

PSB(JXH) ROTARY ENCODER USER'S MANUAL

Explanation of Model	PSB/JXH	□□□□	—	□	□□	□
An example of model	1000P/r,DC5V	Drive	output,	cable	side	out,
	Ex:PSB-1000-G05L	or	JXH-G8L1000			

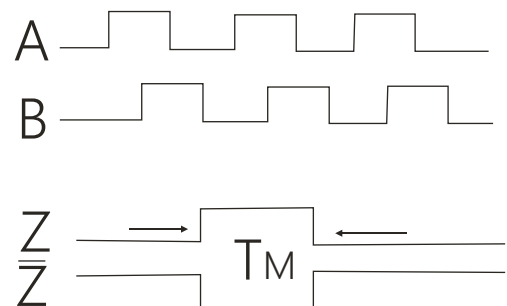
Table Specifications

Operating temperature	-10 °C ~ +60°C	Moment of inertia	$4 \times 10^{-7} \text{N} \cdot \text{mS}^2$	
Storage temperature	-20°C ~ +80°C	Starting torque(25 °C)	$2 \times 10 \text{N} \cdot \text{m}^{-3}$	
Shock resistance	980m/S ² (3 times each in X,Y,Z directions)	Max.speed	5000r/min	
Vibration resistance	50m/S ² (2hrs each in X,Y,Z directions)	Allowable input angle acceleration	10000rad/S ²	
Weight	0.12 kg	Max. Allowable load	Radial direction	Axial direction
			10N	10N
Supply voltage	Dc +5V	Protection rating	Ip54	
Current consumption	80mA	Output frequency	10-200KHz	

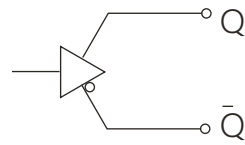
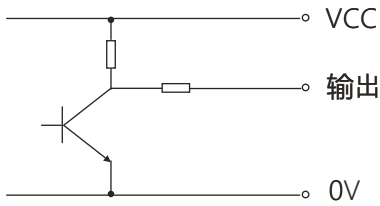
Output Waveforms and Division Accuracy

This figure shows the waveforms when a shaft is rotated clockwise(CW) viewing encoder shaft.

Symmetry	$X_1 + X_2 = 0.5T + 0.1T$ $X_3 + X_4 = 0.5T + 0.1T$
Phase shift	$X_n \geq 0.125T$ (n=1,2,3,4)
Division accuracy of signals	Accumulative angle error $\leq 0.2T$ Pinch error $\leq 0.2T$
$T=360^\circ / N$	(N is the number of A,Bchannel output pulses per revolution)
Signal width of Z channel	$T_M = 1T \pm 0.5T$
Positional relationship of A & B channels and Z channel is not specified.	



Output Circuit



AM26LS31

Specifications of Connection

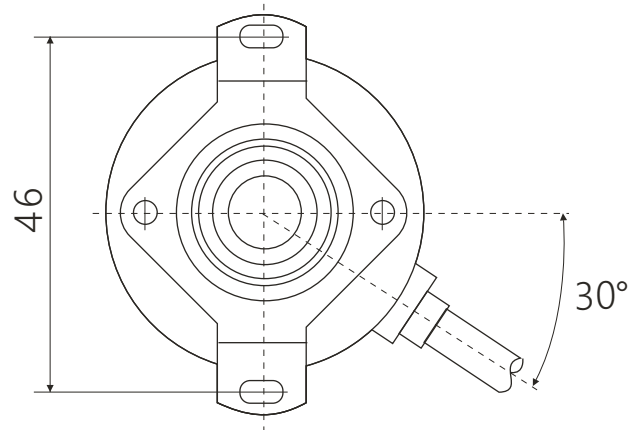
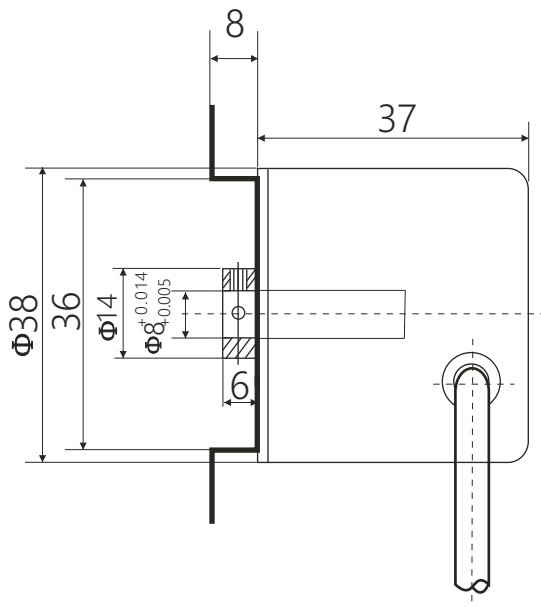
1.

Subscript	1	2	3	4	5	6
Signal	A	Z	Z	+5V	0V	B
line color	Blue	Orange	Yellow	Red	White	Green

2.

Subscript	1	2	3	4	5
Signal	A	B	Z	+5V	0V
line color	Black	Green	Yellow	Red	White

External View



Instructions for installation

This is delicate measuring instrument. Dropping, rough handling or excessive axial and radial forces on the shaft can cause permanent damage to the encoder.

When an encoder is applied to the system, the assembling accuracy should be guaranteed: declination of center should be less than 0.2mm; declination to angle should be less than 0.2°.

There should be space between the encoder and the motor shaft. Do not attempt to assemble by hammering.

Quality assurance

If the encoder does not function properly within one year of the delivering date due to its poor quality, it will be repaired or replaced by the producer for free only when customer has strictly followed the regulations for maintenance and operation.