

Service Manual

Section 0 (02)

TABLES

Trucks



VOLVO

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THE INTERNATIONAL SYSTEM OF UNITS (SI)

The SI-System is an international system of units established in 1960.

It differs from earlier systems in that the units can be used directly without conversion factors.

The SI-System has seven basic units and two supplement units from which all other units (derived units) are developed in a simple way. The SI-System is uniform, that is, each unit pertains *only* to one quantity.

For ex.: the kilogram (kg) in the SI-System concerns only mass – previously the kilogram could cover both mass and force.

Basic Units:

Unit	Quantity	Symbol
Metre	Length	m
Kilogram	Mass (weight)	kg
Second	Time	s
Ampere	Electric current	A
Kelvin	Thermal dynamic temperature	K
Candela	Luminous intensity	cd
Mole	Amount of substance	mol

Supplement units

Unit	Quantity	Symbol
Radian	Plane angle	rad
Steradian	Solid angle	sr

Example of derived units

Unit	Quantity	Symbol (Derivative)
Hertz	Frequency	1 Hz = 1 s ⁻¹
Newton	Force	1 N = 1 kg.m/s ²
Pascal	Pressure and stress	1 Pa = 1 N/m ²
Joule	Work, Energy, Quantity of heat	1 J = 1 Nm
Watt	Power	1 W = 1 J/s

Multiples of SI units

The prefixes given in the table below are used from names and symbols of multiples (decimal multiples and sub-multiples) of the SI units. For ex., 1000 J = 1 kilojoule.

For practical application purposes, a prefix should be chosen so that the measured unit is greater than 0.1 and less than 1000, e.g. 100 kW instead of 100,000 W.

Factor by which the unit is multiplied		Prefix	
		Name	Symbol
10 ¹²		Tera	(T)
10 ⁹		Giga	(G)
10 ⁶		Mega	(M)
10 ³	(= 10 × 10 × 10)	Kilo	(k)
10 ²	(= 10 × 10)	Hecto	(h)
10 ¹	(= 10)	Deka	(da)
10 ⁻¹	(= $\frac{1}{10}$)	Deci	(d)
10 ⁻²	(= $\frac{1}{10 \times 10}$)	Centi	(c)
10 ⁻³	(= $\frac{1}{10 \times 10 \times 10}$)	Milli	(m)
10 ⁻⁶		Micro	(μ)
10 ⁻⁹		Nano	(n)
10 ⁻¹²		Pico	(p)

METRICAL AND IMPERIAL UNITS EXPRESSED

Quantity	Unit	Symbol		Area	Symbol
Length	millimetre	mm	Area	square millimetre	mm ²
	centimetre	cm		square centimetre	cm ²
	metre	m		square metre	m ²
	kilometre	km		square yard	yd ²
	inch	in		hectare	ha
	foot	ft		square inch	in ²
	yard	yd		square foot	ft ²
	mile	mile		acre	ac

Quantity	Unit	Symbol				
Volume	cubic millimetre	mm ³	Speed	metre per second	m/s	
	cubic metre	m ³		kilometre per hour	km/h	
	cubic inch	in ³		foot per minute	ft/min	
	millilitre	ml		mile per hour	mile/h	
	litre	l		revolutions per minute	rev/min	
	pint	pt		Effect	watt	W
	quart	qt			kilowatt	kW
gallon	gal	horse-power	hp			
Mass	gramme	g	brake horse-power	bhp		
	kilogramme	kg	Energy	kilowatt hour	kWh	
	tonne	t		Pressure	bar	bar
	pound	lb	pound per square inch		lbf/in ²	
	hundredweight	cwt	Torque		newtonmetre	Nm
ton	ton	footpound-force		ft lbf		
Time	second	s	Electricity	ampere	A	
	minute	min		volt	V	
	hour	h		ampere hour	Ah	

TABLES OF DECIMAL MULTIPLES AND SUB-MULTIPLES

The following tables give examples of decimal multiples and sub-multiples for a number of commonly used quantities. The purpose is to comparison and conversion of the various multiples of a certain unit. The first column in the table always contains the SI-unit.

Each line in a table contains the various multiples and sub-multiples of a unit. Figures underlined indicate exact comparisons. Some tables contain comparisons beyond that envisaged by the table.

The calculation procedure is similar in all the tables.

Example:

Converting 1 minute to seconds (see table next page). Go straight from "Minute" column in the table to the reference value "1"

Then proceed from there to the "Second" column.

1 minute = 1 x 60 sec.

Converting two hours to weeks.

Go straight from the "Hr." column to the reference value "1".

Then go to the "Week" column to the right.

2 hours = $2 \times 5,952\ 38 \cdot 10^{-3}$ weeks = $11,9 \cdot 10^{-3}$ weeks ($11,9 \cdot 10^{-3} = 0,0119$).

$$1^g = \frac{\pi}{200} \text{ rad} \quad \pi(\text{pi}) \approx 3,14$$

$$1^o = \frac{\pi}{180} \text{ rad}$$

$$1 \text{ newminute} = \frac{1}{1009}$$

$$1 \text{ newsecond} = \frac{1}{100} \text{ newminute}$$

$$1 \text{ stroke (1 Swedish Military stroke)} = \frac{\pi}{3\ 150} \text{ rad}$$

$$1 \text{ \AA (1 \AA ngstr\u00f6m)} = \underline{10^{-10} \text{ m}}$$

$$1 \text{ mil (1 Swedish mile)} = \underline{10^4 \text{ m}} = \underline{10 \text{ km}}$$

$$1 \text{ AU (astronomic unit)} = 0,149\ 600 \times 10^{12} \text{ m}$$

$$1 \text{ light-year} = 9,460 \times 10^{15} \text{ m}$$

$$1 \text{ pc (parsec)} = 30,86 \times 10^{15} \text{ m}$$

Second (s)	Minute (min)	Hour (h)	Day	Week
<u>1</u> <u>60</u> $3,6 \cdot 10^3$ $66,4 \cdot 10^3$ $604,8 \cdot 10^3$	<u>1</u> $16,6667 \cdot 10^{-3}$ <u>60</u> $1,44 \cdot 10^3$ $10,08 \cdot 10^3$	<u>1</u> $0,277778 \cdot 10^{-3}$ $16,6667 \cdot 10^{-3}$ <u>24</u> 168	<u>1</u> $11,5741 \cdot 10^{-6}$ $0,694444 \cdot 10^{-3}$ $41,6667 \cdot 10^{-3}$ <u>7</u>	<u>1</u> $1,65344 \cdot 10^{-6}$ $99,2063 \cdot 10^{-6}$ $5,95238 \cdot 10^{-3}$ <u>7</u> 0,142857 <u>1</u>

Plane angle

Radian (rad)	Gon alt. Nygrad (..... ^g)	Degree (..... ^o)	Minute (.....')	Second (.....'')	Stroke
<u>1</u> $15,7080 \cdot 10^{-3}$ $17,4533 \cdot 10^{-3}$ $0,290888 \cdot 10^{-3}$ $4,84814 \cdot 10^{-6}$ $0,997331 \cdot 10^{-3}$	<u>63,6620</u> <u>1</u> <u>1,11111</u> $18,5185 \cdot 10^{-3}$ $0,308642 \cdot 10^{-3}$ $63,4921 \cdot 10^{-3}$	<u>57,2958</u> <u>0,9</u> <u>1</u> $16,6667 \cdot 10^{-3}$ $0,277778 \cdot 10^{-3}$ $57,1429 \cdot 10^{-3}$	<u>$3,43775 \cdot 10^3$</u> <u>54</u> <u>60</u> <u>1</u> $16,6667 \cdot 10^{-3}$ <u>3,42857</u>	<u>$0,206265 \cdot 10^6$</u> <u>$3,24 \cdot 10^3$</u> <u>$3,6 \cdot 10^3$</u> <u>60</u> <u>1</u> <u>205,714</u>	<u>$1,00268 \cdot 10^3$</u> <u>15,75</u> <u>17,5</u> <u>0,291667</u> $4,86111 \cdot 10^{-3}$ <u>1</u>

$$1^g = \pi/200 \text{ rad}$$

$$\pi (\text{pi}) \approx 3,14$$

$$1^o = \pi/180 \text{ rad}$$

$$1 \text{ newminute} = 1/100^g$$

$$1 \text{ newsecond} = 1/100 \text{ newminute}$$

$$1 \text{ stroke (1 Swedish military stroke)} = \pi/3150 \text{ rad}$$

Length

Meter (m)	Inch (in)	Foot (ft)	Yard (yd)	Mile	Nautical mile
<u>1</u> $25,4 \cdot 10^{-3}$ <u>0,3048</u> <u>0,9144</u> $1,609344 \cdot 10^3$ $1,852 \cdot 10^3$	<u>39,3701</u> <u>1</u> <u>12</u> <u>36</u> $63,36 \cdot 10^3$ $72,9134 \cdot 10^3$	<u>3,28084</u> $83,3333 \cdot 10^{-3}$ <u>1</u> <u>3</u> $5,28 \cdot 10^3$ $6,07612 \cdot 10^3$	<u>1,09361</u> $27,7778 \cdot 10^{-3}$ $0,333333$ <u>1</u> $1,76 \cdot 10^3$ $2,02537 \cdot 10^3$	$0,621371 \cdot 10^{-3}$ $15,7828 \cdot 10^{-6}$ $0,189394 \cdot 10^{-3}$ $0,568182 \cdot 10^{-3}$ <u>1</u> <u>1,15078</u>	$0,539957 \cdot 10^{-3}$ $13,7149 \cdot 10^{-6}$ $0,164579 \cdot 10^{-3}$ $0,493737 \cdot 10^{-3}$ <u>0,868976</u> <u>1</u>

$$1 \text{ \AA (1 \AAngstr\u00f6m)} = 10^{-10} \text{ m}$$

$$1 \text{ mile (1 Swedish mile)} = 10^4 \text{ m} = 10 \text{ km}$$

$$1 \text{ astronomic unit} = 0,149600 \cdot 10^{12} \text{ m}$$

$$1 \text{ light-year} = 9,4605 \cdot 10^{15} \text{ m}$$

Area

Square metre (m ²)	Square inch (in ²)	Square foot (ft ²)	Square yard (yd ²)	Acre (ac)	Square mile
1	1,550 00 · 10 ³	10,763 9	1, 195 99	0,247 105 · 10 ⁻³	0,386 102 · 10 ⁻⁶
0,645 16 · 10 ⁻³	1	6,944 44 · 10 ⁻³	0,771 605 · 10 ⁻³	0,159 421 · 10 ⁻⁶	0,249 098 · 10 ⁻⁹
92,903 0 · 10 ⁻³	144	1	0,111 111	22,956 9 · 10 ⁻⁶	35,870 1 · 10 ⁻⁹
0,836 127	1,296 · 10 ³	9	1	0,206 612 · 10 ⁻³	0,322 831 · 10 ⁻⁶
4,046 86 · 10 ³	6,272 64 · 10 ³	43,56 · 10 ³	4,84 · 10 ³	1	1,562 5 · 10 ⁻³
2,589 99 · 10 ⁶	4,014 49 · 10 ⁹	27,878 4 · 10 ⁶	3,097 6 · 10 ⁶	640	1

1 a (1 are) = 100 m²

1 acre = 4 936 m²

1 barn = 10⁻²⁸ m²

1 circular mile = 0,506 707 x 10⁻³ mm² = area of a circle Ø 10⁻³ in

Volume

Cubic metre (m ³)	Cubic inch (in ³)	Cubic foot (ft ³)	Cubic yard (yd ³)	Gallon (eng)	Gallon (USA)
1	61,023 7 · 10 ³	35,314 7	1,307 95	219,969	264,172
16,387 1 · 10 ⁻⁶	1	0,578 704 · 10 ⁻³	21,433 5 · 10 ⁻⁶	3,604 65 · 10 ⁻³	4,329 00 · 10 ⁻³
28,316 8 · 10 ⁻³	1,728 · 10 ³	1	37,037 0 · 10 ⁻³	6,228 84	7,480 52
0,764 555	46,656 · 10 ³	27	1	168,178	201,974
4,546 09 · 10 ⁻³	277,420	0,160 544	5,946 06 · 10 ⁻³	1	1,200 95
3,785 41 · 10 ⁻³	231	0,133 681	4,951 13 · 10 ⁻³	0,832 675	1

1 l (litre) = 10⁻³ m³ = 1 dm³

1 pint (USA) = 0,4732 l

1 pint (Eng) = 0,5682 l

1 quart (USA) = 0,9463 l

1 quart (Eng) = 1,1363 l

Time

Second (s)	Minute (min)	Hour (h)	Day	Week
1	16,666 7 · 10 ⁻³	0,277 778 · 10 ⁻³	11,574 1 · 10 ⁻⁶	1,653 44 · 10 ⁻⁶
60	1	16,666 7 · 10 ⁻³	0,694 444 · 10 ⁻³	99,206 3 · 10 ⁻⁶
3,6 · 10 ³	60	1	41,666 7 · 10 ⁻³	5,952 38 · 10 ⁻³
86,4 · 10 ³	1,44 · 10 ³	24	1	0,142 857
604,8 · 10 ³	10,08 · 10 ³	168	7	1

Speed

Metre/second (m/s)	Kilometre/hour (km/h)	Foot/second (ft/s)	Mile/hour (mile/h)	Knot (kn)
1	3,6	3,280 84	2,236 94	1,943 84
0,277 778	1	0,911 344	0,621 371	0,539 957
0,304 8	1,097 28	1	0,681 818	0,592 484
0,447 04	1,609 344	1,466 67	1	0,868 976
0,514 444	1,852	1,687 81	1,150 78	1

1 kn = nautical mile/h

Normal acceleration with free fall

$g_n = 9,806 65 \text{ m/s}^2 = 32,174 0 \text{ ft/s}^2$

Mass

Kilogram (kg)	pound (lb)	slug	ounce (oz)	hundredweight (cwt)	Ton (Eng)	Short hundred-weight (USA) (sh cwt)	Short ton (USA) (USA) (sh tn)
1	2.203	$68,522 \cdot 10^{-3}$	35,274	$19,684 \cdot 10^{-3}$	$0,984 \cdot 10^{-3}$	$22,046 \cdot 10^{-3}$	$1,102 \cdot 10^{-3}$
0,454	1	$31,081 \cdot 10^{-3}$	16	$8,929 \cdot 10^{-3}$	$0,446 \cdot 10^{-3}$	$10 \cdot 10^{-3}$	$0,5 \cdot 10^{-3}$
14,594	32,174	1	$51,479 \cdot 10^4$	0,287	$14,363 \cdot 10^{-3}$	0,322	$16,087 \cdot 10^{-3}$
$28,350 \cdot 10^{-3}$	$62,5 \cdot 10^{-3}$	$1,946 \cdot 10^{-3}$	1	$0,558 \cdot 10^{-3}$	$27,902 \cdot 10^{-6}$	$0,625 \cdot 10^{-3}$	$31,25 \cdot 10^{-6}$
50,802	112	3,481	$1,792 \cdot 10^3$	1	$50 \cdot 10^{-3}$	1,12	$56 \cdot 10^{-3}$
$1,016 \cdot 10^3$	$2,24 \cdot 10^3$	69,621	$35,84 \cdot 10^3$	20	1	22,4	1,12
45,359	100	3,108	$1,6 \cdot 10^3$	0,893	$44,643 \cdot 10^{-3}$	1	$50 \cdot 10^{-3}$
907,185	$2 \cdot 10^3$	62,162	$32 \cdot 10^3$	17,857	0,893	20	1

1 ounce = 1 avoirdupois ounce (USA)

7680 oz avdp = 7000 troy ounce

1 hundredweight (Eng) = 1 long hundredweight (USA)

1 ton (Eng) = 1 long ton (USA)

1 ton (1 metric ton) = 10^3 kg

Mass-moment of inertia

kg · m ²	g · cm ²	lb · ft ²	lb · in ²	slug · ft ²	oz · in ²
1	$10 \cdot 10^6$	23,730 4	$3,417 17 \cdot 10^3$	0,737 565	$54,675 0 \cdot 10^3$
$0,1 \cdot 10^{-6}$	1	$2,373 04 \cdot 10^{-6}$	$0,341 717 \cdot 10^{-3}$	$73,756 5 \cdot 10^{-9}$	$5,467 50 \cdot 10^{-3}$
$42,140 0 \cdot 10^{-3}$	$421,4 \cdot 10^3$	1	144	$31,081 0 \cdot 10^{-3}$	$2,304 \cdot 10^3$
$0,292 640 \cdot 10^{-3}$	$2,926 40 \cdot 10^3$	$6,944 40 \cdot 10^{-3}$	1	$0,215 839 \cdot 10^{-3}$	16
1,355 73	$13,557 3 \cdot 10^6$	32,174 0	$4,633 06 \cdot 10^3$	1	$74,128 9 \cdot 10^3$
$18,290 0 \cdot 10^{-6}$	182,900	$0,434 028 \cdot 10^{-3}$	$62,5 \cdot 10^{-3}$	$13,490 0 \cdot 10^{-6}$	1

Density

kg/cm ³	g/cm ³	lb/in ³	lb/ft ³
1	10^{-3}	$36,127 3 \cdot 10^{-6}$	$62,428 0 \cdot 10^{-3}$
10^3	1	$36,127 3 \cdot 10^{-3}$	62,428 0
$27,679 9 \cdot 10^3$	27,679 9	1	$1,728 \cdot 10^3$
16,018 5	$16,018 5 \cdot 10^{-3}$	$0,578 704 \cdot 10^{-3}$	1

Force

Newton (N)	dyn	Kilopond (kp)	Pound-force (lbf)
1	$0,1 \cdot 10^6$	0,101 972	0,224 809
$10 \cdot 10^{-6}$	1	$1,019 72 \cdot 10^{-6}$	$2,248 09 \cdot 10^{-6}$
9,806 65	$0,980 665 \cdot 10^6$	1	2,204 62
4,448 22	$0,444 822 \cdot 10^6$	0,453 592	1

kp = kgf

Moment of a force

Nm	kpm	inchpound — force (in. lbf)	footpound—force (ft. lbf)
1	0,101 972	8,850 75	0,737 562
9,806 65	1	86,796 2	7,233 01
0,112 985	$11,521 2 \cdot 10^{-3}$	1	$83,333 3 \cdot 10^{-3}$
1,355 82	0,138 255	12	1

Pressure

Pascal = N/m ² (pa)	kp/cm ² vid at.	mm water guide of manometer (mm wg)	mm barometric column (mm hg alt.dry)	inch mercury column (inch hg)	Normal 1 atmosphere	pounds per square inch (lbf/in ²)
1	$10,197 \cdot 10^{-6}$	0,102	$75,007 \cdot 10^{-4}$	$29,531 \cdot 10^{-5}$	$98,692 \cdot 10^{-7}$	$14,504 \cdot 10^{-5}$
$98,068 \cdot 10^3$	1	$10 \cdot 10^3$	735,579	28,960	0,968	14,224
9,807	$10 \cdot 10^{-5}$	1	$73,560 \cdot 10^{-3}$	$28,961 \cdot 10^{-4}$	$96,787 \cdot 10^{-6}$	$14,224 \cdot 10^{-4}$
133,32	$13,595 \cdot 10^{-4}$	13,595	1	$39,371 \cdot 10^{-3}$	$13,158 \cdot 10^{-4}$	$19,337 \cdot 10^{-3}$
$33,863 \cdot 10^2$	$34,530 \cdot 10^{-3}$	345,4	25,4	1	$33,420 \cdot 10^{-3}$	0,491
$10,1325 \cdot 10^4$	1,033	$10,335 \cdot 10^3$	760	29,922	1	14,696
$68,945 \cdot 10^2$	$70,303 \cdot 10^{-3}$	703,239	51,714	2,036	$68,043 \cdot 10^{-3}$	1

1 bar = 10^5 pascal

1 lbf/in² = 1 psi

1 kp/cm² = 1,0197 bar

Energy work

Joule (Nm, Ws)	Erg	kilowatt hour (Kwh)	kilopond- metre (kpm)	kilo- calorie (kcal)	metric, horse power/hour (hkh)	foot pound- force (ft · lbf)	British thermal unit (Btu)
1	$10 \cdot 10^6$	$0,278 \cdot 10^{-6}$	0,102	$0,239 \cdot 10^{-3}$	$0,378 \cdot 10^{-6}$	0,738	$0,948 \cdot 10^{-3}$
$0,1 \cdot 10^{-6}$	1	$27,778 \cdot 10^{-15}$	$10,297 \cdot 10^{-9}$	$23,885 \cdot 10^{-12}$	$37,767 \cdot 10^{-15}$	$73,756 \cdot 10^{-9}$	$94,782 \cdot 10^{-12}$
$3,6 \cdot 10^6$	$36 \cdot 10^{12}$	1	$0,367 \cdot 10^6$	859,845	1,360	$2,655 \cdot 10^6$	$3,412 \cdot 10^3$
9,807	$98,067 \cdot 10^6$	$2,724 \cdot 10^{-6}$	1	$2,342 \cdot 10^{-3}$	$3,704 \cdot 10^{-6}$	7,233	$9,295 \cdot 10^{-3}$
$4,187 \cdot 10^3$	$41,868 \cdot 10^9$	$1,163 \cdot 10^{-3}$	426,935	1	$1,581 \cdot 10^{-3}$	$3,088 \cdot 10^3$	3,968
$2,648 \cdot 10^6$	$26,478 \cdot 10^{12}$	0,736	$0,27 \cdot 10^6$	632,415	1	$1,953 \cdot 10^6$	$2,510 \cdot 10^3$
1,356	$13,558 \cdot 10^6$	$0,377 \cdot 10^{-6}$	0,138	$0,324 \cdot 10^{-3}$	$0,512 \cdot 10^{-3}$	1	$1,285 \cdot 10^{-3}$
$1,055 \cdot 10^3$	$10,551 \cdot 10^9$	$0,293 \cdot 10^{-3}$	107,586	0,252	$0,399 \cdot 10^{-3}$	778,169	1

Effect

Watt (W) alt. Nm/s, J/s	kpm/s	kcal/s	kcal/h	metric horse (hk) power	Horsepower (hp) (Eng. USA)	Footpound- force/sec. (ft. lbf/s)	British thermal unit/hour (Btu/h)
1	0,102	$0,239 \cdot 10^{-3}$	0,860	$1,360 \cdot 10^{-3}$	$1,341 \cdot 10^{-3}$	0,738	3,412
9,807	1	$2,342 \cdot 10^{-3}$	8,432	$13,333 \cdot 10^{-3}$	$13,151 \cdot 10^{-3}$	7,233	33,462
$4,187 \cdot 10^3$	426,935	1	$3,6 \cdot 10^3$	5,693	5,615	$3,088 \cdot 10^3$	$14,286 \cdot 10^3$
1,163	0,119	$0,278 \cdot 10^{-3}$	1	$1,581 \cdot 10^{-3}$	$1,560 \cdot 10^{-3}$	0,858	3,968
735,499	75	0,176	632,415	1	0,986	542,476	$2,510 \cdot 10^3$
745,700	76,040	0,178	641,186	1,014	1	550	$2,544 \cdot 10^3$
1,356	0,138	$0,324 \cdot 10^{-3}$	1,166	$1,843 \cdot 10^{-3}$	$1,818 \cdot 10^{-3}$	1	4,626
0,293 2	$29,884 \cdot 10^{-3}$	$69,999 \cdot 10^{-6}$	0,252	$0,399 \cdot 10^{-3}$	$0,393 \cdot 10^{-3}$	0,216	1

Output/area

W/m ²	kcal/m ² h	cal/cm ² s	British thermal unit/foot ² . hour (Btu/ft ² h)
<u>1</u>	0,859 845	23,884 6 · 10 ⁻⁶	0,316 998
<u>1,163</u>	<u>1</u>	<u>27,777 8 · 10⁻⁶</u>	<u>0,368 669</u>
<u>41,868 · 10³</u>	<u>36 · 10³</u>	<u>1</u>	<u>13,272 1 · 10³</u>
3,154 59	2,712 46	75,346 1 · 10 ⁻⁶	<u>1</u>

Output/volume

W/m ³	kcal/m ³ h	cal/cm ³ s	British thermal unit/foot ³ . hour (Btu/ft ³ h)
<u>1</u>	0,859 848	0,238 846 · 10 ⁻⁶	96,621 1 · 10 ⁻³
<u>1,163</u>	<u>1</u>	<u>0,277 778 · 10⁻⁶</u>	<u>0,112 370</u>
<u>4,186 8 · 10⁶</u>	<u>3,6 · 10⁶</u>	<u>1</u>	<u>0,404 533 · 10⁶</u>
10,349 7	8,899 15	2,471 99 · 10 ⁻⁶	<u>1</u>

Temperature and temperature differences

Unit	Kelvin (K)	Celsius (C)	Rankine (R)	Fahrenheit (F)	Physical conditions
Related temperature	<u>0 K</u>	<u>-273,15^o C</u>	<u>0^o R</u>	<u>-459,67^o F</u>	Absolute zero
	255,372 2 K	-17,777 8 ^o C	459,67 ^o R	0 ^o F	
	<u>273,15 K</u>	<u>0^o C</u>	<u>491,67^o R</u>	<u>32^o F</u>	Ice melt point 1)
	<u>273,16 K</u>	<u>0,01^o C</u>	<u>491,688^o R</u>	<u>32,018^o F</u>	Water triple point
Related temperature differences	<u>1 K</u>	<u>1^o C</u>	<u>1,8^o R</u>	<u>1,8^o F</u>	
	0,555 556 K	0,555 556 ^o C	1 ^o R	1 ^o F	

1) Under accurately described conditions

CONVERSION TABLE INCHES TO MILLIMETER

Values rounded from 1/64" to 10"

Inch		0"	1"	2"	3"	4"	5"	6"	7"	8"	9"
		Millimeter									
0"	0"	—	25,400	50,800	76,200	101,600	127,000	152,400	177,800	203,200	228,600
1/64"	0,015625"	0,397	25,797	51,197	76,597	101,997	127,397	152,797	178,197	203,597	228,997
1/32"	0,03125"	0,794	26,194	51,594	76,994	102,394	127,794	153,194	178,594	203,994	229,394
3/64"	0,046875"	1,191	26,591	51,991	77,391	102,791	128,191	153,591	178,991	204,391	229,791
1/16"	0,0625"	1,588	26,988	52,388	77,788	103,188	128,588	153,988	179,388	204,788	230,188
5/64"	0,078125"	1,984	27,384	52,784	78,184	103,584	128,984	154,384	179,784	205,184	230,584
3/32"	0,09375"	2,381	27,781	53,181	78,581	103,981	129,381	154,781	180,181	205,581	230,981
7/64"	0,109375"	2,778	28,178	53,578	78,978	104,378	129,778	155,178	180,578	205,978	231,378
1/8"	0,125"	3,175	28,575	53,975	79,375	104,775	130,175	155,575	180,975	206,375	231,775
9/64"	0,140625"	3,572	28,972	54,372	79,772	105,172	130,572	155,972	181,372	206,772	232,172
5/32"	0,15625"	3,969	29,369	54,769	80,169	105,569	130,969	156,369	181,769	207,169	232,569
11/64"	0,171875"	4,366	29,766	55,166	80,566	105,966	131,366	156,766	182,166	207,566	232,966
3/16"	0,1875"	4,762	30,162	55,562	80,962	106,362	131,762	157,162	182,562	207,962	233,362
13/64"	0,203125"	5,159	30,559	55,959	81,359	106,759	132,159	157,559	182,959	208,359	233,759
7/32"	0,21875"	5,556	30,956	56,356	81,756	107,156	132,556	157,956	183,356	208,756	234,156
15/64"	0,234375"	5,953	31,353	56,753	82,153	107,553	132,953	158,353	183,753	209,153	234,553
1/4"	0,25"	6,350	31,750	57,150	82,550	107,950	133,350	158,750	184,150	209,550	234,950
17/64"	0,265625"	6,747	32,147	57,547	82,947	108,347	133,747	159,147	184,547	209,947	235,347
9/32"	0,28125"	7,144	32,544	57,944	83,344	108,744	134,144	159,544	184,944	210,344	235,744
19/64"	0,296875"	7,541	32,941	58,341	83,741	109,141	134,541	159,941	185,341	210,741	236,141
5/16"	0,3125"	7,938	33,338	58,738	84,138	109,538	134,938	160,338	185,738	211,138	236,538
21/64"	0,328125"	8,334	33,734	59,134	84,534	109,934	135,334	160,734	186,134	211,534	236,934
11/32"	0,34375"	8,731	34,131	59,531	84,931	110,331	135,731	161,131	186,531	211,931	237,331
23/64"	0,359375"	9,128	34,528	59,928	85,328	110,728	136,128	161,528	186,928	212,328	237,728
3/8"	0,375"	9,525	34,925	60,325	85,725	111,125	136,525	161,925	187,325	212,725	238,125
25/64"	0,390625"	9,922	35,322	60,722	86,122	111,522	136,922	162,322	187,722	213,122	238,522
13/32"	0,40625"	10,319	35,719	61,119	86,519	111,919	137,319	162,719	188,119	213,519	238,919
27/64"	0,421875"	10,716	36,116	61,516	86,916	112,316	137,716	163,116	188,516	213,916	239,316
7/16"	0,4375"	11,112	36,512	61,912	87,312	112,712	138,112	163,512	188,912	214,312	239,712
29/64"	0,453125"	11,509	36,909	62,309	87,709	113,109	138,509	163,909	189,309	214,709	240,109
15/32"	0,46875"	11,906	37,306	62,706	88,106	113,506	138,906	164,306	189,706	215,106	240,506
31/64"	0,484375"	12,303	37,703	63,103	88,503	113,903	139,303	164,703	190,103	215,503	240,903
1/2"	0,5"	12,700	38,100	63,500	88,900	114,300	139,700	165,100	190,500	215,900	241,300
33/64"	0,515625"	13,097	38,497	63,897	89,297	114,697	140,097	165,497	190,897	216,297	241,697
17/32"	0,53125"	13,494	38,894	64,294	89,694	115,094	140,494	165,894	191,294	216,694	242,094
35/64"	0,546875"	13,891	39,291	64,691	90,091	115,491	140,891	166,291	191,691	217,091	242,491
9/16"	0,5625"	14,288	39,688	65,088	90,488	115,888	141,288	166,688	192,088	217,488	242,888
37/64"	0,578125"	14,684	40,084	65,484	90,884	116,284	141,684	167,084	192,484	217,884	243,284
19/32"	0,59375"	15,081	40,481	65,881	91,281	116,681	142,081	167,481	192,881	218,281	243,681
39/64"	0,609375"	15,478	40,878	66,278	91,678	117,078	142,478	167,878	193,278	218,678	244,078
5/8"	0,625"	15,875	41,275	66,675	92,075	117,475	142,875	168,275	193,675	219,075	244,475
41/64"	0,640625"	16,272	41,672	67,072	92,472	117,872	143,272	168,672	194,072	219,472	244,872
21/32"	0,65625"	16,669	42,069	67,469	92,869	118,269	143,669	169,069	194,469	219,869	245,269
43/64"	0,671875"	17,066	42,466	67,866	93,266	118,666	144,066	169,466	194,866	220,266	245,666
11/16"	0,6875"	17,462	42,862	68,262	93,662	119,062	144,462	169,862	195,262	220,662	246,062
45/64"	0,703125"	17,859	43,259	68,659	94,059	119,459	144,859	170,259	195,659	221,059	246,459
23/32"	0,71875"	18,256	43,656	69,056	94,456	119,856	145,256	170,656	196,056	221,456	246,856
47/64"	0,734375"	18,653	44,053	69,453	94,853	120,253	145,653	171,053	196,453	221,853	247,253
3/4"	0,75"	19,050	44,450	69,850	95,250	120,650	146,050	171,450	196,850	222,250	247,650
49/64"	0,765625"	19,447	44,847	70,247	95,647	121,047	146,447	171,847	197,247	222,647	248,047
25/32"	0,78125"	19,844	45,244	70,644	96,044	121,444	146,844	172,244	197,644	223,044	248,444
51/64"	0,796875"	20,241	45,641	71,041	96,441	121,841	147,241	172,641	198,041	223,441	248,841
13/16"	0,8125"	20,638	46,038	71,438	96,838	122,238	147,638	173,038	198,438	223,838	249,238
53/64"	0,828125"	21,034	46,434	71,834	97,234	122,634	148,034	173,434	198,834	224,234	249,634
27/32"	0,84375"	21,431	46,831	72,231	97,631	123,031	148,431	173,831	199,231	224,631	250,031
55/64"	0,859375"	21,828	47,228	72,628	98,028	123,428	148,828	174,228	199,628	225,028	250,428
7/8"	0,875"	22,225	47,625	73,025	98,425	123,825	149,225	174,625	200,025	225,425	250,825
57/64"	0,890625"	22,622	48,022	73,422	98,822	124,222	149,622	175,022	200,422	225,822	251,222
29/32"	0,90625"	23,019	48,419	73,819	99,219	124,619	150,019	175,419	200,819	226,219	251,619
59/64"	0,921875"	23,416	48,816	74,216	99,616	125,016	150,416	175,816	201,216	226,616	252,016
15/16"	0,9375"	23,812	49,212	74,612	100,012	125,412	150,812	176,212	201,612	227,012	252,412
61/64"	0,953125"	24,209	49,609	75,009	100,409	125,809	151,209	176,609	202,009	227,409	252,809
31/32"	0,96875"	24,606	50,006	75,406	100,806	126,206	151,606	177,006	202,406	227,806	253,206
63/64"	0,984375"	25,003	50,403	75,803	101,203	126,603	152,003	177,403	202,803	228,203	253,603