

STEMAPHIT R22

Product data sheet

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STEMPLAST HATZIAVGoustis
ENGINEERING PLASTICS

Material:	resin impregnated carbon graphite
Product's shape:	semi-finished products

Material characteristics

Very high compressive strength, very low thermal expansion.

Application examples

Mechanical seals, bearings.

General properties

Density ρ	1.80 gr/cm ³	DIN IEC 60413 / 203
Open porosity	2.5 %	DIN 66133

Mechanical properties

Flexural strength σ_b	69 MPa	DIN IEC 60413 / 501
Compressive strength σ_c	197 MPa	DIN 51910
Young's modulus E	22 GPa	DIN 51915
Rockwell hardness HR _{5/100}	110	DIN IEC 60413 / 303

Thermal properties

Thermal conductivity λ (23°C)	13.9 W/(m·K)	DIN 51908
Coefficient of linear thermal expansion α (average value 20-200°C)	$3.8 \cdot 10^{-6} \cdot K^{-1}$	DIN 51909
Max service temperature	180 °C	

The indicated values result from numerous individual measurements for an approximation of the values and correspond to our today's knowledge. They serve as information about our products and are presented as a guide to choose from our range of materials. This, however, does not include an assurance of specific properties or the suitability for particular application purposes that are legally binding. Since the properties also depend on the dimension of the semi-finished products and the degree of crystallisation (e.g. nucleating by pigments), the actual values of the properties of a particular product may differ from the indicated values.