



PART NUMBER: MEH85

DESCRIPTION: incremental encoder

ELECTRICAL SPECIFICATIONS

| | |
|-------------------------|--|
| output waveform | Square wave |
| output signals | A, B, Z phase |
| current consumption | ≤60 mA |
| frequency response | 0~100 KHz |
| output phase difference | A, B phase difference 90° ± 45° (T/4±T/8) Z phase T±T/2 (see output waveform) |
| supply voltage | 5 V dc ±10% (line driver output only), 5 V ~ 12 Vdc ± 10% , 24 Vdc ± 10% (open collector output only) |
| output resolution (ppr) | 200, 500, 1000, 1024, 3600, 4500, 5400, 7200, 10800, 11250, 18000, 20250, 21600 |
| waveform rise/fall time | 2μ or less (output cable 1m or less) |

MECHANICAL SPECIFICATIONS

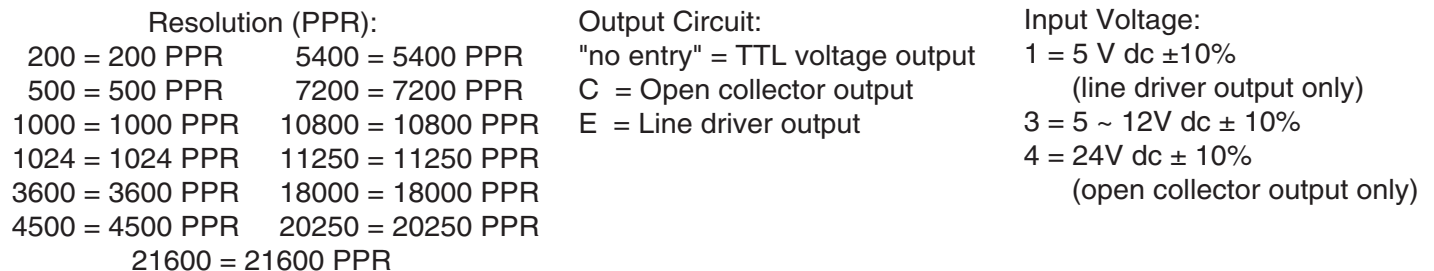
| | |
|-------------------------|---|
| max shaft load, radial: | 9.8N (1kgf) |
| axial: | 4.7N (0.5kgf) |
| starting torque | 40 x 10 ⁻³ N·m (400 gf·cm) (no oil seal) |
| max rotational speed | 1000 RPM |
| shock resistance | 500 m/s ² (50G), 3 times each on XYZ |
| vibration proof | 55 Hz, double amplitude 1.5mm, 2 hours each on XYZ |
| weight | 520g (with 1m cable) |
| cable | 4.2mm outside diameter, 5 core vinyl wire insulated shield cable (1m) |

ENVIRONMENTAL SPECIFICATIONS

| | |
|----------------|---------------------------|
| operating temp | 0° to +60° C |
| storage temp | -20° to +80° C |
| humidity | RH 35%~90% non collecting |

ORDERING INSTRUCTIONS

MEH85 - XXXXX - XX

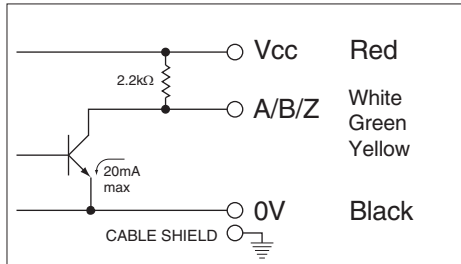


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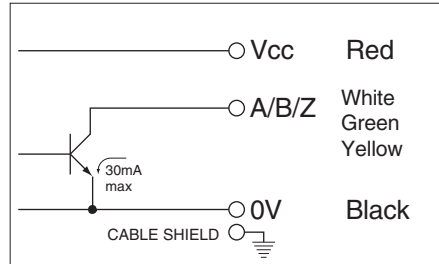
DESCRIPTION: incremental encoder

CIRCUIT CONNECTIONS

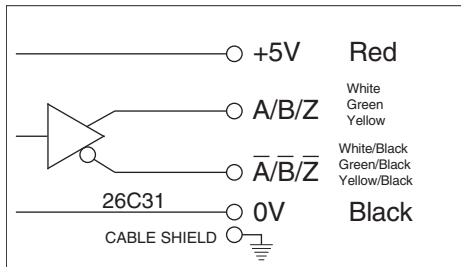
Voltage Output



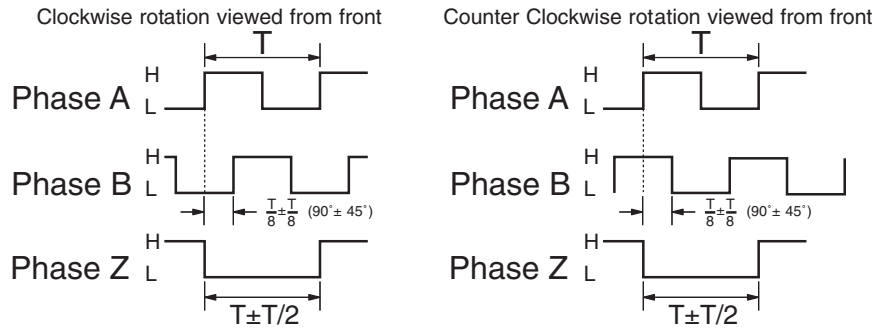
Open Collector Output (C)



Line Drive Output (E)

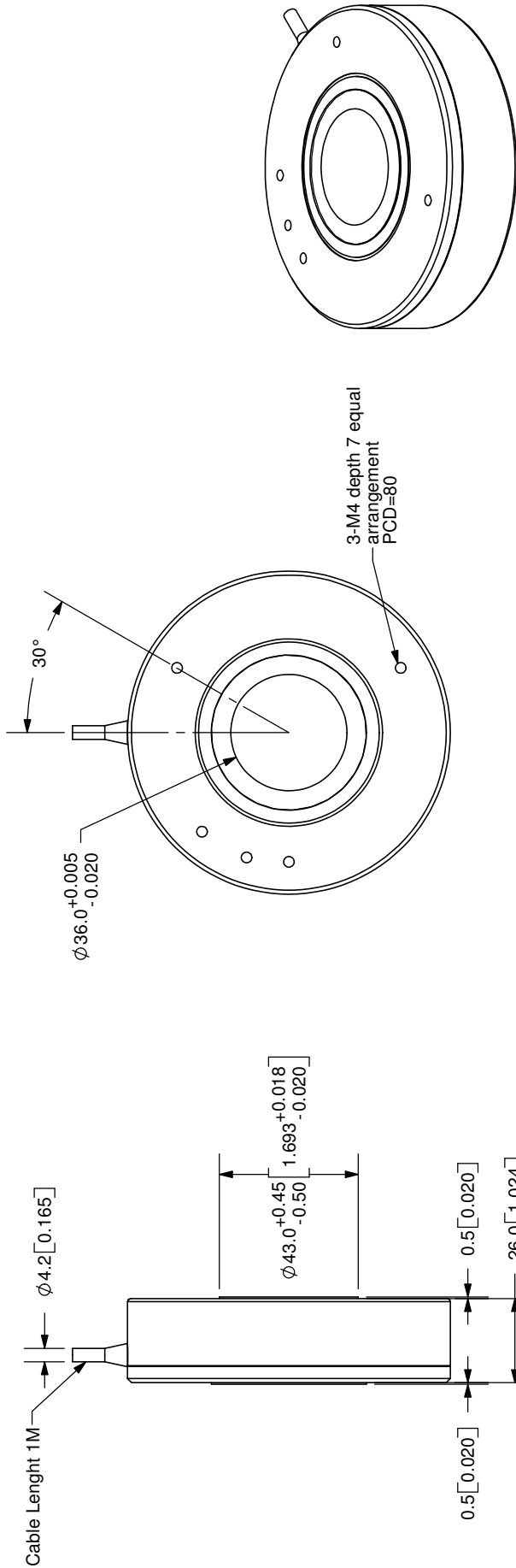


OUTPUT WAVEFORM



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

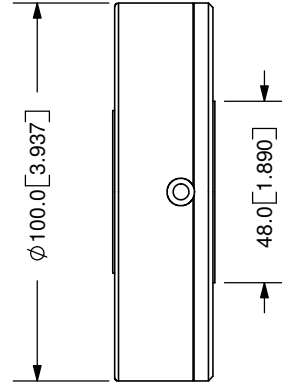


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TITLE: Incremental Encoder REV: A

PART NO: MEH85 UNITS: MM [INCHES]

DRAWN BY: JMS APPROVED BY: SCALE: 1:2



| | | | | | | | | | | | | | |
|---------------|-------|----------------|-------------|-------------|-------|---------|---------|---------|-------|---|---|---|---|
| PC FILE NAME: | MEH85 | COPYRIGHT 2007 | BY CUI INC. | Cable Color | Red | White | Green | Yellow | Black | - | - | - | - |
| | | | | Output Type | Power | A-Phase | B-Phase | Z-Phase | 0V | - | - | - | - |