



A Pressure Gauge correctly installed and to the correct specification gives indication of pressure in the system which helps to ensure the safe working of process plant machinery.

- a) Before fitting the gauge to a pressure source check that the maximum scale value of the gauge is higher than the pressure to be applied. The applied pressure should be 75% of maximum scale value for steady pressures or 65% of maximum scale value for fluctuating pressures.
  - b) Before fitting the gauge 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) When fitting the gauge to the pipework, use correct sealing methods. Do not use the gauge case to tighten the gauge to the pipework, use a correct size spanner on the neck hexagon.
  - d) Do not use gauge for oxygen or acetylene unless approved by our Technical Department. Gauges must have "Oxygen" or "Acetylene" marked on dial if used on these gases.
  - e) Do not use glycerine filled gauges for any fluid which has strong oxydizing agents for example chlorine, hydrogen peroxide, nitric acid, etc.
  - f) If the pressure gauge is to be subject to vibration, pressure surges, pressure pulses or over pressure, consult our Technical Department for approval before use.
  - g) The ambient and process temperature acting on the gauge should be within  $-20^{\circ}\text{C}$  and  $+80^{\circ}\text{C}$  and protected from higher fluid temperature by means of a syphon 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.
  - h) Should the pointer of any pressure gauge not return to zero, when the pressure is removed, it is an indication that damage to the gauge has occurred and the gauge should be replaced immediately.
- If in doubt concerning the application of any pressure gauge please contact our Technical Department who will be only to pleased to give you advice.

## Pressure Conversion Factors

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	bar	ib./in <sup>2</sup>	kg/cm <sup>2</sup>	atm (std)	MH <sub>2</sub> O	inH <sub>2</sub> O	mmHg	inHg	N/M <sup>2</sup>	Pa
bar	1	14.504	1.0197	0.9869	10.197	401.46	750.06	29.53	100000	100000
ib.in <sup>2</sup>	0.0689	1	0.0703	0.068	0.7031	27.68	51.715	2.036	6894.8	6894.8
kg/cm <sup>2</sup>	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 <sub>2</sub> O	0.0981	1.4223	0.1	0.0968	1	39.37	73.556	2.8959	9806.6	9806.6
inH <sub>2</sub> 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 <sup>2</sup>	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