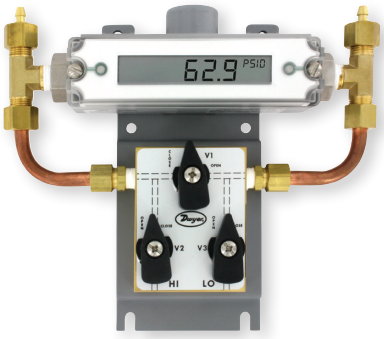
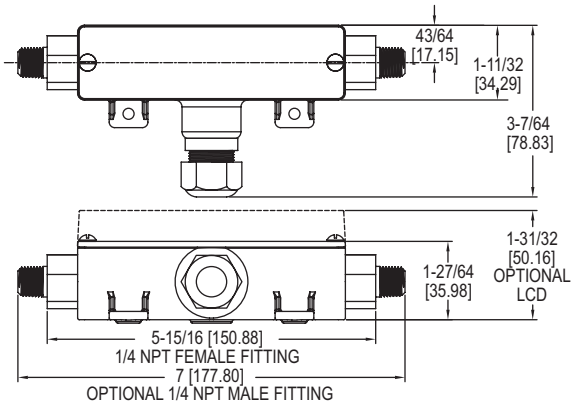
Dwyer

SERIES 629C

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	629C-01-CH-P1-E1-S1-3V
Series	629C							Wet/wet differential pressure transmitter
Range		01 02 03 04 05 06 07 08 09 11 12 13 14 15 16 17 18 19						0 to 5 psid 0 to 10 psid 0 to 25 psid 0 to 50 psid 0 to 100 psid 0 to 150 psid 0 to 200 psid 0 to 300 psid 0 to 500 psid 0 to 0.5 bar differential 0 to 1 bar differential 0 to 2 bar differential 0 to 4 bar differential 0 to 6 bar differential 0 to 10 bar differential 0 to 15 bar differential 0 to 20 bar differential 0 to 30 bar differential
Housing			CH					Conduit housing, NEMA 4X (IP66)
Process Connection				P1 P2 P3 P4				1/4″ male NPT 1/4″ female NPT 1/4″ male BSPT 1/4″ female BSPT
Electrical Connection					E1 E2 E3 E5 E9			Cable gland with 3′ of prewired cable Cable gland with 6′ of prewired cable Cable gland with 9′ of prewired cable 1/2″ female NPT conduit M-12 4 pin connector
Signal Output						S1 S3		4-20 mA Field selectable 0-5, 1-5, 0-10, 2-10 VDC
Options							3V AT FC LCD NIST	3-way valve Aluminum tag Factory calibration certificate LCD indication NIST traceable certificate

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

USA: California Proposition 65
⚠WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov