Photoelectric rotary encoder user's manual

38/30/25 series This product has the characteristics of small size, light weight and easy installation. It uses modules to collect input signals. It is widely used in the measurement and control of vertical and horizontal coordinate feeds such as CNC machine tools and injection molding machines in the field of industrial control automation.

Model Description

E/C38/30/25	06	1-4000	2/3/4/6		5-24V
series	Shaft diameter	pulse/1p/r-4000p/r	Output phase	output method	voltage
diameter 38mm Solid shaft	Φ6mm	100 200 300 360 400 600 1000 (Special can be customized)	2: A,B 3: A,B,Z 4:A,/A,B,/B	NPN PNP Open circuit output Voltage output F:Push-pull output 6:A,/A,B,/B,Z,/Z L: Linear drive output	5: 5VDC±5% 12: 12VDC±5% 24: 24VDC±5%

Wiring instructions

Signal	A	B	Z	+VCC	OV	N.C.	/A	/B	/Z
Wire color	White	green	yellow	Red	black	cable	Brown	Ash	Orange
7-pin socket number	3	5	2	1	4	6	/	/	/
9-pin socket number	5	3	2	1	4	9	7	6	8

(Note: The signal is connected according to the color of the wire shown in the above table. The actual wiring is subject to the label of each encoder. The standard length of the output cable is 1.5 meters.

Electrical parameters

Output circuit	driver L、H	C、E、F	driver T
voltage	+5V±5%	+5 or+8~30V	+5 or+8~30V
Current consumption	≤150MA	≤60MA	≤150MA
Allowable load	20MA	30MA	20MA
Signal high level	≥2.5V	≥VCC*70%	≥VCC*70%
Signal high level	≤0.5V	≤0.5V	≤0.5V
Rise/fall time	≤100NS	≤1US	≤1US
Response frequency	150KHZ	50KHZ	50KHZ

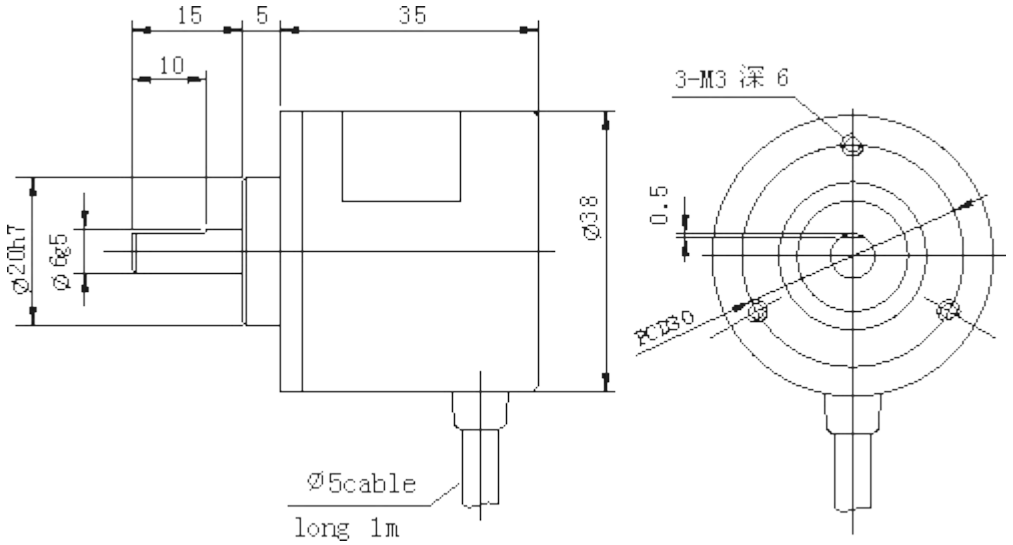
Mechanical parameters

Radial load	≤30N
Axial load	≤20N
Starting torque	$\leqslant 2 \times 10^{-3}$ N.m
Maximum speed	6000r/min
Moment of inertia	20g/cm ^{2}
Allowable angular acceleration	2×10^4 rad/S
weight	About 0.1Kg

Environmental parameters

Impact resistance	1000m/S ^{2} .6ms
Anti-vibration	1000m/S ^{2} .10~200Hz
Operating temperature	-10℃~+70℃
Storage	-20℃~+80℃

Graphic size chart（unit：mm）



Dimensions

Safety Precautions

1:The encoder and the shaft should not be rigidly connected, use flexible connectors. The photoelectric encoder is a high-precision sensor, and it is strictly forbidden to knock during installation.

2:Please do not put the encoder output line and power line together or output in the same trunking, or put it near the switchboard

3:Incorrect wiring will save the internal circuit. When wiring, please connect according to the encoder label, and turn on the machine after checking.