The Series 631B 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 to 5, 1 to 5, 0 to 10 VDC, and 4 to 20 mA output. It also provides an auto-zero capability. The field selectable port swap feature eliminates costly replumbing if the unit is improperly installed or if the transmitter is simply replaced. An optional LCD display is available for on-site indication of line and differential pressure. The all cast aluminum housing is rated NEMA 4 (IP56). 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.

### SPECIFICATIONS

**Service:** Gases or liquids compatible with 17-4 PH stainless steel.

**Accuracy:** All pressure ranges have ±1% full-scale accuracy except the lowest selectable range of each unit is ±2% full-scale.

**Stability:** ±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:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Max. Working Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWDP-1</td>
<td>Selectable 0, 10, 20, 50 psi</td>
<td>100 psi</td>
</tr>
<tr>
<td>WWDP-2</td>
<td>Selectable 10, 20, 50, 100 psi</td>
<td>250 psi</td>
</tr>
<tr>
<td>WWDP-3</td>
<td>Selectable 25, 50, 125, 250 psi</td>
<td>250 psi</td>
</tr>
</tbody>
</table>

**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.

**Temperature:**

- 

**Stability:** ±0.5% per year.

**Temperature Limits:**

- 

**Stability:** ±1% full-scale.

**Accuracy:** ±0.5% per year.

**Response Time:** 1 to 5 sec (selectable).

**Loop Resistance:** 1000 Q.

**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 (IP56).

**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.

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**For NIST traceable calibration certificate, use order code NISTCAL-PT1.**

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**Series 631B Capshelic® Wet/Wet Differential Pressure Transmitter**

The Series 631B 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 to 20 mA output signal for two wire circuits. Digital push button, zero and span adjustments are easily accessed on the front cover. The Series 631B 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.

### SPECIFICATIONS

**Service:** Compatible gases & liquids.

**Wetted Materials:** Brass, silicone, 300 SS.

**Accuracy:** Transmitter output: ±2% FS (includes linearity, hysteresis and repeatability); Gauge: ±3% of full-scale at 70°F (21.1°C).

**Stability:** ±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 msec.

**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.

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**For NIST traceable calibration certificate, use order code NISTCAL-PT1.**

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**ACCESSORY**

A-164, 16.4’ (5 m) cable with M-12 4-pin female connector