

**PART NUMBER:** MEH17**DESCRIPTION:** incremental encoder**ELECTRICAL SPECIFICATIONS**

|                         |  |
|-------------------------|--|
| output waveform         | Square wave  |
| output signals          | A, B, Z phase  |
| current consumption     | ≤30 mA   |
| frequency response      | 0~50 KHz   |
| output phase difference | A, B phase difference 90° ± 45°<br>(T/4±T/8) Z phase T±T/2 (see output waveform) |
| supply voltage          | 5 V ± 10%  |
| output resolution (ppr) | 100, 200, 300, 360, 400, 500   |
| waveform rise/fall time | 2μ or less   |

**MECHANICAL SPECIFICATIONS**

|                         |  |
|-------------------------|--|
| max shaft load, radial: | 1.9N (200gf)                                       |
| axial:                  | 1.9N (200gf)                                       |
| starting torque         | 1 x 10 <sup>-3</sup> N·m (10 gf·cm max.)           |
| max rotational speed    | 6000 RPM   |
| shock resistance        | 500 m/s <sup>2</sup> (50G), 3 times each on XYZ    |
| vibration proof         | 55 Hz, double amplitude 1.5mm, 2 hours each on XYZ |
| weight                  | 20g (with 150mm cable)                             |
| cable                   | Vinyl wire (AWG 28) 150mm cable                    |

**ENVIRONMENTAL SPECIFICATIONS**

|                |                           |
|----------------|---------------------------|
| operating temp | 0° to +50° C              |
| storage temp   | -20° to +80° C            |
| humidity       | RH 35%~90% non collecting |

**ORDERING INSTRUCTIONS****MEH17-XXXP**

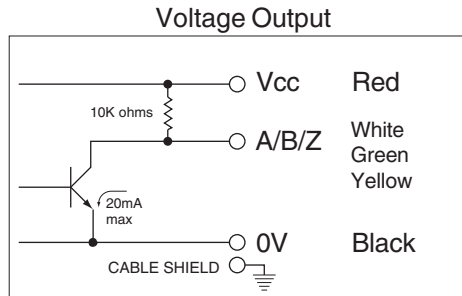
Resolution (PPR):

- 100 = 100 PPR
- 200 = 200 PPR
- 300 = 300 PPR
- 360 = 360 PPR
- 400 = 400 PPR
- 500 = 500 PPR

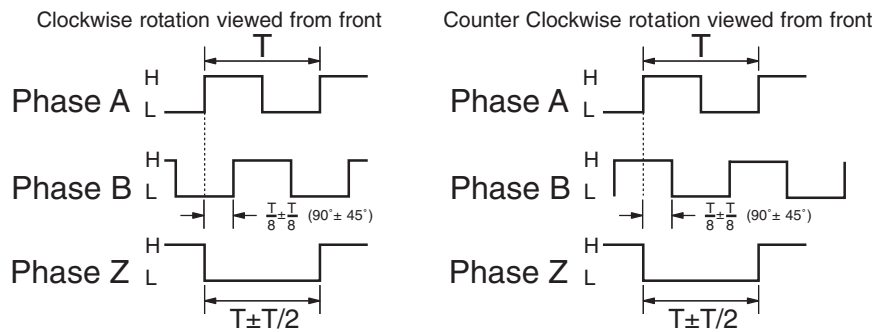
**PART NUMBER:** MEH17

**DESCRIPTION:** incremental encoder

**CIRCUIT CONNECTIONS**

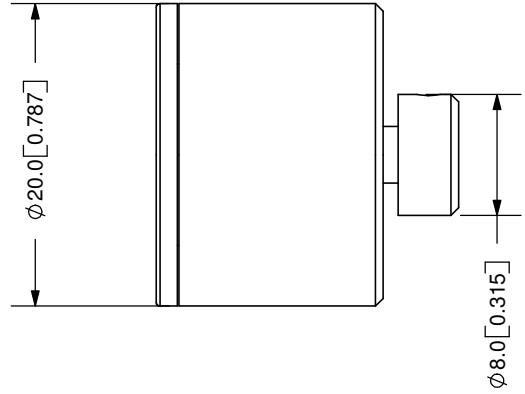
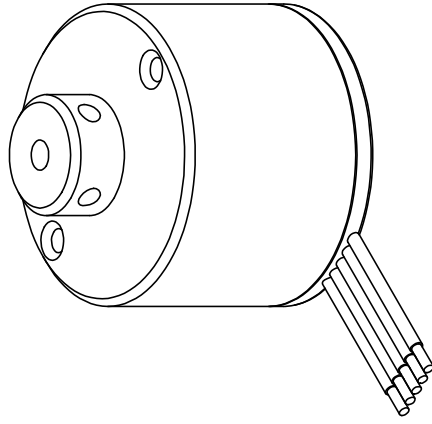
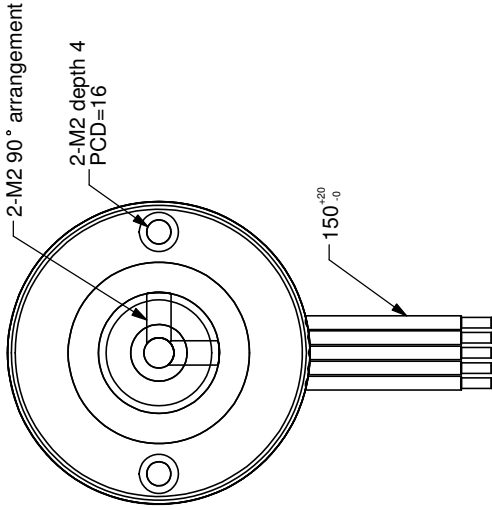
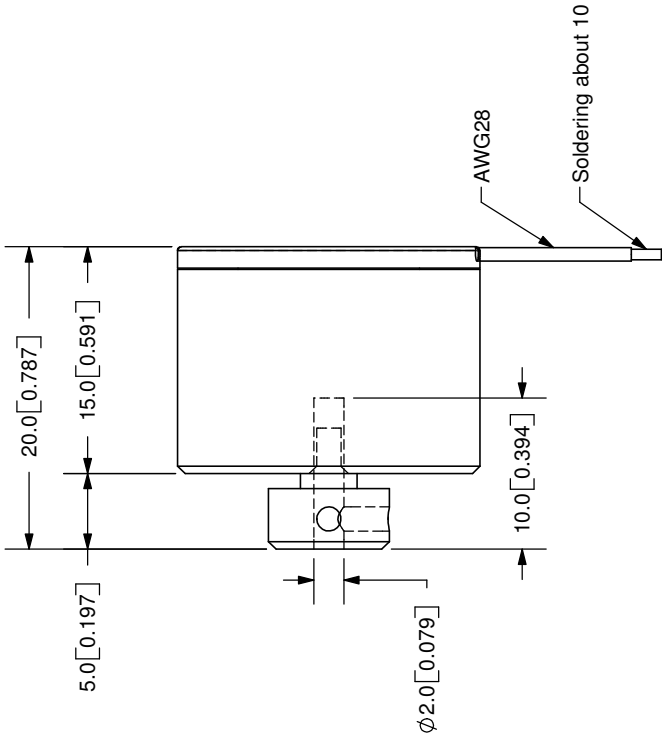


**OUTPUT WAVEFORM**



The position of Z phase against A, B phase is not specified

|      |             |           |
|------|-------------|-----------|
| REV. | DESCRIPTION | DATE      |
| A    | NEW DRAWING | 7/30/2007 |



TOLERANCE:  
±0.3mm UNLESS OTHERWISE  
SPECIFIED



**CUI INC**

20050 SW 112th Ave.  
Tualatin, OR 97062  
Phone: 503-612-2300  
800-275-4899  
Fax: 503-612-2383  
Website: www.cui.com

TITLE: Incremental Encoder  
REV: A

PART NO: MEH17  
UNITS: MM [INCHES]

DRAWN BY: JMS  
APPROVED BY: [Signature]  
SCALE: 2:1

| Cable Color | Red   | White   | Green   | Yellow  | Black |
|-------------|-------|---------|---------|---------|-------|
| Output Type | Power | A-Phase | B-Phase | Z-Phase | 0V    |

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PC FILE NAME: MEH17