

HR23 SERIES

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M23 Circular connector

HR23



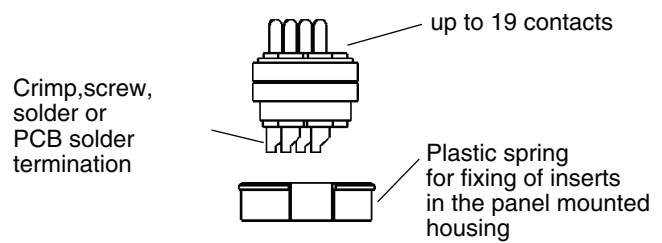
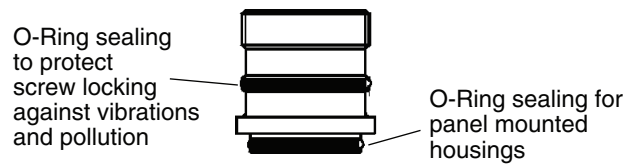
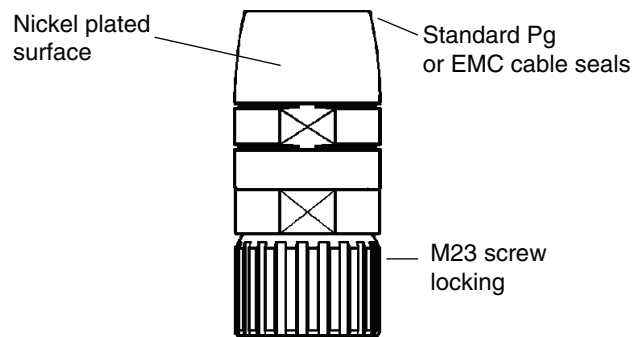
HR23 Circular connector



·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



HR23-006 Circular inserts

25V~/60V- 15A

Inserts

Hoods/Housings: size **HR23**, detail please find the page13-08~13-10.

Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984		
Approvals			
Inserts		Contacts	
Number of contacts	6	Material	Copper alloy
Electrical data acc. to EN 61 984		Surface	Gold plated
Rated current		Contact resistance	≤ 5 mΩ
- power contact	15A	Screw termination	
Rated voltage	25 V~/60 V-	- power contact	0.14-1.0 mm ² / AWG 26-16
of pollution	3	Solder termination	
Test voltage Urms	1.5 kV	- power contact	0.14-2.5 mm ² / AWG 26-14
Insulation resistance	≥ 10 ¹² Ω	PCB solder termination	
Material	PBT	- power contact	∅ 1.5 mm
Temperature range	-40°C...+115°C	-reference to	3.5 mm
Flammability acc. to UL 94	V0	bulkhead mounted housing	

Screw terminal



Inserts	Designation	Order No.
Male	HR23-006-M	02300610100
Female	HR23-006-F	02300610200

Solder terminal



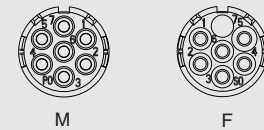
Inserts	Designation	Order No.
Male	HR23-006-MST	02300680100
Female	HR23-006-FST	02300680200

PCB solder termination ²⁾

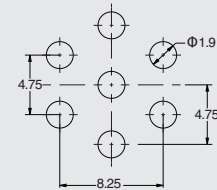


Inserts	Designation	Order No.
Male	HR23-006-MTHT ²⁾	02300690100
Female	HR23-006-FTHT ²⁾	02300690200

Contact arrangement: mating side
(numbering in opposite direction on request)



PCB layout



²⁾ Suitable only for bulkhead mounted housings: HR23-BK-D2.7, HR23-BK/R-OD2.7 and HR23-BK/R-OM2.5

HR23-009 Circular inserts

25V~/60V- 15/7A

Inserts

Hoods/Housings: size **HR23**, detail please find the page13-08~13-10.

Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984		
Approvals			
Inserts		Contacts	
Number of contacts	9	Material	Copper alloy
Electrical data acc. to EN 61 984		Surface	Gold plated
Rated current		Contact resistance	≤ 5 mΩ
- power contact	1x15A	Screw termination	
- signal contact	8x7A	- power contact	0.14-1.0 mm ² / AWG 26-16
Rated voltage	25 V~/60 V-	- signal contact	0.14-0.75 mm ² / AWG 26-18
of pollution	3	Solder termination	
Test voltage Urms	1.5 kV	- power contact	0.14-2.5 mm ² / AWG 26-14
Insulation resistance	≥ 10 ¹² Ω	- signal contact	0.14-1.0 mm ² / AWG 26-16
Material	PBT		
Temperature range	-40 °C...+115 °C		
Flammability acc. to UL 94	V0		

Screw terminal



Inserts	Designation	Order No.
Male	HR23-009-M	02300910100
Female	HR23-009-F	02300910200

Solder terminal



Inserts	Designation	Order No.
Male	HR23-009-MST	02300980100
Female	HR23-009-FST	02300980200

Contact arrangement: mating side
(numbering in opposite direction on request)



M



F

HR23-012 Circular inserts

25V~/60V- 7A

Inserts

Hoods/Housings: size **HR23**, detail please find the page13-08~13-10.

Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984		
Approvals			
Inserts		Contacts	
Number of contacts	12	Material	Copper alloy
Electrical data acc. to EN 61 984		Surface	Gold plated
Rated current		Contact resistance	≤ 5 mΩ
- signal contact	7A	Crimp termination	
Rated voltage	25 V~/60 V-	- D-Sub contact	0.09-0.82 mm ² / AWG 28-18
of pollution	3	Solder termination	
Test voltage Urms	1.5 kV	- signal contact	0.14-1.0 mm ² / AWG 26-16
Insulation resistance	≥ 10 ¹² Ω	PCB solder termination	
Material	PBT	- signal contact	Φ0.6 mm
Temperature range	-40 °C...+115 °C	- reference to	3.5 mm
Flammability acc. to UL 94	V0	bulkhead mounted housing	

Crimp terminal for D-Sub contacts



Inserts	Designation	Order No.
Male	HR23-012-MC	02301220100
Female	HR23-012-FC	02301220200

Solder terminal

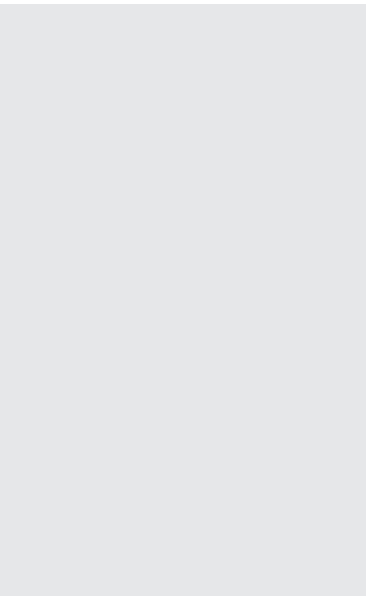


Inserts	Designation	Order No.
Male	HR23-012-MST	02301280100
Female	HR23-012-FST	02301280200

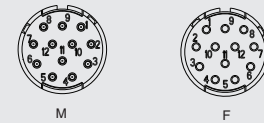
PCB solder termination ²⁾



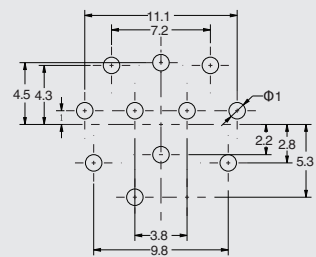
Inserts	Designation	Order No.
Male	HR23-012-MTHT ²⁾	02301290100
Female	HR23-012-FTHT ²⁾	02301290200



Contact arrangement: mating side
(numbering in opposite direction on request)



PCB layout



²⁾ Suitable only for bulkhead mounted housings: HR23-BK-D2.7, HR23-BK/R-OD2.7 and HR23-BK/R-OM2.5

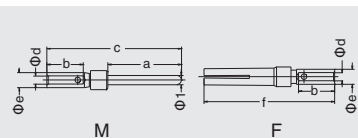
Accessories

Crimp contacts 5A

Contact resistance ≤ 3mΩ
gold plated



Wire gauge	Male	Order No.	Female	Order No.
0.09-0.25	CSGM-0.25	08121171000	CSGF-0.25	08121172000
0.13-0.33	CSGM-0.33	08121173000	CSGF-0.33	08121174000
0.33-0.52	CSGM-0.52	08121175000	CSGF-0.52	08121176000
0.33-0.82	CSGM-0.82	08121177000	CSGF-0.82	08121178000



Detail please find the crimp contacts series

HR23-017 Circular inserts

25V~/60V- 7A

Inserts

Hoods/Housings: size **HR23** ,detail please find the page13-08~13-10.

Technical characteristics

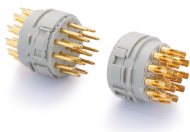
Specifications	DIN EN 60 664 DIN EN 61 984		
Approvals			
Inserts		Contacts	
Number of contacts	17	Material	Copper alloy
Electrical data acc. to EN 61 984		Surface	Gold plated
Rated current		Contact resistance	≤ 5 mΩ
- signal contact	7A	Crimp termination	
Rated voltage	25 V~/60 V-	- D-Sub contact	0.09-0.82 mm ² / AWG 28-18
of pollution	3	Solder termination	
Test voltage Urms	1.5 kV	- signal contact	0.14-1.0 mm ² / AWG 26-16
Insulation resistance	≥ 10 ¹² Ω	PCB solder termination	
Material	PBT	- signal contact	∅ 0.6 mm
Temperature range	-40 °C...+115 °C	- reference to	3.5 mm
Flammability acc. to UL 94	V0	bulkhead mounted housing	

Crimp terminal for D-Sub contacts



Inserts	Designation	Order No.
Male	HR23-017-MC	02301720100
Female	HR23-017-FC	02301720200

Solder terminal

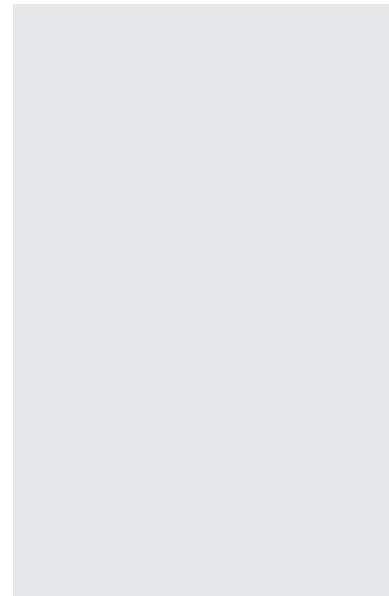


Inserts	Designation	Order No.
Male	HR23-017-MST	02301780100
Female	HR23-017-FST	02301780200

PCB solder termination ²⁾



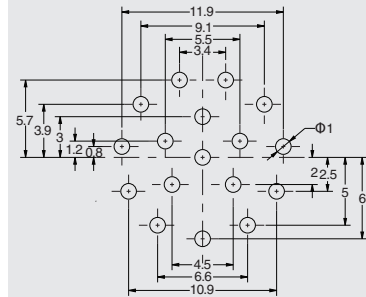
Inserts	Designation	Order No.
Male	HR23-017-MTHT ²⁾	02301790100
Female	HR23-017-FTHT ²⁾	02301790200



Contact arrangement: mating side (numbering in opposite direction on request)



PCB layout



²⁾ Suitable only for bulkhead mounted housings: HR23-BK-D2.7, HR23-BK/R-OD2.7 and HR23-BK/R-OM2.5

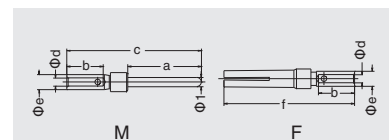
Accessories

Crimp contacts 5A

Contact resistance ≤ 3mΩ gold plated



Wire gauge	Male	Order No.	Female	Order No.
0.09-0.25	CSGM-0.25	08121171000	CSGF-0.25	08121172000
0.13-0.33	CSGM-0.33	08121173000	CSGF-0.33	08121174000
0.33-0.52	CSGM-0.52	08121175000	CSGF-0.52	08121176000
0.33-0.82	CSGM-0.82	08121177000	CSGF-0.82	08121178000



Detail please find the crimp contacts series

HR23-019 Circular inserts

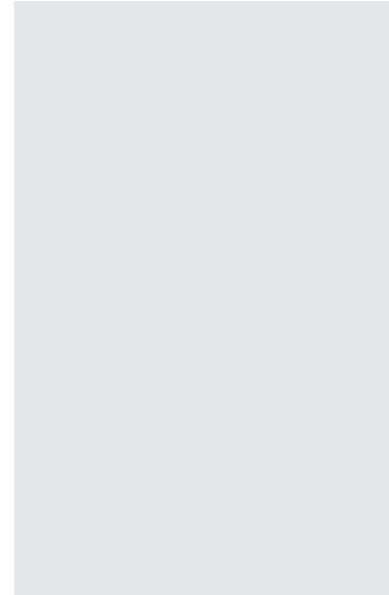
25V~/60V- 10/7A

Inserts

Hoods/Housings: size **HR23**, detail please find the page13-08~13-10.

Technical characteristics

Specifications	DIN EN 60 664 DIN EN 61 984
Approvals	
Inserts	
Number of contacts	19
Electrical data acc. to EN 61 984	
Rated current	
- power contact	3x10A
- signal contact	16x7A
Rated voltage	25 V~/60 V-
of pollution	3
Test voltage Urms	1.5 kV
Insulation resistance	$\geq 10^{12} \Omega$
Material	PBT
Temperature range	-40°C...+115°C
Flammability acc. to UL 94	V0
Contacts	
Material	Copper alloy
Surface	Gold plated
Contact resistance	$\leq 5 \text{ m}\Omega$
Solder termination	
- power contact	0.14-2.5 mm ² / AWG 26-14
- signal contact	0.14-1.0 mm ² / AWG 26-16



HR23

Solder terminal

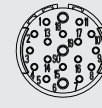


Inserts	Designation	Order No.
Male	HR23-019-MST	02301980100
Female	HR23-019-FST	02301980200

Contact arrangement: mating side
(numbering in opposite direction on request)



M



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HR23 Hoods/Housings

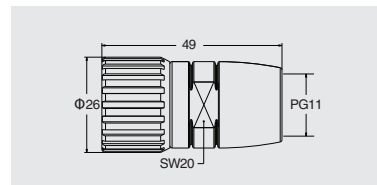
Hoods/Housings	
Material	Copper zinc alloy
Surface	Nickel plated
Flat sealing	NBR
O-Ring sealing	FPM
Temperature range	-40 °C...+115 °C
Protection degree in locked position	IP 67

Hoods, top-entry



Thread	Designation	Order No.
PG11	HR23-TE-PG11	04323203310

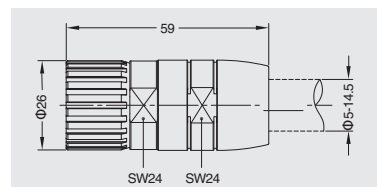
It should be used with cable gland PG11, up to EMC function.



Hoods, top-entry, EMC version



Thread	Designation	Order No.
---	HR23-TE-EMC	04323200010

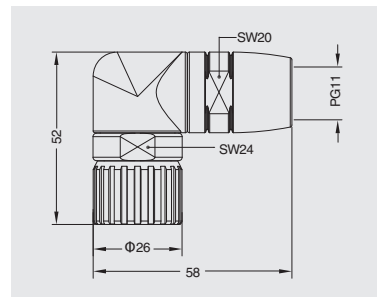


Hood, entry 90°



Thread	Designation	Order No.
PG11	HR23-SE-PG11	04323103310

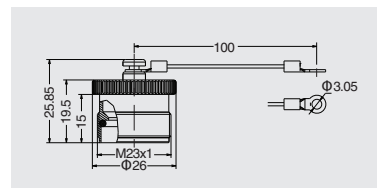
It should be used with cable gland PG11, up to EMC function.



Screw cover, for hoods with tether



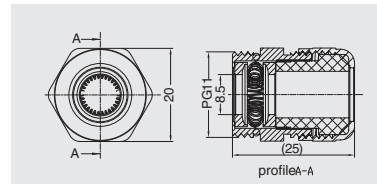
Thread	Designation	Order No.
---	HR23-MCV-M2	04323392210



Cable gland



Thread	Designation	Order No.
PG11	WNACH-PG11/(D6.5-8.5)	06006133100



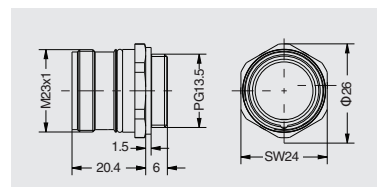
Housings

Housings, bulkhead mounting

front wall assembly
with central locking
PG13.5



Thread	Designation	Order No.
PG13.5	HR23-BK-PG13.5	04323013410



HR23 Hood&Housing

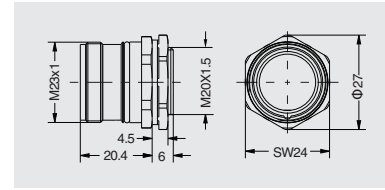
Degree of protection: IP67

Housings, bulkhead mounting

front wall assembly, with central locking M20



Thread	Designation	Order No.
M20	HR23-BK-M20	04323011210



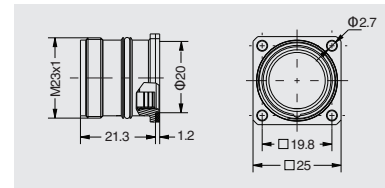
HR23

Housings, bulkhead mounting

front wall assembly, with flat sealing and 4 Ø2.7 holes



Thread	Designation	Order No.
--	HR23-BK-D2.7	04323010020

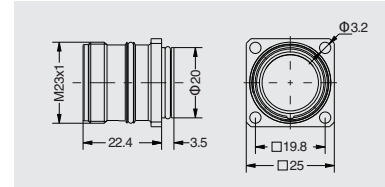


Housings, bulkhead mounting

front wall assembly, with O-ring sealing and 4 Ø3.2 holes



Thread	Designation	Order No.
--	HR23-BK-OD3.2	04323010010

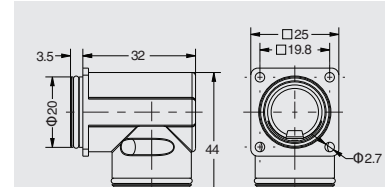


Housings, bulkhead mounting

front wall assembly, with O-ring sealing and 4 Ø2.7 holes



Thread	Designation	Order No.
--	HR23-BK-SE-OD2.7	04323910020

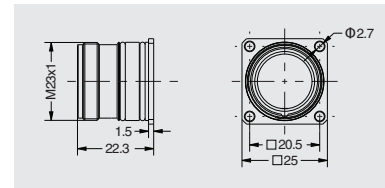


Housings, bulkhead mounting

back wall assembly, with O-ring sealing and 4 Ø2.7 holes



Thread	Designation	Order No.
--	HR23-BK/R-OD2.7	04323020020

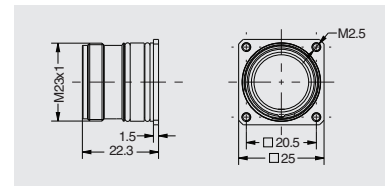


Housings, bulkhead mounting

back wall assembly, with O-ring sealing and 4 Ø2.5 holes



Thread	Designation	Order No.
--	HR23-BK/R-OM2.5	04323021010

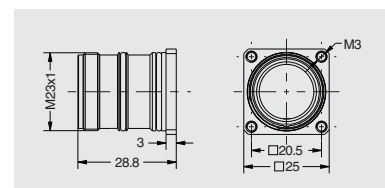


Housings, bulkhead mounting

back wall assembly, with O-ring sealing and 4 Ø3.0 holes



Thread	Designation	Order No.
--	HR23-BK/R-OM3.0	04323021020



HR23 Hood&Housing

HR23 Hood&Housing

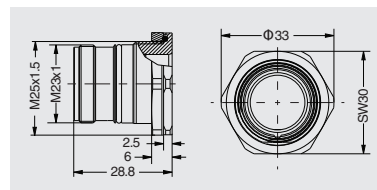
Degree of protection: IP67

Housings, bulkhead mounting

back wall assembly, with central locking M25



Thread	Designation	Order No.
M25	HR23-BK/R-OM25	04323020010

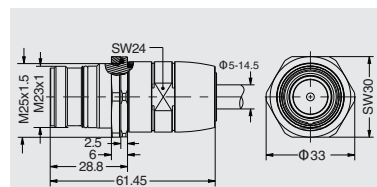


EMC Housings, cable to cable

back wall assembly, with central locking M25



Thread	Designation	Order No.
M25	HR23-CCT/R-OM25	04323120010

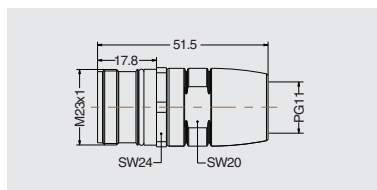


Housings, cable to cable, top entry



Thread	Designation	Order No.
PG11	HR23-CCT-PG11	04323113310

It should be used with cable gland PG11, up to EMC function.

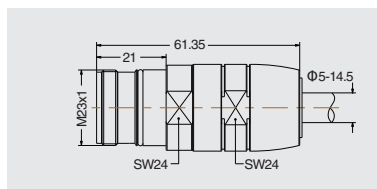


Housings, cable to cable, top entry

EMC version



Thread	Designation	Order No.
---	HR23-CCT-EMC	04323110010

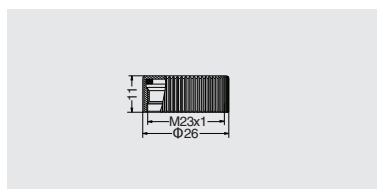


Screw cover

for bulkhead mounted and cable to cable housings



Thread	Designation	Order No.
---	HR23-MCV-F	04323391010

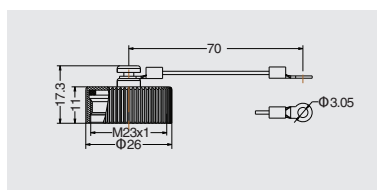


Screw cover

for bulkhead mounted and cable to cable housings, with tether



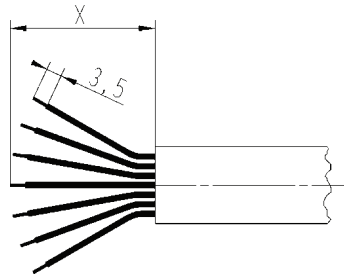
Thread	Designation	Order No.
---	HR23-MCV-F2	04323391210



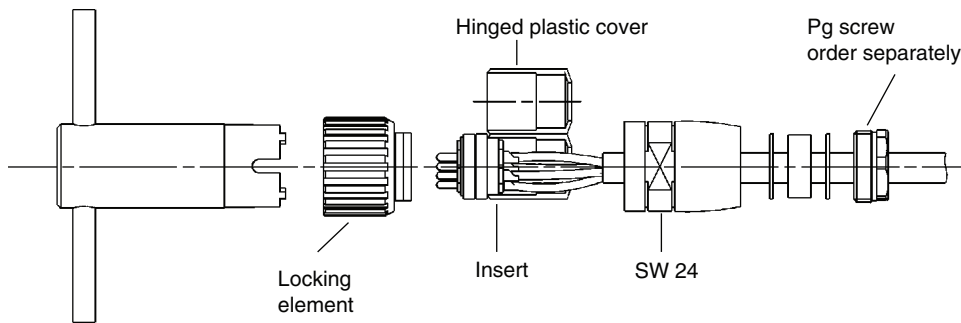
HR23

HR23 Assembly manuals

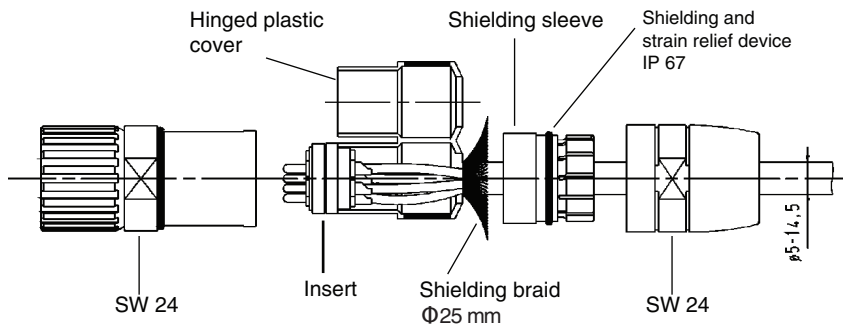
Hoods and Housings	Cable stripping length x
HR23-CCT/R-OM25	26 mm
HR23-TE-PG11	20 mm
HR23-TE-EMC	26 mm
HR23-SE-PG11	30 mm
HR23-CCT-PG11	20 mm
HR23-CCT-EMC	26 mm
HR23-BK-SE-OD2.7	30 mm



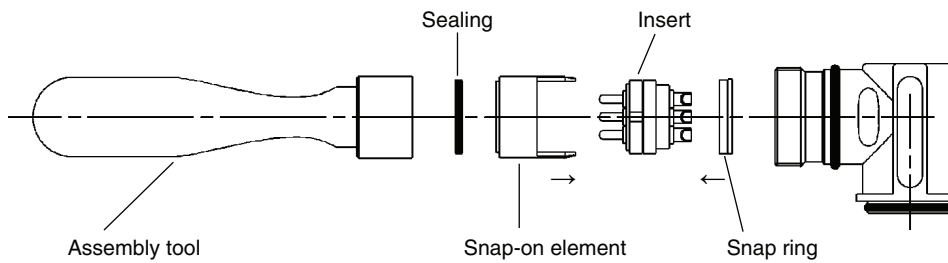
Standard hoods and housing



EMC housings



Right angled bulkhead mounted housing



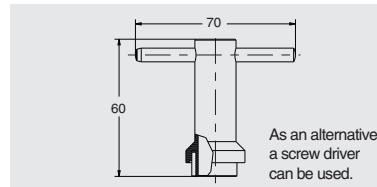
HR23 Tools

Dimensions in mm

Assembly tool



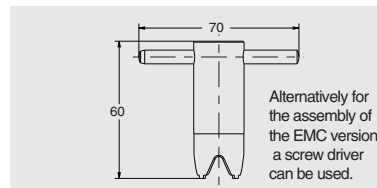
Application	Designation	Order No.
for bulkhead mounted and cable to cable housings and hoods	HR23-TL01	04323002100



Assembly tool



Application	Designation	Order No.
for hoods	HR23-TL02	04323002200



Assembly tool



Application	Designation	Order No.
for angled bulkhead mounted housings	HR23-TL03	04323002300

