

Datasheet

Description:

AKROMID® B28 GM 10/20 1 LA black (4790) is a 10% glass fibre reinforced, 20% glass bead filled, heat stabilised, laser markable, easy flowing polyamide 6 with good surface and slight tendency to warp.

Applications

Housings, handles and switches in the automotive- and electrical industry

Typical values	Test specification	Method	Unit	Value	
				d.a.m.	moist.*

Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	5700	3000
Stress at break	5 mm/min	ISO 527-2	MPa	110	60
Strain at break	5 mm/min	ISO 527-2	%	2,6	10
Flexural modulus	2 mm/min	ISO 178	MPa	5000	
Flexural strength	2 mm/min	ISO 178	MPa	170	
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	30	80
Charpy impact strength	-30°C	ISO 179-1/1eU	kJ/m ²	30	
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	4	7
Charpy notched impact strength	-30°C	ISO 179-1/1eA	kJ/m ²	4	

Electrical Properties

Surface resistivity		b.o. IEC 60093	Ohm	1,0E+5	
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Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	222	
Temp. of deflection under load HDT/A	1,8 MPa	ISO 75	°C	200	

Flammability

Wall thickness			mm	0,4	0,8	1,6	2,0	3,2
Flammability		UL 94	class			HB		
GWFI		IEC 60695-2-12	°C			650		
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302				+		

General Properties

Density	23°C	ISO 1183	g/cm ³	1,35	
Content reinforcement/Content Filler		ISO 1172	%	30	
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	2,2	

Processing

Flowability	7 x 3,5 mm & **	AKRO	mm	900	
Molding shrinkage	flow	ISO 294-4	%	0,5	
Molding shrinkage	transverse	ISO 294-4	%	0,9	

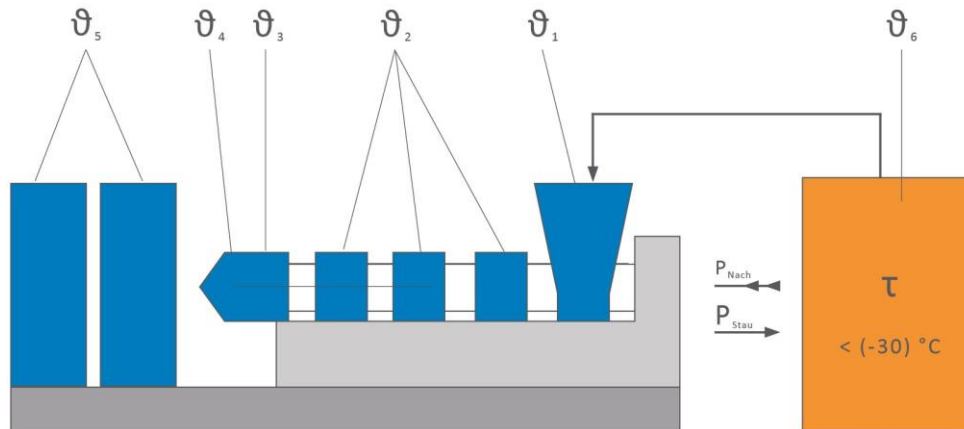
b.o.: based on

* = specimen acc. ISO 1110 stored

** = mould temperature: 80°C, melt temperature: 270°C, injection pressure: 750 bar

Continuation

Processing recommendations



ϑ_6	Drying time	h	0 - 4
ϑ_6	Drying temperature	°C	80
	Processing moisture	%	0,02 - 0,1
ϑ_1	Feed section	°C	60 - 80
ϑ_2	Section 1 - Section 4	°C	240 - 290
ϑ_3	Nozzle	°C	260 - 300
ϑ_4	Melt	°C	270 - 290
ϑ_5	Mould	°C	80 - 100
P_{Nach}	Holding pressure, spec.	bar	300 - 800
P_{Stau}	Back pressure, spez.	bar	50 - 150
	Injection speed		medium to high
	Screw speed	m/min	8 - 15

The listed values are recommendations. Higher values should be used for higher glass loadings. We recommend only de-humidifying or vacuum dryers. Extensive drying can cause filling problems and surface defects.