



## TILTIX Inclinometer

ACS-020-2-SV10-HE2-PM

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### General Specifications

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

### Electrical Specifications

|                             |                   |
|-----------------------------|-------------------|
| Supply Voltage              | 10 - 30 VDC       |
| Power Consumption (no load) | $\leq 0.7$ 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               |
| MTTF                        | 400 years @ 40 °C |

### Environmental Specifications

|                       |  |
|-----------------------|--|
| Operating Temperature | -40 °C (-40 °F) - +85 °C (+185 °F)           |
| Storage Temperature   | -40 °C (-40 °F) - +85 °C (+185 °F)           |
| Temperature Gradient  | 0.004°/ K                                    |
| Protection Class      | IP66/IP67                                    |
| Shock Resistance      | $\leq 100$ 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           | 100 g (0.22 lb)                                   |

### 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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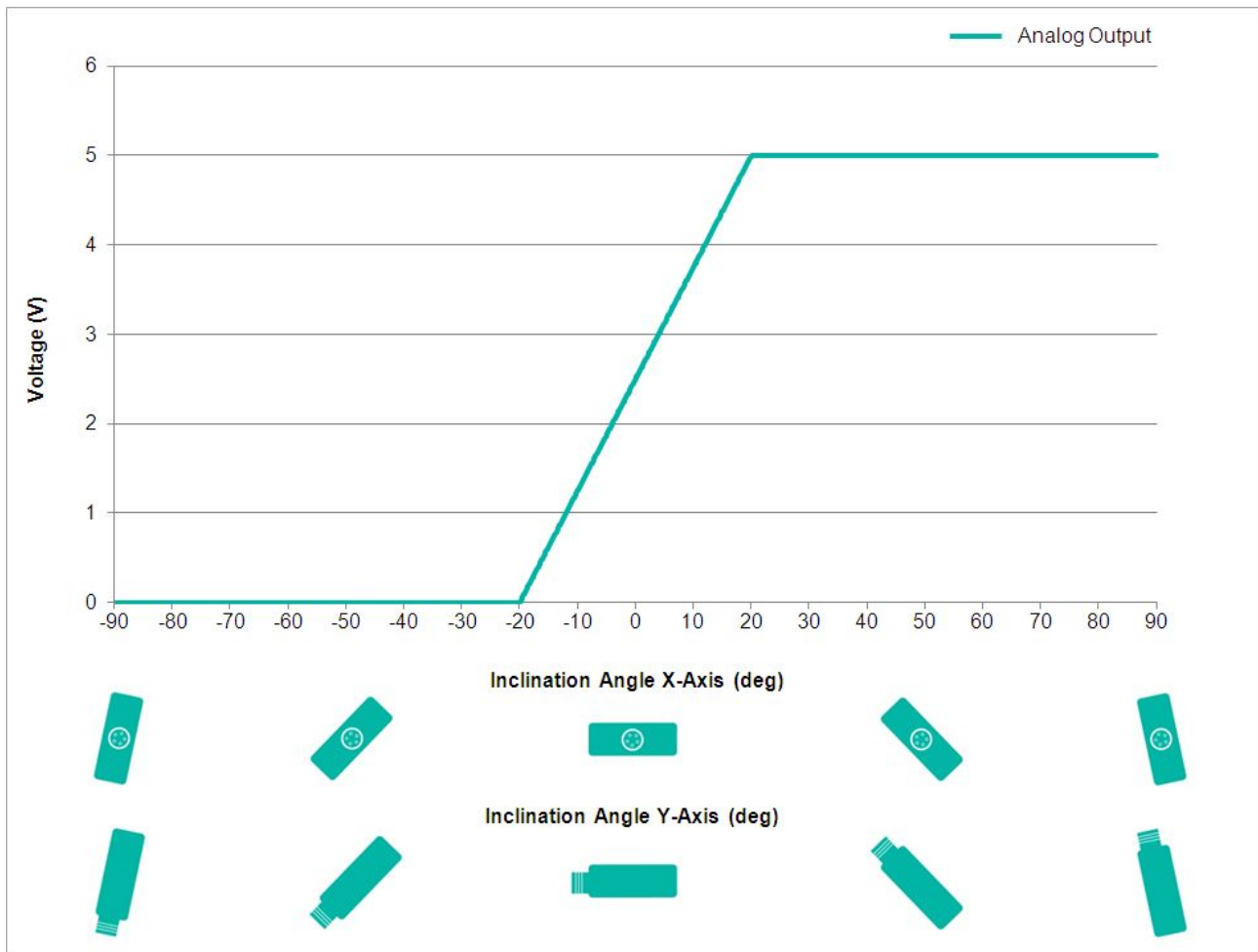
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### Electrical Connection

|                 |                           |
|-----------------|---------------------------|
| Connection Type | Connector M12             |
| Connector       | M12, Male, 8 pin, a coded |

### Product Life Cycle

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

### Certification

|          |            |
|----------|------------|
| Approval | CE + cULus |
|----------|------------|

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### Connection Plan

| SIGNAL                 | PIN NUMBER |
|------------------------|------------|
| Power Supply           | 1          |
| GND                    | 4          |
| X-Axis, Voltage Output | 5          |
| Y-Axis, Voltage Output | 7          |
| Set1                   | 6          |
| Set2                   | 8          |
| RxD                    | 2          |
| TxD                    | 3          |

### Dimensional Drawing

#### [2D Drawing](#)

#### Accessories

Connectors & Cables

10m PUR Cable, 8pin, A-Coded, f

POS M12 8pin-A Female+5m PUR Cable

POS M12 8pin-A Female+2m PUR Cable

POS M12 8pin-A Female+10m PUR Cable

M12, 8pin A-Coded, Female

More

Displays

AP22-D0 Analog Display (4 dig. o/p)

DiMod-A Analog Display

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**Got questions? Need an individual solution? We are here to help!**

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**SERVO2GO.com**

**877-378-0240**

[sales@servo2go.com](mailto:sales@servo2go.com)

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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.

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