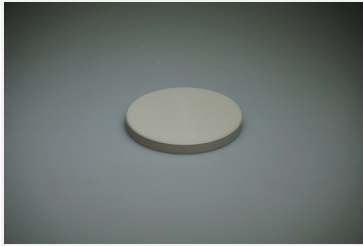


Datasheet AE1500XC20



AE1500XC20, blended, with ceramic fillers, has excellent dimensional stability across a broad range of temperature and humidity conditions and has a good dielectric properties for isolative applications. When compared to PAI or other iridized polymers, this grade has greater hydrolytic stability. When compared with ceramics, it is half the weight and offers greater impact resistance and toughness.

Application

Material

PEEK with ceramic.

Availability

	Value	Unit
Rod diameters	aug-90	mm
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	3000	mm
Sheet thickness	okt-50	mm
Sheet size	1000x2000	mm



AE1500XC20 - Specifications

Physical properties

	Test standard	Value	Unit
Density		1,49	g/cm ³
Thermal conductivity		on request	
Specific heat capacity		on request	
Moisture absorption at 23°C, 50% RH		on request	
Water absorption at 23 °C	ISO 62	0,2	%
Flammability	UL 94	V-0	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	105	MPa
Yield stress	ISO 527	105	MPa
Elongation at break	ISO 527	17	%
Modulus of elasticity in tension	ISO 527	4900	MPa
Bending modulus		on request	
Flexural strength		on request	
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m ²
Charpy notched impact strength +23°C	ISO/1eA	2,1	kJ/m ²
Ball indentation hardness	ISO 2039-1	246	MPa
Compressive modulus	ISO 604	6900	MPa

Thermal properties

	Test standard	Value	Unit
Min. working temperature		on request	
Max. working temperature		250	°C
Intermittent working temperature		300	°C
Heat distortion temperature		on request	
Melting temperature	ISO 3146	340	°C
Thermal coefficient of linear expansion	DIN 53752	4,5	1/K.10-5

Friction properties

	Test standard	Value	Unit
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Electrical properties

	Test standard	Value	Unit
Dielectric constant		on request	
Dielectric loss factor		on request	
Dielectric strength		on request	
Dielectric constant at 1MHZ	IEC 250	3,9	[-]
Volume resistivity		on request	

Electrical properties

Surface resistivity		on request	
Resistance to tracking (CTI)		on request	