

# Carbon Products for General Use (Extruded Graphite) Characteristics Table

Attention: Artificial graphite is subject to export control. Therefore, you would need to obtain export license from Ministry of Economy, Trade and Industry (METI) of Japan, if you want to export them to countries outside of Japan by yourselves.

Grade		Bulk Density (g/cm <sup>3</sup> )	Tensile Strength (MPa)	Shore Hardness (HSD)	Thermal Conductivity (W/m·K)	Maximum Grain Size (mm)	Bending Strength (MPa)	Resistivity (μΩ·m)	Coefficient of Thermal Expansion (×10 <sup>-6</sup> /K)	Ash (%)	Maximum Block Size (mm)	merit
Extruded	GR-102	1.62	12	28	130	0.80	23	9.0	3.5	0.10	ø200×1500/ 125×510×1500	Well Balanced Material for Density and Strength
	GR-103	1.72	14	35	150	0.80	27	7.6	3.5	0.10	ø200×1500/ 125×510×1500	This is extruded graphite with higher density than GR-102.
	GF-130	1.55	13	19	174	0.20	25	4.8	2.5	0.10	ø60×1000	This is fine-grained extruded graphite with low specific resistance.
	EG-1X	1.70	7	25	174	3.40	15	5.0	1.1	0.50	ø1050×1500	This is large-sized extruded round graphite with low CTE and high thermal shock resistance
	EG-30X	1.74	9	20	174	1.70	19	5.5	1.5	0.10	230×560×2100	This is extruded square graphite with high density

1. The above numerical values are representative characteristic values, and are not guaranteed values.
2. Measurement Range for CTE: RT~500°C
3. Unit Conversion: MPa × 10.2 → kg/cm<sup>2</sup> W/m·K × 0.86 → kcal/ m·h·°C
4. We have a good selection of "AK grade series" exclusively for electrolytic plates.
5. For inquiries on products for specific use, please consult with our sales personnel for better recommendation.
6. There are other product sizes in addition to those described above.  
Please contact Nippon Techno-Carbon for details.