Technical datasheet

PK (Polyketone)

Example of application
› gear wheels; seals; pump components; application in chemical plant engineering; shipbuilding

Advantages
› very good resilience › low water absorption › low abrasion resistance

Basic information	specification
Format	**round material:** up to 210 mm available in 3 m length **sheets**: up to 50 mm x 620 mm available in 3 m length

Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.25	g/cm^3	ISO 1183
Moisture ingress	0.4	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	70	MPa	DIN EN ISO 527
Elongation at break	≥ 70	%	DIN EN ISO 527
E-Module	1.700	MPa	DIN EN ISO 527
Notch toughness	12	kJ/m^2	ISO 179
Rochwellhardness	n.sp.	MPa	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	n.sp.	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	1.10	$K^{-1} \cdot 10^{-4}$	DIN 53752
	2.20	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, long-term	100	°C	
Max. operating temperature, short-term	150	°C	
Min. operating temperature, long-term	-40	°C	

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	10^{13}	Ω·cm	DIN IEC 60093
Outer surface coefficient	10^{13}	Ω	DIN IEC 60093
Puncture resistance	n.sp.	kV/mm	DIN EN 60243

Legend
n.sp. = not specified

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.
*Higher specification on request.

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technical plastics

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