

CXB-16 series *Heavy-duty*

Incremental Encoder



■ Special features :

- ▶ Special rugged housing for high vibration and shock resistance
- ▶ HeavyDuty design for high shaft load
- ▶ Hollow shaft up to $\phi 20$ mm or $\phi 17$ mm cone 1:10
- ▶ Advanced high-reliability optical reading system, good performance in electromagnetic compatibility
- ▶ Overvoltage, overcurrent, surge protection.
- ▶ Output signals HTL or TTL
- ▶ 9-30VDC, Single power supply, polarity protection
- ▶ IP 66, available for outdoor use
- ▶ 2 years warranty

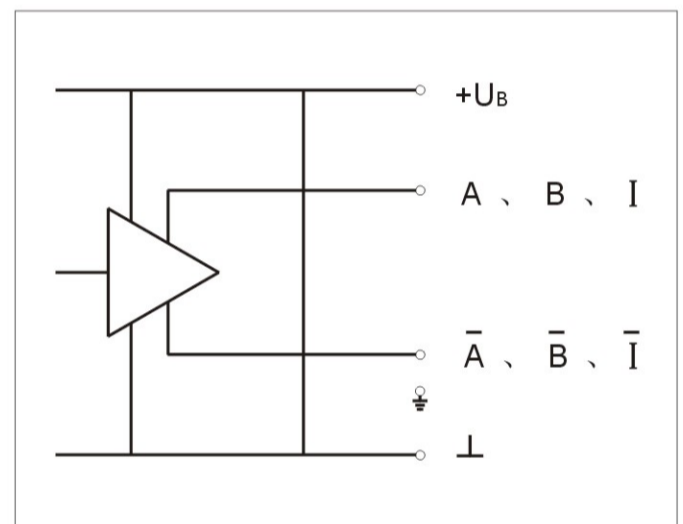
■ Product application:

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

■ Electrical Specification

Cycles per turn	500 512 600 1000 1024 1200 1250 2000 2048 2500
Out frequency	120KHz
Rise time	$\leq 10V/\mu s$
Supply voltage U_B	+9V~+30V or +5V
Current consumption at no-load	$\approx 100mA$
Out voltage ($U_B=24V$)	$U_L \leq 1.5V$; $U_H \geq U_B - 3.5V$
Maximum load current per channel	60mA/average; 200mA/peak
Mark space ratio	1:1 $\pm 20\%$
Square wave displacement	$90^\circ \pm 20\%$

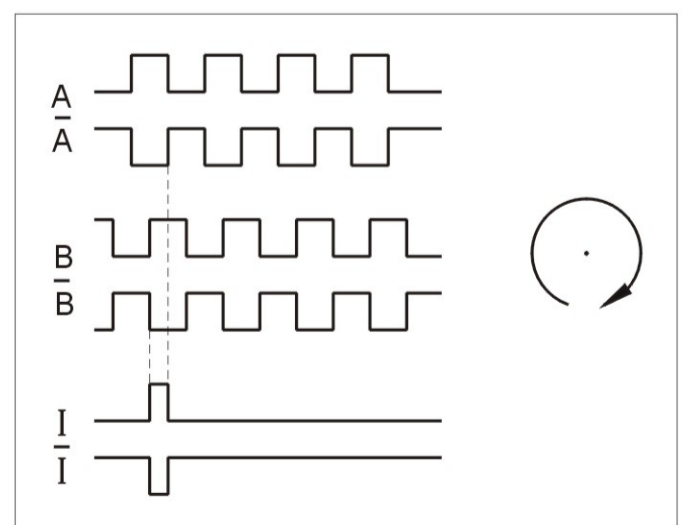
■ Output Circuit



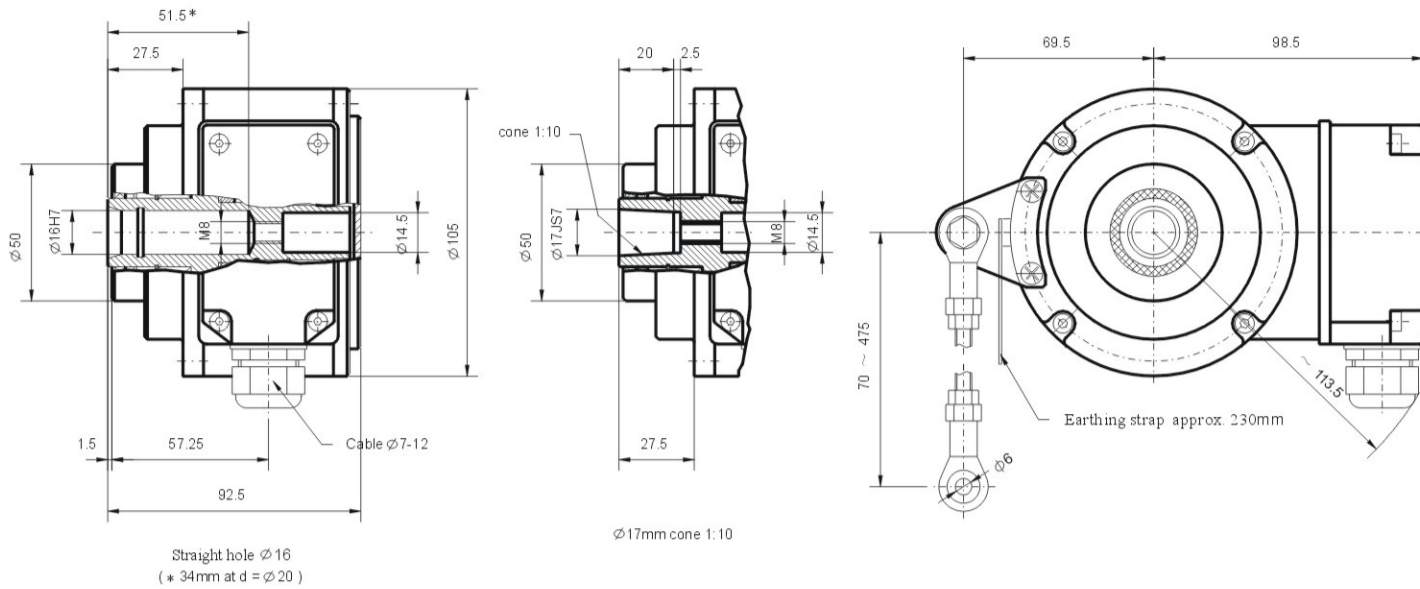
■ Mechanical Specification

Hollow shaft diameter	$\phi 16 - \phi 20$ mm or $\phi 17$ cone 1:10
Moment of inertia	$\approx 500gcm^2$
Speed max	$\leq 6000r/min$
Driving torque	$\approx 6Ncm$
Maximum shaft load	Axial 250N; radial 400N
Vibration resistance	$\leq 10G/10 \sim 2000Hz$
Shock resistance	$\leq 200G/6ms$
Permissible encoder temperature	$-40^\circ C \sim +100^\circ C$
Protection class	IP66
Weight	$\approx 1.7Kg$

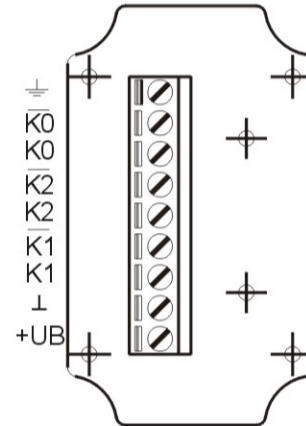
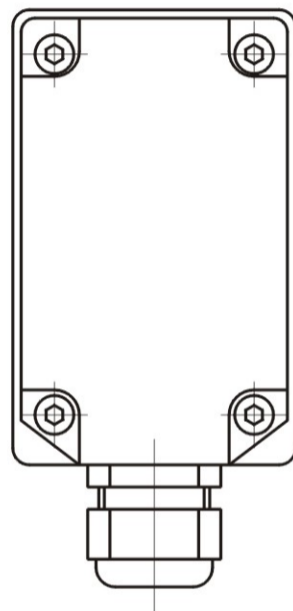
■ Output Signals



■ Dimensions



■ Connection



A=K1 B=K2 I=K0

$\bar{A}=\bar{K}1$ $\bar{B}=\bar{K}2$ $\bar{I}=\bar{K}0$

■ Ordering Information

CXB — 16 — 3 — 1024 — A B

Manufacturer: CXB

Type: 16 Series Heavy-duty Incremental

Codewheel materials: 1. Glass; 2. Plastic; 3. Metal

Not specified: Straight hole
B: Cone hole

A:HTL; B:TTL

Cycles per turn: 500 512 600 1000 1024
1200 1250 2000 2048 2500
(Other needs contact with the manufacturer)

Remarks: Technical modifications reserved.

■ Guarantee

2 years warranty within the conditions of Normal use and maintenance.



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