

## 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  $0^\circ$  point
- Easy installation
- IP67 protection
- Small and robust mechanical construction
- Compact design

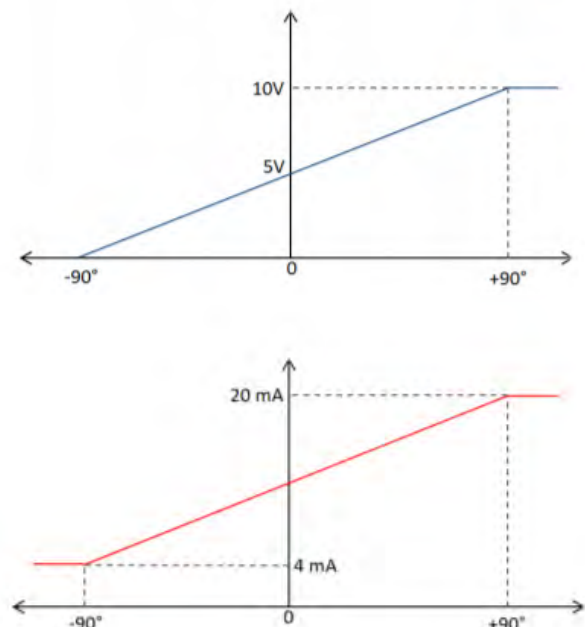
### Technical data - electrical design

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 $0,003^\circ$ D/A converter 12 bit
Accuracy at $25^\circ\text{C}$	1 - dimensional type $\pm 0.5^\circ$ 2 - dimensional type $\pm 1.0^\circ$
Temperature coefficient	$0.01\% / ^\circ\text{C}$
Operating temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Storage temperature	$-40^\circ\text{C}$ to $+125^\circ\text{C}$

### Technical data - mechanical design

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

### Pulse Diagram

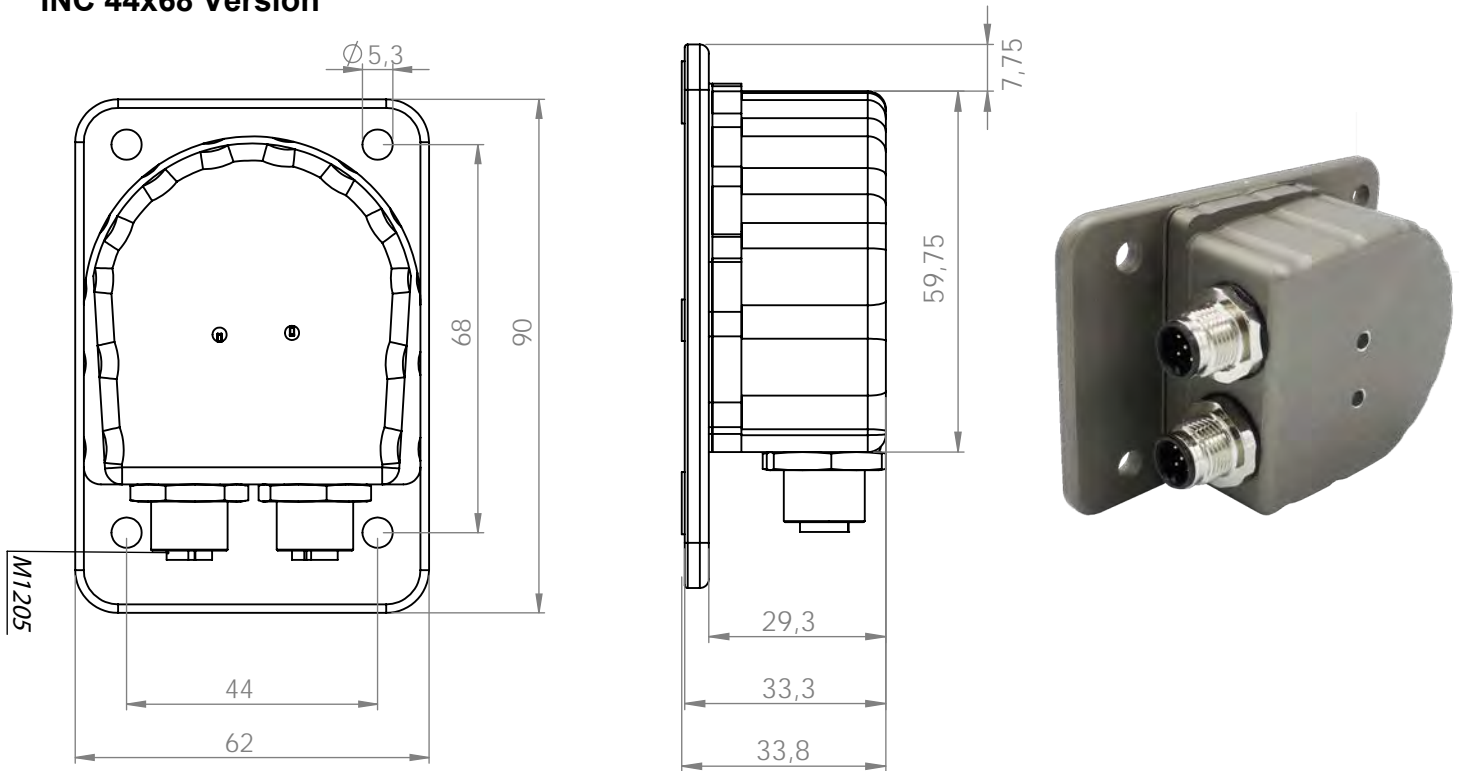


Pin 5 and pin 3 are short-circuited once and then disconnected. Thus, the sensor recognizes its position as  $0^\circ$ . If the same process is repeated a second time, the sensor will be returned to its factory settings. The sensor position should be kept constant for about 4 seconds during the operations.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

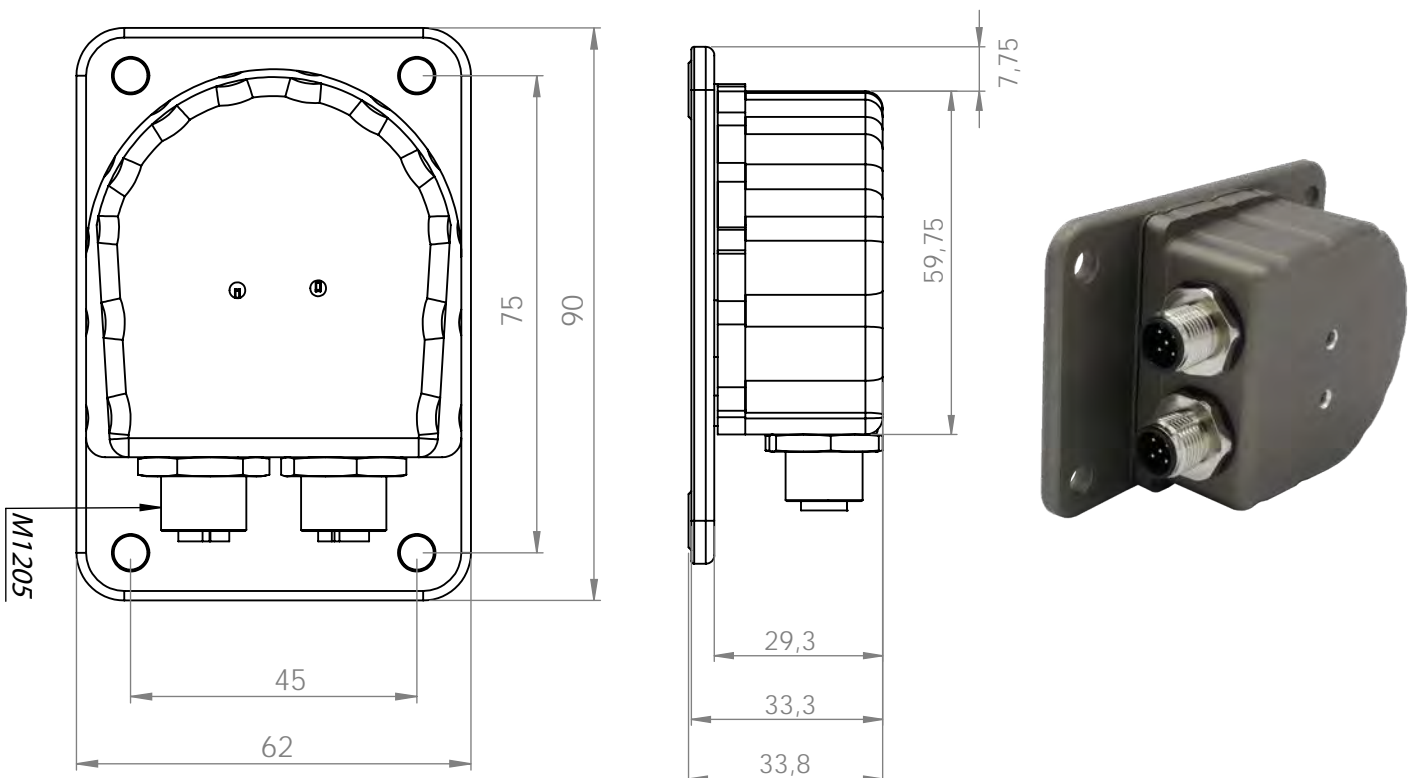
### FNC INC Analog Series

#### Mechanical Dimensions

##### INC 44x68 Version



##### INC 45x75 Version



# Inclinometers

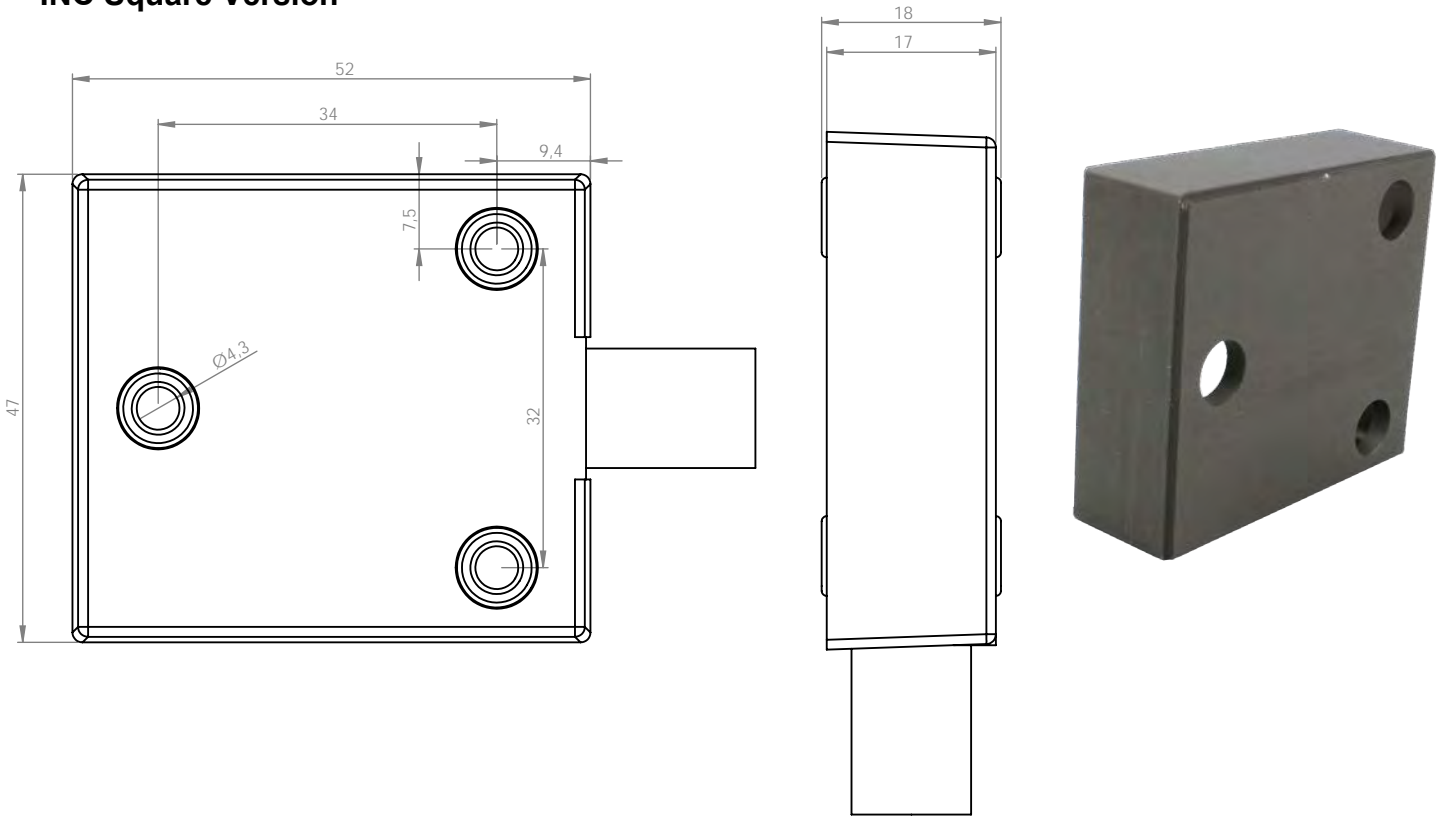
Cable / Connector Wiring, Part Number



## FNC INC Analog Series

### Mechanical Dimensions

#### INC Square Version



### FNC INC Analog Series

#### 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

#### Encoder Part Number

FNC INCA 44 1 1 20 N 30V - SC

**Interface**  
INCA : Inclinometers Analog

**Mounting hole diameter**  
32 : 32x34 mm  
44 : 44x63 mm  
45 : 45x75 mm

**Dimensions**  
1 : 1 dimension  
2 : 2 dimensions

**Measuring angle**  
1 : 360°  
2 : -180 +180°

**Connection**  
SC : Single M1205 connector  
DC : Double M1205 connector

**Supply voltage**  
30V : 5-30V

**Switching options**  
N : No switching  
2 : 2 switching options

**Output**  
20 : 20mA  
10 : 10V