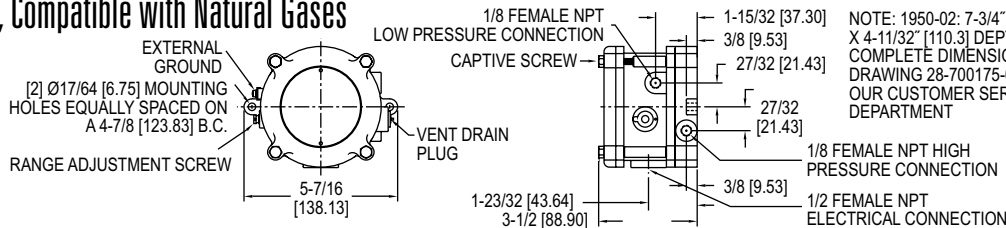


# EXPLOSION-PROOF DIFFERENTIAL PRESSURE SWITCH

Explosion-proof, Weatherproof, Compatible with Natural Gases



NOTE: 1950-02: 7-3/4" [196.9] DIA. X 4-11/32" [110.3] DEPTH. FOR COMPLETE DIMENSIONS REQUEST DRAWING 28-700175-00 FROM OUR CUSTOMER SERVICE DEPARTMENT

**Series 1950G Explosion-Proof Differential Pressure Switch** combines the best features of the popular Dwyer® Series 1950 Pressure Switch with the benefit of natural gas compatibility. Units are rain-tight for outdoor installations, and are UL listed for use in Class I, Groups A, B, C, and D; Class II, Groups E, F, and G and Class III atmospheres, Directive 2014/34/EU (ATEX) Compliant for **CE** 2813 **Ex** II 2G Ex db IIB+H2 T6, CSA and FM approved for Class I, Div. 1, Groups B, C, D; Class II, Div. 1, Groups E, F, G and Class III atmospheres. IECEx Ex db IIB+H2 T6 (-40°C<Ta<+60°C). The 1950G is very compact, about half the weight and bulk of equivalent conventional explosion-proof switches.

Easy access to the SPDT relay and power supply terminals is provided by removing the top plate of the aluminum housing. A supply voltage of 24 VDC, 120 or 240 VAC is required. A captive screw allows the cover to swing aside while remaining attached to the unit. Adjustment to the set point of the switch can be made without disassembly of the housing.

## BENEFITS/FEATURES

- Compatible with natural gas making it suitable for use in those applications
- External set point screw provides easy access that simplifies making adjustments without opening or disassembling enclosure
- Easily accessible electrical connection simplifies the installation

## APPLICATIONS

- Natural gas applications
- Process applications
- All-weather applications

## SPECIFICATIONS

**Service:** Air and compatible combustible gases.

**Wetted Materials:** Contact factory.

**Temperature Limits:** 0 to 140°F

(-17 to 60°C). **Note:** Set point drift may occur with ambient temperature changes.

**Pressure Limits:** 45 in w.c. (11.2 kPa) continuous; 10 psig (68.95 kPa) surge.

**Enclosure Rating:** NEMA 3 (IP54), NEMA 7 and 9.

**Switch Type:** 1 form C relay (SPDT).

**Electrical Rating:** 10 A, 120/240 VAC, 28 VDC. Resistive 50 mA, 125 VDC.

**Power Requirements:** 24 VDC ±10%. 120 or 240 VAC ±10% optional.

**Electrical Connections:** Internal terminal block.

**Process Connections:** 1/8" female NPT.

**Mounting Orientation:** Diaphragm in vertical position. Consult factory for other position orientations.

**Set Point Adjustment:** Screw type on top of housing.

**Weight:** 2 lb 15.7 oz (1.35 kg).

**Compliance:** ATEX, CE, CSA, FM, IECEx, UL.

## MODEL CHART

| UL, CSA, FM Model                                                    | ATEX Model    | Range in w.c. | Approximate Deadband |                |
|----------------------------------------------------------------------|---------------|---------------|----------------------|----------------|
|                                                                      |               |               | Min. Set Point       | Max. Set Point |
| 1950G-00-B-24-NA                                                     | 1950G-00-B-24 | .07 to .15    | .04                  | .06            |
| 1950G-0-B-24-NA                                                      | 1950G-0-B-24  | .15 to .50    | .06                  | .11            |
| 1950G-1-B-24-NA                                                      | 1950G-1-B-24  | .4 to 1.6     | .11                  | .29            |
| 1950G-5-B-24-NA                                                      | 1950G-5-B-24  | 1.4 to 5.5    | .4                   | .9             |
| 1950G-10-B-24-NA                                                     | 1950G-10-B-24 | 3 to 11       | .9                   | 1.8            |
| 1950G-20-B-24-NA                                                     | 1950G-20-B-24 | 4 to 20       | 1.2                  | 3.0            |
| 240 VAC Models: 1950G-XX-B-240-NA; 120 VAC Models: 1950G-XX-B-120-NA |               |               |                      |                |