FACTORES DE CONVERSIÓN

MASA

$\frac{1.000\ g}{1\ kg}$	$\frac{1.000\ kg}{1\ ton.metr.}$	$\frac{2.000\ lb}{1\ ton.\ corta}$	$\frac{2.240\ lb}{1\ ton.\ larga}$
$\frac{453{,}59\ g}{1\ lb}$	$\frac{2{,}2046\ lb}{1\ kg}$	$\frac{16\ onzas}{1\ lb}$	$\frac{453{,}59\ gmol}{1\ lbmol}$
$\frac{32{,}174\ lb}{1\ slug}$	$\frac{14{,}594\ kg}{1\ slug}$		

LONGITUD

$\frac{10^4\ micrones}{1\ cm}$	$\frac{10\ mm}{1\ cm}$	$\frac{100\ cm}{1\ m}$	$\frac{1.000\ mm}{1\ m}$
$\frac{1.000\ m}{1\ km}$	$\frac{10^5\ cm}{1\ km}$	$\frac{2{,}54\ cm}{1\ in}$	$\frac{12\ in}{1\ ft}$
$\frac{30{,}48\ cm}{1\ ft}$	$\frac{3{,}281\ ft}{1\ m}$	$\frac{39{,}37\ in}{1\ m}$	$\frac{3\ ft}{1\ yarda}$

ÁREA

$\frac{10^4\ cm^2}{1\ m^2}$	$\frac{10^6\ mm^2}{1\ m^2}$	$\frac{10^6\ m^2}{1\ km^2}$	$\frac{144\ in^2}{1\ ft^2}$
$\frac{1.550\ in^2}{1\ m^2}$	$\frac{0{,}155\ in^2}{1\ cm^2}$	$\frac{10{,}76\ ft^2}{1\ m^2}$	$\frac{929{,}03\ cm^2}{1\ ft^2}$
$\frac{6{,}45\ cm^2}{1\ in^2}$	$\frac{2{,}59\ km^2}{1\ milla^2}$	$\frac{10^4\ m^2}{1\ hectárea}$	

VOLUMEN

$\frac{1.000\ \text{lt}}{1\ \text{m}^3}$	$\frac{10^6\ \text{cm}^3}{1\ \text{m}^3}$	$\frac{1.000\ \text{ml}}{1\ \text{lt}}$	$\frac{1.000{,}028\ \text{cm}^3}{1\ \text{lt}}$
$\frac{1.000\ \text{cm}^3}{1\ \text{dm}^3}$	$\frac{28{,}32\ \text{lt}}{1\ \text{ft}^3}$	$\frac{16{,}39\ \text{cm}^3}{1\ \text{in}^3}$	$\frac{61{,}025\ \text{in}^3}{1\ \text{lt}}$
$\frac{1.728\ \text{in}^3}{1\ \text{ft}^3}$	$\frac{35{,}29\ \text{ft}^3}{1\ \text{m}^3}$	$\frac{2{,}832 \cdot 10^4\ \text{cm}^3}{1\ \text{ft}^3}$	$\frac{3{,}785\ \text{lt}}{1\ \text{gal}}$

TIEMPO

$\frac{60\ \text{min}}{1\ \text{h}}$	$\frac{60\ \text{s}}{1\ \text{min}}$	$\frac{3.600\ \text{s}}{1\ \text{h}}$	$\frac{86.400\ \text{s}}{1\ \text{dia}}$

DENSIDAD (M = PESO MOLECULAR)

$\frac{1.000\ \text{g/lt}}{1\ \text{g/cm}^3}$	$\frac{1.000\ \text{kg/m}^3}{1\ \text{g/cm}^3}$	$\frac{1.728\ \text{lb/ft}^3}{1\ \text{lb/in}^3}$	$\frac{62{,}43\ \text{lb/ft}^3}{1\ \text{g/cm}^3}$
$\frac{16{,}02\ \text{kg/m}^3}{1\ \text{lb/ft}^3}$	$\frac{7{,}482\ \text{lb/ft}^3}{1\ \text{lb/gal}}$	$\frac{8{,}345\ \text{lb/gal}}{1\ \text{g/cm}^3}$	$\frac{119{,}83\ \text{kg/m}^3}{1\ \text{lb/gal}}$
$\frac{(1.000/\text{M})\ \text{gmol/lt}}{1\ \text{g/cm}^3}$	$\frac{35{,}29\ \text{ft}^3}{1\ \text{m}^3}$		

FUERZA

$\frac{1\ \text{dina}}{1\ \text{g} \cdot \text{cm} / \text{s}^2}$	$\frac{1\ \text{N}}{1\ \text{kg} \cdot \text{m/s}^2}$	$\frac{10^5\ \text{dina}}{1\ \text{N}}$	$\frac{9{,}807\ \text{N}}{1\ \text{kgf}}$
$\frac{2{,}205\ \text{lbf}}{1\ \text{kgf}}$	$\frac{4{,}448\ \text{N}}{1\ \text{lbf}}$	$\frac{1\ \text{poundal}}{1\ \text{lb} \cdot \text{ft/s}^2}$	$\frac{32{,}17\ \text{poundal}}{1\ \text{lbf}}$
$\frac{7{,}233\ \text{poundal}}{1\ \text{N}}$	$\frac{32{,}174\ \text{lb} \cdot \text{ft/s}^2}{1\ \text{lbf}}$		

ENERGÍA

$\frac{1\ \text{erg}}{1\ \text{dina}\cdot\text{cm}}$	$\frac{1\ \text{J}}{1\ \text{N}\cdot\text{m}}$	$\frac{10^7\ \text{erg}}{1\ \text{J}}$	$\frac{9{,}8067\ \text{J}}{1\ \text{kgf}\cdot\text{m}}$
$\frac{4{,}184\ \text{J}}{1\ \text{cal}}$	$\frac{0{,}23901\ \text{cal}}{1\ \text{J}}$	$\frac{3{,}6\cdot10^6\ \text{J}}{1\ \text{kW}\cdot\text{h}}$	$\frac{2{,}778\cdot10^{-7}\ \text{kW}\cdot\text{h}}{1\ \text{J}}$
$\frac{3{,}7251\cdot10^{-7}\ \text{hp}\cdot\text{h}}{1\ \text{J}}$	$\frac{2{,}685\cdot10^6\ \text{J}}{1\ \text{hp}\cdot\text{h}}$	$\frac{0{,}73756\ \text{lbf}\cdot\text{ft}}{1\ \text{J}}$	$\frac{9{,}869\cdot10^{-3}\ \text{lt}\cdot\text{atm}}{1\ \text{J}}$
$\frac{0{,}05122\ \text{ft}^3\cdot psi}{1\ \text{J}}$	$\frac{252\ \text{cal}}{1\ \text{BTU}}$	$\frac{1{,}1622\cdot10^{-6}\ \text{kW}\cdot\text{h}}{1\ \text{cal}}$	$\frac{1{,}5586\cdot10^{-6}\ \text{hp}\cdot\text{h}}{1\ \text{cal}}$
$\frac{3{,}08595\ \text{lbf}\cdot\text{ft}}{1\ \text{cal}}$	$\frac{0{,}02143\ \text{ft}^3\cdot psi}{1\ \text{cal}}$	$\frac{0{,}0412917\ \text{lt}\cdot\text{atm}}{1\ \text{cal}}$	$\frac{1.055{,}04\ \text{J}}{1\ \text{BTU}}$
$\frac{3.412{,}19\ \text{BTU}}{1\ \text{kW}\cdot\text{h}}$	$\frac{2.544{,}48\ \text{BTU}}{1\ \text{hp}\cdot\text{h}}$	$\frac{778\ \text{lbf}\cdot\text{ft}}{1\ \text{BTU}}$	$\frac{0{,}18505\ \text{BTU}}{1\ \text{ft}^3\cdot\text{psi}}$
$\frac{5{,}40386\ \text{ft}^3\cdot psi}{1\ \text{BTU}}$	$\frac{10{,}41215\ \text{lt}\cdot\text{atm}}{1\ \text{BTU}}$	$\frac{1{,}34102\ \text{hp}\cdot\text{h}}{1\ \text{kW}\cdot\text{h}}$	$\frac{2{,}665\cdot10^6\ \text{lbf}\cdot\text{ft}}{1\ \text{hp}\cdot\text{h}}$
$\frac{18.439{,}01\ \text{ft}^3\cdot psi}{1\ \text{kW}\cdot\text{h}}$	$\frac{35.528{,}2\ \text{lt}\cdot\text{atm}}{1\ \text{kW}\cdot\text{h}}$	$\frac{1{,}98\cdot10^6\ \text{lbf}\cdot\text{ft}}{1\ \text{hp}\cdot\text{h}}$	$\frac{13.750\ \text{ft}^3\cdot psi}{1\ \text{hp}\cdot\text{h}}$
$\frac{26.493{,}5\ \text{lt}\cdot\text{atm}}{1\ \text{hp}\cdot\text{h}}$	$\frac{144\ \text{lbf}\cdot\text{ft}}{1\ \text{ft}^3\cdot\text{psi}}$	$\frac{74{,}7354\ \text{lbf}\cdot\text{ft}}{1\ \text{lt}\cdot atm}$	$\frac{0{,}519\ \text{ft}^3\cdot psi}{1\ \text{lt}\cdot atm}$
$\frac{10{,}325\ \text{kgf}\cdot\text{m}}{1\ \text{lt}\cdot atm}$	$\frac{107{,}6\ \text{kgf}\cdot\text{m}}{1\ \text{BTU}}$	$\frac{33.000\ \text{lbf}\cdot\text{ft}}{1\ \text{hp}\cdot\text{min}}$	$\frac{3{,}995\cdot10^{-5}\ \text{BTU}}{1\ (\text{ft/s})^2}$

POTENCIA

$\frac{1\ \text{Watt}}{1\ \text{J/s}}$	$\frac{10^7\ \text{erg/s}}{1\ \text{Watt}}$	$\frac{10^3\ \text{Watt}}{1\ \text{kW}}$	$\frac{14{,}34\ \text{cal/min}}{1\ \text{W}}$
$\frac{9{,}807\ \text{W}}{1\ \text{kgf}\cdot\text{m/s}}$	$\frac{2{,}343\ \text{cal/s}}{1\ \text{kgf}\cdot\text{m/s}}$	$\frac{550\ \text{lbf}\cdot\text{ft/s}}{1\ \text{hp}}$	$\frac{1{,}341\ \text{hp}}{1\ \text{kW}}$
$\frac{745{,}7\ \text{W}}{1\ \text{hp}}$	$\frac{0{,}9863\ \text{hp}}{1\ \text{cv}}$	$\frac{0{,}1781\ \text{kcal/s}}{1\ \text{hp}}$	$\frac{737{,}56\ \text{lbf}\cdot\text{ft/s}}{1\ \text{kW}}$
$\frac{76{,}04\ \text{kgf}\cdot\text{m/s}}{1\ \text{hp}}$	$\frac{56{,}87\ \text{BTU/min}}{1\ \text{kW}}$	$\frac{42{,}4087\ \text{BTU/min}}{1\ \text{hp}}$	$\frac{44{,}25\ \text{lbf}\cdot\text{ft/min}}{1\ \text{W}}$

PRESIÓN

$\frac{1\ N/m^2}{1\ Pa}$	$\frac{10^5\ Pa}{1\ bar}$	$\frac{10\ dinas/cm^2}{1\ Pa}$	$\frac{1{,}0133 \cdot 10^5\ Pa}{1\ atm}$
$\frac{760\ mm\ Hg}{1\ atm}$	$\frac{29{,}921\ in\ Hg}{1\ atm}$	$\frac{1{,}033\ kgf/cm^2}{1\ atm}$	$\frac{144\ lbf/in^2}{1\ lbf/ft^2}$
$\frac{1\ lbf/in^2}{1\ psi}$	$\frac{14{,}696\ psi}{1\ atm}$	$\frac{51{,}7\ mm\ Hg}{1\ psi}$	$\frac{10{,}341\ m\ H_2O}{1\ atm}$
$\frac{33{,}93\ ft\ H_2O}{1\ atm}$	$\frac{2.117\ lbf/ft^2}{1\ atm}$	$\frac{1{,}01325\ bar}{1\ atm}$	$\frac{1{,}01325 \cdot 10^6\ dinas/cm^2}{1\ atm}$

TEMPERATURA

$t_F = 1{,}8 \cdot t_C + 32 = 1{,}8 \cdot T_K - 459{,}69$

$T_R = t_F + 459{,}67 = 1{,}8 \cdot T_K = 1{,}8 \cdot t_C + 491{,}69$

$T_K = t_C + 273{,}15 = t_F / 1{,}8 + 255{,}4$

$t_C = T_R / 1{,}8 - 273{,}15 = (t_F - 32) / 1{,}8$

CALOR ESPECÍFICO

$$\frac{1\ cal/g\cdot{}^oC}{1\ cal/g\cdot K} \qquad \frac{1\ cal/g\cdot{}^oC}{1\ Kcal/Kg\cdot{}^oC} \qquad \frac{1\ cal/g\cdot{}^oC}{1\ BTU/lb\cdot{}^oF} \qquad \frac{1\ BTU/lb\cdot{}^oF}{1\ BTU/lb\cdot{}^oR} \qquad \frac{1\ cal/gmol\cdot K}{1\ BTU/lbmol\cdot{}^oR}$$

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$$R = 1{,}987 \frac{cal}{gmol \cdot K} = 1{,}987 \cdot \frac{BTU}{lbmol \cdot {}^oR} = 8{,}309 \frac{J}{gmol \cdot K} = 0{,}08206 \frac{m^3 \cdot at}{kmol \cdot K} = 0{,}08206 \frac{lt \cdot at}{gmol \cdot K}$$

$$R = 82{,}06 \frac{cm^3 \cdot atm}{gmol \cdot K} = 10{,}731 \frac{ft^3 \cdot psi}{lbmol \cdot {}^oR} = 0{,}7302 \frac{ft^3 \cdot at}{lbmol \cdot {}^oR} = 0{,}0028978 \frac{ft^3 \cdot at}{gmol \cdot K}$$

$$R = 62{,}36 \frac{lt \cdot mm\ Hg}{gmol \cdot K} = 554{,}9 \frac{ft^3 \cdot mm\ Hg}{lbmol \cdot {}^oR} = 0{,}8473 \frac{kgf \cdot m}{gmol \cdot K}$$