

Datasheet

Description:

AKROMID® A28 GF 50 1 GIT black (5029) is a 50% glass fibre reinforced, heat stabilised, easy flowing polyamide 6.6 with high stiffness and strength, for gas injection technology.

Applications

Engineering parts, which are produced by gas injection technology. Furthermore AKROMID® A28 GF 50 1 GIT black (5029) can be used for standard injection moulding for demanding surface quality.

Typical values	Test specification	Method	Unit	Value d.a.m.
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Mechanical Properties

Tensile modulus	1 mm/min	ISO 527-2	MPa	17500
Stress at break	5 mm/min	ISO 527-2	MPa	270
Strain at break	5 mm/min	ISO 527-2	%	3
Charpy impact strength	23°C	ISO 179-1/1eU	kJ/m ²	100
Charpy notched impact strength	23°C	ISO 179-1/1eA	kJ/m ²	20

Thermal Properties

Melting temperature	DSC, 10K/min	DIN EN 11357-1	°C	260
Coeff. of linear therm. expansion, parallel	23°C - 80°C	ISO 11359-1/2	1,0E-4/K	0,15
Coeff. of linear therm. expansion, normal	23°C - 80°C	ISO 11359-1/2	1,0E-4/K	0,78

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

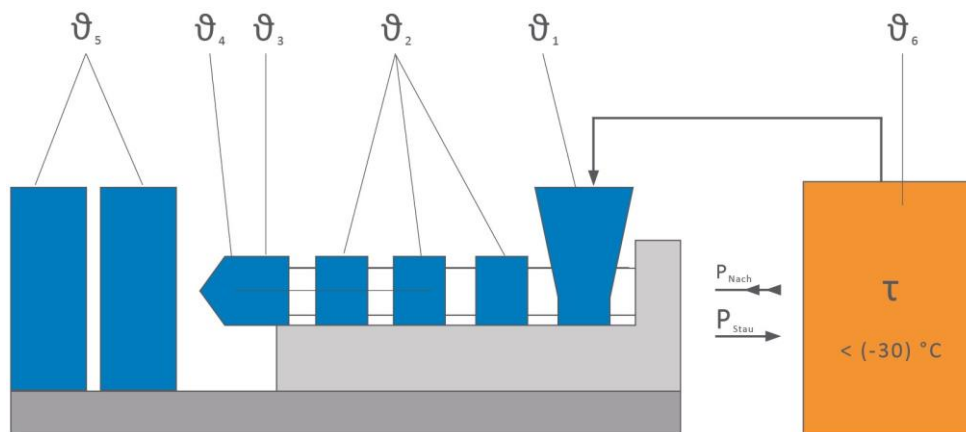
Density	23°C	ISO 1183	g/cm ³	1,57
Content reinforcement/Content Filler		ISO 1172	%	50

Processing

Molding shrinkage	flow	ISO 294-4	%	0,1 - 0,3
Molding shrinkage	transverse	ISO 294-4	%	0,5 - 0,7

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	260 - 300
ϑ_3	Nozzle	°C	270 - 310
ϑ_4	Melt	°C	280 - 300
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.