

Gate Valves

Gate Valves - Classes 150, 300 & 600

Specifications

- Bolted Bonnet
- Flexible or Solid Wedge
- Out Side Screw & Yoke
- Full Port
- Flanged Ends or Buttweld Ends
- Operators : Handwheel, Gear or Actuator

Basic Standards

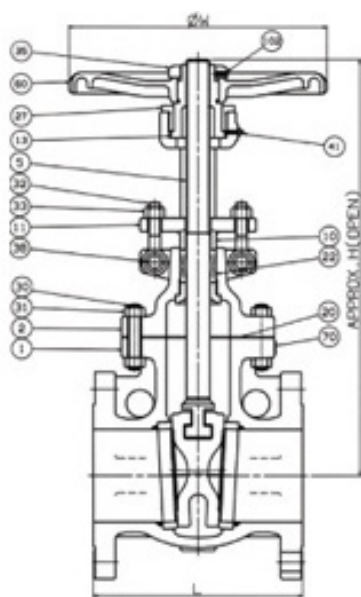
- Design : API 600
- Face to Face/End to End : ANSI B16.10
- Flange Dimensions : ANSI B16.5
- End Dimensions : ANSI B16.25
- Testing : API 598



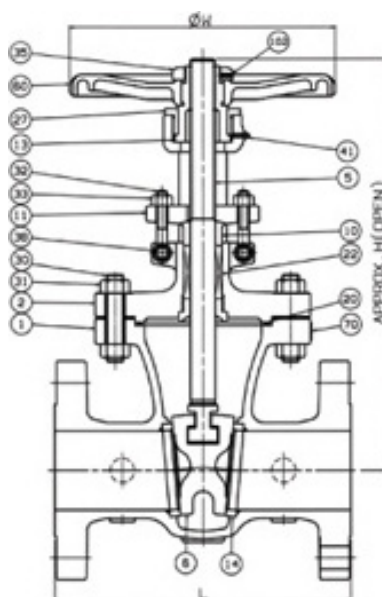
Standard Material Specifications

No	Part Name	Q'ty	ASTM Specifications (Soecs. - Grades/Types)				
1	Body	1	A216-WCB	A217-WC6	A352-LCB	A352-LC3	A217-WC1
2	Bonnet	1	A216-WCB	A217-WC6	A352-LCB	A352-LC3	A217-WC1
5	Stem	1	A276-410	A276-410	A276-304	A276-304	A276-410
6	Disc	1	A217-CA15	A217-CA15	A351-CF8	A351-CF8	A217-CA15
10	Gland	1	A276-410	A276-410	A276-307	A216-WCB	A276-410
11	Gland Flange	1	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB
12	Yoke	1	A216-WCB	A216-WCB	A216-WCB	A216-WCB	A216-WCB
13	Sleeve	1	A439-D2C	A439-D2C	A439-D2C	A439-D2C	A439-D2C
14	Seat Ring	2	A217-CA15	A217-CA15	A351-CF8	A351-CF8	A217-CA15
15	Neck Bush	1	A276-410	A276-410	A276-410	A276-410	A276-410
20	Gasket	1	Spiral Wound W/Graphite/Corrugated				
22	Gland Packing	1set	Graphite + Carbon Fiber				
27	Sleeve Nut	1	A108-1020				
28	Thrust Bearing	1set	Commercial				
30	Cover Blot	1set	A193-B7	A193-B7/B16	A193-B7	A193-B8	A193-B7/B16
31	Cover Blot Nut	1set	A194-2H	A194-2H/4	A194-2H	A194-8	A194-2H/4
32	Gland Blot	2	A307-B				
33	Gland Blot Nut	2	A307-B				
35	Handwheel Nut	1	A108-1020				
38	Gland Blot Pin	2	A276-410				
41	Grease Nipple	1	Steel				
46	Yoke Blot	1set	A307-B				
47	Yoke Blot Nut	1set	A307-B				
60	Handwheel	1	A536				
70	Name Plate	1	A167-304				

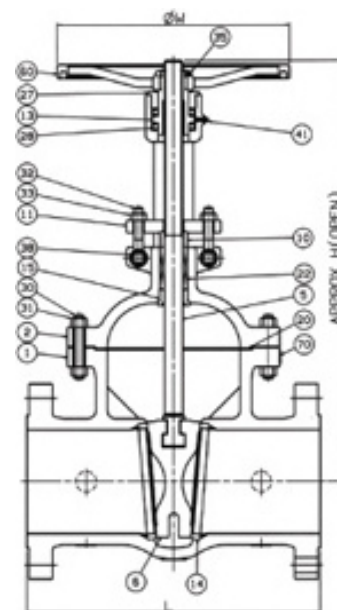
Other materials are available upon request.



L1(BUTT WELDING)
CLASS 150



L1(BUTT WELDING)
CLASS 300



L1(BUTT WELDING)
CLASS 600

Dimensions

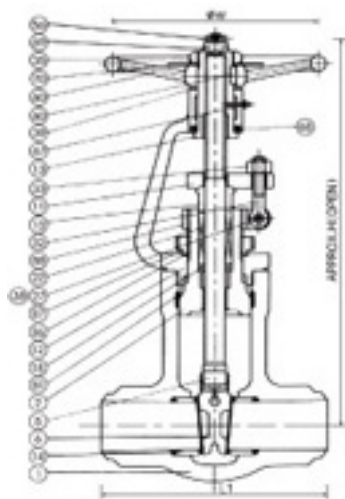
Unit : inch(mm)

NPS	Class 150				Class 300				Class 600			
	L	L1	H	ØW	L	L1	H	ØW	L	L1	H	ØW
2	7 (178)	8.5 (216)	15.25 (390)	8 (200)	8.5 (216)	8.5 (216)	16.25 (413)	8 (200)	11.5 (292)	11.5 (292)	17.25 (441)	8 (200)
2-1/2	7.5 (191)	9.5 (241)	16.75 (425)	8 (200)	9.5 (241)	9.5 (241)	18.75 (476)	8 (200)	13 (330)	13 (330)	19.25 (489)	10 (250)
3	8 (203)	11.25 (283)	18.25 (460)	8.85 (225)	11.25 (283)	11.25 (238)	19 (505)	9 (225)	14 (356)	14 (356)	21 (530)	10 (250)
4	9 (229)	12 (305)	23 (580)	10 (250)	12 (305)	12 (305)	23.75 (604)	10 (250)	17 (432)	17 (432)	25.75 (654)	12 (300)
5	10 (254)	15 (381)	25.5 (650)	11 (280)	15 (381)	15 (381)	30.75 (781)	12 (300)	20 (508)	20 (508)	33.75 (857)	16 (400)
6	10.5 (267)	15 (403)	30.5 (775)	12 (300)	15.25 (403)	15.25 (403)	32 (810)	14 (355)	22 (559)	22 (559)	41 (1041)	20 (500)
8	11.5 (292)	16.5 (419)	38.5 (975)	14 (355)	16.5 (419)	16.5 (419)	4.5 (1026)	15.75 (400)	26 (660)	26 (660)	49.25 (1251)	20 (500)
10	13 (330)	18 (457)	46.5 (1180)	15.75 (400)	18 (457)	18 (457)	49.25 (1251)	17.75 (450)	31 (787)	31 (787)	60.25 (1530)	23.5 (600)
12	14 (356)	19 (502)	54.75 (1390)	17.75 (450)	19.75 (502)	19.75 (502)	57 (1448)	19.75 (500)	33 (838)	33 (838)	70.25 (1784)	23.5 (600)
14	15 (381)	22.5 (572)	60.25 (1527)	19.75 (500)	30 (762)	30 (762)	67 (1698)	22 (560)	35 (889)	35 (889)	73.25 (1860)	23.5 (600)
16	16 (406)	24 (610)	68.50 (1740)	22 (560)	33 (838)	33 (838)	80 (2035)	24.8 (630)	39 (991)	39 (991)	85 (2160)	27.5 (700)
18	17 (432)	26 (660)	81.75 (2077)	24.8 (630)	36 (914)	36 (914)	89.75 (2277)	27.95 (710)	43 (1092)	43 (1092)	94.5 (2400)	27.5 (700)
20	18 (457)	28 (711)	89.25 (2270)	27.95 (710)	39 (991)	39 (991)	96.75 (2458)	31.5 (800)	47 (1194)	47 (1194)	96.75 (2460)	27.5 (700)
24	20 (502)	32 (813)	105 (2667)	31.49 (800)	45 (1143)	45 (1143)	113 (2867)	35.43 (900)	55 (1397)	55 (1397)	118.5 (3010)	27.5 (700)
28	24 (610)	36 (914)	127.5 (13236)	31.49 (800)	54 (1372)	54 (1372)	130 (3302)	35.43 (900)	-	-	-	-
30	24 (610)	36 (914)	134.5 (3417)	31.49 (800)	56 (1422)	56 (1422)	148.5 (3772)	35.43 (900)	-	-	-	-
36	28 (711)	40 (1016)	161.8 (4109)	31.49 (800)	69.12 (1756)	69.12 (1756)	169.8 (4312)	35.43 (900)	-	-	-	-

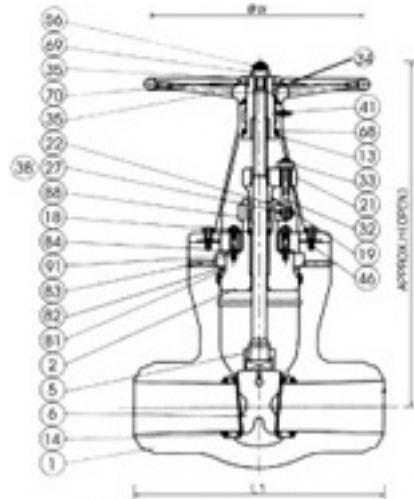
Gate Valves

Gate Valves - Classes 900, 1500 & 2500

Pressure Seal Bonnet



4" and Smaller



6" and Larger

Unit : inch(mm)

NPS	Class 900			Class 1500			Class 2500		
	L1	H	ØW	L1	H	ØW	L1	H	ØW
2-1/2	10 (254)	26 (665)	12 (300)	10 (254)	24 (615)	12 (300)	13 (330)	22 (565)	12 (300)
3	12 (305)	27 (695)	12 (300)	12 (305)	25 (630)	12 (300)	15 (368)	25 (640)	12 (300)
4	14 (356)	34 (855)	16 (400)	16 (406)	29 (735)	16 (400)	18 (300)	29 (735)	16 (400)
5				19 (483)					
6	20 (508)	41 (1050)	20 (500)	22 (559)	38 (960)	20 (500)	24 (460)	41 (1050)	20 (500)
8	26 (660)	56 (1420)	24 (600)	28 (711)	47 (1200)	24 (600)	30 (560)	49 (1235)	24 (600)
10	31 (787)	59 (1500)	28 (700)	34 (864)	15 (1350)	28 (700)	36 (700)	58 (1465)	28 (700)
12	36 (914)	72 (1825)	26 (700)	39 (991)	61 (1550)	28 (700)	41 (800)	65 (1645)	32 (800)
14	39 (991)	78 (1980)	32 (800)	42 (1607)	66 (1680)	32 (800)	44 (1000)	72 (1825)	39 (1000)
16	43 (1092)	82 (2085)	40 (1000)	47 (1194)	73 (1860)	40 (1000)	49 (1100)	79 (2015)	43 (1100)
18	48 (1219)	88 (2245)	40 (1000)	53 (1346)	85 (2150)	40 (1000)	55 (1400)	91 (2310)	55 (1400)
20	52 (1321)	98 (2500)	48 (1200)	28 (1473)	97 (2460)	48 (1200)			

Standard Material Specifications

No	Part Name	Q' ty	ASTM Specifications (Soecs. - Grades/Types)						
			A217					A351	
			WCB	WC6	WC9	C5	C12	CF8	CF8M
1	Body	1	A216 WCB	A217 WC6	A217 WC9	A217-C5	A217-C12	A351-CF9	A351-CF8M
2	Bonnet	1	A105/ A216-WCB	A182-F22/ A217-WC9	A182-F22/ A217-WC9	A182-F5/ A217-C5	A182-F9/ A351-CF8	A182-F304/ A351-CF8	A182-F317/ A351-CF8M
5	Stem	1	A276-431						
6	Disc	1	A216 WCB	A217 WC6	A217 WC9	A217-C5	A217-C12	A351-CF9	A351-CF8M
10	Gland	1	JIS C6782	A276-410					
11	Gland Flange	1	A105						
12	Yoke	1	A216-WCB						
13	Sleeve	1	JIS C6782						
14	Seat Ring	2	A105/ A216-WCB	A182-F22/ A217-WC9	A182-F22/ A217-WC9	A182-F5/ A217-C5	A182-F9/ A351-CF8	A182-F304/ A351-CF8	A182-F317/ A351-CF8M
18	Packing Washer	1	A276-410						
22	Gland Packing	1set	Graphite + Carbon Fiber						
27	Retainer Ring	4	A686-W1						
32	Gland Blot	2	A276-410						
33	Gland Blot Nut	2	A194-2H						
35	Handwheel Nut	1	A108-1020						
38	Gland Blot Pin	2	A276-410						
39	Sleeve Washer	1	JIS C6782						
41	Grease Nipple	1	Steel						
46	Yoke Blot	1set	A193-B7						
56	Split Pin	1	Steel						
60	Handwheel	1	A536						
68	Thrust Ball Bearing	2set	Steel						
69	Disc Stopper	1	A108-1020						
70	Name Plate	1	AISI 304						
81	Seal Ring	1	Soft Steel					A182-F316L	
82	Spacer Ring	1set	A105/ A216-WCB	A182-F22/ A217-WC9	A182-F22/ A217-WC9	A182-F5/ A217-C5	A182-F9/ A351-CF8	A182-F304/ A351-CF8	A182-F317/ A351-CF8M
83	Ring Retainer	1set	A105/ A216-WCB	A182-F22/ A217-WC9	A182-F22/ A217-WC9	A182-F5/ A217-C5	A182-F9/ A351-CF8	A182-F304/ A351-CF8	A182-F317/ A351-CF8M
84	Bonnet Retainer	1	A105/A216-WCB						
88	Bland Bolt Clamp	1set	A32+-WCB						
89	Clamp Bolt	2	A194 B7						
90	Clamp Bolt Nut	4	A194-2H						
91	Retainer Bolt	1set	A194 B7/B16*						
92	Retainer Bolt Nut	1set	A194-2H/4*						

· Used above 540°C(1000°F)

· Other materials are available upon request.