

PRESSURE - TEMPERATURE RATINGS ASME B16.34 - 1996 - STANDARD CLASS

ASTM A216 Gr. WCB

TEMP °F	WORKING PRESSURE (in psig) BY CLASS					
	150	300	600	900	1500	2500
-20 to 100	285	740	1480	2220	3705	6170
200	260	675	1350	2025	3375	5625
300	230	655	1315	1970	3280	5470
400	200	635	1270	1900	3170	5280
500	170	600	1200	1795	2995	4990
600	140	550	1095	1640	2735	4560
650	125	535	1075	1610	2685	4475
700	110	535	1065	1600	2665	4440
750	95	505	1010	1510	2520	4200
800	80	410	825	1235	2060	3430
850	65	270	535	805	1340	2230
900	50	170	345	515	860	1430
950	35	105	205	310	515	860
1000	20	50	105	155	260	430

Not recommended for prolonged use above 800°F

TEMP °C	WORKING PRESSURE (in bar) BY RATING					
	PN 20	PN 50	PN 100	PN 150	PN 250	PN 420
38	19.7	51.0	102.1	153.1	255.5	425.5
93	17.9	46.6	93.1	139.7	232.8	387.9
149	15.9	45.2	90.7	135.9	226.2	377.2
204	13.8	43.8	87.6	131.0	218.6	363.4
260	11.7	41.4	82.8	123.8	206.6	344.1
316	9.7	37.9	75.5	113.1	188.6	314.5
343	8.6	36.9	74.1	111.0	185.2	308.6
371	7.6	36.9	73.4	110.3	183.8	306.2
399	6.6	34.8	69.7	104.1	173.8	289.7
427	5.5	28.3	56.9	85.2	142.1	236.6
454	4.5	18.6	36.9	55.5	92.4	153.8
482	3.4	11.7	23.8	35.5	59.3	98.6
510	2.4	7.2	14.1	21.4	35.5	59.3
538	1.4	3.4	7.2	10.7	17.9	29.7

ASTM A217 Gr WC6

TEMP °F	WORKING PRESSURE (in psig) BY CLASS					
	150	300	600	900	1500	2500
-20 to 100	290	750	1500	2250	3750	6250
200	260	750	1500	2250	3750	6250
300	230	720	1445	2165	3610	6015
400	200	695	1385	2080	3465	5775
500	170	665	1330	1995	3325	5540
600	140	605	1210	1815	3025	5040
650	125	590	1175	1765	2940	4905
700	110	570	1135	1705	2840	4730
750	95	530	1065	1595	2660	4430
800	80	510	1015	1525	2540	4230
850	65	485	975	1460	2435	4060
900	50	450	900	1350	2245	3745
950	35	320	640	955	1595	2655
1000	20	215	430	650	1080	1800
1050	20(1)	145	290	430	720	1200
1100	20(1)	95	190	290	480	800
1150	20(1)	60	125	185	310	515
1200	15(1)	40	75	115	190	315

(1) : For weld end valves only.

TEMP °C	WORKING PRESSURE (in bar) BY RATING					
	PN 20	PN 50	PN 100	PN 150	PN 250	PN 420
38	20.0	51.7	103.4	155.1	258.6	431.0
93	17.9	51.7	103.4	155.2	258.6	431.0
149	15.9	49.7	9.7	149.3	249.0	414.8
204	13.8	47.9	95.5	143.4	239.0	398.3
260	11.7	45.9	91.7	137.6	229.3	382.1
316	9.7	41.7	83.4	125.2	208.6	347.6
343	8.6	40.7	81.0	121.7	202.8	338.3
371	7.6	39.3	78.3	117.6	195.9	326.2
399	6.6	36.6	73.4	110.0	183.4	305.5
427	5.5	35.2	70.0	105.2	175.2	291.7
454	4.5	33.4	67.2	100.7	167.9	280.0
482	3.4	31.0	62.1	93.1	154.8	258.3
510	2.4	22.1	44.1	65.9	110.0	183.1
538	1.4	14.8	29.7	44.8	74.5	124.1
566	1.4(1)	10.0	20.0	29.7	49.7	82.8
593	1.4(1)	6.6	13.1	20.0	33.1	55.2
621	1.4(1)	4.1	8.6	12.8	21.4	35.5
649	1.0(1)	2.8	5.2	7.9	13.1	21.7

Not to be used over 1100°F(593°C) for flanged ends.

ASTM A217 Gr. WC9

TEMP °F	WORKING PRESSURE (in psig) BY CLASS					
	150	300	600	900	1500	2500
-20 to 100	290	750	1500	2250	3750	6250
200	260	750	1500	2250	3750	6250
300	230	730	1455	2185	3640	6070
400	200	705	1410	2115	3530	5880
500	170	665	13300	1995	3325	5540
600	140	605	1210	1815	3025	5040
650	125	590	1175	1765	2940	4905
700	110	570	1135	1705	2840	4730
750	95	530	1065	1595	2660	4430

950	80	510	1015	1525	2450	4230
1000	65	485	975	1460	2435	4060
1050	50	450	900	1350	2245	3745
800	35	375	755	1130	1885	3145
850	20	260	520	780	1305	2170
900	20(1)	175	350	525	875	1455
1100	20(1)	110	220	330	550	915
1150	20(1)	--	--	--	--	--
1200	20(1)	--	--	--	--	--

(1) : For weld end valves only.

TEMP °C	WORKING PRESSURE (in bar) BY RATING					
	PN 20	PN 50	PN 100	PN 150	PN 250	PN 420
38	20.0	51.7	103.4	155.2	258.6	431.0
93	17.9	51.7	103.4	155.2	258.6	431.0
149	15.9	50.3	100.3	150.7	251.0	418.6
204	13.8	48.6	97.2	145.9	243.4	405.5
260	11.7	45.9	91.7	137.6	229.3	382.1
316	9.7	41.7	83.4	125.2	208.6	347.6
343	8.6	40.7	81.0	121.7	202.8	338.3
371	7.6	39.3	78.3	117.6	195.9	326.2
399	6.6	36.6	73.4	110.0	183.4	305.5
427	5.5	35.2	70.0	105.2	175.2	291.7
454	4.5	33.4	67.2	100.7	167.9	280.0
482	3.4	31.0	62.1	93.1	154.8	258.3

510	2.4	25.9	52.1	77.9	130.0	216.9
538	1.4	17.9	35.9	53.8	90.0	149.7
566	1.4(1)	12.1	24.1	36.2	60.3	100.3
593	1.4(1)	7.6	15.2	22.8	37.9	63.1
621	1.4(1)	4.8	9.3	14.1	23.8	39.3
649	1.4(1)	2.8	5.5	8.6	14.1	23.8

Not to be used over 1100°F(593°C) for flanged ends.