



Product Application Manual

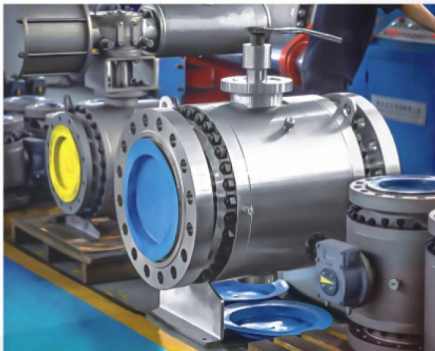
XHVAL GROUP VALVE CO., LTD.



XHVAL GROUP VALVE CO.,LTD.is located in Sangiao Industrial Zone, Wenzhou City, China. established in 1986, With API 6D, ISO, CE, API 607 etc. Certificates engaged in professional valve development, manufacture and sale of professional valve manufacturers. The enterprise is orientated towards clients' satisfaction; in this way, it adapts its valves to your requirements and delivers them in deadlines rigorously established. The technical and human staff, highly qualified, works every day in order to offer you the most innovative solutions and to strengthen the commitment with the customers



About XHVAL



Globe Valve Series



Design

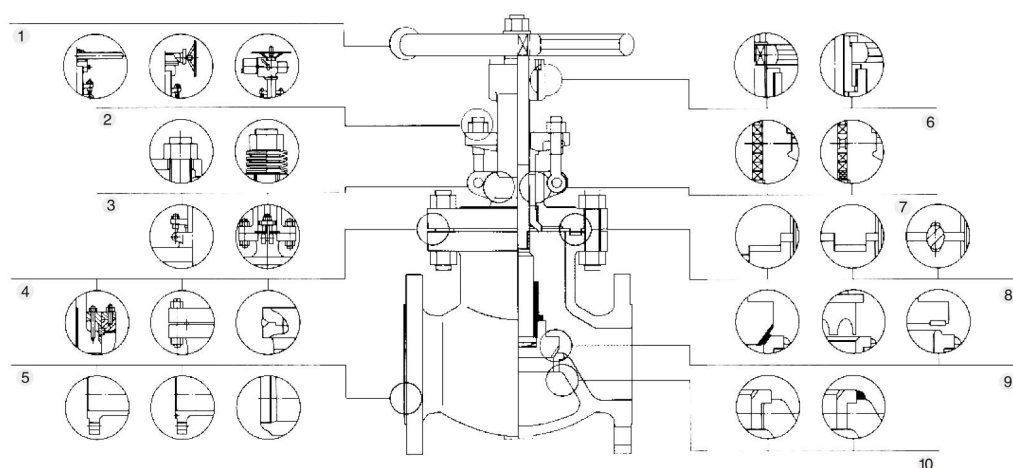
Casting steel globe valve are designed and manufactured to provide maximum service life and dependability. All globe valves are full ported and meet the design requirements of American petroleum Institute Standard API 600 & API 6D, British Standard BS 5351 and generally conform to American Society of Mechanical Engineers Standard ASME B16.34. Valves are available in a complete range of body/bonnet materials and trims.

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's 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 changes
- End connection Modifications
- Packing and Gasket Changes
- Operator Mounting
- Handwheel Extensions
- Pressure Equalizing
- By-pass
- Customer specified Coatings
- Weld End Bore Changes
- Oxygen & Chlorine Cleaning & Packaging



1 Operating

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

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.

3 OS&Y

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

4 BB

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

5 End Connections

A choice of Flanged, RTJ flanged or Butt welding end for piping flexibility.

6 Yoke Sleeve

Furnished in aluminum bronze to reduce operating torque, Most sizes furnished with ball bearing yoke sleeves.

7 Lantern Ring and Double Packing set

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

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 in 900Lb & higher rated valves.

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 guided by the body seat ring for maximum disc stability in throttling applications. The soft TEFLON ring is excellent for lower temperature service where tight shut off is required.

10 Seat Rings

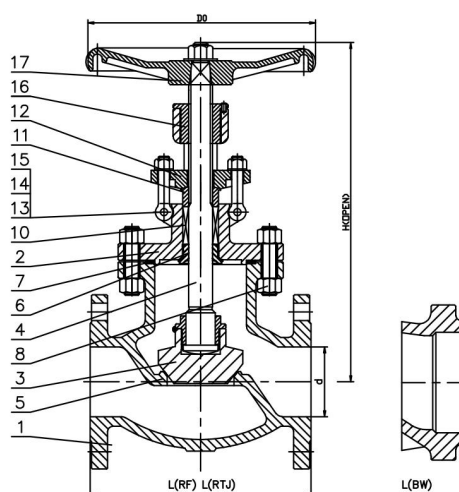
Separate heavy duty, full ported rings for easy maintenance. Screwed or welded connection into body.

Applicable Standards

- Steel globe valves, Bs1873
- 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 pattern body design
- OS & Y, outside screw and yoke
- BB, bolted bonnet
- Yoke integral with bonnet
- Rising stem and handwheel
- Loose disc, choice of plug
- Horizontal service
- Flanged or buttwelding ends
- Available with BG operator



Materials of parts

No.	Part Name	ASTM Material		
1	Body	ASTM A216-WCB	ASTM A217-WC6	ASTM A352-LCB
2	Bonnet	ASTM A216-WCB	ASTM A217-WC6	ASTM A352-LCB
3	Disc	ASTM A105+Cr13	ASTM A182-F11+HF	ASTM A3510-LF2+Cr13
4	Stem	ASTM A182-F6a	CR-MO-V	ASTM A182-F304
5	Seat Ring	ASTM A105+Cr13	ASTM A182-F11+HF	ASTM A350-LF2+Cr13
6	Stem BackSeat	ASTM A276-420	ASTM A276-304	ASTM A276-420
7	Bonnet Gasket	SS304+Graphite	SS304+Graphite	SS304+Graphite
8	Bonnet Stud	ASTM A193-B7	ASTM A193-B16	ASTM A320-L7
9	Bonnet Stud Nut	ASTM A194-2H	ASTM A194-4	ASTM A194-7
10	Packing	Graphite	Graphite	Graphite
11	Gland	ASTM A276-420	ASTM A276-304	ASTM A276-420
12	Gland Flange	ASTM A216-WCB	ASTM A217-WC6	ASTM A352-LCB
13	Eyebolt Pin	Carbon Steel	ASTM A276-420	Carbon Steel
14	Eyebolt	Carbon Steel	ASTM A193-B7	Carbon Steel
15	Eyebolt Nut	Carbon Steel	ASTM A194-2H	Carbon Steel
16	Yokesleeve	Cu alloy	Cu alloy	Cu alloy
17	Handwheel	Malleable Iron	Malleable Iron	Malleable Iron

Noted: The chart above only lists our some common composition of steel valve parts. We may provide other different parts material composition according to the customer's request or the actual valve working condition.

Dimensions are for reference only

NPS DN	2 50	2 1/2 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 (RF/BW)	8.00 203	8.50 216	9.50 241	11.50 292	16.00 406	19.50 495	24.50 622	27.50 698	31.00 787	36.00 914	38.50 978	38.50 978	51.00 1295	in mm
L (RTJ)	8.50 216	9.00 229	10.00 254	12.00 305	16.50 419	20.00 508	25.00 635	28.00 711	31.50 800	36.50 927	—	—	—	in mm
H (Open)	15.00 380	21.00 535	17.50 445	20.25 515	22.00 560	24.25 615	32.00 815	35.88 910	48.38 1230	57.00 1450	—	—	—	in mm
(d)	50	63	76	100	150	200	250	300	360	387	438	488	590	mm
D0	8 200	9 220	10 250	11 280	16 400	18 450	18 450	20 500	22 550	—	—	—	—	in mm
WT (kg)	18 14	30 22	41 33	64 43	86 72	110 88	280 245	380 345	510 450	740 665	1150 —	1650 —	2200 —	RF BW

Dimensions are for reference only

NPS DN	2 50	2 1/2 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 300Lb														
L (RF/BW)	10.50 267	11.50 292	12.50 318	14.00 356	17.50 444	22.00 559	24.50 622	28.00 711	32.99 838	32.99 864	38.46 978	40.00 1016	52.99 1346	in mm
L (RTJ)	11.12 283	12.12 308	13.12 334	14.62 372	18.12 460	22.62 575	25.12 638	28.62 727	—	—	—	—	—	in mm
H (Open)	16.75 425	19.00 485	19.88 505	22.50 570	25.25 640	33.25 845	35.50 900	38.62 980	—	53.97 1371	57.99 1473	61.96 1574	70.98 1803	in mm
(d)	50	63	76	100	150	200	250	300	336	387	431	482	584	mm
D0	8 200	9 220	10 250	12 300	16 400	18 450	20 500	22 550	—	—	—	—	—	in mm
WT (kg)	25 20	32 22	38 27	56 41	96 75	150 117	360 310	550 492	876 —	1200 —	1600 —	2100 —	3150 —	RF BW

Dimensions are for reference only

NPS DN	2 50	2½ 65	3 80	4 100	6 150	8 200	10 250	12 300	2 50	2½ 65	3 80	4 100	6 150	8 200	10 250	in mm
ANSI Class 600Lb								ANSI Class 900Lb								
L (RF/BW)	11.50 292	13.00 330	14.00 356	17.00 432	22.00 559	26.00 660	31.00 787	33.00 838	14.50 368	16.50 419	15.00 381	18.00 457	24.00 610	29.00 737	33.00 838	in mm
L (RTJ)	11.62 295	13.12 333	14.12 359	17.12 435	22.12 562	26.12 663	31.12 790	33.12 841	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	in mm
H (Open)	17.50 445	19.75 502	21.00 533	24.50 622	29.50 750	36.50 927	44.88 1140	53.12 1350	22.00 560	23.25 590	25.25 640	31.88 810	41.38 1050	53.50 1360	61.88 1570	in mm
(d)	50	63	76	100	150	199	247	298	47	57	72	98	146	190	238	mm
D0	10 250	11 280	12 300	14 350	20 500	22 550	28 700	—	—	—	—	—	—	—	—	in mm
WT (kg)	35 27	50 34	60 42	110 84	230 192	410 350	770 680	1140 1030	57 41	82 53	92 58	168 117	365 238	665 538	1250 1060	RF BW

Dimensions are for reference only

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	in mm
ANSI Class 1500Lb							
L (RF/BW)	14.50 368	16.50 419	18.50 470	21.50 546	27.75 705	32.75 832	in mm
L (RTJ)	14.62 371	16.62 422	18.62 473	21.62 549	28.00 711	33.13 842	in mm
H (Open)	22.00 560	23.25 590	29.50 750	36.00 915	48.62 1235	65.00 1650	in mm
(d)	47	57	69	92	136	177	mm
D0	14 350	14 350	16 400	18 450	28 700	28 700	in mm
WT (kg)	68 57	97 81	116 95	215 184	445 347	795 635	R BW

Applicable Standards

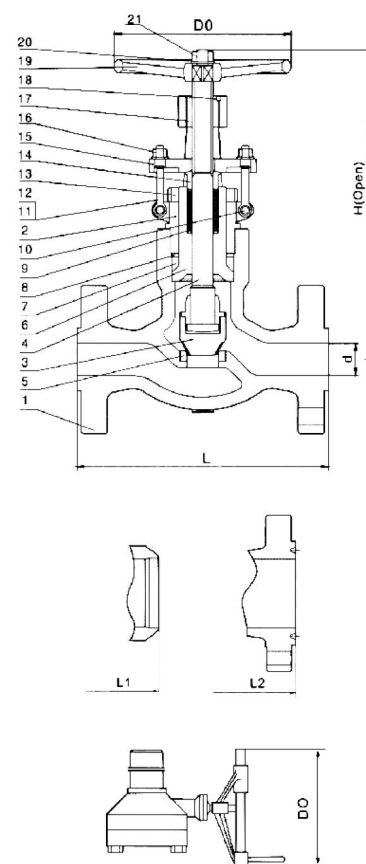
- Steel globe valves, BS 1873
- Steel valves, ASME B16.34
- Face to face, ASME B16.10
- End flanges, ASME B16.5
- Buttwelding ends, ASME B16.25
- Inspection and test, API 598

Design Description

- Straight pattern body design
- OS & Y, outside screw and yoke
- PSB, pressure seal bonnet
- Yoke integral with bonnet
- Rising stem and handwheel
- Loose disc, choice of plug
- Horizontal service
- Flanged or buttwelding ends
- Available with BG operator

Materials of parts

No.	Part Name	ASTM Material		
1	Body	ASTM A216-WCB	ASTM A217-WC6	ASTM A351-CF8M
2	Yoke	ASTM A216-WCB	ASTM A217-WC6	ASTM A351-CF8M
3	Disc	ASTM A216-WCB+HF	ASTM A217-WC6+HF	ASTM A351-CF8M+HF
4	Stem	ASTM A182-F6a	CR-MO-V	ASTM A182-F316
5	Seat	ASTM A105+HF	ASTM A182-F11+HF	ASTM A240-316+HF
6	Bonnet	ASTM A105	ASTM A182-F11	ASTM A240-316
7	Bonnet Gasket ¹⁾	SS304+Graphite	SS304+Graphite	SS304+Graphite
8	Adapter Ring	Carbon Steel	ASTM A276-420	ASTM A276-316
9	Packing	Graphite	Graphite	Graphite
10	Eyebolt Pin	Carbon Steel	ASTM A276-420	ASTM A276-316
11	Eyebolt	Carbon Steel	ASTM A193-B7	ASTM A193-B8
12	Eyebolt Nut	Carbon Steel	ASTM A194-2H	ASTM A194-8
13	Locking Nut	Carbon Steel	Alloy Steel	Stainless Steel
14	Gland	ASTM A276-420	ASTM A276-304	ASTM A276-316
15	Gland Flange	ASTM A216-WCB	ASTM A217-WC6	ASTM A351-CF8M
16	Washer	CS	CS	CS
17	Stem Nut	Cu alloy	Cu alloy	Cu alloy
18	Bolt	CS	CS	CS
19	Handwheel	Malleable Iron	Malleable Iron	Malleable Iron
20	Handwheel Washer	CS	CS	CS
21	Handwheel Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H



Noted: The chart above only lists our some common composition of steel valve parts. We may provide other different parts material composition according to the customer's request or the actual valve working condition.

Dimensions are for reference only

NPS DN	2 50	2 1/2 65	3 80	4 100	6 150	8 200	10 250	12 300	in mm
ANSI Class 1500Lb									
L (RF)	14.50 368	16.50 419	18.50 470	21.49 546	27.75 705	32.75 832	39.01 991	44.48 1130	in mm
L1 (BW)	8.50 216	10.00 254	12.00 305	15.98 406	22.00 559	27.99 711	34.01 864	39.01 991	in mm
L2 (RTJ)	14.62 371	16.62 422	18.62 473	21.61 549	27.99 711	33.14 842	39.41 1001	45.11 1146	in mm
H (Open)	22 557	22 557	22 557	27 685	36.38 925	43.38 1100	50.62 1285	57 1450	in mm
D0	14 350	14 350	16 400	18 450	28 700	28 700	36 900	36 900	in mm
WT (kg)	46 75	53 82	68 95	100 135	270 355	450 680	740 1050	1150 1480	BW RF/RTJ

Applicable Standards

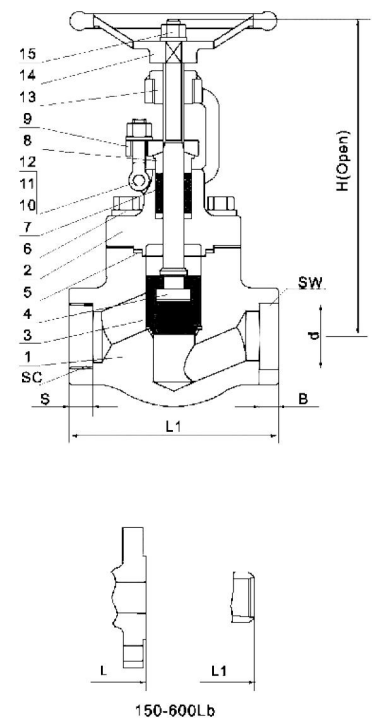
- Steel gate valves, API 602
- Steel valves, ASME B16.34
- End to end, manufacturer standard
- Face to face, flanged, ASME B 16.10
- End flanges, ASME B16.5
- Butt welding ends, ASME B16.25
- Socket-welding ends, ASME B16.11
- Sorewed ends, ASME B 1.20.1
- Inspection and test, API 598

Design Description

- Outside screw and yoke(OS&Y)
- Bolted bonnet
- Choice of WB, welding bonnet
- Loose disc, choice of plug
- Seat rings integral with body
- Yoke integral with bonnet
- Rising stem and handwheel
- Horizontal service
- SW, socket-welding ends
- NPT, thread ends
- BW, butt welding ends

Materials of parts

No.	Part Name	ASTM Material		
		C-Si	16Cr-12Ni-2Mo	1 $\frac{1}{4}$ Cr-1/2Mo-Si
1	Body	A105	A182-F316	A182-F11
2	Bonnet	A105	A182-F316	A182-F11
3	Disc	A182-F6a	A182-F316	A182-F6a+HF
4	Stem	A276-410	A276-316	A276-410
5	Bonnet Gasket ²⁾	Graphite+304	Graphite+316	Graphite+304
6	Bonnet Stud	A193-B7	A193-B8M	A193-B16
7	Packing		Graphite	
8	Gland	A276-410	A276-316	A276-410
9	Gland Flange	A105	A182-F316	A182-F11
10	Eyebolt Pin	A276-410	A276-316	A276-410
11	Eyebolt	A193-B7	A193-B8M	A193-B16
12	Eyebolt Nut	A194-2H	A194-8M	A194-2H
13	Yoke sleeve		A276-410	
14	Handwheel		Malleable Iron	
15	Handwheel Nut		Carbon Steel	



Dimensions are for reference only

NPS DN	Unit	L1 SW/BW/NPT 150Lb-800Lb	L (Flanged Ends)			d	SW		NPT		H (Open)	D0	WT ²⁾ (kg)
			150Lb	300Lb	600Lb		D	B	NPT	S			
3/8 10	in mm	3.12 79	4.00 102	6.00 152	6.50 165	0.354 9	0.693 17.6	0.378 9.6	3/8	0.540 13.6	6.50 164	4.00 100	3.8/2.8
1/2 15	in mm	3.12 79	4.25 108	6.00 152	6.50 165	0.354 9	0.858 21.8	0.378 9.6	1/2	0.535 13.6	6.50 164	4.00 100	5.6/3.4
3/4 20	in mm	2.63 92	4.62 117	7.00 178	7.50 190	0.512 13	1.067 27.1	0.500 12.7	3/4	0.547 13.9	6.50 164	4.00 100	7.8/4.7
1 25	in mm	4.38 111	5.00 127	8.00 203	8.50 216	0.689 17.5	1.331 33.8	0.500 12.7	1	0.681 17.3	8.00 203	5.00 125	12.5/9.2
1 $\frac{1}{4}$ 32	in mm	4.75 120	5.50 140	8.50 216	9.00 229	0.906 23	1.677 42.6	0.500 12.7	1 $\frac{1}{4}$	0.709 18	8.88 224	6.25 160	17/10.5
1 $\frac{1}{2}$ 40	in mm	6.00 152	6.50 165	9.00 229	9.50 241	1.142 29	1.917 48.7	0.500 12.7	1 $\frac{1}{2}$	0.724 18.4	10.25 260	6.25 160	23.5/13.3
2 50	in mm	6.77 172	8.00 203	10.50 267	11.50 292	1.378 35	2.406 61.1	0.626 15.9	2	0.756 19.2	11.88 300	7.00 180	38.8/18.9

Notes: 1) BW, SW or NPT.

2) 900Lb~2500Lb can produce.

DN15~400, PN16~PN40



Application

- Designed for closing or throttling the liquid and gaseous medium
- **Fluids**
Water steam, crude petroleum and petroleum products, natural gas, gas condensate, oxygen, liquid and non-aggressive gases
- **Industry**
Power engineering, chemical and petrochemical industry

Technical description

- Rising, non rotating stem
- Valve opening is provided slowly, with gradual suspension of the stroke, to prevent hydraulic and thermal shocks in the valve
- Shutt-off valves can be operated in position open-close, throttling valve can be operated also in an intermediate position

Testing

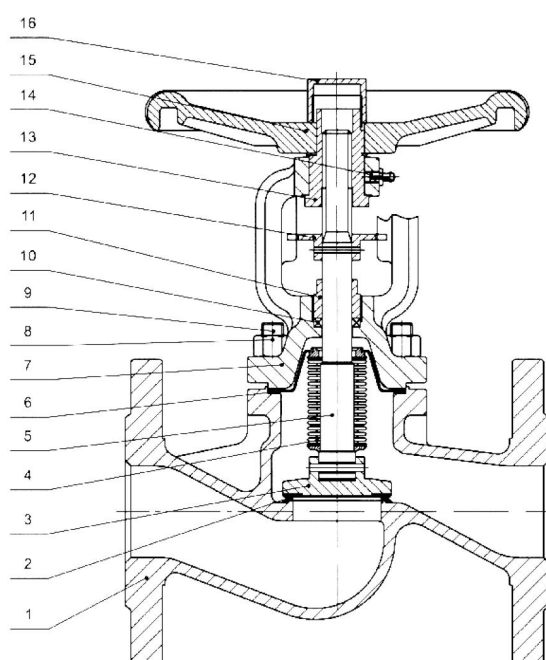
- The valves are pressure tested by water for strength and tightness in accordance with EN-12266
- Shell test: Nominal pressure: $(PN) \times 1.5$
- Tightness of seat: Nominal pressure: $(PN) \times 1.1$

Connection

- Butt-welded according to EN-12627 flanged according to EN 1092-1 or to customer request
- Face to face dimensions according to EN-558-1

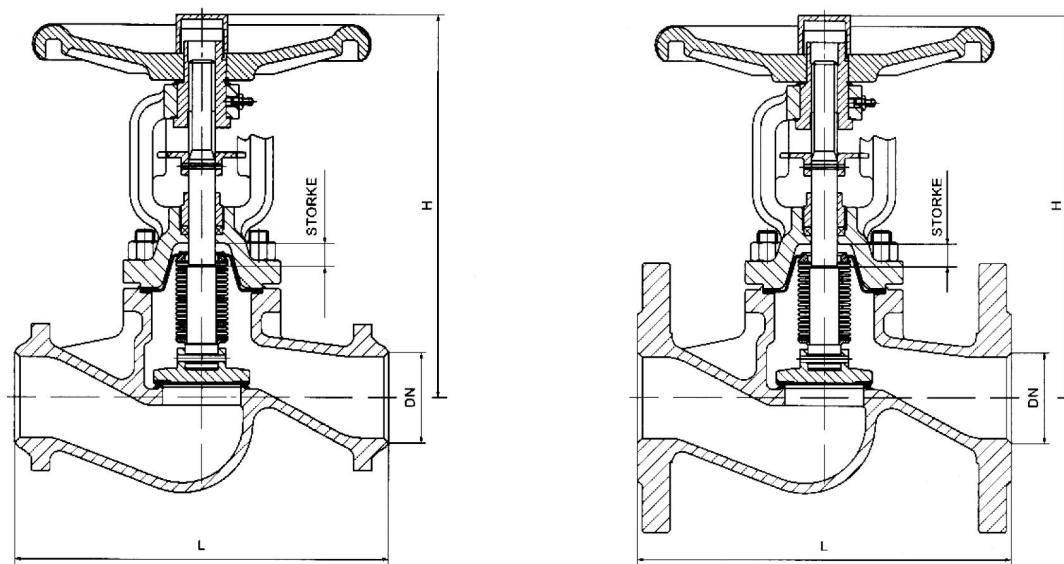
Operation

- Hand wheel (With locking device, if required)
- Electric actuator
- Gear box
- Flange ISO 5211 (Ready for actuator)



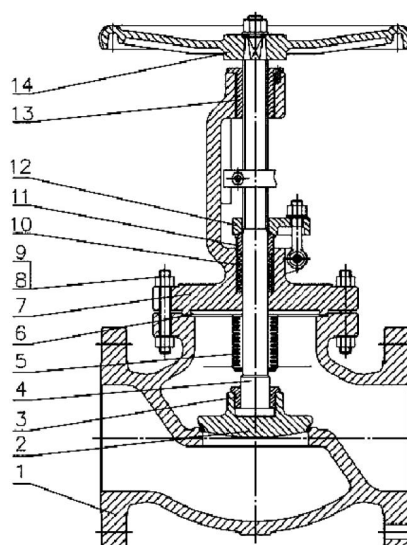
Materials of parts

No.	Part Name	Material		
1	Body	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8M
2	Sealing surface	13Cr	13Cr	STL
3	Disc	ASTM A105	ASTM A182 F304	ASTM A182 F316
4	Bellows	SS304	SS304	ASTM A182 F316
5	Stem	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
6	Gasket	SS304+Graphite	SS304+Graphite	SS316+Graphite
7	Bonnet	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8M
8	Blot	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8M
9	Nut	ASTM A194 2H	ASTM A194 4	ASTM A194 8M
10	Packing	Graphite	Graphite	Graphite
11	Gland	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8M
12	Limit Plate	CS	CS	CS
13	Stem nut	Cu alloy	Cu alloy	Cu alloy
14	Grease nipple	Cu alloy	Cu alloy	Cu alloy
15	Handwheel	Malleable Iron	Malleable Iron	Malleable Iron
16	Lock Nut	CS	CS	CS



Dimensions are for reference only

DN(mm)		15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L(BW)		130	150	160	180	200	230	290	310	350	400	480	600	730	850	980	1100
H		180	190	220	225	252	263	295	330	350	420	455	550	720	800	960	1060
STORKE		8	8	10	10	15	15	18	22	28	33	38	55	70	78	100	115
Weight (kg) RF	PN16	4	4.8	5.5	7	9	10.5	15	19.8	33.2	48.63	67.2	105	265	369	555	850
	PN25	4	4.8	5.5	7	9	11	15.8	21.8	37.5	55	78.5	121	295	388	620	880
	PN40	4	4.8	5.5	7	9	11	15.8	21.8	37.5	55	78.5	132	310	409	650	920
Weight (kg) BW	PN16	2.4	3	3.5	4	5	6	9	14	27	40	58	85	200	300	445	750
	PN25	2.4	3	3.5	4	5	6	9	14	27	40	58	95	215	325	470	785
	PN40	2.4	3	3.5	4	5	6	9	14	27	40	58	95	215	325	470	785



Standards

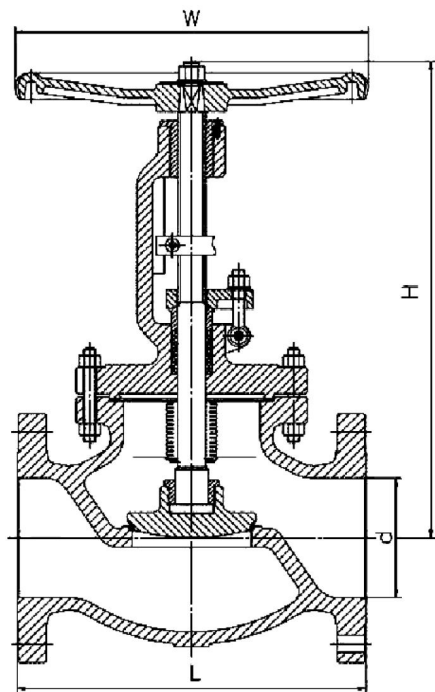
Design Standard	BS 1873
Face to Face	ASTM B16.10
End Flanges Dimensions	ASME B16.5
Inspection and Test	API 598

Structure feature

1. Double seal, more reliable performance.
2. Stem lift position indicatton, more intuitive.
3. Small flow resistance, low pressure drop.

Parts and material list

Part Name		Carbon Steel to ASTM		Alloy Steel to ASTM				Stainless Steel to ASTM			
1	Body	A216 WCB	A352 LCB	A217 WC1	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Disc	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316	A182 F304L	A182 F316L
3	Disc Cover	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316	A182 F304L	A182 F316L
4	Stem	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316	A182 F304L	A182 F316L
5	Bellows Seal	A182 F304	A182 F304	A182 F304	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L
6	Gasket	Flexible Graphite+SS or PTFE									
7	Bonnet	A216 WCB	A352 LCB	A217 WC1	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
8	Bolt	A193 B7	A320 L7	A193 B7	A193 B16	A193 B16	A193 B16	A193 B8	A193 B8M	A193 B8	A193 B8M
9	Nut	A194 2H	A194 4	A194 2H	A194 4	A194 4	A194 4	A194 8	A194 8M	A194 8	A194 8M
10	Packing	Flexible Graphite or PTFE									
11	Gland	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316	A182 F304L	A182 F316L
12	Gland Flange	A216 WCB	A352 LCB	A217 WC1	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
13	Stem Nut	Copper Alloy or A439 D2									
14	Handwheel	Ductile Iron or Carbon Steel									



Dimensions are for reference only

Size		Class 150					Class 300				
		Dimensions(mm)				WT(kg)	Dimensions(mm)				WT(kg)
NPS	DN	L	d	H	W	W.H	L	d	H	W	W.H
1/2	15	108	13	241	120	4	152	13	241	120	6
3/4	20	117	19	241	140	5	178	19	241	140	7
1	25	127	25	241	140	6	203	25	283	140	10
1 1/4	32	140	32	280	180	10	215	32	320	180	15
1 1/2	40	165	38	286	200	13	229	38	322	200	20
2	50	203	51	368	220	18	267	51	399	220	25
2 1/2	65	216	64	387	260	30	292	64	438	260	30
3	80	241	76	400	280	35	318	76	450	280	52
4	100	292	102	457	300	55	356	102	584	300	88
5	125	356	127	520	320	75	400	127	610	320	115
6	150	406	152	609	340	104	444	152	660	340	160
8	200	495	203	698	400	200	559	203	762	400	259
10	250	622	254	762	450	300	622	254	850	450	420
12	300	698	305	876	450	390	711	305	1085	450	595
14	350	787	337	990	450	610	762	336	1187	450	876

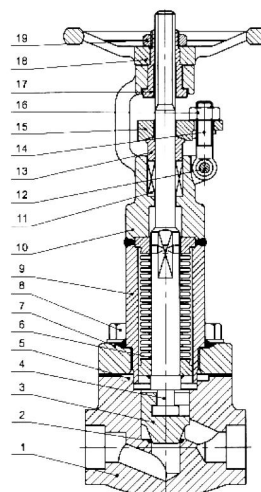
1/2"~3", Class150Lb~1500Lb



Forged Steel Bellow Gate Valve



Forged Steel Bellow Globe Valve



Application

- Designed for closing or throttling the liquid and gaseous medium
- **Fluids**
Water steam, crude petroleum and petroleum products, natural gas, gas condensate, oxygen, liquid and non-aggressive gases
- **Industry**
Power engineering, chemical and petrochemical industry

Technical description

- Rising, non rotating stem
- Valve opening is provided slowly, with gradual suspension of the stroke, to prevent hydraulic and thermal shocks in the valve
- Shutt-off valves can be operated in position open-close

Testing

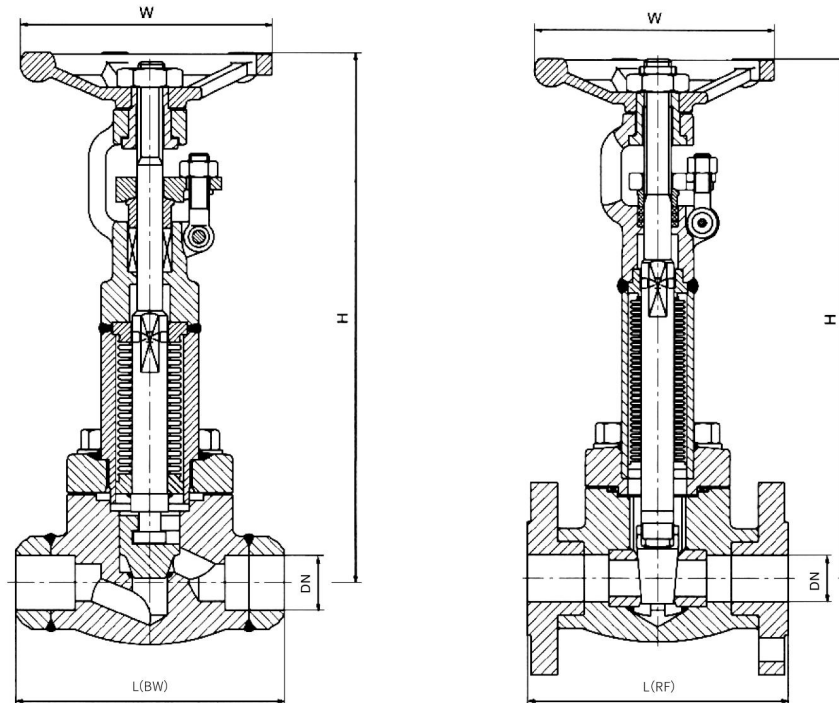
- The valves are pressure tested by water for strength and tightness in accordance with API 598
- Shell test: Nominal pressure: (Class) × 1.5
- Tightness of seat: Nominal pressure: (Class) × 1.1

Connection

- Butt-welded according to ANSI B16.25, Sock welded according to ANSI B16.11 flanged according to ANSI B16.5
- Design S.T.D: API 602
- Face to face dimensions according to ANSI B16.10

Operation

- Hand wheel
- Electric actuator
- Flange ISO 5211 (ready for actuator)



Materials of parts

No.	Part Name	Material		
1	Body	ASTM A105	ASTM A182 F304	ASTM A182 F316
2	Seat	13Cr	STL	STL
3	Disc	ASTM A105	ASTM A182 F304	ASTM A182 F316
4	Bellows	SS304	SS304	SS316
5	Gasket	SS304+Graphite	SS304+Graphite	SS316+Graphite
6	Stem	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
7	Bonnet	ASTM A105	ASTM A182 F304	ASTM A182 F316
8	Blot	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M
9	Pipe	CS	SS	SS316
10	Yoke	CS	SS	SS316
11	Packing	Graphite	Graphite	Graphite
12	Pin	SS	SS	SS
13	Gland flange	ASTM A105	ASTM A182 F304	ASTM A182 F316
14	Eyelet Blot	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M
15	Gland	ASTM A105	ASTM A182 F304	ASTM A182 F316
16	Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
17	Stem nut	ASTM A276 410	ASTM A276 410	ASTM A276 410
18	Handwheel	Malleable Iron	Malleable Iron	Malleable Iron
19	Lock Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 8M

Dimensions are for reference only

NPS DN		1/2" 15	3/4" 20	1" 25	1 1/4" 32	1 1/2" 40	2" 50
L(RF/BW) 150Lb							
L(RF/BW) 300Lb							
L(RF/BW) 600Lb							
L(RF/BW) 900Lb and 1500Lb							
L(SW/NPT) Globe valve 800Lb		79	92	111	120	140	172
L(SW/NPT) Gate valve 800Lb		79	92	111	120	120	140
H(Globe valve)	150Lb	215	220	280	315	340	405
	300Lb	215	220	280	315	340	405
	600Lb	250	250	350	395	420	480
	900Lb	350	350	400	450	510	750
	1500Lb	350	350	400	450	510	750
H(Gate valve)	150Lb	280	285	310	350	370	450
	300Lb	280	285	310	350	370	450
	600Lb	280	285	310	350	370	450
	900Lb	380	380	420	480	550	800
	1500Lb	380	380	420	480	550	800
W	150Lb	100	100	125	160	160	180
	300Lb	100	100	125	160	160	180
	600Lb	100	100	125	160	160	180
	900Lb	125	125	160	160	180	200
	1500Lb	125	125	160	160	180	200