

**Electrical Characteristics** 

## **Features**

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

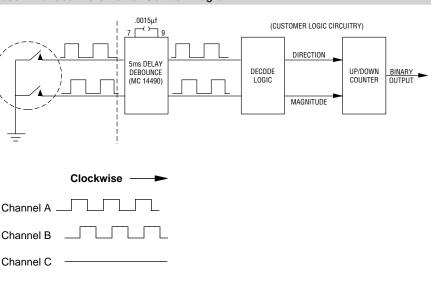
## 3315 - 9mm Square Sealed Incremental Encoder

## **Recommended Incremental Control Diagram**

Output2-bit gray code, Channel A leads Channel B
electrically turning clockwise (CW) Closed Circuit Resistance5 ohms maximum
Contact Rating100 milliamp @ 16 VDC maximum
Insulation Resistance (500 VDC)
Sea Level
5 milliseconds maximum RPM (Operating)120 maximum
<b>Environmental Characteristics</b>
Temperature Range55°C to +125°C Vibration
Shock
Contact Bounce
5.0 millisecond maximum Rotational Life100,000 cycles @ 6PPR 25,000 cycles @ 16ppr
Mechanical Characteristics
Mechanical Angle5 oz-in. maximum TorqueManufacturer's symbol and

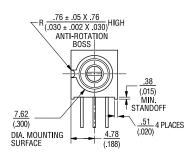
terminal style, date code and resistance code Part Numbering System 3315 Y - 0 0 1 - 006 Model Number Designator -3315 = 9mm Encoder Terminal Style Designator C = In-line Straight Terminals Side Exit R = In-line Terminals Rear Exit P = 5.08mm x 2.54mm Triangular Pattern Rear Exit Y = 5.08mm x 5.08mmTriangular Pattern Rear Exit Shaft End Designator 0 = Shaft End Slotted 1 = Shaft End Flatted Shaft Length Designator 0 = 12.7mm FMS Long Plastic Shaft 1 = 19.05mm FMS Long Plastic Shaft (Use with bushing versions only) 2 = 560mm FMS (Use licelase versions) 2 = 5.59mm FMS (Bushingless version only) Bushing Designator 1 = 6.35mm x 6.35mm Plastic 2 = 6.35mm x 6.35mm Ni Plated Brass 5 = Bushingless (Board Level)

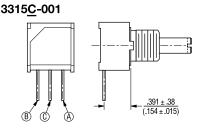
Pulses per Revolution Code 006 = 6 ppr 016 = 16 ppr



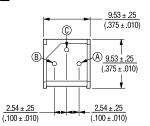
# **3315 - Dimensions and Tolerances**

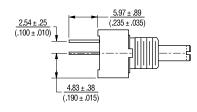
### COMMON DIMENSIONS 3315-001 Plastic Bushing Slotted Shaft 9.53 ± .25 (.375 ± .010) A 9.53 ± .25 (.375 ± .010) $\frac{.51 \pm .05}{(.020 \pm .002)}$ DIA. SOLDER PLATED 5.97 ± .89 COPPER PINS (.235 ± .035) à B $(\frac{2.54 \pm .25}{(.100 \pm .010)})$ 2.54 ± .25 (.100 ± .010) 1/4-32 UNEF-2A THREADED PLASTIC BUSHING — MOUNTING-SURFACE 4.75 MIN FULL (187) THREAD .38 3.18 ± .05 DIA. (.015) MIN STANDOFF (.125 ± .002) A $\frac{4.83 \pm .25}{(.190 \pm .009)}$ \_ $\frac{6.35 \pm .08}{(250 \pm .003)}$ 6.35 (.250) MOUNTING DIA. 5.18 ± .38 <u>12.70 ± .64</u> (.204 ± .015) (.500 ± .025) ADJUSTMENT SLOT - $\frac{.64 \pm .10}{(.025 \pm .004)} \text{WIDE}$

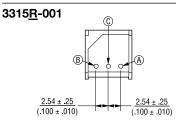


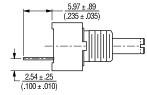




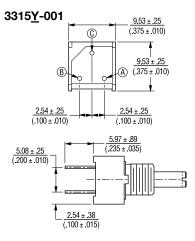




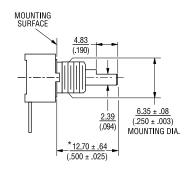


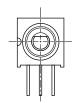






COMMON DIMENSIONS 3315C-101 Plastic Flatted Shaft

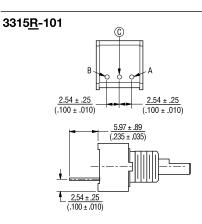


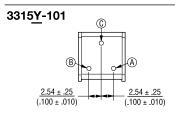


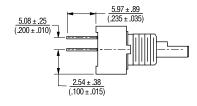
\*FMS = From Mounting Surface

# **3315** - Dimensions and Tolerances

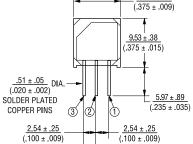
# $3315\underline{P}-101$ (3) (



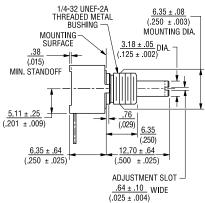




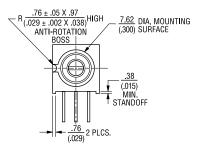


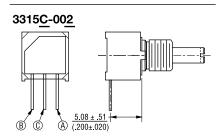


9.53 ± .25

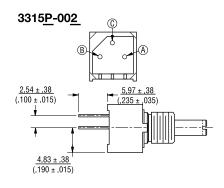


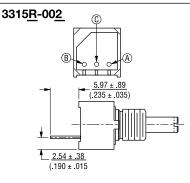


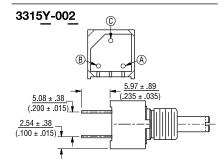




# BOURNS



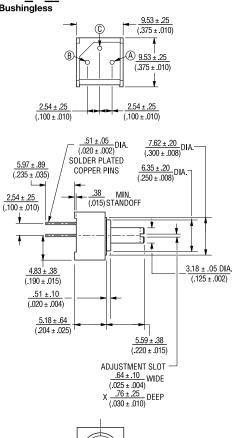




# **3315 - Dimensions and Tolerances**

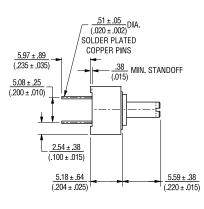
# BOURNS

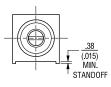
## 3315<u>P</u>-0<u>25</u> Bushingless



<u>38</u> (.015) MIN. STANDOFF Bushingless 9.53 ± 25 (375 ± .010) 9.53 ± 25 (375 ± .010) (375 ± .010) 2.54 ± .25 (100 ± .010) 2.54 ± .25 (100 ± .010)

3315<u>Y</u>-0<u>25</u>





Specifications are subject to change without notice.