

## Pressure Switches Line Guide



**Better under pressure.** For years, manufacturers and operators of heavy-duty equipment have trusted Honeywell Sensing and Control (S&C) pressure and vacuum switches. They're proven under pressure, in applications constantly under attack from chemical splashes, performance spikes and other harsh environments. These switches sense a change in the pressure or vacuum, opening or closing an electrical circuit when the designated point is reached.

Honeywell S&C offers an impressive line of standard products, but our engineering expertise and understanding afford us the ability to modify existing parts or create an original component just for your specifications. Compact size. Durable construction. Enhanced set point integrity. It's all standard, along with Honeywell S&C flexibility.

### FEATURES

#### PRESSURE SWITCHES

##### 1000 Series.

**Features:** Low set point: actuates at 20 psi • Reduced part count • High burst rating • Banjo bolt fitting • Sealed to IP65

**Benefits:** Small, low-cost switch actuated by hydraulic fluid or gas. Excels in harsh environments such as extreme weather conditions or particle-filled areas.

Applications include small vehicle brake light actuation, compact agricultural tractors, utility vehicles, trucks and lift trucks, and small self-propelled vehicles.

##### 5000 Series.

**Features:** Stands up to extended-duty applications • Factory set, capable of field adjustment • Direct acting blade – gold-plated contacts • No dead band • Kapton diaphragm for compatibility with a wide variety of fluids • Various electrical connections and terminations, including a Metri-pack connect that forms a tight seal when connected • Optional rubber boot

**Benefits:** Design benefits include durable construction, compact size, and enhanced set-point integrity. Switch operates with air, motor oils, transmission oils, jet

fuels, and other similar hydrocarbon material. Applications include engine transmission, hydraulics, brakes, power steering, fuel pressure, ABS brakes, cruise control, oxygen concentrators, dental air, embalming equipment, generators/compressors, pool/spa water pressure.

##### HPS Series.

**Features:** Up to 2 million life cycle rating • IP67 sealing • Wide selection of pressure ports and electrical terminations • Configurable • High proof and burst pressure ratings

**Benefits:** Up to  $\pm 2\%$  switching point accuracy provides efficient operation of equipment. 5 mA to 5 A switching capability allows for use in a wide range of applications, from heavy loads to those connected to an electronic control unit Hysteresis option. Applications include heavy-duty construction/agricultural/material-handling machinery, CNC machines, compressors/boilers, fracking equipment, mud pumps, presses and punches, pressure washers, trash compactors, and any industrial machinery that uses high pressure hydraulic fluids.

#### VACUUM SWITCHES

##### 5000 Series.

**Features:** Stands up to extended-duty applications • Factory set • Fluorosilicone rubber diaphragm for compatibility with a wide variety of fluids • Various terminations, including a Metri-pack connect that forms a tight seal when connected

**Benefits:** Design benefits include durable construction, compact size, and enhanced set-point integrity. Applications include engine air cleaners, fuel filters, generators/compressors, and more.

# Pressure Switches Line Guide

## Switch to the leader.

Honeywell S&C's expert model shop, certified lab and engineering staff work with you through the design, prototype, and testing stages. Our rapid prototyping technology allows us to provide you custom samples quickly, while out-of-the-box products deliver all the amenities you demand:

**5000 series** pressure and vacuum switches are factory set, but flexible for field adjustments. Its Kapton diaphragm offers compatibility with a wide variety of fluids. Our Ultra-Duty switches are designed for sudden pressure spikes and high system pressures.

**HPS Series** high-pressure switches' IP67 environmental sealing and high proof pressure and burst pressure ratings allow for use in a variety of rugged applications.



## Pressure Switches

### Series 1000

### 5000 Series

|                               |  |   |
|-------------------------------|--|---|
| <b>Type</b>                   | hydraulic brake pressure switch  | direct action blade contact                                     |
| <b>Set point range</b>        | 20 psi $\pm$ 10 psi [1,37 bar $\pm$ 0,69 bar]                              | factory set: 0.5 psi to 150 psi                                 |
| <b>Contacts</b>               | silver-plated copper contacts  | composite-gold plate  |
| <b>Operating pressure</b>     | 2400 psi   | 150 psi for 0.5 psi to 24 psi<br>250 psi for 25 psi to 150 psi  |
| <b>Proof pressure</b>         | 2400 psi   | 500 psi   |
| <b>Burst pressure</b>         | 4800 psi   | 750 psi for 0.5 psi to 24 psi<br>1250 psi for 25 psi to 150 psi |
| <b>Port</b>                   | M10 x 1.25 banjo fitting (single or double available), M10 x 1, 1/8-27 NPT | 1/8-27 NPT male thread; Piston 1/2-20 UNF                       |
| <b>Electrical termination</b> | 1/4 in blade   | #8-32 screws, 1/4 in blade, 280 series metri-pack               |
| <b>Mechanical life</b>        | depends on application   | 800K  |



## Pressure Switches

### HPS Series

|                               |   |
|-------------------------------|---|
| <b>Type</b>                   | high pressure premium   |
| <b>Set point range</b>        | factory set: 150 psi to 4500 psi [10.34 bar to 310.26 bar]  |
| <b>Contacts</b>               | gold-plated   |
| <b>Operating pressure</b>     | 5000 psi [345 bar]  |
| <b>Proof pressure</b>         | 10000 psi [689 bar]   |
| <b>Burst pressure</b>         | 20000 psi [1379 bar]  |
| <b>Connector</b>              | M14 x 1.5, 9/16-18 UNF; 3/4-16 UNF, 1/2-20 UNF  |
| <b>Electrical termination</b> | spade terminals, screw terminals, cable, Deutsch DT04-3P, AMP Superseal 1.5, Cable with Deutsch DT04-3P, Cable with Deutsch DT04-2P, Cable with AMP Superseal 1.5, Cable with Packard Metripak 150, Cable with DIN 4365D-C, Cable with M12 x 1, 150 mm cable with Packard weatherpack male terminal |
| <b>Mechanical life</b>        | 2M  |

## Highly sensitive.

PBN Series pressure switches offer factory-set and field-adjustable versions. The sensitivity to low pressure and compact design make them suitable for a wide range of automation and medical applications.



## Pressure Switch and Sensor

|                               | PBN1 Series   | PBN3 Series   |
|-------------------------------|---|---|
| <b>Type</b>                   | direct action blade contact   | snap-action switch  |
| <b>Set point range</b>        | 0.018 psi to 1.8 psi  | 0.036 psi to 40.0 psi   |
| <b>Contacts</b>               | gold inlay  | silver  |
| <b>Operating pressure</b>     | 6 psi for 0.018 psi to 0.108 psi<br>12 psi for 0.144 psi to 1.8 psi | 12 psi for 0.036 psi to 2.71 psi<br>60 psi for 3.0 psi to 40.0 psi  |
| <b>Proof pressure</b>         | 8 psi for 0.018 psi to 0.108 psi<br>15 psi for 0.144 psi to 1.8 psi | 15 psi for 0.036 psi to 2.71 psi<br>100 psi for 3.0 psi to 40.0 psi |
| <b>Burst pressure</b>         | 30 psi  | 60 psi for 0.036 psi to 2.71 psi<br>150 psi for 3.0 psi to 40.0 psi |
| <b>Port</b>                   | 5 mm smooth perpendicular; 5 mm barbed radial                       | 5 mm smooth perpendicular; 5 mm barbed radial                       |
| <b>Electrical termination</b> | 4,8 mm x 0,5 mm blades  | 6,3 mm x 0,8 mm blades  |
| <b>Mechanical life</b>        | up to 20M cycles, depending on load                                 | up to 5M cycles, depending on load                                  |

## Vacuum Switches



### 5000 Series

|                               |  |
|-------------------------------|--|
| <b>Type</b>                   | direct action blade contact  |
| <b>Set point range</b>        | factory set: 1.1 in-Hg to 22 in-Hg                                       |
| <b>Vacuum</b>                 | 1.1 in-Hg to 22 in-Hg  |
| <b>Contacts</b>               | composite-gold plate   |
| <b>Operating pressure</b>     | 30 in-Hg max.  |
| <b>Burst pressure</b>         | 150 psi  |
| <b>Port</b>                   | 1/8-27 NPT male thread standard<br>(others, including metric, available) |
| <b>Electrical termination</b> | #8-32 screws, 1/4 in blade, 280 series metri-pack                        |
| <b>Mechanical life</b>        | 800K   |

## PRESSURE SWITCH AND SENSOR PBN1 Series.

**Features:** Sensitive to ultra-low pressures • Gage, vacuum, and differential measurement • Miniature size • Lightweight • Fast response • Rugged housings • High shock and vibration resistant versions available • Adjustable and non-adjustable models • For sale in EMEA only

**Benefits:** High sensitivity and flexible design options make the PBN1 suitable for potential applications such as filter restriction, HVAC, vacuum control, liquid level sensing, pick and place machinery, pump control, and counters.

## PBN3 Series.

**Features:** High current switching capacity • Sensitive to low gage pressures • Miniature size • Lightweight • Fast response • Rugged housings • Adjustable and non-adjustable models • For sale in EMEA only

**Benefits:** Designed to respond to positive air pressure or activated by non-corrosive liquids at low pressures. The PBN3's high switch rating makes the switch suitable for applications such as counting, edge detection, liquid level sensing, traffic counters, motor control, and pressure control in medical equipment.

**Warranty.** Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by

Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit [sensing.honeywell.com](http://sensing.honeywell.com) or call +1-815-235-6847 or 1-800-537-6945; email inquiries to [info.sc@honeywell.com](mailto:info.sc@honeywell.com)

### **WARNING** **PERSONAL INJURY**

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

### **WARNING** **MISUSE OF DOCUMENTATION**

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

Sensing and Control

**Honeywell**

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# Honeywell



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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