



Inclination sensor INY160DH-F199-IE2-V19

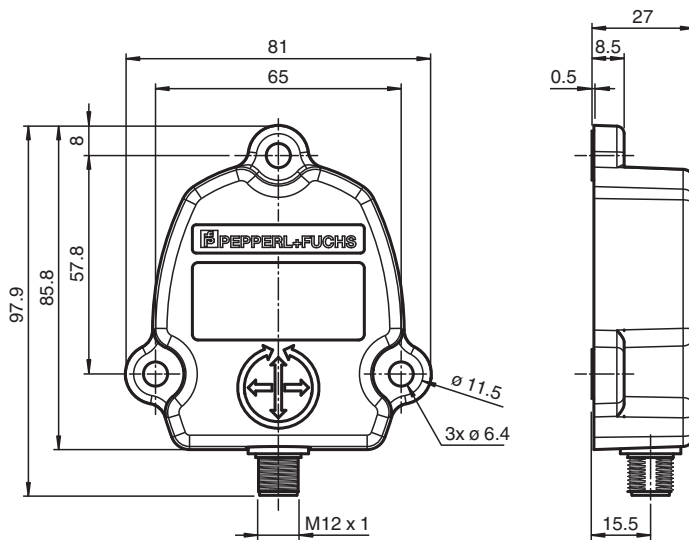
- Sturdy housing
- High accuracy of $\leq \pm 0,15^\circ$
- Analog output 4 mA ... 20 mA
- 2-axis with $\pm 80^\circ$ measuring range



Function

This inclination sensor has an 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	$\pm 80^\circ$

Release date: 2020-06-03 Date of issue: 2020-06-03 Filename: 324839_eng.pdf

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

PF PEPPERL+FUCHS

Technical Data

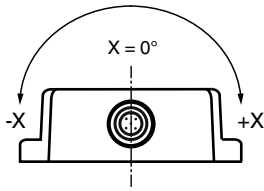
Absolute accuracy		$\leq \pm 0.15^\circ$ for measuring range $\leq \pm 60^\circ$ $\leq \pm 0.4^\circ$ for measuring range $\geq \pm 60^\circ$
Response delay		≤ 100 ms
Resolution		$\leq 0.01^\circ$
Temperature influence		$\leq 0.004^\circ/\text{K}$
Functional safety related parameters		
MTTF _d		700 a at 40 °C
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
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
Analog output		
Output type		current output 4 ... 20 mA (one output for each axis)
Load resistor		270 Ω at 10 V DC
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		8-pin, M12 x 1 connector , A-coded
Housing material		aluminum, corrosion-resistant
Degree of protection		IP68 / IP69
Mass		approx. 200 g

Accessories

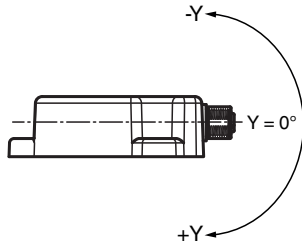
	V19-G-2M-PUR-ABG	Female cordset, M12, 8-pin, shielded, PUR cable
	V19-G-2M-PUR-ABG-V19-G	Connecting cable, M12 to M12, PUR cable 8-pin, shielded
	V19-G-0,5M-PVC-SUBD9	Adapter cable M12 x 1 to sub-D, including DC coupling

Mounting

X-Orientation



Y-Orientation



Electrical connection

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

Release date: 2020-06-03 Date of issue: 2020-06-03 Filename: 324839_eng.pdf

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