



Features

- Snap-in or bushing mount options
- Standard resistance values available
- Digital dial provides excellent readability

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BOURNS®

3610 - 10-Turn Precision Knobpot®

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.....	-25 °C to +85 °C
Temperature Coefficient Over Storage Temperature Range ²	±50 ppm/°C maximum/wire
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).....	50,000 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).....	0.71 to 4.94 N-cm (1.0 to 7.0 oz.-in.) maximum
Torque (Running).....	4.94 N-cm (7.0 oz.-in.) maximum
Variation.....	0.71 N-cm (1.0 oz.-in.) maximum
Backlash.....	1.0 ° maximum
Weight.....	Approximately 20 gm
Terminals.....	Gold-plated J-Hooks
Soldering Condition	
Manual Soldering.....	96.5Sn/3.0Ag/0.5Cu solid wire or no-clean rosin cored wire; 370 °C (700 °F) max. for 3 seconds
Wave Soldering.....	96.5Sn/3.0Ag/0.5Cu solder with no-clean flux; 260 °C (500 °F) max. for 5 seconds
Wash processes.....	Not recommended
Markings.....	Manufacturer's name and part number, resistance value and tolerance, wiring diagram, and date code

¹At room ambient: +25 °C nominal and 50 % relative humidity nominal, except as noted.

Recommended Part Numbers

Part Number	Resistance (Ω)	Resolution (%)
3610S-1-102	1,000	.035
3610S-1-502	5,000	.027
3610S-1-103	10,000	.022

Part Number	Resistance (Ω)	Resolution (%)
3610S-2-102	1,000	.035
3610S-2-502	5,000	.027
3610S-2-103	10,000	.022

BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.

FOR OTHER OPTIONS AND RESISTANCE VALUES, PLEASE CONSULT THE FACTORY.



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

"Knobpot" is a registered trademark of Bourns, Inc.

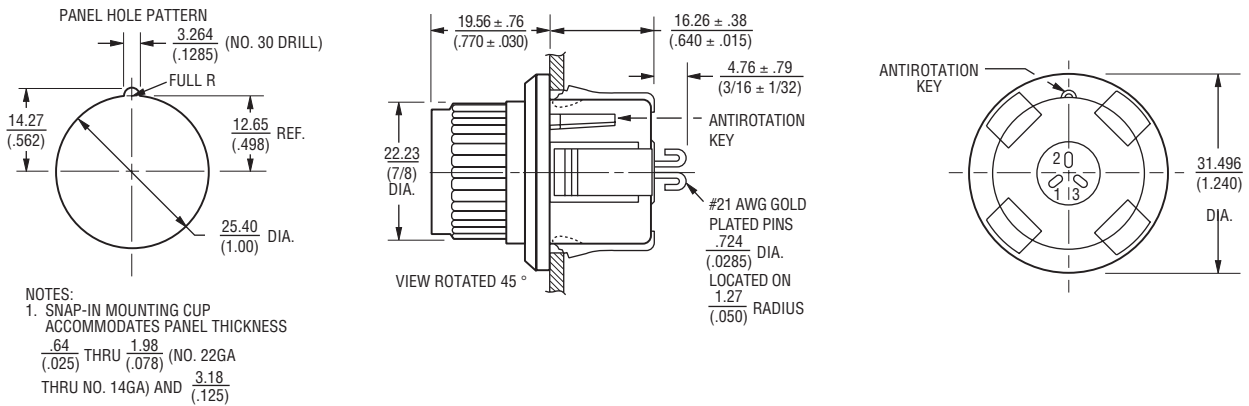
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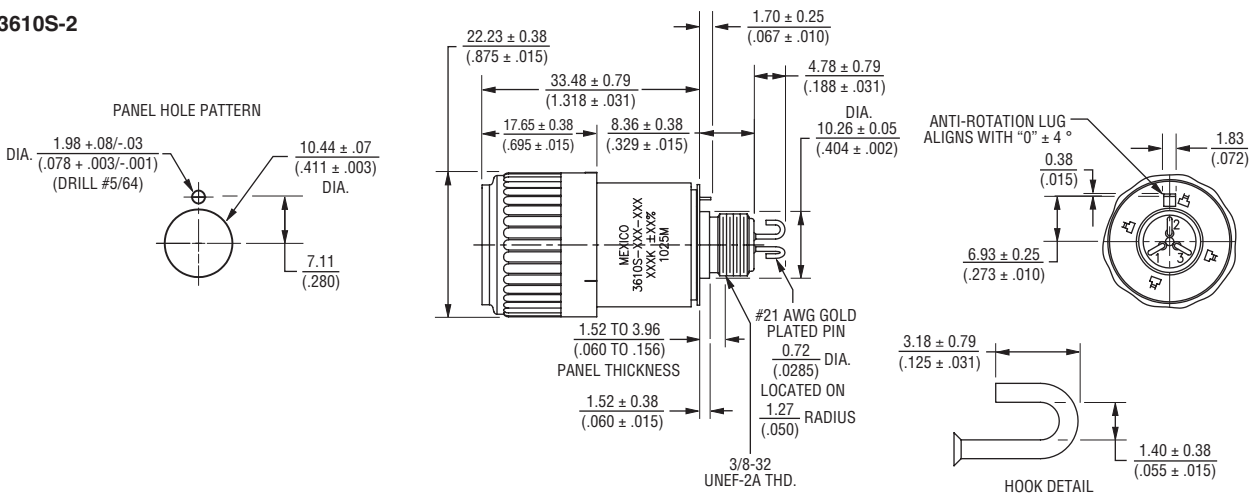
BOURNS®

Product Dimensions

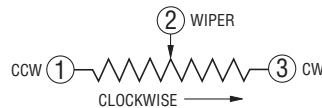
3610S-1



3610S-2



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



REV. 05/22

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