



Series  
629

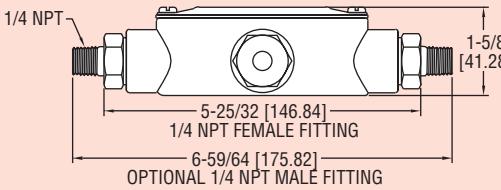
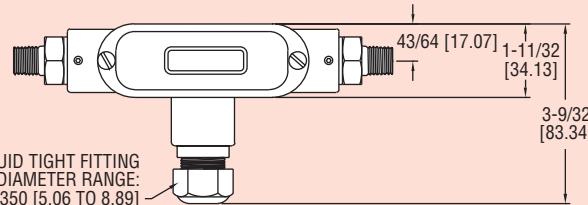
# Wet/Wet Differential Pressure Transmitter

0.5% Accuracy, NEMA 4X (IP66) Enclosure



PRESSURE

Differential Pressure Transmitters



The **Series 629 Differential Pressure Transmitter** monitors differential pressure of air and compatible gases and liquids with 0.5% accuracy. The design employs dual pressure sensors converting pressure changes into a standard 4 to 20 mA output signal for two wire circuits. Small internal volume and minimum moving parts result in exceptional response and reliability. Terminal block, zero and span adjustments are easily accessed under the top cover. The Series 629 Differential Pressure Transmitter is designed to meet NEMA 4X (IP66) construction.

## APPLICATIONS

Monitor differential pressures across:

- Flow elements
- Heat exchangers
- Filters
- Pumps
- Coils
- Chiller

## Standard

| Model              | Range<br>(psid) | Pressure Limits            |                        |
|--------------------|-----------------|----------------------------|------------------------|
|                    |                 | Working*<br>Pressure (psi) | Over<br>Pressure (psi) |
| 629-02-CH-P2-E5-S1 | 10              | 20                         | 100                    |
| 629-03-CH-P2-E5-S1 | 25              | 50                         | 250                    |
| 629-04-CH-P2-E5-S1 | 50              | 100                        | 250                    |
| 629-05-CH-P2-E5-S1 | 100             | 200                        | 500                    |

\*Pressures exceeding the working pressure limit may cause a calibration shift of up to  $\pm 3\%$  of full scale.

## 3-Way Valve Manifold Assembly

| Model                 | Range<br>(psid) | Pressure Limits            |                        |
|-----------------------|-----------------|----------------------------|------------------------|
|                       |                 | Working*<br>Pressure (psi) | Over<br>Pressure (psi) |
| 629-02-CH-P2-E5-S1-3V | 10              | 20                         | 100                    |
| 629-03-CH-P2-E5-S1-3V | 25              | 50                         | 100                    |
| 629-04-CH-P2-E5-S1-3V | 50              | 100                        | 100                    |
| 629-05-CH-P2-E5-S1-3V | 100             | 100                        | 100                    |

## SPECIFICATIONS

**Service:** Compatible gases & liquids.

**Wetted Materials:** Without valve: 316, 316L SS. Additional wetted parts with 3-way valve option: Buna-N, silicone grease, PTFE, brass 360, copper, reinforced acetal copolymer.

**Accuracy:**  $\pm 0.5\%$  FS (includes linearity, hysteresis & repeatability).

**Temperature Limits:** 0 to 200°F (-18 to 93°C).

**Compensated Temperature Limits:** 0 to 175°F (-18 to 79°C).

**Pressure Limits:** See chart.

**Thermal Effect:**  $0.02\%/\text{F}$  ( $0.036\%/\text{C}$ ) includes zero & span.

**Power Requirements:** 13 to 30 VDC (2-wire).

**Output Signal:** 4 to 20 mA. Optional 0 to 5, 0 to 10 VDC.

**Response Time:** 50 ms.

**Loop Resistance:** 0 to 1300  $\Omega$  maximum for current output. For voltage outputs, minimum load resistance: 2000  $\Omega$ .

**Electrical Connections:** Terminal block; 1/2" female NPT conduit.

**Process Connections:** 1/4" female NPT.

**Enclosure Rating:** Designed to meet NEMA 4X (IP66).

**Mounting Orientation:** Not position sensitive.

**Weight:** 10.1 oz (286 g).

**Agency Approvals:** CE.

## OPTIONS

-LED, 4.5 Digit LED Display

-NIST, NIST traceable calibration certificate

## ACCESSORIES

A-131A, 3-way brass manifold valve

641-LED, Field-upgradeable LED

A-155, Cable gland with 1/2" NPT male

BBV-1B, Mini SS 3-valve block manifold

A-228, 12" SS flex hose



3-way valve assembly with integral bleed screws



629 shown with optional Red LED and cable gland.