Röchling

Industrial

Technical Data Sheet

Durostone® EPR S1

GFK-EP

Typical characteristics

- High mechanical strength
- High dielectric strength

Typical industries

- Generator and Motor
- HVDC Transmission
- Building industry
- Topside
- Electrical Industry

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g / cm^3	1,9
Flexural strength ⊥	ISO 178	MPa	500
Modulus of elasticity in flexion ⊥	ISO 178	MPa	20000
Compressive strength ⊥	ISO 604	MPa	300
Tensile strength II	ISO 527	MPa	400
Impact strength II (Charpy)	ISO 179	kJ / m^2	100
Delamination force II	DIN 53463	N	4000
Thermal properties			
Thermal conductivity ⊥		W / (m * K)	0,3
Coefficient of linear expansion II	TMA (Mettler)	10^{-6} x K^{-1}	10 - 20
Temperature index	IEC 60216	T.I.	180
Insulation class	IEC 60085	/	H
Dielectrical properties			
Electric strength 90°C under oil ⊥	IEC 60243	kV / mm	13
Relative permittivity (50 Hz)	IEC 60250	ε_r	≈ 5
Specific surface resistance	IEC 60093	Ω	10^{13}
Specific volume resistance	IEC 60093	Ω x cm	10^{14}
Comparative tracking index	IEC 60112	CTI	225