

HOLLOW TYPE

NOC-H Model



Mechanism for The Shaft Load Resistance (for General Use)

- Standard of The Low Cost Versions of 10~2500 P/R and 5000 P/R.

Model

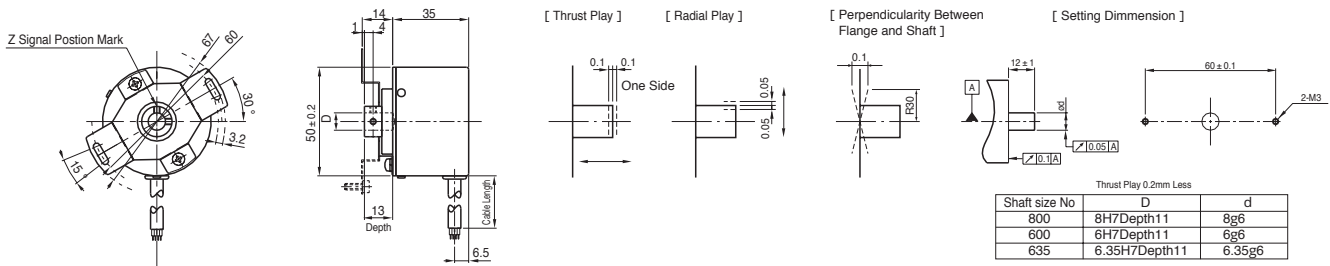
NOC-H **-2M** **00**

Style		Resolution		Output Mode	Hollow Shaft Diameter	Cable Length	
H : Hollow Shaft							
10	10P/R	600	600P/R	8 : 8	050 : 500mm (Standard)	No Indication : Other than D output	
20	20P/R	1000	1000P/R	9525 : 9.525	100 : 1000mm	No Indication : D output with LS	
30	30P/R	1024	1024P/R	10 : 10	300 : 3000mm	C : D output with C-MOS	
40	40P/R	1250	1250P/R	: Option			
50	50P/R	1800	1800P/R	No Indication : Voltage Output			
60	60P/R	2000	2000P/R	C : Open Collector Output			
100	100P/R	2048	2048P/R	HC : Open Collector Output / High Voltage			
200	200P/R	2500	2500P/R	HCP : PNP Mode Open Collector Output / High Voltage			
300	300P/R	3600	3600P/R	HT : Push-Pull Output / High Voltage			
360	360P/R	4096	4096P/R	D : Line Driver Output			
500	500P/R	5000	5000P/R	WT : Push-Pull Output, Wide Voltage			

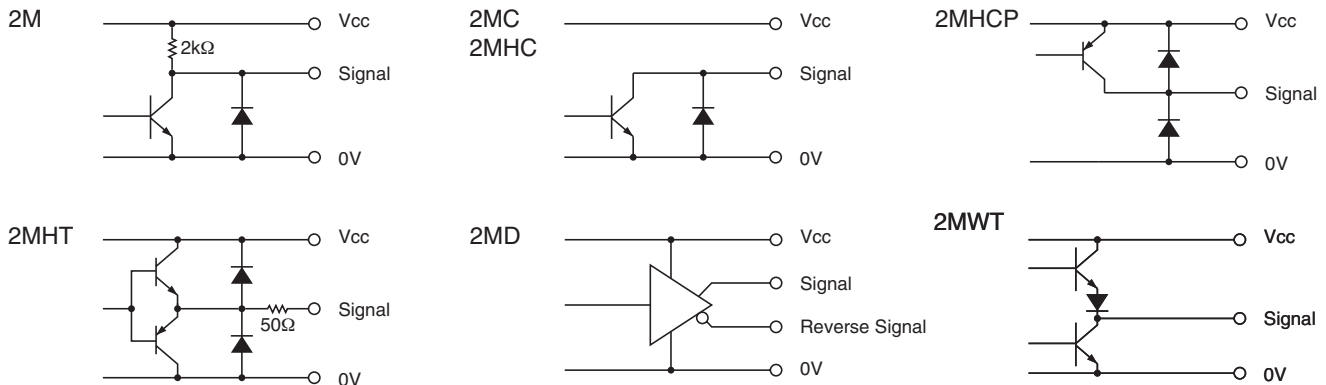
Signal : 2M : AB90 Phase Difference + Zero Signal

WWW.SHSSD.COM

External Dimension



Circuit of Output Signal



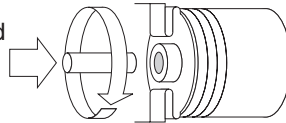
Electrical Spec.

※1) at Maximum Output Current ※2) Maximum Source Current

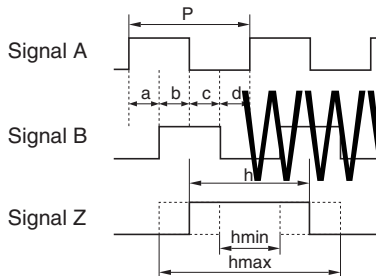
TYPE		2•2M	2C•2MC	2HC•2MHC	2HCP•2MHCP	2HT•2MHT	2MD	2MWT
Supply Voltage		DC4.5 ~ 13.2 V			DC10.8 ~ 26.4 V		DC4.5~5.5V (C-MOS)	DC 4.75~30V
Requirement		90 mA Max	70 mA Max		100 mA Max	90 mA Max	70 mA Max (C-MOS)	60 mA Max
Output Voltage	"H"	Within -1 Power Volt	—————		Within -1 ² Power Volt	Within -3 Power Volt	2.5 V or More	Within -2.5 Power Volt
	"L" ※1	0.5 V Max			—————	3 V Max	0.5 V Max	0.4 V Max
Maximum Output Current		20 mA MAX				40 mA MAX	20 mA MAX	30 mA MAX
Rise & Fall Time		1 μs Max					200 ns Max	3 μs Max
Maximum Frequency Response		200 kHz			50 kHz	200 kHz		100 kHz
Withstanding Voltage of Output Tr.		—————	50 V MAX.			—————		

Wave Form.

CW → Rotating Toward Clockwise Viewed from an Arrow



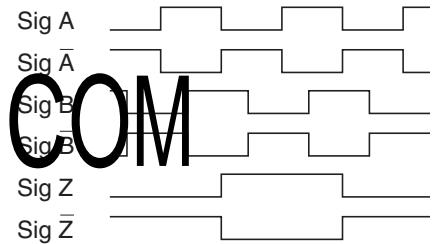
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



$$P = \frac{1}{1 \text{ Resolution}}$$

$$a, b, c, d = \frac{P}{4} \quad \frac{3P}{2} \geq h \geq \frac{P}{2}$$

Wave Ratio (Duty); 50 ± 25 (%)



Electrical Connections

2M
2MC
2MHC
2MHCP
2MHT

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

2MD

Color of Lead Wire	Description	Color of Lead Wire	Description
Red	Power Source	White	Signal B
Black	0V Common	Gray	Signal B-bar
Green	Signal A	Yellow	Signal Z
Blue	Signal A-bar	Orange	Signal Z-bar
Shielding Braid	NC		

Mechanical Spec.

Starting Torque		9.8×10 ⁻³ N • m Max
Angular Acceleration		1×10 ⁵ rad/s ²
Shaft Loading	Thrust axial	49N
	Radial	78.4N
Moment of Inertia		8×10 ⁻⁷ kg • m ²
Maximum RPM		5000r/min
Net Weight		250g Max

Environmental Spec.

Operating Temperature	-10°C ~ +70°C
Storage Temperature	-30°C ~ +85°C
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm 2 h
Shock	980m/s ² , 11ms X, Y, Z Each 3 times
Degree of Protection	IP50