

Conversion factors

Length Conversion

Convert		Into		Multiply by factor
inches	in	millimetres	mm	25.4
feet	ft	metres	m	0.3048
yards	yd	metres	m	0.9144
miles	mile	kilometres	km	1.609344
millimetres	mm	inches	in	0.0394
metres	m	feet	ft	3.28084
kilometres	km	miles	mile	0.621371

Area Conversion

Convert		Into		Multiply by factor
square yards	yd ²	square metres	m ²	0.836
square feet	ft ²	square metres	m ²	0.092903
square inches	in ²	square millimetres	mm ²	645.16
square inches	in ²	square centimetres	cm ²	6.4516
square metres	m ²	square yards	yd ²	1.19599
square metres	m ²	square feet	ft ²	10.7639
square millimetres	mm ²	square inches	in ²	0.00155
square centimetres	cm ²	square inches	in ²	0.155

Volume Conversion

Convert		Into		Multiply by factor
cubic inches	in ³	cubic centimetres	cm ³	16.3871
cubic inches	in ³	cubic decimetre	dm ³	0.0163871
cubic feet	ft ³	cubic metre	m ³	0.0283168
cubic feet	ft ³	cubic decimetre	dm ³	28.3168
UK gallon	gal	cubic decimetre	dm ³	4.54609
cubic centimetres	cm ³	cubic inches	in ³	0.0610237
cubic decimetres	dm ³	cubic inches	in ³	61.0237
cubic decimetres	dm ³	cubic feet	ft ³	0.0353147
cubic decimetres	dm ³	UK gallon	gal	0.219969
cubic metres	m ³	cubic feet	ft ³	35.3147

Mass Conversion

Convert		Into		Multiply by factor
pound	lb	kilogram	kg	0.45359237
UK ton	ton	tonne (1000 kg)	t	1.01605
ounce	oz	gram	g	28.3495
kilogram	kg	pound	lb	2.20462
tonne (1000 kg)	t	UK ton	ton	0.984207
gram	g	ounce	oz	0.035274

Mass Per Unit

Convert		Into		Multiply by factor
pounds per inch	lb/in	kilogram per metre	kg/m	17.858
pounds per foot	lb/ft	kilogram per metre	kg/m	1.48816
kilogram per metre	kg/m	pounds per inch	lb/in	0.055997
kilogram per metre	kg/m	pounds per foot	lb/ft	0.671969

Conversion factors

Density Conversion

Convert		Into		Multiply by factor
pounds per cubic inch	lb/in ³	gram per cubic centimetre	g/cm ³	27.6799
pounds per cubic foot	lb/ft ³	kilogram per cubic metre	kg/m ³	16.0185
ounce per UK gallon	oz/UK gal	gram per cubic metre	g/m ³	6236.03
ounce per UK gallon	oz/UK gal	milligram per litre	mg/litre	6236.03
gram per cubic centimetre	g/cm ³	pounds per cubic inch	lb/in ³	0.0361273
kilogram per cubic metre	kg/m ³	pounds per cubic foot	lb/ft ³	0.062428
gram per cubic metre	g/m ³	ounce per UK gallon	oz/UK gal	1.6036E-04
milligram per litre	mg/litre	ounce per UK gallon	oz/UK gal	1.6036E-04

Force Conversion

Convert		Into		Multiply by factor
pound-force	lbf	newton	N	4.44822
ounce-force	ozf	newton	N	0.278014
poundal	pdl	newton	N	0.138255
kilogram-force	kgf	newton	N	9.80665
newton	N	kilogram-force	kgf	0.101972
newton	N	pound-force	lbf	0.224809
newton	N	ounce-force	ozf	3.59694
newton	N	poundal	pdl	7.23301

Moment of Force (Torque)

Convert		Into		Multiply by factor
pound-force foot	lbf.ft	newton metre	Nm	1.35582
pound-force inch	lbf.in	newton metre	Nm	0.112985
ounce-force inch	ozf.in	newton metre	Nm	0.0070616
pound-force foot	lbf.ft	kilogram-force metre	kgf.m	0.138255
pound-force inch	lbf.in	kilogram-force metre	kgf.m	0.011521
newton metre	Nm	pound-force foot	lbf.ft	0.737562
newton metre	Nm	pound-force inch	lbf.in	8.85075
newton metre	Nm	ounce-force inch	ozf.in	141.612

Stress Conversion

Convert		Into		Multiply by factor
UK ton-force per square inch	tonf/in ²	newton per square millimetre	N/mm ²	15.4443
UK ton-force per square inch	tonf/in ²	meganewton per square metre	MN/m ²	15.4443
UK ton-force per square inch	tonf/in ²	megapascal	MPa	15.4443
newton per square millimetre	N/mm ²	UK ton-force per square inch	tonf/in ²	0.064749
meganewton per square metre	MN/m ²	UK ton-force per square inch	tonf/in ²	0.064749
megapascal	MPa	UK ton-force per square inch	tonf/in ²	0.064749

Pressure Conversion

Convert		Into		Multiply by factor
pound-force per square inch	lbf/in ²	newton per square metre	N/m ²	6894.76
pound-force per square inch	lbf/in ²	pascal	Pa	6894.76
pound-force per square inch	lbf/in ²	kilonewton per square metre	kN/m ²	6.89476
inch of water	in H ₂ O	newton per square metre	N/m ²	249.089
inch of mercury	in Hg	newton per square metre	N/m ²	3386.39
newton per square metre	N/m ²	pound-force per square inch	lbf/in ²	1.45038x10 ⁽⁻⁴⁾
pascal	Pa	pound-force per square inch	lbf/in ²	1.45038x10 ⁽⁻⁴⁾
kilonewton per square metre	kN/m ²	pound-force per square inch	lbf/in ²	0.145038
newton per square metre	N/m ²	inch of water	in H ₂ O	0.0040146
newton per square metre	N/m ²	inch of mercury	in Hg	0.000295