

CHAPTER 11 – CONVERSION FACTORS

GENERAL CONVERSION FACTORS

MULTIPLY	BY	TO OBTAIN	MULTIPLY	BY	TO OBTAIN
atmospheres	33.90	Feet of H ₂ O	circular mils	.00000507	.sq.cm.
	29.92	Inches of Hg		.785	.sq.mils
	14.70	Psi		.000000785	.sq. inches
	1013.2	Millibars	cubic centimeters	.00000353	.cubic ft.
	760.0	mm. of Hg		.061	.cubic in.
	1.058	Tons/sq.ft		.000001	.cubic meters
	1.033	.Kg./sq. cm.		.00000131	.cubic yards
barrels (oil)	.42	Gallons (oil)		.000264	gallons (U.S. liquid)
bars	.9869	Atmospheres		.001	liters
	1020	.kg./sq. meter		.00211	pints (U.S. liquid)
btu	.778.2	foot-pounds		00106	quarts (U.S. liquid)
	252	.gram-calories	cubic feet	.28320	.cu. cms.
	.000393	.horsepower-hours		1728	.cu. inches
	1055	.joules		.028	.cu. meters
	.252	.kilogram-calories		.037	.cu. yards
	.000293	.kilowatt-hours		7.48	gallons (U.S. liquid)
btu/cu. ft.	.8.9	.kilogram-calories/		28.32	liters
cu. meter				59.84	pints (U.S. liquid)
btu/hr	.216	.ft.-pounds/sec.		29.92	quarts (U.S. liquid)
	.007	.gram-cal./sec.	cubic feet/min.	.472	.cu. cms./sec.
	.000393	.horsepower		.125	gallons/sec.
	.293	.watts		.472	liters/sec.
btu ft./hr. sq. ft. °F	.14.88	Cal-cm/hr. sq. cm °C		62.43	pounds water/min.
	8890.0	Cal. gm/cu. meter	cubic inches	.16.39	.cu. cms.
btu/lb	.0.556	.calories/gm.		.000579	.cu. ft.
btu/lb. °F	.1.0	.calories/gm °C		.0000164	.cu. meters
btu/sec.	.1.055	.kW		.0000214	.cu. yards
btu/sq. ft.-min	.122	.watts/sq. in.		.00433	gallons
calories-gram	.00397	.Btu		.0164	liters
calorie-Kg	.3.97	.Btu		.0346	pints (U.S. liquid)
calorie-Kg/cu. meter	0.1124	.Btu/cu. ft. @		.0173	quarts (U.S. liquid)
		.32°F 30" Hg	cubic meters	.1,000,000	.cu. cms.
calorie/hr. sq. cm.	.3.687	.Btu/hr. sq. foot		35.31	.cu. ft.
centiliters	.001	.liters		6102	.cu. inches
centimeters	.0328	.feet		1.308	.cu. yards
	.0394	.inches		264.2	gallons (U.S. liquid)
	.00001	.kilometers		1000	liters
	.01	.meters		2113	pints (U.S. liquid)
	.0000062	.miles		1057	quarts (U.S. liquid)
	10	.millimeters	cubic yards	.764,600	.cu. cms.
	393.7	.mils		27	.cu. ft.
	.0109	.yards		46656	.cu. inches
	1000	.microns		.765	.cu. meters
centimeters of mercury	.0132	.atmospheres	decigrams	.1	.grams
	.446	.ft. of water	deciliters	.1	.liters
	136	.kg./sq. meter	decimeters	.1	.meters
	27.85	.pounds/sq. ft.	degrees (angle)	.011	quadrants
	.193	.pounds/sq. in.		.0175	radians
centimeters/sec.	.1.969	.feet/min.		3600	seconds
	.0328	.feet/sec.	degrees/sec.	.0175	radians/sec.
	.036	.kilometers/hr.		.0167	revolutions/min.
	6	.meters/min.		.00278	revolutions/sec.
	.0224	.miles/hr.	dekagrams	.10	.grams
	.00373	.miles/min.	dekaliters	.10	.liters
centimeters/sec./sec.	.0328	.ft./sec./sec.	dekameters	.10	.meters
	.036	.kms./hr.sec.	dynes/sq. cm.	.000000987	.atmospheres
	.01	.meters/sec.sec.		.0000295	.in. of mercury (at 0°C.)
	.0224	.miles/hr.sec.		.000402	.in. of water (at 4°C)
centipoise	.01	.gr.cm.-sec.		.00001	.bars
	.00067	.pound/ft.-sec.	feet	.30.48	.centimeters
	2.4	.pound/ft.-hr.		.000305	.kilometers
				.305	.meters
				.000189	.miles (stat.)
				304.8	.millimeters

GENERAL CONVERSION FACTORS (Cont'd)

MULTIPLY	BY	TO OBTAIN	MULTIPLY	BY	TO OBTAIN
feet of water	.0295	atmospheres	grams/sq. cm.	2.048	pounds/sq. ft.
	.883	in. of mercury	gram-calories	.00397	btu
	.0305	kgs./sq. cm.		3.086	foot-pounds
	304.8	kgs./sq. meter		.00000156	horsepower-hrs.
	62.43	pounds/sq. ft.		.00000116	kilowatt-hrs.
	.434	pounds/sq. in.		.00116	watt-hrs.
feet/min.	.508	cms./sec.	gram-calories/sec.	14.29	btu/hr.
	.0167	feet/sec.	hectares	2.471	acres
	.0183	kms./hr.		10760	sq. feet
	.305	meters/min.	hectograms	100	grams
	.0114	miles/hr.	hectoliters	100	liters
	30.48	cms./sec.	hectometers	100	meters
feet/sec.	1.097	kms./hr.	hectowatts	100	watts
	18.29	meters/min.	horsepower	.4244	btu/min.
	.682	miles/hr.		33000	foot-lbs./min.
	.0114	miles/min.		550	foot-lbs./sec.
feet/sec./sec.	30.48	cms./sec./sec.	horsepower (metric)	.986	horsepower
	1.097	kms./hr./sec.	horsepower	1.014	horsepower (metric)
	.305	meters/sec./sec.		10.68	kg.-calories/min.
foot-pounds	.00129	btu		.746	kilowatts
	.324	gram-calories		745.7	watts
	.00000505	horsepower-hrs.	horsepower-hours	.2547	btu
	1.356	joules		1,980,000	foot-lbs.
	.000324	kg.-calories		641,190	gram-calories
	.138	kg.-meters		2,684,000	joules
	.00000377	kilowatt-hrs.		641.7	kg.-calories
foot-pounds/sec.	4.63	btu/hr.		273,700	kg.-meters
	.0772	btu/min.		.746	kilowatt-hrs.
	.00182	horsepower	hours	.0417	days
	.00195	kg.-calories/min.		.00595	weeks
	.00136	kilowatts		25.4	millimeters
	.00001	kilometers		1000	mils
gallons	.3785	cu. cms.		.0278	yards
	.134	cu. feet	in. of mercury	.0334	atmospheres
	.231	cu. inches		1.133	feet of water
	.00379	cu. meters		.0345	kgs./sq. cm.
	.00495	cu. yards		345.3	kgs./sq. meter
	3.785	liters		70.73	pounds/sq. ft.
gallons (liq. Br. imp.)	1.201	gallons (U.S. liquid)		.491	pounds/sq. in.
gallons (U.S.)	.833	gallons (imp.)	in. of water (at 4°C)	.00246	atmospheres
gallons of water	8.34	gallons (imp.)		.0736	inches of mercury
gallons/min.	.00223	cu. feet/sec.		.00254	kgs./sq. cm.
	.0631	liters/sec.		.578	ounces/sq. in.
	8.021	cu. feet/hr.		5.204	pounds/sq. ft.
grains (troy)	.1	grains (avdp.)		.0361	pounds/sq. in.
	.0648	grams	joules	.000949	btu
	.00208	ounces (avdp.)		.774	foot-pounds
grams	15.43	grains (troy)		.000239	kg.-calories
	.0000981	joules/cm.		.102	kg.-meters
	.00981	joules/meter (newtons)		.000278	watt-hrs.
	.001	kilograms	kilograms	1000	grams
	1000	milligrams		.0981	joules/cm.
	.0353	ounces (troy)		9.807	joules/meter (newtons)
	.00221	pounds		2.205	pounds
grams/cu. cm.	62.43	pounds/cu. ft.		.000984	tons (long)
	.0361	pounds/cu. in.		.00110	tons (short)
grams/liter	58.42	grains/gal.		35.27	ounces (avdp.)
	8.345	pounds/1,000 gal.			
	.0624	pounds/cu. ft.			

GENERAL CONVERSION FACTORS (Cont'd)

MULTIPLY	BY	TO OBTAIN	MULTIPLY	BY	TO OBTAIN
kilograms/cu. meter	.001	grams/cu. cm.	meters	.100	centimeters
	.0624	pounds/cu. ft		3.281	feet
	.0000361	pounds/cu. in.		39.37	inches
kilograms/sq. cm.	.980665	dynes/sq. cm.		.001	kilometers
	.968	atmospheres		.00054	miles (nautical)
	32.81	feet of water		.000621	miles (statute)
	28.96	inches of mercury		1000	millimeters
	2048	pounds/sq. ft.		1.094	yards
	14.22	pounds/sq. in.	meters/min.	1.667	cms./sec.
kilograms/sq. meter	.0000968	atmospheres		3.281	feet/min.
	.0000981	bars		.0547	feet/sec.
	.00328	feet of water		.06	kms./hr.
	.0029	inches of mercury		.0373	miles/hr.
	.205	pounds/sq. ft.	meters/sec.	196.8	feet/min.
	.00142	pounds/sq. in.		3.281	feet/sec.
	98.07	dynes/sq. cm.		3.6	kilometers/hr.
kilograms/sq. mm	1,000,000	kgs./sq. meter		.06	kilometers/min.
kilogram-calories	3.968	btu		2.237	miles/hr.
	3086	foot-pounds		.0373	miles/min.
	.00156	horsepower-hrs.	meters/sec./sec.	.100	cms./sec./sec.
	4183	joules		3.281	ft./sec./sec.
	1163	kilowatt-hrs.		3.6	kms./hr.sec.
kilogram-meters	7.233	foot-pounds		2.237	miles/hr./sec.
	9.807	joules	micrograms	.000001	grams
	.00234	kg.-calories	micrograms/cu. ft.	.000001	grams/cu. ft
	.0000272	kilowatt-hrs.		.0000353	grams/cu. meter
kiloliters	1.000	liters		.00000022	lbs./1000 cu. ft.
kilometers	100,000	centimeters		35.314	micrograms/cu. meter
	3281	feet	micrograms/cu. m.	0.001	milligrams/cu. m.
	39,370	inches		0.02832	micrograms/cu. ft
	1000	meters	microhms	.000001	ohms
	.621	miles (statute)	microliters	.000001	liters
	.54	miles (nautical)	micromicrons	.000000000001	meters
	1,000,000	millimeters	microns	.000001	meters
	1093.6	yards	miles (statute)	.160,900	centimeters
kilometers/hr.	27.78	cms./sec.		5280	feet
	54.68	feet/min.		63360	inches
	.911	feet/sec.		1.609	kilometers
kilowatts	.3413	btu/hr		1609	meters
	44,260	foot-lbs./min.		.868	miles (nautical)
	737.6	foot-lbs.sec.		1760	yards
	1.341	horsepower	miles/hr.	44.70	cms./sec.
	14.34	kg.-calories/min.		88	ft./min.
	1000	watts		1.467	ft./sec.
kilowatt-hrs.	.3413	btu		1.609	kms./hr.
	2,655,000	foot-lbs.		.0268	kms./min.
	859,850	gram calories		26.82	meters/min.
	1.341	horsepower-hours		.0167	miles/min.
	3,600,000	joules	milligrams	.001	grams
	860.5	kg.-calories	milligrams/liter	1.0	parts/million
	367,100	kg.-meters	milliliters	.001	liters
	3.53	pounds of water evaporated from and at 212°F	millimeters	.1	centimeters
	22.75	pounds of water raised from 62° to 212°F.		.00328	feet
liters	1000	cu. cm.		.0394	inches
	.0353	cu. ft.		.000001	kilometers
	61.02	cu. inches		.001	meters
	.001	cu. meters		.000000621	miles
	.00131	cu. yards		39.37	mils
	.264	gallons (U.S. liquid)		.00109	yards
	2.113	pints (U.S. liquid)	mils	.00254	centimeters
	1.057	quarts (U.S. liquid)		.0000833	feet
liters/min.	.00589	cu. ft./sec.		.001	inches
	.0044	gals./sec.			

GENERAL CONVERSION FACTORS (Cont'd)

MULTIPLY	BY	TO OBTAIN	MULTIPLY	BY	TO OBTAIN
minutes (angles)	.0167	degrees	pounds/sq. ft.	.000473	atmospheres
	.000185	quadrants		.016	feet of water
	.000291	radians		.0141	inches of mercury
	60	seconds		.192	inches of water
minutes (time)	.0000992	weeks		4.882	kgs./sq. meter
	.000694	days		.111	ounces/sq. inch
	.0167	hours		.00694	pounds/sq. inch
	60	seconds	pounds/sq. inc.	.068	atmospheres
ounces	.4375	grains		2.307	feet of water
	28.35	grains		2.036	inches of mercury
	.0625	pounds		27.71	inches of water
	.912	ounces (troy)		703.1	kgs./sq. meter
ounces (fluid)	1.805	cu. inches		16	ounces/sq. inch
	.0296	liters		144	pounds/sq. foot
ounces (troy)	.480	grains	quadrants (angle)	.90	degrees
	31.1	grams		5400	minutes
	1.097	ounces (avdp.)		1.571	radians
ounce/sq. in.	.4309	dynes/sq. cm.		324,000	seconds
	.0625	pounds/sq. in.	quarts (liquid)	.946.4	cu. cms.
	1.732	inches w.c.		.0334	cu. ft.
parts/million	.0584	grains/U.S. gal.		57.75	cu. inches
	.0702	grains/imp. gal.		.000946	cu. meters
	8.345	pounds/million gal.		.00124	cu. yards
ppm (volume)	.385,100,000	lb/ft ³		.25	gallons
	0.02404	micrograms/cu. m.		.946	liters
ppm (weight)	.0012	micrograms/cu. m.	radians	.57.3	degrees
pints (liquid)	.473.2	cubic cms.		3438	minutes
	.0167	cubic ft.		.637	quadrants
	28.87	cubic inches		206,300	seconds
	.000473	cubic meters	radian/sec.	.9.55	rpm
	.000619	cubic yards	rpm	.0.1047	rad./sec.
	.125	gallons	seconds (angle)	.000278	degrees
	.473	liters		.0167	minutes
	.5	quarts (liquid)	square centimeters	.197,300	circular mils
poise	1.0	gram/cm.-sec.		.00108	sq. feet
pounds	7000	grains		.155	sq. inches
	453.6	grams		.0001	sq. meters
	4.448	joules/meter (newtons)		100	sq. millimeters
	.454	kilograms		.00012	sq. yards
	16	ounces	square feet	.929	sq. cms.
	14.58	ounces (troy)		144	sq. inches
	.0005	tons (short)		.093	sq. meters
pounds of water	.016	cu. ft.		.000000359	sq. miles
	27.68	cu. inches		92900	sq. millimeters
	.12	gallons		.111	sq. yards
pounds of water/min.	.000267	cu. ft/sec.	square inches	.6.452	sq. cms.
pounds/cu. ft.	.016	grams/cu. cm.		.00694	sq. ft.
	16.02	kgs./cu. meter		645.2	sq. millimeters
	133,700	ppm (weight)		1,000,000	sq. mils
	.000579	pounds/cu. in.		.000772	sq. yards
pounds/cu. in.	.27.68	grams/cu. cm.	square kilometers	.10,760,000	sq. ft.
	27680	kgs./cu. meter		1,000,000	sq. meters
	1728	pounds/cu. ft.		.386	sq. miles
pounds/ft.	1.488	kgs./meter			
pounds/in.	.178.6	grams/cm.			

GENERAL CONVERSION FACTORS (Cont'd)

MULTIPLY	BY	TO OBTAIN	MULTIPLY	BY	TO OBTAIN
square meters	10000	.sq. cms.	ton refrigeration (U.S.)	.12,000	.btu/hr
	10.76	.sq. ft.		83.33	.lb. ice melted per hr. from and at 32°F
	1550	.sq. inches			
square miles	1,000,000	.sq. millimeters	watts	.3.413	.btu/hr.
	1,196	.sq. yards		.0569	.btu/min.
	27,880,000	.sq. ft.		44.27	.ft.-lbs./min.
square millimeters	2,590	.sq. kms.		.738	.ft.-lbs./sec.
	2,590,000	.sq. meters		.00134	.horsepower
	3,098,000	.sq. yards		.00136	.horsepower (metric)
therms	.1973	.circular mils		.0143	.kg.-calories/min.
	.01	.sq. cms.		.001	.kilowatts
	.0000108	.sq. ft.	watt-hours	.3.413	.btu
tons (long)	.00155	.sq. inches		2656	.foot-lbs.
	100,000	.btu		860.5	.gram-calories
	.1016	.kilograms		.00134	.horsepower-hours
tons (metric)	2240	.pounds		.861	.kilogram-calories
	1.12	.tons (short)		367.2	.kologram-meters
	1000	.kilograms		.001	.kilowatt-hours
tons (short)	2205	.pounds	watt/sq.cm.	.3170.0	.btu/hr./sq. foot
	.907.2	.kilograms	$\frac{\text{watt cm}}{\text{sq. cm. } ^\circ\text{F}}$.57.79	$\frac{\text{btu-ft}}{\text{hr. sq. ft. } ^\circ\text{F}}$
	32000	.ounces			
	2917	.ounces (troy)			
	2000	.pounds			
	2430	.pounds (troy)			
	.893	.tons (long)			
	.908	.tons (metric)			

TEMPERATURE CONVERSIONS

°Fahrenheit = 9/5°C + 32

°Celsius = 5/9 (°F-32)

°Rankine = °F absolute = °F + 459.69

°Kelvin = °C absolute = °C + 273.16

Fahrenheit to Celsius				Celsius to Fahrenheit			
°F	°C	°F	°C	°C	°F	°C	°F
0	-17.78	950	510.0	0	32	850	1562
20	-6.67	1000	537.8	10	50	900	1652
40	4.44	1100	593.3	20	68	950	1742
60	15.56	1200	648.9	30	86	1000	1832
80	26.67	1300	704.4	40	104	1050	1922
100	37.78	1400	760.0	50	122	1100	2012
120	48.89	1500	815.6	60	140	1150	2102
140	60.00	1600	871.1	70	158	1200	2192
160	71.11	1700	926.7	80	176	1250	2282
180	82.22	1800	982.2	90	194	1300	2372
200	93.33	1900	1038	100	212	1350	2462
250	121.1	2000	1093	150	302	1400	2552
300	148.9	2100	1149	200	392	1450	2642
350	176.7	2200	1204	250	482	1500	2732
400	204.4	2300	1260	300	572	1550	2822
450	232.2	2400	1316	350	662	1600	2912
500	260.0	2500	1371	400	752	1650	3002
550	287.8	2600	1427	450	842	1700	3092
600	315.6	2700	1482	500	932	1750	3182
650	343.3	2800	1538	550	1022	1800	3272
700	371.1	2900	1593	600	1112	1850	3362
750	398.9	3000	1649	650	1202	1900	3452
800	426.7	3200	1760	700	1292	1950	3542
850	454.4	3400	1871	750	1382	2000	3632
900	482.2	3600	1982	800	1472	2050	3722

PRESSURE CONVERSIONS

inches water ("w.c.)	ounces/ sq in (osi)	lb/sq in (psi)	inches mercury ("Hg)	millibars (mbar)	kilograms/ sq cm (kg/cm ²)	millimeters water (mm H ₂ O)	kilo- pascals (kPa)
.04	.023	.001	.003	.1	.0001	1	.01
.1	.058	.004	.007	.25	.0003	2.54	.02
.17	.1	.006	.013	.42	.0004	4.4	.04
.2	.115	.007	.015	.5	.0005	5.08	.05
.35	.2	.013	.026	.87	.0009	8.8	.09
.39	.227	.014	.029	.97	.001	10	.1
.40	.23	.015	.029	1	.0010	10.2	.1
.5	.29	.018	.037	1.24	.0013	12.7	.12
.787	.45	.028	.058	1.96	.002	20	.2
.80	.46	.029	.059	2	.0020	20.4	.2
.87	.5	.031	.064	2.16	.0022	22	.22
1	.58	.036	.074	2.49	.0025	25.4	.25
1.73	1	.063	.127	4.30	.0044	44	.43
2	1.15	.072	.147	4.98	.0051	50.8	.5
2.01	1.16	.073	.148	5	.0051	51	.5
2.77	1.6	.1	.204	6.89	.0070	70.3	.69
3	1.73	.108	.221	7.46	.0076	76.2	.75
3.46	2	.125	.254	8.61	.0088	87.9	.86
4	2.31	.144	.294	9.95	.010	101.6	1
4.02	2.32	.145	.296	10	.010	102	1
5	2.89	.181	.368	12.5	.013	127	1.25
5.2	3	.188	.382	12.9	.013	131.9	1.29
5.54	3.2	.2	.407	13.8	.014	140.7	1.38
6	3.46	.216	.441	14.9	.015	152.4	1.49
6.93	4	.25	.51	17.2	.018	175.8	1.72
7	4.04	.253	.515	17.4	.018	177.8	1.74
8	4.62	.289	.588	19.9	.020	203.2	1.99
8.03	4.64	.29	.591	20	.020	204	2
8.66	5	.313	.637	21.5	.022	219.8	2.15
9	5.2	.325	.662	22.4	.023	228.6	2.24
10	5.77	.361	.735	24.9	.025	254	2.49
10.39	6	.375	.764	25.9	.026	263.8	2.59
11	6.35	.397	.809	27.4	.028	279.4	2.74
12	6.93	.433	.882	29.9	.030	304.8	2.99
12.05	6.96	.435	.887	30	.031	306	3
12.12	7	.438	.891	30.2	.031	307.7	3.02
13	7.51	.469	.956	32.4	.033	330.2	3.24
13.6	7.85	.491	1	33.8	.035	345.4	3.38
13.86	8	.5	1.02	34.5	.035	351.6	3.45
14	8.08	.505	1.03	34.9	.036	355.5	3.49
15	8.66	.541	1.10	37.4	.038	381	3.74
15.59	9	.563	1.15	38.8	.04	395.6	3.88
16	9.24	.578	1.18	39.8	.041	406.4	3.98
16.06	9.28	.58	1.18	40	.041	408	4
17	9.82	.614	1.25	42.3	.043	431.8	4.23
17.32	10	.625	1.27	43.1	.044	439.6	4.31
18	10.39	.649	1.32	44.8	.046	457.2	4.48
19	10.97	.686	1.4	47.3	.048	482.6	4.73
19.05	11	.688	1.40	47.4	.048	483.6	4.74
20	11.55	.722	1.47	49.8	.051	508	4.98

PRESSURE CONVERSIONS (Cont'd)

inches water ("w.c.)	ounces/ sq in (osi)	lb/sq in (psi)	inches mercury ("Hg)	millibars (mbar)	kilograms/ sq cm (kg/cm ²)	millimeters water (mm H ₂ O)	kilo- pascals (kPa)
20.1	11.6	.725	1.48	50	.051	510	5
20.78	12	.75	1.53	51.7	.053	528	5.17
21	12.12	.758	1.54	52.3	.053	533	5.23
22	12.7	.794	1.62	54.8	.056	559	5.48
22.52	13	.813	1.66	56.0	.057	572	5.60
23	13.28	.83	1.69	57.3	.058	584	5.73
24	13.86	.866	1.76	59.7	.061	610	5.98
24.1	13.92	.87	1.77	60	.061	612	6
24.25	14	.875	1.78	60.3	.062	615	6.03
25	14.43	.902	1.84	62.3	.064	635	6.23
25.98	15	.938	1.91	64.6	.066	659	6.46
26	15.01	.938	1.91	64.7	.066	660	6.47
27	15.59	.974	1.99	67.2	.069	686	6.72
27.2	15.7	.982	2	67.7	.069	711	6.77
27.71	16	1	2.04	68.9	.070	703	6.89
28	16.17	1.01	2.06	69.7	.071	711	6.97
28.11	16.24	1.02	2.07	70	.071	714	7
29	16.74	1.05	2.13	72.2	.074	737	7.22
29.44	17	1.06	2.16	73.3	.075	747	7.33
30	17.32	1.08	2.21	74.7	.076	762	7.47
31	17.9	1.12	2.28	77.2	.079	787	7.72
31.18	18	1.13	2.29	77.6	.079	791	7.76
32	18.48	1.16	2.35	79.7	.081	813	7.97
32.13	18.56	1.16	2.36	80	.082	816	8
32.91	19	1.19	2.42	81.9	.084	835	8.19
33	19.05	1.19	2.43	82.2	.084	838	8.22
34	19.63	1.23	2.5	84.7	.086	864	8.47
34-64	20	1.25	2.55	86.2	.088	879	8.62
35	20.21	1.26	2.57	87.2	.089	889	8.72
36	20.79	1.3	2.65	89.6	.091	914	8.96
36.14	20.88	1.31	2.66	90	.092	918	9
36.37	21	1.31	2.67	90.5	.092	923	9.05
37	21.36	1.34	2.72	92.1	.094	940	9.21
38	21.94	1.37	2.79	94.6	.097	965	9.46
38.1	22	1.38	2.80	94.8	.097	967	9.48
39	22.52	1.41	2.87	97.1	.099	991	9.71
39.37	22.73	1.42	2.89	98.0	.1	1000	9.80
39.84	23	1.44	2.93	99.1	.101	1011	9.91
40	23.09	1.44	2.94	99.6	.102	1016	9.96
40.16	23.20	1.45	2.96	100	.102	1020	10
40.8	23.56	1.47	3	101.5	.104	1036	10.2
41	23.67	1.48	3.01	102.0	.104	1041	10.2
41.57	24	1.5	3.06	103.4	.106	1055	10.3
42	24.25	1.52	3.09	104.5	.107	1067	10.5
43	24.83	1.55	3.16	107	.109	1092	10.7
43.3	25	1.56	3.18	107.7	.11	1099	10.8
44	25.4	1.59	3.24	109.5	.112	1118	11
45	26	1.63	3.31	112	.114	1144	11.2
46	26.56	1.66	3.38	114.5	.117	1168	11.5
46.76	27	1.69	3.44	116.3	.118	1184	11.6

PRESSURE CONVERSIONS

inches water ("w.c.)	ounces/ sq in (osi)	lb/sq in (psi)	inches mercury ("Hg)	millibars (mbar)	kilograms/ sq cm (kg/cm ²)	millimeters water (mm H ₂ O)	kilo- pascals (kPa)
47	27.14	1.7	3.46	116.9	.119	1194	11.7
48	27.71	1.73	3.53	119.4	.122	1219	12
48.5	28	1.75	3.57	120.7	.123	1232	12.1
49	28.29	1.77	3.60	121.9	.124	1245	12.2
50	28.87	1.80	3.68	124.4	.127	1270	12.5
50.23	29	1.81	3.69	125	.128	1276	12.5
51	29.45	1.84	3.75	126.9	.13	1295	12.7
51.96	30	1.88	3.82	129.3	.132	1320	12.9
52	30.02	1.88	3.82	129.4	.132	1321	12.9
53	30.6	1.91	3.9	131.9	.135	1346	13.2
53.69	31	1.94	3.95	133.6	.136	1364	13.4
54	31.18	1.95	3.97	134.4	.137	1372	13.4
54.4	31.41	1.96	4	135.4	.138	1382	13.5
55.4	32	2	4.07	137.8	.141	1408	13.8
68	39.26	2.45	5	169.2	.173	1727	16.9
78.7	45.46	2.84	5.79	195.8	.2	2000	19.6
80.32	46.4	2.9	5.91	200	.204	2040	20
81.6	47.11	2.94	6	203	.207	2072	20.3
83.14	48	3	6.11	207	.211	2112	20.7
95.2	55	3.44	7	237	.242	2418	23.7
108.8	62.8	3.93	8	271	.276	2763	27.1
110.8	64	4	8.15	276	.282	2816	27.6
120.5	69.6	4.35	8.87	300	.306	3060	30
138.6	80	5	10.2	345	.352	3517	34.5
160.6	92.8	5.8	11.8	400	.408	4080	40
166.3	96	6	12.2	414	.422	4223	41.4
194	112	7	14.3	483	.493	4927	48.3
196.9	113.7	7.1	14.5	490	.5	5000	49.0
200.8	116	7.25	14.8	500	.510	5100	50
221.7	128	8	16.3	552	.563	5631	55.2
241	139	8.7	17.7	600	.612	6120	60
249.4	144	9	18.3	621	.634	6335	62.1
277.1	160	10	20.4	689	.703	7033	68.9
281.1	162	10.15	20.7	700	.714	7140	70
321.3	186	11.6	23.6	800	.816	8160	80
361.4	209	13.05	26.6	900	.918	9180	90
393.7	227	14.21	28.9	980	1	10,000	98.0
401.6	232	14.5	29.6	1000	1.02	10,200	100
415.7	240	15	30.6	1034	1.06	10,559	103.4
554	320	20	40.7	1378	1.41	14,072	137.8
693	400	25	51	1724	1.76	17,602	172.4
831	480	30	61.1	2068	2.11	21,107	206.8
970	560	35	71.3	2414	2.46	24,638	241.3
1108	640	40	81.5	2757	2.81	28,143	275.8
1386	800	50	101.9	3449	3.52	35,204	344.7
1663	960	60	122.3	4138	4.22	42,240	413.7
1940	1120	70	142.6	4827	4.93	49,276	482.6
2217	1280	80	163.0	5516	5.63	56,312	551.6
2494	1440	90	183.4	6206	6.33	63,348	620.5
2771	1600	100	203.8	6895	7.04	70,383	689.5