

### Frequently Used Conversion Factors

U.S. Customary
1 cu. ft. = 1728 cu. in. = 0.03704 cu. yd.
1 cu. ft. = 7.481 gal.
1 gal. = 231 cu. in. = 0.1337 cu. ft.
1 gal. water = 8.3 lbs.
1 cu. ft. Water = 62.43 lbs.
1 KWH. will evaporate 3.5 lb. of water at 212°F
1 KWH. will raise 22.75 lb. of water from 62°F to 212°F
3412 BTU = 1 KWH = 1.34 HP Hour
1 HP = 745.7 Watts
1 BTU = 252 calories = 0.293 Watt Hours

Metric
1 in. = 2.54 cm = 25.4 mm
1 ft. = 0.3048 m
1 m = 39.37 in.
1 sq. in. = 6.4516 sq. cm.
1 sq. ft. = 0.0929 sq. m.
1 cu. in. = 16.39 cu. cm
1 cu. ft. = 0.02832 cu. m. = 28.32 liters
1 lb. = 453.6 grams
1 gal. (U.S.) = 3.785 liters
1 liter = 61.024 cu. in.

TO CONVERT	INTO	MULTIPLY BY
Atmospheres	Cms of Mercury	76
Atmospheres	Feet of Water (at 4°C)	33.9
Atmospheres	Inches of Mercury (at 0°C)	29.92
Atmospheres	Kgs/Square Cm	1.0333
Atmospheres	Kgs/Square Meter	10.332
Atmospheres	Pounds/Square Inch	14.7
BTU/Hour	Watts	0.2931
BTU/Minute	Horsepower	0.02356
BTU/Minute	Kilowatts	0.01757
BTU/Minute	Watts	17.57
Centiliters	Ounces Fluid (U.S.)	0.3382
Centimeters	Feet	$3.281 \times 10^{-2}$
Centimeters	Inches	0.3937
Cubic Centimeters	Cubic Feet	$3.531 \times 10^{-5}$
Cubic Centimeters	Cubic Inches	0.06102
Cubic Centimeters	Gallons (U.S. Liquid)	$2.642 \times 10^{-4}$
Cubic Feet	Cubic Cms	28.320
Cubic Feet	Cubic Inches	1.728
Cubic Feet	Cubic Yards	0.03704
Cubic Feet	Gallons (U.S. Liquid)	7.48052
Cubic Inches	Cubic Cms	16.39
Cubic Inches	Cubic Feet	$5.787 \times 10^{-4}$
Cubic Inches	Gallons	$4.329 \times 10^{-3}$
Cubic Inches	Cubic Feet	35.31
Cubic Meters	Cubic Yards	1.308
Cubic Meters	Gallons (U.S. Liquid)	264.2
Feet	Centimeters	30.48
Feet	Kilometers	$3.048 \times 10^{-4}$
Feet	Millimeters	304.8
Feet of Water	Atmospheres	0.0295
Feet of Water	Inches of Mercury	0.8826
Feet of Water	Pounds/Square Foot	62.43
Feet of Water	Pounds/Square Inch	0.4335
Gallons	Cubic Cms	3,785
Gallons	Cubic Feet	0.1337
Gallons	Cubic Inches	231
Gallons	Cubic Meters	$3.785 \times 10^{-3}$
Gallons	Cubic Yards	$4.951 \times 10^{-3}$
Gallons (Liquid Br. Imp.)	Gallons (U.S. Liquid)	1.20095
Gallons of Water	Pounds of Water	8.3453
Gallons/Minute	Cubic Feet/Hour	8.0208

TO CONVERT	INTO	MULTIPLY BY
Grams	Pounds	$2.205 \times 10^{-3}$
Horsepower	Kilowatts	0.7457
Horsepower (Boiler)	BTU/Hour	33479
Horsepower (Boiler)	Kilowatts	9.803
Inches	Meters	$2.540 \times 10^{-2}$
Inches of Mercury	Atmospheres	0.03342
Inches of Mercury	Feet of Water	1.133
Inches of Mercury	Pounds/Square Inch	0.4912
Kilograms	Pounds	2.205
Kilograms/Cubic Meter	Pounds/Cubic Feet	0.06243
Kilowatt Hours	BTU	3412
Liters	Cubic Feet	0.03531
Meters	Feet	3.281
Meters	Yards	1.094
Microns	Meters	$1 \times 10^{-6}$
Millimeters	Feet	$3.281 \times 10^{-3}$
Millimeters	Inches	0.03937
Ounces	Pounds	0.0625
Radians	Degrees	57.3
Radians	Minutes	3.438
Square Feet	Square Inches	144
Square Feet	Square Yards	0.1111
Square Inches	Square Cms	6.452
Square Inches	Square Feet	$6.944 \times 10^{-3}$
Square Meters	Square Feet	10.76
Square Meters	Square Yards	1.196
Square Yards	Square Feet	9
Square Yards	Square Inches	1,296
Square Yards	Square Meters	0.8361
Watts	BTU/Hour	3.4129
Watts	Foot-Pounds/Minute	44.27
Yards	Kilometers	$9.144 \times 10^{-4}$
Yards	Meters	0.9144