SENSORS

NEV

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°) 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.

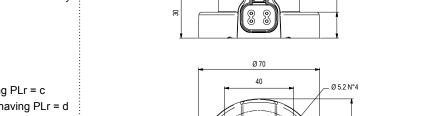
FEATURES

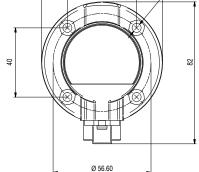
- Supply line is protected against reversed polarity and load dump.
- CAN Bus line is protected against short circuits to GND and battery voltage.
- · Microprocessor based, with dedicated Kalman filters.
- Vibration and shock resistant.
- · Combination of gyroscope and accelerometer.
- Safety requirements:
 - 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	±180°	
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	

APPLICATIONS

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





CONNECTIONS

DIMENSIONS



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

Deutsch DT04-4P

M12

Ordering Code
20.0401.043 (DEUTSCH CONNECTOR)

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.



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