



Characteristics

- Flexible coupling connection avoids damage to encoder
- Shaft Ø6 ensures more stability and more protection
- Metal housing
- Protect level IP54
- Short-circuit protection. Reverse connection protection
- Direct cable output, water-proof end rubber

Naming Rules

BI 38 A Y 6 - L5 P - 1024 . XXXX

1 **2** **3** **4** **5** **6** **7** **8** **9**

1. Series

BI=Easydic Incremental

2. Housing Diameter

38

3. Flange Type

A=Ø6mm×15mm

B=Ø6mm×12.5mm

4. Output direction

Y=Radial

X=axis

5. Shaft Diameter

6=Ø6mm

6. Output & Supply voltage¹⁾

L5=RS422

5Vdc power

L6=RS422

10~30Vdc power

H6=Push-Pull HTL(with reverse sign)

10~30Vdc power

H4=Push-Pull HTL(with reverse sign)

5~30Vdc power

P6=Push-Pull(without reverse sign)

10~30Vdc power

P4=Push-Pull(without reverse sign)

5~30Vdc power

N4=NPN output

5~30Vdc power

C4=NPN collector open

5~30Vdc power

About output configure choice pls refer to electrical constructure & connect cable manual.

7. Type of connection

P=output cable length 0.5m

I=output cable length 1m

A=output cable length 2m

8. Resolution

Pulse/r ≤5000

Attention:for pulse scale pls contact our company

9. XXXX

XXXX=special code

1) Only one channel allowed to be shorted-out
ifUb=5V, short-circuit to channel,0V,or+UB is permitted
ifUb=10...30V, short-circuit to channel or 0V is permitted

Mechanical Characteristics

Shaft (mm)	Ø6g6
Protection acc.to EN 60 529	IP54
Resolution	10,20,30,40,50,60,70,80,90,100,200,300,360,400,500,512,600,800,1000,1024,1200,1250,2000,2500,4000,5000
Speed (r/m)	6000rpm
Max load capacity of shaft	25N axial, 50N radial
Shock resistance	50G/11ms
Vibration resistance	10G 10~2000Hz
Bearing life	10 ⁹ revolution
Rotor moment of inertia	1.8×10 ⁻⁶ kgm ²
Starting torque	<0.05Nm
Body material	AL-alloy
Housing material	AL-alloy+Black Paint
Operating temperature	-20~+80°C
Storage temperature	-30~+85°C
Weight	83g

Attention: Bold part is in stock. For other resolutions pls contact our company.

Electrical Characteristics

Output circuit	Push-pull	RS422	RS422	NPN	NPN collector open
Resolution	Max.5000ppr	Max.5000ppr	Max.5000ppr	Max.5000ppr	Max.5000ppr
Supply voltage (Vdc)	10-30V/5-30V	5V	10-30V	5-30V	5-30V
Power consumption (no load)	≤125mA	≤80mA	≤80mA	≤80mA	≤80mA
Permissible load/channel	±80mA	±50mA	±50mA	±50mA	±50mA
Pulse frequency	Max.300 kHz	Max.300 kHz	Max.300 kHz	Max.300 kHz	Max.300 kHz
Signal level high	Min.Ub-1.5V	Min.3.4V	Min.3.4V	Min.Ub-2.5V	Min.Ub*70% *)
Signal level low	Max.0.8V	Max.0.4V	Max.0.4V	Max.0.4V	Max.0.4V *)
Rise time Tr	Max 1µs	Max 200ns	Max 200ns	Max 1µs	Max 1µs **)
Fall time Tf	Max 1µs	Max 200ns	Max 200ns	Max 1µs	Max 1µs **)

*) : NPN open collector depends on draw resistance, advise resistance is 1K ohm

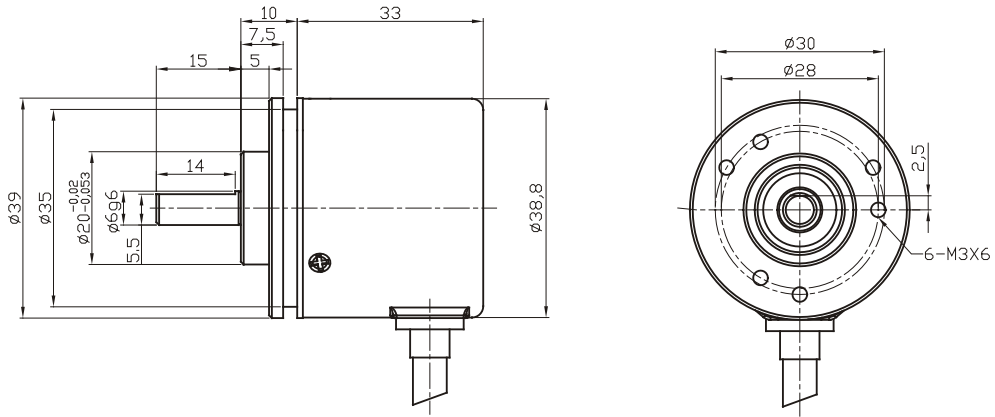
**): NPN open collector depends on draw resistance & cable length

Terminal Assignment

Signal	0V	+Ub	A	\bar{A}	B	\bar{B}	Z	\bar{Z}	Shield
Color	WH	BN	GN	YE	GY	PK	BU	RD	\perp

Dimensions

BI38A



BI38B

