



PA6 E 170x3000 mm black

Article No.	P1000885
Category	PA

Technical Properties

Density & Weight

Property	Value	Unit	Test standard
Density	1.14	g/cm³	ISO 1183

Moisture Absorption

Property	Value	Unit	Test standard
Water absorption to saturation	2.5	%	ISO 62
Water Absorption to Saturation	9	%	ISO 62

Tensile Properties

Property	Value	Unit	Test standard
Tensile Strength	70	MPa	DIN EN ISO 527
Modulus of elasticity (tensile)	3250	MPa	ISO 527-2
Breakdown Voltage	75	MPa	ISO 527-2
Break Elongation	40	%	ISO 527-2

Flexural Properties

Property	Value	Unit	Test standard
Flexural Strength	76	MPa	ISO 527-2

Impact Resistance

Property	Value	Unit	Test standard
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Property	Value	Unit	Test standard
Notched impact strength (Charpy)	5.5	kJ/m²	ISO 179/1eA

Hardness

Property	Value	Unit	Test standard
Hardness Shore D	82	° Shore D	DIN EN ISO 868
Ball pressure hardness	150	MPa	ISO 2039-1

Temperature Limits

Property	Value	Unit	Test standard
Melting point	220	°C	ISO 3146
Maximal operating temperature (short-term)	160	°C	
Maximum Operating Temperature	90.5	°C	
Minimum temperature	-36	°C	
Heat deflection temperature (HDT/A)	70	°C	ISO 75-2
Heat deflection temperature (HDT/B)	140	°C	ISO 75-2
Vicat softening temperature (VST/B/50)	190	°C	ISO 306

Thermal Conductivity

Property	Value	Unit	Test standard
Thermal Conductivity	0.28	W/(m·K)	DIN 52612

Thermal Expansion

Property	Value	Unit	Test standard
Thermal Expansion Coefficient	0.9	10 ⁻⁴ /K	ISO 11359

Insulation Properties

Property	Value	Unit	Test standard
Dielectric Strength	25	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹²	Ω·cm	IEC 60093
Dielectric Constant (1 MHz)	3.7	-	IEC 60250
Dielectric Constant (100 Hz)	3.9	-	IEC 60250
Dielectric loss factor (1 MHz)	0.0	-	IEC 60250
Dielectric loss factor (100 Hz)	0.0	-	IEC 60250

Static spread

Property	Value	Unit	Test standard
Surface Resistivity	10 ¹³	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112

Fire Classification

Property	Value	Unit	Test standard
Flammability Classification (UL 94)	3		UL 94