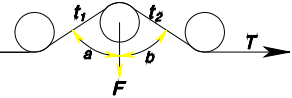


# WEB Tension Measurement



PLATFORM BASE SENSORS

## Model WPM-S-Series

These durable precision sensors are designed to operate with tension forces being pushed toward the mounting base, however, for lower tension ranges the tension forces can be applied to pull away from the base. Each roller end is captured by a sensor and the tension proportionate output from these sensors provides the average tension readings across the web no matter where the web is positioned on the web roller. These models can also be ordered with a functionally independent load cell at each end of the roller for measuring variations in the tension from one web edge to the other. When retrofitting existing machinery, sensors are frequently installed in place of existing rollers. Sensor installation in any orientation is possible when your web angles to either side of the sensing roller are approximately equal and the direction of force aligned perpendicular to the mounting base. For different sensor mounting options, ask about other web sensor options. If you require web rollers longer than 12-inches please ask about our WPED-Series.

## WPM-S-Series Single Roller Models

Webs - Tapes - Bands - Straps - Films - Sheets

### Specifications:

**Sensor Ranges:** From 0 - 2,000 grams to 500 LB (Sensor Dimensions Vary)

**Operating Temperature:** -40°F to 180°F

**Excitation Voltage Recommended:** Regulated 5 - 10 VDC

**Bridge Resistance:** 1,000 ohm nominal each sensor & 500 ohm as sensor pair

**Output Signal:** 1 mV/V full scale nominal

**Resistance to Ground:** Exceeding 500 Megohms

**Noise Level:** Less than 0.2%

**Linearity:** Typically 0.5% or better

**Total Error (Accuracy):** Typically 0.25% - 0.50% anywhere in the sensor range,  
Not to exceed 1% error of the reading anywhere in the FS range.

**Repeatability:** 0.25% - 0.5% typ.

**Transducer Materials:** Typically Aluminum

**Cable:** 10 ft. standard shielded cables provided. Other lengths available.

In-line connectors also available.

**Rollers:** Hard anodized aluminum web rollers offered in lengths from 2" - 12" with typical diameters of 1.50". Larger diameter rollers are also options.

**Overload Protection:** 100% Minimum. Sensor incorporates mechanical overload stops for excellent overload protection.

For Additional Information or to Place an Order Call (303) 465-1011