**Differential Pressure Transmitters**

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 replumbing if the unit is improperly installed or if the transmitter is simply replaced. An optional LCD display is available for one-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 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: 32 to 185°F (-20 to 85°C).
- **Pressure Limits:** Max working pressure: WWDP-1: 50 psi; WWDP-2: 100 psi; WWDP-3: 250 psi;
- **Power Requirements:** AC powered with AC voltage. Note: 4-20 mA output cannot be powered with AC voltage.
- **Output Signal:** 4-20 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 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 g).
- **Agency Approvals:** CE.

### Model Options

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

### Series 631B

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 4-20 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” w.c.

### Specifications

- **Service:** Compatible gases & liquids. Wetted Materials: Brass, silicon, 300 SS.
- **Accuracy:** Transmitter output: ±2% F.S. (includes linearity, hysteresis and repeatability). Gauge: ±3% of full scale at 70°F (21.1°C).
- **Stability:** ±1% F.S./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:** 10-35 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 mounting in vertical position. Consult factory for other position orientations.
- **Weight:** 8 lb, 4 oz (3.74 kg).
- **Agency Approvals:** CE.

### Model Options

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

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**Accessories**

A-164, 16’ (5 m) cable with M-12 4-pin female connector