INTRODUCTION
The APS and APA pressure switch have 316 stainless steel housing and process connections. The APS has a factory fixed setpoint which cannot be changed in the field. The APA is field adjustable and can easily be adjusted by following the instructions in the diaphragm above.

ELECTRICAL CONNECTION
The APS and APA switch is available with wire leads and conduit connections. Refer to the figure on other side for wiring color codes.

- Only trained and skilled personnel are allowed to attach the wires to the electrical terminals of the switch.
- Cable couplers, glands and conduit connectors must have the correct electrical approvals as required by local electrical codes.
- The ground wire/connector is connected to the switch housing.

MICRO SWITCH RATINGS

<table>
<thead>
<tr>
<th>CODE</th>
<th>VAC RATING</th>
<th>VDC RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>5A @ 125/250VAC</td>
<td>5A @ 28Vdc resistive</td>
</tr>
<tr>
<td></td>
<td>3A @ 28Vdc inductive</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>3A @ 125VAC</td>
<td>2A @ 30Vdc resistive</td>
</tr>
<tr>
<td>G</td>
<td>0.1A @ 125VAC</td>
<td>0.1A @ 30Vdc resistive</td>
</tr>
<tr>
<td>L</td>
<td>1A @ 125VAC</td>
<td>1A @ 28Vdc resistive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5A @ 28Vdc inductive</td>
</tr>
</tbody>
</table>
Installation and Maintenance Instructions
for Ashcroft A-Series Miniature
Explosion Proof Pressure Switches

INSTALLATION
• To minimize the risk of injury, the switch enclosure must be
  selected according to the area classification and installed
  according to the required safety and electrical codes.
• Torque should always be applied to the hex portion of the
  body closest to pressure fitting, never to any other part of the
  body for it may alter the setpoint. It is recommended that
  Teflon tape or other sealant be used on the threads prior to
  installing to prevent leaks in the system.
• Switch should be protected from excessive shock and vibration.
• The cover of the APA switch should be closed at all times
  when the switch is in operation.

CAUTIONS
• Always close the cover of the APA switch after making any
  setpoint adjustments.
• Do not exceed current or voltage limits.
• The protection degree of the switch is only valid when the
  switch is installed in accordance with all safety and electrical
  codes and regulations.

CLEANING
• Never use aggressive solvents.
• Do not use high pressure water to clean the switch.

MAINTENANCE/TROUBLESHOOTING
• All Ashcroft switches require little or no maintenance.
• Be sure the cover on the APA switch is closed at all times.
• When the switch is exposed to process media that may harden
  and/or build up in the pressure port, the switch should be
  removed and cleaned as required.
• If the switch does not function, only trained and skilled person-
  nel should check on the wiring, power supply and/or mounting.
• If the problem cannot be solved, please contact one of the
  Ashcroft affiliates or distributors.

FACTORY SETPOINTS
The APS switches and APA switches with a setpoint called out
in the product code are set at the factory as follow s:
• Increasing Setpoint (R) Rising Pressure or Decreasing
  Vacuum – Normally Open contact will close when the pres-
  sure is raised from 0 psig to the setpoint. The resetpoint is
  then measured from the setpoint, reducing the pressure until
  the Normally Open contact opens.
• Decreasing Setpoint (D) Decreasing Pressure or Increasing
  Vacuum – Normally closed contact will close when the pres-
  sure is lowered from full range pressure to the setpoint. The
  reset is then measured from the setpoint, increas-ing the pres-
  sure until the Normally Closed contact opens.

Note: When ordered as a –15/15 psi range switch, depending
on setpoint, the Normally Open contact may be closed
as received.

EXPECTED MECHANICAL LIFE
Leak free to 1 million pressure cycles on “B” or “V” seals, 400k
pressure cycles with “S” seals, and 1 million cycles of the micro-
switch enclosure diaphragm.

SPECIAL CONDITIONS FOR SAFE USE
This equipment utilizes a flexible Ex d wall. Do not exceed
manufacturers maximum limit detailed in the instructions.

WIRE COLOR/FUNCTION

<table>
<thead>
<tr>
<th>WIRE COLOR</th>
<th>SWITCH</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>SW1</td>
<td>NC</td>
</tr>
<tr>
<td>WHITE</td>
<td>SW1</td>
<td>C</td>
</tr>
<tr>
<td>BLUE</td>
<td>SW1</td>
<td>NO</td>
</tr>
<tr>
<td>WHITE/BLACK</td>
<td>SW2</td>
<td>C</td>
</tr>
<tr>
<td>RED/BLACK</td>
<td>SW2</td>
<td>NC</td>
</tr>
<tr>
<td>BLUE/BLACK</td>
<td>SW2</td>
<td>NO</td>
</tr>
<tr>
<td>GREEN</td>
<td>–</td>
<td>Ground</td>
</tr>
</tbody>
</table>

Safety Manual and SIL Certificate, CRN available on
www.ashcroft.com

APPROVALS:

CLASS I DIV 1 GROUPS A, B, C, & D
CLASS II DIV 1 GROUPS E, F, & G

*Sira 13ATEX1123X
CSA 21LEX1051X
IECEx
CSA 13.0015X

II 2GD
Ex d IIC T6/T5 Gb
Ex b IIC T85°C/100°C Db
Ta or Tb = -20/-40°C* to +74/89°C**

*Low ambient temperature is dependent upon Switch Code,
Pressure Range, Material Code and Temperature Code
dependent in description. Only one low temperature is shown
as they are the same for both T6 and T5 Codes.
**High ambient temperature is dependent upon Switch Code,
and Temperature Code dependent in description. Both high
temperature limits are listed as they may be different for the
T6 and T5 Codes. They are separated by a “/” as shown.

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