



Material Datasheet

PEEK Bearing Grade BG 1130 Extruded material

PDS nr.: PDS-IM-207, edition: 13/08/2018
Filler content: 30% Carbon fiber, Color: Dark Grey/Black
Test sample: Extruded material, ø30mm
QC responsible: Ruben Denteneer

Density	ISO 1183 (23°C)	1,41	gr/cm ³
Extrusion direction test values			
Tensile Strength	ISO 527 (23°C)	130	N/mm ²
Tensile modulus	ISO 527 (23°C)	7.700	N/mm ²
Elongation @ break	ISO 527 (23°C)	3,8 - 5,0	%
Compressive strength at 1% deformation		49	N/mm ²
Charpy impact strength	ISO 179/1eU	35	kJ/m ² (unnotched)
Charpy impact strength	ISO 179/1eA	4	kJ/m ² (notched)
Shore D hardness		84	
Min. continuous operating temperature		-30	°C
Max. continuous operating temperature		260	°C
Max. operating temp.		300	°C
Thermal expansion up to 150°C		2,50	1/K10 ⁻⁵
Thermal conductivity		0,92	W/m/°C
Water absorption	ISO 62 (50%RH, 23°C)	0,14	%
Coëfficiënt of friction at steel (Dynamic – 23°C)		0,33	

The values in this datasheet are measured on internally made test samples. These are worth full indications, however not guaranteed values.