

Pressure/Temperature Ratings for Fisher® Valves (ASME B16.34-2004) - U.S. Traditional Units

Material Reference Guide Table

U.S. Traditional Units

Fisher® valves conforming to ASME B16.34-2004 standard have specific pressure-temperature limits depending on construction materials. Use the

material references in table 1 when determining pressure-temperature ratings of valves used in accordance with the ASME standard.

Table 1. Valve Body Materials

CATEGORY	Specification	ASME	
		Grade	Material Group
Carbon Steel	SA-216	WCB	1.1
		WCC	1.2
	SA-352	LCB	1.3
		LCC	1.2
	SA-350	LF2	1.1
Alloy Steels	SA-217	WC6	1.9
		WC9	1.10
Stainless Steel	SA-351	CF8M	2.2
		CF8	2.1
		CF8C	2.11
		CF3M	2.2
		CG8M	2.2



P/T Ratings for Valves (U.S. Units)

Standard Pressure-Temperature Ratings for CL150 and 300 Valves

Fisher valve materials that conform to ASME B16.34-2004 Standard Class pressure-temperature ratings are listed in tables 2 and 3. These ratings apply to all Fisher cast, forged, and fabricated steel valves.

Table 2. For ASME Standard CL150 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9(2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	265	290	285	290	290	290	275	275	275	230	275	275	275	275
200	255	260	260	260	260	260	230	235	235	195	235	235	255	255
300	230	230	230	230	230	230	205	215	215	175	215	215	230	230
400	200	200	200	200	200	200	190	195	195	160	195	195	200	200
500	170	170	170	170	170	170	170	170	170	150	170	170	170	170
600	140	140	140	140	140	140	140	140	140	140	140	140	140	140
650	125	125	125	125	125	125	125	125	125	125	125	125	125	125
700	---	---	110	110	110	110	110	110	110	110	110	110	110	110
750	---	---	95	95	95	95	95	95	95	110	95	95	95	95
800	---	---	80	80	80	80	80	80	80	80	80	80	80	80
850	---	---	---	---	65	65	65	65	65	65	65	65	65	65
900	---	---	---	---	50	50	50	50	---	---	50	50	50	50
950	---	---	---	---	35	35	35	35	---	---	35	35	35	35
1000	---	---	---	---	20	20	20	20	---	---	20	20	20	20
1050	---	---	---	---	20	20	20	20	---	---	20	20	20	---
1100	---	---	---	---	20	20	20	20	---	---	20	20	20	---
1150	---	---	---	---	---	---	20	20	---	---	20	20	20	---
1200	---	---	---	---	---	---	20	20	---	---	20	20	20	---
1250	---	---	---	---	---	---	20	20	---	---	20	20	20	---
1300	---	---	---	---	---	---	20	20	---	---	20	20	20	---
1350	---	---	---	---	---	---	20	20	---	---	20	20	20	---
1400	---	---	---	---	---	---	20	20	---	---	20	15	15	---
1450	---	---	---	---	---	---	20	20	---	---	20	10	10	---
1500	---	---	---	---	---	---	15	15	---	---	15	10	10	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature.
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 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Table 3. For ASME Standard CL300 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	695	750	740	750	750	750	720	720	720	600	720	720	720	720
200	660	750	680	750	750	750	600	620	620	510	620	620	660	660
300	640	730	655	730	720	730	540	560	560	455	560	560	615	615
400	615	705	635	705	695	705	495	515	515	420	515	515	575	575
500	585	665	605	665	665	665	465	480	480	395	480	480	540	540
600	550	605	570	605	605	605	440	450	450	370	450	450	515	515
650	535	590	550	590	590	590	430	440	440	365	440	440	505	505
700	---	---	530	555	570	570	420	435	435	360	435	435	495	495
750	---	---	505	505	530	530	415	425	425	355	425	425	490	490
800	---	---	410	410	510	510	405	420	420	345	420	420	485	485
850	---	---	---	---	485	485	395	420	420	340	420	420	485	485
900	---	---	---	---	450	450	390	415	---	---	415	415	450	450
950	---	---	---	---	320	385	380	385	---	---	385	385	385	385
1000	---	---	---	---	215	265	355	365	---	---	365	365	365	365
1050	---	---	---	---	145	175	325	345	---	---	345	345	360	---
1100	---	---	---	---	95	110	255	305	---	---	---	305	310	---
1150	---	---	---	---	---	---	205	235	---	---	---	235	210	---
1200	---	---	---	---	---	---	165	185	---	---	---	185	150	---
1250	---	---	---	---	---	---	135	145	---	---	---	145	115	---
1300	---	---	---	---	---	---	115	115	---	---	---	115	75	---
1350	---	---	---	---	---	---	95	95	---	---	---	95	50	---
1400	---	---	---	---	---	---	75	75	---	---	---	75	40	---
1450	---	---	---	---	---	---	60	60	---	---	---	60	30	---
1500	---	---	---	---	---	---	40	40	---	---	---	40	25	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature.
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 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Special Pressure-Temperature Ratings for CL150 and 300 Threaded or Welding End Valves

Fisher valve materials that conform to ASME B16.34-2004 Special Class pressure-temperature ratings are listed in tables 4 and 5. These ratings apply to all Fisher cast, forged, and fabricated steel valves. Nondestructive examination applies (Fisher Process Level 6).

Table 4. For ASME Special CL150 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	290	290	290	290	290	290	290	290	290	255	290	290	290	290
200	290	290	290	290	290	290	255	265	265	220	265	265	275	285
300	290	290	285	290	290	285	230	240	240	195	240	240	255	265
400	290	290	280	290	290	280	215	220	220	180	220	220	240	245
500	290	290	280	290	290	280	200	205	205	170	205	205	230	230
600	290	290	280	290	290	275	190	195	195	160	195	195	220	220
650	290	290	275	290	290	275	185	190	190	155	190	190	215	215
700	---	---	265	280	280	270	180	185	185	155	185	185	215	215
750	---	---	245	280	280	270	175	185	185	150	185	185	210	210
800	---	---	195	255	275	270	175	180	180	150	180	180	210	210
850	---	---	---	---	260	260	170	180	180	145	180	180	205	205
900	---	---	---	---	225	230	165	180	---	---	180	180	205	205
950	---	---	---	---	155	180	165	175	---	---	175	175	180	180
1000	---	---	---	---	105	130	160	160	---	---	160	160	160	160
1050	---	---	---	---	70	85	155	160	---	---	---	160	160	---
1100	---	---	---	---	45	55	125	145	---	---	---	145	150	---
1150	---	---	---	---	---	---	100	115	---	---	---	115	100	---
1200	---	---	---	---	---	---	80	90	---	---	---	90	70	---
1250	---	---	---	---	---	---	65	70	---	---	---	70	55	---
1300	---	---	---	---	---	---	55	55	---	---	---	55	35	---
1350	---	---	---	---	---	---	45	45	---	---	---	45	25	---
1400	---	---	---	---	---	---	35	35	---	---	---	35	20	---
1450	---	---	---	---	---	---	30	30	---	---	---	30	15	---
1500	---	---	---	---	---	---	20	20	---	---	---	20	15	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph "2.1.3 Special Class Valves. Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.
 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

P/T Ratings for Valves (U.S. Units)

Table 5. For ASME Special CL300 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	695	750	750	750	750	750	750	750	750	670	750	750	750	750
200	695	750	750	750	750	750	670	690	690	570	690	690	715	740
300	695	750	740	750	750	740	600	625	625	510	625	625	660	690
400	695	750	735	750	750	730	555	575	575	470	575	575	620	645
500	695	750	735	750	750	725	520	535	535	440	535	535	600	605
600	695	750	735	750	750	720	495	505	505	415	505	505	575	575
650	695	750	715	750	750	715	480	495	495	405	495	495	565	565
700	---	---	690	715	735	705	470	485	485	400	485	485	555	555
750	---	---	635	635	730	705	460	475	475	395	475	475	550	550
800	---	---	515	515	720	705	455	470	470	385	470	470	545	545
850	---	---	---	---	680	680	440	465	465	380	465	465	540	540
900	---	---	---	---	585	600	435	465	---	---	465	465	540	540
950	---	---	---	---	400	470	425	460	---	---	460	460	470	470
1000	---	---	---	---	270	335	415	420	---	---	420	420	420	420
1050	---	---	---	---	180	220	405	420	---	---	---	420	420	---
1100	---	---	---	---	120	135	320	380	---	---	---	380	390	---
1150	---	---	---	---	---	---	255	295	---	---	---	295	260	---
1200	---	---	---	---	---	---	205	230	---	---	---	230	190	---
1250	---	---	---	---	---	---	165	185	---	---	---	185	140	---
1300	---	---	---	---	---	---	140	145	---	---	---	145	95	---
1350	---	---	---	---	---	---	115	120	---	---	---	120	65	---
1400	---	---	---	---	---	---	95	95	---	---	---	95	50	---
1450	---	---	---	---	---	---	75	75	---	---	---	75	40	---
1500	---	---	---	---	---	---	50	50	---	---	---	50	35	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph **2.1.3 Special Class Valves**, "Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.

2. Flanged end ratings terminate at 1000°F.

3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Standard Pressure-Temperature Ratings for CL600 and 900 Valves

Fisher valve materials that conform to ASME B16.34-2004 Standard Class pressure-temperature ratings are listed in tables 6 and 7. These ratings apply to all Fisher cast, forged, and fabricated steel valves.

Table 6. For ASME Standard CL600 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	1395	1500	1480	1500	1500	1500	1440	1440	1440	1200	1440	1440	1440	1440
200	1320	1500	1360	1500	1500	1500	1200	1240	1240	1020	1240	1240	1325	1325
300	1275	1455	1310	1455	1445	1455	1075	1120	1120	910	1120	1120	1235	1235
400	1230	1405	1265	1405	1385	1410	995	1025	1025	840	1025	1025	1150	1150
500	1175	1330	1205	1330	1330	1330	930	955	955	785	955	955	1085	1085
600	1105	1210	1135	1210	1210	1210	885	900	900	745	900	900	1030	1030
650	1065	1175	1100	1175	1175	1175	865	885	885	730	885	885	1015	1015
700	---	---	1060	1110	1135	1135	845	870	870	720	870	870	995	995
750	---	---	1015	1015	1065	1065	825	855	855	705	855	855	985	985
800	---	---	825	825	1015	1015	810	845	845	690	845	845	975	975
850	---	---	---	---	975	975	790	835	835	675	835	835	970	970
900	---	---	---	---	900	900	780	830	---	---	830	830	900	900
950	---	---	---	---	640	755	765	775	---	---	775	775	775	775
1000	---	---	---	---	430	535	710	725	---	---	725	725	725	725
1050	---	---	---	---	290	350	650	720	---	---	720	720	720	---
1100	---	---	---	---	190	220	515	610	---	---	---	610	625	---
1150	---	---	---	---	---	---	410	475	---	---	---	475	420	---
1200	---	---	---	---	---	---	330	370	---	---	---	370	300	---
1250	---	---	---	---	---	---	265	295	---	---	---	295	225	---
1300	---	---	---	---	---	---	225	235	---	---	---	235	150	---
1350	---	---	---	---	---	---	185	190	---	---	---	190	105	---
1400	---	---	---	---	---	---	150	150	---	---	---	150	80	---
1450	---	---	---	---	---	---	115	115	---	---	---	115	60	---
1500	---	---	---	---	---	---	85	85	---	---	---	85	55	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature.
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 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

P/T Ratings for Valves (U.S. Units)

Table 7. For ASME Standard CL900 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	2090	2250	2220	2250	2250	2250	2160	2160	2160	1800	2160	2160	2160	2160
200	1980	2250	2035	2250	2250	2250	1800	1860	1860	1535	1860	1860	1985	1985
300	1915	2185	1965	2185	2165	2185	1615	1680	1680	1370	1680	1680	1850	1850
400	1845	2110	1900	2110	2080	2115	1490	1540	1540	1260	1540	1540	1730	1730
500	1760	1995	1810	1995	1995	1995	1395	1435	1435	1180	1435	1435	1625	1625
600	1655	1815	1705	1815	1815	1815	1325	1355	1355	1115	1355	1355	1550	1550
650	1600	1765	1650	1765	1765	1765	1295	1325	1325	1095	1325	1325	1520	1520
700	---	---	1590	1665	1705	1705	1265	1305	1305	1080	1305	1305	1490	1490
750	---	---	1520	1520	1595	1595	1240	1280	1280	1060	1280	1280	1475	1475
800	---	---	1235	1235	1525	1525	1215	1265	1265	1035	1265	1265	1460	1460
850	---	---	---	---	1460	1460	1190	1255	1255	1015	1255	1255	1455	1455
900	---	---	---	---	1350	1350	1165	1245	---	---	1245	1245	1350	1350
950	---	---	---	---	955	1160	1145	1160	---	---	1160	1160	1160	1160
1000	---	---	---	---	650	800	1065	1090	---	---	1090	1090	1090	1090
1050	---	---	---	---	430	525	975	1080	---	---	---	1080	1080	---
1100	---	---	---	---	290	330	770	915	---	---	---	915	935	---
1150	---	---	---	---	---	---	615	710	---	---	---	710	625	---
1200	---	---	---	---	---	---	495	555	---	---	---	555	455	---
1250	---	---	---	---	---	---	400	440	---	---	---	440	340	---
1300	---	---	---	---	---	---	340	350	---	---	---	350	225	---
1350	---	---	---	---	---	---	280	290	---	---	---	290	155	---
1400	---	---	---	---	---	---	225	225	---	---	---	225	125	---
1450	---	---	---	---	---	---	175	175	---	---	---	175	95	---
1500	---	---	---	---	---	---	125	125	---	---	---	125	80	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature.
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 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Special Pressure-Temperature Ratings for CL600 and 900 Threaded or Welding End Valves

Fisher valve materials that conform to ASME B16.34-2004 Special Class pressure-temperature ratings are listed in tables 8 and 9. These ratings apply to all Fisher cast, forged, and fabricated steel valves. Nondestructive examination applies (Fisher Process Level 6).

Table 8. For ASME Special CL600 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	1395	1500	1500	1500	1500	1500	1500	1500	1500	1340	1500	1500	1500	1500
200	1395	1500	1500	1500	1500	1500	1340	1380	1380	1140	1380	1380	1435	1480
300	1395	1500	1480	1500	1500	1480	1200	1250	1250	1020	1250	1250	1320	1375
400	1395	1500	1465	1500	1500	1455	1110	1145	1145	940	1145	1145	1245	1285
500	1395	1500	1465	1500	1500	1450	1040	1065	1065	880	1065	1065	1200	1210
600	1395	1500	1465	1500	1500	1440	985	1005	1005	830	1005	1005	1150	1150
650	1390	1500	1430	1500	1500	1430	965	985	985	815	985	985	1130	1130
700	---	---	1380	1425	1465	1415	945	970	970	805	970	970	1110	1110
750	---	---	1270	1270	1460	1415	920	955	955	790	955	955	1100	1100
800	---	---	1030	1030	1440	1415	905	945	945	770	945	945	1090	1090
850	---	---	---	---	1355	1355	885	930	930	755	930	930	1080	1080
900	---	---	---	---	1175	1200	870	925	---	---	925	925	1080	1080
950	---	---	---	---	795	945	850	915	---	---	915	915	945	945
1000	---	---	---	---	540	670	830	840	---	---	840	840	840	840
1050	---	---	---	---	360	435	815	840	---	---	---	840	840	---
1100	---	---	---	---	240	275	645	765	---	---	---	765	780	---
1150	---	---	---	---	---	---	515	590	---	---	---	590	525	---
1200	---	---	---	---	---	---	410	465	---	---	---	465	375	---
1250	---	---	---	---	---	---	335	370	---	---	---	370	285	---
1300	---	---	---	---	---	---	285	290	---	---	---	290	190	---
1350	---	---	---	---	---	---	230	240	---	---	---	240	130	---
1400	---	---	---	---	---	---	190	190	---	---	---	190	105	---
1450	---	---	---	---	---	---	145	145	---	---	---	145	75	---
1500	---	---	---	---	---	---	105	105	---	---	---	105	70	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph "2.1.3 Special Class Valves. Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.
 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

P/T Ratings for Valves (U.S. Units)

Table 9. For ASME Special CL900 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	2090	2250	2250	2250	2250	2250	2250	2250	2250	2010	2250	2250	2250	2250
200	2090	2250	2250	2250	2250	2250	2010	2075	2075	1710	2075	2075	2150	2220
300	2090	2250	2220	2250	2250	2220	1800	1870	1870	1525	1870	1870	1975	2065
400	2090	2250	2200	2250	2250	2185	1665	1720	1720	1405	1720	1720	1865	1930
500	2090	2250	2200	2250	2250	2175	1560	1600	1600	1320	1600	1600	1800	1815
600	2090	2250	2200	2250	2250	2165	1480	1510	1510	1245	1510	1510	1730	1730
650	2080	2250	2145	2250	2250	2145	1445	1480	1480	1220	1480	1480	1695	1695
700	---	---	2075	2140	2200	2120	1415	1455	1455	1205	1455	1455	1665	1665
750	---	---	1905	1905	2185	2120	1380	1430	1430	1180	1430	1430	1645	1645
800	---	---	1545	1545	2160	2120	1360	1415	1415	1155	1415	1415	1630	1630
850	---	---	---	---	2030	2030	1325	1400	1400	1135	1400	1400	1625	1625
900	---	---	---	---	1760	1800	1300	1390	---	---	1390	1390	1625	1625
950	---	---	---	---	1195	1415	1280	1375	---	---	1375	1375	1415	1415
1000	---	---	---	---	810	1005	1245	1260	---	---	1260	1260	1260	1260
1050	---	---	---	---	540	655	1220	1260	---	---	---	1260	1260	---
1100	---	---	---	---	360	410	965	1145	---	---	---	1145	1170	---
1150	---	---	---	---	---	---	770	885	---	---	---	885	785	---
1200	---	---	---	---	---	---	615	695	---	---	---	695	565	---
1250	---	---	---	---	---	---	500	555	---	---	---	555	425	---
1300	---	---	---	---	---	---	425	435	---	---	---	435	285	---
1350	---	---	---	---	---	---	345	360	---	---	---	360	195	---
1400	---	---	---	---	---	---	285	285	---	---	---	285	155	---
1450	---	---	---	---	---	---	220	220	---	---	---	220	115	---
1500	---	---	---	---	---	---	155	155	---	---	---	155	105	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph **2.1.3 Special Class Valves**, "Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.

2. Flanged end ratings terminate at 1000°F.

3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Standard Pressure-Temperature Ratings for CL1500 and 2500 Valves

Fisher valve materials that conform to ASME B16.34-2004 Standard Class pressure-temperature ratings are listed in tables 10 and 11. These ratings apply to all Fisher cast, forged, and fabricated steel valves.

Table 10. For ASME Standard CL1500 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	3480	3750	3705	3750	3750	3750	3600	3600	3600	3000	3600	3600	3600	3600
200	3300	3750	3395	3750	3750	3750	3000	3095	3095	2555	3095	3095	3310	3310
300	3190	3640	3270	3640	3610	3640	2690	2795	2795	2280	2795	2795	3085	3085
400	3075	3520	3170	3520	3465	3530	2485	2570	2570	2100	2570	2570	2880	2880
500	2930	3325	3015	3325	3325	3325	2330	2390	2390	1970	2390	2390	2710	2710
600	2755	3025	2840	3025	3025	3025	2210	2255	2255	1860	2255	2255	2580	2580
650	2665	2940	2745	2940	2940	2940	2160	2210	2210	1825	2210	2210	2530	2530
700	---	---	2665	2775	2840	2840	2110	2170	2170	1800	2170	2170	2485	2485
750	---	---	2535	2535	2660	2660	2065	2135	2135	1765	2135	2135	2460	2460
800	---	---	2055	2055	2540	2540	2030	2110	2110	1730	2110	2110	2435	2435
850	---	---	---	---	2435	2435	1980	2090	2090	1690	2090	2090	2425	2425
900	---	---	---	---	2245	2245	1945	2075	---	---	2075	2075	2245	2245
950	---	---	---	---	1595	1930	1910	1930	---	---	1930	1930	1930	1930
1000	---	---	---	---	1080	1335	1770	1820	---	---	1820	1820	1820	1820
1050	---	---	---	---	720	875	1630	1800	---	---	---	1800	1800	---
1100	---	---	---	---	480	550	1285	1525	---	---	---	1525	1560	---
1150	---	---	---	---	---	---	1030	1185	---	---	---	1185	1045	---
1200	---	---	---	---	---	---	825	925	---	---	---	925	755	---
1250	---	---	---	---	---	---	670	735	---	---	---	735	565	---
1300	---	---	---	---	---	---	565	585	---	---	---	585	375	---
1350	---	---	---	---	---	---	465	480	---	---	---	480	255	---
1400	---	---	---	---	---	---	380	380	---	---	---	380	205	---
1450	---	---	---	---	---	---	290	290	---	---	---	290	155	---
1500	---	---	---	---	---	---	205	205	---	---	---	205	135	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature.
 Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.
 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

P/T Ratings for Valves (U.S. Units)

Table 11. For ASME Standard CL2500 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	5805	6250	6170	6250	6250	6250	6000	6000	6000	5000	6000	6000	6000	6000
200	5505	6250	5655	6250	6250	6250	5000	5160	5160	4260	5160	5520	5520	5520
300	5315	6070	5450	6070	6015	6070	4480	4660	4660	3800	4660	4660	5140	5140
400	5125	5865	5280	5865	5775	5880	4140	4280	4280	3500	4280	4800	4800	4800
500	4885	5540	5025	5540	5540	5540	3880	3980	3980	3280	3980	3980	4520	4520
600	4595	5040	4730	5040	5040	5040	3680	3760	3760	3100	3760	3760	4300	4300
650	4440	4905	4575	4905	4905	4905	3600	3680	3680	3040	3680	3680	4220	4220
700	---	---	4425	4630	4730	4730	3520	3620	3620	3000	3620	3620	4140	4140
750	---	---	4230	4230	4430	4430	3440	3560	3560	2940	3560	3560	4100	4100
800	---	---	3430	3430	4230	4230	3380	3520	3520	2880	3520	3520	4060	4060
850	---	---	---	---	4060	4060	3300	3480	3480	2820	3480	3480	4040	4040
900	---	---	---	---	3745	3745	3240	3460	---	---	3460	3460	3745	3745
950	---	---	---	---	2655	3220	3180	3220	---	---	3220	3220	3220	3220
1000	---	---	---	---	1800	2230	2950	3030	---	---	3030	3030	3030	3030
1050	---	---	---	---	1200	1455	2715	3000	---	---	---	3000	3000	---
1100	---	---	---	---	800	915	2145	2545	---	---	---	2545	2600	---
1150	---	---	---	---	---	---	1715	1970	---	---	---	1970	1745	---
1200	---	---	---	---	---	---	1370	1545	---	---	---	1545	1255	---
1250	---	---	---	---	---	---	1115	1230	---	---	---	1230	945	---
1300	---	---	---	---	---	---	945	970	---	---	---	970	630	---
1350	---	---	---	---	---	---	770	800	---	---	---	800	430	---
1400	---	---	---	---	---	---	630	630	---	---	---	630	345	---
1450	---	---	---	---	---	---	485	485	---	---	---	485	255	---
1500	---	---	---	---	---	---	345	345	---	---	---	345	230	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature. Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.

2. Flanged end ratings terminate at 1000°F.

3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Special Pressure-Temperature Ratings for CL1500 and 2500 Threaded or Welding End Valves

Fisher valve materials that conform to ASME B16.34-2004 Special Class pressure-temperature ratings are listed in tables 12 and 13. These ratings apply to all Fisher cast, forged, and fabricated steel valves. Nondestructive examination applies (Fisher Process Level 6).

Table 12. For ASME Special CL1500 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	3480	3750	3750	3750	3750	3750	3750	3750	3750	3350	3750	3750	3750	3750
200	3480	3750	3750	3750	3750	3750	3350	3455	3455	2855	3455	3455	3585	3695
300	3480	3750	3700	3750	3750	3695	3000	3120	3120	2545	3120	3120	3295	3440
400	3480	3750	3665	3750	3750	3640	2770	2865	2865	2345	2865	2865	3105	3215
500	3480	3750	3665	3750	3750	3620	2600	2665	2665	2195	2665	2665	3000	3025
600	3480	3750	3665	3750	3750	3605	2465	2520	2520	2075	2520	2520	2880	2880
650	3470	3750	3575	3750	3750	3580	2410	2465	2465	2035	2465	2465	2825	2825
700	---	---	3455	3565	3665	3535	2355	2425	2425	2010	2425	2425	2770	2770
750	---	---	3170	3170	3645	3535	2305	2385	2385	1970	2385	2385	2745	2745
800	---	---	2570	2570	3600	3535	2265	2355	2355	1930	2355	2355	2720	2720
850	---	---	---	---	3385	3385	2210	2330	2330	1890	2330	2330	2705	2705
900	---	---	---	---	2935	3000	2170	2315	---	---	2315	2315	2705	2705
950	---	---	---	---	1995	2360	2130	2290	---	---	2290	2290	2360	2360
1000	---	---	---	---	1350	1670	2075	2105	---	---	2105	2105	2105	2105
1050	---	---	---	---	900	1095	2035	2105	---	---	---	2105	2105	---
1100	---	---	---	---	600	685	1605	1905	---	---	---	1905	1950	---
1150	---	---	---	---	---	---	1285	1480	---	---	---	1480	1305	---
1200	---	---	---	---	---	---	1030	1155	---	---	---	1155	945	---
1250	---	---	---	---	---	---	835	920	---	---	---	920	705	---
1300	---	---	---	---	---	---	705	730	---	---	---	730	470	---
1350	---	---	---	---	---	---	580	600	---	---	---	600	320	---
1400	---	---	---	---	---	---	470	470	---	---	---	470	255	---
1450	---	---	---	---	---	---	365	356	---	---	---	356	195	---
1500	---	---	---	---	---	---	260	260	---	---	---	260	170	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph "2.1.3 Special Class Valves. Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.
 2. Flanged end ratings terminate at 1000°F.
 3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

P/T Ratings for Valves (U.S. Units)

Table 13. For ASME Special CL2500 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8 ^(2,3) or 304 ^(2,3)	CF8M ^(2,3) or 316 ^(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	5805	6250	6250	6250	6250	6250	6250	6250	6250	5580	6250	6250	6250	6250
200	5805	6250	6250	6250	6250	6250	5580	5760	5760	4755	5760	5760	5975	6160
300	5805	6250	6170	6250	6250	6160	5000	5200	5200	4240	5200	5200	5490	5735
400	5805	6250	6105	6250	6250	6065	4620	4755	4755	3905	4755	4755	5180	5355
500	5805	6250	6105	6250	6250	6035	4330	4440	4440	3660	4440	4440	5000	5045
600	5805	6250	6105	6250	6250	6010	4105	4195	4195	3460	4195	4195	4800	4800
650	5780	6250	5960	6250	6250	5965	4020	4105	4105	3395	4105	4105	4710	4710
700	---	---	5760	5940	6110	5895	3930	4040	4040	3350	4040	4040	4620	4620
750	---	---	5285	5285	6070	5895	3840	3975	3975	3280	3975	3975	4575	4575
800	---	---	4285	4285	6000	5895	3770	3930	3930	3215	3930	3930	4530	4530
850	---	---	---	---	5645	5645	3685	3885	3885	3145	3885	3885	4510	4510
900	---	---	---	---	4895	5000	3615	3860	---	---	3860	3860	4510	4510
950	---	---	---	---	3320	3930	3550	3815	---	---	3815	3815	3930	3930
1000	---	---	---	---	2250	2785	3460	3505	---	---	3505	3505	3505	3505
1050	---	---	---	---	1500	1820	3395	3505	---	---	---	3505	3505	---
1100	---	---	---	---	1000	1145	2680	3180	---	---	---	3180	3250	---
1150	---	---	---	---	---	---	2145	2465	---	---	---	2465	2180	---
1200	---	---	---	---	---	---	1715	1930	---	---	---	1930	1570	---
1250	---	---	---	---	---	---	1395	1535	---	---	---	1535	1180	---
1300	---	---	---	---	---	---	1180	1215	---	---	---	1215	785	---
1350	---	---	---	---	---	---	965	1000	---	---	---	1000	535	---
1400	---	---	---	---	---	---	785	785	---	---	---	785	430	---
1450	---	---	---	---	---	---	610	605	---	---	---	605	320	---
1500	---	---	---	---	---	---	430	430	---	---	---	430	285	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph **2.1.3 Special Class Valves**, "Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.

2. Flanged end ratings terminate at 1000°F.

3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Standard and Special Pressure-Temperature Ratings for CL4500 Valves

Fisher valve materials that conform to ASME B16.34-2004 Standard and Special Class pressure-temperature ratings are listed in tables 14 and 15. These ratings apply to all Fisher cast, forged, and fabricated steel valves. For Special Class pressure-temperature ratings, nondestructive examination applies (Fisher Process Level 6).

Table 14. For ASME Standard CL4500 Valves (1)

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8(2,3) or 304(2,3)	CF8M(2,3) or 316(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	10445	11250	11110	11250	11250	11250	10800	10800	10800	9000	10800	10800	10800	10800
200	9905	11250	10185	11250	11250	11250	9000	9290	9290	7670	9290	9290	9935	9935
300	9565	10925	9815	10925	10830	10925	8065	8390	8390	6840	8390	8390	9250	9250
400	9225	10555	9505	10555	10400	10585	7450	7705	7705	6300	7705	7705	8640	8640
500	8795	9965	9040	9965	9965	9965	6985	7165	7165	5905	7165	7165	8135	8135
600	8270	9070	8515	9070	9070	9070	6625	6770	6770	5580	6770	6770	7740	7740
650	7990	8825	8240	8825	8825	8825	6480	6625	6625	5470	6625	6625	7595	7595
700	---	---	7960	8330	8515	8515	6335	6515	6515	5400	6515	6515	7450	7450
750	---	---	7610	7610	7970	7970	6190	6410	6410	5290	6410	6410	7380	7380
800	---	---	6170	6170	7610	7610	6085	6335	6335	5185	6335	6335	7310	7310
850	---	---	---	---	7305	7305	5940	6265	6265	5075	6265	6265	7270	7270
900	---	---	---	---	6740	6740	5830	6230	6230	---	6230	6230	6740	6740
950	---	---	---	---	4785	5795	5725	5795	---	---	5795	5795	5795	5795
1000	---	---	---	---	3240	4010	5315	5450	---	---	5450	5450	5450	5450
1050	---	---	---	---	2160	2625	4885	5400	---	---	---	5400	5400	---
1100	---	---	---	---	1440	1645	3855	4575	---	---	---	4575	4680	---
1150	---	---	---	---	---	---	3085	3550	---	---	---	3550	3135	---
1200	---	---	---	---	---	---	2470	2775	---	---	---	2775	2265	---
1250	---	---	---	---	---	---	2005	2210	---	---	---	2210	1695	---
1300	---	---	---	---	---	---	1695	1750	---	---	---	1750	1130	---
1350	---	---	---	---	---	---	1390	1440	---	---	---	1440	770	---
1400	---	---	---	---	---	---	1130	1130	---	---	---	1130	615	---
1450	---	---	---	---	---	---	875	875	---	---	---	875	465	---
1500	---	---	---	---	---	---	620	620	---	---	---	620	410	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The user is advised that a valve used under the jurisdiction of the ASME Boiler and Pressure Vessel Code, ASME Code for Pressure Piping, or governmental regulations is subject to any limitation of that code or regulation. This includes any maximum temperature limitation for a material or rule governing the use of a material at a low temperature. Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.

2. Flanged end ratings terminate at 1000°F.

3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

P/T Ratings for Valves (U.S. Units)

Table 15. For ASME Special CL4500 Valves ⁽¹⁾

SERVICE TEMPERATURE (°F)	WORKING PRESSURE (PSIG)													
	LCB	LCC	WCB or LF2	WCC	WC6 (2)	WC9 (2)	CF8(2,3) or 304(2,3)	CF8M(2,3) or 316(2,3)	CF3M	316L	CG8M	317 (2,3)	CF8C (2,3)	347
-20 to 100	10445	11250	11250	11250	11250	11250	11250	11250	11250	10045	11250	11250	11250	11250
200	10445	11250	11250	11250	11250	11250	10045	10365	10365	8560	10365	10365	10750	11090
300	10445	11250	11105	11250	11250	11090	9000	9360	9360	7635	9360	9360	9885	10325
400	10445	11250	10995	11250	11250	10915	8315	8600	8600	7030	8600	8600	9320	9645
500	10445	11250	10995	11250	11250	10865	7795	7995	7995	6590	7995	7995	9000	9080
600	10445	11250	10995	11250	11250	10815	7395	7555	7555	6230	7555	7555	8640	8640
650	10405	11250	10730	11250	11250	10735	7230	7395	7395	6105	7395	7395	8480	8480
700	---	---	10365	10690	10995	10605	7070	7270	7270	6025	7270	7270	8315	8315
750	---	---	9515	9515	10930	10605	6910	7150	7150	5905	7150	7150	8235	8235
800	---	---	7715	7715	10800	10605	6790	7070	7070	5785	7070	7070	8155	8155
850	---	---	---	---	10160	10160	6630	6990	6990	5665	6990	6990	8115	8115
900	---	---	---	---	8805	9000	6510	6950	---	---	6950	6950	8115	8115
950	---	---	---	---	5980	7070	6390	6870	---	---	6870	6870	7070	7070
1000	---	---	---	---	4050	5015	6230	6310	---	---	6310	6310	6310	6310
1050	---	---	---	---	2700	3280	6105	6310	---	---	---	6310	6310	---
1100	---	---	---	---	1800	2055	4820	5720	---	---	---	5720	5850	---
1150	---	---	---	---	---	---	3855	4435	---	---	---	4435	3920	---
1200	---	---	---	---	---	---	3085	3470	---	---	---	3470	2830	---
1250	---	---	---	---	---	---	2505	2765	---	---	---	2765	2120	---
1300	---	---	---	---	---	---	2120	2185	---	---	---	2185	1415	---
1350	---	---	---	---	---	---	1735	1800	---	---	---	1800	965	---
1400	---	---	---	---	---	---	1415	1415	---	---	---	1415	770	---
1450	---	---	---	---	---	---	1095	1095	---	---	---	1095	580	---
1500	---	---	---	---	---	---	770	770	---	---	---	770	515	---

1. Table information is extracted from the Valve—Flanged, Threaded, and Welding End, ASME Standard B16.34-2004. These tables must be used in accordance with the ASME standard. The ASME standard states in paragraph **2.1.3 Special Class Valves**, "Threaded or welding end valves that conform to all the requirements of para. 2.1.1 and in addition have successfully passed the examinations required by Section 8, may be designated Special Class valves." The standard also stipulates that, "Special Class ratings shall not be used for flanged end valves." Information copied with permission of the publisher; The American Society of Mechanical Engineers, 345 East 47th Street, New York, New York, 10017.

2. Flanged end ratings terminate at 1000°F.

3. At temperatures over 1000°F, use material only when carbon content is 0.04% or higher.

Note

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P/T Ratings for Valves (U.S. Units)

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59.1:021

February 2009

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