**Dwyer® Series 1800**

**Low Differential Pressure Switches for General Industrial Service**

Set Points from 0.07" to 85" w.c. Repetitive Accuracy within 2%

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**Essential for industrial environments, the Series 1800 combines small size and low price with 2% repeatability for enough accuracy for all but the most demanding applications. Set point adjustment inside the mounting stud permits mounting switch on one side of a wall or panel with adjustment easily accessible on the opposite side. UL and CSA listed, FM approved.**

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**CAUTION: For use only with air or compatible gases.**

**Series 1823 Switches**

**Operating Ranges & Deadbands**

<table>
<thead>
<tr>
<th>Model</th>
<th>Operating Range, Inches W.C.</th>
<th>Approximate Dead Band</th>
<th>At Min. Set Point</th>
<th>At Max. Set Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1823-00</td>
<td>0.07 to 0.22</td>
<td>0.05</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>1823-0</td>
<td>0.15 to 0.5</td>
<td>0.06</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>1823-1</td>
<td>0.3 to 1.0</td>
<td>0.08</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>1823-2</td>
<td>0.5 to 2.0</td>
<td>0.10</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>1823-5</td>
<td>1.5 to 5.0</td>
<td>0.14</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>1823-10</td>
<td>2.0 to 10</td>
<td>0.18</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>1823-20</td>
<td>3 to 22</td>
<td>0.35</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>1823-40</td>
<td>5 to 44</td>
<td>0.56</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>1823-80</td>
<td>9 to 85</td>
<td>1.30</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

**MIL Environmental Construction** — Unlisted Model 1820 can be furnished with a special sealed snap switch for protection against high humidity, fungi and/or military applications. Similar to Model 1823 except dead band is slightly greater and some lower setpoints may not be possible. To order, add suffix -MIL.

Example: 1820-2-MIL.

**No. A-389 Mounting Bracket** is 16 ga. steel, zinc plated and dichromate dipped for corrosion resistance. Provides rugged, permanent mounting and speeds installation.

**SPECIFICATIONS**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Temperature Limits:** -30 to 180°F (-34 to 82.2°C), 1823-00, -20 to 180°F (-28.9 to 82.2°C). 1823-00, -20 to 180°F (-28.9 to 82.2°C).
- **Pressure Limits:** 10 psig (68.95 kPa) continuous, 25 psig (172.4 kPa) surge.
- **Switch Type:** Single-pole double-throw (SPDT).
- **Repeatability:** ±2%.
- **Electrical Rating:** Single-pole double-throw (SPDT).
- **Weight:** 1 lb, 5 oz (595 g).
- **Agency Approvals:** CE, UL, CSA and FM approved. Optional-EXPL explosion-proof enclosure does not possess any agency approvals.

**Electrical Connections:** 3 screw type, common, normally open and normally closed.

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

**Set Point Adjustment:** Screw type inside mounting spud.

**Weatherproof Housing:** 16 ga. steel enclosure with gasketed cover (NEMA 4, IP66) for wet or oily conditions. Withstands 200 hour salt spray test. Wt. 5-1/2 lbs. (2.5 kg). Switch must be factory installed. Change 1823 base number to 1824 and add -WP suffix. Example: 1824-1-WP

**Explosion-Proof Housing:** Cast iron base with aluminum cover. Rated Class I, Div. 1 & 2, Group D; Class II, Div. 1 & 2, Groups E, F, G; Class III and NEMA 7 CD; 9 EFG. Wt. 7-1/2 lbs (3.4 kg). Switch must be factory installed. Change base number to 1824 and add EXPL suffix. Example: 1824-1-EXPL