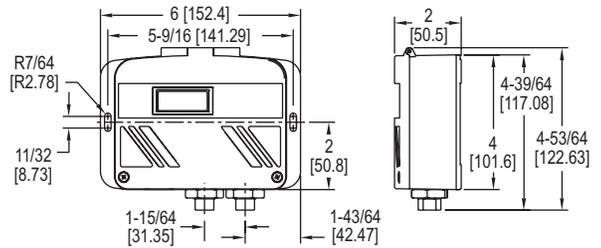
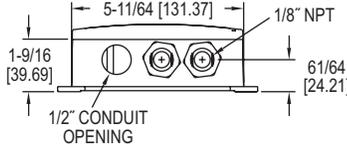


DIFFERENTIAL PRESSURE TRANSMITTER

Selectable Ranges of Uni-Directional or Bi-Directional, Selectable Outputs



The **SERIES WWDP** Wet-to-Wet Differential Pressure Transmitter offers everything in one package by having 30 field selectable variations in just 3 models. The WWDP provides field selectable unidirectional and bidirectional pressure ranges, configurable 0-5, 1-5, 0-10 VDC, and 4 to 20 mA output. It also provides an auto-zero capability. The field selectable port swap feature eliminates costly re-plumbing if the unit is improperly installed or if the transmitter is simply replaced. An optional LCD display is available for on-sight indication of line and differential pressure. The all cast aluminum housing is rated NEMA 4 (IP66). These features make the WWDP transmitter an ideal instrument for measuring the flow of various liquids and gases, pressure drop across filters, measurement of liquid level or pressurized vessels, and for use in energy management and process control systems.

FEATURES/BENEFITS

- Versatile device for liquid or gas supports designs requiring more precise measurements in support of application
- Field selectable port swap eliminates costly re-plumbing if unit is re-installed or replaced
- Uni-directional and bi-directional pressure selection with configurable output provides a single device that can meet broad application needs without having to specify multiple devices
- Optional LCD display provides local status to identify operational conditions
- NEMA 4 rated enclosure provides protection in harsh environments permitting outdoor monitoring or in areas where dust and particulate matter exists

APPLICATIONS

- Chiller monitoring
- Filter monitoring
- Liquid level
- Pressure vessels
- Process control
- Energy management

OPTIONS

Use order code:	Description
NISTCAL-PT1	NIST traceable calibration certificate

SPECIFICATIONS

Service: Gases or liquids compatible with 17-4 PH stainless steel.
Accuracy: All pressure ranges have $\pm 1\%$ full-scale accuracy except the lowest selectable range of each unit is $\pm 2\%$ full-scale.
Stability: $\pm 0.5\%$ per year.
Temperature Limits: Compensated temperature range: 32 to 130°F (0 to 54°C); Operating temperature range: -4 to 185°F (-20 to 85°C).
Pressure Limits: Max working pressure: WWDP-1: 50 psi; WWDP-2: 100 psi; WWDP-3: 250 psi; Proof pressure: 2.2X of full-scale; Burst pressure: 40X of full-scale.
Thermal Effect: 2% FS/100°F (50°C) includes zero and span.
Power Requirements: 12 to 30 VDC/18 to 28 VAC (reverse excitation protected). Note: 4-20 mA output cannot be powered with AC voltage.
Output Signal: Selectable 0 to 5, 0 to 10 and 1 to 5 VDC; 4 to 20 mA.
Zero & Span: Digital "re" zero button (should be used when changing ranges). Span can be adjusted by changing between field selectable ranges.
Response Time: 1 to 5 s (selectable).
Loop Resistance: 1000 Ω .
Current Consumption: VDC power: 0 to 5, 1 to 5 VDC output 4 mA (typ); 0 to 10 VDC output 5 mA (typ); 4 to 20 mA output 20 mA max. Current consumption will equal the transmitter output in current mode. VAC power: 0 to 5, 1 to 5, 0 to 10 VDC output 40 mA (typ).
Electrical Connections: 1/2" conduit.
Process Connections: 1/8" female NPT internal.
Enclosure Rating: Designed to meet NEMA 4 (IP66).
Mounting Orientation: Vertical; mount the pressure ports down (keeps debris from building up inside the pressure port).
Weight: 1.5 lb (680.4 g).
Agency Approvals: CE.

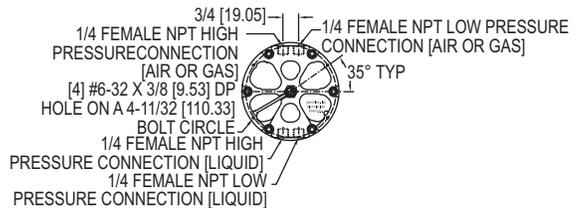
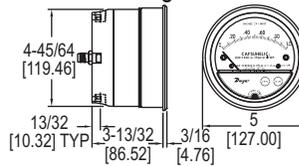
MODEL CHART

Model	Description (psid)	Max. Working Pressure (psi)
WWDP-1	Selectable 5, 10, 25, 50	50
WWDP-2	Selectable 10, 20, 50, 100	100
WWDP-3	Selectable 25, 50, 125, 250	250
WWDP-1-LCD	Selectable 5, 10, 25, 50	50
WWDP-2-LCD	Selectable 10, 20, 50, 100	100
WWDP-3-LCD	Selectable 25, 50, 125, 250	250

SERIES 631B

CAPSULHELIC® WET/WET DIFFERENTIAL PRESSURE TRANSMITTER

Ranges Down to 0.5 in w.c. with 500 psi Static Pressure Rating



The Dwyer **SERIES 631B** Capsuhelic® Differential Pressure Transmitter monitors differential pressure of air and compatible gases and liquids with accuracy. The design employs converting pressure changes into a standard 4-20 mA output signal for two wire circuits. Digital push-button, zero and span adjustments are easily accessed on the front cover. The Series 631 Differential Pressure Transmitter is designed to meet NEMA 4X (IP66) construction. Robust housing offers 500 psi static pressure rating on ranges down to 0.5 in w.c.

FEATURES/BENEFITS

- Gage capsule permits high-pressure usage with small differentials
- Versatile device for liquid or gas supports designs requiring more precise measurements in support of application
- Zero and range adjustments outside of gage means no disassembly in normal service
- NEMA 4X rated enclosure provides protection in harsh environments permitting outdoor monitoring or in areas where dust and particulate matter exists

APPLICATIONS

- Refrigeration equipment
- Energy and water management
- Liquid level in water storage tanks

ACCESSORIES

Model	Description
A-164	16.4' (5 m) cable with M-12 4-pin female connector

SPECIFICATIONS

Service: Compatible gases & liquids.
Wetted Materials: Brass, silicone, 300 SS.
Accuracy: Transmitter output: $\pm 2\%$ FS (includes linearity, hysteresis and repeatability). Gage: $\pm 3\%$ of full-scale at 70°F (21.1°C).
Stability: $\pm 1\%$ FS/yr.
Temperature Limits: 20 to 120°F (-6.67 to 48.9°C).
Pressure Limits: -20" Hg to 500 psig (-0.677 bar to 34.4 bar).
Thermal Effect: 0.025%/°F (0.045%/°C) includes zero & span.
Power Requirements: 10 to 35 VDC.
Output Signal: 4 to 20 mA.
Response Time: 50 ms.
Loop Resistance: 0 to 1250 Ω max.
Electrical Connections: M-12 circular 4 pin connector.
Process Connections: 1/4" female NPT high and low pressure taps, duplicated - one pair top for air and gas, and one pair bottom for liquids.
Enclosure Rating: Designed to meet NEMA 4X (IP66).
Mounting Orientation: Diaphragm in vertical position. Consult factory for other position orientations.
Weight: 8 lb 4 oz (3.74 kg).
Agency Approvals: CE.

MODEL CHART

Model	Range
631B-0	0 to 0.5 in w.c.
631B-1	0 to 1 in w.c.
631B-2	0 to 2 in w.c.
631B-3	0 to 5 in w.c.
631B-5	0 to 25 in w.c.

OPTIONS

To order add suffix:	Description
-NIST	NIST traceable calibration certificate
Example:	631B-2-NIST

USA: California Proposition 65

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov