



## TILTIX Inclinometer

ACS-020-2-SV00-HE2-CW

POSITAL  
FRABA



### 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) | $\leq 0.7$ 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      | $\leq 100$ g (half sine 6 ms, EN 60068-2-27)                      |
| Vibration Resistance  | 1.5 mm (10 Hz - 58 Hz) & $\leq 20$ g (58 Hz to 2000 Hz)           |

Data Sheet

Printed at 27-09-2017 12:09

# POSITAL

## FRABA



### 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 0.5-4.5 V + RS232                                 |
| Teach In                  | Zero Positioning, Inverse Direction, Elevation Range Programming |
| Settling Time             | 125 ms   |
| Output Type               | Voltage 0.5 - 4.5 V  |
| Min Load Resistance       | 5 kΩ   |
| Transmission Rate         | RS232: min. 1200 Baud; max. 115200 Baud                          |
| Default Transmission Rate | RS232: 9600 Baud   |
| Linearity                 | ± 0.02%  |

# POSITAL

## FRABA



### 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         |

Data Sheet

Printed at 27-09-2017 12:09

# POSITAL

## FRABA



|                        |        |
|------------------------|--------|
| 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**

Data Sheet  
Printed at 27-09-2017 12:09

# POSITAL

---

## FRABA



POSITAL  
Contact Us

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.