

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.

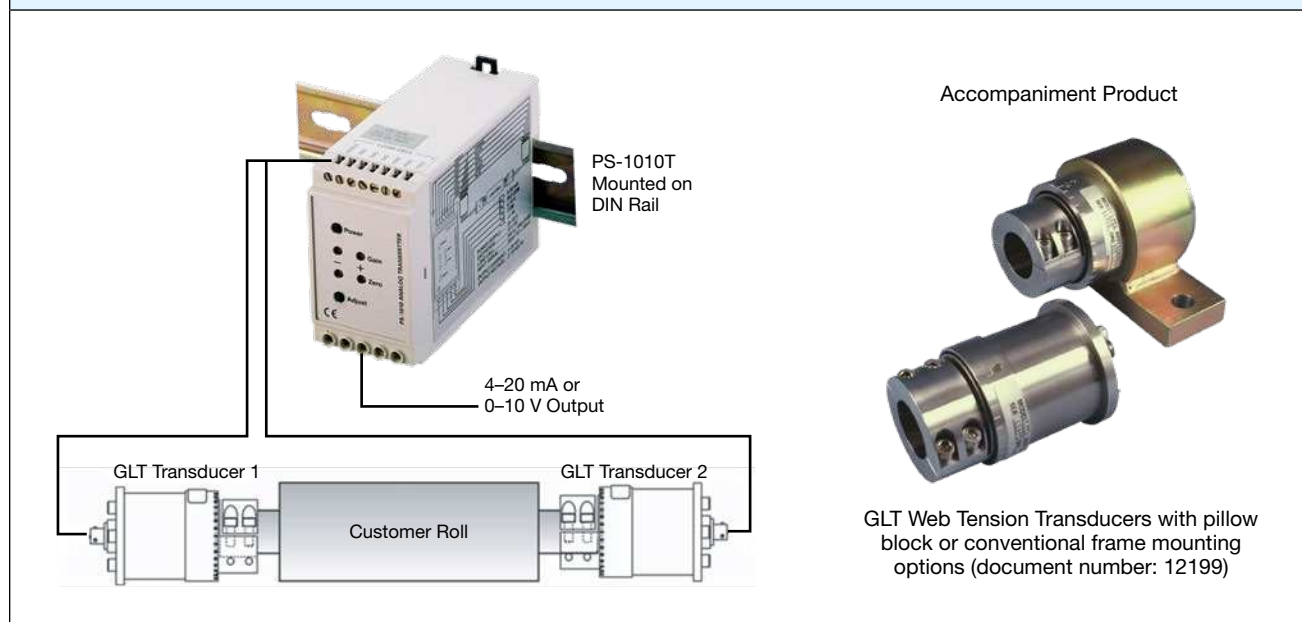
“Snap on” DIN Rail mounting and full front panel configuration significantly reduce system start-up time.



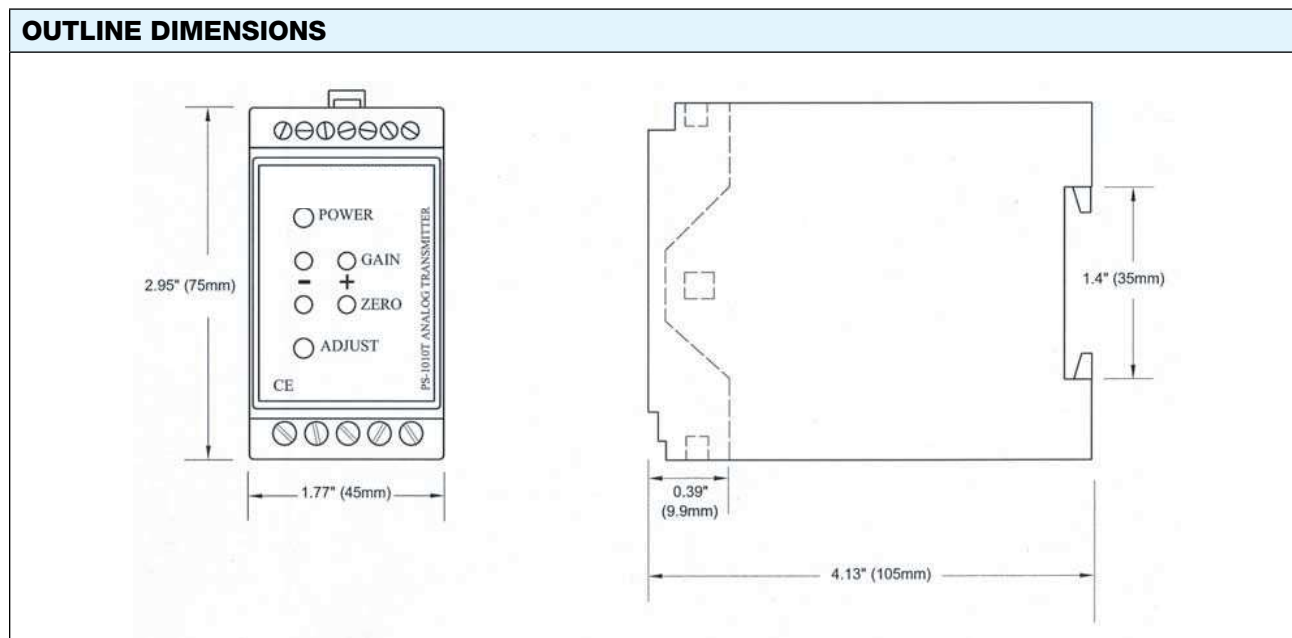
When combined with precision, factory calibrated, transducers, PS-1010T Systems perform superbly, eliminating signal drift and constant recalibration requirements.

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
PERFORMANCE		POWER SUPPLY	
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)	ANALOG OUTPUT SIGNALS	
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	INTERFACE	
Response Time	<100 ms		Panel indicator or PLC input
Input Impedance	>250 MΩ nominal	ENCLOSURE	
ENVIRONMENT		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	APPROVALS	
TRANSDUCER SUPPLY		CE	Conforms to IEC 61326
Excitation	10.0 VDC (symmetric ±5 V)	OPERATING CONDITIONS	
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.

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.