**SERIES 616W**

**DIFFERENTIAL PRESSURE TRANSMITTER**

**NEMA 4X Enclosure, 0.25% FS Accuracy**

Positive, negative and differential pressures can be measured within a full span accuracy of ±0.25 with the Series 616W Differential Pressure Transmitter. Units are enclosed in a polycarbonate case, rated NEMA 4X (IP66) and operate by sensing the pressure of air and compatible gases then sending a standard 4 to 20 mA output signal. Design enables operation in 2-wire current loops. A wide range of models are available factory calibrated to specific ranges. The span and zero controls are for use when checking calibration. They are not intended for re-ranging to a significantly different span. The LCD display allows local indication of pressure.

**FEATURES/BENEFITS**

- **NEMA 4X rated enclosure** provides protection in harsh environments permitting outdoor monitoring or in areas where dust and particulate matter exists.
- **Easy to read LCD display** provides immediate local alerts allowing corrective action to be taken quicker to eliminate the problem from becoming widespread.
- **Zero and span controls** provide easy calibration checks and shorter installation time to get device running and monitoring.
- **NEMA 4X rated enclosure** provides protection in harsh environments permitting outdoor monitoring or in areas where dust and particulate matter exists.
- **Digital, push button zero and span** allows for quick and simple field calibration.

**APPLICATIONS**

- Dust collection
- Outdoor HVAC
- Roof-top equipment

**SPECIFICATIONS**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Accuracy:** ±0.25% FS @ 77°F (25°C), display accuracy ±0.5%.
- **Stability:** ±1% FS/yr.
- **Temperature Limits:** 14 to 185°F (-10 to 85°C).
- **Pressure Limits:** See chart.
- **Power Requirements:** 10 to 35 VDC (2-wire), 17 to 36 VDC, or isolated 21.6 to 33 VAC (3-wire).
- **Output Signal:** 4 to 20 mA (2-wire), 0 to 5 VDC, or 0 to 10 VDC (3-wire).
- **Zero and Span Adjustments:** Push buttons.
- **Agency Approvals:** CE.

**OPTIONS**

- To order add suffix: Description Price
  - NIST NIST traceable calibration certificate $139.00

**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>Max. Pressure</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>616W-2-LCD</td>
<td>0 to 6 in W.C.</td>
<td>10 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-3-LCD</td>
<td>0 to 10 in W.C.</td>
<td>10 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-4-LCD</td>
<td>0 to 20 in W.C.</td>
<td>20 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-5-LCD</td>
<td>0 to 40 in W.C.</td>
<td>20 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-6-LCD</td>
<td>0 to 100 in W.C.</td>
<td>15 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-7-LCD</td>
<td>0 to 200 in W.C.</td>
<td>45 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-20B-LCD</td>
<td>0 to ±10 in W.C.</td>
<td>10 psig</td>
<td>$328.50</td>
</tr>
<tr>
<td>616W-3M-LCD</td>
<td>0 to ±2.5 kPa</td>
<td>86.9 kPa</td>
<td>$328.50</td>
</tr>
</tbody>
</table>

Note: Units with "M" in the model number are metric units.

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**SERIES 616WL**

**DIFFERENTIAL PRESSURE TRANSMITTER**

**Low Ranges Down to 0.25 in.w.c. (60 Pa), NEMA 4X Housing (IP66)**

The Series 616WL Differential Pressure Transmitter senses very low pressures of air and non-combustible, compatible gases and sends a standard 4 to 20 mA output signal. All models, including those featuring the 3 digit LCD digital read-out, are factory calibrated to specific ranges as listed in the chart below. Positive, negative and differential pressures can be measured within a full span accuracy of ±0.50%. This weatherproof unit is enclosed in a polycarbonate case, designed to meet (IP66/ NEMA 4X), internal digital push button zero and span allow for quick and simple field calibration.

**FEATURES/BENEFITS**

- **NEMA 4X rated enclosure** provides protection in harsh environments permitting outdoor monitoring or in areas where dust and particulate matter exists.
- **Easy to read LCD display** provides immediate local alerts allowing corrective action to be taken quicker to eliminate the problem from becoming widespread.
- **Zero and span controls** provide easy calibration checks and shorter installation time to get device running and monitoring.
- **High precision accuracy at low pressure ranges** provides exceptional accuracy for insuring tight-control and minimizing costly out of specification conditions.

**APPLICATIONS**

- Low pressure applications
- Dust collection
- Outdoor HVAC
- Roof-top equipment

**SPECIFICATIONS**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Accuracy:** ±0.50% FS, display accuracy ±0.5%.
- **Stability:** ±1% FS/yr.
- **Temperature Limits:** 0 to 140°F (-17.8 to 60°C).
- **Compensated Temperature Limits:** 20 to 120°F (-6.7 to 48.9°C).
- **Pressure Limits:** See chart.
- **Thermal Effect:** ±0.02% FS/°F (0.036% FS/°C).
- **Power Requirements:** 12 to 30 VDC (2-wire), 0 to 250 Pa (3-wire).
- **Output Signal:** 4 to 20 mA.
- **Zero and Span Adjustments:** Digital, push button adj.
- **Loop Resistance:** Current output: 0 to 1250 Ω max; Voltage output: Load resistance 1 KΩ (min).
- **Current Consumption:** 40 mA (max).
- **Electrical Connections:** 3-wire removable European style terminal block for 16 to 26 AWG.
- **Process Connections:** Barbed, dual size to fit 1/8˝ and 3/16˝ (3.12 and 4.76 mm) ID rubber or vinyl tubing.
- **Enclosure Rating:** NEMA 4X (IP66).
- **Mounting Orientation:** Any orientation.
- **Weight:** Without LCD 8.8 oz (249 g); with LCD 9.6 oz (272 g).
- **Agency Approvals:** CE.

**OPTIONS**

- To order add suffix: Description Price
  - NIST NIST traceable calibration certificate $139.00

**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>Max. Pressure</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>616WL-2-LCD</td>
<td>0 to 0.25 in w.c.</td>
<td>2 psig</td>
<td>$521.50</td>
</tr>
<tr>
<td>616WL-4-LCD</td>
<td>0 to 1 in w.c.</td>
<td>4 psig</td>
<td>$494.50</td>
</tr>
<tr>
<td>616WL-12-LCD</td>
<td>0 to ±0.25 in w.c.</td>
<td>4 psig</td>
<td>$521.50</td>
</tr>
<tr>
<td>616WL-14-LCD</td>
<td>0 to ±1 in w.c.</td>
<td>4 psig</td>
<td>$521.50</td>
</tr>
<tr>
<td>616WL-22-LCD</td>
<td>0 to 60 Pa</td>
<td>2 psig</td>
<td>$521.50</td>
</tr>
<tr>
<td>616WL-32-LCD</td>
<td>0 to ±60 Pa</td>
<td>4 psig</td>
<td>$521.50</td>
</tr>
<tr>
<td>616WL-25-LCD</td>
<td>0 to 250 Pa</td>
<td>4 psig</td>
<td>$494.50</td>
</tr>
<tr>
<td>616WL-35-LCD</td>
<td>0 to ±250 Pa</td>
<td>4 psig</td>
<td>$494.50</td>
</tr>
</tbody>
</table>

Zero and Span Adjustments: Digital, push button adj.

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**Combined Fitting Options:** See page 503 (Gage Tubing Accessories)

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**Process Tubing Options:** See page 503 (Gage Tubing Accessories)