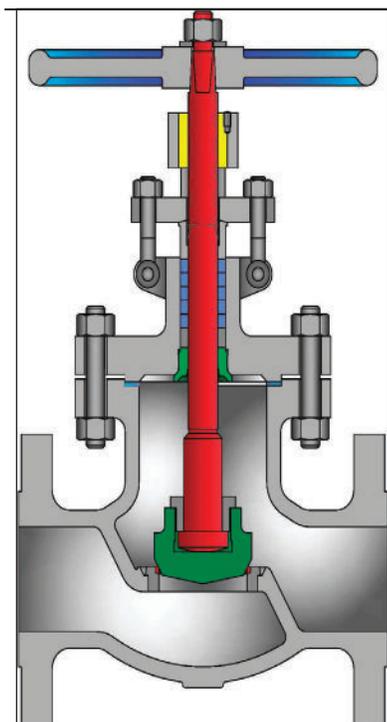




**API 600 WALL GLOBE VALVES**  
BOLTED BONNET, ASME CLASS 150 TO 1500  
CAST CARBON, STAINLESS STEEL OR ALLOY STEEL



Class	Fig. No.
150	1531
300	3031
600	6031
900	9031
1500	1331

**STANDARD MATERIALS (Other materials available)**

PART	MATERIALS			
	Body	A216 Gr. WCB	A217 Gr. WC6	A217 Gr. WC9
Bonnet	A216 Gr. WCB	A217 Gr. WC6	A217 Gr. WC9	A351 Gr. CF8M
Disc	A105 or A216 WCB + 13% Cr Faced	A217 WC6 + Stellite 6 Faced	A217 WC9 + Stellite 6 Faced	SST 316
Disc Nut	SST 410			SST 316
Seat Ring	A105 or A216 WCB + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A351 Gr.CF8M
Stem	SST 410			SST 316
Stem Bushing	A 439 Ductile NI-Resist Gr. D2			
Stem Bushing Set Screw	Steel			Series 300 SST
Gland Flange	Carbon Steel			A351 Gr. CF8M
Eye Bolt	A193 Gr. B7			Series 300 SST
Eye Bolt Nut	A194 Gr. 2H			A194 Gr.8
Groove Pin	Steel			Series 300 SST
Gland	SST 410			SST 316
Packing	Graphite			PTFE
Packing Washer	SST 410			SST 316
Gasket	Class 150: Corrugated SST Encapsulated w/ Graphite Class 300 to 600: Spiral Wound SST with Graphite Class 900 to 1500: RTJ			Class 150: PTFE Class 300-600: Spiral Wound SST with PTFE
Back Seat	SST 410			SST 316
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Malleable Iron or Steel			
Body / Bonnet Stud	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8
Body / Bonnet Nut	A194 Gr. 2H	A194 Gr. 7		A194 Gr.8
Identification Plate	Series 300 SST			

**DESIGN FEATURES:**

- **Standard trim** is API trim 8 for carbon steel valves, API trim 5 for chrome alloy valves, and API trim 10 for CF8M (T316) valves for optimal performance under normal conditions. Other trim materials available on request.
- **Wall thickness** per heavy wall API 600 requirements.
- **Seat faces** lapped for smooth finish and superior sealing.
- **Swivel disc** for optimal seating and longer seat life.
- **Stems** of hand wheel operated valves are rotating / rising design.
- **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.
- **End Flanges** have the following raised faces per ASME B16.5:  
Classes 150-300: 1/16" (2mm)  
Classes 600-1500: 1/4" (7mm)

(1) Weld end valve body A351 Gr. CF3M

**NOTE: See page 52 for flow, safety and maintenance information.**

**Design Specifications**

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

- **Weld ends** are available per ASME B16.25 or per customer's specification.
- **Impactor** hand wheel design standard on the following sizes to assist seating.  
8" to 12" class 150  
6" to 12" class 300  
4" to 10" 600  
For larger sizes or pressure classes, gears are standard.
- **Each** valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test, inspection result and certificate of conformance.
- **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

**GLOBE VALVE DIMENSIONS (CLASS 150—1500).**

SIZE	ASME 150					ASME 300					ASME 600				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
	WE/FE					WE/FE					WE/FE				
2	8.00	11.9	12.9	2.00	8	10.50	11.9	13.1	2.00	8	11.50	13.6	14.7	2.00	10
50	203	302	327	51	200	267	302	332	51	200	292	346	374	51	250
2 ½	8.50	14.9	16.4	2.50	8	11.50	12.9	14.5	2.50	10	13.00	16.4	17.6	2.50	12
65	216	378	416	64	200	292	328	369	64	250	330	416	448	64	300
3	9.50	14.1	15.4	3.00	10	12.50	14.1	15.4	3.00	12	14.00	17.2	18.7	3.00	14
80	241	357	390	76	250	318	357	390	76	300	356	438	475	76	350
4	11.50	16.5	18.0	4.00	12	14.00	16.7	18.0	4.00	14	17.00	20.2	21.7	4.00	18
100	292	419	457	102	300	356	423	458	102	350	432	514	552	102	450
6	16.00	17.6	19.7	6.00	14	17.50	21.0	23.2	6.00	18	22.00	25.7	27.9	6.00	20
150	406	446	499	152	350	444	534	589	152	450	559	653	709	152	500
8	19.50	20.1	22.6	8.00	18	22.00	23.9	26.3	8.00	18	26.00	29.1	31.6	7.87	22
200	495	511	574	203	450	559	606	669	203	450	660	739	803	200	560
10	24.50	29.5	33.6	10.00	18	24.50	29.7	35.1	10.00	22	31.00	32.7	38.9	9.75	28
250	622	750	853	254	450	622	753	892	254	560	787	830	988	248	710
12	27.50	31.9	36.7	12.00	20	28.00	34.2	41.2	12.00	26	33.00	47.8 (1)		11.75	28
300	698	810	932	305	500	711	868	1047	305	650	838	1215		298	710
14	31.00	42.5 (1)		13.25	24	33.00	45.9 (1)		13.25	24	35.00	51.2 (1)		12.87	32
350	787	1080		337	610	838	1165		337	610	889	1401		327	810
16	36.00	45.1 (1)		15.25	24	34.00	51.4 (1)		15.25	24	39.00	56.4 (1)		14.75	40
400	914	1146		387	610	864	1305		387	610	991	1630		375	1000
18	38.50	50.1 (1)		17.25	28	38.50	57.2 (1)		17.00	24	43.00	61.7 (1)		16.50	40
450	978	1450		438	710	978	1453		432	610	1092	1567		419	1000
20	38.50	55.9 (1)		19.25	28	40.00	62.2 (1)		19.00	40	47.00	67.3 (1)		18.25	40
500	978	1420		489	710	1016	1579		483	1000	1194	1710		464	1000
24	51.00	67.7 (1)		23.25	32	53.00	72.9 (1)		23.00	40	55.00	78.9 (1)		22.00	60
600	1295	1720		591	810	1346	1852		584	1000	1397	2004		559	1500

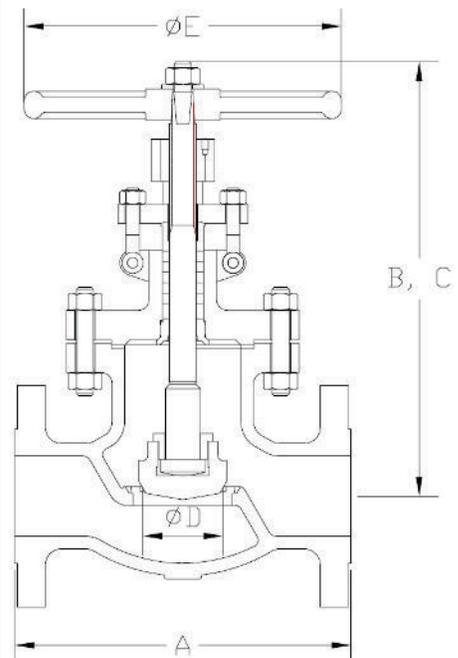
(1) Gear operators standard for 14" and up classes 150 and 300, 12" and up for class 600, 6" and up for classes 900 and 1500. Height is to top of actuator.

**ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.**

SIZE	ASME 900					ASME 1500				
	A	B	C	D	E	A	B	C	D	E
	WE/FE					WE/FE				
2	14.50	19.0	20.6	1.87	14	14.50	19.0	20.6	1.87	14
50	368	483	523	48	350	368	483	523	48	350
2 ½	16.50	19.0	20.6	2.25	14	16.50	19.0	20.6	2.25	16
65	419	483	523	57	350	419	483	523	57	400
3	15.00	23.8	25.5	2.87	18	18.50	27.9	28.9	2.75	18
80	381	605	648	73	450	470	702	735	70	450
4	18.00	26.0	28.2	3.87	18	21.50	28.0	30.2	3.62	18
100	457	661	716	98	450	546	712	767	92	450
6	24.00	33.6 (1)		5.75	24	27.75	39.2 (1)		5.37	28
150	610	853		146	610	705	996		136	710
8	29.00	43.5 (1)		7.50	28	32.75	47.1 (1)		7.00	32
200	737	1105		191	710	832	1196		178	810
10	33.00	52.4 (1)		9.37	32	39.00	56.2 (1)		8.75	32
250	838	1331		238	810	991	1427		224	810

**B = Center to top closed**  
**C = Center to top open**

**WE = Butt weld ends**  
**FE = Flanged ends**



SIZE	ASME 150							ASME 300							ASME 600								
	in mm	F	in mm	WT FE	lb kg	WT WE	lb kg	C <sub>v</sub>	F	in mm	WT FE	lb kg	WT WE	lb kg	C <sub>v</sub>	F	in mm	WT FE	lb kg	WT WE	lb kg	C <sub>v</sub>	
2	17.5		38		34		50		18.5		49		40		50		21.0		71		57		50
50	440		17		15				470		22		18				535		32		26		
2 ½	16.5		45		40		75		17.0		71		56		75		21.5		115		90		75
65	425		21		18				435		32		25				545		52		41		
3	20.5		77		66		110		21.5		104		84		110		24.0		148		121		110
80	520		35		30				545		47		38				610		67		55		
4	24.0		121		104		200		26.5		165		142		200		29.5		260		227		200
100	615		55		47				670		75		65				745		118		103		
6	28.5		205		175		480		31.5		280		232		480		38.0		585		584		480
150	720		93		79				795		127		105				960		265		265		
8	31.0		353		300		880		41.0		565		408		880		44.0		1010		904		850
200	785		160		136				1035		256		185				1115		458		410		
10	35.0		567		481		1370		43.0		830		672		1370		47.0		1450		1279		1300
250	895		257		218				1085		376		305				1190		658		580		
12	45.0		800		679		2050		50.5		1120		772		2050		56.5		2359		1920		2000
300	1145		363		308				1280		508		350				1435		1070		870		
14	47.0		1279		1080		2500		52.5		1786		1455		2500		60.0		4409		3629		2400
350	1200		580		490				1330		810		660				1530		2000		1646		
16	52.0		1742		1477		3300		56.0		2491		2028		3300		63.0		4982		4079		3100
400	1320		790		670				1420		1130		920				1605		2260		1850		
18	55.0		1874		1587		4400		64.5		3527		2866		4300		73.0		6812		5578		4000
450	1400		850		720				1640		1600		1300				1855		3090		2530		
20	60.0		1984		1676		5500		70.5		5710		3417		5300		79.5		8664		7099		4900
500	1525		900		760				1790		2590		1550				2015		3930		3220		
24	68.0		3307		2756		8000		82.0		10141		6107		7800		92.0		13161		10869		7200
600	1725		1500		1250				2080		4600		2770				2340		5970		4930		

SIZE	ASME 900							ASME 1500							
	in mm	F	in mm	WT FE	lb kg	WT WE	lb kg	C <sub>v</sub>	F	in mm	WT FE	lb kg	WT WE	lb kg	C <sub>v</sub>
2	23.5		185		150		40		23.5		201		154		40
50	595		84		68				595		91		70		
2 ½	24.5		254		198		60		27.5		331		232		60
65	625		115		90				695		150		105		
3	26.5		290		238		100		30.0		452		364		90
80	675		132		108				765		205		165		
4	31.5		487		397		190		34.0		597		465		160
100	805		221		180				865		271		211		
6	42.0		891		728		440		46.0		1111		882		380
150	1065		404		330				1175		504		400		
8	45.0		1592		1323		770		57.5		2668		2161		670
200	1145		722		600				1460		1210		980		
10	55.0		2646		2094		1200		62.0		4850		3858		1050
250	1390		1200		950				1580		2200		1750		

**FE** = Flanged ends  
**WE** = Weld ends

**F** = Dismantling dimension

**WT** = Weight  
**C<sub>v</sub>** = Flow coefficient

