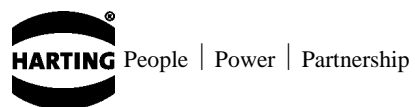


HARTING Electric



## Han<sup>®</sup> R 23 Circular Connector





## Features

- Size R 23
- Outer diameter 26 mm
- High contact density
- Very robust hoods/housings
- Corrosion resistant
- Excellent EMC properties (with continuous shielding)
- Quick and easy assembly
- Vibration resistant screw locking system
- Up to 19 contacts, 25 V~ / 60 V-
- Ideal for applications such as measurement and automatic control.

### Note

**Connectors should not be coupled and decoupled under electrical load.**

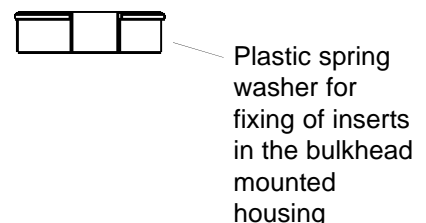
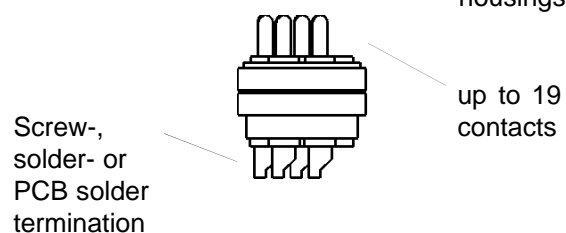
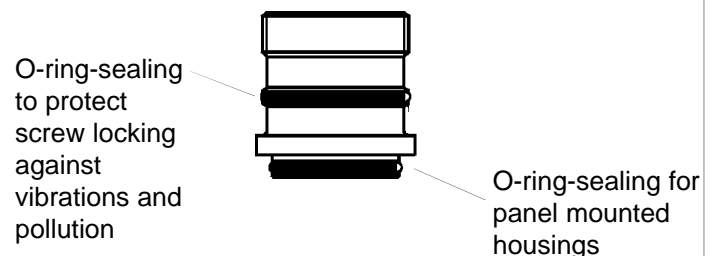
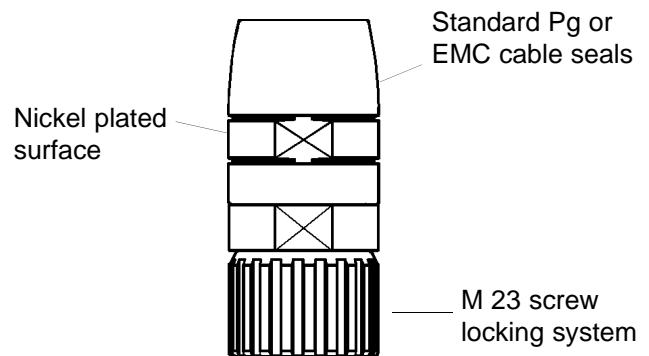
#### General Information

It is the user's responsibility to check whether the components illustrated in this catalogue comply with different regulations 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 particular requirements in production.

This catalogue must not be used in any form or manner without our prior approval in writing (Copyright Law, Fair Trading Law, Civil Code).

We are bound by the German version only.





### Technical Details

**Specifications**

DIN VDE 0627  
DIN VDE 0110

**Hoods/housings**

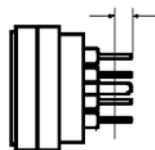
Material: Copper-zinc alloy  
Surface: Nickel plated  
Flat sealing: NBR  
O-ring-sealing: FPM  
Temperature range: - 40° C ... + 115° C  
IP acc. to DIN 40050 in locked position: IP 67

**Inserts**

Number of contacts	6	9	12	17	19
Working current					
- power contact	15 A	1x15A			
- signal contact		8 x 7A	7A	7A	16 x 7A
(see Derating Diagram)					3 x 10A
Working voltage <sup>1)</sup>	25V~ / 60V-				
Degree of pollution	3				
Test voltage U <sub>rms</sub>	1.5 kV				
Insulation resistance	> 10 <sup>12</sup> Ohm				
Material	Thermoplastic polyester (PBT)				
Temperature range	- 40° C ... + 115° C				
Flammability acc. to UL 94	V 0				

**Contacts**

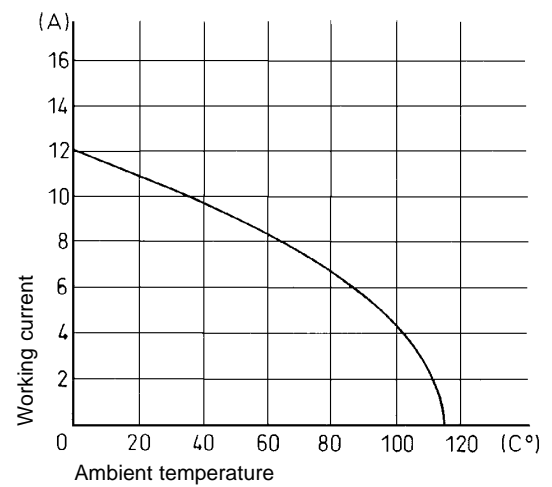
Material	Copper alloy
Surface	Gold plated
Contact resistance	< 5 mOhm
Screw termination	
- power contact	0.14 - 1.0 mm <sup>2</sup> , AWG 26 - 16
- signal contact	0.14 - 0.75 mm <sup>2</sup> , AWG 26 - 18
Solder termination	
- power contact	0.14 - 2.5 mm <sup>2</sup> , AWG 26 - 14
- signal contact	0.14 - 1.0 mm <sup>2</sup> , AWG 26 - 18
Crimp termination	
- D-Sub contact	see Subminiature D catalogue
PCB solder termination	
- power contact	Ø 1.5 mm
- signal contact	Ø 0.6 mm
- solder length with reference to bulkhead mounted housing	3.5 mm



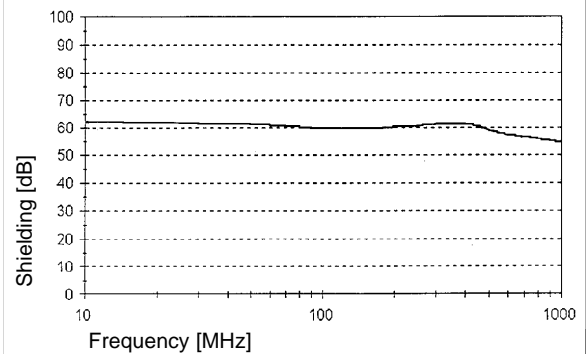
1) Acc. to DIN VDE 0627 metallic parts which may be touched by a person and may have voltages present under fault conditions, must have integral protection. Therefore this R 23 connector is limited for use up to 25V~/60V-.


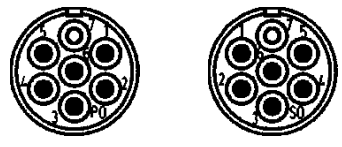

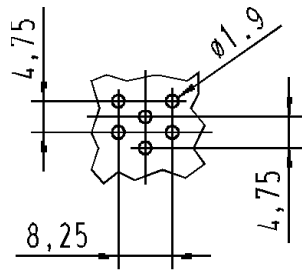

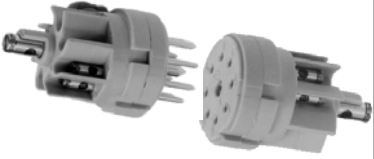
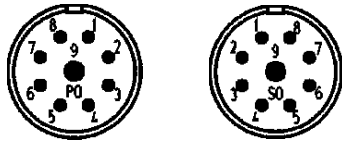
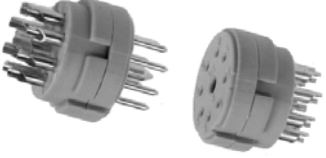
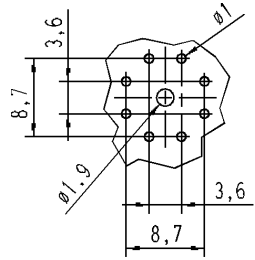
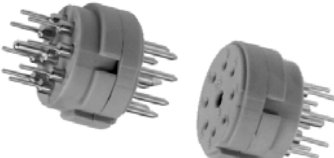
### Derating Diagram

Insert: 12 positions  
Wire gauge: 1 mm<sup>2</sup> (AWG 18)



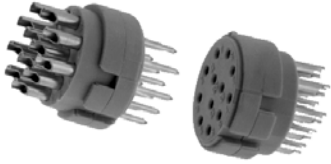
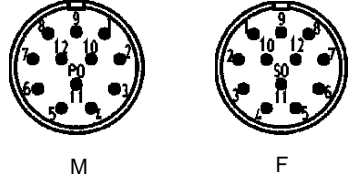
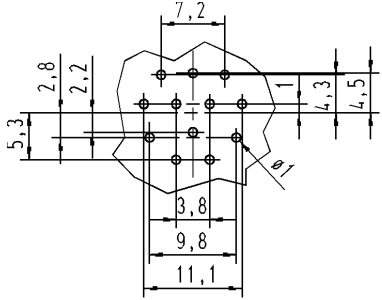


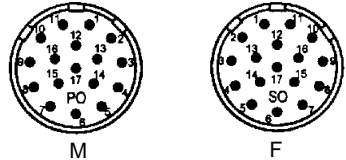
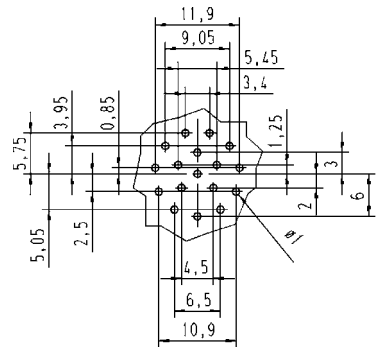


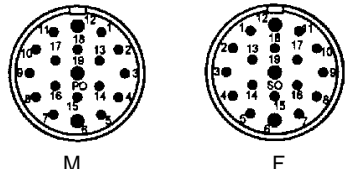
### Shielding of the EMC housing



Identification	Number of contacts	Part No.		Drawing	Dimensions in mm
		Male inserts	Female inserts		
<p>Screw termination</p> 	6	<b>09 15 206 2601</b>	<b>09 15 206 2701</b>	<p>Contact arrangement view: mating side</p>  <p>M                      F</p>	
<p>Solder termination</p> 	6	<b>09 15 206 2603</b>	<b>09 15 206 2703</b>	<p>PCB pinhole pattern:</p> 	
<p>PCB solder termination<sup>2)</sup></p> 	6	09 15 206 2604	09 15 206 2704		
<p>Screw termination</p> 	9	<b>09 15 209 2601</b>	<b>09 15 209 2701</b>	<p>Contact arrangement view: mating side (numbering in opposite direction on request)</p>  <p>M                      F</p>	
<p>Solder termination</p> 	9	<b>09 15 209 2603</b>	<b>09 15 209 2703</b>	<p>PCB pinhole pattern:</p> 	
<p>PCB solder termination<sup>2)</sup></p> 	9	09 15 209 2604	09 15 209 2704		
		<b>Stock items in bold type</b>			


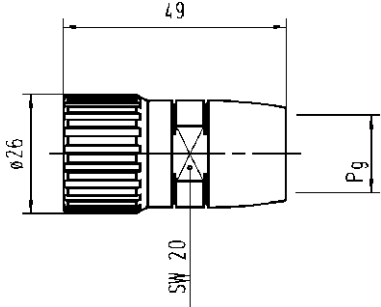

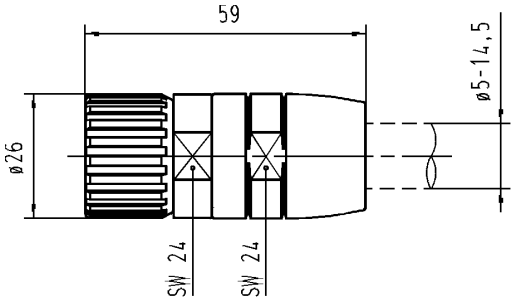

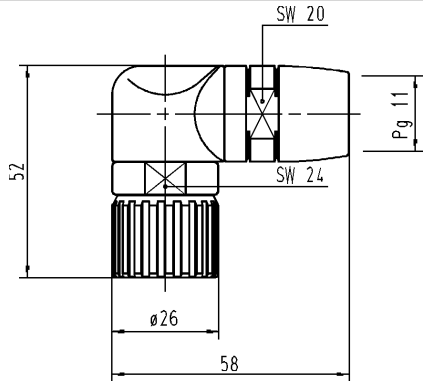

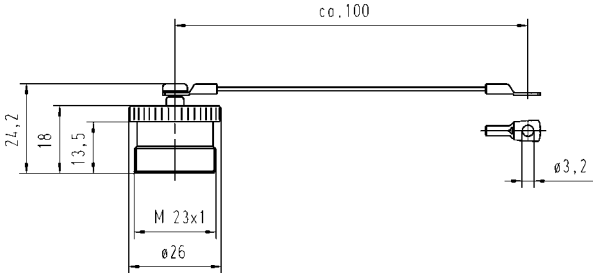
2) Suitable only for housings, bulkhead mounting, No.: 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301

2) Suitable only for housings, bulkhead mounting, No.: 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301

Identification	Number of contacts	Part No.		Drawing	Dimensions in mm	
		Male inserts	Female inserts			
<p>Solder termination</p> 	12	<b>09 15 212 2603</b>	<b>09 15 212 2703</b>	<p>Contact arrangement view: mating side (numbering in opposite direction on request)</p> 	<p>PCB hole details:</p> 	
<p>Crimp termination for D-Sub contacts</p>				09 15 212 2602		09 15 212 2702
<p>PCB solder termination<sup>2)</sup></p> 				09 15 212 2604		09 15 212 2704
<p>Solder termination</p> 	17	<b>09 15 217 2603</b>	<b>09 15 217 2703</b>	<p>Contact arrangement view: mating side (numbering in opposite direction on request)</p> 	<p>PCB hole details:</p> 	
<p>Crimp termination for D-Sub contacts</p>				09 15 217 2602		09 15 217 2702
<p>PCB solder termination<sup>2)</sup></p> 				09 15 217 2604		09 15 217 2704
<p>Solder termination</p> 	19	<b>09 15 219 2603</b>	<b>09 15 219 2703</b>	<p>Contact arrangement view: mating side</p> 	<p><b>Stock items in bold type</b></p>	


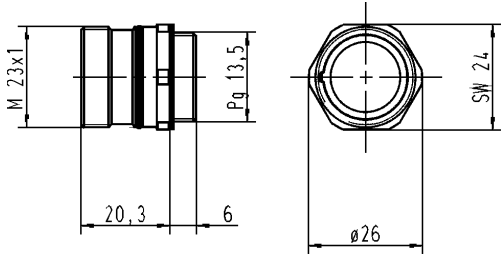

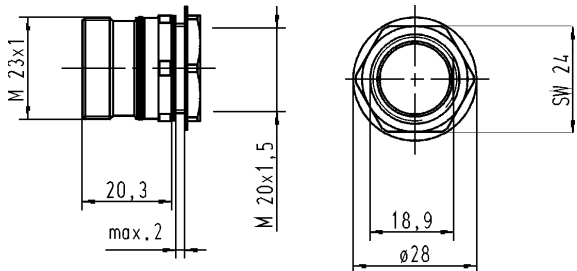

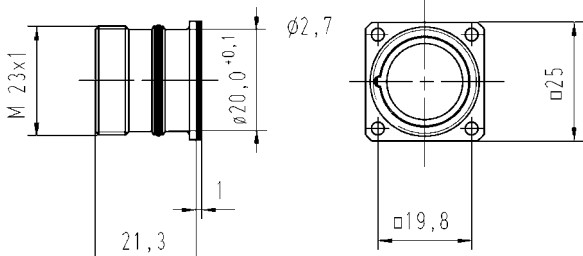

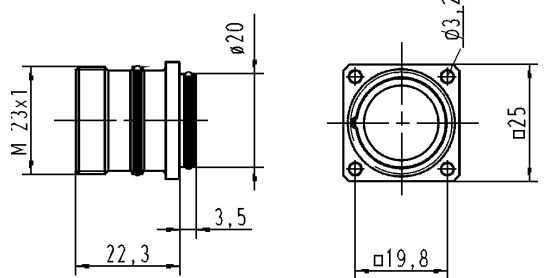

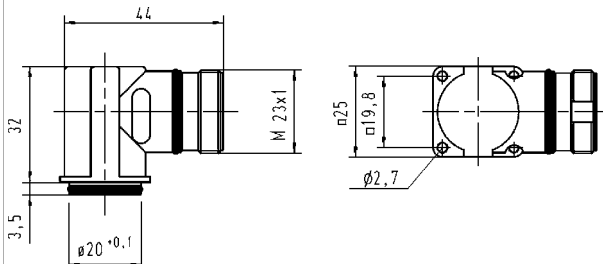
2) Suitable only for housings, bulkhead mounting, No.: 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301

2) Suitable only for housings, bulkhead mounting, No.: 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301

Identification	Part No.	Pg	Drawing	Dimensions in mm
<p>Hood top-entry</p> 	<p>09 15 200 0402 <b>09 15 200 0403</b></p>	<p>9 11</p>		
<p>Hood top-entry EMC version</p> 	<p><b>09 15 200 0451</b></p>	<p>—</p>		
<p>Hood right angle entry</p> 	<p><b>09 15 200 0603</b></p>	<p>11</p>		
Identification	Part No.	Drawing	Dimensions in mm	
<p>Screw cover for hoods with tether</p> 	<p><b>09 15 200 5421</b></p> <p><b>Stock items in bold type</b></p>			


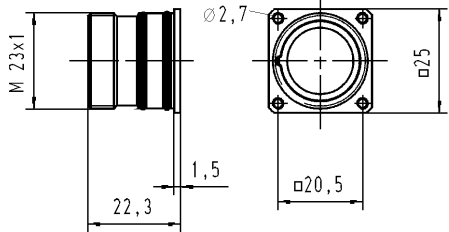

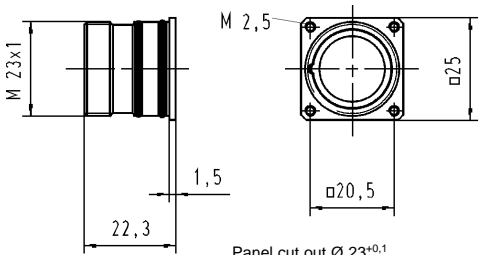

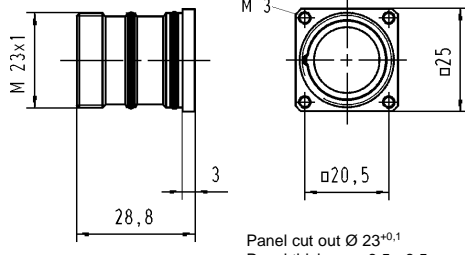

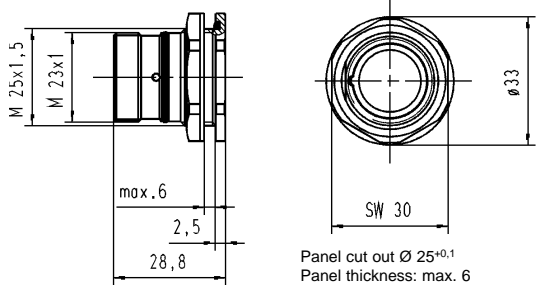

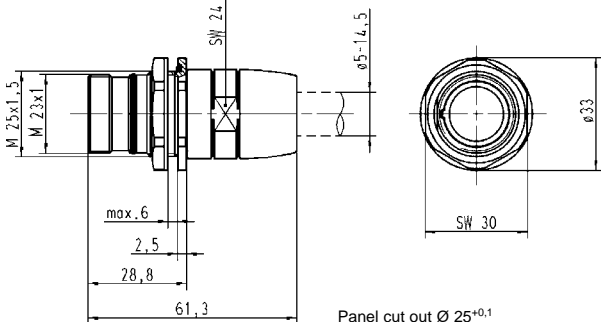
Order inserts separately, see page 4 - 5

Bulkhead mounted housings see page 7 - 9

Identification	Part No.	Drawing	Dimensions in mm
<p>Housing, bulkhead mounting front wall assembly with central locking Pg 13.5</p> 	<p><b>09 15 200 0324</b></p>	 <p>Panel cut out Pg 13,5</p>	
<p>Housing, bulkhead mounting front wall assembly with central locking M 20</p> 	<p><b>09 15 200 0303</b></p>	 <p>Panel cut out <math>\varnothing 20^{+0,1}</math></p>	
<p>Housing, bulkhead mounting front wall assembly with flat sealing</p> 	<p><b>09 15 200 0301</b></p>	 <p>Panel cut out <math>\varnothing 20^{+0,1}</math></p>	
<p>Housing, bulkhead mounting front wall assembly with O-ring-sealing</p> 	<p><b>09 15 200 0305</b></p>	 <p>Panel cut out <math>\varnothing 20^{+0,1}</math></p>	
<p>Housing, right angled bulkhead mounting front wall assembly with O-ring-sealing</p> 	<p><b>09 15 200 0901</b></p> <p><b>Stock items in bold type</b></p>	 <p>Panel cut out <math>\varnothing 20^{+0,1}</math></p>	


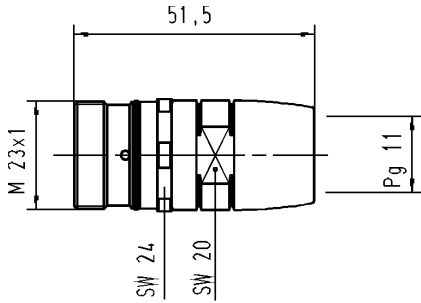

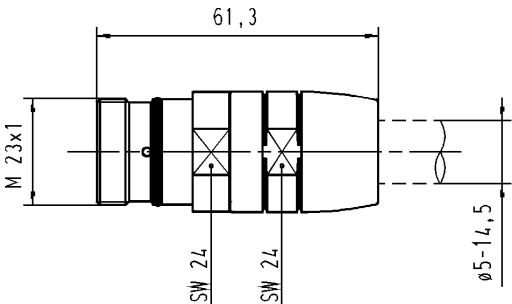

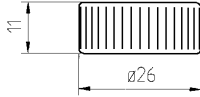

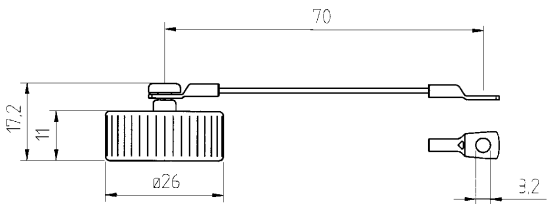
Order inserts separately, see page 4 - 5

Bulkhead mounted housings see page 6

Identification	Part No.	Drawing	Dimensions in mm
<p>Housing, bulkhead mounting back wall assembly with O-ring-sealing</p> 	<p><b>09 15 200 0313</b></p>		<p>Panel cut out <math>\varnothing 23^{+0.1}</math> Panel thickness: 2.7 - 3.5 when using counter-sunk screws</p>
<p>Housing, bulkhead mounting back wall assembly with O-ring-sealing</p> 	<p><b>09 15 200 0311</b></p>		<p>Panel cut out <math>\varnothing 23^{+0.1}</math> Panel thickness: 2.7 - 3.5 when using counter-sunk screws</p>
<p>Housing, bulkhead mounting back wall assembly with O-ring-sealing</p> 	<p><b>09 15 200 0312</b></p>		<p>Panel cut out <math>\varnothing 23^{+0.1}</math> Panel thickness: 3.5 - 8.5 when using counter-sunk screws</p>
<p>Housing, bulkhead mounting back wall assembly with central locking M 25</p> 	<p><b>09 15 200 0314</b></p>		<p>Panel cut out <math>\varnothing 25^{+0.1}</math> Panel thickness: max. 6</p>
<p>Cable gland housing back wall assembly central locking M 25</p> 	<p><b>09 15 200 0351</b></p> <p><b>Stock items in bold type</b></p>		<p>Panel cut out <math>\varnothing 25^{+0.1}</math> Panel thickness: max. 6</p>


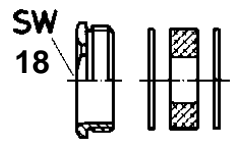


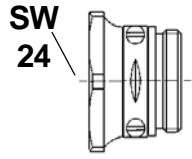





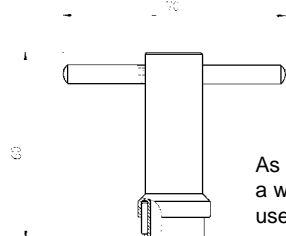

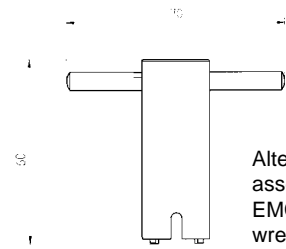
Order inserts separately, see page 4 - 5

Bulkhead mounted housings see page 6

Identification	Part No.	Pg	Drawing	Dimensions in mm
<p>Cable to cable housing top entry</p> 	<p><b>09 15 200 0703</b></p>	<p>11</p>		<p>51,5 M 23x1 Pg 11 SW 24 SW 20</p>
<p>Cable to cable housing top entry EMC version</p> 	<p><b>09 15 200 0751</b></p>	<p>-</p>		<p>61,3 M 23x1 SW 24 SW 24 ø5-14,5</p>
Identification	Part No.	Drawing	Dimensions in mm	
<p>Screw cover for bulkhead mounted and cable to cable housings</p> 	<p>09 15 200 5401</p>			
<p>Screw cover for bulkhead mounted and cable to cable housings with tether</p> 	<p><b>09 15 200 5411</b></p> <p><b>Stock items in bold type</b></p>			

Order inserts separately, see page 4 - 5

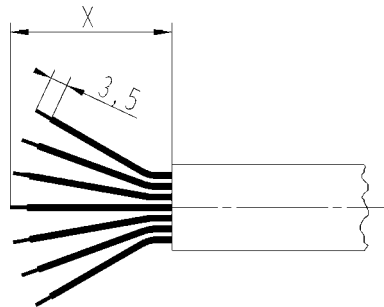
Bulkhead mounted housings see page 6

Cable entry protection		Part No.	Pg	Drawing	Dimensions in mm
Cable sealing metal (IP 65) with normal seal 		<b>09 00 000 5113</b>	11		Suitable cable Ø 10 - 12
	with multiple seal 	<b>09 00 000 5013</b>	11		6.5 - 12
Special cable clamp metal (IP 65) with strain relief and bell mouth 		<b>09 00 000 5191</b>	11		Suitable cable Ø 8 - 12
	normal seal order separately 	<b>09 00 000 5020</b>	11		10 - 12
	multiple seal order separately 	<b>09 00 000 5027</b>	11		6.5 - 12
Assembly tools		Part No.		Drawing	Dimensions in mm
for angled housings, bulkhead mounting 		<b>09 99 000 0324</b>			
for bulkhead mounted and cable to cable housings 		<b>09 99 000 0325</b>			 <p>As an alternative a wrench can be used.</p>
for hoods 		<b>09 99 000 0326</b>		 <p>Alternatively for the assembly of the EMC version a wrench can be used.</p>	
		<b>Stock items in bold type</b>			

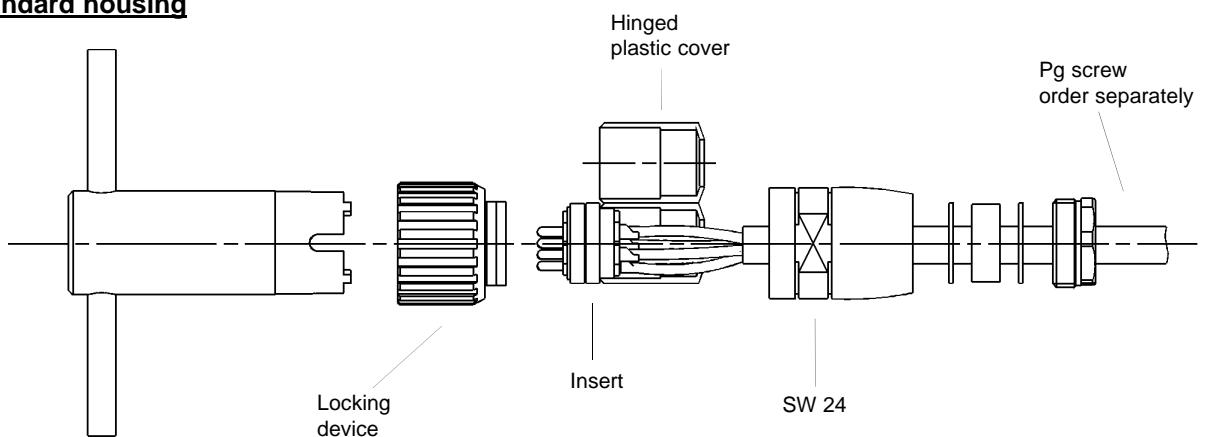
Assembly manual

Dimensions in mm

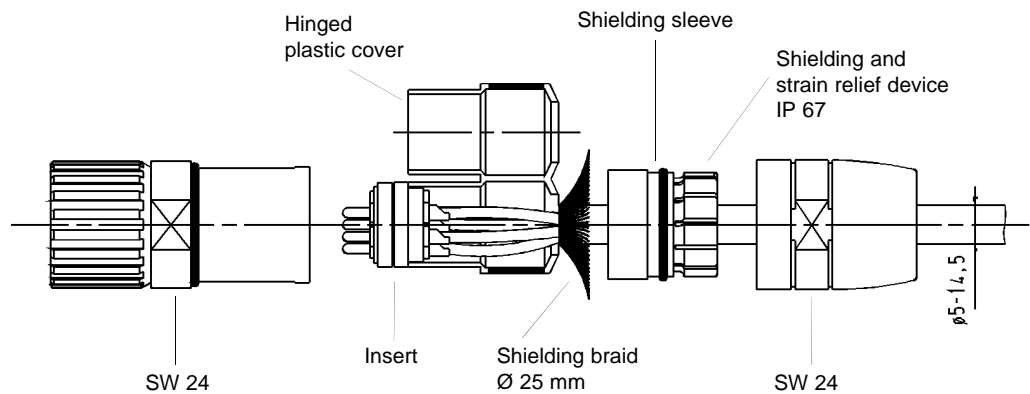
Housing	Cable Strip Length x
09 15 200 0351	26 mm
09 15 200 0403	20 mm
09 15 200 0451	26 mm
09 15 200 0603	30 mm
09 15 200 0703	20 mm
09 15 200 0751	26 mm
09 15 200 0901	30 mm



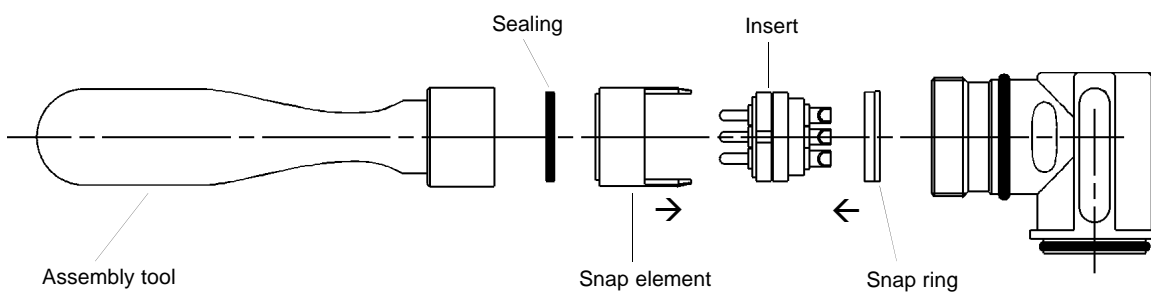
**Standard housing**



**EMC housing**



**Right angled housing, bulkhead mounting**



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