SIGRAFINE® HLM

Material: Graphite
Forming: Extruded
Application: Industrial and electronic applications

Material data of SIGRAFINE® HLM

Typical properties	Units	Test standards		Ø 3 ... Ø 10 in	Ø 12 ... Ø 30 in □ 20 ... in
Bulk density	g/cm³	ASTM C559		1.75	1.72
Max. grain size	in	DIN 66165		0.03	0.03
Open porosity	Vol. %	ASTM C604		15	16
Resistivity	10^{-5}Ωin	ASTM C611	II ⊥	28 39	31 37
Dynamic modulus of elasticity	10^{6}psi	ASTM C747	II ⊥	1.6 1.0	1.2 1.0
Flexural strength (4 points)	psi	ASTM C651	II ⊥	3340 2300	2760 2760
Compressive strength	psi	ASTM C695	II ⊥	6670 6090	5800 5650
Tensile strength	psi	DIN 51914	II ⊥	2470 1600	1810 1810
Thermal expansion (20 – 200 °C)	$10^{-6}K^{-1}$	DIN 51909	II ⊥	2.6 4.0	3.0 3.5
Thermal conductivity (20 °C)	$Wm^{-1}K^{-1}$	DIN 51908	II ⊥	190 130	160 140
Ash content	%	DIN 51903		0.08	0.08

II parallel to the grain direction; ⊥ perpendicular to the grain direction.
For any engineering/design purposes please always contact our technical sales team.

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