



Features

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

PER28 - 28 mm Low Profile Incremental Ring Encoder

Additional Information

Click these links for more information:



Electrical Characteristics

Output.....2-bit quadrature code
 Contact Rating..... 10 mA @ 5 V DC
 Insulation Resistance
 100 megohms @ 250 V DC
 Dielectric Withstanding Voltage
 Sea Level.....300 V AC
 Electrical Travel.....Continuous
 Contact Bounce (15 RPM)..... 2 ms max.**

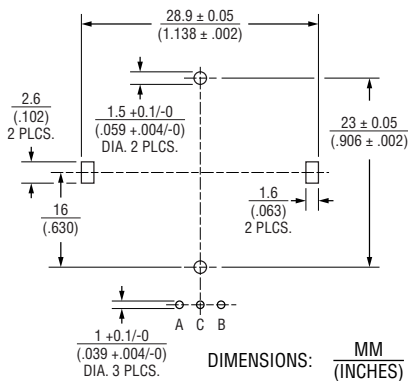
Environmental Characteristics

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 250 gf-cm
 Rotational Life..... 50,000 cycles
 Soldering Condition
 Wave Soldering..... 230 °C for 3 seconds
 Manual Soldering... 300 °C for 3 seconds

Recommended PCB Layout

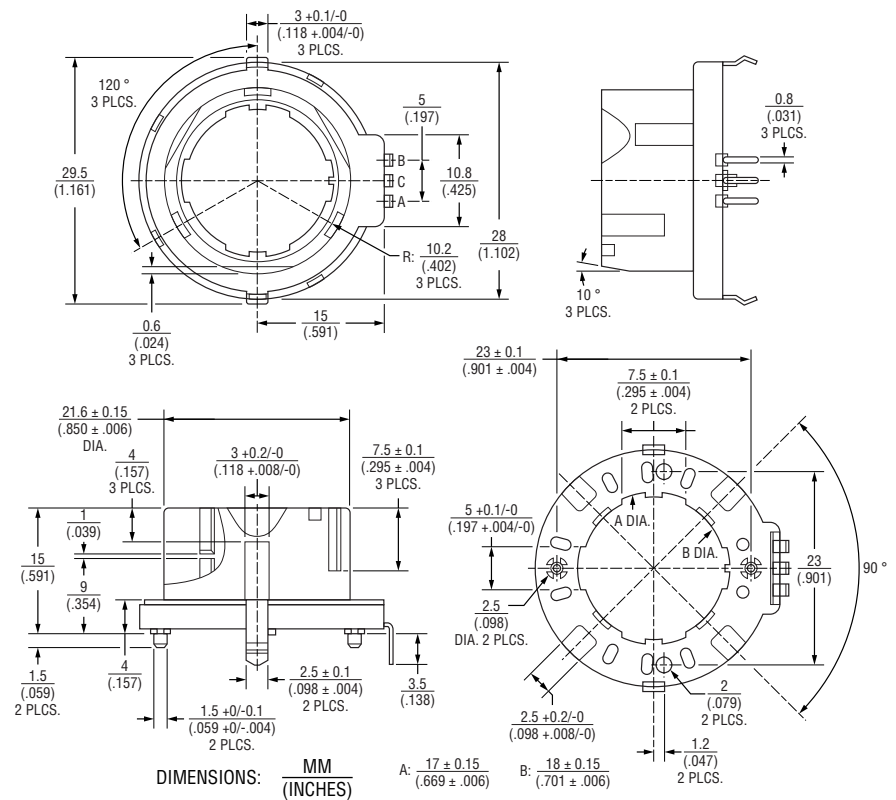


WARNING
 Cancer and Reproductive Harm
www.P65Warnings.ca.gov

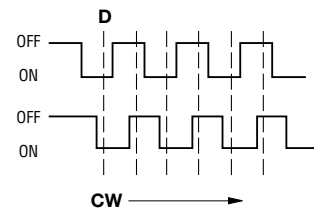
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 ** Devices are tested using standard noise reduction filters. For optimum performance, designers should use noise reduction filters in their circuits.

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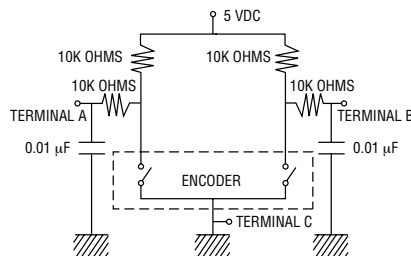
Product Dimensions



Quadrature Output Table



Suggested Filter Circuit



How To Order

PER28 1 - P1 15 - N 0015

Model _____
 Number of Units _____
 1 = Single
 Orientation _____
 P = PC Pins
 Down Facing
 Detent Option _____
 1 = 30 Detents (15 Pulses)
 Ring Height _____
 15 = 15 mm
 Switch Configuration _____
 N = No Switch
 Resolution _____
 0015 = 15 Pulses per 360 ° Rotation



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.

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