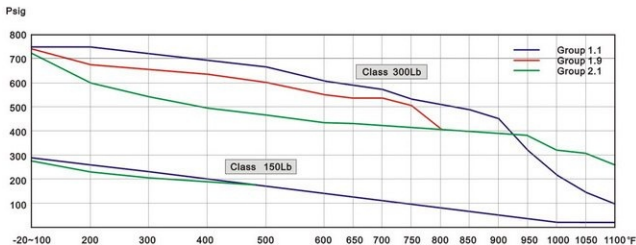




# ANSI CLASS PRESSURE-TEMPERATURE RATINGS 150LB/300LB



ASME B16.34 Maximum Allowable Non-shock Pressure

Paig

TEMPERATURE		ASTM MATERIALS																	
		ANSI Class 150Lb									ANSI Class 300Lb								
°F	°C	Group 1.1	Group 1.2	Group 1.3	Group 1.9	Group 1.10	Group 1.11	Group 1.13	Group 2.1	Group 2.2	Group 1.1	Group 1.2	Group 1.3	Group 1.9	Group 1.10	Group 1.13	Group 2.1	Group 2.2	
-20-100	-20-38	285	290	265	290	290	290	275	275	740	750	695	750	750	750	750	720	720	
200	93	260	260	250	260	260	260	230	235	670	750	655	750	750	745	600	620		
300	149	230	230	230	230	230	230	205	215	655	730	640	720	730	715	540	560		
400	204	200	200	200	200	200	200	190	195	635	705	620	695	705	705	495	515		
500	260	170	170	170	170	170	170	170	170	600	665	585	665	665	665	465	480		
600	316	140	140	140	140	140	140	140	140	550	605	535	605	605	605	435	450		
650	343	125	125	125	125	125	125	125	125	535	590	525	590	590	590	430	445		
700	371	110	110		110	110	110	110	110	535	570		570	570	570	425	430		
750	399	95	95		95	95	95	95	95	505	505		530	530	530	415	425		
800	427	80	80		80	80	80	80	80	410	410		510	510	510	405	420		
850	454				65	65	65	65	65				485	485	485	395	420		
900	482				50	50	50	50	50				450	450	370	390	415		
950	510				35	35	35	35	35				320	375	275	380	385		
1000	538				20	20	20	20	20				215	260	200	320	350		
1050	566				20 <sup>(b)</sup>	20 <sup>(b)</sup>	20 <sup>(b)</sup>	20 <sup>(b)</sup>	20 <sup>(b)</sup>				145	175	145	310	345		
1100	593				20 <sup>(b)</sup>	20 <sup>(b)</sup>	20 <sup>(b)</sup>	20 <sup>(b)</sup>	20 <sup>(b)</sup>				95	110	100	255	305		

TEST PRESSURE BY API 598

Hydrostatic Shell Test	450	450	400	450	450	450	425	425	1125	1125	1050	1125	1125	1125	1100	1100	
Hydrostatic Seal Test	315	320	295	320	320	320	305	305	815	815	765	825	825	825	795	795	
Air Seal Test				80±20													

METRIC CONVERSIONS by API STD 2564

◆ PRESSURE: 1 Pound Per Square Inch (Paig) = 0.06894757 bar = 0.006894757 Mpa ◆ TEMPERATURE: °C = (5/9)(°F - 32)

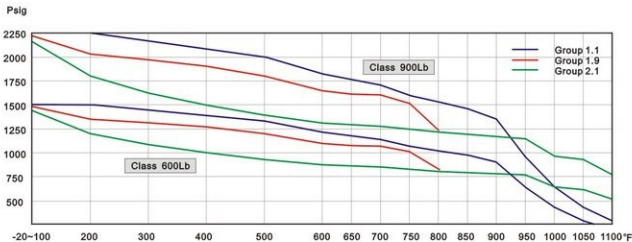
ASME B16.34 Materials Group

Group 1.1	A105 <sup>(a)</sup>	A216-WCB <sup>(a)</sup>	
Group 1.2	A216-WCC <sup>(a)</sup>	A352-LCC <sup>(a)</sup>	
Group 1.3	A352-LCB <sup>(a)</sup>		
Group 1.9	A217-WC6 <sup>(b)</sup>		
Group 1.10	A217-WC9 <sup>(b)</sup>		
Group 1.13	A217-C5		
Group 2.1	A182-F304	A351-CF8	A351-CF3 <sup>(c)</sup>
Group 2.2	A182-F316	A352-CF8M	A351-CF3M <sup>(d)</sup>

- Not to be used over 650 °F (343°C).
- Not to be used over 800 °F (427°C).
- Not to be used over 1000 °F (538°C).
- Not to be used over 1100 °F (593°C).
- Permissible, but not recommended for prolonged use above 800 °F (427°C).
- For welding end valve only. Flanged end rating terminates at 1000 °F (538°C).



# ANSI CLASS PRESSURE-TEMPERATURE RATINGS 600LB/900LB



## ASME B16.34 Maximum Allowable Non-shock Pressure

Psig

TEMPERATURE		ASTM MATERIALS															
		ANSI Class 600Lb								ANSI Class 900Lb							
		Group 1.1	Group 1.2	Group 1.3	Group 1.9	Group 1.10	Group 1.13	Group 2.1	Group 2.2	Group 1.1	Group 1.2	Group 1.3	Group 1.9	Group 1.10	Group 1.13	Group 2.1	Group 2.2
°F	°C																
-20~100	-20~38	1480	1500	1390	1500	1500	1500	1440	1440	2220	2250	2085	2250	2250	2250	2160	2160
200	93	1350	1500	1315	1500	1500	1490	1200	1240	2025	2250	1970	2250	2250	2235	1800	1860
300	149	1315	1455	1275	1445	1455	1430	1080	1120	1970	2185	1915	2165	2185	2150	1620	1680
400	204	1270	1410	1235	1385	1410	1410	995	1025	1900	2115	1850	2080	2115	2115	1490	1540
500	260	1200	1330	1165	1330	1330	1330	930	955	1795	1995	1745	1995	1995	1995	1395	1435
600	316	1095	1210	1065	1210	1210	1210	875	900	1640	1815	1600	1815	1815	1815	1310	1355
650	343	1075	1175	1045	1175	1175	1175	860	890	1610	1765	1570	1765	1765	1765	1290	1330
700	371	1065	1135		1135	1135	1135	850	870	1600	1705		1705	1705	1705	1275	1305
750	399	1010	1010		1065	1065	1055	830	855	1510	1510		1595	1595	1585	1245	1280
800	427	825	825		1015	1015	1015	805	845	1235	1235		1525	1525	1525	1210	1265
850	454				975	975	965	790	835				1460	1460	1450	1190	1255
900	482				900	900	740	780	830				1350	1350	1110	1165	1245
950	510				640	755	550	765	775				955	1130	825	1145	1165
1000	538				430	520	400	640	700				650	780	595	965	1050
1050	566				290	350	290	615	685				430	525	430	925	1030
1100	593				190	220	200	515	610				290	330	300	770	915

### TEST PRESSURE BY API 588

Hydrostatic Shell Test	2225	2225	2100	2250	2250	2250	2175	2175	3350	3375	3150	3375	3375	3375	3375	3250	3250
Hydrostatic Seal Test	1630	1650	1530	1650	1650	1650	1585	1585	2445	2475	2295	2475	2475	2475	2475	2380	2380
Air Seal Test	80±20																

METRIC CONVERSIONS by API STD 2664

◆ PRESSURE: 1 Pound Per Square Inch (Psig) = 0.06894757 bar = 0.006894757 Mpa ◆ TEMPERATURE: °C = (5/9)(°F - 32)

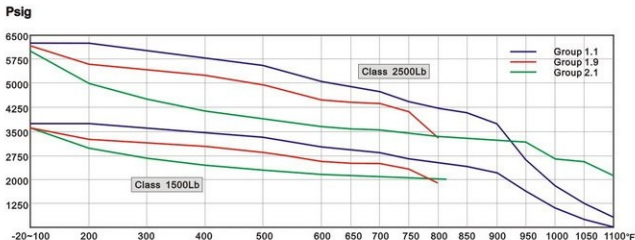
### ASME B16.34 Materials Group

Group 1.1	A105 <sup>a)</sup>	A216-WCB <sup>b)</sup>	
Group 1.2	A216-WCC <sup>c)</sup>	A352-LCC <sup>c)</sup>	
Group 1.3	A352-LCB <sup>d)</sup>		
Group 1.9	A217-WC6 <sup>e)</sup>		
Group 1.10	A217-WC9 <sup>e)</sup>		
Group 1.13	A217-C5		
Group 2.1	A182-F304	A351-CF8	A351-CF3 <sup>f)</sup>
Group 2.2	A182-F316	A352-CF8M	A351-CF3M <sup>f)</sup>

- Not to be used over 650 °F (343°C).
- Not to be used over 800 °F (427°C).
- Not to be used over 1000 °F (538°C).
- Not to be used over 1100 °F (593°C).
- Permissible, but not recommended for prolonged use above 800 °F (427°C).



# ANSI CLASS PRESSURE-TEMPERATURE RATINGS 1500LB/2500LB



## ASME B16.34 Maximum Allowable Non-shock Pressure

Psig

TEMPERATURE		ASTM MATERIALS															
		ANSI Class 1500Lb								ANSI Class 2500Lb							
°F	°C	Group 1.1	Group 1.2	Group 1.3	Group 1.9	Group 1.10	Group 1.13	Group 2.1	Group 2.2	Group 1.1	Group 1.2	Group 1.3	Group 1.9	Group 1.10	Group 1.13	Group 2.1	Group 2.2
-20~100	-20~38	3705	3750	3470	3750	3750	3750	3600	3600	6170	6250	5785	6250	6250	6250	6000	6000
200	93	3375	3750	3280	3750	3750	3750	3000	3095	5625	6250	5470	6250	6250	6250	5000	5160
300	149	3280	3640	3190	3610	3640	3580	2700	2795	5470	6070	5315	6015	6070	5965	4500	4680
400	204	3170	3530	3085	3465	3530	3530	2485	2570	5280	5880	5145	5775	5880	5880	4140	4280
500	260	2995	3325	2910	3325	3325	3325	2330	2390	4990	5540	4850	5540	5540	3880	3980	
600	316	2735	3025	2665	3025	3025	3025	2185	2255	4560	5040	4440	5040	5040	3640	3760	
650	343	2685	2940	2615	2940	2940	2940	2150	2220	4475	4905	4355	4905	4905	3580	3700	
700	371	2665	2840		2840	2840	2840	2125	2170	4440	4730		4730	4730	3540	3620	
750	399	2520	2520		2660	2660	2640	2075	2135	4200	4200		4430	4430	3460	3560	
800	427	2060	2060		2540	2540	2540	2015	2110	3430	3430		4230	4230	3360	3520	
850	454				2435	2435	2415	1980	2090				4060	4060	3300	3480	
900	482				2245	2245	1950	1945	2075				3745	3745	3240	3460	
950	510				1595	1885	1370	1910	1930				2655	3145	2285	3180	3220
1000	538				1080	1305	995	1605	1750				1800	2170	1655	2675	2915
1050	566				720	875	720	1545	1720				1200	1455	1200	2570	2865
1100	593				480	550	495	1285	1525				800	915	830	2145	2545

### TEST PRESSURE BY API 598

Hydrostatic Shell Test	5575	5625	5225	5625	5625	5625	5400	5400	9275	9375	8700	9375	9375	9375	9000	9000
Hydrostatic Seal Test	4080	4125	3820	4125	4125	4125	3960	3960	6790	6875	6365	6875	6875	6875	6600	6600
Air Seal Test				80±20												

METRIC CONVERSIONS by API STD 2564

◆ PRESSURE: 1 Pound Per Square Inch (Psig) = 0.06894757 bar = 0.006894757 Mpa ◆ TEMPERATURE: °C = (5/9)(°F - 32)

### ASME B16.34 Materials Group

Group 1.1	A105 <sup>®</sup>	A216-WCB <sup>®</sup>	
Group 1.2	A216-WCC <sup>®</sup>	A352-LCC <sup>®</sup>	
Group 1.3	A352-LCB <sup>®</sup>		
Group 1.9	A217-WC6 <sup>®</sup>		
Group 1.10	A217-WC9 <sup>®</sup>		
Group 1.13	A217-C5		
Group 2.1	A182-F304	A351-CF8	A351-CF3 <sup>®</sup>
Group 2.2	A182-F316	A352-CF8M	A351-CF3M <sup>®</sup>

- Not to be used over 650 °F (343°C).
- Not to be used over 800 °F (427°C).
- Not to be used over 1000 °F (538°C).
- Not to be used over 1100 °F (593°C).
- Permissible, but not recommended for prolonged use above 800 °F (427°C).