

KS40 Series

- Features : Various resolution, 10~3600 P/R(22 Class)
- Widening power voltage
- Customized design, Prompt delivery



Model

INCREMENTAL
SHAFT TYPE

Outer Diameter: Ø40

KS40 - 6 -

Resolution(P/R)
0010 0030 0048 0050 0100
0125 0200 0250 0256 0300
0360 0400 0500 0512 0600
1000 1024 2000 2048 2500
3000 3600

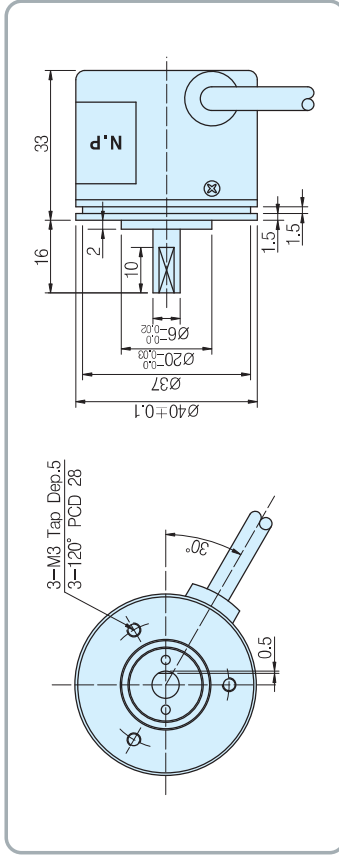
Output Signal
B : A, B
Z : A, B, Z
U : A, A, B, B
V : A, A, B, B, Z, Z

Output Form
O : Open Collector
V : Voltage Output
C : Complementary
T : Totem Pole
L : Line Driver

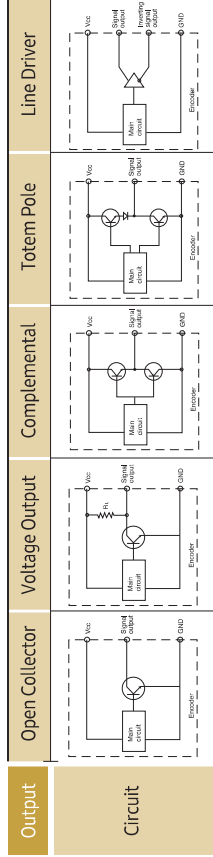
Cable Length
1 : 1[M]
2 : 2[M]
3 : 3[M]
5 : 5[M]
10 : 10[M]

Note) The spec. 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-less than 5%	DC +5[V] ~ +24[V] Ripple: p-less than 5%	DC +15[V] ~ +24[V] Ripple: p-less than 5%	DC +5[V] ~ +24[V] Ripple: p-less than 5%	DC +5[V] , 5 ~ +24[V] Ripple: p-less than 5%
Consuming Current (in case of load)	70mA Max	70mA Max	150mA Max	150mA Max	150mA Max
Maximum Response Frequency	150 KHz (10 ~ 20K48 P/R) / 300 KHz (2500 ~ 3600 P/R)				
Output voltage	Less than V (0.5V) / More than V/2.5V (in case of inputting +5V) / More than V/10V (in case of inputting +15V) / More than V/1.8V (in case of inputting +24V)				
Output current	Less than 20mA	Less than 20mA	Less than 20mA	Less than 10mA	Less than 20mA
Rising, decline time	Less than 3µs	Less than 3µs	Less than 1µs	Less than 1µs	Less than 1µs (Load inductive)
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	50gf ~ cm Max
Minimum number of revolution	7000 rpm
Bearing lifetime	20,000hr (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	4PIAW(G2.6) Shield CABLE
weight	150g

Rigid Spec.

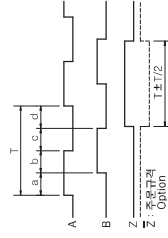
Operating Temp. Range	-10°C ~ +70°C (No freezing)
Preserving temp	-20°C ~ +85°C
Using humidity	35% ~ +85% RH
Preserving Humidity	30% ~ +90% RH
Internal Vibration	5G
Internal Shock	50G
Degree of Protection	IP 50

Output Phase Shift

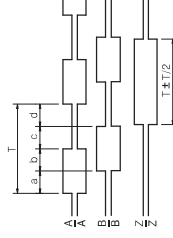
CW → Clockwise viewed from shaft end
 $a + b, c + d = T/2 \pm T/10$
 $a, b, c, d = T/4 \pm T/10$



Open Collector, Voltage Output Complemental, Totem Pole



Line Driver



Connection Table

Cable's Color	Output Form	Output Signal
Red	Open Collector	Vcc
Black	Voltage Output	GND
Green	Complemental	A Sig
Blue	Totem Pole	B Sig
White		-
Pink		B Sig
Yellow		Z Sig
Orange		Z Sig
Shield		CASE Shield