

## Metric Pressure Measurement Units

UNIT	bar	mbar	kbar	Pa	kPa	MPa
1 bar	1	1000	0.001	$10^5$	100	0.1
1 mbar	0.001	1	$10^{-6}$	100	0.1	$10^{-4}$
1 kbar	1000	$10^6$	1	$10^8$	$10^5$	100
1 Pa	$10^{-5}$	0.01	$10^{-8}$	1	0.001	$10^{-6}$
1 kPa	0.01	10	$10^{-5}$	1000	1	0.001
1MPa	10	$10^4$	0.01	$10^6$	1000	1

1 Pa = N/m<sup>2</sup>      1kPa = 1 kN/m<sup>2</sup>      1 MPa = 1 MN/m<sup>2</sup>

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**Pressure, Temperature  
and Level Measurement**

## Pressure Units Cross Reference Chart

psi	atms.	ft. H2O	in. H2O	kg/cm2	meters H2O	in Hg.	mm. Hg.	cm. Hg.	bar	millibar (mbar)	kPa
1	0.0680	2.310	27.720	0.0700	0.704	2.043	51.884	5.188	0.0690	68.947	6.895
14.696	1	33.659	407.513	1.0330	10.351	30.019	762.480	76.248	1.0130	1013.0	101.325
0.433	0.0290	1	12.000	0.0300	0.305	0.884	22.452	2.245	0.0300	29.837	2.984
0.036	0.0025	0.833	1	0.0025	0.025	0.074	1.871	0.187	0.0025	2.486	0.249
14.233	0.9680	32.867	394.408	1	10.018	29.054	737.959	73.796	0.9810	980.662	98.066
1.422	0.0970	3.287	39.370	0.0990	1	2.905	73.796	7.379	0.0980	98.066	9.807
0.489	0.0330	1.131	13.575	0.0340	0.345	1	25.400	2.540	0.0340	33.753	3.375
0.019	0.0013	0.045	0.534	0.0014	0.0136	0.039	1	0.100	0.0010	1.329	0.133
0.193	0.0131	0.445	5.340	0.0140	0.1360	0.393	10.000	1	0.0133	13.290	1.328
14.504	0.9870	33.514	402.164	1.0200	10.2110	29.625	752.470	75.247	1	1000.0	100.0
0.014	0.0009	0.033	0.402	0.0010	0.0102	0.029	0.752	0.075	0.001	1	0.100
0.145	0.0098	0.335	4.021	0.0100	0.1020	0.296	7.525	0.752	0.010	10.000	1