

Technical datasheet

PA 6 E (Polyamide 6 extruded)

Example of application
› slide roller; gear wheels; diversion wheel

Advantages	Disadvantages
› very high hardness › very high resistance › dimensional stability	› high water absorption › bad UV-resistance

Basic information	Specification
Format	round material: 6 mm up to 200 mm available in 3 m length sheets: 0.5 mm up to 50 mm available in 2 m x 1 m

Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.13	g/cm ³	ISO 1183
Moisture ingress	9.5	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	54	MPa	DIN EN ISO 527
Elongation at break	50	%	DIN EN ISO 527
E-Module	3.330	MPa	DIN EN ISO 527
Notch toughness	7	kJ/m ²	ISO 179
Rochwellhardness	155	MPa	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.32	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	1.1	K ⁻¹ · 10 ⁻⁴	DIN 53752
	2.2	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	n.sp.	°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	30	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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