

BUILT-IN TYPE

SBS
SBS2 Model



Standard Built-in Model

- Easy Mounting for Motors.
- General Application Built-in Model.

Model

SBS2- **-** **D** **-** **-050-00**

Resolution

25 2500 P/R

Due to unavailable combination of specifications,
Please make sure with sales Reps of the model name.

Output Mode

D : Line Driver Output

Signal UVW
Electric Angular 12 : 120°

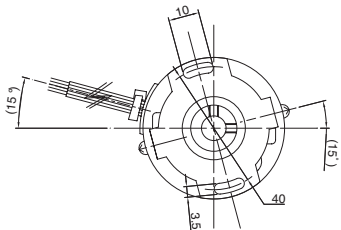
Signal UVW Number of Poles

- 4 : 4Poles
- 6 : 6Poles
- 8 : 8Poles

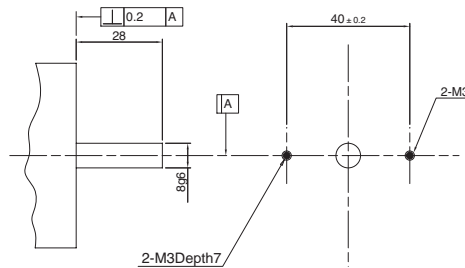
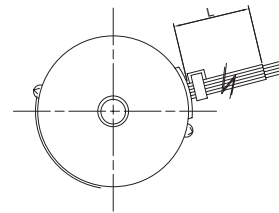
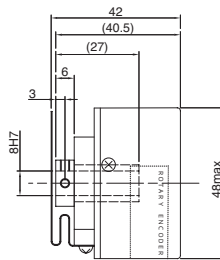
Signals

5MD : Please Inquiry Poles

External Dimension

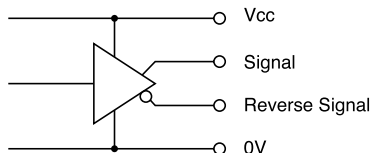


Standard Cable : 50cm



Circuit of Output Signal

2MD
5MD



Electrical Spec.

TYPE		5MD
Supply Voltage		DC4.75 ~ 5.25V
Requirement		250 mA Max
Output Voltage	“H”	2.5 V or More
	“L” ※1	0.5 V Max
Maximum Output Current		20 mA MAX
Rise & Fall Time		200 ns Max
Maximum Frequency Response		200 kHz
Withstanding Voltage of Output Tr.		—

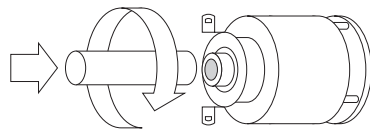
※1) at Maximum Output Current

Electrical Connections

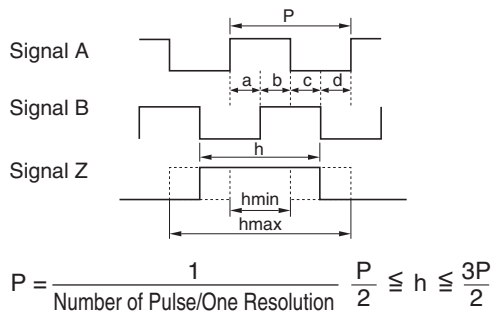
5MD			
Color of Lead Wire	Description	Color of Lead Wire	Description
Red	Power Source	Yellow	Signal Z
Black	0V Common	Yellow - White	Signal Z
Black - White	0V Common	Brown	Signal U
Green	Signal A	Brown - White	Signal U
Green - White	Signal A	Blue	Signal V
Gray	Signal B	Blue - White	Signal V
Gray - White	Signal B	Orange	Signal W
Green - Yellow	F, G	Orange - White	Signal W

Wave Form.

CW Rotating Toward Clockwise
Viewed from an Arrow



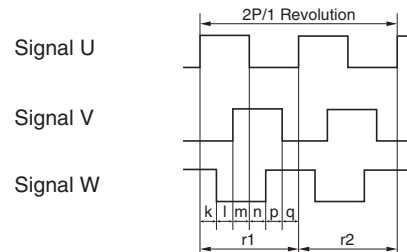
5MD



$a, b, c, d = \frac{P}{4} \pm \frac{P}{8}$ Wave Ratio (Duty); 50 ± 25 (%)

Rising point of B-signal is always at one point while Z-signal is at H-level.

When UVW phases output are 4 poles at 120°.



Mechanical Angular $k \sim q$ $30^\circ \pm 3^\circ$ Position Relation between U and Z phases
 $r1, r2$ $180^\circ \pm 1^\circ$ Mechanical Angular $0^\circ \pm 2^\circ$

A B Z U V W signal are reverse signal of ABZUVW.

Mechanical Spec.

Starting Torque		29.4x10 ⁻⁴ N · m Max
Angular Acceleration		1x10 ⁴ rad/s ²
Shaft Loading	Thrust axial	9.8N
	Radial	19.6N
Moment of Inertia		3x10 ⁻⁶ kg · m ²
Maximum RPM		6000r/min
Net Weight		150g Max

Environmental Spec.

Operating Temperature	-10°C ~ +85°C
Storage Temperature	-20°C ~ +90°C
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm 2 h
Shock	490m/s ² , 11ms X, Y, Z Each 3 times