



**PART NUMBER:** MES17

**DESCRIPTION:** incremental encoder

**ELECTRICAL SPECIFICATIONS**

output waveform	Square Wave
output signals	A, B, Z phase (Z=H)
current consumption	≤30 mA
frequency response	0~50 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 ± 10%
output resolution (ppr)	100, 200, 300, 360, 400, 500
waveform rise/fall time	2μ or less

**MECHANICAL SPECIFICATIONS**

max shaft load, radial:	1.9N (200gf)
axial:	1.9N (200gf)
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	20g (with 150mm cable)
cable	Vinyl wire (AWG 28) 150mm cable

**ENVIRONMENTAL SPECIFICATIONS**

operating temp	0° to +50° C
storage temp	-20° to +80° C
humidity	RH 35%~90% non collecting

**ORDERING INSTRUCTIONS**

**MES17(X)-XXXXP**

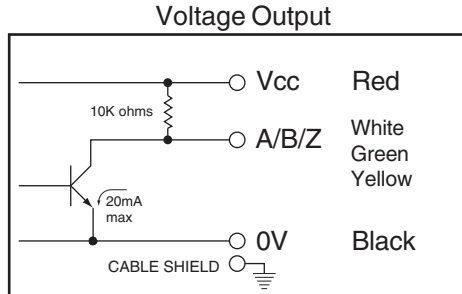
Shaft Diameter:  
2 = Ø 2mm  
4 = Ø 4mm

Resolution (PPR):  
100 = 100 PPR  
200 = 200 PPR  
300 = 300 PPR  
360 = 360 PPR  
400 = 400 PPR  
500 = 500 PPR

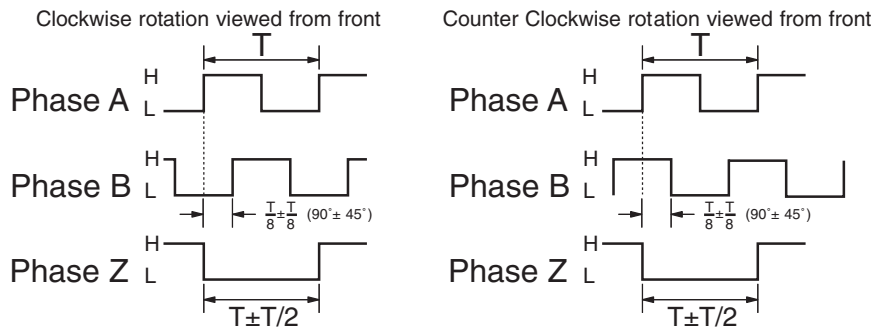
**PART NUMBER:** MES17

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**CIRCUIT CONNECTIONS**

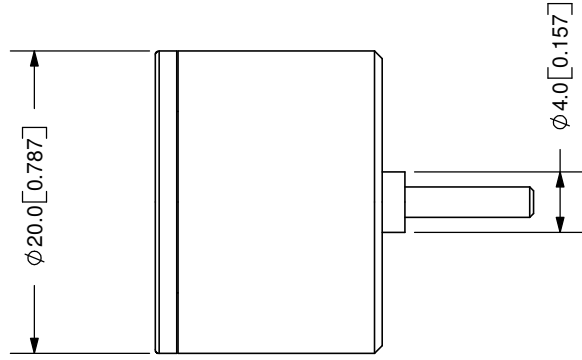
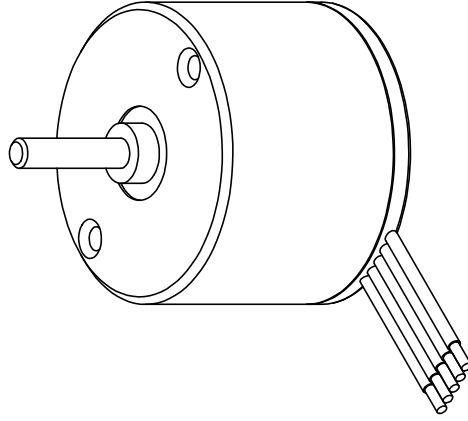
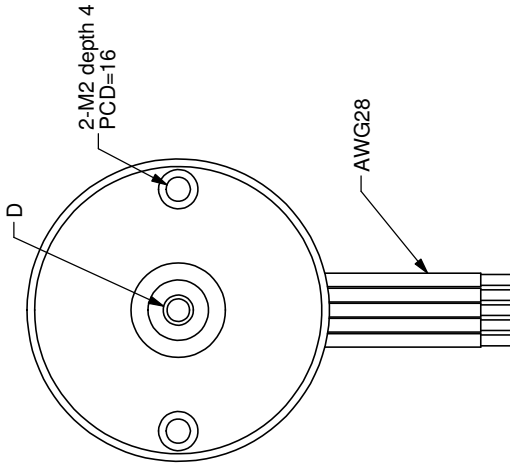
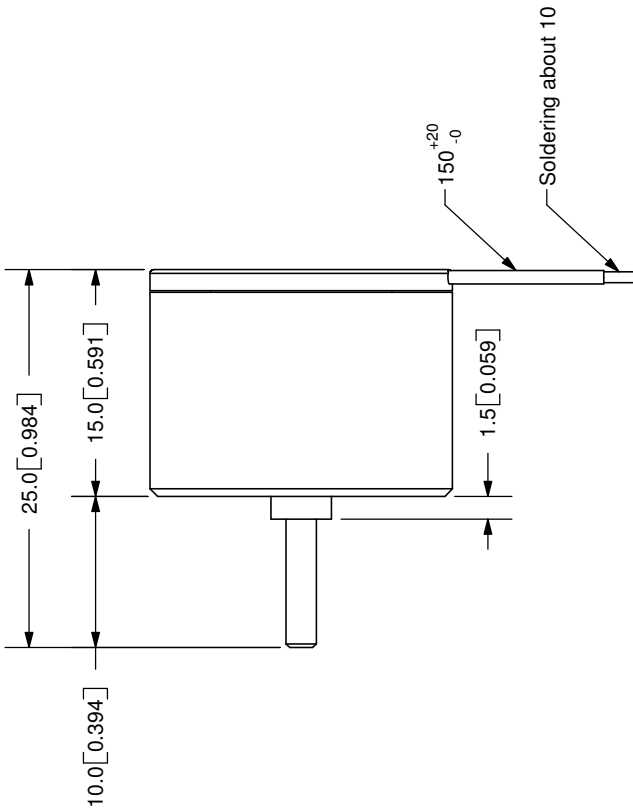


**OUTPUT WAVEFORM**



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: MES17	UNITS: MM [INCHES]
DRAWN BY: JMS	APPROVED BY:
	SCALE: 2:1

Ø 2 <sup>+0.008</sup> <sub>-0.015</sub>	D
Ø 4 <sup>+0.008</sup> <sub>-0.015</sub>	-
-	-
-	-

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

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PC FILE NAME:	MES17
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