EXPLOSION-PROOF
SPDT Solid State Pressure Switch
AST46SW

Overview
The Model 46SW is a high accuracy Explosion-proof Pressure Switch, designed for use in a variety of applications. Applying digital compensation, this product offers top performance over a wide temperature range. Utilizing Krystal Bond Technology™, the sensing element will measure pressure in the most extreme temperature conditions. Where other sensor technologies will freeze or boil, the AST46SW uses a one piece stainless steel sensor to offer continuous operation. If linearity and repeatability are critical for your application, this product will exceed your expectations at an affordable price.

Benefits
- ATEX / IECEx: Class I, Zone 1, Ex d IIC T5 Gb (Ta = -40°C to 85°C)
- CSA30 (UL1203 / FM3615) Class I Div 1 and Zone 1 Group IIC Explosionproof - Groups A, B, C, D
- ANSI 12.27.08-1 Single Seal Approved
- ASIC Compensation
- Superb Temperature Performance
- Wide Operating Temperature
- Excellent Accuracy
- High Proof and Burst Pressure
- Factory Sealed
Applications

- Well Optimization
- Oil and Gas Pipelines
- Drilling Platforms
- CNG / Hydrogen Fill Stations
- Paint Booths
- RTU
- Combustion Controls

Performance @ 25°C (77°F)

Error Tolerance  <±1.0% BFSL of line pressure
Over range  2X rated line pressure, standard (for higher proof pressures, contact factory)
Burst Pressure  5X or 60,000PSI of line pressure, whichever is less
Pressure Cycles  > 100 million full pressure cycle

Environmental Data

Temperature
Operating  -40 to 85°C (-40 to 185°F)
Storage  -55 to 105°C (-67 to 221°F)
0-100% relative humidity, non-condensing

Thermal Limits
Compensated Range  -20 to 70°C (-4 to 158°F)

Other
Shock  100G, 11 msec, 1/2 sine
Vibration  10G peak, 20 to 2000 Hz.
EMI/RFI Protection:  Yes
Rating:  IP-66

Electrical Data

Excitation  10-28VDC
Current Consumption:  400Hz
Set Point  See Chart on Page 2
Output Load:  Yes
Reverse Polarity Protection  Yes
EXPLOSION-PROOF
AST46SW SPDT Solid State Pressure Switch

Dimensions

<table>
<thead>
<tr>
<th>Model Series</th>
<th>Body Diameter “A”</th>
<th>Overall Length “B”</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST4600</td>
<td>0.875”</td>
<td>3.64”</td>
</tr>
<tr>
<td>AST46HA</td>
<td>1”</td>
<td>4.3”</td>
</tr>
<tr>
<td>AST46PT (4-20mA)</td>
<td>1”</td>
<td>4.8”</td>
</tr>
<tr>
<td>AST46PT (Voltage)</td>
<td>1”</td>
<td>4.3”</td>
</tr>
<tr>
<td>AST46SW</td>
<td>1”</td>
<td>4.8”</td>
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</tbody>
</table>
### Ordering Information

#### AST46SW

<table>
<thead>
<tr>
<th>Series Type</th>
<th>A</th>
<th>P</th>
<th>E</th>
<th>T</th>
<th>1</th>
<th>G</th>
<th>00025</th>
<th>R</th>
<th>05</th>
<th>000</th>
<th>-Z</th>
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</thead>
<tbody>
<tr>
<td>Process Connection</td>
<td>A= 1/4”-18 Male NPT</td>
<td>C= 1/4”BSPP</td>
<td>B= 1/8”-27 Male NPT</td>
<td>W= F250C Female Autoclave</td>
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<tr>
<td>System Pressure</td>
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<td></td>
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</tr>
<tr>
<td>Insert 2 digit code</td>
<td>50</td>
<td>100</td>
<td>250</td>
<td>500</td>
<td>1000</td>
<td>3000</td>
<td>5000</td>
<td>7500</td>
<td>10,000</td>
<td>15,000</td>
<td>20,000</td>
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<tr>
<td>System Pressure (Code)</td>
<td>01</td>
<td>02</td>
<td>03</td>
<td>04</td>
<td>05</td>
<td>06</td>
<td>07</td>
<td>08</td>
<td>09</td>
<td>10</td>
<td>11</td>
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<tr>
<td>Pressure Unit</td>
<td>P= PSI</td>
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<tr>
<td>Switch Configurations</td>
<td>E= SPDT [Form C]</td>
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<tr>
<td>Electrical Connection</td>
<td>T= 2ft. 18 AWG wires</td>
<td>U= 4ft. 18 AWG wires</td>
<td>W= 2 Meter 18 AWG wires</td>
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<tr>
<td>Wetted Material</td>
<td>D= 17-4PH</td>
<td>1= 316L</td>
<td>2= Inconel 718</td>
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<td>Pressure Reference</td>
<td>G= Vented Gauge Pressure</td>
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<tr>
<td>Switching Point Pressure</td>
<td>Insert 5 digit code [5-95% of system line pressure]</td>
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<tr>
<td>Switching Pressure (Code)</td>
<td>25</td>
<td>50</td>
<td>100</td>
<td>250</td>
<td>500</td>
<td>1000</td>
<td>2500</td>
<td>5000</td>
<td>10,000</td>
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</tr>
<tr>
<td>Switching Direction</td>
<td>F= Falling</td>
<td>R= Rising</td>
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<tr>
<td>Hysteresis: Insert 2 digit code (example: 1% is 01) [1% of line pressure minimum]</td>
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<tr>
<td>Options: Z= Add “-Z” for CRN Registered to ANSI/ASME B31.3. Contact factory for material, pressure, and process connection options.</td>
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