Oildyne

Pressure Switches
For AC Power

3.4-345 bar (50-5000 psi) Range
**Pressure Switch Features**

- **Versatile**
  Our designs allow the switches to be used in any mounting orientation. They can sense hydraulic fluid pressure or air/gas pressure. A simple spring change allows the same basic switch to be used through a wide range of pressure settings.

- **Durable**
  Heavy-duty electrical contacts are rated for 15 amps at 125, 250 or 460 VAC. Normally open and normally closed contacts are provided.

- **Reliable**
  Repeatability is accomplished through a combination of a PTFE seal and a hardened, nickel-plated steel piston. This use of low-friction materials and the design of the unique PTFE seal (or diaphragm*) prevents the piston from sticking. Repeatability, sensitivity and reliability are excellent. Limited piston movement prevents inertial forces from damaging the piston stop.

*Used for lower pressure differential applications.

**Typical Applications**

Pressure switches sense when a pre-selected fluid pressure is reached or lost and make or break an electrical circuit. Their operation can stop or start a machine’s cycle, actuate indicator lights or sequential operations. Properly installed, their operation is automatic and limited by your imagination and need.

- **Spring Range**
  Duplex models contain two separate switches which can be activated by one or two sensing ports depending on the subplate configuration. See dimensional data for options.

- **Environmentally Resistant**
  Environmentally resistant models are available on special order for certain hazardous location service.

**Subplates**

Subplates are available for in-line mounting of Oildyne pressure switches. This allows further flexibility in mounting to existing equipment. Ports in 1/8 NPT or 7/16-20 (SAE-4) straight thread are standard. The duplex switch has two types of subplates, one with a port for each side of the switch, the other with one port only, for both sides of the switch.

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**Single Switch**

**Duplex Switch**

**Triplex Switch**

**Construction**

- C-RING SEAL FOR LEAK PROOF OPERATION
- STAINLESS STEEL SINTERED METAL DISC OR DIAPHRAGM
- PTFE SEALS FOR MINIMUM FRICTION AND ZERO LEAKAGE
- SEALED PISTON, NO DRAIN LINES NEEDED
- SPRING
- ADJUSTING SCREW MAKES CHANGING PRESSURE SETTING EASY
- 1/2" PIPE CONDUIT CONNECTION
**Dimensions**

**Single Pressure Switch**

- Dimensions in mm (inches).

**Subplates (Single & Duplex)**

- Single
- Duplex
- Triplex

**Wiring**

- Single
- Duplex

**Weight**

- Single: .3 kg (10 oz.)
- Duplex: .4 kg (14 oz.)

**Electrical Duty**

Single pole, double throw element, U.L. rated for 15 amps at 125, 250 or 460 VAC. Electrical leads are not normally furnished with the switch.

**Recommended Oil**

Any clean hydraulic fluid. Standard Buna N seals supplied, optional fluorocarbon rubber seals also available.
Differential
This is the pressure required to open and close the switch contacts. It is a constant value dependent on the characteristics of the switch. The differential will be in the range as shown on the above table. For minimum differential, select the lightest spring including the maximum setting desired.

<table>
<thead>
<tr>
<th>Spring Number</th>
<th>Spring Range</th>
<th>Adjustment Range</th>
<th>Repeatability Plus or Minus</th>
<th>Differential Range</th>
<th>Spring Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50 - 100 psi</td>
<td>50 to 100 psi</td>
<td>2 psi</td>
<td>50 to 90 psi</td>
<td>Green</td>
</tr>
<tr>
<td>2</td>
<td>100 - 300 psi</td>
<td>75 to 300 psi</td>
<td>4 psi</td>
<td>50 to 100 psi</td>
<td>Black</td>
</tr>
<tr>
<td>3</td>
<td>300 - 500 psi</td>
<td>150 to 500 psi</td>
<td>5 psi</td>
<td>50 to 125 psi</td>
<td>Red</td>
</tr>
<tr>
<td>4</td>
<td>500 - 1000 psi</td>
<td>200 to 1000 psi</td>
<td>8 psi</td>
<td>50 to 150 psi</td>
<td>Blue</td>
</tr>
<tr>
<td>5</td>
<td>1000 - 2000 psi</td>
<td>300 to 2000 psi</td>
<td>15 psi</td>
<td>75 to 250 psi</td>
<td>White</td>
</tr>
<tr>
<td>6</td>
<td>2000 - 3000 psi</td>
<td>400 to 3000 psi</td>
<td>20 psi</td>
<td>75 to 250 psi</td>
<td>Yellow</td>
</tr>
<tr>
<td>7</td>
<td>3000 - 4000 psi</td>
<td>500 to 4000 psi</td>
<td>25 psi</td>
<td>125 to 350 psi</td>
<td>Orange</td>
</tr>
<tr>
<td>8</td>
<td>4000 - 5000 psi</td>
<td>500 to 5000 psi</td>
<td>50 psi</td>
<td>150 to 450 psi</td>
<td>Pink</td>
</tr>
</tbody>
</table>

Note: 100 psi = 6.9 bar.

Standard Product Ordering Code

Single Switch
PK-01B Subplate (1/8” Pipe)
PK-50B Subplate (SAE-4 Str. Thd.)

Duplex Switch
PK-01C Subplate (1/8” Pipe) Two Ports
PK-50C Subplate (SAE-4 Str. Thd.) Two Ports
PK-01D Subplate (1/8” Pipe) One Port
PK-50D Subplate (SAE-4 Str. Thd.) One Port

Triplex
Specify Subplate PK-50H (SAE-4 Str. Thd.) and Three Single Switch Specifications from Chart at Left.