



**PART NUMBER:** REH30R

**DESCRIPTION:** incremental encoder

**ELECTRICAL SPECIFICATIONS**

current consumption	60 mA max. (under no load)
sink current	20 mA max. (residual voltage: < 0.5 V at 10 mA)
frequency response	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 ~ 12 V dc ±10%, 24 V dc ±10% (open collector output only)
output resolution (ppr)	200, 400, 500, 1000, 2000
waveform rise/fall time	2µS max. (output cable 1m or less)

**MECHANICAL SPECIFICATIONS**

max shaft load, radial:	19.6N (2kgf)
axial:	9.8N (1kgf)
starting torque	5 x 10 <sup>-3</sup> N·m (200 gf·cm) or less
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	400g (with 1m cable)
cable	ø4.2mm 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**

**REH30 - XXXXR-XX**

Resolution (PPR):  
200 = 200 PPR  
400 = 400 PPR  
500 = 500 PPR  
1000 = 1000 PPR  
2000 = 2000 PPR

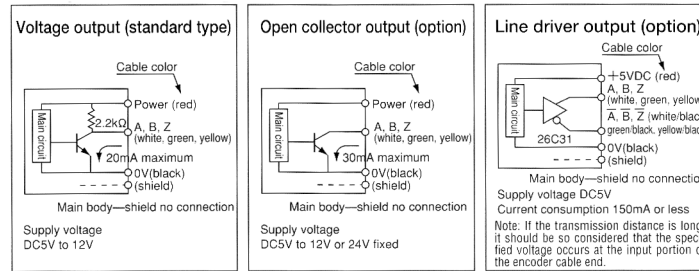
Output Circuit:  
"no entry" = TTL voltage output  
C = Open collector output  
E = Line driver output

Input Voltage:  
1 = 5 V dc ±10%  
(line driver output only)  
3 = 5 ~ 12V dc ± 10%  
4 = 24V dc ± 10%  
(open collector output only)

**PART NUMBER:** REH30R

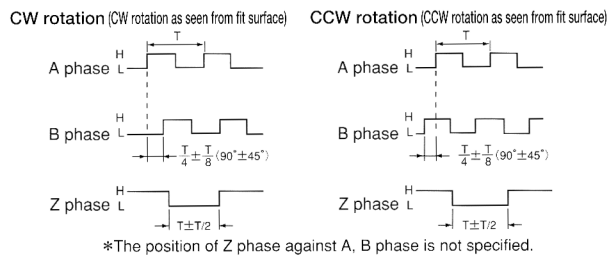
**DESCRIPTION:** incremental encoder

## CIRCUIT CONNECTIONS

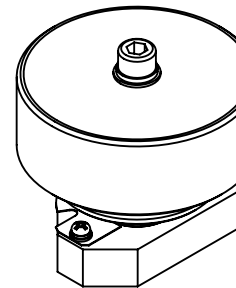
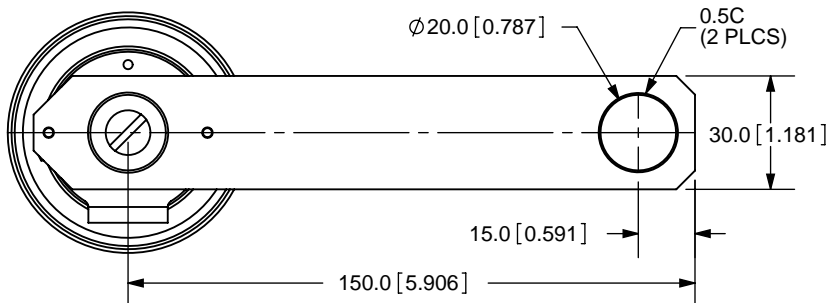
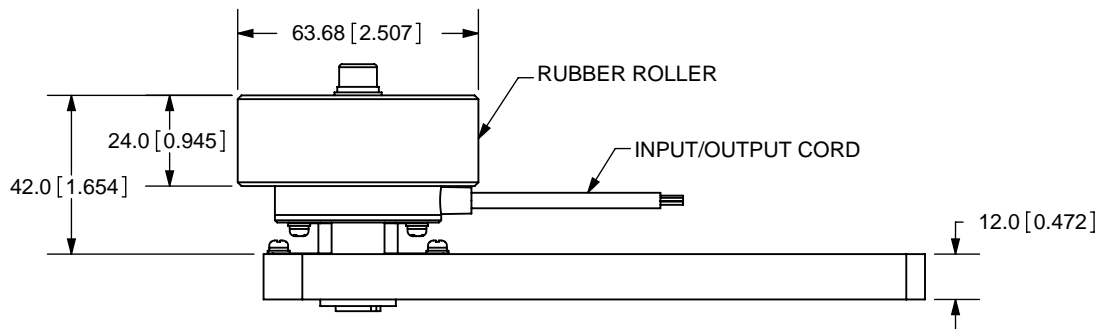


A capacitor (0.1 μF) is connected between 0V and FG (frame ground).

## OUTPUT WAVEFORM



REV.	DESCRIPTION
A	NEW DRAWING



TOLERANCE:  
±0.3mm UNLESS OTHERWISE  
SPECIFIED



TITLE: ENCODER

PART NO. REH30R

DRAWN BY: ZRJ