

# 壓力單位對照表

TO CONVERT FROM TO	psi	mbar	bar	atm	Pa	kPa	MPa	cmH <sub>2</sub> O @20°C	in H <sub>2</sub> O @20°C	ft H <sub>2</sub> O @20°C	mm Hg (Torr) @0°C	in Hg @0°C	kg/cm <sup>2</sup>	ft.sea water
psi	1	68.9476	0.0689476	0.0680460	6894.76	6.89476	6.89476 $\times 10^{-3}$	70.433	27.730	2.3108	51.7149	2.03602	0.0703069	2.2457
mbar	0.0145038	1	0.001	9.86923 $\times 10^{-4}$	100	0.1	0.0001	1.0215	0.40218	0.03352	0.75006	0.02953	0.0010197	0.032571
bar	14.5038	1000	1	0.986923	100000	100	0.1	1021.5	402.18	33.52	750.06	29.5300	1.019716	32.571
atm	14.6959	1013.25	1.01325	1	101325	101.325	0.101325	1035.08	407.511	35.959	760.0	29.9213	1.033227	33.002
Pa	1.45038 $\times 10^{-4}$	0.01	0.00001	9.86923 $\times 10^{-6}$	1	0.001	0.000001	0.010215	0.0040218	3.352 $\times 10^{-4}$	7.5006 $\times 10^{-3}$	2.95300 $\times 10^{-4}$	1.019716 $\times 10^{-5}$	3.2571 $\times 10^{-4}$
kPa	0.145038	10.0	0.01	0.0098692	1000	1	0.001	10.215	4.02118	0.3352	7.5006	0.295300	0.0101972	0.32571
MPa	145.038	10000	10	9.8692	1000000	1000	1	10215	4021.18	335.2	7500.6	295.300	10.1972	325.71
cm H <sub>2</sub> O @20°C	0.14198	0.97891	9.7891 $\times 10^{-4}$	9.66105 $\times 10^{-4}$	97.891	0.097891	9.7891 $\times 10^{-5}$	1	0.3937	0.035281	0.73424	0.028907	9.9821 $\times 10^{-4}$	0.031884
in H <sub>2</sub> O @20°C	0.036063	2.4864	0.0024864	2.45392 $\times 10^{-3}$	248.64	0.24864	2.4864 $\times 10^{-4}$	2.5400	1	0.083333	1.8650	0.073424	0.0025354	0.080986
ft H <sub>2</sub> O @20°C	0.432756	29.8368	0.0298368	0.294470	2983.68	2.98368	2.98368 $\times 10^{-3}$	30.480	12	1	22.380	0.881089	0.030425	0.97183
mm Hg @0°C	0.0193368	1.33322	0.0013332	0.0013158	133.322	0.133322	1.33322 $\times 10^{-4}$	1.3619	0.53620	0.04468	1	0.03937	0.0013595	0.043424
in Hg @0°C	0.491154	33.8639	0.0338639	0.0334211	3386.39	3.38639	3.38639 $\times 10^{-3}$	34.593	13.619	1.13491	25.400	1	0.0345316	1.1030
kg/cm <sup>2</sup>	14.2233	980.665	0.980665	0.967842	98060.5	98.0665	0.0980665	1001.8	394.41	32.868	735.559	28.959	1	31.9410
ft.sea water	0.4453	30.702	0.030702	0.030301	3070.2	3.0702	3.0702 $\times 10^{-3}$	31.3638	12.3482	1.02900	23.029	0.90664	0.031308	1

Additional remark: 1 cmH<sub>2</sub>O = 10 mmH<sub>2</sub>O

1 Torr = 1 mmHg at 0 °C ( 1 mmHg = 0.1 cmHg)

1 psi = 1 lb/in<sup>2</sup>

1 mmAq = 1 mmH<sub>2</sub>O = 1 mmW.C.

1 cmHg = 10 mmHg

1 kbar = 1000 bar ( 1 kbar = 100 MPa)

1 Pa = 1 N/m<sup>2</sup>, 1 kPa = 1 KN/m<sup>2</sup> (1 MPa = 1 MN/m<sup>2</sup>)