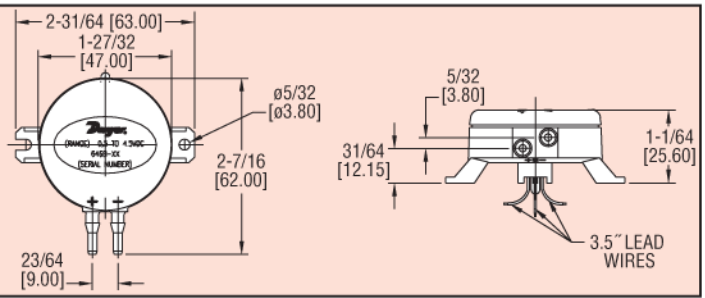
Series 646B

Differential Pressure Transmitter

Ranges Down to 0.5 in w.c., Ratiometric Signal Output



The Series 646B Differential Pressure Transmitter is designed to be used with clean, dry air and other non-corrosive gases. Each unit features a flame retardant enclosure and a unique design which is suitable for circuit board mounting. Series 646B measures differential pressure at an accuracy of ±2.0% FS down to 0.5 in w.c. The transmitter contains a stainless steel sensor that provides resistance against corrosion combined with excellent performance and long term stability. The Series 646B transmitter features excellent stability, low hysteresis, accurate operation over a broad temperature range, and exceptional insensitivity to vibration. These features make the transmitters perfect for VAV systems, filter monitoring, HVAC fan control, building pressurization, and leak detection systems.

Model	Range in w.c.
646B-03	0 to 0.5
646B-04	0 to 1
646B-05	0 to 2.5
646B-06	0 to 5
646B-07	0 to 10

OPTION

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

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: 302 SS, glass, nickel, polyethylene, acrylic and ABS.
Accuracy: ±2.0% FS* at room temperature. *RSS (Root Sum Square) includes non-linearity, hysteresis and non-repeatability.
Temperature Limits: Operating: 23 to 170°F (-5 to 77°C); Storage: -6 to 185°F (-21 to 85°C).
Compensated Temperature: 32 to 170°F (0 to 77°C).
Zero/Span Shift: < 0.05% FS/F (< 0.09% FS/C).
Warm-Up Shift: ±0.1% FS.

See page 567 for process tubing options.

Position Effect: Unit is calibrated in a vertical position.
Pressure Limits: ±10 psi (69 kPa).
Output Signal: 0.5 to 4.5 VDC ratiometric.
Output Impedance: < 5.0 Ω.
Supply Voltage: 5.0 ±0.25 VDC.
Response Time: Approximately 10 ms.
Electrical Connection: Three stripped, color-coded lead wires, 26 AWG, approximately 3.5″ length.
Process Connections: 3/16″ OD barbed fitting for 1/8″ ID push-on tubing.
Housing: PBT+ABS alloy.
Weight: 3.1 oz (90 g).