

# P SERIES ENCAPSULATED PRESSURE SWITCHES



Control what's important.

# ENGINEERING EXCELLENCE



## 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.

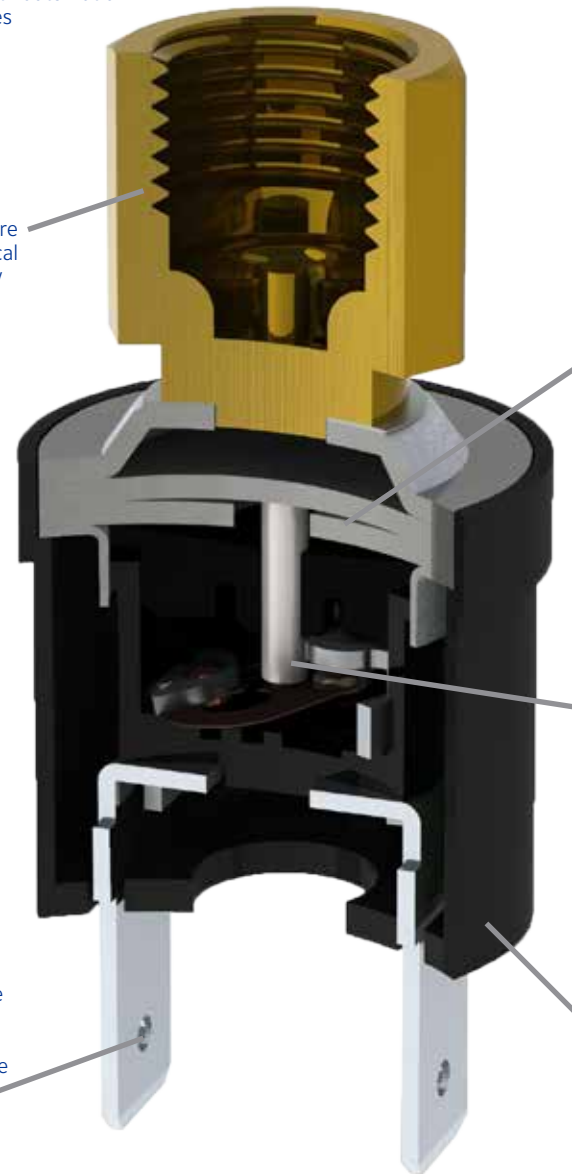
## PS Series

Auto reset • SPST  
Pilot Duty Loads

Available normally open and normally closed, in both automatic and manual reset styles

Wide variety of pressure fittings, both mechanical and brazed, to suit any application

Options include a wide variety of plugs and terminals, plus quick connects and bare wire leads.





## 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

High-grade stainless steel disc for reliable lifetime performance

Hermetic to support all applications



### Alarm Controls

PR Series  
Auto reset • SPDT  
Pilot Duty Loads

Mobile arm is carefully calibrated for maximum life of the switch



### Industrial Controls

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

Rugged housing protects switch mechanism, ensuring reliability in the harshest environments



1/4" 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



Insulated quick connect



Uninsulated quick connect



Insulated quick connect

# P SERIES

## ENCAPSULATED PRESSURE SWITCHES

### 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

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

\*Temperature ranges can be expanded to suit customer applications.

### ELECTRICAL RATINGS

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

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

