

OVERVIEW TECHNICAL DATA

DOGLAS® 180H

Product description	Engineered composite material made of resin-bound glass fabric
Standard colour	light brown
Main applications	Electrical and thermal insulation parts for machine engineering and process industry
Delivery program	Sheets, panels and highly precise machined parts and finished components

Physical characteristics

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm ³	1,9
Water absorption	ISO 62	%	0,1

Thermal characteristics

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	-	°C	180
Operation temperature, short-term	-	°C	180
Coeff. of linear thermal expansion	DIN 51045	10 ⁻⁶ x K ⁻¹	15
Thermal conductivity	DIN 52612	W/mK	0,3

Mechanical characteristics

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm ²	645
Flexural strength at 23 °C	ISO 178	N/mm ²	480
Modul of elasticity	ISO 178	N/mm ²	24000
Tensile strength	ISO 527	N/mm ²	380
Split load	DIN 53463	N	3500

Electrical characteristics

Properties	Test Standard	Unit	Typical value
Comparative tracking index	IEC 112	-	CTI 225
Permittivity	DIN 53483	-	5,0
Electrical insulation resistance after immersion in water	IEC 167	Ω	2 x 10 ¹²
Electric strength (I)	IEC 243-1	KV/3 mm	60
Electric strength (II)	IEC 243-1	KV/25 mm	60

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The standard values shown in this data sheet are measured by standard test methods. Depending on operation terms and dimensions the material properties can differ from these values.

Please contact our applications and sales engineers to clarify the suitability of the material for your application.