

SIGRAFINE® HLM

Material: Graphite

Forming: Extruded

Application: Industrial and electronic applications

Material data of SIGRAFINE® HLM

Typical properties	Units	Test standards	Ø 75 ...			
			Ø 250 ... mm	□ 500 ² ... 610 x 760 ... mm	Ø 300 ... Ø 780 mm	Ø 915 mm
Bulk density	g/cm ³	ASTM C559	1.75	1.72	1.72	
Max. grain size	mm	DIN 66165	0.8	0.8	1.6	
Open porosity	Vol. %	ASTM C604	15	16	21	
Resistivity	µΩm	ASTM C611	II	7.2	7.8	7.6
			I	10.0	9.5	9.5
Dynamic modulus of elasticity	GPa	ASTM C747	II	11.0	8.5	9.0
			I	7.0	7.0	7.0
Flexural strength (4 points)	MPa	ASTM C651	II	23.0	19.0	13.5
			I	16.0	19.0	-
Compressive strength	MPa	ASTM C695	II	46	40	-
			I	42	39	-
Tensile strength	MPa	DIN 51914	II	17.0	12.5	-
			I	11.0	12.5	-
Thermal expansion (20 – 200 °C)	10 ⁻⁶ K ⁻¹	DIN 51909	II	2.6	3.0	2.1
			I	4.0	3.5	3.0
Thermal conductivity (20 °C)	Wm ⁻¹ K ⁻¹	DIN 51908	II	190	160	-
			I	130	140	-
Ash content	%	DIN 51903	0.08	0.08	0.08	

II parallel to the grain direction; I perpendicular to the grain direction.

For any engineering/design purposes please always contact our technical sales team.



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