



## TILTIX Inclinometer

ACS-120-1-SC00-VE2-AW

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### General Specifications

Application	1-Axis Position Monitoring and Leveling
Measurement Range	120°
Absolute Accuracy	0.10°
Resolution	0.01°

### Electrical Specifications

Supply Voltage	10 - 30 VDC (See also Interface: Max Load Resistance)
Power Consumption (no load)	≤ 0.7 W
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes

### Environmental Specifications

Operating Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +70 °C (+158 °F)
Storage Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Temperature Gradient	0.004°/ K
Protection Class	IP66/IP67
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)

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Vibration Resistance	1.5 mm (10 Hz - 58 Hz) & ≤ 20 g (58 Hz to 2000 Hz)
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### Mechanical Specifications

Housing Material	Fibre-Reinforced PBT (Polybutylene Terephthalate)
Potting Material	PUR (Polyurethane)
Weight	800 g (1.76 lb)

### Certificates / Lifetime

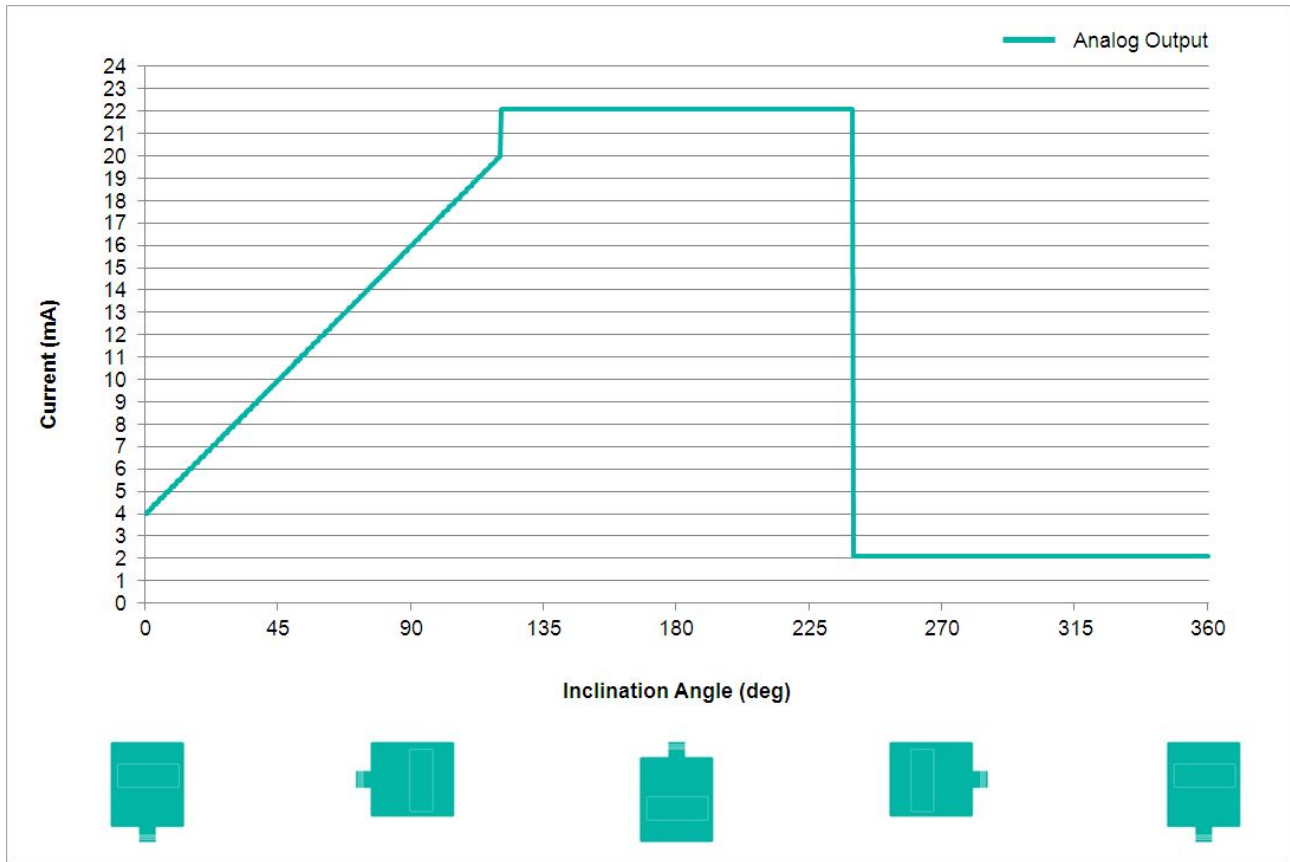
MTTF	350 years @ 40 °C
Certificates	CE

### Interface

Interface	Analog Current 4 - 20 mA + RS232
Teach In	Zero Positioning, Inverse Direction, Elevation Range Programming
Settling Time	125 ms
Output Type	Current 4 - 20 mA
Max Load Resistance	270 Ω @ 10 V DC (500 Ω @ 15 V DC)
Transmission Rate	RS232: min. 1200 Baud; max. 115200 Baud
Default Transmission Rate	RS232: 9600 Baud
Linearity	± 0.02%

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### Electrical Connection

Connection Type	Cable 10 m
Cable Length	10 m [394"]
Wire Cross Section	0.14 mm <sup>2</sup> / AWG 26
Material / Type	PVC
Cable Diameter	6 mm (0.24 in)
Minimum Bend Radius	46 mm (1.81") fixed, 61 mm (2.4") flexing

### Product Life Cycle

Product Life Cycle	Established
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### Connection Plan

SIGNAL	CABLE COLOR
Power Supply	Red
GND	Yellow
Z-Axis, Current Output	Green

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Not Connected	Blue
RxD	Gray
TxD	Pink
Set1	Brown
Set2	White
Shielding	Shield

### Dimensional Drawing



[2D Drawing](#)

**Accessories**

**Contact**

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All dimension in [inch] mm. This drawing and the information contained is for general presentation purposes only. Please refer to the "Download" section for detailed technical drawings. © FRABA B.V., All rights reserved. We do not assume responsibility for technical inaccuracies or omissions. Specifications are subject to change without notice.