

## 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

### Electrical Characteristics

Output.....2-bit gray code,  
 Channel A leads Channel B  
 electrically turning clockwise (CW)  
 Closed Circuit Resistance.....5 ohms  
 maximum  
 Contact Rating.....100 milliamp  
 @ 16 VDC maximum  
 Insulation Resistance (500 VDC)  
 .....1,000 megohms minimum  
 Dielectric Withstanding Voltage  
 Sea Level .....900 VAC minimum  
 Electrical Travel.....Continuous  
 Contact Bounce (15 RPM)  
 .....5 milliseconds maximum  
 RPM (Operating).....120 maximum

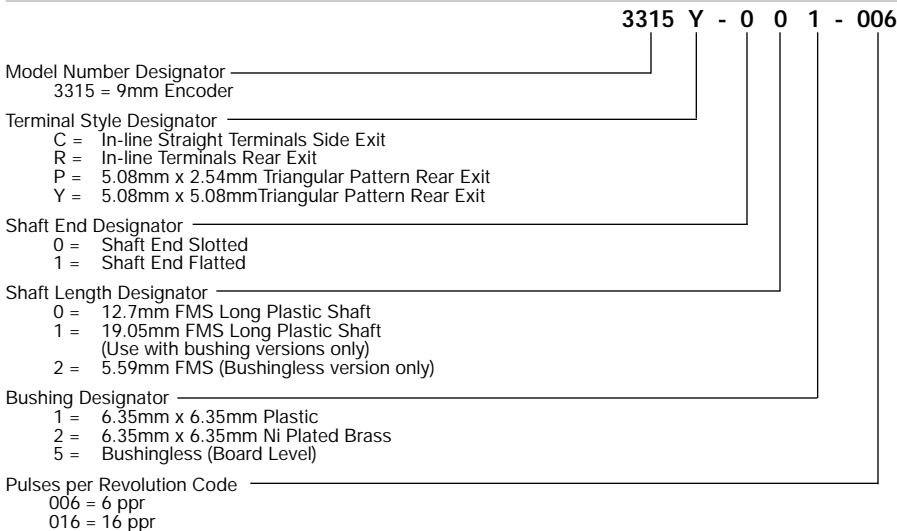
### Environmental Characteristics

Temperature Range .....-55°C to +125°C  
 Vibration .....30G  
 Contact Bounce  
 .....5.0 millisecond maximum  
 Shock .....100G  
 Contact Bounce  
 .....5.0 millisecond maximum  
 Rotational Life ....100,000 cycles @ 6PPR  
 25,000 cycles @ 16ppr

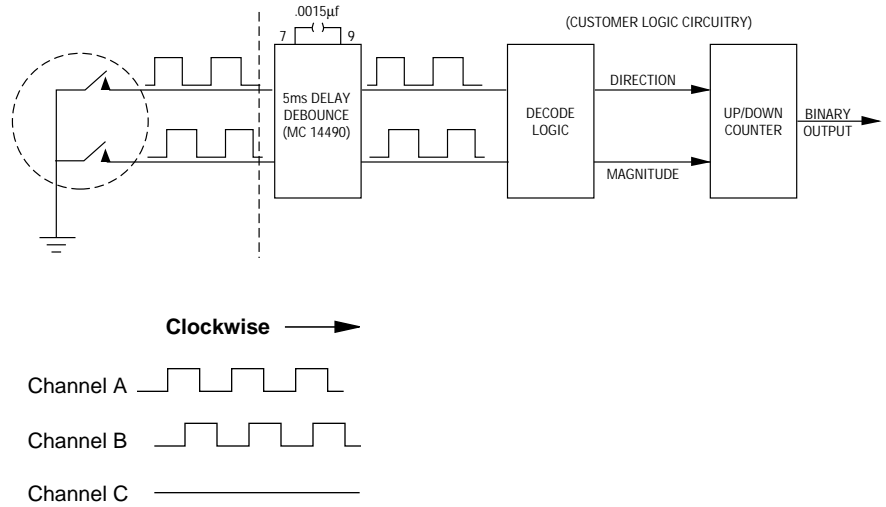
### Mechanical Characteristics

Mechanical Angle .....Continuous  
 Torque .....5 oz-in. maximum  
 Marking .....Manufacturer's symbol and  
 model number, product code,  
 terminal style, date code and  
 resistance code

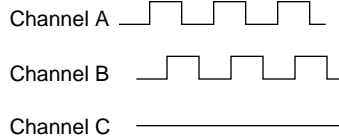
### Part Numbering System



### Recommended Incremental Control Diagram



**Clockwise** →

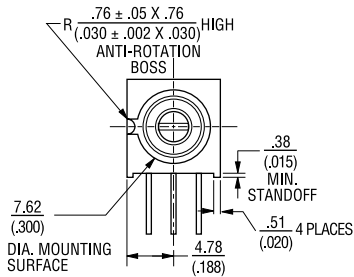
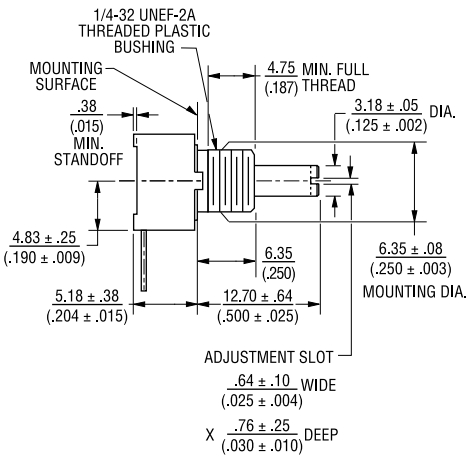
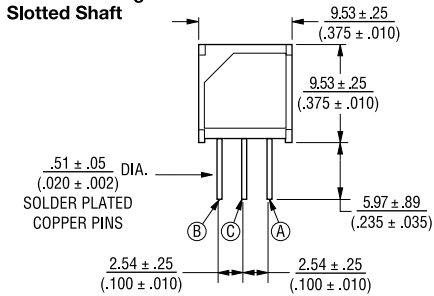


# 3315 - Dimensions and Tolerances

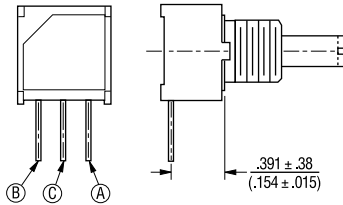


## COMMON DIMENSIONS

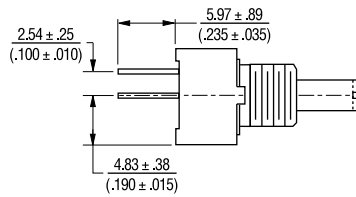
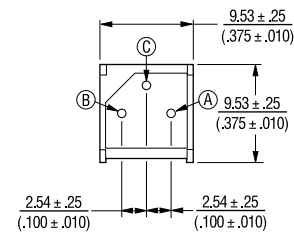
### 3315-001 Plastic Bushing Slotted Shaft



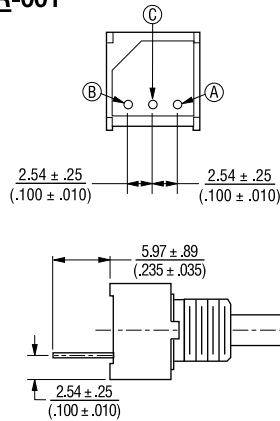
### 3315C-001



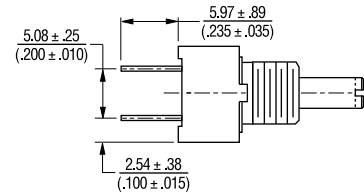
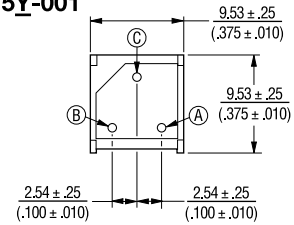
### 3315P-001



### 3315R-001

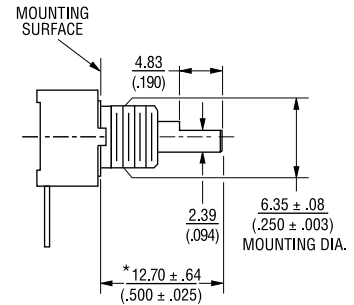


### 3315Y-001



## COMMON DIMENSIONS

### 3315C-101 Plastic Flatted Shaft

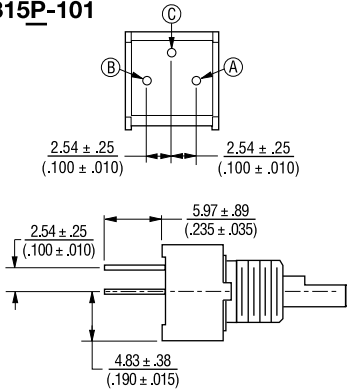


\*FMS = From Mounting Surface

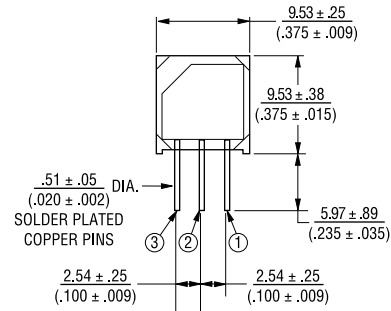
# 3315 - Dimensions and Tolerances



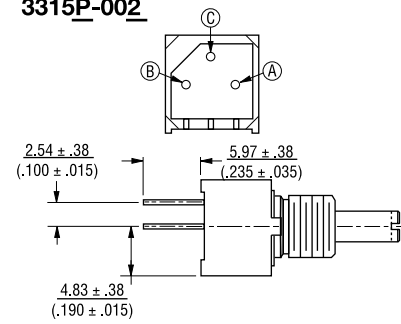
**3315P-101**



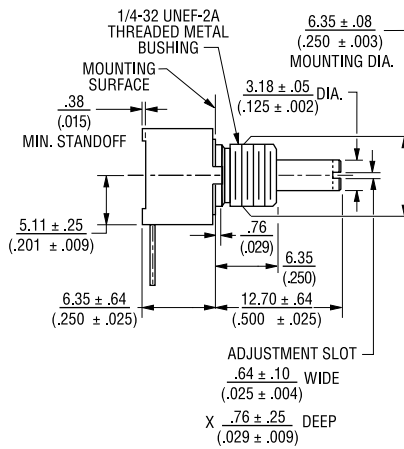
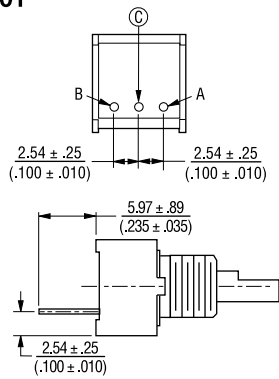
**COMMON DIMENSIONS  
3315-002  
Metal Bushing**



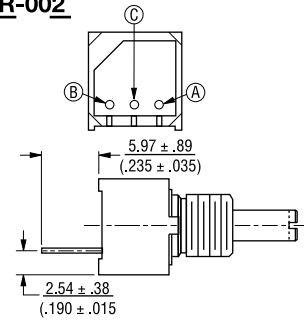
**3315P-002**



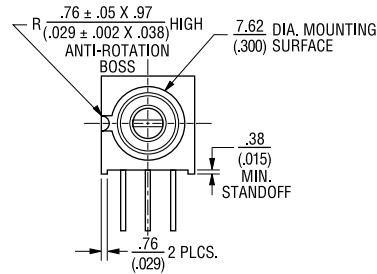
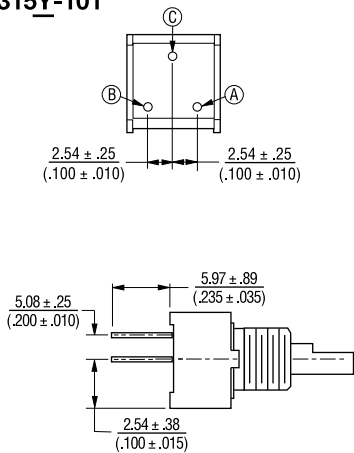
**3315R-101**



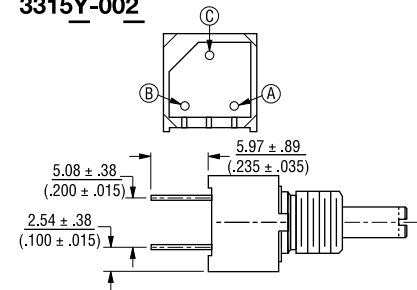
**3315R-002**



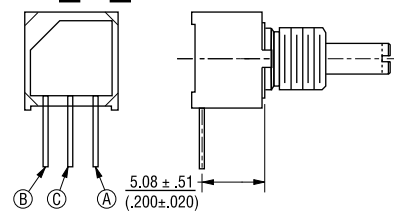
**3315Y-101**



**3315Y-002**



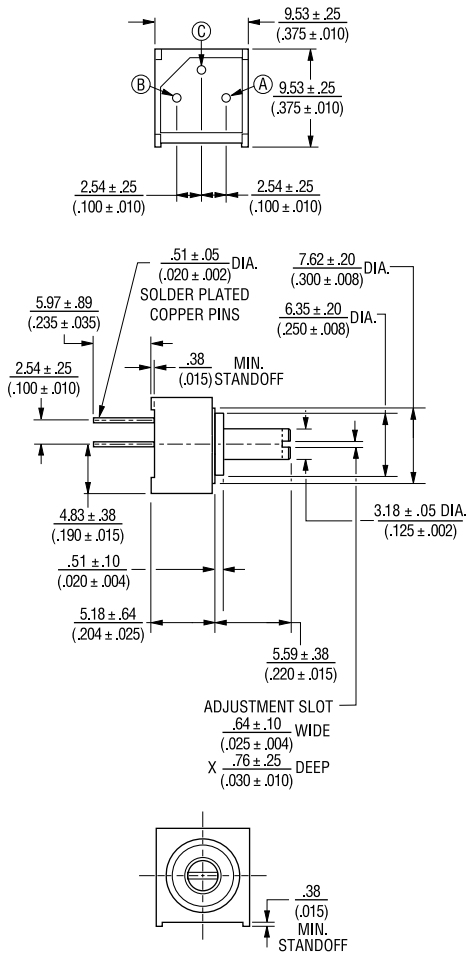
**3315C-002**



# 3315 - Dimensions and Tolerances



**3315P-005**  
Bushingless



**3315Y-005**  
Bushingless

