

CONVERSIONS

METRIC CONVERION FACTORS

APPROX. CONVERSION TO METRIC MEASURES

When You Know	Multiply By	To Find
Length		
inches	2.5	centimetres
feet	30.0	centimetres
yards	0.9	metres
miles	1.6	kilometres

Area

sq. inches	6.5	sq. centimetres
sq. feet	0.09	sq. metres
sq. yards	0.8	sq. metres
sq. miles	2.6	sq. kilometres
acres	0.4	hectares

Mass (weight)

ounces	28.0	grams
pounds	0.45	kilograms
short tons	0.9	metric ton

Volume (U.S. measure)

cubic inches	16.0	millilitres
fluid ounces	30.0	millilitres
cups	0.24	litres
pints	0.47	litres
quarts	0.95	litres
gallons	3.8	litres
cubic feet	0.03	cubic metres
cubic yards	0.76	cubic metres

Pressure

p.s.f.	47.8802	Pa
k.s.i.	6.89475	MPa
Kips	4.44822	kN

Torque

Foot-Pounds	1.35581	Nm
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Temperature (exact)

$$^{\circ}\text{F} = \frac{^{\circ}\text{C} \times 9}{5} + 32$$

APPROX. CONVERSION FROM METRIC MEASURES

When You Know	Multiply By	To Find
Length		
centimetres	0.4	inches
metres	3.3	feet
metres	1.1	yards
kilometres	0.6	miles

Area

sq. centimetres	0.16	sq. inches
sq. metres	10.76	sq. feet
sq. metres	1.2	sq. yards
sq. kilometres	0.4	sq. miles
hectares	2.5	acres

Mass (weight)

grams	0.035	ounces
kilograms	2.2	pounds
metric ton	1.1	short tons

Volume (U.S. measure)

millilitres	0.06	cubic inches
millilitres	0.03	fluid ounces
litres	0.036	cups
litres	2.1	pints
litres	1.06	quarts
litres	0.26	gallons
cubic metres	35.0	cubic feet
cubic metres	1.3	cubic yards

Pa	0.020885	p.s.f.
MPa	0.145	k.s.i.
kN	0.2248	Kips

Nm	0.73776	Foot-Pounds
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Temperature (exact)

$$^{\circ}\text{C} = \frac{(^{\circ}\text{F} - 32) \times 5}{9}$$