



A Pressure Switch correctly installed and to the correct specification gives a switch point at a specific set pressure. This electrical circuit can be used to stop or start a machine, operate an alarm or regulate the pressure in a process. Pressure Switches are invaluable in the efficient and safe operation of plant and machinery.

- a) Before fitting the pressure switch to a pressure source ensure that the maximum pressure of the pressure switch is higher than that of the pressure to be applied.
- b) Before fitting the pressure switch to a pressure source check that the wetted parts are compatible with the fluid being used, and that the pressure connection correctly matches that of the pipework.
- c) Do not use piston type pressure switches on gasses
- d) Do not use standard pressure switches on Oxygen or Acetylene unless approved by our Technical Department.
- e) When fitting the pressure switch to the pipe work use correct sealing methods. Do not use the switch housing to tighten the switch to the pipework, use correct spanners on the base hexagon.
- f) Differential pressure switches should not be used with more than the range applied to one side, unless approved by our Technical Department. Line pressure must not exceed the line pressure stated on the pressure switch label. The higher of the two pressures must be connected to the port marked high and the lower of the two pressures must be connected to the port marked low.
- g) Ensure that the electrical supply is isolated before removing cover. All covers are marked with warning flash.
- h) Ensure before connecting the terminals of the pressure switch to the circuit that the electrical switch is of the correct rating. The rating is stated on the pressure switch label.
- i) Ensure that the terminals are connected correctly and the pressure switch body is correctly earthed.
- j) Ensure that the pressure switch set point is correct before use.
- k) Ambient and process temperature acting on the pressure switch should be within -10°C to $+80^{\circ}\text{C}$ and protected from higher fluid temperatures by means of a siphon tube filled with condensate before use. The fluid in the pressure chamber should not be allowed to freeze or crystallise as this will lead to rupture of the sensing element.

If in doubt concerning the application of any pressure switch contact our Technical Department who will only be too pleased to give you advice.

Pressure Conversion Factors

	bar	ib./in ²	kg/cm ²	atm (std)	MH ₂ O	inH ₂ O	mmHg	inHg	N/M ²	Pa
bar	1	14.504	1.0197	0.9869	10.197	401.46	750.06	29.53	100000	100000
ib.in ²	0.0689	1	0.0703	0.068	0.7031	27.68	51.715	2.036	6894.8	6894.8
kg/cm ²	0.9807	14.223	1	0.9678	10	393.7	735.56	28.959	98066	98066
atm (std)	1.0133	14.696	1.0332	1	10.332	406.78	760	29.921	101325	101325
MH ₂ O	0.0981	1.4223	0.1	0.0968	1	39.37	73.556	2.8959	9806.6	9806.6
inH ₂ O	0.0025	0.0361	0.0025	0.0025	0.0254	1	1.8683	0.0736	249.09	249.09
mmHg	0.0013	0.0193	0.0014	0.0013	0.0136	0.5352	1	0.0394	133.32	133.32
inHg	0.0339	0.4912	0.0345	0.0334	0.3453	13.595	25.4	1	3386.4	3386.4
N/M ²	0.00001	0.00015	0.00001	0.00001	0.0001	0.004	0.0075	0.0003	1	1
Pa	0.00001	0.00015	0.00001	0.00001	0.0001	0.004	0.0075	0.0003	1	1

