



## TILTIX Inclinometer

ACS-020-2-SC00-HK2-PM

POSITAL  
FRABA



### 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 (See also Interface: Max Load Resistance)
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	350 years @ 40 °C

### Environmental Specifications

Operating Temperature	- +85 °C (+185 °F)
Storage Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Temperature Gradient	0.004°/ K
Protection Class	IP68/IP69K
Shock Resistance	$\leq 100$ g (half sine 6 ms, EN 60068-2-27)

Data Sheet

Printed at 8-06-2021 18:06

# POSITAL

## FRABA



Vibration Resistance	1.5 mm (10 Hz - 58 Hz) & $\leq$ 20 g (58 Hz to 2000 Hz)
----------------------	---

### Mechanical Specifications

Housing Material	Die-Cast Aluminum Alloy
Potting Material	PUR (Polyurethane)
Weight	220 g (0.49 lb)

### 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 $\Omega$ @ 10 V DC (500 $\Omega$ @ 15 V DC)
Transmission Rate	RS232: min. 1200 Baud; max. 115200 Baud
Default Transmission Rate	RS232: 9600 Baud
Linearity	$\pm$ 0.02%

Sold & Serviced By:



*Canadian and International Sales*

**ELECTROMATE**

877-737-8698

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

[www.electromate.com](http://www.electromate.com)

*U.S. Sales*

**SERVO2GO.com**

877-378-0240

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

[www.servo2go.com](http://www.servo2go.com)

Data Sheet

Printed at 8-06-2021 18:06

# POSITAL

## FRABA



### Electrical Connection

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

### Product Life Cycle

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

### Certification

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

# POSITAL

## FRABA



### Connection Plan

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

### Dimensional Drawing

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

#### Accessories

##### Connectors & Cables

- 2m PUR Cable, 8pin, A-Coded, f
- 5m PUR Cable, 8pin, A-Coded, f
- 10m PUR Cable, 8pin, A-Coded, f
- 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

Data Sheet

Printed at 8-06-2021 18:06

# POSITAL

---

## FRABA



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

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

**Sold & Serviced By:**



*Canadian and International Sales*

**ELECTROMATE**

**877-737-8698**

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

[www.electromate.com](http://www.electromate.com)

*U.S. Sales*

**SERVO2GO.com**

**877-378-0240**

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

[www.servo2go.com](http://www.servo2go.com)

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.

Data Sheet

Printed at 8-06-2021 18:06