

# SHAFT TYPE

# NE Model



## Super Heavy Duty Model

- Durable for Heavy Shaft Loading.
- Up to 5000 Pulses per Revolution.

### Model



Resolution

002	20P/R	10	1000P/R
004	40P/R	1024	1024P/R
005	50P/R	1250	1250P/R
006	60P/R	18	1800P/R
01	100P/R	20	2000P/R
02	200P/R	2048	2048P/R
03	300P/R	25	2500P/R
036	360P/R	36	3600P/R
05	500P/R	4096	4096P/R
06	600P/R	50	5000P/R

- 00 : 5000rpmSpec, No Connector
- 01 : 5000rpmSpec, With Connector (Option)
- 04 : 9000rpmSpec, With Connector (Option)
- 05 : 9000rpmSpec, No Connector (Option)
- 000 : No Flange
- 068 : With 68mm SQ Flange

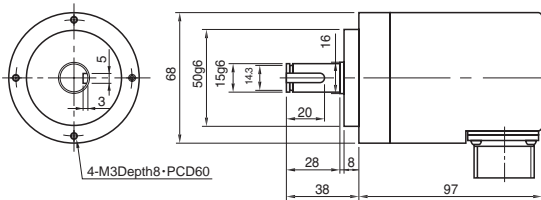
With Connector  
D/MS3106B20-29D (DDK)  
D/MS3057-12A (DDK)

- Flange Style
- No Indication : No Flange
  - F : With Flange

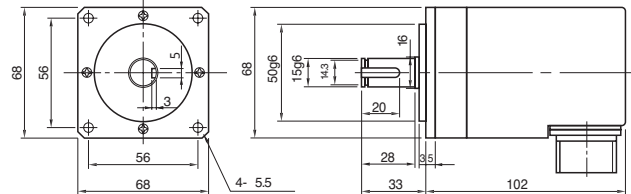
Output Mode — D : Line Driver Output

Signals — AB90° Phase Difference + Zero Signal

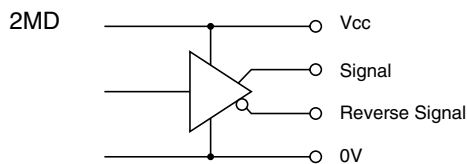
## External Dimension



F : With Flange



## Circuit of Output Signal



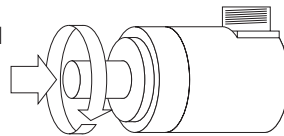
## Electrical Spec.

TYPE		2MD
Supply Voltage		DC4.75 ~ 5.25V
Requirement		150 mA Max
Output Voltage	“H”	2.5 V or More
	“L” ※1	0.5 V Max
Maximum Output Current		40 mA MAX
Rise & Fall Time		200 ns Max
Maximum Frequency Response		200 kHz

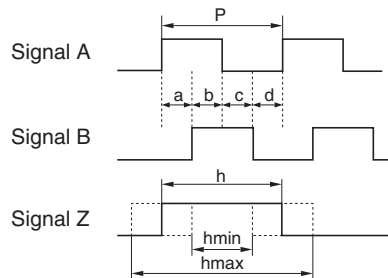
※1)  
at Maximum Output Current

## Wave Form.

CW → Rotating Toward Clockwise Viewed from an Arrow



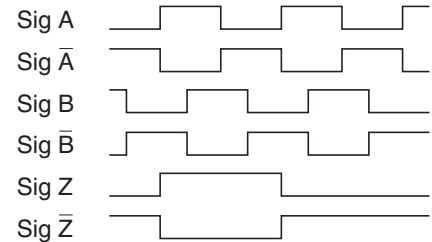
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



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

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

Wave Ratio (Duty); 50 ± 25 (%)



## Electrical Connections

Pin#	Description	Pin#	Description
A	Signal A	K	0V Common
B	Signal Z	N	Signal A
C	Signal B	P	Signal Z
E	F.G	R	Signal B
H	Power Source		

Plug \_\_\_\_\_ Not attached  
Cable clamp \_\_\_\_\_ Not attached  
Receptacle DDK D/MS3102A20-29P

## Mechanical Spec.

( ) Option

Starting Torque		9.8×10 <sup>-2</sup> N · m Max
Angular Acceleration		2×10 <sup>5</sup> rad/s <sup>2</sup>
Shaft Loading	Thrust axial	49N
	Radial	98N
Moment of Inertia		1.7×10 <sup>-5</sup> kg · m <sup>2</sup>
Maximum RPM		5000r/min ( 9000r/min )
Net Weight		1kg Max

## Environmental Spec.

Operating Temperature	-5°C ~ +60°C
Storage Temperature	-30°C ~ +80°C
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm 2 h
Shock	490m/s <sup>2</sup> , 11ms X, Y, Z Each 3 times