Conductive Elastomers

EMCEMI's own manufactured range of fully cured silicones and fluorosilicones with a wide range of metal particle fillers to suit your requirements. These gaskets offer excellent EMC and environmental properties making this a popular choice of gasket. We recommend a comparison ratio of 15% to 20% and to avoid over compression we can fit 'limit' collars or stops to selected gaskets.

When it comes to EMCEMI's O rings, they are joined together using a vulcanising process, which uses the conductive filler compound with an adhesive to enable the join to cure, thus enabling the join to compress identical to the O ring itself.

All O rings are vulcanised unless moulding is specifically requested. If you need a moulded O ring then please refer to Page 10 of this brochure.

Samples of O rings are available upon request, contact us today.

How to order

Profile Code

1 – Cord
2 – Tube
3 – Solid D
4 – Hollow D
5 – 'U' Channel
6 – Hollow 'P' Section
7 – Flat Strip
8 – Sheet
9 – Hollow Square/ Rectangle
10 – TBC
11 – Cord O ring
12 – Tube O ring
13 – Solid D O ring
14 – Hollow D O ring
15 – U Channel O ring
16 – Hollow P O ring
17 – Flat Strip O ring

Material Code

1 – Silicone Carbon
2 – Silicone Nickel Graphite
3 – Fluorosilicone Nickel Graphite
4 – Silicone Nickel Graphite Flame Retardant
5 – Silicone Silver Aluminium
6 – Fluorosilicone Silver Aluminium
7 – Silicone Silver Copper
8 – Fluorosilicone Silver Copper
9 – Silicone Nickel
10 – Fluorosilicone Nickel
11 – Silver Plated Nickel
12 – Silver Glass

Solid Cord Rounds

Dim A (mm):	Part Number:
1.0	CE-1-X-0010
1.2	CE-1-X-0012
1.4	CE-1-X-0014
1.6	CE-1-X-0016
1.8	CE-1-X-0018
2.0	CE-1-X-0020
2.4	CE-1-X-0024
2.6	CE-1-X-0026
2.8	CE-1-X-0028
3.0	CE-1-X-0030
3.2	CE-1-X-0032
3.5	CE-1-X-0035
4.0	CE-1-X-0040
4.5	CE-1-X-0045
4.8	CE-1-X-0048
5.0	CE-1-X-0050
5.5	CE-1-X-0055
6.0	CE-1-X-0060
6.4	CE-1-X-0064
7.0	CE-1-X-0070
7.5	CE-1-X-0075
8.0	CE-1-X-0080
8.5	CE-1-X-0085
9.0	CE-1-X-0090
9.5	CE-1-X-0095
10.00	CE-1-X-0100

Hollow Round

Dim A (mm):	Dim B (mm)	Part Number:
1.6	0.5	CE-2-X-0016-0005
1.8	0.5	CE-2-X-0018-0005
2.0	0.5	CE-2-X-0020-0005
2.0	0.8	CE-2-X-0020-0008
2.4	0.8	CE-2-X-0024-0008
2.4	1.0	CE-2-X-0024-0010
3.0	0.5	CE-2-X-0030-0005
3.0	0.8	CE-2-X-0030-0008
3.0	1.0	CE-2-X-0030-0010
3.0	1.6	CE-2-X-0030-0016
3.2	0.8	CE-2-X-0032-0008
3.2	1.1	CE-2-X-0032-0011
3.5	0.8	CE-2-X-0035-0008
3.5	1.6	CE-2-X-0035-0016
4.0	1.1	CE-2-X-0040-0011
4.0	1.3	CE-2-X-0040-0013
4.0	1.6	CE-2-X-0040-0016
4.0	2.0	CE-2-X-0040-0020
4.5	1.6	CE-2-X-0045-0016
4.8	2.4	CE-2-X-0048-0024
5.0	1.6	CE-2-X-0050-0016
5.0	3.0	CE-2-X-0050-0030
5.5	1.6	CE-2-X-0050-0016
5.5	3.2	CE-2-X-0050-0032
6.0	1.6	CE-2-X-0060-0016
6.0	3.2	CE-2-X-0060-0032
6.4	1.6	CE-2-X-0064-0016
6.4	3.2	CE-2-X-0064-0032
8.0	5.0	CE-2-X-0080-0050
9.0	6.4	CE-2-X-0090-0064
9.5	6.4	CE-2-X-0095-0064
10.00	8.0	CE-2-X-0100-0080

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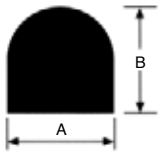
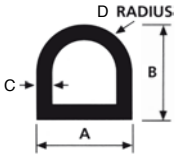
Solid ‘D’



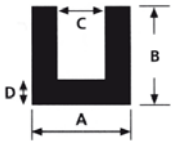
Dim A (mm):	Dim B (mm)	Part Number:
1.63	1.40	CE-3-X-0016-0014
1.73	1.57	CE-3-X-0018-0016
1.98	2.39	CE-3-X-0020-0024
2.26	1.98	CE-3-X-0023-0020
2.54	1.57	CE-3-X-0025-0016
2.79	3.81	CE-3-X-0028-0038
3.43	3.10	CE-3-X-0034-0031
3.96	3.00	CE-3-X-0040-0030
3.96	3.96	CE-3-X-0040-0040
4.45	4.52	CE-3-X-0045-0045
4.78	4.78	CE-3-X-0048-0048

Hollow ‘D’



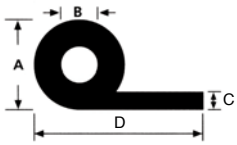
Dim A (mm):	Dim B (mm):	Dim C (mm):	Rad (mm):	Part Number:
3.96	3.96	1.14	1.98	CE-4-X-0040-0040
4.75	4.72	1.27	2.36	CE-4-X-0048-0048
6.35	6.35	1.65	3.18	CE-4-X-0064-0064
7.92	7.92	1.27	3.96	CE-4-X-0080-0080
12.37	8.23	2.03	6.20	CE-4-X-0124-0082

‘U’ Channel



Dim A (mm):	Dim B (mm):	Dim C (mm):	Dim D (mm):	Part Number:
2.54	2.54	0.86	0.84	CE-5-X-0025-0025
3.20	2.80	0.66	1.27	CE-5-X-0032-0028
3.20	5.72	0.51	1.91	CE-5-X-0032-0057
3.96	3.94	1.57	1.19	CE-5-X-0040-0040
4.45	3.95	1.19	1.91	CE-5-X-0045-0039
8.30	5.90	1.57	2.92	CE-5-X-0083-0060

Hollow ‘P’ Section

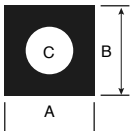


Dim A (mm):	Dim B (mm):	Dim C (mm):	Dim D (mm):	Part Number:
5.08	2.03	1.57	12.70	CE-6-X-0050-0020-0016-0127
5.08	2.03	1.57	21.59	CE-6-X-0050-0020-0016-0215
6.35	3.20	1.57	12.70	CE-6-X-0064-0032-0016-0127
6.35	3.20	1.57	16.00	CE-6-X-0064-0032-0016-0160
6.35	3.20	1.57	22.22	CE-6-X-0064-0032-0016-0220
7.92	4.80	1.57	22.22	CE-6-X-0080-0048-0016-0220
9.10	6.50	1.80	19.81	CE-6-X-0091-0065-0018-0198

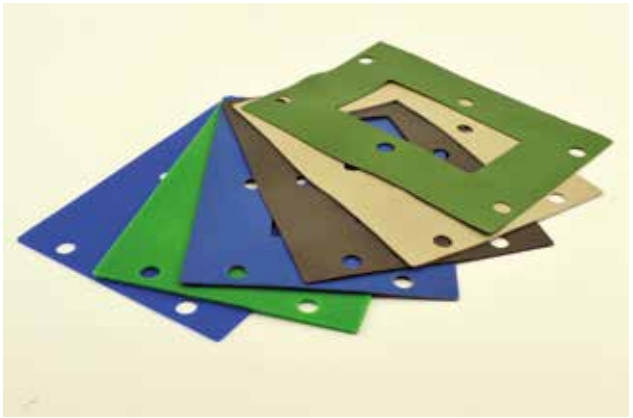
Strip Profile:

Dim A (mm):	Dim B (mm)	Part Number:
1.00	1.60	CE-7-X-0010-0016
1.00	1.80	CE-7-X-0010-0018
1.00	2.00	CE-7-X-0010-0020
1.60	1.60	CE-7-X-0016-0016
1.60	1.80	CE-7-X-0016-0018
1.60	2.00	CE-7-X-0016-0020
1.60	3.20	CE-7-X-0016-0032
1.60	12.70	CE-7-X-0016-0127
1.60	15.90	CE-7-X-0016-0159
1.60	22.35	CE-7-X-0016-0220
2.00	2.00	CE-7-X-0020-0020
2.00	2.40	CE-7-X-0020-0024
2.00	3.00	CE-7-X-0020-0030
2.00	12.70	CE-7-X-0020-0127
2.00	15.90	CE-7-X-0020-0159
2.00	19.00	CE-7-X-0020-0190
2.00	22.35	CE-7-X-0020-0220
3.00	2.00	CE-7-X-0030-0020
3.00	12.70	CE-7-X-0030-0127
4.80	12.70	CE-7-X-0048-0127
6.40	25.40	CE-7-X-0064-0254

Hollow Square/Rectangle:



Dim A (mm):	Dim B (mm):	Dim C (mm):	Part Number:
3.00	3.00	0.80	CE8-X-0030-0030-0008
6.00	6.00	2.00	CE-8-X-0060-0060-0020
6.00	6.00	3.00	CE-8-X-0060-0060-0030
8.00	8.00	3.50	CE-8-X-0080-0080-0035
9.50	9.50	4.80	CE-8-X-0095-0095-0048



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Part Number	CE-?-1	CE-?-2	CE-?-5	CE-?-7	CE-?-9	CE-?-3	CE-?-6	CE-?-8	CE-?-10
Conductive Filler	Carbon	Nickel Graphite	Silver Aluminum (65)	Silver Copper	Nickel	Fluoro Nickel Graphite (70)	Fluoro Silver Aluminum	Fluoro Silver Copper	Fluoro Nickel
Shielding Performance STD 285 /MIL-DTL 83528C (dB)									
10 MHz	30	115	111	115	114	116	114	116	110
100 MHz	65	121	120	122	115	122	122	125	116
400 MHz	60	119	120	119	121	119	118	118	124
1 GHz	N/A	122	121	123	114	122	121	124	117
2 GHz	40	122	119	122	122	122	123	121	112
6 GHz	N/A	115	115	116	117	114	109	117	111
10 GHz	30	114	112	115	114	107	114	115	113
18 GHz	N/A	106	105	104	105	105	103	104	103
Operating Temp	+160	+160	+160	+125	+160	+160	+160	+125	+160
Range (˚C)	-50	-55	-55	-55	-55	-55	-55	-55	-55
Colour	Black	Dark Grey	Beige	Dark Tan	Grey	Green	Light Green	Green	Dark Green
Shore Hardness (A +/-5)	60	60	65	65	65	65	70	65	70
ASTM D2240									
Volume Resistivity (ohms)	2.2	0.04	0.008	0.005	0.1	0.05	0.01	0.005	0.1
ASTM D991									
Specific Gravity (+/- 0.25)	2.0	2.0	2.0	3.5	4.5	2.2	2.0	4.0	4.8

*The results and procedures provides data applicable only to the test enclosure & cover panel design, but which is useful for making comparisons between gasket materials as stated in the MIL-DTL-83528C spec

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