

### **Features**

- Bushing mount
- Optional AR pin feature
- Plastic or metal shaft and bushings
- Wirewound
- Solder lugs or PC pins
- Sealable (Full body seal)
- Designed for use in HMI applications

### ■ RoHS compliant\*

# 3590 - Precision Potentiometer

andard Resistance Range	200 to 100 K oh
tal Resistance Tolerance	
lependent Linearity	
ective Electrical Angle	3600 ° +10 ° -
solute Minimum Resistance	
ise	
electric Withstanding Voltage (MIL-STD-202, Method 301)	
Sea Level	1.500 VAC minim
wer Rating (Voltage Limited By Power Dissipation or 450 VAC, Whichever is Les	
+40 °C	
+125 °C	
sulation Resistance (500 VDC)	1,000 megohms minim
solution	See recommended part numb
Environmental Characteristics <sup>1</sup>	
erating Temperature Range	-40 °C to +125
orace Temperature Range	-55 °C to ±125
orage Temperature Rangemperature Range <sup>2</sup> mperature Range <sup>2</sup>	+50 ppm/°C maximum/
pration	1 ± 50 ppin/ 0 maximum
Wiper Bounce	
ock	
Wiper Bounce	
ad Life	
Total Resistance Shift	
tational Life (No Load)	
Total Resistance Shift	
	5 /6 IIIAAII1
NISTURE RESISTANCE UMIII -STITI-202 METINON 103 CONNITION B)	
pisture Resistance (MIL-STD-202, Method 103, Condition B) Total Resistance Shift	
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Total Resistance Shift	IF
Total Resistance Shift	
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## **Recommended Part Numbers**

(Printed Circuit)	(Solder Lug)	(Solder Lug)	Resistance (Ω)	Resolution (%)
3590P-2-102L	3590S-2-102L	3590S-1-102L	1,000	.029
3590P-2-202L	3590S-2-202L	3590S-1-202L	2,000	.023
3590P-2-502L	3590S-2-502L	3590S-1-502L	5,000	.025
3590P-2-103L	3590S-2-103L	3590S-1-103L	10,000	.020
3590P-2-203L	3590S-2-203L	3590S-1-203L	20,000	.019
3590P-2-503L	3590S-2-503L	3590S-1-503L	50,000	.013
3590P-2-104L	3590S-2-104L	3590S-1-104L	100,000	.009

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

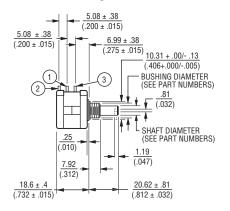
ROHS IDENTIFIER: L = COMPLIANT

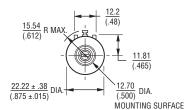
# 3590 - Precision Potentiometer

# BOURNS

#### **Product Dimensions**

#### -1, -3, -5, -7 Configurations

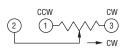




#### **Recommended PCB Lavout**

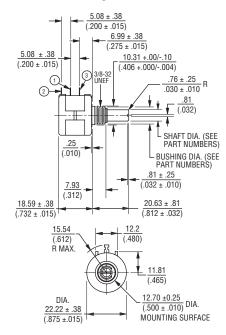


#### **Schematic**



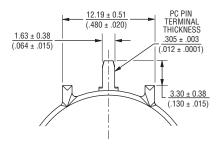
TOLERANCES: EXCEPT WHERE NOTED DECIMALS:  $.XX \pm \frac{.508}{.(02)}, XXX \pm \frac{.127}{.(005)}$  FRACTIONS:  $\pm 1/64$  DIMENSIONS:  $\frac{MM}{(IN.)}$ 

#### -2, -4, -6, -8 Configurations

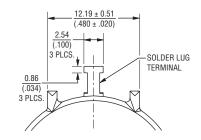


#### **Terminal Styles**

#### "P" Terminal Style

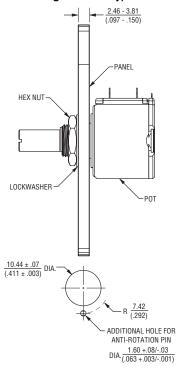


#### "S" Terminal Style



#### **Panel Thickness Dimensions**

#### (For Bushing Mount Only)



Anti-rotation pin hole is shown at six o'clock position for reference only. The actual location is determined by the customer's application. Refer to the front view of the potentiometer to see the location of the optional A/R pin.

Panel thickness and hole diameters are recommended for best fit. However, customers may adjust the dimensions to suit their specific application.

#### **Shaft & Bushing Configurations**

(Bushing - DxL, Shaft - D):

- (-1) Plastic Bushing (3/8 " x 5/16 ") and Shaft (.2480 + .001, - .002)
- (-2) Metal Bushing (3/8 " x 5/16 ") and Shaft (.2497 + .0000, - .0009)
- (-3) Sealed, Plastic Bushing (3/8 " x 5/16 ") and Shaft (.2480 + .001, - .002)
- (-4) Sealed, Metal Bushing (3/8 " x 5/16") and Shaft (.2497 + .0000, - .0009)
- (-5) Metric, Plastic Bushing (9 mm x 7.94 mm) and Shaft (6 mm + 0, .076 mm)
- (-6) Metric, Metal Bushing (9 mm x 7.94 mm) and Shaft (6 mm + 0, .023 mm)
- (-7) Metric, Sealed, Plastic Bushing (9 mm x 7.94 mm) and Shaft (6 mm + 0, .076 mm)
- (-8) Metric, Sealed, Metal Bushing (9 mm x 7.94 mm) and Shaft (6 mm + 0, .023 mm)

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