



## 7/8" $\phi$ , 10-TURN BUSHING MOUNT POTENTIOMETERS HYBRITRON® ELEMENT

- Conductive plastic-on-wirewound element
- Compact size: 7/8" diameter, 3/4" depth
- Rugged, mechanically locked construction
- Longer rotational life
- High performance at low cost

### OPTIONAL FEATURES

- High shaft torque
- $\pm 5\%$  resistance tolerance
- $\pm 0.1\%$  linearity
- Center and multiple taps
- Front and rear shaft extensions
- Anti rotation lug
- Two sections with common shaft
- Two sections with concentric shafts

STANDARD SPECIFICATIONS	MODEL 3541 7/8" $\phi$
<b>Electrical Characteristics</b>	
Resistance Range	1 K $\Omega$ – 100 K $\Omega$
Resistance Tolerance	$\pm 10\%$
Linearity (Independent) <sup>1</sup>	$\pm 0.25\%$
Resolution	essentially infinite
Effective Electrical Angle	3600° + 10° – 0°
Minimum Voltage	0.2% max.
Output Smoothness	0.05% max.
Power Rating	
70 °C	2.0 W
125 °C	0 W
Second Section (-135 or -468) 70 °C	1.5 W
Dielectric Strength MIL-R-39023	
Sea Level	1000 V ~ min.
Insulation Resistance 500 V =	1000 Meg. $\Omega$ min.
<b>Environmental Characteristics</b>	
Operating Temperature Range	-55 °C to +125 °C
Temperature Coefficient	$\pm 100$ ppm/°C max.
Vibration	MIL-R-39023, 15G
Wiper Bounce	0.1 millisecond max.
Shock	MIL-R-39023, 50G
Wiper Bounce	0.1 millisecond max.
Load Life MIL-R-39023	1000 hours
Resistance Shift	5.0% max.
<b>Mechanical and Physical Characteristics</b>	
Mechanical Angle	3600° + 10° – 0°
Shaft Runout	0.003 in. T.I.R.
Lateral Runout	0.005 in. T.I.R.
Pilot Diameter Runout	0.003 in. T.I.R.
Shaft End Play	0.010 in. T.I.R.
Shaft Radial Play	0.003 in. T.I.R.
Rotational Life, shaft revolutions <sup>1</sup>	4,000,000
Stop Strength	75 oz.-in. min.
Torque	0.5 oz.-in. max.
Weight	approx. 23 g
Terminals	Gold-plated solder lugs
Markings	Manufacturer's name and part number, resistance value and tolerance, Linearity tolerance, wiring diagram, date code

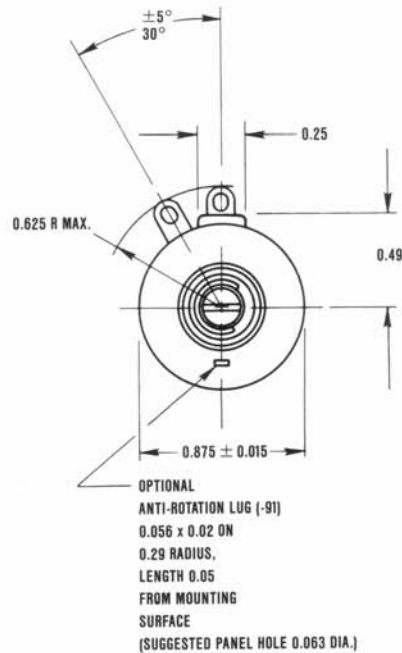
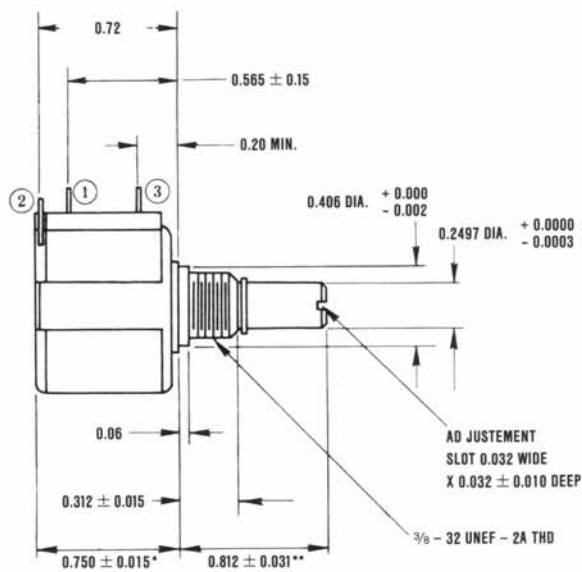
Specifications are subject to change without notice.

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ORDERING INFORMATION		
Resistance $\Omega$	Part Number*	Standard Specification Notes:
1,000	● 3541H-1-102	<sup>1</sup> From 1% to 99% VR Output. <sup>2</sup> Single Unit specification. For price and delivery information, contact your Bourns representative.
2,000	3541H-1-202	
5,000	● 3541H-1-502	
10,000	● 3541H-1-103	
20,000	3541H-1-203	
50,000	3541H-1-503	
100,000	3541H-1-104	

\*The last three digits of the part number represent the resistance value in standard code. ● Preferred resistance values

## DIMENSIONS (INCH)

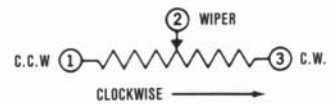


\*ADD 0.745" FOR SECOND SECTION (3541S-135 or 3541S-468)

\*\*ADD 0.5" FOR 0.1248" DIA. INNER (REAR SECTION) CONCENTRIC SHAFT (3541S-468)

NOTE:  
LOCKWASHER & HEX NUT TO BE  
SUPPLIED WITH UNIT.

TOLERANCES: XX = ±0.01  
.XXX = ±0.005 EXCEPT  
WHERE NOTED



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