Model 157



Vishay Spectrol

⁷/₈" (22.2 mm) Precision Industrial Potentiometer, Bushing And Servo Mount Versions, Conductive Plastic



QUICK REFERENCE DATA		
Sensor type	ROTATIONAL, conductive plastic	
Output type	Output by turrets	
Market appliance	Industrial	
Dimensions	⁷ / ₈ " (22.2 mm)	

FEATURES

- High quality
- Rugged one piece metal housing
- Long rotational life
- Wide operating temperature range
- Linearities down to ± 0.25 % special
- · Optional sealed construction (bushing mount only)
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

ELECTRICAL SPECIFICATIONS		
PARAMETER	MIL-PRF-39023 TEST PROCEDURES APPLY	
Resistance	1 kΩ to 100 kΩ	
Resistance Tolerance Special to	± 20 % ± 10 %	
Linearity Special to	± 2.0 % ± 0.25 %	
Temperature Coefficient of Resistance	± 600 ppm/°C	
Power Rating Derated to	1.0 W at 40 °C ambient 0 W at 125 °C	
Electrical Angle	340° ± 4°	
End Voltage	0.5 % maximum	
Dielectric Withstanding	1000 V _{RMS} , 60 Hz	
Insulation Resistance	100 MΩ minimum, 500 V _{DC}	
Output Smoothness	0.1 %	

MECHANICAL SPECIFICATIONS			
PARAMETER			
Weight	0.5 oz. maximum (14 g)		
Rotation	360° (continuous)		
Mount Bearing Type	BUSHING Sleeve bearing	SERVO Ball bearing	
Operating Torque Starting Running	0.30 oz in (21.6 g - cm) 0.25 oz in (18 g - cm)	0.25 oz in (18 g - cm) 0.15 oz in (10.8 g - cm)	
Mechanical Tolerance (in/mm) (maximum)			
Shaft Runout (TIR)	0.002" (0.05 mm)	0.002" (0.05 mm)	
Pilot Dia Runout (TIR)	-	0.002" (0.05 mm)	
Lateral Runout (TIR)	0.005" (0.13 mm)	0.002" (0.05 mm)	
Shaft End Play	0.006" (0.15 mm)	0.005" (0.13 mm)	
Shaft Radial Play	0.003" (0.08 mm)	0.002" (0.05 mm)	

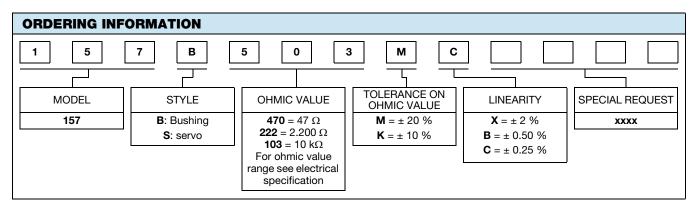
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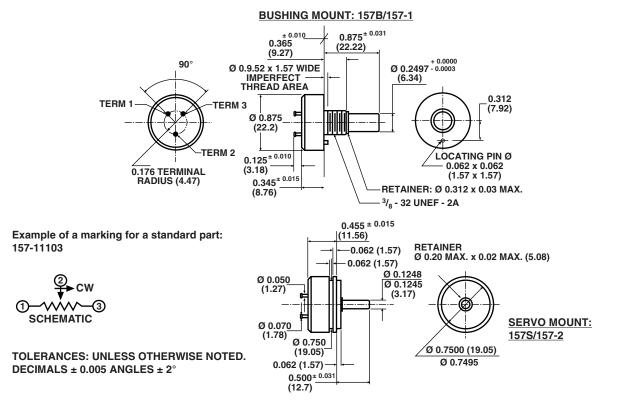
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PART NUMBER DESCRIPTION (for information only)			
157-	2	503	xxxx
MODEL	STYLE	OHMIC VALUE	SPECIAL
B: 1 S: 2			

DIMENSIONS in inches (millimeters)



2



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MATERIAL SPECIFICATIONS		
Housing/Bushing	Aluminum, anodized	
Rear Lid	Ceramic	
Shaft	Stainless steel	
Terminals	Solderable	
Bushing Mount Hardware	Lockwasher, internal tooth steel, nickel plated	
Panel Nut	Brass, nickel plated	

ENVIRONMENTAL SPECIFICATIONS			
Temperature	-55 °C to +125 °C		
Rotational Life	BUSHING 5 million shaft revolutions	SERVO 10 million shaft revolutions	
Moisture Resistant	Yes		
Vibration	15 g 10 to 2000 Hz		
Shock	50 g		
Salt Spray	96 h		
Load Life	900 h		

Note

Nothing stated herein shall be construed as a guarantee of quality or durability.



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