

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**

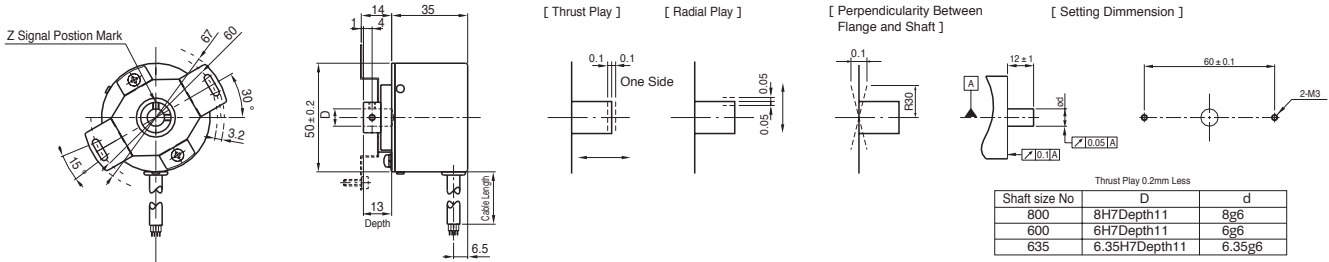
Style Resolution

H : Hollow Shaft

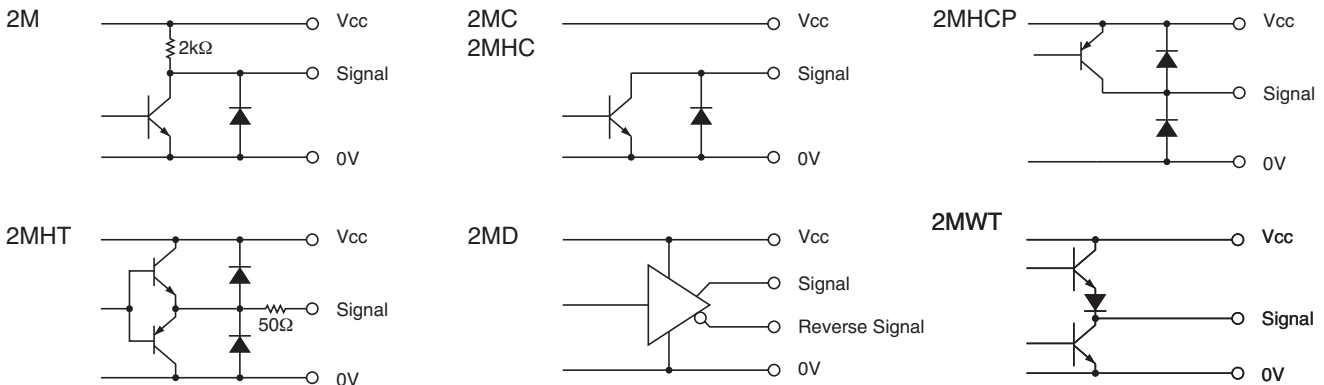
10	10P/R	600	600P/R
20	20P/R	1000	1000P/R
30	30P/R	1024	1024P/R
40	40P/R	1250	1250P/R
50	50P/R	1800	1800P/R
60	60P/R	2000	2000P/R
100	100P/R	2048	2048P/R
200	200P/R	2500	2500P/R
300	300P/R	3600	3600P/R
360	360P/R	4096	4096P/R
500	500P/R	5000	5000P/R

- Output Mode
- 8 : 8
 - 9525 : 9.525
 - 10 : 10
 - : Option
- Hollow Shaft Diameter
- 050 : 500mm (Standard)
 - 100 : 1000mm
 - 300 : 3000mm
- Cable Length
- No Indication : Other than D output
 - No Indication : D output with LS
 - C : D output with C-MOS
- Signals — 2M : AB90° Phase Difference + Zero Signal
- No Indication : Voltage Output
 - C : Open Collector Output
 - HC : Open Collector Output / High Voltage
 - HCP : PNP Mode Open Collector Output / High Voltage
 - HT : Push-Pull Output / High Voltage
 - D : Line Driver Output
 - WT : Push-Pull Output / Wide Voltage

External Dimension



Circuit of Output Signal



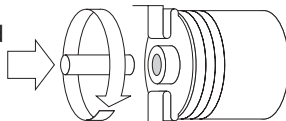
Electrical Spec.

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

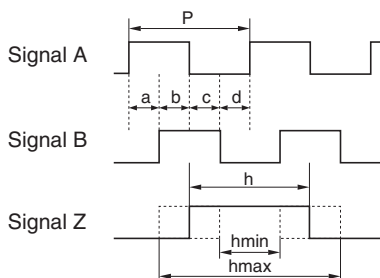
TYPE		2 • 2M	2C•2MC	2HC•2MHC	2HCP•2MHCP	2HT•2MHT	2MD	2MWT
Supply Voltage		DC4.5 ~ 13.2 V			DC10.8 ~ 26.4 V		DC4.5~5.5V (C-MOS)	DC 4.75~30V
Requirement		90 mA Max	70 mA Max		100 mA Max	90 mA Max	70 mA Max (C-MOS)	60 mA Max
Output Voltage	“H”	Within -1 Power Volt	—————		Within -1 ² Power Volt	Within -3 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



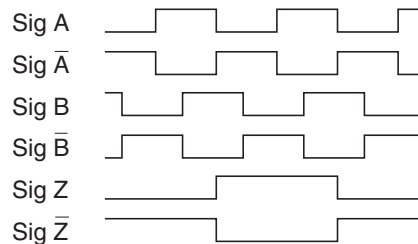
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



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

$$a, b, c, d = \frac{P}{4} \pm \frac{P}{8} \quad \frac{P}{2} \leq h \leq \frac{3P}{2}$$

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