

Incremental Encoder



Special features :

- ▶ Standard design and high-strength metal disk(≤1024CPR) for high vibration and shock resistance
- ▶ Advanced high-reliability optical reading system, good performance in electromagnetic compatibility
- ▶ Overvoltage, overcurrent, surge protection
- ▶ HTL(Push-pull) or TTL(RS422)
- ▶ 10-30V(polarity protection), 5V , Single power supply
- ▶ IP 64
- ▶ 2 years warranty

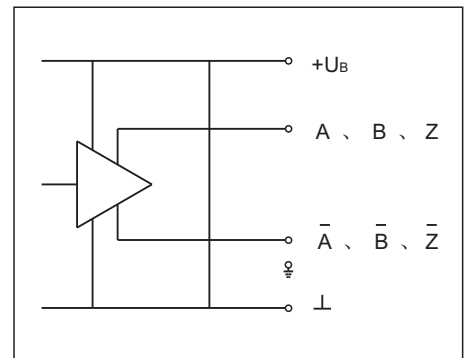
Product application:

- ▶ Applicable for displacement and velocity measurement of heavy equipments under harsh environment

Electrical Specification

Cycles per turn (CPR)	250 256 500 512 900 1000 1024 1200 1250 1500 1800 2000 2048 2500 3000 3600 4096 5000 6000 8192
Out frequency	400KHz
Rise time	Push-pull 400ns; Rs422 100ns
Supply voltage UB	+5V or +10V~+30V
Current consumption at no-load	Push-pull 50mA; Rs422 70mA
Out voltage (UB=24V)	UL≤1.5V; UH≥UB-3.0V
Maximum load current per channel	Push-pull 40mA; Rs422 20mA
Mark space ratio	1:1 ±20%
Square wave displacement	90° ±20%

Output Circuit



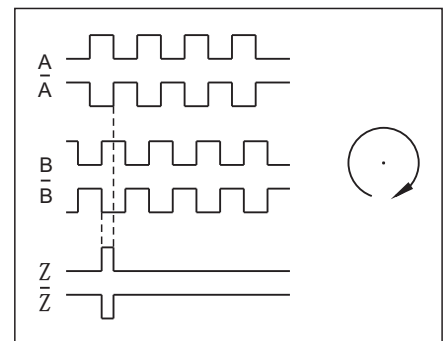
Output styles :

- P** : Push-pull
- R** : RS422 (TTL)
- L** :HTL
- C** : OC

Mechanical Specification

Shaft diameter	φ8 Stainless steel
Moment of inertia	≈5gcm ²
Speed max (Mechanical)	≤6000r/min
Driving torque	≈0.01N·m
Maximum shaft load	Axial 30N; Radial 60N
Vibration resistance	≤10G/55~2000Hz
Shock resistance	≤50G/6ms
Permissible encoder temperature	-20℃ ~+80℃ (-40℃ Optional)
Protection class	IP64
Weight	≈0.20Kg

Output Signals



Index width:

- 0** : No Index
- 1** : 1 T
- 2** : 1/2 T
- 4** : 1/4 T

Remark

$$\text{Speed max (Electronic)} = \frac{f_{\text{max}} * 60 * 10^3}{\text{CPR}} \quad (f_{\text{max}} = \text{Out frequency})$$

