Differential Pressure Switches

ATEX/IECEX APPROVED COMPACT LOW DIFFERENTIAL PRESSURE SWITCHES

The 1900 in Flameproof ATEX/IECEx Enclosure

Series AT-1900 ATEX/IECEx Approved Compact Low Differential Pressure Switches is our most popular switch and is now available in a flameproof package. This pressure switch combines advanced design and precision construction to make these switches able to perform many of the tasks of larger, costlier units. For air and non-combustible compatible gases, the Series AT-1900 switches have set points from 0.07 to 20 in w.c. (1.8 to 508 mm). Set point adjustment is easy with range screw located inside the switch enclosure. Series AT-1900 switches are available in aluminum enclosures and ideal for low pressure, hazardous area applications.

BENEFITS/FEATURES
- Flameproof enclosure protects the device in hazardous areas
- Compact size and repeatability provide a high-value switch for many industrial and OEM applications
- Wide range of models from 0.07 in w.c. to 20 in w.c. can meet exacting OEM specifications for a low pressure switch
- Range screw protected inside switch enclosure prevents tampering
- Increased response time at low pressures with LD port configuration

APPLICATIONS
- Hazardous area low pressure applications
- Air conditioning refrigeration coil icing detection; defrost cycle initiation
- Clogged filter detection
- Variable air volume controller

Attention: Check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.

### PRESSURE LIMITS

<table>
<thead>
<tr>
<th>Port/Valve</th>
<th>One Pressure Port Connected</th>
<th>Both Pressure Ports Connected</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS0</td>
<td>10 kPa</td>
<td>10 kPa</td>
</tr>
<tr>
<td>VL0</td>
<td>10 kPa</td>
<td>10 kPa</td>
</tr>
</tbody>
</table>

### SPECIFICATIONS

- **Service**: Air and non-combustible, compatible gases.
- **Wetted Materials**: Consult factory.
- **Temperature Limits**: -30 to 180°F (-34 to 82.2°C) (Note: Product temperature limits differ from case).
- **Pressure Limits**: See pressure limit chart.
- **Switch Type**: SPDT.
- **Repeatability**: ±3% FS.
- **Electrical Rating**: 15 A @ 120-480 VAC, 60 Hz. Resistive 1/8 HP @ 125 VAC, 1/4 HP @ 250 VAC, 60 Hz. Derate to 10 A for operation at high cycle rates.
- **Mounting Orientation**: Diaphragm in vertical position.
- **Set Point Adjustment**: Screw type on pressure switch inside the enclosure accessible by hole with plug on housing. Set point regulation must be done with instrument de-energized. Follow instructions and safety warning to open cover.
- **Enclosure Rating**: IP66.
- **Housing Material**: Aluminum.
- **Finishing**: Texture epoxy coat RAL7015.
- **Electrical Connections**: Two 1/2˝ NPT female. Cable gland not included.
- **Weight**: 10.5 lb (4.8 kg).
- **ATEX Certificate**: EPT 19 ATEX 3192 X.
- **Agency Approvals**: ATEX compliant: Ex db IIC T5, T6 Gb -60°C ≤Ta ≤+50°C (T6) -60°C ≤Ta ≤+60°C (T5) II 2D Ex tb IIIC T75°C Db IECEx Compliant: Ex db IIC T5, T6 Gb -60°C ≤Ta ≤+50°C (T6) -60°C ≤Ta ≤+60°C (T5) Ex tb IIIC T75°C Db.

### MODEL CHART

<table>
<thead>
<tr>
<th>Example</th>
<th>AT</th>
<th>-101NA</th>
<th>-1910</th>
<th>-00</th>
<th>-B</th>
<th>1</th>
<th>VS0</th>
<th>12</th>
<th>AT-101NA-1910-00-B1VS012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure</td>
<td>AT</td>
<td>101NA</td>
<td>1910</td>
<td></td>
<td>00</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing Material</td>
<td>1910</td>
<td>101NA</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Series</td>
<td>1910</td>
<td>1910 differential pressure switch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>00</td>
<td>0.07-0.15 in w.c. (17.5-37 Pa)</td>
<td>0.15-0.55 in w.c. (37.5-137 Pa)</td>
<td>0.40-1.6 in w.c. (100-398 Pa)</td>
<td>1.4-5.5 in w.c. (348.5-1368 Pa)</td>
<td>3.0-11.75 in w.c. (747-2924 Pa)</td>
<td>4.0-20.0 in w.c. (996-4977 Pa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover</td>
<td>B</td>
<td>Blind</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port/Valve Material</td>
<td>1</td>
<td>Brass</td>
<td>2</td>
<td>SS</td>
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<tr>
<td>Port/Valve Configurations</td>
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<td>2</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
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</tr>
<tr>
<td>Cable Entry</td>
<td>12</td>
<td>1/2 NPT ANSI/ASME B1.20.1</td>
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</tbody>
</table>

USA: California Proposition 65

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov