

Features

- Compact design, long life and high reliability
- Low cost compared to optical type encoders
- Incremental type
- Detent option



PES12 - 12 mm Shaftless Encoder

Electrical Characteristics

Output	Quadrature
Contact Rating	1 mA @ 5 VDC
Insulation Resistance	10 megohms @ 50 VDC
Dielectric Withstanding Voltage	
Sea Level.....	50 VAC minimum
Contact Bounce (60 RPM).....	2.0 ms. maximum**

Environmental Characteristics

Operating Temperature Range	-10 °C to +65 °C (-14 °F to +149 °F)
Rotational Life	30,000 cycles minimum
IP Rating	IP 40

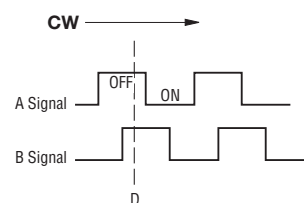
Mechanical Characteristics

Mechanical Angle	360 ° continuous
Running Torque	30 to 200 g-cm (0.41 to 2.78 oz.-in.)
Shaft Side Load (Static).....	2.04 kgf (4.5 lbs.) minimum
Weight	1.5 gm (0.52 oz.)
Terminals	Printed circuit board terminals
Soldering Condition	
Wave Soldering	Sn95.5/Ag2.8/Cu0.7 solder with no-clean flux: 260 °C ±5 °C max. for 1-3 seconds
Hand Soldering	300 °C max. for 3 seconds max.
Hardware	No hardware supplied

How To Order

Model _____	PES12 - 4 0 S - N 0024
Terminal Configuration _____	
4 = PC Horizontal/Rear Facing	
Detent Option _____	
0 = No Detents	
2 = 24 Detents	
Shaft Style _____	
S = Shaftless	
Switch Configuration _____	
N = No Switch	
Resolution _____	
0024 = 24 Pulses per 360 ° Rotation	

Quadrature Output Table



*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

**Devices are tested using standard noise reduction filters. For optimum performance, designers should use noise reduction filters in their circuits.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

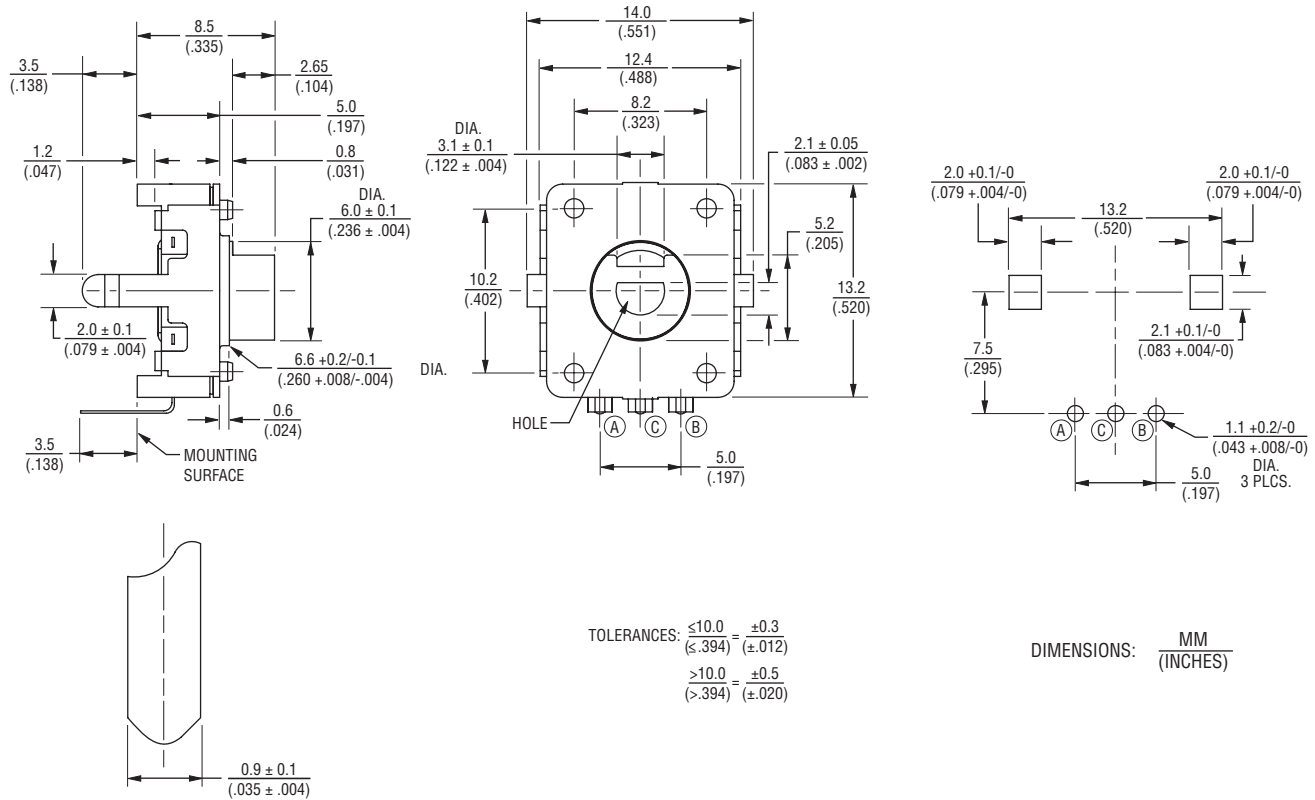
Applications

- Audio-visual equipment
- Consumer electric appliances
- Radios
- Musical instrumentation
- Communications equipment
- Home appliances

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BOURNS®

Product Dimensions



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