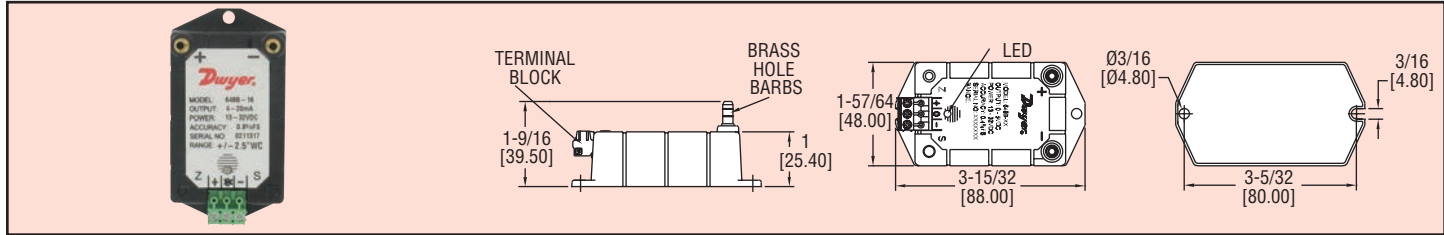




Series  
648B  
&  
648C

# Differential Pressure Transmitters

## Unidirectional and Bidirectional Ranges, Removable Terminal Block



The Series 648B and 648C Differential Pressure Transmitters are designed to be used with clean, dry air and other non-corrosive gases. Each unit features a push-activated zero function and an associated LED light indicator. With the convenient push-button, zero calibration can be performed without any additional equipment, which significantly reduces time and cost for users. The dual color LED indicates if the transmitter is at normal operation, overpressure, or in the process of zero calibration. The enclosure consists of a flame retardant plastic top cover and a stainless steel bottom plate for ruggedness. The pressure ranges vary from 0.1 in w.c. to 25 in w.c. unidirectional and 0.25 in w.c. to 5 in w.c. bidirectional. Series 648B comes standard with  $\pm 0.8\%$  FS\* accuracy, while 648C models are available in  $\pm 0.4\%$  FS\* accuracy for more demanding applications. Wiring time is reduced with the removable terminal block. Each unit features a 2-wire 4 to 20 mA output that is fully protected against short circuiting and incorrect wiring.

Model	Range (in w.c.)	Model	Range (in w.c.)
648B-01	0 to 0.1	648B-08	0 to 25
648B-02	0 to 0.25	648B-13	0 to $\pm 0.25$
648B-03	0 to 0.5	648B-14	0 to $\pm 0.5$
648B-04	0 to 1	648B-15	0 to $\pm 1$
648B-05	0 to 2.5	648B-16	0 to $\pm 2.5$
648B-06	0 to 5	648B-17	0 to $\pm 5$
648B-07	0 to 10		

**Note:** To order unit with  $\pm 0.4\%$  FS\* accuracy, change B to C in model number.  
Ex. 648C-01

### SPECIFICATIONS

**Service:** Air and non-combustible, compatible gases.

**Wetted Materials:** 302 SS, glass, nickel, silicon rubber, polyethylene, acrylic, ABS and brass.

**Accuracy:** 648B:  $\pm 0.8\%$  FS\* at room temperature; 648C:  $\pm 0.4\%$  FS\* at room temperature. \*RSS (Root Sum Square) includes non-linearity, hysteresis and non-repeatability.

**Stability:**  $\pm 1\%$  FS/yr.

**Temperature Limits:** Operating: 0 to 170°F (-18 to 77°C); Storage: -65 to 185°F (-54 to 85°C).

**Pressure Limits:** 15 psi (100 kPa) proof pressure; 30 psi (200 kPa) burst pressure.

### OPTION

For NIST traceable calibration certificate, use order code NISTCAL-PT1.

**Thermal Effects:** 648B:  $\pm 0.025\%$  FS/°F (0.045%/°C); 648C:  $\pm 0.020\%$  FS/°F (0.036%/°C).

**Power Requirements:** 13 to 32 VDC.

**Output Signal:** 4 to 20 mA.

**Zero and Span Adjustments:** Push-button for zero, potentiometer for span.

**Response Time:** Approximately 10 ms.

**Max. Loop Resistance:** DC: 0 to 950  $\Omega$ .

**Electrical Connection:** Detachable euro-style terminal block.

**Process Connections:** 3/16" OD barbed fitting for 1/8" ID push-on tubing.

**Housing:** SS and PC+ABS alloy.

**Weight:** 3.8 oz (108 g).