



PART NUMBER: MES40

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% (line driver output only), 5~12 V dc ±10%, 24 V dc ± 10% (open collector output only)
output resolution (ppr)	100, 200, 300, 360, 400, 500, 512, 600, 1000, 1024, 2000, 3600, 5000, 10000

MECHANICAL SPECIFICATIONS

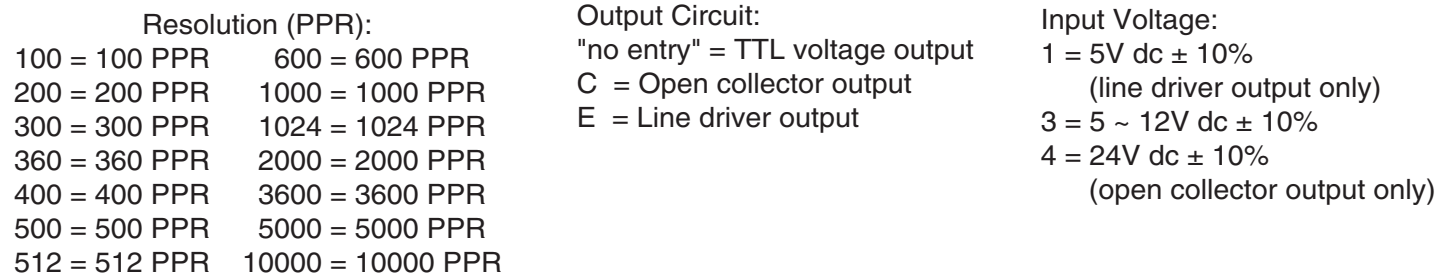
max shaft load, radial:	49N (5kgf)
axial:	29.4N (3kgf)
starting torque	2 x 10 ⁻³ N·m (20 gf·cm) 5 x 10 ⁻³ N·m (50 gf·cm) (drip-proof)
max rotational speed	6000 RPM
shock resistance	500 m/s ² (50G), 3 times each on XYZ
vibration proof	55 Hz, double amplitude 1.5mm, 2 hours each on XYZ
weight	200g (with 1m cable)
cable	4.2mm outside diameter, 5 core vinyl wire insulated shield cable (1m)

ENVIRONMENTAL SPECIFICATIONS

operating temp	-10° to +70° C
storage temp	-20° to +80° C
humidity	RH 35%~90% non collecting

ORDERING INSTRUCTIONS

MES40 - XXXXP-XX

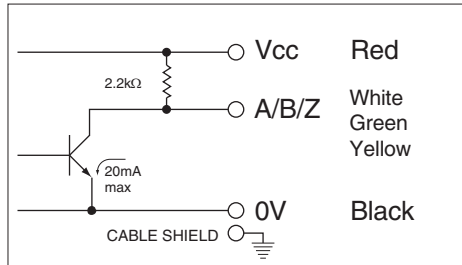


PART NUMBER: MES40

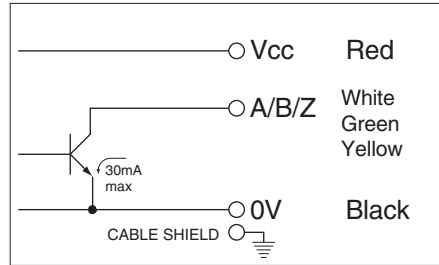
DESCRIPTION: incremental encoder

CIRCUIT CONNECTIONS

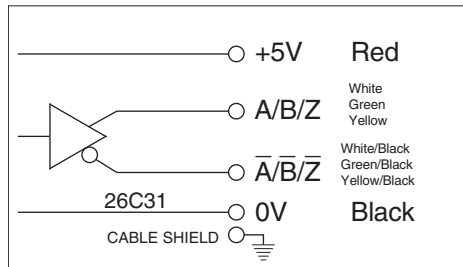
Voltage Output



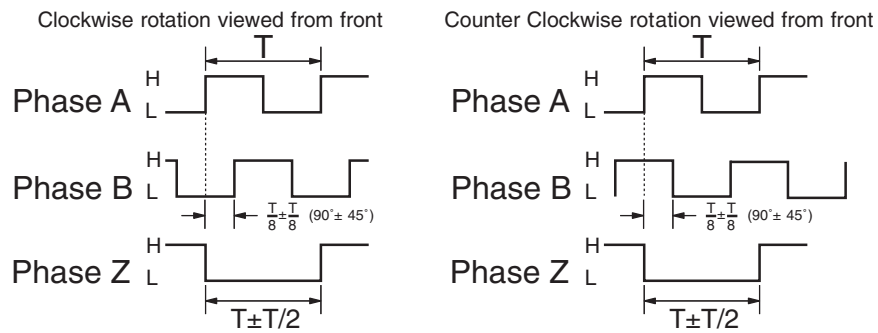
Open Collector Output (C)



Line Drive Output (E)

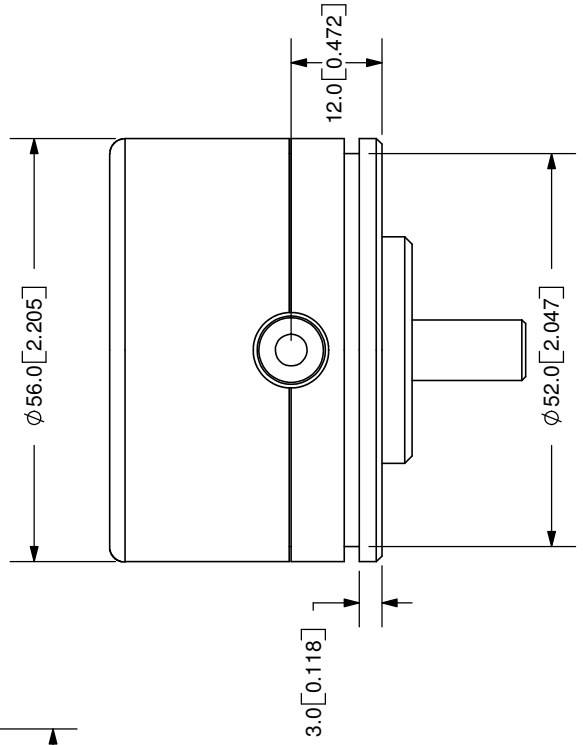
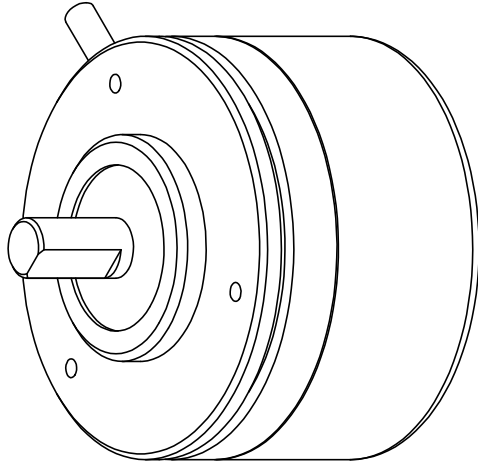
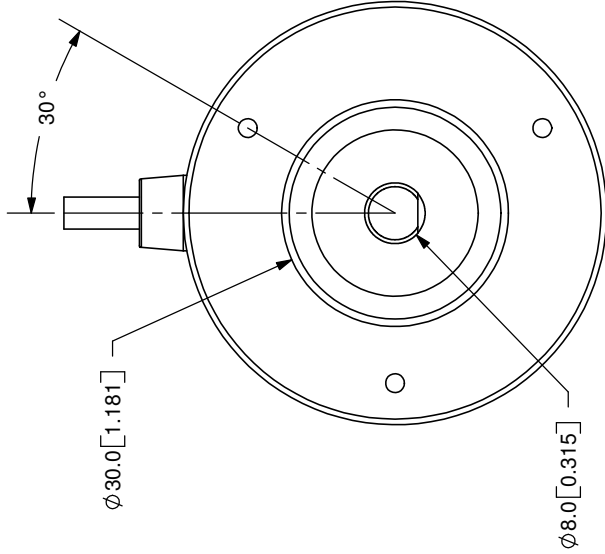
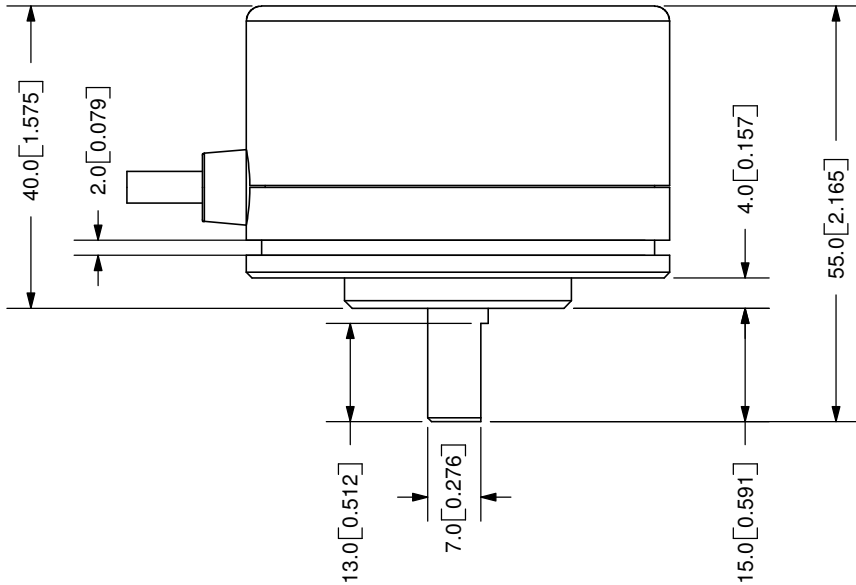


OUTPUT WAVEFORM



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: MES40
 UNITS: MM [INCHES]

DRAWN BY: JMS
 APPROVED BY:
 SCALE: 1:1

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

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PC FILE NAME:
 MES40