

T935 Series

DC-Operated, Gravity-Referenced
Inclinometer



Features

- $\pm 1^\circ$ to $\pm 90^\circ$ ranges
- IP65 Rated, Extremely rugged, withstands 1500g shock
- Stainless steel construction
- Stackable for X and Y measurements
- Industry exclusive 2 year warranty

Applications

Bore Hole Mapping

Structural Health Monitoring

Continuous Casting Mold Alignment

Platform Levelling

Railway Maintenance Equipment

Mobile & Stationary Antenna Alignment

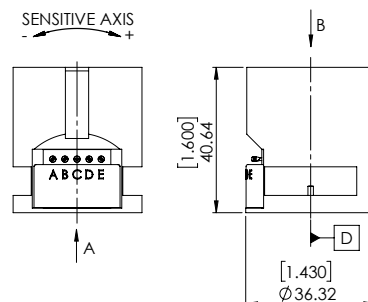
Benefits

- Small Size
- Shock Survival 1500g, 0.5ms
- Solder Pins Termination for safe cable connection
- Robust housing for Industrial Use

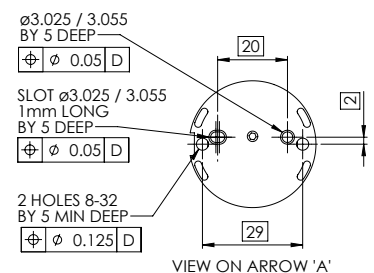
Electrical Connections

Pin A	+12V to +18V dc
Pin B	0V
Pin C	-12V to -18V dc
Pin D	Output
Pin E	Self Test

SIDEVIEW



PLAN VIEW



Specifications

Specifications by Range @20°C		±1°	±3°	±14.5°	±30°	±90°
Output Standardisation	% FRO			±1		
Output Impedance	Ω (max)			10		
Output Noise (DC to 10kHz)	V _{rms} (max)			0.002		
Non-linearity (see note 2)	% FRO	0.08	0.05	0.02	0.02	0.05
Non-repeatability	% FRO	0.02	0.01	0.002	0.001	0.0005
Resolution	arc seconds	0.1	0.2	1.0	2.0	4.0
-3 dB Frequency	Hz	10	15	30	40	55
Sensitive Axis-to-Case Misalignment	deg (max)	±0.15	±0.15	±0.25	±0.50	±1.0
Cross-axis Sensitivity (see note 3)	% FRO(max)			0.2		
Zero Offset	Volts dc	±0.08	±0.04	±0.04	±0.02	±0.02
Thermal Zero Shift	% FRO/°C	±0.05	±0.03	±0.01	±0.005	±0.003
Thermal Sensitivity	% Reading/°C	±0.05	±0.03	±0.01	±0.006	±0.006

Electrical

Full Range Output (FRO)(see note 1)	Volts dc	±5
Excitation Voltage	Volts dc	±12 to ±18
Current Consumption	mA (nom)	±15

Environmental Characteristics

Operating Temperature Range	°C	-18 to +60
Constant Acceleration Overload	g	50
Shock Survival		1500g, 0.5 ms, ½ sine
Vibration Endurance		35g RMS, 20 Hz to 2000 Hz sinusoidal
Environmental Sealing		IP65

Notes

1. Full Range Output is defined as the full angular excursion from positive to negative, i.e. ±90° = 180°.
2. Non-linearity is determined by the method of least squares.
3. Cross axis sensitivity is the output of the unit when tilted to full range angle in cross axis.
4. Zero offset is specified under static conditions with no vibration inputs.

Model Designation & Ordering Code

T935 -

- 1 (±1°)
- 3 (±3°)
- 14.5 (±14.5°)
- 30 (±30°)
- 90 (±90°)