

DSI® Cast Steel Valves • Pressure Temperature Ratings, Class 150 & 300

Pressure temperature ratings are based on ANSI/ASME B16.34 (2004 edition).

The temperatures shown are that of the pressure-containing shell, which is considered to be the same temperature as that of the fluid flowing within it.

Special consideration should be given to such items as trim, bonnet gasket material, and packing to assure that the rating is merited in all respects.

Maximum Allowable Non-Shock Pressure (PSIG)

Service Temperature		Class 150						Class 300							
°F	°C	WCB (a)	LCC (b)	WC6 (c,d)	C5 (d)	C12 (d)	CF8M (f)	WCB (a)	LCC (b)	WC6 (c,d)	C5 (d)	C12 (d)	CF8M (f)		
-20 to 100	-29 to 38	285	290	290	290	290	275	740	750	750	750	750	720		
200	93	260	260	260	260	260	235	680	750	750	750	750	620		
300	149	230	230	230	230	230	215	655	730	720	730	730	560		
400	204	200	200	200	200	200	195	635	705	695	705	705	515		
500	260	170	170	170	170	170	170	605	665	665	665	665	480		
600	316	140	140	140	140	140	140	570	605	605	605	605	450		
650	343	125	125	125	125	125	125	550	590	590	590	590	440		
700	371	110	—	110	110	110	110	530	—	570	570	570	435		
750	399	95	—	95	95	95	95	505	—	530	530	530	425		
800	427	80	—	80	80	80	80	410	—	510	510	510	420		
850	454	65	—	65	65	65	65	320	—	485	485	485	420		
900	482	50	—	50	50	50	50	230	—	450	375	450	415		
950	510	35	—	35	35	35	35	135	—	320	275	370	385		
1000	538	20	—	20	20	20	20	85	—	215	200	290	350		
1050	566	—	—	20(e)	20(e)	20(e)	20(e)	—	—	145	145	190	345		
1100	593	—	—	20(e)	20(e)	20(e)	20(e)	—	—	95	100	115	305		
1150	621	—	—	—	20(e)	20(e)	20(e)	—	—	—	60	75	235		
1200	649	—	—	—	15(e)	20(e)	20(e)	—	—	—	35	50	185		
Hydrostatic Shell Test Pressure		450						425	1125						1100
Valve Closure Test Pressure	Liquid	315	320				305	815	825				795		
Test Pressure	Air	80						80							

Notes:

- (a) Permissible, but not recommended for prolonged exposure above about 800°F. Upon prolonged exposure to temperatures above about 800°F, the carbide phase of Carbon Steel may be converted to Graphite.
- (b) Not to be used over 650°F.
- (c) Not to be used over 1100°F.

- (d) Use normalized and tempered material only.
- (e) For welding end valves only. Flanged end ratings terminate at 1000°F.
- (f) At temperatures over 1000°F, use only when the Carbon content is 0.04% or higher.

For years Industry professionals have specified DSI® valve products for their most demanding projects, and consistently DSI® delivers the highest performance fluid control products available anywhere.

Ask your DSI® representative about our other fine flow control products.

DSI® Cast Steel Valves • Pressure Temperature Ratings, Class 600, 900 & 1500

Pressure temperature ratings are based on ASME B16.34 (2004 edition).

Special consideration should be given to such items as trim, bonnet gasket material, and packing to assure that the rating is merited in all respects.

The temperatures shown are that of the pressure-containing shell, which is considered to be the same temperature as that of the fluid flowing within it.

Maximum Allowable Non-Shock Pressure (PSIG)

Service Temperature		Class 600						Class 900	Class 1500
		WCB (a)	LCC (b)	WC6 (c,d)	C5 (d)	C12 (d)	CF8M (d)	WCB (a)	WCB (a)
°F	°C								
-20 to 100	-29 to 38	1480	1500	1500	1500	1500	1440	2220	3705
200	93	1360	1500	1500	1500	1500	1240	2035	3395
300	149	1310	1455	1445	1455	1455	1120	1965	3270
400	204	1265	—	1385	1410	1410	1025	1900	3170
500	260	1205	1330	1330	1330	1330	955	1810	3015
600	316	1135	1210	1210	1210	1210	900	1705	2840
650	343	1100	1175	1175	1175	1175	885	1650	2745
700	371	1060	—	1135	1135	1135	870	1590	2665
750	399	1015	—	1065	1065	1065	855	1520	2535
800	427	825	—	1015	1015	1015	845	1235	2055
850	454	640	—	975	975	975	835	955	1595
900	482	460	—	900	745	900	830	690	1150
950	510	275	—	640	550	755	775	410	685
1000	538	170	—	430	400	505	725	255	430
1050	566	—	—	290	290	345	720	—	—
1100	593	—	—	190	200	225	610	—	—
1150	621	—	—	—	125	150	475	—	—
1200	649	—	—	—	70	105	370	—	—
Hydrostatic Shell Test Pressure		2225	2250				2175	3350	5575
Valve Closure	Liquid	1630	1650				1590	2450	4080
Test Pressure	Air	80				80	80	80	

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- (c) Not to be used over 1100°F.

- (d) Use normalized and tempered material only.
- (e) For welding end valves only. Flanged end ratings terminate at 1000°F.
- (f) At temperatures over 1000°F, use only when the Carbon content is 0.04% or higher.