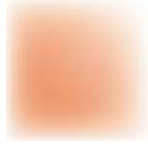
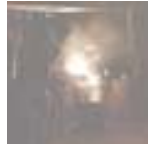




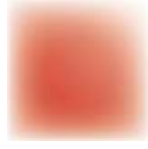
# GATE VALVE



# GLOBE VALVE



# CHECK VALVE



# BALL VALVE



# Y STRAINER - NEEDLE VALVE BUTTERFLY VALVE



# TECHNICAL DATA

# SPECIFICATION

## GATE VALVE APPLICATION

Gate Valves are general service valves that can be made in a broad spectrum of sizes using a variety of materials. Gate valves are primarily used to turn on or shut the flow as opposed to regulating flow and are characterized by a traveling wedge, which is moved with the operation of the stem nut. The wedge travels perpendicular to the direction of the flow. Gate valves usually have a minimum pressure drop when fully opened, provide tight shut-off when fully closed, and remain relatively free of contamination build up.

## MANUFACTURING STANDARDS

General Design	API 600 / API 6D / API 603
Face To Face	ASME/ANSI B16.10
Flange End	ASME/ANSI B16.5 & B16.47
Butt Weld End	ASME/ANSI B16.25
Pressure Rating	ASME/ANSI B16.34
Fire Safe Design	API 6FA
Inspection & Test	API 598 / API 6D
Features	Bolted Bonnet, Outside Screw & Yoke, Rising Stem, Flexible Wedge



### DISC WEDGE

All gates are fully guided to the seats. Gate valves are equipped with flexible wedge disc.

### SEAT RING

Seat rings are designed to greatly reduce and/or prevent any turbulence to avoid damages due to the corrosion. Seat rings for gate valves are typically made from forged steel.

### BACK SEATING DESIGN

All our gate valves have back seating design. When the gate valve is at fully open position the back seat can seal against the stem.

### STEM

The stem connection to the gate is of T design, which is forged integral with the stem. The stem to gate connection is designed to prevent the turning of the disengagement of stem from the wedge while the valve is in service.

### PACKING

The stem packing is designed and arranged to ensure a maximum seal along the stem during operation or while at position thus allowing for a greater reduction in fugitive emissions. Our standard packings are made of graphite.

### END CONNECTIONS

Our valves standard end connection are available in:

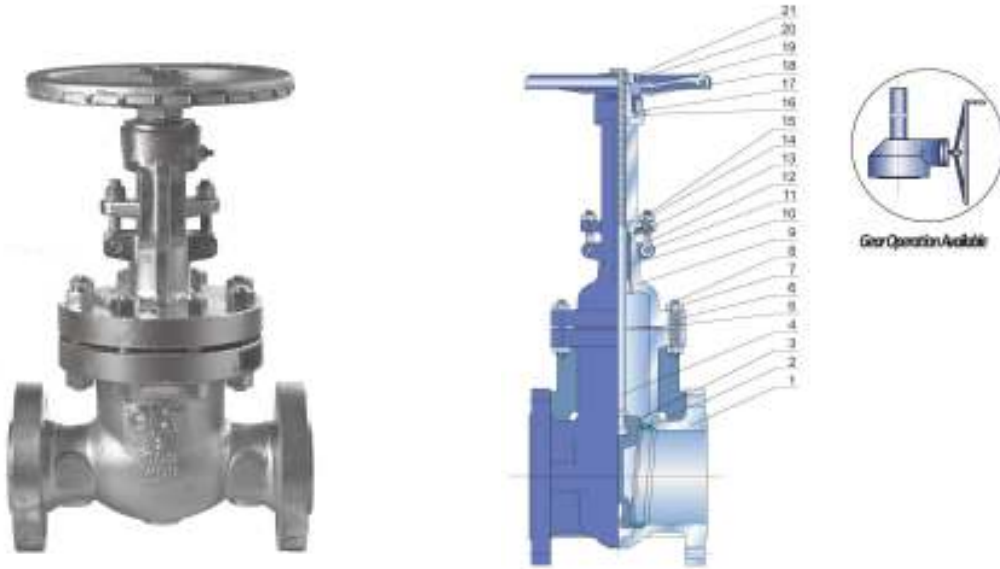
- Flange end type with Raised Face (RF), Flat Face (FF) or Ring Type Joint (RTJ) that conform to ANSI B16.5.
- Butt-welding ends (BW) that conform to ANSI B16.25.
- All face-to-face / end-to-end dimensions that conform to ANSI B16.10.

Other special end connections can be supplied according to customer's requirements.

### OPERATOR

Standard valves come in manual operation. Gear operation can be installed in valves if required. Other accessories such as actuators, chainwheels, locking device and many others options are also available to meet customer requirements.

# CAST STEEL GATE



## STANDARD PARTS & MATERIAL

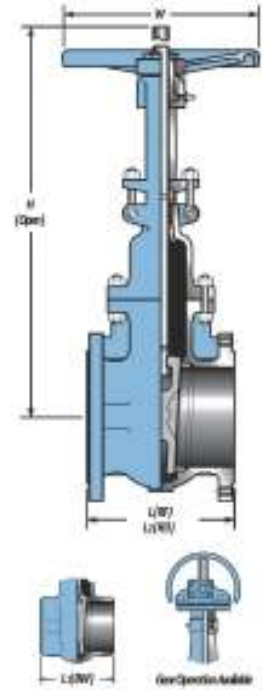
No.	Parts	CARBON STEEL		ALLOY STEEL				STAINLESS STEEL	
		WCB	LCB	WC6	WC9	C5	C12	CF8(M)	CF3(M)
1	Body	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8(M)	A351 CF3(M)
2	Seat	A105 + STL	A350 LF2 + STL	A182 F11 + STL	A182 F22 + STL	A182 F5 + STL	A182 F9 + STL	A351 CF8(M)	A351 CF3(M)
3	Disc	A216 WCB + 13CR	A352 LCB + 13CR	A217 WC6 +13CR	A217 WC9 + 13CR	A217 C5 + 13CR	A217 C12 + 13CR	A351 CF8(M)	A351 CF3(M)
4	Stem	A182 F6	A182 F304	A182 F6				A182 F304/ F316	A182 F304L/ F316L
5	Gasket	SS304 + Graphite						PTFE / SS316 + Graphite	
6	Bonnet	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8(M)	A351 CF3(M)
7	Bonnet Bolt	A193 B7	A320 L7	A193 B16				A193 B8	
8	Bonnet Nut	A194 2H	A194 7	A194 4				A194 8	
9	Back Seat	A276 410	A276 F304	A276 410				A182 F304/ F316	A182 F304L/ F316L
10	Packing	Flexible Graphite						PTFE/Flexible Graphite	
11	Pin	Steel						SS304	
12	Gland Eyebolt	A193 B7	A320 L7	A193 B16				A193 B8	
13	Gland	A276 410	A276 F304	A276 410				A182 F304/ F316	A182 F304L/ F316L
14	Gland Flange	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8(M)	A351 CF3(M)
15	Eye Bolt Nut	A194 2H	A194 7	A194 4				A194 8	
16	Grease Nipple	Brass							
17	Stem Nut	A493 D-2						Bronze	
18	Retaining Nut	Steel						Bronze	
19	Handwheel	Ductile Iron							
20	HandwheelNut	Steel						Bronze	
21	Screw	Steel						SS304	

Other valve material composition are available.

# CAST STEEL GATE

CLASS 150 API 600 / ASME B16.34	Size (In)	W	L (RF)	L1 (BW)	L2 (RTJ)	H ( Open )	Wt . (Kg)
	2	200 ( 8.00)	178 ( 7.00)	261 ( 8.50)	191 ( 7.50)	387 ( 15.20)	19
2.1/2	200 ( 8.00)	191 ( 7.50)	241 ( 9.50)	203 ( 8.00)	435 ( 17.10)	26	
3	250 (10.00)	203 ( 8.00)	283 (11.12)	216 ( 8.50)	481 ( 18.90)	35	
4	300 (12.00)	229 ( 9.00)	305 (12.00)	242 ( 9.50)	585 ( 23.00)	49	
5	300 (12.00)	254 (10.00)	381 (15.00)	267 (10.50)	681 ( 26.80)	64	
6	300 (12.00)	267 (10.50)	403 (15.88)	279 (11.00)	765 ( 30.10)	81	
8	350 (14.00)	292 (11.50)	419 (16.50)	305 (12.00)	956 ( 37.60)	127	
10	400 (16.00)	330 (13.00)	457 (18.00)	343 (13.50)	1149 ( 45.20)	204	
12	450 (18.00)	356 (14.00)	502 (19.75)	368 (14.50)	1351 ( 53.20)	291	
14	500 (20.00)	381 (15.00)	572 (22.50)	394 (15.50)	1508 ( 59.40)	400	
16	550 (22.00)	406 (16.00)	610 (24.00)	419 (16.50)	1703 ( 67.00)	486	
18	600 (24.00)	432 (17.00)	660 (26.00)	445 (17.50)	1892 ( 74.50)	610	
20	680 (27.00)	457 (18.00)	711 (28.00)	470 (18.50)	2119 ( 83.40)	788	
24	760 (30.00)	508 (20.00)	813 (32.00)	521 (20.50)	2500 ( 98.40)	1144	
26	610 (24.00)	559 (22.00)	864 (34.00)	-	2806 (110.00)	1570	
28	610 (24.00)	610 (24.00)	914 (36.00)	622 (24.50)	2960 (117.00)	1900	
30	610 (24.00)	610 (24.00)	914 (36.00)	622 (24.50)	3148 (124.00)	2540	
32	610 (24.00)	660 (26.00)	965 (38.00)	673 (26.50)	3281 (129.00)	2958	
36	610 (24.00)	711 (28.00)	1016 (40.00)	724 (28.50)	3721 (146.00)	3380	
40	610 (24.00)	762 (30.00)	1067 (42.00)	-	3980 (157.00)	4815	
42	813 (32.00)	787 (31.00)	1092 (42.00)	-	4820 (190.00)	5300	
48	813 (32.00)	864 (34.00)	1068 (46.00)	-	5920 (233.00)	7110	

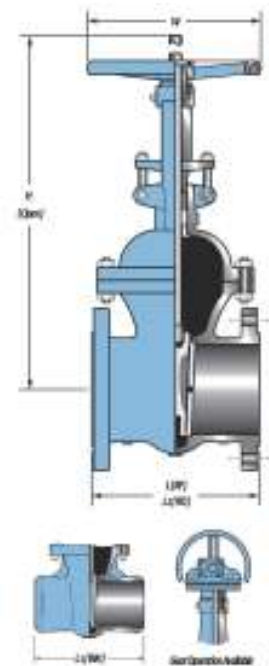
Standard Fig. No. 1A1C1



CLASS 300 API 600 / ASME B16.34	Size (In)	W	L (RF)	L1 (BW)	L2 (RTJ)	H ( Open )	Wt . (Kg)
	2	200 ( 8.00)	216 ( 8.00)	216 ( 8.00)	232 ( 9.12)	410 ( 16.10)	26
2.1/2	200 ( 8.00)	241 ( 9.50)	241 ( 9.50)	257 (10.12)	453 ( 17.80)	35	
3	250 (10.00)	283 (11.12)	283 (11.12)	298 (11.75)	509 ( 20.00)	52	
4	250 (10.00)	305 (12.00)	305 (12.00)	321 (12.62)	612 ( 24.10)	75	
5	300 (12.00)	381 (15.00)	381 (15.00)	397 (15.60)	670 ( 26.40)	102	
6	300 (12.00)	403 (15.88)	403 (15.88)	419 (16.50)	805 ( 31.70)	147	
8	350 (14.00)	419 (16.50)	419 (16.50)	435 (17.12)	1000 ( 39.40)	235	
10	400 (16.00)	457 (18.00)	457 (18.00)	473 (18.62)	1209 ( 47.60)	350	
12	450 (18.00)	502 (19.75)	502 (19.75)	518 (20.38)	1416 ( 55.70)	472	
14	500 (20.00)	572 (22.50)	572 (22.50)	588 (23.12)	1623 ( 62.30)	683	
16	550 (22.00)	638 (25.12)	638 (25.12)	654 (25.72)	1830 ( 69.90)	950	
18	600 (24.00)	714 (28.10)	714 (28.10)	730 (28.72)	2037 ( 77.10)	1145	
20	680 (27.00)	791 (30.72)	791 (30.72)	810 (31.88)	2244 ( 86.40)	1634	
24	760 (30.00)	873 (34.34)	873 (34.34)	895 (35.24)	2598 (102.30)	2660	
26	610 (24.00)	1245 (49.00)	1245 (49.00)	1270 (50.00)	2986 (117.60)	3090	
28	610 (24.00)	1346 (53.00)	1346 (53.00)	1372 (54.00)	3120 (122.80)	3312	
30	610 (24.00)	1397 (55.00)	1397 (55.00)	1422 (56.00)	3205 (126.20)	3597	
32	610 (24.00)	1524 (60.00)	1524 (60.00)	1553 (61.12)	3692 (145.40)	4850	
36	610 (24.00)	1727 (68.00)	1727 (68.00)	1756 (69.12)	4104 (161.60)	6850	

Standard Fig. No. 1A1C3

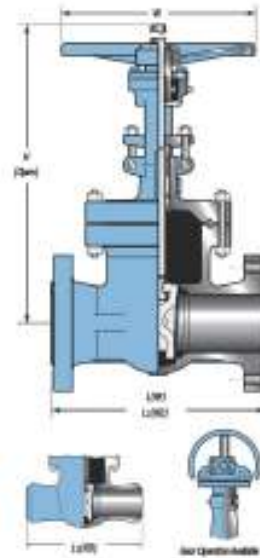
Unit : mm (inch)



# CAST STEEL GATE

CLASS 600 API 600 / ASME B16.34	Size (In)	W	L (RF)	L1 (BW)	L2 (RTJ)	H (Open)	Wt. (Kg)
	2	200 ( 8.00)	292 (11.50)	292 (11.50)	295 (11.62)	418 ( 16.50)	39
	2.1/2	250 (10.00)	330 ( 13.00)	330 (13.00)	333 (13.12)	476 ( 18.70)	52
	3	250 (10.00)	356 (14.00)	356 (14.00)	359 (14.12)	518 ( 20.40)	68
	4	300 (12.00)	432 (17.00)	432 (17.00)	435 (17.12)	646 ( 25.40)	120
	5	400 (16.00)	508 (20.00)	508 (20.00)	511 (20.12)	770 ( 30.30)	170
	6	450 (18.00)	559 (22.00)	559 (22.00)	562 (22.12)	839 ( 33.00)	273
	8	500 (20.00)	660 (26.00)	660 (26.00)	664 (26.12)	1024 ( 40.30)	402
	10	600 (24.00)	787 (31.00)	787 (31.00)	791 (31.12)	1229 ( 48.40)	610
	12	680 (27.00)	838 (33.00)	838 (33.00)	841 (33.12)	1450 ( 57.10)	902
14	610 (24.00)	889 (35.00)	889 (35.00)	892 (35.12)	1574 ( 62.00)	1245	
16	610 (24.00)	991 (39.00)	991 (39.00)	994 (29.12)	1797 ( 70.70)	1530	
18	610 (24.00)	1092 (43.00)	1092 (43.00)	1095 (43.12)	1931 ( 76.02)	2030	
20	610 (24.00)	1194 (47.00)	1194 (47.00)	1200 (47.25)	2207 ( 86.90)	2735	
24	610 (24.00)	1397 (55.00)	1397 (55.00)	1407 (55.38)	2582 (102.00)	3620	
26	813 (32.00)	1448 (57.00)	1448 (57.00)	1461 (57.50)	3150 (124.00)	5220	
28	1000 (40.00)	1549 (61.00)	1549 (61.00)	1562 (61.50)	3362 (133.00)	6050	
30	1000 (40.00)	1651 (65.00)	1651 (65.00)	1664 (65.50)	3549 (140.00)	6945	
32	1000 (40.00)	1778 (70.00)	1778 (70.00)	1794 (70.62)	3811 (150.00)	8312	
36	1000 (40.00)	2082 (82.00)	2082 (82.00)	2099 (82.62)	4260 (168.00)	10000	

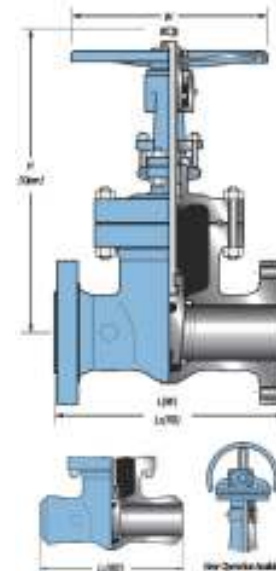
Standard Fig. No. 1A1C6



CLASS 900 API 600 / ASME B16.34	Size (In)	W	L (RF)	L1 (BW)	L2 (RTJ)	H (Open)	Wt. (Kg)
	2	250 (10.00)	368 (14.50)	368 (14.50)	371 (14.62)	498 ( 19.60)	74
	2.1/2	250 (10.00)	419 (16.50)	419 (16.50)	422 (16.62)	547 ( 21.50)	92
	3	300 (12.00)	381 (15.00)	381 (15.00)	384 (15.12)	573 ( 22.60)	101
	4	350 (14.00)	457 (18.00)	457 (18.00)	460 (18.12)	678 ( 26.70)	172
	6	500 (20.00)	610 (24.00)	610 (24.00)	613 (24.12)	900 ( 35.40)	335
	8	610 (24.00)	737 (29.00)	737 (29.00)	740 (29.12)	1103 ( 43.40)	640
	10	610 (24.00)	838 (33.00)	838 (33.00)	841 (33.12)	1345 ( 53.00)	1100
	12	610 (24.00)	965 (38.00)	965 (38.00)	968 (38.12)	1520 ( 59.80)	1360
	14	610 (24.00)	1029 (40.50)	1029 (40.50)	1038 (40.88)	1902 ( 74.90)	2250
16	610 (24.00)	1130 (44.50)	1130 (44.50)	1140 (44.88)	2051 ( 80.70)	2850	
18	810 (32.00)	1219 (48.00)	1219 (48.00)	1232 (48.50)	2212 ( 87.00)	3870	
20	1000 (40.00)	1321 (52.00)	1321 (52.00)	1334 (52.50)	2417 ( 95.00)	4860	
24	1000 (40.00)	1549 (61.00)	1549 (61.00)	1568 (61.75)	2750 (108.40)	6100	

Standard Fig. No. 1A1C9

Unit : mm (inch)



# CAST STEEL GATE

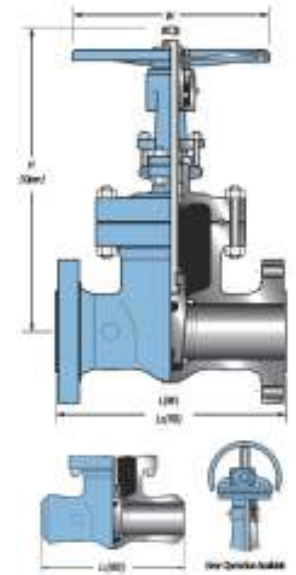
CLASS 1500 API 600 / ASME B16.34	Size (in)	W	L (RF)	L1 (BW)	L2 (RTJ)	H (Open)	Wt. (Kg)
	2	250 (10.00)	368(14.50)	368 (14.50)	371 (15.50)	487 (19.20)	74
	2.1/2	300 (12.00)	419 (16.50)	419 (16.50)	422 (16.62)	572 (22.50)	131
	3	350 (14.00)	470 (18.50)	470 (18.50)	473 (18.62)	603 (23.70)	165
	4	500 (20.00)	546 (21.50)	546 (21.50)	549 (21.62)	700 (27.60)	248
	6	610 (24.00)	705 (27.75)	705 (27.75)	711 (28.00)	984 (38.70)	510
	8	458 (18.00)	832 (32.75)	832 (32.75)	841 (33.12)	1146 (45.10)	1040
	10	458 (18.00)	991 (39.00)	991 (39.00)	1000 (39.38)	1371 (54.00)	1910
	12	610 (24.00)	1130 (44.50)	1130 (44.50)	1146 (45.12)	1633 (64.30)	2685
	14	610 (24.00)	1257 (49.50)	1257 (49.50)	1276 (50.25)	1798 (70.80)	4100
	16	610 (24.00)	1384 (54.50)	1384 (54.50)	1407 (55.38)	1963 (77.30)	6200

Standard Fig. No. 1A1C15

CLASS 2500 API 600	Size (in)	W	L (RF)	L1 (BW)	L2 (RTJ)	H (Open)	Wt. (Kg)
	2	350 (14.00)	451 (17.75)	451 (17.75)	454 (17.88)	563 (22.20)	74
	2.1/2	450 (18.00)	508 (20.00)	508 (20.00)	514 (20.50)	563 (22.20)	131
	3	450 (18.00)	578 (22.75)	578 (22.75)	584 (23.00)	582 (22.90)	165
	4	500 (20.00)	673 (26.50)	673 (26.50)	683 (26.88)	870 (34.30)	248
	6	610 (24.00)	914 (36.00)	914 (36.00)	927 (36.50)	1450 (57.10)	510
	8	610 (24.00)	1022 (40.25)	1022 (40.25)	1038 (40.88)	1610 (63.40)	1040
	10	610 (24.00)	1270 (50.00)	1270 (50.00)	1292 (50.88)	2076 (81.70)	1910
	12	610 (24.00)	1422 (56.00)	1422 (56.00)	1445 (56.88)	2281 (89.80)	2685

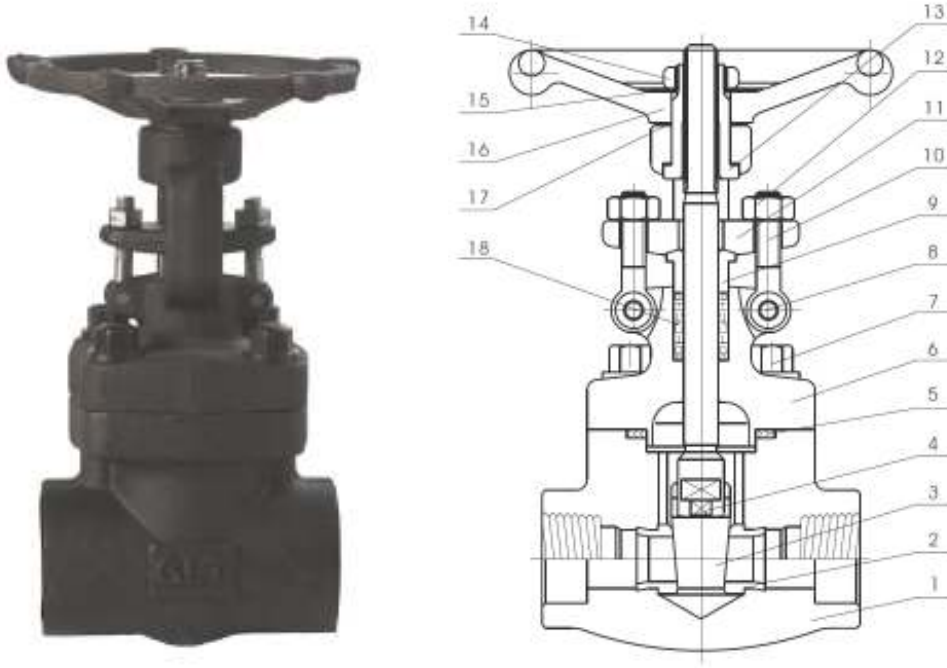
Standard Fig. No. 1A1C25

Unit : mm (inch)



# FORGED STEEL GATE

BOLTED / WELDED BONNET - REDUCED / FULL PORT



## STANDARD PARTS & MATERIAL

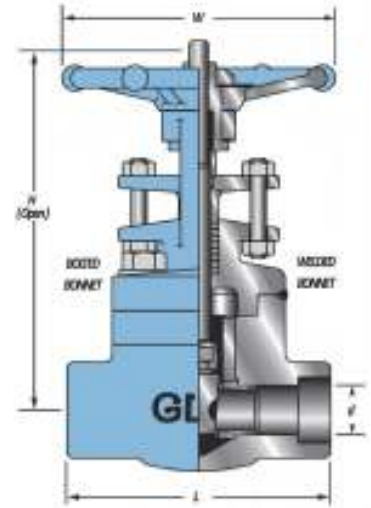
No.	Parts	A105/N	LF2	F11	F22	F304/L	F316/L	F51	
1	Body	A105/N	A350-LF2	A182-F11	A182-F22	A182-F304/L	A182-F316/L	A182-F51	
2	Seat Ring	410+STL	304+STL	410+STL	410+STL	304/L+STL	316/L+STL	F51+STL	
3	Wedge	410	304	420	420	304/L	316/L	F51	
4	Stem	410	304	410	410	304/L	316/L	F51	
5	Gasket	Flexible Graphite + SS Wire							
6	Bonnet	A105/N	A350-LF2	A182-F11	A182-F22	A182-F304/L	A182-F316/L	A182-F51	
7	Bonnet Bolt	A193-B7	A193-L7	A193-B16		A193-B8	A193-B8(M)		
8	Pin	SS304							
9	Gland	420/304/316							
10	Eyebolt	A193-B7	A193-L7	A193-B16		A193-B8	A193-B8(M)		
11	Gland Flange	A105				A105/F304			
12	Gland Nut	A194-2H				A194-8	A194-8(M)		
13	Stem Nut	410							
14	Handwheel Nut	A194-2H							
15	Name Plate	Aluminium							
16	Handwheel	A197							
17	Yoke Sleeve	A276-410							
18	Gland Packing	Flexible Graphite							

Other valve material composition are available.

# FORGED STEEL GATE

## MANUFACTURING STANDARD

General Design	API 602
Face To Face	ASME/ANSI B16.10
Connection	Screw NPT to ANSI B1.20.1, Socket Weld to ANSI B16.11, Buttweld to ANSI B16.25
Pressure Rating	ASME/ANSI B16.34
Fire Safe Design	API 6FA
Inspection & Test	API 598 / API 6D
Features	Bolted Bonnet/Welded Bonnet, Outside Screw & Yoke, Rising Stem, Solid Wedge



CLASS 800 - API 602	Port	Size (In)	W	L	H (Open)	d	Wt. (Kg)
		1/4	100 (3.94)	79 (3.11)	149 (5.87)	8 (0.31)	2
		1/2	100 (3.94)	79 (3.11)	153 (6.02)	10 (0.39)	2
		3/4	100 (3.94)	92 (3.62)	153 (6.02)	13 (0.51)	2
		1	125 (4.92)	111 (4.37)	185 (7.28)	18 (0.71)	4
		1.1/4	160 (6.30)	120 (4.72)	222 (8.74)	24 (0.94)	6
		1.1/2	160 (6.30)	120 (4.72)	240 (9.45)	29 (1.14)	6
		2	180 (7.09)	140 (5.51)	279 (10.98)	37 (1.44)	10
		1/2	100 (3.94)	92 (3.62)	153 (6.02)	13 (0.51)	2
		3/4	125 (4.92)	111 (4.37)	185 (7.28)	18 (0.71)	4
		1	160 (6.30)	120 (4.72)	222 (8.74)	24 (0.94)	6
		1.1/4	160 (6.30)	120 (4.72)	240 (9.45)	29 (1.14)	6
		1.1/2	180 (7.09)	140 (5.51)	279 (10.98)	37 (1.44)	10
		2	200 (7.87)	160 (6.30)	333 (13.11)	48 (1.89)	15

Standard Fig. No. 1A2F8

CLASS 1500 - API 602	Port	Size (In)	W	L	H (Open)	d	Wt. (Kg)
		1/4	100 (3.94)	79 (3.11)	175 (6.89)	8 (0.31)	3
		1/2	125 (4.92)	92 (3.62)	181 (7.13)	10 (0.39)	4
		3/4	125 (4.92)	111 (4.37)	181 (7.13)	13 (0.51)	4
		1	160 (6.30)	120 (4.72)	218 (8.58)	18 (0.71)	6
		1.1/4	160 (6.30)	120 (4.72)	237 (9.33)	24 (0.94)	7
		1.1/2	180 (7.09)	140 (5.51)	274 (10.79)	29 (1.14)	11
		2	200 (7.87)	160 (6.30)	319 (12.56)	37 (1.44)	16
		1/2	125 (4.92)	111 (4.37)	181 (7.13)	13 (0.51)	4
		3/4	160 (6.30)	120 (4.72)	218 (8.58)	18 (0.71)	6
		1	160 (6.30)	120 (4.72)	237 (9.33)	24 (0.94)	7
		1.1/4	180 (7.09)	140 (5.51)	274 (10.79)	29 (1.14)	11
		1.1/2	200 (7.87)	160 (6.30)	319 (12.56)	37 (1.45)	16
		2	200 (7.87)	230 (9.06)	345 (13.58)	48 (1.89)	17

Standard Fig. No. 1A2F15

CLASS 2500 API 602	Port	Size (In)	W	L	H (Open)	d	Wt. (Kg)
		1/2	160 (6.30)	150 (5.90)	253 (9.96)	14 (0.55)	7
		3/4	160 (6.30)	150 (5.90)	253 (9.96)	14 (0.55)	7
		1	200 (7.87)	170 (6.70)	291 (11.46)	19 (0.75)	10
		1.1/4	250 (9.84)	200 (7.87)	339 (13.35)	25 (0.98)	18
		1.1/2	250 (9.84)	200 (7.87)	342 (13.46)	28 (1.10)	20
		2	300 (11.81)	250 (9.84)	398 (15.67)	35 (1.38)	26

Standard Fig. No. 1A2F25

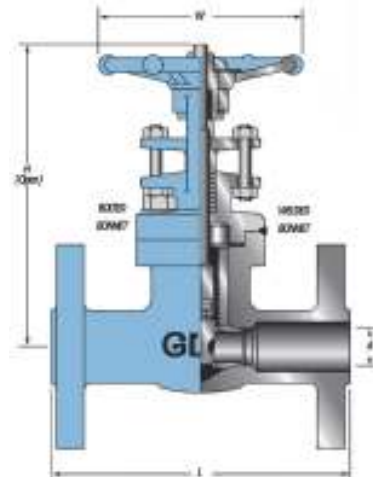
Unit : mm (inch)



# FORGED STEEL GATE

## MANUFACTURING STANDARD

General Design	API 602
Face To Face	ASME/ANSI B16.10
Connection	Flange to ANSI B16.5
Pressure Rating	ASME/ANSI B16.34
Fire Safe Design	API 6FA
Inspection & Test	API 598 / API 6D
Features	Bolted Bonnet/Welded Bonnet, Outside Screw & Yoke, Rising Stem, Solid Wedge, Integral Flange



CLASS 150 API 602	Size (In)	W	L	H (Open)	d	Wt. (Kg)
	1/2	100 (3.94)	108 (4.25)	153 (6.02)	10 (0.39)	3
	3/4	100 (3.94)	118 (4.63)	153 (6.02)	13 (0.51)	4
	1	125 (4.92)	127 (5.00)	185 (7.28)	18 (0.71)	6
	1.1/4	160 (6.30)	140 (5.50)	222 (8.74)	24 (0.94)	7
	1.1/2	160 (6.30)	165 (6.50)	240 (9.45)	29 (1.14)	10
	2	180 (7.09)	178 (7.00)	279 (10.98)	37 (1.44)	14

Standard Fig. No. 1A2F1

CLASS 300 API 602	Size (In)	W	L	H (Open)	d	Wt. (Kg)
	1/2	100 (3.94)	140 (5.50)	153 (6.02)	10 (0.39)	4
	3/4	100 (3.94)	152 (6.00)	153 (6.02)	13 (0.51)	5
	1	125 (4.92)	165 (6.50)	185 (7.28)	18 (0.71)	7
	1.1/4	160 (6.30)	178 (7.00)	222 (8.74)	24 (0.94)	9
	1.1/2	160 (6.30)	191 (7.50)	240 (9.45)	29 (1.14)	13
	2	180 (7.09)	216 (8.50)	279 (10.98)	37 (1.44)	18

Standard Fig. No. 1A2F3

CLASS 600 API 602	Size (In)	W	L	H (Open)	d	Wt. (Kg)
	1/2	100 (3.94)	165 (6.50)	153 (6.02)	10 (0.39)	4
	3/4	100 (3.94)	190 (7.50)	153 (6.02)	13 (0.51)	6
	1	125 (4.92)	216 (8.50)	185 (7.28)	18 (0.71)	9
	1.1/4	160 (6.30)	229 (9.00)	222 (8.74)	24 (0.94)	12
	1.1/2	160 (6.30)	241 (9.50)	240 (9.45)	29 (1.14)	15
	2	180 (7.09)	292 (11.50)	279 (10.98)	37 (1.44)	20

Standard Fig. No. 1A2F6

CLASS 1500 API 602	Size (In)	W	L	H (Open)	d	Wt. (Kg)
	1/2	100 (3.94)	216 (8.50)	153 (6.02)	10 (0.39)	7
	3/4	100 (3.94)	229 (9.00)	153 (6.02)	13 (0.51)	12
	1	125 (4.92)	254 (10.00)	185 (7.28)	18 (0.71)	16
	1.1/4	160 (6.30)	279 (10.98)	222 (8.74)	24 (0.94)	16
	1.1/2	160 (6.30)	305 (12.00)	240 (9.45)	29 (1.14)	23
	2	180 (7.09)	368 (14.49)	279 (10.98)	37 (1.44)	28

Standard Fig. No. 1A2F15

Unit : mm (inch)