



Steinbock valves

CAST STEEL GATE VALVE

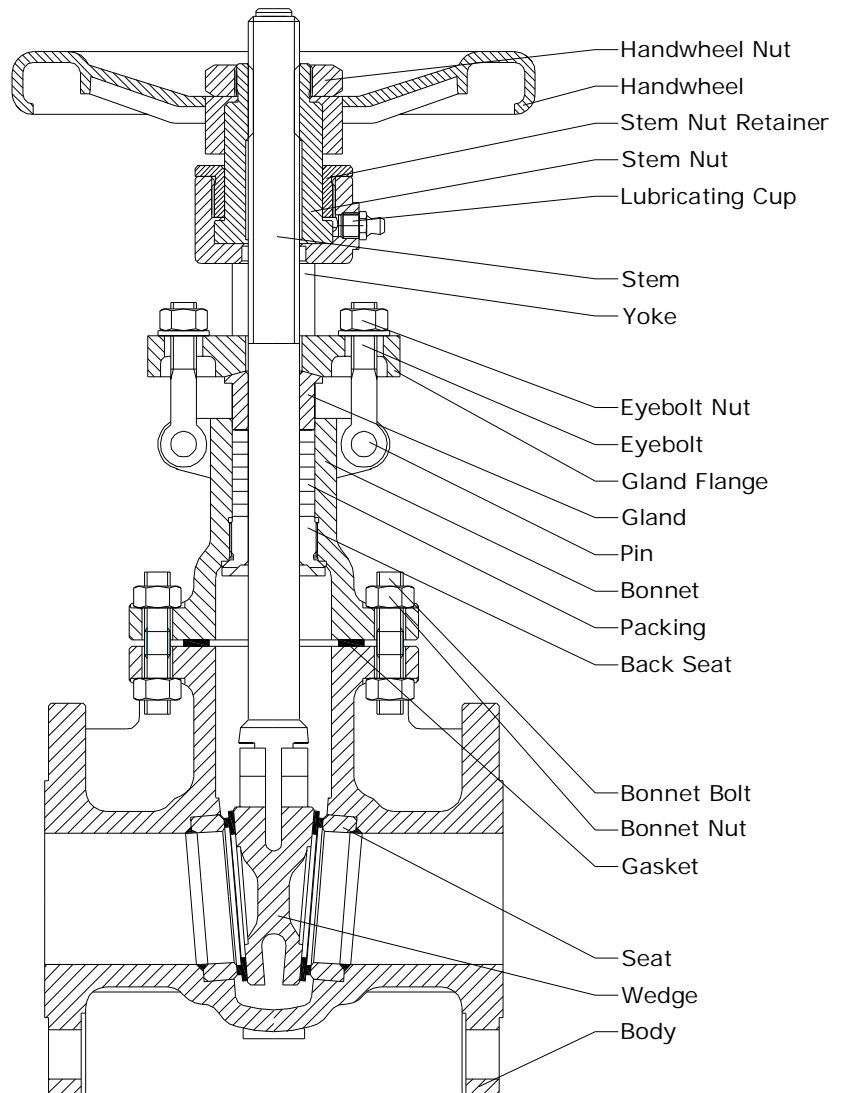
DESIGN CHARACTERISTICS OF API600 CAST STEEL GATE VALVE

The design of thrust bearing makes valve opened easily and flexibly.

Packing uses flexible graphite for dependable sealing performance. If requested by users, packing spacers ring and greasing mechanism can be available. Also other types of packing or live loading.

Upper seal design to ensure dependable packing and sealing when valve is fully opened. (Replacement of packing under pressure is not recommended.)

Lift Stem, with stem and disc connected by T-slot and stem T head integrally forged to ensure sufficient strength of joint.



CAST STEEL GATE VALVE

TYPICAL MATERIAL LIST FOR API600 CAST STEEL GATE VALVE

No.	Part Name	Carbon Steel		Stainless Steel	Alloy Steel
1	Body	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
2	Wedge	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
3	Seat	ASTM A105	ASTM A182 F316		ASTM A182 F304
4	Gasket	Soft Graphite+SS304			
5	Nut	ASTM A194 2H	ASTM A194 B8	ASTM A194 B8	ASTM A194 4
6	Stud	ASTM A193 B7	ASTM A193 8	ASTM A193 8	ASTM A193 B7
7	Back Seat	ASTM A182 F6a	ASTM A182 F316	ASTM A182 F316	ASTM A182 F304
8	Packing	Soft Graphite			
9	Bonnet	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
10	Pin	ASTM A194 2H	ASTM A276 TYPE304	ASTM A276 TYPE304	ASTM A276 TYPE410
11	Gland	ASTM A182 F6a	ASTM A182 F316	ASTM A182 F304	ASTM A182 F6a
12	Gland Flange	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A216 WCB
13	Eyebolt	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8	ASTM A193 B7
14	Eyebolt Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 8	ASTM A194 4
15	Yoke	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A216 WCB
16	Stem	ASTM A276 WCB	ASTM A276 TYPE304	ASTM A276 TYPE316	ASTM A182 F22
17	Lubricating Cup	COPPER ALLOY			
18	Stem Nut	ASTM B148UNS C95600	ASTM B148UNS C95600	ASTM B148UNS C95600	ASTM B148UNS C95600
19	Stem Nut Retainer	ASTM A108 1020	ASTM A182 F304	ASTM A182 F304	ASTM A108 1020
20	Handwheel	ASTM A197	ASTM A197	ASTM A197	ASTM A197
21	Handwheel Nut	ASTM A108 1020	ASTM A182 F304	ASTM A182 F304	ASTM A108 1020

- Remarks:
1. Pressure and temperature rating of casing material referred to Appendix
 2. Chemical compositions and mechanical property of casing material referred to Appendix
 3. Trim materials and recommended service coverage referred to Appendix
 4. NACE MR-01-75 when specified by user
- * Stellite 6 overlay available

Technical Specification

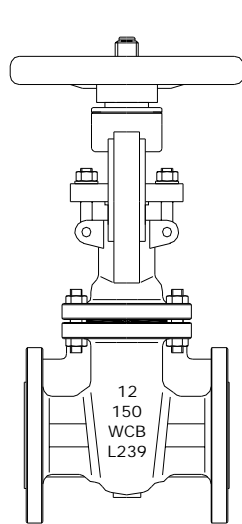
Design Standard	API600 API603							
Pressure-Temperature Rating	ASME B16.34							
Face-Face	ASME B16.10							
Flange Ends	ASME B16.5 / ASTM B16.47							
Buttwelding Ends	ASME B16.25							
Inspection and Test	API598							
Nominal Pressure (Class)	150	300	400	600	900	1500	2500	
Test-Pressure (MPa)	Shell Test	2.93	7.55	10.0	15.0	22.5	37.5	63.0
	High Pressure Seal Test	2.07	5.52	7.31	11.03	16.5	27.5	46.0
	Low Pressure Seal Test	0.6						
Applicable Temperature	Different raw material for different work temperature							
Applicable Medium	Water, Oil, Gas and other causticity medium (Different raw material for different medium)							

API CAST STEEL GATE VALVE

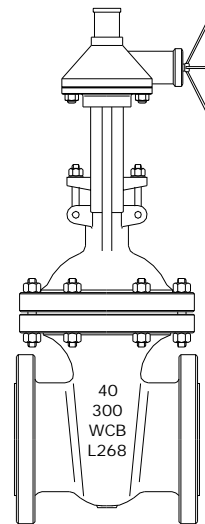
API CAST STEEL GATE VALVE PRODUCT LINE

Size		Pressure (CLASS)																	
		Bolted Bonnet								Pressure Seal Bonnet									
		Hand operated				Gear operated				Hand operated				Gear operated					
DN	NPS	150	300	600	900	1500	300	600	900	1500	600	900	1500	2500	600	900	1500	2500	
40	1-1/2	*	*	*	*	*													
50	2	*	*	*	*	*													
65	2-1/2	*	*	*	*	*													
80	3	*	*	*	*	*					*	*	*	*					
100	4	*	*	*	*	*					*	*	*	*					
125	5	*	*	*	*	*					*	*	*	*					
150	6	*	*	*	*	*					*	*	*	*					
200	8	*	*	*	*	*					*	*	*						*
250	10	*	*	*	*	*					*	*	*						*
300	12	*	*	*	*	*				*	*	*							*
350	14	*	*	*	*	*				*	*	*							*
400	16	*	*	*					*	*	*					*	*	*	*
450	18	*	*	*					*	*	*					*	*	*	*
500	20	*	*	*					*	*	*					*	*	*	*
600	24	*	*					*	*	*					*	*	*	*	*
650	26	*	*					*							*	*	*	*	*
700	28	*	*					*							*	*	*	*	*
750	30	*	*					*							*	*	*	*	*
800	32	*	*					*							*	*	*	*	*
900	36	*	*					*							*	*	*	*	*
1000	40	*					*	*											
1050	42	*					*	*											
1200	48	*					*	*											

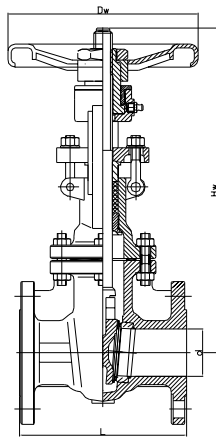
For sizes classes not shown please contact our sales department



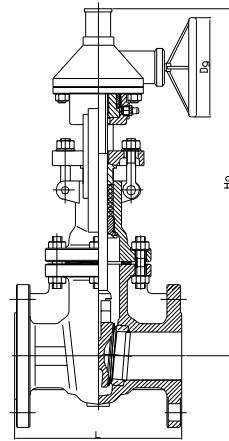
Handwheel Operate



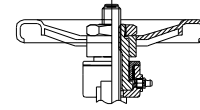
Gear Operate



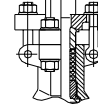
Handwheel operation



Gear operation for 14" and larger



Bearing and injection
For NPS 8" and larger



Yoke for NPS 10" and larger

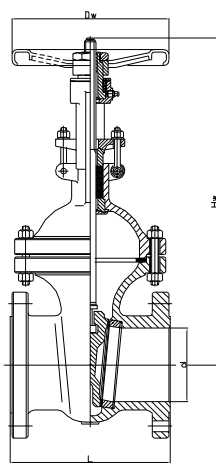
Design Standard

1. Design and Manufacture Standard: API 600 , API 603
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
ANSI B16.5(NPS<=24") , ASME B16.47(NPS>24")
5. Inspection and Test Standard: API 598

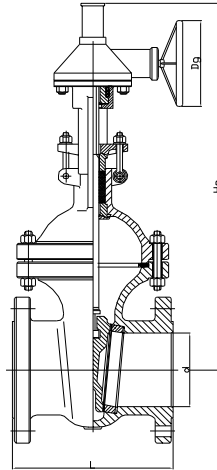
Technical Specification

Unit(mm)

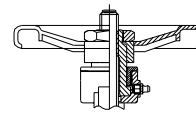
NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	178	191	216	51	400	-	200	-	19	-
2-1/2	65	191	203	241	64	435	-	200	-	25	-
3	80	203	216	283	76	515	-	250	-	33	-
4	100	229	241	305	102	595	-	280	-	49	-
5	125	254	267	381	127	725	-	280	-	62	-
6	150	267	279	403	152	780	820	300	310	77	104
8	200	292	305	419	203	975	1020	350	310	123	150
10	250	330	343	457	254	1150	1200	400	310	188	215
12	300	356	368	502	305	1380	1430	450	310	288	315
14	350	381	394	572	337	1545	1580	500	310	385	435
16	400	406	419	610	387	1733	1780	500	460	500	552
18	450	432	445	660	438	1915	1990	500	460	601	653
20	500	457	470	711	489	2122	2220	600	460	764	816
24	600	508	521	813	591	2520	2600	600	460	1007	1185
26	650	559	-	864	633	-	2800	-	600	-	1550
28	700	610	-	914	684	-	3050	-	600	-	1880
30	750	610	-	914	735	-	3130	-	600	-	2300
32	800	711	-	965	779	-	3280	-	600	-	2550
34	850	762	-	1016	830	-	3500	-	600	-	2950
36	900	711	-	1016	874	-	3720	-	600	-	3390



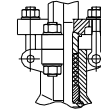
Handwheel operation



Gear operation for 12" and larger



Bearing and injection
For NPS 8" and larger



Yoke for NPS 10" and larger

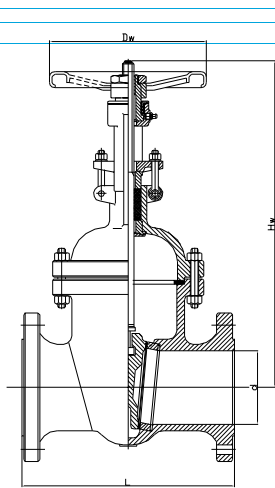
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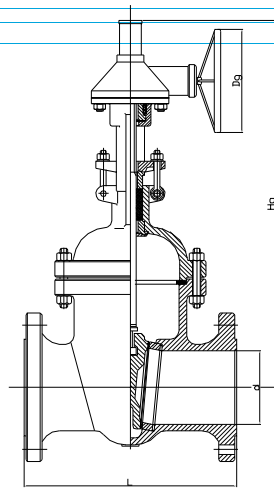
Technical Specification

Unit(mm)

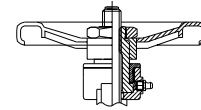
NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	216	232	216	51	420	-	200	-	-	-
2-1/2	65	241	257	241	64	446	-	200	-	30	-
3	80	283	298	283	76	537	-	250	-	48	-
4	100	305	321	305	102	619	650	280	-	73	100
5	125	381	397	381	127	722	750	300	-	99	126
6	150	403	419	403	152	806	835	350	310	130	186
8	200	419	435	419	203	1000	1030	400	310	208	235
10	250	457	473	457	254	1240	1280	450	310	334	386
12	300	502	518	502	305	1425	1460	500	310	450	502
14	350	762	778	762	337	1585	1620	600	310	704	756
16	400	838	854	838	387	1790	1830	600	460	923	965
18	450	914	930	914	438	1960	2000	650	460	1131	1224
20	500	991	1010	991	489	2158	2220	750	460	1345	1400
24	600	1143	1165	1143	591	2576	2620	900	460	2122	2385
26	650	1245	1270	1245	633	-	2850	-	600	-	3000
28	700	1346	1372	1346	684	-	3080	-	600	-	3300
30	750	1397	1422	1397	735	-	3180	-	600	-	3550
32	800	1524	1553	1524	779	-	3300	-	600	-	4400
34	850	1626	1654	1626	830	-	3550	-	600	-	5200
36	900	1727	1756	1727	874	-	3760	-	600	-	6050



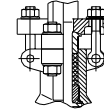
Handwheel Operation



Gear operation for 10" and larger



Bearing and injection
For NPS 6" and larger



Yoke for NPS 8" and larger

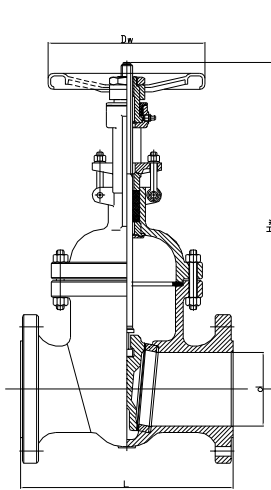
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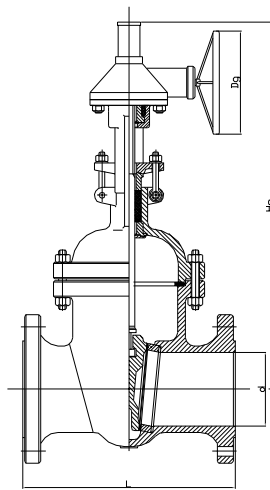
Technical Specification

Unit(mm)

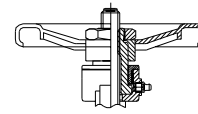
NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	292	295	292	51	444	-	200	-	32	-
2-1/2	65	330	333	330	64	500	-	250	-	52	-
3	80	356	359	356	76	558	585	280	310	60	87
4	100	432	435	432	102	665	695	300	310	107	134
5	125	508	511	508	127	750	790	350	310	175	227
6	150	559	562	559	152	868	900	450	310	216	268
8	200	660	664	660	203	1073	1110	500	310	399	451
10	250	787	791	787	254	1263	1300	650	460	605	657
12	300	838	841	838	305	1600	1650	700	460	851	893
14	350	889	892	889	337	1705	1750	900	460	1177	1232
16	400	991	994	991	387	1835	1990	900	460	1513	1568
18	450	1092	1095	1092	438	-	2020	-	600	-	1980
20	500	1194	1200	1194	489	-	2172	-	600	-	2460
24	600	1397	1407	1397	591	-	-	-	600	-	3650



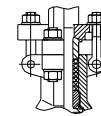
Handwheel Operation



Gear operation for 10" and larger



Bearing and injection
For NPS 6" and larger



Yoke for NPS 8" and larger

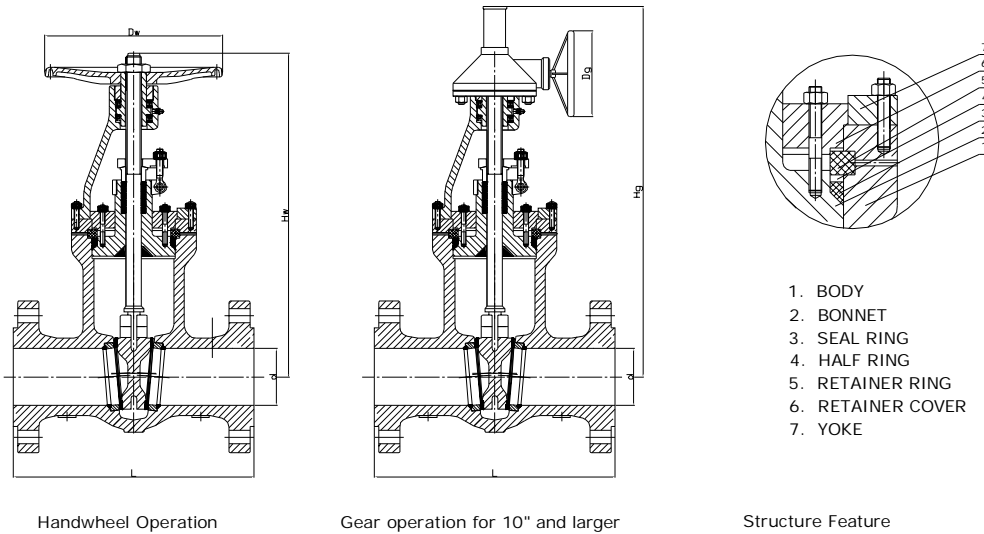
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5. Inspection and Test Standard: API 598

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	368	371	368	51	500	-	280	-	70	-
2-1/2	65	419	422	419	64	550	-	280	-	110	-
3	80	381	384	381	76	610	660	300	310	140	167
4	100	457	460	457	102	702	750	350	310	200	227
5	125	559	562	559	127	850	900	400	310	258	285
6	150	610	613	610	152	980	1060	500	460	358	410
8	200	737	740	737	203	1100	1140	650	460	550	600
10	250	838	841	838	254	1320	1370	700	460	1000	1100
12	300	965	968	965	305	1500	1560	900	460	1215	1310
14	350	1029	1038	1029	322	1900	1950	900	600	1600	1700
16	400	1130	1140	1130	373	2050	2100	900	600	2150	2330



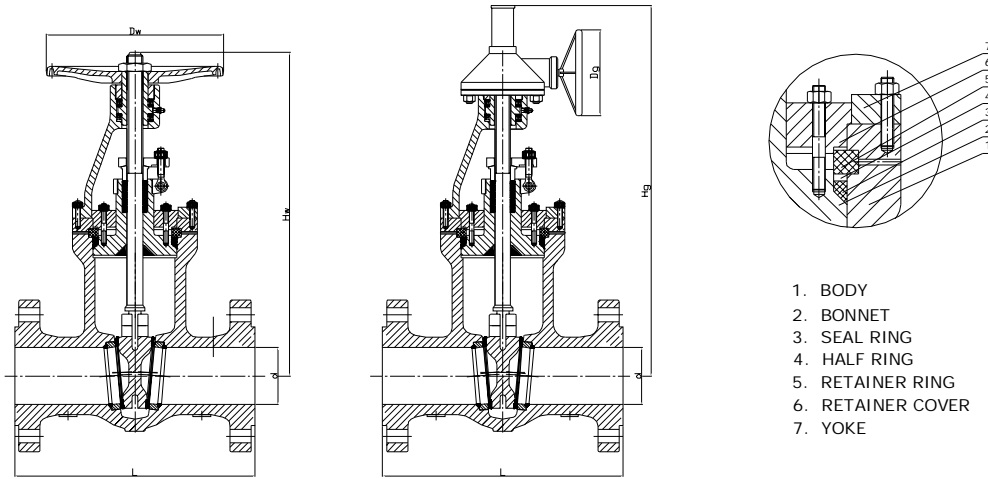
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Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	368	371	368	51	510	-	280	-	70	-
2-1/2	65	419	422	419	64	560	-	300	-	110	-
3	80	470	473	470	76	620	670	350	310	175	202
4	100	546	549	546	102	728	770	400	310	270	300
5	125	673	676	673	127	870	920	450	310	378	405
6	150	705	711	705	144	1000	1070	500	460	520	575
8	200	832	841	832	192	1130	1180	750	460	820	915
10	250	991	1000	991	239	1360	1410	900	600	1560	1750
12	300	1130	1146	1130	287	-	1620	-	600	-	2120
14	350	1257	1276	1257	315	-	2020	-	600	-	2600
16	400	1384	1407	1384	360	-	2180	-	600	-	3450



Handwheel Operation

Gear operation for 10" and larger

Structure Feature

Design Standard

1. Design and Manufacture Standard: API 600
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
ANSI B16.5(NPS ≤ 24") , ASME B16.47(NPS > 24")
5. Inspection and Test Standard: API 598

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	451	454	451	42	530	580	280	310	100	130
2-1/2	65	508	514	508	52	580	630	300	310	150	180
3	80	578	584	578	62	650	700	350	310	245	275
4	100	673	683	673	87	750	800	400	310	390	420
5	125	794	807	794	96	900	960	500	460	550	580
6	150	914	927	914	131	1040	1100	600	460	780	835
8	200	1022	1038	1022	179	1150	1200	750	460	1260	1355
10	250	1270	1292	1270	223	1400	1460	900	600	2380	2565
12	300	1422	1445	1422	265	-	1660	-	600	-	3250

CAST STEEL GLOBE VALVE

DESIGN CHARACTERISTICS OF BS1873 CAST STEEL GLOBE VALVE

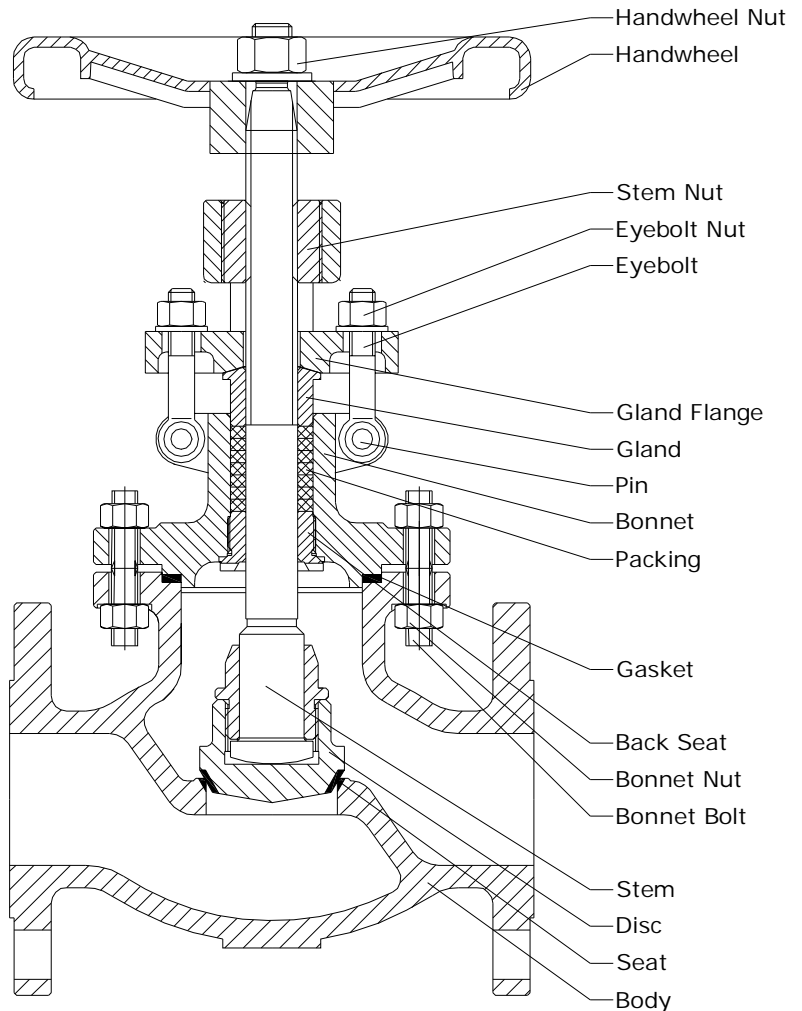
Stem nut uses aluminum bronze material. Large valve is provided with thrust bearing to make it opened easily and flexibility.

Two-piece design of packing gland to avoid stem clogging caused by over pressure.

Packing uses flexible graphite for dependable sealing performance. If requested by users, packing spacer ring and greasing mechanism can be available. Also other types of packing or live loading.

Upper seal design to ensure dependable packing and sealing when valve is fully opened. (Replacement of packing under pressure is not recommended).

Lift Stem. with a piece of hard stainless head and disc to avoid deformation caused by extrusion and corrosion leading to inflexibility of disc action.



CAST STEEL GLOBE VALVE

TYPICAL MATERIAL LIST FOR BS1873 CAST STEEL GLOBE VALVE

No.	Part Name	Carbon Steel		Stainless Steel	Alloy Steel
1	Body	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
2	Seat	ASTM A105	ASTM A182 F304	-	ASTM A182 F304
3	Disc	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
4	Stem	A276 TYPE 410	A276 TYPE 304	A276 TYPE 304	A182 F22
5	Bonnet Bolt	ASTM A193 B7	ASTM A193 8	ASTM A193 8	ASTM A193 B7
6	Bonnet Nut	ASTM A194 2H	ASTM A194 B8	ASTM A194 B8	ASTM A194 4
7	Back Seat	A182 F6a	A182 F304	A182 F304	A182 F304
8	Gasket	Soft Graphite+SS304			
9	Packing	Soft Graphite			
10	Bonnet	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
11	Pin	A194 2H	A276 TYPE 304	A276 TYPE 304	A276 TYPE 410
12	Gland	A182 F6a	A182 F304	A182 F304	A182 F6a
13	Gland Flange	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
14	Eyebolt	ASTM A193 B7	ASTM A193 8	ASTM A193 8	ASTM A193 B7
15	Eyebolt Nut	ASTM A194 2H	ASTM A194 B8	ASTM A194 B8	ASTM A194 4
16	Stem Nut	B148UNS C95600	B148UNS C95600	B148UNS C95600	B148UNS C95600
17	Handwheel	ASTM A197			
18	Handwheel Nut	A108 1020	A182 F304	A182 F304	A108 1020

- Remarks:
1. Pressure and temperature rating of casing material referred to Appendix
 2. Chemical compositions and mechanical property of casing material referred to Appendix
 3. Trim materials and recommended service coverage referred to Appendix
 4. NACE MR-01-75 when specified by user

* Stellite 6 overlay available

Technical Specification

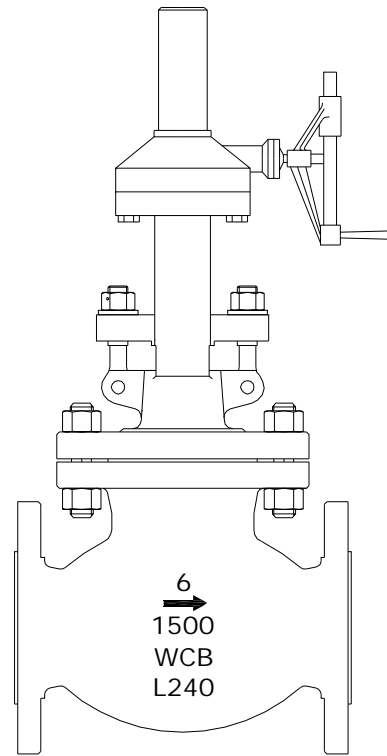
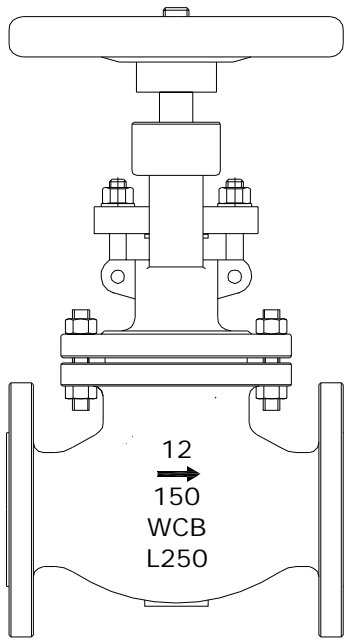
Design Standard	BS 1873 / API600						
Pressure-Temperature Rating	ASME B16.34						
Face-Face	ASME B16.10						
Flange Ends	ASME B16.5 / ASME B16.47						
Buttwelding Ends	ASME B16.25						
Inspection and Test	API598						
Nominal Pressure (Class)	150	300	400	900	1500	2500	
Test-Pressure (MPa)	Shell Test	2.93	7.55	10.0	15.0	22.5	37.5
	High Pressure Seal Test	2.07	5.52	7.31	11.03	16.5	27.5
	Low Pressure Seal Test	0.6					
Applicable Temperature	Different raw material for different work temperature						
Applicable Medium	Water, Oil, Gas and other causticity medium (Different raw material for different medium)						

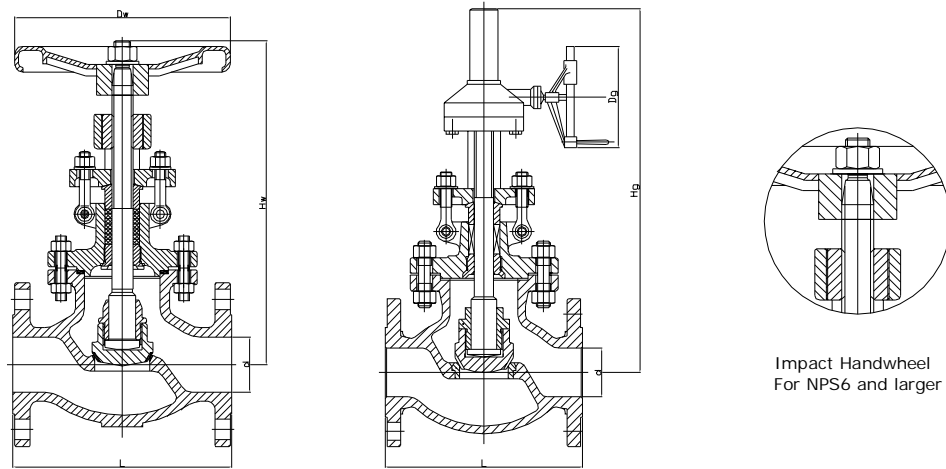
CAST STEEL GLOBE VALVE

CAST STEEL GLOBE VALVE PRODUCT LINE

Size		Pressure (CLASS)																	
		Bolted Bonnet										Pressure Seal Bonnet							
		Hand operated					Gear operated					Hand operated				Gear operated			
DN	NPS	150	300	600	900	1500	150	300	300	600	900	1500	600	900	1500	600	900	1500	
40	1-1/2	*	*	*															
50	2	*	*	*															
65	2-1/2	*	*	*															
80	3	*	*	*	*	*							*	*	*				
100	4	*	*	*	*	*							*	*	*				
150	6	*	*	*	*	*							*	*	*				
200	8	*	*	*	*							*	*	*				*	
250	10	*	*	*	*					*	*	*	*				*	*	
300	12	*	*							*							*		
350	14	*	*																
400	16	*	*						*										
450	18	*							*										
500	20	*							*										
600	24	*							*										

For sizes classes not shown please contact our sales department





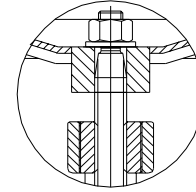
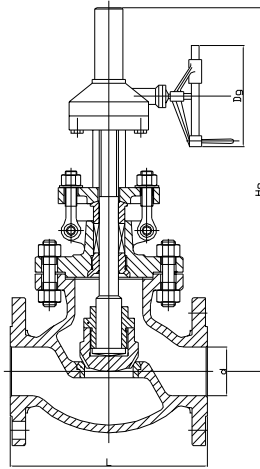
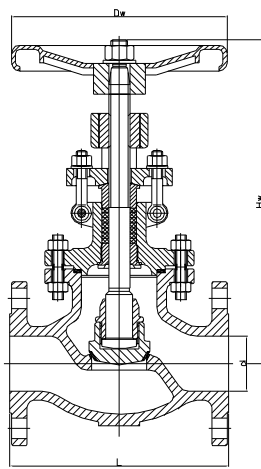
Design Standard

1. Design and Manufacture Standard: BS 1873
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
5. Inspection and Test Standard: API 598

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
1-1/2	40	165	178	165	38	258	-	135	-	16	-
2	50	203	216	203	51	330	-	200	-	25	-
2-1/2	65	216	229	216	64	360	-	250	-	42	-
3	80	241	254	241	76	390	-	280	-	46	-
4	100	292	305	292	102	445	-	300	-	74	-
5	125	356	369	356	127	480	-	350	-	111	-
6	150	406	419	406	152	520	556	350	310	165	258
8	200	495	508	495	203	600	658	400	310	275	300
10	250	622	635	622	254	773	805	450	460	400	450
12	300	698	711	698	305	880	955	500	460	624	725



Impact Handwheel
For NPS6 and larger

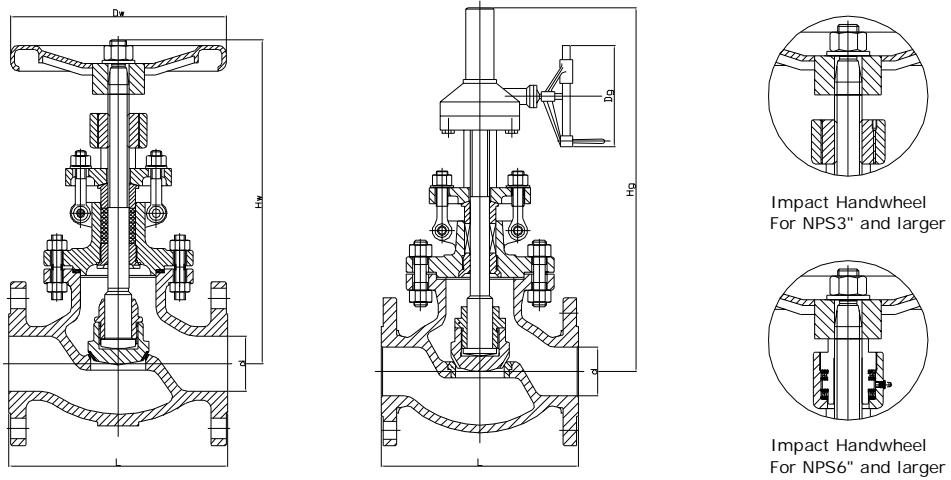
Design Standard

1. Design and Manufacture Standard: BS 1873
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
5. Inspection and Test Standard: API 598

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
1-1/2	40	229	241	229	38	260	-	160	-	19	-
2	50	267	283	267	51	385	-	200	-	25	-
2-1/2	65	292	308	292	64	420	-	200	-	42	-
3	80	318	333	318	76	440	-	280	-	46	-
4	100	356	371	356	102	515	-	350	-	74	-
5	125	400	416	400	127	580	-	350	-	111	-
6	150	444	460	444	152	660	690	400	310	165	195
8	200	559	575	559	203	900	950	550	460	275	327
10	250	622	638	622	254	950	990	600	460	400	452
12	300	711	727	711	305	1030	1080	700	460	624	725



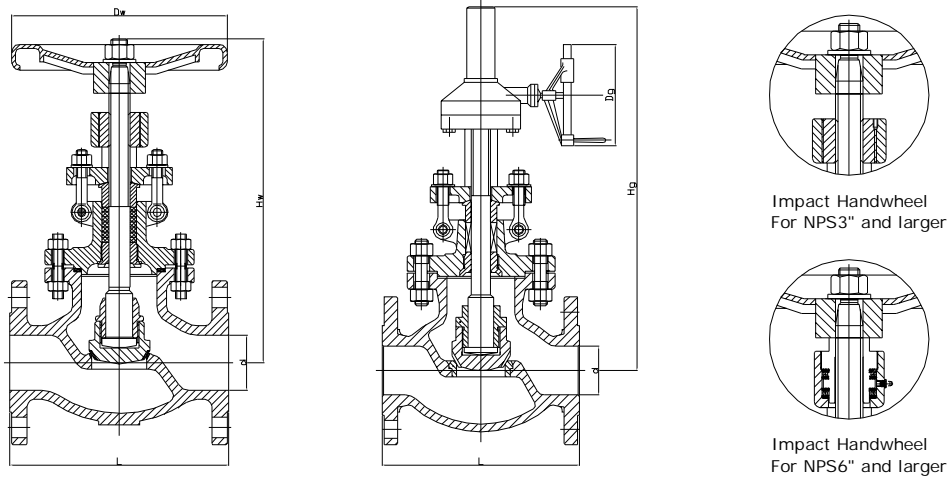
Design Standard

1. Design and Manufacture Standard: BS 1873
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
5. Inspection and Test Standard: API 598

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	292	295	292	51	360	-	250	-	32	-
2-1/2	65	330	333	330	64	410	-	280	-	42	-
3	80	356	359	356	76	465	-	300	-	63	-
4	100	432	435	432	102	545	575	400	310	107	138
5	125	508	511	508	127	625	660	500	310	185	215
6	150	559	562	559	152	785	820	550	460	290	342
8	200	660	664	660	200	930	960	650	460	540	645



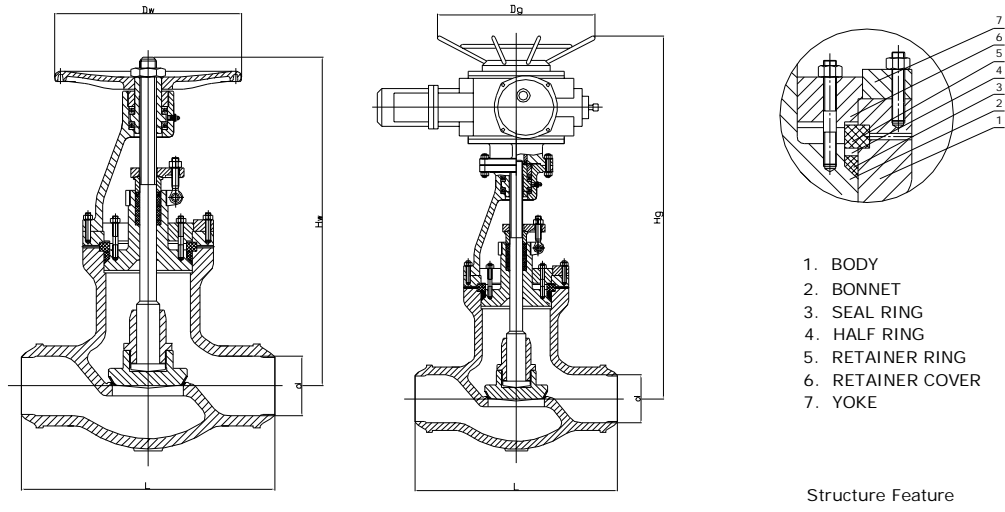
Design Standard

1. Design and Manufacture Standard: BS 1873
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
5. Inspection and Test Standard: API 598

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	368	371	368	51	480	-	350	-	55	-
2-1/2	65	419	422	419	64	520	-	350	-	68	-
3	80	381	384	381	76	564	630	400	310	95	128
4	100	457	460	457	102	685	720	450	310	160	210
5	125	559	562	559	127	780	840	550	460	270	325
6	150	610	613	610	152	950	1015	650	460	410	480



- 1. BODY
- 2. BONNET
- 3. SEAL RING
- 4. HALF RING
- 5. RETAINER RING
- 6. RETAINER COVER
- 7. YOKE

Structure Feature

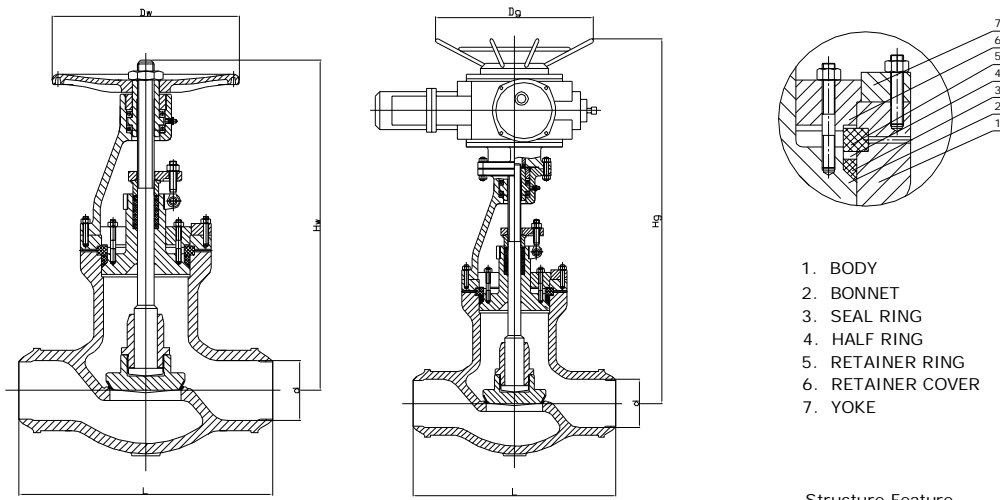
Design Standard

- 1. Design and Manufacture Standard: BS 1873
- 2. Material Pressure-Temp Standard: ANSI B16.34
- 3. End to End Standard: ANSI B16.10
- 4. Flange End Dimension Standard:
- 5. Inspection and Test Standard: API 598
- 6. Flanges ends available upon request

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	368	371	368	51	480	-	350	-	55	-
2-1/2	65	419	422	419	64	520	-	350	-	68	-
3	80	381	384	381	76	564	630	400	310	95	128
4	100	457	460	457	102	685	720	450	310	160	210
5	125	559	562	559	127	780	840	550	460	270	325
6	150	610	613	610	152	950	1015	650	460	410	480



1. BODY
2. BONNET
3. SEAL RING
4. HALF RING
5. RETAINER RING
6. RETAINER COVER
7. YOKE

Structure Feature

Design Standard

1. Design and Manufacture Standard: BS 1873
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard:
5. Inspection and Test Standard: API 598
6. Flanges ends available upon request

Technical Specification

Unit(mm)

NPS		L			d	Hw	Hg	Dw	Dg	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W.	G.O.
2	50	368	371	368	51	480	-	350	-	55	-
2-1/2	65	419	422	419	64	520	-	350	-	68	-
3	80	381	384	381	76	564	630	400	310	95	128
4	100	457	460	457	102	685	720	450	310	160	210
5	125	559	562	559	127	780	840	550	460	270	325
6	150	610	613	610	152	950	1015	650	460	410	480

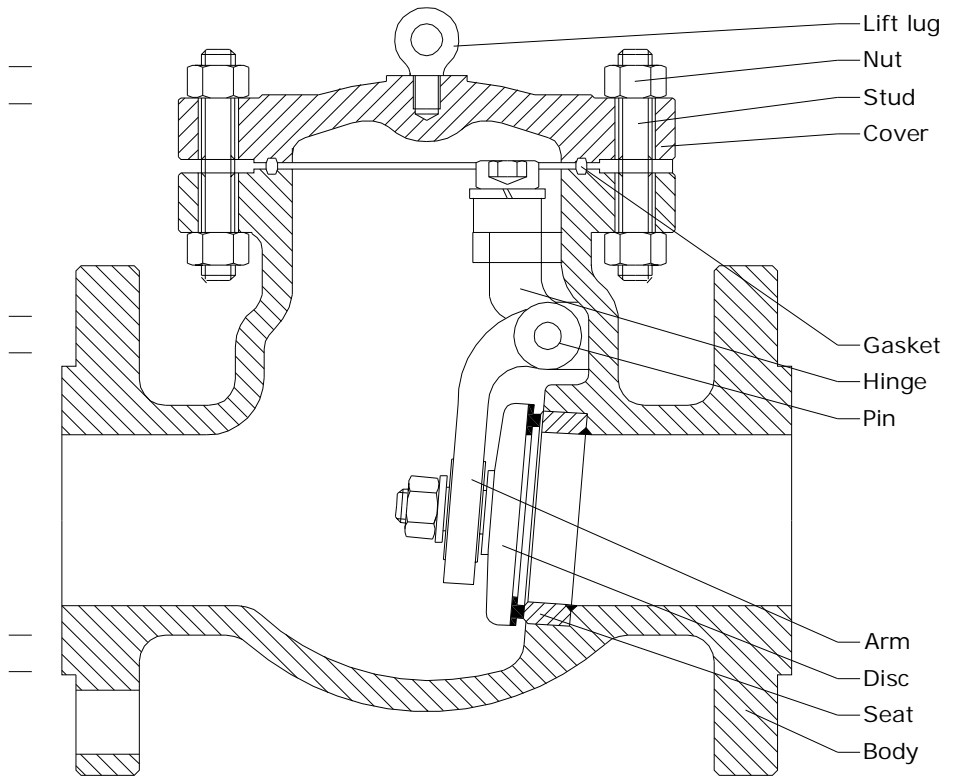
CAST STEEL SWING CHECK VALVE

DESIGN CHARACTERISTICS OF BS 1868 CAST STEEL SWING CHECK VALVE

Large-sized check valves are provided with lifting rings for the convenience of lifting

Bolted cover and the type of middle flange gasket may be different according to pressure; Class 600 check valve may adopt pressure self-tightening seal structure.

Solid pin is precisely installed and provided with high intensity to ensure operational performance and service life of valve.



CAST STEEL SWING CHECK VALVE

MATERIAL LIST FOR BS1868 CAST STEEL SWING CHECK VALVE

No.	Part Name	Carbon Steel		Stainless Steel	Alloy Steel
1	Body	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
2	Seat	ASTM A105	ASTM A182 F304	ASTM A105	ASTM A182 F304
3	Disc	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
4	Arm	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
5	PIIn	ASTM A182 F6a	ASTM A1S82 F304	ASTM A276 TYPE304	ASTM A182 F304
6	Connector	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
7	Gasket	Graphite+SS304	Graphite+SS304	Graphite+SS304	Graphite+SS304
8	Bonnet	ASTM A216 WCB	ASTM A352 LCB	ASTM A351 CF8	ASTM A217 WC6
9	Stud	ASTM A193 B7	ASTM A193 B8	ASTM A193 CF8	ASTM A193 B7
10	NUt	ASTM A194 2H	ASTM A194 8	ASTM A194 8	ASTM A194 4

- Remarks:
1. Pressure and temperature rating of casing material referred to Appendix
 2. Chemical compositions and mechanical property of casing material referred to Appendix
 3. Commonly used trim materials and service coverage referred to Appendix
 4. NACE MR-01-75 when specified by user
- * Stellite 6 overlay available

Technical Specification

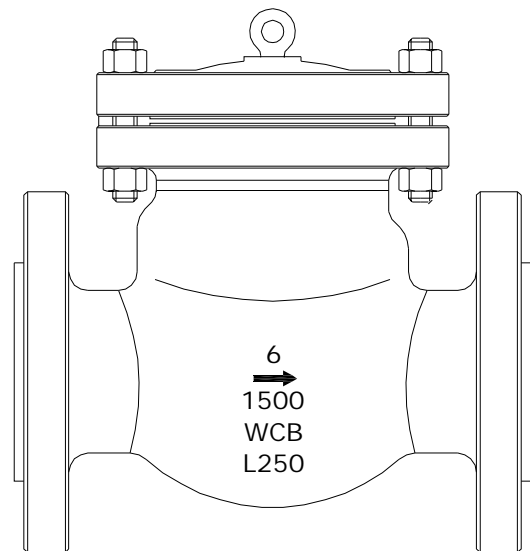
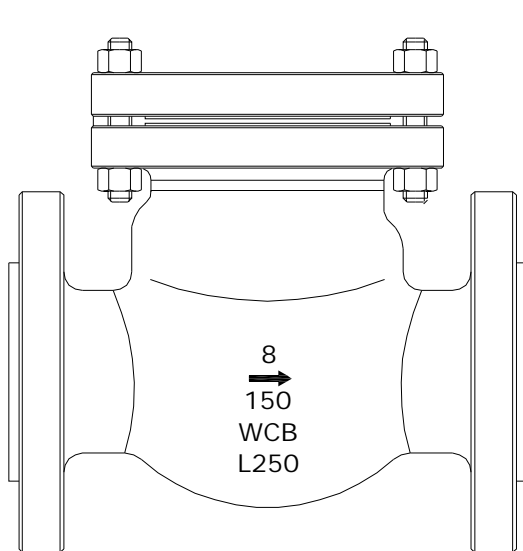
Design Standard		BS 1868					
Pressure-Temperature Rating		ASME B16.34					
Face-Face		ASME B16.10					
Flange Ends		ASME B16.5 / ASME B16.47					
Buttwelding Ends		ASME B16.25					
Inspection and Test		API598					
Nominal Pressure (Class)		150	300	400	600	900	1500
Test-Pressure (MPa)	Shell Test	2.93	7.55	10.0	15.0	22.5	37.5
	High Pressure Seal Test	2.07	5.52	7.31	11.03	16.5	27.5
	Low Pressure Seal Test	0.6					
Applicable Temperature	Different raw material for different work temperature						
Applicable Medium	Water, Oil, Gas and other causticity medium (Different raw material for different medium)						

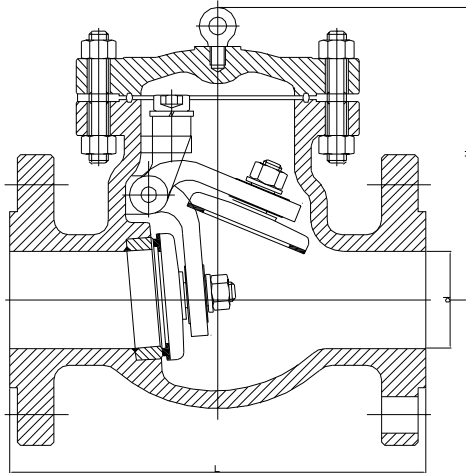
CAST STEEL SWING CHECK VALVE

CAST STEEL SWING CHECK VALVE PRODUCT LINE

Size		Bolted Bonnet			Pressure Seal Bonnet			
DN	NPS	API			BS			
		150	300	600	600	900	1500	2500
40	1-1/2	*	*	*	*	*	*	*
50	2	*	*	*	*	*	*	*
65	2-1/2	*	*	*	*	*	*	*
80	3	*	*	*	*	*	*	*
100	4	*	*	*	*	*	*	*
150	6	*	*	*	*	*	*	*
200	8	*	*	*	*	*	*	*
250	10	*	*	*	*	*	*	*
300	12	*	*	*	*	*	*	*
350	14	*	*	*	*	*	*	*
400	16	*	*	*	*	*	*	*
450	18	*	*	*	*	*	*	*
500	20	*	*	*	*	*	*	*
600	24	*	*	*	*	*	*	*
650	26	*	*	*	*	*	*	*
700	28	*	*	*	*	*	*	*
750	30	*	*	*	*	*	*	*
800	32	*	*	*	*	*	*	*
900	36	*	*	*	*	*	*	*

For sizes classes not shown please contact our sales department





REMARK: EYE SCREW FOR NPS5" & LARGER

Design Standard

1. Design and Manufacture Standard: API6D or BS1868
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard: ANSI B16.5(NPS<=24") , ASME B16.47(NPS>24")
5. Inspection and Test Standard: API 598

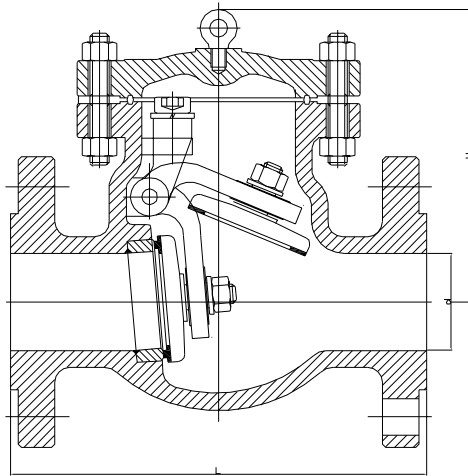
MAIN DIMENSION

Unit(mm)

SIZE		CLASS 150						CLASS 300					
NPS		L			d	H	Weight (Kg)	L			d	H	Weight (Kg)
inch	mm	RF	RTJ	BW				RF	RTJ	BW			
2	50	203	216	203	51	132	15	267	283	267	51	144	20
2-1/2	65	216	229	216	64	147	20	292	308	292	64	169	35
3	80	241	254	241	76	176	27	318	333	318	76	210	40
4	100	292	305	292	102	198	45	356	371	356	102	260	61
5	125	330	343	330	127	255	58	400	416	400	127	295	80
6	150	356	368	356	152	320	69	445	460	445	152	326	130
8	200	495	508	495	203	380	131	533	549	533	203	380	190
10	250	622	635	622	254	440	219	622	638	622	254	440	296
12	300	699	711	699	305	480	321	711	727	711	305	520	450
14	350	787	800	787	337	530	380	838	854	838	337	540	640
16	400	864	876	864	387	580	560	864	879	864	387	588	850
18	450	978	991	978	438	618	630	978	994	978	438	674	1030
20	500	978	991	978	489	657	770	1016	1035	1016	489	720	1330
24	600	1295	1308	1295	591	760	960	1346	1368	1346	591	850	1950
26	650	1295	-	1295	633	840	1250	1346	1372	1346	633	920	2300
28	700	1448	-	1448	684	920	1580	1499	1524	1499	684	1150	2600
30	750	1524	-	1524	735	980	1950	1594	1619	1594	735	1260	3200

CAST STEEL SWING CHECK VALVE

CLASS 600lb - 900lb



REMARK: EYE SCREW FOR NPS5" & LARGER

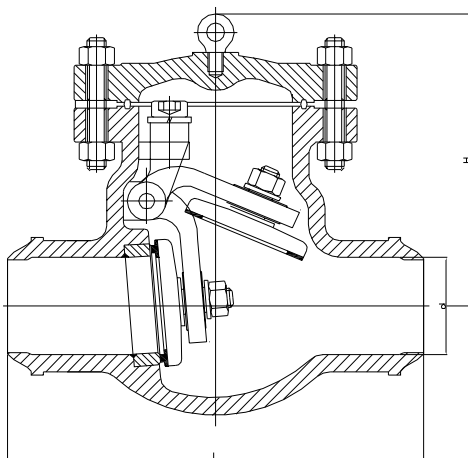
Design Standard

1. Design and Manufacture Standard: API6D or BS1868
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard: ANSI B16.5(NPS<=24") , ASME B16.47(NPS>24")
5. Inspection and Test Standard: API 598

MAIN DIMENSION

Unit(mm)

SIZE		CLASS 600						CLASS 900					
NPS		L			d	H	Weight (Kg)	L			d	H	Weight (Kg)
inch	mm	RF	RTJ	BW				RF	RTJ	BW			
2	50	292	295	292	51	170	28	368	371	368	51	200	48
2-1/2	65	330	333	330	64	178	40	419	422	419	64	220	75
3	80	356	359	356	76	246	68	381	384	381	76	280	95
4	100	432	435	432	102	290	117	457	460	457	102	320	136
5	125	508	511	508	127	320	155	559	562	559	127	360	200
6	150	559	562	559	152	360	192	610	613	610	152	400	264
8	200	660	664	660	203	430	340	737	740	737	203	480	424
10	250	787	791	787	254	502	515	838	841	838	254	560	730
12	300	838	841	838	305	554	750	965	968	965	305	632	1070
14	350	889	892	889	337	595	890	1029	1038	1029	322	680	1180
16	400	991	994	991	387	680	1303	1130	1140	1130	373	780	1790
18	450	1092	1095	1092	438	778	1800	1219	1232	1219	423	880	2500
20	500	1194	1200	1194	489	970	2150	1321	1334	1321	471	1050	3080
24	600	1397	1407	1397	591	1100	3200	1549	1568	1549	522	1200	4600



REMARK: EYE SCREW FOR NPS5" & LARGER

Design Standard

1. Design and Manufacture Standard: API6D or BS1868
2. Material Pressure-Temp Standard: ANSI B16.34
3. End to End Standard: ANSI B16.10
4. Flange End Dimension Standard: ANSI B16.5(NPS<=24") , ASME B16.47(NPS>24")
5. Inspection and Test Standard: API 598 or API6D

MAIN DIMENSION

Unit(mm)

SIZE		CLASS 1500						CLASS 2500							
NPS		RF	L			d	H	Weight (Kg)	RF	L			d	H	Weight (Kg)
inch	mm		RTJ	BW						RTJ	BW				
2	50	368	371	368	51	210	48	451	454	451	42	230	68		
2-1/2	65	419	422	419	64	240	75	508	514	508	52	260	100		
3	80	470	473	470	76	303	120	578	584	578	62	330	165		
4	100	546	549	546	102	340	180	673	683	673	87	370	260		
5	125	673	676	673	127	380	294	794	807	794	96	410	440		
6	150	705	711	705	144	430	385	914	927	914	131	460	580		
8	200	832	841	832	192	500	634	1022	1038	1022	179	530	970		
10	250	991	1000	991	239	590	1140	1270	1292	1270	223	620	1700		
12	300	1130	1146	1130	287	660	1650	1422	1445	1422	265	690	2600		
14	350	1257	1276	1257	315	710	2000	-	-	-	-	-	-		
16	400	1384	1407	1384	360	820	2700	-	-	-	-	-	-		