



**CAST STEEL GLOBE VALVES**



**VAHN-TECH International Inc.**, headquartered in Toronto, Canada is a unique company within the Flow Control Industry.

- ✳ 'vt' brand = high quality certified products (API, NSF, CSA, WRAS etc.)
- ✳ Valves, Actuators and Accessories – all 'vt' branded
- ✳ Width and Depth of Product Offerings
- ✳ Flexibility to customize products to customer needs
- ✳ Specialized user-friendly products including large sizes
- ✳ Quick Response
- ✳ Reduced Delivery times
- ✳ Efficient after sales service
- ✳ Competitive Pricing

**VAHN-TECH International Inc.** is a customer focused organization based on “Value-add” and “Quality Service” principles. Achieving long term partnership with our customers and being their supplier of choice is our prime mission.

We develop, manufacture and market VAHN-TECH (vt) branded Valves, Actuators, Automatic Control Valves and Accessories for variety of Industrial Applications. Our product range includes:



Oil and Gas



Water and Sewage,  
Desalination



Chemicals



Paper and Pulp



Irrigation



Power Plants



Various  
Industrial Applications

We can supply all types of valves with following materials of construction like:

Ductile Iron, Cast Iron, Carbon Steel, Stainless Steel – SS304, SS304L, SS316, SS316L, Duplex Stainless Steel, Super Duplex, Alloy, Monel and Inconel with variety of seating and stem configurations.



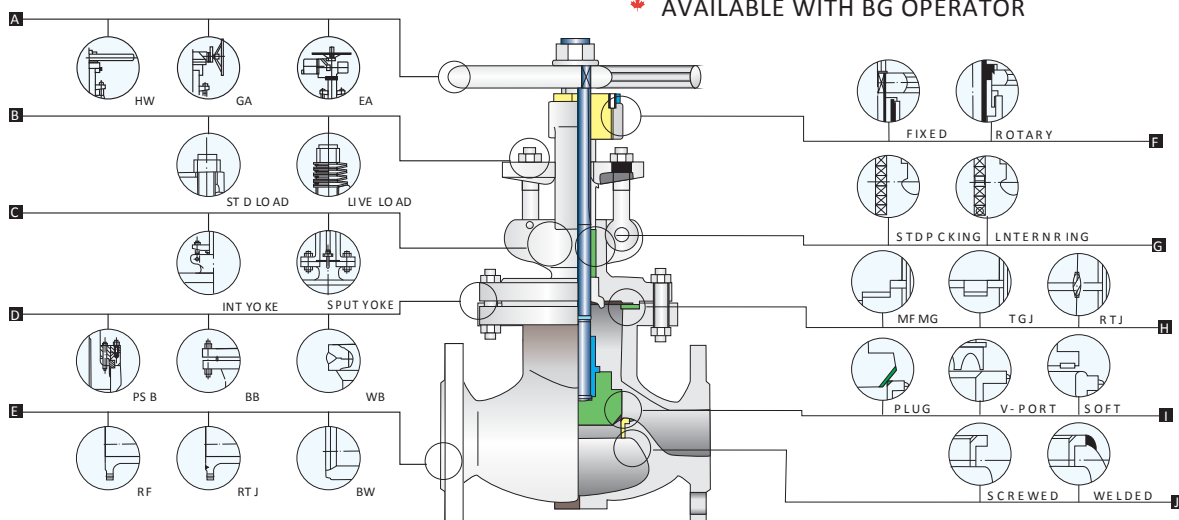
# Globe Valves (Cast Steel, Bolted Bonnet)

## Applicable Standards

- ✦ STEEL GLOBE VALVES, API 600/BS EN 13709
- ✦ STEEL VALVES, ASME B16.34
- ✦ FACE TO FACE, ASME B16.10
- ✦ END FLANGES, ASME B16.5
- ✦ BUTTWELDING ENDS, ASME B16.24
- ✦ INSPECTION & TEST, API 598

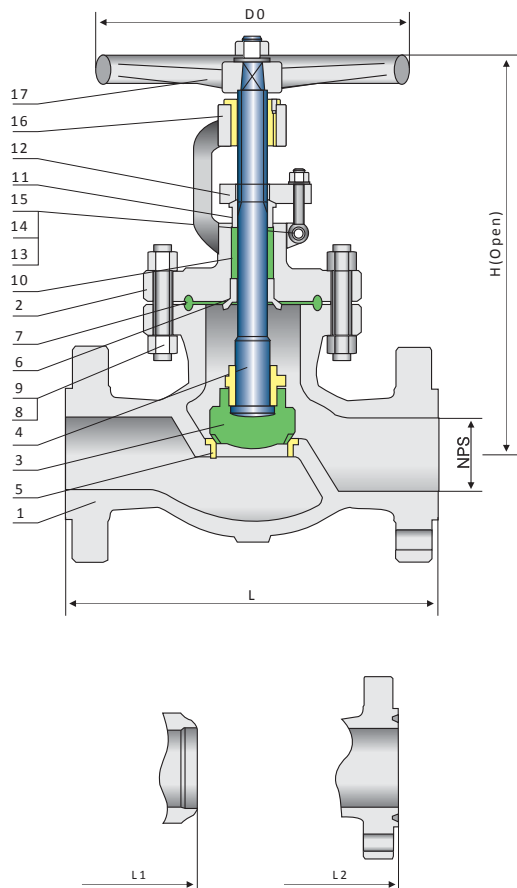
## Features

- ✦ STRAIGHT PATTERN BODY DESIGN
- ✦ OS&Y OUTSIDE SCREW AND YOKE
- ✦ 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



<p><b>A</b> Operation</p> <p>Large handwheels for easy operation. Gear box, electrical and pneumatic actuators are also available.</p>	<p><b>B</b> Live Load Packing</p> <p>Under operating conditions requiring frequent cycling or under high pressure/temperature variants, live loading extends the service life between maintenance periods. Belleville springs are employed to provide constant packing gland pressure.</p>	<p><b>C</b> OS&amp;Y</p> <p>Outside screw &amp; yoke. For cast steel gate valves, the yoke is designed as an integral part with the bonnet for 10" and smaller sizes.</p>	<p><b>D</b> BB</p> <p>Bolted, welding and pressure seal bonnet are available in services requiring frequent cycling or with high pressure temperature variations.</p>	<p><b>E</b> End Connections</p> <p>A choice of flanged, RTJ flanged or butt-welding ends are available for piping flexibility.</p>
<p><b>F</b> Yoke Sleeve</p> <p>Furnished in aluminum bronze to reduce the operating torque. Most sizes are furnished with ball-bearing yoke sleeves.</p>	<p><b>G</b> Lateral Ring and Double Packing Set</p> <p>Lateral ring fitting connection and double packing stack is optionally available for critical services.</p>	<p><b>H</b> Body-to-Bonnet Joint</p> <p>A male and female joint is used in 150Lb to 600Lb valves. A ring joint is used in the body to bonnet connections in 900Lb &amp; higher rated valves.</p>	<p><b>I</b> Disc</p> <p>The plug disc is guided by the stem for all sizes. The disc has a deferential angle from the seat to provide contact for maximum sealing. In vigorous applications, the bottom of the disc is guided by the seat ring for maximum stability. The soft Teflon ring is suitable for lower temperature applications, where tight shut-o is required.</p>	<p><b>J</b> Seat Rings</p> <p>Separate heavy duty, full ported rings that are either screwed or welded into the body enable easy maintenance.</p>

# Cast Steel Globe Valve - 150lb / 300lb



## Parts List & Materials

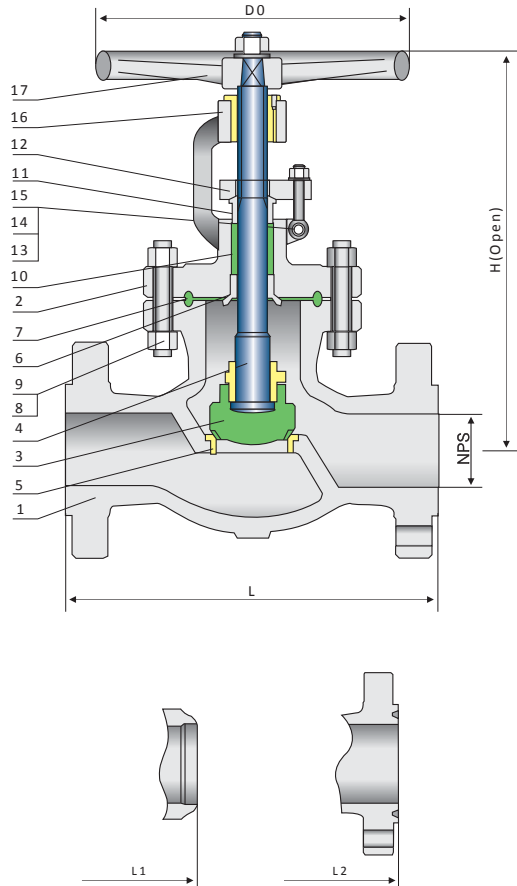
No.	Parts Name	ASTM Material		
		Carbon Steel	Low Carbon Steel	Alloy Steel
1	Body	A216 WCB	A352 LCB	A217 WC6
2	Bonnet	A216 WCB	A352 LCB	A217 WC6
3	Disc	A105 + CR13	A352 LF2 + CR13	A182 F11 + HF
4	Stem	A182 F6a	A182 F6a	CR MO-V
5	Seat Ring	A105 + HF	A350 LF2 + HF	A182 F11 + HF
6	Stem Backseat	A276 420	A276 420	A276 304
7	Bonnet Gasket	Steel Ring		SS304
8	Bonnet Stud	A193 B7	A320 L7	A193 B16
9	Bonnet Stud Nut	A194 2H	A194 4	A194 7
10	Packing	Graphite		
11	Gland	A276 420		A276 304
12	Gland Flange	A216 WCB	A352 LCB	A217 WC6
13	Eyebolt Pin	Carbon Steel		A276 420
14	Eyebolt	Carbon Steel		A193 B7
15	Eyebolt Nut	Carbon Steel		A194 2H
16	Yoke Sleeve	Aluminum - Bronze		
17	Handwheel	Malleable Iron		

\* 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.

## Dimensional Data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H (open)		D0		WT(kg)		L/L1 (RF/BW)		L2 (RTJ)		H (open)		D0		WT(kg)	
ANSI Class 150lb											ANSI Class 300lb										
2	50	8.00	203	8.00	203	15.00	380	7	180	18	14	10.50	267	11.12	282	16.75	425	8	200	25	20
2 1/2	65	8.50	216	8.50	216	21.00	535	10	240	30	22	11.50	292	12.12	308	19.00	485	10	240	32	22
3	80	9.50	241	9.50	241	17.50	445	11	280	41	33	12.50	318	13.12	333	19.88	505	11	280	38	27
4	100	11.50	292	11.50	292	20.25	515	11	280	64	43	14.00	356	14.62	371	22.50	570	13	320	56	41
6	150	16.00	406	16.00	406	22.00	560	13	320	86	72	17.50	444	18.12	460	25.25	640	16	400	96	75
8	200	19.50	495	19.50	495	24.25	615	13	320	110	88	22.00	559	22.62	575	33.25	845	18	450	150	117
10	250	24.50	622	24.50	622	32.00	815	16	400	280	245	24.50	622	25.12	638	35.50	900	20	500	360	310
12	300	27.50	698	27.50	698	35.88	910	18	450	380	345	28.00	711	28.62	727	38.62	980	24	600	550	492
14	350	31.00	787	31.00	787	48.38	1230	20	500	510	450	-	-	-	-	-	-	-	-	-	-
16	400	36.00	914	36.00	914	57.00	1450	24	600	740	665	-	-	-	-	-	-	-	-	-	-
in	mm	in	mm	in	mm	in	mm	in	mm	RF	BW	in	mm	in	mm	in	mm	in	mm	RF/RTJ	BW

# Cast Steel Globe Valve - 600lb / 900lb



## Parts List & Materials

No.	Parts Name	ASTM Material		
		Carbon Steel	Low Carbon Steel	Alloy Steel
1	Body	A216 WCB	A352 LCB	A217 WC6
2	Bonnet	A216 WCB	A352 LCB	A217 WC6
3	Disc	A105 + CR13	A352 LF2 + CR13	A182 F11 + HF
4	Stem	A182 F6a	A182 F6a	CR MO-V
5	Seat Ring	A105 + HF	A350 LF2 + HF	A182 F11 + HF
6	Stem Backseat	A276 420	A276 420	A276 304
7	Bonnet Gasket	Steel Ring		SS304
8	Bonnet Stud	A193 B7	A320 L7	A193 B16
9	Bonnet Stud Nut	A194 2H	A194 4	A194 7
10	Packing	Graphite		
11	Gland	A276 420		A276 304
12	Gland Flange	A216 WCB	A352 LCB	A217 WC6
13	Eyebolt Pin	Carbon Steel		A276 420
14	Eyebolt	Carbon Steel		A193 B7
15	Eyebolt Nut	Carbon Steel		A194 2H
16	Yoke Sleeve	Aluminum - Bronze		
17	Handwheel	Malleable Iron		

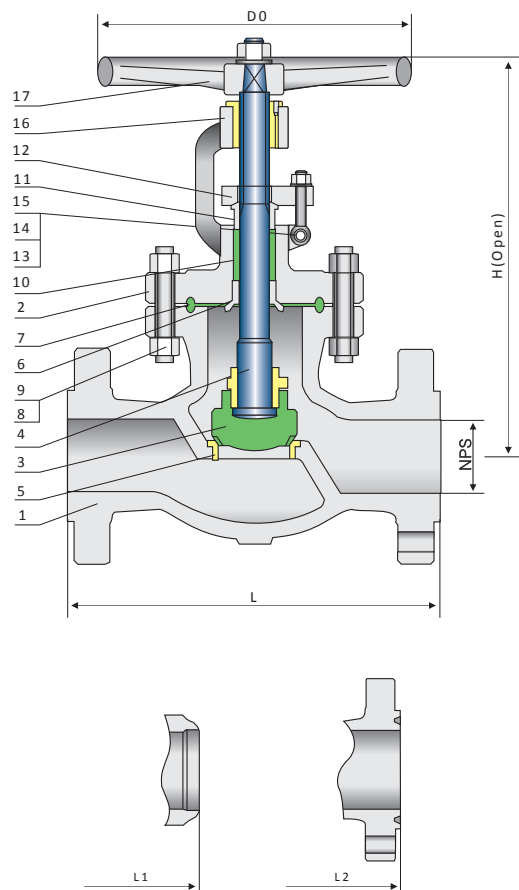
\* Disc and seat ring may either be solid facing material or a base material equal to or better than the body/bonnet material with facing as shown.

## Dimensional Data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H (open)		D0		WT(kg)		L/L1 (RF/BW)		L2 (RTJ)		H (open)		D0		WT(kg)	
ANSI Class 600lb											ANSI Class 900lb										
2	50	11.50	292	11.62	295	17.50	445	10	240	35	27	14.50	368	14.62	371	22.00	560	11	280	57	41
2½	65	13.00	330	13.12	333	19.75	502	11	280	50	34	16.50	419	16.62	422	23.25	590	13	320	82	53
3	80	14.00	356	14.12	359	21.00	533	13	320	60	42	15.00	381	15.12	384	25.25	640	16	400	91	58
4	100	17.00	432	17.12	435	24.50	622	16	400	110	84	18.00	457	18.12	460	31.88	810	18	450	168	117
6	150	22.00	559	22.12	562	29.50	750	18	450	230	192	24.00	610	24.12	613	41.38	1050	20	500	365	238
8	200	26.00	660	26.12	663	36.50	927	20	500	410	350	29.00	737	29.12	740	53.50	1360	24	600	665	538
10	250	31.00	787	31.12	790	44.88	1140	24	600	770	680	33.00	838	33.12	841	61.88	1570	24	600	1250	1060
12	300	33.00	838	33.12	841	53.12	1350	24	600	1140	1030	-	-	-	-	-	-	-	-	-	-
in	mm	in	mm	in	mm	in	mm	in	mm	RF/RTJ	BW	in	mm	in	mm	in	mm	in	mm	RF/RTJ	BW

# Cast Steel Globe Valve - 1500lb / 2500lb

## Parts List & Materials



No.	Parts Name	ASTM Material		
		Carbon Steel	Low Carbon Steel	Alloy Steel
1	Body	A216 WCB	A352 LCB	A217 WC6
2	Bonnet	A216 WCB	A352 LCB	A217 WC6
3	Disc	A105 + CR13	A352 LF2 + CR13	A182 F11 + HF
4	Stem	A182 F6a	A182 F6a	CR MO-V
5	Seat Ring	A105 + HF	A350 LF2 + HF	A182 F11 + HF
6	Stem Backseat	A276 420	A276 420	A276 304
7	Bonnet Gasket	Steel Ring		SS304
8	Bonnet Stud	A193 B7	A320 L7	A193 B16
9	Bonnet Stud Nut	A194 2H	A194 4	A194 7
10	Packing	Graphite		
11	Gland	A276 420		A276 304
12	Gland Flange	A216 WCB	A352 LCB	A217 WC6
13	Eyebolt Pin	Carbon Steel		A276 420
14	Eyebolt	Carbon Steel		A193 B7
15	Eyebolt Nut	Carbon Steel		A194 2H
16	Yoke Sleeve	Aluminum - Bronze		
17	Handwheel	Malleable Iron		

\* 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.

## Dimensional Data

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H (open)		D0		WT(kg)		L/L1 (RF/BW)		L2 (RTJ)		H (open)		D0		WT(kg)	
ANSI Class 1500lb											ANSI Class 2500lb										
2	50	14.50	368	14.62	371	22.00	560	13	320	68	57	17.75	451	17.88	454	25.50	650	16	400	97	72
2 1/2	65	16.50	419	16.62	422	23.25	590	16	400	97	81	20.00	508	20.50	414	28.12	715	18	450	138	95
3	80	18.50	470	18.62	473	29.50	750	18	450	116	95	22.75	578	23.00	584	32.50	825	20	500	167	108
4	100	21.50	546	21.62	549	36.00	915	20	500	215	184	26.50	673	26.88	683	47.00	1195	24	600	305	196
6	150	27.75	705	28.00	711	48.62	1235	24	600	445	347	36.00	914	36.50	927	70.50	1790	28	700	633	351
8	200	32.75	832	33.12	841	65.00	1650	28	700	795	635	-	-	-	-	-	-	-	-	-	-
in	mm	in	mm	in	mm	in	mm	in	mm	RF/RTJ	BW	in	mm	in	mm	in	mm	in	mm	RF/RTJ	BW



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