

Web Tension Transmitter









FEATURES

- Ruggedized, field mounted web tension transmitter
- Integral multiple-transducer summing circuit
- Digital filtering dampens vibration without reducing response time
- 0-10V, 4-20mA, and RS-485 signal outputs
- 3½ digit front panel display with trailing zero
- NEMA 4/4X enclosure standard

OPTIONAL FEATURE

• Modbus RTU or Allen-Bradley Remote I/O Interface

DESCRIPTION

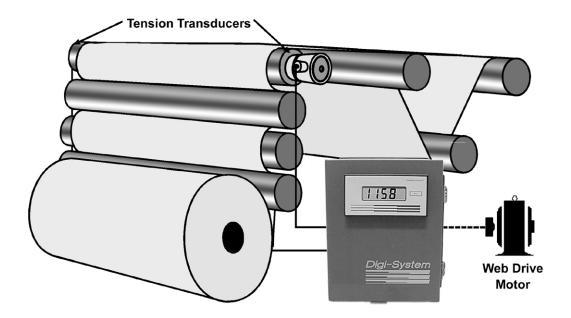
DXt-15 transmitters add high accuracy, 50,000 count resolution for web tension measurement systems. Precision tension measurement signals from LTT or HTZ transducers are measured, processed, and displayed on the front panel meter. Simultaneously, precise web tension signals are transmitted through the analog and serial outputs.

Digital filtering ensures stable display readings and smooth output signals for brake and motor drive controls. The DXt-15 contains an internal multi-cell summing circuit, 10 or 15 volt excitation, and digital RS-485 or Allen-Bradley Remote I/O outputs.

APPLICATIONS

- Paper machines
- Converting equipment
- Roofing shingle machines

CONFIGURATION



BLH

Web Tension Transmitter



SPECIFICATIONS

Performance

Resolution 50,000 counts
Sensitivity 0.5 microvolt/count
Full Scale Range 25 or 35mV (selectable)

Dead Load Range 100%

Input Impedance 10 Mohms, min

Load Cell Excitation 10V for up to eight 350 ohm

(Selectable) load cells (250mA)

15V for up to six 350 ohm

load cells (260mA)

Linearity $\pm 0.01\%$ of full scale

Common Mode Rej. 100db or better at or below 35Hz

Conversion Speed 50msec

Temperature Coefficient

Span ±2ppm/°C typical, 7ppm/°C max.

Zero ±2ppm/°C

Environment

 $\begin{array}{lll} \mbox{Operating Temperature} & -10 \mbox{ to } 55^{\circ}\mbox{C} \mbox{ (12 to } 131^{\circ}\mbox{F}) \\ \mbox{Storage Temperature} & -20 \mbox{ to } 85^{\circ}\mbox{C} \mbox{ (-4 to } 185^{\circ}\mbox{F}) \\ \mbox{Humidity} & 5 \mbox{ to } 90\% \mbox{ rh, non-condensing} \\ \mbox{Voltage} & 115/230 \mbox{ Vac } \pm 15\% \mbox{ 50/60 Hz} \\ \end{array}$

Power 10 watts max Parameter Storage EEPROM

EMI/RFI shielded from typical industrial

interference

Display

Type 3 1/2 digit LCD with trailing zero

characters are 0.7" tall

Enclosure

Dimensions (NEMA 4/4X) 11.5x 8.0 x4.3 HxWxD

Isolated Analog Output

Type 12 bit D/A conversion

Voltage 0 to 10 volt (25K ohm min load)
Current 4 to 20mA (1000 ohm max load)

Serial Communication

Simplex Data Output (Standard)

Interface Type RS-485 simplex ASCII data

Baud Rates 1200 or 9600

Data Format 7 data bits, even parity, 1 stop bit

Terminal/Computer Interface (Optional)

Interface Type RS-485 half duplex (standard)

Baud Rates 1200 or 9600

Protocol ASCII duplex command/

response

Format Format 7 data bits, even parity, 1 stop bit

Interface/Protocol Options

Allen Bradley

Remote I/O 1/4 logical rack Modbus RTU protocol

Approvals

FM (Factory Mutual) 3611 (Class I, II, III;

Div.1,2; Groups A-G)

CSA C22.2 (Class I, II,III;

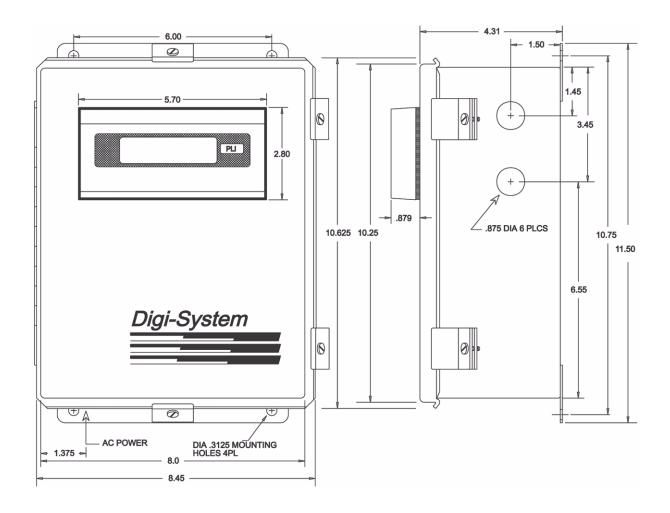
Div.1,2; Groups A-G)

Allen-Bradley is a trademark of Rockwell Automation Modbus is a trademark of Schneider Automation.

BLH is continually seeking to improve product quality and performance. Specifications may change without notification.



OUTLINE DIMENSIONS



Legal Disclaimer Notice



Vishay Precision Group

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Document Number: 63999 www.vishaypg.com Revision: 22-Feb-10