

Hockey Puck Encoder



The Hockey Puck Non-Contact Rotary Encoder

Joral Devices has created a revolutionary new rotary encoder, called the Hockey Puck. It is non-contact to the measuring surface and compensates for mechanical misalignment. It has no shaft or bearings so the problems of drag, endplay, corrosion, side loading, and push-out have been eliminated. The user mounts a magnet on the

rotating object and locates the encoder close by. Precise mounting is not required, as it will tolerate changes in distance, centering and planer tilt. This is important as the machine wears over time. Non-contact means vibration and shock from the mechanics are not transmitted directly to the electronics in the encoder. (Patent Pending)

Features

- No Shaft or Bearings
- No Mechanical Coupling Required
- Reduced Vibration and Shock
- State-of-the-art Magnetic Technology
- Compensates for Machine Wear and Tear
- Completely Sealed Electronics
- Rugged Duty Design and Packaging
- Designers Kit Available
- Resolutions from 20 to 2048 PPR
- 30, 40, 50, and 58mm diameters
- Spike Protection
- Mis-wire Protection
- Diagnostic LEDs
- Wide Operating Voltage Range
- Incremental or Absolute Position
- CANBUS, Serial, Wireless Interface
- Customizations Available

The New Joral Non-Contact Measurement Sensor

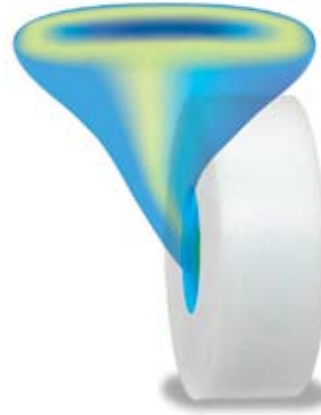


Wide Range of Magnetic Positions

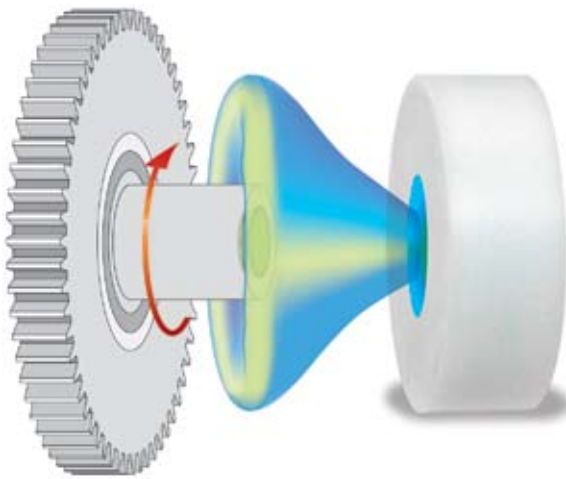
The Hockey Puck Encoder senses the position of the magnet over a wide range of positions and angles. The figures below show potential magnet placement areas using the center or the outside of the encoder. Other positions or angles can be used.



Centered Magnet Coupling

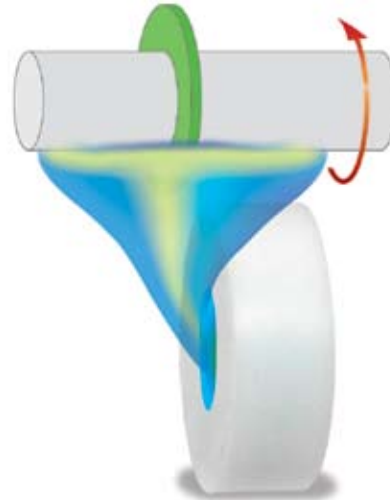


Adjacent Magnetic Coupling



Centered Coupling Example

The magnet is mounted to the center of the gear and the center of the Hockey Puck is located in the front of the gear.



Adjacent Coupling Example

The rotating shaft through the ring magnet can be sensed by the Hockey Puck from the side.

Standard Product Specifications

Diameter : 30mm, 40mm, 50mm or 58mm

Quadrature Output : ChA , ChB and Marker

Resolution (PPR) : 8, 10, 16, 20, 25, 32, 40, 50, 64, 80, 100, 125, 128, 200, 250, 256, 400, 500, 512, 1024, 2048

Output Driver : Push/Pull Output

Supply Voltage : 6 to 30 VDC

Current Draw : 60 millamps

Rotational Speed : 6000 rpm

5 Pin Connector with screw lockdowns :

Phoenix MC 1,5/5-STF-3,81

Operating Temperature : -40 to +125 C

Approximate Weight : 2.5 oz

Enclosure Rating : IP67

Potting Material : Non-porous, water and chemical resistant
RoHS compliant, Constant Service temp to 140C

PART NUMBERS : HPdd-ppr (dd:diam, ppr:resolution.)

Options & Functions :

Step and Direction, 0 to 10VDC Analog, Serial SSI, CANBUS

Connectors : Pigtails, M8 Circular, others upon request

Labeling : Customs available

Part Numbers : Customs Available

Designer Kit

The Designer Kit contains everything you need to begin experimenting with the amazing capabilities of the Hockey Puck encoder. It contains a standard 58mm Hockey Puck Encoder, an assortment of magnets, a cable for power and a 9VDC battery all enclosed in a handy carrying case.



ORDER ONE TODAY!

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DEVICES