



BOURNS®

Features

- Snap-in mounting
- Space saving - extends only 5/8" behind most panels
- Easy one-hole, snap-in mounting
- Digital dial provides excellent readability

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

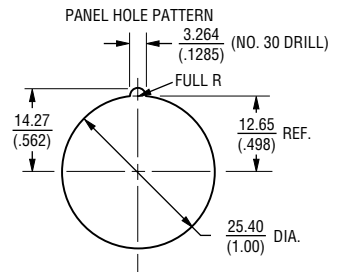
Stop Strength.....	14 N-cm (20 oz.-in.) minimum
Mechanical Angle	3600° +20°, -0°
Torque (Starting).....	0.71 to 4.94 N-cm (1.0 to 7.0 oz.-in.) maximum
Torque (Running).....	4.94 N-cm (7.0 oz.-in.) maximum
Variation	0.71 N-cm (1.0 oz.-in.) maximum
Backlash.....	1.0° maximum
Weight.....	Approximately 20 gm
Terminals	
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, wiring diagram, and date code.

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

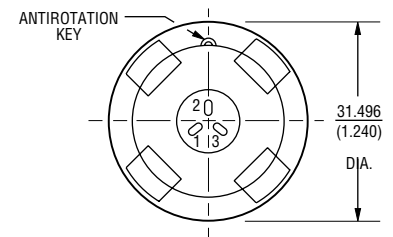
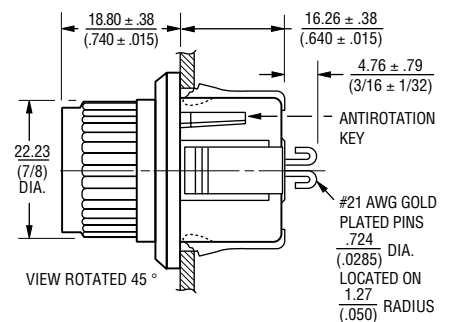
Recommended Part Numbers

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

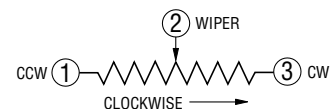
BOLDFACE LISTINGS ARE IN STOCK AND READILY AVAILABLE THROUGH DISTRIBUTION.
FOR OTHER OPTIONS CONSULT FACTORY.



NOTES:
1. SNAP-IN MOUNTING CUP ACCOMMODATES PANEL THICKNESS
 $\frac{.64}{(.025)}$ THRU $\frac{1.98}{(.078)}$ (NO. 22GA)
THRU NO. 14GA) AND $\frac{3.18}{(.125)}$



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



REV. 11/04

"Knobpot" is a registered trademark of Bourns, Inc.
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.