

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

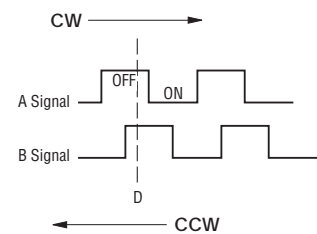
Mechanical Angle	360 ° continuous
Running Torque	30 to 200 g-cm (0.41 to 2.78 oz.-in.)
Shaft Side Load (Static).....	2.04 kgf (4.5 lbs.) minimum
Weight	1.5 gm (0.05 oz.)
Terminals	Printed circuit board terminals
Soldering Condition	
Wave Soldering.....	Sn95.5/Ag2.8/Cu0.7 solder with no-clean flux: 260 °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.

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

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