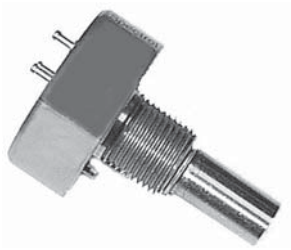
$^{7}/_{8}$" (22.2 mm) Single Turn Wirewound, Precision Potentiometer



FEATURES

- Rugged, high-quality, all metal housing
- Short length behind panel $^{11}/_{32}$" (8.76 mm)
- Ohmic value range: 5 Ω to 40 kΩ
- 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 Standard Range	5 Ω to 20 kΩ - special to 40 kΩ	
Tolerance 50 Ω and Above: Below 50 Ω	**STANDARD** ± 3 % ± 5 %	**SPECIAL** ± 1 % ± 3 %
Linearity (independent) Total Resistance 5 Ω to 100 Ω 100 Ω to 500 Ω 500 Ω and Above	**STANDARD** ± 1.0 % ± 1.0 % ± 0.5 %	**BEST PRACTICAL** ± 0.75 % ± 0.50 % ± 0.35 %
Noise	100 Ω ENR	
Power Rating (at 40 °C ambient)	2 W derated to zero at 125 °C	
Electrical Angle	340° ± 2°	
Insulation Resistance	1000 MΩ 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 kΩ For ohmic value range see electrical specification	**xxxx**

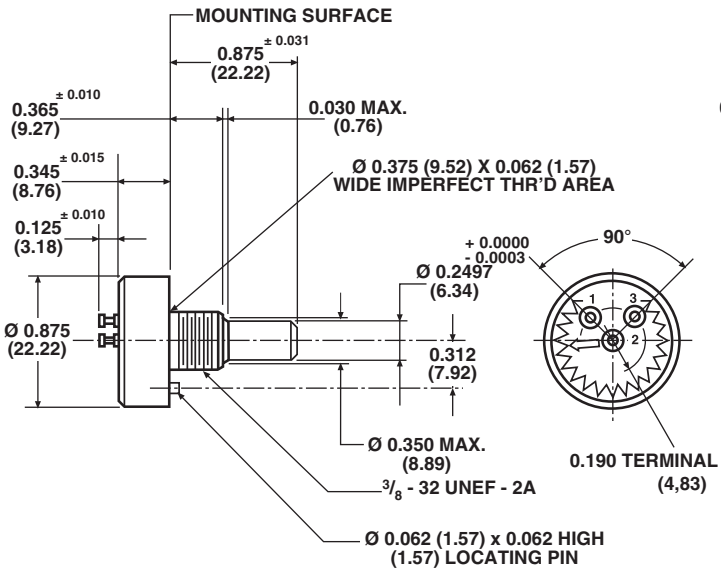
PART NUMBER DESCRIPTION (for information only)

152-	1	1	103	xxxx
MODEL	STYLE	GANGS	OHMIC VALUE	SPECIAL
	B: 1 **S**: 2			

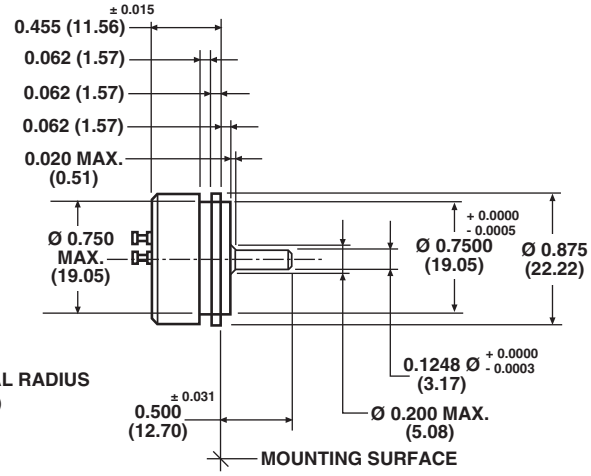
For technical questions, contact: sferprecisionpot@vishay.com

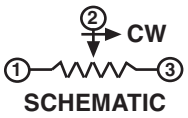
DIMENSIONS in inches (millimeters)

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



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



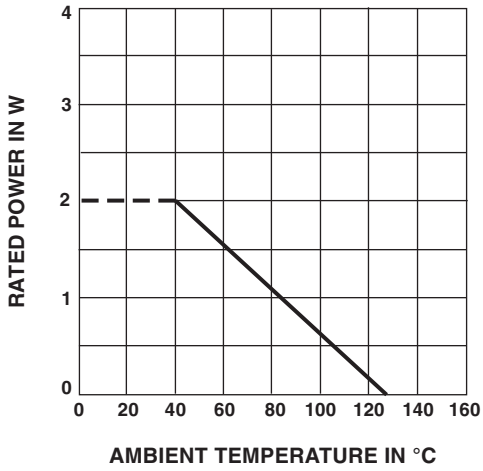


TOLERANCES: UNLESS OTHERWISE NOTED.
DECIMALS ± 0.005 ANGLES ± 2°

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

POWER RATING CHART



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.

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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