

POM-C CELCON® M25



POLYACETAL COPOLYMER CELCON® M25

Material description

POM-C MG 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/cm ³
Water absorption	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/m ²
Ball indentation hardness	DIN EN ISO 2039-1	150	MPa

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

These technical data have been determined as average values by our suppliers from many individual measurements. In all measurements, the test specimens were tested in the dry state. We pass on the data with reservation. The table does not claim to be complete or correct. Material technology is subject to constant further development. No rights or guarantees can be derived from it. Own tests are necessary because the environmental and operating conditions (humidity, temperature, mechanical forces, radiation and chemicals, etc.) set limits in the application.