

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

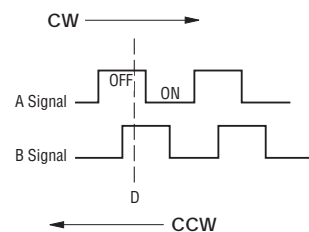
Mechanical Characteristics

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 (0.05 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

	PES12 - 4 0 S - N 0024
Model	_____
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



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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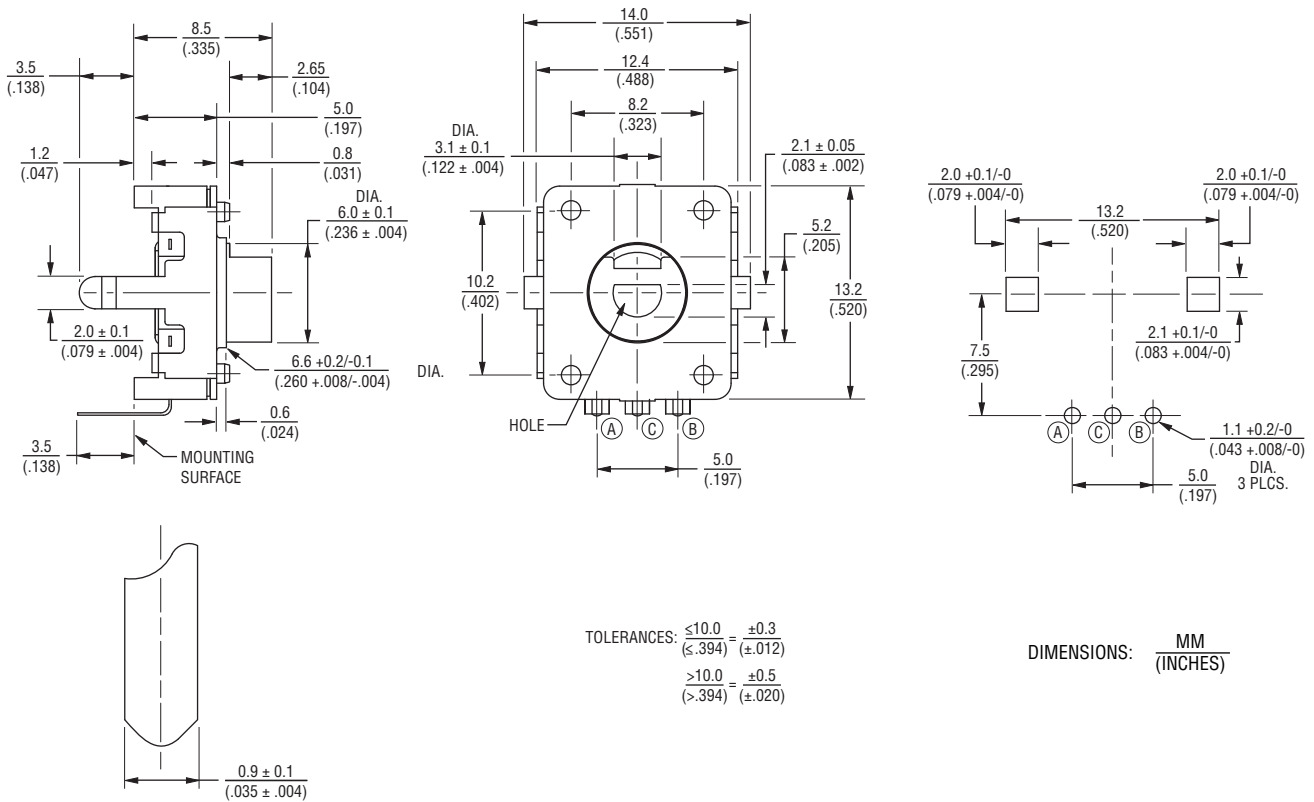
Applications

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

PES12 - 12 mm Shaftless Encoder

BOURNS®

Product Dimensions



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Users should verify actual device performance in their specific applications.

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