



## TILTIX Inclinometer

ACS-080-2-SV10-HK2-CW

POSITAL  
FRABA



### General Specifications

|                   |   |
|-------------------|---|
| Application       | 2-Axes Position Monitoring and Leveling |
| Measurement Range | $\pm 80^\circ$                          |
| Absolute Accuracy | $0.10^\circ$                            |
| Resolution        | $0.01^\circ$                            |

### 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 | $-40^\circ\text{C} (-40^\circ\text{F}) - +80^\circ\text{C} (+176^\circ\text{F})$ |
| Storage Temperature   | $-40^\circ\text{C} (-40^\circ\text{F}) - +85^\circ\text{C} (+185^\circ\text{F})$ |
| Temperature Gradient  | $0.004^\circ/\text{K}$   |
| Protection Class      | IP68/IP69K   |
| 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 | Die-Cast Aluminum Alloy |
| Potting Material | PUR (Polyurethane)      |
| Weight           | 370 g (0.82 lb)         |

### Certificates / Lifetime

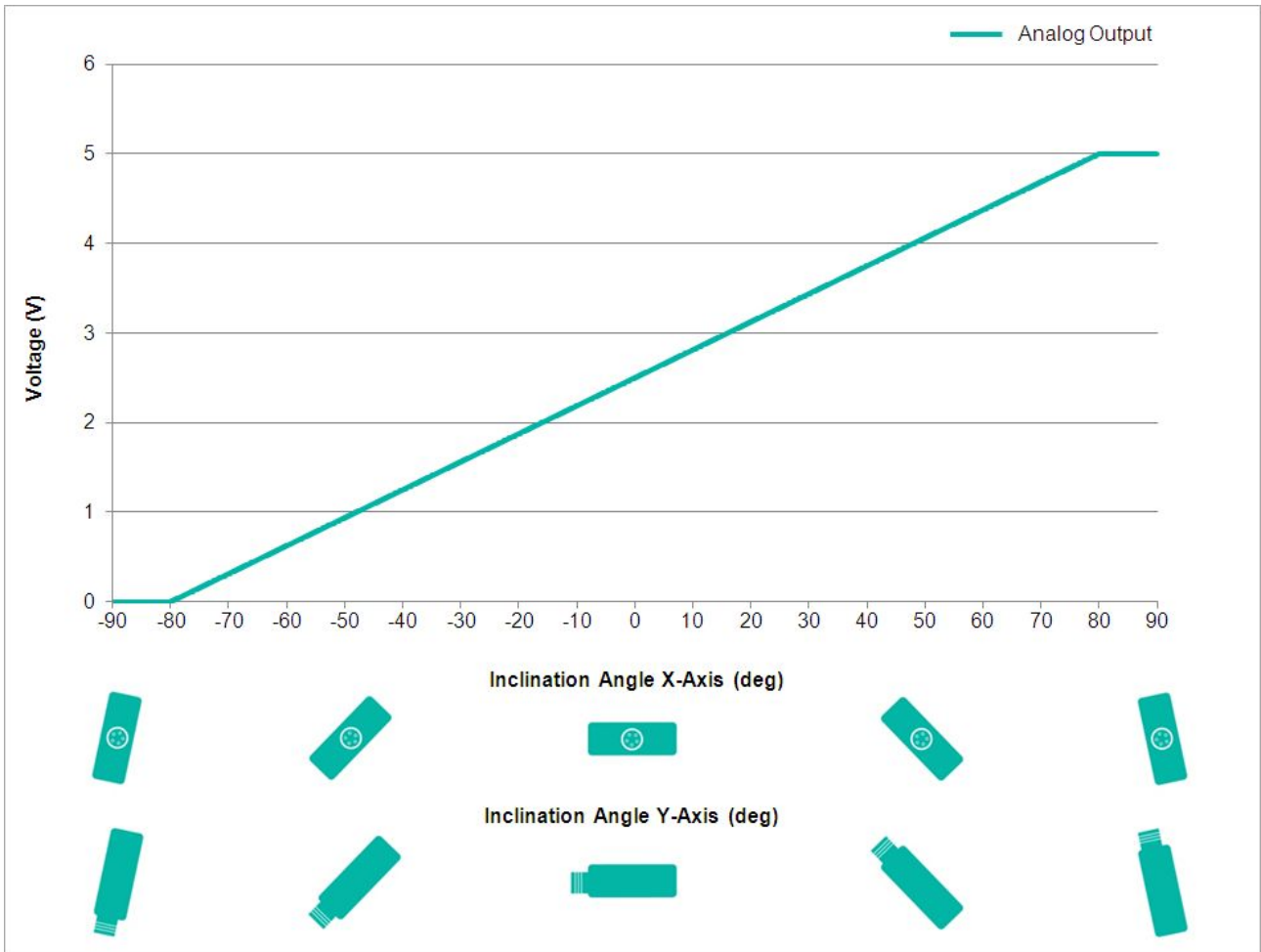
|              |                   |
|--------------|-------------------|
| MTTF         | 400 years @ 40 °C |
| Certificates | CE                |

### 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  | 0.34 mm <sup>2</sup> / AWG 22          |
| Material / Type     | PUR / PU                               |
| Cable Diameter      | 7.5 mm (0.30 in)                       |
| Minimum Bend Radius | 56 mm (2.2") fixed, 75 mm (3") flexing |

### Product Life Cycle

|                    |             |
|--------------------|-------------|
| Product Life Cycle | Established |
|--------------------|-------------|

### Connection Plan

|              |             |
|--------------|-------------|
| SIGNAL       | CABLE COLOR |
| Power Supply | Red         |

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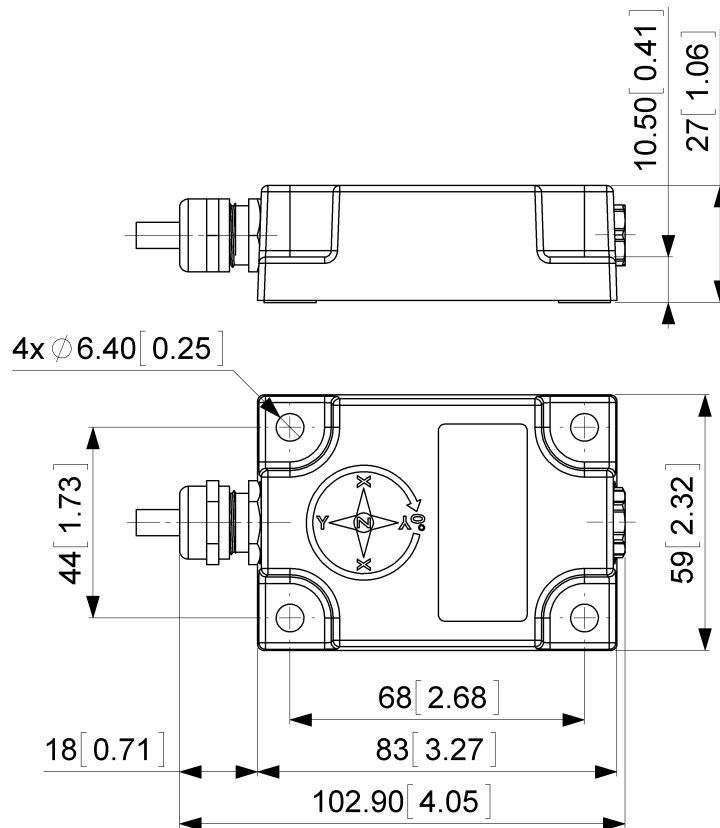
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|                        |        |
|------------------------|--------|
| GND                    | Yellow |
| X-Axis, Voltage Output | Green  |
| Y-Axis, Voltage Output | Blue   |
| RxD                    | Gray   |
| TxD                    | Pink   |
| 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.