

TECHNICAL DATA SHEET

TECHNYL C 216 V30 BL 2234 CF

TECHNYL C 216 V30 BL 2234 CF is a polyamide 6, reinforced with 30% of glass fibre, for injection moulding. This grade has good mechanical properties and offering an excellent combination between thermal and mechanical properties.

General

Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	UL-Yellow Card	EC 1907/2006 (REACH)
Applications	Power Tool & Garden Equipment General Purpose	Sport
Colors available	Black Grey	Natural
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF30
ISO 16396 designation	PA6,GF30,M1,S14-090

	Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.36
Water absorption	24 hr, 23°C	ISO 62	%	1.1

Mechanical properties

dam / cond.*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9600 / 6400
Stress at break		ISO 527-1/-2	MPa	145 / 94
Strain at break		ISO 527-1/-2	%	2.1 / 3.7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7000 / 4600
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	205 / 135
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	25 / 40

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	218
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → QMFZ2.E44716			
Flammability, 1.5 mm	1.5 mm	UL 94		HB
*: conditioned according to ISO 1110				

Processing conditions

Drying temperature/time	80 °C			
Suggested max moisture	0.2 %			
Rear temperature	230 - 235 °C			
Middle temperature	235 - 240 °C			
Front temperature	240 - 250 °C			
Recommended mould temperature	60 - 90 °C			

Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 / 1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 / 1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.

Disclaimer

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