

S40 Series

- Features : Various resolution, 10~3600 P/R(29 Class)
Wide ranging power voltage, Customized design,
Prompt delivery

Model

INCREMENTAL
SHAFT TYPE
Outer Diameter Ø40

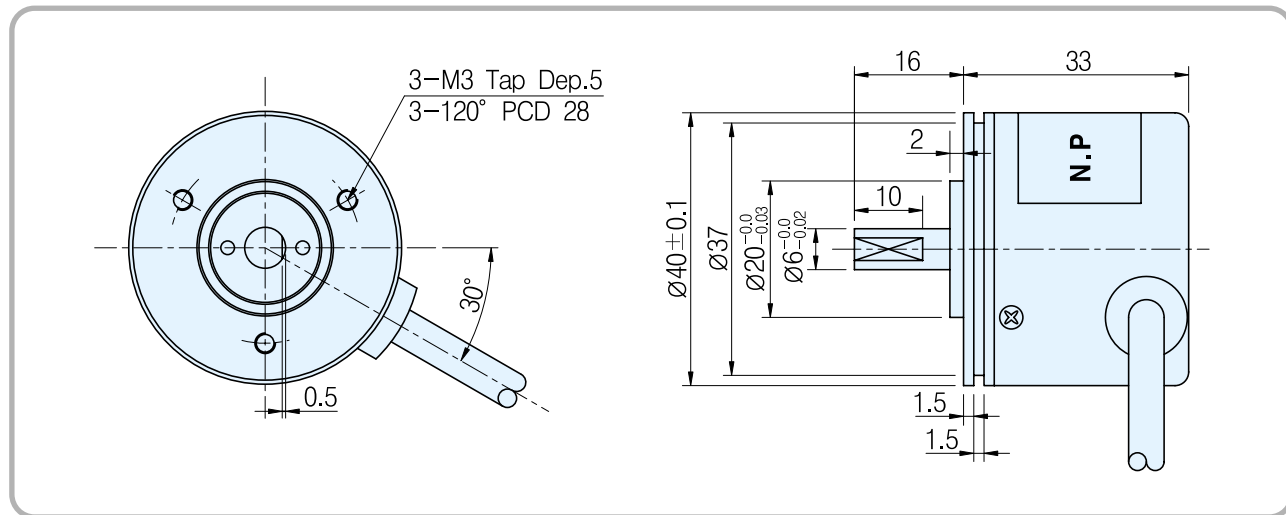
Shaft Size
6: Ø6

S40 - 6 - [] [] [] [] - [] [] - []

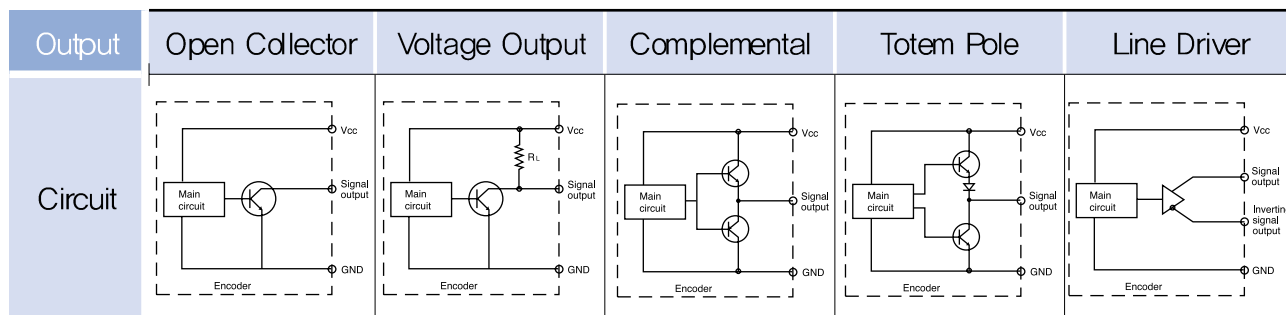
| Resolution(P/R) | Output Signal | Output Form | Cable Length |
|---|--|---|---|
| 0010 0030 0048 0050 0060 0072 0075 0100 0120 0125 0192 0200 0250 0256 0300 0360 0400 0500 0512 0600 0720 1000 1024 1200 2000 2048 2500 3000 3600 | B : A, B Z : A, B, Z U : A, \bar{A} , B, \bar{B} V : A, \bar{A} , B, \bar{B} , Z, \bar{Z} | O : Open Collector V : Voltage Output C : Complemental T : Totem Pole L : Line Driver | 1 : 1[M] 2 : 2[M] 3 : 3[M] 4 : 5[M] 5 : 10[M] |

⚠ The sep. of power may be different depending on the type of output and be sure to check the electric spec.

External Dimension



Output Circuit



Electrical Spec.

| Output type | Open Collector | Voltage Output | Complemental | Totem Pole | Line Driver |
|--|--|--|--|---|---------------------------------------|
| Power Supply | DC +5[V] ~ +24[V] Ripple p-p : less than 5% | DC +5[V] ~ +24[V] Ripple p-p : less than 5% | DC +15[V], +24[V] Ripple p-p : less than 5% | DC +5[V] ~ 24[V] Ripple p-p : less than 5% | DC +5[V] Ripple p-p : less than 5% |
| Consuming Current (In case of no load) | 70mA Max | 70mA Max | 150mA Max | 150mA Max | 150mA Max |
| Maximum Response Frequency | 150 KHz (10 ~ 2048 P/R) / 300 KHz (2500 ~ 3600 P/R) | | | | |
| Output voltage | Less than V _i 0.5[V] / More than V _i 2.5[V] (In case of inputting +5V) / More than V _i 10[V] (In case of inputting +15V) / More than V _i 18[V] (In case of inputting +24V) | | | | |
| Output current | Less than 20mA | Less than 20mA | Less than 10mA | Less than 10mA | Less than 20mA |
| Rising, decline time | Less than 3μs | Less than 3μs | Less than 1μs | Less than 1μs | Less than 0.1μs |
| Common conditions | In case that the cable length of output side is 1[M] and load resistance is less than 1[kΩ] | | | | |

Mechanical Spec.

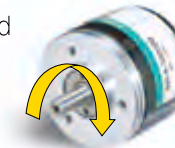
| | |
|--|---|
| Starting Torque | 50g - cm Max |
| Maximum number of revolution | 7000 rpm |
| Bearing lifetime | 20,000[hr] (In case of rotating by 5000rpm) |
| Allowable Shaft Load | Radial : 2.2kg Max Axial : 1.1kg Max |
| Position deflection of allowable shaft | Radial : Less than 0.05 mm Axial : Less than 0.2mm |
| Connection Table | 4P(AWG26) Shield CABLE |
| weight | 150g |

Rigid Spec.

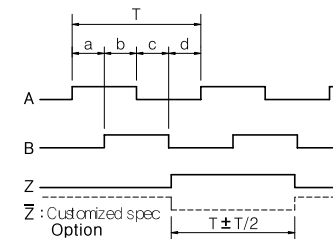
| | |
|-----------------------|--------------------------------|
| Operating Temp. Range | -10°C ~ +70°C (No freezing) |
| Preserving temp | -20°C ~ +85°C |
| Using humidity | 35% ~ 85% RH |
| Preserving Humidity | 30% ~ 90% RH |
| Internal Vibration | 5G |
| Internal Shock | 50G |
| Degree of Protection | IP 50 |

Output Phase Shift

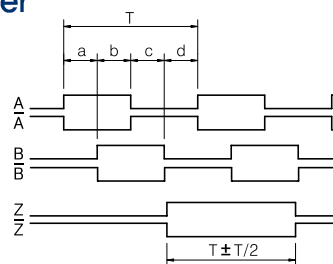
CW → Clockwise viewed from shaft end
 $a + b, c + d = T/2 \pm T/10$
 $a, b, c, d = T/4 \pm T/10$



Open Collector, Voltage Output Complemental, Totem Pole



Line Driver



Connection Table

| Cable's Color | Connection Table | |
|---------------|--|---------------|
| Output Form | Open Collector Voltage Output Complemental Totem Pole | Line Driver |
| Red | Vcc | Vcc |
| Black | GND | GND |
| Green | A Sig | A Sig |
| Blue | - | \bar{A} Sig |
| White | B Sig | B Sig |
| Pink | - | \bar{B} Sig |
| Yellow | Z Sig | Z Sig |
| Orange | - | \bar{Z} Sig |
| Shield | CASE Shield | CASE Shield |