

KS68A Series

- Features : Machine tools, Industrial robot, Rigid shaft type (Industrial robot), Various resolution

Model

INCREMENTAL
SHAFT TYPE

Outer Diameter: $\varnothing 68$

KS68A - 15 -

Resolution(P/R)

0100 1000 1024
2000 2048

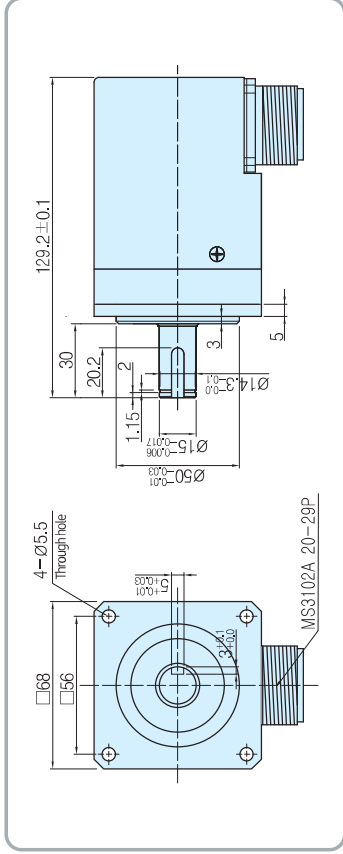
Shaft Size

$\varnothing 15$: $\varnothing 15$

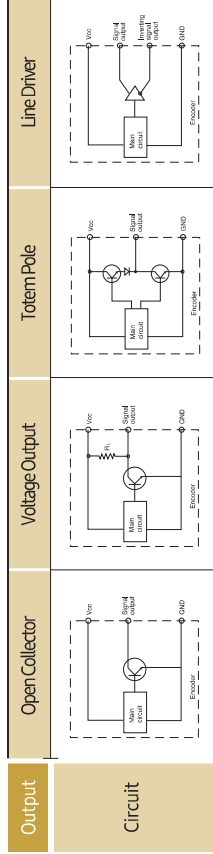


Note) The spec. of power may be different depending on the type of output and be sure to check the electric spec.

External Dimension



Output Circuit



ROTARY ENCODER

Electrical Spec.

Output type	Open Collector	Voltage Output	Totem Pole	Line Driver
Power Supply	DC +15[V] Ripple-p: less than 5%	DC +15[V] Ripple-p: less than 5%	DC +5[V] ~ 24[V] Ripple-p: less than 5%	DC +5[V] Ripple-p: less than 5%
Consuming Current (in case of no load)	70mA Max	70mA Max	150mA Max	150mA Max
Maximum Response Frequency	150 KHz (10 ~ 2048 P/R)			
Output voltage	Less than V _{CC} (V _{CC} more than V _{CC} in case of inputting +15[V]), More than V _{CC} (V _{CC} more than V _{CC} in case of inputting +24[V])			
Output current	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 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	800gf-cm Max
Maximum number of revolution	8000 rpm
Bearing lifetime	100,000 hr (in case of rotating by 5000 rpm)
Allowable Shaft Load	Radial : 5kg Max Axial : 5kg Max
Position deflection of allowable shaft	Radial : Less than 0.05 mm Axial : Less than 0.2 mm
Connection Table	MS3102A 20-29P
weight	720g

Rigid Spec.

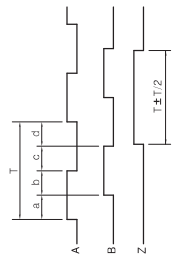
Operating Temp. Range	-10°C ~ +70°C (No freezing)
Preserving temp	-20°C ~ +85°C
Using humidity	35% ~ +85% RH
Preserving Humidity	30% ~ +95% RH
Internal Vibration	5G
Internal Shock	50G
Degree of Protection	IP 54

Output Phase Shift

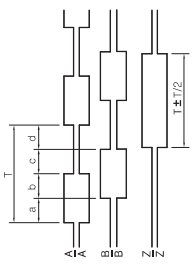
CW → Clockwise viewed from shaft end
 $a + b, c + d = T/2 \pm T/10$
 $a, b, c, d = T/4 \pm T/10$



Open Collector, Voltage Output Totem Pole



Line Driver



Connection Table

Cable's Color	Output Signal
Pin code	Open Collector Voltage Output Totem Pole
H	Vcc
K, M	GND
A	A Sig
N	\bar{A} Sig
C	B Sig
R	\bar{B} Sig
B	Z Sig
P	\bar{Z} Sig
T	CASE Shield