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 Pressure Switch 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 I, Groups C and D, Class II Groups E, F, G and Class III hazardous atmospheres (NEMA 7 & 9). Raintight 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 applications with hazardous atmospheres and a single positive connection, consult factory for other position orientations.

Screw Type: Single-pole double-throw (SPDT).

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 NPT.

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

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

Agency Approvals: CE, UL, CSA, FM.

### Specifications

**Service:** Air and non-combustible, compatible gases.

**Wetted Materials:** Contact factory.

**Temperature Limits:** -40 to 140°F (-40 to 60°C).

**Pressure Limits:** Continuous: 1950's - 45 in w.c. (11.2 kPa); 1950P's - 50 psi (3.45 bar), 1950P-50 only - 90 psi (6.21 bar).

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

**Switch Type:** Single-pole double-throw (SPDT).

**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 NPT.

**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, UL, CSA, FM, NEMA 7 & 9.

### Series 1950 Switches - Operating Ranges and Dead Bands

<table>
<thead>
<tr>
<th>Model</th>
<th>Range, inches W.C.</th>
<th>Approximate Dead Band at Max. Set Point</th>
<th>Approximate Dead Band at Min. Set Point</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-02-2F</td>
<td>0.03 to 0.10</td>
<td>0.25</td>
<td>0.05</td>
<td>$198.75</td>
</tr>
<tr>
<td>1950-00-2F</td>
<td>0.07 to 0.15</td>
<td>0.04</td>
<td>0.05</td>
<td>$137.00</td>
</tr>
<tr>
<td>1950-02-2F</td>
<td>0.15 to 0.50</td>
<td>0.10</td>
<td>0.15</td>
<td>$137.00</td>
</tr>
<tr>
<td>1950-1-2F</td>
<td>0.4 to 1.6</td>
<td>0.15</td>
<td>0.20</td>
<td>$137.00</td>
</tr>
<tr>
<td>1950-5-2F</td>
<td>1.4 to 5.5</td>
<td>0.30</td>
<td>0.40</td>
<td>$137.00</td>
</tr>
<tr>
<td>1950-10-2F</td>
<td>3 to 11</td>
<td>0.40</td>
<td>0.50</td>
<td>$137.00</td>
</tr>
<tr>
<td>1950-20-2F</td>
<td>4 to 20</td>
<td>0.40</td>
<td>0.60</td>
<td>$137.00</td>
</tr>
</tbody>
</table>

**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*

### Series 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, Div I, Groups A, B, C, & D; Class II, Groups E, F, G and Class III hazardous atmospheres (NEMA 7 & 9). Diaphragm in vertical position. Consult factory for other position orientations.

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

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

**Agency Approvals:** CE, UL, CSA, FM, ATEX, ICEX.

### Specifications

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

**Wetted Materials:** Contact factory.

**Temperature Limits:** 0 to 140°F (-17 to 60°C).

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

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

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

**Electrical Rating:** 10A, 120/240 VAC, 26 VDC. Resistive 50 mA, 125 VDC.

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

### Series 1950G-XX-B-24-NA

<table>
<thead>
<tr>
<th>Model</th>
<th>Range, Inches W.C.</th>
<th>Approximate Dead Band at Max. Set Point</th>
<th>Approximate Dead Band at Min. Set Point</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950G-00-B-24-NA</td>
<td>.03 to 0.10</td>
<td>.04</td>
<td>.06</td>
<td>$204.00</td>
</tr>
<tr>
<td>1950G-0-24-NA</td>
<td>.07 to 0.15</td>
<td>.06</td>
<td>.08</td>
<td>$285.50</td>
</tr>
<tr>
<td>1950G-XX-B-240-NA</td>
<td>.238.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950G-XX-B-120-NA, 120 VAC</td>
<td>.240.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>