



# Inclination sensor INY100DH-F199-IE2-V19

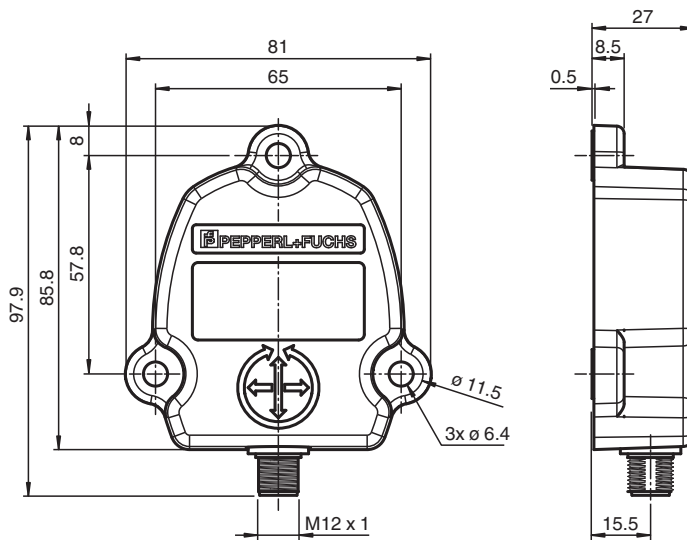
- Sturdy housing
- High accuracy of  $\leq 0,15^\circ$
- Analog output 4 mA ... 20 mA
- 2-axis with  $\pm 50^\circ$  measuring range



## Function

This inclination sensor has a analog output 4 mA ... 20 mA. 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	125 ms
Measurement range	$\pm 50^\circ$

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com




Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

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## Technical Data

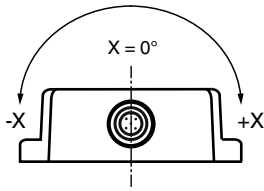
Absolute accuracy		$\leq \pm 0.15^\circ$
Response delay		$\leq 100$ ms
Resolution		$\leq 0.01^\circ$
Temperature influence		$\leq 0.004^\circ/\text{K}$
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		700 a at 40 °C
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC
No-load supply current	I <sub>0</sub>	$\leq 65$ mA at 10 V DC $\leq 60$ mA at 24 V DC
<b>Analog output</b>		
Output type		current output 4 ... 20 mA (one output for each axis)
Load resistor		270 Ω at 10 V DC
<b>Compliance with standards and directives</b>		
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
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		8-pin, M12 x 1 connector , A-coded
Housing material		aluminum, corrosion-resistant
Degree of protection		IP68 / IP69
Mass		approx. 200 g

## Accessories

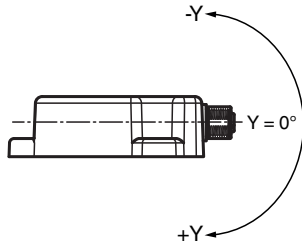
	<b>V19-G-2M-PUR-ABG</b>	Female cordset, M12, 8-pin, shielded, PUR cable
	<b>V19-G-2M-PUR-ABG-V19-G</b>	Connecting cable, M12 to M12, PUR cable 8-pin, shielded
	<b>V19-G-0,5M-PVC-SUBD9</b>	Adapter cable M12 x 1 to sub-D, including DC coupling

**Mounting**

**X-Orientation**



**Y-Orientation**



**Electrical connection**

Signal	8-pin, M12 x 1 connector
+U <sub>b</sub>	1
RxD	2
TxD	3
GND	4
Analog output X axis	5
Set 1	6
Analog output Y axis	7
Set 2	8
Pinout	

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