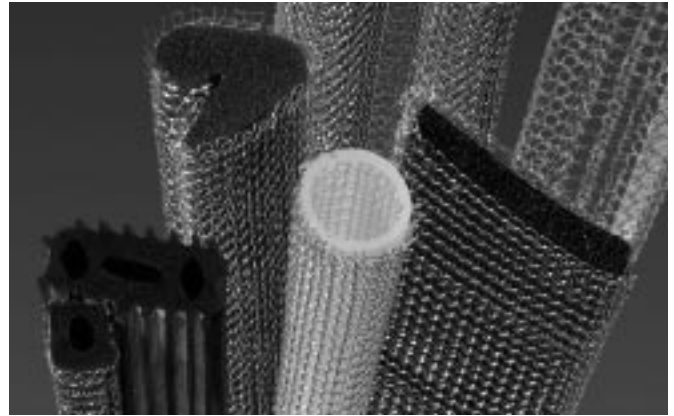


ElectroNit® Elastomer Core EMI Gasketing

ElectroNit® elastomer core EMI gaskets are elastomer cores usually with 2 layers of knitted wire mesh around if not indicated otherwise. These gaskets combine excellent shielding performance with high elasticity and provide an additional environmental sealing. As elastomer core we use mainly sponge neoprene or silicone. For hollow strips we use solid silicone as core to secure better elasticity whereas solid neoprene can only be used with a certain wall thickness due to stability reasons. Standard profiles are round, tubular or rectangular. Other profiles are possible on request. The wires used are mainly Monel®, a nickel-copper alloy with good ageing qualities and elasticity performance as well as high tensile strength. SCF offers the best H-field EMI shielding. Additional wire materials are stainless steel and aluminium. When selecting the wire, please consider the electrochemical compatibility to avoid galvanic corrosion. Optimum shielding is achieved with 2 layers of wire and 25 % compression with a closing force of 1,4 kp/cm². For very soft gasket strips, PU-foam is used. To maintain the elasticity of the foam, all PU-foam gasket strips only have 1 layer of knitted wire. Please refer to page 10 (ElectroNit® SuperSoft) ElectroNit® elastomer core EMI gaskets are not only available in continuous lengths but also as custom made gaskets. For mounting purposes some of the gaskets can optionally be provided with a non-conductive adhesive tape. Consult factory for feasibility.



Suitable for enclosures and doors with low closing force as well as in sheet metal and moulded enclosures. Simple attachment by pressing into place or glueing the gasket into the groove (glue only spotwise). To facilitate assembly further, ElectroNit® elastomer core EMI gaskets are also available with fin or as double round with fin.

- Monel® = Alloy of copper (30 %) and nickel (67 %).
- SCF = Tinned copperclad steel. Steel (64 %), copper (34 % min), tin (2 %).

Material Code

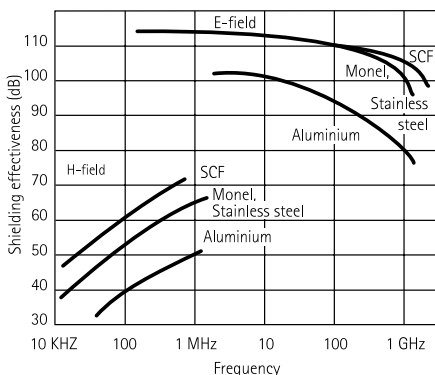
Elastomer	Mesh			
	Monel®	Alu	Stainless steel	SCF
Sponge neoprene	8011-	8012-	8013-	8014-
Solid neoprene	8111-	8112-	8113-	8114-
Sponge Silicone	8211-	8212-	8213-	8214-
Solid silicone	8311-	8312-	8313-	8314-
PU-foam	8411-	8412-	8413-	8414-
Sponge EPDM	8511-	8512-	8513-	8514-
TPE	8611-	8612-	8613-	8614-
TPE UL94 HB	8661-	8662-	8663-	8664-*
TPE UL94 VO	8651-	8652-	8653-	8654-*

* UL approval no.: E 170327

Note:

- not all combinations Elastomer/Profile are possible or make sense
- Also available Monel® wire in Ø 0.002 inch (0,05 mm) and 0.004 inch (0,09 mm). SCF wire in 0.004 inch (0,09 mm).

Shielding Performance



All dimensions shown are in inches (millimeters) unless otherwise specified.

Specifications

Mesh:	
Monel®:	Ø 0.004 inch (Ø 0,114 mm), DIN 17743/17750
Aluminium:	Ø 0.005 inch (Ø 0,127 mm), DIN 1725, Material-no. 3.3555, AMS-4182, Alloy 5056
Stainless steel:	Ø 0.004 inch (Ø 0,114 mm), DIN 17440
SCF:	Ø 0.004 inch (Ø 0,114 mm), ASTM-B-520

Mechanical Tolerances

Knitted mesh all dimensions		Knitted mesh all dimensions	
0.079 - 0.197 inch:	+ 0.016 - 0.0 inch	> 0.394 inch:	+ 0.059 - 0.020 inch
2 - 5 mm:	+ 0,4 - 0,0 mm	>10 mm:	+ 1,5 - 0,5 mm
> 0.197 - 0.394 inch:	+ 0.020 - 0.012 inch	0.590 inch:	+/- 0.079 inch
> 5 - 10 mm:	+ 0,5 - 0,3 mm	15 mm:	+/- 2 mm

Recommended Groove Size

For O-Strip Gaskets		
with 10 % compression:	depth: Ø x 0,9	width: Ø x 1,1
with 20 % compression:	depth: Ø x 0,8	width: Ø x 1,2

Elastomer	Standard	Shore	Cell-size	Density	Temperature	Colour
TPE	on request	on request	closed-cell	170 kg/m ³	-40° to +70°C	white
Sponge neoprene	MIL-R-6130 Type 2 Grade A	similar to shore 15 - 20	approx. 0,2 - 0,5 mm closed cell	180 - 240 kg/m ³	-31° to +100°C	black
Solid neoprene	MIL-R-6855 Class 2	60 - 70	on request	on request	-54° to +100°C	black
Sponge silicone	AMS-3195	similar to shore 15 - 20	on request	on request	-75° to +205°C	on request
Solid silicone	ZZ-R-765 Class 2	50 - 70	on request	on request	-62° to +260°C	on request
PU-foam	on request	on request	open cell	64 kg/m ³	-40° to +90°C	dark grey
Sponge EPDM	on request	on request	approx. 0,1 - 0,5 mm closed cell	130 - 170 kg/m ³	-40° to +100°C	black

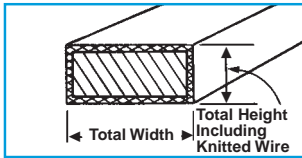
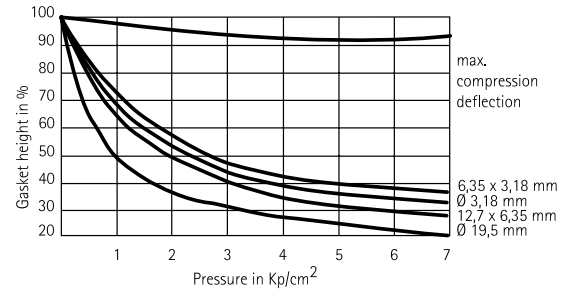


ElectroNit® Elastomer Core EMI Gasketing

Dimensions

Advised dimensions are for the elastomer core including wire mesh (e.g. 8011-2004 is a neoprene core Ø 0.236 inch (Ø 6 mm) with 2 layers of Monel® and a total cross section of Ø 0.25 inch (Ø 6,35 mm)).

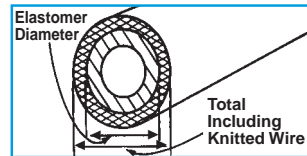
Compression Force



Rectangular with Sponge Elastomer

Rectangular with Sponge Elastomer

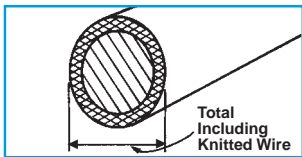
Part No.	Total Height	Total Width	Part No.	Total Height	Total Width
-2202	0.095 (2,4)	0.126 (3,2)	-2212	0.189 (4,8)	0.374 (9,5)
-2203	0.095 (2,4)	0.189 (4,8)	-2213	0.252 (6,4)	0.252 (6,4)
-2204	0.095 (2,4)	0.252 (6,4)	-2214	0.252 (6,4)	0.374 (9,5)
-2205	0.126 (3,2)	0.126 (3,2)	-2215	0.252 (6,4)	0.500 (12,7)
-2206	0.126 (3,2)	0.189 (4,8)	-2295	0.335 (8,5)	0.492 (12,5)
-2207	0.126 (3,2)	0.252 (6,4)	-2292	0.374 (9,5)	0.571 (14,5)
-2208	0.126 (3,2)	0.374 (9,5)	-2219	0.413 (10,5)	0.610 (15,5)
-2209	0.126 (3,2)	0.500 (12,7)	-2217	0.413 (10,5)	0.650 (16,5)
-2210	0.189 (4,8)	0.189 (4,8)	-2263	0.413 (10,5)	1.043 (26,5)
-2211	0.189 (4,8)	0.252 (6,4)			



Round with Silicone Elastomer

Round with Silicone Elastomer

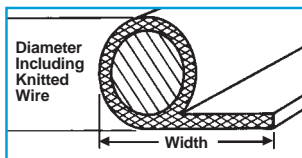
Part No.	A.D.	core i ø x wall thickness
-2101	0.094 (2,4)	0.04 x 0.01 (1,0 x 0,3)
-2102	0.126 (3,2)	0.06 x 0.02 (1,50 x 0,4)
-2103	0.189 (4,8)	0.08 x 0.04 (2,0 x 1,0)
-2104	0.252 (6,4)	0.16 x 0.04 (4,0 x 1,0)
-2105	0.311 (7,9)	0.16 x 0.07 (4,0 x 1,75)
-2106	0.374 (9,5)	0.18 x 0.09 (4,5 x 2,25)
-2115	0.394 (10,0)	0.26 x 0.06 (6,5 x 1,5)
-2108	0.500 (12,7)	0.28 x 0.10 (7,0 x 2,5)
-2109	0.571 (14,5)	0.43 x 0.06 (11,0 x 1,5)
-2110	0.622 (15,8)	0.31 x 0.14 (8,0 x 3,5)



Round with Sponge Elastomer

Round with Sponge Elastomer

Part No.	Total Diameter Over Wire	Part No.	Total Diameter Over Wire
-2000	0.063 (1,6)	-2015	0.335 (8,5)
-2032	0.091 (2,3)	-2006	0.374 (9,5)
-2001	0.094 (2,4)	-2013	0.413 (10,5)
-2027	0.098 (2,5)	-2007	0.437 (11,1)
-2002	0.126 (3,2)	-2008	0.500 (12,7)
-2003	0.189 (4,8)	-2009	0.563 (14,3)
-2014	0.217 (5,5)	-2010	0.626 (15,9)
-2004	0.252 (6,4)	-2011	0.752 (19,1)
-2030	0.295 (7,5)	-2012	1.000 (25,4)
-2005	0.311 (7,9)		

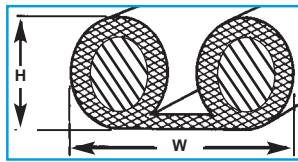
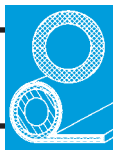


Single Fin with Sponge Elastomer

Single Fin with Sponge Elastomer

Part No.	Diameter	Width	Part No.	Diameter	Width	Part No.	Diameter	Width
-2301	0.063 (1,6)	0.531 (13,5)	-2317	0.189 (4,8)	0.626 (15,9)	-2329	3.740 (9,5)	0.752 (19,1)
-2302	0.063 (1,6)	0.626 (15,9)	-2318	0.189 (4,8)	0.752 (19,1)	-2330	3.740 (9,5)	0.874 (22,2)
-2303	0.063 (1,6)	0.752 (19,1)	-2319	0.189 (4,8)	0.874 (22,2)	-2331	3.740 (9,5)	1.000 (25,4)
-2305	0.095 (2,4)	0.531 (13,5)	-2320	0.252 (6,4)	0.531 (13,5)	-2332	0.437 (11,1)	0.752 (19,1)
-2306	0.095 (2,4)	0.752 (19,1)	-2321	0.252 (6,4)	0.626 (15,9)	-2333	0.437 (11,1)	0.874 (22,2)
-2309	0.126 (3,2)	0.531 (13,5)	-2322	0.252 (6,4)	0.752 (19,1)	-2334	0.437 (11,1)	1.000 (25,4)
-2310	0.126 (3,2)	0.563 (14,3)	-2323	0.252 (6,4)	0.874 (22,2)	-2335	0.500 (12,7)	0.752 (19,1)
-2311	0.126 (3,2)	0.626 (15,9)	-2324	0.252 (6,4)	1.000 (25,4)	-2336	0.500 (12,7)	0.874 (22,2)
-2312	0.126 (3,2)	0.752 (19,1)	-2325	0.311 (7,9)	0.626 (15,9)	-2337	0.500 (12,7)	1.000 (25,4)
-2313	0.158 (4,0)	0.531 (13,5)	-2326	0.311 (7,9)	0.752 (19,1)			
-2314	0.158 (4,0)	0.752 (19,1)	-2327	0.311 (7,9)	0.874 (22,2)			
-2316	0.189 (4,8)	0.531 (13,5)	-2328	3.740 (9,5)	0.626 (15,9)			

All dimensions shown are in inches (millimeters) unless otherwise specified.



Double Fin with Sponge Elastomer

Double Fin with Sponge Elastomer

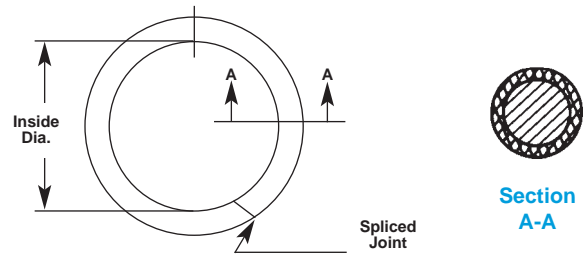
Part No.	Elastomer Diameter	Overall Width
-2401	0.063 (1,6)	0.531 (13,5)
-2402	0.063 (1,6)	0.626 (15,9)
-2403	0.063 (1,6)	0.752 (19,1)
-2404	0.063 (1,6)	0.874 (22,2)
-2405	0.095 (2,4)	0.531 (13,5)
-2420	0.098 (2,5)	1.000 (25,4)
-2406	0.126 (3,2)	0.531 (13,5)
-2407	0.126 (3,2)	0.626 (15,9)
-2408	0.126 (3,2)	0.752 (19,1)
-2409	0.126 (3,2)	0.874 (22,2)
-2410	0.126 (3,2)	1.000 (25,4)
-2411	0.189 (4,8)	0.626 (15,9)
-2412	0.189 (4,8)	0.752 (19,1)
-2413	0.189 (4,8)	0.874 (22,2)
-2414	0.189 (4,8)	1.000 (25,4)
-2415	0.252 (6,4)	0.752 (19,1)
-2416	0.252 (6,4)	0.874 (22,2)
-2417	0.252 (6,4)	1.000 (25,4)
-2418	0.374 (9,5)	1.000 (25,4)
-2419	0.374 (9,5)	1.252 (31,8)

Fabricated Elastomer Core Gaskets

The fabricated gaskets shown below can be provided to meet specific enclosure size and mounting criteria.

Figures 1 and 2 represent standard elastomer core construction. Please consult Laird Technologies engineering department at 1-800-843-4556 for elastomer core rectangular gaskets.

Figure 1. O-Ring Construction

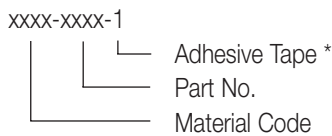


Tolerance

Diameter Size Range	Tolerance
2.0 to 4.0 (50,8 to 101,6)	± 0.020 (±0,5)
4.0 to 8.0 (101,6 to 203,2)	± 0.030 (±0,8)
8.0 to 12.0 (203,2 to 304,8)	± 0.046 (±1,2)
12.0 to 18.0 (304,8 to 457,2)	± 0.062 (±1,6)

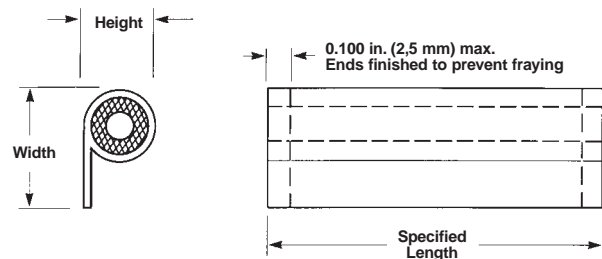
Ordering Information

The ordering code consists of the material code, followed by the part no.:



* If adhesive tape is required, please check possibility with customer service. For adhesive tape add „-1“ to the end of the order code.

Figure 2. Cut-to-length



Tolerance on Length

Cut-to-Length Size Range	Tolerance
1.0 to 4.0 (25,4 to 101,6)	± 0.060 (±1,5)
4.0 to 8.0 (101,6 to 203,2)	± 0.060 (±1,5)
8.0 to 12.0 (203,2 to 304,8)	± 0.093 (±2,4)
12.0 to 18.0 (304,8 to 457,2)	± 0.125 (±3,2)
18.0 to 24.0 (457,2 to 609,6)	± 0.250 (±6,4)
24.0 to 30.0 (609,6 to 762,0)	+ 0.500/- 0.250 (+12,7/-6,4)
30.0 to 60.0 (762,0 to 1524,0)	+ 1.00/- 0.250 (+25,4/-6,4)
over 60.0 (1524,0)	+ 2.00/- 0.250 (+50,8/-6,4)

All dimensions shown are in inches (millimeters) unless otherwise specified.