

## PTX 510 and PTX 510/IS

### Industrial Pressure Transmitter

- Ranges 1.5 through 10,000 psi gauge or absolute
- $\pm 0.15\%$  F.S. BSL accuracy
- Process media  $-20^{\circ}$  to  $+250^{\circ}\text{F}$
- 4-20 mA, two-wire output
- Intrinsically safe (PTX 510/IS)
- Low cost, quick delivery



The PTX 510 combines micro machined silicon diaphragms with fully welded stainless steel and Hastelloy pressure ports to provide a highly accurate, stable pressure transmitter with the materials and environmental protection required for industrial applications.

The silicon sensors incorporate developments derived from aerospace applications to improve output noise, non-linearity and hysteresis and long term stability.

Batch manufacturing ensures optimum pricing, with the ability to custom calibrate to alternate ranges and pressure units prior to completion with the required electrical connection and rapid delivery.

A detachable industrial electrical connector provides access to the independent zero and span trim controls, and if a configuration change to the electrical or pressure connections are required on-site, replacement parts and screw in pressure adaptors are available.

Each transmitter incorporates RFI/EMC and electrical spike protection, and Intrinsically Safe approved units are available as an option.

The PTX 510/IS version is approved for use with barrier systems to CSA Certification Class I, Groups A, B, C and D with a T4 temperature code.

## STANDARD SPECIFICATION

### Operating pressure range

0 to 1.5 through 0 to 880 psi gauge  
 0 to 881 through 0 to 10000 psi sealed gauge  
 0 to 3.6 through 0 to 10000 psi absolute

Other engineering units are available.  
 Please specify, e.g. 400 in. H<sub>2</sub>O gauge,  
 30 in. Hg absolute, etc.

### Proof pressure

The rated pressure can be exceeded by the following multiples without degrading performances:-

4x for ranges up to 7 psi  
 3x for 7 psi to 600 psi  
 2x for ranges above 600 psi  
 (4x available for ranges up to 600 psi,  
 please contact manufacturer.)

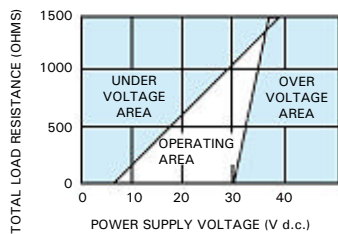
### Pressure Media

Fluids compatible with a fully welded assembly of 316 stainless steel and Hastelloy C276 (NACE compatible grades).

### Transmitter Supply Voltage

9-30V d.c.

This voltage must appear across the transmitter terminals.



### Output Current

4-20mA (two-wire configuration)  
 proportional for zero to full scale pressure.

### Accuracy

Combined effects of non-linearity,  
 hysteresis and repeatability  
 0.15% F.S. Best Straight Line.

### Operating temperature range

Ambient: -5° to +175°F  
 Process media: -20° to +250°F  
 Storage: -40° to +250°F

### Temperature Effects

For ranges of 5 psi and above the output will not deviate from room temperature calibration by more than:

1% F.S. over 15° to +122°F  
 2% F.S. over -5° to +175°F  
 Typically 0.7% F.S., -15° to +122°F  
 1.5% F.S., -5° to +175°F

For ranges below 5 psi these values will increase pro-rata with calibrated span.

### Pressure connection

1/4" NPT female  
 Screw-in male/male adaptors available  
 (See accessories)

### Electrical connection

Industrial plug/socket

### Weight

14 oz. nominal

### Calibration standards

Transmitters manufactured by Druck Inc. are calibrated against precision pressure calibration equipment which is traceable to NIST (formerly NBS).

### ACCESSORIES AVAILABLE TO ORDER:

#### Screw in male/male adaptors

1/4 NPT male (P/N 401-US-040)  
 7/16 UNF male (MS33656-4 compatible)  
 (P/N 401-US-039)

Adaptors manufactured in 316 stainless steel

#### Cable

For gauge ranges of 880 psi and below the PTX 510 requires vented cable.

### OPTIONS AVAILABLE:

Druck Inc. manufacture other ranges of pressure transmitters and can offer alternative electrical connections

Basic cores for OEM use

Integral cable

Military plug/socket

Various conduit fittings

#### Intrinsically safe

Transmitters which can be certified for use with barrier systems, CSA and Cenelec approvals apply.

When specifying model PTX 510/IS the transmitter will be approved for use with barrier systems to CSA Certification Class I, Groups A, B, C and D with a T4 temperature code. For other approvals please refer to manufacturer.

#### Submersible units

Druck Inc. specializes in submersible units. Please refer to the depth/level data sheet or consult the manufacturer.

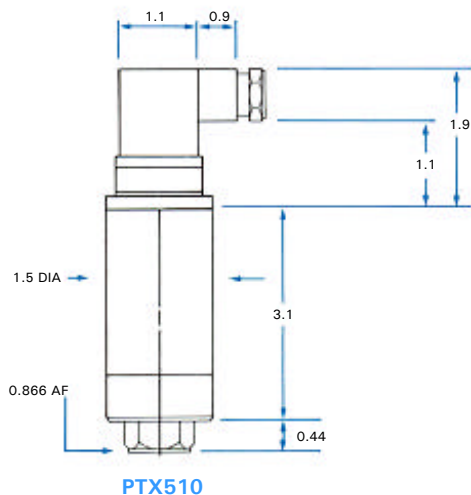
#### Calibration equipment

Druck Inc. manufacture precision pressure calibrators for laboratory or field use. Please refer to the DPI 601 or DPI 510 data sheets or consult the manufacturer.

#### Ordering information

- PTX 510 or PTX 510/IS
- Pressure range and engineering units e.g. 50 psi gauge  
30 in Hg absolute, etc
- Accessories (if required).

## Installation Dimensions:



*Continuing development sometimes necessitates specification changes without notice.*

Druck is an ISO 9001 registered company.



### Representative



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