

Globe Valves

Features

Forged steel globe valves are designed and manufactured in accordance with ASME B16.34, these valves are available in size from NPS 1/2" to 4" , and available in pressure from Class 800 to Class 4500.

A wide range of body materials are available including A105, F11, F22, F91, F92, F316, F316H etc.

Various Connection types are available with Socket Weld, Butt Weld, Screw and Flange.

Special service applications valves such as NACE MR0175 can also be provided.



Design Features

Body

- ◎ The body is always forged carbon, alloy or stainless steel. All pressure-containing parts are enclosed in one-piece body.
- ◎ No body-bonnet gasket or pressure seal is needed.
- ◎ The body seat is integral with a facing of stellite 6.
- ◎ All machining from raw forging to final finish of the seat is completed on a single machine, ensuring concentricity of all parts.

Stem

- ◎ Non-rotating stem prevents torsional damage of packing and ensures low torque. Stem threads is protected from dirt, dust, sand.

Disc

- ◎ The valve disc is always faced with stellite hardfacing. The disc is attached to the valve stem in every case the disc is free to rotate independently of the stem, so that during closing or opening, the disc does not rotate against the seat. The disc is fully body guided at bottom and top throughout its travel.

Packing

- ◎ Self aligning two-piece gland is designed provide correct compression of the gland packing and easy removal during maintenance.
- ◎ Optional live-loading of gland packing is possible.

Gland Flange

- ◎ The gland flange is always forged from stainless steel. Succeedent machining ensures concentricity of gland.

Stem Nut

- ◎ The stem nut is normally made from aluminium bronze. The low coefficient of friction of this material ensures low operating torques and minimal wear of the stem threads. Fully enclosed and greased stem nut is protected from dirt, dust, sand.
- ◎ Stem nut riding on two thrust needle bearings.

Gland

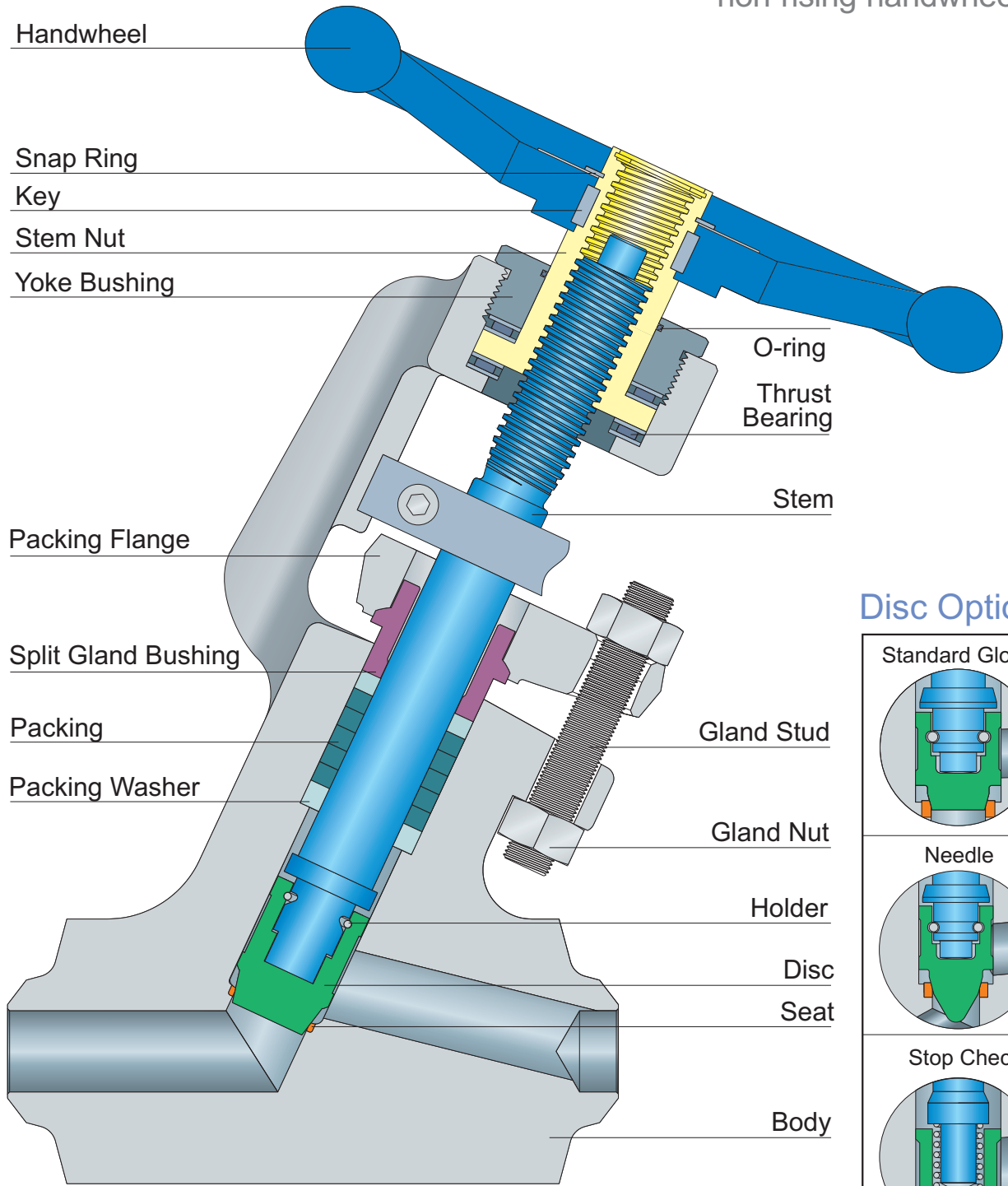
- ◎ Self aligning two-piece gland is designed provide correct compression of the gland packing and easy removal during maintenance.
- ◎ Optional live-loading of gland packing is possible.

Bonnetless Y-Pattern Globe Valve

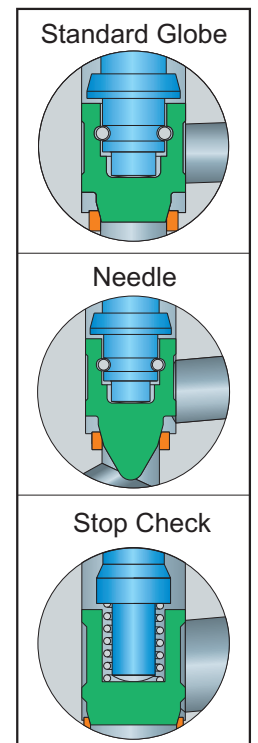
Standard Globe, Needle or Stop Check Disc

Low maintenance and fast in-line repairs

With non-rotating stem and non-rising handwheel



Disc Options



Standard Materials of Construction

Component	Valve Body Material			
	A105N, LF2	F11, F22	F91, F92	F316, F316H
Seat (integral)	Stellite 6			
Disc	Stellite 6			
Stem	F6a/ASTM A182		F92/ASTM A182	F316/ASTM A182
Stem nut	D-2C/ASTM A439			
Packing	Graphite			
Packing washer	F304/ASTM A182			
Split gland bushing	CA15/ASTM A217			
Packing flange	A105		F92/ASTM A182	F304/ASTM A182
Gland stub	B7/ASTM A193		B6/ASTM A193	B8M2/ASTM A193
Gland nut	2H/ASTM A194			8M/ASTM A194
Yoke bushing	1020/ASTM A519			1020/ASTM A519 (nickel-plate)
Thrust bearing	Steel			
O-ring	NBR			
Handwheel	Malleable iron (painted)			
Snap ring	Steel			
Key	Steel			
Body	A105N, LF2	F11, F22	F91, F92	F316, F316H

Sour Gas Service

The globe valves with female NPT, male NPT, Socket weld and Butt weld end connections are available for sour gas service. Materials for wetted components are selected in accordance with NACE Specification MR 0175 for sulfide stress cracking-resistant materials. To order, add **-SG** as a suffix to the ordering number.

Example: **316-G2-FN8-N-SG**

⚠ **Packing adjustment may be required during the valves service life.**

⚠ **Valves that have not been cycled for a period of time may have a higher initial actuation torque.**

Caution: Do not mix or interchange parts with those of other manufacturers.

Cleaning and Packaging

The globe valve is cleaned and packaged in accordance with CAVAL Standard AC-10. AC-10 is Standard cleaning and packaging for general industrial procedures.

Special cleaning and packaging in accordance with CAVAL Specification AC-11 is available as an option. AC-11 is Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C. To order the globe valves cleaned and packaged in accordance with CAVAL Specification AC-11, add **-AC11**.

Example: **316-G8-FN8-N-AC11**

Pressure - Temperature Ratings

The following table data are based on Standard Class of ASME B16.34.

ASTM A105N (1)(2)(3)/ASTM A350 LF2(1)(2)(3)

°F	°C	800	PN130	1500	PN250	1690	PN280	2500	PN420	2680	PN450	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-20~100	-29~38	1976	136.2	3705	255.3	4175	287.7	6170	425.5	6615	456.2	11110	765.9
122	50	1940	133.7	3637	250.6	4098	282.4	6057	417.7	6493	447.8	10907	751.9
212	100	1804	124.3	3382	233.0	3810	262.6	5631	388.3	6036	416.3	10140	699.0
302	150	1745	120.3	3272	225.4	3686	254.0	5447	375.6	5839	402.7	9808	676.1
392	200	1695	116.8	3179	219.0	3581	246.8	5293	365.0	5674	391.3	9531	657.0
482	250	1623	111.9	3044	209.7	3429	236.3	5068	349.5	5433	374.7	9126	629.1
572	300	1541	106.2	2890	199.1	3256	224.4	4812	331.8	5158	355.7	8665	597.3
617	325	1499	103.3	2810	193.6	3166	218.2	4678	322.6	5015	345.9	8424	580.7
662	350	1454	100.2	2726	187.8	3071	211.6	4539	313.0	4866	335.6	8174	563.5
707	375	1408	97.0	2639	181.8	2973	204.9	4396	303.1	4712	325.0	7913	545.5
752	400	1344	92.6	2520	173.6	2839	195.6	4195	289.3	4498	310.2	7555	520.8
797	425	1113	76.7	2087	143.8	2352	162.1	3476	239.7	3726	257.0	6260	431.5
842	450	890	61.4	1669	115.0	1881	129.6	2780	191.7	2980	205.5	5006	345.1
887	475	675	46.5	1266	87.2	1426	98.3	2107	145.3	2259	155.8	3794	261.5
932	500	456	31.4	854	58.8	962	66.3	1420	97.9	1522	105.0	2558	176.3
1000	538	229	15.8	429	29.5	483	33.3	714	49.2	765	52.8	1286	88.6

Note: (1) Upon prolonged exposure to temperatures above 425 °C the carbide phase of steel may be converted to graphite. Permissible, but not recommended for prolonged usage above 425 °C.

(2) Class 4500 applies only welding-end valves.

(3) A class designation greater than class 2500 or a rating temperature greater than 538 °C not applied to threaded-end valves.

ASTM A182 F316 (1)(2)(3)/F316H(2)(3)

°F	°C	800	PN130	1500	PN250	1690	PN280	2500	PN420	2680	PN450	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-20~100	-29~38	1920	132.4	3600	248.2	4056	279.7	6000	413.7	6432	443.5	10800	744.6
122	50	1862	128.4	3490	240.6	3932	271.1	5815	400.9	6233	429.8	10468	721.7
212	100	1633	112.6	3061	211.0	3348	237.8	5100	351.6	5467	377.0	9180	632.9
302	150	1490	102.7	2793	192.5	3146	216.9	4653	320.8	4988	343.9	8375	577.4
392	200	1380	95.1	2587	178.3	2914	200.9	4311	297.2	4621	318.6	7759	534.9
482	250	1291	89.1	2421	166.9	2728	188.1	4034	278.1	4324	298.2	7261	500.6
572	300	1223	84.4	2294	158.1	2584	178.2	3822	263.5	4097	282.5	6880	474.3
617	325	1195	82.4	2240	154.4	2524	174.0	3734	257.4	4002	276.0	6720	463.3
662	350	1173	80.9	2199	151.6	2478	170.8	3665	252.7	3929	270.9	6598	454.9
707	375	1156	79.7	2167	149.4	2442	168.4	3612	249.0	3872	267.0	6501	448.2
752	400	1139	78.5	2135	147.2	2406	165.9	3558	245.3	3814	263.0	6406	441.6
797	425	1127	77.7	2114	145.7	2381	164.2	3523	242.9	3777	260.4	6340	437.1
842	450	1116	76.9	2092	144.2	2357	162.5	3487	240.4	3738	257.7	6276	432.7
887	475	1110	76.5	2080	143.4	2344	161.6	3465	238.9	3715	256.1	6239	430.1
932	500	1090	75.2	2044	140.9	2303	158.8	3409	235.0	3654	252.0	6136	423.0
1000	538	971	67.0	1821	125.5	2051	141.4	3030	208.9	3248	224.0	5451	375.8
1022	550	967	66.7	1812	124.9	2041	140.8	3017	208.0	3234	223.0	5427	374.2
1067	575	926	63.9	1737	119.7	1956	134.9	2894	199.5	3102	213.9	5209	359.1
1112	600	770	53.1	1444	99.5	1626	112.1	2406	165.9	2580	177.9	4331	298.6
1157	625	612	42.2	1148	79.1	1293	89.2	1912	131.8	2050	141.3	3441	237.2
1202	650	490	33.8	919	63.3	1035	71.4	1530	105.5	1641	113.1	2755	189.9
1247	675	400	27.6	749	51.6	844	58.2	1248	86.0	1337	92.2	2246	154.8
1292	700	325	22.4	608	41.9	685	47.2	1013	69.8	1086	74.9	1824	125.7
1337	725	270	18.7	507	34.9	571	39.4	844	58.2	905	62.4	1520	104.8
1382	750	227	15.7	425	29.3	479	33.1	710	48.9	761	52.5	1275	87.9
1427	775	177	12.2	331	22.8	373	25.7	552	38.0	591	40.8	993	68.4
1472	800	135	9.3	253	17.4	285	19.6	424	29.2	454	31.3	763	52.6
1500	816	109	7.6	205	14.1	231	15.9	346	23.8	370	25.6	620	42.7

Note: (1) At temperatures above 538 °C, use only when the carbon content is 0.04% or higher.

(2) Class 4500 applies only welding-end valves.

(3) A class designation greater than class 2500 or a rating temperature greater than 538 °C not applied to threaded-end valves.

Pressure - Temperature Ratings

The following table data are based on Standard Class of ASME B16.34.

ASTM A182/F11 Class 2(1)(2)(3)(4)

°F	°C	800	PN130	1500	PN250	1690	PN280	2500	PN420	2680	PN450	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-20~100	-29~38	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
122	50	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
212	100	1991	137.3	3733	257.4	4206	290.0	6223	429.0	6671	460.0	11200	772.2
302	150	1924	132.3	3607	248.7	4064	280.2	6013	414.5	6445	444.4	10823	746.2
392	200	1855	127.9	3478	239.8	3918	270.2	5796	399.6	6214	428.4	10434	719.4
482	250	1793	123.7	3362	231.8	3778	261.2	5602	386.2	6005	414.0	10077	694.8
572	300	1659	114.4	3110	214.4	3503	241.6	5180	357.1	5553	382.9	9320	642.6
617	325	1598	110.2	2996	206.6	3376	232.8	4994	344.3	5354	369.1	8987	619.6
662	350	1556	107.3	2917	201.1	3286	226.6	4864	335.3	5214	359.5	8750	603.3
707	375	1502	103.6	2815	194.1	3172	218.7	4688	323.2	5026	346.5	8438	581.8
752	400	1416	97.7	2655	183.1	2992	206.3	4423	304.9	4741	326.9	7955	548.5
797	425	1355	93.4	2540	175.1	2861	197.3	4230	291.6	4534	312.6	7610	524.7
842	450	1307	90.2	2451	169.0	2762	190.4	4088	281.8	4382	302.1	7354	507.0
887	475	1224	84.4	2295	158.2	2585	178.3	3828	263.9	4104	282.9	6887	474.8
932	500	995	68.6	1865	128.6	2101	144.9	3110	214.4	3334	230.0	5597	385.9
1000	538	577	39.8	1081	74.5	1218	84.0	1800	124.1	1930	133.1	3240	223.4
1022	550	492	33.9	921	63.5	1038	71.6	1536	105.9	1647	113.6	2765	190.6
1067	575	341	23.5	639	44.0	719	49.6	1065	73.4	1142	78.7	1915	132.0
1112	600	236	16.3	443	30.5	499	34.4	739	50.9	792	54.6	1329	91.6
1157	625	165	11.4	309	21.3	348	24.0	515	35.5	552	38.1	927	63.9
1202	650	110	7.6	206	14.2	232	16.0	343	23.6	367	25.3	618	42.6

- Note: (1) Use normalized and tempered material only.
 (2) Permissible, but not recommended for prolonged use above 595 °C.
 (3) Class 4500 applies only welding-end valves.
 (4) A class designation greater than class 2500 or a rating temperature greater than 538 °C not applied to threaded-end valves.

ASTM A182/F22 Class 2(1)(2)(3)

°F	°C	800	PN130	1500	PN250	1690	PN280	2500	PN420	2680	PN450	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-20~100	-29~38	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
122	50	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
212	100	1993	137.4	3736	257.6	4209	290.3	6229	429.4	6677	460.4	11211	773.0
302	150	1940	133.8	3637	250.8	4098	282.6	6066	418.2	6503	448.4	10918	752.8
392	200	1883	129.9	3530	243.4	3977	274.3	5881	405.4	6304	434.6	10585	729.8
482	250	1793	123.7	3362	231.8	3788	261.2	5602	386.2	6005	414.0	10077	694.8
572	300	1659	114.4	3110	214.4	3503	241.6	5180	357.1	5553	382.9	9320	642.6
617	325	1598	110.2	2996	206.6	3376	232.8	4994	344.3	5354	369.1	8986	619.6
662	350	1556	107.3	2917	201.1	3286	226.6	4864	335.3	5214	359.5	8750	603.3
707	375	1502	103.6	2815	194.1	3172	218.7	4688	323.2	5026	346.5	8438	581.8
752	400	1416	97.7	2655	183.1	2992	206.3	4423	304.9	4741	326.9	7955	548.5
797	425	1355	93.4	2540	175.1	2861	197.3	4230	291.6	4534	312.6	7610	524.7
842	450	1307	90.2	2451	169.0	2762	190.4	4088	281.8	4382	302.1	7353	507.0
887	475	1224	84.4	2295	158.2	2585	178.3	3828	263.9	4104	282.9	6886	474.8
932	500	1090	75.2	2044	140.9	2302	158.8	3409	235.0	3654	252.0	6135	423.0
1000	538	714	49.2	1338	92.2	1507	103.9	2230	153.7	2390	164.8	4012	276.6
1022	550	605	41.7	1134	78.2	1278	88.1	1890	130.3	2026	139.7	3401	234.5
1067	575	407	28.1	763	52.6	860	59.3	1272	87.7	1364	94.1	2290	157.9
1112	600	266	18.4	499	34.4	562	38.8	833	57.4	893	61.6	1499	103.3
1157	625	173	11.9	324	22.3	365	25.2	540	37.2	579	39.9	971	66.9
1202	650	110	7.6	206	14.2	232	16.0	343	23.6	367	25.3	618	42.6

- Note: (1) Permissible, but not recommended for prolonged use above 595 °C.
 (2) Class 4500 applies only welding-end valves.
 (3) A class designation greater than class 2500 or a rating temperature greater than 538 °C not applied to threaded-end valves.

Pressure - Temperature Ratings

The following table data are based on Standard Class of ASME B16.34.

ASTM A182/F91 (1)(2)

°F	°C	800	PN130	1500	PN250	1690	PN280	2500	PN420	2680	PN450	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-20~100	-29~38	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
122	50	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
212	100	1993	137.4	3736	257.6	4209	290.3	6229	429.4	6677	460.4	11211	773.0
302	150	1940	133.8	3637	250.8	4098	280.6	6066	418.2	6503	448.4	10918	752.8
392	200	1883	129.9	3530	243.4	3977	274.3	5881	405.4	6304	434.6	10585	729.8
482	250	1793	123.7	3362	231.8	3788	261.2	5602	386.2	6005	414.0	10077	694.8
572	300	1659	114.4	3110	214.4	3503	241.6	5180	357.1	5553	382.9	9320	642.6
617	325	1598	110.2	2996	206.6	3376	232.8	4994	344.3	5354	369.1	8986	619.6
662	350	1556	107.3	2917	201.1	3286	226.6	4864	335.3	5214	359.5	8750	603.3
707	375	1502	103.6	2815	194.1	3172	218.7	4688	323.2	5026	346.5	8438	581.8
752	400	1416	97.7	2655	183.1	2992	206.3	4423	304.9	4741	326.9	7955	548.5
797	425	1355	93.4	2540	175.1	2861	197.3	4230	291.6	4534	312.6	7610	524.7
842	450	1307	90.2	2451	169.0	2762	190.4	4088	281.8	4382	302.1	7353	507.0
887	475	1224	84.4	2295	158.2	2585	178.3	3828	263.9	4104	282.9	6886	474.8
932	500	1090	75.2	2044	140.9	2302	158.8	3409	235.0	3654	252.0	6135	423.0
1000	538	971	67.0	1820	125.5	2051	141.4	3030	208.9	3249	224.0	5451	375.8
1022	550	966	66.7	1812	124.9	2041	140.8	3017	208.0	3235	223.0	5427	374.2
1067	575	926	63.9	1736	119.7	1956	134.9	2894	199.5	3102	213.9	5208	359.1
1112	600	754	52.0	1414	97.5	1593	110.0	2357	162.5	2527	174.2	4243	292.5
1157	625	565	39.0	1059	73.0	1193	82.3	1766	121.7	1893	130.5	3178	219.1
1202	650	384	26.5	720	49.6	811	55.9	1200	82.7	1286	88.7	2160	148.9

Note: (1) Class 4500 applies only welding-end valves.

(2) A class designation greater than class 2500 or a rating temperature greater than 538°C not applied to threaded-end valves.

ASTM A182/F92 (1)(2)

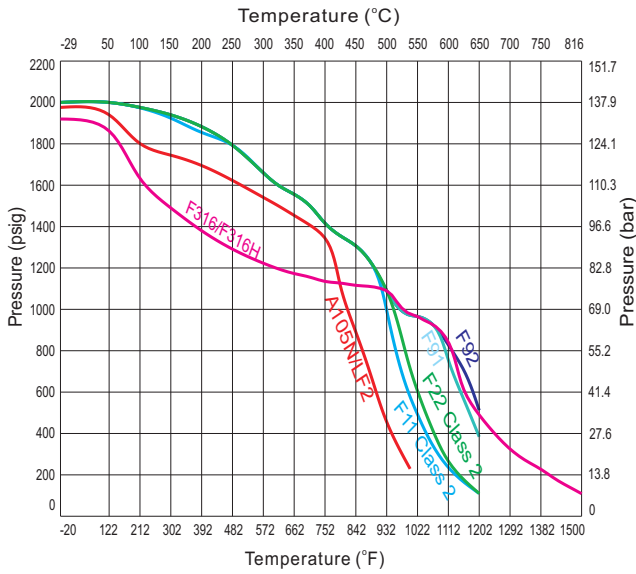
°F	°C	800	PN130	1500	PN250	1690	PN280	2500	PN420	2680	PN450	4500	PN760
		psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar
-20~100	-29~38	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
122	50	2000	138.0	3750	258.6	4225	291.4	6250	430.9	6700	462.0	11250	775.7
212	100	1993	137.4	3736	257.6	4209	290.3	6229	429.4	6677	460.4	11211	773.0
302	150	1940	133.8	3637	250.8	4098	280.6	6066	418.2	6503	448.4	10918	752.8
392	200	1883	129.9	3530	243.4	3977	274.3	5881	405.4	6304	434.6	10585	729.8
482	250	1793	123.7	3362	231.8	3788	261.2	5602	386.2	6005	414.0	10077	694.8
572	300	1659	114.4	3110	214.4	3503	241.6	5180	357.1	5553	382.9	9320	642.6
617	325	1598	110.2	2996	206.6	3376	232.8	4994	344.3	5354	369.1	8986	619.6
662	350	1556	107.3	2917	201.1	3286	226.6	4864	335.3	5214	359.5	8750	603.3
707	375	1502	103.6	2815	194.1	3172	218.7	4688	323.2	5026	346.5	8438	581.8
752	400	1416	97.7	2655	183.1	2992	206.3	4423	304.9	4741	326.9	7955	548.5
797	425	1355	93.4	2540	175.1	2861	197.3	4230	291.6	4534	312.6	7610	524.7
842	450	1307	90.2	2451	169.0	2762	190.4	4088	281.8	4382	302.1	7353	507.0
887	475	1224	84.4	2295	158.2	2585	178.3	3828	263.9	4104	282.9	6886	474.8
932	500	1090	75.2	2044	140.9	2302	158.8	3409	235.0	3654	252.0	6135	423.0
1000	538	971	67.0	1820	125.5	2051	141.4	3030	208.9	3249	224.0	5451	375.8
1022	550	966	66.7	1812	124.9	2041	140.8	3017	208.0	3235	223.0	5427	374.2
1067	575	926	63.9	1736	119.7	1956	134.9	2894	199.5	3102	213.9	5208	359.1
1112	600	828	57.1	1552	107.0	1738	120.0	2589	178.5	2776	191.4	4662	321.4
1157	625	706	48.7	1323	91.2	1482	102.2	2205	152.0	2364	163.0	3971	273.8
1202	650	512	35.3	960	66.2	1076	74.2	1600	110.3	1715	118.3	2881	198.6

Note: (1) Class 4500 applies only welding-end valves.

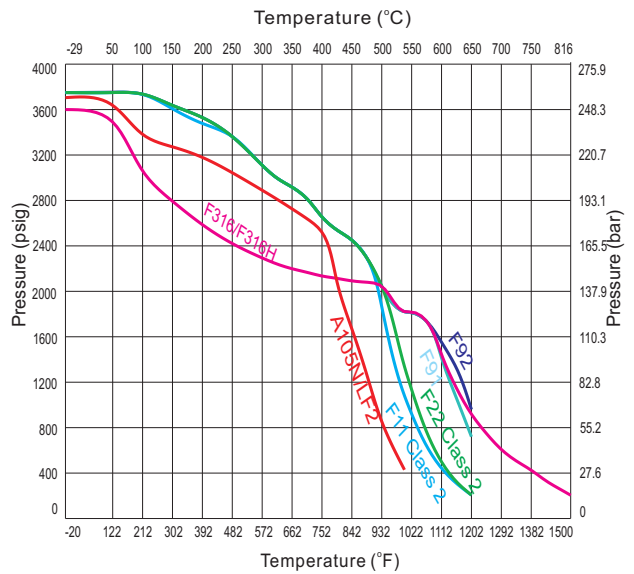
(2) A class designation greater than class 2500 or a rating temperature greater than 538°C not applied to threaded-end valves.

Chart of Pressure vs. Temperature

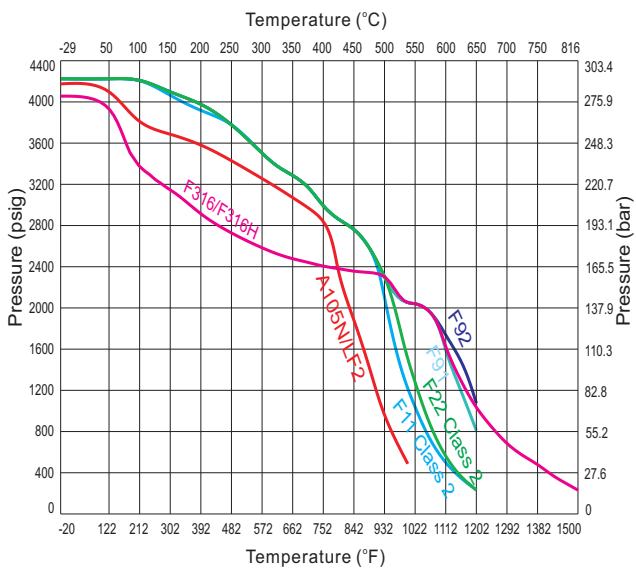
Class 800



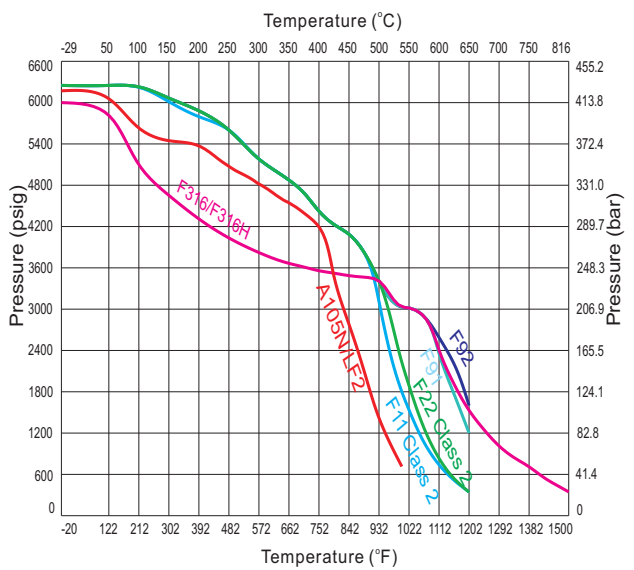
Class 1500



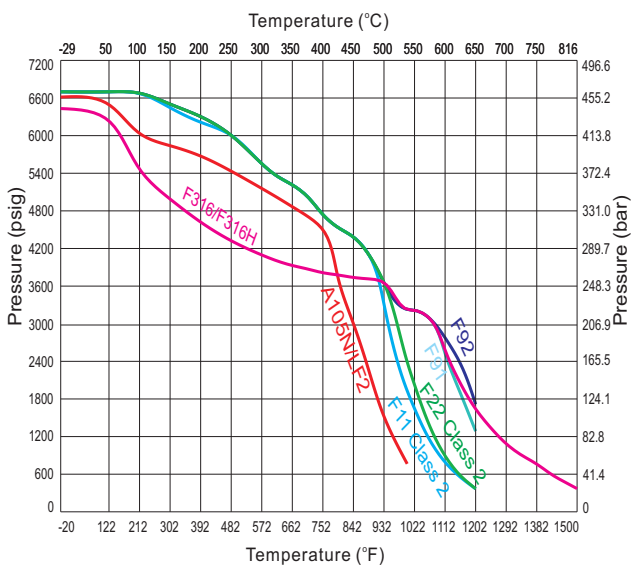
Class 1690



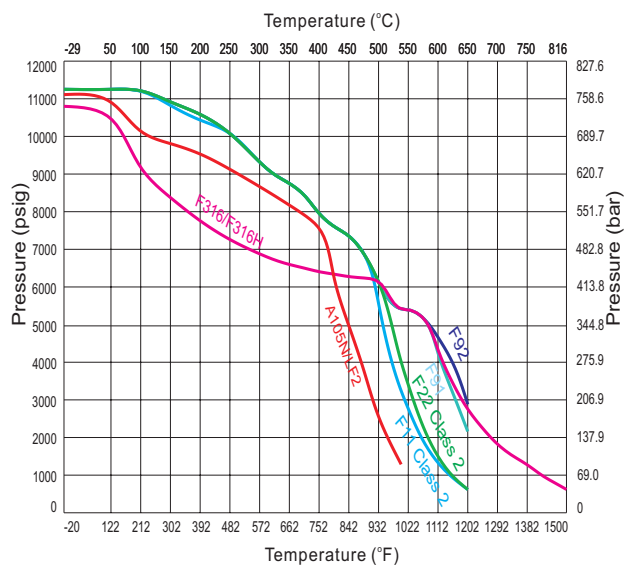
Class 2500



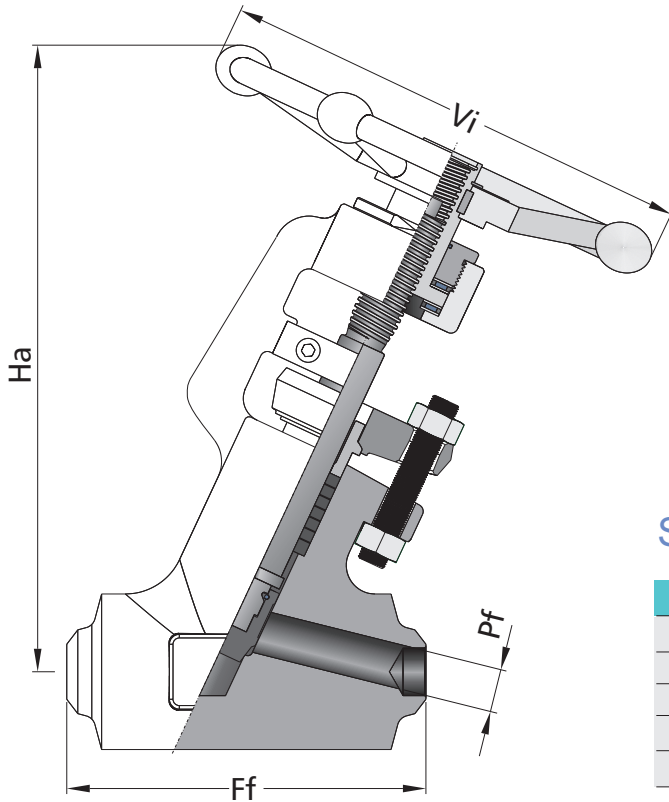
Class 2680



Class 4500



Forged Steel Y-Pattern Bonnetless Globe Valves



Non-rotating stem
Low actuation torque
Quick and easy disassembly

Specifications

DESIGN	ASME B16.34
Socket weld ends	ASME B16.11
Butt weld ends	ASME B16.25
Threaded ends	ASME B1.20.1
Testing	ASME B16.34 & MSS SP-61
Marking	MSS SP-25

Note: Valves are also supplied with electric, pneumatic or gear actuators.

Dimensions and Weights

Class 800-BW/SW(1)/NPT(1)

Dimensions	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Ff in. (mm)	3.15 (80.0)	3.94 (100.0)	4.33 (110.0)	6.3 (160.0)	7.48 (190.0)	7.87 (200.0)	8.27 (210.0)
Ha in. (mm)	5.79 (147.0)	7.32 (186.0)	8.66 (220.0)	12.01 (305.0)	13.86 (352.0)	14.96 (380.0)	15.35 (390.0)
Vi in. (mm)	3.54 (90.0)	3.94 (100.0)	4.72 (120.0)	5.51 (140.0)	7.87 (200.0)	8.66 (220.0)	9.84 (250.0)
Pf in. (mm)	0.47 (12.0)	0.7 (18.0)	0.89 (22.5)	1.38 (35.0)	1.79 (45.5)	2.72 (69.0)	3.62 (92.0)
Wt lb (kg)	5.3 (2.4)	6.6 (3.0)	8.8 (4.0)	22.0 (10.0)	35.2 (16.0)	61.6 (28.0)	79.2 (36.0)

Note: (1) Threaded and socket welding-end valves are not larger than NPS 2 1/2.

Class 1500-BW/SW(1)/NPT(1)

Dimensions	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Ff in. (mm)	3.94 (100.0)	4.33 (110.0)	4.72 (120.0)	7.48 (190.0)	7.48 (190.0)	8.66 (220.0)	9.06 (230.0)
Ha in. (mm)	7.32 (186.0)	8.66 (220.0)	9.02 (229.0)	13.70 (348.0)	15.31 (389.0)	16.50 (419.0)	17.13 (435.0)
Vi in. (mm)	3.94 (120.0)	6.89 (175.0)	6.89 (175.0)	7.87 (200.0)	10.24 (260.0)	15.16 (385.0)	16.22 (412.0)
Pf in. (mm)	0.47 (12.0)	0.63 (16.0)	0.79 (20.0)	1.26 (32.0)	1.69 (43.0)	2.56 (65.0)	3.54 (90.0)
Wt lb (kg)	6.6 (3.0)	8.8 (4.0)	15.4 (7.0)	33.0 (15.0)	41.0 (19.0)	112.2 (51.0)	171.6 (78.0)

Note: (1) Threaded and socket welding-end valves are not larger than NPS 2 1/2.

Dimensions, Weights and Catal. No.

Class 1690-BW/SW(1)/NPT(1)

Dimensions	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Ff in. (mm)	3.94 (100.0)	4.33 (110.0)	4.72 (120.0)	7.48 (190.0)	7.48 (190.0)	8.66 (220.0)	9.06 (230.0)
Ha in. (mm)	7.32 (186.0)	8.66 (220.0)	9.02 (229.0)	13.70 (348.0)	15.31 (389.0)	16.50 (419.0)	17.13 (435.0)
Vi in. (mm)	3.94 (100.0)	4.72 (120.0)	5.51 (140.0)	8.86 (225.0)	9.84 (250.0)	15.16 (385.0)	16.22 (412.0)
Pf in. (mm)	0.47 (12.0)	0.63 (16.0)	0.79 (20.0)	1.26 (32.0)	1.69 (43.0)	2.56 (65.0)	3.54 (90.0)
Wt lb (kg)	6.6 (3.0)	8.8 (4.0)	15.4 (7.0)	33.0 (15.0)	41 (19.0)	112.2 (51.0)	171.6 (78.0)

Note: (1) Threaded and socket welding-end valves are not larger than NPS 2 1/2.

Class 2500-BW/SW(1)/NPT(1)

Dimensions	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Ff in. (mm)	4.33 (110.0)	4.72 (120.0)	4.72 (120.0)	7.48 (190.0)	8.27 (210.0)	8.66 (220.0)	9.06 (230.0)
Ha in. (mm)	8.54 (217.0)	10.87 (276.0)	10.87 (276.0)	15.28 (388.0)	15.83 (402.0)	16.50 (419.0)	17.13 (435.0)
Vi in. (mm)	5.51 (140.0)	7.87 (200.0)	7.87 (200.0)	10.24 (260.0)	13.78 (350.0)	15.16 (385.0)	16.22 (412.0)
Pf in. (mm)	0.39 (10.0)	0.51 (13.0)	0.71 (18.0)	1.1 (28.0)	1.38 (35.0)	2.05 (52.0)	2.68 (68.0)
Wt lb (kg)	8.8 (4.0)	11 (5.0)	24.2 (11.0)	37.4 (17.0)	50.6 (23.0)	112.2 (51.0)	171.6 (78.0)

Note: (1) Threaded and socket welding-end valves are not larger than NPS 2 1/2.

Class 2680-BW/SW(1)

Dimensions	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Ff in. (mm)	4.33 (110.0)	4.72 (120.0)	4.72 (120.0)	7.48 (190.0)	8.27 (210.0)	8.66 (220.0)	9.06 (230.0)
Ha in. (mm)	8.54 (217.0)	10.87 (276.0)	10.87 (276.0)	15.27 (388.0)	15.83 (402.0)	16.50 (419.0)	17.13 (435.0)
Vi in. (mm)	5.51 (140.0)	7.87 (200.0)	7.87 (200.0)	9.84 (250.0)	13.78 (350.0)	15.16 (385.0)	16.22 (412.0)
Pf in. (mm)	0.39 (10.0)	0.51 (13.0)	0.71 (18.0)	1.1 (28.0)	1.38 (35.0)	2.05 (52.0)	2.68 (68.0)
Wt lb (kg)	8.8 (4.0)	15.4 (7.0)	17.6 (8.0)	39.7 (18.0)	52.9 (24.0)	112.2 (51.0)	171.6 (78.0)

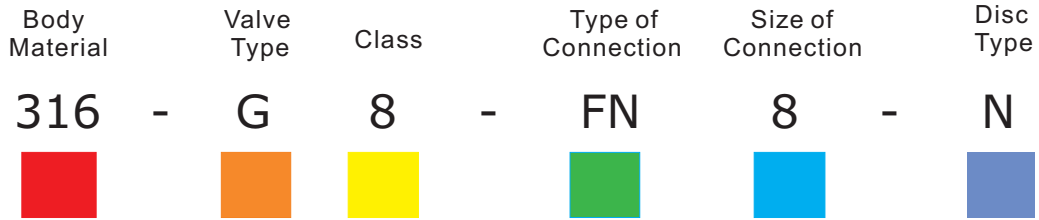
Note: (1) Socket welding-end valves are not larger than NPS 2 1/2.

Class 4500-BW/SW(1)

Dimensions	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
Ff in. (mm)	4.72 (120.0)	6.3 (160.0)	7.48 (190.0)	8.27 (210.0)	9.06 (230.0)	10.63 (270.0)	12.01 (305.0)
Ha in. (mm)	9.57 (243.0)	12.67 (322.0)	14.88 (378.0)	17.79 (452.0)	20.47 (520.0)	20.87 (530.0)	21.65 (550.0)
Vi in. (mm)	6.89 (175.0)	7.87 (200.0)	10.24 (260.0)	13.78 (350.0)	13.78 (350.0)	15.94 (405.0)	17.95 (456.0)
Pf in. (mm)	0.39 (10.0)	0.43 (11.0)	0.55 (14.0)	0.98 (25.0)	1.18 (30.0)	1.77 (45.0)	2.36 (60.0)
Wt lb (kg)	15.4 (7.0)	18.5 (8.4)	32.1 (14.6)	50.6 (23.0)	97.4 (42.0)	167.2 (76.0)	290.4 (132.0)

Note: (1) Socket welding-end valves are not larger than NPS 2 1/2.

Ordering Information



The figure numbers shown on this key are designed to cover essential features of caval valves. Please use figure numbers to ensure prompt and accurate processing of your order. A detailed description must accompany any special orders.

316 Body Material

316 - 316 SS	CS - A105
11 - F11	22 - F22
91 - F91	91 - F91

G Valve Type

G - Globe Valve

8 Class

8 - Class 800	25 - Class 2500
15 - Class 1500	27 - Class 2680
17 - Class 1690	45 - Class 4500

FN Type of Connection

FN - Female NPT	SW - Socket Weld
NS - Male NPT	BW - Butt Weld

8 Size of Connection

8 - 1/2" or DN15	32 - 2" or DN50
12 - 3/4" or DN20	48 - 3" or DN80
16 - 1" or DN25	64 - 4" or DN100
24 - 1 1/2" or DN40	

N Disc Type

S - Stop
N - Needle
C - Stop Check