

Datasheet AE900PE



Designed for the demand of sliding applications and is used in mechanical systems and appliance engineering. It can also be used for structural parts. AE900PE can resist high loads. Due to its outstanding tribological properties they have a wear resistant with minimal coefficients of friction.

Application

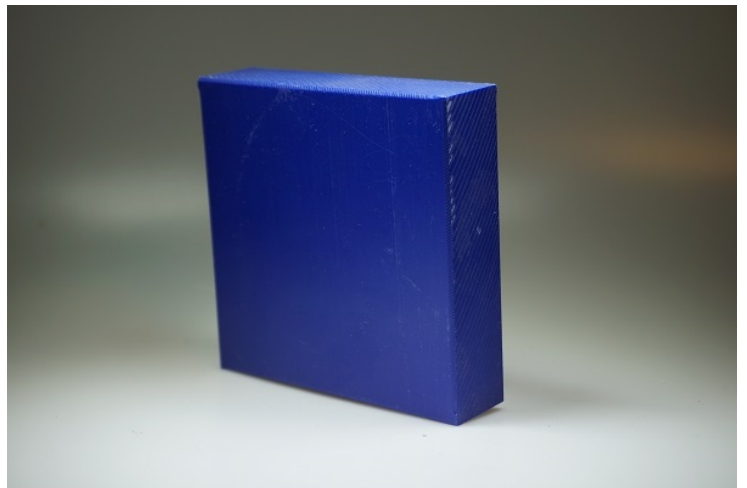
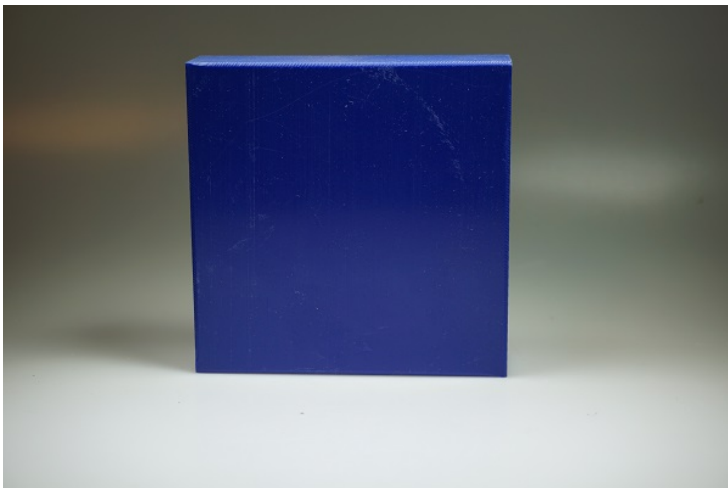
Highly stressed sliding and guide elements

Material

POM-C with PE.

Availability

	Value	Unit
Rod diameters	6-150	mm
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	3000	mm
Sheet thickness	8-100	mm
Sheet size	1000x2000	mm



AE900PE - Specifications

Physical properties

	Test standard	Value	Unit
Density		1,34	g/cm ³
Thermal conductivity		on request	
Specific heat capacity		on request	
Moisture absorption at 23°C, 50% RH	ISO 62	0,2	%
Water absorption at 23 °C	ISO 62	0,8	%
Flammability	UL 94	HB	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	40	MPa
Hardness	ISO 868	77	SHORE-D
Yield stress	ISO 527	40	MPa
Elongation at break	ISO 527	7	%
Modulus of elasticity in tension	ISO 527	2100	MPa
Bending modulus		on request	
Flexural strength		on request	
Charpy impact strength +23°C	ISO 179/1eU	17	kJ/m ²
Charpy notched impact strength +23°C	ISO/1eA	2,5	kJ/m ²
Ball indentation hardness		on request	
Compressive modulus		on request	

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-50	°C
Max. working temperature		80	°C
Intermittent working temperature		100	°C
Heat distortion temperature		on request	
Melting temperature		on request	
Glass transition temperature	ISO 3146	-60	°C
Thermal coefficient of linear expansion	DIN 53752	14	1/K.10-5

Friction properties

	Test standard	Value	Unit
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Electrical properties

	Test standard	Value	Unit
Dielectric constant		on request	
Dielectric loss factor		on request	
Dielectric strength		on request	

Electrical properties

Dielectric constant at 1MHZ	IEC 250	4,4	[-]
Volume resistivity	IEC 93	10^{13}	$\Omega \cdot \text{cm}$
Surface resistivity	IEC 93	10^{13}	Ω
Resistance to tracking (CTI)		on request	

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