Models SG6540, SG6541
General Service & Explosion Proof Pressure Switches

Pressure switches monitor line pressure and can activate an external alarm (not supplied) when a certain predetermined pressure is reached. They can be set to activate on either increasing or decreasing pressure.

Pressure switches are commonly used with cylinder manifolds to warn against product depletion. For example, a switch set to activate on decreasing pressure can alert the user that manifold pressure is low and that a cylinder changeout is required.

Two models of pressure switches are available: a general service version for nonflammable gases, and an explosion-proof version for flammable gases or Oxygen. The explosion-proof model is UL listed and CSA certified for use in hazardous locations Class I Groups A, B, C, D and Class II Groups E, F, G. Each model has a single-pole, double throw, electrical switch with a maximum rating of 15 amps at 250 VAC. Their weathertight housings are constructed of aluminum.

Pressure switches are supplied with two compression-type male connectors and five feet of stainless steel tubing for connection to a manifold or pipeline.

Specifications
Maximum Inlet Pressure: See Table I
Operating Temp. Range: -30°F to 200°F (+32°F to 400°F with Viton® seals)
Adjustable Pressure Range: See Table I
Electrical Rating:
15 amps at 250 VAC
5 amps at 30 VDC (resistive)
Minimum Current Required: 100mA
Housing: NEMA 4, 4X, IP65
Pressure Port Connection: 1⁄4" NPT female
Male Connectors (2 supplied):
1⁄4" NPT male by 1⁄8" compression and
1⁄8" NPT male by 1⁄8" compression
Tubing: 5' x 1⁄8" OD
Approximate Weight:
SG6540: 2 lbs
SG6541: 3 lbs

Materials of Construction
Housing: Aluminum
Diaphragm: Type 316 Stainless Steel
Pressure Port: Type 316 Stainless Steel
Seal: See Table I
Male Connectors: Type 316 Stainless Steel
Tubing: Type 316 Stainless Steel

Internal view of pressure switch

Application Note Oxygen Service: We strongly recommend the use of our Explosion-Proof Type Pressure Switch for Oxygen Applications. The Explosion-Proof models contain a hermetically sealed switching element, which provides a safe environment for handling Pure Oxygen.

Table I, General Service and Explosion-Proof Pressure Switches

<table>
<thead>
<tr>
<th>General Service</th>
<th>Explosion-Proof Service</th>
<th>Maximum Inlet Pressure</th>
<th>Adjustable Range**</th>
<th>O-Ring Seal Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part No.</td>
<td>Part No.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SG6540-2-N-(psig)</td>
<td>SG6541-2-N-(psig)</td>
<td>3000 psig</td>
<td>12–100 psig</td>
<td>Neoprene</td>
</tr>
<tr>
<td>SG6540-2-V-(psig)</td>
<td>SG6541-2-V-(psig)</td>
<td>3000 psig</td>
<td>12–100 psig</td>
<td>Neoprene</td>
</tr>
<tr>
<td>SG6540-3-N-(psig)</td>
<td>SG6541-3-N-(psig)</td>
<td>3000 psig</td>
<td>45–550 psig</td>
<td>Neoprene</td>
</tr>
<tr>
<td>SG6540-3-V-(psig)</td>
<td>SG6541-3-V-(psig)</td>
<td>3000 psig</td>
<td>45–550 psig</td>
<td>Neoprene</td>
</tr>
<tr>
<td>SG6540-4-N-(psig)</td>
<td>SG6541-4-N-(psig)</td>
<td>5000 psig</td>
<td>500–4000 psig</td>
<td>Neoprene</td>
</tr>
<tr>
<td>SG6540-4-V-(psig)</td>
<td>SG6541-4-V-(psig)</td>
<td>5000 psig</td>
<td>500–4000 psig</td>
<td>Neoprene</td>
</tr>
</tbody>
</table>

Where “(psig)” is indicated above, insert desired pressure setting. Example: SG6540-2-N-20. Switch will be factory set to activate at 20 psig.

Note: Models SG6540-4 and SG6541-4 can be factory set to activate up to 2000 psig. Settings for pressures above 2000 must be field set.

** Other ranges available on special order.