

# Vacuum Pressures Unit Conversions Chart (Absolute)

ver 01-Dec-2022

% Vacuum	ATM (standard atmosphere)	PSIA	Torr (mm Hg)	in HG (inches Mercury)	kPa (SI unit)	bar	mbar
0.00	1.00	14.70	760.00	29.92	101.33	1.01	1013.25
1.40	0.99	14.49	749.36	29.50	99.91	1.00	999.06
1.90	0.98	14.42	745.56	29.35	99.40	0.99	994.00
3.30	0.97	14.21	734.92	28.93	97.98	0.98	979.81
6.60	0.93	13.73	709.84	27.95	94.64	0.95	946.38
7.90	0.92	13.53	699.96	27.56	93.32	0.93	933.20
9.80	0.90	13.26	685.52	26.99	91.40	0.91	913.95
10.00	0.90	13.23	684.00	26.93	91.19	0.91	911.93
20.00	0.80	11.76	608.00	23.94	81.06	0.81	810.60
25.00	0.75	11.02	570.00	22.44	75.99	0.76	759.94
30.00	0.70	10.29	532.00	20.94	70.93	0.71	709.28
33.00	0.67	9.85	509.20	20.05	67.89	0.68	678.88
35.00	0.65	9.55	494.00	19.45	65.86	0.66	658.61
40.00	0.60	8.82	456.00	17.95	60.80	0.61	607.95
45.00	0.55	8.08	418.00	16.46	55.73	0.56	557.29
50.00	0.50	7.35	380.00	14.96	50.66	0.51	506.63
55.00	0.45	6.61	342.00	13.46	45.60	0.46	455.96
60.00	0.40	5.88	304.00	11.97	40.53	0.41	405.30
61.00	0.39	5.73	296.40	11.67	39.52	0.40	395.17
65.00	0.35	5.14	266.00	10.47	35.46	0.35	354.64
68.00	0.32	4.70	243.20	9.57	32.42	0.32	324.24
70.00	0.30	4.41	228.00	8.98	30.40	0.30	303.98
75.00	0.25	3.67	190.00	7.48	25.33	0.25	253.31
80.00	0.20	2.94	152.00	5.98	20.27	0.20	202.65
85.00	0.15	2.20	114.00	4.49	15.20	0.15	151.99
87.00	0.13	1.91	98.80	3.89	13.17	0.13	131.72
88.00	0.12	1.76	91.20	3.59	12.16	0.12	121.59
89.00	0.11	1.62	83.60	3.29	11.15	0.11	111.46
90.00	0.10	1.47	76.00	2.99	10.13	0.10	101.33
92.00	0.08	1.18	60.80	2.39	8.11	0.08	81.06
93.00	0.07	1.03	53.20	2.09	7.09	0.07	70.93
95.00	0.05	0.73	38.00	1.50	5.07	0.05	50.66
96.60	0.03	0.50	25.84	1.02	3.45	0.03	34.45
97.40	0.03	0.38	19.76	0.78	2.63	0.03	26.34
98.70	0.01	0.19	9.88	0.39	1.32	0.01	13.17
100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Perfect vacuum or 100% vacuum is a zero reference pressure. In practice, a perfect vacuum is impossible to obtain.

kPa = bar x 100; mbar = bar x 1000



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# Vacuum Pressures Unit Conversions Chart (Relative)

ver 01-Dec-2022

% Vacuum	ATM (standard atmosphere)	PSIG negative gauge	Torr (mm Hg) negative gauge	inches Hg negative gauge	kPa negative gauge	bar negative gauge	mbar negative gauge
0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
1.40	0.99	- 0.21	- 10.64	- 0.42	- 1.42	-0.01	- 14.19
1.90	0.98	- 0.28	- 14.44	- 0.57	- 1.93	-0.02	- 19.25
3.30	0.97	- 0.48	- 25.08	- 0.99	- 3.34	-0.03	- 33.44
6.60	0.93	- 0.97	- 50.16	- 1.97	- 6.69	-0.07	- 66.87
7.90	0.92	- 1.16	- 60.04	- 2.36	- 8.00	-0.08	- 80.05
9.80	0.90	- 1.44	- 74.48	- 2.93	- 9.93	-0.10	- 99.30
10.00	0.90	- 1.47	- 76.00	- 2.99	- 10.13	-0.10	- 101.33
20.00	0.80	- 2.94	-152.00	- 5.98	- 20.27	-0.20	- 202.65
25.00	0.75	- 3.67	-190.00	- 7.48	- 25.33	-0.25	- 253.31
30.00	0.70	- 4.41	-228.00	- 8.98	- 30.40	-0.30	- 303.98
33.00	0.67	- 4.85	-250.80	- 9.87	- 33.44	-0.33	- 334.37
35.00	0.65	- 5.14	-266.00	- 10.47	- 35.46	-0.35	- 354.64
40.00	0.60	- 5.88	-304.00	- 11.97	- 40.53	-0.41	- 405.30
45.00	0.55	- 6.61	-342.00	- 13.46	- 45.60	-0.46	- 455.96
50.00	0.50	- 7.35	-380.00	- 14.96	- 50.66	-0.51	- 506.63
55.00	0.45	- 8.08	-418.00	- 16.46	- 55.73	-0.56	- 557.29
60.00	0.40	- 8.82	-456.00	- 17.95	- 60.80	-0.61	- 607.95
61.00	0.39	- 8.96	-463.60	- 18.25	- 61.81	-0.62	- 618.08
65.00	0.35	- 9.55	-494.00	- 19.45	- 65.86	-0.66	- 658.61
68.00	0.32	- 9.99	-516.80	- 20.35	- 68.90	-0.69	- 689.01
70.00	0.30	- 10.29	-532.00	- 20.94	- 70.93	-0.71	- 709.28
75.00	0.25	- 11.02	-570.00	- 22.44	- 75.99	-0.76	- 759.94
80.00	0.20	- 11.76	-608.00	- 23.94	- 81.06	-0.81	- 810.60
85.00	0.15	- 12.49	-646.00	- 25.43	- 86.13	-0.86	- 861.26
87.00	0.13	- 12.79	-661.20	- 26.03	- 88.15	-0.88	- 881.53
88.00	0.12	- 12.93	-668.80	- 26.33	- 89.17	-0.89	- 891.66
89.00	0.11	- 13.08	-676.40	- 26.63	- 90.18	-0.90	- 901.79
90.00	0.10	- 13.23	-684.00	- 26.93	- 91.19	-0.91	- 911.93
92.00	0.08	- 13.52	-699.20	- 27.53	- 93.22	-0.93	- 932.19
93.00	0.07	- 13.67	-706.80	- 27.83	- 94.23	-0.94	- 942.32
95.00	0.05	- 13.96	-722.00	- 28.43	- 96.26	-0.96	- 962.59
96.60	0.03	- 14.20	-734.16	- 28.90	- 97.88	-0.98	- 978.80
97.40	0.03	- 14.31	-740.24	- 29.14	- 98.69	-0.99	- 986.91
98.70	0.01	- 14.50	-750.12	- 29.53	-100.01	-1.00	-1000.08
100.00	0.00	- 14.70	-760.00	- 29.92	-101.33	-1.01	-1013.25

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