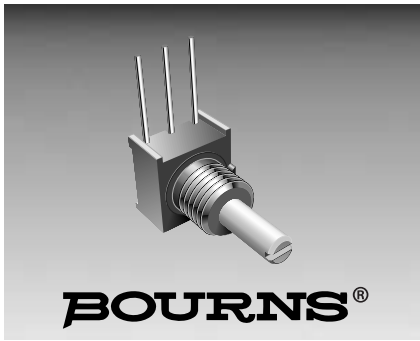




Features

- Miniature package for design flexibility
- Long operating life
- Conductive plastic element
- Bushing or PC board mount
- Quadrature output

3315 - 9 mm Square Sealed Incremental Encoder

Electrical Characteristics

Output	2-bit gray code, Channel A leads Channel B electrically turning clockwise (CW)
Closed Circuit Resistance	5 ohms maximum
Contact Rating	TTL compatible loads
Insulation Resistance (500 VDC).....	1,000 megohms minimum
Dielectric Withstanding Voltage	
Sea Level	900 VAC minimum
Electrical Travel.....	Continuous
Contact Bounce	5 milliseconds maximum
RPM (Operating)	120 maximum

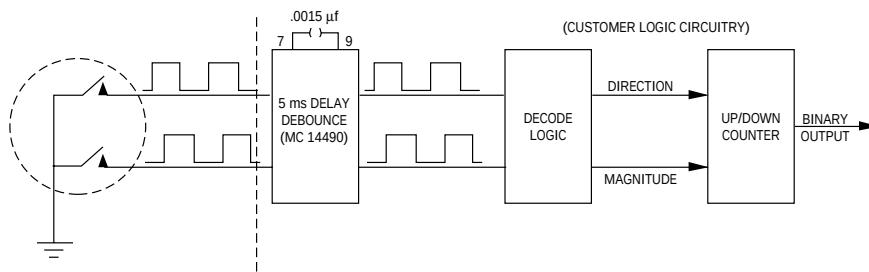
Environmental Characteristics

Operating Temperature Range	+1 °C to +125 °C (+33 °F to +257 °F)
Storage Temperature Range.....	-55 °C to +125 °C (-67 °F to +257 °F)
Humidity.....	MIL-STD-202, Method 103B, Condition B
Vibration	30 G
Contact Bounce	5.0 millisecond maximum
Shock	100 G
Contact Bounce	5.0 millisecond maximum
Rotational Life	100,000 cycles @ 6 PPR 25,000 cycles @ 16 PPR
IP Rating	IP 67

Mechanical Characteristics

Mechanical Angle	360 ° Continuous
Running Torque	3.53 N-cm (5 oz.-in.) maximum
Mounting Torque	
Plastic Bushing.....	45.19 N-cm (4.0 lb.-in.) maximum
Metal Bushing	79 N-cm (7.0 lb.-in.) maximum
Weight	4.5 gm (0.15 oz.)
Terminals	Solderable pins
Soldering Condition	5 seconds at 360 °C (680 °F) maximum
Marking.....	Manufacturer's trademark, part number, and date code
Hardware	One lockwasher and one mounting nut are shipped with each encoder, except where noted in the part number.

Suggested Incremental Control Diagram



Quadrature Output Table

	Clockwise →
Channel A	
Channel B	
Channel C	

3315 - 9 mm Square Sealed Incremental Encoder

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Part Numbering System

3315 Y - 0 0 1 - 006

Model Number Designator

3315 = 9 mm Encoder

Terminal Style Designator

C = In-line Straight Terminals Side Exit

R = In-line Terminals Rear Exit

P = 5.08 mm x 2.54 mm Triangular Pattern Rear Exit

Y = 5.08 mm x 5.08 mm Triangular Pattern Rear Exit

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 (Bushingless version only)

Bushing Designator

1 = 6.35 mm x 6.35 mm Plastic

2 = 6.35 mm x 6.35 mm Ni Plated Brass

5 = Bushingless (Board Level)

Pulses per Revolution Code

006 = 6 PPR

016 = 16 PPR

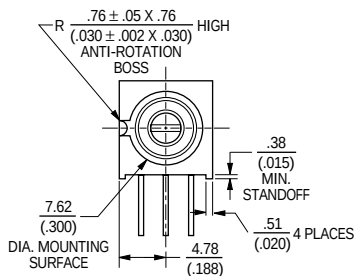
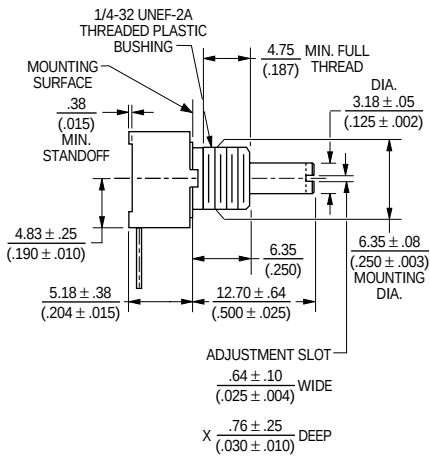
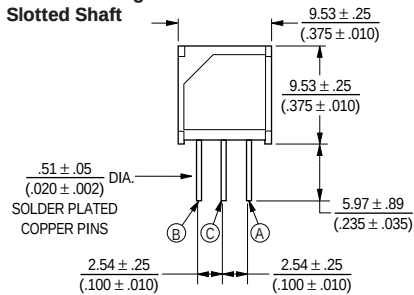
3315 - 9 mm Square Sealed Incremental Encoder

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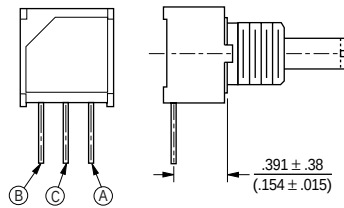
Product Dimensions

COMMON DIMENSIONS

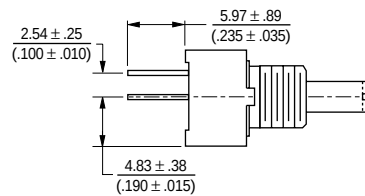
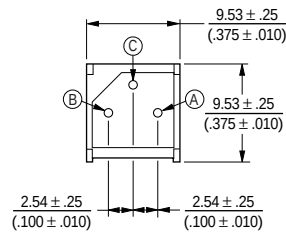
3315-001 Plastic Bushing Slotted Shaft



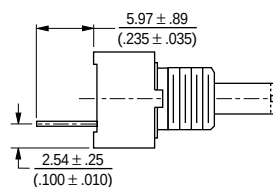
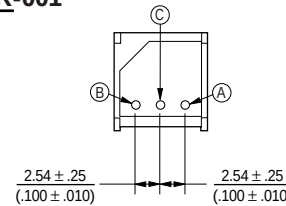
3315C-001



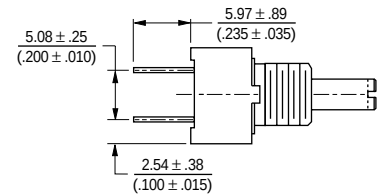
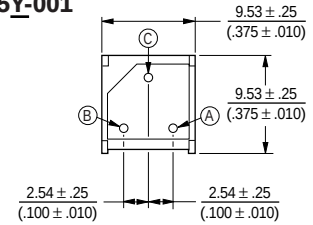
3315P-001



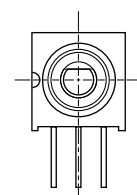
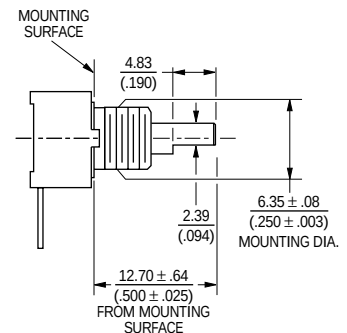
3315R-001



3315Y-001



COMMON DIMENSIONS 3315C-101 Plastic Flatted Shaft



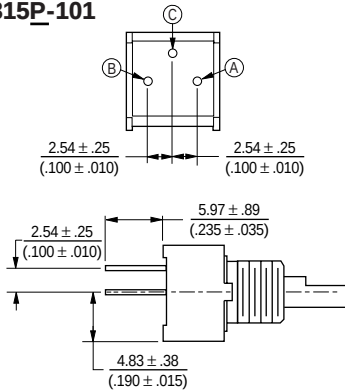
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(IN.)

3315 - 9 mm Square Sealed Incremental Encoder

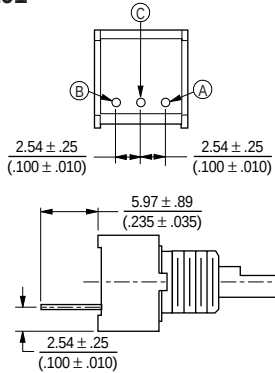
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Product Dimensions

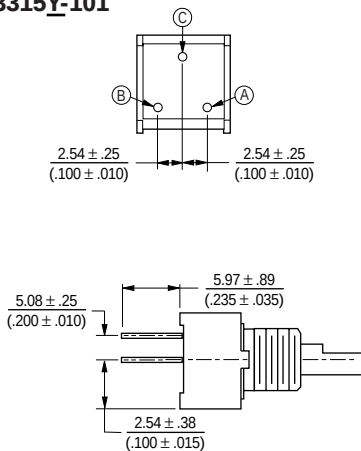
3315P-101



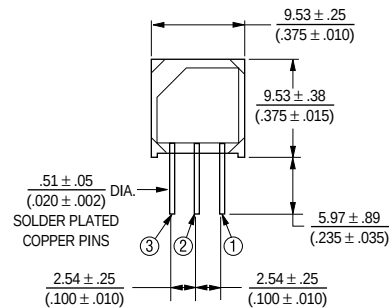
3315R-101



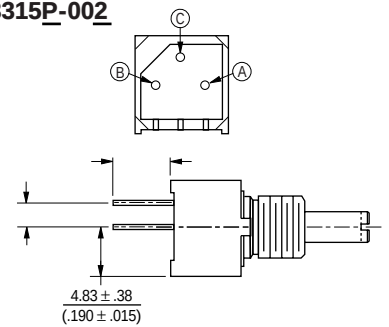
3315Y-101



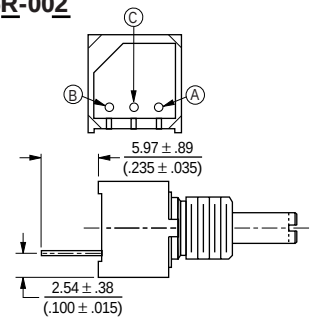
COMMON DIMENSIONS 3315-002 Metal Bushing



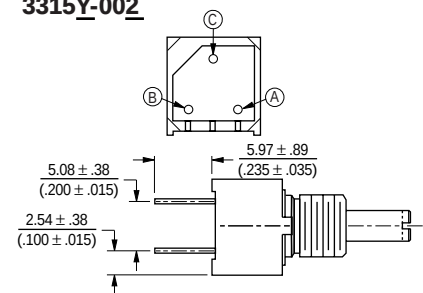
3315P-002



3315R-002

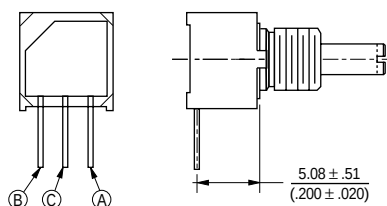


3315Y-002



DIMENSIONS: MM
(IN.)

3315C-002



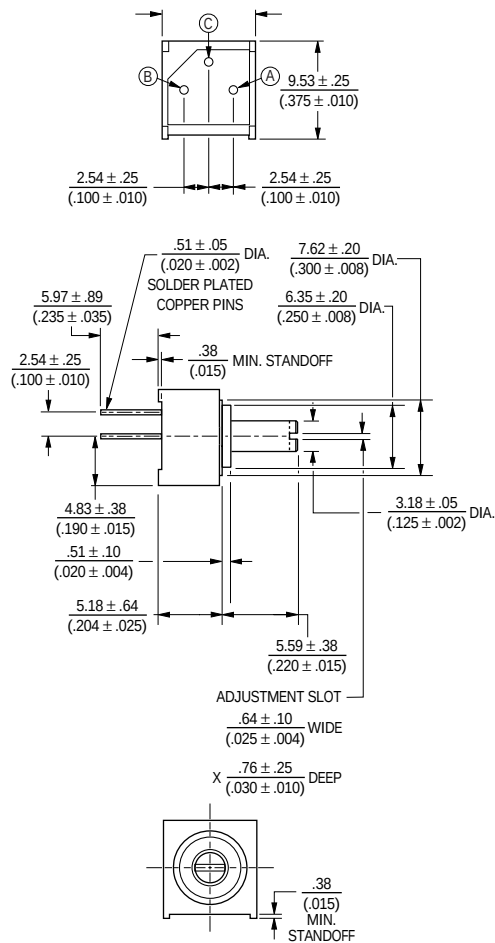
3315 - 9 mm Square Sealed Incremental Encoder

BOURNS®

Product Dimensions

3315P-025

Bushingless



3315Y-025

Bushingless

