

Multiple inch	by 2.54	To Get cm						
This can also be written as: 1 inch = 2.54 cm								
A acre	43,560	ft ²	hp	2544.5	Btu / hr	m / s	3.60	km / h
ampere-hr (A-h)	3,600	coulomb (C)	hp	745.70	W (watt)	m / s	3.2808	ft / s
ångström (Å)	1x10 ⁻¹⁰	m	hp	0.74570	kW	m / s	2.237	mi / h (mph)
atm (atmosphere)	1.01325	bar	hp	33,000	ft-lbf / min	m / s ²	3.2808	ft / s ²
atm, std	76.0	cm of Hg	hp	550	ft-lbf / sec	metric ton	1000	kg
atm, std	760	mm of Hg at 0°C	hp-hr	2544	Btu	mil	0.001	in
atm, std	33.90	ft of water	hp-hr	1.98x10 ⁶	ft-lbf	mi (mile)	5280	ft
atm, std	29.92	in of Hg at 30°F	hp-hr	2.68x10 ⁶	J	mi	1.6093	km
atm, std	14.696	lbf/in ² abs (psia)	in	2.54*	cm	mi ² (square mile)	640	acres
atm, std	101.325	kPa	in of Hg	0.0334	atm	mph (mile/hour)	1.6093	km / hr
atm, std	1.013x10 ⁵	Pa	in of Hg	13.60	in of water	mph	88.0	ft / min (fpm)
atm, std	1.03323	kgf / cm ²	in of Hg	3.387	kPa	mph	1.467	ft / s
atm, std	14.696	psia	in of water	0.0736	in of Hg	mph	0.4470	m / s
atm, std	0.9869	atm, std	in of water	0.0361	lbf / in ² (psi)	micron	1x10 ⁻⁶	m
bar	1x10 ⁵	Pa	in of water	0.002458	atm	mm of Hg	1.316x10 ⁻³	atm
Btu	778.169	ft-lbf	J J (joule)	9.4782x10 ⁻⁴	Btu	mm of Hg	0.1333	kPa
Btu	1055.056	J	J	6.2415x10 ¹⁸	eV	mm of water	9.678x10 ⁻⁵	atm
Btu	5.40395	psia-ft ³	J	0.73756	ft-lbf	N N (newton)	1	kg-m / s ²
Btu	2.928x10 ⁻⁴	kWh	J	1	N-m	N	1x10 ⁵	dyne
Btu	1x10 ⁻⁵	therm	J	1x10 ⁷	ergs	μN (microN)	0.1	dyne
Btu / hr	1.055056	kJ / hr	K kg (kilogram)	2.2046226	W	N	0.22481	lbf
Btu / hr	0.216	ft-lbf / sec	kg	0.068522	lbf (pound mass)	N-m	0.7376	ft-lbf
Btu / hr	3.929x10 ⁻⁴	hp	kg	1x10 ⁻³	slug	N-m	1	J
Btu / hr	0.2931	W	kg / m ³	0.062428	metric ton	P Pa (pascal)	1	N / m ²
Btu / lbm	2.326*	kJ / kg	kgf	9.80665	lbf / ft ³	Pa	1.4504x10 ⁻⁴	lbf / in ² (psia)
Btu / lbm	25.037	ft ² / s ²	kip	1000	newton (N)	Pa	0.020886	lbf / ft ²
Btu / lbm-R	4.1868	kJ / kg-K	kip	4448	lbf	Pa	9.869x10 ⁻⁶	atm
Btu / lbm-°F	4.1868	kJ / kg-°C	kJ	1	1 kPa-m ³	Pa-s	10	poise
Btu / lbmol-R	4.1868	kJ / kmol-K	kJ	1000	N-m	psi (pounds per square inch) --- see lbf / in ²		
C cal (g-calorie)	3.968x10 ⁻³	Btu	kJ / kg	0.42992	Btu	R radian	180/π	degree
cal	1.560x10 ⁻⁶	hp-hr	kJ / kg-K	0.23885	Btu / lbm	S short ton	2000	lbm
cal (IT calorie)	4.1868	J	kJ / kg-°C	1	Btu / lbm-°R	short ton	907.1847	kg
Calorie (Cal)	4.1868	kJ	kJ / kg-°C	1	kJ / kg-K	slug	32.174	lbm
cal / sec	4.1868	W (watt)	J / kg-°C	1	J / g-°C	slug	14.5939	kg
cm (centimeter)	0.03281	ft	kJ / kg-°C	0.23885	Btu / lbm-°F	slug / ft ³	0.5154	g / cm ³
cm	0.3937	in	kJ / kg-°C	0.23885	Btu / lbm-R	stokes	1x10 ⁻⁴	m ² / s
cP (centipoise)	0.001	Pa-sec	km	3280.8	ft	T therm	1x10 ⁵	Btu
cSt (centistokes)	1x10 ⁻⁶	m ² / sec	km/hr	0.6214	mi	ton of refrigeration	200	Btu / min
D degree	π/180	radian	km/hr	0.6214	mi / hr (mph)	W W (watt)	3.4121	Btu / hr
dyne	10	μN (micronewton)	km/hr	0.2778	m/s	W	0.7376	ft-lbf / sec
E eV (electronvolt)	1.602x10 ⁻¹⁹	J	km/hr	0.9113	ft/s	W	1.341x10 ⁻³	hp
erg	1x10 ⁻⁷	J	kPa (kilopascal)	9.8693x10 ⁻³	atm	W	1	J / s
F ft (feet)	0.3048*	m	kPa	0.14504	lbf / in ² (psi)	W / cm ²	1x10 ⁴	W / m ²
ft	30.48	cm	kW	3412.14	Btu / hr	W / cm ³	1x10 ⁶	W / m ³
ft ²	2.2957x10 ⁻⁵	acre	kW	0.9478	Btu / sec	W / m ²	0.3171	Btu / (h-ft ²)
ft ²	144	in ²	kW	737.56	lbf-ft / sec	W / m ³	0.09665	Btu / (h-ft ³)
ft ²	0.09290304*	m ²	kWh	1.341	hp	W / m-°C	1	W / m-K
ft ³	7.481	gal (U.S.)	kWh	3600	Btu	W / m-°C	0.57782	Btu / (h-ft-°F)
ft ³	0.02832	m ³	L L (liter)	0.03531	hp-hr	W / (m ² -°C)	1	W / (m ² -K)
ft ³	28.317	L	L	61.02	kJ	W / (m ² -°C)	0.17612	Btu / (h-ft ² -°F)
ft ³ / lbm	0.062428	m ³ / kg	L	0.2642	ft ³	weber / m ²	10,000	gauss
ft-lbf	1.285x10 ⁻³	Btu	L	0.001	in ³			
ft-lbf	1.35582	J	L	2.119	gal (U.S.)			
ft-lbf	3.766x10 ⁻⁷	kWh	L / s	15.85	m ³			
ft-lbf	1.35582	N-m	L / s	15.85	ft ³ / min (cfm)			
ft-lbf	0.324	calorie (g-cal)	lbf (pound force)	32.174	gal / min (gpm)			
ft-lbf / sec	1.818x10 ⁻³	hp	lbf	4.44822	lbf-ft / s ²			
ft / s ²	0.3048*	m / s ²	lbf	32.17	N			
G U.S. gallon (gal)	0.13368	ft ³	lbf / in ² (psi)	0.06805	poundals			
gal	3.7854	L	lbf / in ²	2.307	atm			
gal	3.7854x10 ⁻³	m ³	lbf / in ²	2.036	ft water			
gal	231	in ³	lbf / in ²	6894.757	in Hg			
gal (U.K.)	1.201	gal (U.S.)	lbm	0.45359237*	Pa			
gal (U.K.)	277.4	in ³	lbm	0.031081	kg			
gal / min (gpm)	0.002228	ft ³ / sec	lbm / in ³	1728	slug			
gamma (γ,Γ)	1x10 ⁻⁹	tesla (T)	lbm / ft ³	0.016018	lbf / ft ³			
gauss	1x10 ⁻⁴	T	lbm / ft ³	16.018	g / cm ³			
gram (g)	2.205x10 ⁻³	lbm	M m (meter)	3.28083	kg / m ³			
g / cm ³	1	1 kg / L	m	1.0926	ft			
g / cm ³	1000	kg / m ³	m	39.370	yard			
g / cm ³	62.428	lbm / ft ³	m ²	1550	in			
g / cm ³	1.940	slug / ft ³	m ²	10.764	in ²			
g / cm ³	0.036127	lbm / in ³	m ²	1.0764	ft ²			
H hectare	1x10 ⁴	m ²	m ³	1x10 ⁶	cm ³ (cc)			
hectare	2.47104	acres	m ³	35.315	ft ³			
hp (horsepower)	42.41	Btu / min	m ³	264.17	gal (U.S.)			
hp	0.7068	Btu / sec	m ³	1000	L			
			m ³ / kg	16.02	ft ³ / lbfm			
			m / s	196.8	ft / min			

* The exact conversion between metric and English.

TEMPERATURE

T(K) = T(°C) + 273.15
 T(R) = T(°F) + 459.67
 T(°F) = 1.8 T(°C) + 32

SOME IMPORTANT CONSTANTS

Atomic Mass Unit (u)	=	1.66054x10 ⁻²⁷ kg
Avogadro's number (N _A)	=	6.02213x10 ²³ particles/mol
Boltzmann's constant (k _B)	=	1.38065x10 ⁻²³ J / K
electron charge (e)	=	-1.6022x10 ⁻¹⁹ C
electron mass (m _e)	=	9.10939x10 ⁻³¹ kg
proton mass (m _p)	=	1.6726x10 ⁻²⁷ kg
Gas Constant (R)	=	8314 J / kmol-K
Gravitational Constant (G)	=	6.672x10 ⁻¹¹ N-m ² / kg ²
Gravity (mean)	=	9.8067 (9.81) m / s ²
Planck's constant (h)	=	6.6260x10 ⁻³⁴ J-s
Speed of Light (c)	=	2.99792458x10 ⁸ m/s (exact)

SI PREFIXES

yocto (10⁻²⁴), zepto (10⁻²¹), atto (10⁻¹⁸), femto (10⁻¹⁵), pico (10⁻¹²), nano (10⁻⁹), micro (10⁻⁶), milli (10⁻³), centi (10⁻²), deci (10⁻¹), deka (10¹), hecto (10²), kilo (10³), mega (10⁶), giga (10⁹), tera (10¹²), peta (10¹⁵), exa (10¹⁸), zetta (10²¹), yotta (10²⁴)