

SIGRAFINE® R4820

Material: Graphite

Forming: Isostatically pressed Application: Continuous casting

Material data of SIGRAFINE® R4820

Typical properties	Units	Test standards	Values*_
Average grain size	μm	ISO 13320	20
Bulk density	g/cm³	DIN IEC 60413/204	1.82
Open porosity	Vol. %	DIN 66133	10
Medium pore entrance diameter	μm	DIN 66133	2
Coefficient of permeability (ambient temperature)	cm²/s	DIN 51935	0.15
Rockwell hardness HR ₁₀ / ₁₀₀		DIN IEC 60413/303	100
Resistivity	μΩm	DIN IEC 60413/402	11
Flexural strength	MPa	DIN IEC 60413/501	50
Compressive strength	MPa	DIN 51910	105
Dynamic modulus of elasticity	MPa	DIN 51915	11 x 10 ³
Thermal expansion (20 – 200 °C)	K ⁻¹	DIN 51909	4.2 x 10 ⁻⁶
Thermal conductivity [20°C]	Wm ⁻¹ K ⁻¹	DIN 51908	125
Ash content	ppm	DIN 51903	100

^{*} Typical average values of different rectangular and round block sizes. The actual individual block values might vary depending on dimension and format. For any engineering/design purposes please always contact our technical sales team.



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