

Preliminary Datasheet

Description:

AKROMID® B28 GF 50 1 GIT black (4732) is a 50% glass fibre reinforced, heat stabilised, easy flowing polyamide 6 with very high stiffness and strength for gas injection technology.

Applications

Engineering parts, which are produced by gas injection technology. Furthermore B28 GF 50 1 GIT black (4732) can be used for standard injection moulding for demanding surface quality.

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

Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	16700	10500
Stress at break	5 mm/min	ISO 527-2	MPa	235	150
Strain at break	5 mm/min	ISO 527-2	%	3	4,5
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	105	105
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	20	25

Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	220
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Flammability

Wall thickness			mm	0,4	0,8	1,6	2,0	3,2
Flammability		UL 94	class		HB			
Burning rate (< 100 mm/min)	> 1 mm thickness	FMVSS 302						+

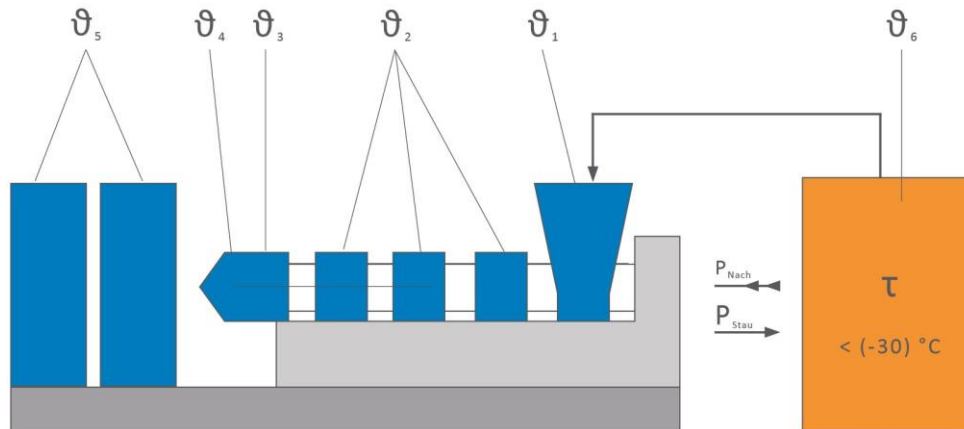
General Properties

Density	23°C	ISO 1183	g/cm ³	1,55
Content reinforcement/Content Filler		ISO 1172	%	50
Humidity absorption	70°C, 62% r.h.	ISO 1110	%	1,65

* = specimen acc. ISO 1110 stored

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.