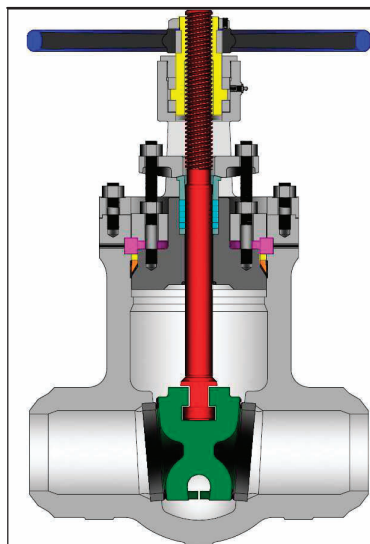




**PRESSURE SEAL GATE VALVES**  
 CAST CARBON, STAINLESS STEEL OR ALLOY STEEL  
 2 TO 24" (50 TO 600 mm)  
 ASME CLASSES 600 TO 2500



**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		

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

**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 back-seat 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.

**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

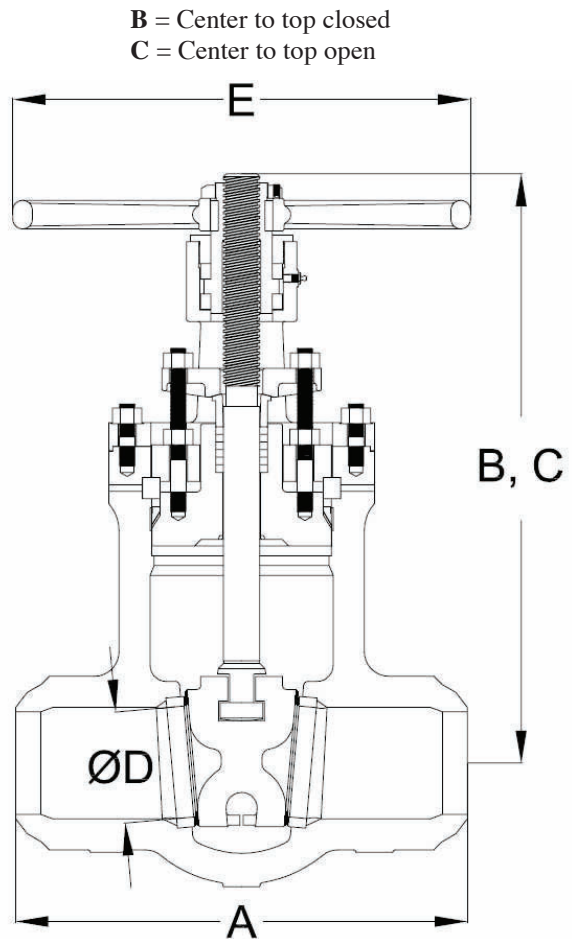
- **Other** available options as follows:
  - Alternate valve materials such as chrome and stainless steel alloys
  - Alternate trim materials
  - Bypass, drain and other auxiliary connections
  - Gear, motor, and cylinder actuators available
  - NACE service
  - Special cleaning for applications such as oxygen or chlorine
  - Other options available as specified

**GATE VALVE DIMENSIONS (CLASS 600—2500).**

SIZE	ASME 600					ASME 900					ASME 1500				
	in	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D
2	7.00	15.7	18.2	2.00	8	8.50	19.7	22.0	1.87	14	8.50	19.7	22.0	1.87	14
50	178	399	462	51	200	216	499	558	48	356	216	499	558	48	356
2½	8.50	19.6	22.6	2.50	12	10.00	21.5	24.1	2.25	14	10.00	21.5	24.3	2.25	14
65	216	498	573	64	305	254	546	612	57	356	254	545	616	57	356
3	10.00	20.3	23.7	3.00	12	12.00	22.8	26.1	2.87	14	12.00	23.7	27.1	2.75	16
80	254	516	602	76	305	305	578	664	73	356	305	603	688	70	406
4	12.00	24.4	29.0	4.00	14	14.00	25.2	29.5	3.87	16	16.00	27.7	31.9	3.62	20
100	305	620	736	102	356	356	640	750	98	406	406	703	811	92	500
6	18.00	27.6	34.1	6.00	20	20.00	28.7	35.1	5.75	20	22.00	30.2	36.3	5.37	22
150	457	700	865	152	508	508	729	892	146	508	559	768	923	136	560
8	23.00	32.6	41.2	7.87	20	26.00	33.6	42.0	7.50	25	28.00	34.8	42.6	7.00	28
200	584	828	1047	200	508	660	854	1066	191	640	711	883	1083	178	720
10	28.00	38.4	49.0	9.75	25	31.00	44.2	53.5	9.37	30	34.00	44.5	53.3	8.75	28
250	711	975	1245	248	640	787	1122	1360	238	762	864	1131	1353	222	710
12	32.00	44.5	56.9	11.75	28	36.00	59.3	70.4	11.12	30	39.00	50.1	60.5	10.37	30
300	813	1129	1445	298	680	914	1505	1788	282	762	991	1272	1535	263	762
14	35.00	56.9	62.1	12.87	30	39.00	66.9	79.2	12.25	30	42.00	63.1	74.5	11.37	36
350	889	1445	1577	327	762	991	1700	2011	311	762	1067	1604	1892	289	914
16	39.00	74.9	14.75	18	43.00	76.1	14.00	24	47.00	76.1	13.00	24			
400	991	1903	375	460	1092	1933	356	610	1194	1933	330	610			
18	43.00	84.9	16.50	18	48.00	88.7	15.75	24	53.00	84.6	14.62	24			
450	1092	2157	419	460	1219	2255	400	610	1346	2149	371	610			
20	47.00	86.6	18.25	18	52.00	92.2	17.50	24	58.00	104	16.37	24			
500	1194	2200	464	460	1321	2342	445	610	1473	2626	416	610			
24	55.00	90.4	22.00	18	61.00	106	21.00	24	76.50	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
2	11.00	18.6	20.5	1.50	12
50	279	473	521	38	300
2½	13.00	22.0	26.1	1.87	18
65	330	558	662	48	457
3	14.50	22.0	26.1	2.25	18
80	368	558	662	57	457
4	18.00	28.2	32.0	2.87	20
100	457	717	812	73	508
6	24.00	31.4	36.5	4.37	24
150	610	798	928	111	610
8	30.00	39.2	47.2	5.75	24
200	762	997	1200	146	610
10	36.00	45.3	52.6	7.25	30
250	914	1151	1335	184	762
12	41.00	52.7	66.7	8.62	36
300	1041	1339	1695	219	914
14	44.00	74.2	9.50	24	
350	1118	1885	241	610	
16	49.00	77.0	10.87	24	
400	1245	1956	276	610	
18	55.00	79.9	12.25	32	
450	1397	2030	311	800	



**PRESSURE SEAL GATE VALVES**  
 CAST CARBON , STAINLESS STEEL OR ALLOY STEEL  
 2 TO 24" ( 50 TO 600 mm)  
 ASME CLASSES 600 TO 2500

SIZE	ASME 600					ASME 900					ASME 1500					ASME 2500							
	in mm	F	in mm	WT	lb kg	C <sub>v</sub>	F	in mm	WT	lb kg	C <sub>v</sub>	F	in mm	WT	lb kg	C <sub>v</sub>	F	in mm	WT	lb kg	C <sub>v</sub>		
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  
 C<sub>v</sub> = Flow Coefficient

