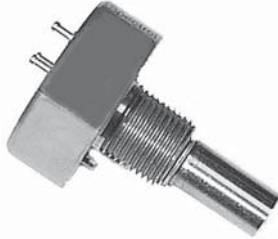




7/8" (22.2 mm) Single Turn Wirewound, Precision Potentiometer



FEATURES

- Rugged, high-quality, all metal housing
- Short length behind panel ¹¹/₃₂" (8.76 mm)
- Ohmic value range: 5 Ω to 40 k Ω
- Extra taps available
- Bushing and servo mount types
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

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

ELECTRICAL SPECIFICATIONS		
PARAMETER		
Total Resistance	5 Ω to 20 k Ω - special to 40 k Ω	
Standard Range		
Tolerance	STANDARD	SPECIAL
50 Ω and Above:	$\pm 3\%$	$\pm 1\%$
Below 50 Ω	$\pm 5\%$	$\pm 3\%$
Linearity (independent)	STANDARD	BEST PRACTICAL
Total Resistance	$\pm 1.0\%$	$\pm 0.75\%$
5 Ω to 100 Ω	$\pm 1.0\%$	$\pm 0.50\%$
100 Ω to 500 Ω	$\pm 0.5\%$	$\pm 0.35\%$
500 Ω and Above		
Noise	100 Ω ENR	
Power Rating (at 40 $^{\circ}$ C ambient)	2 W derated to zero at 125 $^{\circ}$ C	
Electrical Angle	340 $^{\circ}$ \pm 2 $^{\circ}$	
Insulation Resistance	1000 M Ω minimum 500 V _{DC}	
Dielectric Strength	1000 V _{RMS} , 60 Hz	
Absolute Minimum Resistance	Not to exceed linearity times total resistance or 0.5 W whichever is greater	
Minimum Voltage	0.5 % max.	
Temperature Coefficient of Resistance	Refer to standard resistance element data	

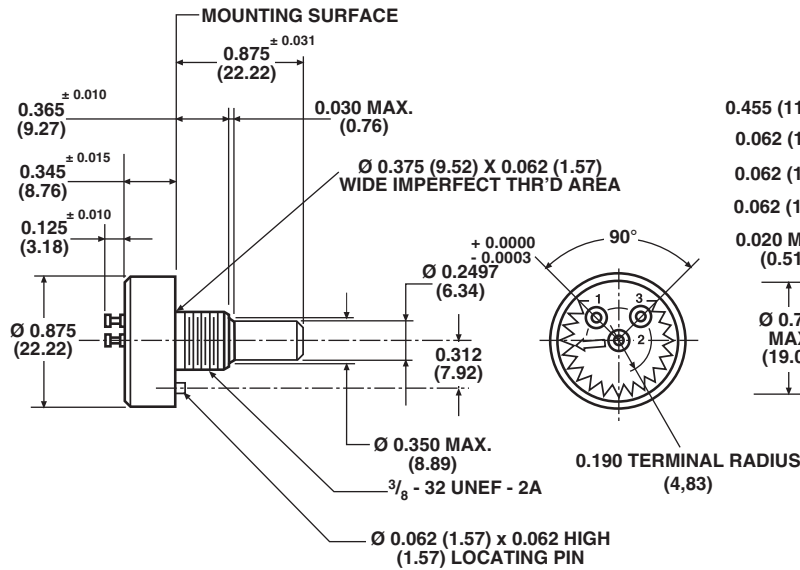
ORDERING INFORMATION									
1	5	2	B	1	0	3			
MODEL		STYLE		OHMIC VALUE			SPECIAL REQUEST		
152		B: bushing S: servo		470 = 47 Ω 222 = 2.200 Ω 103 = 10 k Ω For ohmic value range see electrical specification			xxxx		

PART NUMBER DESCRIPTION (for information only)				
152-	1	1	103	xxxx
MODEL	STYLE	GANGS	OHMIC VALUE	SPECIAL
	B: 1 S: 2			

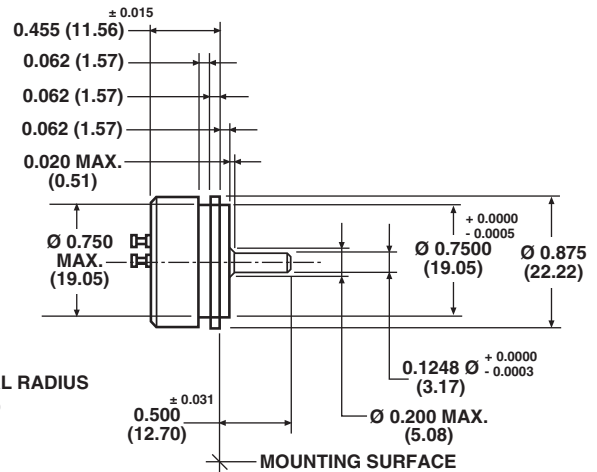


DIMENSIONS in inches (millimeters)

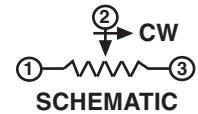
BUSHING MOUNT TYPE: 152B/152-1...



SERVO MOUNT TYPE: 152S/152-2...



TOLERANCES: UNLESS OTHERWISE NOTED.
DECIMALS ± 0.005 ANGLES ± 2°



MECHANICAL SPECIFICATIONS		
PARAMETER		
Rotation	360° continuous	
Bearing Type	Servo mount: Ball bearing Bushing mount: Sleeve bearing	
Torque (maximums)	STARTING	RUNNING
Servo	0.25 oz. - in (18.00 g - cm)	0.15 oz. - in (10.80 g - cm)
Bushing	0.30 oz. - in (21.60 g - cm)	0.25 oz. - in (18.00 g - cm)
Mechanical Runouts (maximums)	BUSHING	SERVO
Shaft Runout	0.002" (0.05 cm)	0.002" (0.05 cm)
Pilot Dia. Runout	-	0.002" (0.05 cm)
Lateral Runout	0.005" (0.13 cm)	0.002" (0.05 cm)
Shaft End Play	0.006" (0.15 cm)	0.005" (0.13 cm)
Shaft Radial Play	0.003" (0.08 cm)	0.002" (0.05 cm)
Weight	0.5 oz. maximum (14.18 g)	



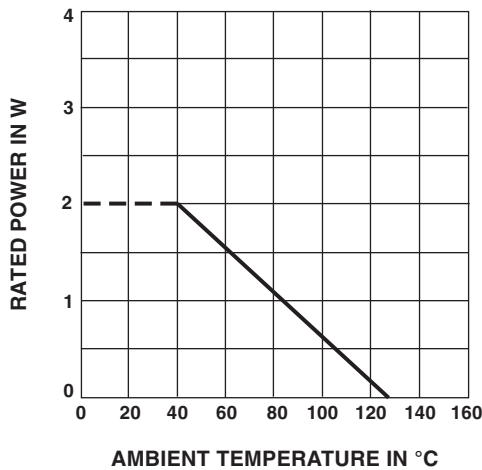
MATERIAL SPECIFICATIONS	
Housing	Aluminum, anodized
Shaft	Stainless steel, non-magnetic non-passivated
Rear Lid	Molded glass filled phenolic
Terminals	Brass, plated for solderability
Bushing Mount Hardware Lockwasher Internal Tooth: Panel Nut:	Steel, nickel plated Brass, nickel plated

ENVIRONMENTAL SPECIFICATIONS	
Vibration	15 g thru 2000 Hz
Shock	50 g
Salt Spray	96 h
Rotational Life Shaft Revolution:	Bushing 1 million Servo 2 million
Load Life	900 h
Operating Temperature Range	-55 °C to +125 °C

Note

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

POWER RATING CHART



MARKING	
Unit Identification	Units shall be marked with Vishay Spectrol name, model number, resistance and tolerance, linearity terminal identification and data code. Applicable test procedures: MIL-R-12934 Example of a marking for a standard part: 152-11202



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