Model 657

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Vishay Spectrol

Industrial Rotary Position Sensor Bushing Mount Type, Conductive Plastic



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QUICK REFERENCE DATA		
Sensor type	ROTATIONAL, conductive plastic	
Output type	Output by turrets	
Market appliance	Industrial	
Dimensions	15.81 mm x 17.46 mm	

FEATURES

- · Fully sealed for high immunity to environmental damage
- Excellent temperature stability
- · Rotational life exceeds 2 million revolutions
- · Low cost and wide range of options
- · Stainless steel shaft
- Shock to 30 g vibration to 15 g at 10 Hz to 2000 Hz

ELECTRICAL SPECIFICATIONS	
PARAMETER	
Standard resistance	1 kΩ to 100 kΩ
Capability range	200 kΩ
Resistance tolerance	± 20 %
Linearity	± 2 %
Power rating	1.0 W at 85 °C
Electrical travel	240° ± 4°
Dielectric withstanding	500 V _{RMS} at 60 Hz minimum
Output smoothness	0.2 % maximum

MECHANICAL SPECIFICATIONS		
PARAMETER		
Bearing type	Sleeve	
Mechanical rotation	250° ± 2°	
Stop strength	10 in - Ib minimum, 11.5 kg/cm	
Starting torque	3.0 o.z - in maximum, 216 g/cm	
Running torque	3.0 oz in maximum, 216 g/cm	

ORDEF	RING INFO	RMATION/DESC	RIPTION				
657	В	F	0		50 kΩ	B10	
MODEL	STYLE	SHAFT OPTIONS	SHAF	F BUSHING OPTION	S	TOTAL RESISTANCE	PACKAGING
			A	B	\sim		
	B: Bushing	R - Round F - Flatted	Shaft length 0 - 0.875" FMS 1 - 0.625" FMS 2 - 1.000" FMS 3 - 1.250" FMS	Bushing length 0.375" FMS 0.250" FMS 0.500" FMS 0.750" FMS	Flat 0.440" 0.315" 0.440" 0.440"		Box of 10 pieces

SAP PART NUMB	ERING GUIDELINES			
657B	R	1	103	BO10
MODEL	END SHAFT	SHAFT AND BUSHING OPTIONS	OHMIC VALUE	PACKAGING
	R: Round	(see above)		

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1 For technical questions, contact: sferprecisionpot@vishay.com Document Number: 57077

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DIMENSIONS in inches (millimeters)



STANDARD RESISTANCE VALUES		
CODE	RESISTANCE (Ω)	
102	1K	
202	2K	
502	5K	
103	10K	
203	20K	
503	50K	
104	100K	

MATERIAL SPECIFICATIONS		
Shaft Stainless steel		
Bushing	Nickel plated brass	
Housing	Thermoplastic	
Element	Conductive plastic on alumina substrate	

ENVIRONMENTAL SPECIFICATIONS		
Rotational life	2 million revolutions	
Vibration	15 <i>g</i> at 10 Hz to 2000 Hz	
Operating temperature	-40 °C to +125 °C	
Storage temperature	-55 °C to +150 °C	
Temperature coefficient	± 600 ppm/°C	
Shock	30 <i>g</i>	
Resistant to solder heat	350 °C for 5 s	
Moisture resistance IP rating	Sealed construction IP67* application to provide protection for wiring terminals	

Note

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

MARKING	
Unit identification	Vishay Spectrol, part number, data code, country of origin and terminal designation. Example of a marking for a standard part: 657-2-0-102

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2 For technical questions, contact: <u>sferprecisionpot@vishav.com</u>



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