

Features

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

3315 - 9 mm Square Sealed Incremental Encoder

Electrical Characteristics

Output.....	2-bit quadrature 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

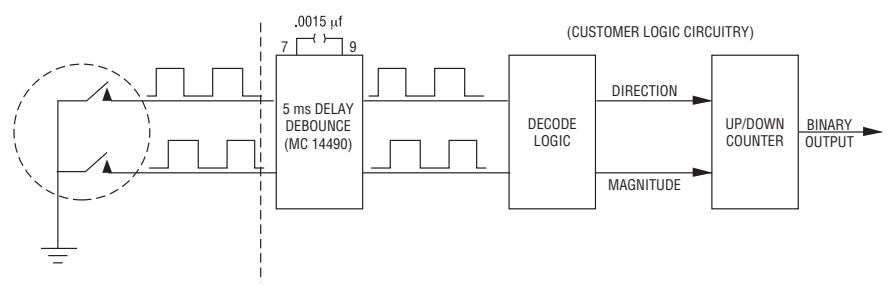
Environmental Characteristics

Operating Temperature Range.....	-40 °C to +125 °C (-40 °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

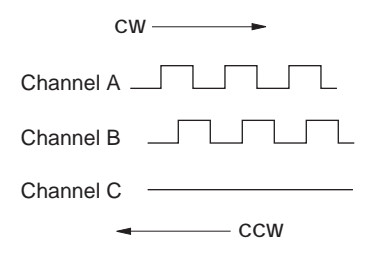
Mechanical Characteristics

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	
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, 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



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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 Specifications are subject to change without notice.
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How to Order

3315 Y - 0 0 1 - 006 L

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	_____	_____	_____	_____	_____
RoHS Identifier _____ L = Compliant	_____	_____	_____	_____	_____

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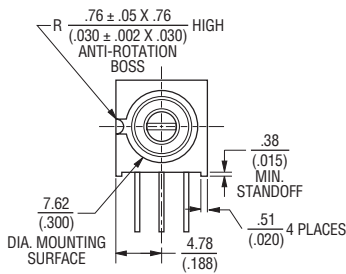
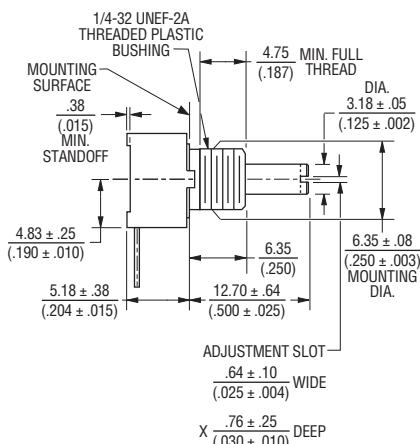
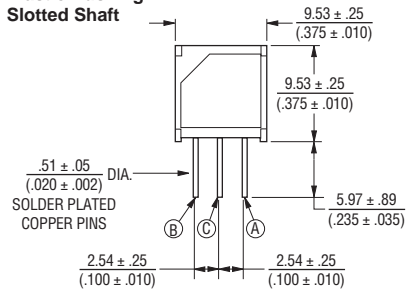
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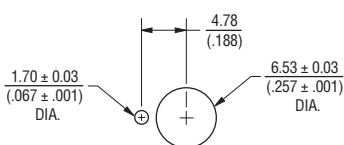
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Product Dimensions

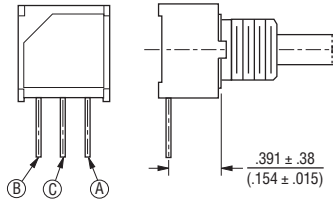
COMMON DIMENSIONS 3315-001 Plastic Bushing Slotted Shaft



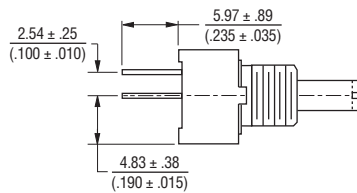
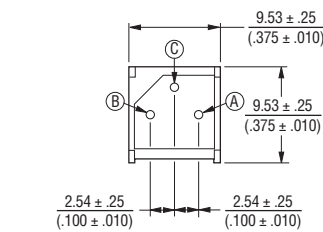
MOUNTING HOLE PATTERN



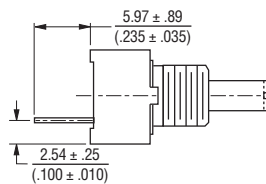
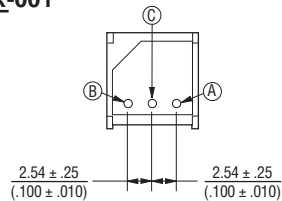
3315C-001



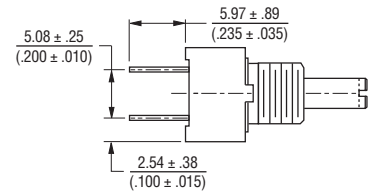
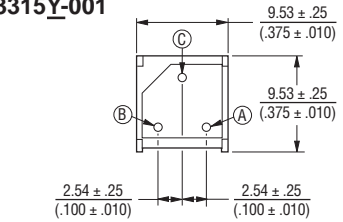
3315P-001



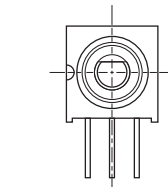
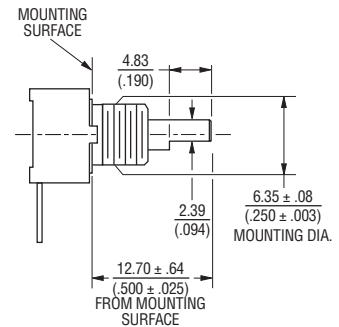
3315R-001



3315Y-001



COMMON DIMENSIONS 3315C-101 Plastic Flatted Shaft



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

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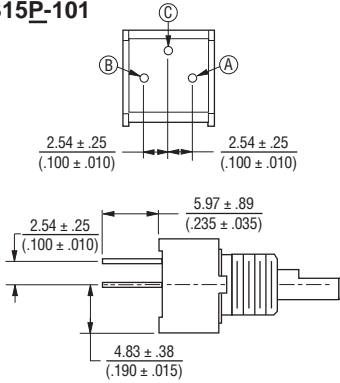
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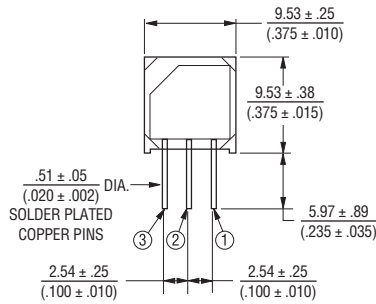
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Product Dimensions

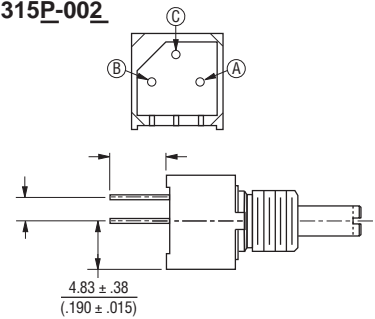
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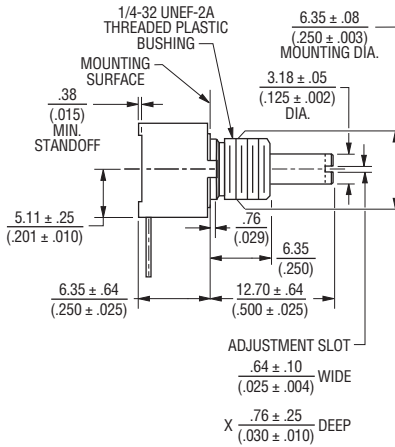
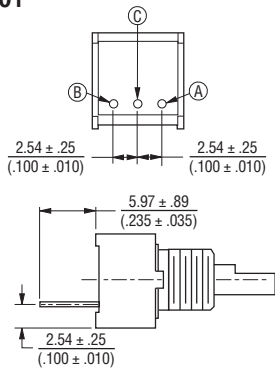
COMMON DIMENSIONS 3315-002 Metal Bushing



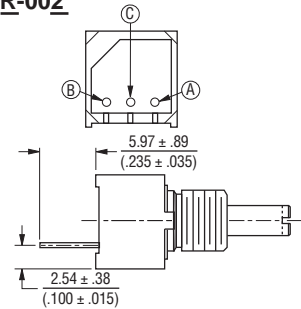
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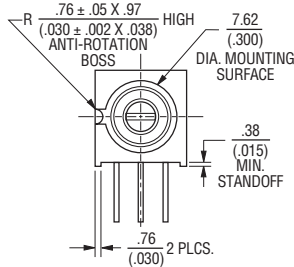
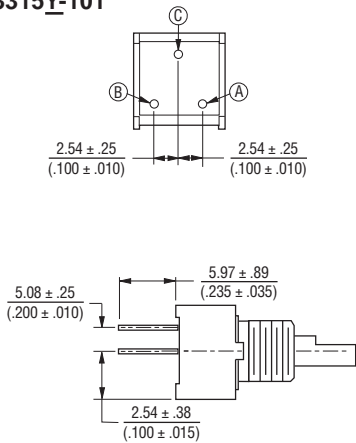
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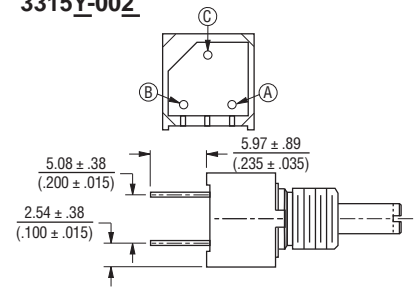
3315R-002



3315Y-101

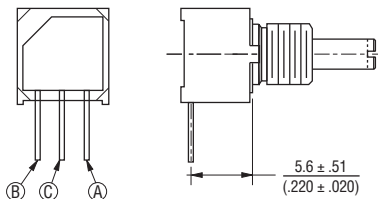


3315Y-002



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

3315C-002



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