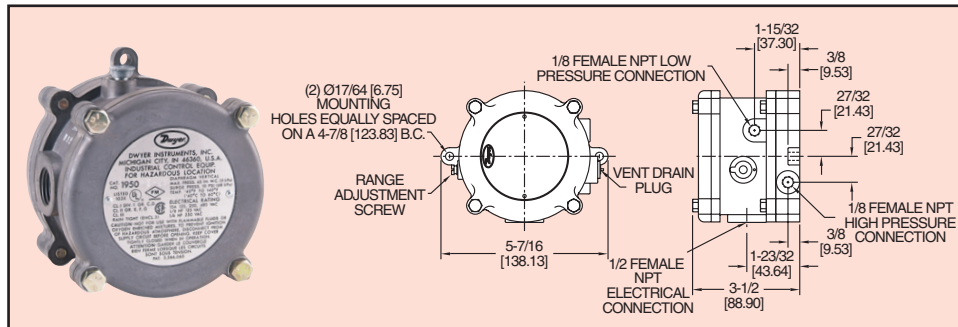




Series 1950 Explosion-Proof Differential Pressure Switches

Compact, Low cost, Explosion-proof and Weatherproof.



Model 1950 Explosion-Proof Differential Pressure Switch combines the best features of the popular Dwyer series 1900 with an integral explosion-proof and weather-proof 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 & 9), Raintight (NEMA 3). Weather-proof 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" w.c. (7.5 kPa to 5 kPa) and from .5 to 50 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 weather-proof switches with separate enclosures.

PHYSICAL DATA

Temperature Limits: -40°F to 140°F (-40°C to 60°C). 0°F to 140°F (-18°C to 60°C) for 1950P-8, 15, 25, and 50 -30°F to 130°F (34°C to 54°C) for 1950-02.
Maximum Surge Pressure: 1950-10 psi (1.7 bar), 1950P - 50 psi (3.4 bar) 1950P-50 only - 90 psi (6.2 bar).
Rated Pressure: 1950 - 45" (.1 bar) w.c., 1950P - 35 psi (2.4 bar), 1950P-50 only - 70 psi (4.8 bar).
Pressure Connection: 1/8" female NPT.
Electrical Rating: 15 A @ 125, 250, 480 VAC, 60 Hz. Resistive 1/8 HP @ 125 V, 1/4 HP @ 250 VAC, 60 Hz.
Wiring Connections: 3 screw type; common, norm. open and norm. closed.
Conduit Connection: 1/2" female NPT.
Set Point Adjustment: Screw type on top of housing. Field adjustable.
Housing: Anodized cast aluminum.
Diaphragm: Molded fluorosilicone rubber. 02 model, silicone on nylon.
Calibration Spring: Stainless steel.
Installation: Mount with diaphragm in vertical position.
Weight: 3.25 lbs. (1.5 kg) 02 model, 4.4 lbs. (2 kg).

SERIES 1950 SWITCHES - STOCKED MODELS, OPERATING RANGES AND DEAD BANDS

Model Number	Range, Inches W.C.	Approximate Dead Band at	
		Min. Set Point	Max. Set Point
1950-02	.03 to .10	.025	.05
1950-00	.07 to .15	.04	.05
1950-0	.15 to .50	.10	.15
1950-1	.4 to 1.6	.15	.20
1950-5	1.4 to 5.5	.30	.40
1950-10	3 to 11	.40	.50
1950-20	4 to 20	.40	.60

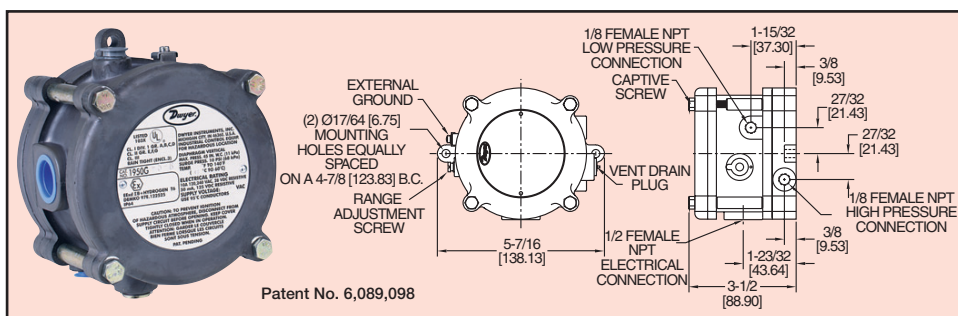
Model* Number	Range, psid	Approximate Dead Band at	
		Min. Set Point	Max. Set Point
1950P-2	0.5 to 2	.3	.3
1950P-8	1.5 to 8	1.0	1.0
1950P-15	3 to 15	.9	.9
1950P-25	4 to 25	.7	.7
1950P-50	15 to 50	1.0	1.5

CAUTION: For use only with air or compatible gases. Applications with hazardous atmospheres and a single positive pressure may require special venting.
 *P=psid range models



Model 1950G Explosion-Proof Differential Pressure Switch

Explosion-Proof, Weatherproof, Compatible with Natural Gases



The Model 1950G Explosion-Proof 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, & D; Class II, Groups E, F, & G and Class III atmospheres, CENELEC approved for EExd IIB & Hydrogen T6, and CSA & FM approved for Class I, Div 1, Groups B, C, D; Class II, Div 1, Groups E, F, G and Class III atmospheres. 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. Supply voltage is 24 VDC, 120VAC, or 240VAC. 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.

PHYSICAL DATA

Temperature Limits: 0°F to 140°F (18° to 60°C). Note: Setpoint drift may occur with ambient temperature changes.
Rated Pressure: 45 in. w.c. (11.2 kPa) (2.7 bar).
Maximum Surge Pressure: 10 psi.
Pressure Connections: 1/8" female NPT.
Electrical Rating: 10A, 120/240 VAC, 28 VDC Resistive 50mA, 125 VDC.
Supply Voltage: 24 VDC, 120VAC or 240VAC.
Wiring Connections: Internal Terminal Block.
Conduit Connections: 1/2" female NPT.
Set Point Adjustment: Screw type on top of housing. Field adjustable.
Housing: Anodized cast aluminum.
Diaphragm: Buna-N. **Weight:** 3 1/4 lbs.
Calibration Spring: Stainless Steel.
Installation: Mount with diaphragm in vertical position.
Response Time: Switch response time may be as much as 10-25 seconds where applied pressures are near set point.

STOCKED MODELS*

Model Number*	Range, Inches W.C.	Approximate Dead Band at	
		Min. Set Point	Max. Set Point
1950G-00-B-	.07 to .15	.04	.06
1950G-0-B-	.15 to .50	.06	.11
1950G-1-B-	.4 to 1.6	.11	.29
1950G-5-B-	1.4 to 5.5	.4	.9
1950G-10-B-	3 to 11	.9	1.8
1950G-20-B-	4 to 20	1.2	3.0

* Specify either 24 for 24 VDC, 120 for 120 VAC or 240 for 240 VAC when ordering. 24 VDC and 120 VAC models are stocked. Example: 1950G-00-B-120