



Inclination sensor INY160DH-F199-B30-V15

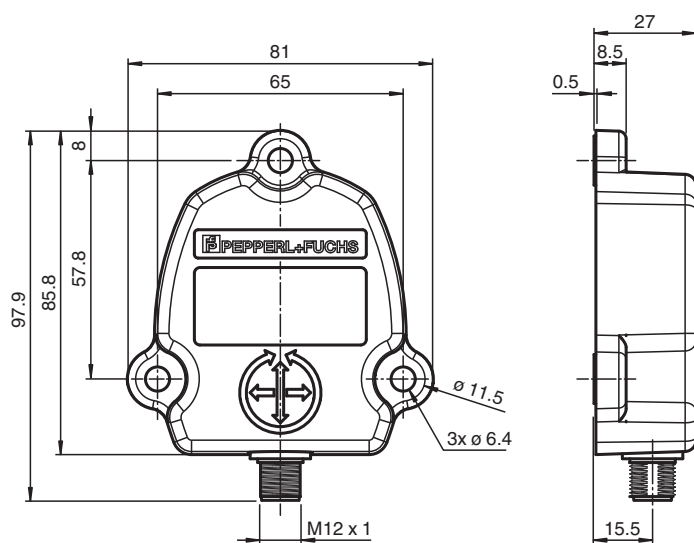
- Sturdy housing
- High accuracy of $\leq \pm 0,15^\circ$
- Communication via MODBUS RTU
- 2-axis with $\pm 80^\circ$ measuring range



Function

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

Dimensions



Technical Data

General specifications

Type	Inclination sensor, 2-axis
Time delay before availability	320 ms
Measurement range	$\pm 80^\circ$

Technical Data

Absolute accuracy		$\leq \pm 0.15^\circ$ for measuring range $\leq \pm 60^\circ$ $\leq \pm 0.4^\circ$ for measuring range $\geq \pm 60^\circ$
Response delay		≤ 25 ms
Resolution		$\leq 0.01^\circ$
Temperature influence		$\leq 0.004^\circ/\text{K}$
Functional safety related parameters		
MTTF _d		900 a at 40 °C
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Electrical specifications		
Operating voltage	U _B	4.5 ... 30 V DC
No-load supply current	I ₀	≤ 100 mA at 5 V DC ≤ 25 mA at 24 V DC
Interface		
Interface type		MODBUS RTU
Transfer rate		2.4 ... 115200 kBit/s , programmable in 7 steps , factory setting 19,2 kBit/s
Data format		even parity, 1 start bit, 1 stop bit, 8 data bits
Node ID		1 ... 247 , programmable , factory setting 127 decimal
Output driver		line driver RS485
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
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
Housing material		aluminum, corrosion-resistant
Degree of protection		IP68 / IP69
Mass		approx. 200 g

Accessories

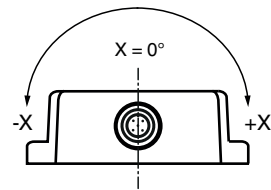


V15S-T-CAN/DN-V15

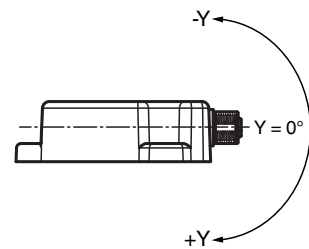
Y-Splitter, M12 socket on M12 connector/socket

Mounting

X-Orientation



Y-Orientation



Connection

Electrical connection

Signal	5-pin, M12 x 1 connector
n. c.	1
+V _S	2
GND	3
RS485 A +	4
RS485 B -	5
Pinout	