



Model number

INX360DH-F199-B16-2V15

Features

- **Sturdy housing**
- **High accuracy of $\leq \pm 0,15^\circ$**
- **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

Type	Inclination sensor, 1-axis
Time delay before availability	150 ms
Measurement range	0 ... 360°
Absolute accuracy	$\leq \pm 0,15^\circ$
Response delay	≤ 25 ms
Resolution	$\leq 0,01^\circ$
Temperature influence	$\leq 0,004^\circ/\text{K}$

Functional safety related parameters

MTTF _d	700 a at 40 °C
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Status indicator	dual-LED, green/red
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Electrical specifications

Operating voltage U _B	10 ... 30 V DC
No-load supply current I ₀	≤ 65 mA at 10 V DC ≤ 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

Ambient temperature	-40 ... 85 °C (-40 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

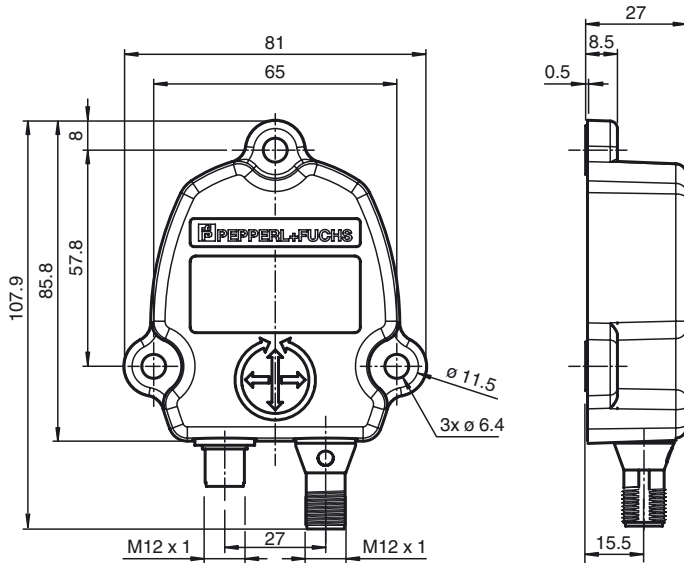
Mechanical specifications

Connection type	5-pin, M12 x 1 connector , A-coded 5-pin, M12 x 1 socket , 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

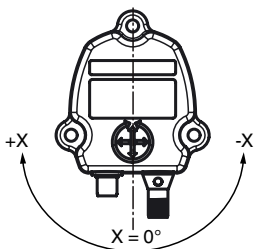
Dimensions



Electrical connection

Signal	Bus Out, 5-pin, M12 x 1 socket	Bus In, 5-pin, M12 x 1 connector
CAN GND	1	1
+U _b	2	2
GND	3	3
CAN-High	4	4
CAN-Low	5	5
Pinout		

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

ICZ-TR-CAN/DN-V15

Terminal resistor for DeviceNet, CANopen

V15S-T-CAN/DN-V15

Y distributor, M12 socket on M12 connector/socket

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 occurred
On	Bus off	The CAN controller is in stae bus off. No communication possible anymore. Too many error frames in the network.