

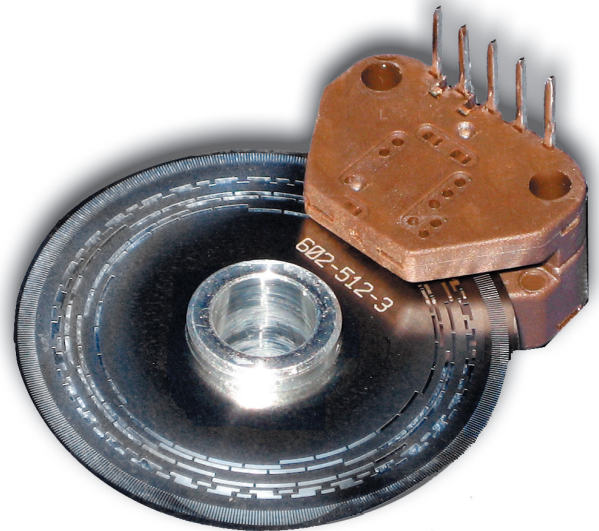
SERIES M602 & M832

Dynapar™ brand

Kit Encoder

Key Features

- Compact Size for Easy Integration
- Advanced Phased-Array Sensor Technology with Digital Output
- Available with Unbreakable Plastic or Stainless Code Discs



SPECIFICATIONS

ELECTRICAL

Code: Incremental

Resolution: See ordering information for standard resolutions

Supply Voltage: 5Vdc + 10% at 60mA maximum

Output Format: Dual channel quadrature with index

Output Type: Square wave, TTL and CMOS compatible, 10mA sink

Frequency Response: 125 kHz (data and index)

Connector:

Molex Connector: P/N 50-57-9005

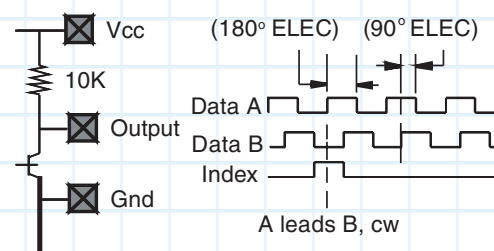
Molex Socket: P/N 16-02-0069

AMP Connector: P/N 87499-9

AMP Socket: P/N 87667-3

DIGITAL OUTPUT FORMAT

OUTPUT STAGE DATA AND INDEX



Reading from top as shown in picture.

MECHANICAL

Dimensions: See module outline dimensions

Bore Diameter: 1/4", 3/8", 6mm, 8mm, 10mm

Disc Interface

Runout: 0.005 inches TIR

Endplay: + 0.010 inches

Termination: .025 sqr. discrete pins

Optical Radius (data): 0.602 or 0.832 inches

Motor Interface

Mounting Holes: See recommended mounting

Materials

Module: Molded PPS 40% glass (R-4)

Pins: Gold Plated

Disc: Mylar or Etched Metal

Hub: Aluminum

Weight: <0.25 ounces

ENVIRONMENTAL CONDITIONS

Operating Temperature: -40° to 100°C (non-condensing)

Storage Temperature: -40° to 100°C

Enclosure: Unsealed housing

ORDERING INFORMATION

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

| | | | |
|---|---|---|--|
| <p>Encoder Module (Rotary)</p> <p>Digital M 602 - 1000 - 3T - See ★ Note</p> <p style="text-align: center;">1. 2. 3.</p> | <p>Code Disc and Hub</p> <p>DH 602 - 1000 - 0 - 25</p> <p style="text-align: center;">1. 2. 3. 4.</p> | | |
| | <p>Code Disc Only (no Hub)</p> <p>D 602 - 1000 - 0</p> <p style="text-align: center;">1. 2. 3.</p> | | |
| <p>1. Optical Radius</p> <p>0.602 inches 602</p> <p>0.832 inches 832</p> <p>2. Standard Resolutions</p> <p>Digital 602 Module Resolutions from 35 to 3600. See "Current Resolutions" list.</p> <p>Digital 832 Module Resolutions from 360 to 5000 See "Current Resolutions" list.</p> <p>3. Lead Positions</p> <p>Digital Side Exit Top Exit ABZ 3S ABZ 3T</p> | <p>1. Disc Outside Diameter</p> <p>1.30 inches 602</p> <p>1.75 832</p> <p>2. Standard Resolutions See "Current Resolutions" list.</p> <p>3. Commutation Tracks (Not Available) Default Option 0</p> <p>4. Hub Bore Size*</p> <p>1/4 inch 25 6mm 6M</p> <p>3/8 inch 38 8mm 8M</p> <p style="text-align: right;">10mm 10M</p> <p>*Consult factory for other sizes</p> | | |
| <p>Current Resolutions</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>M602 Digital Modules</p> <p>1, 24, 25, 35, 40, 60, 100, 120, 192, 200, 240, 250, 256, 300, 360, 500, 512, 600, 625, 720, 1000*, 1024*</p> <p>* Available as direct read or doubler</p> <p>Doubler: 1000, 1024, 1200, 1250, 1440, 2500, 2540, 2600 3600</p> </td> <td style="width: 50%; vertical-align: top;"> <p>M832 Digital Modules</p> <p>Direct Read: 360, 1000, 1024</p> <p>Doubler: 2000, 2048, 3600, 4096, 5000</p> </td> </tr> </table> | | <p>M602 Digital Modules</p> <p>1, 24, 25, 35, 40, 60, 100, 120, 192, 200, 240, 250, 256, 300, 360, 500, 512, 600, 625, 720, 1000*, 1024*</p> <p>* Available as direct read or doubler</p> <p>Doubler: 1000, 1024, 1200, 1250, 1440, 2500, 2540, 2600 3600</p> | <p>M832 Digital Modules</p> <p>Direct Read: 360, 1000, 1024</p> <p>Doubler: 2000, 2048, 3600, 4096, 5000</p> |
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*** NOTE: When ordering Modules with Index add a "G" to the end of the part number for GATED INDEX or "U" for UNGATED INDEX.**

Note: Gated Index only available on Doubler Modules.

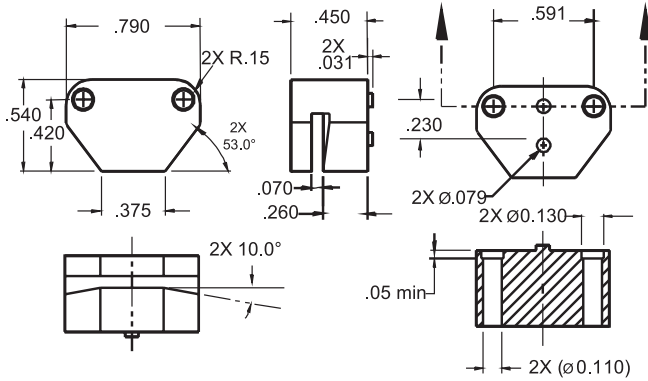
When ordering Modules in 1000 or 1024PPR to specify DOUBLER CIRCUIT add a "D" to the last digit.

Example: M602-1000-3T-UD

SERIES M602 & M832



Module Outline Dimensions



Pin Layouts

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

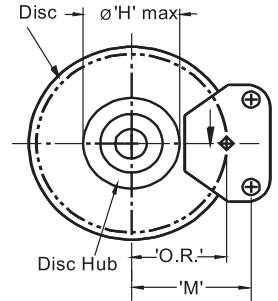
Module Interface

Module 602

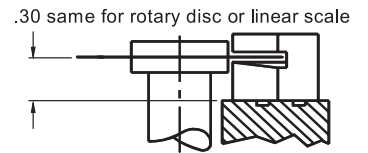
'O.R.' – Optical Radius 0.602 in.
 'M' – Mounting dimension .. 0.756 in.
 Ø 'H' – Hub Maximum O.D. .. 0.061 in.

Module 832

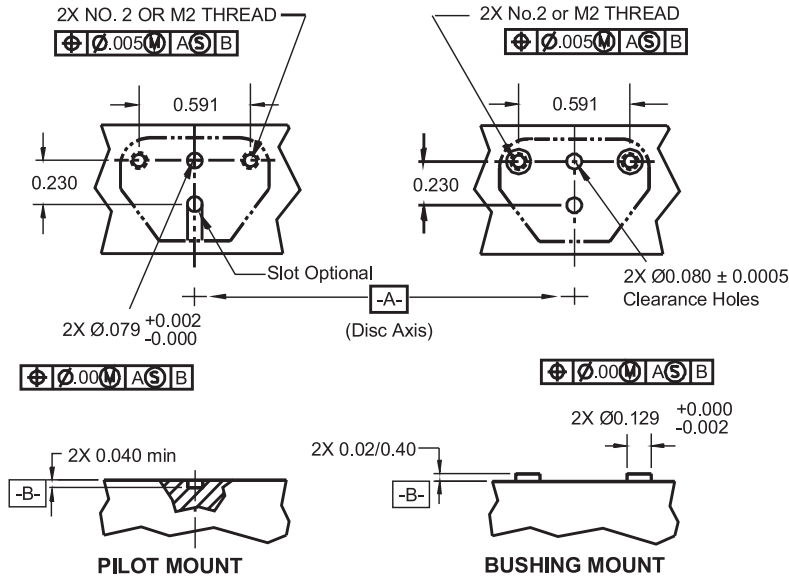
'O.R.' – Optical Radius 0.832 in.
 'M' – Mounting dimension... 0.986 in.
 Ø 'H' – Hub maximum O.D... 1.07 in.



DISC MOUNTING



Recommended Mounting Configurations



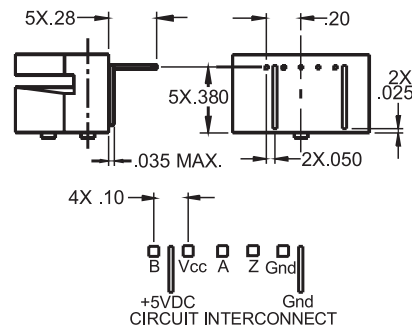
Pin Layouts

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

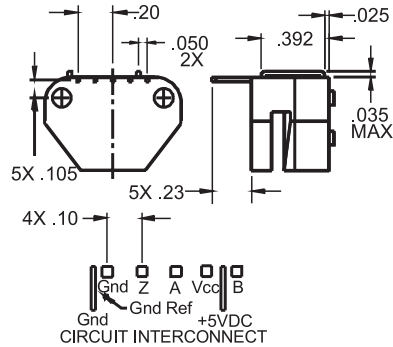
ABZ CONFIGURATION

5X .025 square pins

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



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



Disc and Hub Dimensions

Module 602 Disc and Hub

Ø'D' – Disc O.D.1.30 in.

Ø'H' – Hub O.D.0.61 in.

Module 832 Disc and Hub

Ø'D' – Disc O.D.1.75 in.

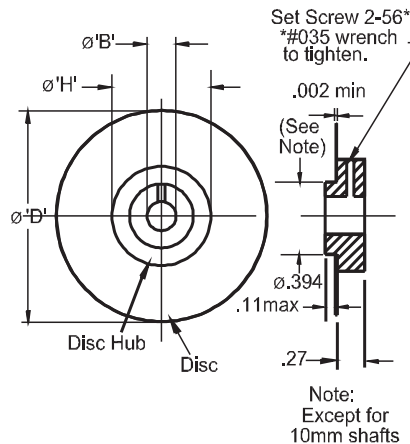
Ø'H' – Hub O.D.1.00 in.

Shaft Size Hub Bore Sizes

| | Ø'B' in. | Ø'B' mm |
|---------|----------|---------|
| | +.0005 | +.013 |
| | +.0000 | -.000 |
| 1/4 in. | .2500 | 6.350 |
| 3/8 in. | .3750 | 9.525 |
| 6 mm | .2362 | 6.000 |
| 8 mm | .3150 | 8.000 |
| 10 mm | .3937 | 10.000 |

Disc only

.3942 I.D. x .002 min. thick



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