

Pressure-temperature Ratings for Forged Steel Valves

RATINGS ARE IN ACCORDANCE WITH ASME B16.34-2004, STANDARD CLASS. - PRESSURE (PSIG)

	CLASS 150					CLASS 300					CLASS 600					CLASS 800					CLASS 1500					
SERVICE	A105	F316	F11	F22	LF2	A105	F316	F11	F22	LF2	A105	F316	F11	F22	LF2	A105	F5	F316	316H	LF2	F9	F11	F22	A105	F5	F316
TEMP																										
-50 F		275			285		720			740		1440			1480			1920		1975						3600
-20 TO 100 F	285	275	290	290	285	740	720	750	750	740	1480	1440	1500	1500	1480	1975	2000	1920	1920	1975	2000	2000	2000	3705	3750	3600
200 F	260	235	260	260	260	680	620	750	750	680	1360	1240	1500	1500	1360	1810	1965	1655	1655	1810	2000	2000	2000	3395	3680	3095
300 F	230	215	230	230	230	655	560	720	720	655	1310	1120	1445	1445	1310	1745	1865	1495	1495	1745	1940	1925	1940	3270	3495	2795
400 F	200	195	200	200	200	635	515	695	695	635	1265	1025	1385	1410	1265	1690	1780	1370	1370	1690	1880	1850	1880	3170	3345	2570
500 F	170	170	170	170	170	605	480	665	665	605	1205	955	1330	1330	1205	1610	1725	1275	1275	1610	1775	1775	1775	3015	3230	2390
600 F	140	140	140	140	140	570	450	605	605	570	1135	900	1210	1210	1135	1515	1615	1205	1205	1515	1615	1615	1615	2840	3025	2255
650 F	125	125	125	125	125	550	440	590	590	550	1100	885	1175	1175	1100	1465	1570	1180	1185	1465	1570	1570	1570	2745	2940	2210
700 F	110	110	110	110	110	530	435	570	570	530	1060	870	1135	1135	1060	1415	1515	1160	1160	1415	1515	1515	1515	2655	2840	2170
750 F	95	95	95	95	95	505	425	530	530	505	1015	855	1065	1065	1015	1350	1420	1140	1140	1350	1420	1420	1420	2535	2660	2135
800 F	80	80	80	80	80	410	420	510	510	410	825	845	1015	1015	825	1100	1355	1125	1125	1100	1355	1355	1355	2055	2540	2110
850 F	65	65	65	65	65	320	420	485	485	320	640	835	975	975	640	850	1300	1115	1115	850	1300	1300	1300	1595	2435	2090
900 F	50	50	50	50	50	230	415	450	450	230	460	830	900	900	460	615	995	1105	1105	615	1200	1200	1200	1150	1870	2075
950 F	35	35	35	35	35	135	385	320	385	135	275	775	640	755	275	365	735	1030	1030	365	1005	850	1030	685	1370	1930
1000 F	20	20	20	20	20	85	365	215	265	85	170	725	430	535	170	225	530	970	970	225	675	575	710	430	995	1820
1050 F								145	175				290	350			385		960		460	385	465		720	
1100 F								95	110				190	220			255		815		300	255	295		480	
1150 F								65	70				130	135			165		630		200	175	180		310	
1200 F								40	40				80	80			95		495		140	110	110		170	
1250 F																			390							
1300 F																			310							
1350 F																			255							
1400 F																			200							
1450 F																			155							
1500 F																			110							

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	CLASS 150					CLASS 300					CLASS 600					CLASS 800							CLASS 1500			
SERVICE TEMP	A105	F316	F11	F22	LF2	A105	F316	F11	F22	LF2	A105	F316	F11	F22	LF2	A105	F5	F316	316H	LF2	F9	F11	F22	A105	F5	F316
-46 C		19.0			19.6		49.6			51.1		99.3			102.1			132.4		136.2						248.2
-29 TO 38C	19.6	19.0	19.8	19.8	19.6	51.1	49.6	51.7	51.7	51.1	102.1	99.3	103.4	103.4	102.1	136.2	137.9	132.4	132.4	136.2	137.9	137.9	137.9	255.3	258.6	248.2
50 C	19.2	18.4	19.5	19.5	19.2	50.1	48.1	51.7	51.7	50.1	100.2	96.2	103.4	103.4	100.2	133.7	137.3	128.3	128.3	133.7	137.9	137.9	137.9	250.6	257.5	240.6
100 C	17.7	16.2	17.7	17.7	17.7	46.6	42.2	51.5	51.5	46.6	93.2	84.4	103.0	103.0	93.2	124.3	134.5	112.5	112.5	124.3	137.4	137.3	137.4	233.0	252.2	211.0
150 C	15.8	14.8	15.8	15.8	15.8	45.1	38.5	49.7	50.3	45.1	90.2	77.0	99.5	100.3	90.2	120.2	128.5	102.7	102.7	120.2	133.8	132.6	133.8	225.4	240.9	192.5
200 C	13.8	13.7	13.8	13.8	13.8	43.8	35.7	48.0	48.6	43.8	87.6	71.3	95.9	97.2	87.6	116.8	123.4	95.1	95.1	116.8	129.6	127.9	129.6	219.0	231.3	178.3
250 C	12.1	12.1	12.1	12.1	12.1	41.9	33.4	46.3	46.3	41.9	83.9	66.8	92.7	92.7	83.9	111.8	119.5	89.0	89.0	111.8	123.6	123.6	123.6	209.7	224.1	166.9
300 C	10.2	10.2	10.2	10.2	10.2	39.8	31.6	42.9	42.9	39.8	79.6	63.2	85.7	85.7	79.6	106.2	114.3	84.3	84.3	106.2	114.3	114.3	114.3	199.1	214.4	158.1
325 C	9.3	9.3	9.3	9.3	9.3	38.7	30.9	41.4	41.4	38.7	77.4	61.8	82.6	82.6	77.4	103.2	110.2	82.4	82.4	103.2	110.2	110.2	110.2	193.6	206.6	154.4
350 C	8.4	8.4	8.4	8.4	8.4	37.6	30.3	40.3	40.3	37.6	75.1	60.7	80.4	80.4	75.1	100.2	107.3	80.9	80.9	100.2	107.3	107.3	107.3	187.8	201.1	151.6
375 C	7.4	7.4	7.4	7.4	7.4	36.4	29.9	38.9	38.9	36.6	72.7	59.7	77.6	77.6	72.7	97.0	103.5	79.7	79.7	97.0	103.5	103.5	103.5	181.8	194.1	149.4
400 C	6.5	6.5	6.5	6.5	6.5	34.7	29.4	36.5	36.5	34.7	69.4	58.9	73.3	73.3	69.4	92.6	97.6	78.5	78.5	92.6	97.6	97.6	97.6	173.6	183.1	147.2
425 C	5.5	5.5	5.5	5.5	5.5	28.8	29.1	35.2	35.2	28.8	57.5	58.3	70.0	70.0	57.5	76.7	93.4	77.7	77.7	76.7	93.4	93.4	93.4	143.8	175.1	145.7
450 C	4.6	4.6	4.6	4.6	4.6	23.0	28.8	33.7	33.7	23.0	46.0	57.7	67.7	67.7	46.0	61.3	90.2	76.9	76.9	61.3	90.2	90.2	90.2	115.0	169.0	144.2
475 C	3.7	3.7	3.7	3.7	3.7	17.4	28.7	31.7	31.7	17.4	34.9	57.3	63.4	63.4	34.9	46.5	74.3	76.4	76.4	46.5	84.5	84.5	84.5	87.2	139.3	143.4
500 C	2.8	2.8	2.8	2.8	2.8	11.8	28.2	25.7	28.2	11.8	23.5	56.5	51.5	56.5	23.5	31.4	57.0	75.3	75.3	31.4	75.3	68.6	75.3	58.8	106.9	140.9
538 C	1.4	1.4	1.4	1.4	1.4	5.9	25.2	14.9	18.4	5.9	11.8	50.0	29.8	36.9	11.8	15.7	36.5	66.8	66.8	15.7	46.7	39.7	49.2	29.5	68.6	125.5
550 C								12.7	15.6				25.4	31.3			32.1		66.5		40.0	33.9	41.7		60.2	
575 C								8.8	10.5				17.6	21.1			23.5		63.8		27.9	23.5	28.1		44.0	
600 C								6.1	6.9				12.2	13.8			16.2		53.1		19.1	16.3	18.4		30.3	
625 C								4.3	4.5				8.5	8.9			10.7		42.1		13.2	11.4	11.9		20.0	
650 C								2.8	2.8				5.7	5.7			6.3		33.8		9.4	7.6	7.6		11.8	
675 C																			27.5							
700 C																			22.3							
725 C																			18.7							
750 C																			15.6							
775 C																			12.1							
800 C																			9.3							
816 C																			7.7							

A105 ASTM A105 (2)
 LF2 ASTM A350 FL2 (2)
 F316 ASTM A182 F316/F316L (1)
 316H ASTM A182 F316H
 F5 ASTM A182 F5
 F9 ASTM A182 F9
 F91 ASTM A182 F91
 F11 ASTM A182 F11 Cl 2 (3) (4)
 F22 ASTM A182 F22 Cl 3 (3)

(1) F316 Stainless Steel containing Max. Carbon of .030 - Do not use above 1000 F (538C)
 (2) A105 & LF2 are permitted but not recommended for prolonged use above 800 F (427C)
 (3) F11 & F22 are permitted but not recommended for prolonged use above 1100 F (593C)
 (4) F11 to be Normalized and Tempered only