TILTIX Inclinometer

AKS-180-F-C901-VK2-PW



POSITAL

General Specifications

Application	Dynamic Inclinometer 2-Axes with Pitch and Rol	
Measurement Range	Pitch ± 85°, Roll ± 180°	
Absolute Accuracy	±0.30°	
Resolution	0.01°	
Repeatability	≤0.05°	
Dynamic Accuracy	±0.50°	
Cycle Time Base Sensor	5 ms	
Hysteresis	≤0.05°	
Device Orientation	Vertical	

Sold & Serviced By:

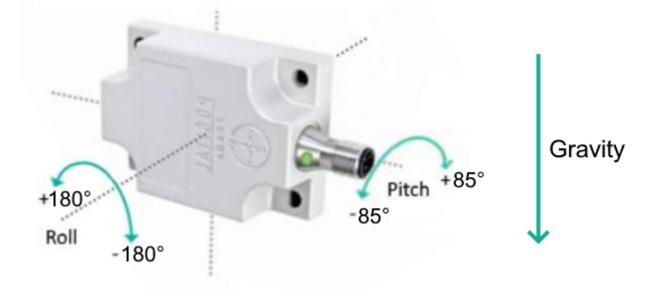




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Electrical Specifications

Supply Voltage	9 – 30 VDC
Current Consumption	≤ 65 mA @ 10 V DC, ≤ 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
MTTF	260 years @ 40 °C

Environmental Specifications

Operating Temperature	-40 °C (-40 °F) - +75 °C (+167 °F)
Storage Temperature	-40 °C (-40 °F) – +85 °C (+185 °F)
Temperature Gradient	0.008°/ K
Protection Class	IP68/IP69K
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)
Vibration Resistance	1.5 mm (10 Hz – 58 Hz) & ≤ 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)

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Interface

Interface	J1939
Settling Time	50 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 65280 (Pitch, Roll, Acceleration x, Acceleration y) + PGN 65281 (Acceleration z, Gyro x, Gyro y, Gyro z)

Electrical Connection

Connection Type	Connector 2 x M12 (m+f)
Connector 1	M12, Male, 5 pin, a coded
Connector 2	M12, Female, 5 pin, a coded

Product Life Cycle

Certification

Approval CE	: + E1
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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	
CAN GND	Connector 2	1	

Dimensional Drawing

2D Drawing

Accessories

Connectors & Cables

M12, 5pin A-Coded, Male 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 POS M12 5pin-A Female+5m PUR Cable 10m PUR Cable, 5pin, A-Coded, m POS M12 5pin-A Female+2m PUR Cable POS M12 5pin-A Female+10m PUR Cable M12, 5pin A-Coded, Female More

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





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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.