

FORGED STEEL GATE VALVES

Class 800, Trim API No.5, 1/2"-2"



CONSTRUCTION IS AS FOLLOWS:

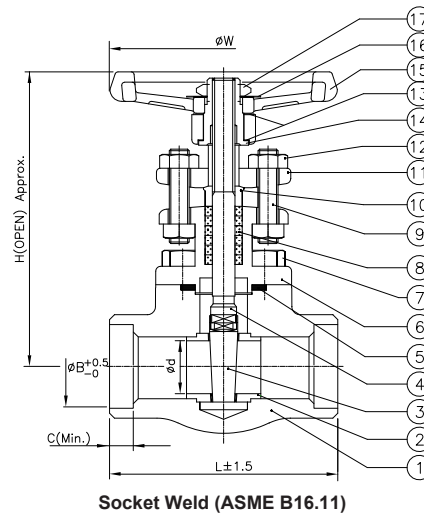
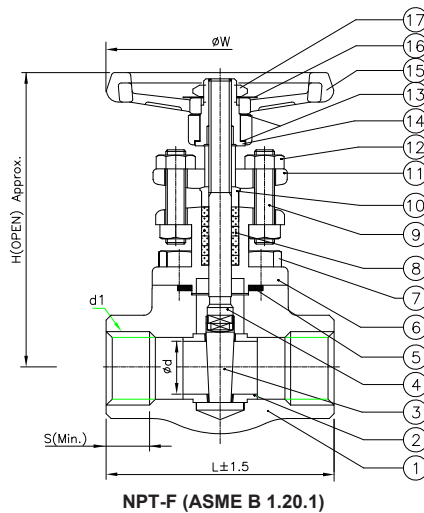
- Full Port (Conventional Port also available)
- Outside Screw and Yokes (OS & Y)
- Two piece self aligning packing gland
- Bolted bonnet with spiral-wound gasket
- Integral backseat
- Socket weld Ends to ANSI/ASME B16.11
- Screwed Ends (NPT) to ANSI/ASME B1.20.1

DESIGN CONSTRUCTION & SPECIFICATIONS

Forged steel gate valves conform to API 602, BS 5352 ANSI B16.34 / Each are tested according to API 598 and marking is per MSS SP-25

Standard Material Specifications

No.	Part Name	Materials			
			9	Gland Bolt	A193-B7M
1	Body	A105N	10	Gland	A276-410
2	Seat Ring	A276-410 HF No.6	11	Gland Flange	A105N
3	Wedge	A182-F6a HF No.6	12	Gland Nut	A194-2HM
4	Stem	A182-F6a	13	Sleeve Washer	Stainless Steel
5	Gasket	SPW 304+Graphite	14	Stem Sleeve	A276-410
6	Bonnet	A105N	15	Handwheel	A197
7	Bonnet Bolt	A193-B7M	16	Nameplate	SS304
8	Gland Packing	Flexible Graphite	17	H/W Nut	A194



Dimensions (mm)

NPS (inch)	NPT-F (ASME B 1.20.1)						Socket Weld (ASME B16.11)					
	H	L	ØW	Ød	d1	S	H	L	ØW	Ød	ØB	C
1/2"	158	79	100	9.5	1/2 NPT	13.6	158	79	100	9.5	21.8	10
3/4"	162	92	100	12.7	3/4 NPT	14	162	92	100	12.7	27.2	12.7
1"	197	111	120	17.5	1 NPT	17.4	197	111	120	17.5	33.9	12.7
1-1/4"	225	120	150	23	1-1/4 NPT	18	225	120	150	23	42.7	12.7
1-1/2"	247	120	150	28.6	1-1/2 NPT	18.4	247	120	150	28.6	48.8	12.7
2"	267	140	150	36.5	2 NPT	19.2	267	140	150	36.5	61.2	16



FORGED STEEL GATE VALVES

Class 1500, Trim API No.5, 1/2"-2"

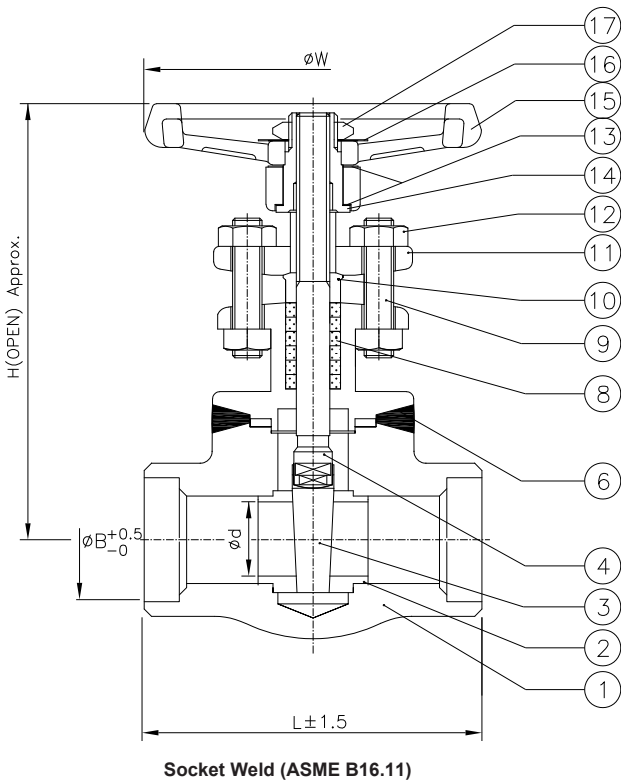


CONSTRUCTION IS AS FOLLOWS:

- Full Port or Conventional Port
- Outside Screw and Yokes (OS & Y)
- Two piece self aligning packing gland
- Seal welded bonnet
- Integral backseat
- Socket weld Ends to ANSI/ASME B16.11
- Screwed Ends (NPT) to ANSI/ASME B1.20.1

DESIGN CONSTRUCTION & SPECIFICATIONS

Forged steel globe valves conform to API 602, BS 5352, and ANSI B16.34. Each are tested according to API 598. and marking is per MSS SP-25.



Standard Material Specifications

No.	Part Name	Materials (ASTM)
1	Body	A182-F22
2	Seat Ring	A276-410 HF No.6
3	Wedge	A182-F6a HF No.6
4	Stem	A182-F6a
6	Bonnet	A182-F22
8	Gland Packing	Flexible Graphite
9	Gland Bolt	A193-B16
10	Gland	A276-410
11	Gland Flange	A182-F22
12	Gland Nut	A194-4
13	Sleeve Washer	Stainless Steel
14	Stem Sleeve	A276-410
15	Handwheel	A197
16	Nameplate	SS 304
17	H/W Nut	A194

Dimensions (mm)

NPS (inch)	H	L	ØW	Ød	ØB	C
1/2"	162	92	100	9.5	21.8	10
3/4"	197	111	120	12.7	27.2	13
1"	219	120	150	17.5	33.9	13
1-1/4"	243	120	150	23	42.7	13
1-1/2"	281	140	150	28.6	48.8	13
2"	315	178	220	36.5	61.2	16

PRESSURE-TEMPERATURE RATINGS



ASTM A 105 (1)(2), ASTM 350 GR LF2 (1), ASTM A216 Grade WCB (1) and ASTM A352 Grade LCC (1)

Temperature		MAXIMUM ALLOWABLE NON-SHOCK WORKING PRESSURE IN PSIG BY CLASS					
°F	°C	150	300	600	800	1500	2500
-20 to 100	-29 to 38	285	740	1480	1973	3705	6170
200	93	260	680	1360	1809	3395	5655
300	149	230	655	1310	1747	3270	5450
400	204	200	635	1265	1689	3170	5280
500	260	170	605	1205	1609	3015	5025
600	316	140	570	1135	1516	2840	4730
650	343	125	550	1100	1467	2745	4575
700	371	110	530	1060	1413	2665	4425
750	399	98	505	1015	1351	2535	4230
800	427	80	410	825	1098	2055	3430
850	454	65	320	640	849	1595	2655
900	482	50	230	460	613	1150	1915
950	510	35	135	275	364	685	1145
1000	538	20	85	170	227	430	715

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

(2) Only killed steel shall be used above 455°C.

(a) Flanged End Valve ratings terminate at 1000°F.

ASTM A 182 GR F22 AND ASTM A217 Grade WC9

Temperature		MAXIMUM ALLOWABLE NON-SHOCK WORKING PRESSURE IN PSIG BY CLASS					
°F	°C	150	300	600	800	1500	2500
-20 to 100	-29 to 38	290	750	1500	2000	3750	6250
200	93	260	750	1500	2000	3750	6250
300	149	230	720	1445	1124	3610	6015
400	204	200	695	1385	1849	3465	5775
500	260	170	665	1330	1773	3325	5540
600	316	140	605	1210	1613	3025	5040
650	343	125	590	1175	1569	2940	4905
700	371	110	570	1135	1516	2840	4730
750	399	95	530	1065	1418	2660	4430
800	427	80	510	1015	1356	2540	4230
850	454	65	485	975	1298	2435	4060
900	482	50	450	900	1200	2245	3745
950	510	35	385	755	1031	1930	3220
1,000	538	20	265	535	711	1335	2230
1,050	566	20(*)	175	350	467	875	1455
1,100	593	20(*)	110	220	293	550	915
1,150	621	20(*)	70	135	182	345	570
1,200	649	15(*)	40	80	111	205	345

* At temperatures above 538°C, use only when the carbon content is 0.04% or higher.

(a) Flanged End Valve ratings terminate at 1000°F.

