

# PMX Series— Panel Mount Incremental Rotary Optical Encoder

BEI Sensors



The PM Series Panel Mount Encoder was developed to provide control manually. It is interchangeable with standard potentiometer type panel mounting, yet provides direct digital accuracy without A/D conversion and has an exponentially longer life expectancy.

The new BEI Panel Encoder is designed for applications where position control and analog to digital conversions require manual knob control. Standard output includes TTL quadrature with resolution up to 256. For zero referencing, an optional index is available.

Hybrid technology aids in reliable operation over a standard temperature range of 0° to 70°C. High reliability and accurate position control are possible by using non-contacting elements, including a slotted metal disc placed between a collimated infrared LED source and a common substrate sensor array. A strain relief is provided for securing of lead terminations.

BEI's new Panel Mount Encoder is ideal for audio, instrumentation, medical and other related markets where accurate manual control is necessary.

## Mechanical Specifications

**Dimensions:** See Dimensions

**Weight:** 2 oz.

**Shaft Loads:** 2lbs. Axial, 1lb Radial

**Torque:** 1.0 oz. max.

**Shaft Speed:** 200 RPM max. (cont.)

**Panel Thickness:** 0.10" max.

**Materials:**

**Housing:** Polycarbonate

**Bushing/Shaft:** Metal

**Code Disc:** Stainless Steel

## Electrical Specifications

**Code:** Incremental

**Resolution:** See ordering instructions

**Supply Voltage:** 5VDC±10% @ 60 mA max.

**Output Format:** TTL Dual Channel  
20 mA Source, 0.4V max.  
10 mA Source, 3.5V min.

**Output Format Option:** Index

## Environmental Specifications

**Temperature:** Operating 0° to 70°C  
Storage -25° to 90°C

**Shock:** 50 G's for 11ms duration

**Vibration:** 5Hz to 2kHz @ 20 G's

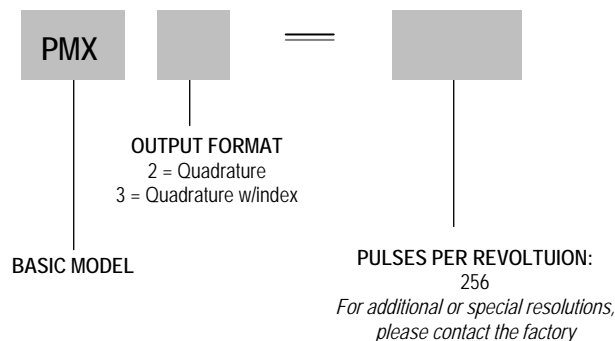
## Termination Specifications

**Type:** 5 position terminal board

**Pin Out:** See Pin out

## PMX Ordering Options for assistance, call 800.350.2727

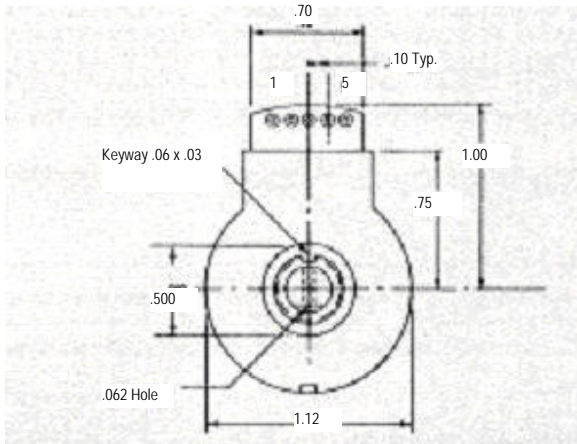
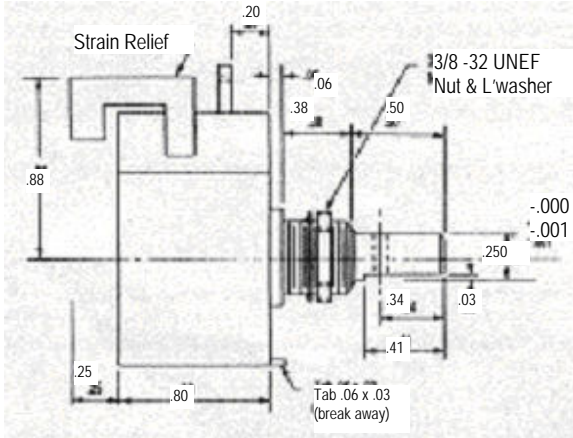
Use this diagram, working from left to right to construct your model number (example: **PM2-256**)



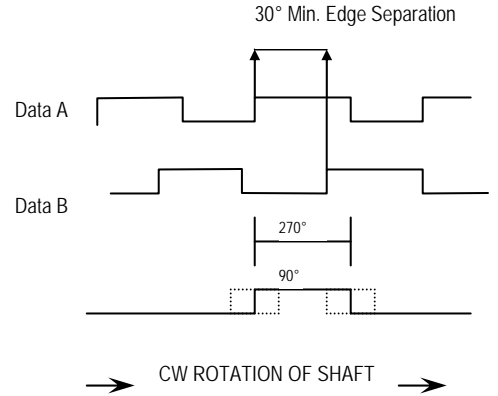
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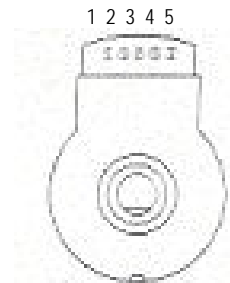
## Dimensions



## Waveforms



## Pin out



- 1 Data B
- 2 Data A
- 3 +5 Volt
- 4 Index (option)
- 5 Ground

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