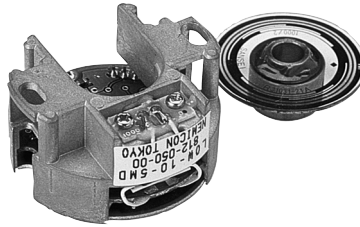


MODULAR TYPE

LOW Model



Small Modular Model

- For Compact and High Speed Motion : More Than 10000r/min.
- Low Cost due to No Bearings.

Model

LOW - [] [] - [] [] **D** - [] [] [] - **050-0** []

Resolution

05	500 P/R
0512	512 P/R
10	1000 P/R

Signal UVW Electric Angular

Boss

- 0 : With
- 1 : Without

06 : 60°

12 : 120°

Signal UVW Number of Poles

- 4 : 4Poles
- 6 : 6Poles
- 8 : 8Poles

Output Mode

D : Line Driver Output

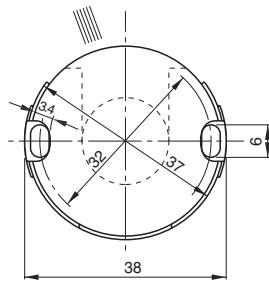
Signals

- 2 : AB90° Phase Difference
- 2M : AB90° Phase Difference + Zero Signal
- 5M : AB90° Phase Difference + Zero Signal + UVW120° (60°) Phase Difference

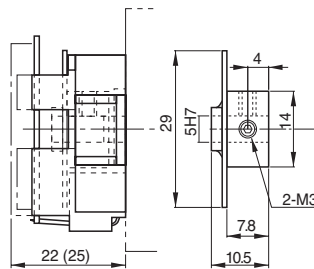
5MD: Due to unavailable combination of specifications, Please make sure with sales Reps of the model name.

5MD:5MD: Available Boss Only.

External Dimension

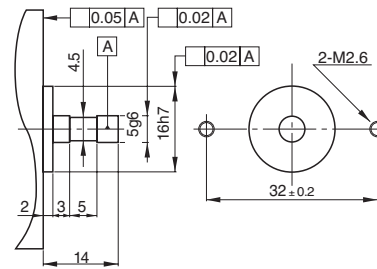


()...5MD MODEL



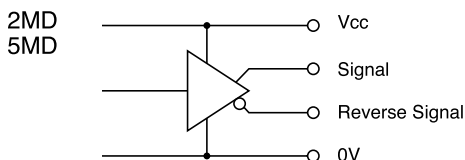
Standard Cable : 50cm

Boss Available



Setting Dimension

Circuit of Output Signal



Electrical Spec.

TYPE		2MD	5MD
Supply Voltage		DC4.75 ~ 5.25V	
Requirement		150 mA Max	250 mA Max
Output Voltage	“H”	2.5 V or More	
	“L” ※1	0.5 V Max	
Maximum Output Current		20 mA MAX	
Rise & Fall Time		200 ns Max	
Maximum Frequency Response		200 kHz	
Withstanding Voltage of Output Tr.		—	

※1) at Maximum Output Current

Electrical Connections

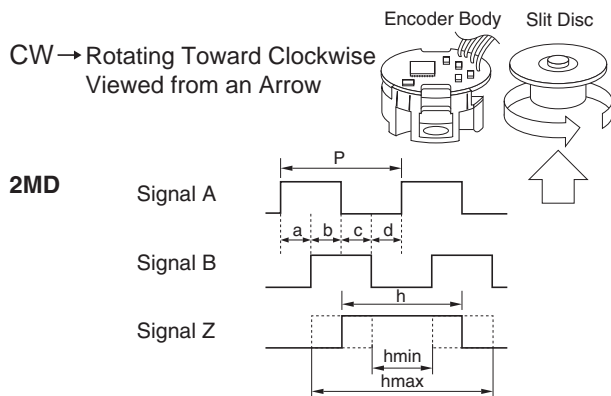
2MD

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

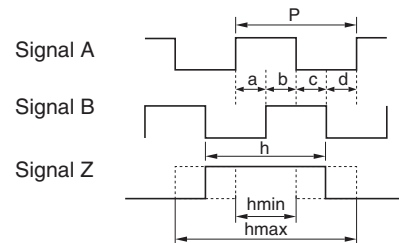
5MD

Color of Lead Wire	Description	Color of Lead Wire	Description
Red	Power Source	Yellow	Signal Z
Red - White	Power Source	Yellow - White	Signal Z
Black	0V Common	Brown	Signal U
Black - White	0V Common	Brown - White	Signal U
Green	Signal A	Blue	Signal V
Green - White	Signal A	Blue - White	Signal V
Gray	Signal B	Orange	Signal W
Gray - White	Signal B	Orange - White	Signal W
Shielding Braid	F, G		

Wave Form.



5MD



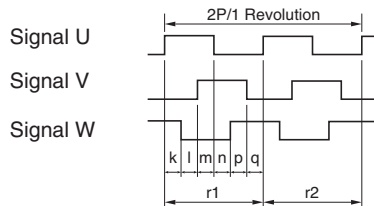
$$P = \frac{1}{1\text{Resolution}} \quad a, b, c, d = \frac{P}{4} \pm \frac{P}{8} \quad \frac{P}{2} \leq h \leq \frac{3P}{2}$$

Wave Ratio (Duty); 50 ± 25 (%)

Rising point of A-signal is always at one point while Z-signal is at H-level.

Rising point of B-signal is always at one point while Z-signal is at H-level.

When UVW phases output are 4 poles at 120°.



Mechanical Angular $k \sim q \quad 30^\circ \pm 3^\circ$
 $r1, r2 \quad 180^\circ \pm 1^\circ$

Position Relation between U and Z phases
 Mechanical Angular $0^\circ \pm 2^\circ$

$\bar{A} \bar{B} \bar{Z} \bar{U} \bar{V} \bar{W}$ signal are reverse signal of ABZUVW.

Mechanical Spec.

Moment of Inertia	5x10 ⁻⁷ kg · m
Angular Acceleration	1x10 ⁴ rad / s ²
Maximum RPM	10000 r/min
Net Weight	150 g Max

Environmental Spec.

Operating Temperature	-10°C ~ +85°C
Storage Temperature	-20°C ~ +85°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