POM-C CELCON® M25

POLYACETAL COPOLYMER CELCON® M25

Material description

POM-C Celcon® M25 is a highly crystalline thermoplastic with very good sliding properties and high abrasion resistance. This construction material has an ideal combination of strength, rigidity and toughness. Its excellent impact strength even at temperatures down to -40°C, chemical resistance, high dimensional stability and low moisture absorption are coupled with excellent machinability.

Conformities

RoHS, REACH

Physical properties	Test method	Value	Unit
Density	DIN EN ISO 1183-1	1.41	g/cm3
Water absorbtion	DIN EN ISO 62	0.2	%
Sliding friction		◑	
Abrasion resistance		◕	

Mechanical properties	Test method	Value	Unit
Yield stress	DIN EN ISO 527	67	MPa
Elongation at break	DIN EN ISO 527	30	%
Tensile modulus of elasticity	DIN EN ISO 527	2800	MPa
Notched impact strength	DIN EN ISO 527	6	kJ/m2

Thermal properties	Test method	Value	Unit
Thermal conductivity	DIN 52612-2	0.31	W/(m*K)
Heat capacity	DIN 52612-1	1.5	kJ/(kg*K)
Coefficient of thermal expansion	DIN 53752	110	10^{-6*K}-1
Operating temperature short term		140	°C
Operating temperature long term		-50 bis 100	°C
Heat deflection temperature	DIN EN ISO 75 / A	110	°C
Flammability	UL 94, 3 mm	HB	

Electrical properties	Test method	Value	Unit
Volume resistivity	IEC 60093	10^{13}	Ω * cm
Surface resistivity	IEC 60093	10^{13}	Ω * cm
Dielectric strength	IEC 60243	25	kV/mm
Comparative tracking index (CTI)	IEC 60112	600	CTI

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