

## PRESSURE CONVERSION TABLE

| Pressure Unit Value | mm mercury (°C) (torr) | in. mercury (°C) (32° F) | millibars (mB) (hPa) | lb per sq in. (psi) | lb per sq ft (psf) | grams/sq cm | in. water (60° F) (20° C) | in. water (68° F) (20° C) | in. water (60° F) | ft. water (50° F) (10° C) | in. water (4° C) (39.2° F) | cm. water (25° C) (77° F) | cm. water (20° C) (68° F) | cm water (4° C) (39.2° F) | atmosphere |
|---------------------|------------------------|--------------------------|----------------------|---------------------|--------------------|-------------|---------------------------|---------------------------|-------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|------------|
| mm Hg (0 C)         | 1                      | 0.039370                 | 1.3332               | 0.019337            | 2.7845             | 1.3595      | 0.53620                   | 0.53620                   | 0.53577           | 0.044617                  | 0.53525                    | 1.3635                    | 1.3620                    | 1.3595                    | 0.00131579 |
| in. Hg (0 C)        | 25.400                 | 1                        | 33.864               | 0.49115             | 70.726             | 34.532      | 13.620                    | 13.620                    | 13.609            | 1.1333                    | 13.595                     | 34.634                    | 34.594                    | 34.532                    | 0.033421   |
| millibars           | 0.75006                | 0.029550                 | 1                    | 0.014504            | 2.0885             | 1.0197      | 0.40218                   | 0.40218                   | 0.40186           | 0.033465                  | 0.40147                    | 1.0227                    | 1.0215                    | 1.0197                    | 0.00098692 |
| lb per sq in.       | 51.715                 | 2.0360                   | 68.948               | 1                   | 144                | 70.307      | 27.730                    | 27.730                    | 27.707            | 2.3073                    | 27.681                     | 70.515                    | 70.433                    | 70.309                    | 0.068046   |
| lb per sq ft        | 0.35913                | 0.014139                 | 0.47880              | 0.0069444           | 1                  | 0.48824     | 0.19257                   | 0.19257                   | 0.19241           | 0.016023                  | 0.19223                    | 0.48969                   | 0.48912                   | 0.48826                   | 0.00047254 |
| grams / sq cm       | 0.73556                | 0.028959                 | 0.98067              | 0.014223            | 2.0482             | 1           | 0.39441                   | 0.39441                   | 0.39409           | 0.032818                  | 0.39371                    | 1.0030                    | 1.0018                    | 1.0000                    | 0.00096784 |
| in water (68 F)     | 1.8650                 | 0.073424                 | 2.4864               | 0.036063            | 5.1930             | 2.5354      | 1                         | 1                         | 0.99919           | 0.083209                  | 0.99823                    | 2.5430                    | 2.5400                    | 2.5355                    | 0.0024539  |
| in water (60 F)     | 1.8665                 | 0.073483                 | 2.4884               | 0.036092            | 5.1972             | 2.5375      | 1.0008                    | 1.0008                    | 1                 | 0.083276                  | 0.99904                    | 2.5450                    | 2.5421                    | 2.5376                    | 0.0024559  |
| ft water (50 F)     | 22.413                 | 0.88241                  | 29.882               | 0.43340             | 62.409             | 30.471      | 12.018                    | 12.018                    | 12.008            | 1                         | 11.997                     | 30.561                    | 30.526                    | 30.472                    | 0.029491   |
| in water (4 C)      | 1.8683                 | 0.073554                 | 2.4908               | 0.036126            | 5.2022             | 2.5399      | 1.0018                    | 1.0018                    | 1.0010            | 0.083356                  | 1                          | 2.5475                    | 2.5445                    | 2.5400                    | 0.0024582  |
| cm water (25 C)     | 0.73339                | 0.028874                 | 0.97777              | 0.014181            | 2.0421             | 0.99705     | 0.39324                   | 0.39324                   | 0.39293           | 0.032721                  | 0.39255                    | 1                         | 0.99884                   | 0.99707                   | 0.00096498 |
| cm water (20 C)     | 0.73424                | 0.028907                 | 0.97891              | 0.014198            | 2.0445             | 0.99821     | 0.39370                   | 0.39370                   | 0.39338           | 0.032759                  | 0.39301                    | 1.0012                    | 1                         | 0.99823                   | 0.00096611 |
| cm water (4 C)      | 0.73554                | 0.028958                 | 0.98064              | 0.014223            | 2.0481             | 0.99997     | 0.39440                   | 0.39440                   | 0.39408           | 0.032817                  | 0.39370                    | 1.0029                    | 1.0018                    | 1                         | 0.00096781 |
| atmosphere          | 760                    | 29.9213                  | 1013.250             | 14.69595            | 2116.22            | 1033.227    | 407.51                    | 407.51                    | 407.18            | 33.909                    | 406.79                     | 1036.29                   | 1035.08                   | 1033.26                   | 1          |

### Example: PSI to Feet

To convert 22 PSI into feet of water at 50° F, find the row that is labeled "lb per sq in." Look across to the column labeled "ft. water (50° F)." The number at that intersection is 2.3073. Multiply by 2.3073 to convert to ft of water.  
**22 PSI \* 2.3073 = 50.760 ft.**

Therefore 22 PSI is the same as 50.761 ft of water at (60° F)

- 1 millibar = 1000 dynes per sq cm
- 1 gram per sq meter = 0.0001 gram per sq cm
- 1 kg per sq meter = 0.1 gram per sq cm
- 1 centibar = 10 millibars = 1 kPa (kilopascal)
- 1 inch = 2.54 centimeters
- NOTE:** All conversions related to the height of a column of liquid are specified at a specific temperature. This is because the density of the fluid changes with temperature.
- NOTE:** Conversions are based on the Standard Acceleration of Gravity or Standard normal gravity which is 9.80665 m/s<sup>2</sup> = 32.1740 ft/s<sup>2</sup>
- 1 bar = 1000 millibars
- 1 millibar = 100 pascals = 1 hectopascal (hPa)
- 1 mm Hg = 1000 microns
- 1 kg per sq cm = 1000 grams per sq cm