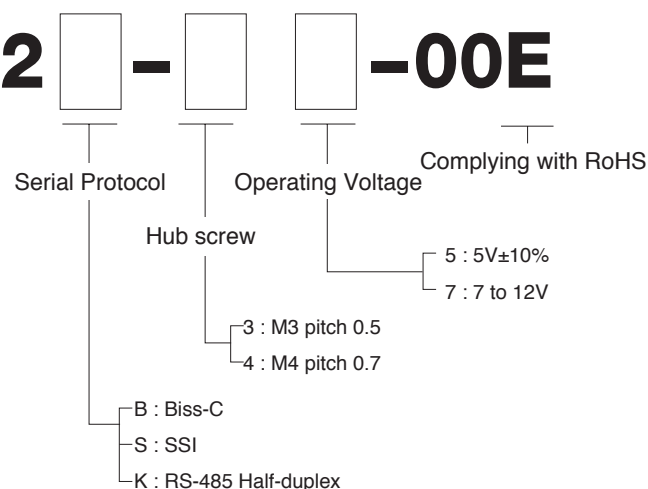


Battery less 42bit Multi turn

- Module type
- Full Magnetic

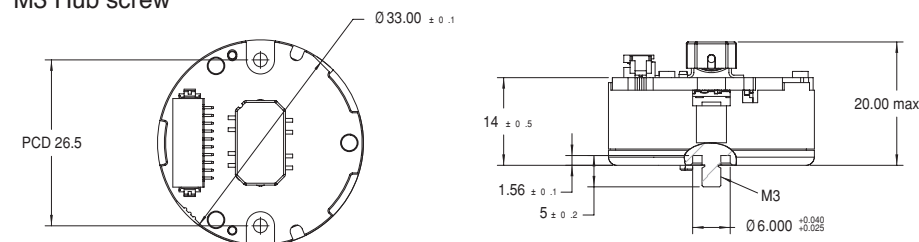
Model

N33MA-M42	-			-00E
------------------	----------	--	--	-------------

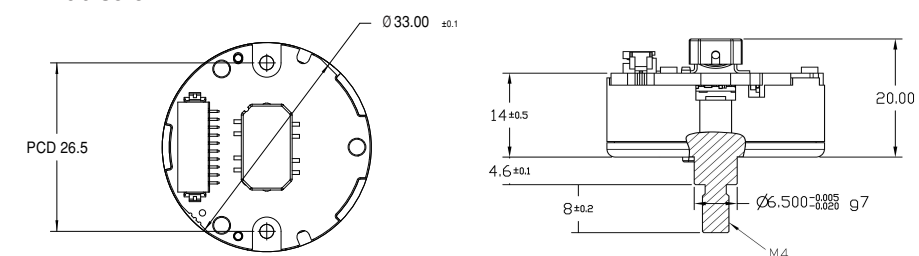


Dimension

M3 Hub screw

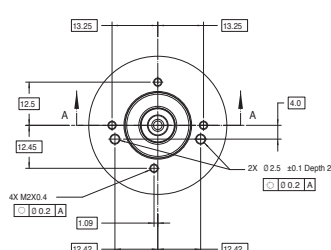


M4 Hub screw

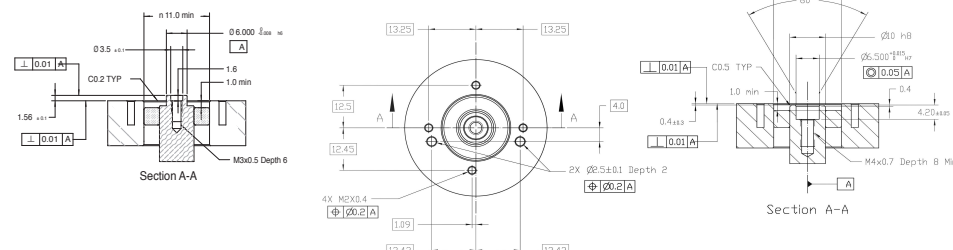


Mounting

M3 Hub screw



M4 Hub screw



Electrical Spec

Resolution	Multi turn	24bits
	Single turn	18bits
Current Consumption(No load)		65mA Max (5v) 55mA Max (7v)
Supply Voltage		5V ± 10% or 7 to 12V
Electrically Permissible Speed		< 12000 min ⁻¹
Initialization Time		< 1s

Mechanical Spec.

System Accuracy (With electrical correction)		± 313 Arc-sec
Mechanical Permissible Speed		$< 12000 \text{ min}^{-1}$
Shaft Play	Axial	$\leq \pm 0.2 \text{ mm}$
	Radial	$\leq \pm 0.05 \text{ mm}$

Connection

Pin No	SSI	BiSS-C	RS-485
1	GND	GND	GND
2	VDD	VDD	VDD
3	SCLK-	MA-	NC
4	SCLK+	MA+	NC
5	DAT-	SLO-	DATA-
6	DAT+	SLO+	DATA+
7	SPI CLK	NC(1)	NC(1)
8	SPI DO	NC(1)	NC(1)
9	SPI DIN	NC(1)	NC(1)
10	GND	GND	GND

Note (1): Do not connect during operation

*Recommended mating connector:

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

Hirose (Terminal Pin for Wire 26~30AWG):

DF13-2630SCF (CL No.536-0300-5)

Environmental Spec.

Storage Temperature	- 40 ~ + 115°C
Operating Temperature	- 40 ~ + 115°C
Relative Air Humidity (Non-Condensing)	90%RH (T _{amb} = 60°C)
Vibration	10G; 10 to 2000Hz
Shock	6ms; Half Sine; 200G
Electrostatic Discharge (Module level)	± 4kV

Data communication

SSI		BiSS-C		RS-485	
Interface	Circuit	Interface	Circuit	Interface	Circuit
Shift Clock (SCLK)	Receiver (P/N:ISL3283E)	Serial Clock(MA)	Receiver (P/N:ISL3283E)	Serial Data (DAT)	Receiver (P/N:ISL3283E)
Data Output (DAT)	Transmitter (P/N:ISL3295E)	Serial Data(SLO)	Transmitter (P/N:ISL3295E)	Serial Data (DAT)	Transmitter (P/N:ISL3295E)

[Note]

There are an Alignment Fixture and an Accuracy calibration station (SSI, Biss-C or RS-485) available separately. Please contact our Sales for inquiries about this product or details.