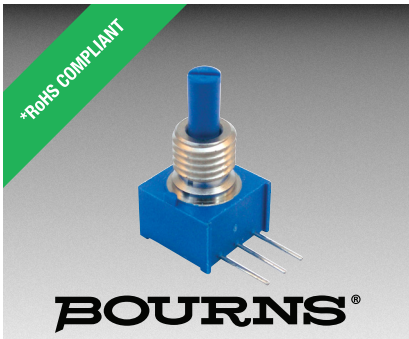




THE DATASHEET OF
3310H-003-105L





Features

- Conductive plastic
- PC board and bushing mount
- Plastic 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 Characteristics¹

| | |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 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 |

¹Electrical 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.

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Additional Features

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

3310 – 9 mm Square Sealed Panel Control

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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

YYWW M

- M = COUNTRY OF MANUFACTURE (MEXICO)
- WW = WEEK NUMBER
- YY = LAST TWO DIGITS OF YEAR MANUFACTURED

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
 5 = Bushingless (Board Level Control)

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

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

RoHS Identifier _____
 L = Compliant

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3310 – 9 mm Square Sealed Panel Control

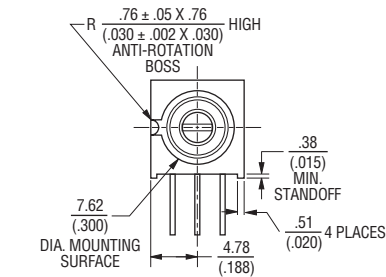
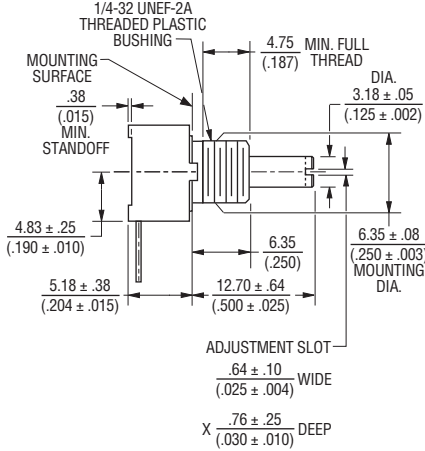
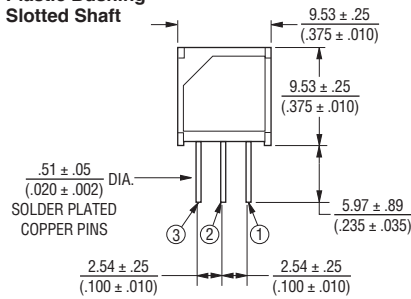
BOURNS®

Product Dimensions

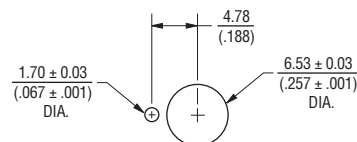
COMMON DIMENSIONS

3310-001

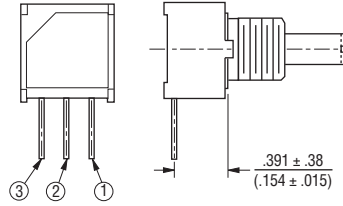
Plastic Bushing
Slotted Shaft



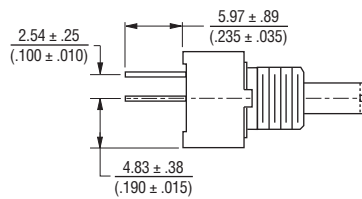
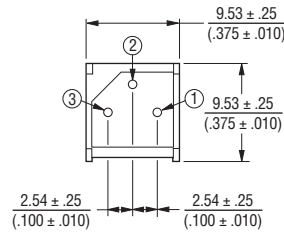
MOUNTING HOLE PATTERN



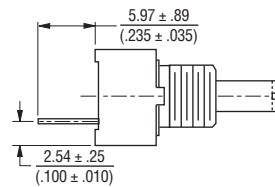
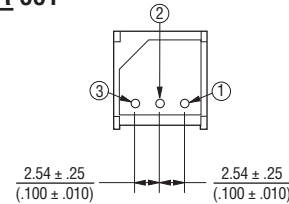
3310C-001



3310P-001

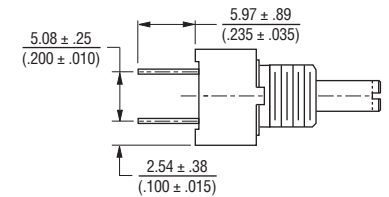
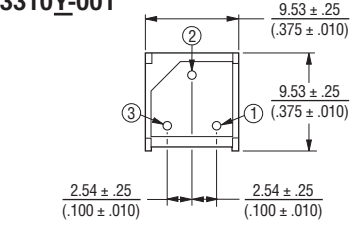


3310R-001



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

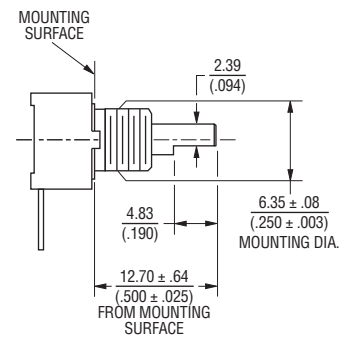
3310Y-001



COMMON DIMENSIONS

3310C-101

Plastic Flatted Shaft



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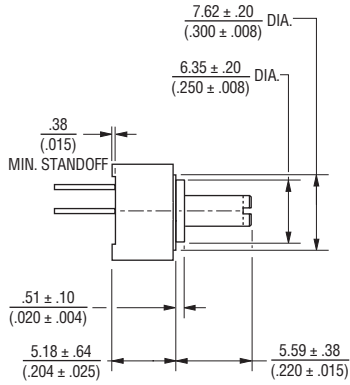
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3310 – 9 mm Square Sealed Panel Control

BOURNS®

Product Dimensions

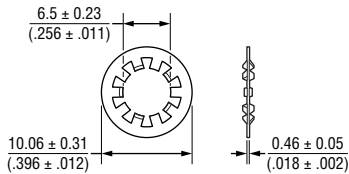
3310P-025* Bushingleess



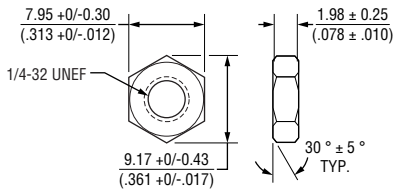
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Hardware

LOCKWASHER H-37-5

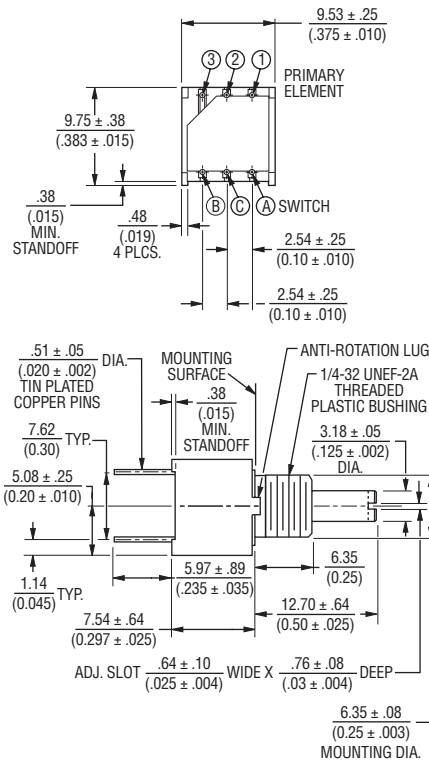


NUT H-38-1

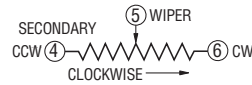
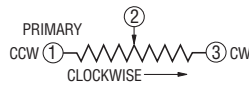


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

COMMON DIMENSIONS 3310H-003 Pot/Switch Dual Cup Plastic Bushing

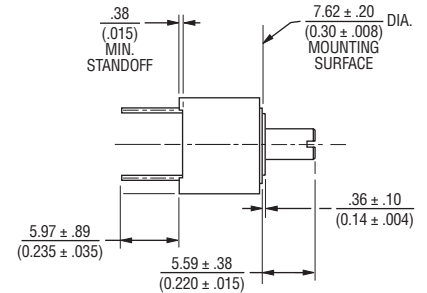
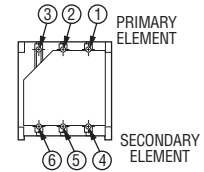


Pot/Pot Dual Cup



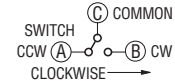
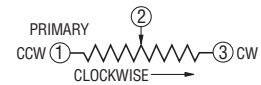
NOTE: * Only recommended shaft length for bushingless version

3310H-025* Pot/Pot Dual Cup Bushingleess

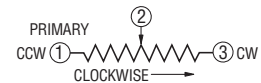


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Pot/Switch Dual Cup



Pot Single Cup



REV. 11/25

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