

## Cast Steel Globe Valve (Bolted Bonnet)

FlowBiz brand Globe Valves are factory-engineered with quality material for long term use. Globe Valve regulates the flow and pressure as well as entirely shutoffs flow. Globe valve is used as a block or isolation valve. FlowBiz Globe Valve is also well-engineered to regulate flow in the partially open position.

### Key Features :

- Throttling capability & control of applications where the positive shutoff is required on/off duty provides higher resistance from the flow direction change.
- It can be operated frequently, instantly & rapidly due to the short travel of the disk between the open and closed positions
- Low maintenance since the disk and seat can be replaced very quickly and with minimum difficulty at a very economical expense.

**Size Range :** 2 inch to 12 inch (50mm to 300mm)

**Class :** 150 class to 600 Class

### Industries We Serve :

- Refineries, Power Stations, Process and General Industry
- For Water, Steam, Gas, Oil, and Other Media
- Other application on request

### Operating Date

- Maximum allowable pressure 1500 psi (106 bar)
- Maximum allowable temperature 1500° F (816° C)
- Pressure/Temperature retings par ASME B16.34

Material Options	
ASTM A216 WCB	up to 800° F (427° C)
ASTM A217 WC6	up to 1100° F (593° C)
ASTM A217 WC9	up to 1100° F (593° C)
ASTM A217 C5	up to 1200° F (649° C)
ASTM A217 C12	up to 1200° F (649° C)
ASTM A352 LCB	up to 650° F (343° C)
ASTM A352 LCC	up to 650° F (343° C)
ASTM A351 CF8	up to 1500° F (816° C)
ASTM A352 CF8M	up to 1500° F (816° C)

**Trims :** As per API 600

### Design Specification :

- Globe Valve Design per BS 1873
- Pressure / Temperature Rating per ASME B16.34
- End to End dimension per ASME B16.10
- Flange dimension per ASME B16.5 and MSS SP44
- Testing per API 598
- Bolted Bonnet
- Outside screw and yoke
- Graphite Packing
- Stainless Steel / Graphite Gaskets

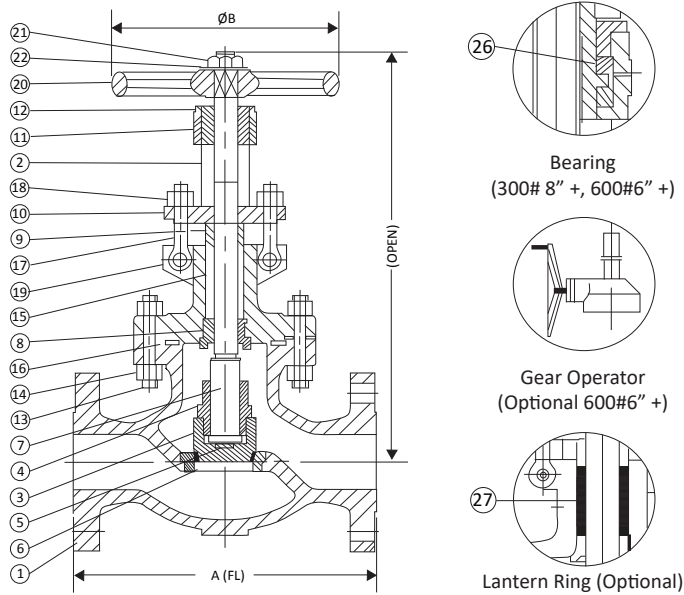


### Add - Ons On Request :

- Gear Operators
- Electric Actuators
- Bypass Execution
- Radiography
- Butt weld ends par ASME B16.25
- Other add-ons



## Globe Valves



### Design Specifications

General Valve Design	: BS 1873
Pressure/Temperature Rating	: ASME B16.34
Flange Dimensions	: ASME B16.5
Buttweld Ends	: ASME B16.25
End-to-End	: ASME B16.10
Testing	: API 598

### How To Select?

- Valve Type
- ANSI Pressure Class
- Size
- Design Pressure
- Design Temperature
- Differential Pressure-shut off
- Flow Medium
- Material of Construction
- Trim Material (API Trim Number)
- Type of End Connection
- Pipe Schedule (For Buttweld Ends)
- Add-Ons
- Valve data sheet if applicable

### Dimensions :

#### Class 150

SIZE		2	2.5	3	4	6	8	10	12
A (FL)	inch	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50
	mm	203	216	241	292	406	495	622	698
A (BW)	inch	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50
	mm	203	216	241	292	406	495	622	698
B	inch	8	8	10	14	14	18	20	25
	mm	200	200	250	350	350	450	500	640
C	inch	13.3	16.3	16.0	18.4	22.0	26.5	33.8	33.9
	mm	338	415	406	468	560	672	858	862
Wt.	lbs	42	70	77	121	254	309	562	1186
	kg	19	32	35	55	115	140	255	539

#### Class 300

SIZE		2	2.5	3	4	6	8	10	12
A (FL)	inch	10.50	11.50	12.50	14.00	17.50	22.00	24.50	28.00
	mm	267	292	318	356	445	559	622	711
A (BW)	inch	10.50	11.50	12.50	14.00	17.50	22.00	24.50	28.00
	mm	267	292	318	356	445	559	622	711
B	inch	8	10	10	14	18	20	20	26
	mm	200	250	250	350	450	500	500	650
C	inch	14.0	18.7	16.9	19.7	23.9	32.6	36.0	40.6
	mm	355	474	430	500	607	828	914	1032
Wt.	lbs	60	106	106	154	276	639	805	1390
	kg	27	48	48	70	125	290	365	632



## Class 600

Class 600		2	2.5	3	4	6	8	10	12
A (FL)	inch	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00
	mm	292	330	356	432	559	660	787	838
A (BW)	inch	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00
	mm	292	330	356	432	559	660	787	838
B	inch	10	10	12	14	20	24	24	24
	mm	250	250	350	350	500	610	610	610
C	inch	11.8	21.3	19.2	21.9	30.6	36.0	43.8	50.4
	mm	300	540	488	555	777	915	1113	1280
Wt.	lbs	77	154	143	231	474	1168	1720	1980
	kg	35	70	65	105	215	530	780	900

## Materials

Part No.	Part Name	WCB	WC6	WC9	C5	C12	LCB	LCC	CF8	CF8M	
1	Body	A216 WCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A352 LCB	A352 LCC	A351 CF8	A351 CF8M	
2	Bonnet	A216 WCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A352 LCB	A352 LCC	A351 CF8	A351 CF8M	
3	Disc Base	A216 WCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A352 LCB	A352 LCC	A351 CF8	A351 CF8M	
4	Disc Nut	13Cr	13Cr	13Cr	13Cr	13Cr	304	304	304	316	
5	Thrust Washer	13Cr	13Cr	13Cr	13Cr	13Cr	304	304	304	316	
6	Seat Ring Base	A105	A182 F11	A182 F22	A182 F5	A182 F9	A350 LF2	A350 LF2	Integral		
7	Stem	See Trim Material Table									
8	Backseat Bushing	See Trim Material Table									
9	Gland	13Cr	13Cr	13Cr	13Cr	13Cr	304	304	304	316	
10	Gland Flange	A216 WCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A352 LCB	A352 LCC	A351 CF8	A351 CF8M	
11	Yoke Bushing	A439 D2C									
12	Set Screw	Carbon Steel							Stainless Steel		
13	Bonnet Studs	A193 B7	A193 B16	A193 B16	A193 B16	A193 B16	A320 L7	A320 L7	A193 B8	A193 B8	
14	Bonnet Nuts	A194 2H	A194 Gr. 4	A194 Gr. 4	A194 Gr. 4	A194 Gr. 4	A194 Gr. 4	A194 Gr. 4	A194 Gr. 8	A194 Gr. 8	
15	Packing	Graphite									
16	Gasket	Graphite + Stainless Steel									
17	Eyebolt	A307 Gr. B	A193 B16	A193 B16	A193 B16	A193 B16	A320 L7	A320 L7	A193 B8	A193 B8	
18	Eyebolt Nuts	A194 2H	A194 Gr. 4	A194 Cr. 4	A194 Cr. 4	A194 Cr. 4	A194 Gr. 4	A194 Gr. 4	A194 Gr. 8	A194 Gr. 8	
19	Eyebolt Pins	Carbon Steel							Stainless Steel		
20	Handwheel	Ductile or S.G Iron									
21	Handweel Nut	Carbon Steel							Stainless Steel		
22	Washer	Carbon Steel							Stainless Steel		
23	Yoke	A216 WCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A352 LCB	A352 LCC	A351 CF8	A351 CF8M	
24	Yoke Bolts	A193 B7	A193 B16	A193 B16	A193 B16	A193 B16	A320 L7	A320 L7	A193 B8	A193 B8	
25	Yoke Nuts	A194 2H	A194 Gr. 4	A194 Gr. 4	A194 Cr. 4	A194 Cr. 4	A194 Gr. 4	A194 Gr. 4	A194 Gr. 8	A194 Gr. 8	
26	Bearing	Steel									
27	Lantern Ring	13Cr	13Cr	13Cr	13Cr	13Cr	304	304	304	316	



### Trim Materials :

Part No.	Part Name	Trim 1 13Cr/13Cr	Trim 2 304/304	Trim 5 Stellite/Stellite	Trim 8 Stellite/13Cr	Trim 10 316/316
3	Disc Face	13Cr	304 Stainless Steel	Stellite	13Cr	316 Stainless Steel
6	Seat Ring Face	13Cr	304 Stainless Steel	Stellite	Stellite	316 Stainless Steel
7	Stem	13Cr	304 Stainless Steel	13Cr	13Cr	316 Stainless Steel
8	Backseat Bushing	13Cr	304 Stainless Steel	13Cr	13Cr	316 Stainless Steel

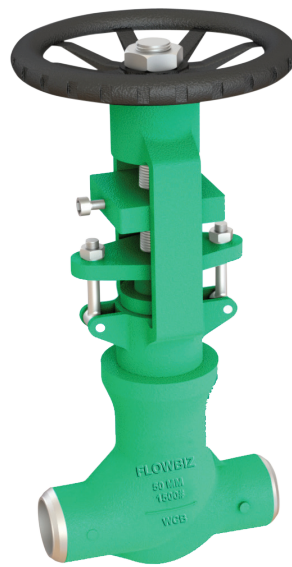
### Test Requirements :

Test	Medium	Class 150		Class 300		Class 600	
		psi	bar	psi	bar	psi	bar
Shell	Water	450	32	1125	78	2225	153
Backseat	Water	315	23	815	56	1630	112
Seat	Water	315	23	815	56	1630	112

Note : A216 WCB test pressures



Bolted Bonnet Flanged End  
Raised Face Globe Valve



OSY Type Butt Weld Ends  
Pressure Seal Globe Valve



Bolted Bonnet Flanged End  
Ring Type Joint Globe Valve

