

**NEMICON**  
ABSOLUTE TYPE

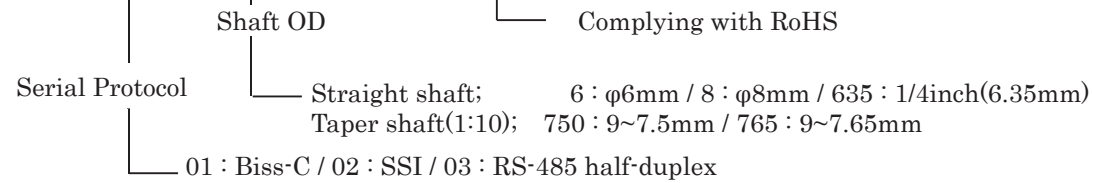
# 37HA-MB Series



- 39bit Multi turn
- Housed encoder
- Hollow and Taper Shaft

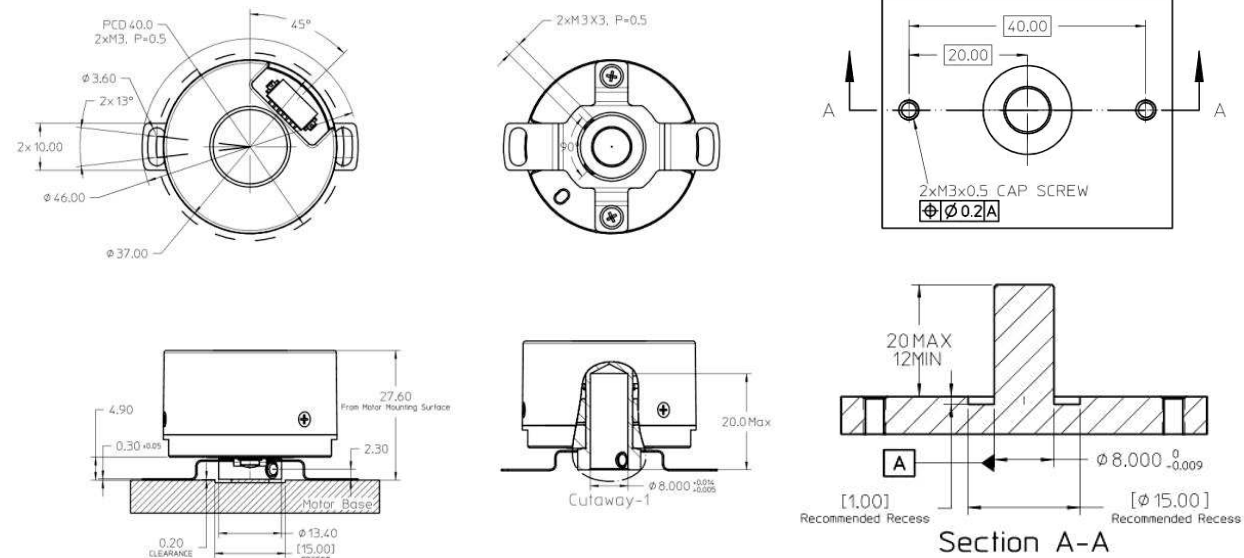
## Model

37HA-MB□□-□□□-000-00E

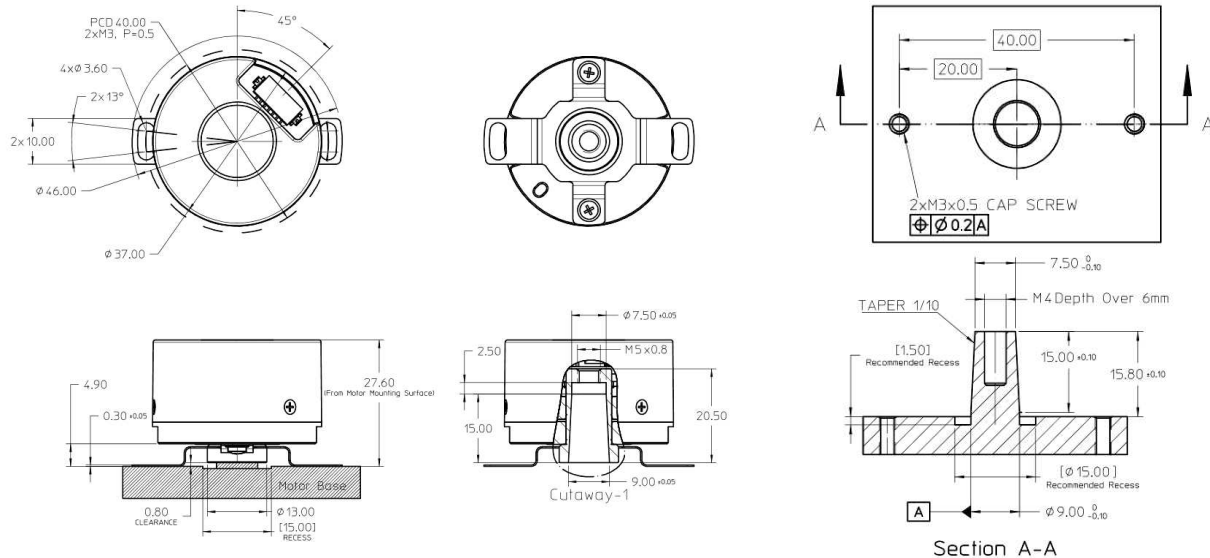


## Dimension

Straight Shaft type(ex. φ 8)



Taper Shaft type (ex. φ 9 to 7.5mm)



## Electrical Spec.

Resolution	Multi turn:16bits Single turn: 23bits
Current Consumption	115mA Typ. (No load)
Supply Voltage	5V ± 0.5V
Electrically Permissible Speed	< 6000 min <sup>-1</sup>
Initialization Time	< 500 ms
Recommended external Battery	3.60V/ 2,000mAh Lithium battery

## Mechanical Spec.

System Accuracy (With electrical correction)	±80 Arc-sec ( T <sub>amb</sub> = 25°C)
Mechanical Permissible Speed	< 6000 min <sup>-1</sup>
Shaft Play	≤±0.05 mm(Radial) ≤±0.1 mm(Axial)
Starting torque	≤9.8x10 <sup>-3</sup> N·m T <sub>amb</sub> = 25°C
Weight	0.047kg (±10%)

## Environmental Spec.

Storage Temperature	-20 to 105 °C
Operating Temperature	-20 to 105 °C
Relative Air Humidity (Non-Condensing)	90%RH (T <sub>amb</sub> = 40°C)

Vibration	10G; 10 to 2000Hz
Shock	6ms; Half Sine; 200G
Protection	IP40

## Connection

Pin	BiSS-C (10 pins connector)	SSI (10 pins connector)	RS-485 (7 pins connector)
1	VCC, Encoder Supply	VCC, Encoder Supply	VCC, Encoder Supply
2	GND, Ground	GND, Ground	GND, Ground
3	GND (External Battery)	GND (External Battery)	GND (External Battery)
4	BATPWR (External Battery)	BATPWR (External Battery)	BATPWR (External Battery)
5	MA+	SCL+	DATA+
6	MA-	SCL-	DATA-
7	SLO+	DOUT+	N/C
8	SLO-	DOUT-	N/A
9	N/C	N/C	N/A
10	N/C	N/C	N/A

\*Recommended mating connector:

Hirose Part No : DF13-7S-1.25C (7pins) or DF13-10S-1.25C (10 pins) connector (CL No.536-0006-8)

Hirose (Terminal Pin for Wire 26~30AWG): DF13-2630SCF (CL No.536-0300-5)

## Data communication

BiSS-C / SSI		RS-485	
Interface	Circuit	Interface	Circuit
Serial Clock(MA)	Transceiver(P/N:SN65LBC179Q)	Serial Data(DATA+)	Transceiver(P/N:ISL8485E)
Serial Data(SLO)	Transceiver(P/N:SN65LBC179Q)	Serial Data(DATA-)	Transceiver(P/N:ISL8485E)

[Note]

Please contact our Sales for inquiries about this product of details.