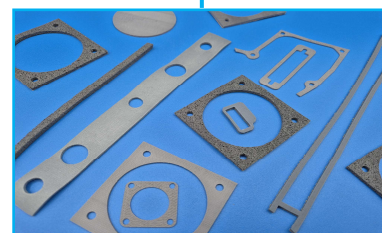


SILMEL gaskets are high performance gaskets combining sealing and electrical continuity in all applications of enclosures, enclosures, hatches... Out-Door. SILMEL seals are mainly used as seals for: connectors, bases, etc. These flat gasket are made of silicone in which are "embedded" Monel or Aluminium wires perpendicular oriented to the surface that are perfect for cutting on request. The homogeneity, texture and chemical composition of silicone are not degraded by the presence of wire. Indeed, these offer a good compatibility with most materials, it is rare to see the slightest galvanic corrosion between the SILMEL seal and its support, even on aluminum. The presence of

corrugated wires of metals positioned perpendicular to the faces embedded in the mass of the silicone, does not affect the sealing function of the joints. Thus, the resistance to external aggressions (chemicals, fluids...) and the service life are those of pure silicone. This product has good resistance to EMI. it is recommended when you have irregular contact surfaces.



Technical characteristics

Features	Units	Values	Remarks
Material			
Base material	/	-Silicone Compact grade 40 Shore A -Silicone foam -Fluorinated Silicone Compact grade 50 Shore A	-USA Specif. ZZ-R-765 Classe 2B -USA Specif. AMS-3195 -USA Specif. MIL-R-25988 gr50
Conductive filler	/	-Monel wires/ Diameter 0.1143mm -Aluminium Wire/ Diameter 0.127 mm	-USA Specif. QQ-N-281-B -USA Specif. Alloy 5056
Standards sizes			
Thickness silicone compact	mm	0,8 - 1,0 - 1,2 - 1,6 - 2,4 - 3,2	+/- 0,15 mm
Density of compact silicone wires	threads/ cm ²	140	
Silicone foam thickness	mm	1,6 - 2,4 - 3,2 - 4,8	+/- 0,15 mm
Density of silicone foam wires	files/cm ²	110	
Plates / Holes	mm	900x225 ou 1000x225	+/- 10mm / +/- 0.4mm
General properties			
Color	/	Light Gray	Blue for the Fluoro Silicone
Monel Shielding Effectiveness	dB	55 dB à 10 kHz 72 dB à 100 kHz 138 dB à 1 MHz 125 dB à 100 MHz 108 dB à 1 GHz 60 dB à 10 GHz	+/- 5 dB
Aluminum Shielding Efficiency	dB	41 dB à 10 kHz 64 dB à 100 kHz 138 dB à 1 MHz 100 dB à 100 MHz 98 dB à 1 GHz 48 dB à 10 GHz	+/- 5 dB
Compression	/	See table below	
Operating temperatures	°C	-60 à + 200 (Silicone) -55 à + 200 (Fluoro Silicone)	
Standard packaging	/	Sheets or pieces cut from a plan	

The attenuation varies according to the compression especially in H-field and in plane wave.

The compression varies according to the hardness of the silicones, one can nevertheless be based on the values of the following

Compression forces required

Compact silicone in Monel or aluminium

Thickness (mm)	Compression %	Compression force N/cm ²
0.8	10	45
0.8	15	60
0.8	20	90
1.6	10	60
1.6	15	85
1.6	20	120
2.4	10	80
2.4	15	120
2.4	20	140
3.2	10	90
3.2	15	125
3.2	20	145

Recommended compression is 15% to 20% maximum. These values are non-contractual.

Silicone foam in Monel or aluminium

Thickness (mm)	Compression %	Compression force N/cm ²
1.6	10	50
1.6	15	50
1.6	20	55
1.6	25	60
2.4	10	50
2.4	15	50
2.4	20	50
2.4	25	50
3.2	10	40
3.2	15	40
3.2	20	40
3.2	25	45

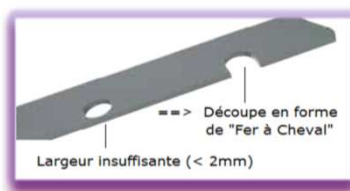
Recommended compression is 15% to 25% maximum. These values are non-contractual.

NOTA: It is advisable not to compress the joints more than the values given above.
To help you, we can on request insert compression stops or limiters.

General tolerances

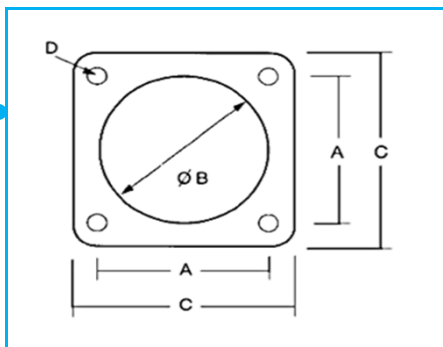
Type	Tolérances
Linear	+/- 0,9 mm
Center of the holes	+/- 0,5 mm
Thickness	+/- 0,15 mm

Exemple:



Shapes available

1: MT 930 Base Connectors



MIL-C-81511

Connector size	A	B	C	D
8	15.09	14.43	20.62	3.5
10	18.26	17.27	23.80	3.5
14	23.01	23.83	28.58	3.5
16	24.61	27.00	31.75	3.5
18	26.97	30.20	34.11	3.5
20	29.36	33.32	37.26	3.5
22	31.75	36.50	39.67	3.5
24	34.93	39.70	43.26	4.0

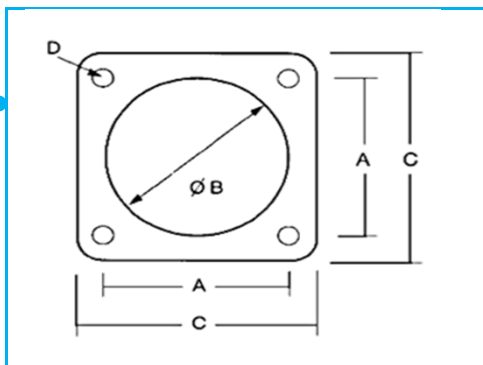
MIL-C-5015

connector size	A	B	C	D
8	15.09	14.43	20.62	3.5
10	18.26	17.27	23.80	3.5
12	23.01	23.83	28.58	3.5
14	24.61	27.00	31.75	3.5
16	26.97	30.20	34.11	3.5
18	29.36	33.32	37.26	3.5
20	31.75	36.50	39.67	3.5
22	31.75	34.93	41.28	5.0

MIL-C-5015

Connector size	A	B	C	D
24	34.93	38.10	44.45	5.5
28	39.67	44.45	50.80	5.5
32	44.45	50.80	57.15	6.0
36	49.23	55.58	63.50	6.0
40	55.58	61.93	69.85	6.0
44	60.33	70.64	76.20	6.0
48	66.68	76.99	82.55	6.0

1: MT 930 Base Connectors

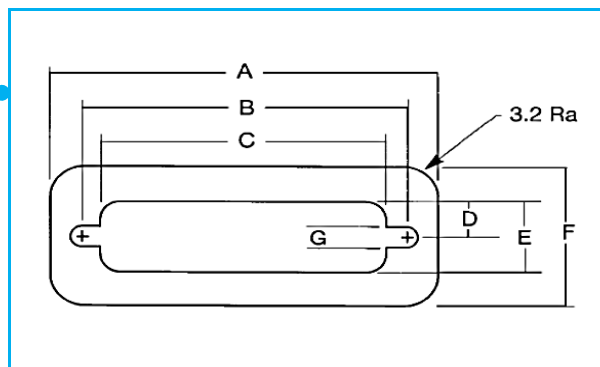


MIL-C-38999

Connector size	A	B	C	D
9	15.09	16.25	21.34	4.0
9/10	18.26	19.30	24.51	4.0
11/12	20.62	22.48	26.92	4.0
13/14	23.01	25.78	29.29	4.0
15/16	24.61	29.05	31.95	4.0
18	26.97	32.25	34.32	4.0
19/20	29.36	35.18	38.10	4.0
21/22	31.75	38.35	41.28	4.0
23/24	34.93	41.53	44.45	4.5
25	38.10	44.70	47.63	4.5

Shapes availables

2 : Connecteurs Sub-D



n° Pins	A	B	C	D	E	F	G
9	35.80	24.90	19.80	5.6	11.20	17.5	3.2
15	44.20	33.30	28.20	5.6	11.20	17.5	3.2
25	57.90	47.00	41.90	5.6	11.20	17.5	3.2
37	74.40	63.50	58.20	5.6	11.20	17.5	3.2
50	72.10	61.20	53.60	7.1	13.90	20.3	6.1

Connectors or joints cut on plan

Please contact us directly.

The results were obtained under laboratory conditions and should be considered only as an indication. As AB2E has no control over its customers' equipment and many other factors, it is the user's responsibility to carry out its own tests to ensure that the product corresponds to its needs.