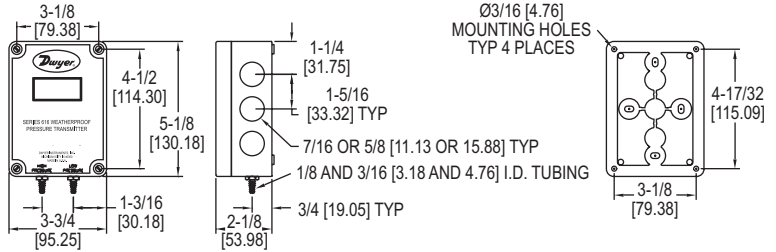


# DIFFERENTIAL PRESSURE TRANSMITTER

## NEMA 4X Enclosure, 0.25% FS Accuracy



Positive, negative and differential pressures can be measured within a full span accuracy of  $\pm 0.25$  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 4-20 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 provides easy calibration checks and shorter installation time to get device running and monitoring

**APPLICATIONS**

- Dust collection
- Outdoor HVAC
- Roof-top equipment

Model	Range	Max. Pressure
616W-2-LCD	0 to 6 in w.c.	10 psig
616W-3-LCD	0 to 10 in w.c.	10 psig
616W-4-LCD	0 to 20 in w.c.	20 psig
616W-5-LCD	0 to 40 in w.c.	20 psig
616W-6-LCD	0 to 100 in w.c.	15 psig
616W-7-LCD	0 to 200 in w.c.	45 psig
616W-20B-LCD	0 to $\pm 10$ in w.c.	10 psig
616W-3M-LCD	0 to 2.5 kPa	68.9 kPa

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

**SPECIFICATIONS**

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

**Loop Resistance:** Current output: 0 to 1250  $\Omega$  max; Voltage output: Load resistance 1 k $\Omega$  (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**

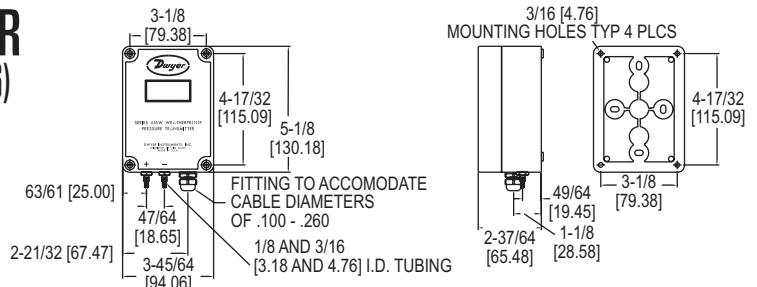
To order add suffix:	Description
-NIST	NIST traceable calibration certificate
Example: 616W-3-LCD-NIST	

Process Tubing Options: See page 453 (Gage Tubing Accessories)

**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 4-20 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  $\pm 0.50\%$ . 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 provides 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

To order add suffix:	Description
-NIST	NIST traceable calibration certificate
Example: 616WL-4-LCD-NIST	

**SPECIFICATIONS**

**Service:** Air and non-combustible, compatible gases.  
**Wetted Materials:** Consult factory.  
**Accuracy:**  $\pm 0.50\%$  FS, display accuracy  $\pm 0.5\%$ .  
**Stability:**  $\pm 1\%$  FS/yr.  
**Temperature Limits:** 0 to 140°F (-17.8 to 60°C).  
**Compensated Temperature Limits:** 20 to 120°F (-6.67 to 48.9°C).  
**Pressure Limits:** See chart.  
**Thermal Effect:**  $\pm 0.02\%$  FS/°F (0.036% FS/°C).  
**Power Requirements:** 12-30 VDC (2-wire).  
**Output Signal:** 4-20 mA.

**Zero and Span Adjustments:** Digital, push-button adj.  
**Loop Resistance:** DC; 0 to 900  $\Omega$  max.  
**Current Consumption:** DC; 38 mA max.  
**Electrical Connections:** Screw-type terminal block.  
**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:** Vertical, consult factory for other position orientations.  
**Weight:** Without LCD 17 oz (482 g); with LCD 18 oz (510 g).  
**Agency Approvals:** CE.

**MODEL CHART**

Model	Range	Max. Pressure
616WL-2-LCD	0 to 0.25 in w.c.	2 psig
616WL-4-LCD	0 to 1 in w.c.	4 psig
616WL-12-LCD	0 to $\pm 0.25$ in w.c.	2 psig
616WL-14-LCD	0 to $\pm 1$ in w.c.	4 psig
616WL-22-LCD	0 to 60 Pa	2 psig
616WL-32-LCD	0 to $\pm 60$ Pa	2 psig
616WL-25-LCD	0 to 250 Pa	4 psig
616WL-35-LCD	0 to $\pm 250$ Pa	4 psig

Process Tubing Options: See page 453 (Gage Tubing Accessories)