

TriView™ Left-Right-Total Tension Indicator (Model Ti31)



**TriView™
Enclosure Mount**

In addition to displaying total tension across the width of a running web, the TriView™ tension indicator shows tension on the left and right edge simultaneously. Tension is measured continuously on all three channels and out-of-spec readings alert the machine operator to make adjustments to equalize side-to-side tension and optimize total tension. For web break prevention, minimum and maximum limits can be set to activate an alarm.

The TriView tension indicator works with a Narrow Web, Tension Roll® transducer or a pair of standard DFE tension transducers (shaft-end transducers mounted on a dead- or live-shaft idler roll) as tension sensor inputs. The tension signal, calibrated to read



**TriView™
Panel Mount**

actual tension from the transducers, is amplified and displayed on a large meter on the touch screen interface on the front panel. The touch screen allows the machine operator to select and display total tension and either Left and Right Tension OR a balance indication showing any deviation from Left to Right on the web. Having the ability to distinguish between left edge and right edge tensions allows the machine operator to equalize tension via appropriate manual or automatic adjustments to the machine.

Additional voltage signal outputs, proportional to tension, from each channel can be used to tie into controllers, PLC's, data acquisition devices or chart recorders.

FEATURES

- QuikCal™ Zero and Calibration
- Displays actual web tension at either side of web, or Left/Right Balance to permit equalization side to side. Also displays total tension. No guesswork.
- Programmable registers for up to 5 selectable setups. Setups can be stored and re-called by number.
- Isolated independent 0-10Vdc and 4-20mA outputs proportional to left, right, and total tension. Can be interfaced with tension control systems.
- 5" Touchscreen display and customer selectable tension meter ranges.
- 25% Calibration Weight. Select this option if the standard 10% calibration weight is too low a value for the application.
- High & Low Tension Limit Switch (TLS). Selectable setting that can trigger external alarms via 2 solid state relays. One for TLS Low and one for TLS High.

SPECIFICATIONS

Power Input: Voltage/Current

24 VDC @ 0.25 Amp OR Optional 100-240 VAC 60/50Hz single phase @ 0.25 - 0.15 Amp

Tension Outputs:

- 0 to +10 Vdc @ 5mA individually isolated outputs for left, right, and total.
- 4 to 20 mA individually isolated outputs for left, right, and total.

Transducer Input Signal:

500 mVdc at rated load per pair
(1000mV for XR Transducers and XRE Excitation.)

Transducer Excitation:

5 Vdc regulated (10 Vdc with XR option)

Zero Range: 0-95% of transducer rating (min.)

System Accuracy: 1% typical

Calibration Range: 50:1 (min)

Weight: 5.5 lbs. (2.5 kg) Enclosed Version

Temperature Range: 32°F to 104°F (0°C to 40°C)

Tension Meter:

5" touchscreen with analog/digital display

Customer Selectable Tension Ranges:

0-1, 5, 10, 15, 20, 25, 35, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500, 750, 1000, 1250, 1500, 2000, 2500, 3000, 4000, 5000.

Mating Transducer Cable Connectors:

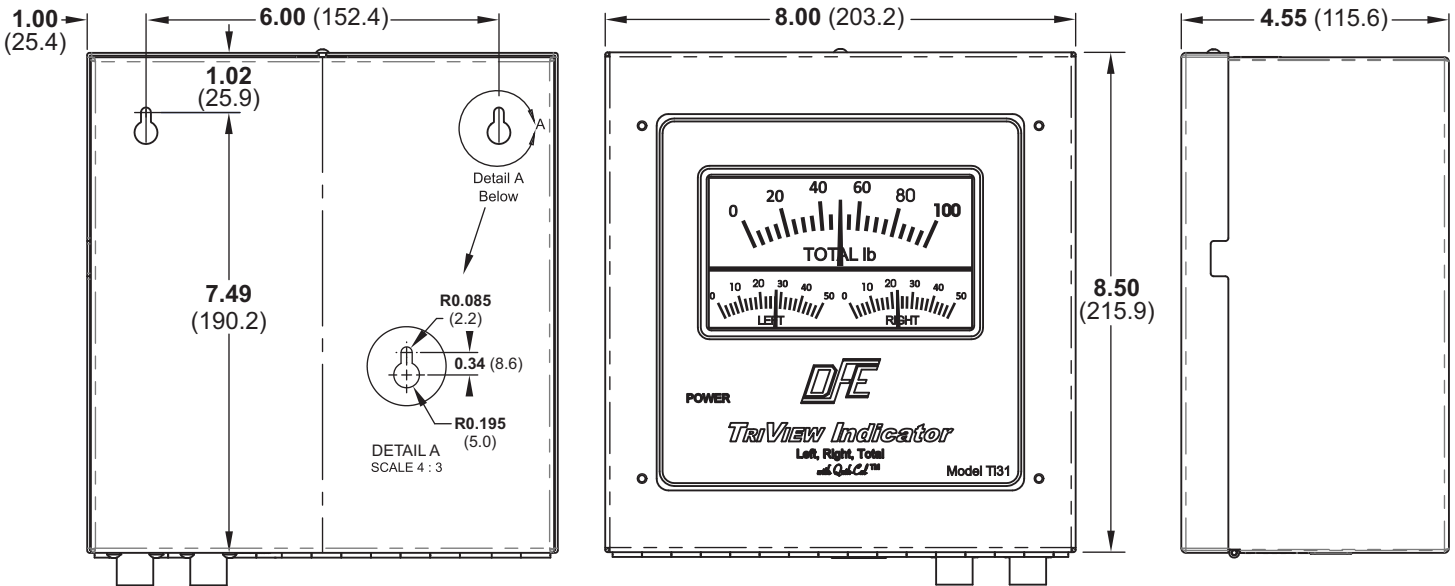
DFE P/N 721-1445

Tension Limit Switch Relay:

Dedicated High/Low Isolated Solid State Relay rated @ 250mA/24V Normally Open

DIMENSIONS OF ENCLOSURE VERSION

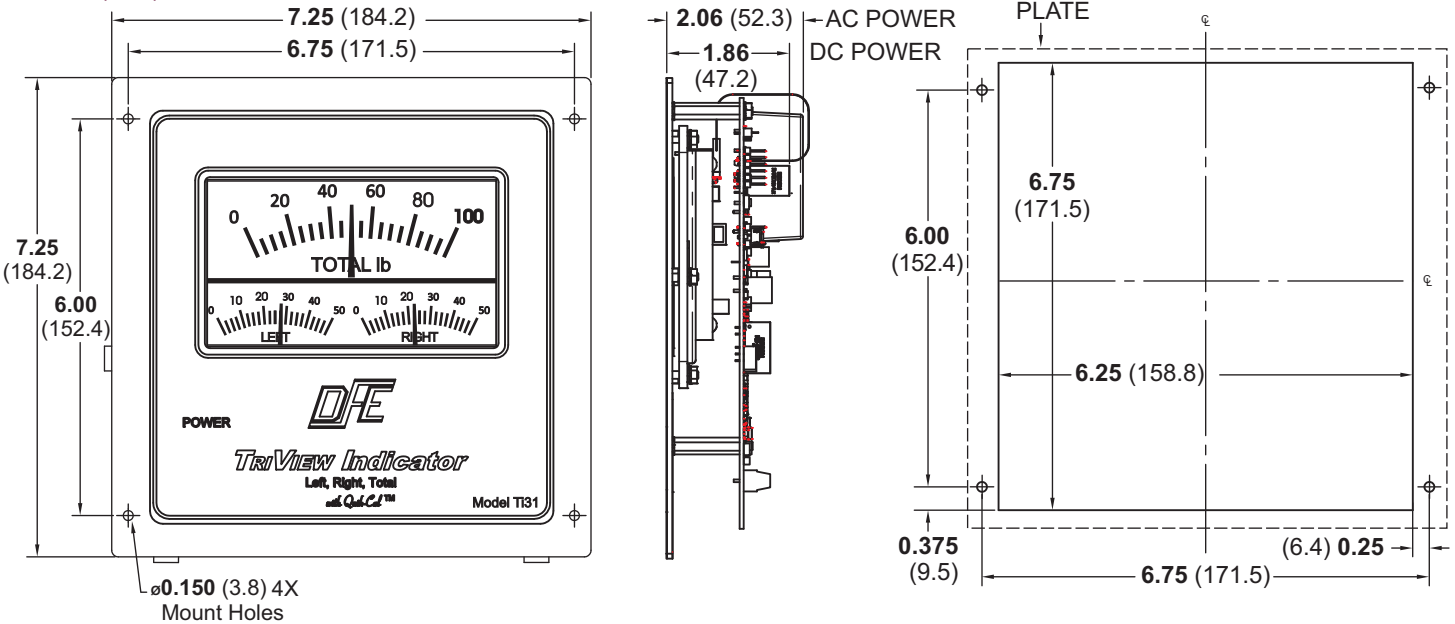
inches (mm)



Allow 3" Minimum under unit
for electrical connections

DIMENSIONS OF PANEL VERSION

inches (mm)



ORDERING INFORMATION:

You may order by description or by specifying the code shown on the right by matching each labeled position with one of the choices given.

Example: Ti31-E-24-100-XRE

Ti31 - X - X - XXXX - OPTIONS

PACKAGING	POWER	METER SCALE	OPTIONS
E = Enclosure	24	1 100 1000	25CW = Calibration Weight is 25% DIFF = Displays difference between left & right side tensions TLS = Tension Limit Switch XRE = Extended Range ¹
P = Panel Mount	AC	5 125 1250	
		10 150 1500	
		15 200 2000	
		20 250 2500	
		25 300 3000	
		35 400 4000	
		50 500 5000	
		75 750	

NOTES: 1. XRE option requires transducers to have XR option.

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