



# POSITAL

## FRABA

### TILTIX Inclinometer

ACS-080-2-C902-HK2-PN

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#### General Specifications

Application	2-Axes Position Monitoring and Leveling
Measurement Range	$\pm 80^\circ$
Absolute Accuracy	$0.10^\circ$ (within $\pm 60^\circ$ range)
Resolution	$0.01^\circ$

#### Electrical Specifications

Supply Voltage	10 - 30 VDC
Current Consumption	$\leq 65$ mA @ 10 V DC, $\leq 60$ mA @ 24 V DC
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	$-40^\circ\text{C}$ ( $-40^\circ\text{F}$ ) - $+85^\circ\text{C}$ ( $+185^\circ\text{F}$ )
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	$\leq 100$ 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)

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### Mechanical Specifications

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

### Certificates / Lifetime

MTTF	350 years @ 40 °C
Certificates	CE

### Interface

Interface	J1939
Settling Time	150 ms
Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Coupl
Transmission Rate	125 KBaud, 250 KBaud, 500 KBaud
Default Transmission Rate	250 kBaud
Default Node ID	C0h
Default PGN	PGN 65283 (Pitch, Roll)

### Electrical Connection

Connection Type	Connector 2 x M12
Connector 1	M12, Male, 5 pin, a coded
Connector 2	M12, Female, 5 pin, a coded

### Product Life Cycle

Product Life Cycle	New
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### Certification

Approval	CE + cULus
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### Connection Plan

SIGNAL	CONNECTOR	PIN NUMBER
Power Supply	Connector 1	2
GND	Connector 1	3
CAN High	Connector 1	4
CAN Low	Connector 1	5
CAN GND	Connector 1	1
Power Supply	Connector 2	2
GND	Connector 2	3
CAN High	Connector 2	4
CAN Low	Connector 2	5

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CAN GND

Connector 2

1

### Dimensional Drawing

[2D Drawing](#)

#### Accessories

Connectors & Cables

M12, 5pin A-Coded, Male

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

5m PUR Cable, 5pin, A-Coded, f

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

5m PUR Cable, 5pin, A-Coded, f

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

Angled M12, 5pin A-Coded, Female

2m PUR Cable, 5pin, A-Coded, m

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

5m PUR Cable, 5pin, A-Coded, m

10m PUR Cable, 5pin, A-Coded, m

M12, 5pin A-Coded, Female

More

#### Contact



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.

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