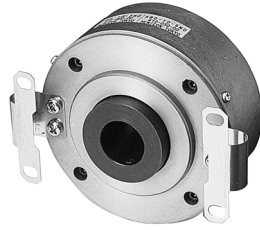


BUILT-IN TYPE

SBT Model



Big Size Built-in Model

- Suitable for Big Machine Motors.
- Mountable for The Shaft 14~ 26 mm.

Model

SBT - [] - [] [] - [] [] - **050-01**

Resolution

Output Mode

Hollow Shaft Diameter

- 14 : 14
- 16 : 16
- 19 : 19
- 20 : 20
- 24 : 24
- 26 : 26

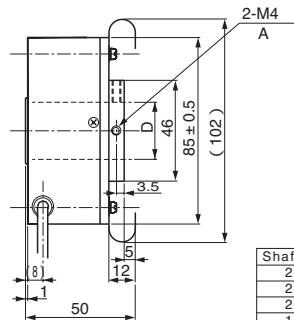
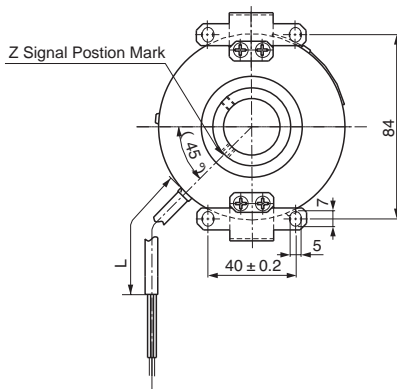
- No Indication : Voltage Output
- C : Open Collector Output
- D : Line Driver Output

Signals — 2M : AB90° Phase Difference + Zero Signal

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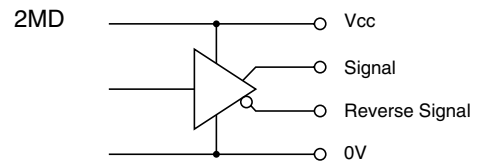
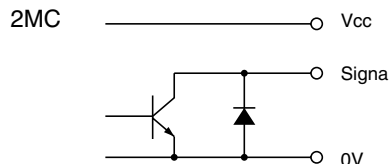
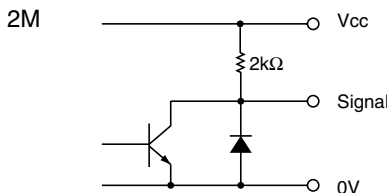
01	100 P/R	05	500 P/R	10	1000 P/R
02	200 P/R	0512	112 P/R	38	3800 P/R
036	360 P/R	06	600 P/R		

External Dimension



Shaft No	D	A
26	26H7	M4 x 5
24	24H7	M4 x 5
20	20H7	M4 x 8
19	19H7	M4 x 8
16	16H7	M4 x 10
14	14H7	M4 x 10

Circuit of Output Signal



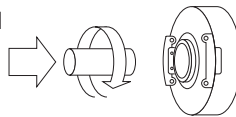
Electrical Spec.

TYPE		2M	2MC	2MD
Supply Voltage		DC 4.5 ~ 13.2 V		DC 4.5 ~ 5.25 V
Requirement		80 mA Max	60 mA Max	150 mA Max
Output Voltage	“H”	Within -1 Power Volt	——	2.5 V or More
	“L” ※1	0.5 V Max		
Maximum Output Current		20 mA MAX		
Rise & Fall Time		1 μs Max		200 ns Max
Maximum Frequency Response		200 kHz		
Withstanding Voltage of Output Tr.		——	50 V MAX.	——

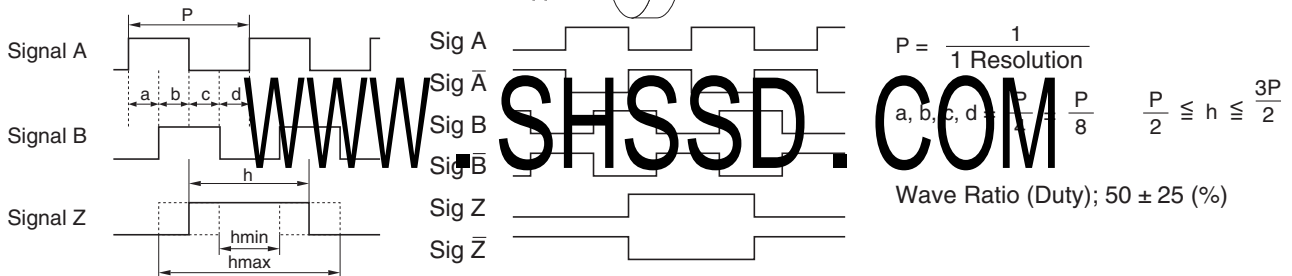
※1) at Maximum Output Current

Wave Form.

CW → Rotating Toward Clockwise Viewed from an Arrow



Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



Electrical Connections

2M 2MC	Color of Lead Wire	Description	2MD	Color of Lead Wire	Description	Color of Lead Wire	Description
	Red	Power Source		Red	Power Source	White	Signal B
	Black	0V Common		Black	0V Common	Gray	Signal B
	Green or Blue	Signal A		Green	Signal A	Yellow	Signal Z
	White	Signal B		Blue	Signal A	Orange	Signal Z
	Yellow	Signal Z		Shielding Braid	NC		
	Shielding Braid	NC					

Mechanical Spec.

Starting Torque	19.6X10 ⁻³ N · m Max	
Angular Acceleration	1X10 ⁴ rad/s ²	
Shaft Loading	Thrust axial	19.6N
	Radial	29.4N
Moment of Inertia	8X10 ⁻⁵ kg · m ²	
Maximum RPM	3600r/min	
Net Weight	1kg Max	

Environmental Spec.

Operating Temperature	-10°C ~ +50°C : 3600r/min +70°C : 3000r/min
Storage Temperature	-20°C ~ +80°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