

**EC-SNR-ANG-G360-H SINGLE AXIS INCLINOMETER WITH GYROSCOPE****DESCRIPTION**

Absolute single axis (roll) inclinometer with combined gyroscope and accelerometer.

**OPERATION**

Signal output is linearly proportional to the angle and highly insensitive to high shock, acceleration and random vibrations. The gyroscope allows a fast measure of the angle without the need of the heavy filtering which is typical of plain accelerometer-based devices.

With a measurement range of  $\pm 180^\circ$  ( $360^\circ$ ) this device is designed to be connected in a CANbus network (J1939 or CANOpen). It is well-suited for self-levelling applications of systems needing a precise dynamic response and high accuracy.

**FEATURES**

- Supply line is protected against reversed polarity and load dump.
- CAN Bus line is protected against short circuits to GND and battery voltage.
- Microprocessor based, with dedicated Kalman filters.
- Vibration and shock resistant.
- Combination of gyroscope and accelerometer.
- Safety requirements:
  - the single device designed for systems having PLr = c
  - easy assembling of dual device for systems having PLr = d
- Electro Magnetic Compatibility (EMC): EN 61000-6-2 (Immunity)  
EN 61000-6-3 (Emissions)

**SPECIFICATIONS**

Operating voltage:	8 ÷ 32 VDC
Max current consumption:	70 mA @ 12V
CANbus physical layer:	ISO 11898, 250 kbit/s (adjustable bus speed)
CANbus protocol:	J1939 (option: CANOpen)
Max working angle	$\pm 180^\circ$
Resolution:	0.01°
Stability:	0.2° @ 25°C
Dynamic:	125°/s
Operating temperature:	-40°C / +105°C
Degree of protection:	IP 68
Connector type:	Deutsch DT04-4P or M12
Fixing screws included:	n.4 - M5x20
Weight:	120 g (screws included)

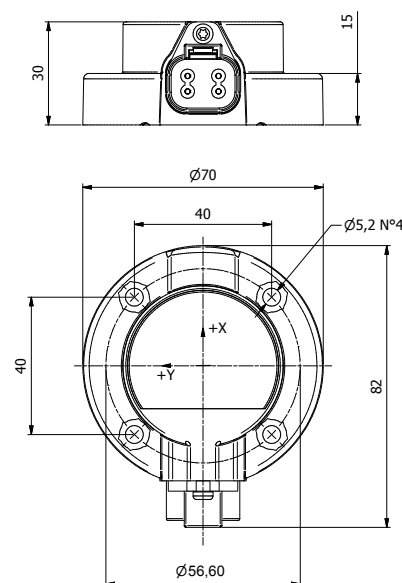
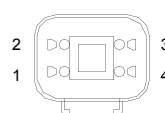
**APPLICATIONS**

- 12 VDC and 24 VDC systems.
- Automatic basket self levelling for aerial platforms, agricultural machines and lift equipment.
- Automatic bucket self levelling for wheel loaders.

**ORDERING CODE**

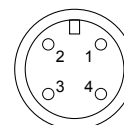
**20.0401.043** with Deutsch connector

**20.0401.044** with M12 connector

**DIMENSIONS****CONNECTIONS**

Deutsch DT04-4P

- 1 +VBATT
- 2 GND
- 3 CAN-H
- 4 CAN-L



M12

**WARNING:** the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.