P SERIES
ENCAPSULATED PRESSURE SWITCHES

Control what’s important.
Control what's important

The PENN® P Series of pressure switches are designed to prevent unsafe pressures from occurring during high load or abnormal system conditions. For nearly a century, PENN has delivered the reliability and accuracy to protect customer assets. These switches are designed for maximum versatility. Our pressure switches are expertly designed and built using only quality materials to ensure extended life and consistent performance. This attention to detail in design makes PENN switches the ideal component in critical applications, such as air-conditioning systems, refrigeration systems, and transportation.

Designed and built with you in mind

The PENN team of engineers maintain and manage your drawings and specifications throughout the life of your product as each pressure switch is designed and built with you in mind. The P Series features specifically-calibrated steel discs for exceptional performance. Each pressure switch provides versatile and precise control of your system. This compact design pressure control works on a simple snap-disc mechanism. Concave stainless steel discs are welded and stress tuned to snap at the designed actuation and release set points.

PENN pressure switches feature a specially-calibrated steel disc for exceptional performance

Our standard product lines — available for low-pressure cutout, high-pressure cutout, or fan cycling — cover an incredible variety of HVAC/R applications.

Our custom products are specifically designed and built for customers whose systems require more complex components. These custom switches can be created for virtually any application.

PENN switches are available to meet a wide array of customer applications, including situations where extreme conditions or exceptional performance are essential. Durable, reliable and compact, our controls can be equipped with a nearly limitless variety of pressure fittings and electrical connections, making them the ideal controls for any system application.
FLEXIBLE OPTIONS
PENN pressure switches are available with a wide variety of pressure fitting and electrical connectors. Whether your application requires one of our standard products or a completely custom arrangement, our broad array of options can be engineered for any system configuration. Your PENN sales representative can help you find the right options.

Safety Controls
PM Series
- Manual reset • SPST / SPDT
- Pilot Duty Loads

Alarm Controls
PR Series
- Auto reset • SPDT
- Pilot Duty Loads

Industrial Controls
PC Series
- Auto reset • SPST / SPDT
- Motor / Pilot Duty Loads

- ¼" SAE FF Capillary tube
- Swaged Cu tube 05mm
- 1/8"-27 NPT
- 3/8"-24 Male
- IP65-rated connector
- Mini locking plug
- Uninsulated quick connect
- Insulated quick connect
- Uninsulated quick connect
- Insulated quick connect

High-grade stainless steel disc for reliable lifetime performance
Hermetic to support all applications
Mobile arm is carefully calibrated for maximum life of the switch
Rugged housing protects switch mechanism, ensuring reliability in the harshest environments

Safety Controls
PM Series
- Manual reset • SPST / SPDT
- Pilot Duty Loads

Alarm Controls
PR Series
- Auto reset • SPDT
- Pilot Duty Loads

Industrial Controls
PC Series
- Auto reset • SPST / SPDT
- Motor / Pilot Duty Loads
P Series Advantages
- Hermetically sealed sensor design
- Specifically-calibrated steel discs
- Custom pressure switch models

Features
PENN offers a wide range of reliable and economical controls for high and low pressure cutouts, as well as extended cycle life. These include the system control PS Series, alarm control PR Series, safety control PM Series, and industrial control PC Series.
- Auto/manual reset
- Single-pole, single-throw or single-pole, double-throw switch
- Wide variety of pressure fittings, both mechanical and brazed to suit any application
- Wide variety of plugs and terminals, plus quick connects and wire leads
- Rugged housing protects switch mechanism, ensuring reliability in harsh environments

### OPERATING RANGES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Metric</th>
<th>English (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Range</td>
<td>0 to 50 bar</td>
<td>0 to 725 psig</td>
</tr>
<tr>
<td>Minimum Proof Pressure</td>
<td>17 to 69 bar</td>
<td>250 to 800 psig</td>
</tr>
<tr>
<td>Burst Pressure</td>
<td>345 bar</td>
<td>5,000 psig</td>
</tr>
<tr>
<td>Ambient Temperature*</td>
<td>-40°C to 85°C</td>
<td>-40° to 185°F</td>
</tr>
<tr>
<td>Fluid Temperature*</td>
<td>-55°C to 135°C</td>
<td>-65° to 275°F</td>
</tr>
<tr>
<td>Storage Temperature*</td>
<td>-60° to 105°C</td>
<td>-75° to 220°F</td>
</tr>
<tr>
<td>Humidity Range</td>
<td>0% to 98% RH</td>
<td>0% to 98% RH</td>
</tr>
<tr>
<td></td>
<td>non-condensing</td>
<td>non-condensing</td>
</tr>
<tr>
<td></td>
<td>Max dew point: 30°C</td>
<td>Max dew point: 85°F</td>
</tr>
</tbody>
</table>

*Temperature ranges can be expanded to suit customer applications.

### ELECTRICAL RATINGS

<table>
<thead>
<tr>
<th></th>
<th>PS/PM</th>
<th>PR</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 VDC Resistive</td>
<td>2 AMP</td>
<td>3 AMP</td>
<td>15 AMP</td>
</tr>
<tr>
<td>24 VAC Pilot</td>
<td>125 VA</td>
<td>125 VA</td>
<td>125 VA</td>
</tr>
<tr>
<td>120-277 VAC Pilot</td>
<td>375 VA</td>
<td>375 VA</td>
<td>480-720 VA</td>
</tr>
<tr>
<td>120 VAC Inductive</td>
<td>6 FLA</td>
<td>6/8 FLA*</td>
<td>13 FLA</td>
</tr>
<tr>
<td></td>
<td>36 LRA</td>
<td>40.2 LRA</td>
<td>65 LRA</td>
</tr>
<tr>
<td>240 VAC Inductive</td>
<td>3 FLA</td>
<td>4 FLA</td>
<td>10 FLA</td>
</tr>
<tr>
<td></td>
<td>18 LRA</td>
<td>26 LRA</td>
<td>45 LRA</td>
</tr>
<tr>
<td>480 VAC Inductive</td>
<td>–</td>
<td>–</td>
<td>4 FLA</td>
</tr>
<tr>
<td></td>
<td>–</td>
<td>–</td>
<td>24 LRA</td>
</tr>
<tr>
<td>600 VAC Inductive</td>
<td>–</td>
<td>–</td>
<td>3.2 FLA</td>
</tr>
<tr>
<td></td>
<td>–</td>
<td>–</td>
<td>20 LRA</td>
</tr>
</tbody>
</table>

* PR Series can be configured for 8 FLA @ 240 VAC.