

HARTING



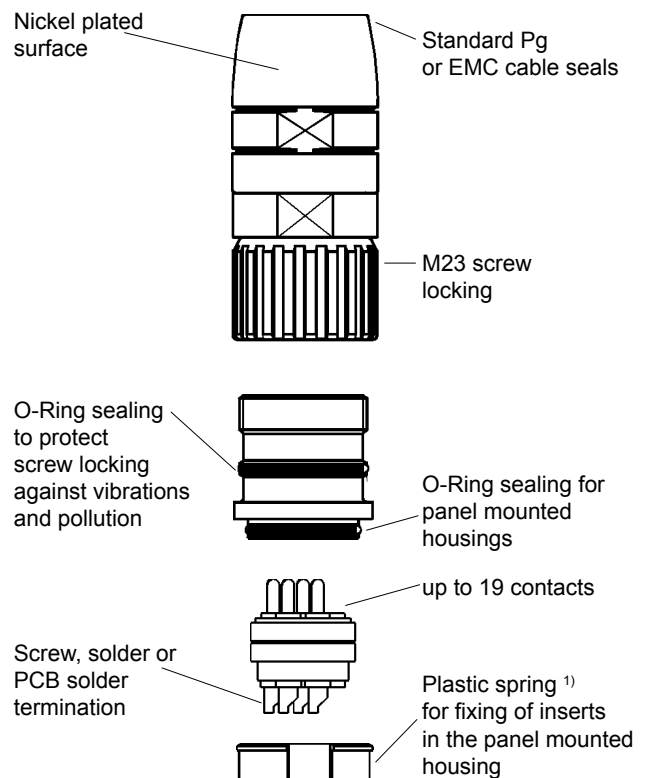
Han® R 23 Circular Connectors



Features

- Size R 23
- Outer diameter 26 mm
- High contact density
- Very robust hoods and 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

Description



¹⁾ is part of delivery range of bulkhead mounted housings
Part-number of spare part: 09 15 200 9901

General information

Fields of application:

HARTING Industrial Connectors are applicable in a wide variety of electronic and electrical applications.

The degree of protection of all hoods and housings is in accordance with International Standard IEC 60 529.

- Power Utilities
- Robotics
- Chemical Plants
- Machine Tool Controls
- Injection Moulding
- Industrial Instrumentation
- Conveyor Equipment
- Transportation
- and many more



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

Specifications

- VDE 0110 table concerning clearance and creepage distances
- VDE 0627 Connectors and plug devices

Standards DIN EN 61 984

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.

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.

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Technical characteristics

Specifications

DIN VDE 0110
DIN EN 61 984

Hoods and Housings

Material	Copper zinc alloy
Surface	Nickel plated
Flat sealing	NBR
O-Ring sealing	FPM
Temperature range	-40 °C ... +115 °C
Protection degree in locked position	IP 67

Inserts

Number of contacts	6	9	12	17	19
Rated current					
- power contact	15A	1x15A			3 x 10A
- signal contact		8 x 7A	7A	7A	16 x 7A
(see Derating Diagram)					
Rated voltage ¹⁾	25 V~ / 60 V-				
Degree of pollution	3				
Test voltage U_{rms}	1.5 kV				
Insulation resistance	$\geq 10^{12} \Omega$				
Material	Thermoplastic polyester (PBT)				
Temperature range	-40 °C ... +115 °C				
Flammability accd. to UL 94	V 0				

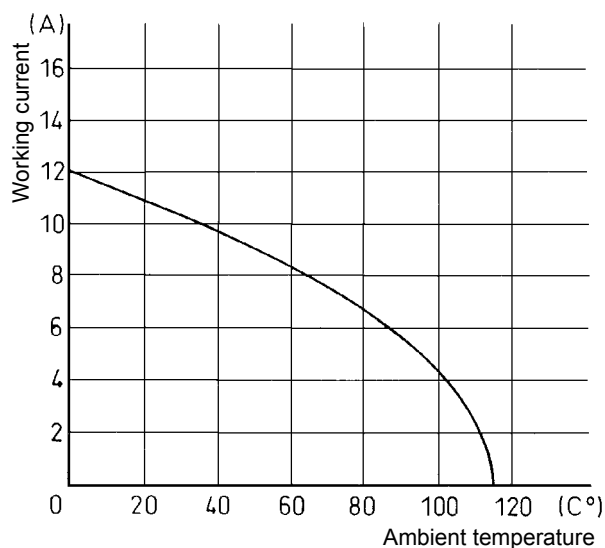
Contacts

Material	Copper alloy
Surface	Gold plated
Contact resistance	$\leq 5 \text{ m}\Omega$
Screw termination	
- power contact	0.14 - 1.0 mm ² / AWG 26 - 16
- signal contact	0.14 - 0.75 mm ² / AWG 26 - 18
Solder termination	
- power contact	0.14 - 2.5 mm ² / AWG 26 - 14
- signal contact	0.14 - 1.0 mm ² / AWG 26 - 16
Crimp termination	
- D-Sub contact	see catalogue Interface Connectors
PCB solder termination	
- power contact	$\varnothing 1.5 \text{ mm}$
- signal contact	$\varnothing 0.6 \text{ mm}$
- reference to bulkhead mounted housing	3.5 mm



1) Accd. 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 25 V~/60 V-.

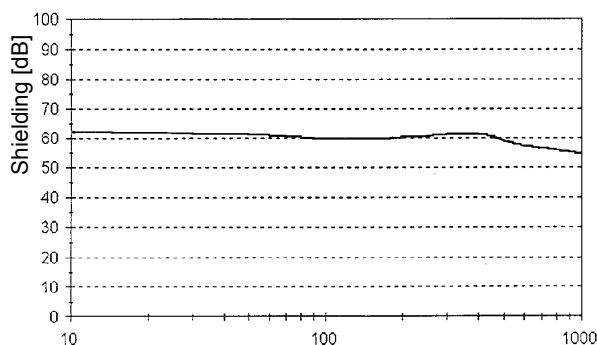
Derating Diagram

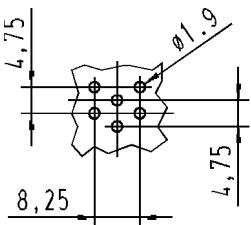
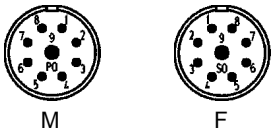
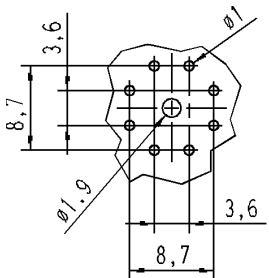


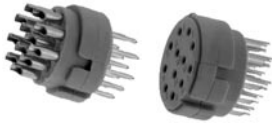
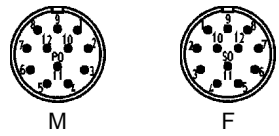
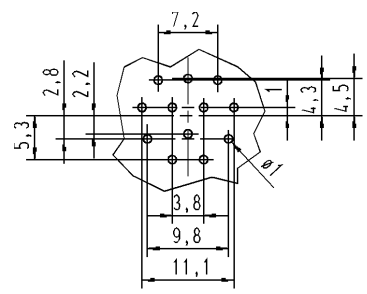
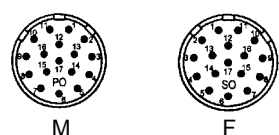
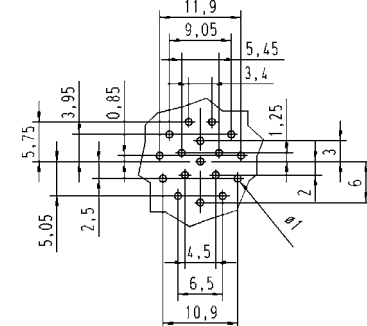
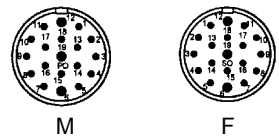
Insert: 12 pins

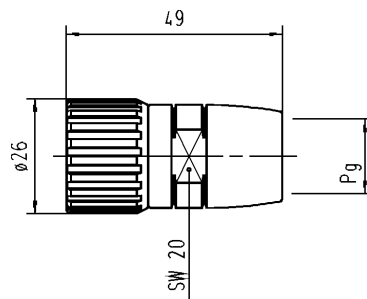
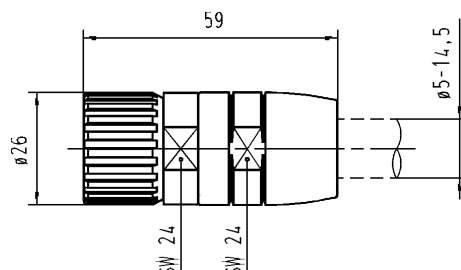
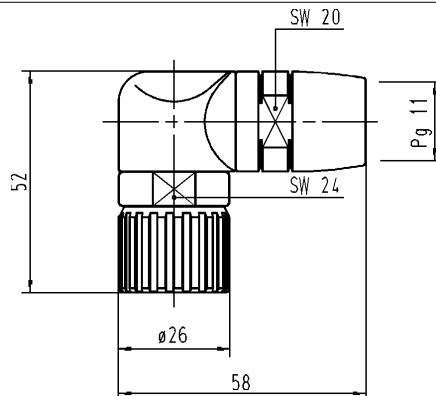
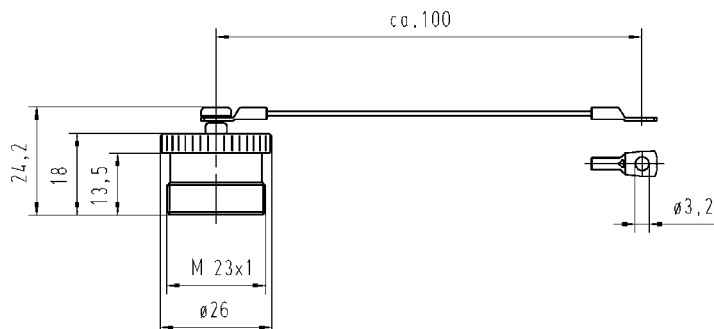
Wire gauge: 1 mm² (AWG 18)

Shielding of the EMC housings



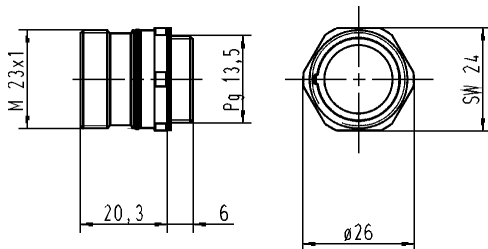
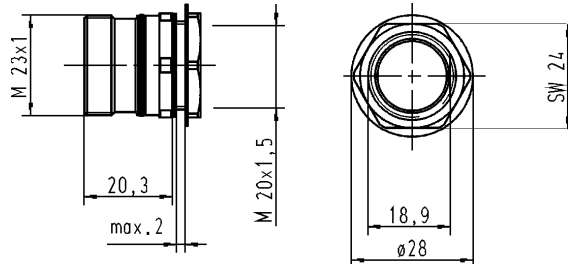
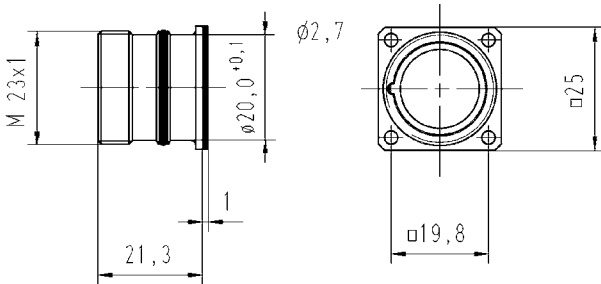
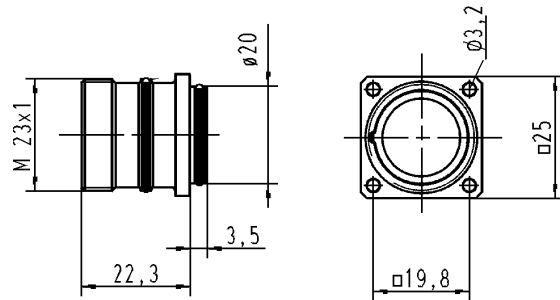
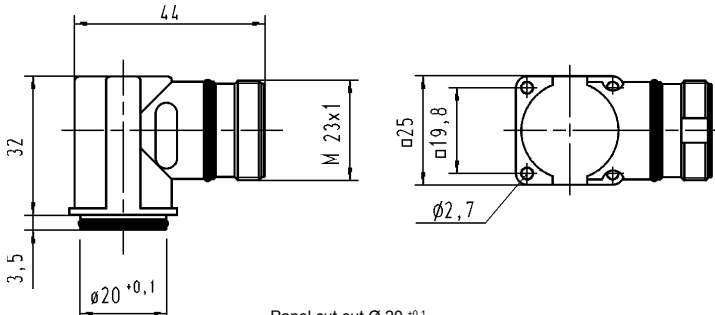
Identification	Number of contacts	Part number		Drawing	Dimensions in mm
		Male insert (M)	Female insert (F)		
Screw terminal 	6	09 15 206 2601	09 15 206 2701	Contact arrangement view: mating side 	
Solder terminal 	6	09 15 206 2603	09 15 206 2703	PCB hole details: 	
PCB solder termination²⁾ 	6	09 15 206 2604	09 15 206 2704	2) Suitable only for bulkhead mounted housings No. 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301	
Screw terminal 	9	09 15 209 2601	09 15 209 2701	Contact arrangement view: mating side (numbering in opposite direction on request) 	
Solder terminal 	9	09 15 209 2603	09 15 209 2703	PCB hole details: 	
PCB solder termination²⁾ 	9	09 15 209 2604	09 15 209 2704	2) Suitable only for bulkhead mounted housings No. 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301	

Identification	Number of contacts	Part number		Drawing	Dimensions in mm
		Male insert (M)	Female insert (F)		
Solder terminal 	12	09 15 212 2603	09 15 212 2703	Contact arrangement view: mating side (numbering in opposite direction on request)  PCB hole details:  2) Suitable only for bulkhead mounted housings No. 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301	
Crimp terminal for D-Sub contacts 	12	09 15 212 2602	09 15 212 2702		
PCB solder termination²⁾ 	12	09 15 212 2604	09 15 212 2704		
Solder terminal 	17	09 15 217 2603	09 15 217 2703	Contact arrangement view: mating side (numbering in opposite direction on request)  PCB hole details:  2) Suitable only for bulkhead mounted housings No. 09 15 200 0311, 09 15 200 0313 and 09 15 200 0301	
Crimp terminal for D-Sub contacts 	17	09 15 217 2602	09 15 217 2702		
PCB solder termination²⁾ 	17	09 15 217 2604	09 15 217 2704		
Solder terminal 	19	09 15 219 2603	09 15 219 2703	Contact arrangement view: mating side 	

Identification	Part-Number	Pg	Drawing	Dimensions in mm
Hood top-entry 	09 15 200 0402 09 15 200 0403	9 11		
Hood top-entry EMC version 	09 15 200 0451	—		
Hood right angle entry 	09 15 200 0603	11		
Identification	Part-Number	Drawing	Dimension in mm	
Screw cover for hoods with tether 	09 15 200 5421			

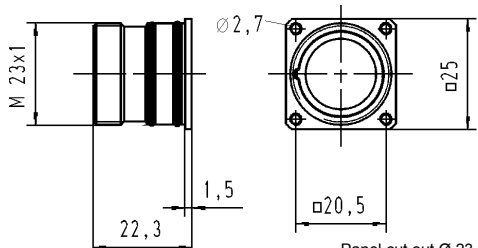
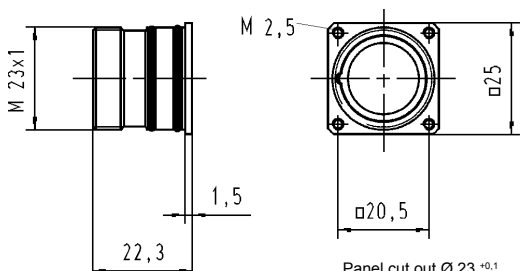
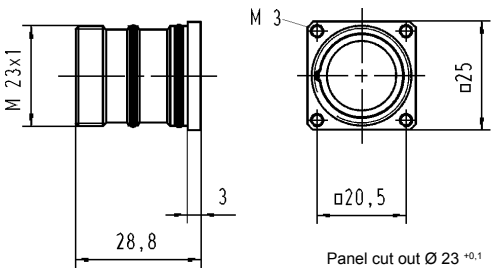
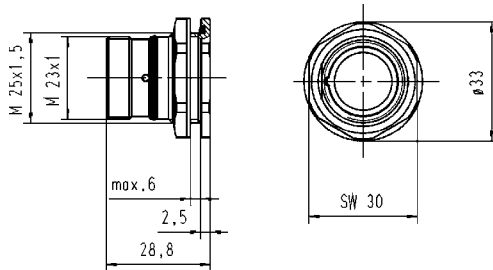
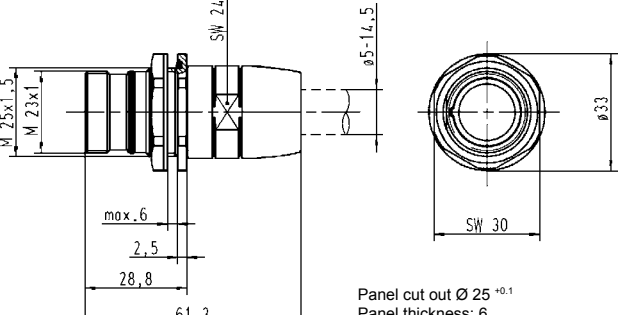
Order inserts separately see page 4 - 5

Corresponding hoods and housing see page 7 - 9

Identification	Part-Number	Drawing	Dimension in mm
Bulkhead mounted housing front wall assembly with central locking Pg 13.5 	09 15 200 0324	 Panel cut out Pg 13.5	
Bulkhead mounted housing front wall assembly with central locking M20 	09 15 200 0303	 Panel cut out Ø 20 ^{+0.1}	
Bulkhead mounted housing front wall assembly with flat sealing 	09 15 200 0301	 Panel cut out Ø 20 ^{+0.1}	
Bulkhead mounted housing front wall assembly with O-ring sealing 	09 15 200 0305	 Panel cut out Ø 20 ^{+0.1}	
Bulkhead mounted housing front wall assembly with O-ring sealing 	09 15 200 0901	 Panel cut out Ø 20 ^{+0.1}	

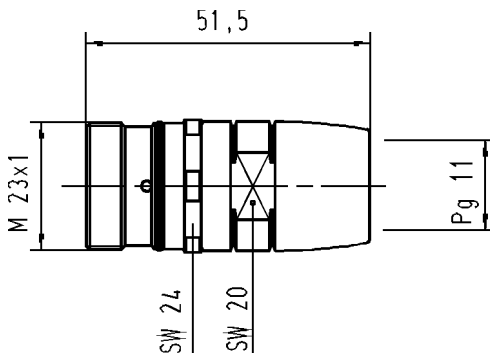
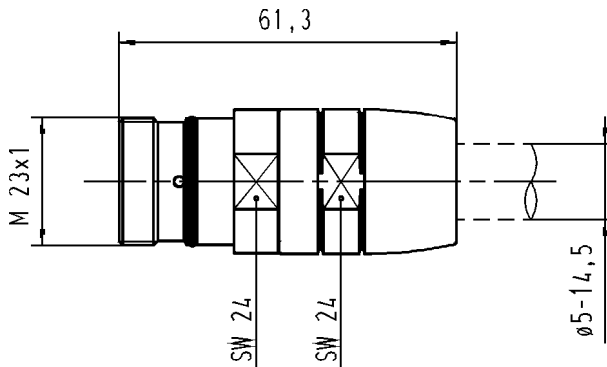
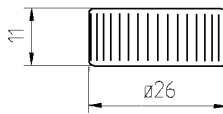
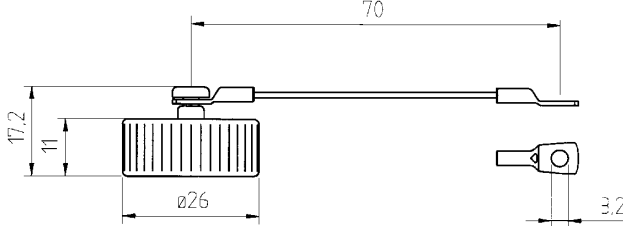
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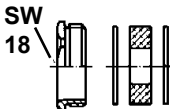
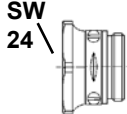
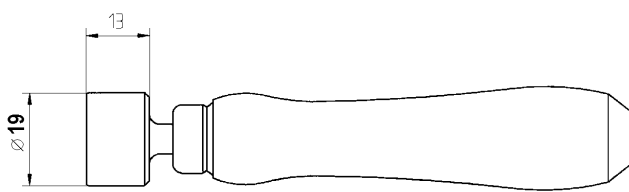
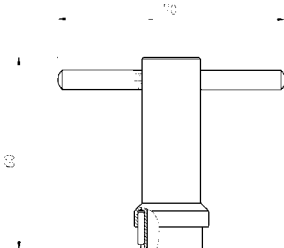
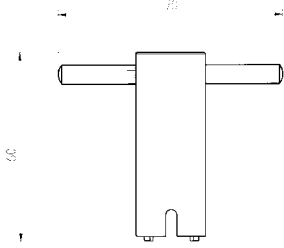
Corresponding hoods and housings see page 6

Identification	Part-Number	Drawing	Dimension in mm
Bulkhead mounted housing back wall assembly with O-ring sealing 	09 15 200 0313	 Panel cut out $\varnothing 23^{+0,1}$ Panel thickness: 2.7 - 3.5 when using counter sunk screws	
Bulkhead mounted housing back wall assembly with O-ring sealing 	09 15 200 0311	 Panel cut out $\varnothing 23^{+0,1}$ Panel thickness: 2.7 - 3.5 when using counter sunk screws	
Bulkhead mounted housing back wall assembly with O-ring sealing 	09 15 200 0312	 Panel cut out $\varnothing 23^{+0,1}$ Panel thickness: 3.5 - 8.5 when using counter sunk screws	
Bulkhead mounted housing back wall assembly with central locking M25 	09 15 200 0314	 Panel cut out $\varnothing 25^{+0,1}$ Panel thickness: 6	
Cable to cable housing back wall assembly with central locking M25 	09 15 200 0351	 Panel cut out $\varnothing 25^{+0,1}$ Panel thickness: 6	

Order inserts separately, see page 4 - 5

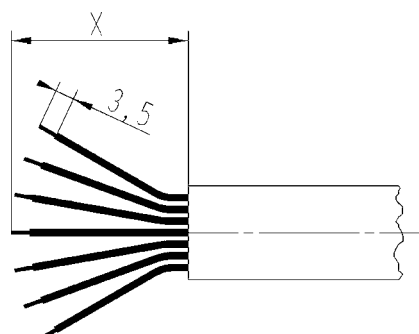
Corresponding hoods and housings see page 6

Identification	Part-Number	Pg	Drawing	Dimensions in mm
Cable to cable housing top-entry 	09 15 200 0703	11		
Cable to cable housing top-entry EMC version 	09 15 200 0751	—		
Identification	Part-Number	Drawing	Dimension in mm	
Screw cover for bulkhead mounted and cable to cable housings 	09 15 200 5401			
Screw cover for bulkhead mounted and cable to cable housings with tether 	09 15 200 5411			

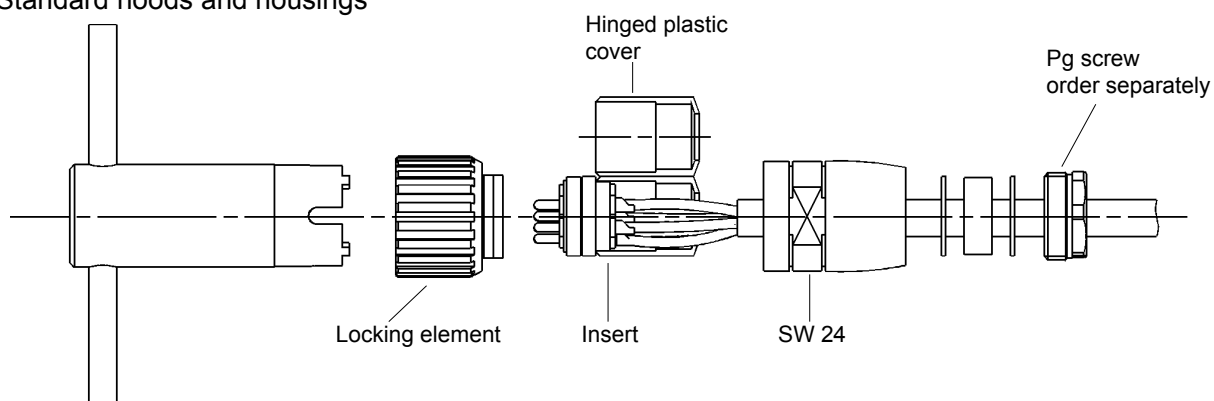
Identification	Part-Number	Pg	Drawing	Dimensions in mm
Cable clamp metal (IP 65) with normal seal 	09 00 000 5113	11	Suitable cable Ø 10 - 12	
with multiple seal 	09 00 000 5013	11	6.5 - 12	
Spacel cable clamp metal (IP 65) with strain relief and bell mouth 	09 00 000 5191	11	Suitable cable Ø 8 - 12	
with normal seal order separately 	09 00 000 5020	11	10 - 12	
with strain relief and bell mouth order separately 	09 00 000 5027	11	6.5 - 12	
Identification	Part-Number	Drawing	Dimension in mm	
Assembly tool for angled bulkhead mounted housings 	09 99 000 0324			
Assembly tool for bulkhead mounted and cable to cable housings 	09 99 000 0325	 As an alternative a screw driver can be used.		
Assembly tool for hoods 	09 99 000 0326	 Alternatively for the assembly of the EMC version a screw driver can be used.		

Assembly manuals

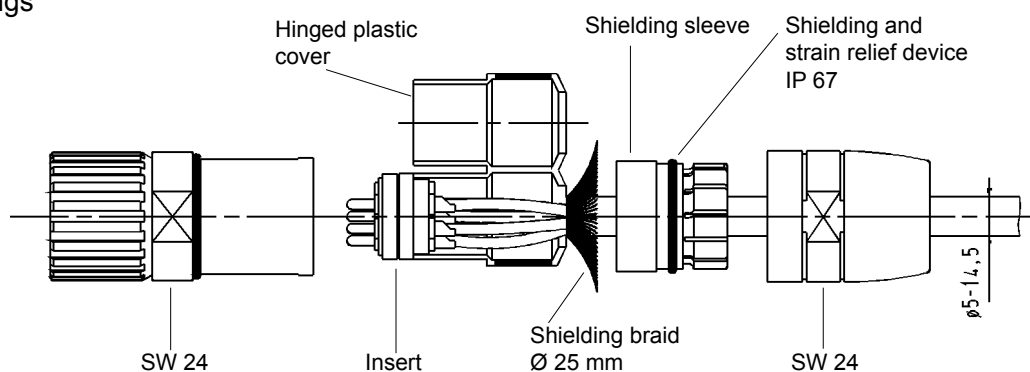
Hoods and Housings	Cable stripping length x
09 15 200 0351	26 mm
09 15 200 0403	20 mm
09 15 200 0451	26 mm
09 15 200 0603	30 mm
09 15 200 0703	20 mm
09 15 200 0751	26 mm
09 15 200 0901	30 mm



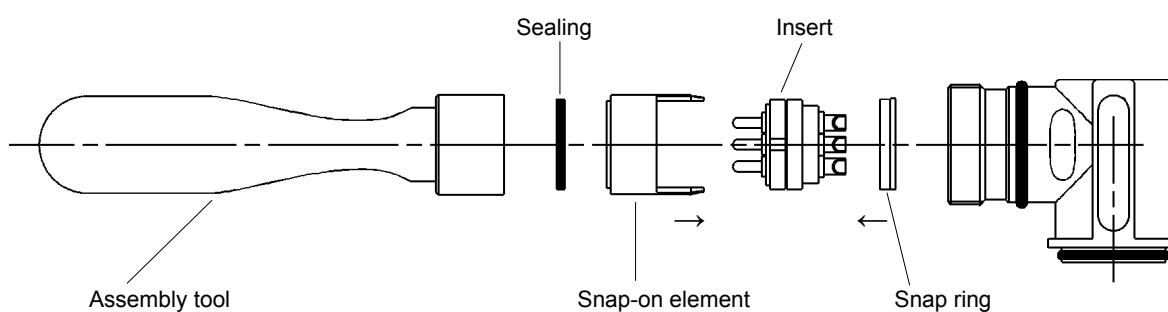
Standard hoods and housings



EMC housings



Right angled bulkhead mounted housing



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