

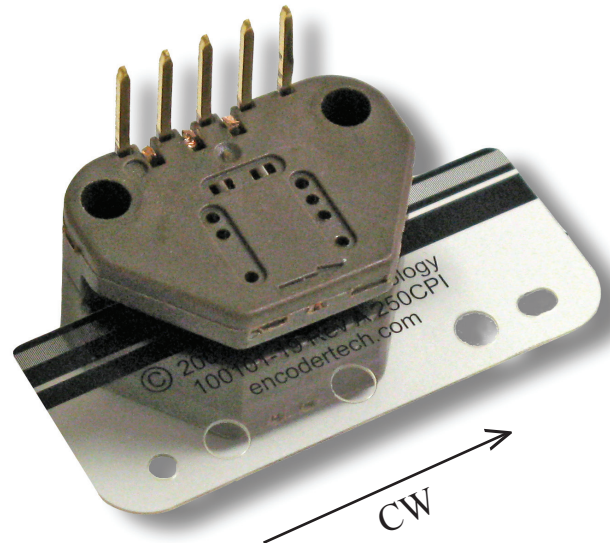
# SERIES LM & LAM

**Dynapar™ brand**

## Kit Encoder

### Key Features

- Compact Size for Easy Integration
- Advanced Phased-Array Sensor Technology with Digital or Analog Output
- Rugged Plastic or Metal Scale Material



## SPECIFICATIONS

### ELECTRICAL

- Code:** Incremental
- Resolution:** See ordering information for standard resolutions
- Supply Voltage:** 5Vdc + 10% at 60mA maximum
- Output Format:** Dual channel quadrature
- Output Format Options:** Index
- Output Type – Digital:** Square wave, TTL and CMOS compatible, 10mA sink
- Output Type – Analog:** Output from diode array
- Frequency Response:** 125 kHz (data and index)

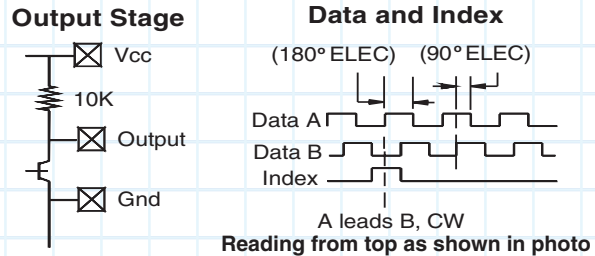
### MECHANICAL

- Dimensions:** See module outline dimensions
- Weight:** <0.25 ounces
- Termination:** .025 sq. discrete pins
- Materials**
- Module:** Molded PPS 40% glass (R-4)
- Pins:** gold plated
- Scale:** Mylar or etched metal

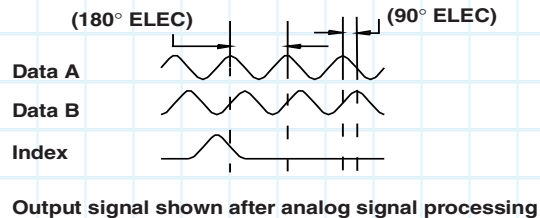
### ENVIRONMENTAL CONDITIONS

- Operating Temperature:** -40° to 100°C (non-condensing)
- Storage Temperature:** -40° to 100°C
- Enclosure:** Unsealed housing

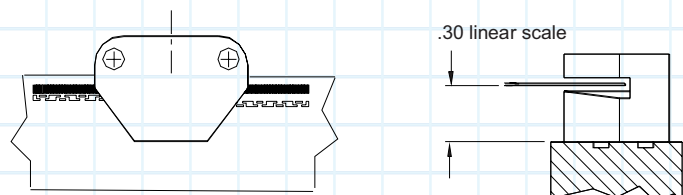
### Digital Output



### Analog Output Wave Forms



### SCALE MOUNTING



Linear Module Scale made to order: contact factory

**ORDERING INFORMATION**

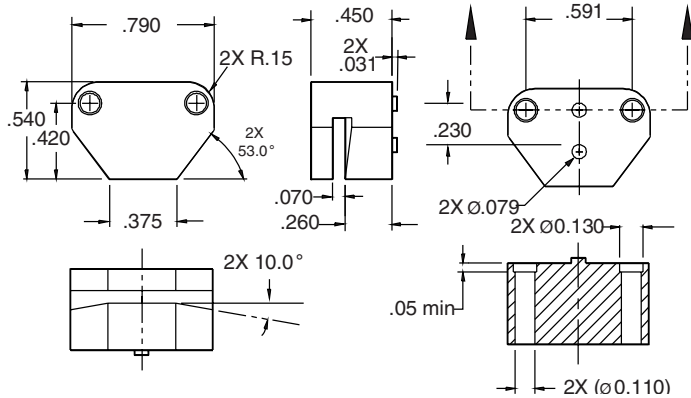
To order, complete the model number with code numbers from the table below:

Encoder Module (Linear)	Scale Characteristics								
<p><b>Digital LM</b>    <span style="border: 1px solid black; padding: 2px;">720CPI</span> - <span style="border: 1px solid black; padding: 2px;">3T</span> - <span style="border: 1px solid black; padding: 2px;">See Note</span></p> <p style="text-align: center;">1.                      3.</p> <p><b>Analog LAM</b>    <span style="border: 1px solid black; padding: 2px;">500CPI</span>    <span style="border: 1px solid black; padding: 2px;">6T</span></p> <p style="text-align: center;">2.                      3.</p>	<p><b>Standard Resolution - Digital</b> after 4x edge multiplication.</p> <p><b>12 cycles/mm = 0.0008 Inch</b> Available Scale Length: 1.5 inches</p> <p><b>25 cycles/mm = 0.01mm</b> Available Scale Length: Up to 600mm</p> <p><b>720 cycles per inch = 0.00035 inch</b> Available Scale Length: 0.75, 1.0, 1.26, 1.70, 2.03, 3.255 or 4.8 inches</p>								
<p><b>1.Linear Digital Module (LM)</b> 12CPMM.....12 cycles/mm 25CPMM.....25 cycles/mm 720CPI.....720 cycles/inch See "Current Resolutions List" for Scale Lengths.</p> <p><b>2. Linear Analog Module (LAM)</b> 250CPI.....250 cycles /inch 500 cycles/inch.....500CPI See "Current Resolutions List" for Scale Lengths.</p> <p><b>3.Lead Positions</b></p> <p><b>Digital</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Side Exit</td> <td style="width: 50%;">Top Exit</td> </tr> <tr> <td>A.....1S</td> <td>A.....1T</td> </tr> <tr> <td>AB.....2S</td> <td>AB.....2T</td> </tr> <tr> <td>ABZ.....3S</td> <td>ABZ.....3T</td> </tr> </table> <p><b>Analog</b></p> <p>Top Exit</p> <p>ABZ.....6T</p> <p style="text-align: center;"><b>Note: When ordering Modules with a Gated Index, add a "G". For Ungated Index, add a "U".</b></p>	Side Exit	Top Exit	A.....1S	A.....1T	AB.....2S	AB.....2T	ABZ.....3S	ABZ.....3T	<p><b>Standard Resolution – Analog</b> Available in custom lengths to 6 feet. Consult factory.</p> <p><b>250 cycles per inch = 1.6 microns</b> after16x interpolate and 4x edge multiplication.</p> <p><b>500 cycles per inch = .8 microns</b> after16X interpolate and 4x edge multiplication.</p> <p><b>Length &amp; Index Positioning</b> Per customer requirement Consult factory for availability, part numbers and pricing.</p>
Side Exit	Top Exit								
A.....1S	A.....1T								
AB.....2S	AB.....2T								
ABZ.....3S	ABZ.....3T								

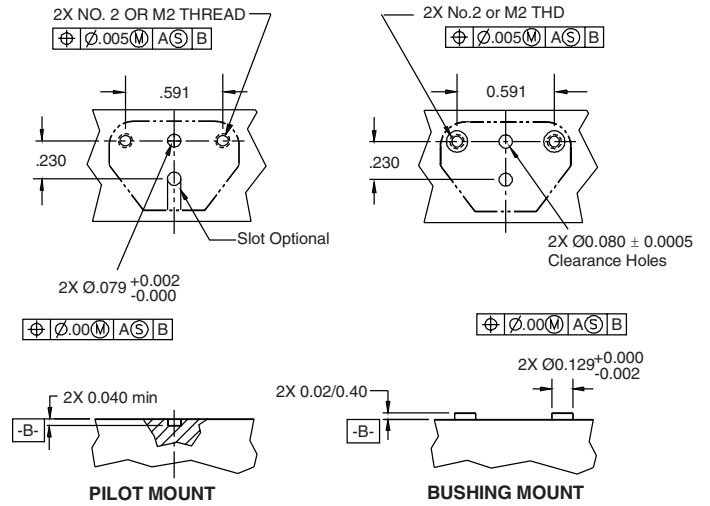
# SERIES LM & LAM



## Module Outline Dimensions



## Recommended Mounting Configurations

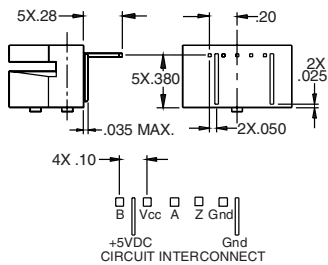


## Pin Layouts

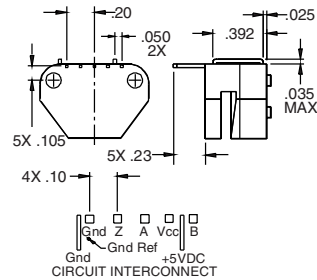
The Optical Encoder Modules come standard in either top mount or side mount with A, B, and Index Channels.

### ABZ CONFIGURATION 5X .025 square pins

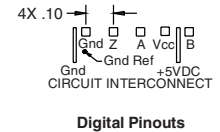
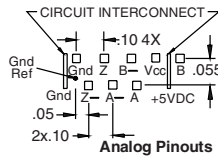
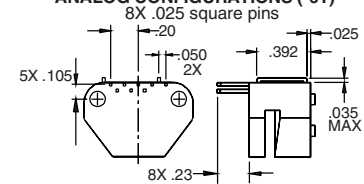
SIDE MOUNT (-1S, -2S, -3S)



TOP MOUNT (-1T, -2T, -3T)



### ANALOG CONFIGURATIONS (-6T)



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