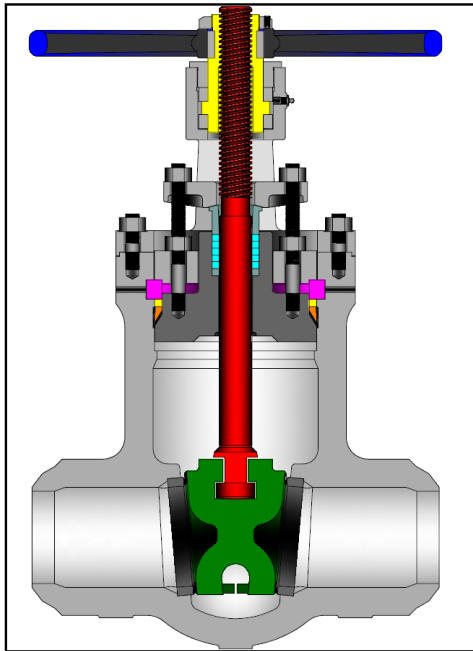


PRESSURE SEAL GATE VALVES

CAST, CARBON, STAINLESS STEEL OR ALLOY STEEL

2 - 24" (50 - 600 mm)

ASME CLASSES 600 - 2500



Class	Fig. No.
600	1603
900	1903
1500	1103
2500	1203

STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A216 Gr. WCB (STANDARD)	A217 Gr. WC6	A217 Gr. WC9	A217 Gr. C12A
Bonnet	A105	A182 F11	A182 F22	A182 F91
Yokearm	A216 Gr. WCB			
Wedge	A216 WCB + Stellite 6 Faced	A217 WC6 + Stellite 6 Faced	A217 WC9 + Stellite 6 Faced	A217 C12A + Stellite 6 Faced
Seat Ring	Carbon Steel + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F91 + Stellite 6 Faced
Stem	A182 F6a			
Stem Bushing	A 439 Ductile NI-Resist Gr. D2			
Stem Bushing Lock Nut	Steel			
Gland Flange	A216 Gr. WCB			
Eye Bolt	A193 Gr. B7			
Eye Bolt Nut	A194 Gr. 2H			
Gland	SST 410			
Packing	Graphite			
Packing Washer / Packing Spacer	SST 410			
Protective Ring	SST 410			
Segmental Thrust Ring	SST 410			
Support Plate	Steel			
Gasket	SST 304L			
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Steel			
Key	Steel			
Lubricant Fitting	Steel			
Bonnet Takeup / Yoke Stud	A193 Gr. B7	A193 Gr. B16		
Bonnet Takeup / Yoke Nut	A194 Gr. 2H	A194 Gr. 7		

DESIGN FEATURES:

- Flexible Wedge for improved seating and ease of operation, especially in high temperature service. Wedges are accurately guided thru the entire stroke.
- Valves are full port design per ASME B16.34 Table A-1.
- Standard trim is stellite faced seat and disc seat surfaces, and 13% chrome stem (API trim 5). Other trims available on request.
- Seat faces lapped for smooth finish and superior sealing.
- Stems are non-rotating with surface finish to maximize packing seal for low fugitive emissions.
- Yoke arms designed for ease of gear, motor or cylinder actuator adaptation.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- Each valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test report, inspection report and certificate of conformance.
- Valve sizes 4" and smaller have bonnet take up ring design instead of support plate design.
- Weld end valves are B16.10 short pattern design. Flanged end valves are available on request and are B16.10 long-pattern design. Weld end valve dimensions given in table on next page.
- Other available options as follows:
 - Alternate valve materials such as chrome and stainless steel alloys

Design Specifications

Item	Applicable Specification
Wall thickness	API 600
Pressure - temperature ratings	ASME B16.34
General valve design	ASME B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Butt Weld design	ASME B16.25
Materials	ASTM

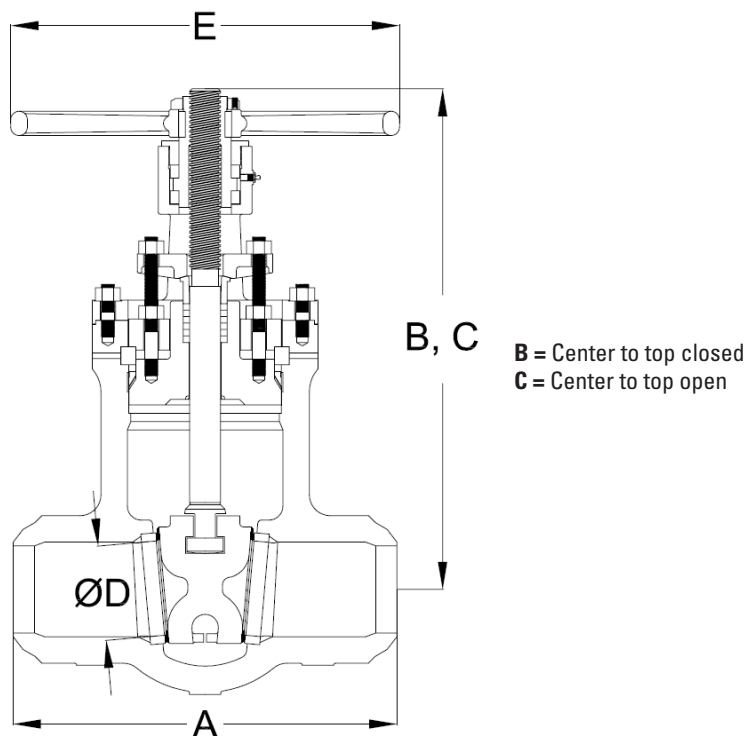
- » Alternate trim materials
- » Bypass, drain and other auxiliary connections
- » Gear, motor, and cylinder actuators available
- » NACE service
- » Special cleaning for applications such as oxygen or chlorine
- » Other options available as specified

GATE VALVE DIMENSIONS (CLASSES 600 - 2500)

SIZE	ASME 600					ASME 900					ASME 1500				
in mm	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D	E
2	7	15.7	18.2	2.00	8	8.5	19.7	22.0	1.87	14	8.5	19.7	22.0	1.87	14
50	178	399	462	51	200	216	499	558	48	356	216	499	558	48	356
2½	8.5	19.6	22.6	2.50	12	10.0	21.5	24.1	2.25	14	10.0	21.5	24.3	2.25	14
65	216	498	573	64	305	254	546	612	57	356	254	545	616	57	356
3	10	20.3	23.7	3.00	12	12.0	22.8	26.1	2.87	14	12.0	23.7	27.1	2.75	16
80	254	516	602	76	305	305	578	664	73	356	305	603	688	70	406
4	12	24.4	29.0	4.00	14	14.0	25.2	29.5	3.87	16	16.0	27.7	31.9	3.62	20
100	305	620	736	102	356	356	640	750	98	406	406	703	811	92	500
6	18	27.6	34.1	6.00	20	20.0	28.7	35.1	5.75	20	22.0	30.2	36.3	5.37	22
150	457	700	865	152	508	508	729	892	146	508	559	768	923	136	560
8	23	32.6	41.2	7.87	20	26.0	33.6	42.0	7.50	25	28.0	34.8	42.6	7.00	28
200	584	828	1047	200	508	660	854	1066	191	640	711	883	1083	178	720
10	28	38.4	49.0	9.75	25	31.0	44.2	53.5	9.37	30	34.0	44.5	53.3	8.75	28
250	711	975	1245	248	640	787	1122	1360	238	762	864	1131	1353	222	710
12	32	44.5	56.9	11.75	28	36.0	59.3	70.4	11.12	30	39.0	50.1	60.5	10.37	30
300	813	1129	1445	298	680	914	1505	1788	282	762	991	1272	1535	263	762
14	35	56.9	62.1	12.87	30	39.0	66.9	79.2	12.25	30	42.0	63.1	74.5	11.37	36
350	889	1445	1577	327	762	991	1700	2011	311	762	1067	1604	1892	289	914
16	39	74.9	14.75	18	43.0	76.1	14.00	24	47.0	76.1	13.00	24			
400	991	1903	375	460	1092	1933	356	610	1194	1933	330	610			
18	43	84.9	16.5	18	48.0	88.7	15.75	24	53.0	84.6	14.62	24			
450	1092	2157	419	460	1219	2255	400	610	1346	2149	371	610			
20	47	86.6	18.25	18	52.0	92.2	17.5	24	58.0	104	16.37	24			
500	1194	2200	464	460	1321	2342	445	610	1473	2626	416	610			
24	55	90.4	22.00	18	61.0	106.0	21.00	24	76.5	138	19.62	24			
600	1397	2295	559	460	1549	2680	533	610	1943	3490	498	610			

(1) Gear operators standard for 16" and up classes 600 to 1500 and 14" and up for class 2500.

SIZE	ASME 2500				
in	A	B(1)	C(1)	D	E
mm					
2	11.0	18.6	20.5	1.50	12
50	279	473	521	38	300
2½	13.0	22.0	26.1	1.87	18
65	330	558	662	48	457
3	14.5	22.0	26.1	2.25	18
80	368	558	662	57	457
4	18.0	28.2	32.0	2.87	20
100	457	717	812	73	508
6	24.0	31.4	36.5	4.37	24
150	610	798	928	111	610
8	30.0	39.2	47.2	5.75	24
200	762	997	1200	146	610
10	36.0	45.3	52.6	7.25	30
250	914	1151	1335	184	762
12	41.0	52.7	66.7	8.62	36
300	1041	1339	1695	219	914
14	44.0	74.2		9.50	24
350	1118	1885		241	610
16	49.0	77.0		10.87	24
400	1245	1956		276	610
18	55.0	79.9		12.25	32
450	1397	2030		311	800



PRESSURE SEAL GATE VALVES

CAST CARBON, STAINLESS STEEL OR ALLOY STEEL

2 - 24" (50 - 600 mm)

ASME CLASSES 600 - 2500

SIZE	ASME 600					ASME 900					ASME 1500					ASME 2500				
in mm	F	in mm	WT lb kg	CV		F	in mm	WT lb kg	CV		F	in mm	WT lb kg	CV		F	in mm	WT lb kg	CV	
2	27.5		95	240		30.2		95	210		30.2		95	210		30.6		176	140	
50	699		43			766		43			766		43			778		80		
2½	30.2		125	390		30.3		125	310		32.8		135	310		34.6		348	220	
65	768		56			769		56			832		61			878		158		
3	32.3		143	560		35.4		154	510		36.9		221	470		34.6		392	310	
80	821		65			898		70			937		100			878		178		
4	39.0		181	1000		40.4		229	950		43.9		401	830		43.2		522	520	
100	990		82			1025		104			1115		182			1098		237		
6	45.5		364	2400		46.9		518	2200		47.2		760	2000		50.3		772	1300	
150	1155		165			1192		235			1199		345			1278		381		
8	54.5		712	4300		56.4		904	3900		57.1		1583	3400		60.2		1852	2300	
200	1385		323			1433		410			1449		718			1530		840		
10	65.2		1091	6700		68.2		1820	6200		66.4		2787	5400		72.5		3504	3700	
250	1655		495			1733		825			1687		1264			1841		1589		
12	76.6		1616	10000		78.0		2586	9000		78.0		3235	7800		82.6		5420	5400	
300	1945		733			1982		1173			1980		1467			2098		2458		
14	84.5		2221	12000		81.5		3421	11000		89.8		5140	9400		94.1		7110	6600	
350	2146		1007			2069		1552			2282		2336			2391		3225		
16	94.2		2898	16000		99.4		4291	14000		101.9		6477	12000		111.8		4016	8600	
400	2393		1314			2523		1946			2588		2937			2840		4801		
18	105.3		3646	21000		111.5		5164	19000		114.9		7857	16000		114.7		10587	11000	
450	2675		1654			2832		2342			2917		3563			2913		4801		
20	116.4		4456	25000		122.3		6005	23000		129.0		9256	20000						
500	2958		2021			3106		2723			3275		4198							
24	141.9		6231	37000		147.5		7463	33000		161.3		11983	29000						
600	3605		2826			3747		3385			4098		5434							

Note: Does not include weight of gear.

WT = Weight
F = Dismantling Dimension
CV = Flow Coefficient

