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 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 & 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 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. and from .5 to 50 psi (0.035 to 3.5 MPa) and from .40 to 7 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.

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>Min. Set Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-01</td>
<td>0.25</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>1950-02</td>
<td>0.50</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>1950-03</td>
<td>1.0</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td>1950-04</td>
<td>1.5</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>1950-05</td>
<td>2.0</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>1950-06</td>
<td>2.5</td>
<td>.60</td>
<td></td>
</tr>
</tbody>
</table>

Model 1950G Explosion-proof Differential Pressure Switch is 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 raintight 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, Directive 94/9/EC (ATEX) compliant for CE II 2G Ex II1B H2 T6, CSA & FM approved for Class I, Div 1, Groups B, C, D, Class II, Div 1, Groups E, F, G and Class III atmospheres IECEx Exd 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 captive screw (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.

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 w.c. (11.2 kPa) continuous; 10 psig (69.95 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.
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).
Agency Approvals: CE, UL, CSA, FM, IECEx.