## Bailey & Mackey Ltd

A Pressure Transducer correctly installed and to the correct specification gives an electrical output proportional to the pressure in the system which helps to ensure the safe working of process plant and machinery.

**J**nstallation

a) Before fitting the pressure transducer to a pressure source check that the range (full scale) of the device is the same or higher than the pressure to be applied.

b) Before fitting the pressure transducer 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 pressure transducer to pipework use correct sealing methods. Do not use the transducer body to tighten the pressure transducer to the pipework, use correct spanners on the hexagon base.

d) Do not use pressure transducers on Oxygen or Acetylene unless approved by our Technical Department.

e) Ambient and process temperature acting on the transducer should be within catalogue values. The unit should be protected from higher fluid temperatures 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.

f) Differential pressure transducers should not be used with more than the range of the transducer applied to one side unless approved by our Technical Department. Line pressure must not exceed the line pressure stated on the pressure transducers 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 pressure transducer is connected electrically in accordance with the installation instructions supplied with the unit. Incorrect connection can damage the pressure transducer beyond repair.

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



## Pressure Conversion Factors

	bar	ib./in²	kg/cm <sup>2</sup>	atm (std)	$MH_2O$	inH₂O	mmHg	inHg	N/M <sup>2</sup>	Ра
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
inH₂O	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
Ра	0.00001	0.00015	0.00001	0.00001	0.0001	0.004	0.0075	0.0003	1	1



