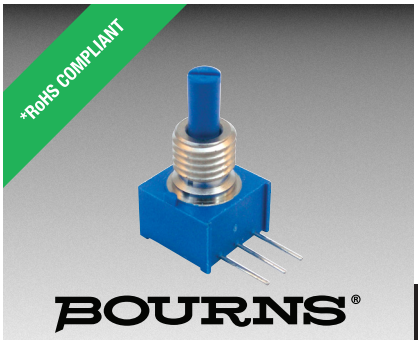


Features

- Conductive plastic
- PC board and bushing mount
- Plastic or metal bushing and plastic shaft
- Withstands typical industrial washing processes
- Compact package saves board and panel space

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

3310 – 9 mm Square Sealed Panel Control

Electrical Characteristics[1]

Standard Resistance Range - Linear	1 K ohms to 1 megohm
Total Resistance Tolerance - Linear Tapers	±20 %
Independent Linearity	±5 %
End Resistance	2 % or 2 ohms maximum (whichever is greater)
Effective Electrical Angle	270 ° ±15 °
Contact Resistance Variation	1 % or 1 ohm (whichever is greater)
Dielectric Withstanding Voltage (MIL-STD-202 – Method 301)	
Sea Level	900 VAC minimum
70,000 Feet	350 VAC minimum
Insulation Resistance	1,000 megohms minimum
Power Rating @ 70 °C (Derate to 0 at 125 °C - Voltage Limited By Power Dissipation or 200 VAC, Whichever is Less)	0.25 watts
Theoretical Resolution	Essentially infinite

Environmental Characteristics

Operating Temperature Range	-40 °C to +125 °C (-40 °F to +257 °F)
Storage Temperature Range	-55 °C to +125 °C (-67 °F to +257 °F)
Temperature Coefficient Over Storage Temperature Range	±1,000 ppm/°C
Vibration	30 G
Total Resistance Shift	±1 % maximum
Voltage Ratio Shift	±1 % maximum
Shock	100 G
Total Resistance Shift	±1 % maximum
Voltage Ratio Shift	±1 % maximum
Load Life	1,000 hours
Total Resistance Shift	±10 % TRS maximum
Rotational Life (No Load)	50,000 cycles
Total Resistance Shift	±5 % TRS maximum
Contact Resistance Variation	3 % or 3 ohms (whichever is greater)
Moisture Resistance	MIL-STD-202, Method 103, Condition B
Total Resistance Shift	±10 % TRS maximum
IP Rating	IP67
Moisture Sensitivity Level	1
ESD Classification (HBM)	N/A

Mechanical Characteristics

Stop Strength	5.65 N-cm (8 oz.-in.)
Mechanical Angle	295 ° ±10 °
Torque	
Starting	3.53 N-cm (5.0 oz.-in.) maximum
Running	3.53 N-cm (5.0 oz.-in.) maximum
Mounting (Torque on Bushing)	45 N-cm (4.0 lb.-in.) max [plastic bushing]; 79 N-cm (7.0 lb.-in.) max [metal bushing]
Weight (Single Section)	4.5 grams
(Each Additional Section)	2.5 grams
Terminals	Solderable pins
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	For recommended wash processes, please refer to http://www.bourns.com/pdfs/sldclen.pdf
Marking	Manufacturer's trademark, model number, product code, terminal style, resistance code and date code
Ganging	2 cups maximum
Hardware	One lockwasher (H-37-5) and one mounting nut (H-38-1) is shipped with each potentiometer, except bushingless versions
Flammability	Conforms to UL94V-0
Epoxy	Conforms to UL 94V-1
IP Rating	IP67

Switch Characteristics

Switch Life	10K cycles
Contact Resistance	2 ohms max.
Dielectric Strength	350 VDC
Detent Torque	0.5 oz-in min.
Power Rating (Resistive Load)	100 mA @ 16 VDC

[1]Electrical specifications tested at 60 RPM, at room ambient: +25 °C nominal.

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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Additional Features

- Audio taper versions available as special order
- RoHS compliant*

3310 – 9 mm Square Sealed Panel Control

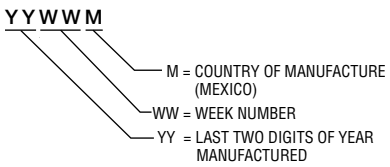
BOURNS®

Standard Resistance Table

Resistance (Ohms)	Resistance Code
1,000	**102**
2,000	**202**
5,000	**502**
10,000	**103**
20,000	**203**
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105

Popular values listed in boldface. Consult factory for special resistances.

Date Code Description



How To Order

3310 Y - 0 0 1 - 103 L

Model Number Designator
3310 = 9 mm Panel Control

Terminal Style Designator
Single Cup:
C = In-line Straight Terminals Side Exit 2.54 mm centers
R = In-line Terminals Rear Exit 2.54 mm centers
P = 5.08 mm x 2.54 mm Triangular Pattern Rear Exit
Y = 5.08 mm x 5.08 mm Triangular Pattern Rear Exit

Dual Cup (Pot/Pot or Pot/Switch):
H = Dual In-line Straight Terminals Rear Exit 2.54 mm centers

Shaft End Designator
0 = Shaft End Slotted
1 = Shaft End Flatted

Shaft Length Designator
0 = 12.7 mm FMS Long Plastic Shaft (Available w/bushing only)
1 = 19.05 mm FMS Long Plastic Shaft (Available w/bushing only)
2 = 5.59 mm FMS Long Plastic Shaft (Bushingless version only)

Bushing Designator
Pot (or Pot/Pot):
1 = 6.35 mm x 6.35 mm Plastic
2 = 6.35 mm x 6.35 mm Ni Plated Brass*
5 = Bushingless (Board Level Control)

Pot/Switch Bushing Designator (use with "H" terminal style only.)
3 = 6.35 mm x 6.35 mm Plastic
4 = 6.35 mm x 6.35 mm Ni Plated Brass*
6 = Bushingless (Board Level)

Resistance Code
(1st 2 digits are significant, 3rd digit is number of 0s to follow)

RoHS Identifier
L = Compliant

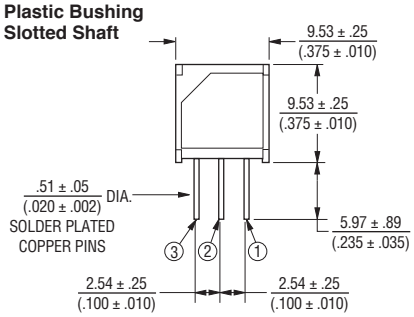
**Bushing Designator 2 and 4 are currently available, but not recommended for new designs.*

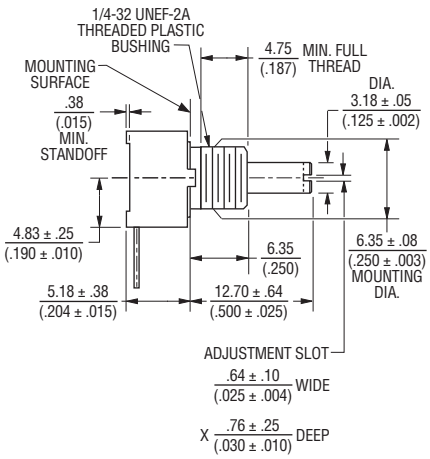
Product Dimensions

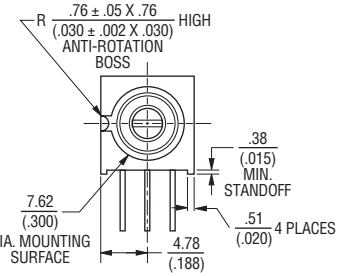
COMMON DIMENSIONS

3310-001

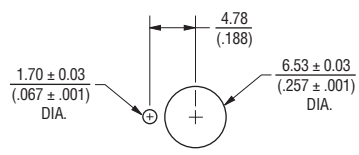
Plastic Bushing
Slotted Shaft



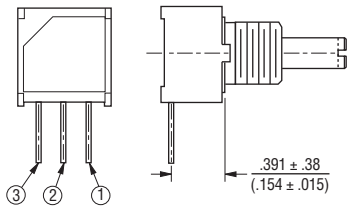




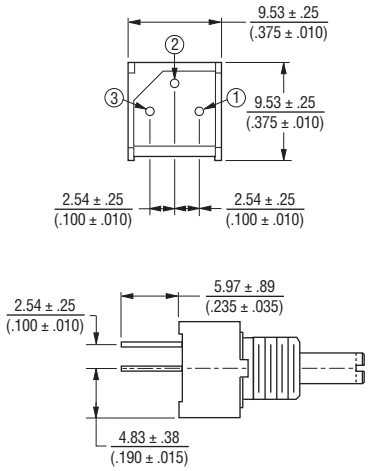
MOUNTING HOLE PATTERN



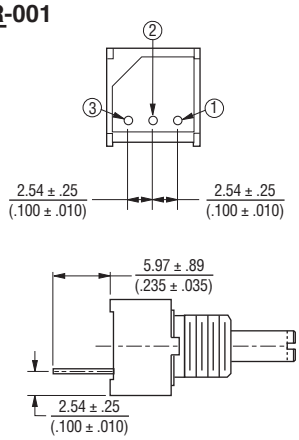
3310C-001



3310P-001

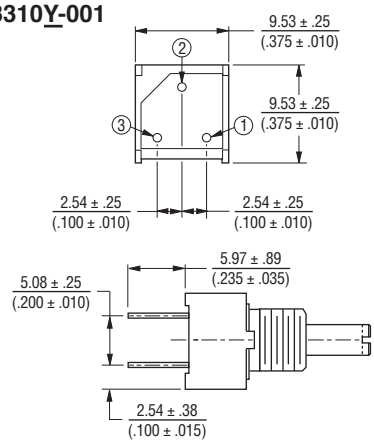


3310R-001



DIMENSIONS: MM / (INCHES)

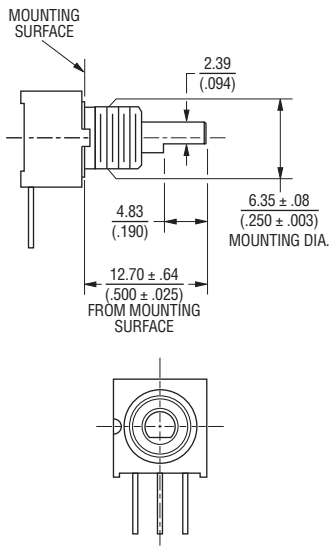
3310Y-001



COMMON DIMENSIONS

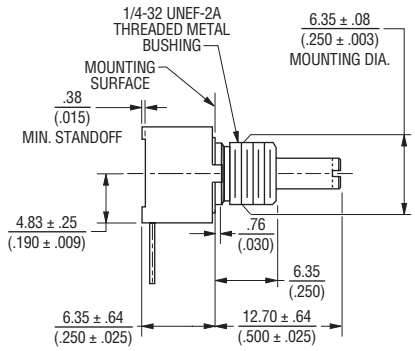
3310C-101

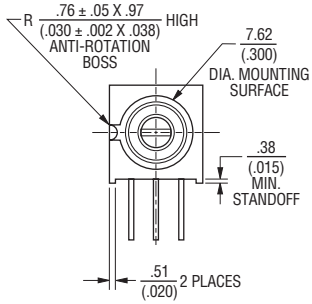
Plastic Flatted Shaft



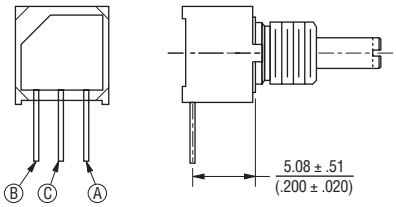
Product Dimensions

COMMON DIMENSIONS
3310-002
Metal Bushing



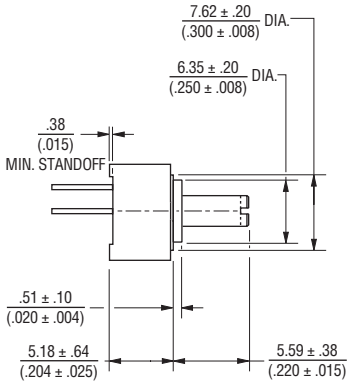


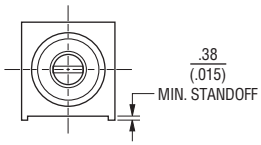
3310C-002



NOTE: * Only recommended shaft length for bushingless version

3310P-025 *
Bushingless

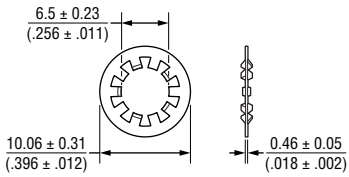




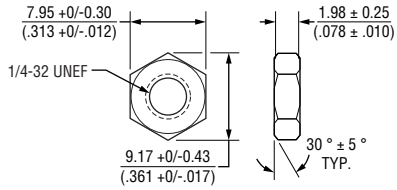
DIMENSIONS: MM / (INCHES)

Hardware

LOCKWASHER H-37-5



NUT H-38-1

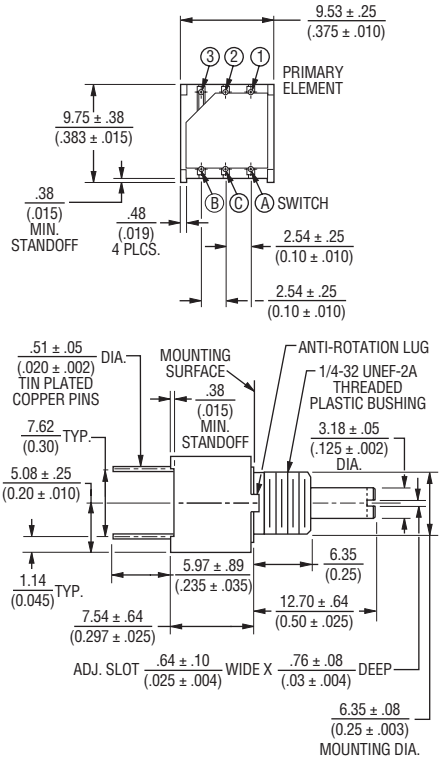


DIMENSIONS: MM / (INCHES)

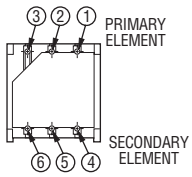
Product Dimensions

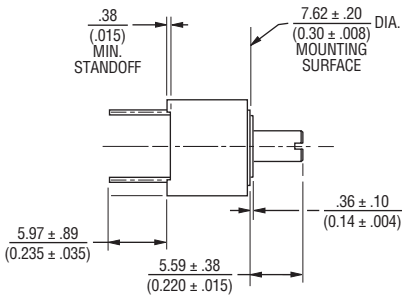
COMMON DIMENSIONS

3310H-003
Pot/Switch Dual Cup
Plastic Bushing

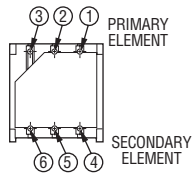


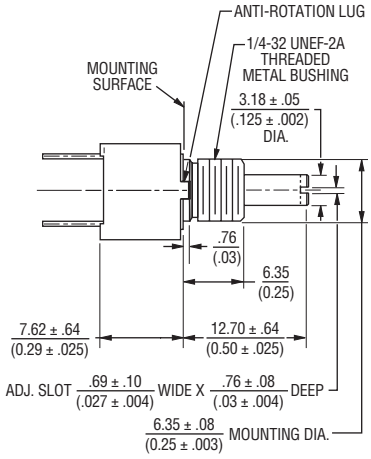
3310H-025*
Pot/Pot Dual Cup
Bushingless



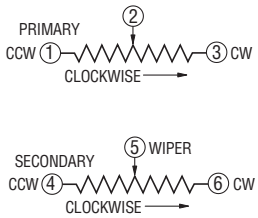


3310H-002
Pot/Pot Dual Cup
Metal Bushing

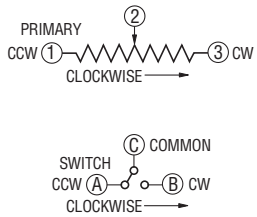




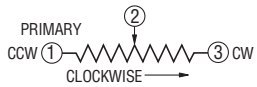
Pot/Pot Dual Cup



Pot/Switch Dual Cup



Pot Single Cup



DIMENSIONS: MM / (INCHES)

NOTE: * Only recommended shaft length for bushingless version

REV. 04/25

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