



**PART NUMBER:** MEH9

**DESCRIPTION:** incremental encoder

**ELECTRICAL SPECIFICATIONS**

output waveform	Square Wave
output signals	A, B, Z phase
current consumption	≤40 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%
output resolution (ppr)	100, 200, 256, 300, 360, 500, 1000
waveform rise/fall time	2μ or less (outout cable 140mm or less)

**MECHANICAL SPECIFICATIONS**

max shaft load, radial:	1.9N (200gf)	0.98N (100gf) (1000 ppr)
axial:	1.9N (200gf)	0.98N (100gf) (1000 ppr)
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	10g (with 140mm cable)	
cable	Vinyl wire (AWG 30) 140mm cable	

**ENVIRONMENTAL SPECIFICATIONS**

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

**ORDERING INSTRUCTIONS**

**MEH9 - XXXPX**

Resolution (PPR):  
 100 = 100 PPR    300 = 300 PPR  
 200 = 200 PPR    360 = 360 PPR  
 256 = 256 PPR    500 = 500 PPR  
 1000 = 1000 PPR

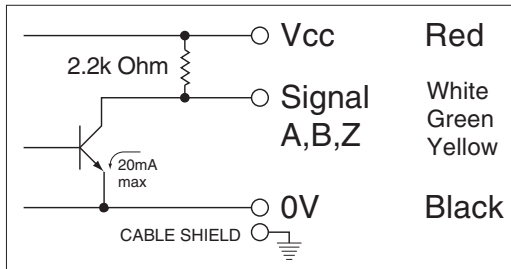
Output Circuit:  
 "no entry" = TTL voltage output  
 C = Open collector output

**PART NUMBER:** MEH9

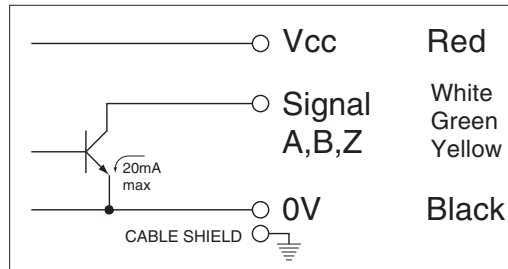
**DESCRIPTION:** incremental encoder

**CIRCUIT CONNECTIONS**

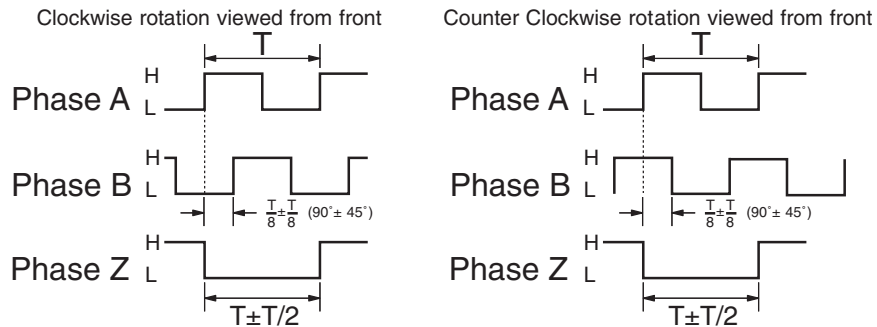
Voltage Output



Open Collector Output

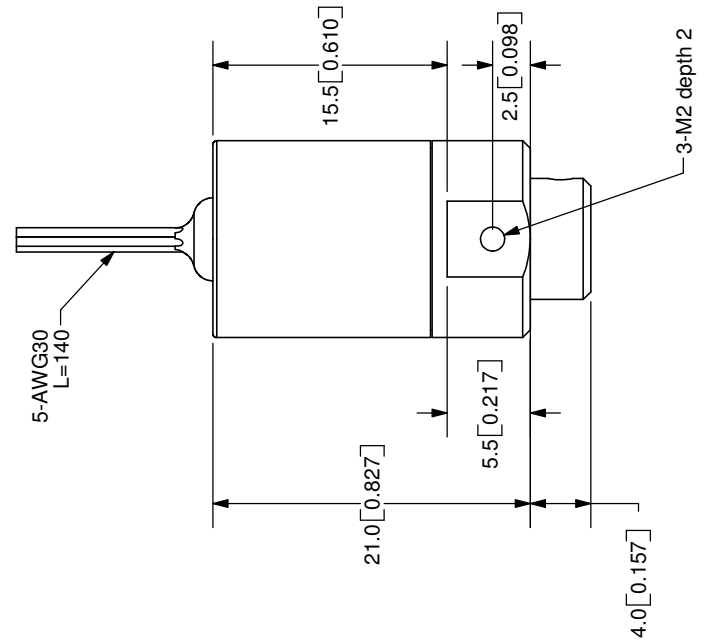
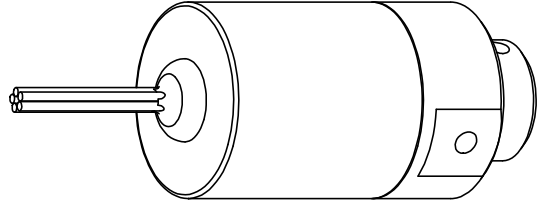
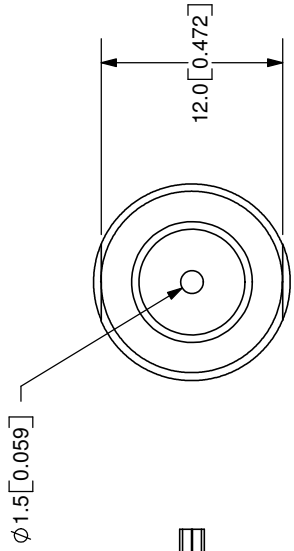
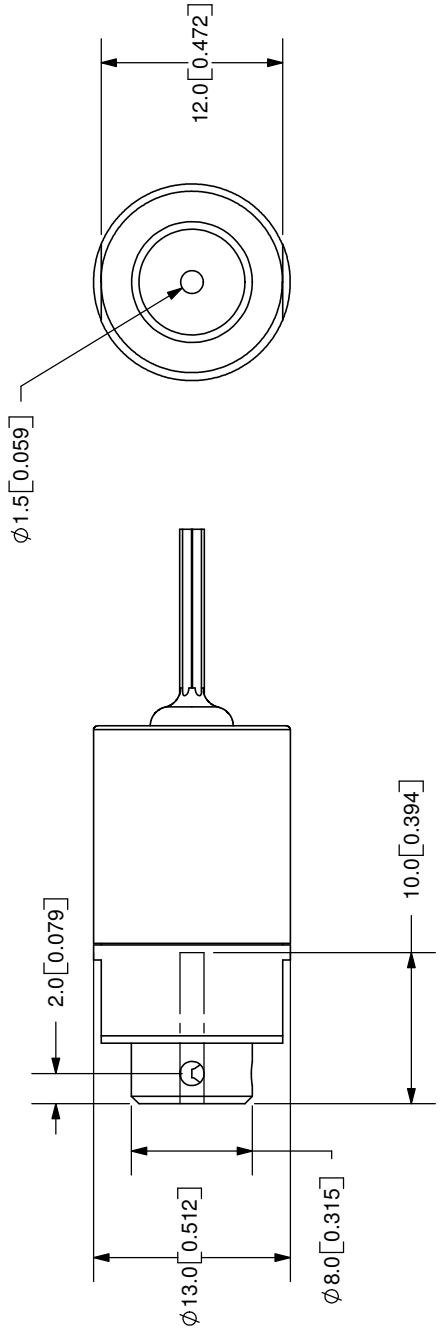


**OUTPUT WAVEFORM**



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

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



TOLERANCE:  
±0.3mm UNLESS OTHERWISE  
SPECIFIED



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: MEH9	UNITS: MM [INCHES]
DRAWN BY: JMS	APPROVED BY:
	SCALE: 2:1

PC FILE NAME: MEH9	COPYRIGHT 2007 BY CUI INC.								
Cable Color	Output Type	Red	White	Green	Yellow	Black			
		Power	A-Phase	B-Phase	Z-Phase	0V			