



## TILTIX Inclinometer

ACS-270-1-SC00-VE2-CW

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### General Specifications

|                   |   |
|-------------------|---|
| Application       | 1-Axis Position Monitoring and Leveling |
| Measurement Range | 270°                                    |
| 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) |
|----------------------|--|

### Mechanical Specifications

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

### Certificates / Lifetime

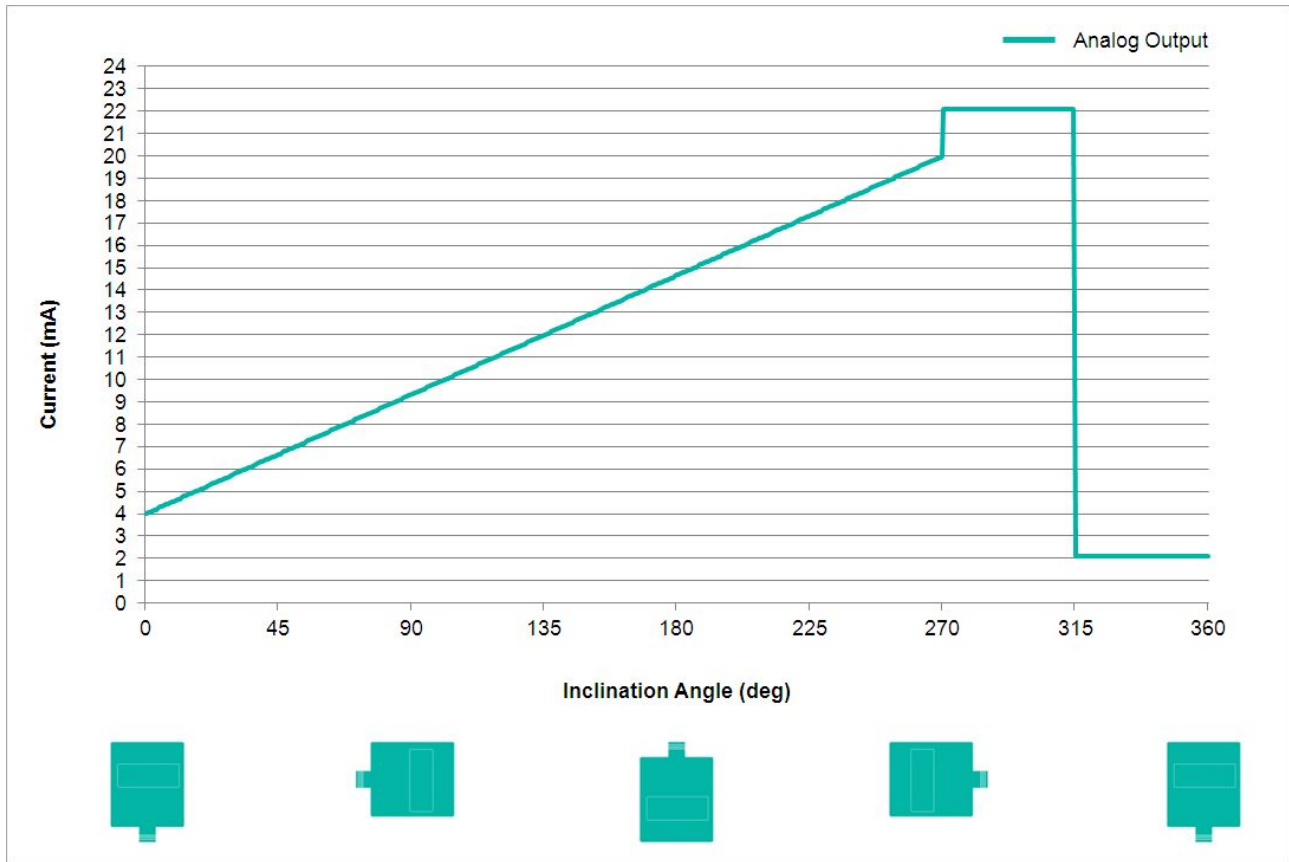
|              |                   |
|--------------|-------------------|
| MTTF         | 350 years @ 40 °C |
| Certificates | CE                |

### 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 1 m                                 |
| Cable Length        | 1 m [39"]                                 |
| 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 |
|--------------------|-------------|

### 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.