

OVERVIEW TECHNICAL DATA

ELTIMID® CP 15G

Material description	High-temperature polyimide, with Graphit (15%)
Colour	green-grey
Application	bearing bushes, thrust rings
Available as	blanks, rods and components as per drawing

Mechanical and physical properties

Properties	Test method/standard	Unit	Value	
Tensile strength	DIN EN ISO 527	MPa	60	
Elongation at break		%	3,0	
Tensile modulus		MPa	2850	
Flexural strength	DIN EN ISO 178	MPa	80	
Flexural strain at break		%	3,0	
Flexural modulus		MPa	3170	
Compressive strength	DIN EN ISO 604	MPa	350	
Compressive stress at 10 % compression		MPa	150	
Compressive stress at 50 % compression		MPa	330	
Compressive modulus		MPa	3940	
Shore hardness	EN ISO 868	Shore D	82	
Coefficient of friction static	-	μ	0,35	
dynamic	-		0,28	
Wear	-	g/kWh	0,21	
Oil/grease resistance	-	-	resistant	
Specific ensity	-	g/cm ³	1,33	
Water absorption	DIN EN ISO 62	%	24 h at 23 °C	0,8
48 h at 23 °C			1,1	
96 h at 23 °C			1,6	
3 weeks at 23 °C			2,7	
24 h at 80 °C			2,2	
48 h at 80 °C			2,6	
96 h at 80 °C			2,9	
3 weeks at 80 °C			-	

Thermal properties

Properties	Test method/standard	Unit	Value
Long-term service temperature	-	°C	280
Short-term service temperature < 3h < 1h (under minimal load)	-	°C	400 450
Coefficient of linear thermal expansion	DIN 53752/TMA	10 ⁻⁶ x K ⁻¹	40
Specific heat capacity	DSC	J/g x K	1,080
Thermal conductivity	DSC	W/m x K	0,3
Glass transition temperature T _g (tan delta max)	DMA	°C	361

Electrical characteristics

Properties	Test method/standard	Unit	Value
Dielectric constant	IEC 60250	-	-
Dielectric dissipation factor		-	-
Surface resistivity	DIN IEC 93	Ω	-
Volume resistivity		Ω m	-
Tracking resistance	DIN EN 60112	-	-
Electric strength	DIN IEC 60243-1	kV/3 mm	21

 Issue:
 03/2021

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.