

RS-51(R470B) PRESSURE & TEMPERATURE TABLE : ABSOLUTE

TEMPERATURE	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
(oC)	(kPa)	(kPa)	(bara)	(bara)	(psia)	(psia)
-60	109.77	20.34	1.0977	0.2034	15.92	2.95
-59	115.02	21.70	1.1502	0.2170	16.68	3.15
-58	120.47	23.15	1.2047	0.2315	17.47	3.36
-57	126.11	24.67	1.2611	0.2467	18.29	3.58
-56	131.95	26.27	1.3195	0.2627	19.13	3.81
-55	137.99	27.95	1.3799	0.2795	20.01	4.05
-54	144.25	29.72	1.4425	0.2972	20.92	4.31
-53	150.71	31.59	1.5071	0.3159	21.85	4.58
-52	157.40	33.55	1.5740	0.3355	22.82	4.86
-51	164.31	35.60	1.6431	0.3560	23.82	5.16
-50	171.45	37.76	1.7145	0.3776	24.86	5.47
-49	178.82	40.02	1.7882	0.4002	25.93	5.80
-48	186.43	42.39	1.8643	0.4239	27.03	6.15
-47	194.27	44.88	1.9427	0.4488	28.17	6.51
-46	202.37	47.48	2.0237	0.4748	29.34	6.88
-45	210.72	50.20	2.1072	0.5020	30.55	7.28
-44	219.32	53.05	2.1932	0.5305	31.80	7.69
-43	228.19	56.02	2.2819	0.5602	33.09	8.12
-42	237.32	59.13	2.3732	0.5913	34.41	8.57
-41	246.72	62.38	2.4672	0.6238	35.77	9.04
-40	256.40	65.77	2.5640	0.6577	37.18	9.54
-39	266.36	69.30	2.6636	0.6930	38.62	10.05
-38	276.60	72.99	2.7660	0.7299	40.11	10.58
-37	287.13	76.83	2.8713	0.7683	41.63	11.14
-36	297.96	80.83	2.9796	0.8083	43.20	11.72
-35	309.09	85.00	3.0909	0.8500	44.82	12.33
-34	320.53	89.34	3.2053	0.8934	46.48	12.95
-33	332.27	93.85	3.3227	0.9385	48.18	13.61
-32	344.33	98.55	3.4433	0.9855	49.93	14.29
-31	356.71	103.42	3.5671	1.0342	51.72	15.00
-30	369.41	108.49	3.6941	1.0849	53.56	15.73
-29	382.44	113.75	3.8244	1.1375	55.45	16.49
-28	395.81	119.22	3.9581	1.1922	57.39	17.29
-27	409.52	124.89	4.0952	1.2489	59.38	18.11
-26	423.57	130.77	4.2357	1.3077	61.42	18.96
-25	437.97	136.87	4.3797	1.3687	63.51	19.85
-24	452.73	143.20	4.5273	1.4320	65.65	20.76
-23	467.84	149.75	4.6784	1.4975	67.84	21.71
-22	483.32	156.53	4.8332	1.5653	70.08	22.70
-21	499.16	163.56	4.9916	1.6356	72.38	23.72
-20	515.39	170.83	5.1539	1.7083	74.73	24.77
-19	531.98	178.35	5.3198	1.7835	77.14	25.86
-18	548.97	186.14	5.4897	1.8614	79.60	26.99
-17	566.34	194.18	5.6634	1.9418	82.12	28.16
-16	584.10	202.50	5.8410	2.0250	84.69	29.36
-15	602.27	211.09	6.0227	2.1109	87.33	30.61
-14	620.83	219.97	6.2083	2.1997	90.02	31.90
-13	639.81	229.14	6.3981	2.2914	92.77	33.23
-12	659.19	238.60	6.5919	2.3860	95.58	34.60
-11	679.00	248.37	6.7900	2.4837	98.46	36.01
-10	699.22	258.45	6.9922	2.5845	101.39	37.48
-9	719.87	268.84	7.1987	2.6884	104.38	38.98
-8	740.96	279.55	7.4096	2.7955	107.44	40.53
-7	762.48	290.60	7.6248	2.9060	110.56	42.14
-6	784.44	301.98	7.8444	3.0198	113.74	43.79
-5	806.85	313.71	8.0685	3.1371	116.99	45.49
-4	829.71	325.79	8.2971	3.2579	120.31	47.24
-3	853.02	338.22	8.5302	3.3822	123.69	49.04
-2	876.79	351.02	8.7679	3.5102	127.13	50.90
-1	901.03	364.20	9.0103	3.6420	130.65	52.81
0	925.74	377.76	9.2574	3.7776	134.23	54.78
1	950.91	391.70	9.5091	3.9170	137.88	56.80
2	976.57	406.04	9.7657	4.0604	141.60	58.88
3	1002.70	420.78	10.0270	4.2078	145.39	61.01
4	1029.30	435.94	10.2930	4.3594	149.25	63.21
5	1056.50	451.51	10.5650	4.5151	153.19	65.47
6	1084.10	467.52	10.8410	4.6752	157.19	67.79
7	1112.20	483.95	11.1220	4.8395	161.27	70.17
8	1140.80	500.83	11.4080	5.0083	165.42	72.62

TEMPERATURE	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
(oC)	(kPa)	(kPa)	(bara)	(bara)	(psia)	(psia)
9	1169.90	518.17	11.6990	5.1817	169.64	75.13
10	1199.60	535.96	11.9960	5.3596	173.94	77.71
11	1229.70	554.22	12.2970	5.5422	178.31	80.36
12	1260.40	572.96	12.6040	5.7296	182.76	83.08
13	1291.60	592.18	12.9160	5.9218	187.28	85.87
14	1323.30	611.90	13.2330	6.1190	191.88	88.73
15	1355.60	632.12	13.5560	6.3212	196.56	91.66
16	1388.40	652.86	13.8840	6.5286	201.32	94.66
17	1421.70	674.12	14.2170	6.7412	206.15	97.75
18	1455.60	695.90	14.5560	6.9590	211.06	100.91
19	1490.10	718.23	14.9010	7.1823	216.06	104.14
20	1525.10	741.11	15.2510	7.4111	221.14	107.46
21	1560.60	764.54	15.6060	7.6454	226.29	110.86
22	1596.70	788.54	15.9670	7.8854	231.52	114.34
23	1633.40	813.13	16.3340	8.1313	236.84	117.90
24	1670.70	838.30	16.7070	8.3830	242.25	121.55
25	1708.50	864.07	17.0850	8.6407	247.73	125.29
26	1746.90	890.44	17.4690	8.9044	253.30	129.11
27	1785.80	917.44	17.8580	9.1744	258.94	133.03
28	1825.40	945.07	18.2540	9.4507	264.68	137.04
29	1865.50	973.34	18.6550	9.7334	270.50	141.13
30	1906.30	1002.30	19.0630	10.0230	276.41	145.33
31	1947.60	1031.80	19.4760	10.3180	282.40	149.61
32	1989.50	1062.10	19.8950	10.6210	288.48	154.00
33	2032.00	1093.00	20.3200	10.9300	294.64	158.49
34	2075.10	1124.70	20.7510	11.2470	300.89	163.08
35	2118.80	1157.00	21.1880	11.5700	307.23	167.77
36	2163.20	1190.10	21.6320	11.9010	313.66	172.56
37	2208.10	1223.90	22.0810	12.2390	320.17	177.47
38	2253.60	1258.40	22.5360	12.5840	326.77	182.47
39	2299.80	1293.70	22.9980	12.9370	333.47	187.59
40	2346.60	1329.80	23.4660	13.2980	340.26	192.82
41	2393.90	1366.60	23.9390	13.6660	347.12	198.16
42	2441.90	1404.30	24.4190	14.0430	354.08	203.62
43	2490.60	1442.70	24.9060	14.4270	361.14	209.19
44	2539.80	1482.00	25.3980	14.8200	368.27	214.89
45	2589.70	1522.10	25.8970	15.2210	375.51	220.70
46	2640.20	1563.10	26.4020	15.6310	382.83	226.65
47	2691.30	1604.90	26.9130	16.0490	390.24	232.71
48	2743.10	1647.70	27.4310	16.4770	397.75	238.92
49	2795.50	1691.30	27.9550	16.9130	405.35	245.24
50	2848.50	1735.80	28.4850	17.3580	413.03	251.69
51	2902.10	1781.30	29.0210	17.8130	420.80	258.29
52	2956.40	1827.70	29.5640	18.2770	428.68	265.02
53	3011.30	1875.10	30.1130	18.7510	436.64	271.89
54	3066.80	1923.50	30.6680	19.2350	444.69	278.91
55	3122.90	1972.90	31.2290	19.7290	452.82	286.07
56	3179.70	2023.30	31.7970	20.2330	461.06	293.38
57	3237.00	2074.80	32.3700	20.7480	469.37	300.85
58	3295.00	2127.30	32.9500	21.2730	477.78	308.46
59	3353.60	2181.00	33.5360	21.8100	486.27	316.25
60	3412.80	2235.70	34.1280	22.3570	494.86	324.18
61	3472.70	2291.60	34.7270	22.9160	503.54	332.28
62	3533.10	2348.60	35.3310	23.4860	512.30	340.55
63	3594.10	2406.80	35.9410	24.0680	521.14	348.99
64	3655.60	2466.30	36.5560	24.6630	530.06	357.61
65	3717.80	2527.00	37.1780	25.2700	539.08	366.42
66	3780.50	2589.00	37.8050	25.8900	548.17	375.41
67	3843.70	2652.20	38.4370	26.5220	557.34	384.57
68	3907.50	2716.90	39.0750	27.1690	566.59	393.95
69	3971.80	2782.90	39.7180	27.8290	575.91	403.52
70	4036.60	2850.30	40.3660	28.5030	585.31	413.29
71	4101.90	2919.20	41.0190	29.1920	594.78	423.28
72	4167.60	2989.60	41.6760	29.8960	604.30	433.49
73	4233.80	3061.60	42.3380	30.6160	613.90	443.93
74	4300.40	3135.20	43.0040	31.3520	623.56	454.60
75	4367.30	3210.40	43.6730	32.1040	633.26	465.51
76	4434.50	3287.40	44.3450	32.8740	643.00	476.67
77	4502.00	3366.20	45.0200	33.6620	652.79	488.10
78	4569.80	3446.90	45.6980	34.4690	662.62	499.80
79	4637.60	3529.60	46.3760	35.2960	672.45	511.79
80	4705.60	3614.40	47.0560	36.1440	682.31	524.09
81	4773.50	3701.40	47.7350	37.0140	692.16	536.70
82	4841.30	3790.70	48.4130	37.9070	701.99	549.65
83	4908.80	3882.40	49.0880	38.8240	711.78	562.95
84	4975.90	3976.90	49.7590	39.7690	721.51	576.65
85	5042.30	4074.30	50.4230	40.7430	731.13	590.77
86	5107.80	4174.90	51.0780	41.7490	740.63	605.36
87	5172.10	4279.00	51.7210	42.7900	749.95	620.46
88	5234.70	4387.20	52.3470	43.8720	759.03	636.14
89	5294.90	4500.10	52.9490	45.0010	767.76	652.51
90	5352.00	4618.50	53.5200	46.1850	776.04	669.68



RS-51 (R470B)PRESSURE & TEMPERATURE TABLE : GAUGE

TEMPERATURE	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
(oC)	(kPag)	(kPag)	(barg)	(barg)	(psig)	(psig)
-60	9.77	-79.66	0.10	-0.80	1.22	-11.75
-59	15.02	-78.30	0.15	-0.78	1.98	-11.55
-58	20.47	-76.85	0.20	-0.77	2.77	-11.34
-57	26.11	-75.33	0.26	-0.75	3.59	-11.12
-56	31.95	-73.73	0.32	-0.74	4.43	-10.89
-55	37.99	-72.05	0.38	-0.72	5.31	-10.65
-54	44.25	-70.28	0.44	-0.70	6.22	-10.39
-53	50.71	-68.41	0.51	-0.68	7.15	-10.12
-52	57.40	-66.46	0.57	-0.66	8.12	-9.84
-51	64.31	-64.40	0.64	-0.64	9.12	-9.54
-50	71.45	-62.24	0.71	-0.62	10.16	-9.23
-49	78.82	-59.98	0.79	-0.60	11.23	-8.90
-48	86.43	-57.61	0.86	-0.58	12.33	-8.55
-47	94.27	-55.12	0.94	-0.55	13.47	-8.19
-46	102.37	-52.52	1.02	-0.53	14.64	-7.82
-45	110.72	-49.80	1.11	-0.50	15.85	-7.42
-44	119.32	-46.95	1.19	-0.47	17.10	-7.01
-43	128.19	-43.98	1.28	-0.44	18.39	-6.58
-42	137.32	-40.87	1.37	-0.41	19.71	-6.13
-41	146.72	-37.62	1.47	-0.38	21.07	-5.66
-40	156.40	-34.23	1.56	-0.34	22.48	-5.16
-39	166.36	-30.70	1.66	-0.31	23.92	-4.65
-38	176.60	-27.01	1.77	-0.27	25.41	-4.12
-37	187.13	-23.17	1.87	-0.23	26.93	-3.56
-36	197.96	-19.17	1.98	-0.19	28.50	-2.98
-35	209.09	-15.00	2.09	-0.15	30.12	-2.37
-34	220.53	-10.66	2.21	-0.11	31.78	-1.75
-33	232.27	-6.15	2.32	-0.06	33.48	-1.09
-32	244.33	-1.46	2.44	-0.01	35.23	-0.41
-31	256.71	3.42	2.57	0.03	37.02	0.30
-30	269.41	8.49	2.69	0.08	38.86	1.03
-29	282.44	13.75	2.82	0.14	40.75	1.79
-28	295.81	19.22	2.96	0.19	42.69	2.59
-27	309.52	24.89	3.10	0.25	44.68	3.41
-26	323.57	30.77	3.24	0.31	46.72	4.26
-25	337.97	36.87	3.38	0.37	48.81	5.15
-24	352.73	43.20	3.53	0.43	50.95	6.06
-23	367.84	49.75	3.68	0.50	53.14	7.01
-22	383.32	56.53	3.83	0.57	55.38	8.00
-21	399.16	63.56	3.99	0.64	57.68	9.02
-20	415.39	70.83	4.15	0.71	60.03	10.07
-19	431.98	78.35	4.32	0.78	62.44	11.16
-18	448.97	86.14	4.49	0.86	64.90	12.29
-17	466.34	94.18	4.66	0.94	67.42	13.46
-16	484.10	102.50	4.84	1.03	69.99	14.66
-15	502.27	111.09	5.02	1.11	72.63	15.91
-14	520.83	119.97	5.21	1.20	75.32	17.20
-13	539.81	129.14	5.40	1.29	78.07	18.53
-12	559.19	138.60	5.59	1.39	80.88	19.90
-11	579.00	148.37	5.79	1.48	83.76	21.31
-10	599.22	158.45	5.99	1.58	86.69	22.78
-9	619.87	168.84	6.20	1.69	89.68	24.28
-8	640.96	179.55	6.41	1.80	92.74	25.83
-7	662.48	190.60	6.62	1.91	95.86	27.44
-6	684.44	201.98	6.84	2.02	99.04	29.09
-5	706.85	213.71	7.07	2.14	102.29	30.79
-4	729.71	225.79	7.30	2.26	105.61	32.54
-3	753.02	238.22	7.53	2.38	108.99	34.34
-2	776.79	251.02	7.77	2.51	112.43	36.20
-1	801.03	264.20	8.01	2.64	115.95	38.11
0	825.74	277.76	8.26	2.78	119.53	40.08
1	850.91	291.70	8.51	2.92	123.18	42.10
2	876.57	306.04	8.77	3.06	126.90	44.18
3	902.70	320.78	9.03	3.21	130.69	46.31
4	929.30	335.94	9.29	3.36	134.55	48.51
5	956.50	351.51	9.57	3.52	138.49	50.77
6	984.10	367.52	9.84	3.68	142.49	53.09
7	1012.20	383.95	10.12	3.84	146.57	55.47
8	1040.80	400.83	10.41	4.01	150.72	57.92
9	1069.90	418.17	10.70	4.18	154.94	60.43
10	1099.60	435.96	11.00	4.36	159.24	63.01
11	1129.70	454.22	11.30	4.54	163.61	65.66
12	1160.40	472.96	11.60	4.73	168.06	68.38
13	1191.60	492.18	11.92	4.92	172.58	71.17
14	1223.30	511.90	12.23	5.12	177.18	74.03
15	1255.60	532.12	12.56	5.32	181.86	76.96
16	1288.40	552.86	12.88	5.53	186.62	79.96
17	1321.70	574.12	13.22	5.74	191.45	83.05

TEMPERATURE	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)	BUBBLE PRESSURE (LIQUID)	DEW PRESSURE (VAPOUR)
(oC)	(kPag)	(kPag)	(barg)	(barg)	(psig)	(psig)
18	1355.60	595.90	13.56	5.96	196.36	86.21
19	1390.10	618.23	13.90	6.18	201.36	89.44
20	1425.10	641.11	14.25	6.41	206.44	92.76
21	1460.60	664.54	14.61	6.65	211.59	96.16
22	1496.70	688.54	14.97	6.89	216.82	99.64
23	1533.40	713.13	15.33	7.13	222.14	103.20
24	1570.70	738.30	15.71	7.38	227.55	106.85
25	1608.50	764.07	16.09	7.64	233.03	110.59
26	1646.90	790.44	16.47	7.90	238.60	114.41
27	1685.80	817.44	16.86	8.17	244.24	118.33
28	1725.40	845.07	17.25	8.45	249.98	122.34
29	1765.50	873.34	17.66	8.73	255.80	126.43
30	1806.30	902.30	18.06	9.02	261.71	130.63
31	1847.60	931.80	18.48	9.32	267.70	134.91
32	1889.50	962.10	18.90	9.62	273.78	139.30
33	1932.00	993.00	19.32	9.93	279.94	143.79
34	1975.10	1024.70	19.75	10.25	286.19	148.38
35	2018.80	1057.00	20.19	10.57	292.53	153.07
36	2063.20	1090.10	20.63	10.90	298.96	157.86
37	2108.10	1123.90	21.08	11.24	305.47	162.77
38	2153.60	1158.40	21.54	11.58	312.07	167.77
39	2199.80	1193.70	22.00	11.94	318.77	172.89
40	2246.60	1229.80	22.47	12.30	325.56	178.12
41	2293.90	1266.60	22.94	12.67	332.42	183.46
42	2341.90	1304.30	23.42	13.04	339.38	188.92
43	2390.60	1342.70	23.91	13.43	346.44	194.49
44	2439.80	1382.00	24.40	13.82	353.57	200.19
45	2489.70	1422.10	24.90	14.22	360.81	206.00
46	2540.20	1463.10	25.40	14.63	368.13	211.95
47	2591.30	1504.90	25.91	15.05	375.54	218.01
48	2643.10	1547.70	26.43	15.48	383.05	224.22
49	2695.50	1591.30	26.96	15.91	390.65	230.54
50	2748.50	1635.80	27.49	16.36	398.33	236.99
51	2802.10	1681.30	28.02	16.81	406.10	243.59
52	2856.40	1727.70	28.56	17.28	413.98	250.32
53	2911.30	1775.10	29.11	17.75	421.94	257.19
54	2966.80	1823.50	29.67	18.24	429.99	264.21
55	3022.90	1872.90	30.23	18.73	438.12	271.37
56	3079.70	1923.30	30.80	19.23	446.36	278.68
57	3137.00	1974.80	31.37	19.75	454.67	286.15
58	3195.00	2027.30	31.95	20.27	463.08	293.76
59	3253.60	2081.00	32.54	20.81	471.57	301.55
60	3312.80	2135.70	33.13	21.36	480.16	309.48
61	3372.70	2191.60	33.73	21.92	488.84	317.58
62	3433.10	2248.60	34.33	22.49	497.60	325.85
63	3494.10	2306.80	34.94	23.07	506.44	334.29
64	3555.60	2366.30	35.56	23.66	515.36	342.91
65	3617.80	2427.00	36.18	24.27	524.38	351.72
66	3680.50	2489.00	36.81	24.89	533.47	360.71
67	3743.70	2552.20	37.44	25.52	542.64	369.87
68	3807.50	2616.90	38.08	26.17	551.89	379.25
69	3871.80	2682.90	38.72	26.83	561.21	388.82
70	3936.60	2750.30	39.37	27.50	570.61	398.59
71	4001.90	2819.20	40.02	28.19	580.08	408.58
72	4067.60	2889.60	40.68	28.90	589.60	418.79
73	4133.80	2961.60	41.34	29.62	599.20	429.23
74	4200.40	3035.20	42.00	30.35	608.86	439.90
75	4267.30	3110.40	42.67	31.10	618.56	450.81
76	4334.50	3187.40	43.35	31.87	628.30	461.97
77	4402.00	3266.20	44.02	32.66	638.09	473.40
78	4469.80	3346.90	44.70	33.47	647.92	485.10
79	4537.60	3429.60	45.38	34.30	657.75	497.09
80	4605.60	3514.40	46.06	35.14	667.61	509.39
81	4673.50	3601.40	46.74	36.01	677.46	522.00
82	4741.30	3690.70	47.41	36.91	687.29	534.95
83	4808.80	3782.40	48.09	37.82	697.08	548.25
84	4875.90	3876.90	48.76	38.77	706.81	561.95
85	4942.30	3974.30	49.42	39.74	716.43	576.07
86	5007.80	4074.90	50.08	40.75	725.93	590.66
87	5072.10	4179.00	50.72	41.79	735.25	605.76
88	5134.70	4287.20	51.35	42.87	744.33	621.44
89	5194.90	4400.10	51.95	44.00	753.06	637.81
90	5252.00	4518.50	52.52	45.19	761.34	654.98