

KS48 Series

- Features : Various resolution, 10~6000 P/R(24 Class)
Wideranging power voltage
Customized design, Prompt delivery

Model

INCREMENTAL
SHAFT TYPE

Shaft Size
8 : Ø8

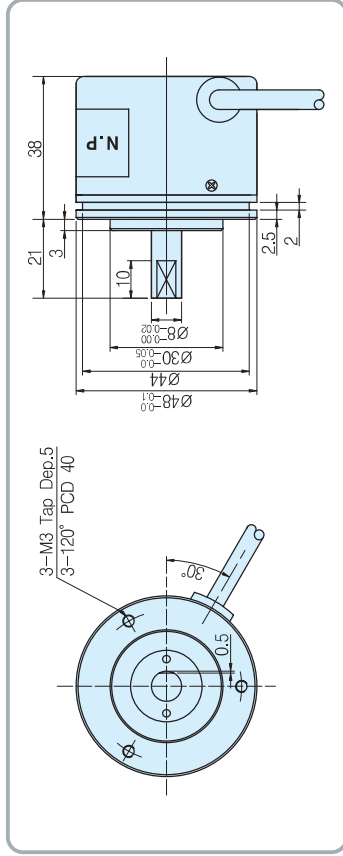
Outer Diameter Ø48

KS48 - 8

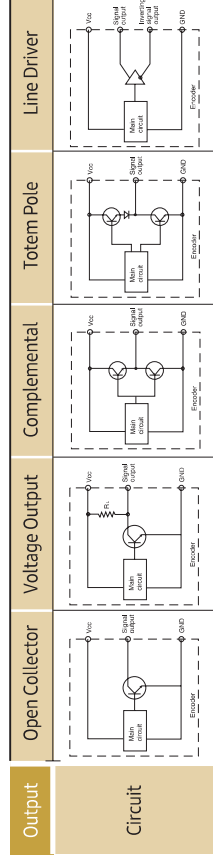
Resolution(P/R)	Output Signal	Output Form	Cable Length
0010 0030 0048 0050 0100	B : A, B Z : A, B, Z	O : Open Collector V : Voltage Output	1 : 1[M] 2 : 2[M] 3 : 3[M] 5 : 5[M] 10 : 10[M]
0125 0200 0250 0256 0300	U : A, A, B, B V : A, A, B, B, Z, Z	C : Complementary T : Totem Pole L : Line Driver	
0360 0400 0500 0512 0600			
1000 1024 2000 2048 2500			
3000 3600 5000 6000			

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



ROTARY ENCODER

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] ; S ~ +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 ~ 2048 P/R) / 300 KHz (2500 ~ 6000 P/R)				
Output voltage	Less than V (0.5V) (More than V/2.5) (In case of inputting +5V), More than V/10 (In case of inputting +10V) More than V/18 (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 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	80gf·cm Max
Maximum number of revolution	6000 rpm
Bearing lifetime	27,000 [hr] (In case of rotating by 5000 rpm)
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	20g

Rigid Spec.

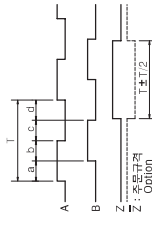
Operating Temp. Range	-10°C ~ +70°C (No freezing)
Preserving temp	-20°C ~ +85°C
Using humidity	35% ~ +85% RH
Preserving Humidity	30% ~ +90% RH
Internal Vibration	5G
Internal Shock	100G
Degree of Protection	IP 50

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

