ABSOLUTE TYPE

38HA-MS Model

Battery less Multi turn

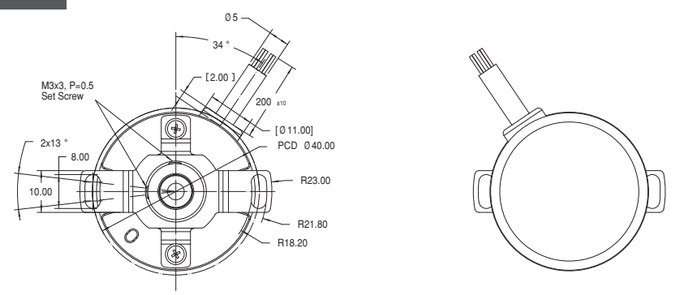
- Module type
- Compact (ϕ35)

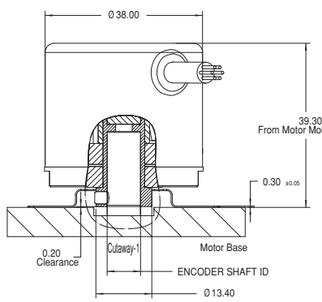
Model

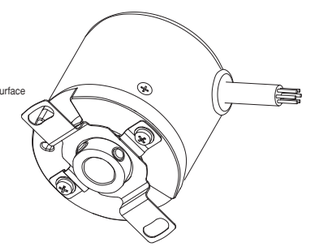
38HA-MS– □□ – □□□ –200-00E

- Serial Protocol
  - 01 : BiSS-C
  - 02 : SSI
  - 03 : RS-485 half-duplex
- Hollow Shaft Diameter
  - 6 : φ6
  - 8 : φ8
  - 635 : 1/4inch(6.35mm)
- Cable Length
  - 200 : 200mm
- Complying with RoHS

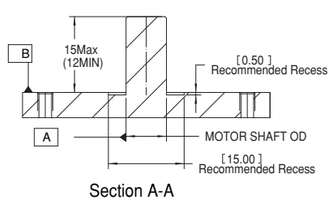
Dimension







Mounting



Section A-A

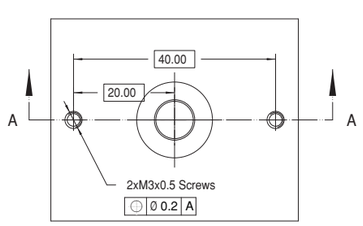


TABLE 1 : SHAFT OPTION

OPTION	SHAFT SIZE	ENCODE SHAFT ID DIMENSIONS(mm)	MOTOR SHAFT OD DIMENSIONS(mm)
635	1/4 INCH	6.355/6.364	6.341/6.350
6	6mm	6.005/6.014	5.991/6.000
8	8mm	8.005/8.014	7.991/8.000

Electrical Spec.

Resolution	Multi turn	16bit
	Single turn	23bit
Current Consumption		115mA Typ. (No load)
Supply Voltage		5V ± 0.5V
Electrically Permissible Speed		< 6000 min^{-1}
Initialization Time		< 500 ms

Connection

Pin No	Cable Color	BiSS-C (7 core cable)	SSI (7 core cable)	RS-485 (5 core cable)
1	RED	VCC, Encoder Supply	VCC, Encoder Supply	VCC, Encoder Supply
2	BLACK	GND, Ground	GND, Ground	GND, Ground
3	BROWN	MA+	SCL+	DATA+
4	WHITE	MA−	SCL−	DATA−
5	ORANGE	SLO+	DOUT+	N/A
6	BLUE	SLO−	DOUT−	N/A
7	Cable Shield	Cable Shield	Cable Shield	Cable Shield

[Note]

Cable provided is 200mm +/− 10mm (included pigtail length) with AWG28.

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		0.091kg

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)
Vibration	10G; 10 to 2000Hz
Shock	6ms; Half Sine; 200G
Protection	IP50

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.