

FNC INC Analog Series



Features

- $\pm 90^\circ$ measuring range
- 4 - 20 mA, 0 - 5V, 0 - 10V signal 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

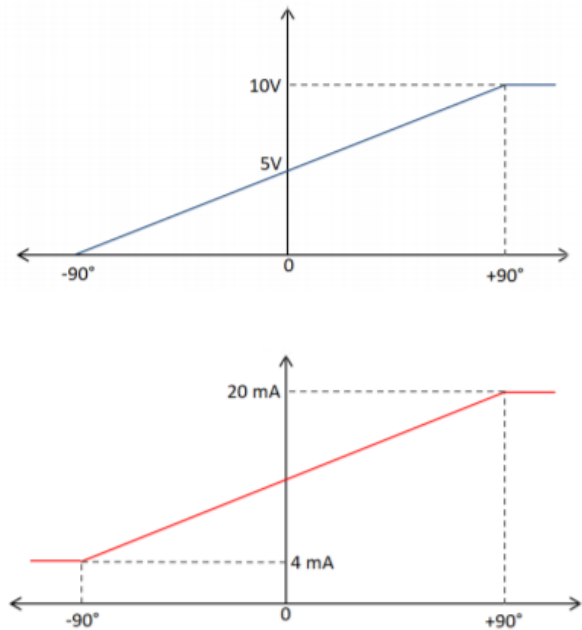
Technical data - electrical design

Voltage Supply	12VDC to 30VDC
Output options	4 - 20 mA analog output 0 - 10V analog output
Current consumption (no load)	25 mA
Reverse polarity protection of the supply voltage	Yes
Sampling rate	50 Hz (20 ms)
PowerON time	< 0.5 ms
Resolution	Internal sensor 0,003° D/A converter 12 bit
Accuracy at 25°C	1 - dimensional type $\pm 0.5^\circ$ 2 - dimensional type $\pm 1.0^\circ$
Temperature coefficient	0.01% / °C
Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +125°C

Technical data - mechanical design

Connection	M12, 5 pin connector
Measuring axes	X and Y, $\pm 85^\circ$

Pulse Diagram

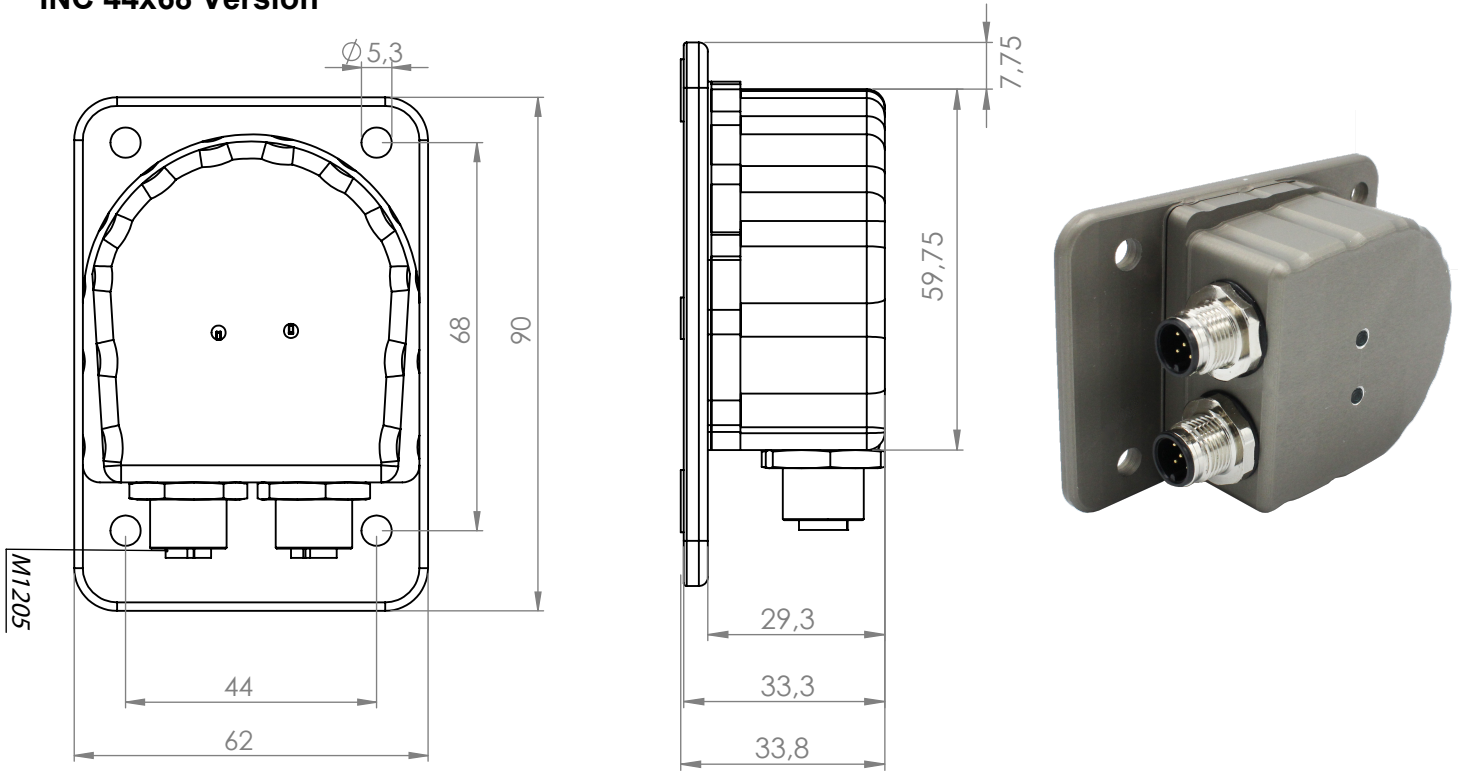


Pin 5 and pin 3 are short-circuited once and then disconnected. Thus, the sensor recognizes its position as 0° . If the same process is repeated a second time, the sensor will be returned to its factory settings. The sensor position should be kept constant for about 4 seconds during the operations. It memorizes the 0° position, does not return to the factory settings in case of power failure.

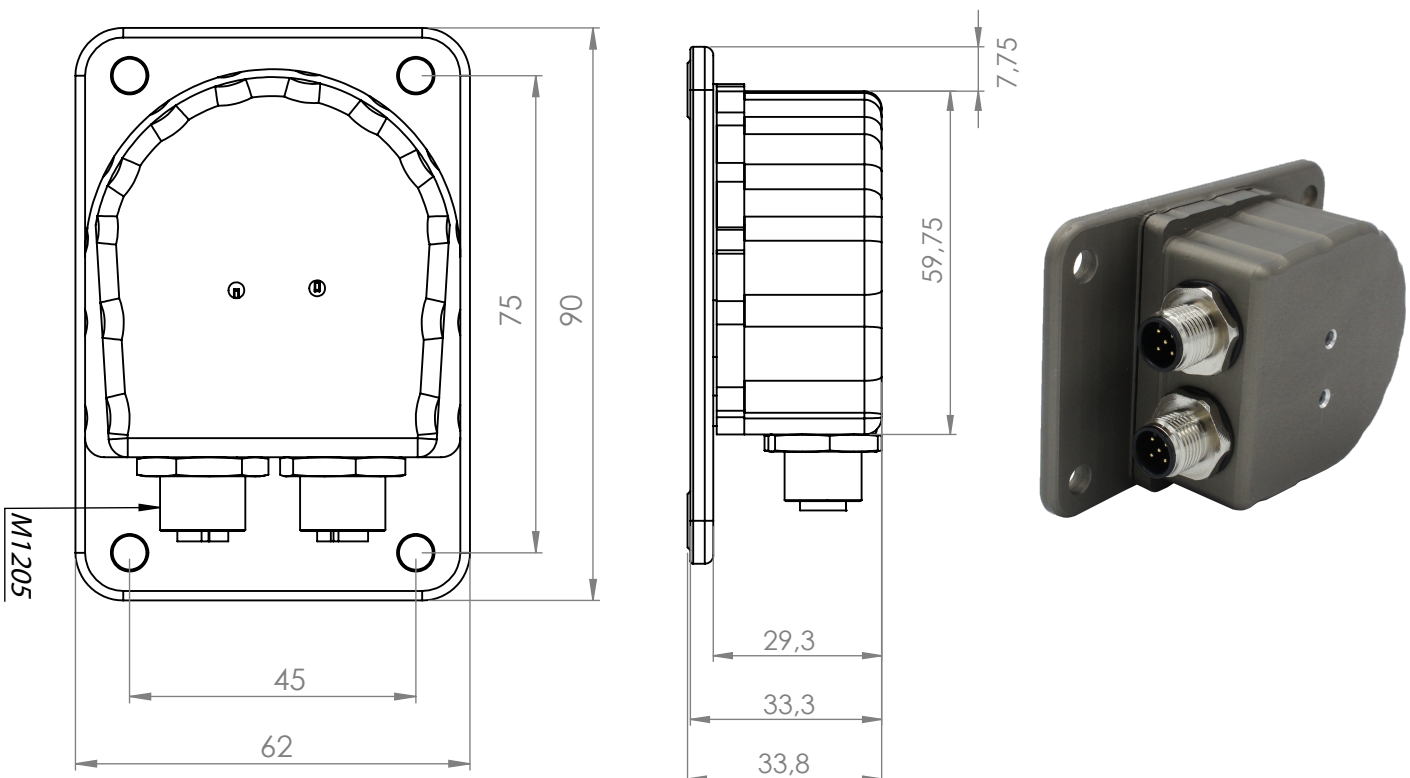
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Mechanical Dimensions

INC 44x68 Version



INC 45x75 Version



Inclinometers

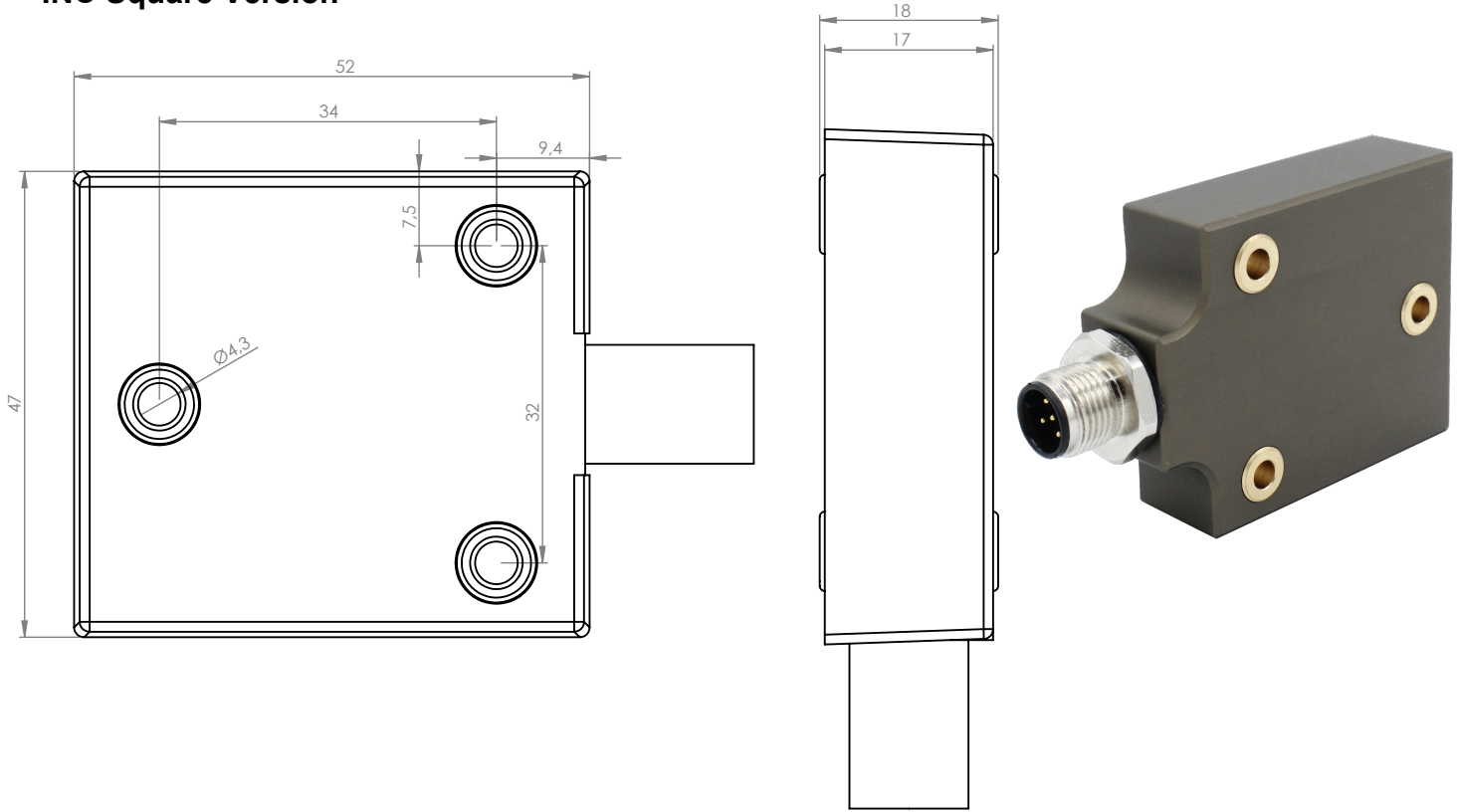
Cable / Connector Wiring, Part Number



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Mechanical Dimensions

INC Square Version



Connection

Function	Color	Renk	M1205
VCC	○ White	Beyaz	pin 1
OUT Y	● Brown	Kahverengi	pin 2
GND	● Gray	Gri	pin 3
OUT X	● Green	Yeşil	pin 4
TEACH	● Yellow	Sarı	pin 5

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LED Status

GREEN LED

The device is in the state "reset" or no power supply is available if the Green LED is off.
 The device is in the "pre-operational" state if the Green LED is permanently on.
 If the Green LED flashes, the device is in the "operational" state.
 The device is in the "stopped" state if the Green LED is lighting briefly once.

RED LED

In the non-fault state, the Red LED is off.
 Red LED is on continuously in case of CAN communication error and IC sensor error.
 In Bus State off state, it is on for 100 ms, off for 100 ms and repeats periodically.
 In passive error state, it lights up for 400 ms and goes out for 400 ms, repeats periodically.

Encoder Part Number

