

Vishay Spectrol

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



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FEATURES

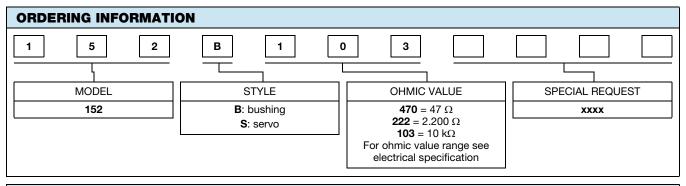
- Rugged, high-quality, all metal housing
- Short length behind panel $^{11}/_{32}$ " (8.76 mm)



- 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

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

PARAMETER		
Total Resistance Standard Range	5 Ω to 20 kΩ -	- special to 40 k Ω
Tolerance 50 Ω and Above: Below 50 Ω	STANDARD ± 3 % ± 5 %	SPECIAL ± 1 % ± 3 %
Linearity (independent) Total Resistance 5Ω to 100Ω 100Ω to 500Ω 500Ω 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 re	esistance element data



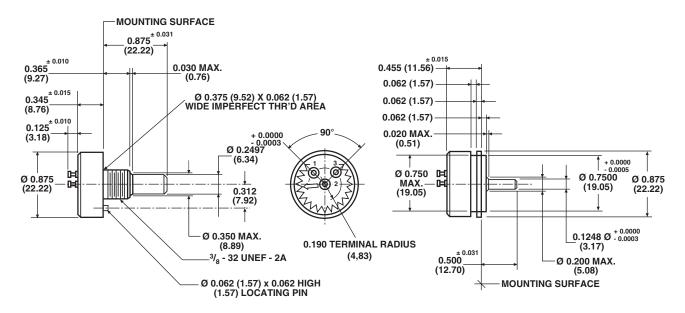
PART NUMBER DESCRIPTION (for information only)				
152-	1	1	103	xxxx
MODEL	STYLE	GANGS	OHMIC VALUE	SPECIAL
	B : 1 S : 2			

Vishay Spectrol

DIMENSIONS in inches (millimeters)

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

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



TOLERANCES: UNLESS OTHERWISE NOTED. DECIMALS \pm 0.005 ANGLES \pm 2°

MECHANICAL SPECIFICATION	IS .		
PARAMETER			
Rotation	360° cc	ontinuous	
Pooring Type	Servo mount: Ball bearing		
Bearing Type	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. maxii	mum (14.18 g)	

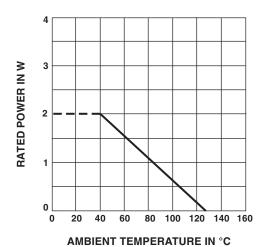


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MATERIAL SPECIFICATIONS		
Housing	Aluminum, anodized	
Shaft	Stainless steel, non-magnetic non-passivated	
Rear Lid	Molded glass filled phenolic	
Terminals	Brass, plated for solderability	
Bushing Mount Hardware Lockwasher Internal Tooth: Panel Nut: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

POWER I	DATING	\sim LLA	DT
PUWER	RAIING	CHA	MI.



ENVIRONMENTAL SPECIFICATIONS		
Vibration	15 <i>g</i> 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



Legal Disclaimer Notice

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