



## Features

- Low profile incremental encoder
- High-class rotational feel
- Haptic detent feedback
- RoHS compliant\*

# PER35 - 35 mm Low Profile Incremental Ring Encoder

### Additional Information

Click these links for more information:



### Electrical Characteristics

Output.....3-phase quadrature code  
 Contact Rating..... 1 mA @ 5 V DC  
 Insulation Resistance  
 .....100 Mohms @ 250 V DC  
 Dielectric Withstanding Voltage  
 Sea Level.....300 V AC  
 Electrical Travel.....Continuous  
 Contact Bounce..... 3 ms max.\*\*

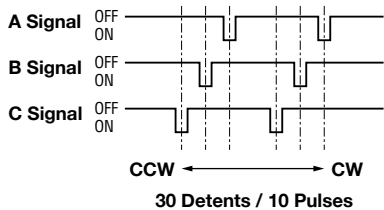
### Environmental Characteristics

Operating Temperature..... -30 °C to +80 °C  
 Storage Temperature..... -40 °C to +85 °C  
 IP Rating..... IP 40

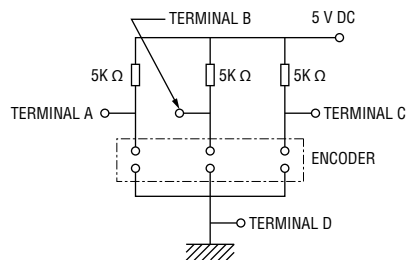
### Mechanical Characteristics

RPM (Operating) ..... 60 max.  
 Mechanical Angle ..... 360 ° continuous  
 Detent Torque..... 50 to 200 gf-cm  
 Rotational Life..... 50,000 cycles  
 Soldering Condition  
 Wave Soldering..... 230 °C for 3 seconds  
 Manual Soldering... 300 °C for 3 seconds

### Quadrature Output Table

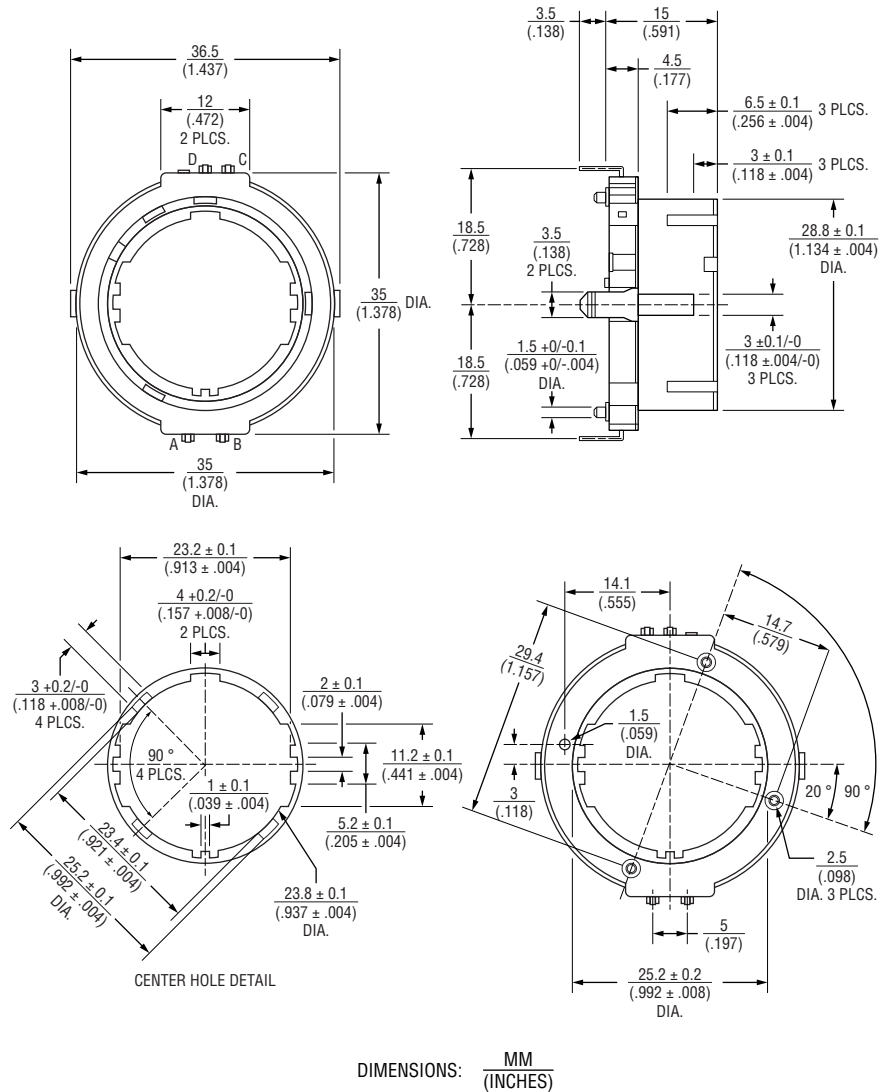


### Suggested Filter Circuit



**CAUTION**  
 Do not store product in high temperature and humidity, direct sunlight and/or places where corrosive gases may be generated. Please use product within 6 months from the date of delivery and promptly after unpacking.

### Product Dimensions



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

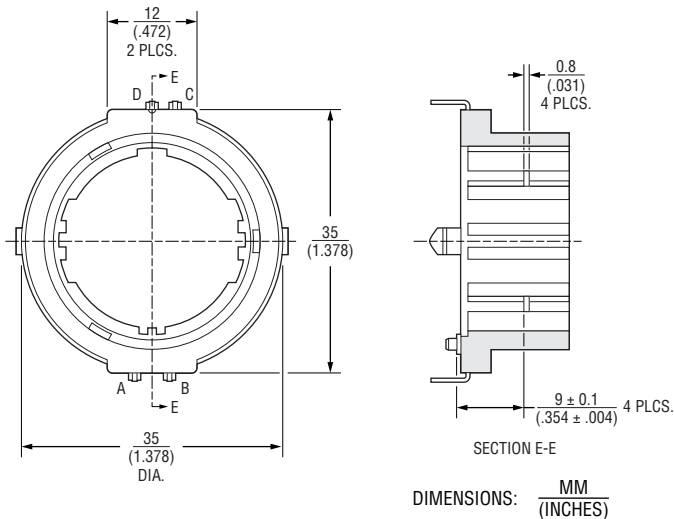
\*\* Devices are tested using standard noise reduction filters.

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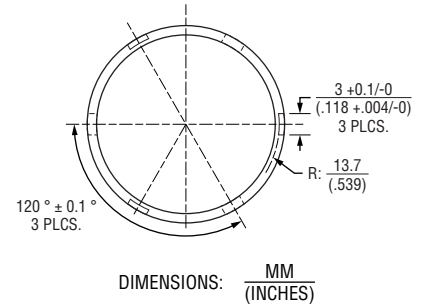
# PER35 - 35 mm Low Profile Incremental Ring Encoder

# BOURNS®

## Cross Section



## Shaft Detail



## How To Order

**PER35 1 - P1 15 - N 0010**

Model \_\_\_\_\_

Number of Units \_\_\_\_\_  
1 = Single

Orientation \_\_\_\_\_  
P = PC Pins  
Down Facing

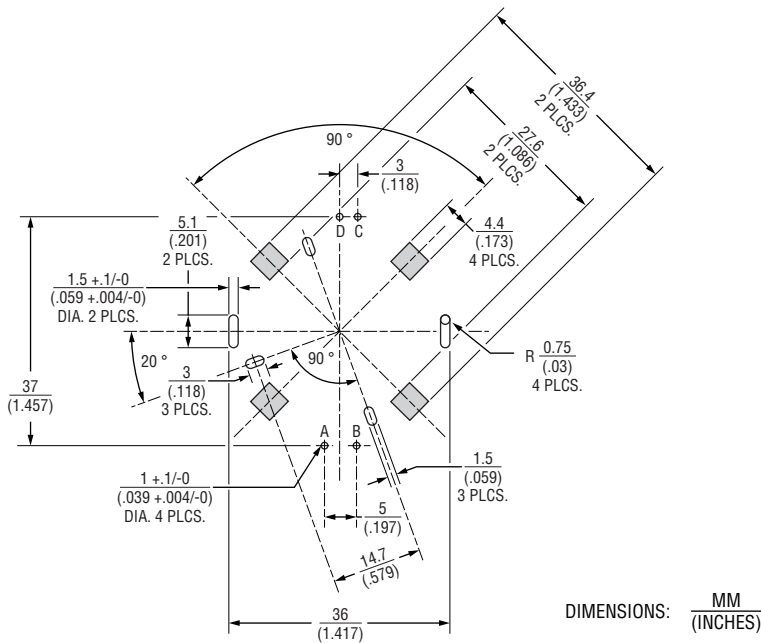
Detent Option \_\_\_\_\_  
1 = 30 Detents (10 Pulses)

Ring Height \_\_\_\_\_  
15 = 15 mm

Switch Configuration \_\_\_\_\_  
N = No Switch

Resolution \_\_\_\_\_  
0010 = 10 Pulses per 360° Rotation

## Recommended PCB Layout



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