



PART NUMBER: MEH130

DESCRIPTION: incremental encoder

ELECTRICAL SPECIFICATIONS

output waveform	square wave
output signals	A, B, Z phase
current consumption	150 mA max.
frequency response	0~100 KHz
output phase difference	A, B phase difference $90^\circ \pm 45^\circ$ (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)	360, 600, 1024, 4500, 5000, 9000, 20250, 25000, 28125
waveform rise/fall time	2μ or less (output cable 1m or less)

MECHANICAL SPECIFICATIONS

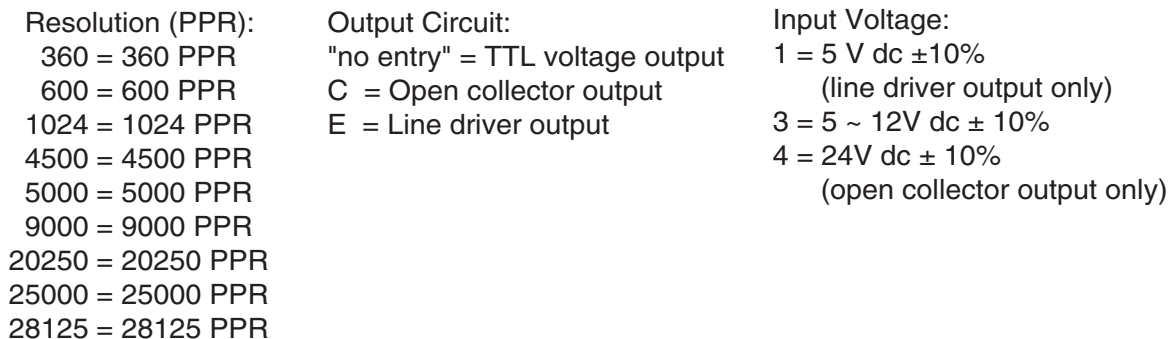
max shaft load, radial:	19.6N (2kgf)
axial:	9.8N (1kgf)
starting torque	50×10^{-3} N·m (500 gf·cm) (no oil seal)
max rotational speed	1000 RPM
shock resistance	500 m/s ² (50G), 3 times each on XYZ
vibration proof	55 Hz, double amplitude 1.5mm, 2 hours each on XYZ
weight	3kg (with 1m cable)
cable	4.2mm 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

MEH130 - XXXXXX-XX

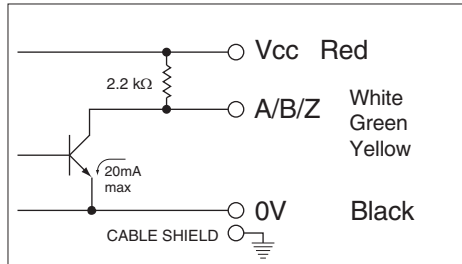


PART NUMBER: MEH130

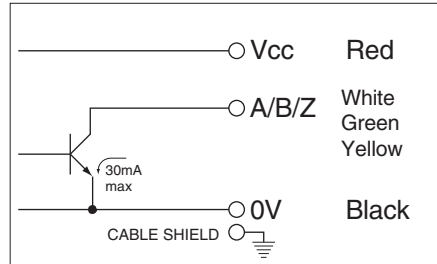
DESCRIPTION: incremental encoder

CIRCUIT CONNECTIONS

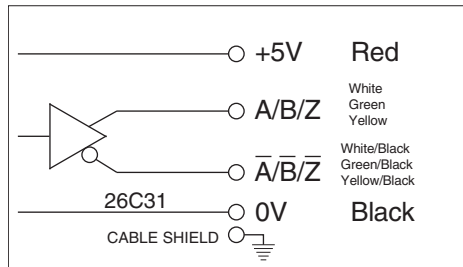
Voltage Output



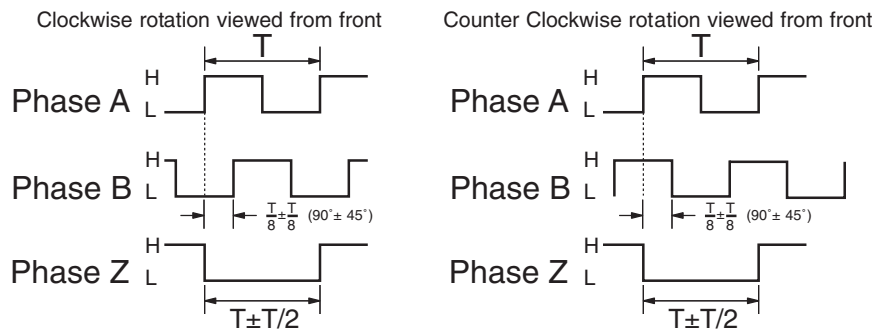
Open Collector Output (C)



Line Drive Output (E)

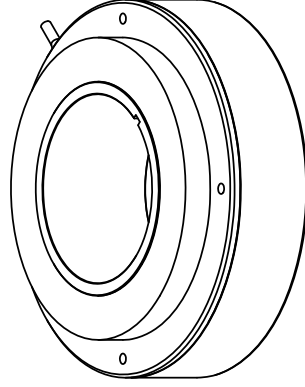
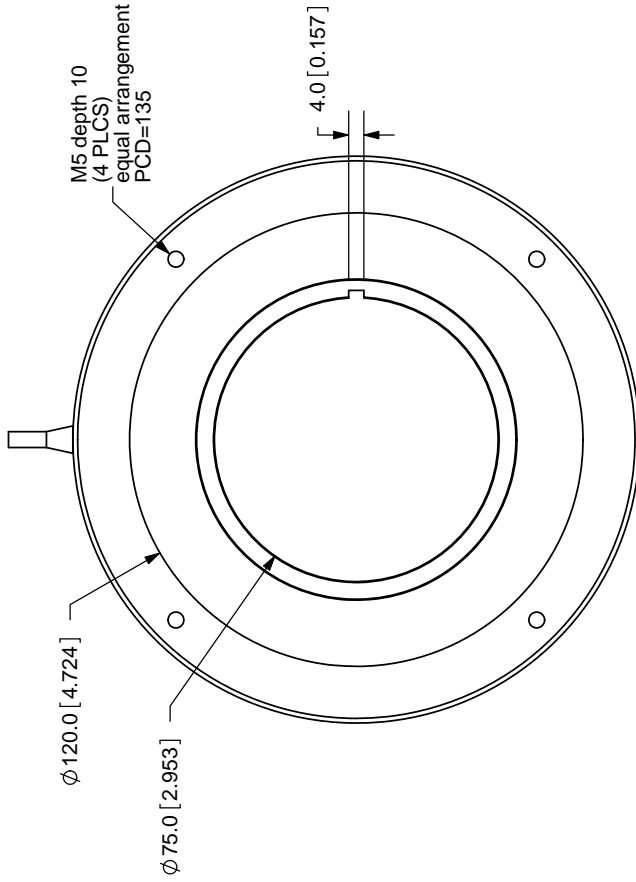
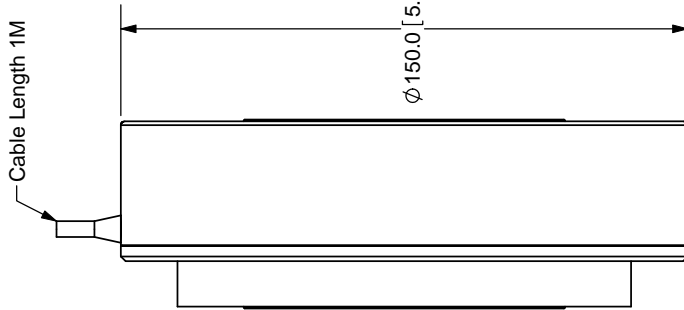


OUTPUT WAVEFORM



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

REV.	DESCRIPTION	DATE
A	NEW DRAWING	7/30/2007
B	drawing update	9/22/2008
C	added output types	4/27/2009



SCALE: 1:3



TOLERANCE:
 ±0.3mm UNLESS OTHERWISE SPECIFIED



CUI INC

20050 SW 112th Ave.
 Tualatin, OR 97062
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 Fax: 503-612-2383
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TITLE: INCREMENTAL ENCODER - 360 ~ 1024 REV: C

PART NO:	MEH130	UNITS:	MM [INCHES]
DRAWN BY:	ZRJ	APPROVED BY:	
		SCALE:	1:2

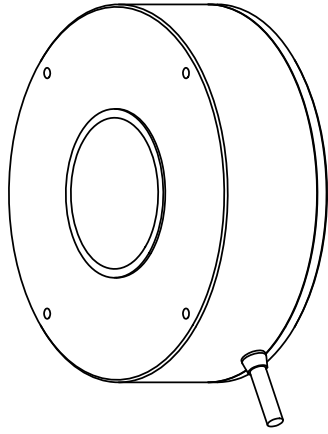
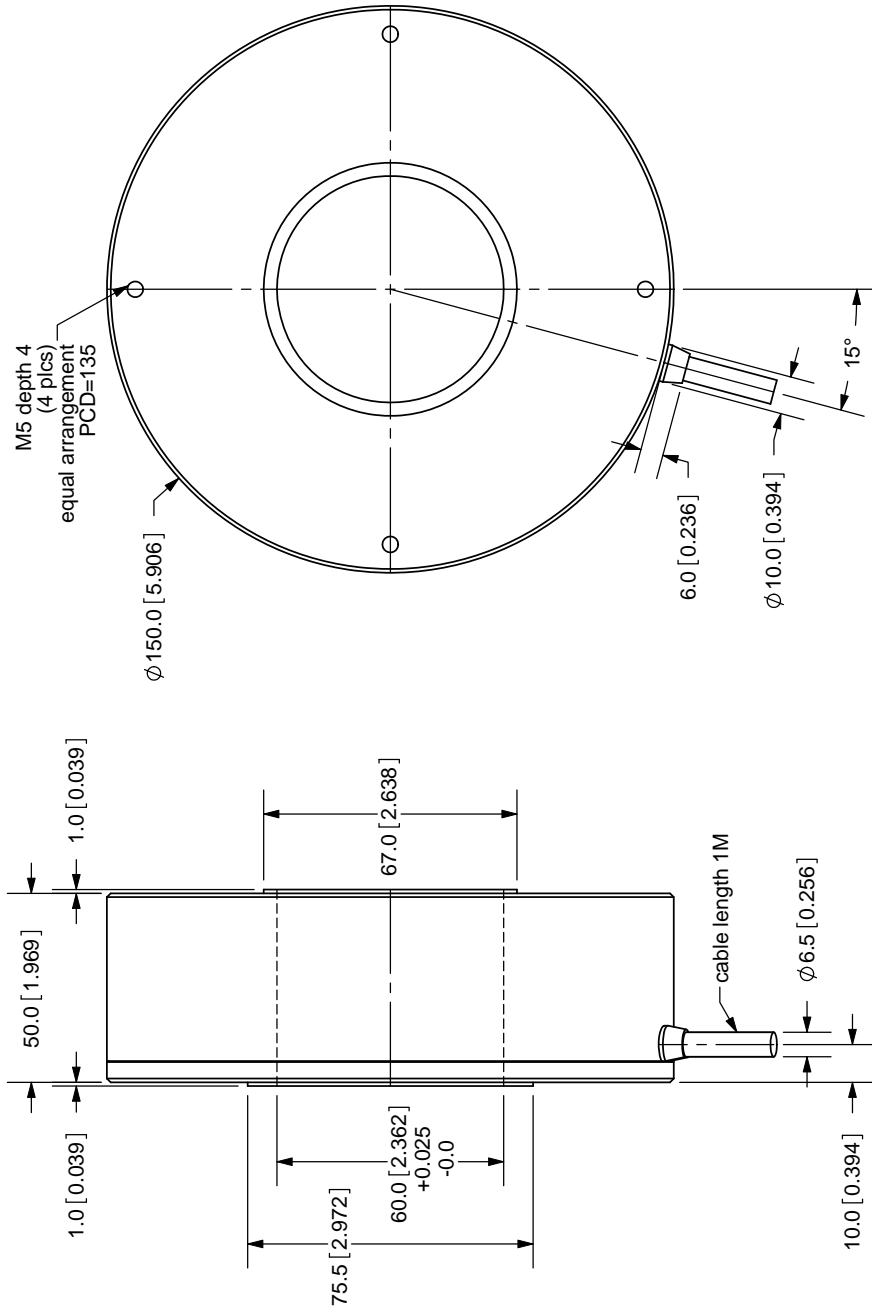
LINE DRIVER ONLY				
white/black	green/black	yellow/black	yellow/black	Z
black	0V	Z	B	Z
red	Power	A	A	Z

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PC FILE NAME:
 MEH130

Cable Color	Output Type	red	white	green	yellow	black	white/black	green/black	yellow/black
		Power	A	B	Z	0V			

REV.	DESCRIPTION	DATE
A	NEW DRAWING	4/27/2009



SCALE: 1:3



TOLERANCE:
#0.3mm UNLESS OTHERWISE
SPECIFIED



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TITLE: INCREMENTAL ENCODER - 4500 ~ 28125 REV: A

PART NO:	MEH130	UNITS:	MM [INCHES]
DRAWN BY:	ZRJ	APPROVED BY:	
		SCALE:	1:2

LINE DRIVER ONLY		white/black	green/black	yellow/black	black	0V	A	B	Z
Cable Color	Output Type	red	white	green	yellow	black	A	B	Z
		Power							

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PC FILE NAME:
MEH130