

DTSL/DTXL

Heavy Duty Hand-Held Digital Tension Meters

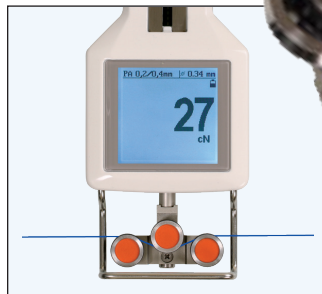
Features

- Large 30mm diameter V-grooved rollers fabricated from Hardened Steel for materials up to 5mm diameter
- Optional U-Grooved Rollers (Code "R1"), Flat Cylindrical Rollers 6mm width between flanges (Code "B6") or 10mm width between flanges (Code "B10")
- Large diameter rollers minimize material deflection
- 3 different display modes: Numeric, Numeric with bar graph, Numeric with trend graph (tension vs. time)
- Automatic Zero-Setting in all measuring positions
- Material memory locations for custom calibrations: 4 (DTSL), 9 (DTXL)
- User-set Min and Max alarms with indication if reading is out of limits
- User-selectable measurement units: cN, daN, g, kg, N, lb
- Hi-speed data sampling & recording of Min, Max, Hi-Peak, Lo-Peak, Average & Standard Deviation
- Setup parameters can be password protected
- Rugged aluminium housing with rubberized handle
- CE certified with 1-Year Warranty
- NIST-Traceable Calibration Certification is optionally available

4 tension ranges available from 155.0 - 2500 g up to 2 - 40 Kg (44 Lbs)

DTSL and DTXL heavy-duty tension meters are ideal for use on cables, ropes, wires, buffer tubes, optic fiber tows etc., as well as flat materials, up to 10mm in width.

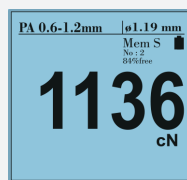
Large, hardened guide rollers for minimized material deflection with 29.5mm groove
DTXL (datalogging) models include: memory storage for 60,000 data points and USB output with sample rates up to 1kHz. Tension Inspect Software which displays real-time readings on a pc or allows downloading of stored data is included. WiFi for wireless communication is available as an option.



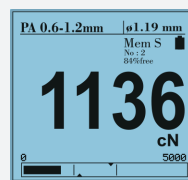
Depending on the measuring position the LCD display automatically rotates in 90° steps and locks in position.



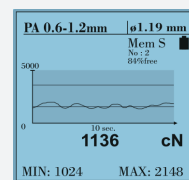
Large backlit Display with 3 user-selected display modes



Numeric



Numeric, Bar Graph with set point markers



Numeric and Trend Graph

Specifications

Accuracy	- Factory Cal Mat¹ ±1% FS ±1-digit, from 5% to 100% Full scale - Other Materials ±3% FS ±1-digit	Damping	User-adjustable electronic damping (averaging)
Calibration Memory	- DTSL 1 for factory calibration plus 4 for customized calibrations - DTXL 1 for factory calibration plus 10 for customized calibrations	Cal. adjustment	±10 steps in 1% increments
Measuring units	<i>Tension:</i> cN, daN, g, kg, N, lb <i>Thickness:</i> mm, inch	Auto power off	Approx. 3 minutes of non-use
Overrange	Approx. 10% FS*, without accuracy guarantee	Temperature coefficient	Gain: less than ±0.01% FS* /°C Zero point less than ±0.3% FS* /°C
Overload protection	200% Full Scale	Temperature range	50 to 113°F (10 – 45 °C)
Measuring principle	Strain gauge bridge	Air humidity	85% RH, max.
Measuring frequency	Max.1 kHz (1000 samples/sec.)	Built-in battery	Lithium Polymer
Measuring roller	0.2mm, maximum	- Battery Life	20 hours continuous use (approx.)
Sampling rate	200 Hz: AVG, MIN and MAX	- Recharging Time	3½ hours (approx.)
Display update rate	Approx. 2 times per second	- Battery Charger	100-240V AC, swappable plug adapters
LCD Display	Color-TFT 128 x 160	- Plug Adapter	USA, Euro and UK
Display modes (3)	Large Numeric, Numeric with bar graph, Numeric with trend graph (time vs. tension)	Housing material	Die-cast aluminium
Memory	Min, Max, Hi-Peak, Lo-Peak, Average & Standard Deviation (per measuring interval)	Housing dimensions	10.45" x 3.09" x 1.81" (265 x 78.5 x 46mm)
		Weight, net / gross	Up to DTSL-50K approx. 1.93 lbs / 3.42 lbs (940g / 1620g)
		Additional specifications model DTXL	
		Output signal	USB
		Memory	60,000 values at 255 measuring periods
		Memory modes	5 memory modes with statistical evaluation

*Full scale



Tension Ranges

Model	Tension Range	Resolution	Measuring Head Width*
DTSL-2500 / DTXL-2500	150 - 2500 g	1 g	185mm
DTSL-5500 / DTXL-5000	250 - 5000 g	1 g	185mm
DTSL-10K / DTXL-10K	1 - 10 Kg	0.01 Kg	235mm
DTSL-20K / DTXL-20K	2 - 20 Kg	0.01 Kg	235mm

* Width of bracket assembly.

Roller Guides

Roller Width	Line Speeds *max...m/min	Roller Material*
Standard	4000	Hard-coated aluminum
Code R1	4000	Hard-coated aluminum
Code B6	2000	Hard-coated aluminum
Code B10	2000	Hard-coated aluminum

Complete Kit

DTSL models include tension meter in a foam-fitted carrying case, built-in rechargeable battery, AC-adapter/Charger (with US and Euro plug adapters) and operating instruction manual.

DTXL models also include USB cable and Tension Inspect software.