

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.

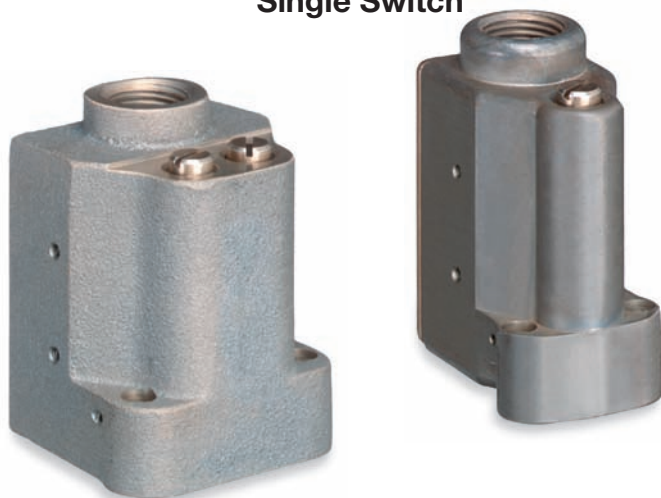
• Environmentally Resistant

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.

Single Switch

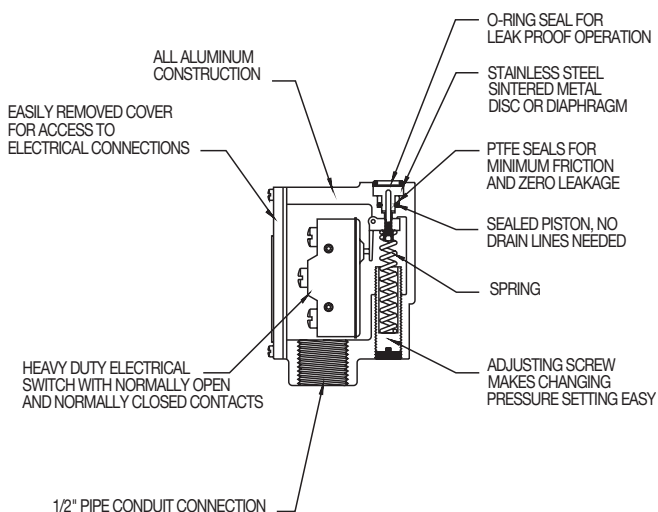


Duplex Switch



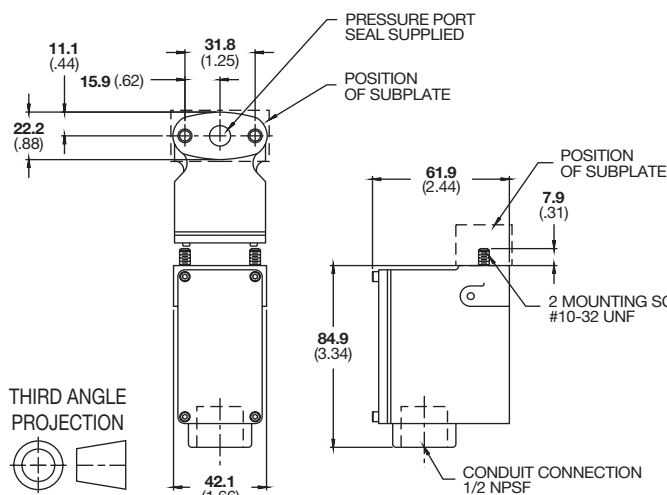
Triplex Switch

Construction



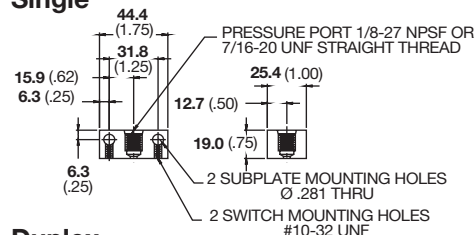
Dimensions

Single Pressure Switch

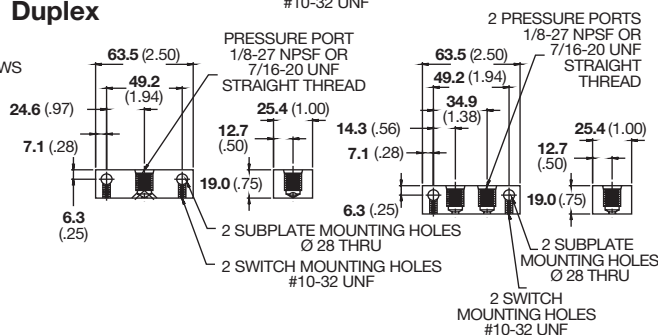


Subplates (Single & Duplex)

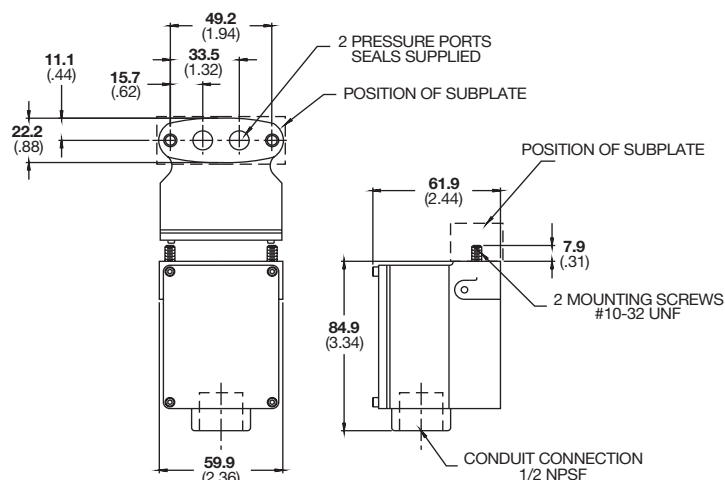
Single



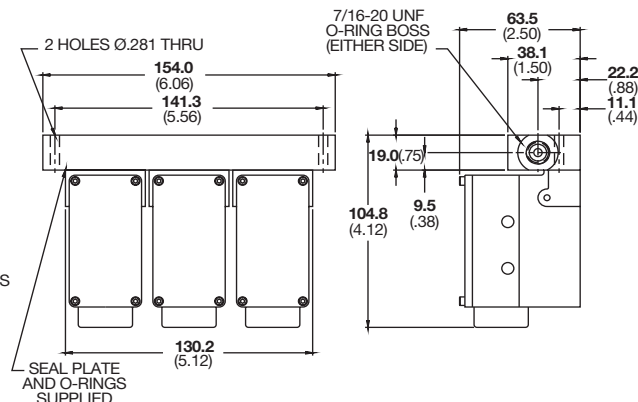
Duplex



Duplex Pressure Switch

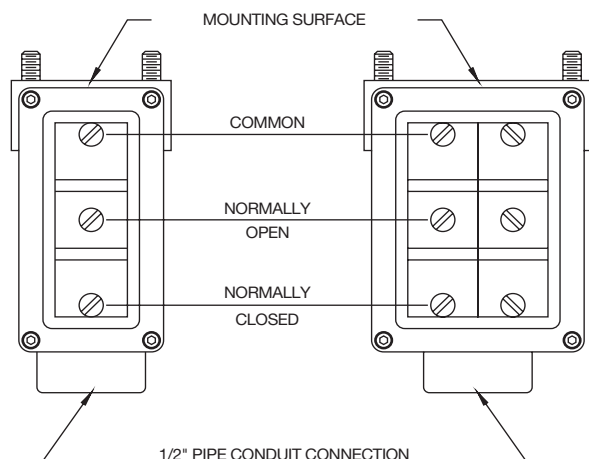


Triplex Pressure Switch



Note: All dimensions in mm (inches).

Wiring



Weight

Single

Standard .3 kg (10 oz.)

Duplex

Standard .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.

Spring Selection Guide

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

Note: 100 psi = 6.9 bar.

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.

Standard Product Ordering Code

Seals		Model		Pressure Range of Springs Single Switch or LH Side Duplex		Pressure Range of Springs RH Side Duplex Only	
O — Buna-N		H — Single Switch		1 — 50 - 100		1 — 50 - 100	
F — Fluorocarbon Rubber		K — Duplex Switch		2 — 100 - 300		2 — 100 - 300	
				3 — 300 - 500		3 — 300 - 500	
				4 — 500 - 1000		4 — 500 - 1000	
				5 — 1000 - 2000		5 — 1000 - 2000	
				6 — 2000 - 3000		6 — 2000 - 3000	
				7 — 3000 - 4000		7 — 3000 - 4000	
				8 — 4000 - 5000		8 — 4000 - 5000	

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.