

Saturated Steam Temperature-Pressure Relations

Deg.C	Absolute Pressure			Vacuum in Hg ref to 29.921 in bar at 32F	Specific Volume sat vap ft ³ /lbm V _g	Total Heat or Enthalpy Btu/lb		
	in Hg	mm Hg	psi			water h _f	evap h _{fg}	steam h _g
32	0.1803	4.581	0.08859	29.741	3304.7	-0.0179	1075.5	1075.5
32.018	0.1805	4.585	0.08865	29.741	3302.4	0.0003	1075.5	1075.5
33	0.1878	4.77	0.09223	29.734	3180.7	0.989	1074.9	1075.9
34	0.1955	4.96	0.09600	29.726	3061.9	1.996	1074.9	1076.4
35	0.203	5.17	0.09991	29.718	2948.1	3.002	1073.8	1076.8
36	0.212	5.38	0.10395	29.710	2839.0	4.008	1073.2	1077.2
37	0.220	5.59	0.10815	29.701	2734.4	5.013	1072.7	1077.7
38	0.229	5.82	0.11249	29.692	3634.2	6.018	1072.1	1078.1
39	0.238	6.05	0.11698	29.683	2538.0	7.023	1071.5	1078.5
40	0.248	6.29	0.12163	29.674	2445.8	8.027	1071.0	1079.0
41	0.257	6.54	0.12645	29.664	2357.3	9.031	1070.4	1079.4
42	0.268	6.80	0.13143	29.654	2274.4	10.035	1069.8	1079.9
43	0.278	7.06	0.13659	29.643	2191.0	11.038	1069.3	1080.3
44	0.289	7.34	0.14192	29.632	2112.8	12.041	1068.7	1080.7
45	0.300	7.62	0.14744	29.621	2037.8	13.044	1068.1	1081.2
46	0.312	7.92	0.15314	29.610	1965.7	14.047	1067.6	1081.6
47	0.324	8.22	0.15904	29.597	1896.5	15.049	1067.0	1081.1
48	0.336	8.54	0.16514	29.585	1830.0	16.051	1066.4	1082.5
49	0.349	8.87	0.17144	29.572	1766.2	17.053	1065.9	1082.9
50	0.362	9.20	0.17796	29.559	1704.8	18.054	1065.3	1083.4
51	0.376	9.55	0.18469	29.545	1645.9	19.056	1064.7	1083.8
52	0.390	9.91	0.19165	29.531	1589.2	20.057	1064.2	1084.2
53	0.405	10.28	0.19883	29.516	1534.8	21.058	1063.6	1084.7
54	0.420	10.67	0.20625	29.501	1482.4	00.058	1063.1	1085.1
55	0.436	11.06	0.21392	29.486	1432.0	23.059	1062.5	1085.6
56	0.452	11.47	0.22183	29.470	1383.6	24.0598	1061.9	1086.0
57	0.468	11.89	0.23000	29.453	1337.0	25.060	1061.4	1086.4
58	0.485	12.33	0.23843	29.436	1292.2	26.060	1060.8	1086.9
59	0.503	12.78	0.24713	29.418	1249.1	27.060	1060.2	1087.3
60	0.521	13.24	0.25611	29.400	1207.6	28.060	1059.7	1087.7
61	0.540	13.72	0.26538	29.381	1167.6	29.059	1059.1	1088.2
62	0.560	14.22	0.27494	29.362	1129.2	30.059	1058.5	1088.6
63	0.580	14.73	0.28480	29.341	1092.1	31.058	1058.0	1089.0
64	0.601	15.285	0.29497	29.321	1056.5	32.058	1057.4	1089.5
65	0.622	15.80	0.30545	29.299	1022.1	33.057	1056.9	1089.0
66	0.644	16.36	0.31626	29.277	989.0	34.056	1056.3	1090.4
67	0.667	16.93	0.32740	29.255	957.2	35.055	1055.7	1090.8
68	0.690	17.53	0.33889	29.231	926.5	36.054	1055.2	1091.2
69	0.714	18.14	0.35073	29.207	896.9	37.053	10547.6	1091.7
70	0.739	18.77	0.36292	29.182	868.4	38.052	1054.0	1092.1

71	0.765	19.42	0.37549	29.157	840.9	39.050	1053.5	1092.5
72	0.791	20.09	0.38844	29.130	814.3	40.049	1052.9	1093.0
73	0.818	20.78	0.40177	29.103	788.8	41.048	1052.4	1093.4
74	0.846	21.49	0.41550	29.075	764.1	42.046	1051.8	1093.8
75	0.875	22.22	0.42964	29.047	740.3	43.045	1051.2	1094.3
76	0.904	22.97	0.44420	29.017	717.4	44.043	1050.7	1094.7
77	0.935	23.75	0.45919	28.986	695.2	45.042	1050.1	1095.1
78	0.966	24.54	0.47461	28.955	673.9	46.040	1049.5	1095.6
79	0.999	25.37	0.49049	28.923	653.2	47.038	1049.0	1096.0
80	1.032	26.21	0.50683	28.889	633.3	48.037	1048.4	1096.4
81	1.066	27.06	0.52364	28.855	614.1	49.035	1047.8	1096.9
82	1.101	27.97	0.54093	28.820	595.6	50.033	1047.3	1097.3
83	1.138	28.89	0.55872	28.784	577.6	51.031	1046.7	1097.7
84	1.175	29.84	0.57702	28.746	560.3	52.029	1046.1	1098.2
85	1.213	30.81	0.59583	28.708	543.6	53.027	1045.6	1098.6
86	1.253	31.81	0.61518	28.669	527.5	54.026	1045.0	1099.0
87	1.293	32.84	0.63507	28.628	511.9	55.024	1044.4	1099.5
88	1.335	33.90	0.65551	28.587	496.8	56.022	1043.9	1099.9
89	1.377	34.99	0.67653	28.544	482.2	57.020	1043.3	1100.3
90	1.421	36.10	0.69813	28.500	468.1	58.018	1042.7	1100.8
91	1.467	37.25	0.72032	28.455	454.5	59.016	1042.2	1101.2
92	1.513	38.43	0.74313	28.408	441.3	60.014	1041.6	1101.6
93	1.561	39.64	0.76655	28.361	428.6	61.012	1041.0	1102.1
94	1.610	40.89	0.79062	28.312	416.3	62.010	1040.5	1102.5
95	1.660	42.165	0.81534	28.261	404.4	63.008	1039.9	1102.9
96	1.712	43.478	0.84072	28.210	392.9	64.006	1039.3	1103.3
97	1.765	44.826	0.86679	28.157	381.7	65.005	1038.8	1103.8
98	1.819	46.210	0.89356	28.102	370.9	66.003	1038.2	1104.2
99	1.875	47.631	0.92103	28.046	360.5	67.001	1037.6	1104.6
100	1.933	49.090	0.94924	27.989	350.4	67.999	1037.1	1105.1
101	1.992	50.586	0.97818	28.930	340.6	68.997	1036.5	1105.5
102	2.052	52.123	1.00789	27.869	331.1	69.995	1035.9	1105.9
103	2.114	53.700	1.03838	27.807	322.0	70.993	1035.4	1106.3
104	2.178	55.317	1.06965	27.743	313.1	71.992	1034.8	1106.8
105	2.243	56.976	1.10174	27.678	304.5	72.990	1034.2	1107.2
106	2.310	58.681	1.1347	27.611	296.18	73.99	1033.6	1107.6
107	2.379	60.424	1.1684	27.542	288.11	74.99	1033.1	1108.1
108	2.504	62.213	1.2030	27.417	280.30	75.98	1032.5	1108.5
109	2.522	64.049	1.2385	27.400	272.72	76.98	1031.9	1108.9
110	2.596	65.936	1.2750	27.325	265.39	77.98	1031.4	1109.3
111	2.672	67.865	1.3123	27.249	258.28	78.98	1030.8	1109.8
112	2.750	69.841	1.3505	27.172	251.38	79.98	1030.2	1110.2
113	2.830	71.873	1.3898	27.092	244.70	80.98	1029.6	1110.6
114	2.911	73.947	1.4299	27.001	238.22	81.97	1029.1	1111.0
115	2.995	76.078	1.4711	26.926	231.94	82.97	1028.5	1111.5
116	3.081	78.260	1.5133	26.840	225.85	83.97	1027.9	1111.9
117	3.169	80.499	1.5566	26.752	219.94	84.97	1027.3	1112.3
118	3.259	82.790	1.6009	26.662	214.21	85.97	1026.8	1112.7

119	3.352	85.138	1.6463	26.569	208.66	86.97	1026.2	1113.2
120	3.446	87.538	1.6927	26.475	203.26	87.97	10285.6	1113.6
121	3.543	89.999	1.7403	26.378	198.03	88.96	1025.0	1114.0
122	3.643	92.523	1.7891	26.279	192.95	89.96	1024.5	1114.4
123	3.744	95.103	1.8390	26.177	188.03	90.96	1023.9	1114.9
124	3.848	97.746	1.8901	26.073	183.24	91.96	1023.3	1115.3
125	3.956	100.47	1.9428	25.966	178.60	92.96	1022.7	1115.7
126	4.064	103.22	1.9959	25.858"	174.09	93.96	1022.2	1116.1
127	4.175	106.05	2.0507	25.746	169.72	94.96	1021.6	11165.5
128	4.289	108.95	2.1068	25.632	165.47	95.96	1021.0	1117.0
129	4.406	111.92	2.1642	25.515	161.34	96.96	1020.4	1117.4
130	4.526	114.96	2.2230	25.395	157.33	97.96	1019.8	1117.8
131	4.648	118.06	2.2830	25.273	153.44	98.95	1019.3	1118.2
132	4.773	121.25	2.3445	25.148	149.66	99.95	1018.7	1118.6
133	4.902	124.50	2.4074	25.020	145.98	100.95	1018.1	1119.1
134	5.032	127.82	2.4717	24.889	142.41	101.95	1017.5	1119.5
135	5.166	131.23	2.5375	24.755	138.94	102.95	1016.9	1119.9
136	5.303	134.70	2.6047	24.618	135.57	103.95	1016.4	1120.3
137	5.443	138.26	2.6735	24.78	132.29	104.95	1015.8	1120.7
138	5.586	141.89	2.7438	24.335	129.11	105.95	1015.2	1121.1
139	5.773	145.61	2.8157	24.188	126.01	106.95	1014.6	1121.6
140	5.882	149.41	2.8892	24.039	123.00	107.95	1014.0	1112.0
141	6.035	153.30	2.9643	23.886	120.07	108.95	1013.4	1122.4
142	6.192	157.27	3.0411	23.730	117.22	109.95	1012.9	1122.8
143	6.351	161.32	3.1195	23.570	114.45	110.95	1012.3	1123.2
144	6.515	165.47	3.1997	23.407	111.76	11.95	1011.7	1123.6
145	6.681	169.71	3.2816	23.240	109.14	112.95	1011.1	1124.0
146	6.852	174.04	3.3653	23.069	106.59	113.95	1010.5	1124.5
147	7.026	178.46	3.4508	22.895	104.11	114.95	1009.9	1124.9
148	7.204	182.97	3.5381	22.718	101.70	115.95	1007.3	1125.3
149	7.385	187.58	3.6273	22.536	99.35	116.954	1008.7	1125.7
150	7.571	192.30	3.7184	22.351	97.07	117.95	1008.2	1126.1
151	7.760	197.11	3.8114	22.161	94.84	118.95	1007.6	1126.5
152	7.954	202.02	3.9065	21.968	92.68	119.95	1007.0	1126.9
153	8.151	207.04	4.0035	21.770	90.57	120.95	1006.4	1127.3
154	8.353	212.16	4.1025	21.569	88.52	121.95	1005.8	1127.7
155	8.559	217.39	4.2036	21.363	86.52	122.95	1005.2	1128.2
156	8.759	222.73	4.3068	21.153	84.57	123.95	1004.6	1128.6
157	8.983	228.18	4.4122	20.938	82.68	124.95	1004.0	1129.0
158	9.202	233.74	4.5197	20.719	80.83	125.95	1003.4	1129.4
159	9.426	239.41	4.6294	20.495	79.04	126.96	1002.8	1129.8
160	9.654	245.20	4.7414	20.678	77.29	127.96	1002.2	1130.2
161	9.886	251.11	4.8556	20.035	75.58	128.96	1001.6	1130.6
162	10.123	257.14	4.9722	19.798	73.92	129.96	1001.0	1131.0
163	10.366	263.28	5.0911	19.556	72.30	130.96	1000.4	1131.4
164	10.613	269.56	5.2124	19.309	70.72	131.96	999.8	1131.8
165	10.864	275.96	5.3361	19.057	69.18	132.96	999.2	1132.2

166	11.121	282.48	5.4623	18.800	67.68	133.97	998.6	1132.6
167	11.384	289.14	5.5911	18.358	66.22	134.97	998.0	1133.0
168	11.651	295.73	5.7223	18.271	64.80	135.97	997.4	1133.4
169	11.923	302.85	5.862	17.998	63.41	136.97	996.8	1133.8
170	12.201	309.91	5.9926	17.720	62.06	137.97	996.2	1134.2
171	12.484	317.10	6.1318	17.437	60.74	138.97	995.6	1134.6
172	12.773	324.44	6.2736	17.148	59.45	139.97	995.0	1135.0
173	13.068	331.92	6.4182	16.854	58.19	140.98	994.4	1135.4
174	13.368	339.54	6.56569	16.554	56.97	141.98	993.8	1135.8
175	13.674	347.31	6.7159	16.248	55.77	142.99	993.2	1136.2
176	13.985	355.23	6.8690	15.936	54.61	143.99	992.6	1136.6
177	14.303	363.30	7.0250	15.618	53.47	144.99	992.0	1137.01
178	14.627	371.52	7.1840	15.295	52.36	145.99	991.4	1137.4
179	14.957	379.90	7.3460	14.965	51.28	147.00	990.8	1137.8
180	15.293	388.42	7.5110	14.629	50.225	148.00	990.2	1138.2
181	15.635	397.12	7.679	14.287	49.194	149.00	989.6	1138.6
182	15.963	405.96	7.850	13.939	48.189	150.01	989.0	1139.0
183	16.339	415.01	8.025	13.582	47.207	151.01	988.4	1139.4
184	16.701	424.22	8.203	13.220	46.249	152.01	987.8	1139.8
185	17.070	433.58	8.384	12.851	45.313	153.02	987.1	1140.2
186	17.445	443.09	8.568	12.477	44.400	154.02	986.5	1140.5
187	17.827	452.81	8.756	12.094	43.508	155.02	985.9	1140.9
188	18.216	462.69	8.947	11.705	42.638	156.03	985.3	1141.3
189	18.611	472.72	9.141	11.310	41.787	157.03	982.7	1141.7
190	19.016	483.02	9.340	10.905	40.957	158.04	984.1	1142.1
191	19.426	493.41	9.541	10.496	40.146	159.04	983.5	1142.5
192	19.845	504.06	9.747	10.076	39.354	160.05	982.8	11742.9
193	20.271	514.87	9.956	9.651	38.580	161.05	982.2	1143.3
194	20.702	525.84	10.168	9.219	37.824	162.05	981.6	1143.7
195	21.144	537.06	10.385	8.777	37.086	163.05	981.0	1144.0
196	21.592	548.43	10.605	8.329	36.364	164.06	980.4	1144.4
197	22.050	560.07	10.830	7.871	35.659	165.07	979.7	1144.8
198	22.514	571.86	11.058	7.407	34.970	166.08	979.1	1145.2
199	22.987	583.86	11.290	6.935	34.297	167.08	978.5	1145.6
200	23.467	596.06	11.526	6.454	33.639	168.09	977.9	1146.0
201	23.956	608.48	11.766	5.966	32.996	169.09	977.2	1146.3
202	24.456	621.15	12.011	5.467	32.367	170.10	976.6	1146.7
203	24.960	633.97	12.259	4.962	31.752	171.10	976.0	1147.1
204	25.475	647.05	12.512	4.447	31.151	172.11	975.4	1147.5
205	26.00	660.40	12.770	3.921	30.564	173.12	974.7	1147.9
206	26.531	673.89	13.031	3.390	29.989	174.12	974.1	1148.2
207	27.073	687.65	13.297	2.848	29.428	175.13	973.5	1148.6
208	27.625	701.67	13.568	2.297	28.878	176.14	972.8	1149.0
209	28.185	715.89	13.843	1.737	28.341	177.14	972.2	1149.4
210	28.755	730.37	14.123	1.167	27.816	178.15	971.6	1149.7
211	29.333	745.05	14.407	0.588	27.302	179.16	970.9	1150.1
212	29.921	760.00	14.696	0.000	26.799	180.17	970.3	1150.5