

FNC INA 45 Series Analog Inclinator

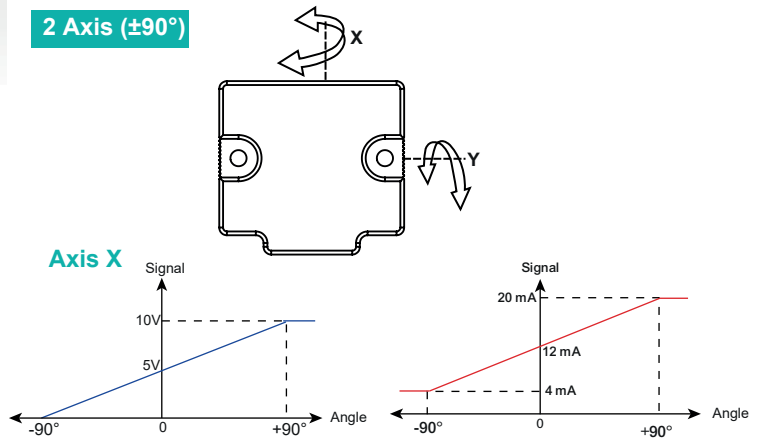


Features

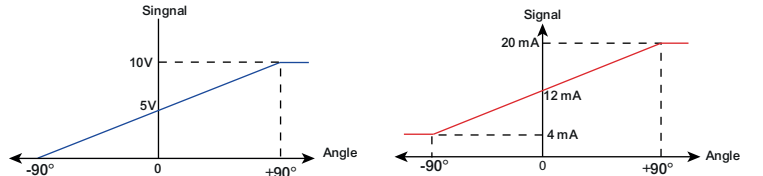
- 4 different analog output options
- Compensated axis sensitivity
- High sensitivity : $\pm 0.003^\circ$
- Ability to determine 0° point
- Easy installation
- IP67 protection
- Small and robust mechanical construction
- Compact design

Axis and analog output graphs

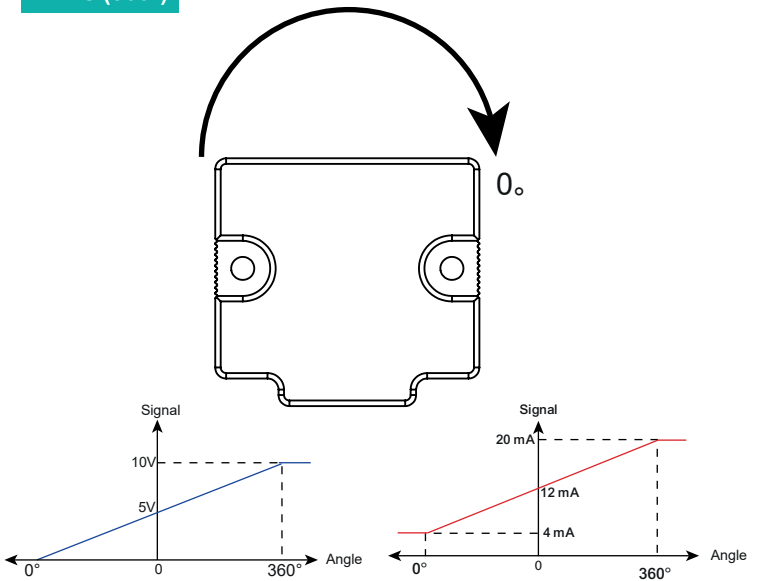
2 Axis ($\pm 90^\circ$)



Axis Y



1 Axis (360°)



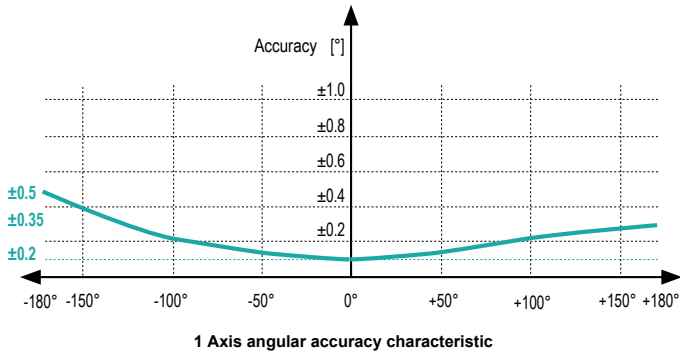
Technical data - electrical design

Voltage Supply	15VDC to 30VDC
Output options	4 - 20 mA analog output 0 - 20 mA analog output 0 - 10 Volt analog output 0 - 5 Volt analog output
Current consumption (no load)	32 mA
Reverse polarity protection of the supply voltage	Yes
Sampling rate	400 Hz (20 ms)
PowerON time	< 20 ms
Resolution	Internal sensor 0,003° D/A converter 11 bit
Accuracy at 25°C	1 - dimensional type $\pm 0.5^\circ$ 2 - dimensional type $\pm 1.0^\circ$
Temperature coefficient	0.01% / °C
Cross-axis-sensitivity typ.	0.3 %
Measuring range	1 axis: $0 \dots 360^\circ$ 2 axis: $\pm 90^\circ$
Limit frequency	0.1 ... 10 Hz
Over Voltage Protection	Yes
Short Circuit Protection	Yes
Protection EN 60529	IP67
Operating temperature	-40°C to $+85^\circ\text{C}$
Storage temperature	-40°C to $+125^\circ\text{C}$

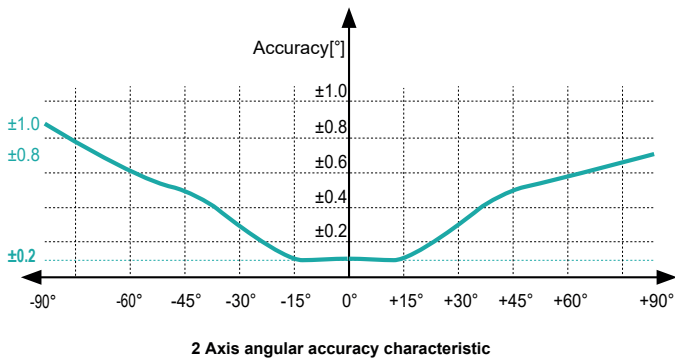
FNC INA 45 Series Analog Inclinometer

Angular accuracy characteristic

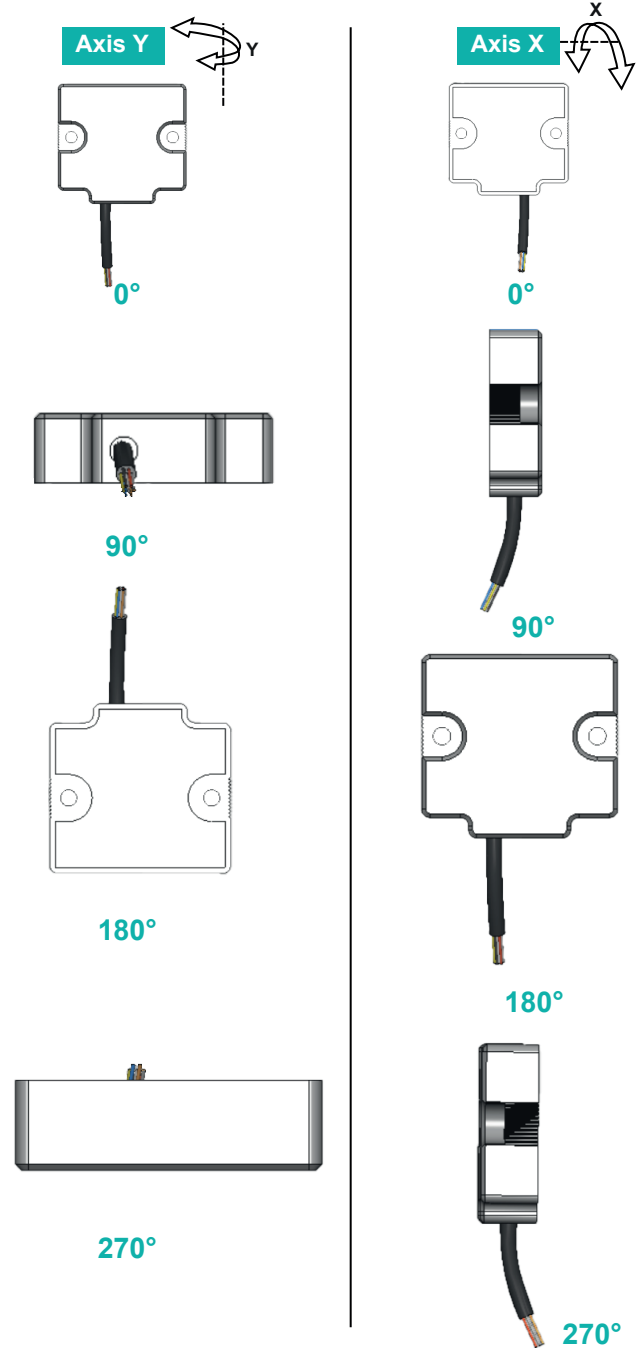
1 Axis (360°)



2 Axis (±90°)

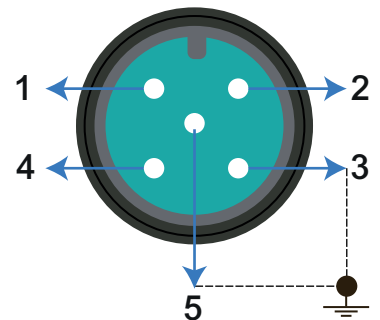


Sensor Orientation



Zero offset setting

Pins 5 and 3 are short-circuited for 4 seconds, causing the sensor to detect its position as 0°. The connection between the pins is then disconnected. The device stores the 0° position in memory during this time and does not revert to factory settings in the event of a power failure.

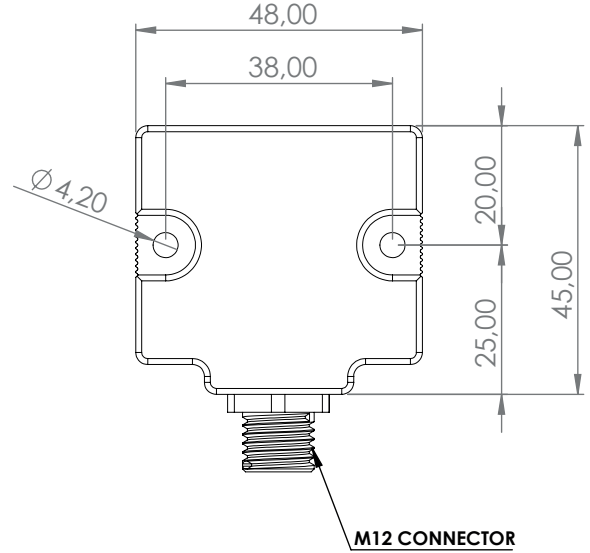
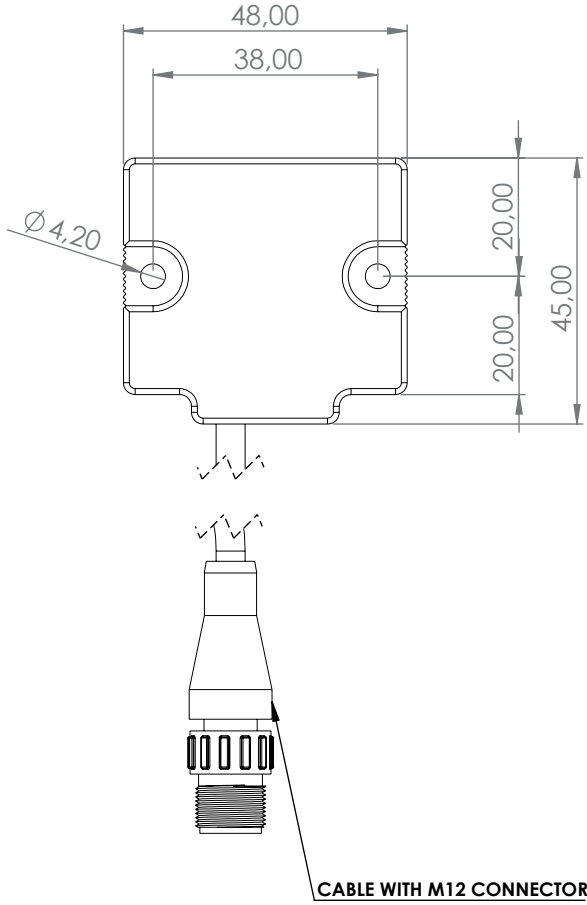


Inclinometers

Mechanical Dimensions, Cable / Connector Wiring

FNC INA 45 Series Analog Inclinometer

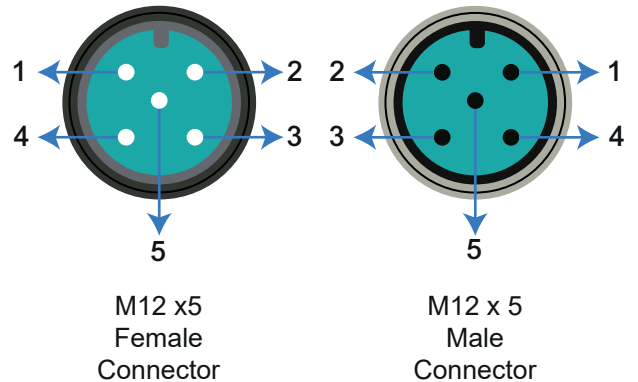
Mechanical Dimensions



Connection

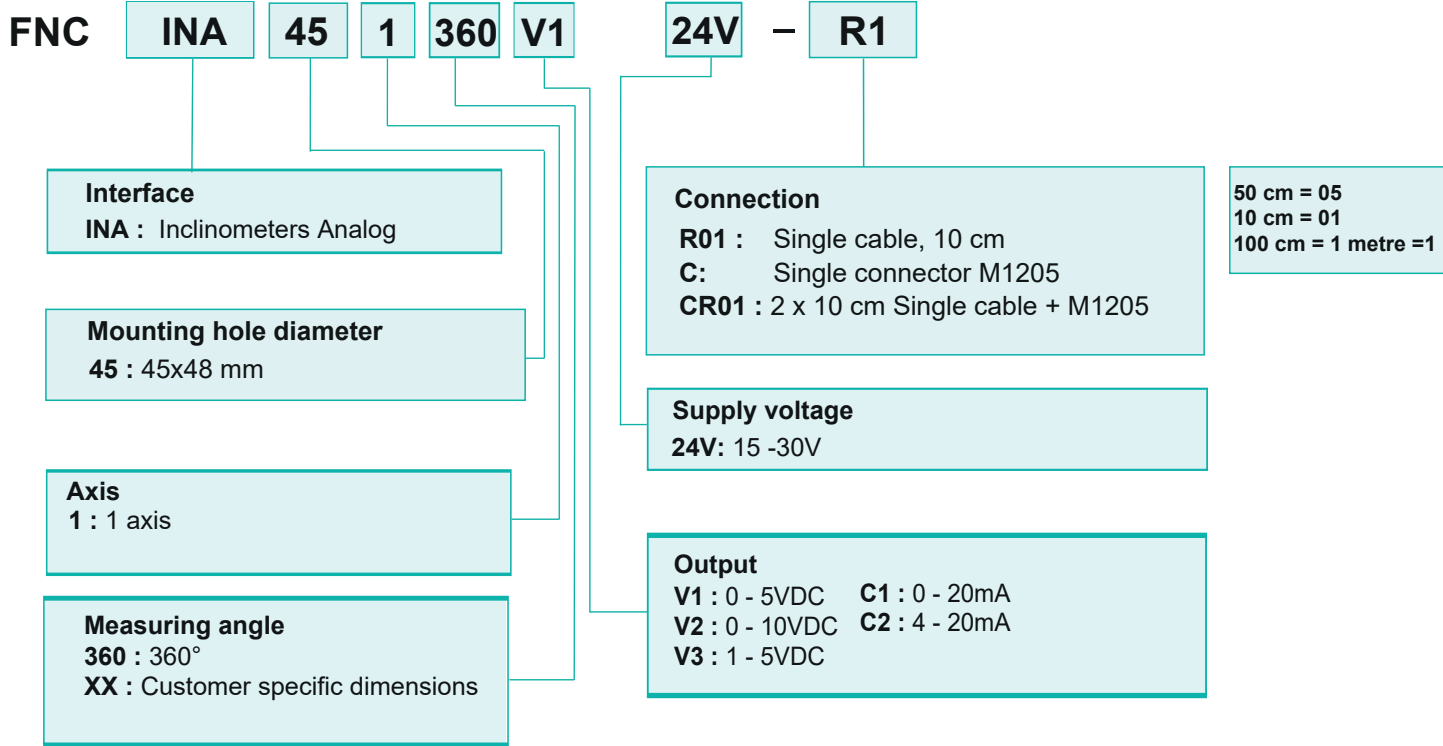
Pin	Color Pre-wired models only	Function
1	 Brown	+VDC
2	 Yellow	Analog OUT Y
3	 White	0V GND
4	 Green	Analog OUT X
5	 Gray	Reference / TEACH

M1205



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FNC INA 45 1 Axis Part Number



FNC INA 45 2 Axis Part Number

