

# ROLEC Gehäuse-Systeme GmbH

## Polyoxymethylene (POM)

### Mechanical properties

Stress at yield	ISO 527	65	MPa
Elongation at break	ISO 527	27	%
Tensile modulus	ISO 527	2700	MPa
Ball pressure hardness	ISO 2039-1	145	MPa
Standard for ball pressure hardness		H358/30	
Hardness Shore (A/D) or Rockwell (R/L/M)	ISO 868, ISO 2039-2	D81	-
Izod notched impact strength at 23 °C	ISO 180/1A	5,5	KJ/m <sup>2</sup>
Charpy notched impact strength at 23 °C	ISO 179/1eA	6,0	KJ/m <sup>2</sup>

### Electrical properties

Dielectric constant at 50 Hz	IEC 60250	3,8	-
Dielectric constant at 1 MHz	IEC 60250	3,8	-
Dissipation factor at 50 Hz	IEC 60250	10	1E-4
Dissipation factor at 1 MHz	IEC 60250	50	1E-4
Dielectric strength	IEC 60243-1	40	kV/mm
Thickness for electric strength		1,0	mm
Volume resistivity	IEC 60093	10 <sup>14</sup>	Ohm · m
Surface resistivity	IEC 60093	10 <sup>14</sup>	Ohm

### Thermal properties

Thermal conductance	DIN 52 612	0,31	W/K m
Linear thermal expansion along/cross to direction of flow	ISO 11359	110	10 <sup>-6</sup> /K
Melting point or glass transition temp.	ISO 11357	167	°C
Heat distortion temperature A	ISO 75 HDT/A (1.8 MPa)	105	°C
Short time use temperature		140	°C
Continuous use temperature		100	°C

### Other properties

Humidity absorption at 23°C/50%	ISO 62	0,20	%
Flammability UL 94	IEC 60695-11-10	HB	-