





EXPLOSION-PROOF DIFFERENTIAL PRESSURE SWITCH

Explosion-proof, Weatherproof, Compatible with Natural Gases 1/8 FEMALE NPT 1-15/32 [37.30] NOTE: 1950-02: 7-3/4" [196.9] DIA. LOW PRESSURE CONNECTION X 4-11/32" [110.3] DEPTH. FOR 3/8 [9.53] EXTERNAL. COMPLETE DIMENSIONS REQUEST CAPTIVE SCREW - F GROUND 27/32 [21.43] DRAWING 28-700175-00 FROM [2] Ø17/64 [6.75] MOUNTING OUR CUSTOMER SERVICE 27/32 HÖLES EQUALLY SPACED ON DEPARTMENT A 4-7/8 [123.83] B.C. [21.43] VENT DRAIN 1/8 FEMALE NPT HIGH **PLUG** RANGE ADJUSTMENT SCREW PRESSURE CONNECTION 3/8 [9.53] 5-7/16 1-23/32 [43.64] 1/2 FEMALE NPT [138.13] 3-1/2 [88.90] ELECTRICAL CONNECTION

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 (€ 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

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