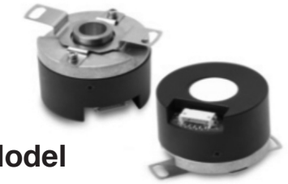
ABSOLUTE TYPE

37HA-MB Model



39bit Multi turn

- Housed encoder
- Hollow and Taper shaft

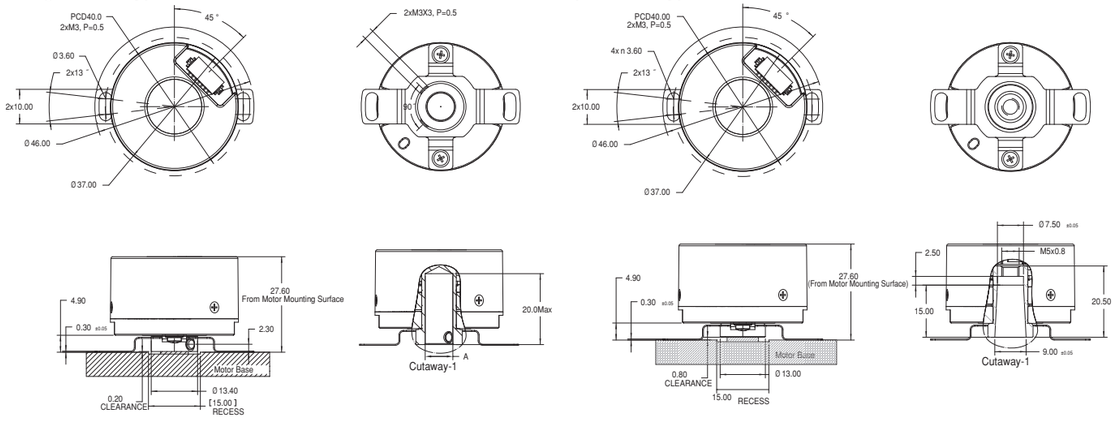
Model

37HA-MB-□□-□□□-000-00E

- Complying with RoHS
- Shaft OD
  - Straight shaft
    - 6 : φ6mm
    - 8 : φ8mm
    - 635 : 1/4inch(6.35mm)
  - Taper shaft(1:10)
    - 750 : 9~7.5mm
    - 765 : 9~7.65mm
- Serial Protocol
  - 01 : Biss-C / 02 : SSI
  - 03 : RS-485 half-duplex

Dimension

Straight Shaft type



Taper Shaft type

Mounting

Straight Shaft type

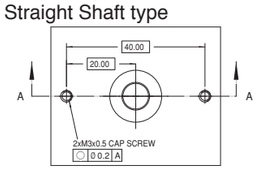
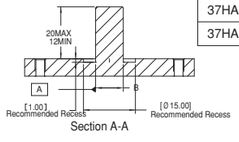


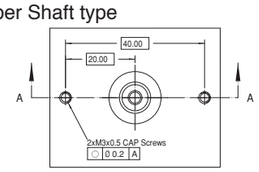
TABLE 1:

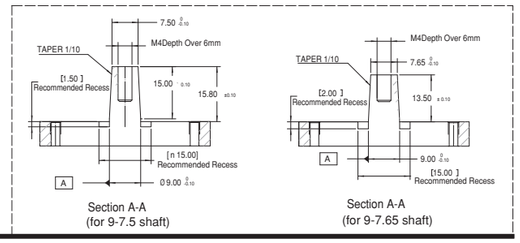
PART NUMBER	A	B
37HA-MBXX-635	6.350 +0.014 +0.005	6.350 0 -0.009
37HA-MBXX-6	6.000 +0.014 +0.005	6.000 0 -0.009
37HA-MBXX-8	8.000 +0.014 +0.005	8.000 0 -0.009



Section A-A

Taper Shaft type





Electrical Spec.

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

Connection

Pin No	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)

Mechanical Spec.

System Accuracy (With electrical correction)		±80 Arc-sec(T_{amb} = 25°C)
Mechanical Permissible Speed		< 6000 min^{-1}
Shaft Play	Axial	≦±0.1 mm
	Radial	≦±0.05 mm
Starting torque		≦9.8x10^{-3} N・m T_{amb} = 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_{amb} = 40°C)
Shock	10G; 10 to 2000Hz
Protection	6ms; Half Sine; 200G
Vibration	IP40

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.