**Explosion Proof Compact Switch**

**Series 9671X, 9681X, 9692X**

**Features**
- IECEx & ATEX approved
- NEMA 4X, 7 & 9
- NACE compliant
- SPDT and DPDT switch
- Safe to adjust during operation
- Dia-seal/piston sensor
- Hazardous location dual seal approved for Canada
- Lower ambient temperature option (-40°F to 149°F)

**Applications**
- BOP closing units
- Safety panels
- Pipelines
- Chemical and petrochemical plants
- Pulp and paper mills
- Pump and gas compressors
- Turbines
- Oil & gas applications

**General Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>±2% of full scale</td>
</tr>
<tr>
<td>Typical Life</td>
<td>2.5 million cycles</td>
</tr>
<tr>
<td>Switch</td>
<td>SPDT, snap action, simulated DPDT (optional)</td>
</tr>
<tr>
<td>Wetted Parts</td>
<td>Process Fitting: 316 stainless steel</td>
</tr>
<tr>
<td>Seals</td>
<td>Viton® Diaphragm (9671X &amp; 9681X), Viton® O-ring and Teflon® backup ring (9692X)</td>
</tr>
<tr>
<td>Piston</td>
<td>Stainless steel (on 9692X)</td>
</tr>
<tr>
<td>Enclosure</td>
<td>316 stainless steel or aluminum</td>
</tr>
<tr>
<td>Electrical Connection</td>
<td>1/2&quot; NPT male conduit connection, 18 AWG, 18&quot; (300 mm) free leads</td>
</tr>
<tr>
<td>Electrical Rating</td>
<td>11 amps @ 125/250VAC, 5 amps @ 30 VDC (CC Class)</td>
</tr>
<tr>
<td>Enclosure Ratings</td>
<td>NEMA 4X, 7 &amp; 9 (SS), NEMA 4, 7, &amp; 9 (AL)</td>
</tr>
</tbody>
</table>

**Pressure Connection:** 1/4" NPT female (standard)
See configurator for more options

**Approvals:**
- ATEX/IECEx
- UL # E37043
- CSA # LR22354
- UL&CSA Approved for use in hazardous locations Class I, Groups A,B,C,& D; Class II, Groups E,F,& G (Group A, UL Only)

**Ambient Temperature:**
- LT Option: (not UL or CSA)
  - -4° to +104°F (-20° to +40°C)
  - -40° F to 149° F (-40°C to +65°C) (Consult factory)

**EMI/RFI:** EN55011

**Vibration:** 10g’s 10-500 Hz, MIL-STD-202F

**Shock:** 50g’s, 11 mS, MIL-S-901C

**Adjustment:** Internal adjustment wheel with built in locking set-screws (#6)

**Shipping Weight:** Approximately 1.85 lbs.

**Wiring Code**

<table>
<thead>
<tr>
<th>Lead</th>
<th>9692X/9681X (Pressure)</th>
<th>9671X (Vacuum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normally Open</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Common</td>
<td>Purple</td>
<td>Purple</td>
</tr>
<tr>
<td>Normally Closed</td>
<td>Blue</td>
<td>Red</td>
</tr>
<tr>
<td>Ground</td>
<td>Green</td>
<td>Green</td>
</tr>
</tbody>
</table>

**Wiring Diagram (9681X/9692X models)**
(NO/NC contacts are reversed on 9671X model)

**Adjustment:**
- Internal adjustment wheel with built in locking set-screws (#6)

**Pressure Connection:**
- 1/4" NPT female (standard)
- See configurator for more options

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**Shipping Weight:** Approximately 1.85 lbs.

* Need to loosen set screw (#6) at all times when resetting adjustment.
### Explosion Proof Compact Switch

**Series 9671X, 9681X, 9692X**

#### Technical Drawings

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**Product Configurator**

**Example:**

- **A** 9681X -1CC -2 -AL -K -W036-LT

**Approvals**

- **Blank** All approvals (ATEX & IECEx, UL & CSA)
- **A** ATEX & IECEx only

**Base Model**

- **9671X** Vacuum switch, 1 - 30 in. Hg.
- **9681X** Pressure switch, 2 - 500 psi
- **9692X** Pressure switch, 100 - 10000 psi

#### Limit Switch

**9692X-K**

- **-K** Mounting holes and conduit wrench flats

**Process Connection**

- **-LT** 1/4" NPT male process connection
- **-P1** 7/16-20 SAE female process connection
- **-P3** 1/2" NPT female process connection
- **-P4** 1/2" NPT male process connection

**Wetted Material**

- **-B** Buna-N diaphragm/O-rings
- **-E** EPR diaphragm/O-rings
- **Blank** Viton® diaphragm/O-rings (standard)

**Housing Option**

- **-AL** Aluminum housing (-K only)
- **Blank** 316 stainless steel housing

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**Pressure Ranges for 9681X & Vacuum Ranges for 9671X**

<table>
<thead>
<tr>
<th>Range</th>
<th>Decreasing - psi (bar)</th>
<th>Increasing - psi (bar)</th>
<th>Approx. Deadband² (Actuation Value)</th>
<th>Proof Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9671X Blank</strong></td>
<td>1&quot; Hg 21&quot; Hg 5&quot; Hg 30&quot; Hg 4 - 9&quot; Hg 30&quot; Hg</td>
<td>Min Max Min Max Min Max</td>
<td>Min Max Min Max Min Max</td>
<td>Min Max Min Max Min Max</td>
</tr>
<tr>
<td><strong>9681X</strong></td>
<td>Min Max Min Max Min Max</td>
<td>2 12 (8) 3 15 (1) 1 3 (0.7 - 2) 1000 (69)</td>
<td>2 12 (8) 3 15 (1) 1 3 (0.7 - 2) 1000 (69)</td>
<td>2 12 (8) 3 15 (1) 1 3 (0.7 - 2) 1000 (69)</td>
</tr>
</tbody>
</table>

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**Wetted Material**

<table>
<thead>
<tr>
<th>Wetted Material</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-B Buna-N diaphragm/O-rings</td>
<td>For -LT Option (consult factory)</td>
</tr>
<tr>
<td>-E EPR diaphragm/O-rings</td>
<td>Consult factory for lead-time and availability.</td>
</tr>
<tr>
<td>Blank</td>
<td>Viton® diaphragm/O-rings (standard)</td>
</tr>
</tbody>
</table>

**Process Connection**

- **-LT** Low temp: -40°F to 149°F [Must select option "A]
- **-T** Cover screws
- **-Wxxx** Extra wire length (XXX = inches)
- **-Sxxx** Factory preset (consult factory)

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**Contact factory for more details**

**For -7 RANGE)**

- **-W** EPR diaphragm/O-rings (UL and ATEX not available with this option; CSA only available on the 9692X models)

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**Process Connection**

- **-LT** Low temp: -40°F to 149°F [Must select option "A]
- **-T** Cover screws
- **-Wxxx** Extra wire length (XXX = inches)
- **-Sxxx** Factory preset (consult factory)

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**Contact factory for other possible connection options.**

**See sales drawing for more details.**

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**Dimensions in inches (mm):**

- **-36x494**
- **-35x513**
- **-32x500**
- **-1x464**
- **-32x327**
- **-30x243**
- **-25x199**
- **-20x146**
- **-16x102**
- **-12x59**

**See Barksdale’s Standard Conditions of Sale.** Specifications are subject to modification at any time. Bulletin #S0049-K 02/17 ©2017 Printed in the U.S.A.