



**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**

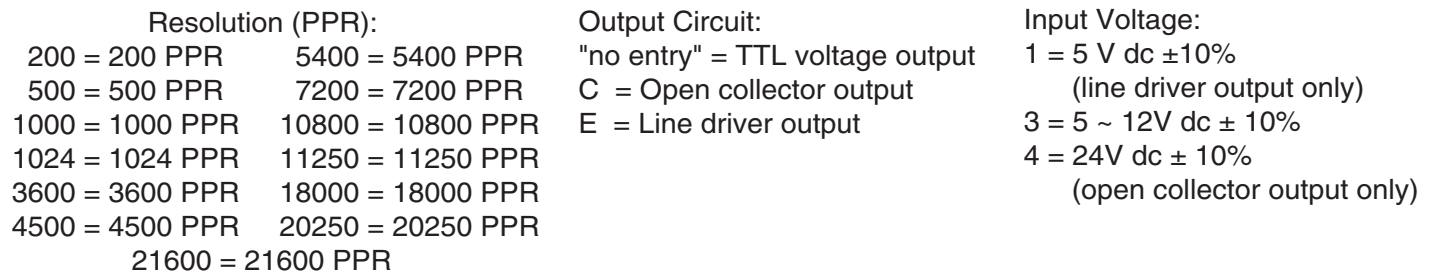
max shaft load, radial:	9.8N (1kgf)
axial:	4.7N (0.5kgf)
starting torque	40 x 10 <sup>-3</sup> N·m (400 gf·cm) (no oil seal)
max rotational speed	1000 RPM
shock resistance	500 m/s <sup>2</sup> (50G), 3 times each on XYZ
vibration proof	55 Hz, double amplitude 1.5mm, 2 hours each on XYZ
weight	520g (with 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**

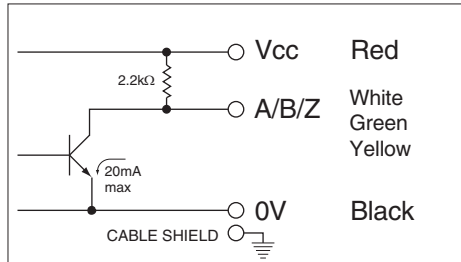


**PART NUMBER:** MEH85

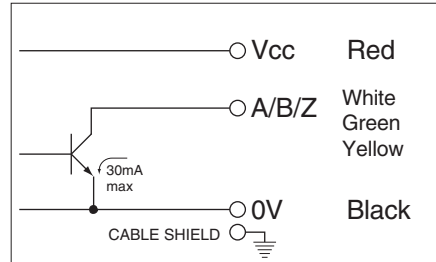
**DESCRIPTION:** incremental encoder

### CIRCUIT CONNECTIONS

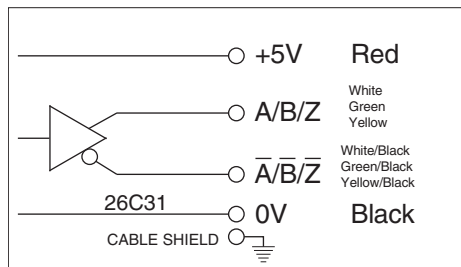
Voltage Output



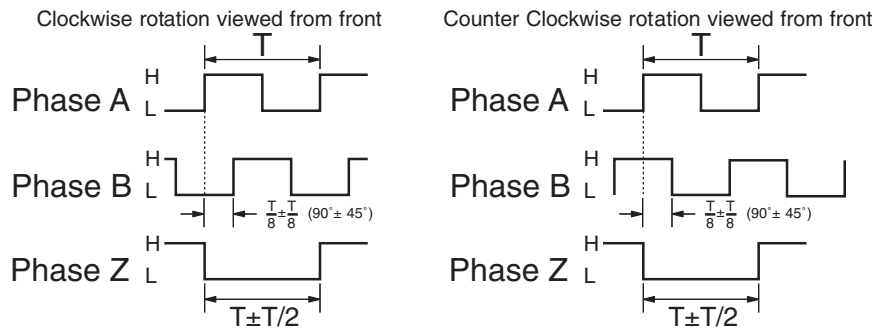
Open Collector Output (C)



Line Drive Output (E)

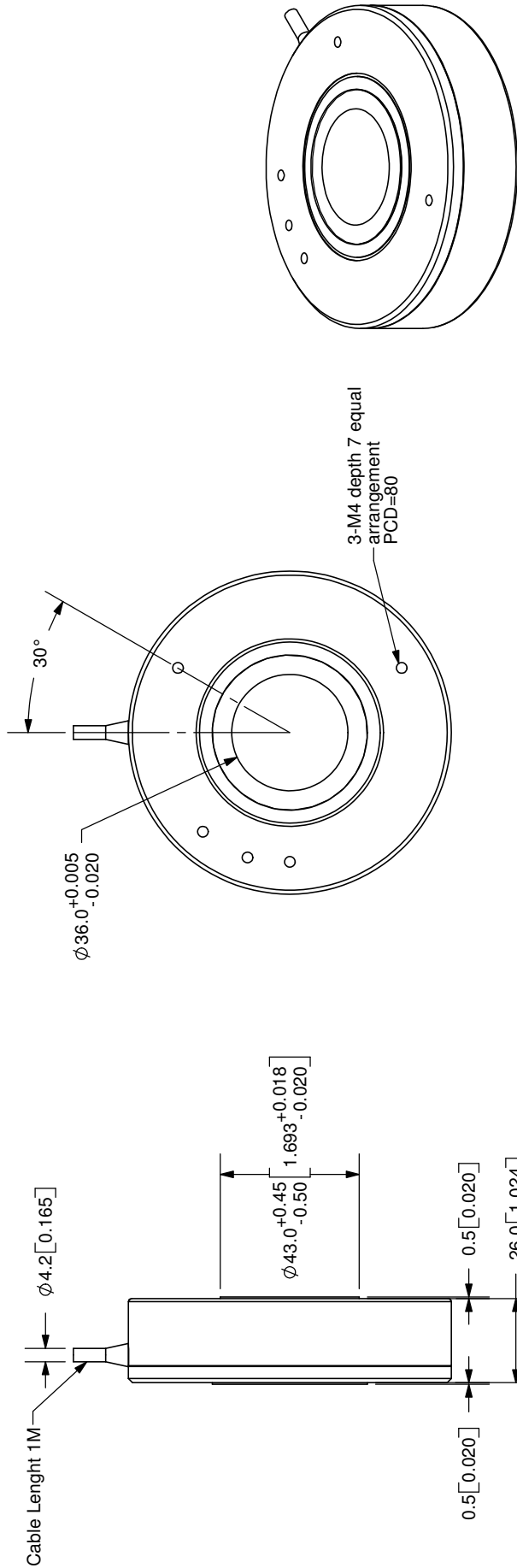


### OUTPUT WAVEFORM



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

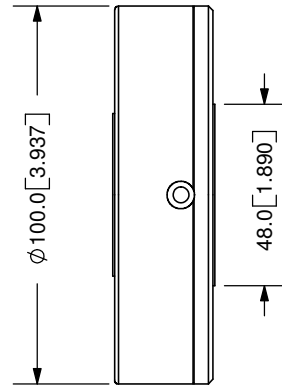


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TITLE: Incremental Encoder REV: A

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