

Design

cast steel globe valve designed and manufactured to provide maximum service life and dependability. All globe valves are full ported and meet the design requirements of American Petroleum Institute Standard API 600, BS1873, BS6753/3709 and generally conform to American Society of Mechanical Engineers standard ASME B16.34, valves are available in a complete range of body/bonnet materials and trims.

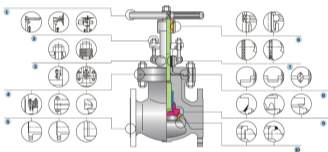
Available Modifications for Cast Steel Valves

- *Trim Change
- *End Connection Modifications
- *Packing and Gasket Changes
- *Operator Mounting
- *Handwheel Extensions

Range of Materials

Standard body/bonnet materials include nine grades of carbon, low alloy and stainless steels. For special applications they can be supplied in other grades of alloy and stainless steel. There is a full range of trim materials to match any service. Optional packing and gasket materials are available for a full range of service conditions.

- *Pressure Equalizing
- *By-pass
- *Customer Specified Coatings
- *Weld End Bore Changes
- *Oxygen & Chlorine Cleaning & Packaging



1 Operating

Large handwheels for easy operation. Also available with gearing, motor actuators, pneumatic or hydraulic actuators for more difficult services.

3 OS & Y

Outside Screw and Yoke. Cast steel globe valve yoke integral with bonnet for 10 & smaller.

5 End Connections

A choice of Flanged, RFJ flanged or Subwelding and for piping flexibility.

7 Lantern ring and double packing set

Lantern ring with leak-off fitting connection and double packing stack is optionally available for critical services.

9 Disc

Plug disc is stem guided on all sizes. Disc has a differential angle front the seat to provide a line contact for maximum sealing. The bottom of V-port disc is faced by the body seat ring for maximum disc stability in throttling applications. The soft TEFLON ring is excellent for lower temperature services where tight shut-off is required.

2 Live Load Packing

In services requiring frequent cycling or with high pressure/temperature variations, live loading extends the service life between maintenance periods by requiring less frequent packing gland adjustments. Belleville springs are employed to provide constant packing gland stress.

4 BB

Bolted bonnet. Welding bonnet and pressure seal bonnet in services requiring frequent cycling or with high pressure/temperature variations.

6 Yokesleeve

Furnished in aluminum bronze to reduce operating torque. Most sizes furnished with ball bearing yokesleeves.

8 Body-to-Bonnet Joint

A Male and Female joint or Torque and Groove joint is used 150L to 600L valves. Ring joint is used in the body to bonnet connection in 600L to 6 higher rated valves.

10 Seat Rings

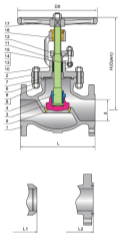
Separate heavy duty full ported rings for easy maintenance. Screwed or welded connection into body.

Applicable standards:

STEEL GLOBE VALVES, BS1873/AF600
 STEEL VALVES, ASME B16.34
 FACE TO FACE, ASME B16.13
 END FLANGES, ASME B16.5
 BUTTWELDING ENDS, ASME B16.25
 INSPECTION AND TEST API 598

Design description:

STRAIGHT PATTERN BODY DESIGN
 CG & Y, OUTSIDE SCREW AND YOKE
 BOLL BOLTED BONNET
 YOKE INTEGRAL WITH BONNET
 RISING STEM AND HANDWHEEL
 LOOSE DISC, CHOICE OF PLUG OR BALL
 RENEWABLE SEAT RING
 IMPACT HANDWHEEL FOR 10" & ABOVE
 HORIZONTAL SERVICE
 FLANGED OR BUTTWELDING ENDS
 AVAILABLE WITH BG OPERATOR



Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1%Cu-1Mo	Carbon Steel
1	Body	A216-WCB	A217-WCB	A352-LCB
2	Bonnet	A216-WCB	A217-WCB	A352-LCB
3	Disc	A105+CR13	A182-F11+HF	A3510-LF2+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F8a
5	Seat Ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem Backseat	A276-420	A276-304	A276-420
7	Bonnet Gasket	Spiral Wound (Graphite+304)		
8	Bonnet Stud	A193-B7	A193-B16	A320-L7
9	Bonnet Stud Nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland Flange	A216-WCB	A217-WCB	A352-LCB
13	Eyebolt Pin	Carbon Steel	A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	A194-2H	Carbon Steel
16	Yoke/leave	Aluminum-Bronze		
17	Handwheel	Malleable Iron		

Note 1) Ductile Ni Resist optional

2) Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

Dimensions data

NPS	2	3	4	6	8	10	12	14	16	18	20	24	in
DN	50	65	80	100	150	200	250	300	350	400	450	500	600

ANSI Class 150Lb

L/L1 (RF/BW)	6.30	6.50	9.50	11.50	16.00	19.50	24.50	27.50	31.00	36.00	38.50	38.50	50.00	in
L2 (RTJ)	283	216	241	292	498	495	622	666	787	914	977	977	1295	mm
H (OPEN)	280	525	445	515	583	815	815	910	1220	1450	1066	1117	1285	mm
(G)	50	63	78	100	150	200	250	300	380	387	436	486	560	mm
DO	7	10	11	11	13	13	16	16	20	24	28.34	28.34	33.46	in
WT (kg)	186	240	350	390	320	320	450	450	500	650	720	720	850	mm
(kg)	14	22	33	43	72	86	245	345	450	665	-	-	2290	BW

ANSI Class 300Lb

L/L1 (RF/BW)	10.50	11.50	12.50	14.00	17.50	22.00	24.50	28.00	32.99	32.99	36.48	45.00	52.99	in
L2 (RTJ)	287	282	318	356	444	559	622	711	838	863	977	1016	1346	mm
H (OPEN)	11.12	12.12	13.3	14.43	18.12	22.42	25.12	28.82	-	-	-	-	-	in
(G)	282	358	333	371	490	575	638	727	-	-	-	-	-	mm
DO	8	10	11	13	16	16	20	24	35.85	24.01	24.01	28.34	28.34	in
WT (kg)	250	240	280	320	490	450	500	600	860	610	610	720	720	mm
(kg)	25	32	38	56	96	150	360	550	876	1290	1600	2100	3150	BW
(kg)	20	22	27	41	75	117	310	482	-	-	-	-	-	BW