



TILTIX Inclinometer

ACS-020-2-SV10-HE2-CW

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General Specifications

Application	2-Axes Position Monitoring and Leveling
Measurement Range	$\pm 20^\circ$
Absolute Accuracy	0.10°
Resolution	0.01°

Electrical Specifications

Supply Voltage	10 - 30 VDC
Power Consumption (no load)	$\leq 0.7 \text{ W}$
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 ($+23^\circ\text{F}$) - $+70^\circ\text{C}$ ($+158^\circ\text{F}$)
Storage Temperature	-40°C (-40°F) - $+85^\circ\text{C}$ ($+185^\circ\text{F}$)
Temperature Gradient	$0.004^\circ/\text{K}$
Protection Class	IP66/IP67
Shock Resistance	$\leq 100 \text{ g}$ (half sine 6 ms, EN 60068-2-27)
Vibration Resistance	1.5 mm (10 Hz - 58 Hz) & $\leq 20 \text{ g}$ (58 Hz to 2000 Hz)

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Mechanical Specifications

Housing Material	Fibre-Reinforced PBT (Polybutylene Terephthalate)
Potting Material	PUR (Polyurethane)
Weight	170 g (0.37 lb)

Certificates / Lifetime

MTTF	400 years @ 40 °C
Certificates	CE

Interface

Interface	Analog Voltage 0-5 V + RS232
Teach In	Zero Positioning, Inverse Direction, Elevation Range Programming
Settling Time	125 ms
Output Type	Voltage 0 - 5 V
Min Load Resistance	5 kΩ
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 1 m
Cable Length	1 m [39"]
Wire Cross Section	0.14 mm ² / 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

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GND	Yellow
X-Axis, Voltage Output	Green
Y-Axis, Voltage Output	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.