

S30 Series

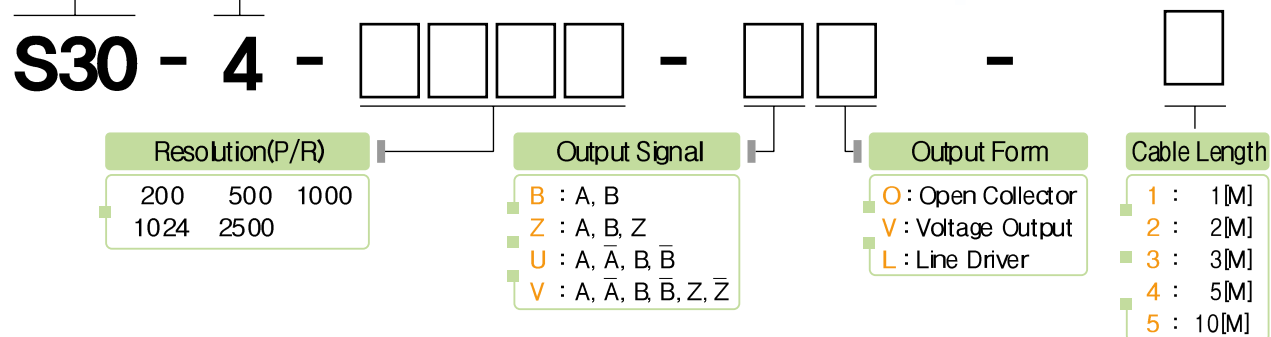
■Features : Small size and various resolution
200~2500P/R(5 Class), Wide ranging power voltage,
Customized design, Prompt delivery



Model

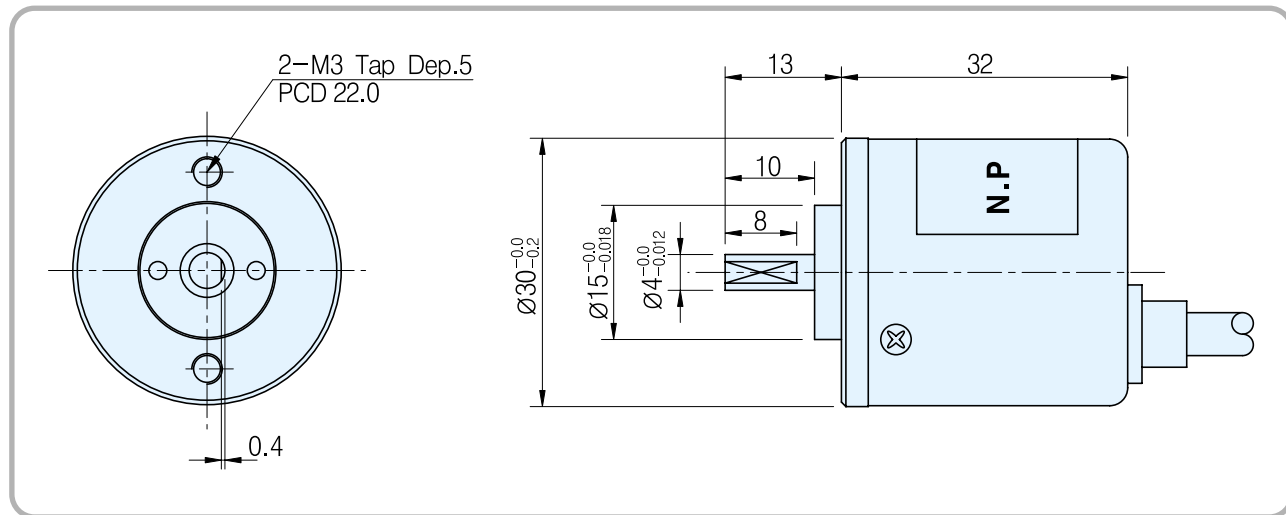
INCREMENTAL
SHAFT TYPE
Outer Diameter Ø30

Shaft Size
4: Ø4

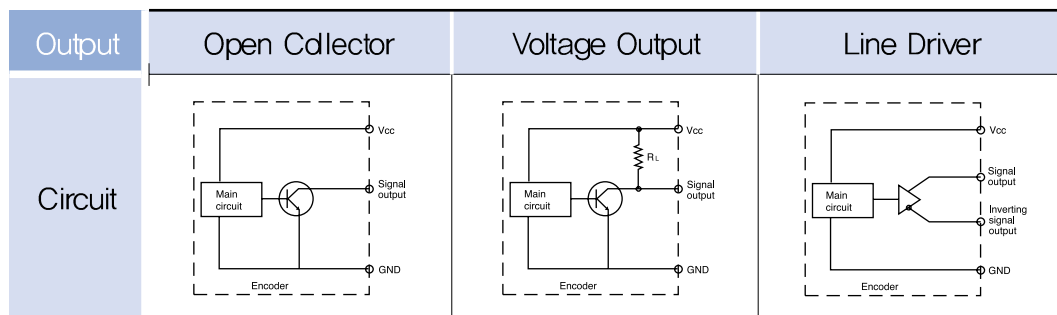


The spec of power may be different depending on the type of output and be sure to check the dedriscpec.

External Dimension



Output Circuit



Electrical Spec.

Output type	Open Collector	Voltage Output	Line Driver
Power Supply	DC +12[V] ~ +15[V] Ripple p-p : less than 5%	DC +12[V] ~ +15[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
Maximum Response Frequency	150 KHz (200 ~ 1024 P/R) / 300 KHz (2500 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)		
Output current	Less than 20mA	Less than 20mA	Less than 20mA
Rising, decline time	Less than 3μs	Less than 3μs	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.

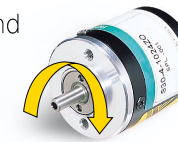
Starting Torque	50g - cm Max
Maximum number of revolution	3000 rpm
Bearing lifetime	20,000[hr](In case of rotating by 3000rpm)
Allowable Shaft Load	Radial : 1.8kg Max Axial : 0.9kg Max
Position deflection of allowable shaft	Radial : Less than 0.05 mm Axial : Less than 0.2mm
Connection Table	4P(AWG26) Shield CABLE
weight	120g

Rigid Spec.

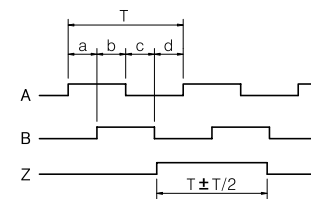
Operating Temp. Range	-10°C ~ +70°C (No freezing)
Preserving temp	-20°C ~ +85°C
Using humidity	35% ~ +85% RH
Preserving Humidity	30% ~ +90% RH
Internal Vibration	5G
Internal Shock	100G
Degree of Protection	IP 50

Output Phase Shift

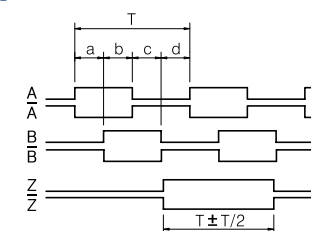
CW → Clockwise viewed from shaft end
 $a + b, c + d = T/2 \pm T/8$
 $a, b, c, d = T/4 \pm T/8$



Open Collector, Voltage Output



Line Driver



Connection Table

Cable's Color	Connection Table	
Output Form	Open Collector Voltage Output	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