

## Web Tension Transmitter

### FEATURES

- Web Tension Measurement
- Eliminates low tension signal drift
- Simple System Set Up and Calibration
- Compact – Lightweight DIN Rail “Snap Track” Installation
- Independent Zero and Span Adjustments
- Galvanically Isolated 0–10 V, 4–20 mA Output Signals
- Bipolar Uplifting or Downward Tension Force Measurement
- Low power – 24 VDC @ 125 mA
- Filters any electrical noise caused by AC drives, servo motors, and switching devices

### APPLICATIONS

- Single zone web tension measurement
- Paper, film, foil converting equipment
- Winders and rewinders
- Laminating and coating sections

### DESCRIPTION

PS-1010T Transmitter provides signal conditioning, amplification, and an isolated analog output signal for web tension measurement and control systems.

The galvanically isolated analog output signal accurately tracks web tension force signals for precise brake/clutch control or remote panel meter display.

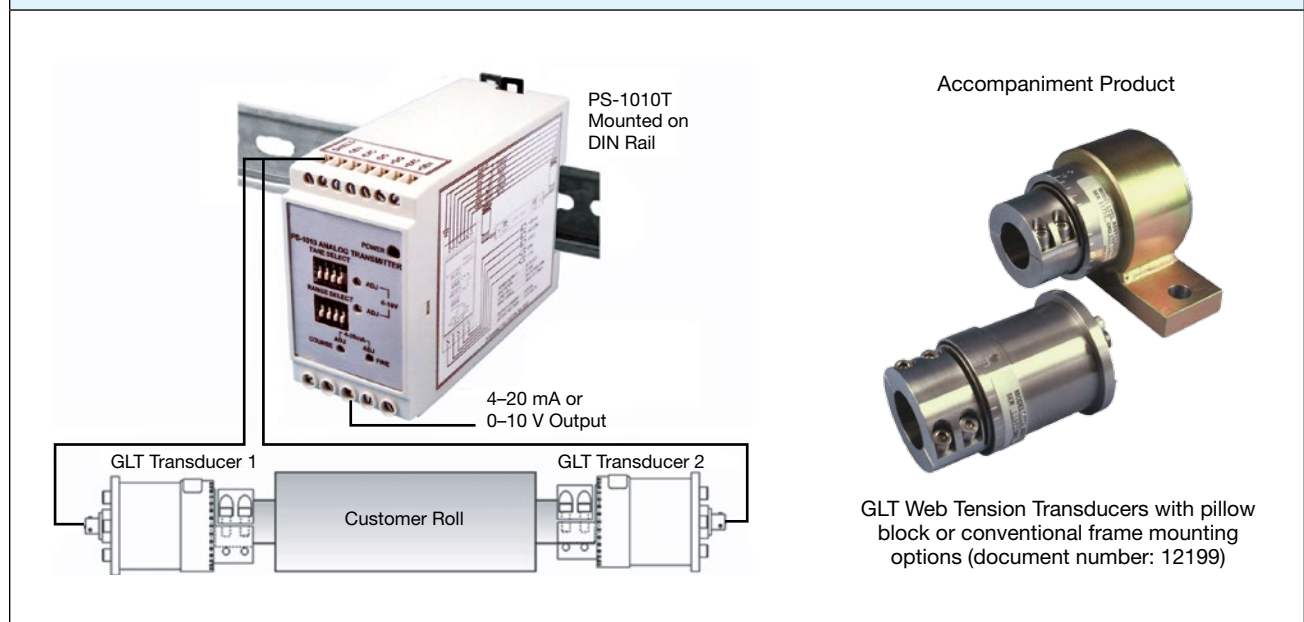
“Snap on” DIN Rail mounting and full front panel configuration significantly reduce system start-up time.



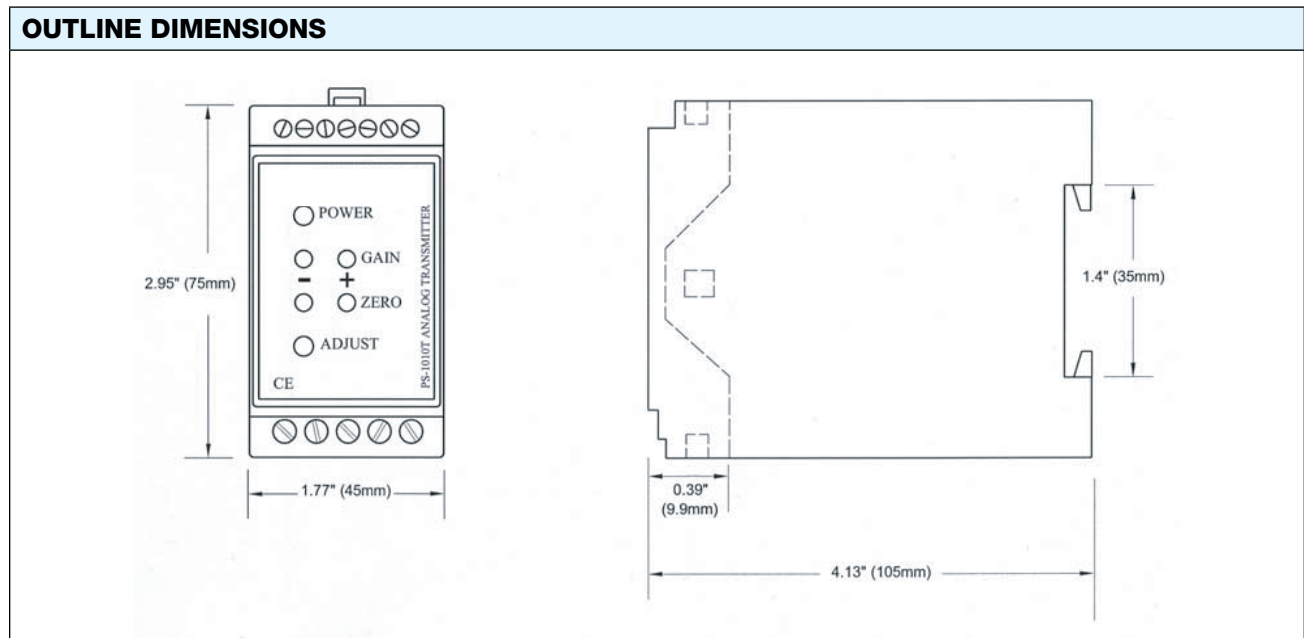
When combined with precision, factory calibrated, transducers, PS-1010T Systems perform superbly, eliminating signal drift and constant recalibration requirements.

The PS-1010T transmitter is designed to provide long term reliability wherever tension is to be measured and controlled in the continuous processing of paper; plastic, film, foil, tape, rubber, filament, wire, cable and many other products.

### CONFIGURATION



Web Tension Transmitter



SPECIFICATIONS		SPECIFICATIONS	
PARAMETER	VALUE	PARAMETER	VALUE
<b>PERFORMANCE</b>		<b>POWER SUPPLY</b>	
Full Scale Input	-3.0 to +3.0 mV/V full bridge	Supply Voltage	24 VDC @ 125 mA
Dead Load Range	±100% full scale output	Range	20 to 30 VDC
Calibration Range	0.2 to 2.5 mV/V for nominal output (1:12.5)	<b>ANALOG OUTPUT SIGNALS</b>	
Linearity	0.01% full scale output	Voltage	0-10 VDC @ > 2 kΩ
Common Mode Rejection	120 dB minimum	Current	4-20 mA @ < 700 Ω
Common Mode Input	±20% of excitation voltage	Galvanically Isolated	Yes
Temperature Stability	50 ppm/°C	<b>INTERFACE</b>	
Response Time	<100 ms		Panel indicator or PLC input
Input Impedance	>250 MΩ nominal	<b>ENCLOSURE</b>	
<b>ENVIRONMENT</b>		Type	DIN-Rail mount
Operating Temperature	0 to 55°C (32 to 131°F)	Overall Size	45 × 75 × 105 mm L × H × D (1.77 × 2.95 4.13 in L × H × D)
Storage Temperature	-25 to 55°C (-13 to 131°F)	Weight	185 g (6.5 oz)
Humidity	85% at 55°C	Terminals	Standard screw clamp type
Atmosphere	Nonflammable and noncorrosive	<b>APPROVALS</b>	
<b>TRANSDUCER SUPPLY</b>		CE	Conforms to IEC 61326
Excitation	10.0 VDC (symmetric ±5 V)	<b>OPERATING CONDITIONS</b>	
Gage Resistance	175-1,000 Ω	Pollution	Pollution degree 2
Gage Type foil	(2-3 mV/V), full bridge	Protection	IP20 enclosure
Number of load cells	Two (2) per tension zone		

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.



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