

DPS DYN-RAC125 BK

Acetal (POM) Copolymer
Dynamic Polymer Solutions

Technical Data			
Product Description			
Polyoxymethylene Copolymer, 25 melt black Produced with recycled content			
General			
Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• North America		
Recycled Content	• Yes		
Features	• Copolymer		
Appearance	• Black		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.41	1.41 g/cm³	ASTM D792
73°F (23°C)	1.41 g/cm³	1.41 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	25 g/10 min	25 g/10 min	ASTM D1238 ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	406000 psi	2800 MPa	ISO 527-1/10
Tensile Strength			
Yield ³	9280 psi	64.0 MPa	ASTM D638
Yield	9140 psi	63.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ³	32 %	32 %	ASTM D638
Break	30 %	30 %	ISO 527-2/50
Flexural Modulus ⁴			
--	372000 psi	2560 MPa	ASTM D790
--	399000 psi	2750 MPa	ISO 178
Flexural Strength ⁴			
--	13200 psi	91.1 MPa	ASTM D790
--	11000 psi	76.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.0 ft·lb/in²	4.2 kJ/m²	ISO 179
Notched Izod Impact			
73°F (23°C)	1.6 ft·lb/in	85 J/m	ASTM D256
73°F (23°C)	4.6 ft·lb/in²	9.6 kJ/m²	ISO 180
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	316 °F	158 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	320 °F	160 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	230 °F	110 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	217 °F	103 °C	ISO 75-2/A
Peak Melting Temperature	331 °F	166 °C	ASTM D3418 ISO 3146

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	77 to 104 °F	25 to 40 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	< 0.050 %	< 0.050 %
Processing (Melt) Temp	410 to 464 °F	210 to 240 °C
Mold Temperature	122 to 185 °F	50 to 85 °C
Injection Rate	Slow	Slow
Back Pressure	80.0 to 120 psi	0.552 to 0.827 MPa

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² Typical properties: these are not to be construed as specifications.
- ³ 2.0 in/min (50 mm/min)
- ⁴ 0.20 in/min (5.0 mm/min)

