



**Graphite Material Datasheet**

**AR-12**

*AR-12 is a superfine grain, molded graphite material, and the properties are isotropic.*

Common Material Applications: EDM Applications
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**Material Properties & Characteristics**

Grain Type:	Superfine Grain
Form Process:	Molded Graphite
Special Treatments:	None
Avg. Particle Size:	.000354" [8.99922 μ]
Bulk Density:	1.82 g/cm <sup>3</sup>
Shore Hardness:	65 Shore
Electrical Resistivity:	450 μΩ-inch
Flexural Strength:	8,400 lbs/in <sup>2</sup>
Compressive Strength:	18,400 lbs/in <sup>2</sup>
Tensile Strength:	5,000 lbs/in <sup>2</sup>
Young's Modulus:	10.1 GPa
Thermal Conductivity:	112.4 W/m•°K
Thermal Expansion [CTE]: 752 - 932 °F	3.28 x10-6 /°F
Ash Content:	500 ppm
Porosity:	8%
Max. Inert Temperature	5,000° F

*all material specifications presented are considered typical from each of the manufacturers and/or distributors*