

 $\epsilon$ 

## **Model number**

INX360DH-F199-B16-V15

## **Features**

- Sturdy housing
- High accuracy of ≤ ± 0,15°
- CANopen interface
- 1-axis with 360° measuring range

# **Function description**

This inclination sensor has a CANopen interface. With its sturdy housing and its high accuracy, it is ideally suited for applications in the fields of solar, wind or mobile equipment.

| Technical              | Data |
|------------------------|------|
| General specifications |      |

| Туре                                 | Inclination sensor, |
|--------------------------------------|---------------------|
| Time delay before availability       | 150 ms              |
| Measurement range                    | 0 360 °             |
| Absolute accuracy                    | ≤ ± 0.15 °          |
| Response delay                       | ≤ 25 ms             |
| Resolution                           | ≤ 0.01 °            |
| Temperature influence                | ≤ 0.004 °/K         |
| Functional safety related parameters |                     |

 $\begin{array}{ll} \text{MTTF}_{\rm d} & 700 \text{ a at } 40 \, ^{\circ}\text{C} \\ \text{Mission Time (T}_{\rm M}) & 20 \text{ a} \\ \text{Diagnostic Coverage (DC)} & 0 \, ^{\circ}\text{W} \end{array}$ 

Indicators/operating means

Status indicator dual-LED, green/red

Electrical specifications

Operating voltage  $U_B$  10 ... 30 V DC No-load supply current  $I_0$   $\leq$  65 mA at 10 V DC  $\leq$  60 mA at 24 V DC

Interface
Interface type CANopen
Device profile DS 410

Transfer rate 20 ... 1000 kBit/s , programmable , factory setting 125 kBit/s
Node ID 1... 127 , programmable , factory setting 1 decimal
Output driver transceiver according ISO 11898, galvanically isolated by

means of photocouplers

**Ambient conditions** 

 $\begin{array}{lll} \mbox{Ambient temperature} & -40 \dots 85 \ ^{\circ}\mbox{C} \ (-40 \dots 185 \ ^{\circ}\mbox{F}) \\ \mbox{Storage temperature} & -40 \dots 85 \ ^{\circ}\mbox{C} \ (-40 \dots 185 \ ^{\circ}\mbox{F}) \\ \end{array}$ 

Mechanical specifications

Connection type 5-pin, M12 x 1 connector , A-coded
Housing material aluminum, corrosion-resistant
Degree of protection IP68 / IP69
Mass approx. 200 g

Compliance with standards and directives

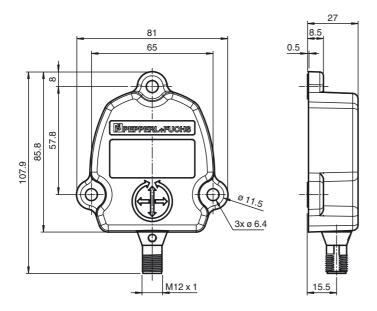
Standard conformity

Noise immunity EN 61000-6-2 Emitted interference EN 61000-6-4

 Shock and impact resistance
 DIN EN 60068-2-27, 100 g, 6 ms

 Vibration resistance
 DIN EN 60068-2-6, 20 g, 10 ... 2000 Hz

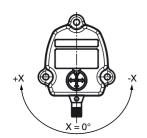
# **Dimensions**



# **Electrical connection**

| Signal          | 5-pin, M12 x 1 connector |
|-----------------|--------------------------|
| CAN GND         | 1                        |
| +V <sub>S</sub> | 2                        |
| GND             | 3                        |
| CAN-High        | 4                        |
| CAN-Low         | 5                        |
| Pinout          | 2 ( 4                    |

# X-Orientation



# **Accessories**

#### V15-G-2M-PUR-CAN-V15-G

DeviceNet/CANOpen bus cable, M12 to M12, PUR cable 5-pin

# V15-G-5M-PUR-CAN-V15-G

DeviceNet/CANOpen bus cable, M12 to M12, PUR cable 5-pin

## V15-G-10M-PUR-CAN-V15-G

DeviceNet/CANOpen bus cable, M12 to M12, PUR cable 5-pin

## V15S-T-CAN/DN-V15

Y distributor, M12 socket on M12 connector/socket

**EPPERL+FUCHS** 

# **Indicating elements**

# LED-indicator with dual color LED

| CAN Run (green) | State                 | Description  |
|-----------------|-----------------------|--|
| Flashing        | Pre-Operational       | Boot up message is sent, device configuration is possible, device is in CAN state    |
|                 |                       | "Pre-Operational"  |
| Single flash    | Stopped               | The device is in CAN state "Stopped"   |
| On              | Operational           | The device is in CAN state "Operational"   |
| Off             |                       | No power supply  |
| Err (red)       | State                 | Description  |
| Off             | No error              | The device is in operating mode  |
| Flashing        | Configuration fault   | General configuration fault (such as wrong baudrate)                                 |
| Single flash    | Warning limit reached | At least one of the error counters of the CAN controller has reached or exceeded the |
|                 |                       | warning level (too many error frames)  |
| Double flash    | Error control event   | A guard event (NTM slave or NTM master) or a heartbeat event has occured             |
| On              | Bus off               | The CAN controller is in stae bus off. No communication possible anymore. Too        |
|                 |                       | many error frames in the network.  |