

CONVERSION FACTORS & EQUIVALANTS 01

1 Atmosphere	= 760 33.91 29.92 1.0333 14.969	mm of mercury ft of water (4°C) in. of mercury (0°C) kg/cm psi
1 Bar	= 0.9869	atmosphere
1 British thermal unit	= 777.6 252.0 1054.8 2.930x10 ⁴	foot-lbs gram-calories joules kilowatt hours
1 Btu\hr	= 0.2930	watts
1 Btu\min	= 17.58	watts
1 Btu\hr • ft ² • F deg	= 2.0345x10 ³ 5.678x10 ⁴	watts/in. ² F deg watts/cm ² C
Celsius	= (1.8•C) + 32	Fahrenheit
1 Centimeter	= 0.3937	inches
1 Centimeter of mercury (0°C)	= 0.4460 0.1934	feet of water pounds/sq in.
1 Circular mil	= 0.7854	square mils
1 Cubic centimeter	= 0.06102	cubic inches
1 Cubic foot	= 1728 0.02832 28.32 7.481	cubic inches cubic metres litres gallons
1 Cubic foot/min	= 0.472	litres/sec
1 Cubic foot\sec	= 448.8	gallons/min
1 Cubic inch	= 16.387 0.016387	cubic cm litres
1 Cubic meter	= 35.31 1.308 264.2 1000.0	cubic feet cubic yards gallons litres
CFM x 0.000472	= m ³ /s	
1 Erg	= 1.0	cm-dynes
Fahrenheit	= (F - 32)\1.8	Celsius
1 Foot	= 0.3048	meters
1 Foot of water(68 F)	= 0.4335	lb/sq in.
1 Foot\min	= 0.01136	miles/hr
1 Foot-pound	= 1.383 x 10 ⁴ 1.356	cm-grams joules
FPM x 0.005	= m/s	
1 Gallon	= 231.0 3.785 8.346	cubic inches litres lb of water (68 F)
1 Gram	= 0.3527 2.205 x 10 ⁻³ 3.969 x 10 ⁻³ 1.163 x 10 ⁻³	ounces (avdp) pounds Btu watt-hours
1 Gram-calorie		
1 Horsepower	= 42.41 33 000 550 0.7457	Btu/min ft-lb/min ft-lb/sec kilowatts
1 Inch	= 25.40 1.133	millimeters ft of water
1 Inch of mercury	= 0.4912 0.03453	lb/sq in. kg/sq cm
1 Inch of water (0°C)	= 0.07361 0.03613	inches of mercury lb/sq in.
Inches WG x 250	= N/m ²	

1 Joule	= 9.480 x 10 ⁴ 0.7376 2.389 x 10 ⁴ 2.778 x 10 ⁴	Btu ft-lb kg-calories watt hours
1 Kilogram	= 2.205	pounds
1 Kilogram/sq cm	= 0.9678 32.81 28.96	atmosphere feet of water inches of mercury
1 Kilogram-calories	= 3.969 3087 4186	Btu ft-lb joules
1 Kilometer	= 3281 0.6214	feet miles
1 Kilometer/hr	= 54.68	feet/min
1 Kilowatt	= 56.89 1.341	Btu/min horsepower
1 Kilowatt-hr	= 3413 3.6 x 10 ⁶ 860	Btu joules kilogram-calories
1 Meter	= 3.281 39.37 1.094	feet inches yards
1 Mile (nautical)	= 6080	feet
(standard)	= 5280	feet
1 Mile/hr	= 88.0	feet/min
1 mm	= 0.03937 39.37	inches mils
1 Newton/sq meter	= 1.0	pascals
1 Ounce	= 28.35 0.0625	grams pounds
1 Pint (liquid)	= 473.2 28.87 0.4732	cubic cm cubic inches litres
1 Pound	= 7000 453.6 4.448 0.4536	grains grams newtons kg
1 sq cm	= 0.1550	sq inches
1 sq foot	= 144.0 0.09290	sq inches sq meters
1 sq inch	= 6.452 106	sq cm sq mils
1 sq meter	= 10.764 1.1960	sq feet sq yards
1 sq mm	= 0.1550	sq inches
1 sq yard	= 9.0 0.8361	sq feet sq meters
TEMPERATURE: Kelvin	= Celsius + 273	
Rankine	= Fahrenheit + 460	
1 Ton (long)	= 1016 2240	kg pounds
1 Ton (short)	= 907.2 2000	kg pounds
1 Ton (refrigeration)	= 12 000 3.517 12.65	Btu/hr kilowatt-hr megajoules
1 Ton (metric)	= 1000 2205	kg pounds
1 Torr	= 1.0	mm hg
1 Watt	= 3.413 0.8598	Btu/hr kg-calories/hr
1 Watt-second	= 1.0	joule
1 Yard	= 0.9144 0.8598	meters kg-calories/hr