

INC 210 INCLINOMETER (TILT SENSOR)

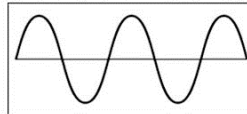


- Measuring range up to 360° angle
- Single Axis
- CANopen output
- Analog outputs: 0-10 V_{DC}, 4-20 mA
- Optional Redundant output
- High and stable accuracy ±0.1°
- Re-determinable 0° point
- Shock/Vibration resistant
- Insensitive to moisture/temperature changes
- Easy to fit and mount
- High protection class: IP67
- Robust and compact metal housing

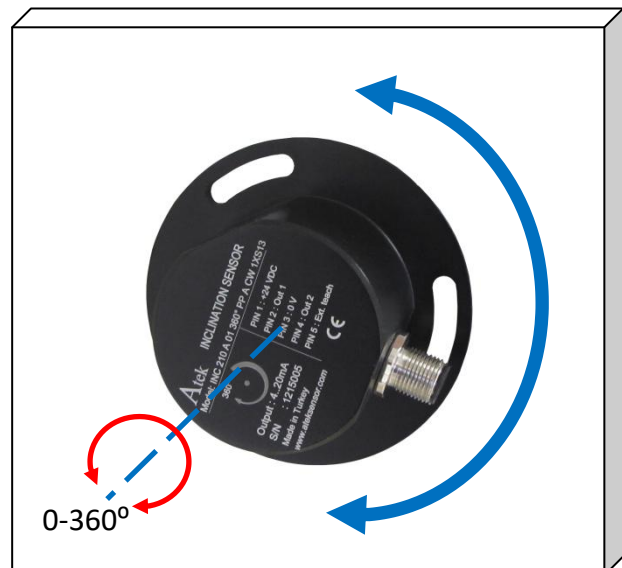
Applications

- Cranes
- Excavators
- Forklifts
- Fire trucks
- Solar Panels Movement Tracking Systems
- Automation solutions
- Shipbuilding
- Robotics
- Marine transfer cranes
- Construction machinery
- Camera Systems
- Wind Turbines
- Aviation
- Aerial Lift platform leveling
- Wheel alignment systems
- Precise laser cutting machines
- Aerospace engineering

ANALOG



CANopen®



1. TECHNICAL PROPERTIES

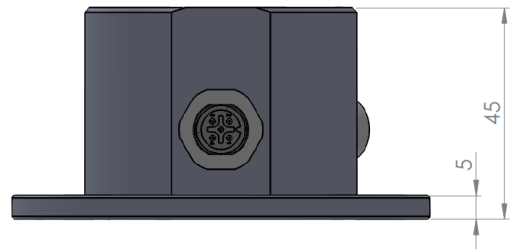
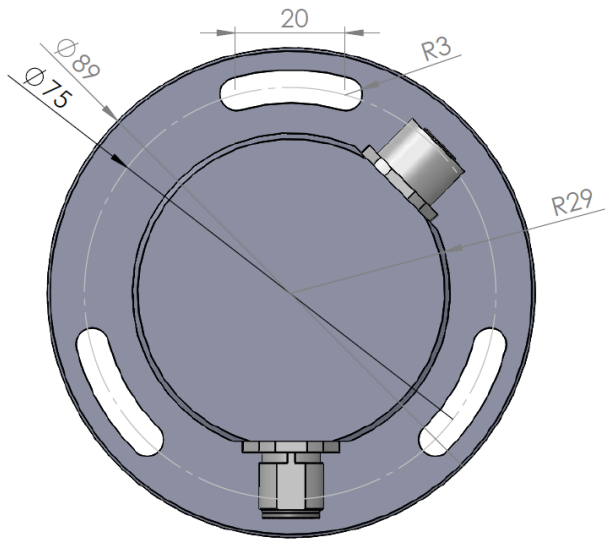
GENERAL CHARACTERISTICS

Measuring Range	Different options up to 360°
Supply Voltage	12...30 V _{DC}
Axes	X (Single Axis)
Output	Analog outputs 4-20mA or 0.1-10V _{DC} CANopen **Optional redundant output
Accuracy	±0,1°
Resolution	Analog outputs: 12 bit CANopen output: 0.05°
Protection Class	IP 67
Humidity	%10 ... %90
Temperature Range	-30 °C ... +70 °C
Electrical Connection	Analog models: M12 5 pins (male) or with cable CANopen models: M12 Connector 5 pins (male and/or female)
Housing	Black nickel plating on Aluminum
Weight	250 grams

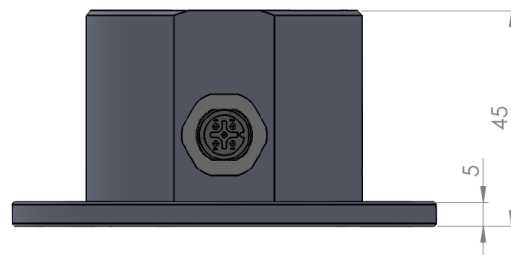
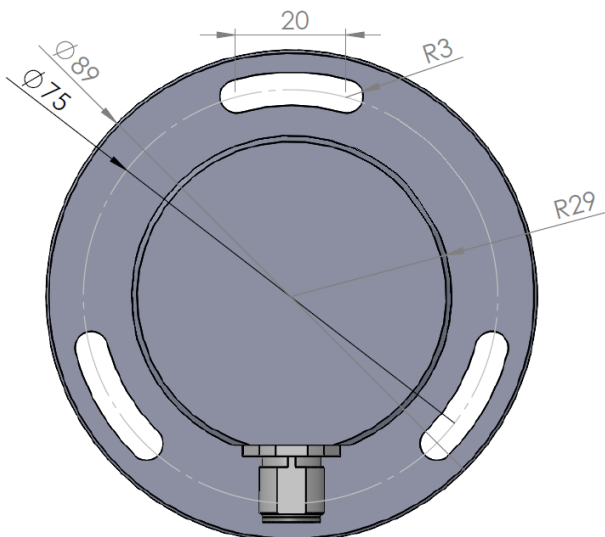
CANopen PROPERTIES

Communication Protocol	CiA 301
Resolution	23 bit
Response Rate Frequency	100 Hz
Type	CANopen, CiA DS410
Node ID	Default: 1 Can be arranged by LSS and SDO between 1 and 127
Baud Rate	10 kBit/s, 20 kBit/s, 50 kBit/s, 100 kBit/s, 125 kBit/s, 250 kBit/s, 500 kBit/s, 800 kBit/s, 1 Mbit/s
PDO Data Rate	500 ms
Error Messages	Heartbeat, Emergency Message
PDO	1 Tx PDO
PDO Modes	Event/Time triggered, Synch/Asynch
SDO	1 server

MECHANICAL DIMENSIONS



CANOPEN

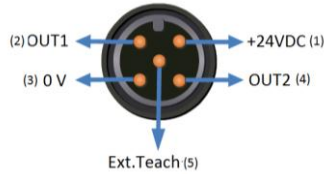


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ELECTRICAL CONNECTIONS

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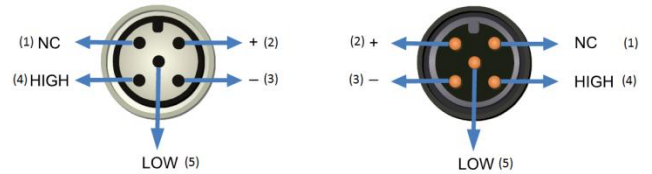
Signal	M12 connector	Cable color
U+ (12..30V _{DC})	Pin 1	Red
Output 1: 0.1-10V _{DC} / 4-20mA	Pin 2	Yellow
GND (0V)	Pin 3	Black
Output 2: 0.1-10V _{DC} / 4-20mA	Pin 4	Green
Reset	Pin 5	Pink



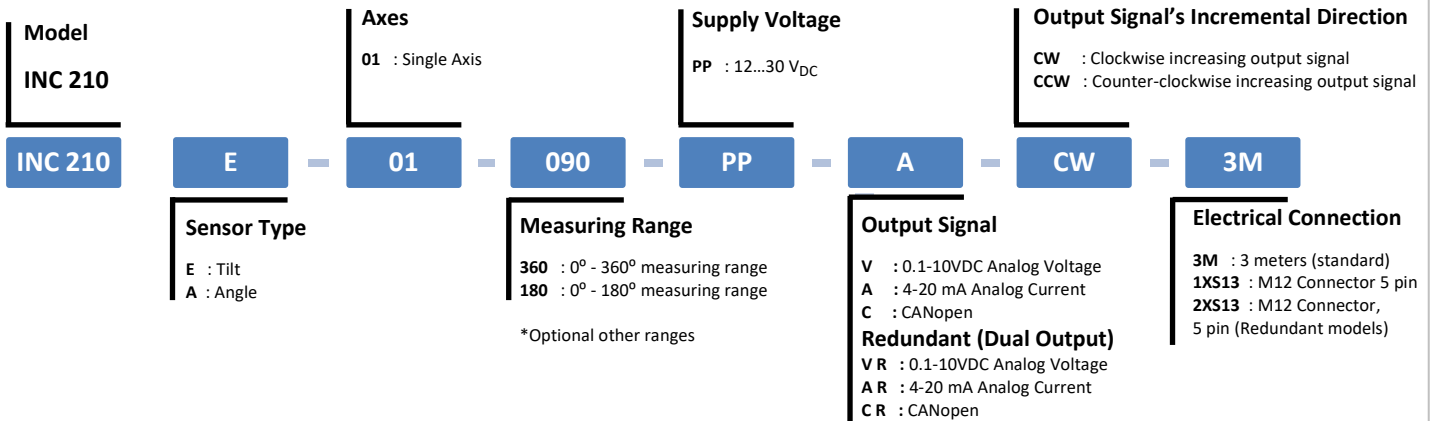
Reset function is to determine 0° point. When pin 5 is activated 1st time, reset function occurs and 0° becomes where the sensor is at that moment. When pin 5 is activated for 2nd time, factory settings are applied for 0° point.

CANOPEN

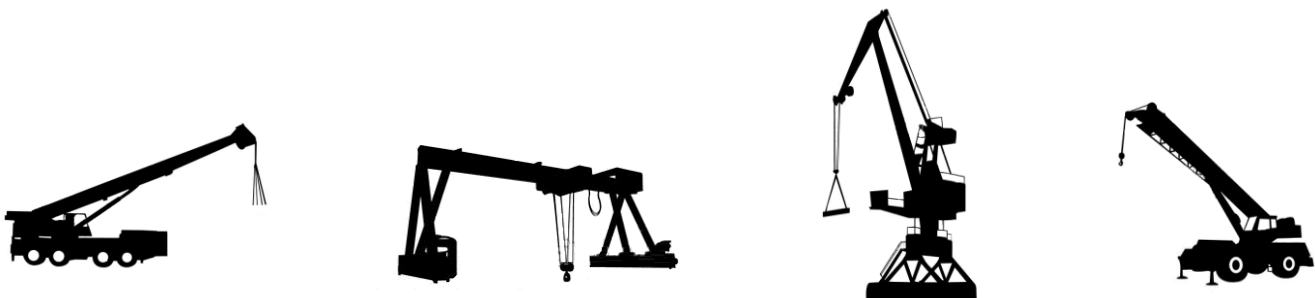
Signal	M12 connector	Cable color
CAN_SHIELD	Pin 1	Shield
U+ (12..30V _{DC})	Pin 2	Red
GND (0V)	Pin 3	Black
CAN_H	Pin 4	Yellow
CAN_L	Pin 5	Green



ORDERING CODE



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