The Series 1950G Explosion-Proof Differential Pressure Switch combines the best features of the popular Dwyer® Series 1900 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, Directive 2014/34/EU (ATEX) Compliant for II 2G Ex db IIB+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, and IECEx Ex db IIB+H2 T6 (-40°C<Ta<+60°C). UKCA Ex compliant for II 2G Ex db IIB+H2 T6 Gb.

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**

- ATEX approved explosion proof for natural gas applications
- External set point screw provides easy access without opening or disassembling enclosure
- Easily accessible electrical connection simplifies the installation
- Isolated process chambers from electrical compartment

**APPLICATIONS**

- Natural gas applications
- Process applications
- All-weather applications

**DESCRIPTION**

The Series 1950G Explosion-Proof Differential Pressure Switch combines the best features of the popular Dwyer® Series 1900 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, Directive 2014/34/EU (ATEX) Compliant for II 2G Ex db IIB+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, and IECEx Ex db IIB+H2 T6 (-40°C<Ta<+60°C). UKCA Ex compliant for II 2G Ex db IIB+H2 T6 Gb.

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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th><strong>Service</strong></th>
<th>Air and compatible combustible gases.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wetted Materials</strong></td>
<td>Consult factory.</td>
</tr>
<tr>
<td><strong>Temperature Limits</strong></td>
<td>0 to 140°F (-17 to 60°C). Note: Set point drift may occur with ambient temperature changes.</td>
</tr>
<tr>
<td><strong>Pressure Limits (Continuous)</strong></td>
<td>45 in. w.c. (11.2 kPa) continuous; 10 psig (68.95 kPa) surge.</td>
</tr>
<tr>
<td><strong>Enclosure Rating</strong></td>
<td>NEMA 3 (IP54), NEMA 7 and 9.</td>
</tr>
<tr>
<td><strong>Switch Type</strong></td>
<td>1 form C relay (SPDT).</td>
</tr>
<tr>
<td><strong>Electrical Rating</strong></td>
<td>10 A, 120/240 VAC, 28 VDC. Resistive 50 mA, 125 VDC.</td>
</tr>
<tr>
<td><strong>Power Requirements</strong></td>
<td>24 VDC ±10%. 120 or 240 VAC ±10% optional.</td>
</tr>
<tr>
<td><strong>Electrical Connections</strong></td>
<td>Internal terminal block.</td>
</tr>
<tr>
<td><strong>Process Connections</strong></td>
<td>1/8” female NPT.</td>
</tr>
<tr>
<td><strong>Mounting Orientation</strong></td>
<td>Diaphragm in vertical position. Consult factory for other position orientations.</td>
</tr>
<tr>
<td><strong>Set Point Adjustment</strong></td>
<td>Screw type on top of housing.</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>2 lb 15.7 oz (1.35 kg).</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>ATEX, CE, CSA, FM, IECEx, KCs, PESO, UKCA Ex, UL.</td>
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### How to Order

Use the bold characters from the chart below to construct a product code.

**SERIES**

**1950G**: Explosion-proof differential pressure switch

**DIAPHRAGM**

- **-B**: Buna-N

**RANGE**

- **-00**: 0.07 to 0.15 in w.c.
- **-0**: 0.15 to 0.5 in w.c.
- **-1**: 0.4 to 1.6 in w.c.
- **-5**: 1.5 to 5.5 in w.c.
- **-10**: 3.0 to 11.0 in w.c.
- **-20**: 4.0 to 20.0 in w.c.

**INPUT VOLTAGE SUPPLY**

- **-120**: 120 VAC (standard)
- **-240**: 240 VAC
- **-24**: 24 VDC

**OPTIONS**

- **-AT**: Aluminum tag
- **-KC**: KCs certification
- **-NA**: Non-ATEX approved units
- **-PESO**: PESO registration
- **-PRESET**: Preset
- **-ST**: Stainless steel tag

<table>
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<th>-120</th>
<th>-AT</th>
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<tr>
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<td>-20</td>
<td>4.0</td>
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</table>

**DIMENSIONS**

- 1/8" NPT HIGH PRESSURE PORT
- 1/8" NPT LOW PRESSURE PORT
- 1/2" NPT ELECTRICAL CONDUIT CONNECTION
- 4-7/8 [123.8]" DIAMETER
- 5-7/16 [138.1]" DIAMETER
- 3-1/2 [88.9]" DIAMETER
- 13/32 [10.312]" DIAMETER
- 1-1/16 [42.86]" DIAMETER
- 1-17/32 [38.89]" DIAMETER
- 2-17/32 [69.87]" DIAMETER
- 2-7/8 [72.4]" DIAMETER
- 17/64" [0.68]" DIAMETER
- 17/64" [0.68]" DIAMETER

**WIRING DIAGRAM**

- Captive Screw
- External Ground
- Captive Screw
- Vent Drain Plug
- Electrical Conduit Connection

**ORDER ONLINE TODAY!**

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