Charlies GLOBE VALVE, BB, CS

Design

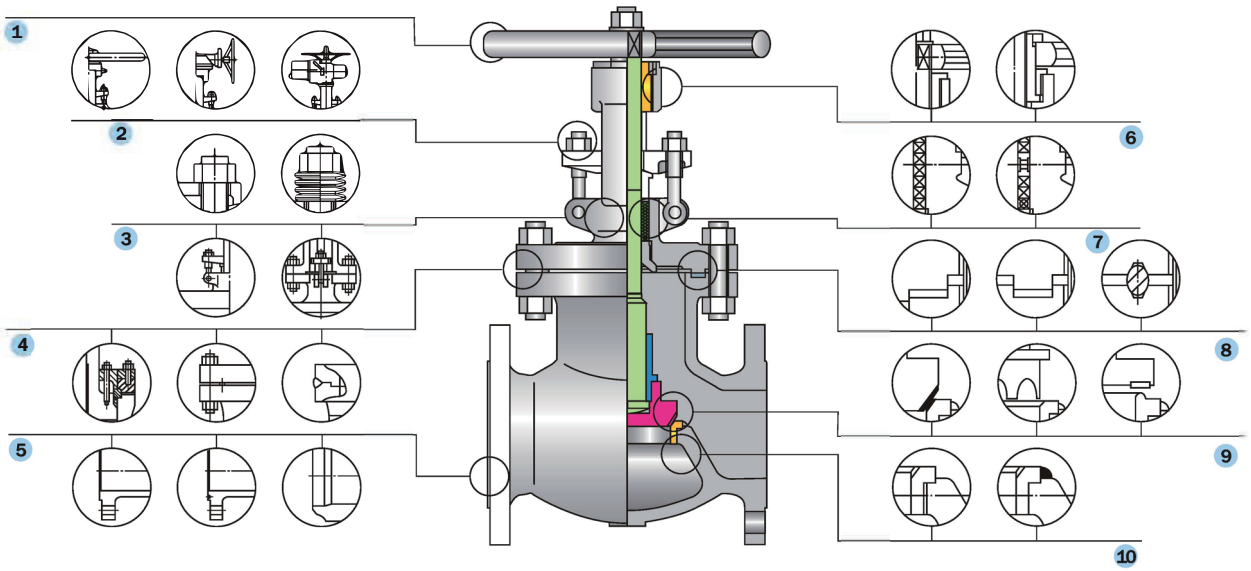
Cast steel globe valve designed and manufactured to provide maximum service life and dependability. All globe valves are full ported and meet the design requirements of American Petroleum Institute Standard API600、BS1873、BSEN13709 and generally conform to American Society of Mechanical Engineers standard ASME B16.34, Valves are available in a complete range of body/bonnet materials and trims.

Rang of Materials

Standard body/bonnet materials include nine grades of carbon,low alloy and atainless steels. For special apolications 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.

Available Modifications for Cast Steel Valves

*Trim Change
*End Connection Modifications
*Packing and Gasket Changes
*Opetator Mounting
*Handwheel Extensions
*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 & and smaller.

5 End Connections

A choice of Flanged, RFJ flanged of Buttwelding end 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 stom 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 fuided by the body seat ring for maximum disc stability in throttling applications.The soft TEFL ON ring is excellent for lower temperature service where tight shutoff is required.

2 Live Load Packing

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

4 BB

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

6 Yokesleeve

Fumished in aluminum bronze to reduce operating torque,Most sizes fumished with ball bearing yokesleeves.

8 Body-to-Bonnet Joint

A Male and Female joint or Tongue and Groove joint is used 150Lb to 600Lb valves.Ring joint is used in the body to bonnet connection in900Lb & higher rated valves.

10 Seat Rings

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

CAST STEEL GLOBE VALVE

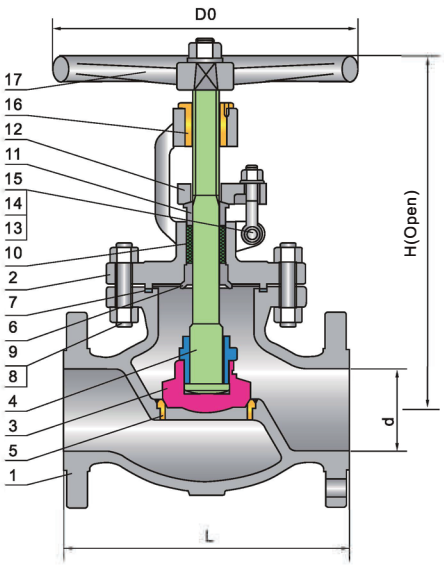
150Lb/300Lb

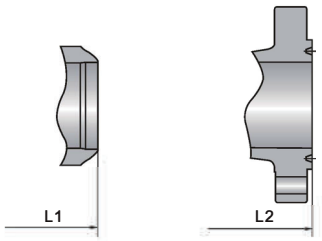
Applicable standards:

STEEL GLOBE VALVES,BS1873/API600
STEEL VALVES,ASME B16.34
FACE TO FACE,ASME B16.10
END FLANGES,ASME B16.5
BUTTWELDING ENDS,ASME B16.25
INSPECTION AND TEST,API 598

Design description:

STRAIGHT PATTEREN BODY DESIGN
OS & Y,OUTSIDE SCREW AND YOKE
BB,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 SERVECE
FLANGED OR BUTTWELDING ENDS
AVAILABLE WITH BG OPERATOR





Materials of parts

NO	Part Name	ASTM Material		
		Carbon Steel	1¼Cr-½Mo	Carbon Steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Disc	A105+CR13	A182-F11+HF	A3510-LF2+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
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-WC6	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	Yokesleeve	Aluminum-Bronze[1)]		
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 / DN	2 / 50	2½ / 65	3 / 80	4 / 100	6 / 150	8 / 200	10 / 250	12 / 300	14 / 350	16 / 400	18 / 450	20 / 500	24 / 600	in / mm
ANSI Class 150Lb														
L/L1 (RF/BW)	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50	31.00	36.00	38.46	38.46	50.98	in
	203	216	241	292	406	495	622	698	787	914	977	977	1295	mm
L2 (RTJ)	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50	31.00	36.00	-	-	-	in
	203	216	241	292	406	495	622	698	787	914	-	-	-	mm
H (OPEN)	15.00	21.00	17.50	20.25	22.00	24.25	32.00	35.88	48.38	57.00	41.96	43.97	50.98	in
	380	535	445	515	560	615	815	910	1230	1450	1066	1117	1295	mm
(d)	50	63	76	100	150	200	250	300	360	387	438	488	590	mm
D0	7	10	11	11	13	13	16	18	20	24	28.34	28.34	33.46	in
	180	240	280	280	320	320	400	450	500	600	720	720	850	mm
WT (kg)	18	30	41	64	86	110	280	380	510	740	1150	1650	2200	RF
	14	22	33	43	72	88	245	345	450	665	-	-	-	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	38.46	40.00	52.99	in
	267	292	318	356	444	559	622	711	838	863	977	1016	1346	mm
L2 (RTJ)	11.12	12.12	13.12	14.62	18.12	22.62	25.12	28.62	-	-	-	-	-	in
	282	308	333	371	460	575	638	727	-	-	-	-	-	mm
H (OPEN)	16.75	19.00	19.88	22.50	25.25	33.25	35.50	38.62	-	53.97	57.99	61.96	70.98	in
	425	485	505	570	640	845	900	980	-	1371	1473	1574	1803	mm
(d)	50	63	76	100	150	200	250	300	336	387	431	482	584	mm
D0	8	10	11	13	16	18	20	24	33.85	24.01	24.01	28.34	28.34	in
	200	240	280	320	400	450	500	600	860	610	610	720	720	mm
WT (kg)	25	32	38	56	96	150	360	550	876	1200	1600	2100	3150	RF
	20	22	27	41	75	117	310	492	-	-	-	-	-	BW