

Factores de conversión



Tabla 1: Longitud [L]

	cm	m	ft	milla (int)
1 cm	1,000000 E+0	1,000000 E-2	3,280840 E-2	6,213712 E-6
1 m	1,000000 E+2	1,000000 E+0	3,280840 E+0	6,213712 E-4
1 ft	3,048000 E+1	3,048000 E-1	1,000000 E+0	1,893939 E-4
1 in	2,540000 E+0	2,540000 E-2	8,333333 E-2	1,578783 E-5
1 milla (int)	1,609344 E+5	1,609344 E+3	5,280000 E+3	1,000000 E+0
1 milla (naut)	1,852000 E+0	1,852000 E+3	6,076115 E+3	1,150779 E+0
1 yd	9,144000 E+1	9,144000 E-1	3,000000 E+0	5,681818 E-4

Tabla 2: Masa [M]

	g	kg	lb	ton (US)
1 g	1,000000 E+0	1,000000 E-3	2,204623 E-3	1,102311 E-6
1 kg	1,000000 E+3	1,000000 E+0	2,204623 E+0	1,102311 E-3
1 lb (pd)	4,535924 E+2	4,535924 E-1	1,000000 E+0	5,000000 E-4
1 oz	2,834952 E+1	2,834952 E-2	6,250000 E-2	3,124999 E-5
1 kilate	2,000000 E+1	2,000000 E-4	4,409246 E-4	2,204622 E-7
1 geokilo	9,806650 E+3	9,806650 E+0	2,161997 E+1	1,080998 E-2
1 slug	1,459390 E+4	1,459390 E+1	3,217405 E+1	1,608702 E-2

Tabla 3: Temperatura [T]

	T (K)	T (°C)	T (°R)	T (°F)
T (K)	1	T (°C) - 273,15	1,8 T(K)	1,8 T(K) - 459,67
T (°C)	T (°C) + 273,15	1	T (°C) - 491,67	1,8 T(°C) + 32
T (°R)	T (°R) / 1,8	(T (°R) - 491,67) / 1,8	1	T (°R) - 459,67
T (°F)	(T (°F) + 459,67) / 1,8	(T (°F) - 32) / 1,8	T (°F) + 459,67	1

Tabla 4: Superficie [L²]

	cm ²	m ²	sq.ft	sq.in
1 cm ²	1,000000 E+0	1,000000 E-4	1,076391 E-3	1,550003 E-1
1 m ²	1,000000 E+4	1,000000 E+0	1,076391 E+1	1,550003 E+3
1 sq.ft	9,290304 E+2	9,290304 E-2	1,000000 E+0	1,440000 E+2
1 sq.in	6,451600 E+0	6,451600 E-4	6,944444 E-3	1,000000 E+0
1 ha	1,000000 E+8	1,000000 E+4	1,076391 E+5	1,550003 E+7
1 km ²	1,000000 E+10	1,000000 E+6	1,076391 E+7	1,550000 E+9
1sq mile	2,589988 E+10	2,589988 E+6	2,787840 E+7	4,014489 E+9

Tabla 5: Volumen [L³]

	cm ³	m ³	cu.ft	L
1 cm ³	1,000000 E+0	1,000000 E-6	3,531467 E-5	1,000000 E-3
1 m ³	1,000000 E+6	1,000000 E+0	3,531467 E+1	1,000000 E+3
1 cu.ft	2,831685 E+4	2,831685 E-2	1,000000 E+0	2,831685 E+1
1 L	1,000000 E+3	1,000000 E-3	3,531467 E-2	1,000000 E+0
1 cu.in	1,638706 E+1	1,638706 E-5	5,787036 E-4	1,638706 E-2
1 gal (US)	3,785412 E+3	3,785412 E-3	1,336806 E-1	3,785412 E+0
1 gal (UK)	4,546092 E+3	4,546092 E-3	1,605437 E-1	4,546092 E+0
1 barrel (bbl)	1,589873 E+5	1,589873 E-1	5,614584 E+0	1,589873 E+2
fl-oz (US)	2,957353 E+1	2,957353 E-5	1,044379 E-3	2,957353 E-2
1 yd ³	7,645549 E+5	7,645549 E-1	2,700000 E+1	7,645549 E+2

Factores de conversión



Tabla 6: Densidad [ML⁻³]

	g.cm ⁻³	kg.m ⁻³	lb / cu.ft	lb / cu.in
1 g.cm ⁻³	1,000000 E+0	1,000000 E+3	6,742796 E+1	3,612729 E-2
1 kg.m ⁻³	1,000000 E-3	1,000000 E+0	6,242796 E-2	3,612729 E-5
1 lb / cu.ft	1,601846 E-2	1,601846 E+1	1,000000 E+0	5,787035 E-4
1 lb / cu.in	2,767491 E+1	2,767491 E+4	1,728000 E+3	1,000000 E+0

Tabla 7: Velocidad [Lt⁻¹]

	cm.s ⁻¹	m.s ⁻¹	ft / s	km / h
cm.s ⁻¹	1,000000 E+0	1,000000 E-2	3,280840 E-2	3,600000 E-2
m.s ⁻¹	1,000000 E+2	1,000000 E+0	3,280840 E+0	3,600000 E+0
ft / s	3,048000 E+1	3,048000 E-1	1,000000 E+0	1,097280 E+0
1 km / h	2,777778 E+1	2,777778 E-1	9,113444 E-1	1,000000 E+0
1 in / s	2,540000 E+0	2,540000 E-2	8,333334 E-2	9,144000 E-2
1 mile / h	4,470400 E+1	4,470400 E-1	1,466667 E+0	1,609344 E+0
1 knot	5,144444 E+1	5,144444 E-1	1,687810 E+0	1,852000 E+0

Tabla 8: Aceleración [Lt⁻²]

	cm.s ⁻²	m.s ⁻²	ft / s ²	km / h ²
1 cm.s ⁻²	1,000000 E+0	1,000000 E-2	3,280840 E-2	1,296000 E+2
1 m.s ⁻²	1,000000 E+2	1,000000 E+0	3,280840 E+0	1,296000 E+4
1 ft / s ²	3,048000 E+1	3,048000 E-1	1,000000 E+0	3,950208 E+3
1 km / h ²	7,716049 E-3	7,716049 E-5	2,531512 E-4	1,000000 E+0
1 in / s ²	2,540000 E+0	2,540000 E-2	8,333334 E-2	3,291840 E+2

Tabla 9: Fuerza [MLt⁻²]

	dina	N	lbf	kgf
1 dina	1,000000 E+0	1,000000 E-5	2,248089 E-6	1,019717 E-6
1 N	1,000000 E-5	1,000000 E+0	2,248089 E-1	1,019717 E-1
1 lbf	4,448222 E+5	4,448222 E+0	1,000000 E+0	4,535928 E-1
1 kgf	9,806650 E+5	9,806650 E+0	2,204622 E+0	1,000000 E+0
1 poundal (pdl)	1,382550 E+4	1,382550 E-1	3,108095 E-2	1,409810 E-2

Tabla 10: Presión [ML⁻¹t⁻²]

	dina / cm ²	Pa	psi	kgf / cm ²
1 dina / cm ²	1,000000 E+0	1,000000 E-1	1,450377 E-5	1,019716 E-6
1 Pa	1,000000 E+1	1,000000 E+0	1,450377 E-4	1,019716 E-5
1 psi	6,894757 E+4	6,894757 E+3	1,000000 E+0	7,030695 E-2
1 kgf / cm ²	9,806650 E+5	9,806650 E+4	1,422332 E+1	1,000000 E+0
1 bar	1,000000 E+6	1,000000 E+5	1,450377 E+1	1,019716 E+0
1 atm	1,013250 E+6	1,013250 E+5	1,469629 E+1	1,033227 E+0
1 psf	4,788026 E+2	4,788026 E+1	6,844444 E-3	4,882428 E-4

Factores de conversión



Tabla 11: Trabajo, Calor, Energía [ML²t⁻²]

	erg	J	BTU	cal
1 erg	1,000000 E+0	1,000000 E-7	9,47817 E-11	2,388459 E-8
1 J	1,000000 E+7	1,000000 E+0	9,478170 E-4	2,388459 E-1
1 BTU	1,055056 E10	1,055056 E+3	1,000000 E+0	2,519958 E+2
1 cal	4,186800 E+7	4,186800 E+0	3,968320 E-3	1,000000 E+0
1 kW.h	3,600000 E13	3,600000 E+6	3,412141 E+3	8,598452 E+5
1 kgf.m	9,806650 E+7	9,806650 E+0	9,294910 E-3	2,342278 E+0
1 lbf.ft	1,355818 E+7	1,355818 E+0	1,285067 E-3	3,238316 E-1
1 HP.h	2,684520 E13	2,684520 E+6	2,544434 E+3	6,411866 E+5

Tabla 12: Potencia [ML²t⁻³]

	erg / s	W	BTU / h	HP
1 erg / s	1,000000 E+0	1,000000 E-7	3,412141 E-7	1,34102 E-10
1 W	1,000000 E+7	1,000000 E+0	3,412141 E+0	1,341022 E-3
1 BTU / h	2,930711 E+6	2,930711 E-1	1,000000 E+0	3,930148 E-4
1 HP	7,457000 E+9	7,457000 E+2	2,544434 E+3	1,000000 E+0
1 cal / s	4,186800 E+7	4,186800 E+0	1,428595 E+1	5,614590 E-3
1 lbf.ft / s	1,355818 E+7	1,355818 E+0	4,626242 E+0	1,818182 E-3
1 lbf.ft / h	3,766161 E+3	3,766161 E-4	1,285067 E+3	5,050504 E-7

Tabla 13: Flujo másico [ML⁻²t⁻¹]

	g / cm ² s	kg.m ⁻² s ⁻¹	lb / ft ² s	lb / in ² s
1 g / cm ² s	1,000000 E+0	1,000000 E+1	2,048161 E+0	1,422334 E-2
1 kg.m ⁻² s ⁻¹	1,000000 E-1	1,000000 E+0	2,048161 E-1	1,422334 E-3
1 lb / ft ² s	4,882428 E-1	4,882428 E-0	1,000000 E+0	6,944443 E-3
1 lb / in ² s	7,030696 E+1	7,030696 E+2	1,440000 E+2	1,000000 E+0
1 kg.m ⁻² h ⁻¹	2,777778 E-5	2,777778 E-4	5,689337 E-5	3,950928 E-7
1 lb / ft ² h	1,356230 E-4	1,356230 E-3	2,777778 E-4	1,929012 E-6

Tabla 14: Caudal volumétrico [L³t⁻¹]

	cm ³ s ⁻¹	m ³ s ⁻¹	ft ³ / s	bbl / d
cm ³ s ⁻¹	1,000000 E+0	1,000000 E-6	3,531467 E-5	5,434396 E-1
m ³ s ⁻¹	1,000000 E+6	1,000000 E+0	3,531467 E+1	5,434396 E+5
ft ³ / s	2,831685 E+4	2,831685 E-2	1,000000 E+0	1,538849 E+4
bbl / d	1,840131 E+0	1,840131 E-6	6,498362 E-5	1,000000 E+0
1 ft ³ / h	7,865791 E+0	7,865791 E-6	2,777778 E-4	4,274582 E+0
1 L / s	1,000000 E+3	1,000000 E-3	3,531467 E-2	5,434396 E+2
1 m ³ / h	2,777778 E+2	2,777778 E-4	9,809631 E-3	1,509550 E+2
1 gal (US) / min	6,309020 E+1	6,309020 E-5	2,228010 E-3	3,428571 E+1
1 gal (US) / h	1,051503 E+0	1,051503 E-6	3,713348 E-5	5,714283 E-1
1 in ³ / s	1,638707 E+1	1,638707 E-5	5,787040 E-4	8,905382 E+0
1 in ³ / h	4,551962 E+0	4,551962 E-6	1,607510 E-4	2,473716 E+0
1 bbl / h	4,416314 E+1	4,416314 E-5	1,559607 E-3	2,400000 E+1

Factores de conversión



Tabla 15: Valor de la constante R de los gases ideales (PV=nRT)

Presión	Volumen	Cant. Materia	Temperatura	R
1 Pa	m ³	mol	K	8,3144
1 bar	L	kmol	K	83,1440
1 atm	L	kmol	K	82,0568
1 mmHg 0°C	L	mol	K	62,3633
1 kgf / cm ²	L	kmol	K	84,7833
1 atm	ft ³	lbmol	°R	0,2302
1 psia	ft ³	lbmol	°R	10,7315
1 psf	ft ³	lbmol	°R	1,545,34
1 inHg 60 °F	ft ³	lbmol	°R	21,9113
1 psia	in ³	lbmol	°R	18.544,03

Tabla 16: Cantidad de materia [C]

	mol	kmol	lbmol
1 mol	1,000000 E+0	1,000000 E-3	2,204623 E-3
1 kmol	1,000000 E+3	1,000000 E+0	2,204623 E+0
1 lbmol	4,535924 E+2	4,535924 E-1	1,000000 E+0