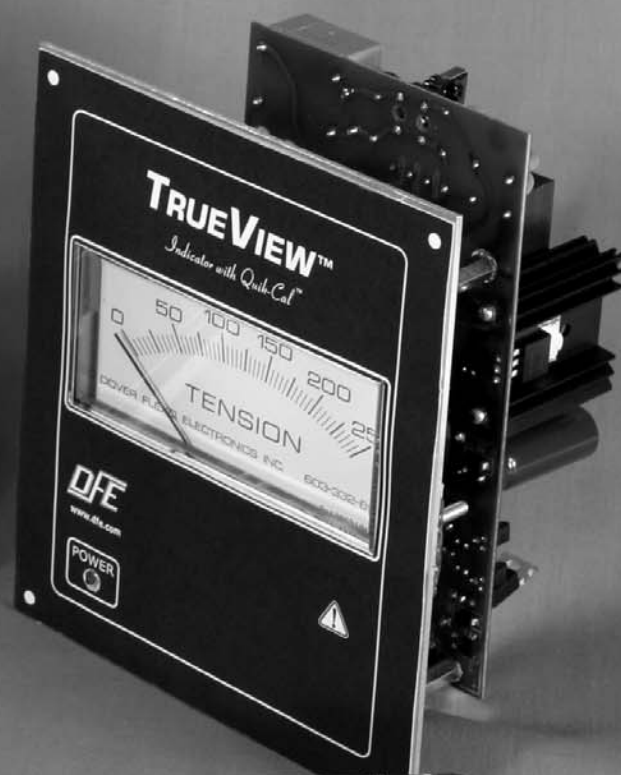


TRUEVIEW™
TENSION INDICATOR
Models TI23 and TI24
with Quik-Cal™



5 YEAR WARRANTY

TRUEVIEW™ TENSION INDICATOR

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The TrueView™ Tension Indicator with Quik-Cal™ push-button zero and calibration is a general purpose device for the measurement and display of process web tension.

In addition to amplifying the signal output from tension transducers installed in the web path and displaying actual tension on its analog (or optional digital) meter, the TrueView powers the tension transducer (or transducer pair) and provides an isolated 0-to-10Vdc (or optional isolated 4-to-20 mA) signal proportional to tension for a drive, controller or PLC. A status LED lights when power is applied.

For mounting on a web machine or press frame, the TrueView is available in a compact, steel, full enclosure (E) or in an open Panel Mount (P) version for mounting into a cutout on an OEM operator panel or cabinet.

External connections are by means of a closed terminal strip header for power and signal outputs. Transducers connect to the terminal strip in the panel version, or to circular connectors on the enclosure.

Integrated electrical isolation, package options, ease-of-installation, ease-of-use, and low cost make the TrueView indicator a value for web tension monitoring or control applications.

There are two power input choices available. The TrueView TI23 operates on 115Vac 60Hz (230Vac 50Hz optional) and the TI24 operates on 24Vdc, power supplied separately.

FEATURES

- 115/230 Vac 50/60 Hz power input (TI23)
- 24 Vdc (TI24)
- 0 to 10 Vdc isolated output proportional to tension. Integrated isolation from chassis and transducer ground.
- 0-to-1mA signal output for the front panel tension meter
- Quik-Cal™ push-button zero and calibration eliminates potentiometer adjustments to make calibrating simple and fast.
- Auto Zero on power up (jumper selectable)
- Meter damping adjustment. Minimizes meter fluctuation (Used with tension meter). Does not affect 0-10V or 4-20mA output
- 50:1 calibration range, minimum.
- Robust design with high-precision components for noise and surge protection in the most demanding industrial environments.
- 10% Calibration Weight Ratio. A 15 lb. calibration weight allows full meter-scale output at 150 lbs. tension.

BENEFITS

- TrueView improves machine operation and productivity by making it easier to run proper tension, gain a higher level of process control and reductions of waste, web breaks, and other web problems.
- TrueView is a low-cost tension indicator for a transducer-based tension measurement or control system with unparalleled output stability. Drift-free performance even over wide temperature swings makes the TrueView the most stable tension monitoring device available.
- Safe and reliable performance. Integrated Isolation and Circuit stabilization—including built-in noise and surge protection, short-circuit protection, and active current-limiting on the transducer excitation signal.

OPTIONS

- **25% Calibration Weight (25CW).** Used when 25% of full scale calibration weight is desired instead of the standard 10% calibration weight. Jumper selectable.
- **230 Volt Input (230).** 230Volt 50/60 Hz Ac power input. TI23 only.
- **4 to 20mA Output (I420).** 4 to 20 mA output instead of 0-10V output on output terminals. Isolated from chassis and transducer ground.
- **Auto Zero (AZ).** Unit will auto zero the output on each power up. Jumper selected on or off.
- **Dual Calibration (DC).** Front panel rocker switch allows setting changes between two transducer calibration ranges. Meter scales for both calibration ranges must be selected when ordering.
- **Digital Meter (DM).** 4-digit red LED display installed in place of standard analog front panel meter.
- **Extended Range (XRE).** Extends the tension sensing range of XR equipped transducers to effectively increase the transducer sensitivity for very low web tensions. Transducers must have the XR option.
- **Nonstandard Meter Scale.** Any other meter scale than the standard ones offered.
- **Tension Limit Switch (TLS).** An open collector output (max. current of 250mA) actuates at pre-set adjustable tension trip points. Can be used as a web break detector.

SPECIFICATIONS

Power Input:

TI23:

Voltage: 115/230 Vac $\pm 10\%$, 50/60 Hz. Single phase AC operation only.

Current: $115V/60Hz = 0.047A$

$230VAC/50Hz = 0.053A$ $230VAC/60Hz = 0.025A$.

TI24: Voltage: 24 Vdc $\pm 10\%$. Current: 0.10 Amp DC

Tension Outputs:

- 0 to +10Vdc OR 4 to 20mA (jumper selectable), both isolated from input power and transducer circuit.
 - » 0 to +10Vdc capable of over-range, -15% to 120% of full scale (-1.5Vdc to 12Vdc), to indicate over-range or error conditions.
 - » 0 to +10Vdc max loading is 5mA. This requires a 2000 Ohm or greater input resistance for equipment connected to this output.
 - » 4-20mA capable of over-range, -15% to 120% of full scale (1.6mA to 23mA), to indicate over-range or error conditions.
 - » 4-20mA max loop resistance is 500 Ohms.
- Damped analog or digital meter readout.

Transducer Voltage Supply:

5 Vdc regulated (10Vdc for XRE), jumper selectable

Transducer Input Signal:

500 mVdc at rated load (1.00 Vdc for XRE option)

Zero Range: Minimum 95% of transducer rating

Calibration Range: Minimum 50:1

Ambient Temperature Range:

32° F to 104° F (0° C to 40° C)

Weight:

1.5 lbs to 3.5 lbs (0.23 kg to 1.59 kg) depending on configuration

Standard Scales for Tension Meter:

0 to 1, 5, 10, 25, 50, 100, 150, 250, 500, 1000

ORDERING INFORMATION

The TI23 and TI24 are identical except for power input: the TI23 requires 115VAC and the TI24 requires 24VDC. You may order the TI23 or the TI24 by description or by specifying the code below by matching each labeled digit with your choice.

Examples: TI23E - 25 - I420, or TI24P - 50/100 - TLS

TI23 X - XX - OPTIONS (Separated by commas)
or TI24 | | |

MOUNTING STYLE	METER SCALE ³	OPTIONS
E = Full Enclosure P = Panel Mount	1 = 0 - 1 5 = 0 - 5 10 = 0 - 10 25 = 0 - 25 50 = 0 - 50 100 = 0 - 100 150 = 0 - 150 250 = 0 - 250 500 = 0 - 500 1000 = 0 - 1000	230 = 230Vac Input ⁴ 25CW = 25% Calibration Weight AZ = Auto Zero DC = Dual Cal ³ DM = Digital Meter I420 = Isolated 4 to 20mA Output ¹ NMS = Non-std. meter scale TLS = Tension Limit Switch XRE = Extended Range ² Z = Special (SPR)

NOTES:

1. Selected by jumper. Takes place of 0-10V output.
2. XRE option requires that transducers have XR option.
3. When ordering the DC option, specify both meter scales separated by a "/".
4. Available on TI23 only.

