

**OVERVIEW TECHNICAL DATA**

# DOGLAS® 180H

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

## Physical characteristics

Properties	Test Standard	Unit	Typical value
Specific density	ISO 1183	g/cm <sup>3</sup>	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 <sup>-6</sup> x K <sup>-1</sup>	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 <sup>2</sup>	645
Flexural strength at 23 °C	ISO 178	N/mm <sup>2</sup>	480
Modul of elasticity	ISO 178	N/mm <sup>2</sup>	24000
Tensile strength	ISO 527	N/mm <sup>2</sup>	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 <sup>12</sup>
Electric strength (I)	IEC 243-1	KV/3 mm	60
Electric strength (II)	IEC 243-1	KV/25 mm	60

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We reserve the right to make changes in the context of further technical developments. The guide values listed in this data sheet are not contractual data.

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