

附表 B12 饱和水与饱和水蒸气的热力性质(按压力排列)

压力	温度	比体积		焓		汽化 潜热	熵	
		液体	蒸汽	液体	蒸汽		液体	蒸汽
$p$	$t$	$v'$	$v''$	$h'$	$h''$	$r$	$s'$	$s''$
MPa	℃	$\frac{\text{m}^3}{\text{kg}}$	$\frac{\text{m}^3}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg} \cdot \text{K}}$	$\frac{\text{kJ}}{\text{kg} \cdot \text{K}}$
0.0010	6.9491	0.0010001	129.185	29.21	2513.29	2484.1	0.1056	8.9735
0.0020	17.5403	0.0010014	67.008	73.58	2532.71	2459.1	0.2611	8.7220
0.0030	24.1142	0.0010028	45.666	101.07	2544.68	2443.6	0.3546	8.5758
0.0040	28.9533	0.0010041	34.796	121.30	2553.45	2432.2	0.4221	8.4725
0.0050	32.8793	0.0010053	28.191	137.72	2560.55	2422.8	0.4761	8.3930
0.0060	36.1663	0.0010065	23.738	151.47	2566.48	2415.0	0.5208	8.3283
0.0070	38.9967	0.0010075	20.528	163.31	2571.56	2408.3	0.5589	8.2737
0.0080	41.5075	0.0010085	18.102	173.81	2576.06	2402.3	0.5924	8.2266
0.0090	43.7901	0.0010094	16.204	183.36	2580.15	2396.8	0.6226	8.1854
0.010	45.7988	0.0010103	14.673	191.76	2583.72	2392.0	0.6490	8.1481
0.015	53.9705	0.0010140	10.022	225.93	2598.21	2372.3	0.7548	8.0065
0.020	60.0650	0.0010172	7.6497	251.43	2608.90	2357.5	0.8320	7.9068
0.025	64.9726	0.0010198	6.2047	271.96	2617.43	2345.5	0.8932	7.8298
0.030	69.1041	0.0010222	5.2296	289.26	2624.56	2335.3	0.9440	7.7671
0.040	75.8720	0.0010264	3.9939	317.61	2636.10	2318.5	1.0260	7.6688
0.050	81.3388	0.0010299	3.2409	340.55	2645.31	2304.8	1.0912	7.5928
0.060	85.9496	0.0010331	2.7324	359.91	2652.97	2293.1	1.1454	7.5310
0.070	89.9556	0.0010359	2.3654	376.75	2659.55	2282.8	1.1921	7.4789
0.080	93.5107	0.0010385	2.0876	391.71	2665.33	2273.6	1.2330	7.4339
0.090	96.7121	0.0010409	1.8698	405.20	2670.48	2265.3	1.2696	7.3943
0.10	99.634	0.0010432	1.6943	417.52	2675.14	2257.6	1.3028	7.3589
0.12	104.810	0.0010473	1.4287	439.37	2683.26	2243.9	1.3609	7.2978
0.14	109.318	0.0010510	1.2368	458.44	2690.22	2231.8	1.4110	7.2462
0.16	113.326	0.0010544	1.09159	475.42	2696.29	2220.9	1.4552	7.2016
0.18	116.941	0.0010576	0.97767	490.76	2701.69	2210.9	1.4946	7.1623
0.20	120.240	0.0010605	0.88585	504.78	2706.53	2201.7	1.5303	7.1272
0.25	127.444	0.0010672	0.71879	535.47	2716.83	2181.4	1.6075	7.0528
0.30	133.556	0.0010732	0.60587	561.58	2725.26	2163.7	1.6721	6.9921
0.35	138.891	0.0010786	0.52427	584.45	2732.37	2147.9	1.7278	6.9407
0.40	143.642	0.0010835	0.46246	604.87	2738.49	2133.6	1.7769	6.8961
0.45	147.939	0.0010882	0.41396	623.38	2743.85	2120.5	1.8210	6.8567
0.50	151.867	0.0010925	0.37486	640.35	2748.59	2108.2	1.8610	6.8214
0.60	158.863	0.0011006	0.31563	670.67	2756.66	2086.0	1.9315	6.7600
0.70	164.983	0.0011079	0.27281	697.32	2763.29	2066.0	1.9925	6.7079
0.80	170.444	0.0011148	0.24037	721.20	2768.86	2047.7	2.0464	6.6625
0.90	175.389	0.0011212	0.21491	742.90	2773.59	2030.7	2.0948	6.6222
1.00	179.916	0.0011272	0.19438	762.84	2777.67	2014.8	2.1388	6.5859

续 表

压力	温度	比体积		焓		汽化 潜热	熵	
		液体	蒸汽	液体	蒸汽		液体	蒸汽
$p$	$t$	$v'$	$v''$	$h'$	$h''$	$r$	$s'$	$s''$
MPa	℃	$\frac{\text{m}^3}{\text{kg}}$	$\frac{\text{m}^3}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg}}$	$\frac{\text{kJ}}{\text{kg} \cdot \text{K}}$	$\frac{\text{kJ}}{\text{kg} \cdot \text{K}}$
1.10	184.100	0.0011330	0.17747	781.35	2781.21	1999.9	2.1792	6.5529
1.20	187.995	0.0011385	0.16328	798.64	2784.29	1985.7	2.2166	6.5225
1.30	191.644	0.0011438	0.15120	814.89	2786.99	1972.1	2.2515	6.4944
1.40	195.078	0.0011489	0.14079	830.24	2789.37	1959.1	2.2841	6.4683
1.50	198.327	0.0011538	0.13172	844.82	2791.46	1946.6	2.3149	6.4437
1.60	201.410	0.0011586	0.12375	858.69	2793.29	1934.6	2.3440	6.4206
1.70	204.346	0.0011633	0.11668	871.96	2794.91	1923.0	2.3715	6.3988
1.80	207.151	0.0011679	0.11037	884.67	2796.33	1911.7	2.3979	6.3781
1.90	209.838	0.0011723	0.104707	896.88	2797.58	1900.7	2.4230	6.3583
2.00	212.417	0.0011767	0.099588	908.64	2798.66	1890.0	2.4471	6.3395
2.20	217.289	0.0011851	0.090700	930.97	2800.41	1869.4	2.4924	6.3041
2.40	221.829	0.0011933	0.083244	951.91	2801.67	1849.8	2.5344	6.2714
2.60	226.085	0.0012013	0.076898	971.67	2802.51	1830.8	2.5736	6.2409
2.80	230.096	0.0012090	0.071427	990.41	2803.01	1812.6	2.6105	6.2123
3.00	233.893	0.0012166	0.066662	1008.2	2803.19	1794.9	2.6454	6.1854
3.50	242.597	0.0012348	0.057054	1049.6	2802.51	1752.9	2.7250	6.1238
4.00	250.394	0.0012524	0.049771	1087.2	2800.53	1713.4	2.7962	6.0688
5.00	263.980	0.0012862	0.039439	1154.2	2793.64	1639.5	2.9201	5.9724
6.00	275.625	0.0013190	0.032440	1213.3	2783.82	1570.5	3.0266	5.8885
7.00	285.869	0.0013515	0.027371	1266.9	2771.72	1504.8	3.1210	5.8129
8.00	295.048	0.0013843	0.023520	1316.5	2757.70	1441.2	3.2066	5.7430
9.00	303.385	0.0014177	0.020485	1363.1	2741.92	1378.9	3.2854	5.6771
10.0	311.037	0.0014522	0.018026	1407.2	2724.46	1317.2	3.3591	5.6139
11.0	318.118	0.0014881	0.015987	1449.6	2705.34	1255.7	3.4287	5.5525
12.0	324.715	0.0015260	0.014263	1409.7	2684.50	1193.8	3.4952	5.4920
13.0	330.894	0.0015662	0.012780	1530.8	2661.80	1131.0	3.5594	5.4318
14.0	336.707	0.0016097	0.011486	1570.4	2637.07	1066.7	3.6220	5.3711
15.0	342.196	0.0016571	0.010340	1609.8	2610.01	1000.2	3.6836	5.3091
16.0	347.396	0.0017099	0.009311	1649.4	2580.21	930.8	3.7451	5.2450
17.0	352.334	0.0017701	0.008373	1690.0	2547.01	857.1	3.8073	5.1776
18.0	357.034	0.0018402	0.007503	1732.0	2509.45	777.4	3.8715	5.1051
19.0	361.514	0.0019258	0.006679	1776.9	2465.87	688.9	3.9395	5.0250
20.0	365.789	0.0020379	0.005870	1827.2	2413.05	585.9	4.0153	4.9322
21.0	369.868	0.0022073	0.005012	1889.2	2341.67	452.4	4.1088	4.8124
22.0	373.752	0.0027040	0.003684	2013.0	2084.02	71.0	4.2969	4.4066

此表引自严家禄编著《工程热力学》(第三版),2001。