32		
Hood with integrated cable gland top entry 	9 41 110 0422	M32		
Protection covers for hoods with cord 	9 41 010 5406 9 41 010 5407			

Stock items in bold type

Plastic hoods/housings for industrial applications / 2 lever locking system

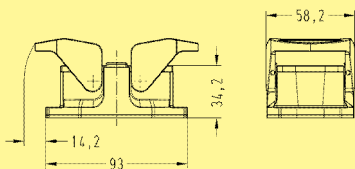
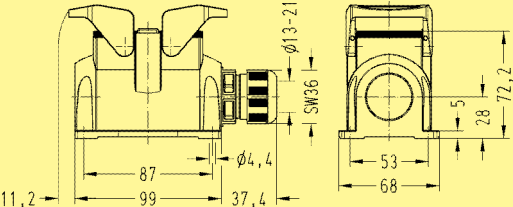
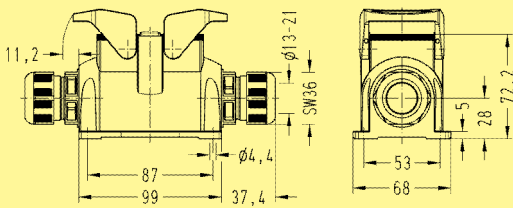
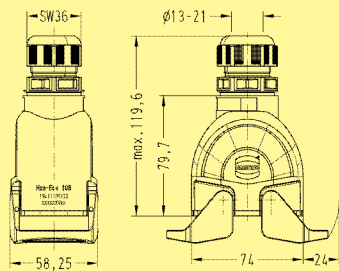
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Housings, bulkhead mounting 	9 41 010 0301 ¹			
Housings, surface mounting, with integrated cable gland side entry 	9 41 110 0232 ¹	M32		
Housings, surface mounting, with integrated cable gland side entries 	9 41 110 0272 ¹	2x M32		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 110 0722 ¹	M32		

Plastic hoods/housings for industrial applications / 2 lever locking system

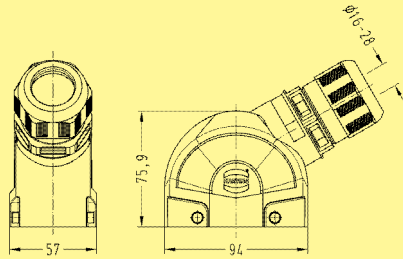
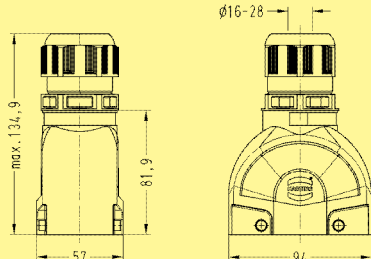
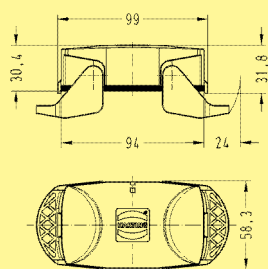
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Protection covers for housings  with cord 	9 41 010 5405 ¹ 9 41 010 5404 ¹			

Stock items in bold type

Plastic hoods/housings for outdoor applications / 2 lever locking system

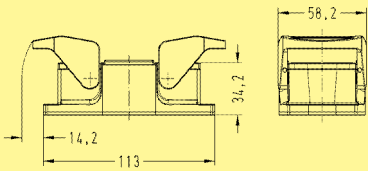
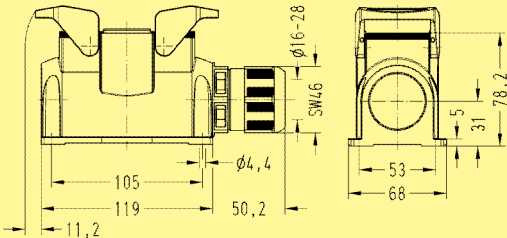
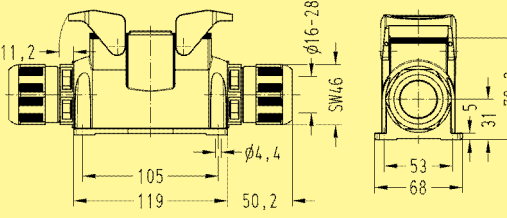
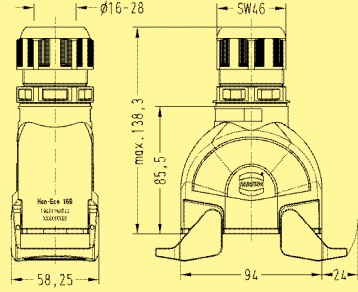
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Housings, bulkhead mounting 	9 41 210 0301 ¹			
Housings, surface mounting, with integrated cable gland side entry 	9 41 310 0232 ¹	M32		
Housings, surface mounting, with integrated cable gland side entries 	9 41 310 0272 ¹	2x M32		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 310 0722 ¹	M32		

Plastic hoods/housings for industrial applications / 2 lever locking system

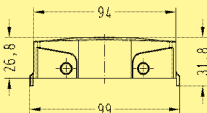
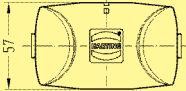
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Hood with integrated cable gland side entry 	9 41 116 0523 ¹	M40		
Hood with integrated cable gland top entry 	9 41 116 0423 ¹	M40		
Protection covers for hoods with cord 	9 41 016 5406 ¹ 9 41 016 5407 ¹			

Stock items in bold type

Plastic hoods/housings for industrial applications / 2 lever locking system

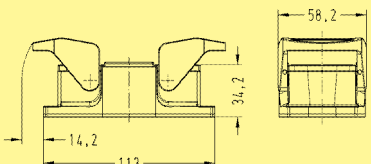
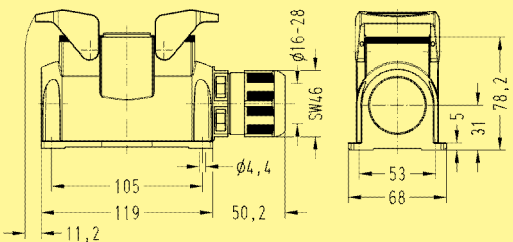
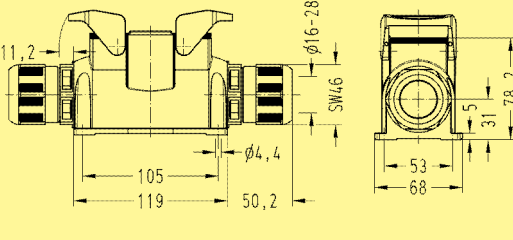
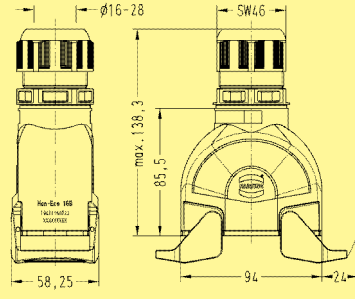
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Housings, bulkhead mounting 	9 41 016 0301 [†]			
Housings, surface mounting, with integrated cable gland side entry 	9 41 116 0233 [†]	M40		
Housings, surface mounting, with integrated cable gland side entries 	9 41 116 0273 [†]	2x M40		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 116 0723 [†]	M40		

Plastic hoods/housings for industrial applications / 2 lever locking system

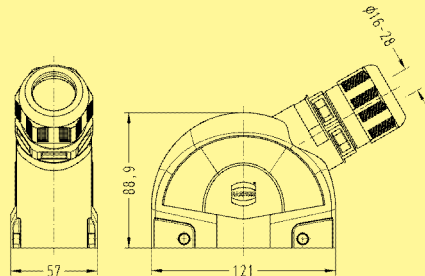
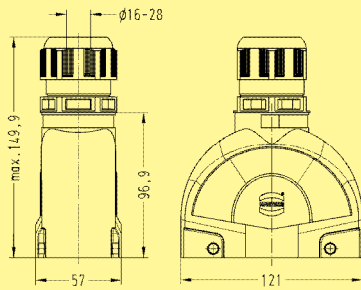
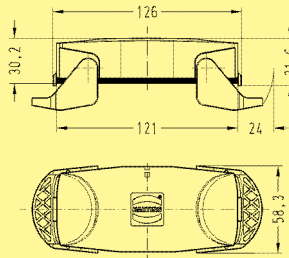
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Protection covers for housings				
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with cord				
	9 41 016 5404			

Stock items in bold type

Plastic hoods/housings for outdoor applications / 2 lever locking system

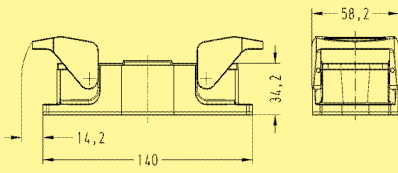
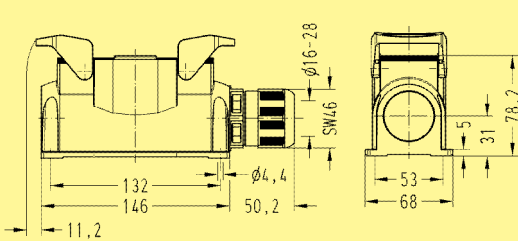
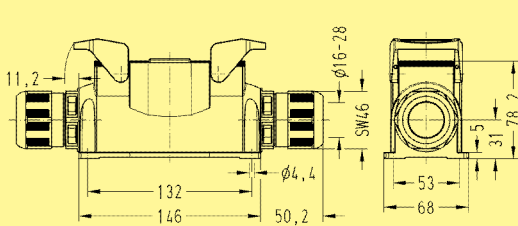
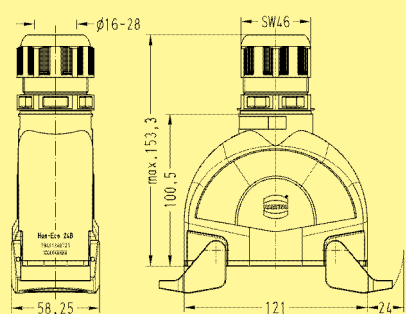
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Housings, bulkhead mounting 	9 41 216 0301 ¹			
Housings, surface mounting, with integrated cable gland side entry 	9 41 316 0233 ¹	M40		
Housings, surface mounting, with integrated cable gland side entries 	9 41 316 0273 ¹	2x M40		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 316 0723 ¹	M40		

Plastic hoods/housings for industrial applications / 2 lever locking system

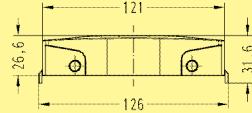
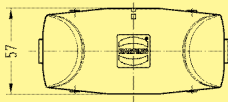
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Hood with integrated cable gland side entry 	9 41 124 0523	M40		
Hood with integrated cable gland top entry 	9 41 124 0423	M40		
Protection covers for hoods with cord 	9 41 024 5406 9 41 024 5407			

Stock items in bold type

Plastic hoods/housings for industrial applications / 2 lever locking system

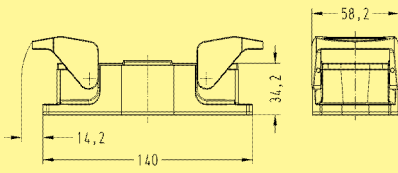
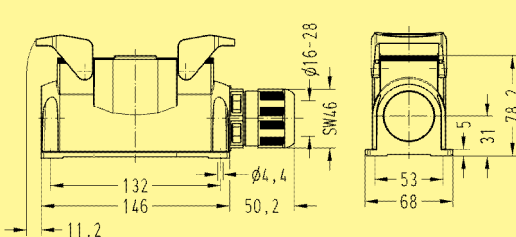
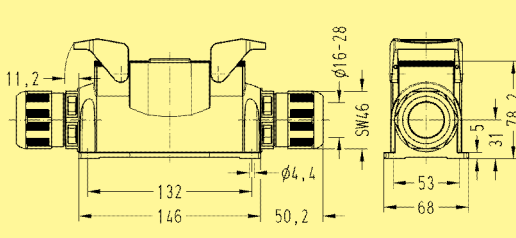
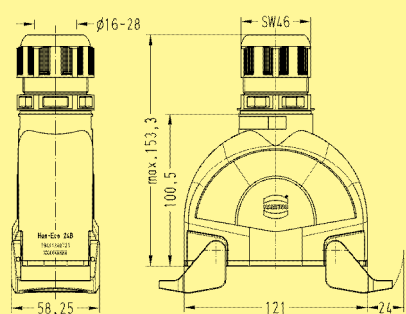
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Housings, bulkhead mounting 	9 41 024 0301			
Housings, surface mounting, with integrated cable gland side entry 	9 41 124 0233	M40		
Housings, surface mounting, with integrated cable gland side entries 	9 41 124 0273	2x M40		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 124 0723	M40		

Plastic hoods/housings for industrial applications / 2 lever locking system

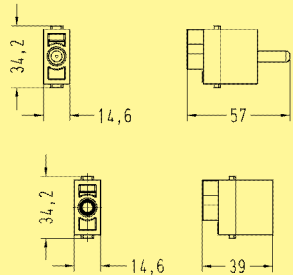
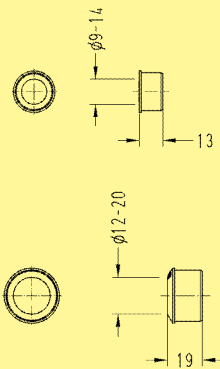
Identification	Part number	Cable entry	Drawing	Dimensions in mm
Protection covers for housings				
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with cord 	9 41 024 5404			

Stock items in bold type

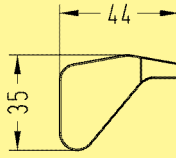
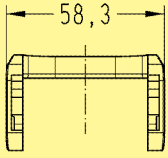
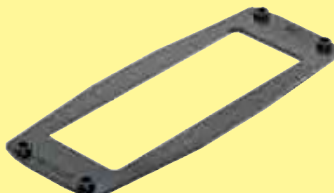
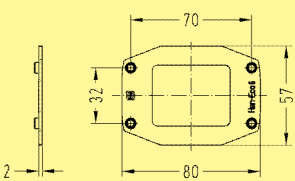
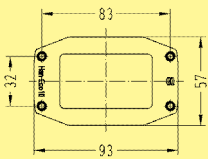
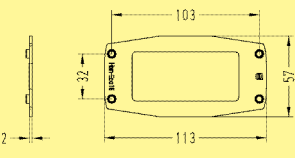
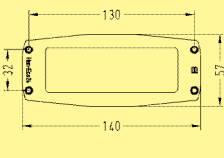
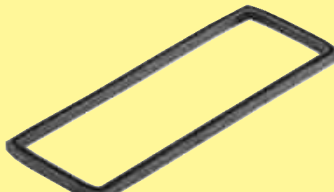
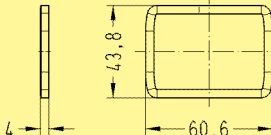
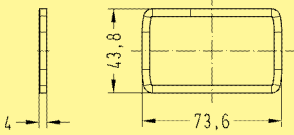
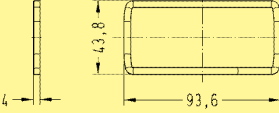
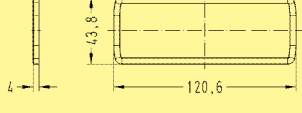
Plastic hoods/housings for outdoor applications / 2 lever locking system

Identification	Part number	Cable entry	Drawing	Dimensions in mm
Housings, bulkhead mounting 	9 41 224 0301			
Housings, surface mounting, with integrated cable gland side entry 	9 41 324 0233	M40		
Housings, surface mounting, with integrated cable gland side entries 	9 41 324 0273	2x M40		
Hoods, cable to cable, with integrated cable gland top entry 	9 41 324 0723	M40		

Han-Eco

Identification	Part number	Drawing	Dimensions in mm
Han-Eco® PE contact module with Screw terminal Termination wire gauge 1,5 mm² ... 16 mm² (with HARTING Crimping tool 09 99 000 0830¹ also cable up to 25 mm² with ferrule adaptable) Male insert  Female insert 	9 41 001 2600¹ 9 41 001 2700¹		
Han-Eco® Reduction sealing insert Size M32  Size M40 	9 41 000 5132¹ 9 41 000 5142¹		
Cable glands M32  M40 	9 41 000 5131¹ 9 41 000 5141¹		

Stock items in bold type

Identification	Size	Part number	Drawing	Dimensions in mm
Locking lever Han-Eco® double levers				
	6 B	9 41 000 5201		
	10 B	9 41 000 5201		
	16 B	9 41 000 5201		
	24 B	9 41 000 5201		
Gasket for Han-Eco®				
	6 B	9 41 000 9801		
	10 B	9 41 000 9802		
	16 B	9 41 000 9803		
	24 B	9 41 000 9804		
Profile seal for Han-Eco®				
	6 B	9 41 000 9901		
	10 B	9 41 000 9902		
	16 B	9 41 000 9903		
	24 B	9 41 000 9904		

Identification	Part number	Drawing	Dimensions in mm
Removal tool for modules			
Thermoplastic 	09 99 000 0331		
Metal 	09 99 000 0828		

Stock items in bold type

Series	Han® 100 A Axial module	Han® 100 A Crimp module	Han® 70 A Axial module	Han® 40 A Axial module
Number of contacts	2	2	2	2
Modules	Axial screw terminal 	Crimp terminal 	Axial screw terminal 	Axial screw terminal 
Rated current	100 A	100 A	70 A	40 A
Rated voltage	1000 V	1000 V	1000 V	1000 V
Wire gauge	10 ... 38 mm²	10 ... 35 mm²	6 ... 22 mm²	2,5 ... 10 mm²
Series	Han® 40 A Crimp module	Han® C Axial module	Han® C module	Han® CC Protected module
Number of contacts	2	3	3	4
Modules	Crimp terminal 	Axial screw terminal 	Crimp terminal 	Crimp terminal 
Rated current	40 A	40 A	40 A	40 A
Rated voltage	1000 V	690 V	400 / 690 V	830 V
Wire gauge	1,5 ... 10 mm²	2,5 ... 10 mm²	1,5 ... 10 mm²	1,5 ... 6 mm²
Series	Han® CD module	Han E® module	Han® EE module	Han® EE Quick Lock module
Number of contacts	3	6	8 /	8
Modules	Crimp terminal 	Crimp terminal 	Crimp terminal 	Quick Lock termination 
Rated current	40 A	16 A	16 A	16 A
Rated voltage	830 V	500 V	400 V	400 V
Wire gauge	1,5 ... 6 mm²	0,14 ... 4 mm²	0,14 ... 4 mm²	0,5 ... 2,5 mm²
Series	Han E® Protected module	Han® EEE module	Han® ES module	Han® HV module
Number of contacts	6	20	5	2
Modules	Crimp terminal 	Crimp terminal 	Cage-clamp terminal 	Crimp terminal 
Rated current	16 A	16 A	16 A	16 A
Rated voltage	830 V	500 V	400 V	2900 / 5000 V
Wire gauge	0,14 ... 4 mm²	0,14 ... 4 mm²	0,14 ... 2,5 mm²	0,5 ... 4 mm²

Series	Han® HV module	Han DD® module	Han DD® Quick Lock module	Han® DDD module
Number of contacts	2	12	12	17
Modules	Crimp terminal 	Crimp terminal 	Quick Lock termination 	Crimp terminal 
Rated current	40 A	10 A	10 A	10 A
Rated voltage	2900 / 5000 V	250 V	250 V	160 V
Wire gauge	1,5 ... 10 mm²	0,14 ... 2,5 mm²	0,25 ... 1,5 mm²	0,14 ... 2,5 mm²

Series	Han® High Density module	Han® D-Sub module		
Number of contacts	25	9		
Modules	Crimp terminal 	Crimp terminal 		
Rated current	4 A	5 A		
Rated voltage	50 V	50 V		
Wire gauge	0,08 ... 0,52 mm²	0,08 ... 0,52 mm²		

Series	Han® USB module	Han® FireWire module	Han® RJ45 module	Han® GigaBit module
Number of contacts	4	6	8	8
Modules	USB 2.0 	IEEE 1394 	Ethernet Cat. 6 	Ethernet Cat. 6 

Series	Han-Quintax® module			
Number of contacts	2			
Modules				
Contacts	Han-Quintax® contact 4 + shielding 	High Density Quintax contact 8 + shielding 	Han D® Coax contact 75 Ω 1 + shielding  75 Ω	Han E® Coax contact 50 Ω 1 + shielding  50 Ω

for more technical details see chapter 06

Series	Han® SC module	Han-Elisa®	Han® Dummy module	
Number of contacts	4			
Modules				
Contacts	SC contact for GI 50; 62,5 / 125 µm  For the use with Han-Eco® please order female module 09 14 004 4713. Only for multimode fiber.	Temperature I/O modules ID module		