

Material datasheet

Material: PAS-60 GK50

mechanical characteristics

Characteristic	Standard	Unit	Value
Tensile stress at break (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	85
Elongation at break (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	%	3
Tensile E-modulus (+23°C, dry)	ISO 527-1/-2 DIN 53455 ASTM D 638	MPa (N/mm ²)	6000
Charpy impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	60
Charpy notched impact strength (+23°C, dry)	ISO 179 DIN 53453	kJ/m ²	6
Coefficient of sliding friction (p = 0.3N/mm ² / 0.6N/mm ² , v = 0.27m/s, against steel hardened and ground, dry)			0.3

thermal characteristics

Characteristic	Standard	Unit	Value
min. Operating temperature (continuous)		°C	-30
max. service temperature (continuous)		°C	100
max. service temperature (short-term)		°C	180
Coefficient of linear thermal expansion (23 - 60°C)	ISO 11359	10 ⁻⁶ /K	70

electrical characteristics

Characteristic	Standard	Unit	Value
Dielectric constant, relative permittivity (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		3.8
Dielectric loss factor (1 MHz, dry)	DIN IEC 60250 (DIN VDE 0303-4) ASTM D 150		0.022
Surface resistivity (dry)	DIN IEC 60093 (DIN VDE 0303-30) ASTM D 257	Ω	10 ¹³

These data are guideline values which are subject to change depending on the type of manufacture of the test specimens and stress. These data are based on our own experience and on manufacturer's data. However, they are provided without guarantee, since each application is different and must be considered with reference to its specific influence parameters.

physical characteristics

Characteristic	Standard	Unit	Value
Density, Gross density	ISO 1183 DIN 53479 ASTM D 792	g/cm ³	1.52