

METALASTIC™ and PORCUPINE METALASTIC™

Woven Mesh or Expanded Metal EMI Gaskets With or Without Pressure Seal



Customer Value Proposition:

Parker Chomerics METALASTIC woven aluminum mesh, and PORCUPINE METALASTIC expanded Monel or aluminum foil, are metal-based EMI shielding gaskets produced in thin sheets that can be cut into custom geometries to meet application specific needs.

METALASTIC is only available “filled” with an elastomer binder to provide a pressure seal, while PORCUPINE METALASTIC can be “filled” for a pressure seal, or “unfilled” for no pressure seal.

Because of the high metal content of these materials, they are extremely durable and economical solutions for applications requiring high pressure sealing and/or moderate levels of EMI shielding (waveguides, connectors, etc.).

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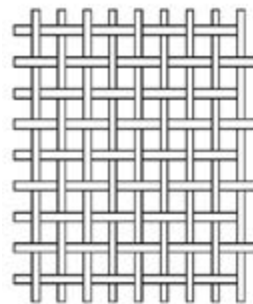
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METALASTIC

- Woven aluminum mesh
- Pressure seal
- Filled with silicone, neoprene or fluorosilicone, impregnated in the woven aluminum mesh

METALASTIC is intended for use only in applications in which joint unevenness is less than 0.002 in. (0.05 mm), and/or where space is severely limited.

The material can be easily cut into gaskets of intricate shapes and is available with a minimum nominal thickness of 0.016 in. (0.40 mm). These gaskets are not intended to be re-used after joints are opened.



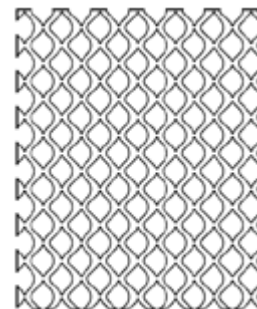
METALASTIC:
Woven wires offer a traditional screen-type product with various elastomer fillers.

PORCUPINE METALASTIC

- Expanded Monel or aluminum foil
- Pressure seal optional
- This product can be ordered “unfilled” with no pressure seal or filled with silicone or fluorosilicone elastomer as a pressure seal

PORCUPINE METALASTIC gains its excellent compressibility from very uniform thickness. The expanded foil provides dozens of contact points per square inch of surface area, assuring moderate shielding effectiveness.

PORCUPINE METALASTIC gasketing is intended for applications in which joint unevenness is less than 0.003 in. (0.08 mm) and where the gasket must be less than 4 x 6 in. (102 x 152 mm). These gaskets are not intended to be re-used after joints are opened.



PORCUPINE METALASTIC:
Expanded mesh offers “bite-thru” from edges of the mesh with filled and unfilled options.

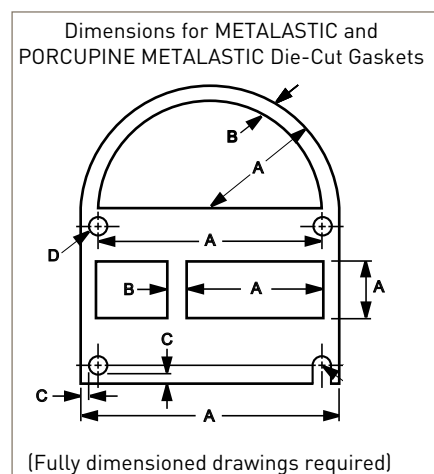
Product Information

METALASTIC and PORCUPINE METALASTIC

STANDARD MATERIAL SPECIFICATIONS						
	ELASTOMERS			METALS		
Gasketing Types	Solid Silicone*	Solid Neoprene*	Fluorosilicone	Aluminum	Monel	Shelf Life
METALASTIC® (woven wire)	AMS 3302D	AMS-3222	MIL-R-25988 Class 1 Type 2 Grade 40	Alloy 5056 AMS-4182	N/A	Indefinite
PORCUPINE METALASTIC® (expanded foil)	A-A-59588 Class 2B Grade 50	N/A	N/A	QQ-A-250/2 3003 AL (expanded)	QQ-N-281 (expanded)	Indefinite

* Temperature Ranges: Silicone-solid, EXPANDED FOIL & WOVEN WIRE METALASTIC gasketing: (A-A-59588 Class 2B Grade 50), -65° to +500°F (-54° to +260°C).
Neoprene-solid, WOVEN WIRE METALASTIC gasketing: AMS-3222, -65° to +500°F (-54° to +260°C).

N/A = Not Available



GASKET TOLERANCES inches (mm)		
DIMENSIONS		TOLERANCES
A All Die-cut Dimensions		±0.015 (±0.38)
B Min. Width	METALASTIC	0.140 (3.56)
	PORCUPINE METALASTIC	0.125 (3.18)
C Min. Wall Thickness	METALASTIC	0.090 (2.28)
	PORCUPINE METALASTIC	0.080 (2.03)
D Slot		If min. wall thickness C cannot be accommodated, holes should be changed to slots.

Product Information Cont.

METALASTIC and PORCUPINE METALASTIC

Table 1

METALASTIC WOVEN WIRE ROLLS					
Thickness	Metal	Elastomer	Width inches (mm)	Length Feet (m)	Part No.
0.016 ±0.004 (0.40 ±0.10)	Aluminum	Silicone	8.00 ±0.25 (203 ±6.35)	25 (7.62)	04-0502
	Aluminum	Fluorosilicone			04-1802
	Aluminum	Neoprene			04-0602
0.020 ±0.004 (0.51 ±0.10)	Aluminum	Silicone			04-0102
	Aluminum	Fluorosilicone			04-2002
	Aluminum	Neoprene			04-0202

Table 2

PORCUPINE METALASTIC EXPANDED FOIL ROLLS					
Thickness	Metal	Elastomer	Width inches (mm)	Length Feet (m)	Part No.
0.020 ±0.004 (0.51 ±0.10)	Monel	None	12.00 ±0.25 (305 ±6.35)	25 (7.62)	08-0601
	Monel	Silicone			08-0201
	Monel	Fluorosilicone			08-1701
	Aluminum	None			08-0602
	Aluminum	Silicone			08-0202
	Aluminum	Fluorosilicone			08-1702
0.030 ±0.004 (0.76 ±0.10)	Monel	None			08-0501
	Monel	Silicone			08-0101
	Monel	Fluorosilicone			08-1001
	Aluminum	None			08-0502
	Aluminum	Silicone			08-0102
	Aluminum	Fluorosilicone			08-1002

Ordering Information

Sheets: Order by part number from Table 1 or 2. All woven wire METALASTIC sheets are 8.0 in. wide (20.32 cm), and expanded foil PORCUPINE METALASTIC sheets are 12 in. (30.4 cm) wide.

Custom die-cut gaskets: Specify material from the table by part number and submit a drawing. For gaskets exceeding standard width, a miter or ovetail joint is recommended.

For additional assistance, contact Parker Chomerics Applications Engineering Department.

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