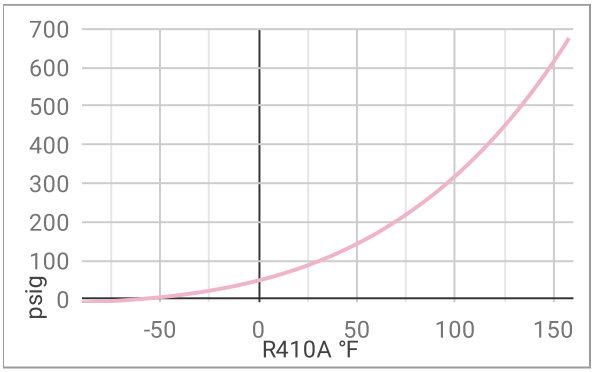
Heat exchangers
VZH Ostrava

https://www.heat-exchangers.uk/

R410A pressure temperature chart

Fahrenheit °F

The pressure shown **(psig)** is relative to atmospheric pressure. To calculate absolute pressure **(psia)**, add 1 bar (14.5 psi) to the gauge pressure.



	for vapor (condensing)		for liquid (evaporating)	
R410A °F	psig	bar(g)	psig	bar(g)
-90	-8.8	-0.60	-8.8	-0.61
-80	-6.5	-0.45	-6.5	-0.45
-70	-3.5	-0.24	-3.6	-0.25
-60	0.3	0.02	0.2	0.01
-50	5.0	0.34	4.9	0.34
-45	7.7	0.53	7.6	0.53
-40	10.8	0.74	10.7	0.74
-35	14.1	0.97	14.0	0.97
-30	17.8	1.23	17.7	1.22
-25	21.9	1.51	21.7	1.50
-20	26.3	1.82	26.2	1.81
-18	28.2	1.95	28.1	1.94
-16	30.2	2.08	30.0	2.07
-14	32.2	2.22	32.1	2.21
-12	34.3	2.37	34.1	2.35
-10	36.5	2.52	36.3	2.50
-8	38.7	2.67	38.5	2.66
-6	41.0	2.83	40.8	2.82
-4	43.4	2.99	43.2	2.98
-2	45.9	3.16	45.7	3.15
0	48.4	3.34	48.2	3.32
2	51.1	3.52	50.8	3.50
4	53.8	3.71	53.5	3.69
6	56.6	3.90	56.3	3.88

Výměníky tepla
Ostrava

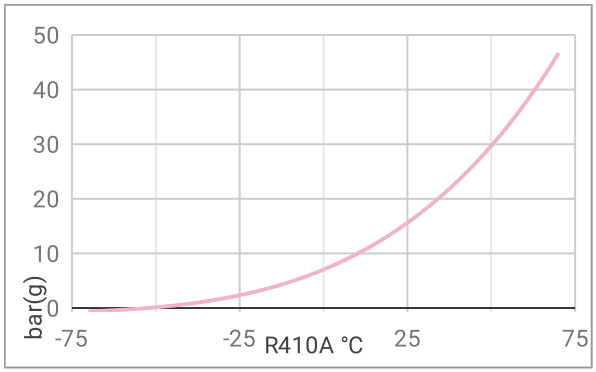
www.vymeniky-tepla.cz

R410A pressure temperature chart

Celsius °C

The pressure **bar(g)** shown is relative to atmospheric pressure. To calculate absolute pressure **bar(a)**, add 1 bar to the gauge pressure.

Zobrazený tlak je relativní **bar(g)** k atmosférickému tlaku. Pro výpočet absolutního tlaku **bar(a)** přidejte k naměřenému tlaku 1 bar.



	for vapor (condensing)		for liquid (evaporating)	
R410A °C	bar(g)	psig	bar(g)	psig
-70	-0.66	-9.5	-0.66	-9.6
-65	-0.53	-7.7	-0.53	-7.7
-60	-0.37	-5.4	-0.37	-5.4
-55	-0.17	-2.5	-0.17	-2.5
-50	0.08	1.1	0.07	1.0
-45	0.38	5.5	0.37	5.4
-40	0.74	10.8	0.74	10.7
-38	0.91	13.1	0.90	13.0
-36	1.08	15.7	1.08	15.6
-34	1.27	18.5	1.26	18.3
-32	1.47	21.4	1.46	21.2
-30	1.69	24.5	1.68	24.4
-28	1.92	27.8	1.91	27.7
-26	2.16	31.4	2.15	31.2
-24	2.42	35.2	2.41	35.0
-22	2.70	39.2	2.69	39.0
-20	2.99	43.4	2.98	43.2
-18	3.30	47.9	3.29	47.7
-16	3.63	52.7	3.62	52.4
-14	3.98	57.7	3.96	57.5
-12	4.34	63.0	4.33	62.8
-10	4.73	68.6	4.71	68.3
-8	5.1	74.5	5.1	74.2
-6	5.6	80.7	5.5	80.4

8	59.4	4.10	59.2	4.08
10	62.4	4.30	62.1	4.29
12	65.5	4.51	65.2	4.50
14	68.6	4.73	68.3	4.71
16	71.9	5.0	71.6	4.93
18	75.2	5.2	74.9	5.2
20	78.6	5.4	78.3	5.4
22	82.2	5.7	81.9	5.6
24	85.8	5.9	85.5	5.9
26	89.6	6.2	89.2	6.2
28	93.4	6.4	93.0	6.4
30	97.3	6.7	97.0	6.7
32	101	7.0	101	7.0
34	106	7.3	105	7.3
36	110	7.6	109	7.5
38	114	7.9	114	7.8
40	119	8.2	118	8.2
42	123	8.5	123	8.5
44	128	8.8	128	8.8
46	133	9.2	133	9.1
48	138	9.5	138	9.5
50	143	9.9	143	9.8
52	148	10.2	148	10.2
54	154	10.6	153	10.6
56	159	11.0	159	10.9
58	165	11.4	164	11.3
60	171	11.8	170	11.7
62	176	12.2	176	12.1
64	183	12.6	182	12.5
66	189	13.0	188	13.0
68	195	13.5	195	13.4
70	202	13.9	201	13.9
72	208	14.4	208	14.3
74	215	14.8	215	14.8
76	222	15.3	222	15.3
78	229	15.8	229	15.8
80	237	16.3	236	16.3
82	244	16.8	243	16.8
84	252	17.3	251	17.3
86	259	17.9	259	17.8
88	267	18.4	266	18.4
90	275	19.0	274	18.9
92	284	19.6	283	19.5
94	292	20.1	291	20.1
96	301	20.7	300	20.7
98	309	21.3	308	21.3
100	318	22.0	317	21.9
102	328	22.6	327	22.5
104	337	23.2	336	23.2

-4	6.0	87.3	6.0	87.0
-2	6.5	94.2	6.5	93.8
0	7.0	101	7.0	101
2	7.5	109	7.5	109
4	8.1	117	8.0	117
6	8.6	125	8.6	125
8	9.2	134	9.2	134
10	9.9	143	9.8	143
12	10.5	153	10.5	152
14	11.2	162	11.2	162
16	11.9	173	11.9	172
18	12.7	184	12.6	183
20	13.5	195	13.4	195
22	14.3	207	14.2	206
24	15.1	219	15.1	219
26	16.0	232	16.0	232
28	16.9	246	16.9	245
30	17.9	259	17.8	259
32	18.9	274	18.8	273
34	19.9	289	19.8	288
36	21.0	304	20.9	303
38	22.1	320	22.0	319
40	23.2	337	23.2	336
42	24.4	354	24.4	353
44	25.7	372	25.6	371
46	27.0	391	26.9	390
48	28.3	410	28.2	409
50	29.7	430	29.6	429
52	31.1	451	31.0	450
54	32.6	473	32.5	472
56	34.2	495	34.1	494
58	35.8	519	35.7	517
60	37.4	543	37.3	542
62	39.1	567	39.1	566
64	40.9	593	40.8	592
66	42.7	620	42.7	619
68	44.6	647	44.6	647
70	46.6	676	46.6	675

Refrigerant **R410A is a mixture of several refrigerants** with different condensing temperatures. Thus, two temperatures are indicated: **a) Boiling Temperature,** where the liquid refrigerant starts to boil and becomes vapor; **b) Condensing Temperature,** where the vapor refrigerant begins to condense.

Chladivo **R410A je směsí více chladiv.** Tato dílčí chladiva mají vlastní teploty, při kterých kondenzují. Proto se pro chladiva R407C, R410A uvádějí dvě teploty: **a)** kdy chladivo začíná vřít a **b)** kdy chladivo začíná kondenzovat.

106	346	23.9	345	23.8
108	356	24.6	355	24.5
110	366	25.2	365	25.2
112	376	25.9	375	25.9
114	387	26.7	386	26.6
116	397	27.4	396	27.3
118	408	28.1	407	28.1
120	419	28.9	418	28.8
122	430	29.7	429	29.6
124	442	30.5	441	30.4
126	454	31.3	453	31.2
128	466	32.1	464	32.0
130	478	32.9	477	32.9
132	490	33.8	489	33.7
134	503	34.7	502	34.6
136	516	35.6	515	35.5
138	529	36.5	528	36.4
140	543	37.4	542	37.3
142	556	38.4	555	38.3
144	570	39.3	569	39.3
146	585	40.3	584	40.2
148	599	41.3	598	41.2
150	614	42.3	613	42.3
152	629	43.4	628	43.3
154	644	44.4	644	44.4
156	660	45.5	659	45.5
158	676	46.6	675	46.6

Refrigerant **R410A is a mixture of several refrigerants** with different condensing temperatures. Thus, two temperatures are indicated: **a) Boiling Temperature,** where the liquid refrigerant starts to boil and becomes vapor; **b) Condensing Temperature,** where the vapor refrigerant begins to condense.