

Measures of Pressure

1 Pound Per Square Inch = 144 Pounds Per Square Foot = 0.068 Atmosphere = 2.042 Inches of Mercury at 62°F = 27.7 Inches of Water at 62°F = 2.31 Feet of Water at 62°F.

1 Atmosphere = 30 Inches of Mercury at 62°F = 14.7 Pounds Per Square Inch = 2116.3 Pounds Per Square Foot = 33.95 Feet of Water at 62°F.

1 Foot of Water at 62°F = 62.355 Pounds Per Square Foot = 0.433 Pounds Per Square Inch.

1 Inch of Mercury at 62°F = 1.132 Feet of Water = 13.58 Inches of Water = 0.491 Pounds Per Square Inch.

Column of Water 12 Inches High, 1 Inch in Diameter = .341 Pounds

If temperature is kept constant, the volume of a given mass of gas is inversely proportional to the pressure which is exerted upon it.

Length Conversion Constants

Millimeters x .039370 = Inches
 Meters x 39.370 = Inches
 Meters x 3.2808 = Feet
 Meters x 1.09361 = Yards
 Kilometers x 3,280.8 = Feet
 Kilometers x .62137 = Statute Mile
 Kilometers x .53959 = Nautical Miles

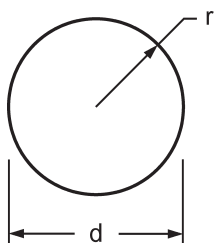
Inches x 25.4001 = Millimeters
 Inches x .0254 = Meters
 Feet x .30480 = Meters
 Yards x .91440 = Meters
 Feet x .0003048 = Kilometers
 Statute Miles x 1.60935 = Kilometers
 Nautical Miles x 1.85325 = Kilometers

Weight Conversion Constants

Grams x .03527 = Ounces (Avd.)
 Grams x .033818 = Fluid Ounces (Water)
 Kilograms x 35.27 = Ounces (Avd.)
 Kilograms x 2.20462 = Pounds (Avd.)

Ounces (Avd.) x 28.35 = Grams
 Fluid Ounces (Water) x 29.57 = Grams
 Ounces (Avd.) x .02835 = Kilograms
 Pounds (Avd.) x .45359 = Kilograms

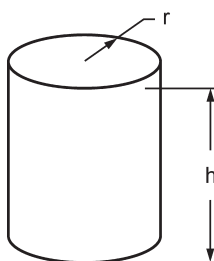
Circumference of a Circle



$$\text{Circumference} = 2\pi r = \pi d = 3.14159 d$$

$$\text{Area} = \pi r^2 = \pi \frac{d^2}{4} = .78539d^2$$

Right Cylinder



r = radius
 h = length

$$\text{Volume} = \pi r^2 h$$

$$\text{Surface Area} = 2\pi r (r + h)$$

If end planes are parallel but not at 90° to h, the same formulas apply, but a slice at 90° through the cylinder must be used to determine r.

