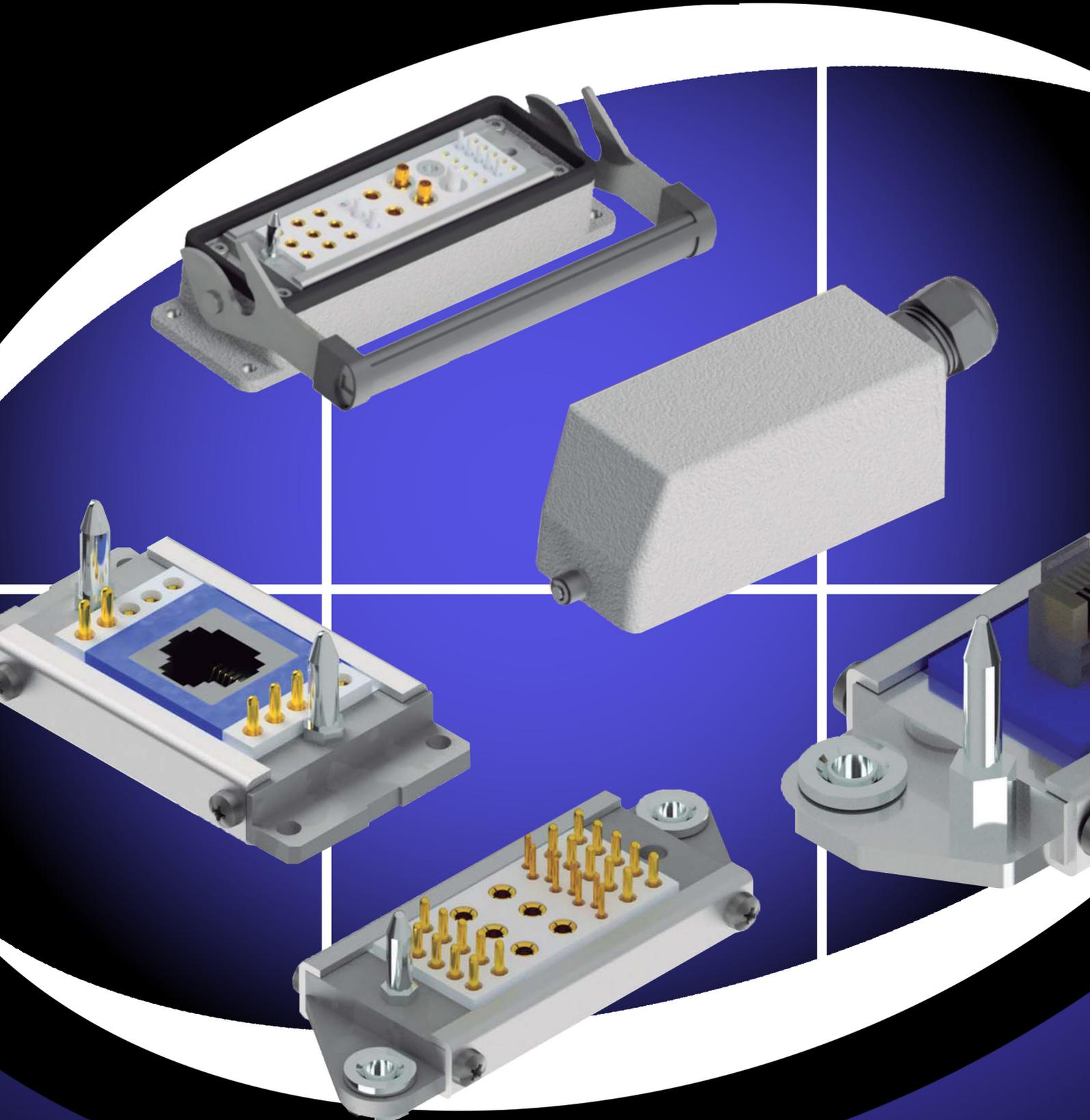


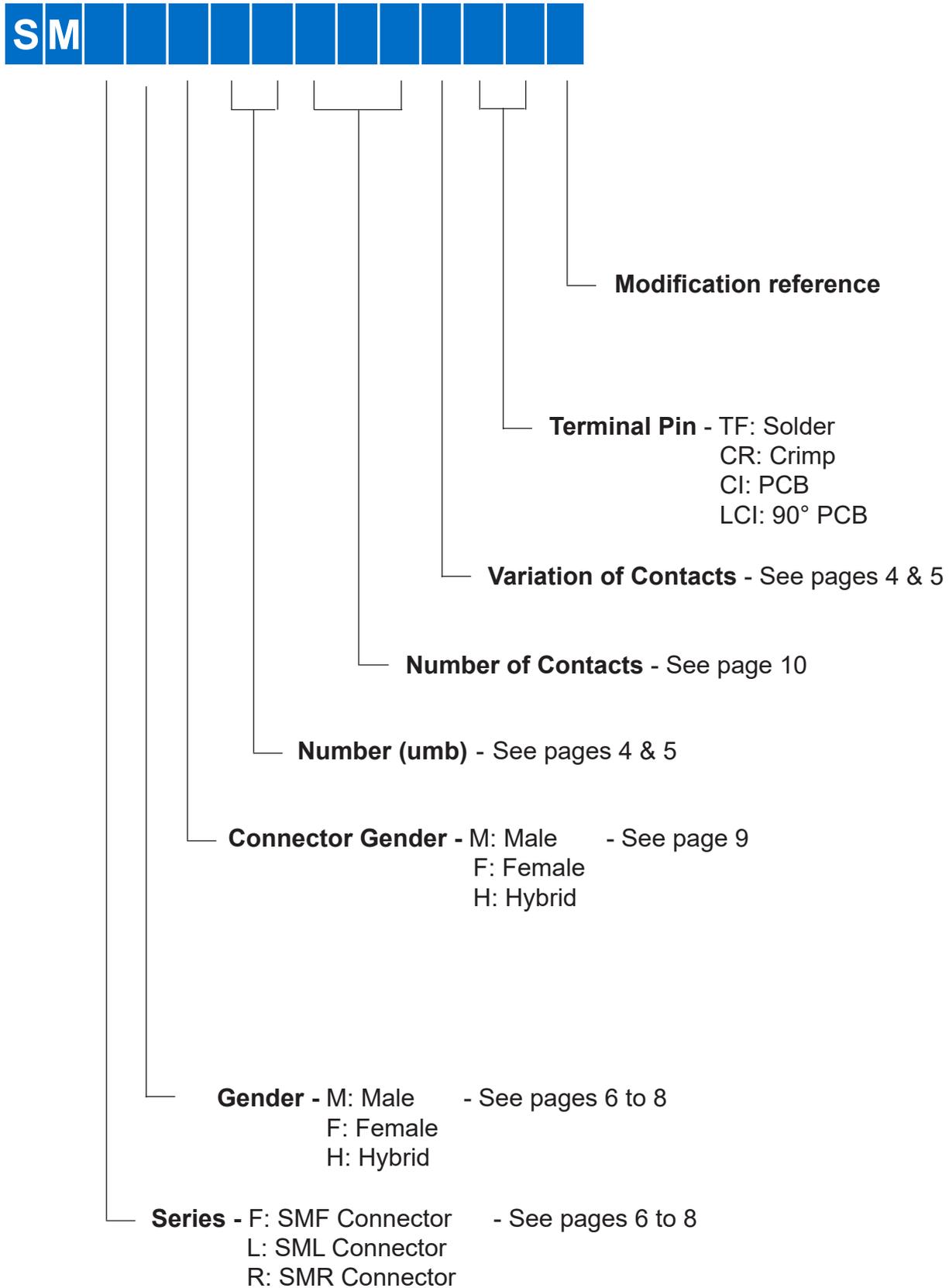
# CEEP

ALFA<sup>1</sup>R CONNECTORS

Rectangular  
and Rack



## SM Part Number Reference:



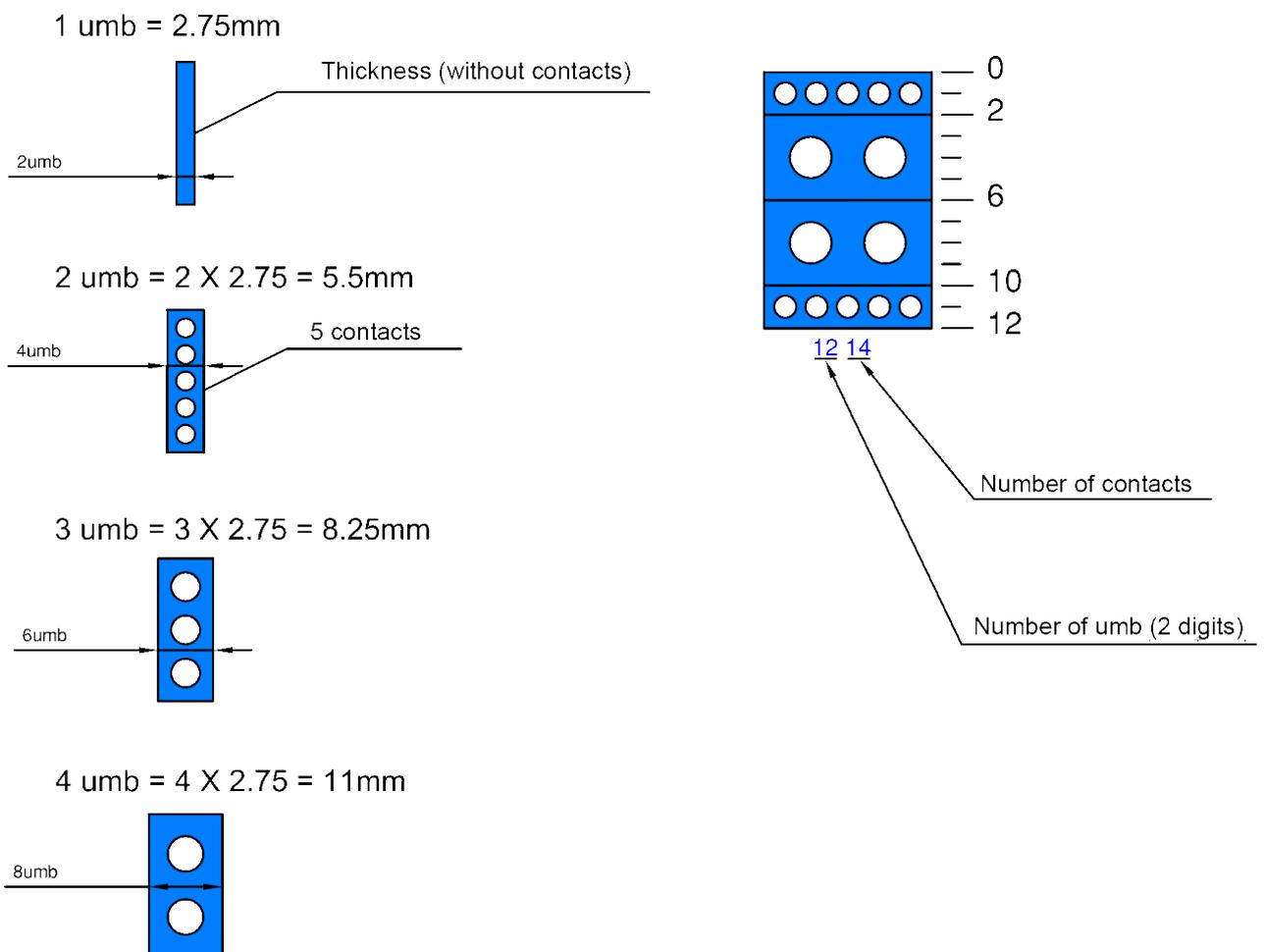
## Product Description:

These connectors are made up of male, female or hybrid monoblock elements (SMP) mounted on a rigid and robust aluminium frame.

They are manufactured in 13 sizes and in three different clamping brackets (see pages 6-8, series: SMF / SML / SMR).

The connector guides allow for perfect alignment and coupling. These guides, regardless of their arrangement, prevent accidental connection with reversed polarity. A unit of measure (umb) MonoBlock Unit has been established to allow for a composition of different elements (SM). See example configurations below.

### Monoblock Unit (umb)



# Contact Distribution:

1umb	2umb	4umb	6umb	8umb	10umb		12umb		13umb Compatible SME	
0100	0205 0208	0402 0410 0413 0416	0606 0607 0608 0615 0624	0804 0805 0811 0812 0820 0826 0832	1004 1008 1009 1009A 1009B 1012 1016 1016A	1017 1018 1022 1025 1026 1026A 1031 1040	1206 1212 1214 1214A 1220 1221 1221A 1223	1222 1230 1230A 1234 1235 1236 1238 1248	1306 1311 1312 1312A 1314 1319 1320	1322 1325 1328 1330 1325 1325 1343 1348

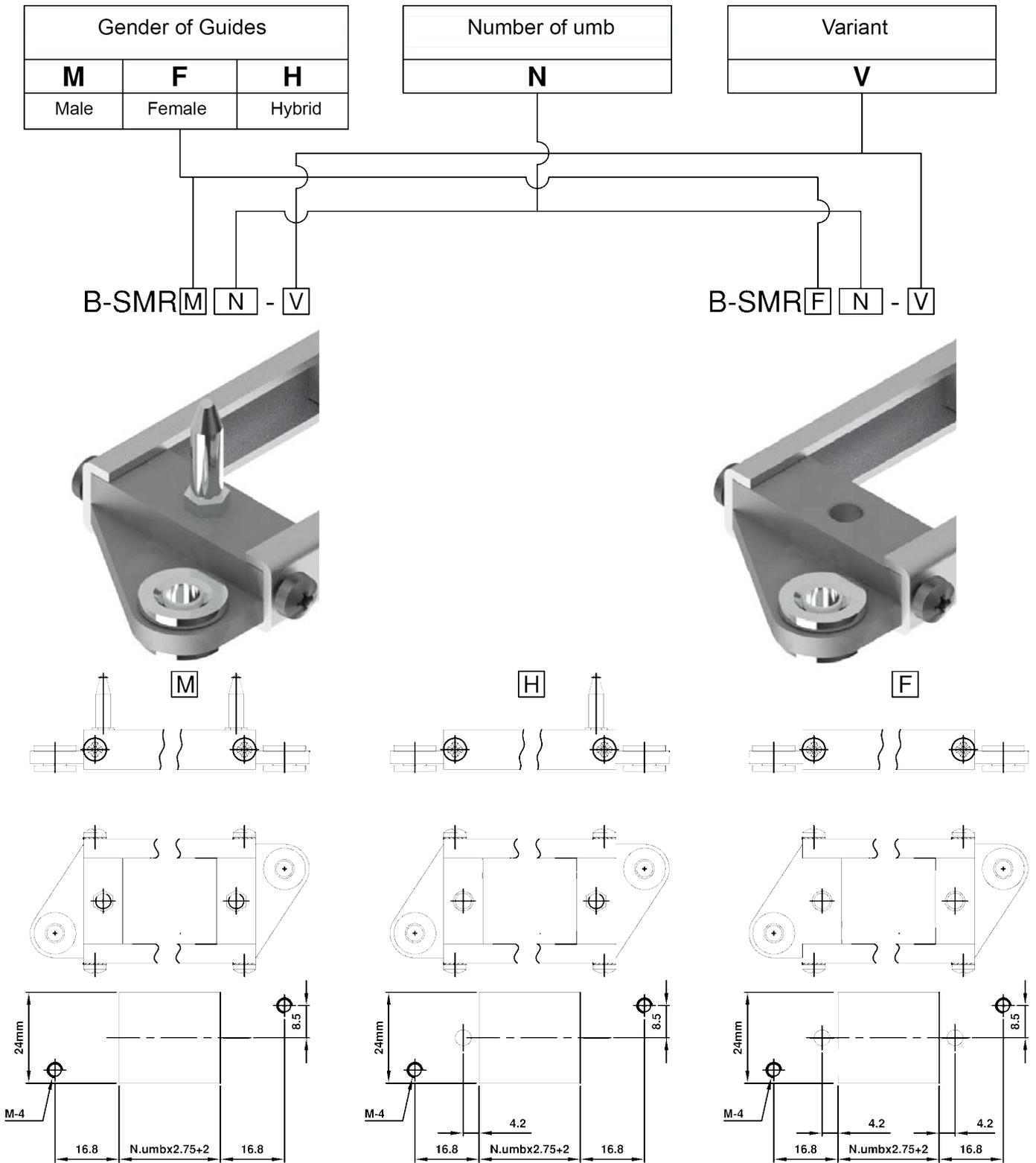
# Contact Distribution:

15umb		16umb		18umb		20umb		25umb		3013umb Compatible SME	
1509	1533	1608	1632	1808	1837	2010	2032	2512	2540A	3014	3040
1515	1535	1614	1637	1812	1840	2011	2034	2517	2555	3024	3050
1517	1537	1617	1640	1818	1845	2016	2044	2524	2560	3030	3075
1523	1538	1622	1644	1820	1845	2017	2050	2528	2596	3035	30120
1525	1542	1624	1652	1826	1858	2018	2056	2540			
1526	1551	1624A	1664	1828	1872	2024	2080				
1527	1556	1631		1830							
1527A											

## 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).

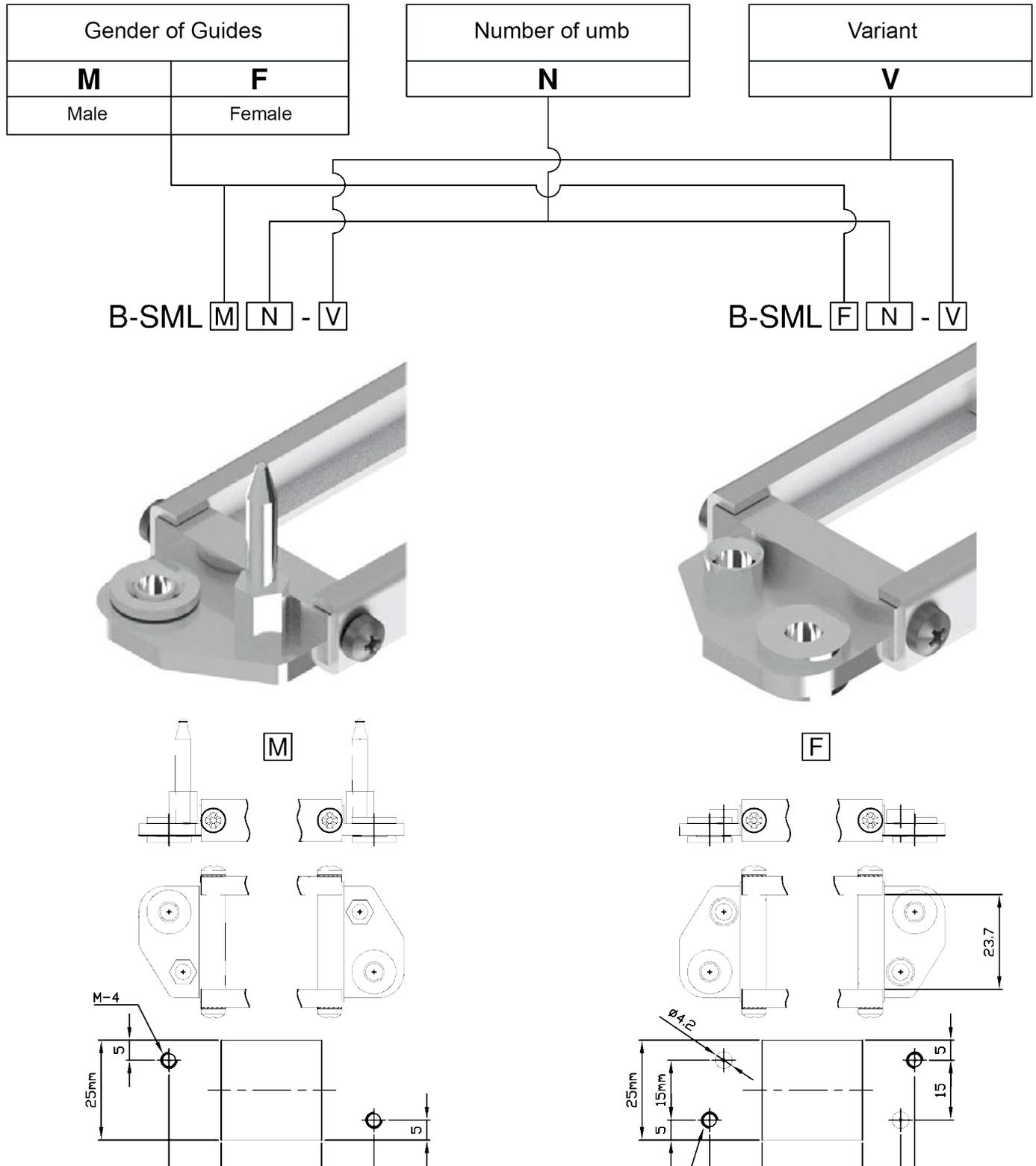
They are compatible with aluminium housings (SME series) in two sizes, 13 umb and 30 umb. The codes shown below are for empty frames (without contact blocks).



## 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).



## 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).

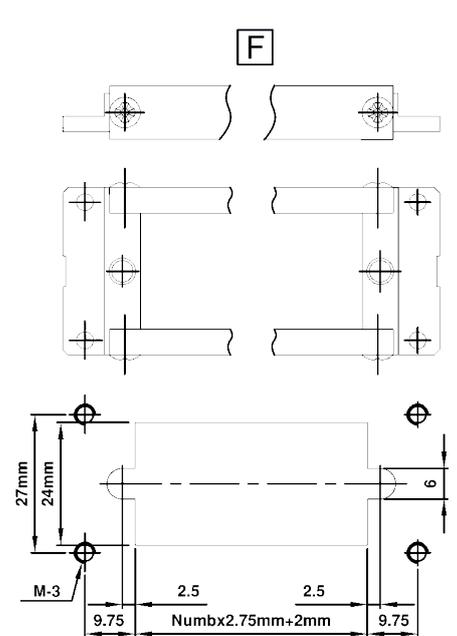
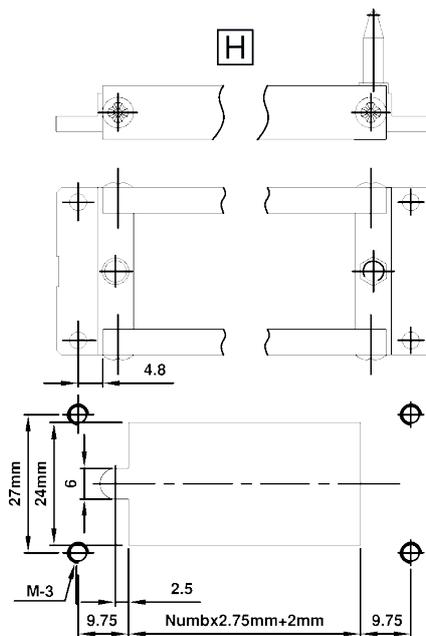
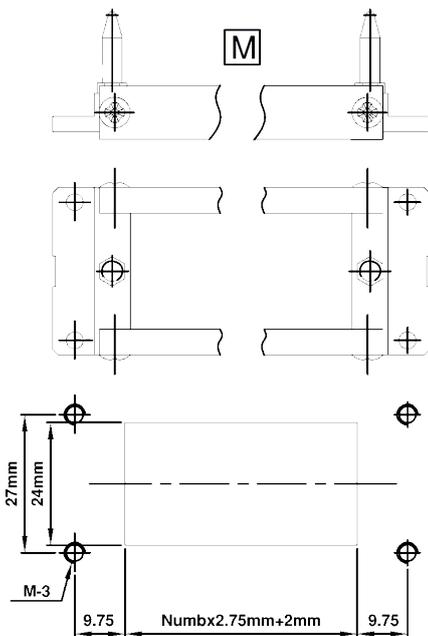
Gender of Guides		
M	F	H
Male	Female	Hybrid

Number of umb
N

Variant
V

B-SMF **M** **N** - **V**

B-SMF **F** **N** - **V**

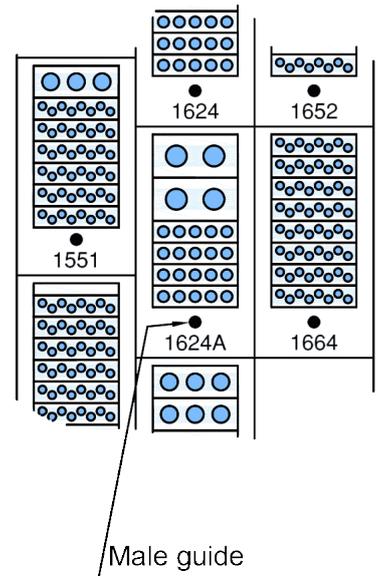


# SM F / L / R

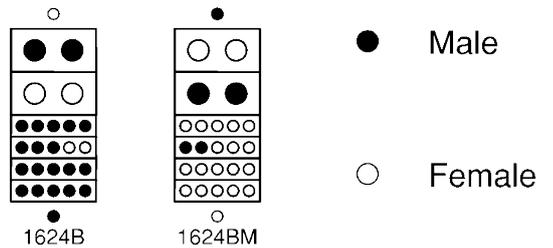
Hybrid connectors come with a male and female guide and an asymmetric arrangement of contacts. The male guide is identified as per the diagram below (for more information please refer to pages 4 & 5).

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]



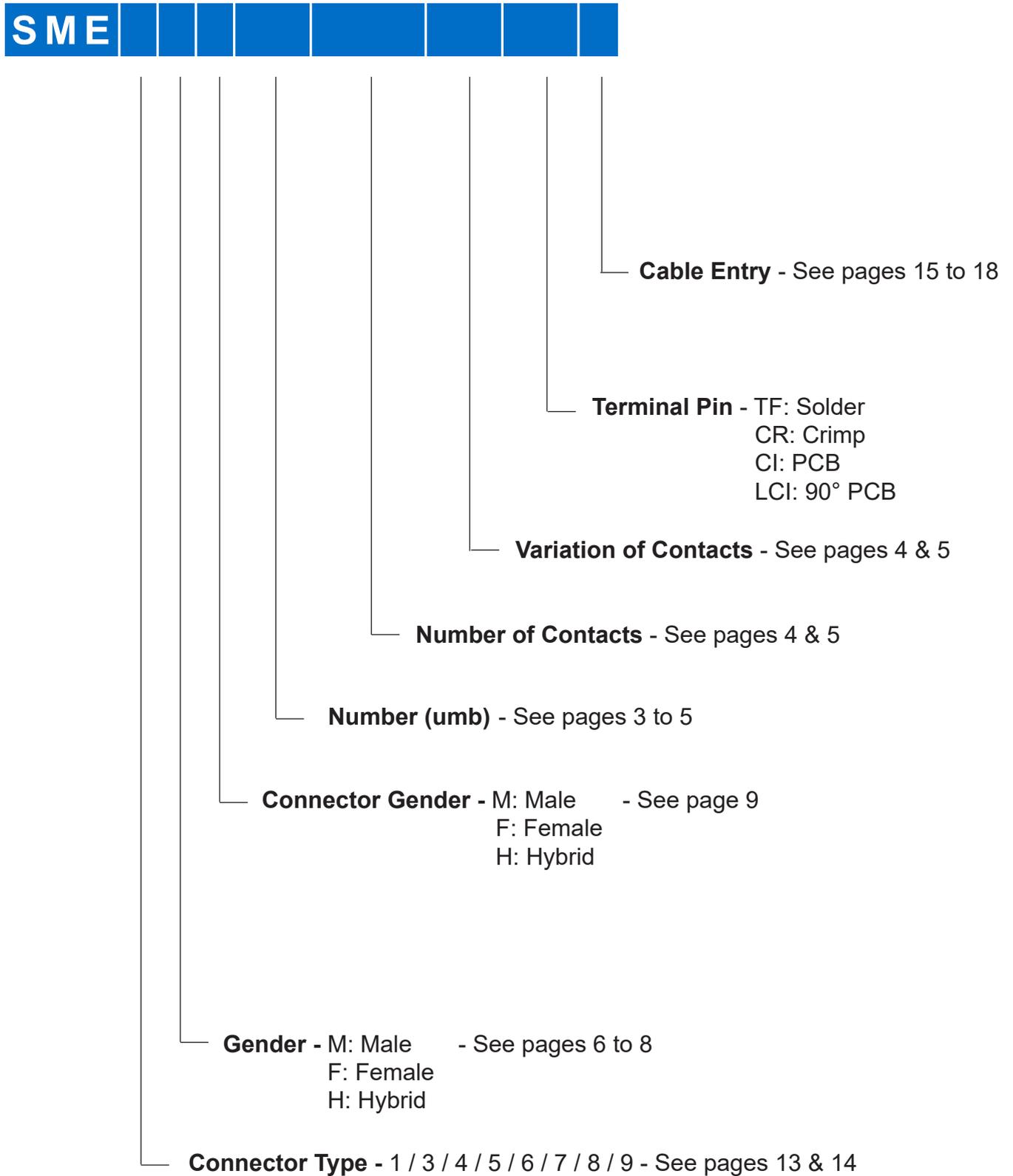
B-SM[R] [H] [H] [16|24|BM] [TF]



## Contacts:

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

## SME Part Number Reference:



## 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 15-18)



## 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**



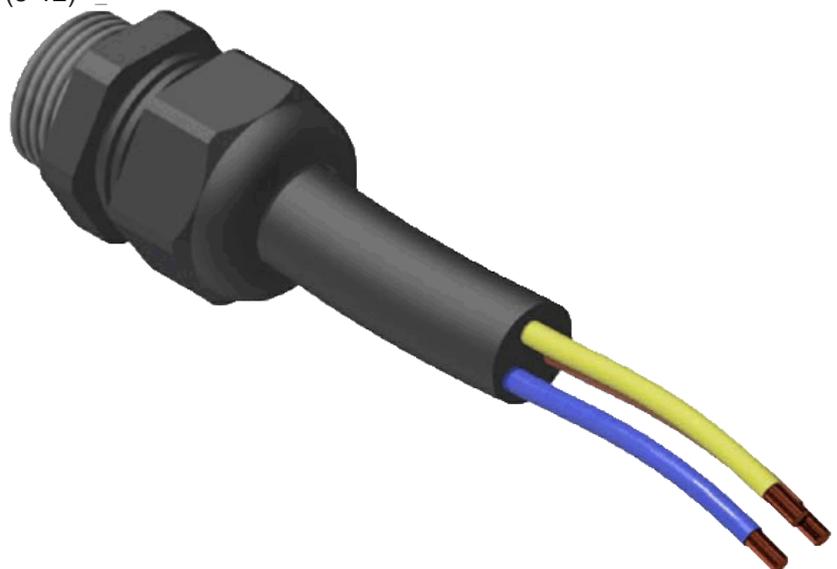
Recessed base, with lever  
**SME 9**

## 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

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



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



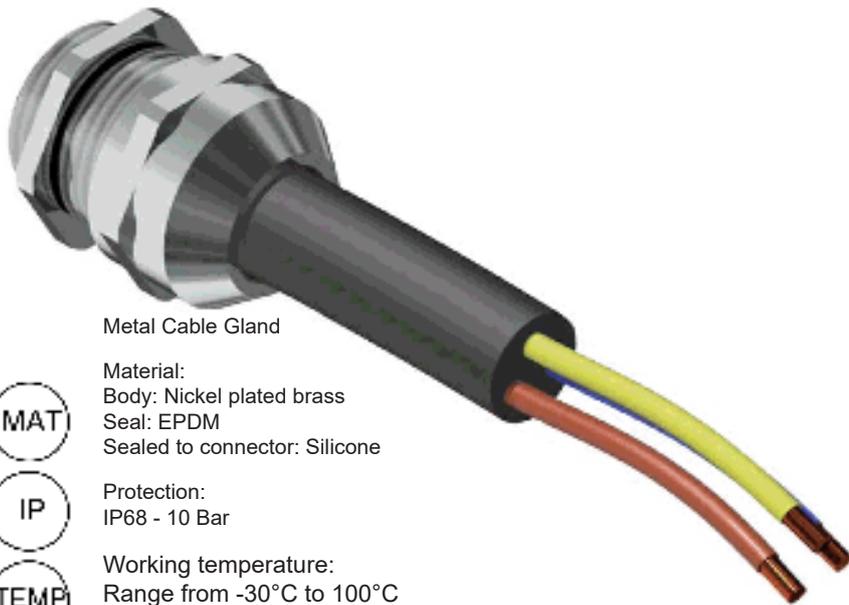
Protection:  
IP68 - 5 Bar



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



# Cable Glands



Metal Cable Gland

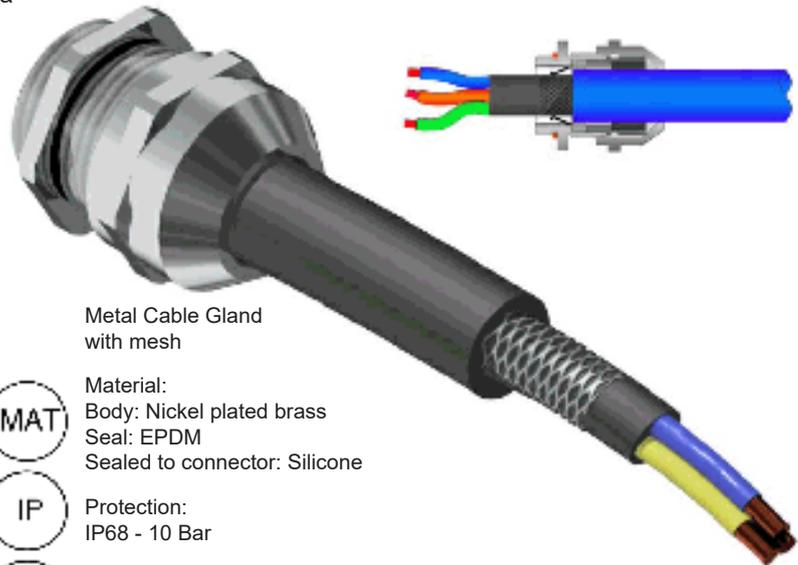
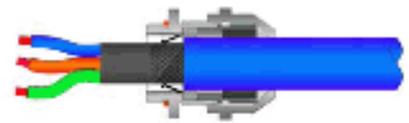
Material:  
 Body: Nickel plated brass  
 Seal: EPDM  
 Sealed to connector: Silicone



Protection:  
 IP68 - 10 Bar



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

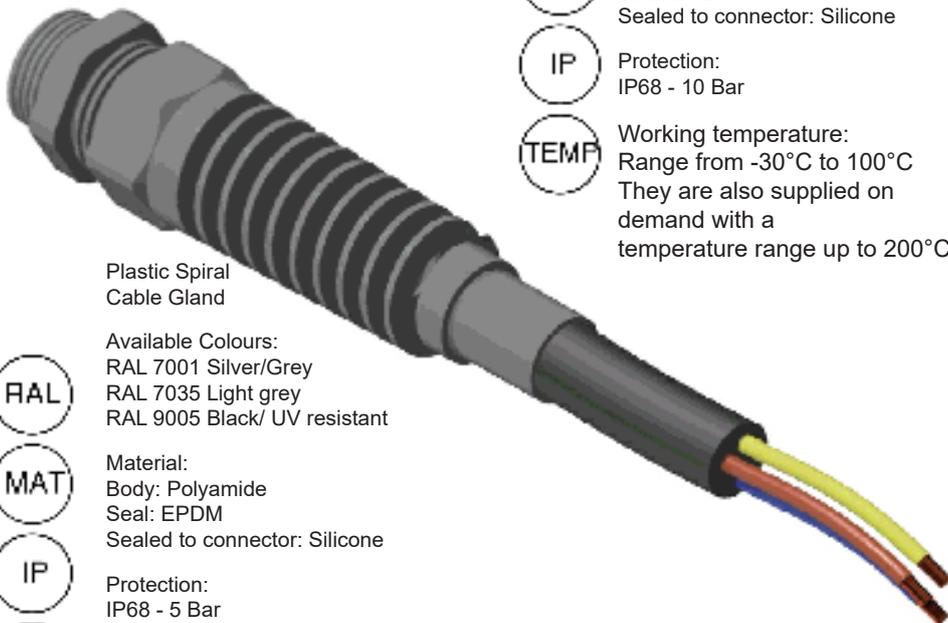
Material:  
 Body: Nickel plated brass  
 Seal: EPDM  
 Sealed to connector: Silicone



Protection:  
 IP68 - 10 Bar



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

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



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



Protection:  
 IP68 - 5 Bar

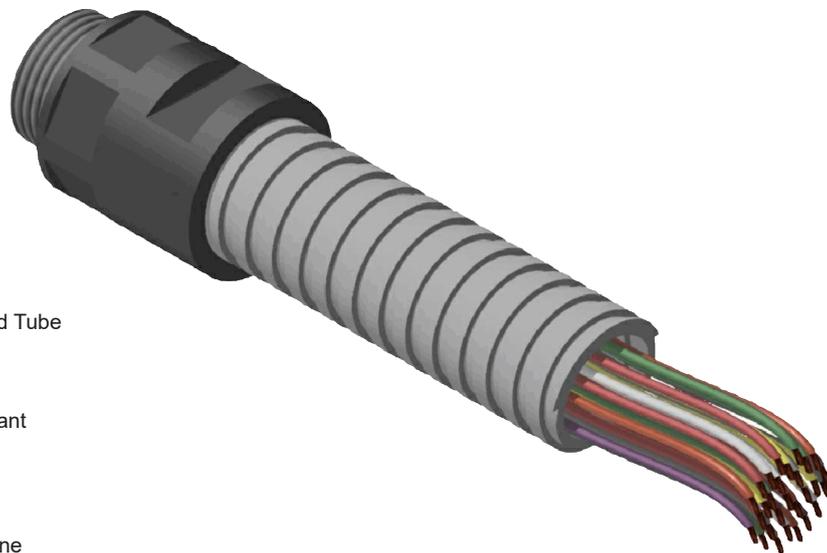


Working temperature:  
 Static: from -20°C to 100°C  
 Dynamic: from -40°C to 100°C



## 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

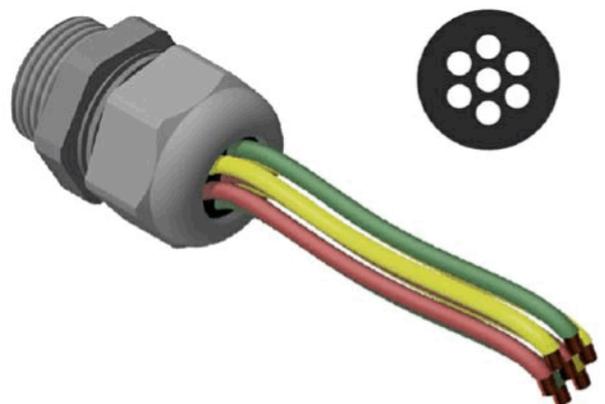


Cable Gland for Corrugated Tube

- 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 Glands

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	NBR	
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





## **CEEP Connectors Limited**

Unit 4 Rake Heath House, London Road, Hill Brow, Liss,  
Hampshire, GU33 7NT, United Kingdom

Tel: +44 (0) 1730 895785

[www.ceep.co.uk](http://www.ceep.co.uk)

[sales@ceep.co.uk](mailto:sales@ceep.co.uk)



Ed-CEEPUK202105