

## Datasheet

# RS PRO POM-H Black Rod 20mm Diameter x 1000mm long

Stock No: 197-4277



### Specifications:

Chemical designation	POM-H (Polyacetal (Homopolymer))
Colour	Black
Density	1.43 g/cm <sup>3</sup>
Filler(s)	None

## Technical Specifications:

Mechanical Properties	Parameter	Value	Unit	Standard/Norm
Modulus of elasticity (tensile test)	1mm/min	3600	MPa	DIN EN ISO 527-2
Tensile strength	50mm/min	80	MPa	DIN EN ISO 527-2
Tensile strength at yield	50mm/min	80	MPa	DIN EN ISO 527-2
Elongation at yield	50mm/min	32	%	DIN EN ISO 527-2
Elongation at break	50mm/min	43	%	DIN EN ISO 527-2
Flexural strength	2mm/min, 10N	106	MPa	DIN EN ISO 178
Modulus of elasticity (flexural test)	2mm/min, 10N	3600	MPa	DIN EN ISO 178
Compressive strength	1% / 2%; 5mm/min, 10N	22 / 38	MPa	EN ISO 604
Compression modulus	5mm/min, 10N	2800	MPa	EN ISO 604
Impact strength (Charpy)	max. 7.5J	n.b.	kJ/m2	DIN EN ISO 179-1eU
Notched impact strength (Charpy)	max. 7.5J	14	kJ/m2	DIN EN ISO 179-1eA
Ball indentation hardness		185	MPa	ISO 2039-1

Thermal Properties	Parameter	Value	Unit	Standard/Norm
Glass transition temperature		-60	°C	DIN 53765
Melting temperature		182	°C	DIN 53765
Service temperature	Short term	150	°C	
Service temperature	Long term	110	°C	
Thermal expansion (CLTE)	23-60°C, long	11	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2
Thermal expansion (CLTE)	23-100°C, long	11	10 <sup>-5</sup> K <sup>-1</sup>	DIN EN ISO 11359-1;2
Specific heat		1.3	J/(g*K)	ISO 22007-4:2008
Thermal conductivity		0.43	W/(K*m)	ISO 22007-4:2008

Electrical Properties	Parameter	Value	Unit	Standard/Norm
Specific surface resistance	Silver electrode, 23°C, 12% r.h.	10 <sup>14</sup>	W	DIN IEC 60093
Specific volume resistance	Silver electrode, 23°C, 12% r.h.	10 <sup>14</sup>	W*cm	DIN IEC 60093
Dielectric strength	23°C, 50% r.h.	38	kV/mm	ISO 60243-1
Resistance to tracking (CTI)	Platin electrode, 23°C, 50% r.h., solvent A	600	V	DIN EN 60112

Other Properties	Parameter	Value	Unit	Standard/Norm
Water absorption	24h / 96h (23 °C)	0.05 / 0.1	%	DIN EN ISO 62
Resistance to hot water / bases		-		
Resistance to weathering		-		
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10



### **Features & Benefits:**

- **Manufactured using black DuPont™ Delrin® resin**
- **High Strength**
- **Difficult to bond**
- **Good slide and wear properties**
- **Good machinability**
- **Not hot water resistant over 60°C**
- **Good chemical resistance**
- **Easy to polish**

### **Compliances:**

- **ISO 9001 Approved**
- **ROHS**
- **REACH**
- **FDA (batch specific)**
- **EU 10/2011 (batch specific)**
- **Aerospace Approved**