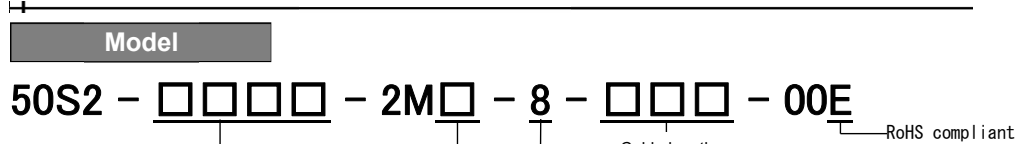




Standard Shaft type

- ◇ High Resolution; Up to 20000P/R
- ◇ Compatible with 50S/NOC3 series

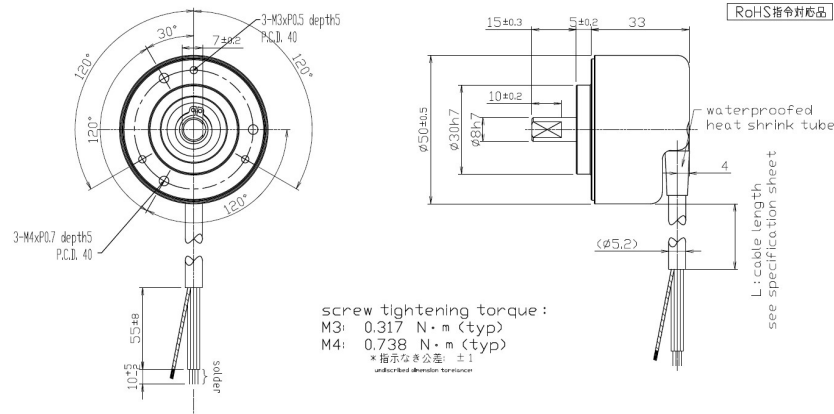
50S2 Series



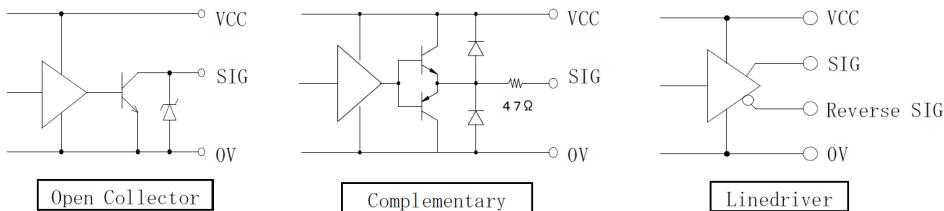
- C: Open Collector
- T: Complementary
- D: Line Driver

1024	1024P/R	1250	1250P/R	2048	2048P/R	2500	2500P/R	4096	4096P/R
5000	5000P/R	8192	8192P/R	10000	10000P/R	16384	16384P/R	20000	20000P/R

Dimension



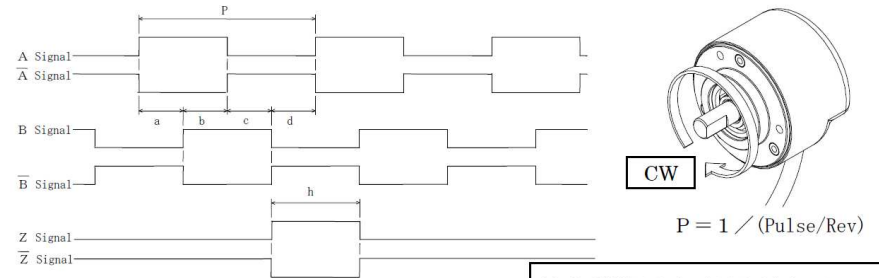
Output circuit



Electrical Spec.

TYPE	2MC	2MT	2MD
Supply Voltage	DC 4.5 to 30V		DC 4.5 to 5.5V
Current consumption (Unloaded)	<50mA (Typ.) 100mA(MAX)	<80mA (Typ.) 130mA(MAX)	<50mA (Typ.) 100mA(MAX)
Output Voltage	[H]: - [L]: <0.5V	[H]: >Vcc -3V [L]: <3V	[H]: >2.4V [L]: <0.5V
Output Current	40mA MAX	40mA MAX	20mA MAX
Maximum Frequency response	2MHz MAX		
Rise / Fall time	1μs MAX	200μs MAX	100ns MAX
Insulation resistance	50MΩ or more DC 500V(0V⇔CASE)		
Dielectric resistance	AC500V 1minute		

Wave Form



Accuracy waveform

- a) Signal A, B $a, b, c, d = (P/4) \pm (P/8)$
- b) Signal Z $\text{Duty} = (P/2) \pm (P/4)$
 $(P/4) \leq h \leq (3P/4)$

\bar{A} , \bar{B} , \bar{Z} 信号はラインドライバ出力のみ
(Signal \bar{A} , \bar{B} , \bar{Z} are Linedriver only.)

*Note: Rising of A signal is one point when Z signal is high.(CW)
Falling of A signal is one point when Z signal is high.(CCW)

Wiring characteristics

Open collector / Complementary		Line driver			
Color	Signal	Color	Signal	Color	Signal
Red	VCC	Red	VCC	Yellow	Sig. Z
Black	0V	Black	0V	Orange	Sig. \bar{Z}
Blue	Sig. A	Green	Sig. A	Shield	N.C
White	Sig. B	Blue	Sig. \bar{A}		
Yellow	Sig. Z	White	Sig. B		
Shield	N.C	Gray	Sig. \bar{B}		

Mechanical Spec.

Starting torque	9.8×10 ⁻³ N·m max (at +25°C)
Moment of Inertia	8×10 ⁻⁷ kg·m ² max
Maximum shaft load	Thrust 49.0N
	Radial 78.4N
Mechanical speed	5000 r/min max
Angular acceleration	1×10 ⁵ rad/s ² max
Net Weight	250g max

Environmental Spec.

Operating temperature	-10 ~ 85 °C
Storage temperature	-30 ~ 85 °C
Relative humidity (No condensation)	RH 85% or less
Vibration	10 ~ 55Hz/1.5mm
Shock	980m/s ² , 11ms
Ingress Protection	IP65

[Note] Please contact our sales for inquiries about the product of details.