

Submersible Tilt Meter

Description

NOTE: This is a legacy and discontinued product not available for order.

The RST Submersible Tiltmeter provides precision real-time remote monitoring of tilt of submerged structures. It consists of a MEMS inclinometer sensor and electronics mounted inside a rugged waterproof enclosure. The instrument housing is machined from solid stainless steel, providing extreme endurance for long-term high-pressure underwater service. The cable entry is a submarine grade connector, which provides watertight performance at depths exceeding 200 meters.

SUBMERSIBLE TILT METER SPECIFICATIONS

ITEM	SPECIFICATION
Range	$\pm 30^\circ$
Resolution	$(\pm 0.0002^\circ)$ (0.04 mm/m) ¹
Sensor Precision	$\pm 0.0013^\circ$ (0.02 mm/m) ¹
Sensor Precision	$\pm 0.0005^\circ$ (0.01 mm/m) ²
Sensor 24hr Stability	± 0.03 mm/m ¹
Sensor 24hr Stability	± 0.01 mm/m ²
Sensor	MEMS Accelerometer
Temperature Dependent Uncertainty	± 0.016 mm/m/ $^\circ\text{C}$ ($\pm 0.001^\circ/\text{C}$), for $\pm 5^\circ$ from vertical
Temperature Dependent Uncertainty	± 0.033 mm/m/ $^\circ\text{C}$ ($\pm 0.002^\circ/\text{C}$), for $\pm 15^\circ$ from vertical
Temperature Accuracy	± 0.5 $^\circ\text{C}$ (0 $^\circ\text{C}$ to 60 $^\circ\text{C}$)
Temperature Accuracy	± 1.0 $^\circ\text{C}$ (-40 $^\circ\text{C}$ to 60 $^\circ\text{C}$)
Temperature Resolution	0.06 $^\circ\text{C}$
Operating Temperature	-40 to 80 $^\circ\text{C}$ (-40 to 175 $^\circ\text{F}$)
Dimensions	$\varnothing 28.6\text{mm} \times 211\text{mm}$ ($\varnothing 1.125'' \times 8.31''$)

¹: 99% Confidence Interval ²: 68% Confidence Interval

SPECIFICATIONS