

SHAFT TYPE

NE Model



Super Heavy Duty Model

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

Model

NE - [] [] - **2M** **D** - [] - [] [] [] - [] []

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

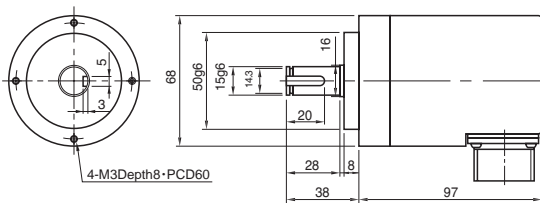
With Connector
D/MS3106B20-29D (DDK)
D/MS3057-12A (DDK)

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

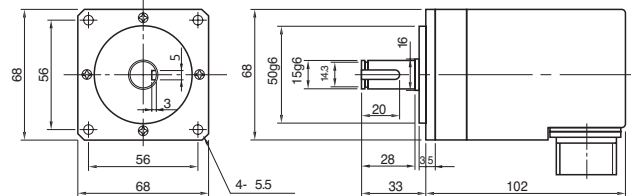
Output Mode — D : Line Driver Output

Signals — AB90° Phase Difference + Zero Signal

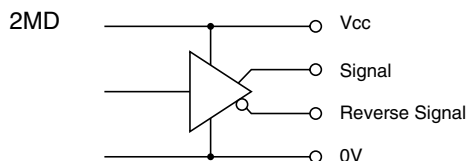
External Dimension



F : With Flange



Circuit of Output Signal



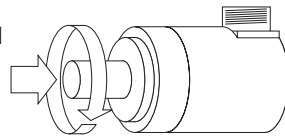
Electrical Spec.

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

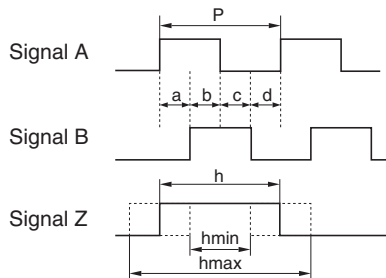
※1)
at Maximum Output Current

Wave Form.

CW → Rotating Toward Clockwise Viewed from an Arrow



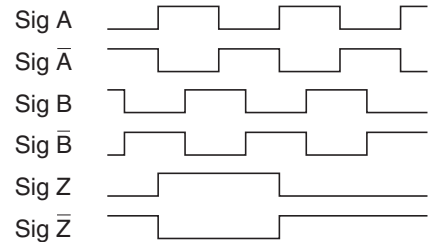
Rising point of A-Signal is always at one point while Z-Signal is at H-Level in CW.



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

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

Wave Ratio (Duty); 50 ± 25 (%)



Electrical Connections

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

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

Mechanical Spec.

() Option

Starting Torque	9.8×10 ⁻² N · m Max	
Angular Acceleration	2×10 ⁵ rad/s ²	
Shaft Loading	Thrust axial	49N
	Radial	98N
Moment of Inertia	1.7×10 ⁻⁵ kg · m ²	
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 ² ,11ms X, Y, Z Each 3 times