

## CONVERSION TABLES COMMON THREADS

Thread UNF	US Spec. SAE	Outside. mayor diameter mm	Core dia. (min size) mm	Pitch nr. per inch	Pitch mm
5/16" - 24 UNF	1/8" SAE	7,938	6,792	24	1,058
3/8" - 24 UNF	3/16" SAE	9,525	8,379	24	1,058
7/16" - 20 UNF	1/4" SAE	11,112	9,738	20	1,270
1/2" - 20 UNF	5/16" SAE	12,700	11,328	20	1,270
5/8" - 18 UNF	3/8" SAE	15,875	14,348	18	1,411
3/4" - 16 UNF	1/2" SAE	19,050	17,330	16	1,588
7/8" - 14 UNF	5/8" SAE	22,225	20,262	14	1,814
1 1/16" - 14 UNF	3/4" SAE	25,400	25,024	14	1,814
1 1/8" - 12 UNF	-	28,575	26,284	12	2,117
1 1/4" - 12 UNF	7/8" SAE	31,750	29,459	12	2,117
1 3/8" - 12 UNF	1" SAE	34,925	32,634	12	2,117
1 1/2" - 12 UNF	-	38,100	35,809	12	2,117

### TORQUE FOR SAE FLARE FITTINGS

TUBE DIAM.	RECOMMENDED TORQUE	MAXIMUM TORQUE
1/8"	8,0 Nm (6 ft.lbs)	9,5 Nm (7 ft.lbs)
3/16"	11,0 Nm (8 ft.lbs)	12,2 Nm (9 ft.lbs)
1/4"	12,2 Nm (9 ft.lbs)	13,5 Nm (10 ft.lbs)
5/16"	19,0 Nm (14 ft.lbs)	22,0 Nm (16 ft.lbs)
3/8"	27,0 Nm (20 ft.lbs)	33,7 Nm (25 ft.lbs)
1/2"	40,5 Nm (30 ft.lbs)	47,2 Nm (35 ft.lbs)
5/8"	60,8 Nm (45 ft.lbs)	74,2 Nm (55 ft.lbs)
3/4"	107,0 Nm (79 ft.lbs)	119,0 Nm (88 ft.lbs)
7/8"	147,0 Nm (108 ft.lbs)	154,0 Nm (113 ft.lbs)

### POWER

	kW	Watt	Kcal/h	BTU/h
1 kW	-	1000,000	860,000	3412,00
1 Watt	0,001000	-	0,860	3,41
1 Kcal/h	0,001163	1,163	-	3,95
1 BTU/h	0,000293	0,293	0,250	-

1 kW = 0,284 US tons of refrigeration

### MEASURES

Linear measures					
mm	x	0,039370	= inches	x 25,400000	= mm
cm	x	0,393700	= inches	x 2,540000	= cm
m	x	39,370000	= inches	x 0,0254000	= m
m	x	3,281000	= feet	x 0,3048000	= m
m	x	1,093600	= yards	x 0,9144000	= m
Km	x	3280,800000	= feet	x 0,0003048	= Km
Km	x	1093,600000	= yards	x 0,0009144	= Km
Km	x	0,621337	= miles	x 1,6094320	= Km

Square measures					
mm²	x	0,001550	= sq inches	x 645,2000000	= mm²
cm²	x	0,155000	= sq inches	x 6,4520000	= cm²
m²	x	10,764000	= sq feet	x 0,0929000	= m²
m²	x	1,196000	= sq yards	x 0,8361000	= m²
Km²	x	0,386100	= sq miles	x 2,5900000	= Km²
ha	x	2,471000	= acres	x 0,4047000	= ha

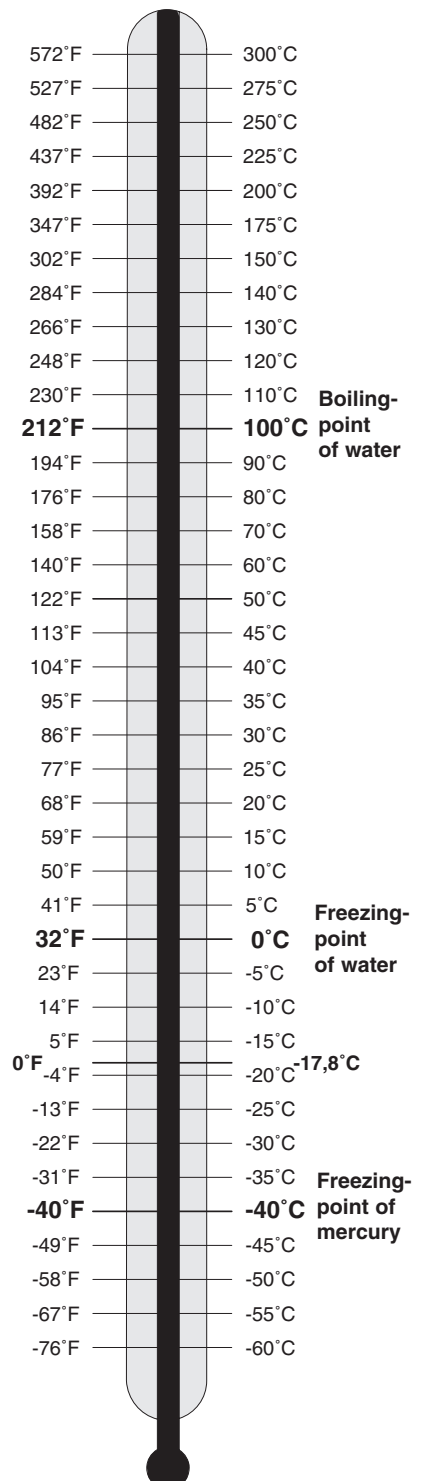
Capacity					
cm³	x	0,061023	= cu inches	x 16,3870000	= cm³
cm³	x	0,033810	= fl ounces	x 29,5700000	= cm³
l	x	61,023000	= cu inches	x 0,0163870	= l
l	x	0,035310	= cu feet	x 28,3170000	= l
l	x	0,264200	= U.S. gal	x 3,7850000	= l
l	x	0,220000	= Imperial gal	x 4,5440000	= l
m³	x	35,314000	= cu feet	x 0,0283200	= m³

### USED ABBREVIATIONS

**FFL** : Female Flare sae 45°  
**MFL** : Male Flare sae 45°  
**FPT** : Female national Pipe Thread  
**MPT** : Male national Pipe Thread  
**ODS** : Solder Ends Connections

### TEMPERATURE

°F = °C x 1,8 + 32  
°C = (°F - 32) / 1,8



Weights						
g	x	15,432000	= grains	x	0,06480	= g
g	x	0,035300	= oz	x	28,35000	= g
Kg	x	35,270000	= oz	x	0,02835	= Kg
Kg	x	2,204600	= lbs	x	0,45360	= Kg
Kg	x	0,001102	= U.S. tons (short)	x	907,20000	= Kg
Kg	x	0,000984	= long tons	x	1.016,04800	= Kg

Flow						
l/min	x	0,264200	= U.S. gallon/min	x	3,78500	= l/min
l/min	x	0,035310	= cfm	x	28,31700	= l/min
l/hr	x	0,004400	= U.S. gallon/min	x	227,10000	= l/hr
m <sup>3</sup> /hr	x	0,588600	= cfm	x	1,69920	= m <sup>3</sup> /hr
m <sup>3</sup> /hr	x	4,402800	= U.S. gallon/min	x	0,22710	= m <sup>3</sup> /hr
m <sup>3</sup> /hr	x	16,670000	= l/min	x	0,06000	= m <sup>3</sup> /hr

## VACUUM

Boiling temperatures of water at converted pressures	Microns	Torr (mmHg)	mbar	Absolute pressure inches Hg ("HgA)	psia	% Vacuum
100°C	760000	760,000	1013,00000	29,92100	14,69600	0,0000
	750000	750,000	999,67000	29,52700	14,50300	1,3200
	700000	700,000	933,03000	27,55900	13,53600	7,8900
96,1°C	600000	600,000	799,74000	23,62200	11,60200	21,0500
	535000	535,000	713,01000	21,06000	10,35000	29,6000
	400000	400,000	533,18000	15,74800	7,73500	47,3700
80°C	355092	355,100	473,45600	13,98000	6,87000	53,2800
	300000	300,000	399,87000	11,81100	5,80100	60,5300
70°C	233680	233,680	311,57400	9,20000	4,52000	69,2600
60°C	149352	149,350	199,13400	5,88000	2,89000	80,3500
	100000	100,000	133,29000	3,93700	1,93400	86,8400
50°C	92456	92,460	123,28000	3,64000	1,79000	87,8300
	80000	80,000	106,63000	3,15000	1,54700	89,4700
	70000	70,000	93,30000	2,75600	1,35400	90,7900
40°C	60000	60,000	79,97000	2,36200	1,16000	92,1100
	55118	55,120	73,49400	2,17000	1,06615	92,7500
	40000	40,000	53,32000	1,57500	0,77300	94,7400
30°C	31750	31,750	42,33400	1,25000	0,61410	95,8200
	25400	25,400	33,86000	1,00000	0,49100	96,6600
	20000	20,000	26,66000	0,78740	0,38700	97,3700
15°C	12700	12,700	16,93400	0,50000	0,24560	98,3300
7,2°C	7620	7,620	10,16000	0,30000	0,14740	99,0000
-6,1°C	2540	2,540	3,38600	0,10000	0,04910	99,6600
	750	0,750	0,99970	0,02950	0,01450	99,9000
-31,1°C	254	0,254	0,33860	0,01000	0,00491	99,9665
-37,2°C	127	0,127	0,16930	0,00500	0,00246	99,9830
	10	0,010	0,01330	0,00039	0,00019	99,9987
	0	0,000	0,00000	0,00000	0,00000	100,0000

## Conversion formulas

Torr (mmHg) = "HgA x 25,4  
 = psia x 51,7  
 = mbar x 0,75

HgAbsolute = mmHg/25,4  
 = psia x 2  
 = mbar x 0,0295

## PRESSURE

	psi	kPa	kg/cm <sup>2</sup>	inches of Hg	mm of Hg	ounces per square inch	bar	mbar
1 psi	-	6,895	0,07031	2,0360	51,715	16,000	0,0689	68,948
1 kPa	0,1450	-	0,01020	0,2953	7,501	2,321	0,0100	10,000
1 kg/cm <sup>2</sup>	14,2233	98,067	-	28,9590	735,559	227,573	0,9807	1.013,250
1 inch of Hg	0,4912	3,386	0,03453	-	25,400	7,858	0,0339	33,864
1 mm of Hg	0,0193	0,133	0,00136	0,0394	-	0,309	0,0013	1,333
1 ounce per square inch	0,0625	0,431	0,00439	0,1273	3,232	-	0,0043	4,309
1 bar	14,5038	100,000	1,01972	29,5300	750,063	232,061	-	1.000,000
1 mbar	0,0145	0,100	0,00102	0,0295	0,750	0,232	0,0010	-