

Digital Hand-Held Tension Meter | RTMB / RTMX



RTMB / RTMX Dual Flange Rollers up to 30mm Width

BTMB / BTMX Single Flange Rollers up to 30mm Width

The RTMB tension meter is designed to measure tension of carbon fiber, tape and other narrow web materials. Cylindrical rollers are offered in 7, 10, 15, 20 and 30 mm lengths to measure tapes, bands, films and similar materials. Roller length should not exceed 2x the width of the material being measured.

RTMX / BTMX Additional Features

- Built-in datalogging with RS232 and 0-1 VDC Analog output
- Memory capacity of 100 values plus min, max, peak, avg and standard deviation
- Optional TensionView software available for batch download or continuous real-time trending

Features

- Roller shifting mechanism ensures easy acquisition of the running material
- Cylindrical rollers pointing toward the operator
- Dual-flanged outer guide rollers (single-flanged rollers optional, recommended if the material being measured is wider than the tape roller)
- Carbon Fiber Optimized Rollers Optionally Available, Code CF, Inquire for details

Specifications

Accuracy

From 10% up to 90% of tension range: $\pm 0.5\%$ full scale and ± 1 digit remaining tension range and other calibration material: $\pm 3\%$ full scale and ± 1 digit

Overrange

Approx. 15% full scale, without accuracy guarantee

Overload protection	100% of tension range
Measuring principle	Strain gauge bridge
Measuring roller deflection	0.2 mm max.
Converter	12 bit A/D
Temperature Coefficient	Gain: less than ± 0.01 % full scale/ $^{\circ}\text{C}$ Zero point: less than ± 0.3 % full scale/ $^{\circ}\text{C}$
Display	LCD 4 digit, 12 mm high
Display update rate	Adjustable 0.5, 1, 2 or 4 s (averaging)
Field adjustment	± 7 steps in 1.5 % increment
Memory	MIN, MAX, PEAK and last value
Temperature range	10 -45 $^{\circ}\text{C}$
Air humidity	85 % relative humidity, max.
Housing Dimensions	235 x 76 x 45mm (LxWxH)