



## 3/4", 1 1/4" Ø, 10-TURN BUSHING MOUNT, CLOCK FACE KNOBPOT® POTENTIOMETERS WIREWOUND ELEMENT

- Integral clockface readout, knob and potentiometer
- Easy two hole mounting
- Cost saving: Pre-phased
- Highly readable clockface readout

| STANDARD SPECIFICATIONS                        | MODEL 3600<br>3/4" Ø                                          | MODEL 3640<br>1 1/4" Ø                                                                           |
|------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Electrical Characteristics</b>              |                                                               |                                                                                                  |
| Resistance Range                               | 100 Ω – 100 KΩ                                                |                                                                                                  |
| Resistance Tolerance                           | ± 5%                                                          | ± 3%                                                                                             |
| Readout Accuracy (Voltage Ratio)               | ± 0.5% all TR values                                          | ± 0.20% 100 Ω – 200 Ω<br>± 0.15% 500 Ω – 5 KΩ<br>± 0.12% 10 KΩ – 20 KΩ<br>± 0.10% 50 KΩ – 100 KΩ |
| Repeatability of Dial Reading                  | ± 0.1% voltage ratio                                          | ± 0.05% voltage ratio                                                                            |
| Effective Electrical Angle                     | 3600° nominal                                                 |                                                                                                  |
| Absolute Minimum Resistance                    | 1.0 Ω or 0.1%, whichever is greater                           |                                                                                                  |
| Noise                                          | 100 Ω ENR max.                                                |                                                                                                  |
| Power Rating                                   | 25°C<br>85°C                                                  | 2.5 W<br>0 W                                                                                     |
| Dielectric Strength                            | MIL-Std.-202                                                  | MIL-R-12934                                                                                      |
| Sea Level                                      | 1000 V ~ min.                                                 | 1000 V ~ min.                                                                                    |
| 70,000 feet                                    | 400 V ~ min.                                                  | 250 V ~ min.                                                                                     |
| Insulation Resistance, 500 V =                 | 1000 Meg. Ω min.                                              |                                                                                                  |
| <b>Environmental Characteristics</b>           |                                                               |                                                                                                  |
| Operating Temperature Range                    | –65°C to +85°C                                                |                                                                                                  |
| Temperature Coefficient of Wire                | 20 ppm/°C max.                                                |                                                                                                  |
| Humidity                                       | MIL-Std.-202, Method 103                                      |                                                                                                  |
| Vibration                                      | MIL-R-12934, 10G                                              |                                                                                                  |
| Wiper Bounce                                   | 0.1 millisecond max.                                          |                                                                                                  |
| Wiper Shift                                    | 0.2% max.                                                     |                                                                                                  |
| Shock                                          | MIL-R-12934, 50G                                              |                                                                                                  |
| Wiper Bounce and Wiper Shift                   | Same as Vibration                                             |                                                                                                  |
| Load Life                                      | MIL-R-12934, 1000 hours                                       |                                                                                                  |
| Resistance Shift                               | 2.0% max.                                                     |                                                                                                  |
| Sand, Dust, Fungus                             | MIL-E-5272                                                    |                                                                                                  |
| Salt Spray                                     | MIL-R-12934                                                   |                                                                                                  |
| <b>Mechanical and Physical Characteristics</b> |                                                               |                                                                                                  |
| Mechanical Angle                               | 3600° + 20° – 0°                                              | 3600° + 10° – 0°                                                                                 |
| Rotational Life                                | 100,000 dial revolutions                                      |                                                                                                  |
| Stop Strength                                  | 20 oz.-in. min.                                               | 48 oz.-in. min.                                                                                  |
| Torque, Starting and Running                   | 1.0 to 5.0 oz.-in.                                            | 1.0 to 10.0 oz.-in.                                                                              |
| Weight                                         | approx. 17 g                                                  | approx. 50 g                                                                                     |
| Terminals                                      | Gold plated solder lugs                                       |                                                                                                  |
| Markings                                       | Manufacturer's name, part number, resistance value, date code |                                                                                                  |

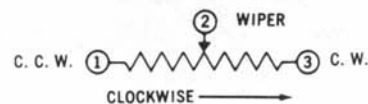
Specifications are subject to change without notice.

# BOURNS®

## ORDERING INFORMATION

| Resistance $\Omega$ | Part Number*  | Resolution % | Part Number*  | Resolution % |
|---------------------|---------------|--------------|---------------|--------------|
| 100                 | 3600S-1-101   | 0.044        | 3640S-1-101   | 0.060        |
| 200                 | 3600S-1-201   | 0.044        | 3640S-1-201   | 0.045        |
| 500                 | 3600S-1-501   | 0.039        | 3640S-1-501   | 0.031        |
| 1,000               | ● 3600S-1-102 | 0.032        | 3640S-1-102   | 0.030        |
| 2,000               | 3600S-1-202   | 0.030        | 3640S-1-202   | 0.021        |
| 5,000               | ● 3600S-1-502 | 0.026        | ● 3640S-1-502 | 0.016        |
| 10,000              | ● 3600S-1-103 | 0.020        | ● 3640S-1-103 | 0.019        |
| 20,000              | 3600S-1-203   | 0.016        | 3640S-1-203   | 0.016        |
| 50,000              | 3600S-1-503   | 0.012        | 3640S-1-503   | 0.011        |
| 100,000             | 3600S-1-104   | 0.012        | 3640S-1-104   | 0.010        |

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

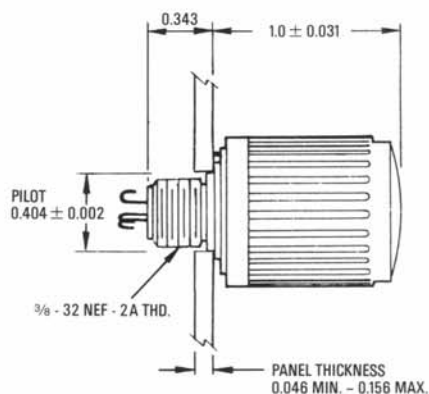


## DIMENSIONS (INCH)

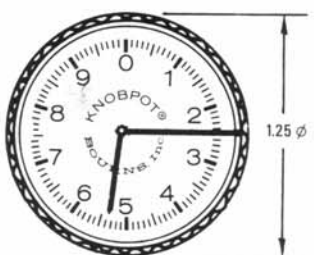
● Preferred resistance values



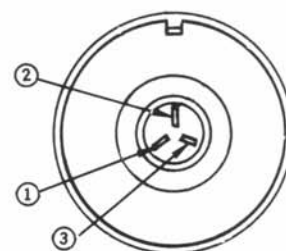
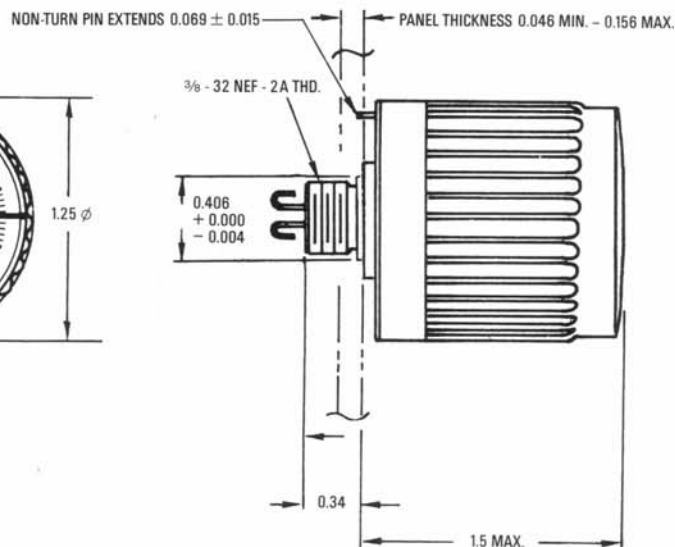
3600



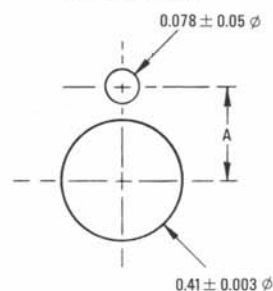
NON-TURN PIN EXTENDS 0.047 ± 0.015



3640



PANEL HOLE PATTERN



NOTE: A  
3600 = 0.280  
3640 = 0.562

NOTE:  
LOCKWASHER AND HEX NUT  
SUPPLIED WITH EACH UNIT

TOLERANCES: EXCEPT WHERE AS NOTED  
DECIMALS: .XX ± 0.01, .XXX ± 0.005

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