

Steam pressure table

Water

Pressure table: Saturated steam											Specific values		
Pressure						Saturated steam temperature		Water enthalpy	Enthalpy of vaporisation	Steam enthalpy	Steam volume	Steam density	
Gauge pressure			absolute pressure										
p _g			p _a			t		h'	r	h''	v''	ρ''	
bar	psi	kPa	bar	psi	kPa	°C	°F	kJ/kg	kJ /kg	kJ /kg	m³ / kg	kg/m³	
The gauge pressure is based on an absolute pressure of 1 bar (14.5 psi)			0.01	0.15	1	7	44.6	29.34	2485	2514	129.2	0.008	
			0.05	0.73	5	32.9	91.2	137.8	2424	2562	28.19	0.036	
			0.1	1.45	10	45.8	114.4	191.8	2393	2585	14.67	0.068	
			0.2	2.90	20	60.1	140.2	251.5	2358	2610	7.65	0.131	
			0.3	4.35	30	69.1	156.4	289.3	2336	2625	5.229	0.191	
			0.4	5.80	40	75.9	168.6	317.7	2319	2637	3.993	0.250	
			0.5	7.25	50	81.3	178.3	340.6	2305	2646	3.24	0.309	
			0.6	8.70	60	86	186.8	359.9	2294	2654	2.732	0.366	
			0.7	10.15	70	90	194.0	376.8	2283	2660	2.365	0.423	
			0.8	11.60	80	93.5	200.3	391.7	2274	2666	2.087	0.479	
0.9	13.05	90	96.7	206.1	405.2	2266	2671	1.869	0.535				
0	0.00	0	1	14.50	100	99.6	211.3	417	2258	2675	1.694	0.590	
0.1	1.45	10	1.1	15.95	110	102.3	216.1	429	2251	2680	1.549	0.646	
0.2	2.90	20	1.2	17.40	120	104.8	220.6	439	2244	2683	1.428	0.700	
0.3	4.35	30	1.3	18.85	130	107.1	224.8	449	2238	2687	1.325	0.755	
0.4	5.80	40	1.4	20.31	140	109.3	228.7	458	2232	2690	1.236	0.809	
0.5	7.25	50	1.5	21.76	150	111.4	232.5	467	2226	2693	1.158	0.863	
0.6	8.70	60	1.6	23.21	160	113.3	235.9	475	2221	2696	1.091	0.917	
0.7	10.15	70	1.7	24.66	170	115.2	239.4	483	2216	2699	1.031	0.97	
0.8	11.60	80	1.8	26.11	180	116.9	242.4	491	2211	2702	0.977	1.023	
0.9	13.05	90	1.9	27.56	190	118.6	245.5	498	2206	2704	0.929	1.076	
1	14.50	100	2	29.01	200	120.2	248.4	505	2201	2706	0.885	1.129	
1.5	21.76	150	2.5	36.26	250	127.4	261.3	535	2181	2716	0.718	1.392	
2	29.01	200	3	43.51	300	133.5	272.3	561	2163	2724	0.606	1.651	
2.5	36.26	250	3.5	50.76	350	138.9	282.0	584	2147	2731	0.524	1.908	
3	43.51	300	4	58.02	400	143.6	290.5	605	2133	2738	0.462	2.163	
3.5	50.76	350	4.5	65.27	450	147.9	298.2	623	2120	2743	0.414	2.417	
4	58.02	400	5	72.52	500	151.8	305.2	640	2107	2747	0.375	2.669	
4.5	65.27	450	5.5	79.77	550	155.5	311.9	656	2096	2752	0.343	2.92	
5	72.52	500	6	87.02	600	158.8	317.8	670	2085	2755	0.316	3.17	
6	87.02	600	7	101.53	700	165	329.0	697	2065	2762	0.273	3.667	

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p _g			p _a			°C	°F	kJ/kg	kJ/kg	kJ/kg	m ³ /kg	kg/m ³
bar	psi	kPa	bar	psi	kPa							
7	101.53	700	8	116.03	800	170.4	338.7	721	2046	2767	0.240	4.162
8	116.03	800	9	130.53	900	175.4	347.7	743	2029	2772	0.215	4.655
9	130.53	900	10	145.04	1000	179.9	355.8	763	2013	2776	0.194	5.147
10	145.04	1000	11	159.54	1100	184.1	363.4	781	1999	2780	0.177	5.637
11	159.54	1100	12	174.05	1200	188	370.4	798	1984	2782	0.163	6.127
12	174.05	1200	13	188.55	1300	191.6	376.9	815	1971	2786	0.151	6.617
13	188.55	1300	14	203.05	1400	195	383.0	830	1958	2788	0.141	7.106
14	203.05	1400	15	217.56	1500	198.3	388.9	845	1945	2790	0.132	7.596
15	217.56	1500	16	232.06	1600	201.4	394.5	859	1933	2792	0.124	8.085
16	232.06	1600	17	246.56	1700	204.3	399.7	872	1921	2793	0.117	8.575
17	246.56	1700	18	261.07	1800	207.1	404.8	885	1910	2795	0.110	9.065
18	261.07	1800	19	275.57	1900	209.8	409.6	897	1899	2796	0.105	9.555
19	275.57	1900	20	290.08	2000	212.4	414.3	909	1888	2797	0.100	10.05
20	290.08	2000	21	304.58	2100	214.9	418.8	920	1878	2798	0.095	10.54
24	348.09	2400	25	362.59	2500	223.9	435.0	962	1839	2801	0.080	12.51