

Technical datasheet

POM-C ELS black

(Polyoxymethylene copolymer ELS-conductive)

Example of application
› mechanical engineering; bearing components; blade wheels

Advantages	Disadvantages
› excellent machinability and good anti-friction properties › high viscosity › electrically conductive	› poor adhesion and paintability › poor acid resistance

Basic information	Specification
Format	round material: 30 mm up to 80 mm available in 3 m length sheets: 10 up to 60 mm available in 3 m x 0.62 m length

Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.40	g/cm ³	ISO 1183
Moisture ingress	0.25	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	40	MPa	DIN EN ISO 527
Elongation at break	30	%	DIN EN ISO 527
E-Module	1.900	MPa	DIN EN ISO 527
Notch toughness	5.0	kJ/m ²	ISO 179
Rochwellhardness	100	MPa	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	n.sp.	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	1.3	K ⁻¹ · 10 ⁻⁴	DIN 53752
	2.6	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, long-term	100	°C	
Max. operating temperature, short-term	140	°C	
Min. operating temperature, long-term	-20	°C	

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	5 x 10 ³	Ω·cm	DIN IEC 60093
Outer surface coefficient	≤ 10 ⁵	Ω	DIN IEC 60093
Puncture resistance	n.sp.	kV/mm	DIN EN 60243

Legend
n.sp. = not specified

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.

*Higher specification on request.

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