

Datasheet AE250GF30



AE250GF30 Gives an increased compressive strength and rigidity, stiffness, creep resistance and dimensional stability while retaining good wear resistance. It can be used when improved load capacity or better frictional characteristics are requested. It also allows higher maximal service temperatures.

Application

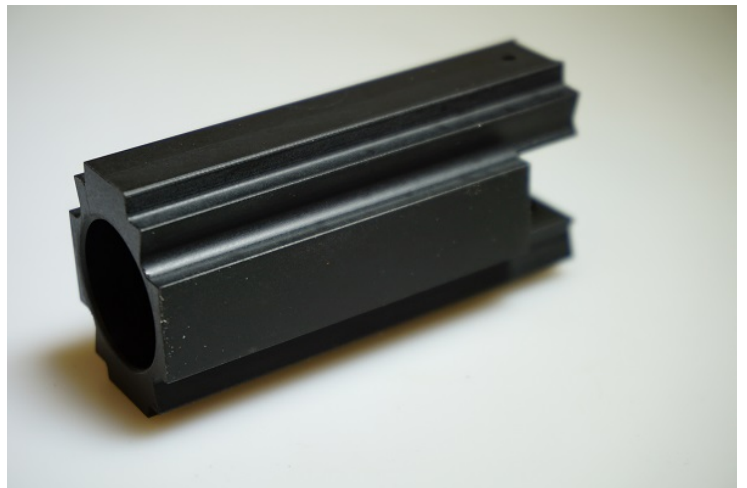
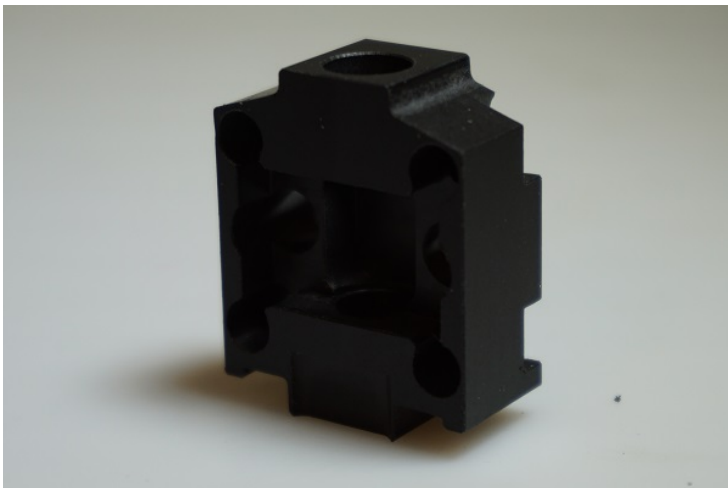
Transport and conveyer, mechanical and automotive engineering, precision engineering, paper and packaging processing machinery.

Material

Polyamide 6.6 with 30% glass fibers.

Availability

	Value	Unit
Rod diameters	6-160	mm
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	3000	mm
Sheet thickness	8-100	mm
Sheet size	610-3000	mm



AE250GF30 - Specifications

Physical properties

	Test standard	Value	Unit
Density		1,35	g/cm ³
Thermal conductivity	Method A	0,27	W/m ^{°K}
Specific heat capacity	IEC 1006	1,5	J/g.K
Moisture absorption at 23°C, 50% RH	ISO 62	1,5	%
Water absorption at 23 °C	ISO 62	5,5	%
Flammability	UL 94	HB	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	110	MPa
Hardness	ISO 868	85	SHORE-D
Yield stress		on request	
Elongation at break	ISO 527	8	%
Modulus of elasticity in tension	ISO 527	5500	MPa
Bending modulus	Flexural test	5300	MPa
Flexural strength	ISO 178	170	MPa
Charpy impact strength +23°C	ISO 179/1eU	37	kJ/m ²
Charpy notched impact strength +23°C	ISO/1eA	5,8	kJ/m ²
Ball indentation hardness	ISO 2039-1	252	N/mm ²
Compressive modulus	ISO 604	3500	MPa

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-20	°C
Max. working temperature		130	°C
Intermittent working temperature		200	°C
Heat distortion temperature	Method A ISO 75	150	°C
Melting temperature	ISO 3146	260	°C
Thermal coefficient of linear expansion	DIN 53752	5	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	30	KV/mm
Dielectric constant at 1MHZ		on request	

Electrical properties

Volume resistivity	IEC 93	$> 10^{12}$	$\Omega \cdot \text{cm}$
Surface resistivity	IEC 93	10^{11}	Ω
Resistance to tracking (CTI)	DIN EN 60112	475	[-]

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