



PART NUMBER: MEH12-2000PST

DESCRIPTION: incremental encoder

ELECTRICAL SPECIFICATIONS

output waveform	Square Wave
output signals	A, B, Z phase
current consumption	≤40 mA
frequency response	0~50 KHz X (by multiplication) Voltage Output - 100KHz Open collector
output phase difference	See output waveform
supply voltage	5 V dc ± 10%
output resolution (ppr)	4000, 8000, 16,000, 32,000
waveform rise / fall time	2μ or less (output cable 1m or less)

MECHANICAL SPECIFICATIONS

max shaft load, radial:	0.98N (100gf)
axial:	0.98N (100gf)
starting torque	1 x 10 ⁻³ N·m (10 gf·cm)
max rotational speed	6000 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	40 g (with 1m cable)
cable	3mm outside diameter 5-core vinyl wire, insulated shield cable (length 1m)

ENVIRONMENTAL SPECIFICATIONS

operating temp	0° to +50° C
storage temp	-20° to +80° C
humidity	RH 35%~90% no collecting

ORDERING INSTRUCTIONS

MEH12 - (X)2000PSTXXX

Bore options:

- 1.5 = 1.5mm
- 2 = 2mm
- 3 = 3mm

Resolution (PPR):

- 2 = 2000 X 2 (4,000 PPR)
- 4 = 2000 X 4 (8,000 PPR)
- 8 = 2000 X 8 (16,000 PPR)
- 16 = 2000 X 16 (32,000 PPR)

Output Circuit:

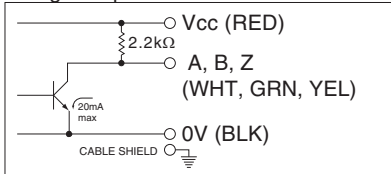
- "no entry" = TTL voltage output
- C = Open collector output
- E = Line driver output

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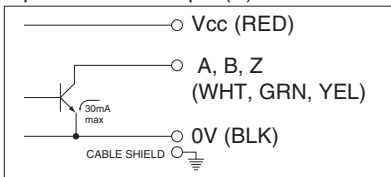
DESCRIPTION: incremental encoder

CIRCUIT CONNECTIONS

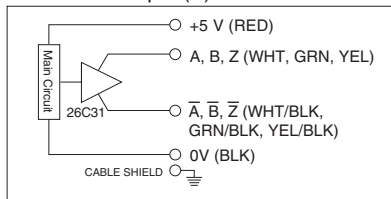
Voltage Output



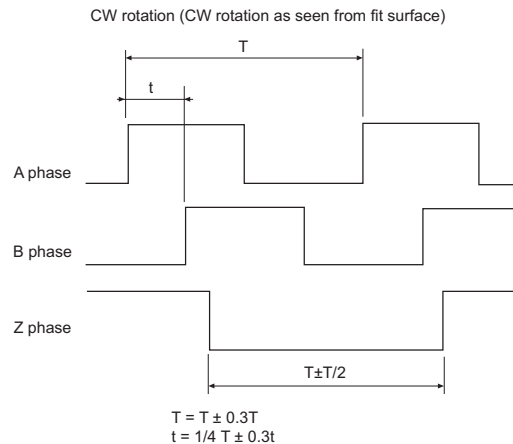
Open Collector Output (C)



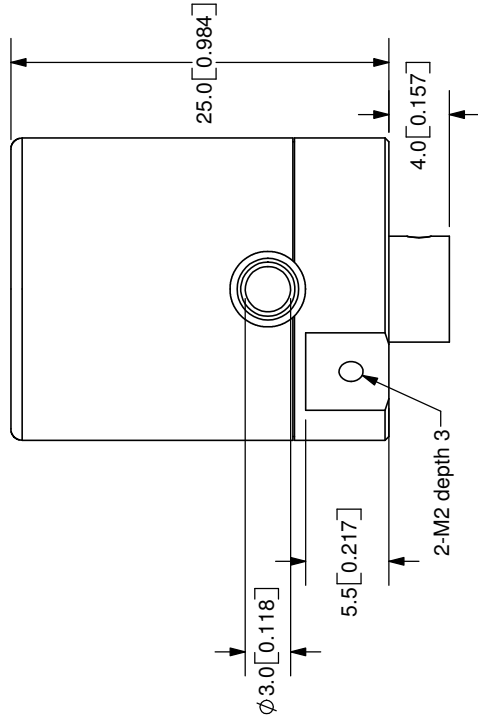
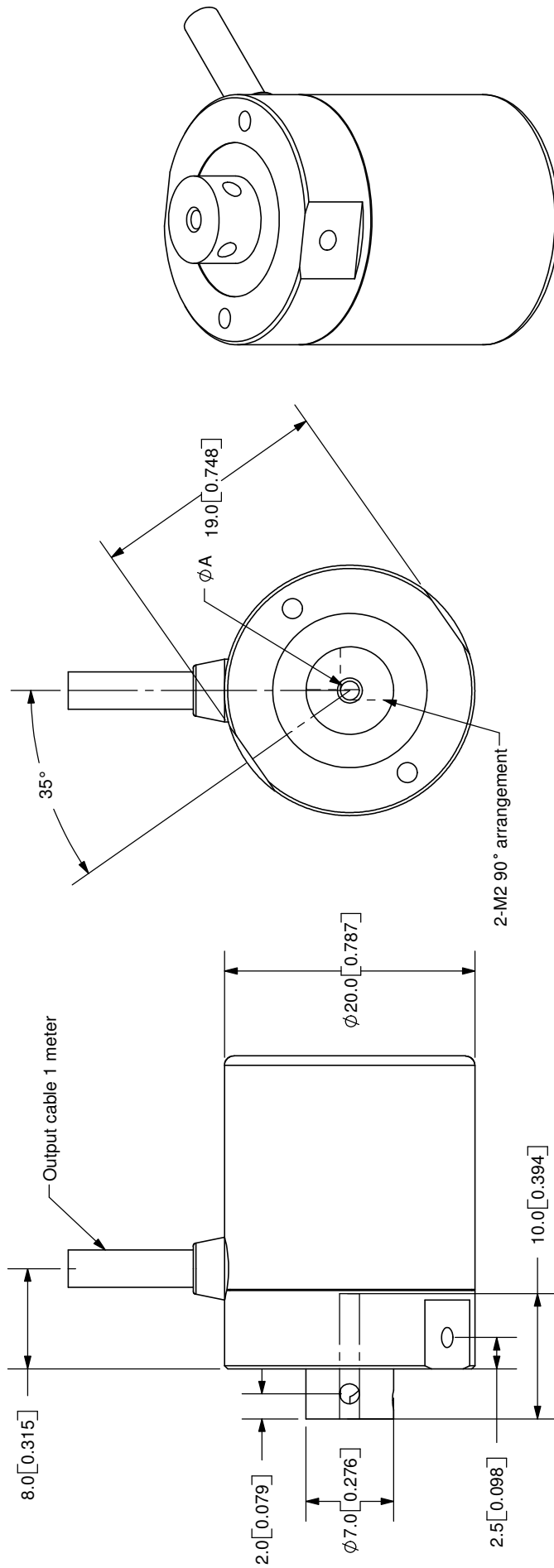
Line Driver Output (E)



OUTPUT WAVEFORM



REV.	DESCRIPTION	DATE
A	NEW DRAWING	7/27/2007



Hole ϕ A	
$\phi 1.5$	$\phi 2.0$
-	$\phi 3.0$
-	-
-	-

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

PC FILE NAME: MEH12
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TOLERANCE: $\pm 0.3\text{mm}$ UNLESS OTHERWISE SPECIFIED



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TITLE: Incremental Encoder	REV: A
PART NO: MEH12	UNITS: MM [INCHES]
DRAWN BY: JMS	APPROVED BY:
	SCALE: 2:1