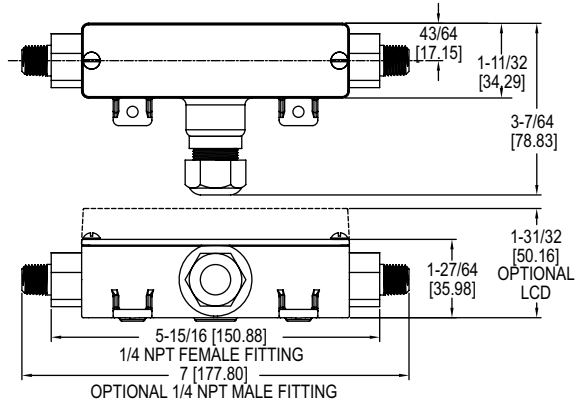
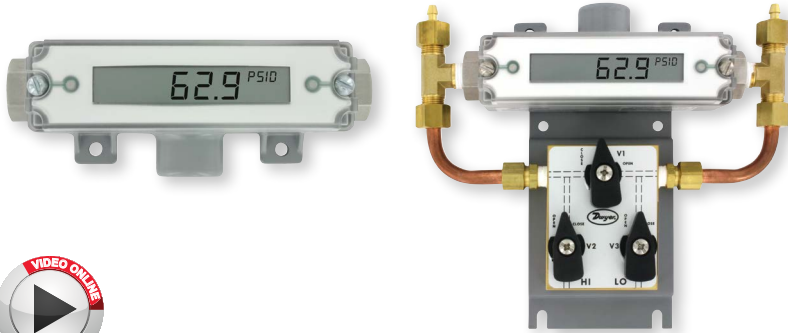


# WET/WET DIFFERENTIAL PRESSURE TRANSMITTER

0.5% Accuracy, NEMA 4X (IP66) Enclosure



The **SERIES 629C** Wet/Wet 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 or field selectable voltage. Small internal volume and minimal moving parts result in exceptional response and reliability. The terminal block, as well as a zero adjustment button, are easily accessed under the top cover. The Series 629C Differential Pressure Transmitter is designed to meet NEMA 4X (IP66) construction.

**FEATURES/BENEFITS**

- Powered by either DC or AC - take advantage of most readily available power source reducing installation costs
- Optional LCD does not need a separate power supply - lowers installed cost
- Selectable voltage range - provides flexible choice for changing design or inputs for process/HVAC controllers being used to monitor and control
- Push button zero (versus trim pot) - more simple zeroing provides easy install and calibration reducing installation time and possibility of operator error
- Optional LCD indicator provides local status to identify operational condition

**APPLICATIONS**

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

**SPECIFICATIONS**

**Service:** Compatible gases and liquids.  
**Wetted Materials:** Without valve: 316, 316L SS. Additional wetted parts with valve option: Buna-N, silicone grease, PTFE, brass 360, copper, and reinforced copolymer.  
**Accuracy:** ±0.5% FS (includes linearity, hysteresis & repeatability).  
**Stability:** ±1% FS/year.  
**Temperature Limits:** 0 to 200°F (-18 to 93°C).  
**Compensated Temperature Limits:** 0 to 175°F (-18 to 79°C).  
**Pressure Limits:** See Table 1.  
**Thermal Effects:** Avg 0.04%/°F (0.072%/°C) (includes zero and span).  
**Power Requirements:** 2-wire: 10 to 35 VDC; 3-wire: 13 to 35 VDC or isolated 16 to 33 VAC (reverse polarity protected).  
**Output Signal:** 2-wire: 4 to 20 mA; 3-wire: Field selectable 0 to 5, 1 to 5, 0 to 10, or 2 to 10 VDC.  
**Zero and Units:** Push buttons inside conduit enclosure.  
**Response Time:** 400 msec.  
**Loop Resistance:** Current output: 0 to 1250 Ω (max), Rmax = 50(Vps-10); Voltage output: Minimum load resistance = 5 kΩ.  
**Current Consumption:** 28 mA (max).  
**Electrical Connections:** Removable terminal block; 1/2" female NPT conduit.  
**Process Connections:** 1/4" female or male NPT.  
**Display:** Optional 4-1/2 digit LCD field attachable display.  
**Enclosure Rating:** Designed to meet NEMA 4X.  
**Mounting Orientation:** Not position sensitive.  
**Weight:** 10.1 oz (286 g).  
**Agency Approvals:** CE.

MODEL CHART							
Example	629C	-01	-CH	-P1	-E1	-S1	-3V
Series	629C						
Range		01					
		02					
		03					
		04					
		05					
		06					
		07					
		08					
		09					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
Housing			CH				
Process Connection				P1 P2 P3 P4			
Electrical Connection					E1 E2 E3 E5 E9		
Signal Output						S1 S3	
Options							3V AT FC LCD NIST

RANGE			
Range Number	Range	Working Pressure*	Over Pressure
01	0 to 5 psid	10 psi	50 psi
02	0 to 10 psid	20 psi	50 psi
03	0 to 25 psid	50 psi	120 psi
04	0 to 50 psid	100 psi	250 psi
05	0 to 100 psid	200 psi	500 psi
06	0 to 150 psid	300 psi	750 psi
07	0 to 200 psid	400 psi	1000 psi
08	0 to 300 psid	600 psi	1200 psi
09	0 to 500 psid	1000 psi	2000 psi
11	0 to 0.5 bar differential	1 bar	3 bar
12	0 to 1 bar differential	2 bar	8 bar
13	0 to 2 bar differential	4 bar	8 bar
14	0 to 4 bar differential	8 bar	18 bar
15	0 to 6 bar differential	12 bar	18 bar
16	0 to 10 bar differential	20 bar	50 bar
17	0 to 15 bar differential	30 bar	60 bar
18	0 to 20 bar differential	40 bar	80 bar
19	0 to 30 bar differential	60 bar	120 bar

\*Pressures exceeding the working pressure limit may cause a calibration shift of up to ±3% of full scale.  
**Note:** Over pressure of all models with 3-way valve is 100 psi.

ACCESSORIES	
Model	Description
A-155	Cable gland with 1/2" NPT male
A-228	12" SS flex hose
A-62X-LCD	Field-upgradeable LCD
BBV-1B	Mini SS 3-valve block manifold