

METALASTIC® EXP-URE

High-Performance Conductive Gasketing for Corrosion and Lightning Strike Protection

Parker Chomerics METALASTIC® EXP-URE gaskets combine expanded aluminum mesh with a conformable, urethane-based filler to deliver superior corrosion resistance, electrical conductivity, and environmental sealing in flange-to-flange assemblies. Die cut to ensure consistent fit and sealing over the entire surface, these fully cured gaskets are engineered for harsh aerospace environments and are ideal for applications requiring galvanic corrosion mitigation, fluid resistance, EMI shielding, and lightning strike protection.

Unlike traditional woven mesh or particle-filled gaskets, METALASTIC® EXP-URE delivers uniform, exceptional conductivity across the entire surface thanks to its expanded aluminum structure. EXP-URE achieves through conductivity at less than 15% deflection requiring only 10 psi—a fraction of the 400-600 psi (35%-40% deflection) required by competitors—enabling significantly lower torque during assembly. Significantly lower torque requirements reduces the risk of damage to aircraft structures and antennas and minimizes gel squeeze-out, ensuring reliable galvanic corrosion mitigation, lightning strike grounding, high-performance EMI shielding, and long-lasting seal integrity.

In addition, unlike competitor products EXP-URE has no orientation requirements, which eliminates installation errors. EXP-URE is the optimal solution for engineers seeking enhanced performance, durability, and ease of installation in critical aerospace applications.

Product Features

- Corrosion resistance to most harsh aircraft fluids
- Superior performance in salt fog testing
- Uniform, high through conductivity across entire gasket
- Superior EMI shielding and grounding
- Low compression force
- No gasket orientation requirements
- Die cut for custom solutions

Typical Applications

- External antenna, radar, and lighting base seals
- Access panels for electronics bays and fuselage hatches
- Connector and waveguide interface gaskets
- Corrosive-prone aircraft areas such as lavatories and galleys



METALASTIC EXP-URE PRODUCT INFORMATION

Parker Chomerics Urethane Expanded Metalastic gaskets are available in customer specified finished gasket form factors. Gaskets are available in two standard thicknesses.

Table 1: Dimensional Parameters

Thickness in (mm)	Maximum Width in (mm)	Maximum Length in (mm)
0.030 (0.70)	12.0 (304.8)	22.0 (558.8)
0.055 (1.40)	12.0 (304.8)	22.0 (558.8)

Table 2: Design Tolerances

Parameters	Values in (mm)
Thickness Tolerance, in (mm)	.030 (0.76): ± 0.006 (0.15) .055 (1.40): ± 0.008 (0.20)
Width/Length Tolerance, in (mm)	< 5 (127): ± 0.020 (0.51) 5.01 to 10 (127.2 to 254): ± 0.030 (0.76) > 10 (254): ± 0.045 (1.14)
Minimum Wall Thickness, in (mm)	0.188 (4.78)
Minimum Hole Diameter, in (mm)	0.125 (3.18)

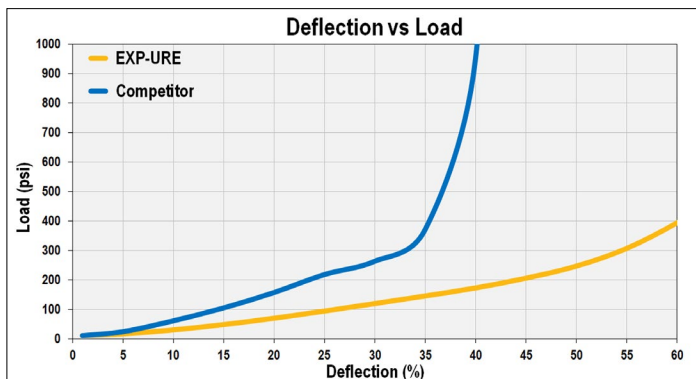
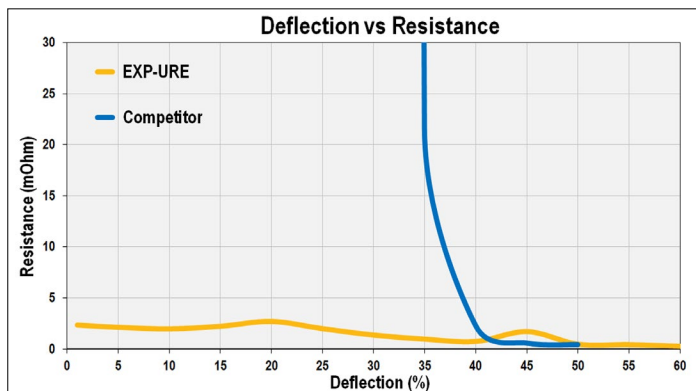
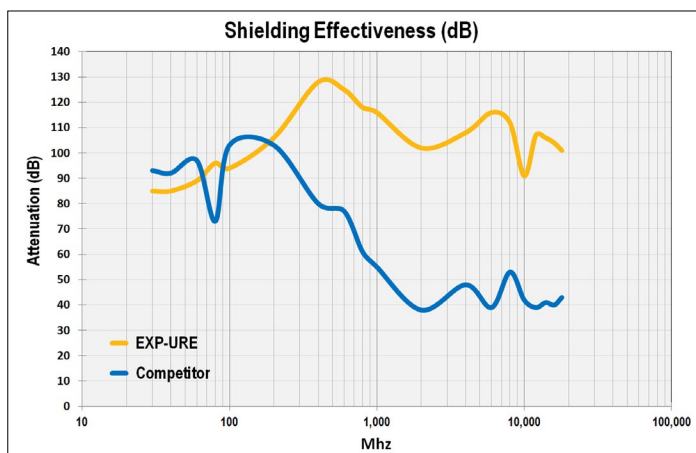
Table 3: Product Performance

Typical Properties	Values	Test Method
Metal	3003 Aluminum Alloy	-
Filler	Translucent Orange Urethane	-
Electrical Thru Resistance, Ohms	.0015	ASTM D575
Shielding Effectiveness, dB	>90	CHO TP09
Deflection Required for Through Conductivity	<15%	ASTM D575
Load Required for Through Conductivity, psi	>10	ASTM D575
JP-5 Jet Fuel Immersion, % volume swell	-12.9%	ASTM D471
Lubricating Oil Immersion, % volume swell	2%	ASTM D471
Deicing Fluid Immersion, % volume swell	1%	ASTM D471
Salt Fog 2024 Al Class 1A Weight Loss, g	0.0009	1,000 Hour CHO-TM100
Salt Fog 6061-T6 AL Class 3 Weight Loss, g	0.0011	1,000 Hour CHO-TM100
RoHS Compliant	Yes	Chomerics Certification

* Additional data available upon request

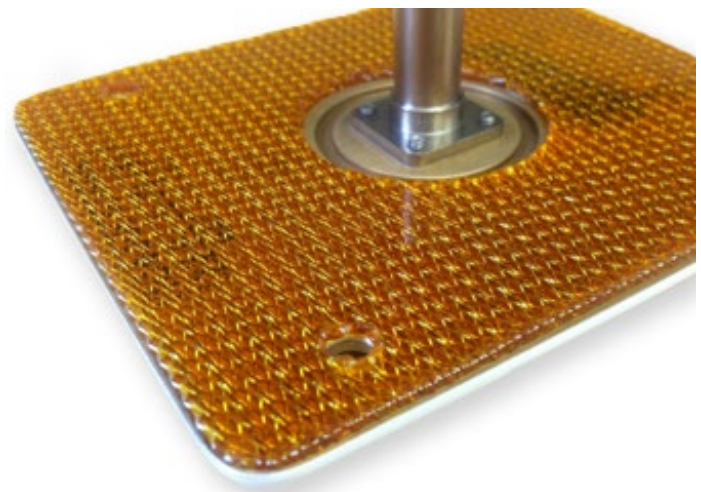
** Copies available at parker.com/chomerics

*** All frequencies; 10 MHz to 18 GHz



METALASTIC EXP-URE ORDERING INFORMATION

Part Number	Configuration	Areal Weight
08-6502-XXXX	Custom Gasket, 0.055" Thick	0.0444 oz/sq. inch
08-6002-XXXX	Custom Gasket, 0.030" Thick	0.0219 oz/sq. inch



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