

HOLLOW TYPE

NOC-HP Model



Heavy Duty Model 50mm Diameter Encoder (IP65)

•Standard Versions of 10~10000 P/R, for High Accurate Application.



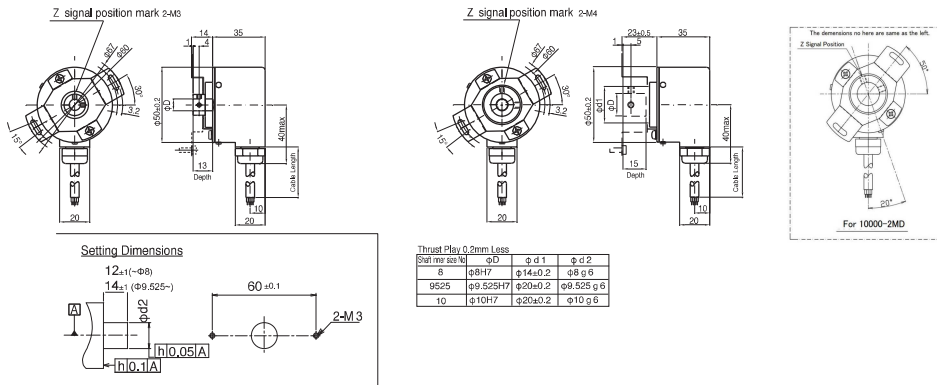
Model

NOC-HP -2M -00E

Style	Resolution	Output Mode	Hollow Shaft Diameter	Cable Length	Complying with RoHS		
H: Hollow Shaft P: Dust-Proof & Water-Proof	10 20 30 40 50 60 100 200 250 300 360 500	10P/R 20P/R 30P/R 40P/R 50P/R 60P/R 100P/R 200P/R 250P/R 300P/R 360P/R 500P/R	600 1000 1024 1250 1800 2000 2048 2500 3600 4096 5000 10000P/R	600P/R 1000P/R 1024P/R 1250P/R 1800P/R 2000P/R 2048P/R 2500P/R 3600P/R 4096P/R 5000P/R 10000P/R	8 : φ8 *9525 : φ9.525 10 : φ10 * Option	050 : 500mm (Standard) 100 : 1000mm 300 : 3000mm	No Indication : Other than D output No Indication : D output with LS C : D output with C-MOS
		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(10~2500P/R)	Signals : 2M: AB90° Phase Difference + Index Signal				

*10000 P/R (Line Driver Only)

External Dimension



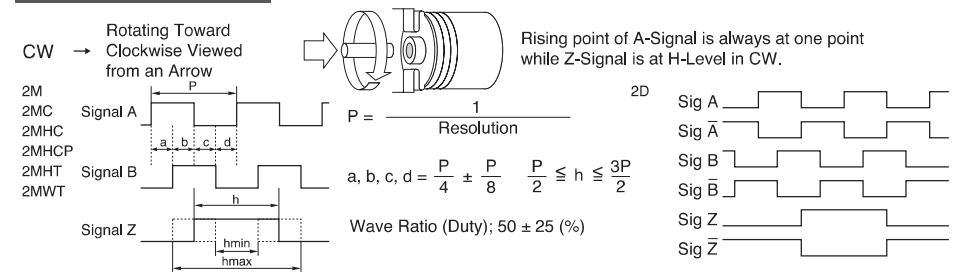
Electrical Connections

Color	Signal	Color	Signal
Red	Power Supply(Vcc)	Red	Power Supply(Vcc)
Black	0V	Black	0V
Green or Blue	Signal A	White	Signal B
White	Signal B	Gray	Signal B
Blue	Signal A	Yellow	Signal Z
Yellow	Signal Z	Orange	Signal Z
Shield	F·G		

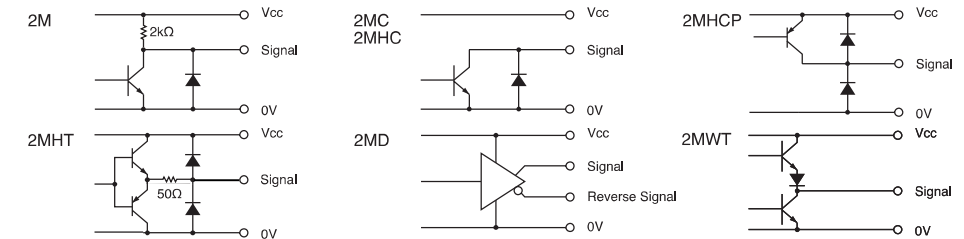
Electrical Spec

TYPE	*1) at Maximum Sink Current				*2) Maximum Source Current	
	2M	2MC	2MHC	2MHCP	2MHT	2MD
Power Supply(Vcc)	DC4.5~13.2 V			DC10.8~26.4 V		DC4.5~5.5V (C-MOS)
Current Consumption	90 mA Max	70 mA Max		100 mA Max	90 mA Max	70 mA Max (C-MOS)
Output Voltage	"H"	Vcc-1V Min	Vcc-1V Min		Vcc-3V Min	2.5 V Min
	"L"	0.5 V Max		3 V Max		0.5 V Max
Maximum Sink Current	20 mA			40 mA	20 mA	30 mA
Rise & Fall Time	1 μs Max				200 ns Max	3 μs Max
Maximum Frequency Response	200 kHz		50 kHz	200 kHz	1 MHz	(~5000P/R) (10000P/R)
Withstanding Voltage of Output Tr.	50 V Max					

Wave Form



Output Circuit



Mechanical Spec

Starting Torque	9.8x10 ⁻³ N · m Max
Angular Acceleration	1x10 ⁵ rad/s ²
Shaft Loading	Thrust : 49N
	Radial : 78.4N
Moment of Inertia	3x10 ⁻⁶ kg · m ²
Maximum Permissible Speed	Instantaneous : 5000min ⁻¹
	Continuous : 3000min ⁻¹
Net Weight(Without Cable)	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 X,Y,Z Each 2h
Shock	980m/s ² , 11ms X, Y, Z Each 3 times
Ingress Protection	IP65