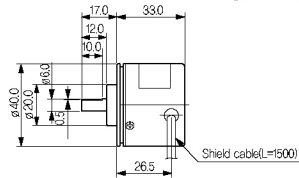
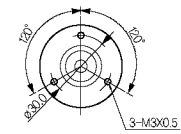




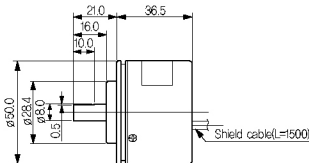
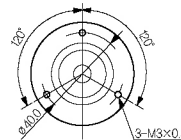
|                          |                             |                                                                                                                                         |
|--------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical Specification | Starting Torque             | Ø40 : $4 \times 10^{-3}$ N · m max,<br>Ø50 : $7 \times 10^{-3}$ N · m max.                                                              |
|                          | Moment of inertia           | Ø40 : $4 \times 10^{-6}$ kg · m <sup>2</sup> max, Ø50 : $7 \times 10^{-6}$ kg · m <sup>2</sup> max                                      |
|                          | Permissible Shaft Loading   | Ø40 : Radial : Within 30 N, Thrust : Within 20 N<br>Ø50 : Radial : Within 50 N, Thrust : Within 30 N                                    |
|                          | Max. Permissible Revolution | 5000 r/min                                                                                                                              |
|                          | Insulation Resistance       | Over 100 M $\Omega$ (Base on 500 V d.c mega between terminal and case)                                                                  |
|                          | Dielectric strength         | 800 V AC (Between terminal and case at 60 Hz for 1 minute)                                                                              |
|                          | Vibration Resistance        | 10 ~ 55Hz (Cycle for 1 minute), Double amplitude width: 1.5 mm, Each X · Y · Z direction for 2 hours                                    |
|                          | Shock Resistance            | Ø40 : 490 % Max., Ø50 : 735 % Max.                                                                                                      |
|                          | Ambient Temperature         | -10 ~ 70 °C(Without condensation),Storage Temperatur : -25 ~ 85 °C                                                                      |
|                          | Ambient Humidity            | 35 ~ 85 % R.H.                                                                                                                          |
|                          | Protection                  | Protection IP 50 (IEC Standard)                                                                                                         |
|                          | Wire Specification          | 5 P, Ø 5.0 mm, Length : 1.5 m, Shield cable(Option : 2 m, 8 m, 10 m)<br>(Line Driver Type : 8P, Ø 5.0 mm, Length : 1.5 m, Shield cable) |
|                          | Weight                      | Ø 40 : 170 g, Ø 50 : 200 g                                                                                                              |
|                          | Accessory                   | Ø 40 : Ø 6.0 or Ø 8.0 mm Coupling, Ø 50 : Ø 8.0 mm Coupling, Bracket                                                                    |

## Dimension

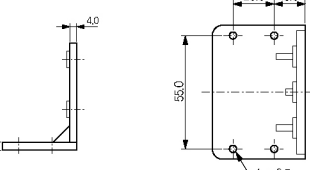
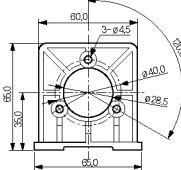
### ■ Ø 40 Axis



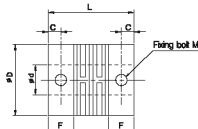
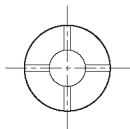
### ■ Ø 50 Axis



### ■ Ø 50 Axis (Bracket)



### ■ Mode # : RC-06 / RC-08 (Coupling)



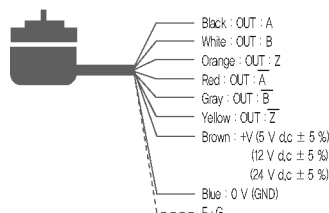
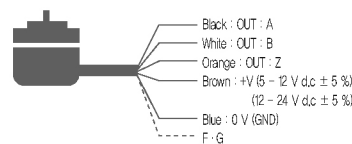
|          | C   | D  | d                  | F   | L    | M    |
|----------|-----|----|--------------------|-----|------|------|
| Ø40      | 3.5 | 19 | 6 <sup>+0.05</sup> | 7.2 | 25   | M4×5 |
| Ø40, Ø50 | 3.5 | 19 | 8 <sup>+0.05</sup> | 6.0 | 23.2 | M3×5 |

※ Please be careful when coupling with revolving shafts that if there are larger coupling errors (parallel misalignment, angular misalignment), the lifetime of the encoder and coupling could be shortened.

## Wiring diagram

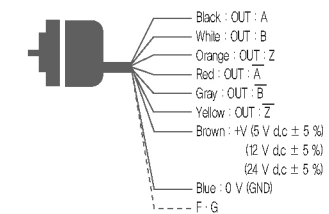
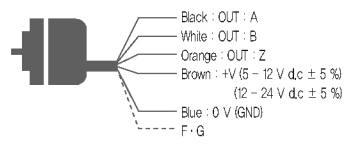
### ■ Ø40 Axis

- Voltage output, Totem Pole output, Open collector output
- Line Driver output



### ■ Ø50 Axis

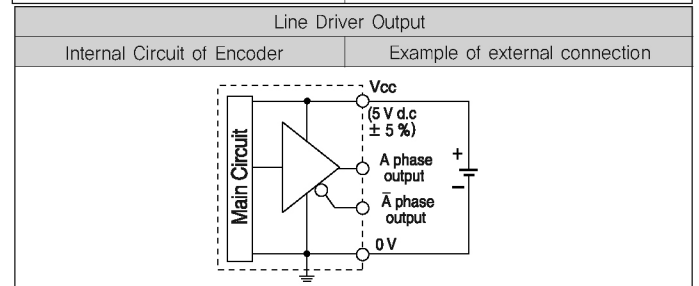
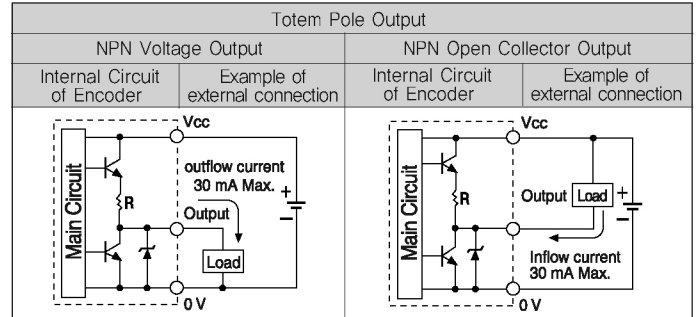
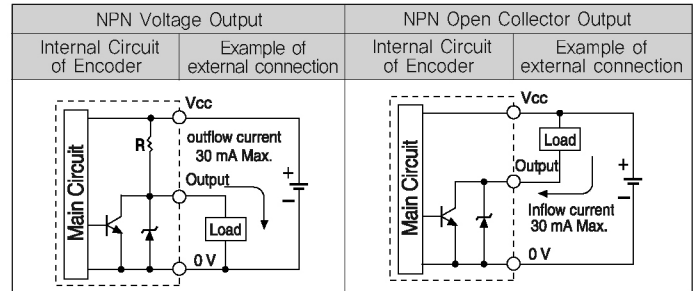
- Voltage output, Totem Pole output, Open collector output
- Line Driver output



※ Please insulate unused lines

※ Metal case of encoder and Shield line must be ground connection.

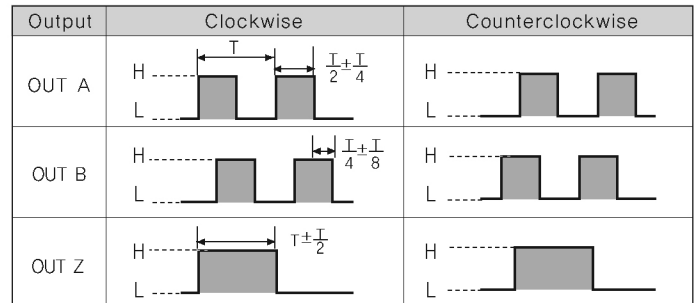
## Control output circuit diagram



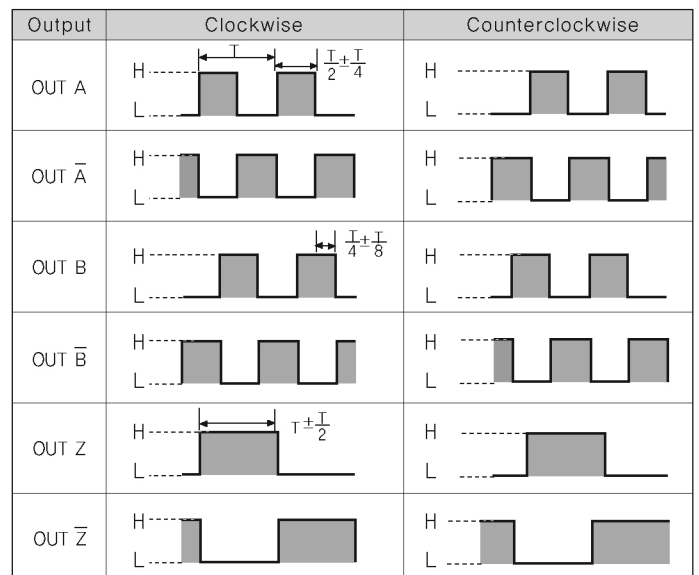
※ The output circuit of A, B, Z phase (Line drive output A,  $\bar{A}$ , B,  $\bar{B}$ , Z,  $\bar{Z}$  phase) is same.

## Wiring diagram

### ■ NPN Voltage output, NPN Open Collector Output, Totem Pole output



### ■ Line Driver Output



Clockwise (CW): When you are looking at the shaft of the product, it is turning in a clockwise direction.  
Counterclockwise (CCW): When you are looking at the shaft of the product, it is turning in a counterclockwise.