

## Gate/Globe/Check **PRESSURE-TEMPERATURE RATINGS** FORGED STEEL

### Class 150/300/600

WORKING PRESSURE BY CLASS, psig																					
Temp °F	Carbon Steel (A105, A350-LF2)			F5			F11			F22			F304 F304H			F316 F316H			F304L F316L		
	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600
-20 to 100	285	740	1480	290	750	1500	290	750	1500	290	750	1500	275	720	1440	275	720	1440	230	600	1200
200	260	675	1350	260	745	1490	260	750	1500	260	750	1500	230	600	1200	235	620	1240	195	505	1015
300	230	655	1315	230	715	1430	230	720	1445	230	730	1455	205	540	1080	215	560	1120	175	455	910
400	200	635	1270	200	705	1410	200	695	1385	200	705	1410	190	495	995	195	515	1025	160	415	825
500	170	600	1200	170	665	1330	170	665	1330	170	665	1330	170	465	930	170	480	955	145	380	765
600	140	550	1095	140	605	1210	140	605	1210	140	605	1210	140	435	875	140	450	900	140	360	720
650	125	535	1075	125	590	1175	125	590	1175	125	590	1175	125	430	860	125	445	890	125	350	700
700	110	535	1065	110	570	1135	110	570	1135	110	570	1135	110	425	850	110	430	870	110	345	685
750	95	505	1010	95	530	1055	95	530	1065	95	530	1065	95	415	830	95	425	855	95	335	670
800	80	410	825	80	510	1015	80	510	1015	80	510	1015	80	405	805	80	420	845	80	330	660
850	65	270	535	65	485	965	65	485	975	65	485	975	65	395	790	65	420	835	65	320	645
900	50	170	345	50	370	740	50	450	900	50	450	900	50	390	780	50	415	830			
950				35	275	550	35	320	640	35	375	755	35	380	765	35	385	775			
1000				20	200	400	20	215	430	20	260	520	20	320	640	20	350	700			
1050					145	290		145	290		175	350		310	615		345	685			
1100					100	200		95	190		110	220		255	515		305	610			
1150					60	125		60	125		70	135		200	400		235	475			
1200					35	70		40	75		40	80		155	310		185	370			
1250														115	225		145	295			
1300														85	170		115	235			

### Class 800/1500/2500

WORKING PRESSURE BY CLASS, psig																					
Temp °F	Carbon Steel (A105, A350-LF2)			F5			F11			F22			F304 F304H			F316 F316H			F304L F316L		
	800	1500	2500	800	1500	2500	800	1500	2500	800	1500	2500	800	1500	2500	800	1500	2500	800	1500	2500
-20 to 100	1975	3705	6170	2000	3750	6250	2000	3750	6250	2000	3750	6250	1920	3600	6000	1920	3600	6000	1600	3000	5000
200	1800	3375	5625	2000	3725	6205	1900	3750	6250	1910	3750	6250	1600	3000	5000	1655	3095	5160	1350	2530	4220
300	1750	3280	5470	1940	3580	5965	1795	3610	6015	1805	3640	6070	1410	2700	4500	1495	2795	4660	1210	2270	3780
400	1690	3170	5280	1880	3530	5880	1755	3465	5775	1730	3530	5880	1255	2485	4140	1370	2570	4280	1100	2065	3440
500	1595	2995	4990	1775	3325	5540	1710	3325	5540	1705	3325	5540	1165	2330	3880	1275	2390	3980	1020	1910	3180
600	1460	2735	4560	1615	3025	5040	1615	3025	5040	1615	3025	5040	1105	2185	3640	1205	2255	3760	960	1800	3000
650	1430	2685	4475	1570	2940	4905	1570	2940	4905	1570	2940	4905	1090	2150	3580	1185	2220	3700	935	1750	2920
700	1420	2665	4440	1515	2840	4730	1515	2840	4730	1515	2840	4730	1075	2125	3540	1150	2170	3620	915	1715	2860
750	1345	2520	4200	1420	2640	4400	1420	2660	4430	1420	2660	4430	1060	2075	3460	1130	2135	3560	895	1680	2800
800	1100	2060	3430	1325	2540	4230	1355	2540	4230	1355	2540	4230	1050	2015	3360	1105	2110	3520	875	1645	2740
850	715	1340	2230	1170	2415	4030	1300	2435	4060	1300	2435	4060	1035	1980	3300	1080	2090	3480	860	1610	2680
900	460	860	1430	940	1850	3085	1200	2245	3745	1200	2245	3745	1025	1945	3240	1050	2075	3460			
950				695	1370	2285	1005	1595	2655	1005	1885	3145	1000	1910	3180	1030	1930	3220			
1000				510	995	1655	595	1080	1800	715	1305	2170	860	1605	2675	970	1750	2915			
1050				375	720	1200	365	720	1200	530	875	1455	825	1545	2570	960	1720	2865			
1100				275	495	830	225	480	800	300	550	915	685	1285	2145	860	1525	2545			
1150				185	310	515	140	310	515	275	345	570	520	995	1655	735	1185	1970			
1200				120	170	285	95	190	315	145	205	345	415	770	1285	550	925	1545			
1250													295	565	945	485	735	1230			
1300													220	430	715	365	585	970			

- 1.0 Following grades permissible but not recommended for prolonged use:
  - 1.1 Carbon steel A105, over 850°F
  - 1.2 F11 and F22 over 1100°F
  - 1.3 F304L over 800°F
  - 1.4 F316L over 850°F
- 2.0 Temperature limitation for material grades not listed, see: B16.5, B16.34 and API 602.
- 3.0 Types and grades of material used for bolting and gaskets, also influence temperature limitation.

### Class 1690/2680/4500

WORKING PRESSURE BY CLASS, psig												
Temp °F	Carbon Steel (A105, A350-LF2)			F11			F22			F316 F316H		
	1690	2680	4500	1690	2680	4500	1690	2680	4500	1690	2680	4500
-20 to 100	4175	6615	11110	4225	6700	11250	4225	6700	11250	4055	6430	10800
200	3805	6030	10120	4225	6700	11250	4225	6700	11250	3485	5530	9290
300	3700	5865	9845	4065	6450	10830	4100	6505	10925	3150	4995	8390
400	3570	5660	9505	3905	6190	10400	3975	6305	10585	2895	4590	7705
500	3375	5350	8980	3745	5940	9965	3745	5940	9965	2690	4265	7165
600	3080	4890	8210	3410	5405	9070	3405	5405	9070	2540	4030	6770
650	3025	4795	8055	3315	5260	8825	3315	5260	8825	2500	3965	6660
700	3005	4760	7990	3200	5070	8515	3200	5070	8515	2445	3880	6515
750	2840	4500	7560	2995	4750	7970	2995	4750	7970	2405	3815	6410
800	2320	3675	6170	2860	4535	7610	2860	4535	7610	2380	3775	6335
850	1510	2390	4010	2745	4350	7305	2745	4350	7305	2355	3730	6265
900				2530	4015	6740	2530	4015	6740	2340	3710	6230
950				1795	2845	4785	2125	3370	5665	2175	3450	5795
1000				1215	1930	3240	1470	2325	3910	1970	3125	5245
1050				810	1285	2160	985	1560	2625	1935	3070	5155
1100				540	860	1440	620	980	1645	1720	2725	4575
1150				350	550	925	390	610	1030	1335	2110	3550
1200				215	335	565	230	370	615	1045	1655	2775
1250										830	1320	2210
1300										660	1040	1750

- 1.0 Following grades permissible but not recommended for prolonged use:
  - 1.1 Carbon steel A105, over 850°F
  - \*1.2 F11 and F22 over 1100°F
  - 1.3 F304L over 800°F
  - 1.4 F316L over 850°F
- 2.0 Temperature limitation for material grades not listed, see: B16.5, B16.34 and API 602.
- 3.0 Types and grades of material used for bolting and gaskets, also influence temperature limitation.