



NOTE: 1950-02: 7-3/4" [196.9] DIA.

DRAWING 28-700175-00 FROM

OUR CUSTOMER SERVICE

DEPARTMENT

X 4-11/32" [110.3] DEPTH. FOR COMPLETE DIMENSIONS REQUEST

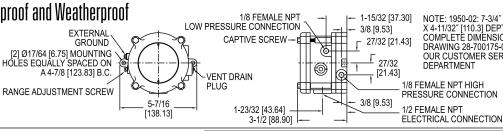




EXPLOSION-PROOF DIFFERENTIAL PRESSURE SWITCH

Compact, Low Cost, Explosion-proof and Weatherproof





Series 1950 Explosion-Proof Differential Pressure Switch combines the best features of the popular Dwyer® Series 1900 Pressure Switch with an integral explosionproof and weatherproof housing, making it an exceptional value for either application. It is CE, UL and CSA listed, FM approved for use in Class I, Div 1, Groups C and D, Class II Groups E, F, and G and Class III hazardous atmospheres NEMA 7 and 9. Rain tight NEMA 3 (IP54), weatherproof features include a drain plug and O-ring seal in cover. Electrical connections are easily made by removing front cover. For convenience the set point adjustment screw is located on the outside of the housing. Twelve models offer set points from .03 to 20 in w.c. (0.0075 to 5 kPa) and from .5 to 60 psi (0.035 to 3.5 bar). The unit is very light and compact - about half the weight and bulk of other explosion-proof or weatherproof switches with separate enclosures. CAUTION: For use only with air or compatible gases. Applications with hazardous atmospheres and a single positive pressure may require special venting.

BENEFITS/FEATURES

- · Explosion-proof and weatherproof housing provides device protection for outdoor use or harsh environment operation
- External set point screw provides easy access that simplifies making adjustments without opening or disassembling enclosure
 Easily accessible electrical connection simplifies the installation

SPECIFICATIONS

Service: Air and non-combustible.

Wetted Materials: Consult factory.

Temperature Limits: -40 to 140°F
(-40 to 60°C); 0 to 140°F (-17.8 to 60°C)
for 1950P-8, 15, 25, and 50. -30 to 130°F
(-34.4 to 54.4°C) for 1950-02.

Pressure Limits: Continuous: 1950's - 45 in w.c. (0.11 bar); 1950P's - 35 psi (2.41 bar); 1950P-50 only - 70 psi (4.83 bar). Surge: 1950's - 10 psi (0.69 bar), 1950P's - 50 psi (3.45 bar), 1950P-50 only - 90 psi (6.21 bar).

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

Switch Type: Single-pole double-throw

Electrical Rating: 15 A @, 125, 250, 480 VAC, 60 Hz. Resistive 1/8 HP @ 125 VAC, 1/4 HP @ 250 VAC, 60 Hz. Electrical Connections: 3 screw type, common, normally open and normally closed

Process Connections: 1/8" female

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

Set Point Adjustment: Screw type on

top of housing. **Weight:** 3.25 lb (1.5 kg); 1950-02 model, 4.4 lb (2 kg).

Agency Approvals: CE, CSA, FM, UL.

APPLICATIONS

Process applications

All-weather applications

MODEL CHAR	MODEL CHART Ap		ate			Approximate Deadband				Approximate Deadband	
Model	Range, psid	Min. Set Point	Max. Set Point	Model*	Range*	Min. Set Point	Max. Set Point	Model	Range, in w.c.	Min. Set Point	Max. Set Point
1950P-2-2F	0.5 to 2	0.3	0.3	1950P-50-2F	15 to 50	1.0	1.5	1950-1-2F	.4 to 1.6	.15	.20
1950P-8-2F	1.5 to 8	1.0	1.0	1950-00-2F	.07 to .15	.04	.05	1950-5-2F	1.4 to 5.5	.30	.40
1950P-15-2F	3 to 15	0.9	0.9	1950-0-2F	.15 to .50	.10	.15	1950-10-2F	3 to 11	.40	.50
1950P-25-2F	4 to 25	0.7	0.7					1950-20-2F	4 to 20	.40	.60
*P=PSID range models. Other ranges in w.c.											
Caution: For use only with air or compatible gases. Applications with hazardous atmospheres and a single positive pressure may require special venting.											

SERIES 1950G

C E ® Ex



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EXPLOSION-PROOF DIFFERENTIAL PRESSURE SWITCH

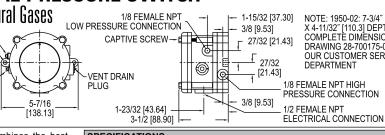
EXTERNAL

GROUND

Explosion-proof, Weatherproof, Compatible with Natural Gases







Series 1950G Explosion-Proof Differential Pressure Switch combines the best 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 € 11 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. EIECEX 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
- 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),

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

DEPARTMENT

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

Set Point Adjustment: Screw type on

Weight: 2 lb 15.7 oz (1.35 kg).

Agency Approvals: 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	1950G-5-B- <u>24</u>	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- <u>240</u> -NA; 120 VAC Models: 1950G-XX-B- <u>120</u> -NA								