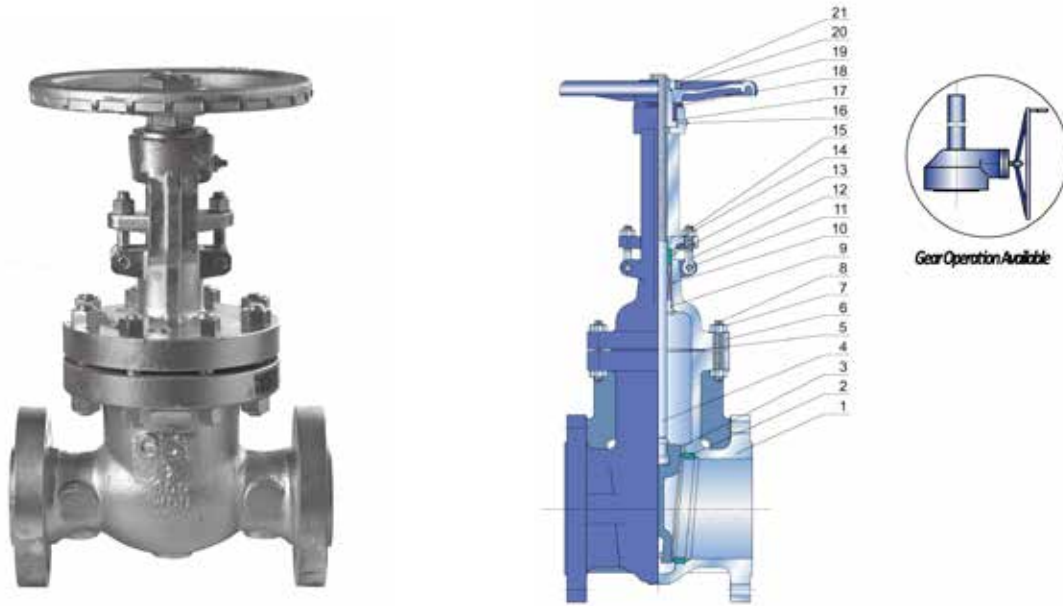


CAST STEEL GATE



STANDARD PARTS & MATERIAL

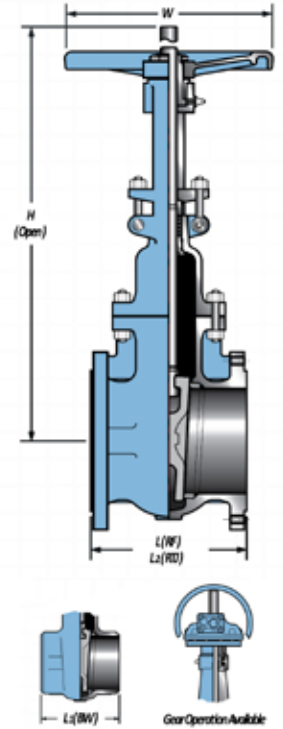
No.	Parts	CARBON STEEL		ALLOY STEEL				STAINLESS STEEL	
		WCB	LCB	WC6	WC9	C5	C12	CF8(M)	CF3(M)
1	Body	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8(M)	A351 CF3(M)
2	Seat	A105 + STL	A350 LF2 + STL	A182 F11 + STL	A182 F22 + STL	A182 F5 + STL	A182 F9 + STL	A351 CF8(M)	A351 CF3(M)
3	Disc	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

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

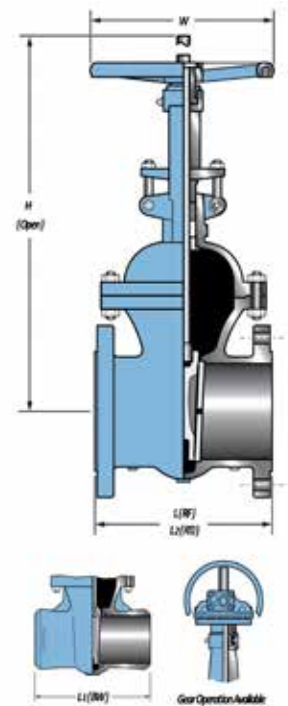
Standard Fig. No. 1A1C1



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)	762 (30.00)	762 (30.00)	778 (30.62)	1582 (62.30)	683
16	550 (22.00)	838 (33.00)	838 (33.00)	854 (33.62)	1725 (67.90)	950
18	600 (24.00)	914 (36.00)	914 (36.00)	930 (36.62)	1959 (77.10)	1145
20	680 (27.00)	991 (39.00)	991 (39.00)	1010 (39.75)	2194 (86.40)	1634
24	760 (30.00)	1143 (45.00)	1143 (45.00)	1165 (45.88)	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)

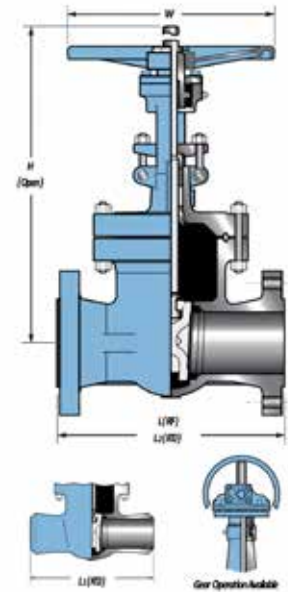


CAST STEEL GATE

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

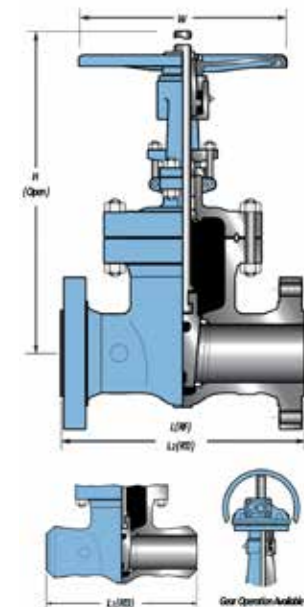


CLASS 900
API 600 / ASME B16.34

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

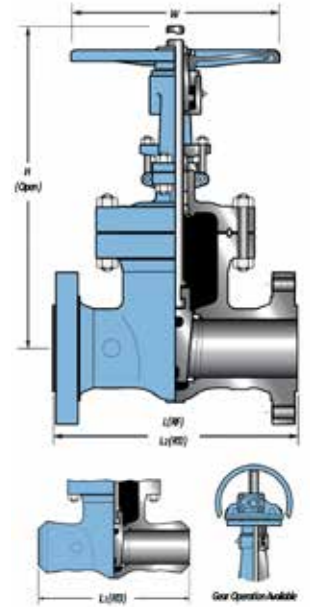
CLASS 1500 API 600 / ASME B16.34	Size (in)	W	L (RF)	L1 (BW)	L2 (RTJ)	H (Open)	Wt. (Kg)
	2	250 (10.00)	368(14.50)	368 (14.50)	371 (15.50)	487 (19.20)	74
	2.1/2	300 (12.00)	419 (16.50)	419 (16.50)	422 (16.62)	572 (22.50)	131
	3	350 (14.00)	470 (18.50)	470 (18.50)	473 (18.62)	603 (23.70)	165
	4	500 (20.00)	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

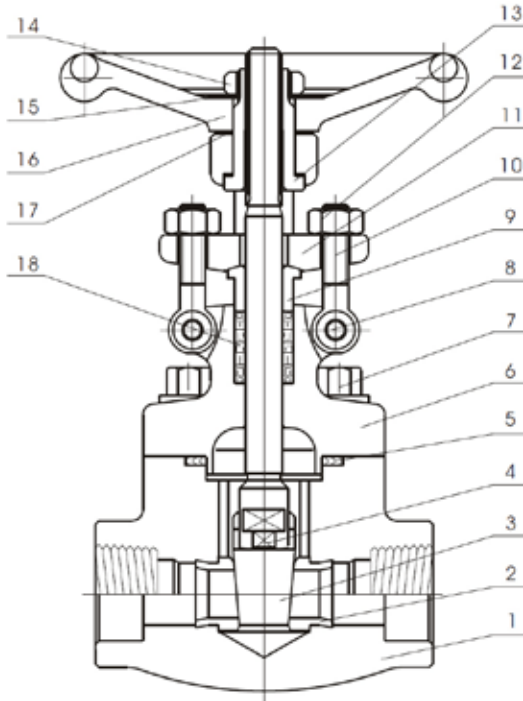
Standard Fig. No. 1A1C25

Unit : mm (inch)



FORGED STEEL GATE

BOLTED / WELDED BONNET - REDUCED / FULL PORT



STANDARD PARTS & MATERIAL

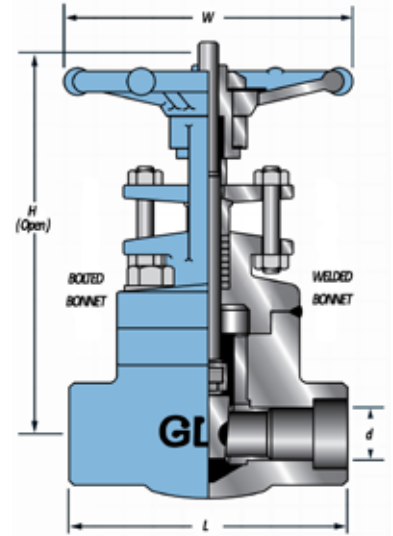
No.	Parts	A105/N	LF2	F11	F22	F304/L	F316/L	F51	
1	Body	A105/N	A350-LF2	A182-F11	A182-F22	A182-F304/L	A182-F316/L	A182-F51	
2	Seat Ring	410+STL	304+STL	410+STL	410+STL	304/L+STL	316/L+STL	F51+STL	
3	Wedge	410	304	420	420	304/L	316/L	F51	
4	Stem	410	304	410	410	304/L	316/L	F51	
5	Gasket	Flexible Graphite + 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)
	REGULAR		1/4	100 (3.94)	79 (3.11)	149 (5.87)	8 (0.31)
		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
FULL		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)
	REGULAR		1/4	100 (3.94)	79 (3.11)	175 (6.89)	8 (0.31)
		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
FULL		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)
	REGULAR		1/2	160 (6.30)	150 (5.90)	253 (9.96)	14 (0.55)
		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

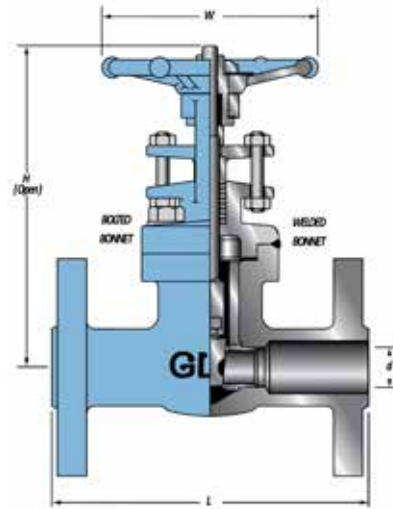
Standard Fig. No. 1A2F25

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)