

PER40

22 mm Low Profile Incremental Ring Encoder



*RoHS COMPLIANT

Features

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

Applications

- Industrial automation
- Industrial tools
- Test and measurement
- Instrumentation
 - Home appliances

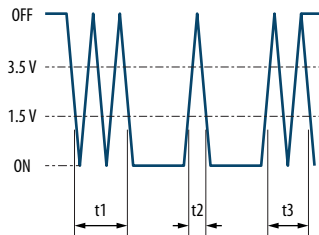
Sustainability

- Small size reduces material use
- High pallet density for lower CO₂
- Eco-logistics-friendly packing
- Recyclable ESD-safe packaging
- High efficiency, low power loss
- Energy-saving low-power design

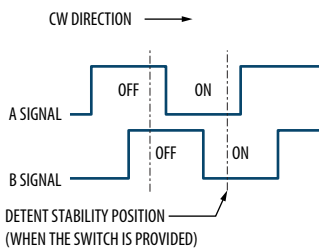
Product Overview

The Model PER40 has been designed for applications where mechanical feel is as important as electrical performance. Its combination of compact dimensions, premium haptic feedback, quadrature output, and industrial operating capability makes it well-suited for next-generation control interfaces used in industrial equipment and other electronic products requiring intuitive rotary user input. The product is supplied in a standardized PCB-mount configuration to simplify integration into new designs.

Switching Characteristics



Quadrature Output Table



Electrical Characteristics

Output.....	2-phase quadrature code
Contact Rating.....	0.3 mA to 1 mA
Rated Voltage.....	3.3 VDC to 5 VDC
Insulation Resistance	100 MΩ min. @ 250 VDC
Dielectric Strength - Sea Level.....	300 VAC 1 min.
Electrical Travel.....	Continuous
Sliding Bounce	3 ms max.
Resolution	15 pulses in 360 ° rotation

Environmental Characteristics

Operating Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Soldering Condition	
Dip Soldering.....	260 ±5 °C for 3 s
Manual Soldering.....	300 °C for 3 s
IP Rating.....	IP 40

Mechanical Characteristics

Mechanical Angle.....	360 ° continuous
Detent Torque.....	200 ±100 gf.cm
Rotational Life.....	30,000 cycles
Terminal Strength (static load)	500 gf
Shaft Wobble (momentary load)	500 gf (≤ 0.55 mm p-p)

Product Characteristics

Weight.....	15.295 grams
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Contact Information

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

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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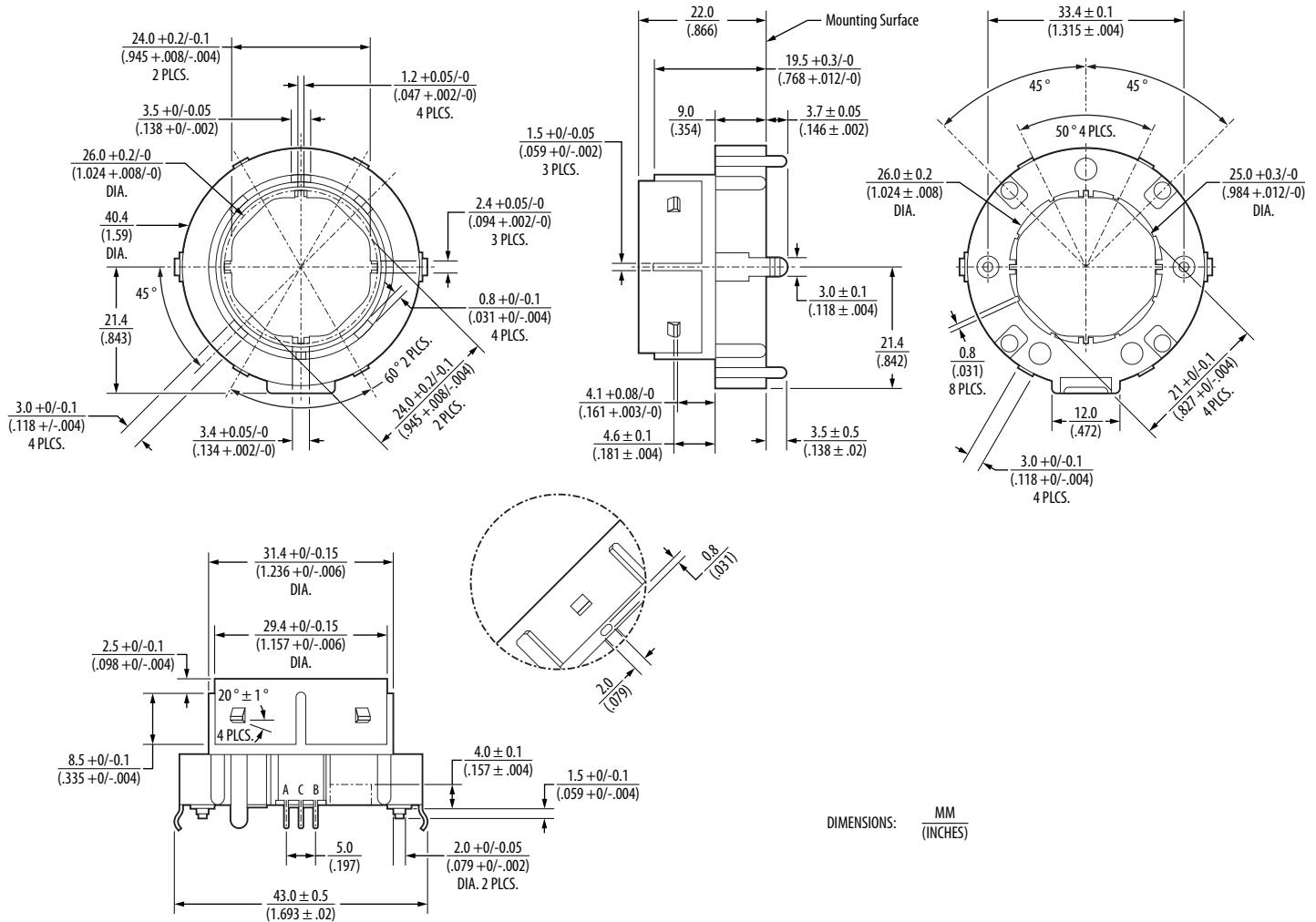
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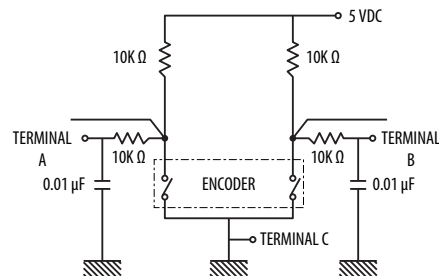


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Product Dimensions



Suggested Filter Circuit



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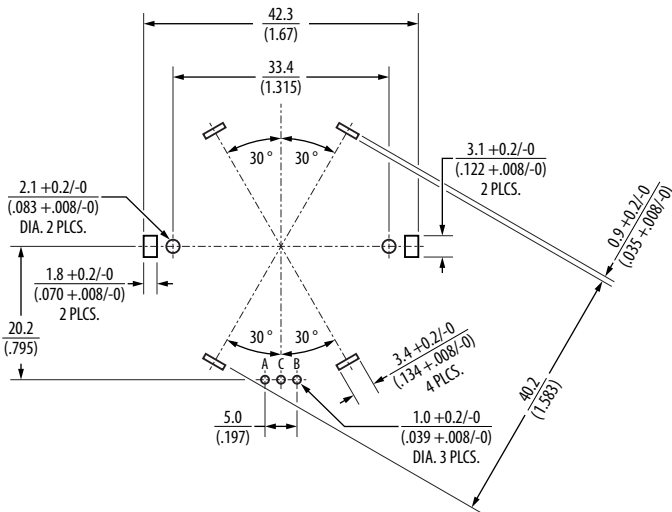
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Mounting Hole Details



How to Order

PER40 1 - P 1 22 - N 0015

Model Series _____
22 mm Incremental Ring Encoder

Number of Units _____
1 = Single

Orientation _____
P = PC Pins Down Facing

Detent Option _____
1 = 30 Detents (15 Pulses)

Ring Height _____
22 = 22 mm

Switch Configuration _____
N = No Switch

Resolution _____
0015 = 15 Pulses per 360° Rotation

Package Specifications

Bulk.....600 pcs. per carton

REV. 08/26

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