

## 7/8" (22.2 mm) Ten Turn Wirewound Precision Potentiometer with a Plastic Shaft



### FEATURES

- 10 standard resistance values
- Plastic shaft
- Rugged integrated construction
- 0.20 % linearity



ELECTRICAL SPECIFICATIONS	
PARAMETER	
Total Resistance	Range 100 Ω to 100 kΩ, tolerance ± 5 %
Linearity (Independent)	± 0.20 %
Noise	100 Ω ENR maximum
Electrical Angle	3600° +10° - 0°
Power Rating	2.0 W at 70 °C derated to zero at 125 °C
Insulation Resistance	1000 MΩ minimum 500 V <sub>DC</sub>
Dielectric Strength	1000 V <sub>RMS</sub> , 60 Hz
Absolute Minimum Resistance	Not to exceed 0.10 % of total resistance or 1 Ω whichever is greater
Temperature Coefficient	20 ppm/°C (wire only)
End Voltage	0.25 % of total applied voltage maximum

ORDERING INFORMATION/DESCRIPTION				
536	B	10K	BO10	e4
MODEL	MOUNTING	OHMIC VALUE	PACKAGING	LEAD FINISH
	B: Bushing		Box of 10 pieces	

SAP PART NUMBERING GUIDELINES			
536	B	103	B10
MODEL	STYLE	OHMIC VALUE	PACKAGING

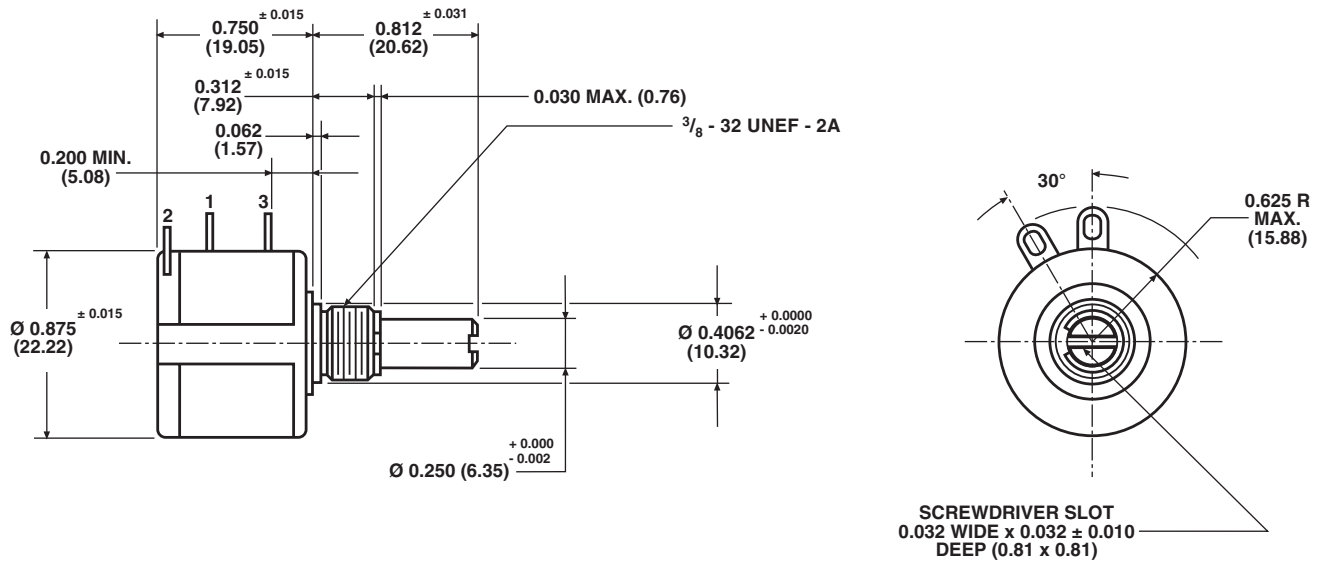


**7/8" (22.2 mm) Ten Turn Wirewound  
Precision Potentiometer with a Plastic Shaft**

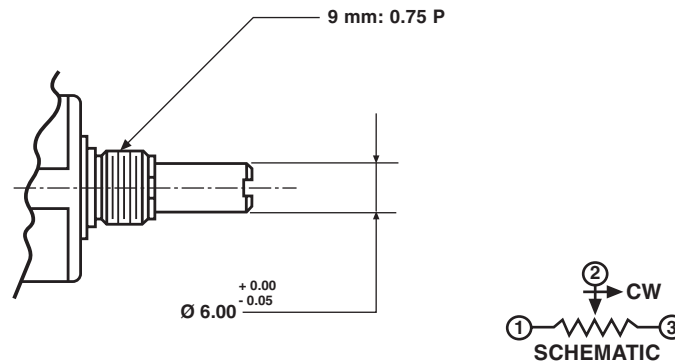
Vishay Spectrol

**DIMENSIONS** in inches (millimeters)

**BUSHING MOUNT**



**METRIC SHAFT/BUSHING THREAD**



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

<b>MECHANICAL SPECIFICATIONS</b>		
<b>PARAMETER</b>		
Rotation	3600° + 10° - 0°	
Torque (Maximums)	<b>STARTING</b> 0.5 oz. - in (36.00 g - cm)	<b>RUNNING</b> 0.4 oz. - in (28.80 g - cm)
Mechanical Runouts		
Shaft (TIR)	0.005" (0.13 cm)	
Pilot Dia. (TIR)	0.003" (0.08 cm)	
Lateral Runout (TIR)	0.005" (0.13 cm)	
Shaft End Play	0.010" (0.25 cm)	
Shaft Radial Play	0.005" (0.13 cm)	
Weight (Maximum)	0.75 oz. (21.26 g)	
Stop Strength	75 oz. - in (static) (5.4 kg - cm)	

# Model 536



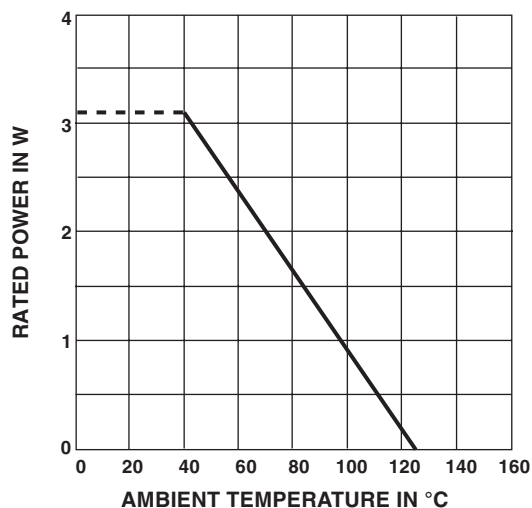
Vishay Spectrol

7/8" (22.2 mm) Ten Turn Wirewound  
Precision Potentiometer with a Plastic Shaft

MATERIAL SPECIFICATIONS	
Front Lid	Stainless steel and nickel plated brass bushing
Housing	Thermoplastic nylon glass filled
Rear Lid	Thermo-glass filled
Shaft	Thermo-glass filled
Terminals	Brass plated for solderability
Mounting Hardware Lockwasher Internal Tooth: Panel Nut:	Steel nickel plated Brass, nickel plated

ENVIRONMENTAL SPECIFICATIONS	
Vibration	15 g thru 2000 Hz
Shock	50 g
Rotational Life	1 million shaft revolutions
Load Life	900 h
Operating Temperature Range	- 55 °C to + 125 °C

## POWER RATING CHART



RESISTANCE ELEMENT DATA				
RESISTANCE VALUES (Ω)	RESOLUTION (%)	OHMS PER TURN	MAXIMUM CURRENT AT 70 °C AMBIENT (mA)	MAXIMUM VOLTAGE ACROSS COIL (V)
100	0.060	0.0603	141.0	14.1
200	0.037	0.0746	100.0	20.0
500	0.031	0.1520	63.2	31.6
1K	0.025	0.2459	44.7	44.7
2K	0.021	0.4113	31.6	63.2
5K	0.016	0.8206	20.0	100.0
10K	0.017	1.7230	14.1	141.0
20K	0.015	3.0160	10.0	200.0
50K	0.009	4.6690	6.32	316.0
100K	0.007	7.4560	4.47	447.0

MARKING	
Unit Identification	Units shall be marked with Vishay Spectrol name and model no, resistance, resistance tolerance, linearity, terminal identification and date code



## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.