

Multiplast PEEK PVX

Multiplast PEEK PVX, Polyether ether ketone with carbon fibres, PTFE and graphite, is a high temperature-resistant thermoplastics with very good sliding values.

Multiplast PEEK PVX:

- Very good sliding values
- Suitable for bearings under high levels of stress

Properties	Units		
Modulus of elasticity (tensile test)	MPa	5500	
Tensile strength	MPa	84	
Tensile strength at yield	MPa	84	
Elongation at yield	%	3	
Elongation at break	%	3	
Modulus of elasticity (flexural test)	MPa	6000	
Flexural strength	MPa	142	
Compression modulus	MPa	4000	
Compressive strength (1% / 2%)	MPa	23 / 44	
Impact strength (Charpy)	kJ / m ²	28	
Notched impact strength (Charpy)	kJ / m ²	-	
Ball indentation hardness	MPa	250	
Glass transition temperature	°C	146	
Melting temperature	°C	341	
Service temperature	short term	°C	300
	long term	°C	260
Thermal expansion	23 °C – 60 °C	10 ⁻⁵ K ⁻¹	3
	23 °C – 100 °C	10 ⁻⁵ K ⁻¹	3
Specific heat	J / (g x K)	1,1	
Thermal conductivity	W /m K	0,82	

Properties	Units	
Specific surface resistance	Ω	10^{11}
Specific volume resistance	$\Omega \times \text{cm}$	10^{12}
Dielectric strength	kV / mm	-
Resistance to tracking (CTI)	V	-
Water absorption 24 h / 96 h (@ 23°C)	%	0,02 / 0,03
Resistance to hot water / bases	-	Good resistance
Resistance to weathering	-	Poor resistance
Flammability	UL94	V0
Density	g/cm ³	1,44
Colour	-	Black / Opaque

Availability:

Sheet: Size: 500 x 3000 mm (smaller sizes are possible)
 Thickness: 10, 20, 30, 40 and 50 mm

Rod: Length: 3000 mm (shorter lengths are possible)
 Diameter 10 - 80 mm
 100 mm (only available in 1000 mm length)

Tube: Length: 3000 mm (shorter lengths are possible)
 Minimum Inside Diameter: 30 mm
 Maximum Outside Diameter: 150 mm

Cut pieces: On request

Parts: Finished products according to drawing