

INCREMENTAL
HOLLOW TYPE

H40 Series

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

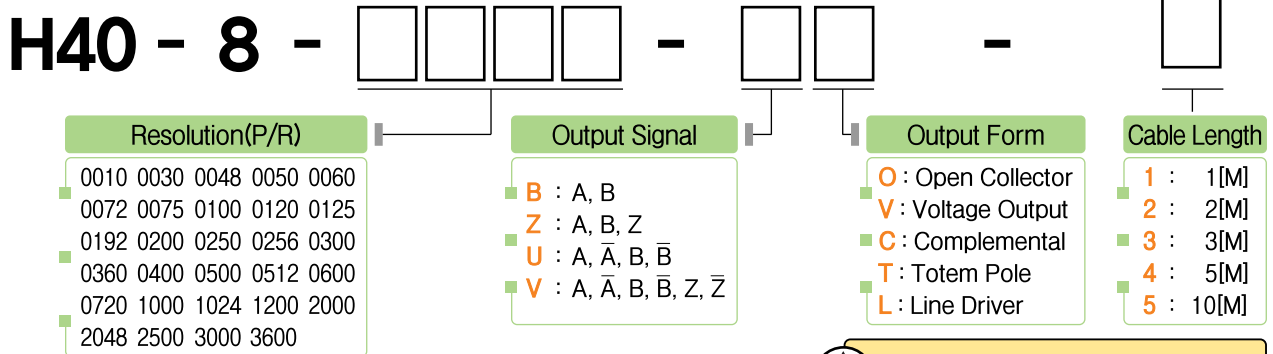


Model

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Outer Diameter $\varnothing 40$

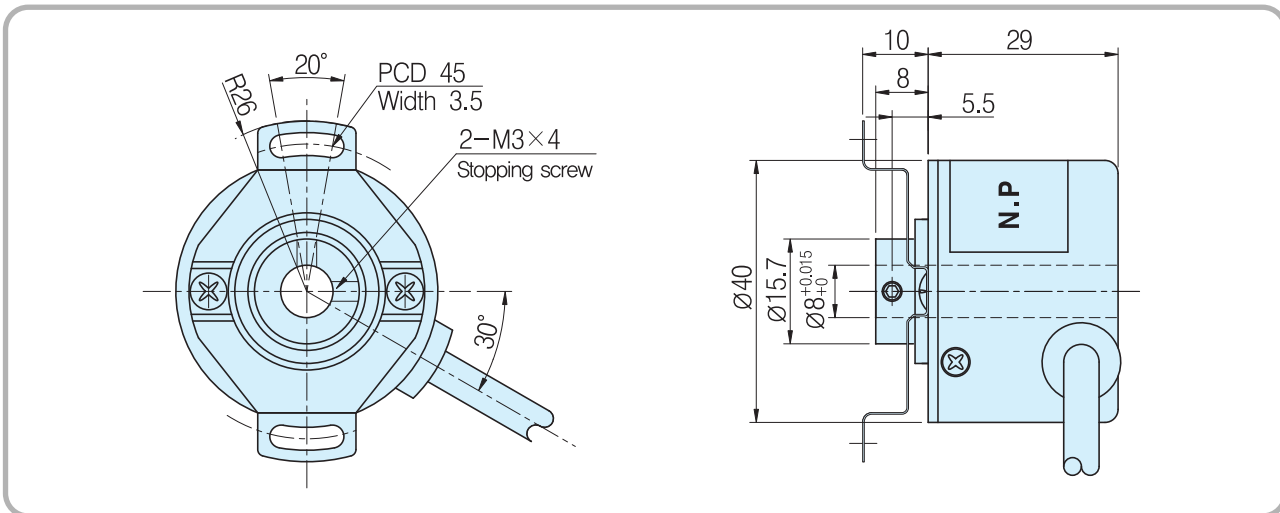
Shaft Size

8 : $\varnothing 8$ *Option: 5 : $\varnothing 5$ / 6 : $\varnothing 6$

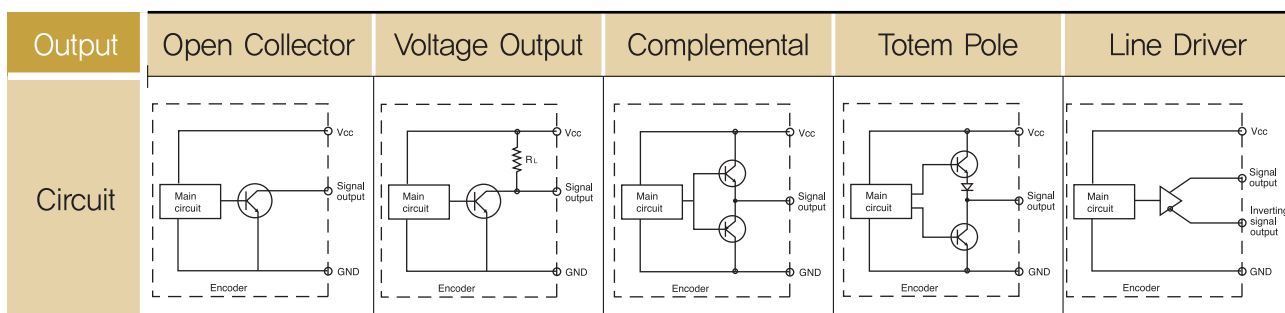


The sep(c) of power may be different depending on the type of output and be sure to check the electric spec.

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] ~ 15[V], +24[V] Ripple p-p : less than 5% | DC +5[V], +5~24[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 3 μ s | Less than 3 μ s | Less than 1 μ s | Less than 1 μ s | Less than 0.1 μ s |
| Common conditions | In case that the cable length of output side is 1[M] and load resistance is less than 1[k Ω] | | | | |

Mechanical Spec.

| | |
|--|---|
| Starting Torque | 80g – cm Max |
| Maximum number of revolution | 6000 rpm |
| Bearing lifetime | 27,000[hr](In case of rotating by 5000rpm) |
| Allowable Shaft Load | Radial : 2.5kg Max Axial : 1.3kg 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% ~ 80% RH |
| Preserving Humidity | 30% ~ 85% RH |
| Internal Vibration | 5G |
| Internal Shock | 50G |
| Degree of Protection | IP 50 |

Output Phase Shift

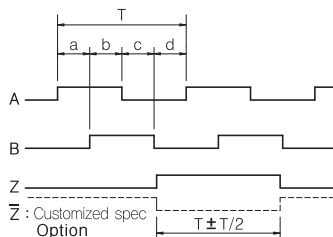
CW \rightarrow Clockwise viewed from shaft end

$$a + b, c + d = T/2 \pm T/10$$

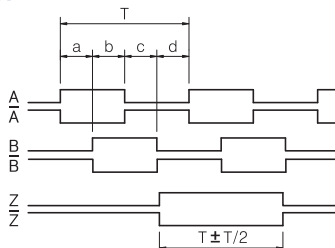
$$a, b, c, d = T/4 \pm T/10$$



**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 |