

# Nickel Graphite Coated Fabric Conductive Elastomer

The following is a relative measurements of properties for Nickel Graphite Coated Fabric conductive elastomer, tested in accordance with the procedures and requirements outlined in ASTM and MIL-DTL-83528.

This special conductive material is a 65 durometer nickel coated graphite filled elastomer reinforced with an inner layer of conductive fabric. The composite can be used in EMI shielding and environmental sealing applications. The composite yields volume resistance values similar to much more expensive silver coated metal filled elastomers. The conductive fabric gives the composite much superior physical properties than seen with an elastomer alone.

Electrical Specifications	Tolerance	Test Method	Nickel Graphite Elastomer
Volume Resistivity (ohm-cm)	Maximum	MIL-DTL-83528 (PARA 4.6.11)	0.007

## Range of measurements for Nickel Graphite Coated Fabric Conductive Elastomer

Shore A	Tensile (psi)	Elongation (min.)	Tear (#/in)	Volume Resistivity ohm cm	Specific Gravity
58-68	950	20	165	0.007	1.93

Thickness (in.)	Compression Set (% 70 hr. 100C)	Color	Thermal Stability Range Deg. C
0.029 – 0.035	25	Dark Gray	-55 - 200

- Superior Strength- Compared to alternative EMI/RFI shielding and sealing materials
- Silver Like Conductivity- Without silver pricing volatility and cost concerns
- Produced as a Continuous Roll - Up to 15 inches wide; eliminating yield concerns, lead times, added labor, and handling issues when cutting molded sheets

**Application:** The surface that this material is to be applied to must be conductive, meaning no non-conductive paint, oils, or coatings. If a non-conductive surface is present on the mating or mounting surface the conductive elastomer, shielding effectiveness will be greatly degraded.