

Datasheet AIEPGC21



AI EP GC 21 Has particularly good electrical and mechanical properties. Extremely high mechanical strength. Retains electrical properties at high air humidity. High resistance to chemicals. Engineering and insulation material in large rotating electrical machines and insulation cylinders in dry transformers.

Application

Construction and insulation material in larger rotating electrical machines, insulation cylinders in dry-type transformers

Material

Epoxy with woven glass cloth composite.

Availability

	Value	Unit
Rod diameters	on request	
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	on request	

AIEPGC21 - Specifications

Physical properties

	Test standard	Value	Unit
Density	ISO 1183-A	1,75	g/cm ³
Water absorption at 23 °C	ISO 62-1	0,2	mg/cm ²
Flammability		on request	

Mechanical properties

	Test standard	Value	Unit
Compressive strength static		on request	
Module of elasticity - Youngs modulus		on request	
Tensile strength		on request	
Shear strength		on request	
Impact strength		on request	
Bending strenght	ISO 178	325	MPa
Flexural strength		on request	
Insulation resistance		on request	
Elastic modulus from bending test		on request	
Compressive strenth perpendicular		on request	

Thermal properties

	Test standard	Value	Unit
Thermal endurance 20,000 h (T.I)	IEC 60216	140	°C

Friction properties

	Test standard	Value	Unit
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Electrical properties

	Test standard	Value	Unit
Dielectric strength parallel		on request	
Permittivity 50Hz	IEC 60250	4,5	[-]
Permittivity 1MHz	IEC 60250	4,5	[-]
Dissipation factor 50Hz	IEC 60250	0,01	[-]
Dissipation factor 1 MHz	IEC 60250	0,01	[-]
Insulation resistance after submersion in water	IEC 60167	10.000	MΩ