



BOURNS®

Features

- Bushing mount
- Cost saving; pre-phased
- Highly readable clockface readout
- Easy mounting

3600 - 10-Turn Precision Potentiometer

Electrical Characteristics¹

Standard Resistance Range	100 to 100 K ohms
Total Resistance Tolerance	±5 %
Effective Electrical Angle	3600 ° nominal
Absolute Minimum Resistance	1 ohm or 0.1 % maximum (whichever is greater)
Noise	100 ohms ENR maximum
Dielectric Withstanding Voltage (MIL-STD-202, Method 301)	
Sea Level	1,000 VAC minimum
70,000 Feet	400 VAC minimum
Power Rating (Voltage Limited By Power Dissipation or 385 VAC, Whichever is Less)	
+25 °C	1.5 watts
+85 °C	0 watt
Insulation Resistance (500 VDC)	1,000 megohms minimum
Resolution	See recommended part numbers
Accuracy (Correlation of Dial Readout to Voltage Ratio Output)	±0.5 % voltage ratio
Repeatability of Dial Readout	±0.1 % voltage ratio

Environmental Characteristics¹

Operating Temperature Range	+1 °C to +85 °C
Storage Temperature Range	-65 °C to +85 °C
Temperature Coefficient Over Storage Temperature Range	±50 ppm/°C maximum/unit
Vibration	10 G
Wiper Bounce	0.1 millisecond maximum
Total Resistance Shift	±2 % maximum
Voltage Ratio Shift	±0.2 % maximum
Shock	50 G
Wiper Bounce	0.1 millisecond maximum
Total Resistance Shift	±2 % maximum
Voltage Ratio Shift	±0.2 % maximum
Load Life	1,000 hours, 1.5 watts
Total Resistance Shift	±2 % maximum
Rotational Life (No Load)	100,000 shaft revolutions
Total Resistance Shift	±2 % maximum
Moisture Resistance (MIL-STD-202, Method 103, Condition B)	
Total Resistance Shift	±2 % maximum
IP Rating	IP 60

Mechanical Characteristics¹

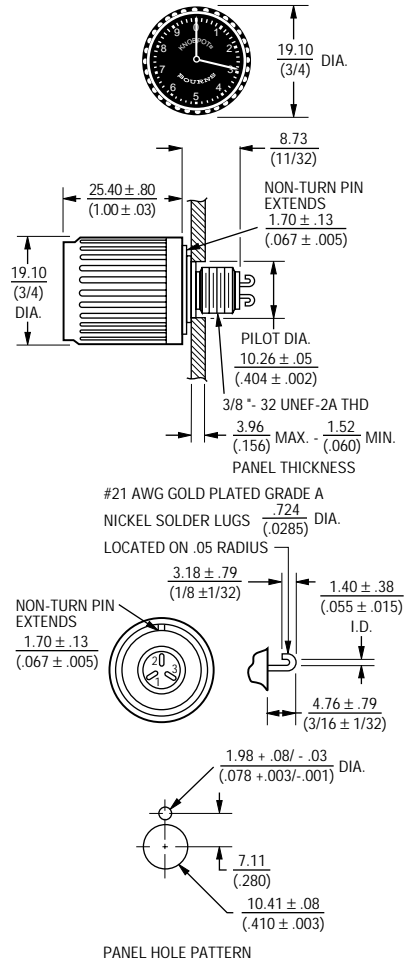
Stop Strength	14 N-cm (20 oz.-in.) minimum
Mechanical Angle	3600 ° +20 °, -0 °
Torque (Starting)	0.21 to 5.65 N-cm (0.3 to 8.0 oz.-in.) maximum
Torque (Running)	5.65 N-cm (8.0 oz.-in.) maximum
Variation	0.71 N-cm (1.0 oz.-in.) maximum
Mounting	170-200 N-cm (15-18 lb.-in.) maximum
Backlash	1.0 ° maximum
Weight	Approximately 17 gm
Terminals	Gold-plated J-Hooks
Soldering Condition	Recommended hand soldering using Sn95/Ag5 no clean solder, 0.025" wire diameter. Maximum temperature 399 °C (750 °F) for 3 seconds. No wash process to be used with no clean flux.
Markings	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, and date code.

¹At room ambient: +25 °C nominal and humidity nominal, except as noted.

Recommended Part Numbers

Part Number	Resistance (Ω)	Resolution (%)
3600S-1-102	1,000	.035
3600S-1-502	5,000	.027
3600S-1-103	10,000	.022

BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.
FOR OTHER OPTIONS CONSULT FACTORY.



TOLERANCES: EXCEPT WHERE NOTED
 DECIMALS: .XX ± $\frac{.25}{(.010)}$, .XXX ± $\frac{.13}{(.005)}$
 FRACTIONS: ±1/64
 DIMENSIONS: $\frac{MM}{(IN.)}$

