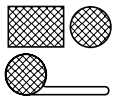
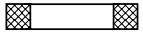
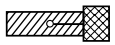
Wire Mesh EMI Gasket Selection Guide

PRODUCT TRADE NAME		MESH STRIP™ (ALL-METAL)	SHIELDMESH™ COMPRESSED MESH GASKETS	MESH STRIP™ (ELASTOMER CORE) AND METALKLIP® GASKETING	COMBO® AND COMBO® STRIP GASKETING	COMBO® GASKETS	FRAME GASKETING	PORCUPINE [5] METALASTIC® GASKETING	METALASTIC® GASKETING	POLASTRIP® GASKETING	POLASHEET®
Schematic Cross Section											
Construction		Formed or Compressed Knitted Wire Mesh		Knitted Wire Mesh Over Elastomer Strips	Formed Knitted Wire Strips in Parallel with Elastomer Strips; or Die-Cut Gaskets		Formed Knitted Wire Strips Clamped in Aluminum Extrusions	Expanded Metal in Elastomer	Woven Wire in Elastomer	Oriented Wire in Matrix of Silicone Elastomer (available with pressure sensitive adhesive)	
Available Forms		Strips, Gaskets Made by Joining Strips	Jointless Rings or Rectangular Gaskets	Strips, Gaskets Made by Joining Strips, Clip-On Strips	Strips, Gaskets Made by Joining Strips	Die-Cut Elastomer with Joined EMI Strips	Strips, Fab. Lengths, Frames with Joined EMI Strips	Sheets, Die-Cut Gaskets	Sheets, Die-Cut Gaskets	Strips, Gaskets Made by Joining Strips	Sheets, Die-Cut Gaskets
EMI Rating[6]	14 kHz (H)	>20- >30 dB	>25- >30 dB	>25- >35 dB	>20- >30 dB		>20- >30 dB	>35 dB	>35 dB	>46 dB	>35 dB
	18 MHz (E)	>102 dB	>102 dB	>102 dB	>102 dB		>102 dB	>102 dB	>102 dB	>102 dB	>102 dB
	1.0 GHz (P)	>83- >93 dB	>93 dB	>93 dB	>83- >93 dB		>93 dB	>85 dB	>40 dB	>93 dB	>93 dB
Maximum Joint Unevenness, % of Gasket Height	Class A – Permanently Closed	30-40%	30%	30-50%	30%		30%	15%	10%`	20%	20%
	Class B – Open-Close in Same Position	25-30%	25%	25-40%	30%		25%	10%	7%	17%	17%
	Class C – Completely Interchangeable	20-25%	20%	20-30%	25%		25%	10%	7%	17%	17%
Minimum/Maximum Height	Inches (mm)	0.062/0.500 (1.57/12.70)	0.040/0.375 (1.02/9.53)	0.125/0.750 (3.18/19.05)	0.062/0.375 (1.57/9.53)		0.093/0.250 (2.36/6.35)	0.020/0.030 (0.51/0.76)	0.016/0.020 (0.41/0.51)	0.062/0.312 (1.57/7.92)	0.030/0.250 (0.76/6.35)
Min. Width (Greater of Actual Dim. or Portion of Height)	Inches (mm)	0.062/1/2H (1.57/1/2H)	0.062/1/2H (1.57/1/2H)	0.62/1/2H (1.57/1/2H)	0.125/1 1/2H (3.18/1 1/2H)		0.437 (11.0)	0.140 (3.56)	0.125 (3.18)	0.093/1/2H (2.36/1/2H)	0.125 (3.18)
Recommended Compression Pressure	psi (kg/cm)	5-100 (0.35-7.03)	5-100 (0.35-7.03)	5-100 (0.35-7.03)	20-100 (1.41-7.03)		5-100 (0.35-7.03)	20-100 (1.41-7.03)	20-100 (1.41-7.03)	20-100 (1.41-7.03)	20-100 (1.41-7.03)
Attachment or Positioning	In Slot	Excellent	Excellent	Excellent	Excellent		No	No	No	Good	Possible
	Pressure Sensitive Adhesive	N/A	N/A	N/A	Excellent		N/A	N/A	N/A	Special	Excellent
	Bond Non-EMI Gasket Portion[4]	Versions with Fins Only[2]	*	Versions with Fins Only[2]	Good-Excellent		Poor[3]	Special	Special	Combo Version Only	N/A
	Conductive Adhesive	Poor to Good	Poor to Good	Poor to Good	N/A		N/A	No	No	Use Silicone Base Adhesive See Note 7.	
	Bolt thru Bolt Holes	Possible with Fin Versions[2]	N/A	Possible with Fin Versions[2]	Excellent		Excellent[3]	Excellent	Excellent	Excellent	Excellent
Elastomer Temperature Range	Neoprene Version	N/A	N/A	–30°F to 150°F –34°C to 66°C	–30°F to 150°F –34°C to 66°C		–30°F to 150°F –34°C to 66°C	N/A	–40°F to 225°F –40°C to 107°C	Special	Special
	Silicone Version	N/A	N/A	–80°F to 400°F –62°C to 204°C	–80°F to 400°F –62°C to 204°C		–80°F to 400°F –62°C to 204°C	–80°F to 400°F –62°C to 204°C	–65°F to 500°F –53°C to 260°C	–70°F to 500°F –57°C to 260°C	–80°F to 400°F –62°C to 204°C
Standard Metals Available in EMI Portion (others also available)		Monel Ferrex[1], Aluminum	Monel Ferrex[1], Aluminum	Monel Ferrex[1], Aluminum	Monel, Ferrex[1], Aluminum		Monel, Ferrex[1]	Monel, Aluminum	Aluminum Only	Monel, Aluminum	Monel, Aluminum

(1) Ferrex® is Chomerics' tradename for tin-plated, copper-clad steel EMI gasketing.

(2) Two versions,  and  have fins especially designed for easy attachment.

(3) The aluminum extrusion is intended as a convenient means of attachment.

(4) Most products for which this method is suitable are available with "dr y back" (solvent-activated) adhesives already applied.

(5) Available without elastomer in metal form only.

(6) These EMI ratings are based on MIL-STD-285 test methods and are useful for making meaningful qualitative comparisons between products in this table since all tests were conducted under similar conditions. They cannot be used to compare to other EMI gasket data unless those data were obtained by the same methods.

(7) Non-conductive RTV yields excellent results, but use sparingly. If more adhesive surface is needed, use conductive adhesive.

* Pressure sensitive adhesive is available for certain mesh over core gaskets. Contact Chomerics for details.

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Parker Seals