Differential Pressure Switches

Two opposing bellows combine maximum sensitivity and vibration resistance with moderate cost in the Series DP differential pressure switches. Both set and reset points are easily adjustable through non-interactive, externally accessible controls. Visible set-point indicators simplify changes. SPDT snap action switch, 316 stainless steel or brass are easily adjustable through non-interactive, externally accessible controls. Visible set-points simplify changes.

Rugged Series A4 Differential Pressure Switch offers field adjustments and can handle system pressures up to 6000 psig. Piston design allows mounting in any orientation. The switch is capable of carrying moderate shock and vibratory loads.

### Specifications

**Service:** Compatible gases.
**Wetted Materials:** Body, piston, and fittings: anodized aluminum; spring: steel.
**Temperature Limits:** -65 to 225°F (-54 to 107°C).
**Pressure Limits:** 2000 psid (138 bar), 6000 psig (413 bar).
**Repeatability:** See table.
**Switch Type:** SPDT.
**Electrical Rating:** AC: 3 VA, 0.25A @ 120 VAC; DC: 5 VA, 0.25A @ 175 VDC.
**Electrical Connection:** 24 AWG X 12” (30.5 cm) wire leads.
**Process Connection:** 1/4” female NPT.
**Mounting Orientation:** Any.
**Set Point Adjustment:** See table.
**Weight:** 8.5 oz (241 g).

### Optional Enclosures

- **Weatherproof Enclosure** — to order add “W” suffix after DPA. Example: DPA-7033-153-61
- **Explosion-Proof Enclosure** — to order add “E” suffix after DPA. Example: DPA-7033-153-61

### Optional Attachments

- **Explosion Proof:** To order add “E” suffix after model number. Example: DPA-7033-153-61

### Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Repeatability</th>
<th>Set Point psid (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4-1</td>
<td>±2 (14)</td>
<td>Increasing: 7.13 (49.89) Decreasing: 2.7 (17.48)</td>
</tr>
<tr>
<td>A4-2</td>
<td>±4 (28)</td>
<td>13.25 (89.17)</td>
</tr>
<tr>
<td>A4-3</td>
<td>±8 (55)</td>
<td>25.41 (173.1)</td>
</tr>
<tr>
<td>A4-4</td>
<td>±16 (1.1)</td>
<td>35.60 (241.0)</td>
</tr>
<tr>
<td>A4-5</td>
<td>±32 (2.2)</td>
<td>120-250 (830-172)</td>
</tr>
</tbody>
</table>

**Recommended deadband** is 5 psi (34 bar).

**Accuracy** is ±1% of full scale.

**Pressure Rating:**
- **Series A4:** 600 psig (41 bar)
- **Series DP:** 2000 psig (138 bar), 6000 psig (413 bar)

**Enclosure Rating:**
- **Weatherproof:** 5 lb (2.3 kg), weatherproof: 7 lb (3 kg), explosion-proof: 25 lb (11 kg)
- **Explosion-Proof:** 25 lb (11 kg)

**Agency Approvals:** CE, cULs, UL.

**General Purpose**:
- 5 lb (2.3 kg), weatherproof: 7 lb (3 kg), explosion-proof: 1/4” male NPT
- Mounting: Vertical
- Set Point Adjustment: Thumbscrew

**Weatherproof**:
- General purpose: 5 lb (2.3 kg), weatherproof: 7 lb (3 kg), explosion-proof: 1/4” male NPT

**Explosion-Proof**:
- General purpose: 5 lb (2.3 kg), explosion-proof: 25 lb (11 kg)

**Switch Type:**
- Snap switch. (Contact factory for mercury switch)
- Terminal: Screw
- Conduit Connection: General purpose: 1/2” hole for conduit hub; Weatherproof: 1/2” conduit hub; Explosion-proof: 3/4” female NPT
- Process Connection: General purpose: 1/2” female NPT, explosion-proof: 1/4” female NPT

**Weight:**
- General purpose: 5 lb (2.3 kg), weatherproof: 7 lb (3 kg), explosion-proof: 25 lb (11 kg)

**Agency Approvals:** CE, cULs, UL.