Product selection guide

SCS30T・Series

Applications & Features

The SCS30T series are high performance, low cost, two channel optical incremental encoders. Each encoder contains a lensed LED source, an intergrated circuit with detectors and circuitry, and a code-wheel which rotates between the emitter and detector IC. These encoders may be quickly and easily mounted to a motor. The quadrature signals and the index pulse are accessed through four 0.025 inch square pins located on 0.1 inch centers.

Features:

No signal adjustment required, low cost, resolutions up to1024 counts per revolution; Small size; TTL compatible.

Applications:

The SCS30T series provide motion detection at a low cost, making them ideal for high volume applications. Typical applications include printers, plotters, tape drives, positioning tables, and automatic handlers.

Part Number

SCS	30	T	8	- G	1M	1	L	1000	B

Product Series
Modular encoder

External Diameter
Φ 30mm

Shaft Type
T: Through Hollow Shaft

Shaft Diameter
Φ 6mm
Φ 8mm
Φ 10mm

Connection
G: Dustproof radial cable

Cable Lengt
Standard 1M
0.3M-10M

Supply Voltage
1: DC5V

Output Circuit
E: Voltage
L: Line Driver

Resolution
100、200、256、360、400、500、512、1000、1024
(Other pulses no. available on request)

Output Signal
A: A phase signal
B: 90° phase different A、B singals output

Electrical Specifications

Output signals	A, B phase
Current consumption	0-5mA
Output current	≤25mA
Response frequency	0-20Hz (Voltage output)、0-50Hz (Line driver output)
Output phase difference	90° ±45°
Supply voltage	5V DC±5%
Signal level	VH≥85% Vcc, VL≤0.3V
Number of pulses	100、200、256、360、400、500、512、1000、1024 (Other pulses no. available on request)
Output circuit	Line driver, Voltage

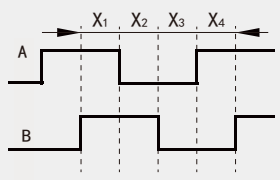
Mechnical Specifications

Rotor inertia of code-wheel	Approx. 0.6gcm^2
Hollow shaft diameter	≤8mm
Shock resistance	980m/s^2, 6ms, 2times each on XYZ
Vibtation proof	50m/s^2, 10-200Hz, 2 hours each on XYZ
Working life	MTBF≥50000h(+25° C, 2000rpm)
Weight	Apporox. 10g

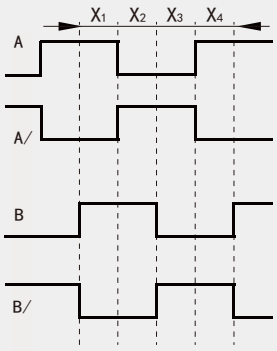
Environmental Specification

Working humidity	30-85%(No condensation)
Storage temperature	-40° C-85° C
Working temperature	-40° C-85° C
Weld temperature	≤260° C
Protection class	IP50

Output Waveform



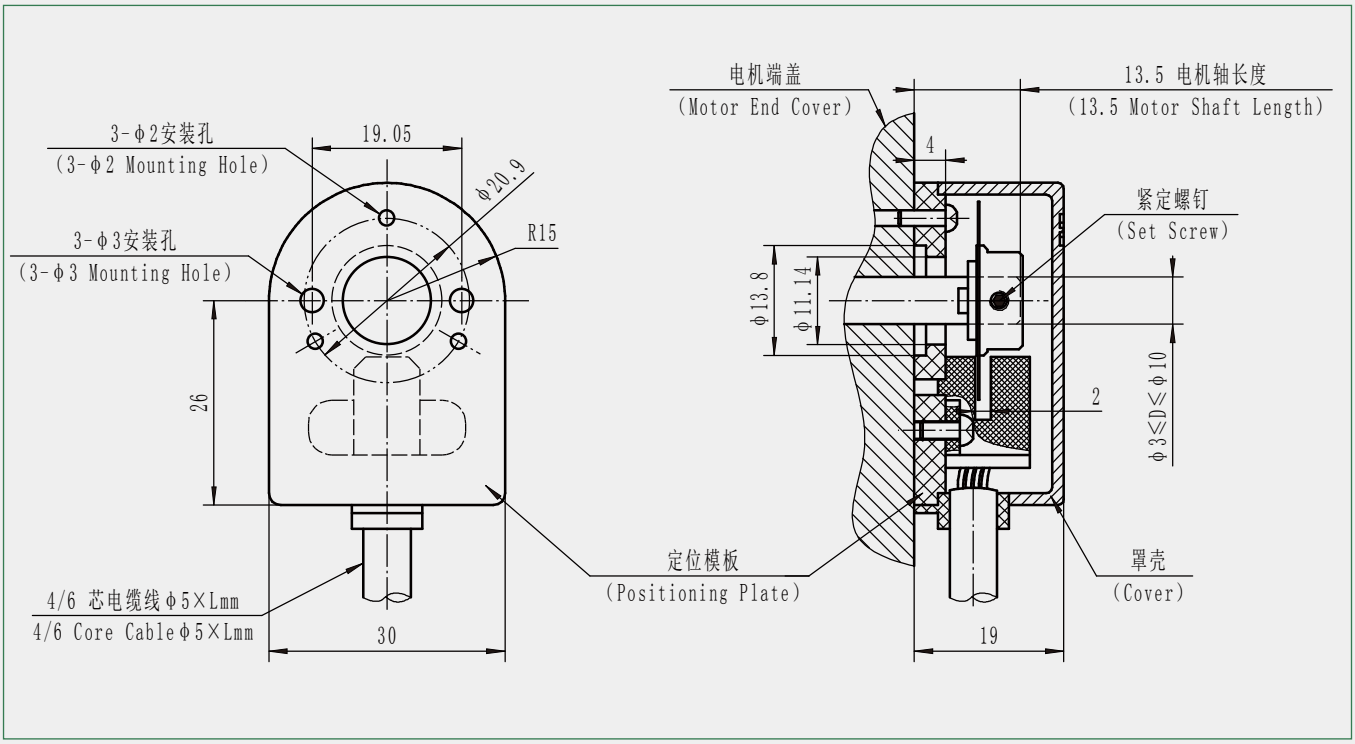
Waveform for E output



Waveform for L output

90° phase difference of A and B signals. The picture shows the clockwise(CW) wavefrom from the shaft side.

Dimension



Connections

Cable Color	Black	Red	Green	White	Brown	Gray
Line Driver Output	0V	Vcc	A	B	-A	-B
Cable Color	Black	Red	Green	White		
Voltage Output	0V	Vcc	A	B		

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www.roundssencoder.com