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 05, 15, 0-10 VDC, and 4 to 20 mA output. It also provides an auto-zero capability. The field selectable port swap feature eliminates costly rehousing 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 4X (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 levels, zeroing 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˝ w.c. 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 sec (selectable). Loop Resistance: 1000 ohms. Current Consumption: VDC power: 0-5, 1-5 VDC output 4 mA (typ); 0-10 VDC output 5 mA (typ); 4-20 mA output 20 mA max. Current consumption will equal the transmitter output in current mode. VAC power: 0-5, 1-5, 0-10 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.

**Table: Model and Description**

<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, 100 psi</td>
<td>100 psi</td>
</tr>
<tr>
<td>WWDP-2</td>
<td>Selectable 10, 20, 50, 100 psi</td>
<td>100 psi</td>
</tr>
<tr>
<td>WWDP-3</td>
<td>Selectable 25, 50, 125, 250 psi</td>
<td>250 psi</td>
</tr>
<tr>
<td>WWDP-1-LCD</td>
<td>Selectable 0, 10, 20, 50, 100 psi</td>
<td>100 psi</td>
</tr>
<tr>
<td>WWDP-2-LCD</td>
<td>Selectable 10, 20, 50, 100 psi</td>
<td>100 psi</td>
</tr>
<tr>
<td>WWDP-3-LCD</td>
<td>Selectable 25, 50, 125, 250 psi</td>
<td>250 psi</td>
</tr>
</tbody>
</table>

**Specifications**

- **Service:** Gases or liquids compatible with 17-4 PH stainless steel.
- **Accuracy:** Full scale accuracy is ±2%.
- **Stability:** ±0.5% per year.
- **Temperature Limits:** Compensated temperature range: 32°F to 130°F (0 to 54°C).
- **Pressure Limits:** Max working pressure: WWDP-1: 50 psi; WWDP-2: 100 psi; WWDP-3: 250 psi.
- **Thermal Effect:** % FS/100°F (50°C).
- **Power Requirements:** 2% FS/100°F (50°C) includes zero and span.
- **Pressure Limits:** 12 to 30 VDC/18 to 28 VAC (reverse excitation protected).
- **Output Signal:** 4-20 mA output cannot be powered with AC voltage.
- **Enclosure Rating:** NEMA 4X (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.

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**Dwyer Instruments, Inc.**

**Model:** 631B

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

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

**Specifications**

- **Service:** Compatible gases & liquids.
- **Wetted Materials:** Brass, silicone, 300 SS.
- **Accuracy:** Transmitter output: ±2% F.S. (includes linearity, hysteresis and repeatability).
- **Gage:** ±3% of full scale at 70°F (21.1°C).
- **Stability:** ±1% F.S./yr.
- **Temperature Limits:** 20 to 120°F (-6.7°F to 48.9°C).
- **Pressure Limits:** -20 Hg to 500 psig (-0.67 bar to 34.4 bar).
- **Thermal Effect:** 0.025%/°F (0.045%/°C) includes zero & span.
- **Power Requirements:** 10-35 VDC.
- **Output Signal:** 4 to 20 mA.

**Response Time:** 50 msec.

**Loop Resistance:** 0-1250 ohms maximum.

**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:** Vertical; diaphragm in vertical position. Consult factory for other position orientations.

**Agency Approvals:** CE.

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**Dwyer Instruments, Inc.**

**Model:** 631B-5

**Series 631B Differential Pressure Transmitter**

Welded wetted parts - 316 SS.

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

**Specifications**

- **Service:** Gases or liquids compatible with 17-4 PH stainless steel.
- **Accuracy:** Full scale accuracy is ±2%.
- **Stability:** ±0.5% per year.
- **Temperature Limits:** Compensated temperature range: 32°F to 130°F (0 to 54°C).
- **Pressure Limits:** Max working pressure: WWDP-1: 50 psi; WWDP-2: 100 psi; WWDP-3: 250 psi.
- **Thermal Effect:** % FS/100°F (50°C).
- **Power Requirements:** 2% FS/100°F (50°C) includes zero and span.
- **Pressure Limits:** 12 to 30 VDC/18 to 28 VAC (reverse excitation protected).
- **Output Signal:** 4-20 mA output cannot be powered with AC voltage.
- **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 sec (selectable).
- **Loop Resistance:** 1000 ohms.
- **Current Consumption:** VDC power: 0-5, 1-5 VDC output 4 mA (typ); 0-10 VDC output 5 mA (typ); 4-20 mA output 20 mA max. Current consumption will equal the transmitter output in current mode. VAC power: 0-5, 1-5, 0-10 VDC output 40 mA (typ).
- **Electrical Connections:** 1/2” conduit.
- **Process Connections:** 1/8” female NPT internal.
- **Enclosure Rating:** 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.

**Table: Model and Range**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>631B-5</td>
<td>0-25” w.c.</td>
</tr>
<tr>
<td>631B-3</td>
<td>0-5” w.c.</td>
</tr>
<tr>
<td>631B-2</td>
<td>0-2” w.c.</td>
</tr>
<tr>
<td>631B-1</td>
<td>0-1” w.c.</td>
</tr>
<tr>
<td>631B-0</td>
<td>0-0.5” w.c.</td>
</tr>
</tbody>
</table>