Differential Pressure Transmitters

**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.

**APPLICATIONS**

- Dust collection
- Outdoor HVAC
- Roof-top equipment

**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>Max. Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>616W-2-LCD</td>
<td>0 to 6 in w.c.</td>
<td>10 psig</td>
</tr>
<tr>
<td>616W-3-LCD</td>
<td>0 to 10 in w.c.</td>
<td>10 psig</td>
</tr>
<tr>
<td>616W-4-LCD</td>
<td>0 to 20 in w.c.</td>
<td>20 psig</td>
</tr>
<tr>
<td>616W-5-LCD</td>
<td>0 to 40 in w.c.</td>
<td>20 psig</td>
</tr>
<tr>
<td>616W-6-LCD</td>
<td>0 to 100 in w.c.</td>
<td>15 psig</td>
</tr>
<tr>
<td>616W-7-LCD</td>
<td>0 to 200 in w.c.</td>
<td>45 psig</td>
</tr>
<tr>
<td>616W-20B-LCD</td>
<td>0 to 10 in w.c.</td>
<td>10 psig</td>
</tr>
<tr>
<td>616W-3M-LCD</td>
<td>0 to 2.5 kPa</td>
<td>68.9 kPa</td>
</tr>
</tbody>
</table>

**OPTIONS**

<table>
<thead>
<tr>
<th>To order add suffix:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-NIST</td>
<td>NIST traceable calibration certificate</td>
</tr>
</tbody>
</table>

**Example: 616W-3-LCD-NIST**

**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 ensuring tight-control and minimizing costly out of specification conditions.

**APPLICATIONS**

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

**OPTIONS**

<table>
<thead>
<tr>
<th>To order add suffix:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-NIST</td>
<td>NIST traceable calibration certificate</td>
</tr>
</tbody>
</table>

**Example: 616WL-4-LCD-NIST**

**SPECIFICATIONS**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Accuracy:** ±0.25% FS (±0.5% FS at 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.
- **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.

**SPECIFICATIONS**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Accuracy:** ±0.25% FS, display accuracy ±0.5%.
- **Stability:** ±1% FS/yr.
- **Temperature Limits:** 0 to ±100°F (-17.8 to 60°C).
- **Compensated Temperature Limits:** 20 to 120°F (-6.67 to 48.9°C).
- **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.

**SPECIFICATIONS**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Accuracy:** ±0.25% FS, display accuracy ±0.5%.
- **Stability:** ±1% FS/yr.
- **Temperature Limits:** 0 to ±100°F (-17.8 to 60°C).
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- **Power Requirements:** 10 to 35 VDC (2-wire), 17 to 36 VDC, or isolated 21.6 to 33 VAC (3-wire).
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- **Zero and Span Adjustments:** Push buttons.
- **Agency Approvals:** CE.