Dynamic Tension Measurement

Sensor Ranges: From 1 to 6,000 grams (wrap angle dependent)
Operating Temperature: -40° F to 180° F
Excitation Voltage Recommended: Regulated 5 - 10 VDC
Bridge Resistance: 350 ohm nominal
Output Signal: 1 mV/V full scale nominal
Resistance to Ground: Exceeding 500 Megohms
Drift at Midpoint: 0.2%
Noise Level: Less than 0.2%
Linearity: 0.25% to 0.5% or better is typical
Repeatability: 0.25% - 0.5% typ.
Accuracy (Total Error): 0.25 - 0.5% anywhere in range is typ., not to exceed 1% anywhere in the full-scale tension range.
Shielded Cable: P.T.F.E. insulated, with braided shield. 10 ft. standard.
Other lengths available. In-line connectors also available.
Transducer Materials: Aluminum is the standard
Overload Protection: 100% minimum. Sensor housing also provides additional mechanical overload protection.

VERSATILE TENSION SENSORS
FT-Series, Single & 3-Roller Options
Can Be Cantilever, Base or Face Mounted

Specifications:

Multi-Purpose Model FT-Series
These versatile tension sensors can be ordered as single and three rollers instruments. A variety of standard rollers and non-rotating contact elements make them adaptable to many applications as both a simple tension readout or for closed loop control. Some of their uses include filaments, fiber, yarn, wire, tapes, tubing and tow. Higher temperature options and vacuum compatible options also available. For 3-roller use, three standard faceplate widths of 3”, 4” and 5” are offered. No faceplate is required when ordered as a single roller sensor. See drawings for dimensions.