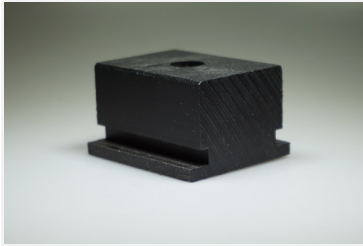


Datasheet AE250BL



AE250BL is the hardest and most rigid type of extruded Nylon. It's high temperature resistance and has a high tensile strength. AE250BL is high resistance to the most organic solvents, oils, greases, fuels and the most alkalis.

Application

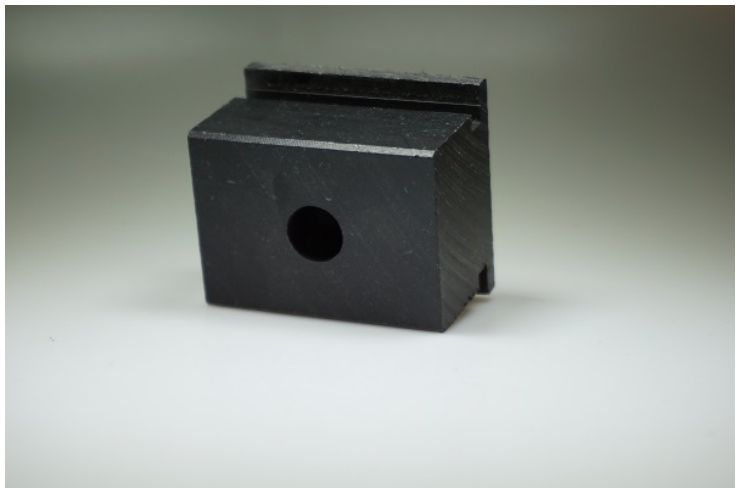
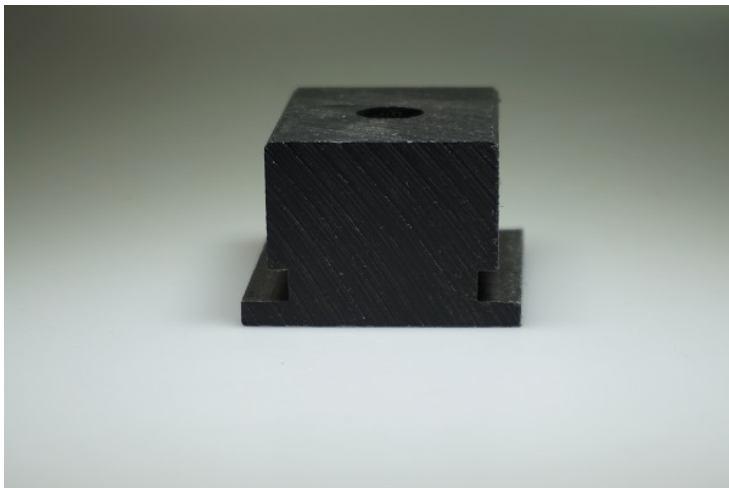
Parts exposed to mechanical stress and strain under elevated temperatures.

Material

Polyamide 6.6 black

Availability

	Value	Unit
Rod diameters	6-150	mm
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	3000	mm
Sheet thickness	aug-60	mm
Sheet size	610x3000	mm



AE250BL - Specifications

Physical properties

	Test standard	Value	Unit
Density		1,14	g/cm ³
Thermal conductivity	Method A	0,3	W/m°K
Specific heat capacity	IEC 1006	1,6	J/g.K
Moisture absorption at 23°C, 50% RH	ISO 62	2,7	%
Water absorption at 23 °C	ISO 62	8,5	%
Flammability	UL 94	HB	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	80	MPa
Hardness	ISO 868	82	SHORE-D
Yield stress	ISO 527	86	MPa
Elongation at break	ISO 527	>50	%
Modulus of elasticity in tension	ISO 527	3300	MPa
Bending modulus	Flexural test	3200	MPa
Flexural strength	ISO 178	120	MPa
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m ²
Charpy notched impact strength +23°C	ISO/1eA	7	kJ/m ²
Ball indentation hardness	ISO 2039-1	155	N/mm ²
Compressive modulus	ISO 604	2600	MPa

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-30	°C
Max. working temperature		90	°C
Intermittent working temperature		160	°C
Heat distortion temperature	Method A ISO 75	80	°C
Melting temperature	ISO 3146	260	°C
Glass transition temperature	ISO 3146	60	°C
Thermal coefficient of linear expansion	DIN 53752	8	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	IEC 243	25	KV/mm

Electrical properties

Dielectric constant at 1MHZ	IEC 250	3,3	[-]
Volume resistivity	IEC 93	10 ¹³	Ω.cm
Surface resistivity	IEC 93	10 ¹²	Ω
Resistance to tracking (CTI)		on request	
Dissipation factor 1 MHz	IEC 250	0,02	[-]