CEEP

ALFA'R CONNECTORS

Rectangular

Part Number Reference:

Cable Entry - See pages 13 to 16

Terminal Pin - TF: Solder
CR: Crimp
CI: PCB
LCI: 90° PCB

Variation of Contacts - See pages 4 & 5

Number of Contacts - See page 4 & 5

Number (umb) - See pages 4 & 5

Connector Gender - M: Male - See page 11
F: Female
H: Hybrid

Gender - M: Male - See pages 8 to 10
F: Female
H: Hybrid

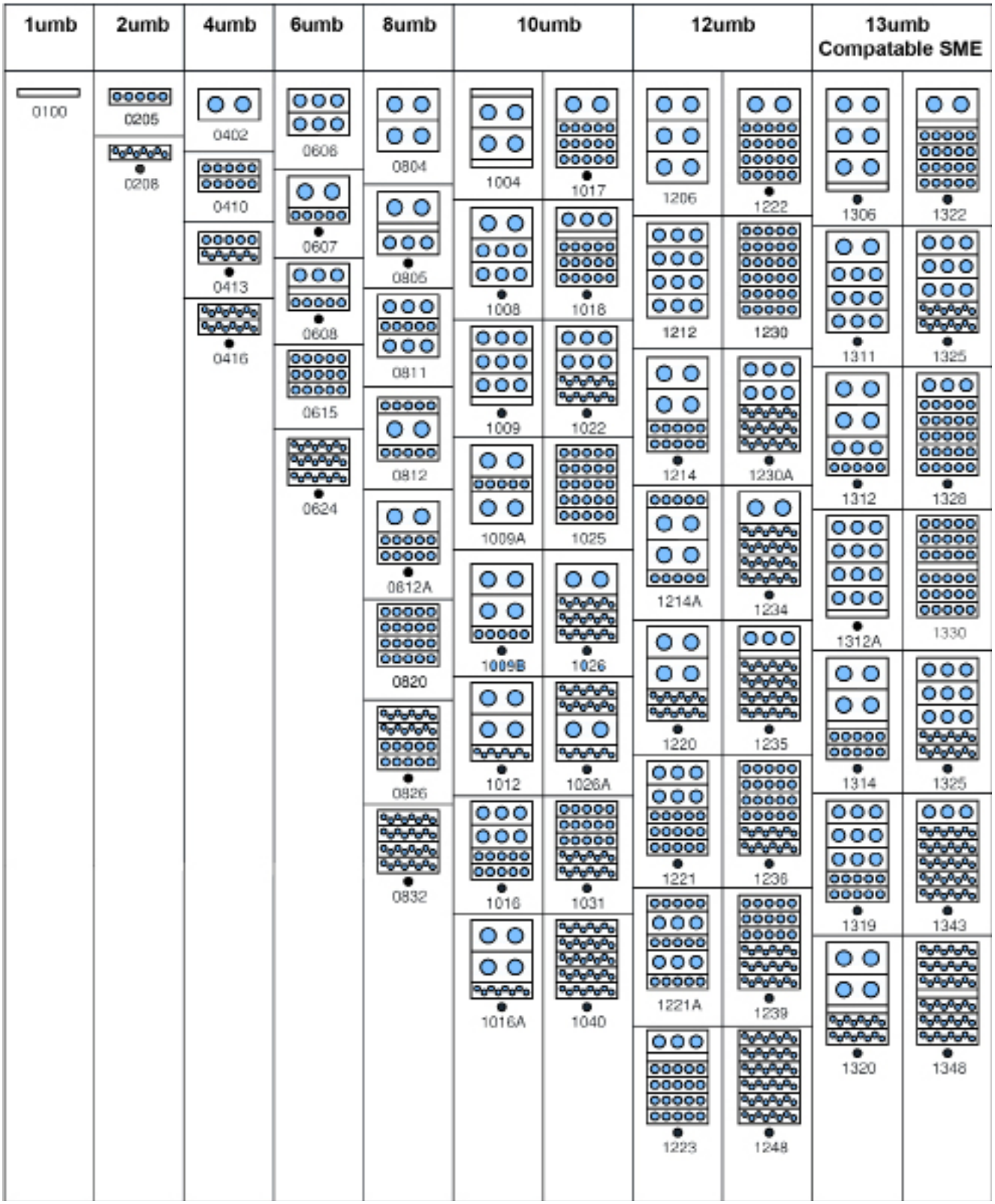
Connector Type - 1 / 3 / 4 / 5 / 6 / 7 / 8 / 9 - See pages 6 & 7

SME Product Description:

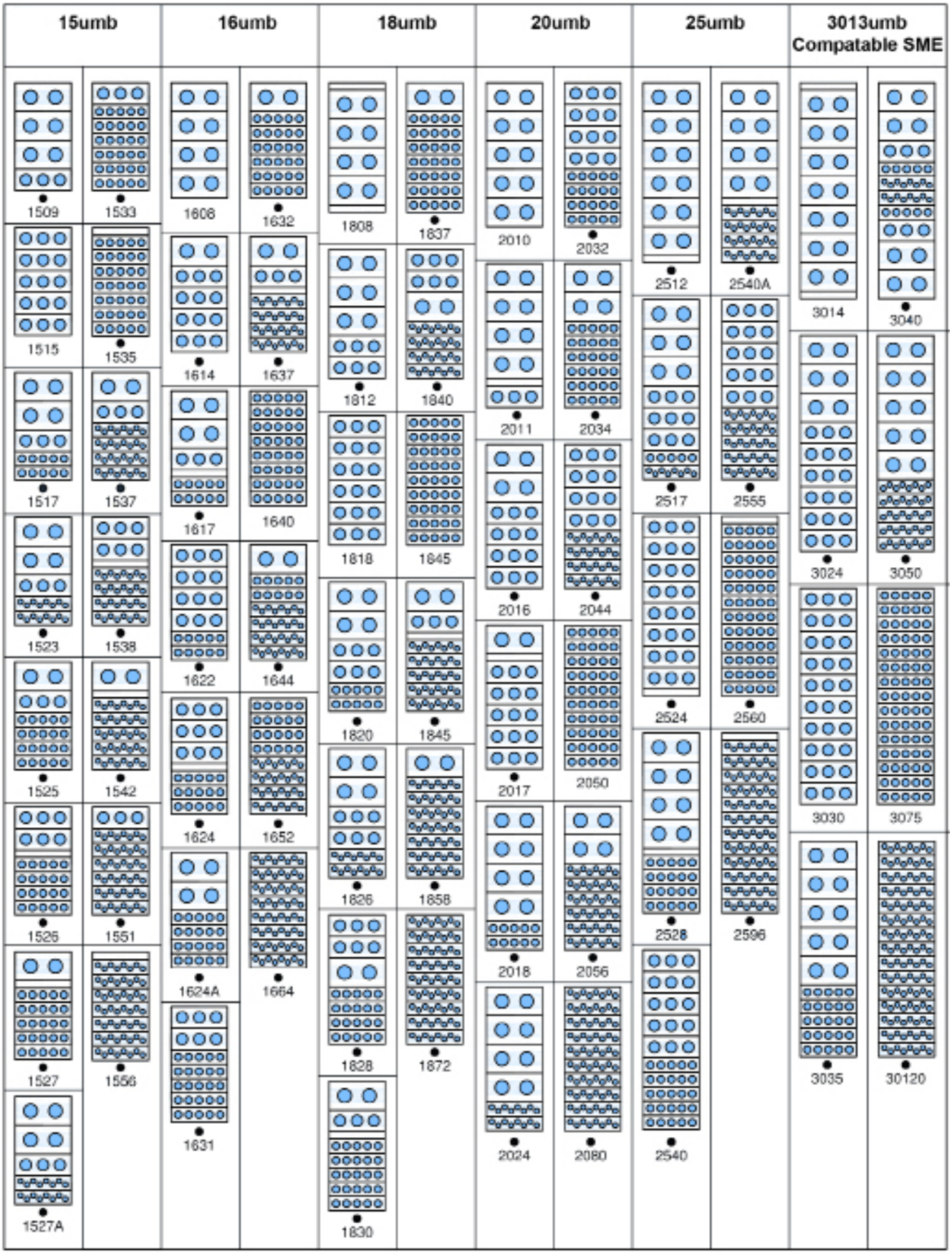
These connectors are made up of elements of the SMF series, mounted in aluminium housings. They are manufactured in two sizes: 13umb (from 6 to 48 contacts) 30umb (from 14 to 120) (See diagrams on pages 4 and 5)

The housings are provided with gaskets resistant to industrial agents, mineral oils and hydrocarbons, which, together with the appropriate cable outlet accessories, guarantee an IP65 degree of protection. For the cable outlet there is a wide range of accessories consisting of: integrated cable glands, external plastic, external metal and spiral glands of various diameters (see pages 13-16)

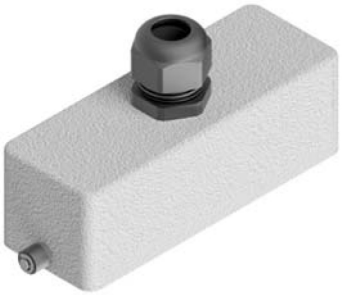
Contact Distribution:



Contact Distribution:



Series SME Type:



Vertical entry, with pivots
SME 1

Extended vertical entry, with pivots
SME 3

Side entry 15°, with pivots
SME 4

Extended side entry 15°, with pivots
SME 5

Series SME Type:

Vertical outlet, with lever
SME 6

Vertical outlet, with lever
SME 7

Recessed base, with pivots
SME 8

Recessed base, with lever
SME 9

Series SMF Rack:

Characterized by their small size and robustness. Fixed at four points. The guides of the two supports can be male (M), female (F) or one male and the other female, hybrid configuration (H).
They are compatible with aluminium housings (SME series) in two sizes, 13 umb and 30 umb.
The codes shown below are for empty frames (without contact blocks).

Gender of Guides		
M	**F**	**H**
Male	Female	Hybrid

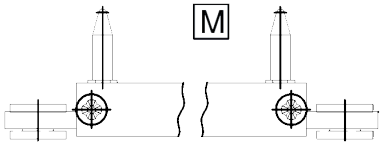
Number of umb
N

Variant
V

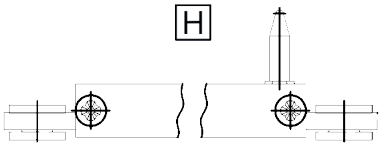
B-SMR M N - V

B-SMR F N - V

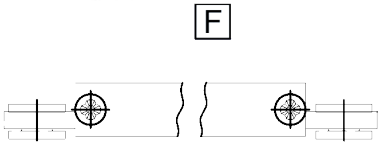
M

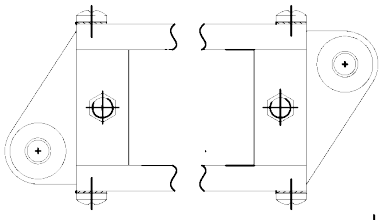


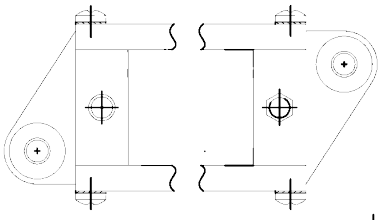
H

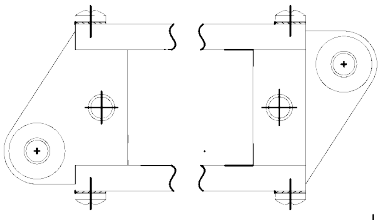


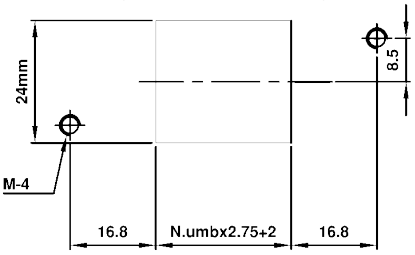
F

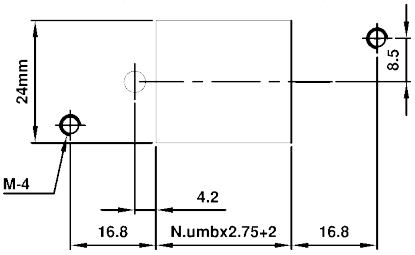


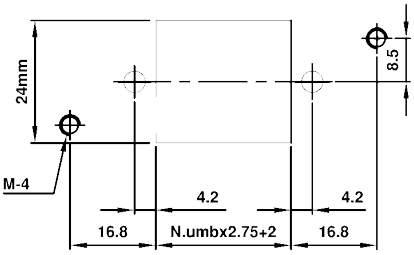












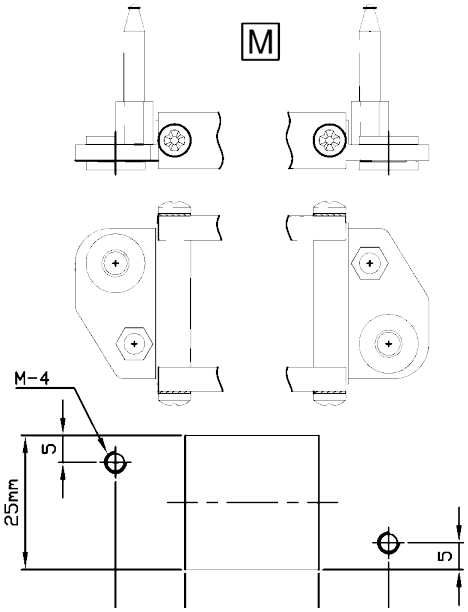
Series SML Rack:

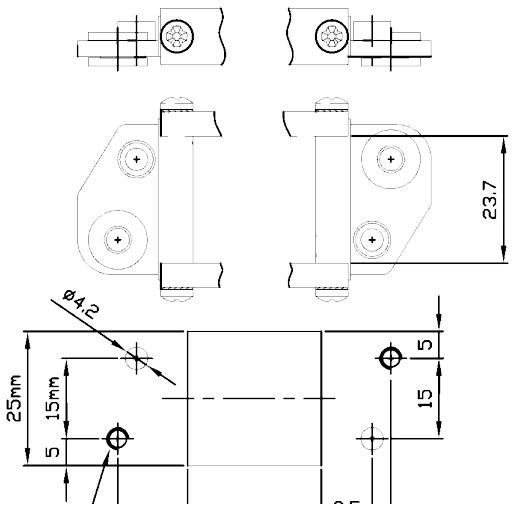
These connectors have longer male guides than the other series. The guide of the two supports are always of the same gender, male (M) or female (F). The hybrid configuration is not possible.
The connectors are provided with a floating clamping system. The codes shown below are for empty frames (without contact blocks).

Gender of Guides		Number of umb	Variant
M	**F**	**N**	**V**
Male	Female		

B-SML M N - V

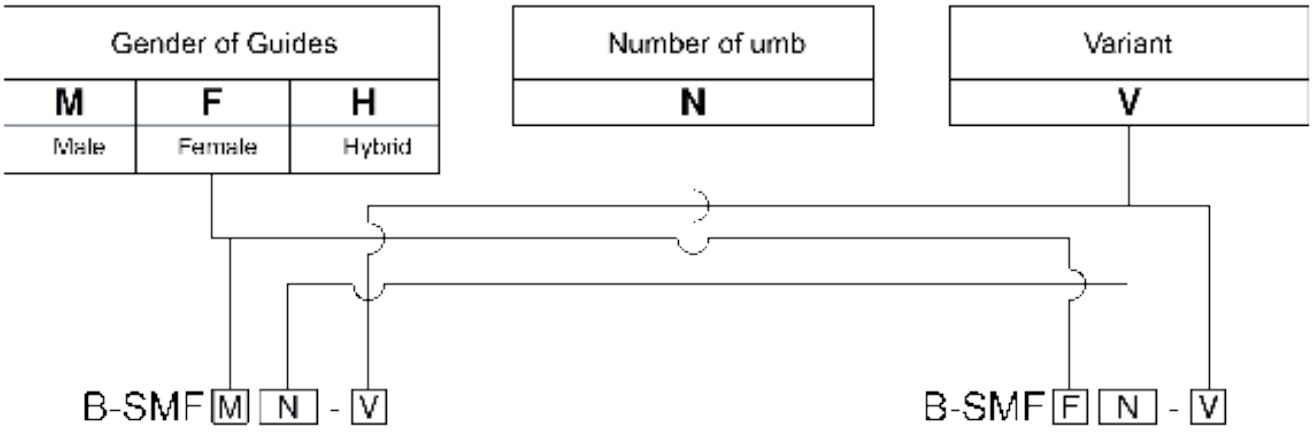
B-SML F N - V

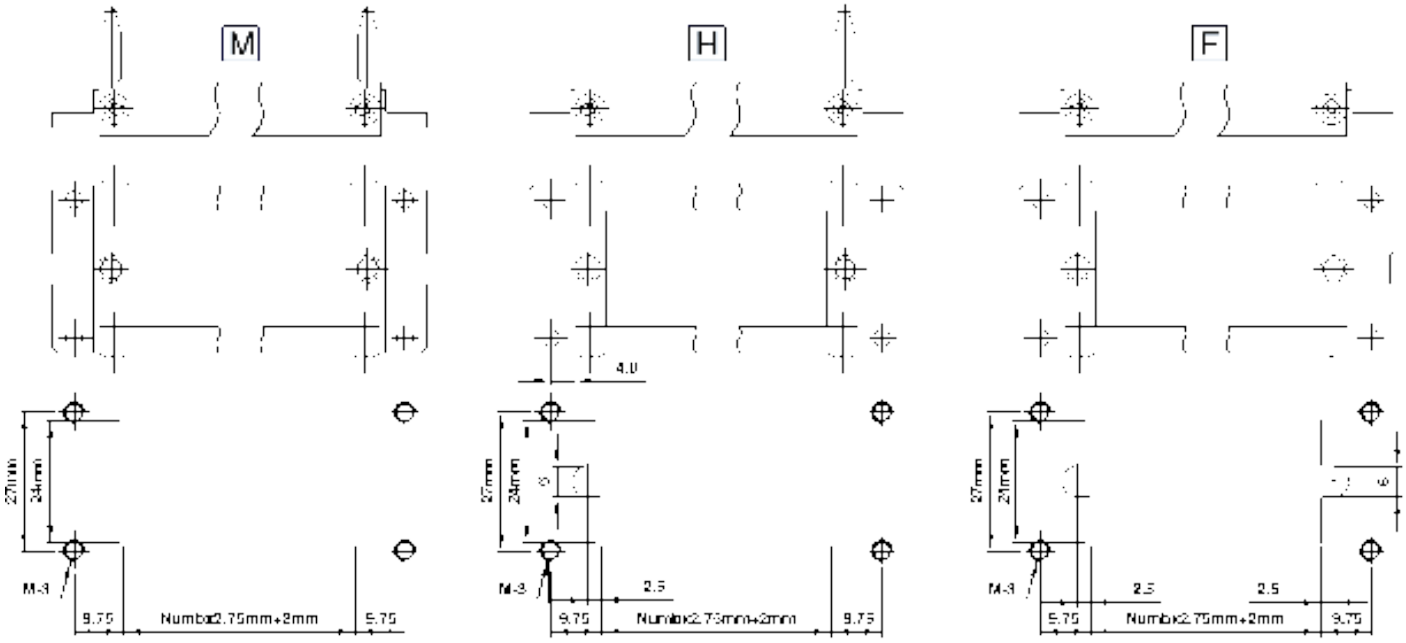




Series SMR Rack:

In this series, the guides of the two supports can be male (M), female (F), or one male and one female, hybrid configuration (H).
The connectors are provided with a floating fixing system. The codes shown below are for empty frames (without contact blocks).

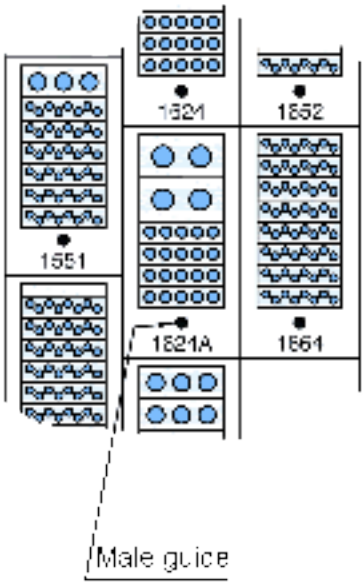




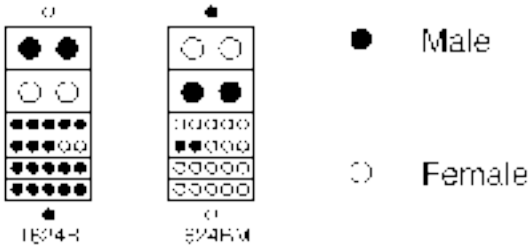
SM F / L / R

Hybrid connectors come with a male and female guide and an asymmetric arrangement of contacts. The male guide is identified as per the diagram below (for more information please refer to pages 4 & 5).
For connectors containing hybrid contacts (mix of male and female), when the two connectors are mated, they present a totally inverted configuration scheme. This is differentiated by adding the letter M within the part number (see example below).

B-SM R H H 16 24 B TF



B-SM R H H 16 24 BM TF



Contacts:

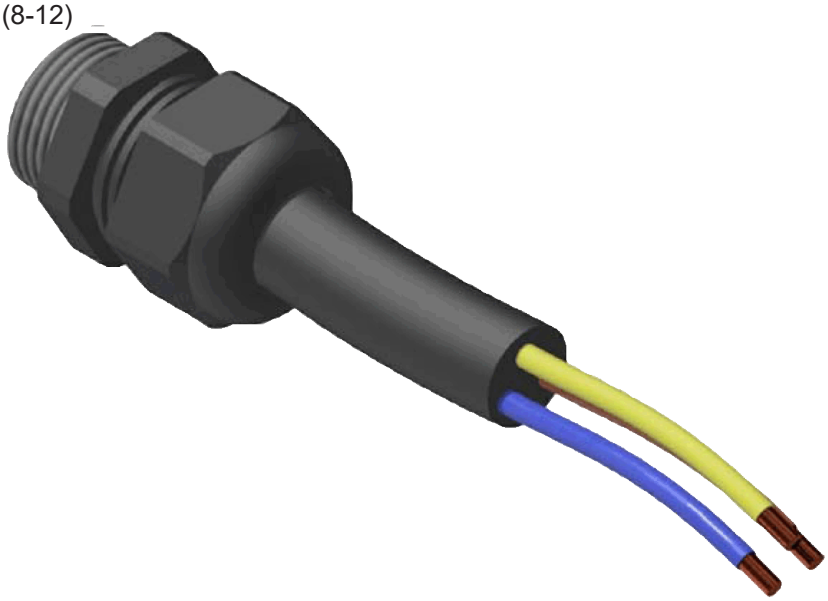
Number of Contacts	2	3	5	8	10	16
Wire section (mm²)	5.3	2.1	0.9	0.6	0.9	0.9
Average extraction force per contact	<6N	<4N	<2N			
Insulator resistance at 20 °C and 80% realitive humidity	> 10^3 MΩ					
Contact resistance (male and female mated)	< 5 MΩ					
Test voltage at sea level for melamine (thermostable) (V.eff.)	2500V	2000V	1500V			
Test voltage at sea level for thermostable (V.eff.)	-		1500V		-	
Working voltage at sea level for melamine (thermostable) (V.eff.)	750V	500V	250V			
Working voltage at sea level for thermostable (V.eff.)	-		250V		-	
Working temperature for melamine (thermostable)	-40°C + 120 °C					
Working temperature for thermoplastic (UL 04:CO)	-55°C + 90 °C					
Nominal current per contact (A)	25A	15A	10A	7.5A	10A	

Cable Glands:

Taking into account the size of the connector and the cable, we can complete the code according to the table below. Available with: EMI Shield, flexible spiral, rigid cable, or multiple cable outlet (see figure below). Please contact us for more information.

Cable Gland						
Ø Cable Entry		Size	Reference			
Min	Max		Plastic	Metal	Ground Contact	Spiral
5	10	M20	A	E	-	SA
6	13		-	-	I	-
7	13		B	F	J	SB
7.5	14		-	-	L	-
10	14		D	H	-	SD
7	15	M32	B	F	-	SB
11	21		C	G	K	SC
16	24.5		-	-	L	-
20	25		D	H	-	SD
11*	23	M40	A	E	-	SA
19	28		B	F	J	SB
22	32		-	H	L	-
27	32		D	-	-	SD

*With silicone reducer. Ref:N050S100TA0 (8-12)



Plastic Cable Gland

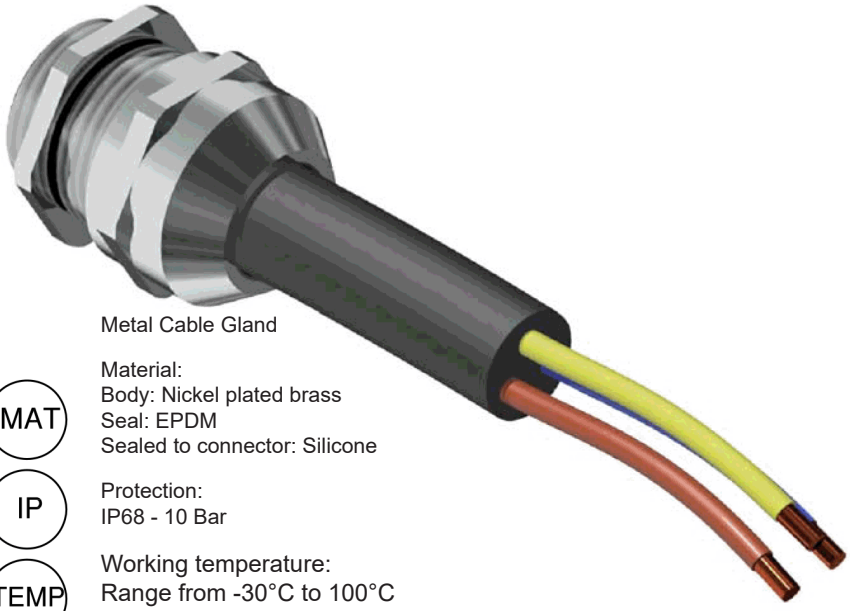
RAL
Available Colours:
RAL 7001 Silver/Grey
RAL 7035 Light grey
RAL 9005 Black/ UV resistant

MAT
Material:
Body: Polyamide
Seal: EPDM
Sealed to connector: Silicone

IP
Protection:
IP68 - 5 Bar

TEMP
Working temperature:
Static: from -40°C to 100°C
Dynamic: from -40°C to 100°C

Cable Glands

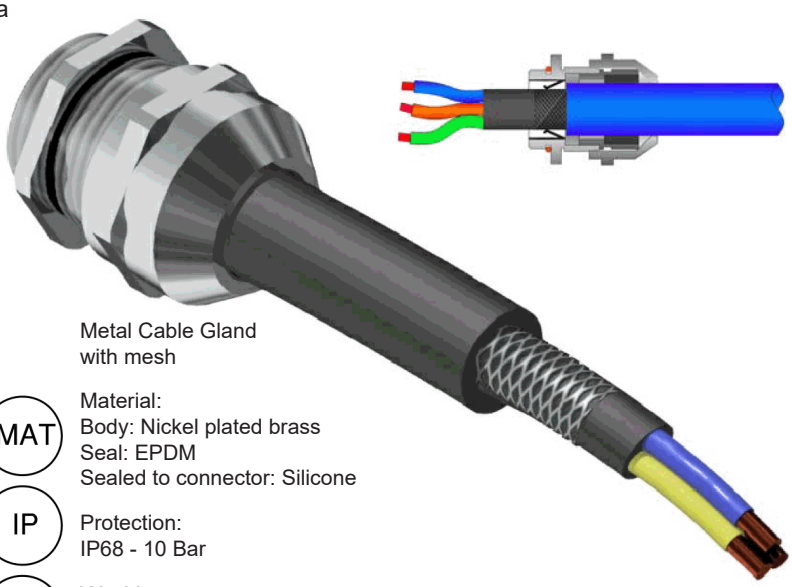


Metal Cable Gland

MAT
Material:
Body: Nickel plated brass
Seal: EPDM
Sealed to connector: Silicone

IP
Protection:
IP68 - 10 Bar

TEMP
Working temperature:
Range from -30°C to 100°C
They are also supplied on demand with a temperature range up to 200°C

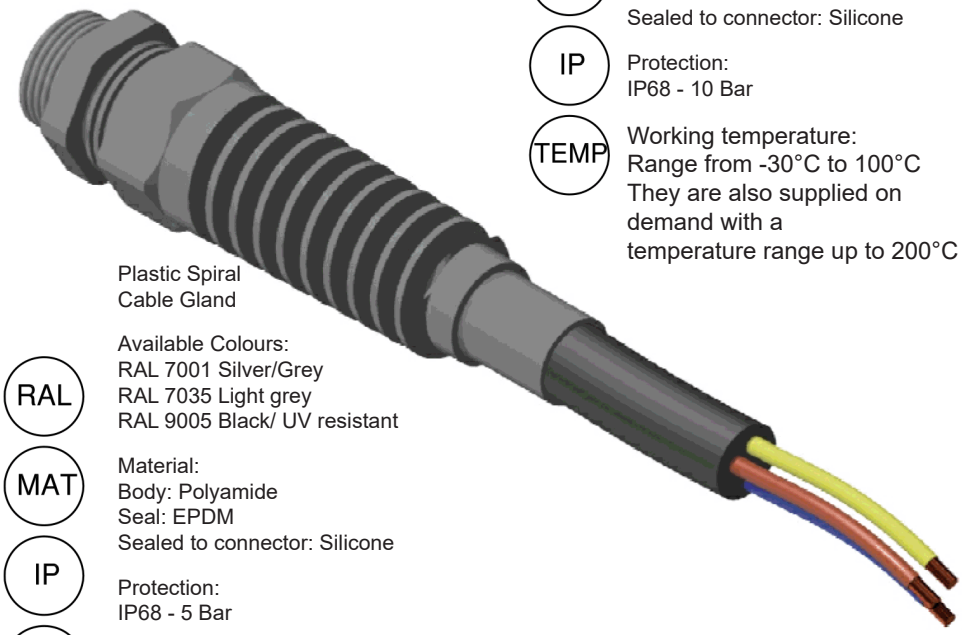


Metal Cable Gland
with mesh

MAT
Material:
Body: Nickel plated brass
Seal: EPDM
Sealed to connector: Silicone

IP
Protection:
IP68 - 10 Bar

TEMP
Working temperature:
Range from -30°C to 100°C
They are also supplied on demand with a temperature range up to 200°C



Plastic Spiral
Cable Gland

RAL
Available Colours:
RAL 7001 Silver/Grey
RAL 7035 Light grey
RAL 9005 Black/ UV resistant

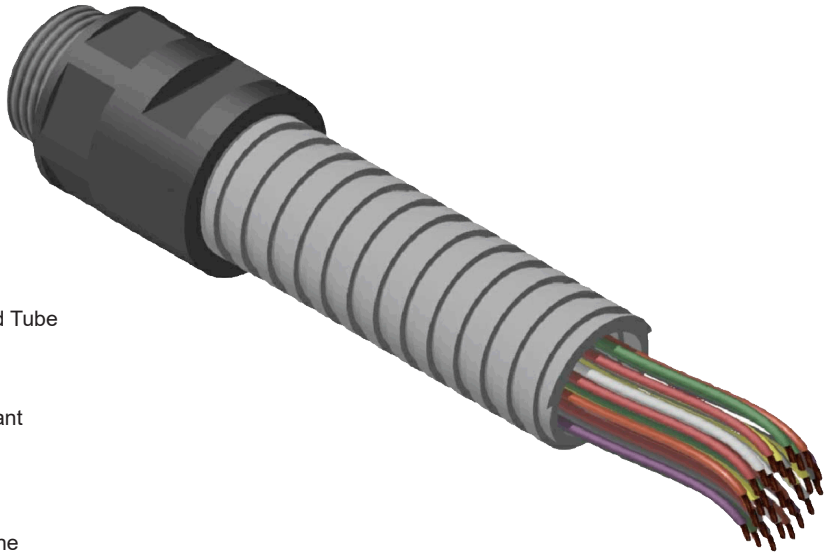
MAT
Material:
Body: Polyamide
Seal: EPDM
Sealed to connector: Silicone

IP
Protection:
IP68 - 5 Bar

TEMP
Working temperature:
Static: from -20°C to 100°C
Dynamic: from -40°C to 100°C

Cable Glands:

Cable Gland for Corrugated Tube				
Ø Tube			Size	Reference
Nom	Ext	Int		
10	13	10	M16	FB
12	15.8	12		FC
12	15.8	12	M20	FD
16	21.2	16.5		FE
27.5	34.9	29	M32	FF
35	42.5	36	M40	FG
48	54.5	48	M63	FH



Cable Gland for Corrugated Tube

RAL
Available Colours:
RAL 7035 Light grey
RAL 9005 Black/ UV resistant

MAT
Material:
Body: Polyamide
Seal: EPDM
Sealed to connector: Silicone

IP
Protection:
IP68 - 5 Bar
IP69K according to DIN 40050 T.9

TEMP
Working temperature:
Range from -30°C to 100°C

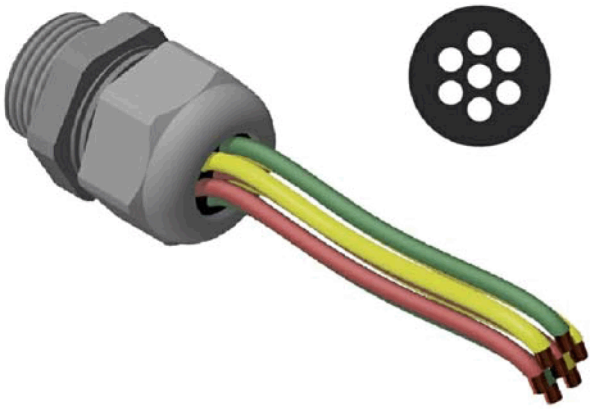
Multi-Cable Plastic Gland

RAL
Available Colours:
RAL 7001 Silver/Grey
RAL 7035 Light grey
RAL 9005 Black/ UV resistant

MAT
Material:
Body: Polyamide
Seal: NBR / VITON
Sealed to connector: Silicone

IP
Protection:
IP54

TEMP
Working temperature:
Static: from -40°C to 100°C



Cable Gland for Corrugated Tube				
No of Cables	**Ø Cable**	**Size**	**Reference**	**Material**
2	2	M16	J1	NBR
2	3		J2	
2	4		J3	
2	5	M20	J4	
2	6		J5	
3	4		J6	
3	5.3		J7	
3	5.8		J8	
4	4		J9	
4	5		J10	
9	2		J11	
4	3		J12	
2	5		JV1*	VITON
2	6		JV2*	
2	7	M32	J13	NBR
2	8		J14	
2	9		J15	
3	7		J16	
3	8		J17	
4	6		J18	
4	7		J19	
5	6		J20	
6	5		J21	
8	4		J22	
8	5		J23	
9	4		J24	
2	9	M40	J25	
3	10		J26	
4	8		J27	
4	9		J28	
5	8		J29	
5	9		J30	
6	7		J31	
8	6		J32	
9	6.9		J33	
9	6.9		JV3*	VITON

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