Datasheet inclinometro elettrolitico biassiale

±25° UART/TTL Dual-Axis Inclinometer - Part Number: F225-00T-003-01

Operating Specifications	
Digital Interface	UART/TTL
Analog Output	None
Supply Voltage	5.0 V DC ±0.25 V DC
Supply Current	<10 mA @ 5 V DC
Operating Range	±25°
Linear Range	±10°
Axes of Measurement	2
Linearity (% of ±10°)	≤1.0%
Repeatability	±0.005°
Resolution	≤0.001°
Null Offset	±2°
Cross-Axis Sensitivity	≤0.03% per degree
Long Term Stability/Drift	≤0.005°
Null Temperature Offset	0.0002° per °C
Scale Temperature Offset	0.075% per °C
Operating Temperature	-40° to 85 °C
Storage Temperature	-40° to 100 °C
Time Constant (63.2% of final output)	≤1 second

Physical Characteristics	
Housing	None
Electrical Connections	8-pin Molex 1054291308
Mating Connector	8-Pin Molex 1053081208
Weight	20 grams
Length	45 mm (1.78”)
Width	45 mm (1.78”)
Height	17 mm (0.65”)

Description

The F225-00T-003-01 UART/TTL inclinometer utilizes Fredericks 0703-1603-99 mid-range single axis electrolytic tilt sensors and the 1-6200-013 16-bit UART/TTL signal conditioner. The use of high accuracy single axis sensors and 16-bit ADCs make this inclinometer ideal for high precision tilt measurement. This inclinometer has superior tolerances and unit to unit performance with an economic design, making it an excellent solution for many markets and applications.

Key Features and Benefits

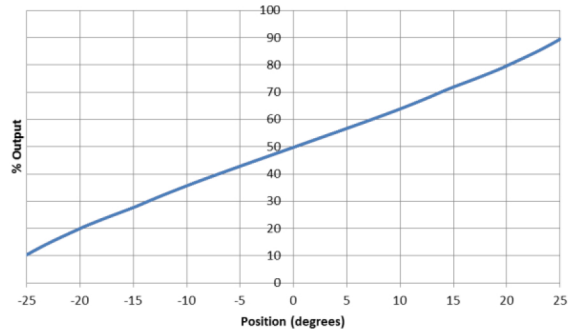
- ±0.005° repeatability, ≤0.001° resolution, very high accuracy
- ≤0.005° long term drift with an extremely long life
- Minimal drift compared to MEMS devices
- -40 °C to 85 °C operating temperature for industrial applications
- Live text and video chat technical support

Applications

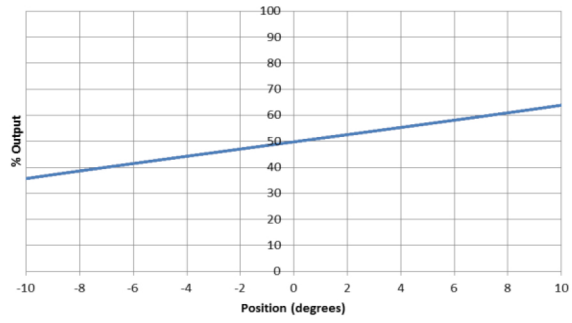
- Geotechnical and structural monitoring
- Construction tools, laser leveling
- Construction machinery and equipment
- Medical devices

Operating and Linear Range Output Behavior

Operating Range



Linear Range



WELOG srls
Sede operativa: via Tomasini 13bis 35127 Padova
Sede Legale: via Risorgimento 69 98123 Messina
www.welog.cloud – info@welog.cloud