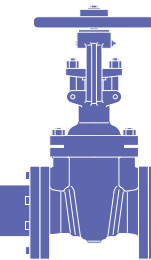


Sawamura



SAWAMURA VALVE Co., Ltd

Gate Valve, Globe valve, Check Valve

沢村バルブ株式会社

〒522-0223 彦根市川瀬馬場町1262-2
TEL:0749-25-1101 (代) FAX:0749-25-2964
E-mail:s-info@sawamura-valve.co.jp

SAWAMURA VALVE Co., Ltd.

1262-2 kawase babacho hikone shiga 522-0223 japan
TEL +81-749-25-1101 FAX +81-749-25-2964
E-mail:s-info@sawamura-valve.co.jp

沢村バルブ株式会社

1925年創業の我社は
おかげさまで90周年を迎えました。

長い長い業歴の中
造船業を始め各種プラント、発電所など
幅広い産業に納入して参りました。
様々な用途に合わせた
様々なバルブを製作するなかで
“作ってみよう”を掛け声に
創意工夫で開発・改良を重ね
個性ある製品づくりに取り組んで参りました。

一方
長い長い業歴の中
私達には
“日本の品質管理”の考え方が
あたかも日々の入浴習慣のように染付いています。

近年マーケットの国際化に伴い
仕入・販売を東アジアに拡大する一方
海外業務に於いても
“個性ある製品づくり”と“日本の品質管理”を以て
“世界中のお客様に喜んで頂ける製品を提供する”
ことを目標に歩んで参ります。

Since our establishment in 1925,
We have been supplying our products to
various industries, such as shipbuilding, power plant, petro-chemical plant,
and etc.

Nature of our company is "Just try it".

During the period, we developed and improved many kind of valves in many
applications to meet customers' needs of safe, durable, high performance and
cost effectiveness.

Through the above experiences, we built up highly solid manufacturing
standard of "Japan Quality" in our company.

Following globalization of the market, we aim to expand our supply and
purchase network to Asian countries

We would contribute customers in the area through supplying our original
products made with our policy, "Japan Quality with International Price".

with best regards,
Naoki Sawamura, President



Contents

GATE VALVE

01-13

Bolted Bonnet Gate Valve.....	04-05
Pressure Seal Gate Valve.....	06-07
Parallel Slab Gate Valve.....	08-09
API602 Forged Steel Gate Valve.....	10-11
Bellow Seal Gate Valve.....	12
Cast Steel Bellow Seal Gate Valve.....	13

GLOBE VALVE

14-23

Bolted Bonnet Globe Valve.....	17-18
Pressure Seal Globe Valve.....	19
API602 Forged Steel Globe Valve.....	20-21
Bellow Seal Globe Valve.....	22
Cast Steel Bellow Seal Globe Valve.....	23

CHECK VALVE

24-34

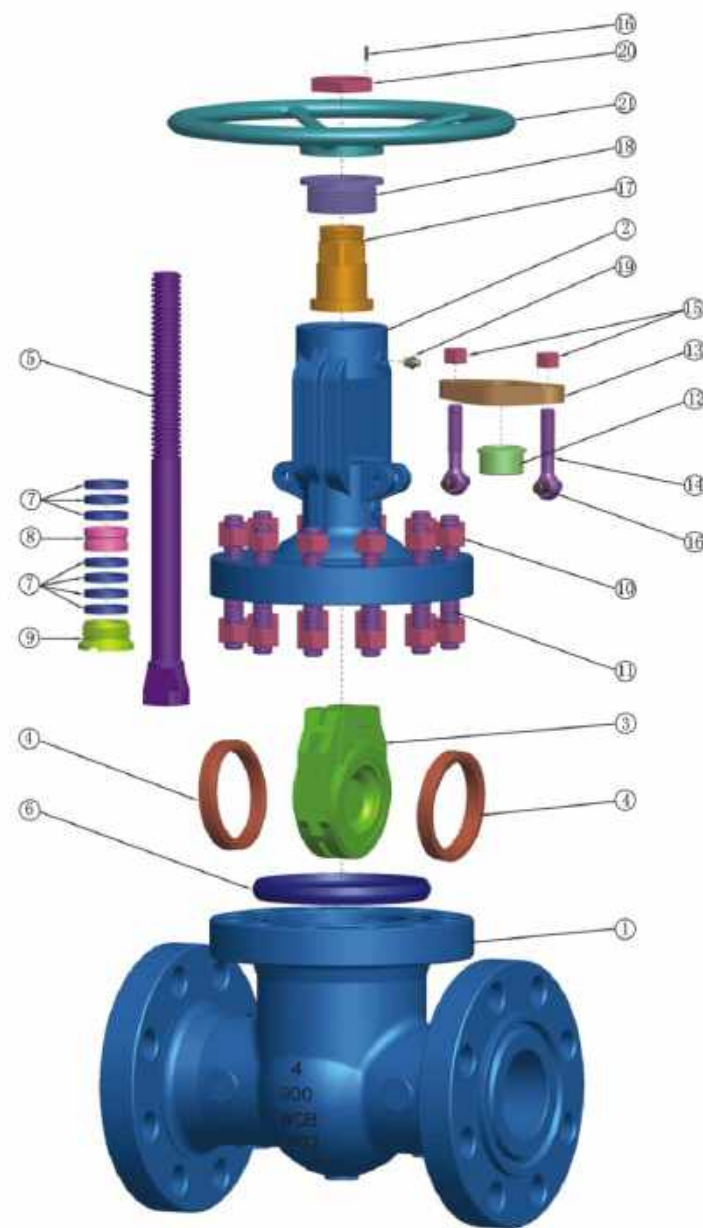
Bolted Cover Check Valve.....	27-28
Pressure Seal Check Valve.....	29
Bolted Cover Lift Check Valve.....	30
Wafer Double Disc Check Valve.....	31-32
API602 Forged Steel Check Valve.....	33-34

BUTTERFLY VALVE

35-41

Wafer Butterfly Valve.....	36-38
Flanged Butterfly Valve.....	39-41

Gate Valve



No	Part Name	No	Part Name	No	Part Name
1	Body	8	Lantern Ring	15	Gland Nut
2	Bonnet	9	Backseat Bushing	16	Pin
3	Wedge	10	Nut	17	Stem Nut
4	Seating Ring	11	Bolt	18	Retaining Nut
5	Stem	12	Gland	19	Nipple
6	Gasket	13	Gland Flange	20	H.W.Lock Nut
7	Stem Packing	14	Gland Eyebolt	21	Handwheel

Gate Valve

Standards

ANSI Series	
Basic design	API600
	API6D
	ASME B16.34
Pressure-temperature ratings	ASME B16.34
	ASME B16.10
Face to face dimension	ASME B16.5
	ASME B16.47
	MSS SP44
Flanged ends	JIS
	ASME B16.25
B.W.Ends	API598
	API6D
Test	

Trim material

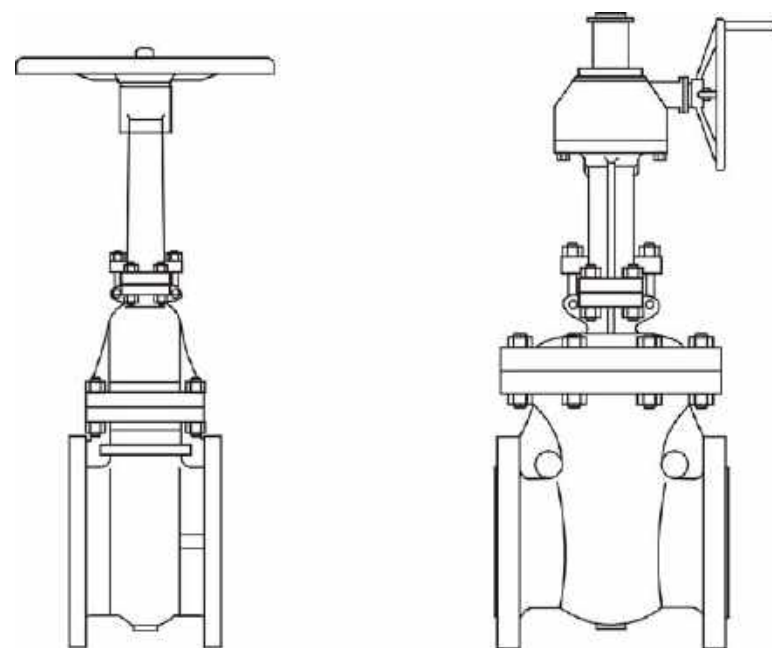
Seating code	Seat ring surface	Wedge seat surface	Stem & backseat bushing
1	13Cr	13Cr	A182 F6a
2	18Cr-8Ni	18Cr-8Ni	A182 F304
3	25Cr-20Ni	25Cr-20Ni	A182 F310
4	Hard 13Cr	Hard 13Cr	A182 F6a
5	Stellite	Stellite	A182 F6a
6	13Cr	Cu-Ni Alloy	Monel
7	13Cr	Hard 13Cr	A182 F6a
8	Stellite	13Cr	A182 F6a
9	Cu-Ni Alloy	Cu-Ni Alloy	Monel
10	18Cr-8Ni-Mo	18Cr-8Ni-Mo	A182 F316
11	Cu-Ni Alloy	Cu-Ni Alloy	Monel
12	Stellite	18Cr-8Ni-Mo	A182 F316
13	19Cr-29Ni	19Cr-29Ni	20 Alloy

Material list of API600 Rising Stem Cast Steel Gate Valve

No	Part Name	Carbon Steel to ASTM		Stainless Steel to ASTM				Alloy Steel to ASTM		
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
2	Bonnet	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
3	Wedge	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
4	Seating Ring	A105N	A350LF2	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A182 F11	A182 F22	A182 F5
5	Stem	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
6	Gasket	Graphite+SS304, PTFE								
7	Stem Packing	Flexible Graphite								
8	Lantern Ring	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
9	Backseat Bushing	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
10	Nut	A194 2H	A194 4	A194 8				A194 7		
11	Bolt	A193 B7	A320 L7	A193 B8				A193 B16		
12	Gland	F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
13	Gland Flange	A216 WCB	A352 LCB	A351 CF8	A351 CF8	A351 CF8	A351 CF8	A217 WC6	217 WC9	A217 C5
14	Gland Eyebolt	A193 B7		A193 B8				A193 B16		
15	Gland Nut	A194 2H		A194 8				A194 7		
16	Pin	ANSI 1045		A182 F304				ANSI 1045		
17	Stem Nut	A439 D2 / B148 952A								
18	Retaining Nut	ANSI 1020								
19	Nipple	铜合金 Copper Alloy								
20	H.W.Lock Nut	ANSI 1020								
21	Handwheel	A197								

※Suitable for H₂S service and meet requirement of NACE MR 0175.

Cast Steel Gate Valve

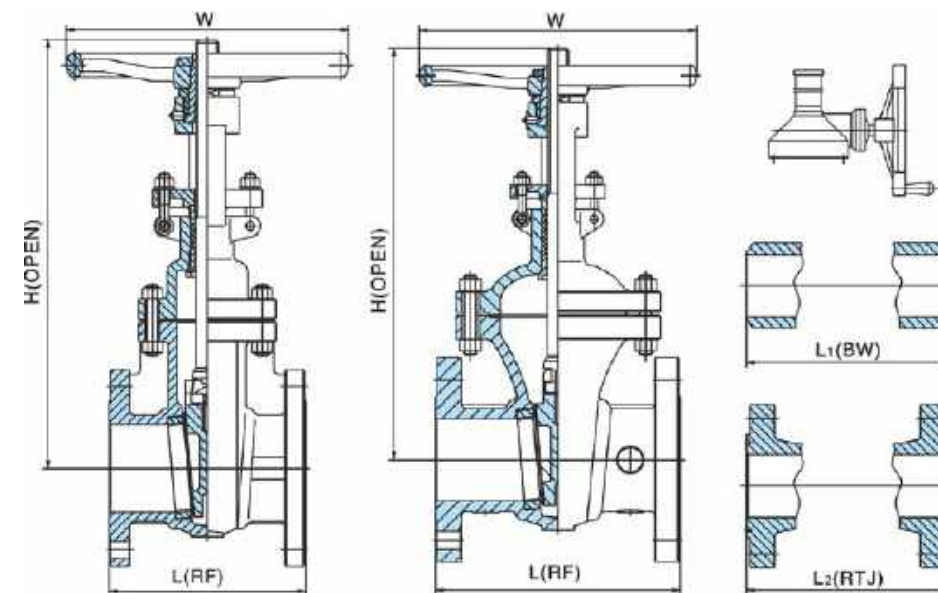


Supply Range of Cast Steel Gate Valve

Pressure ratings		DN/NPS																			
		50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200
		2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48
API Bolted bonnet gate valve	Class150 JIS10K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class300 JIS20K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class600 JIS40K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class1500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Parallel slab gate valve	Class150 JIS10K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class300 JIS20K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class600 JIS40K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class1500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Pr-essure seal gate valve	Class600	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class1500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class2500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
GB Bolted bonnet gate valve	PN1.6MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	PN2.5MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	PN4.0MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	PN6.3MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	PN10.0MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	PN16.0MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	PN25.0MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

※If you need any products unlisted here, please send us the specification.

Bolted Bonnet Gate Valve



Construction feature

Bolted bonnet
Flexible or solid wedge
Renewable seat
(Threaded or welded seat ring)
≤8" Yoke integral with bonnet
≥10" Sparete yoke bolted to bonnet

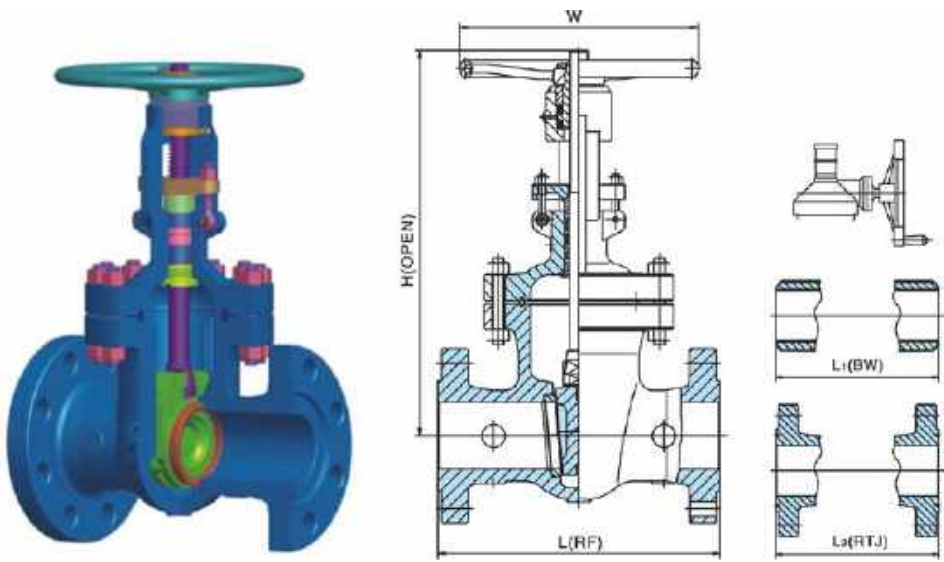
Pressure Test

Pressure ratings	Class150
	Class300
Shell test	3.2MPa
	7.8MPa
Seat test	2.2MPa
	5.7MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class150																					
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200
L (RF)	in	7	7 1/2	8	9	10	10 1/2	11 1/2	13	14	15	16	17	18	20	24	28	28	32	32	42
	mm	178	190	203	229	254	267	292	330	356	381	406	432	457	508	610	660	711	813	813	1067
L (BW)	in	8 1/2	9 1/2	11 1/10	12	15	15 7/8	16 1/2	18	19 3/4	22 1/2	24	26	28	32	36	38	40	42	45	54
	mm	216	241	282	305	381	403	419	457	502	572	610	660	711	813	914	965	1016	1067	1143	1371
L (RTJ)	in	7 1/2	8	8 1/2	9 1/2	10 1/2	11	12	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2	20 1/2	24 1/2	26 1/2	28 1/2	/	/	/
	mm	191	203	216	242	267	280	305	343	369	394	419	445	470	521	622	673	724	/	/	/
H	in	15 3/8	16 1/26	18	21 3/16	24 1/4	27 5/16	34	40 13/16	44 1/2	50	57	67	70 11/16	86 3/16	102	113	118	130	137	156
	mm	391	408	457	538	615	693	863	1036	1130	1272	1447	1701	1795	2189	2590	2870	2997	3302	3479	3962
W	in	7 7/8	7 7/8	9 7/8	11	11	11 13/16	13 3/4	15 3/4	17 11/16	19 11/16	21 2/3	23 5/8	25 3/5	27 5/9	/	/	/	/	/	/
	mm	200	200	250	280	280	300	350	400	450	500	550	600	650	700	/	/	/	/	/	/
WT (KG)	RF	20	30	36	53	71	85	136	220	323	387	553	660	810	1250	1931	2490	3600	4650	5100	6500
	BW	17	26	29	46	66	77	116	202	294	350	506	575	720	1130	1765	2280	3080	/	/	/
Class300																					
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200
L (RF, BW)	in	8 1/2	9 1/2	11 1/8	12	15	15 7/8	16 1/2	18	19 3/4	30	33	36	39	45	55	60	68	76 15/16	80	90
	mm	216	241	282	305	381	403	419	457	502	762	838	914	991	1143	1346	1524	1727	1955	2032	2286
L (RTJ)	in	9 1/8	10 1/8	11 3/4	12 5/8	15 5/8	16 1/2	17 1/8	18 5/8	20 3/8	30 5/8	33 5/8	36 5/8	39 3/4	45 7/8	54	61 1/8	69 1/8	/	/	/
	mm	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165	1371	1552	1755	/	/	/
H	in	18 3/8	19 1/2	20 1/2	24	27 5/16	32 1/2	39 3/4	47	50 1/2	56	61	71	77	99	104	112 1/2	120	146 3/16	154 3/16	177 3/16
	mm	467	495	520	609	693	825	1009	1193	1282	1422	1549	1803	1955	2425	2641	2857	3048	3713	3916	4501
W	in	7 7/8	7 7/8	9 7/8	11	11 13/16	13 3/4	15 3/4	17 13/16	19 11/16	21 2/3	23 5/8	25 3/5	27 5/9	31 1/2	/	/	/	/	/	/
	mm	200	200	250	280	300	350	400	450	500	550	600	650	700	800	/	/	/	/	/	/
WT (KG)	RF	30	39	55	83	92	137	240	333	536	699	1010	1205	1720	2800	4027	4850	6632	8100	9750	13050
	BW	26	34	47	68	70	118	195	271	432	695	848	1025	1460	2294	3600	4235	5900	/	/	/

Bolted Bonnet Gate Valve



Construction feature

Bolted bonnet
Flexible or solid wedge
Renewable seat
(Threaded or welded seat ring)
≤6" Yoke integral with bonnet
≥8" Spigate yoke bolted to bonnet

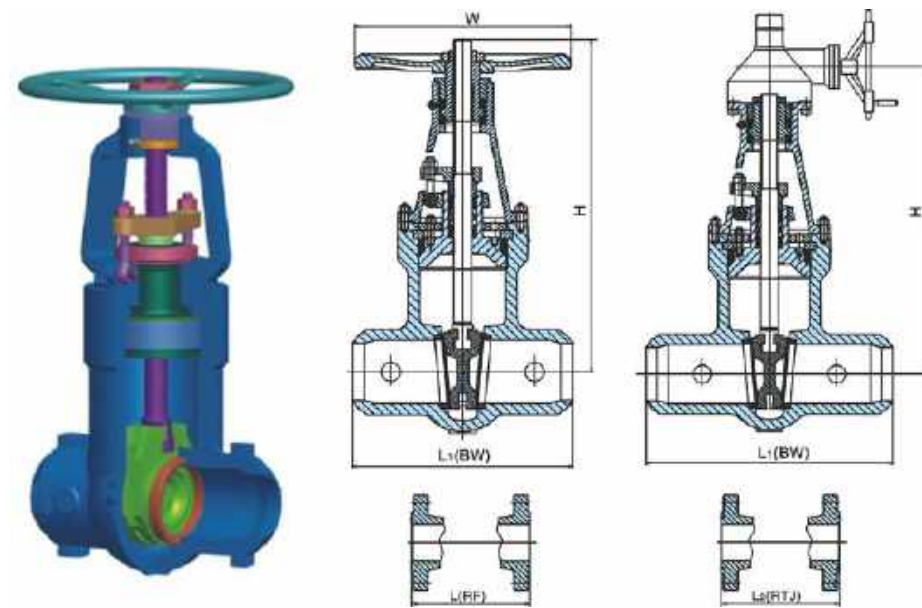
Pressure Test

Pressure ratings	Class600 Class900 Class1500
Shell test	15.6MPa 23.3MPa 38.8MPa
Seat test	11.4MPa 17.1MPa 28.5MPa
Seat test	0.6MPa 0.6MPa 0.6MPa

Main dimensions and weights

Class600																			
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
L(RF, BW)	in	11 1/2	13	14	17	20	22	26	31	33	35	39	43	47	55	61	70	82	84 5/8
	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1549	1778	2083	2149
L	in	11 5/8	13 1/8	14 1/8	17 1/8	20 1/8	22 1/8	26 1/8	31 1/8	33 1/8	35 1/8	39 1/8	43 1/8	47 1/4	55 3/8	61 1/2	70 5/8	82 5/8	/
(RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1562	1794	2099	/
H	in	15 1/4	19	21 1/8	25 1/2	32 1/2	36	43	46 1/2	52 1/2	58	65	68	79 1/2	93 3/4	104 7/8	122 1/16	135 13/16	141 3/4
	mm	387	483	537	647	825	914	1092	1181	1333	1473	1651	1727	2019	2382	2663	3100	3450	3600
W	in	7 7/8	9 7/8	11	11 13/16	15 3/4	17 11/16	19 11/16	23 5/8	25 3/5	27 5/9	29 1/2	31 1/2	39 3/8	/	/	/	/	/
	mm	200	250	280	300	400	450	500	600	650	700	750	800	1000	/	/	/	/	/
WT	RF	41	58	88	131	/	253	413	623	784	1288	1820	2150	2540	4080	5960	8312	10125	14300
(KG)	BW	35	50	68	104	/	208	328	496	637	1120	1448	1828	2201	3360	/	/	9580	/
Class900																			
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	
L(RF, BW)	in	14 1/2	16 1/2	15	18	22	24	29	33	38	40 1/2	44 1/2	48	52	61	/	/	/	/
	mm	368	419	381	457	559	610	737	838	965	1029	1130	1219	1321	1549	/	/	/	/
L	in	14 5/8	16 5/8	15 1/8	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8	40 7/8	44 7/8	48 1/2	52 1/2	61 3/4	/	/	/	/
(RTJ)	mm	371	422	384	460	562	613	740	841	968	1039	1140	1232	1334	1568	/	/	/	/
H	in	20 9/16	22 11/16	24	26 1/2	30	34	42 1/2	48 1/2	54 1/2	62	85	93	97	120	/	/	/	/
	mm	523	577	609	673	762	863	1079	1231	1384	1574	2159	2362	2463	3048	/	/	/	/
W	in	11	11 13/16	11 13/16	13 3/4	15 3/4	19 11/16	23 5/8	27 5/9	29 1/2	31 1/2	39 3/8	/	/	/	/	/	/	/
	mm	280	300	300	350	400	500	600	700	750	750	800	1000	/	/	/	/	/	/
WT	RF	90	110	123	148	/	420	650	1160	1700	2300	2750	3000	3800	4900	/	/	/	/
(KG)	BW	82	93	108	122	/	359	566	980	1450	2000	2390	/	/	/	/	/	/	/
Class1500																			
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24				
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600				
L(RF, BW)	in	14 1/2	16 1/2	18 1/2	21 1/2	26 1/2	27 3/4	32 3/4	39	44 1/2	49 1/2	54 1/2	60 1/2	65 1/2	76 1/2				
	mm	368	419	470	546	673	705	832	991	1130	1257	1384	1537	1664	1943				
L	in	14 5/8	16 5/8	18 5/8	21 5/8	26 5/8	28	33 1/8	39 3/8	45 1/8	50 1/4	55 3/8	61 3/8	66 3/8	77 5/8				
(RTJ)	mm	371	422	473	549	676	711	842	1001	1146	1276	1406	1559	1686	1971				
H	in	22 5/8	27 9/16	31 3/4	34 15/16	39 3/4	42 1/2	53 15/16	59 13/16	65	76 9/16	88 9/16	96	102	116				
	mm	574	700	806	887	1009	1079	1370	1520	1651	1945	2250	2438	2590	2946				
W	in	13 3/4	15 3/4	17 3/4	22 1/16	23 5/8	12	24	30	30	30	30	33 7/8	33 7/8	33 7/8				
	mm	350	400	450	560	600	305*	610*	760*	760*	760*	760*	860*	860*	860*				
WT	RF	117	175	240	337	/	680	1228	2278	3260	4100	5960	5705	6750	9500				
(KG)	BW	93	144	185	285	/	584	978	1990	2850	3320	4890	/	/	/				

Pressure Seal Gate Valve



Construction feature

Pressure seal bonnet
Flexible or solid wedge
Renewable seat
(Threaded or welded seat ring)
≤4" Screw bonnet
≥6" Bolt pretightening bonnet

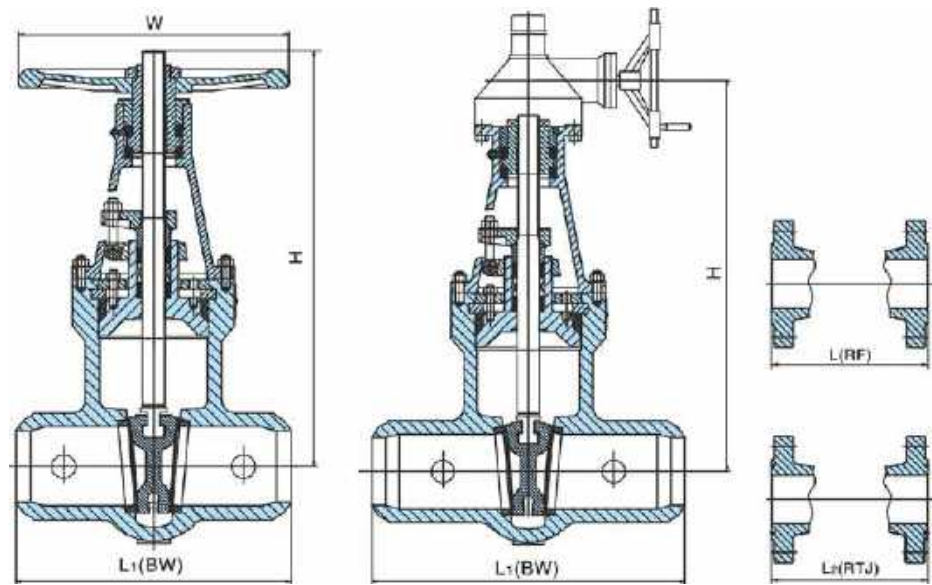
Pressure Test

Pressure ratings	Class600 Class900
Shell test	15.6MPa 23.3MPa
Seat test	11.4MPa 17.1MPa
Seat test	0.6MPa 0.6MPa

Main dimensions and weights

Class600																			
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	
L	in	11 1/2	13	14	17	20	22	26	31	33	35	39	43	47	55	61	70	82	
(RF)	mm	292	330	356	423	508	559	660	787	838	889	991	1092	1194	1397	1549	1778	2083	
L	in	7	8 1/2	10	12	15	18	23	28	32	35	39	43	47	55	/	/	/	
(BW)	mm	178	216	254	305	381	457	584	711	813	889	991	1092	1194	1397	/	/	/	
L	in	11 5/8	13 1/8	14 1/8	17 1/8	20 1/8	22 1/8	26 1/8	31 1/8	33 1/8	35 1/8	39 1/8	43 1/8	47 1/4	55 3/8	61 1/2	70 5/8	82 5/8	
(RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1562	1794	2099	
H	in	19	21 1/8	24	30	31 3/4	34	43	46	50	57	65	68	78	90 7/8	108 1/4	124	133 7/8	
	mm	483	537	609	762	806	863	1092	1168	1270	1447	1651	1727	1981	2308	2750	3150	3400	
W	in	7 7/8	9 7/8	11	11 13/16	15 3/4	17 3/4	19 11/16	23 5/8	25 9/16	27 9/16	29 1/2	31 1/2	39 3/8	/	/	/	/	
	mm	200	250	280	300	400	450	500	600	650	700	750	800	1000	/	/	/	/	
WT	RF	/	/	68	112	/	209	315	529	775	1210	1600	1895	2356	4300	5600	7890	9112	
(KG)	BW	/	/	54	84	/	169	245	429	615	960	1200	1435	1795	3600	4770	6840	7802	
Class900																			
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	
L	in	14 1/2	16 1/2	15	18	22	24	29	33	38	40 1/2	44 1/2	48	52	61	65 1/2	73	80	
(RF)	mm	368	419	381	457	559	610	737	838	965	1029	1130	1219	1321	1549	1663	1854	2032	
L	in	8 1/2	10	12	14	17	20	26	31	36	39	43	/	/	/	/	/	/	
(BW)	mm	216	254	305	356	432	508	660	787	914	991	1092	/	/	/	/	/	/	
L	in	14 5/8	16 5/8	15 1/8	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8	40 7/8	44 7/8	48 1/2	52 1/2	61 3/4	/	/	/	
(RTJ)	mm	371	422	384	460	562	613	740	841	968	1039	1140	1232	1334	1568	/	/	/	
H	in	22 1/6	23 5/8	26	28	30	34	40	46 1/2	52	61 3/4	85	93 3/4	96 1/2	117	145 1/2	164	181	
	mm	560	600	660	711	762	863	1016	1181	1320	1568	2159	2381	2451	2971	3695	4165	4597	
W	in	11 13/16	13 3/4	13 3/4	15 3/4	/	22 1/16	18 1/9	24	24	24	29 15/16	/	/	/	/	/	/	
	mm	300	350	350	400	/	560	460*	610*	610*	610*	760*	/	/	/	/	/	/	
WT	RF	50	84	92	154	/	341	622	950	1295	1720	2380	2750	3400	4400	6900	11000	13500	
(KG)	BW	39	64	82	120	/	266	524	760	1090	1450	2018	2340	2800	3420	5454	9042	10874	

Pressure Seal Gate Valve



Construction feature

Pressure seal bonnet
Flexible or solid wedge
Renewable seat
(Threaded or welded seat ring)
≤ 4" Screw bonnet
≥ 6" Bolt pretightening bonnet

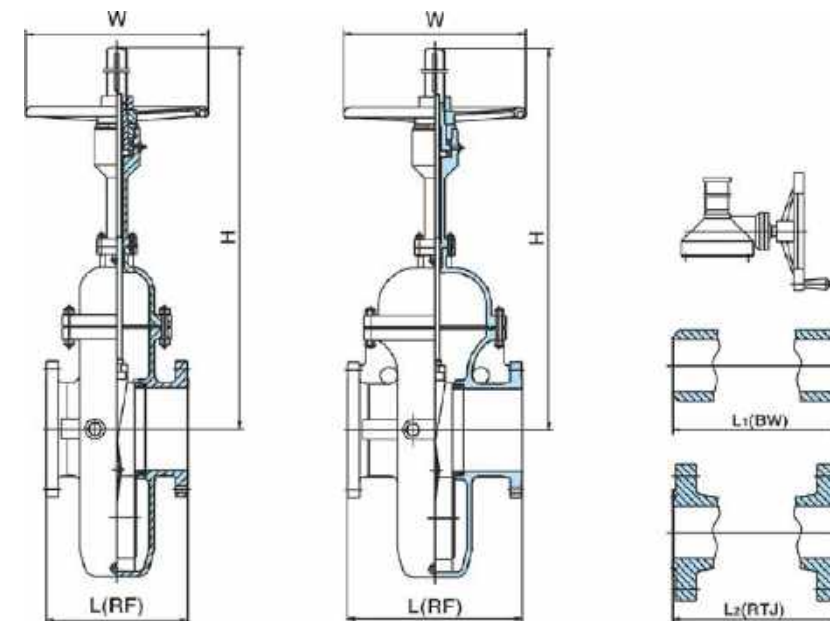
Pressure Test

Pressure ratings	Class1500 Class2500
Shell test	38.8MPa 63.8MPa
Seat test	28.5MPa 46.9MPa
Seat test	0.6MPa 0.6MPa

Main dimensions and weights

Class1500															
NPS DN	in mm	2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600
L (RF)	in	14 1/2	16 1/2	18 1/2	21 1/2	26 1/2	27 3/4	32 3/4	39	44 1/2	49 1/2	54 1/2	60 1/2	65 1/2	76 1/2
	mm	368	419	470	546	673	705	832	991	1130	1257	1384	1537	1664	1943
L (BW)	in	8 1/2	10	12	16	19	22	28	34	39	42	47	53	58	/
	mm	216	254	305	406	483	559	711	864	991	1067	1194	1346	1473	/
L (RTJ)	in	14 5/8	16 5/8	18 5/8	21 5/8	26 5/8	28	33 1/8	39 3/8	45 1/8	50 1/4	55 3/8	61 3/8	66 3/8	77 5/8
	mm	371	422	473	549	676	711	842	1001	1146	1276	1406	1559	1686	1971
H	in	24	25 3/4	26	29	32 1/2	36	49	58 7/16	75	78	83	87	94	110
	mm	610	654	660	736	825	914	1244	1485	1905	1981	2108	2209	2387	2794
W	in	11 13/16	17 3/4	17 3/4	22 1/16	23 5/8	12	18 1/9	24	24	29 15/16	29 15/16	/	/	/
	mm	300	450	450	560	600	305*	460*	610*	610*	760*	760*	/	/	/
WT (KG)	RF	60	91	128	182	/	394	795	1370	2120	2800	3870	5225	6310	9050
	BW	46	71	85	130	/	292	587	974	1615	2010	2815	4000	4800	7500
Class2500															
NPS DN	in mm	2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600
L (RF)	in	17 3/4	20	22 3/4	26 1/2	31 1/4	36	40 1/4	50	56	/	/	/	/	/
	mm	451	508	578	673	794	914	1022	1270	1422	/	/	/	/	/
L (BW)	in	11	13	14 1/2	18	21	24	30	36	41	44	49	55	/	/
	mm	279	330	368	457	533	610	762	914	1041	1118	1245	1397	/	/
L (RTJ)	in	17 7/8	20 1/4	23	26 7/8	31 3/4	36 1/2	40 7/8	50 7/8	56 7/8	/	/	/	/	/
	mm	454	514	584	683	807	927	1038	1292	1444	/	/	/	/	/
H	in	24	25 3/4	29 5/8	31 3/4	33 7/16	49 3/8	54 1/10	66 5/16	/	/	/	/	/	/
	mm	610	654	753	806	850	1254	1374	1685	/	/	/	/	/	/
W	in	19 11/16	19 11/16	23 5/8	23 5/8	27 5/9	18 1/9	18 1/9	24	/	/	/	/	/	/
	mm	500	500	600	600	700	460*	460*	610*	/	/	/	/	/	/
WT (KG)	RF	121	175	195	229	/	720	1295	2250	/	/	/	/	/	/
	BW	88	135	144	158	/	500	892	1550	/	/	/	/	/	/

Parallel Slab Gate Valve



Construction feature

Bolted bonnet
Single or double disc
Renewable seat

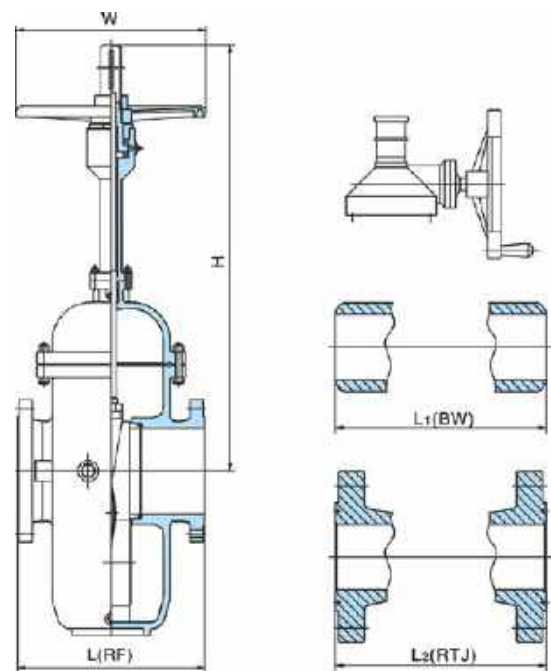
Pressure Test

Pressure ratings	Class150 Class300
Shell test	3.2MPa 7.8MPa
Seat test	2.2MPa 5.7MPa
Seat test	0.6MPa 0.6MPa

Main dimensions and weights

Class150																			
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
L (RF)	in	7	7 1/2	8	9	10	10 1/2	11 1/2	13	14	15	16	17	18	20	24	28	28	32
	mm	178	190	203	229	254	267	292	330	356	381	406	432	457	508	610	660	711	813
L (BW)	in	8 1/2	9 1/2	11 1/10	12	15	15 7/8	16 1/2	18	19 3/4	22 1/2	24	26	28	32	36	38	40	/
	mm	216	241	282	305	381	403	419	457	502	572	610	660	711	813	914	965	1016	1067
L (RTJ)	in	7 1/2	8	8 1/2	9 1/2	10 1/2	11	12	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2	20 1/2	24 1/2	26 1/2	28 1/2	/
	mm	191	203	216	242	267	280	305	343	369	394	419	445	470	521	622	673	724	/
H	in	16 5/16	19	20 7/8	27 1/4	31 3/4	35 1/4	42 1/2	53 9/16	58 7/8	66 15/16	76 3/4	88 9/16	97 1/16	/	/	/	/	/
	mm	415	483	530	692	806	895	1080	1360	1495	1700	1950	2250	2465	/	/	/	/	/
Do	in	9 7/8	11 13/16	11 13/16	13 3/4	13 3/4	13 3/4	13 3/4	17 11/16	19 11/16	23 5/8	25 3/5	27 5/9	31 1/2	39 3/8	/	/	/	/
	mm	250	300	300	35	350	350	350	450	500	600	650	700	800	1000	/	/	/	/
WT (KG)	RF	54	70	73	85	/	180	300	329	455	704	987	1267	1631	2625	3640	5159	/	/
	BW	48	59	63	73	/	158	264	290	400	619	869	1115	1435	2310	3203	4540	/	/
Class300																			
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24				
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600				
L (RF, BW)	in	8 1/2	9 1/2	11 1/8	12	15	15 7/8	16 1/2	18	19 3/4	22	24	26	28	32	36	39	45	
	mm	216	241	282	305	381	403	419	457	502	572	610	660	711	813	914	991	1143	
L (RTJ)	in	9 1/8	10 1/8	11 3/4	12 5/8	15 5/8	16 1/2	17 1/8	18 5/8	20 3/8	23 5/8	25 3/5	27 5/9	31 1/2	39 3/8	45 7/8			
	mm	232	257	298	321	397	419	435	473	518	594	650	711	813	914	1010	1165		
H	in	16 5/16	19	20 7/8	27 1/4	31 3/4	35 1/4	42 1/2	53 9/16	58 7/8	66 15/16	76 3/4	88 9/16	97 1/16	/				
	mm	415	483	530	692	806	895	1080	1360	1495	1700	1950	2250	2465	/				
Do	in	7 7/8	11 13/16	11 13/16	13 3/4	13 3/4	13 3/4	13 3/4	17 11/16	19 11/16	23 5/8	25 3/5	27 5/9	31 1/2	39 3/8				
	mm	200	300	300	350	350	350	350	450	500	600	650	700	800	1000				
WT (KG)	RF	54	70	73	90	/	180	300	470	650	1005	1410	1810	2330	3750				
	BW	51	62	66	78	/	159	266	416	576	890	1260	1620	2110	3410				

Parallel Slab Gate Valve



Construction feature

Bolted bonnet
Single or double disc
Renewable seat

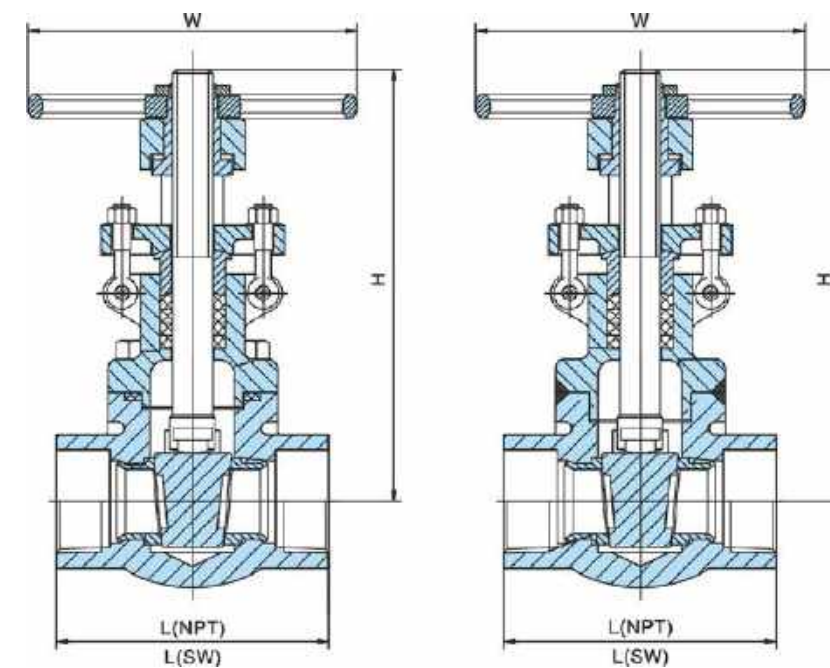
Pressure Test

Pressure ratings	Class600
	Class900
Shell test	15.6MPa
	23.3MPa
Seat test	11.4MPa
	17.1MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class600											
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14
DN	mm	50	65	80	100	125	150	200	250	300	350
L (RF, BW)	in	11 1/2	13	14	17	20	22	26	31	33	35
	mm	292	330	356	432	508	559	660	787	838	889
L (RTJ)	in	11 5/8	13 1/8	14 1/8	17 1/8	20 1/8	22 1/8	26 1/8	31 1/8	33 1/8	35 1/8
	mm	295	333	359	435	511	562	663	790	841	892
H	in	16 5/16	19	20 7/8	27 1/4	31 3/4	35 1/4	42 1/2	53 9/16	58 7/8	66 15/16
	mm	415	483	530	692	806	895	1080	1360	1495	1700
Do	in	11 13/16	13 3/4	13 3/4	15 3/4	17 11/16	19 11/16	23 5/8	25 3/5	27 5/9	31 1/2
	mm	300	350	350	400	450	500	600	650	700	800
WT (KG)	RF	68	90	122	167	/	260	484	720	1160	1620
	BW	59	78	106	134	/	212	384	540	965	1305
Class900											
NPS	in	2	2 1/2	3	4	5	6	8	10	12	
DN	mm	50	65	80	100	125	150	200	250	300	
L (RF, BW)	in	14 1/2	16 1/2	15	18	22	24	29	33	38	
	mm	368	419	381	457	559	610	737	838	965	
L (RTJ)	in	14 5/8	16 5/8	15 1/8	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8	
	mm	371	422	384	460	562	613	740	841	968	
H	in	31 7/8	34 1/2	38 11/16	43 1/4	46 1/2	53 3/4	62 1/16	76 1/2	81	
	mm	809	877	982	1098	1181	1366	1577	1943	2058	
Do	in	11 13/16	13 3/4	13 3/4	15 3/4	17 11/16	19 11/16	23 5/8	25 3/5	27 5/9	
	mm	300	350	350	400	450	500	600	650	700	
WT (KG)	RF	/	/	/	/	/	443	707	1034	1720	
	BW	/	/	/	/	/	421	672	983	1634	

API602 Forged Steel Gate Valve



Construction feature

Bolted or welded bonnet
Solid wedge
Renewable seat

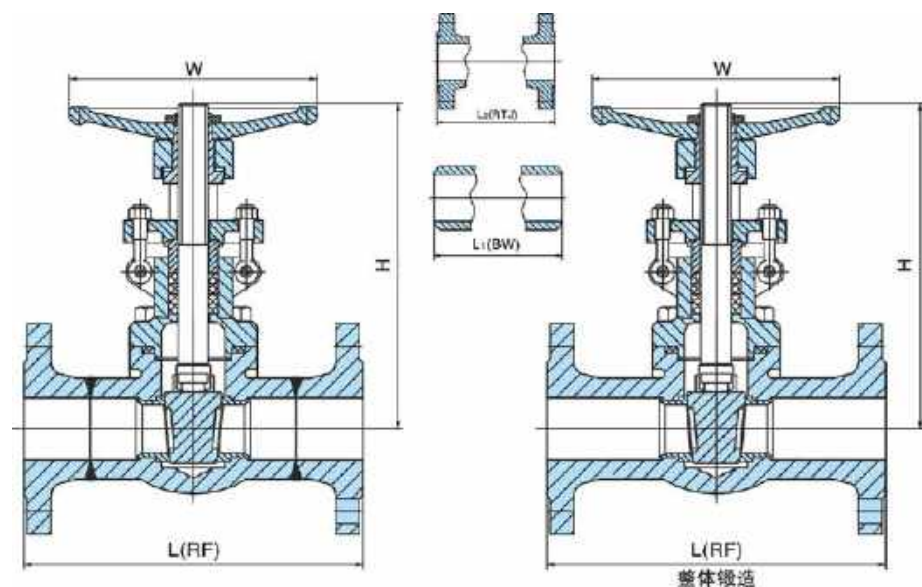
Pressure Test

Pressure ratings	Class800
	Class900
	Class1500
Shell test	19.9MPa
	23.3MPa
	38.8MPa
Seat test	14.6MPa
	17.1MPa
	28.5MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class800RB									
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50
L (SW)	in	3 1/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2
	mm	79	79	79	92	111	120	120	140
L (NPT)	in	3 1/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2
	mm	79	79	79	92	111	120	120	140
H	in	6 1/2	6 1/2	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7
	mm	166	166	166	169	193	236	246	283
W	in	4	4	4	4	5	6 2/7	6 2/7	7
	mm	100	100	100	100	125	160	160	180
WT(KG)	/	2.2	2.2	2.2	2.2	4.7	5.9	6.9	11.1
Class800FB									
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50
L (SW)	in	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2	7
	mm	79	79	92	111	120	120	140	178
L (NPT)	in	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2	7
	mm	79	79	92	111	120	120	140	178
H	in	6 1/2	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7	13
	mm	166	166	169	193	236	246	283	330
W	in	4	4	4	5	6 2/7	6 2/7	7	7 7/8
	mm	100	100	100	125	160	160	180	200
WT(KG)	/	2.2	2.2	2.2	4.7	5.9	6.9	11.1	15.2
Class900/1500									
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50
L (SW)	in	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2	7
	mm	102	102	102	111	120	120	140	178
L (NPT)	in	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2	7
	mm	102	102	102	111	120	120	140	178
H	in	6 1/2	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7	13
	mm	166	166	169	193	236	246	283	330
W	in	4	4	4	5	6 2/7	6 2/7	7	7 7/8
	mm	100	100	100	125	160	160	180	200
WT(KG)	/	3.6	3.5	3.4	3.8	7.8	11.9	12.2	21.9

API602 Forged Steel Gate Valve



Construction feature

Bolted or welded bonnet
Solid wedge
Renewable seat

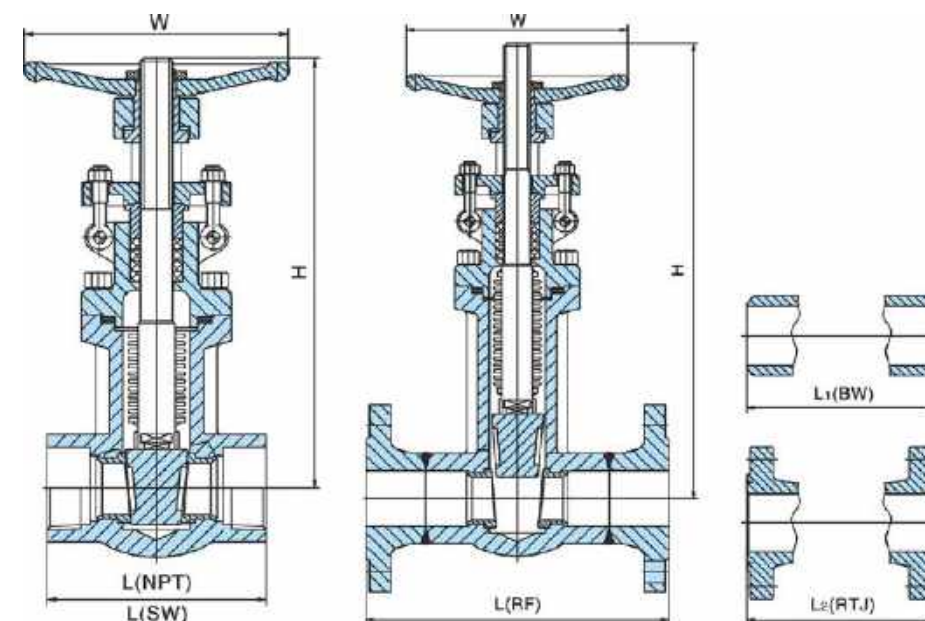
Pressure Test

Pressure ratings	Class150 Class300 Class600 Class900 Class1500
Shell test	3.2MPa 7.8MPa 15.6MPa 23.3MPa 38.8MPa
Seat test	2.2MPa 5.7MPa 11.4MPa 17.1MPa 28.5MPa
Seat test	0.6MPa 0.6MPa 0.6MPa 0.6MPa 0.6MPa

Main dimensions and weights

Class150								Class300					
NPS DN	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	4 1/4	4 3/4	5	5 1/2	6 1/2	7	5 1/2	6	6 1/2	7	7 1/2	8 1/2
	mm	108	117	127	140	165	178	140	152	165	178	190	216
L ₂ (RTJ)	in	4 2/3	5 1/8	5 1/2	6	7	7 1/2	6	6 1/2	7	7 1/2	8	9 1/7
	mm	119	130	140	153	178	190	151	165	178	191	203	232
L ₁ (BW)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8 1/2	5 1/2	6	6 1/2	7	7 1/2	8 1/2
	mm	108	117	127	140	165	216	140	152	165	178	190	216
H	in	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7
	mm	166	169	193	236	246	283	166	169	193	236	246	283
W	in	4	4	5	6 2/7	6 2/7	7	4	4	5	6 2/7	6 2/7	7
	mm	100	100	125	160	160	180	100	100	125	260	160	180
WT(KG)	/	3	3.5	5.5	6.8	10.4	14.4	3.6	4.9	7	9.4	13.3	18
Class600								Class900/1500					
NPS DN	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	8 1/2	9	10	11	12	14 1/2
	mm	165	190	216	229	241	292	216	229	254	279	305	368
L ₂ (RTJ)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 3/5	8 1/2	9	10	11	12	14 3/5
	mm	165	190	216	229	241	295	216	229	254	279	305	371
L ₁ (BW)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	8 1/2	9	10	11	12	14 1/2
	mm	165	190	216	229	241	292	216	229	254	279	305	368
H	in	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7
	mm	166	169	193	236	246	283	166	169	193	236	246	283
W	in	4	4	5	6 2/7	6 2/7	7	4	4	5	6 2/7	6 2/7	7
	mm	100	100	125	160	160	180	100	100	125	160	160	180
WT(KG)	/	4.2	5.8	8.8	12.1	15.6	19.5	7.2	11.5	15.6	16.2	22.6	28.2

Bellow Seal Gate Valve



Construction feature

Bellow seal bolted bonnet
Solid or flexible wedge
Renewable seat

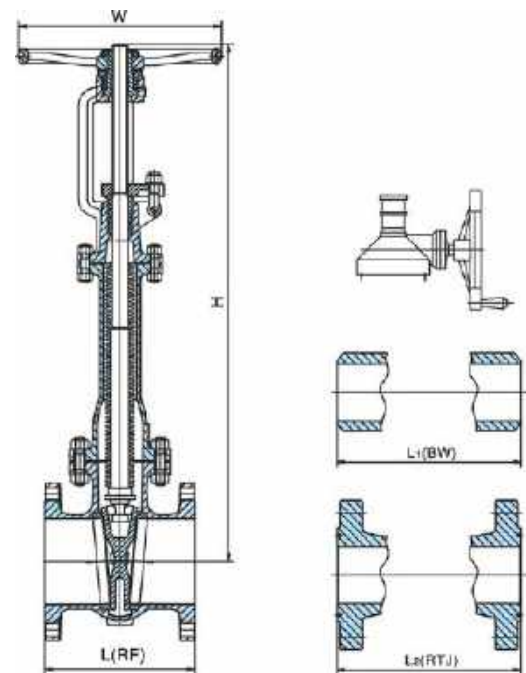
Pressure Test

Pressure ratings	Class150 Class300 Class600 Class800
Shell test	3.2MPa 7.8MPa 15.6MPa 19.9MPa
Seat test	2.2MPa 5.7MPa 11.4MPa 14.6MPa
Seat test	0.6MPa 0.6MPa 0.6MPa 0.6MPa

Main dimensions and weights

Class150								Class300						Class600					
NPS DN	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	4 1/4	4 3/4	5	5 1/2	6 1/2	7	5 1/2	6	6 1/2	7	7 1/2	8 1/2	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2
	mm	108	117	127	140	165	178	140	152	165	178	190	216	165	190	216	229	241	292
L ₂ (RTJ)	in	4 2/3	5 1/8	5 1/2	6	7	7 1/2	6	6 1/2	7	7 1/2	8	9 1/7	6 1/2	7 1/2	8 1/2	9	9 1/2	11 3/5
	mm	119	130	140	153	178	190	151	165	178	191	203	232	165	190	216	229	241	295
L ₁ (BW)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8 1/2	5 1/2	6	6 1/2	7	7 1/2	8 1/2	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2
	mm	108	117	127	140	165	216	140	152	165	178	190	216	165	190	216	229	241	292
H	in	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7	6 1/2	6 2/3	7 3/5	9 2/7	9 2/3	11 1/7
	mm	209	232	266	310	321	338	209	232	266	310	321	338	209	232	266	310	321	338
W	in	4	4	5	6 2/7	6 2/7	7	4	4	5	6 2/7	6 2/7	7	4	4	5	6 2/7	6 2/7	7
	mm	100	100	125	160	160	180	100	100	125	160	160	180	100	100	125	160	160	180
WT(KG)	/	3	3.5	5.5	6.8	10.4	14.4	3.6	4.9	7	9.4	13.3	18	4.2	5.8	8.8	12.1	15.6	19.5
Class800																			
NPS DN		in	1/2		3/4		1		1 1/4		1 1/2		5						
		mm	15		20		25		32		40		50						
L (SW)		in	3 1/9		3 5/8		4 3/8		4 5/7		4 5/7		5 1/2						
		mm	79		92		111		120		120		140						
L ₂ (NPT)		in	3 1/9		3 5/8		4 3/8		4 5/7		4 5/7		5 1/2						
		mm	79		92		111		120		120		140						
H		in	6 1/2		6 2/3		7 3/5		9 2/7		9 2/3		11 1/7						
		mm	209		232		266		310		321		338						
W		in	4		4		5		6 2/7		6 2/7		7						
		mm	100		100		125		160		160		180						
WT(KG)		/	2.2		2.2		4.7		5.9		6.9		11.1						

Cast Steel Bellow Seal Gate Valve



Construction feature

Bellow seal bolted bonnet
Solid or flexible wedge
Renewable seat

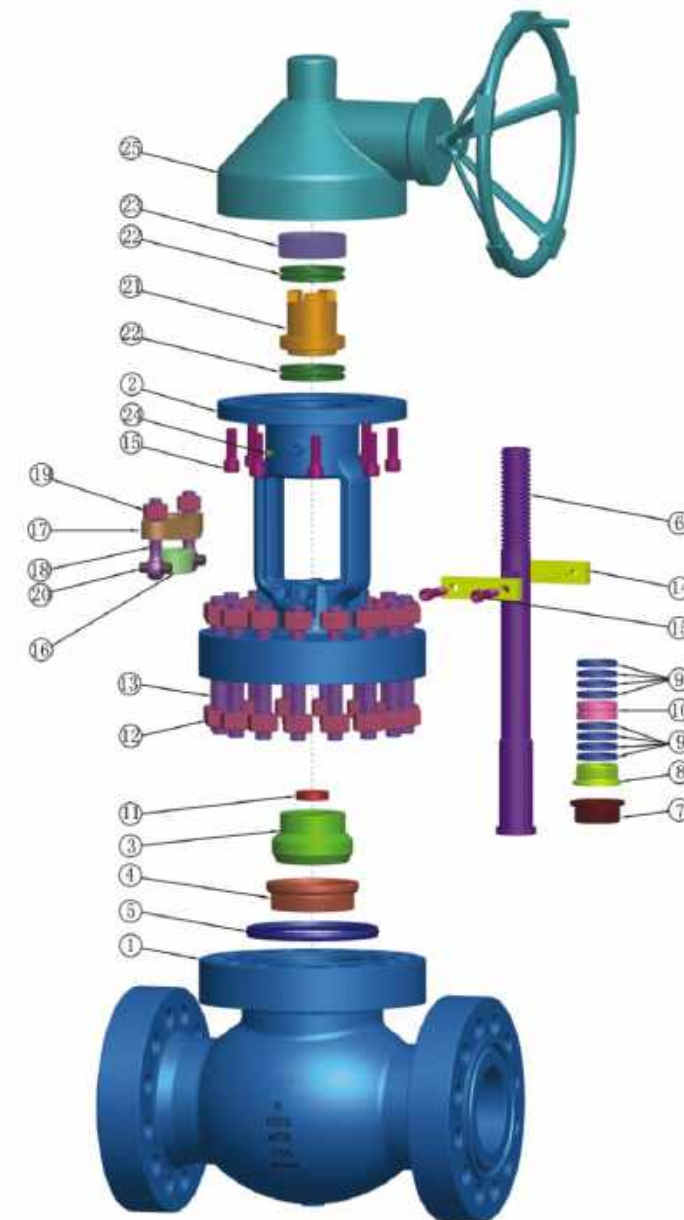
Pressure Test

Pressure ratings	Class150
	Class300
Shell test	3.2MPa
	7.8MPa
Seat test	2.2MPa
	5.7MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class150									
NPS DN	in	2	2 1/2	3	4	6	8	10	12
	mm	50	65	80	100	150	200	250	300
L (RF)	in	7	7 1/2	8	9	10 1/2	11 1/2	13	14
	mm	178	190	203	229	267	292	330	356
L (BW)	in	8 1/2	9 1/2	11 1/10	12	15 7/8	16 1/2	18	19 3/4
	mm	216	241	282	305	403	419	457	502
L (RTJ)	in	7 1/2	8	8 1/2	9 1/2	11	12	13 1/2	14 1/2
	mm	191	203	216	242	280	305	343	369
H	in	/	/	31 1/4	39 3/8	54 5/7	70 4/5	85	99 1/5
	mm	/	/	870	1000	1390	1798	2160	2520
W	in	7 7/8	7 7/8	9 7/8	11	11 13/16	13 3/4	15 3/4	17 11/16
	mm	200	200	250	280	300	350	400	450
Class300									
NPS DN	in	2	2 1/2	3	4	6	8	10	12
	mm	50	65	80	100	150	200	250	300
L (RF, BW)	in	8 1/2	9 1/2	11 1/8	12	15 7/8	16 1/2	18	19 3/4
	mm	216	241	282	305	403	419	457	502
L (RTJ)	in	9 1/8	10 1/8	11 3/4	12 5/8	16 1/2	17 1/8	18 5/8	20 3/8
	mm	232	257	298	321	419	435	473	518
H	in	/	/	40	48	67 1/3	86 1/4	99 1/5	118 8/9
	mm	/	/	1015	1218	1710	2191	2520	3020
W	in	7 7/8	7 7/8	9 7/8	11	13 3/4	15 3/4	17 11/16	19 11/16
	mm	200	200	250	280	350	400	450	500

Globe Valve



No	Part Name	No	Part Name	No	Part Name
1	Body	10	Lantern Ring	19	Gland Nut
2	Bonnet	11	Thrust Washer	20	Pin
3	Disc	12	Nut	21	Stem Nut
4	Seating Ring	13	Bolt	22	Bearing
5	Gasket	14	Anti-rotating Device	23	Retaining Nut
6	Stem	15	Screw	24	Nipple
7	Disc Nut	16	Gland	25	Bevel gearbox
8	Backseat Bushing	17	Gland Flange		
9	Stem Packing	18	Gland Eyebolt		

Globe Valve

Standards

ANSI Series	
Basic design	API600 BS1873
	ASME B16.34
Pressure-temperature ratings	ASME B16.34
Face to face dimension	ASME B16.10
Flanged ends	ASME B16.5
	ASME B16.47
	MSS SP44
	JIS
B.W.Ends	ASME B16.25
Test	API598
	API6D

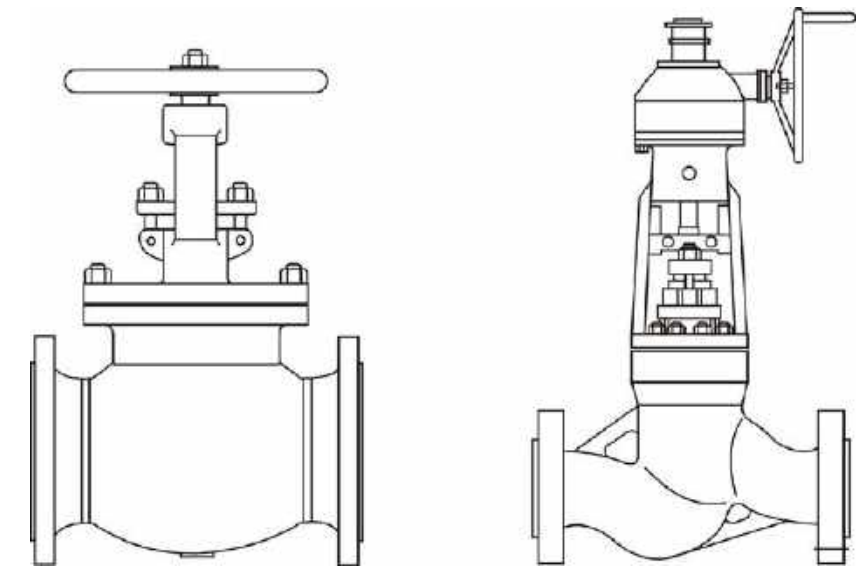
API600 Trim material

Seating code	Seat ring surface	Wedge seat surface	Stem & backseat bushing
1	13Cr	13Cr	A182 F6a
2	18Cr-8Ni	18Cr-8Ni	A182 F304
3	25Cr-20Ni	25Cr-20Ni	A182 F310
4	Hard 13Cr	Hard 13Cr	A182 F6a
5	Stellite	Stellite	A182 F6a
6	13Cr	Cu-Ni Alloy	Monel
7	13Cr	Hard 13Cr	A182 F6a
8	Stellite	13Cr	A182 F6a
9	Cu-Ni Alloy	Cu-Ni Alloy	Monel
10	18Cr-8Ni-Mo	18Cr-8Ni-Mo	A182 F316
11	Cu-Ni Alloy	Cu-Ni Alloy	Monel
12	Stellite	18Cr-8Ni-Mo	A182 F316
13	19Cr-29Ni	19Cr-29Ni	20 Alloy

ASTM Material list of BS1873 Rising Stem Cast Steel Globe Valve

No	Part Name	Carbon Steel to ASTM		Stainless Steel to ASTM				Alloy Steel to ASTM		
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
2	Bonnet	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
3	Disc	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
4	Seating Ring	A105N	A350 LF2	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A182 F11	A182 F22	A182 F5
5	Gasket	Graphite+SS304, PTFE								
6	Stem	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
7	Disc Nut	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
8	Backseat Bushing	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
9	Stem Packing	Flexible Graphite								
10	Lantern Ring	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
11	Thrust Washer	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
12	Nut	A194 2H	A194 4	A194 8				A194 7		
13	Bolt	A193 B7	A320 L7	A193 B8				A193 B16		
14	Anti-rotating Device	ANSI 1020		A182 F304				ANSI 1020		
15	Screw	A194 2H		A194 8				A194 2H		
16	Gland	F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
17	Gland Flange	A216 WCB	A352 LCB	A351 CF8	A351 CF8	A351 CF8	A351 CF8	A217 WC6	A217 WC9	A217 C5
18	Gland Eyebolt	A193 B7		A193 B8				A193 B16		
19	Gland Nut	A194 2H		A194 8				A194 7		
20	Pin	ANSI 1045		A182 F304				ANSI 1045		
21	Stem Nut	A439 D2/ B148 952A								
22	Bearing	/								
23	Retaining Nut	ANSI 1020								
24	Nipple	Copper Alloy								
25	Bevel gearbox	/								

Globe Valve

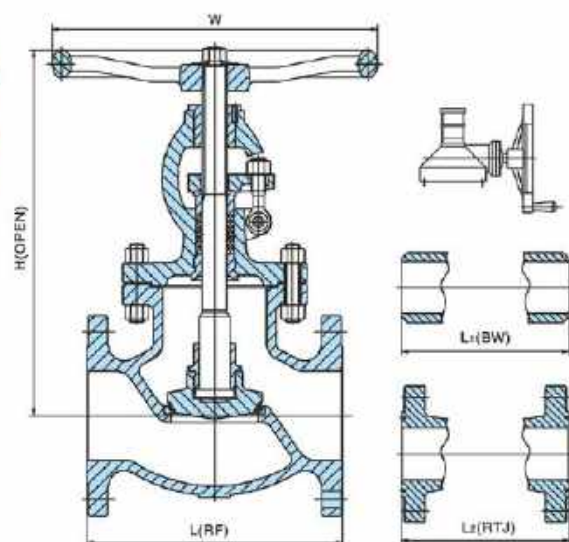


Supply Range of Cast Steel Globe Valve

Pressure ratings		DN/NPS																
		50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900
		2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36
API Bolted bonnet gate valve	Class150 JIS10K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class300 JIS20K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class600 JIS40K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●						
	Class1500	●	●	●	●	●	●	●	●	●	●	●						
Pressure seal gate valve	Class600	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Class900	●	●	●	●	●	●	●	●	●	●	●						
	Class1500	●	●	●	●	●	●	●	●	●	●	●						

※ If you need any products unlisted here, please send us the specification.

Bolted Bonnet Globe Valve



Construction feature

Bolted bonnet
Flat or plug type disc
Renewable seat
(Threaded or welded seat ring)
≥ 10" Thrust bearing design

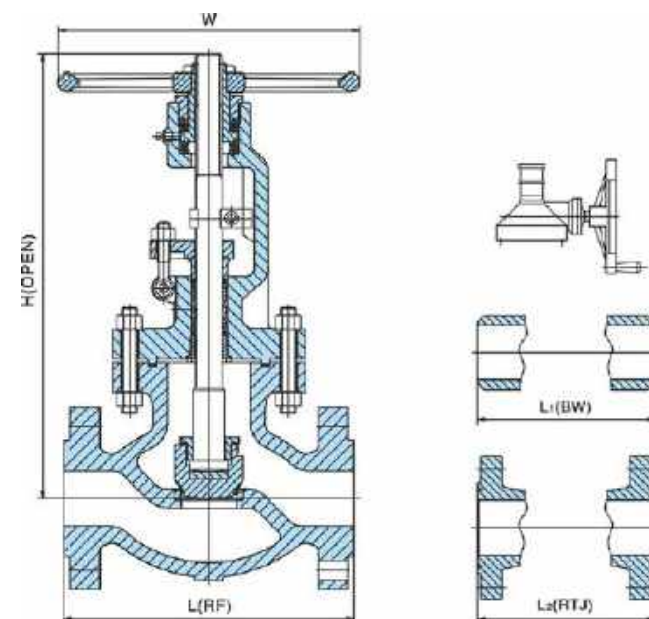
Pressure Test

Pressure ratings	Class150
	Class300
Shell test	3.2MPa
	7.8MPa
Seat test	2.2MPa
	5.7MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class150													
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18
	mm	50	65	80	100	125	150	200	250	300	350	400	450
L (RF, BW)	in	8	8 1/2	9 1/2	11 1/2	14	16	19 1/2	24 1/2	27 1/2	31	36	38 1/2
	mm	203	216	241	292	356	406	495	622	698	787	914	978
L (RTJ)	in	8 1/2	9	10	12	14 1/2	16 1/2	20	25	28	31 1/2	36 1/5	39
	mm	216	229	254	305	369	419	508	635	711	800	927	991
H	in	14 11/16	15 3/8	16 9/16	20 1/4	21 3/16	22 5/16	24 5/8	28	39	35	38 7/16	41 15/16
	mm	373	390	421	515	538	567	626	712	990	889	977	1066
W	in	7 7/8	7 7/8	9 7/8	11	11	11 13/16	13 3/4	15 3/4	17 11/16	19 11/16	21 2/3	23 5/8
	mm	200	200	250	280	280	300	350	400	450	500	550	600
WT (KG)	RF	22	29	42	64	77	105	154	288	507	610	880	1150
	BW	19	25	34	49	65	82	131	249	430	/	/	/
Class300													
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	
	mm	50	65	80	100	125	150	200	250	300	350	400	
L (RF, BW)	in	10 1/2	11 1/2	12 1/2	14	15 3/4	17 1/2	22	24 1/2	28	33	34	
	mm	267	292	318	356	400	444	559	622	711	838	863	
L (RTJ)	in	11 1/8	12 1/8	13 1/8	14 5/8	16 3/8	18 1/8	22 5/8	25 1/8	28 5/8	33 5/8	34 5/8	
	mm	283	308	334	372	416	460	575	638	727	854	879	
H	in	15 11/16	17 1/8	18 3/16	22 1/16	24 3/8	27 5/16	38 5/8	44 1/2	41 5/16	43	54	
	mm	398	436	462	560	620	694	982	1130	1049	1092	1371	
W	in	7 7/8	7 7/8	9 7/8	11	11 13/16	13 3/4	15 3/4	17 11/16	19 11/16	21 2/3	23 5/8	
	mm	200	200	250	280	300	350	400	450	500	550	600	
WT (KG)	RF	31	43	57	86	130	168	280	385	724	876	1200	
	BW	26	28	44	68	110	138	228	329	618	/	/	

Bolted Bonnet Globe Valve



Construction feature

Bolted bonnet
Flat or plug type disc
Renewable seat
(Threaded or welded seat ring)
≥ 6" Thrust bearing design

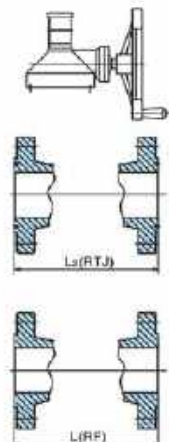
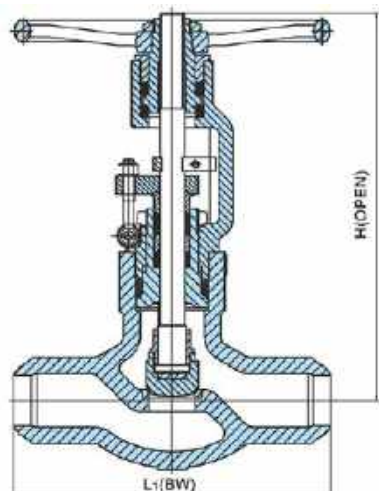
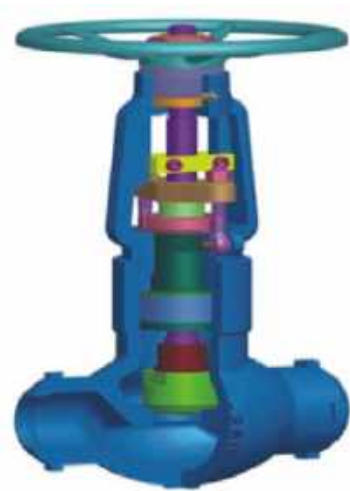
Pressure Test

Pressure ratings	Class600
	Class900
	Class1500
Shell test	15.6MPa
	23.3MPa
Seat test	38.8MPa
	11.4MPa
Seat test	17.1MPa
	28.5MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class600												
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16
	mm	50	65	80	100	125	150	200	250	300	350	400
L (RF, BW)	in	11 1/2	13	14	17	20	22	26	31	33	/	/
	mm	292	330	356	432	508	559	660	787	838	/	/
L (RTJ)	in	11 5/8	13 1/8	14 1/8	17 1/8	20 1/8	22 1/8	26 1/8	31 1/8	33 1/8	/	/
	mm	295	333	359	435	511	562	663	790	841	/	/
H	in	16 3/4	19 3/4	20 1/2	24 3/8	28	34 7/8	36 11/16	41	50 3/8	/	/
	mm	425	502	521	620	712	886	936	1040	1280	/	/
W	in	7 7/8	9 7/8	11	11 13/16	15 3/4	17 11/16	19 11/16	23 5/8	25 3/5	/	/
	mm	200	250	280	300	400	450	500	600	650	/	/
WT (KG)	RF	39	58	73	120	/	327	482	700	900	/	/
	BW	33	48	61	95	/	261	385	588	795	/	/
Class900												
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16
	mm	50	65	80	100	125	150	200	250	300	350	400
L (RF)	in	14 1/2	16 1/2	15	18	2	24	29	33	38	40 1/2	/
	mm	368	419	381	457	559	610	737	838	965	1029	/
L (RTJ)	in	14 5/8	16 5/8	15 1/2	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8	40 9/10	/
	mm	371	422	384	460	562	613	740	841	968	1039	/
H	in	9 7/16	10 1/4	11	12 5/8	14 11/16	15	20 7/8	/	/	/	/
	mm	240	260	280	320	373	382	530	/	/	/	/
W	in	11	/	11 13/16	13 3/4	15 3/4	19 11/16	23 5/8	27 5/9	29 1/2	29 1/2	31 1/2
	mm	280	/	300	350	400	500	600	700	750	750	800
WT (KG)	RF	100	118	131	218	/	452	710	1400	/	/	/
	BW	75	94	105	185	/	340	630	/	/	/	/
Class1500												
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16
	mm	50	65	80	100	125	150	200	250	300	350	400
L (RF)	in	14 1/2	16 1/2	18 1/2	21 1/2	26 1/2	27 3/4	32 3/4	39	44 1/2	49 1/2	/
	mm	368	419	470	546	673	705	832	991	1130	1257	/
L (RTJ)	in	14 5/8	16 5/8	18 5/8	21 5/8	26 5/8	28	33 1/8	39 3/8	45 1/8	50 1/4	/
	mm	371	422	473	549	676	711	842	1001	1146	1276	/
H	in	23 5/16	26	27 1/4	35 11/16	38 5/8	40	45 1/16	/	/	/	/
	mm	592	660	692	907	982	1015	1145	/	/	/	/
W	in	13 3/4	15 3/4	17 3/4	18 1/8	18 1/8	24	24	/	/	/	/
	mm	350	400	450	460	460	610	610	/	/	/	/
WT (KG)	RF	112	141	228	336	/	822	720	1675	/	/	/
	BW	84	115	183	277	/	715	615	/	/	/	/

Pressure Seal Globe Valve



Construction feature

Pressure seal bolted bonnet
Flat or plug type disc
Renewable seat
(Threaded or welded seat ring)
≤6" Screw bonnet
≥8" Bolt pretinghtening bonnet

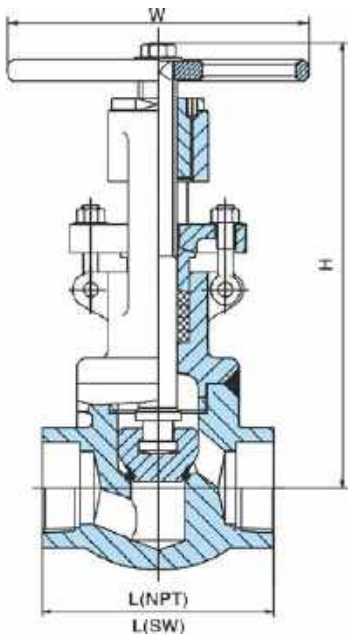
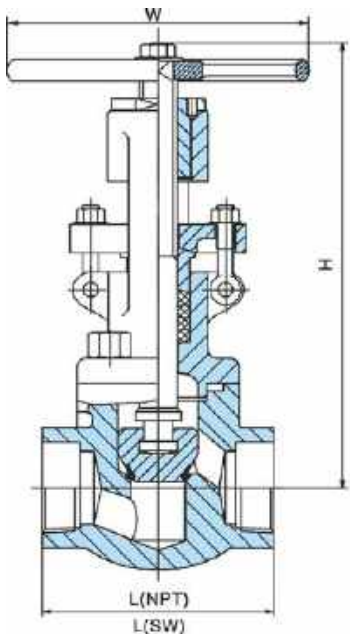
Pressure Test

Pressure ratings	Class600 Class900 Class1500
Shell test	15.6MPa 23.3MPa 38.8MPa
Seat test	11.4MPa 17.1MPa 28.5MPa
Seat test	0.6MPa 0.6MPa 0.6MPa

Main dimensions and weights

Class600												
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16
DN	mm	50	65	80	100	125	150	200	250	300	350	400
L(RF)	in	11 1/2	13	14	17	20	22	26	31	33	/	/
	mm	292	330	356	432	508	559	660	787	838	/	/
L(BW)	in	7	8 1/2	10	12	15	18	23	28	32	/	/
	mm	178	216	254	305	381	457	584	711	813	/	/
L(RTJ)	in	11 5/8	13 1/8	14 1/8	17 1/2	20 1/8	22 1/8	26 1/8	31 1/8	33 1/8	/	/
	mm	295	333	359	435	511	562	663	790	841	/	/
H	in	16 3/4	19 3/4	20 1/2	24 3/8	15 3/4	34 7/8	36 11/16	41	50 3/8	/	/
	mm	425	502	521	620	400	886	932	1040	1280	/	/
W	in	7 7/8	9 7/8	11	11 13/16	13 3/4	17 11/16	19 11/16	23 5/8	25 3/5	/	/
	mm	200	250	280	300	350	450	500	600	650	/	/
WT(KG)	RF	39	58	73	120	/	327	482	700	900	/	/
	BW	33	48	61	95	/	261	385	588	795	/	/
Class900												
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16
DN	mm	50	65	80	100	125	150	200	250	300	350	400
L(RF)	in	14 1/2	16 1/2	15	18	2	24	29	33	38	40 1/2	/
	mm	368	419	381	457	559	610	737	838	965	1029	/
L(BW)	in	/	10	12	14	17	20	28	31	36	39	43
	mm	/	254	305	356	432	508	660	787	914	991	1092
L(RTJ)	in	14 5/8	16 5/8	15 1/2	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8	40 9/10	/
	mm	371	422	384	460	562	613	740	841	968	1039	/
H	in	9 7/16	10 1/4	11	12 5/8	13 3/4	15	20 7/8	/	/	/	/
	mm	240	260	280	320	350	382	530	/	/	/	/
W	in	11	/	11 13/16	13 3/4	15 3/4	19 11/16	23 5/8	27 5/9	29 1/2	29 1/2	31 1/2
	mm	280	/	300	350	400	500	600	700	750	750	800
WT(KG)	RF	100	118	131	218	/	450	710	1400	/	/	/
	BW	75	94	105	185	/	340	630	/	/	/	/
Class1500												
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16
DN	mm	50	65	80	100	125	150	200	250	300	350	400
L(RF)	in	14 1/2	16 1/2	18 1/2	21 1/2	26 1/2	27 3/4	32 3/4	39	44 1/2	49 1/2	/
	mm	368	419	470	546	673	705	832	991	1130	1257	/
L(BW)	in	8 1/2	10	12	16	19	22	28	34	39	42	47
	mm	216	254	305	406	483	559	711	864	991	1067	1194
L(RTJ)	in	14 5/8	16 5/8	18 5/8	21 5/8	26 5/8	28	33 1/8	39 3/8	45 1/8	50 1/4	/
	mm	371	422	473	549	676	711	842	1001	1146	1276	/
H	in	23 5/16	26	27 1/4	35 11/16	38 1/8	40	45 1/16	/	/	/	/
	mm	592	660	692	907	968	1015	1145	/	/	/	/
W	in	15 3/4	15 3/4	17 3/4	22 1/16	23 5/8	24	24	/	/	/	/
	mm	400	400	450	560	600	610*	610*	/	/	/	/
WT(KG)	RF	112	141	228	336	/	822	720	1675	/	/	/
	BW	84	115	183	227	/	715	615	/	/	/	/

API602 Forged Steel Globe Valve



Construction feature

Bolted or welded bonnet
Plug type disc
Integral seat

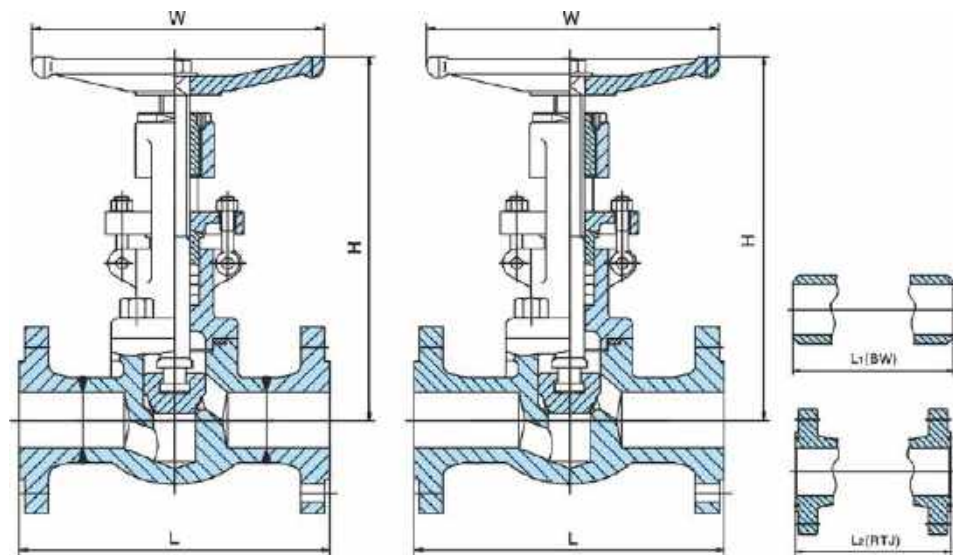
Pressure Test

Pressure ratings	Class800 Class900 Class1500
Shell test	19.9MPa 23.3MPa 38.8MPa
Seat test	14.6MPa 17.1MPa 28.5MPa
Seat test	0.6MPa 0.6MPa 0.6MPa

Main dimensions and weights

Class800 RB									
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50
L	in	3 1/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2
(SW)	mm	79	79	79	92	111	120	120	140
L	in	3 1/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2
(NPT)	mm	79	79	79	92	111	120	120	140
H	in	6	6	6 2/9	6 3/7	7 3/5	9 5/6	9 5/6	11 1/2
	mm	153	153	158	163	193	250	250	291
W	in	4	4	4	4	5	6 2/7	6 2/7	7
	mm	100	100	100	100	125	160	160	180
WT(KG)	/	2.2	2.2	2.2	2.2	4.7	5.9	6.9	11.1
Class800 FB									
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50
L	in	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2	7
(SW)	mm	79	79	92	111	120	120	140	178
L	in	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2	7
(NPT)	mm	79	79	92	111	120	120	140	178
H	in	6	6 2/9	6 3/7	7 3/5	9 5/6	9 5/6	11 1/2	13 7/9
	mm	153	158	163	193	250	250	291	350
W	in	4	4	4	5	6 2/7	6 2/7	7	9 4/9
	mm	100	100	100	125	160	160	180	240
WT(KG)	/	2.2	2.2	2.2	4.7	5.9	6.9	11.1	15.2
Class900/1500									
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50
L	in	4 3/8	4 3/8	4 3/8	5 1/8	6	6 7/9	8 2/3	9 1/4
(SW)	mm	111	111	111	130	152	172	220	235
L	in	4 3/8	4 3/8	4 3/8	5 1/8	6	6 7/9	8 2/3	9 1/4
(NPT)	mm	111	111	111	130	152	172	220	235
H	in	8 1/7	8 1/7	8 1/8	9 4/9	10 1/6	11 3/7	13 1/4	14
	mm	207	207	207	240	258	290	337	354
W	in	4	4	4	5	6 2/7	6 2/7	7	9 4/9
	mm	100	100	100	125	160	160	180	240
WT(KG)	/	2.4	2.2	2	3.8	4.2	8	13.2	16.8

API602 Forged Steel Globe Valve



Construction feature

Bolted or welded bonnet
Plug type disc
Integral seat

Pressure Test

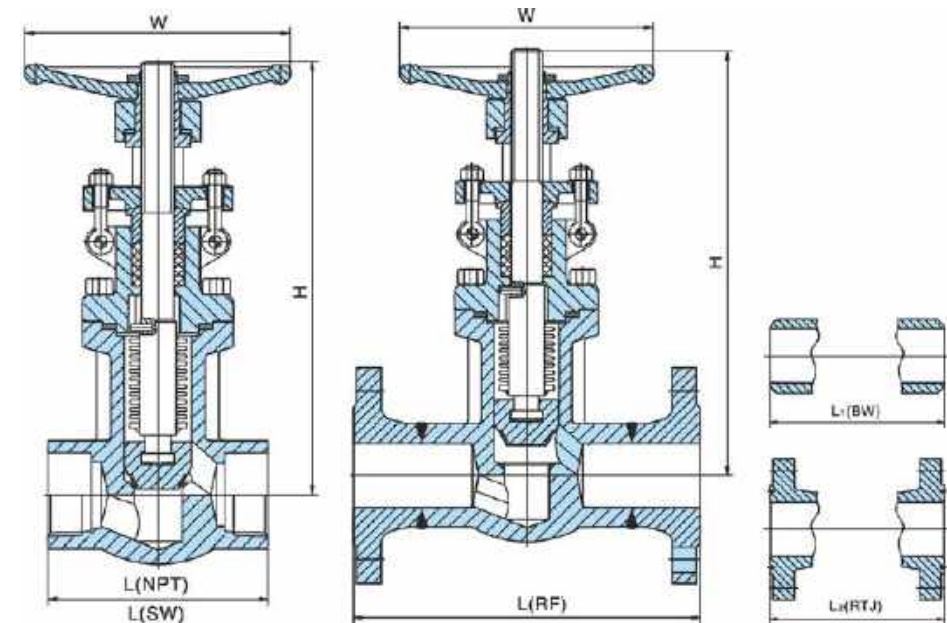
Pressure ratings	Class150
	Class300
Shell test	Class600
	Class900
Seat test	Class1500
	3.2MPa
Seat test	7.8MPa
	15.6MPa
Seat test	23.3MPa
	38.8MPa
Seat test	2.2MPa
	5.7MPa
Seat test	11.4MPa
	17.1MPa
Seat test	28.5MPa
	0.6MPa
Seat test	0.6MPa
	0.6MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class150								Class300					
NPS	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8	6	7	8	8 1/2	9	10 1/2
	mm	108	117	127	140	165	203	152	178	203	216	229	267
L (RTJ)	in	4 2/3	5 1/8	5 1/2	6	7	8 1/2	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/7
	mm	119	130	140	153	178	216	164	190	216	229	241	283
L (BW)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8	6	7	8	8 1/2	9	10 1/2
	mm	108	117	127	140	165	203	152	178	203	216	229	267
H	in	6 2/9	6 3/7	7 3/5	9 5/6	9 5/6	11 1/2	6 2/9	6 3/7	7 3/5	9 5/6	9 5/6	11 1/2
	mm	158	163	193	250	250	291	158	163	193	250	250	291
W	in	4	4	5	6 2/7	6 2/7	7	4	4	5	6 2/7	6 2/7	7
	mm	100	100	125	160	160	180	100	100	125	160	160	180
WT(KG)	/	4.5	6.9	9.8	13.5	19.5	28	4.8	7.7	11	16.8	21.2	32.6

Class600								Class900/1500					
NPS	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	8 1/2	9	10	11	12	14 1/2
	mm	165	190	216	229	241	292	216	229	254	279	305	368
L (RTJ)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 3/5	8 1/2	9	10	11	12	14 3/5
	mm	165	190	216	229	241	295	216	229	254	279	305	371
L (BW)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	8 1/2	9	10	11	12	14 1/2
	mm	165	190	216	229	241	292	216	229	254	279	305	368
H	in	6 2/9	6 3/7	7 3/5	9 5/6	9 5/6	11 1/2	8 1/7	9 4/9	10 1/6	11 3/7	13 1/4	14
	mm	158	163	193	250	250	291	207	240	258	290	337	354
W	in	4	4	5	6 2/7	6 2/7	7	4	5	6 2/7	6 2/7	7	9 4/9
	mm	100	100	125	160	160	180	125	125	160	160	180	240
WT(KG)	/	5.6	7.8	12.5	17	23.5	38.8	7.4	12.5	16	17.2	23	29.8

Bellow Seal Globe Valve



Construction feature

Bolted seal bonnet
Plug type disc
Integral seat

Pressure Test

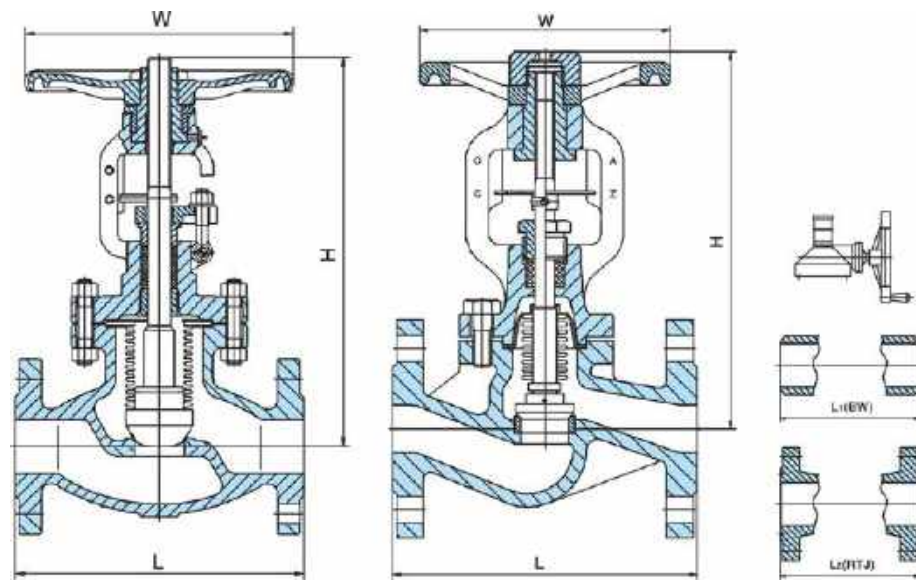
Pressure ratings	Class150
	Class300
Shell test	Class600
	Class800
Seat test	3.2MPa
	7.8MPa
Seat test	15.6MPa
	19.9MPa
Seat test	2.2MPa
	5.7MPa
Seat test	11.4MPa
	14.6MPa
Seat test	0.6MPa
	0.6MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class150								Class300					
NPS	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8	6	7	8	8 1/2	9	10 1/2
	mm	108	117	127	140	165	203	152	178	203	216	229	267
L (RTJ)	in	4 2/3	5 1/8	5 1/2	6	7	8 1/2	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/7
	mm	119	130	140	153	178	216	164	190	216	229	241	283
L (BW)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8	6	7	8	8 1/2	9	10 1/2
	mm	108	117	127	140	165	203	152	178	203	216	229	267
H	in	8 2/9	9 1/7	10 1/2	12 2/3	12 2/3	13 1/3	8 2/9	9 1/7	10 1/2	12 2/3	12 2/3	13 1/3
	mm	209	232	266	321	321	338	209	232	266	321	321	338
W	in	4	4	5	6 2/7	6 2/7	7	4	4	5	6 2/7	6 2/7	7
	mm	100	100	125	160	160	180	100	100	125	160	160	180
WT(KG)	/	4.5	6.9	9.8	13.5	19.5	28	4.8	7.7	11	16.8	21.2	32.6

Class600								Class800							
NPS	in	1/2	3/4	1	1 1/4	1 1/2	2	NPS	in	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	15	20	25	32	40	50	DN	mm	15	20	25	32	40	50
L (RF)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	L (SW)	in	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2
	mm	165	190	216	229	241	292		mm	79	92	111	120	120	140
L (RTJ)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 3/5	L (NPT)	in	3 1/9	3 5/8	4 3/8	4 5/7	4 5/7	5 1/2
	mm	165	190	216	229	241	295		mm	79	92	111	120	120	140
L (BW)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	H	in	8 2/9	9 1/7	10 1/2	12 2/3	12 2/3	13 1/3
	mm	165	190	216	229	241	292		mm	209	232	266	321	321	338
H	in	8 2/9	9 1/7	10 1/2	12 2/3	12 2/3	13 1/3	W	in	4	4	5	6 2/7	6 2/7	7
	mm	209	232	266	321	321	338		mm	100	100	125	160	160	180
W	in	4	4	5	6 2/7	6 2/7	7	WT(KG)	/	2.2	2.2	4.7	5.9	6.9	11.1
	mm	100	100	125	160	160	180								
WT(KG)	/	5.6	7.8	12.5	17	23.5	38.8								

Cast Steel Bellow Seal Globe Valve



Construction feature

Bolted seal bolted bonnet
Flat or plug type disc
Integral seat

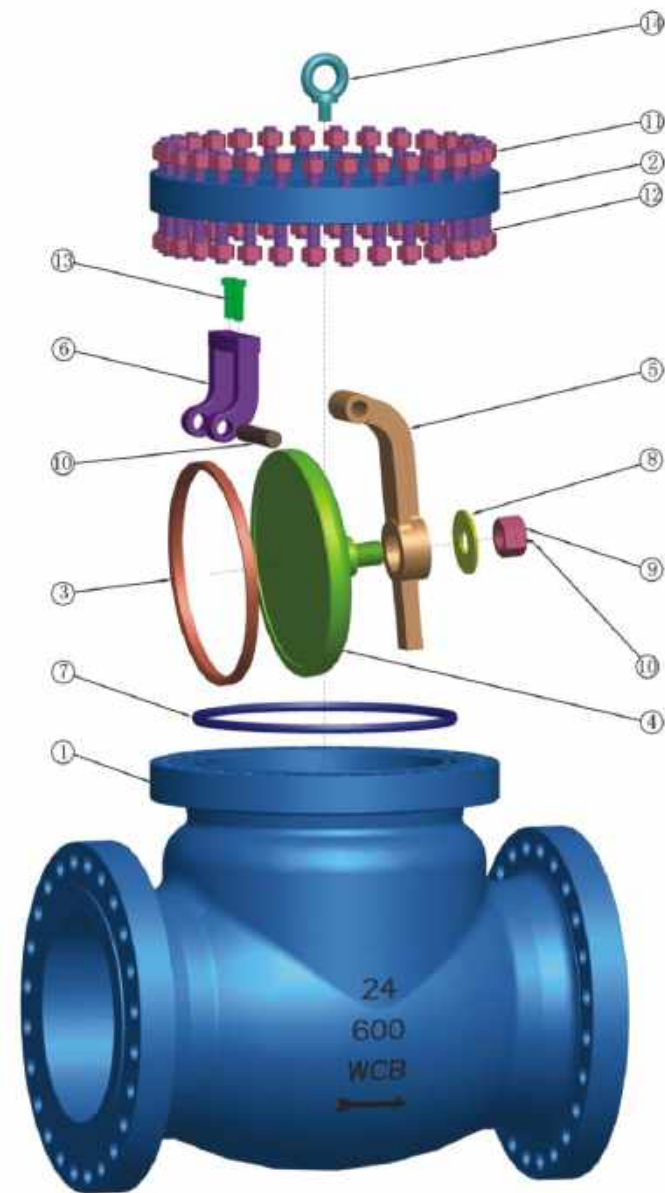
Pressure Test

Pressure ratings	Class150
	Class300
Shell test	3.2MPa
	7.8MPa
Seat test	2.2MPa
	5.7MPa
Seat test	0.6MPa
	0.6MPa

Main dimensions and weights

Class150													
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450
L (RF, BW)	in	8	8 1/2	9 1/2	11 1/2	14	16	19 1/2	24 1/2	27 1/2	31	36	38 1/2
	mm	203	216	241	292	356	406	495	622	698	787	914	978
L (RTJ)	in	8 1/2	9	10	12	14 1/2	16 1/2	20	25	28	31 1/2	36 1/5	39
	mm	216	229	254	305	369	419	508	635	711	800	927	991
H	in	14 11/16	15 3/8	16 9/16	20 1/4	21 3/16	22 5/16	24 5/8	28	39	35	38 7/16	41 15/16
	mm	373	390	421	515	538	567	626	712	990	889	977	1066
W	in	7 7/8	7 7/8	9 7/8	11	11	11 13/16	13 3/4	15 3/4	17 11/16	19 11/16	21 2/3	23 5/8
	mm	200	200	250	280	280	300	350	400	450	500	550	600
WT (KG)	RF	22	29	42	64	77	105	154	288	507	610	880	1150
	BW	19	25	34	49	65	82	131	249	430	/	/	/
Class300													
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	
DN	mm	50	65	80	100	125	150	200	250	300	350	400	
L (RF, BW)	in	10 1/2	11 1/2	12 1/2	14	15 3/4	17 1/2	22	24 1/2	28	33	34	
	mm	267	292	318	356	400	444	559	622	711	838	863	
L (RTJ)	in	11 1/2	12 1/8	13 1/8	14 5/8	16 3/8	18 1/8	22 5/8	25 1/8	28 5/8	33 5/8	34 5/8	
	mm	283	308	334	372	416	460	575	638	727	854	879	
H	in	15 11/16	17 1/8	18 3/16	22 1/16	24 3/8	27 5/16	38 5/8	44 1/2	41 5/16	43	54	
	mm	398	436	462	560	620	694	982	1130	1049	1092	1371	
W	in	7 7/8	7 7/8	9 7/8	11	11 13/16	13 3/4	15 3/4	17 11/16	19 11/16	21 2/3	23 5/8	
	mm	200	20	250	280	300	350	400	450	500	550	600	
WT (KG)	RF	31	43	57	86	130	168	280	385	724	876	1200	
	BW	26	28	44	68	110	138	228	329	618	/	/	

Check Valve



No	Part Name	No	Part Name	No	Part Name
1	Body	6	Yoke	11	Nut
2	Cover	7	Gasket	12	Bolt
3	Seat Ring	8	Disc Washer	13	Screw
4	Disc	9	Disc Nut	14	Lifting Lug
5	Hinge	10	Pin		

Check Valve

Standards

ANSI Series	
Basic design	BS1868 API6D
	ASME B16.34
Pressure-temperature ratings	ASME B16.34
Face to face dimension	ASME B16.10
Flanged ends	ASME B16.5
	ASME B16.47
	MSS SP44
	JIS
B.W.Ends	ASME B16.25
Test	API598
	API6D

API600 Trim material

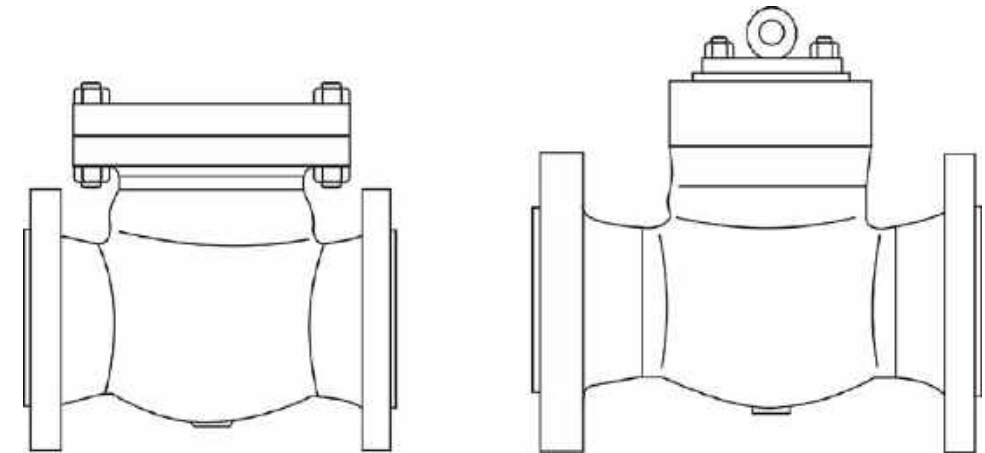
Seating code	Seat ring surface	Wedge seat surface	Hinge Pin
1	13Cr	13Cr	A182 F6a
2	18Cr-8Ni	18Cr-8Ni	A182 F304
3	25Cr-20Ni	25Cr-20Ni	A182 F310
4	Hard 13Cr	Hard 13Cr	A182 F6a
5	Stellite	Stellite	A182 F6a
6	13Cr	Cu-Ni Alloy	Monel
7	13Cr	Hard 13Cr	A182 F6a
8	Stellite	13Cr	A182 F6a
9	Cu-Ni Alloy	Cu-Ni Alloy	Monel
10	18Cr-8Ni-Mo	18Cr-8Ni-Mo	A182 F316
11	Cu-Ni Alloy	Cu-Ni Alloy	Monel
12	Stellite	18Cr-8Ni-Mo	A182 F316
13	19Cr-29Ni	19Cr-29Ni	20 Alloy

ASTM Material list of BS1873 Rising Stem Cast Steel Check Valve

No.	Part name	Carbon Steel to ASTM		Stainless Steel to ASTM				Alloy Steel to ASTM		
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
2	Cover	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
3	Seat Ring	A105N	A352 LF2	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A182 F11	A182 F22	A182 F5
4	Disc	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
5	Hinge	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
6	Yoke	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
7	Gasket	Graphite+SS304, PTFE								
8	Disc Washer	A182 F6a	A182 F6a	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
9	Disc Nut	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
10	Pin	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
11	Nut	A194 2H	A194 4	A194 8				A194 7		
12	Bolt	A193 B7	A320 L7	A193 B8				A193 B16		
13	Screw	193 B7	A320 L7	A182 F304	A182 F316	A182 F304L	A182 F316L	A193 B16		
14	Lifting Lug	A194 2H								

※Suitable for H₂S service and meet requirement of NACE MR 0175.

Check Valve

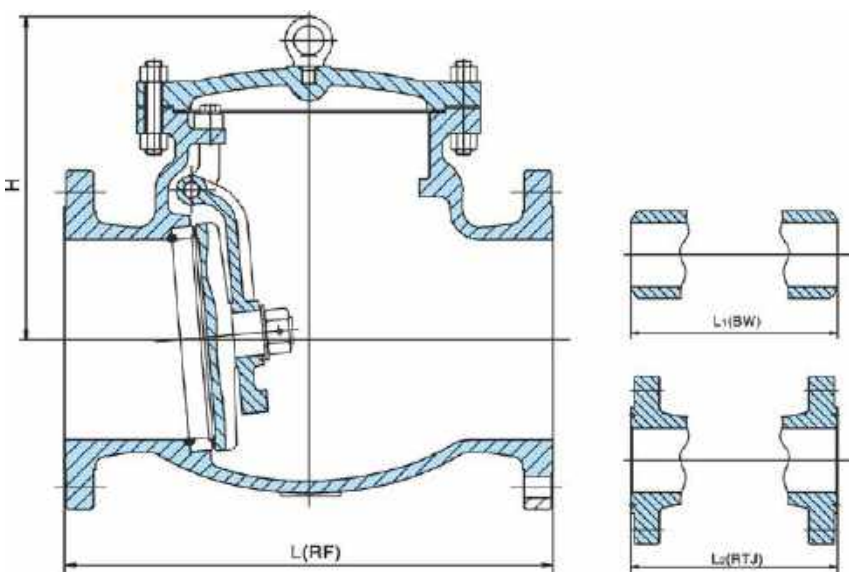


Supply Range of Cast Steel Globe Valve

Pressure ratings		DN/NPS																
		50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900
		2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36
API Bolted bonnet gate valve	Class150 JIS10K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class300 JIS20K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class600 JIS40K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class1500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Pressure seal gate valve	Class600	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class1500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wafer dual plate check valve	Class150 JIS10K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class300 JIS20K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class600 JIS40K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class900	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Class1500	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

※ If you need any products unlisted here, please send us the specification.

Bolted Cover Check Valve



Construction feature

Bolted cover
Renewable seat
(Threaded or welded seat ring)

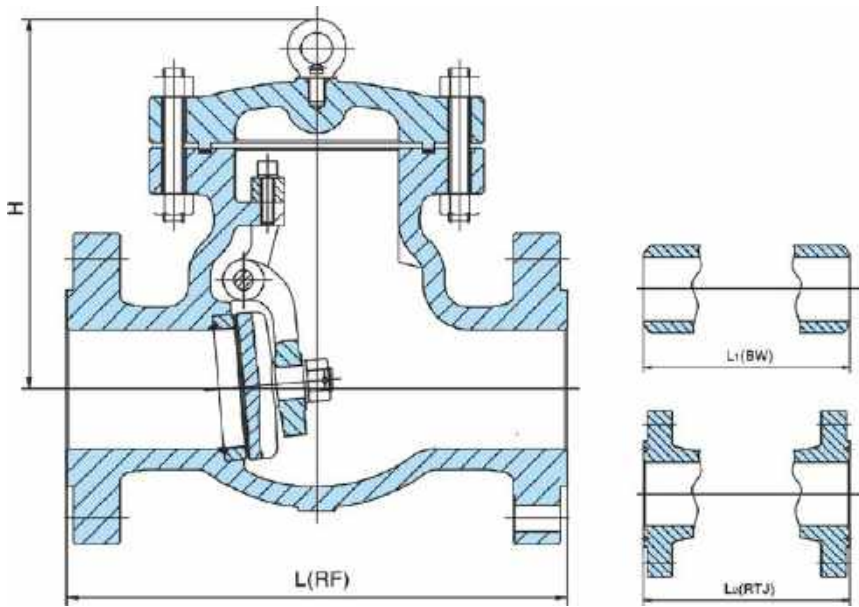
Pressure Test

Pressure ratings	Class150
	Class300
	Class600
Shell test	3.2MPa
	7.8MPa
	15.6MPa
Seat test	2.2MPa
	5.7MPa
	11.4MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class150																		
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900
L (RF、BW)	in	8	8 1/2	9 1/2	11 1/2	13	14	19 1/2	24 1/2	27 1/2	31	34	38 1/2	38 1/2	51	57	68	77
	mm	203	216	241	292	330	356	495	622	698	787	864	978	978	1295	1448	1727	1956
L (RTJ)	in	8 1/2	9	10	12	13 1/2	14 1/2	20	25	28	31 1/2	34 1/2	39	39	51 1/2	57 1/2	68 1/2	77 1/2
	mm	216	229	254	305	343	369	508	635	711	800	877	991	991	1308	1461	1740	1969
H	in	5 7/8	6 5/8	7 1/16	8 1/4	9 1/16	10 13/16	13 3/8	14	16 1/8	18 11/16	21 3/4	23 5/8	26	29 1/8	33	40	40 3/4
	mm	150	168	180	210	230	275	340	355	410	475	552	600	660	740	838	1016	1035
WT (KG)	RF	17	21	29	42	69	74	108	177	282	372	570	665	900	1359	2500	2800	3344
	BW	13	17	24	36	57	62	96	158	238	324	483	548	782	1150	2190	2345	2940
Class300																		
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900
L (RF、BW)	in	10 1/2	11 1/2	12 1/2	14	15 3/4	17 1/2	21	24 1/2	28	33	34	38 1/2	40	53	59	68	82
	mm	267	292	318	356	400	444	533	622	711	838	864	978	1016	1346	1499	1727	2083
L (RTJ)	in	11 1/8	12 1/8	13 1/8	14 5/8	16 3/8	18 1/8	21 5/8	25 1/8	28 5/8	33 5/8	34 5/8	39 1/8	40 3/4	53 7/8	60	69 1/10	83 1/10
	mm	283	308	334	372	416	460	549	638	727	854	880	994	1035	1368	1524	1755	2111
H	in	7 1/16	7 1/4	8 1/4	10 5/8	13 7/12	14 3/16	14 9/16	15 1/8	17 5/16	20 7/16	21 13/16	23 1/4	24 3/16	27 15/16	34 1/16	40	45
	mm	180	185	210	270	345	360	370	385	440	520	554	590	614	614	866	1016	1143
WT (KG)	RF	21	32	43	61	84	131	213	384	449	680	840	1025	1320	1960	/	/	/
	BW	16	24	35	44	61	105	167	272	375	560	710	828	1070	1586	/	/	/
Class600																		
NPS DN	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	/	/
	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	/	/
L (RF、BW)	in	11 1/2	13	14	17	20	22	26	31	33	35	39	43	47	55	63	/	/
	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1600	/	/
L (RTJ)	in	11 5/8	13 1/8	14 1/8	17 1/8	20 1/8	22 1/8	26 1/8	31 1/8	33 1/8	35 1/8	39 1/8	43 1/8	47 1/4	55 3/8	63 1/2	/	/
	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1613	/	/
H	in	7 3/4	8 1/8	9 1/8	11 1/16	13 7/12	14 1/4	17 3/16	19 5/16	20 3/4	22 1/2	26	28 3/8	29 3/8	37 13/16	42	/	/
	mm	197	207	231	281	345	362	437	490	528	572	660	720	746	960	1066	/	/
WT (KG)	RF	36	49	68	111	/	230	416	673	875	944	1220	1620	2120	3100	4001	/	/
	BW	28	40	57	83	/	191	361	543	770	773	1015	1350	1750	2520	3125	/	/

Bolted Cover Check Valve



Construction feature

Bolted cover
Renewable seat
(Threaded or welded seat ring)

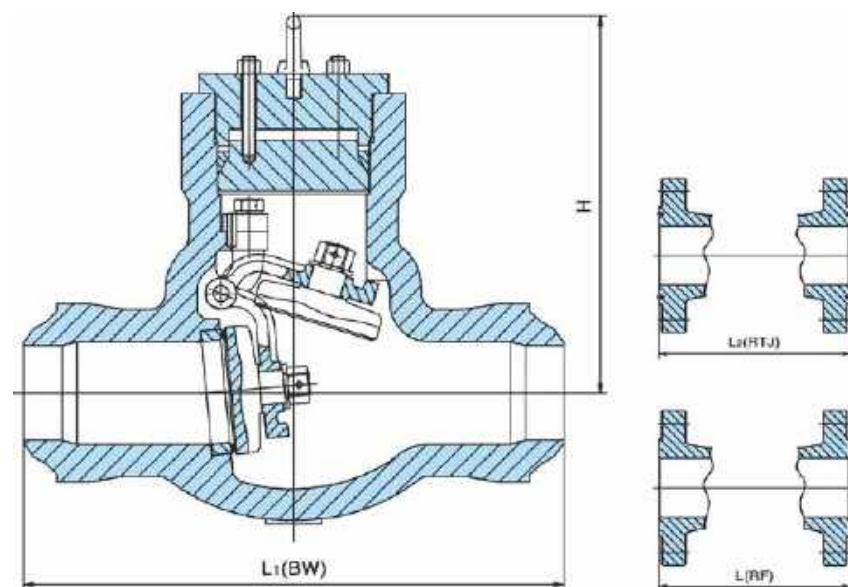
Pressure Test

Pressure ratings	Class900
	Class1500
	Class2500
Shell test	23.3MPa
	38.8MPa
	63.8MPa
Seat test	17.1MPa
	28.5MPa
	46.9MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class900																	
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	
L (RF, BW)	in	14 1/2	16 1/2	15	18	22	24	29	33	38	40 1/2	44 1/2	48	52	61	72	
	mm	368	419	381	457	559	610	737	838	965	1029	1130	1219	1321	1549	1828	
L (RTJ)	in	14 5/8	16 5/8	15 1/8	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8	40 7/8	44 7/8	48 1/2	52 1/2	61 3/4	/	
	mm	371	422	384	460	562	613	740	841	968	1039	1140	1232	1334	1568	/	
H	in	9 7/16	10 1/4	11	12 5/8	14 3/16	15	20 7/8	22 1/16	23 1/4	24 13/16	27 9/16	34	37	42	47	
	mm	240	260	280	320	360	382	530	560	590	630	700	863	939	1066	1193	
WT (KG)	RF	69	93	91	145	/	259	565	900	1200	1500	2130	2840	3756	6000	7229	
	BW	52	74	70	112	/	218	448	733	975	1240	1760	2000	2700	4100	5750	
Class1500																	
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	/	/
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	/	/
L (RF, BW)	in	14 1/2	16 1/2	18 1/2	21 1/2	26 1/2	27 3/4	32 3/4	39	44 1/2	49 1/2	54 1/2	60 1/2	65 1/2	76 1/2	/	/
	mm	368	419	470	546	673	705	832	991	1130	1257	1384	1537	1664	1943	/	/
L (RTJ)	in	14 5/8	16 5/8	18 5/8	21 5/8	26 5/8	28	33 1/8	39 3/8	45 1/2	50 1/4	55 3/8	61 3/8	66 3/8	77 3/5	/	/
	mm	371	422	473	549	676	711	842	1001	1146	1276	1406	1559	1686	1971	/	/
H	in	12 1/4	12 3/5	13	14	15	15 3/4	20 7/8	22 1/16	25 5/8	29 1/2	31	34 5/6	37 4/5	44	/	/
	mm	310	320	330	355	380	400	530	560	650	750	787	885	960	1120	/	/
WT (KG)	RF	69	93	140	232	/	490	990	1490	1970	2600	3250	3960	4400	6800	/	/
	BW	49	74	111	185	/	375	803	1250	1625	1800	2200	2600	2700	4100	/	/
Class2500																	
NPS	in	2	2 1/2	3	4	5	6	8	10	12	/	/	/	/	/	/	/
DN	mm	50	65	80	100	125	150	200	250	300	/	/	/	/	/	/	/
L (RF, BW)	in	17 3/4	20	22 3/4	26 1/2	31 1/4	36	40 1/4	50	56	/	/	/	/	/	/	/
	mm	451	508	578	673	794	914	1022	1270	1422	/	/	/	/	/	/	/
L (RTJ)	in	17 7/8	20 1/4	23	26 7/8	31 3/4	36 1/2	40 7/8	50 7/8	56 7/8	/	/	/	/	/	/	/
	mm	454	514	584	683	807	927	1038	1292	1444	/	/	/	/	/	/	/
H	in	17 7/8	20 1/4	23	26 8/9	33 1/2	36 1/2	40 6/7	50 6/7	56 8/9	/	/	/	/	/	/	/
	mm	454	514	584	683	850	927	1038	1292	1445	/	/	/	/	/	/	/
WT (KG)	RF	118	150	204	352	650	880	1440	2652	3756	/	/	/	/	/	/	/
	BW	80	102	120	220	412	540	920	1692	2296	/	/	/	/	/	/	/

Pressure Seal Check Valve



Construction feature

Pressure seal cover
Renewable seat
(Threaded or welded seat ring)

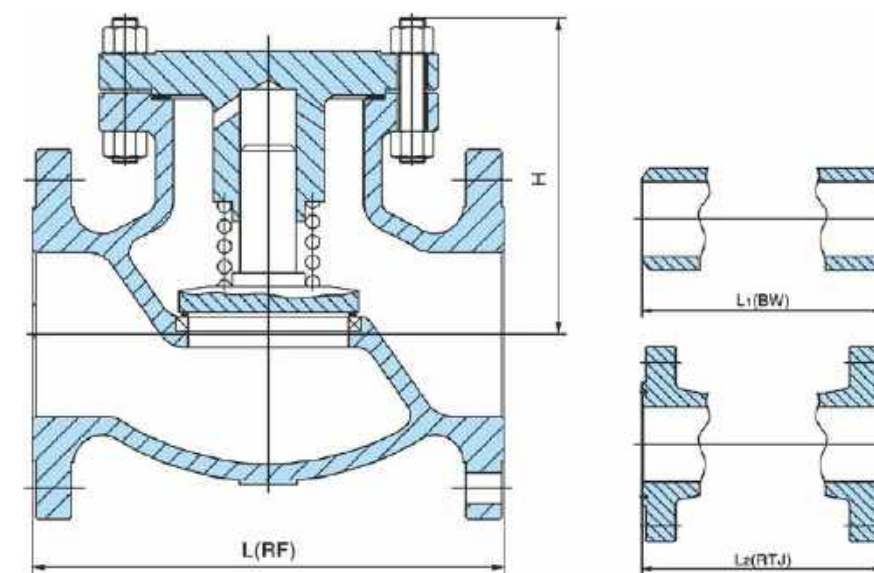
Pressure Test

Pressure ratings	Class900
	Class1500
	Class2500
Shell test	23.3MPa
	38.8MPa
	63.8MPa
Seat test	17.1MPa
	28.5MPa
	46.9MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights Class 900/1500/2500

Item	NPS /DN Class	2	2 1/2	3	4	5	6	8	10	12	14	16
		50	65	80	100	125	150	200	250	300	350	400
L (RF)	900LB	368	419	381	457	559	610	737	838	965	1029	1130
	1500LB	368	419	470	546	673	705	832	991	1130	1257	1384
	2500LB	451	508	578	673	794	914	1022	1270	1422	/	/
L (BW)	900LB	216	254	305	356	432	508	660	787	914	991	1092
	1500LB	216	254	305	406	483	559	711	864	991	1067	1194
	2500LB	279	330	368	457	533	610	762	914	1041	/	/
L (RTJ)	900LB	371	422	384	460	562	613	740	841	968	1039	1140
	1500LB	371	422	473	549	676	711	842	1101	1146	1276	1406
	2500LB	454	514	584	683	807	927	1038	1292	1444	/	/
H	900LB	188	210	210	216	/	368	511	614	705	736	756
	1500LB	265	265	270	370	/	475	570	630	770	795	824
	2500LB	280	305	310	370	/	485	544	710	800	905	944
WT (KG)	RF	900LB	50	65	62	124	/	256	513	940	1725	1834
		1500LB	60	75	73	130	/	334	590	1025	1854	2060
		2500LB	88	115	135	215	/	550	900	1600	2300	/
	BW	900LB	35	46	44	78	/	179	385	705	1130	1355
		1500LB	42	53	51	86	/	230	460	715	1150	1390
		2500LB	88	90	95	160	/	385	640	1200	1725	/

Bolted Cover Lift Check Valve



Construction feature

Bolted cover
Renewable seat
(Threaded or welded seat ring)

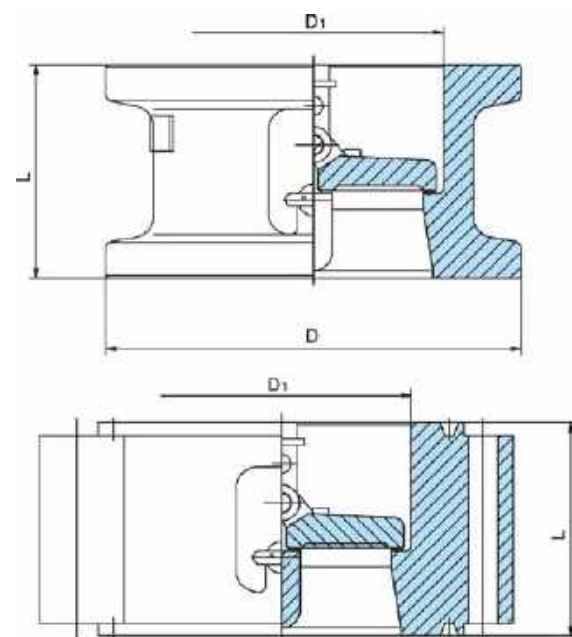
Pressure Test

Pressure ratings	Class150
	Class300
	Class600
Shell test	Class900
	Class1500
	3.2MPa
Seat test	7.8MPa
	15.6MPa
	23.3MPa
Seat test	38.8MPa
	2.2MPa
	5.7MPa
Seat test	11.4MPa
	17.1MPa
	28.5MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class150												Class300											
NPS DN	in mm	2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300			
L(RF, BW)	in mm	8 203	8 1/2 216	9 1/2 241	11 1/2 292	14 356	16 406	19 1/2 495	24 1/2 622	27 1/2 698	31 787	10 1/2 267	11 1/2 292	12 1/2 318	14 356	15 3/4 400	17 1/2 444	22 559	24 1/2 622	28 711			
L (RTJ)	in mm	8 1/2 216	9 229	10 254	12 305	14 1/2 369	16 1/2 419	20 508	25 635	28 711	31 1/2 800	11 1/8 283	12 1/8 308	13 1/8 334	14 5/8 372	16 3/8 416	18 1/8 460	22 5/8 575	25 1/8 638	28 5/8 727			
H	in mm	7 1/16 179	7 5/8 194	8 7/16 214	9 3/8 238	10 1/4 260	11 7/16 291	13 1/2 343	15 5/16 389	17 1/4 438	/	7 13/16 198	8 5/8 219	9 5/8 244	10 13/16 275	11 3/4 298	12 7/8 327	15 381	17 432	19 495			
WT (KG)	RF BW	17 /	25 /	29 /	48 /	68 /	85 /	138 /	210 /	350 /	/	28 /	33 /	42 /	67 /	98 /	135 /	203 /	296 /	448 /			
Class600																							
NPS DN	in mm	2 50		2 1/2 65		3 80		4 100		5 125		6 150		8 200		10 250		12 300					
L (RF)	in mm	11 1/2 292		13 330		14 356		17 432		20 508		22 559		26 660		31 787		33 838					
L (BW)	in mm	11 1/2 292		13 330		14 356		17 432		20 508		22 559		26 584		31 711		33 813					
L (RTJ)	in mm	11 5/8 295		13 1/8 338		14 1/8 359		17 1/8 435		20 1/8 511		22 1/8 562		26 1/8 663		31 1/8 790		33 1/8 841					
H	in mm	8 7/16 214		9 1/4 235		10 5/16 262		11 13/16 300		13 330		14 1/2 368		16 9/16 421		19 483		20 7/8 530					
WT (KG)	RF BW	32 27		45 38		58 47		102 79		147 104		195 148		308 211		455 305		630 470					
Class900												Class1500											
NPS DN	in mm	2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	2 50	2 1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350		
L(RF, BW)	in mm	14 1/2 368	16 1/2 419	18 181	20 215	22 249	24 290	28 357	33 437	38 488	40 1/2 509	14 1/2 368	16 1/2 419	18 1/2 470	21 1/2 546	26 1/2 673	27 3/4 705	32 3/4 832	39 991	44 1/2 1130	49 1/2 1257		
L (RTJ)	in mm	14 5/8 371	16 5/8 422	18 1/8 460	20 1/8 518	22 1/8 562	24 1/8 613	29 1/8 740	33 1/8 841	38 1/8 968	40 7/8 1039	14 5/8 371	16 5/8 422	18 5/8 473	21 5/8 549	26 5/8 676	28 711	33 1/8 842	39 3/8 1001	45 1/2 1146	50 1/4 1277		
H	in mm	9 7/16 240	10 1/4 260	11 12 280	12 5/8 320	/ 382	15 20 530	17 7/8 565	19 1/2 630	22 1/16 690	23 1/4 740	12 1/4 310	12 3/5 320	13 330	14 355	/ 400	15 3/4 400	17 1/2 530	19 560	21 650	/		
WT (KG)	RF BW	69 52	93 74	91 70	145 112	/ 218	259 218	565 448	900 733	1200 975	1500 1240	69 49	93 74	140 111	232 185	/ 375	490 303	990 803	1490 1250	1970 1625	/		

Wafer Double Disc Check Valve



Construction feature

Wafer or wafer lug type
Spring loaded

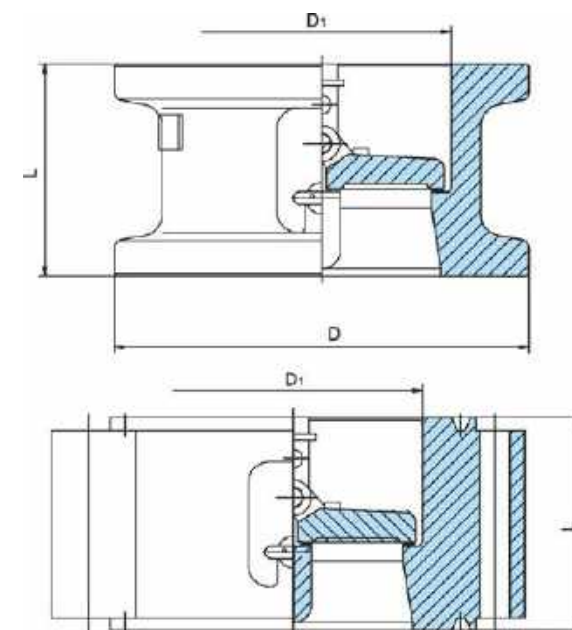
Pressure Test

Pressure ratings	Class150
	Class300
	Class600
Shell test	3.2MPa
	7.8MPa
	15.6MPa
Seat test	2.2MPa
	5.7MPa
	11.4MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class150																		
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900
L	in	2 1/3	2 2/3	2 7/8	2 7/8	3 2/5	3 6/7	5	5 3/4	7 1/8	7 1/4	7 1/2	8	8 5/8	8 3/4	12	12	14 1/2
	mm	60	67	73	73	86	98	127	146	181	184	191	203	219	222	305	305	368
D	in	2	2 5/9	3 1/7	4	5	6	8	10	12	13 7/9	15 3/4	17 5/7	19 2/3	23 5/8	27 5/9	31 1/3	35 1/3
	mm	51	65	80	102	127	152	203	254	305	350	400	450	500	600	700	796	898
D ₁	in	4	4 4/5	5 1/3	6 4/5	7 2/3	8 2/3	11	13 1/4	16	17 2/3	20 1/6	21 1/2	23 7/9	28 1/7	30 3/7	34 4/7	38 5/7
	mm	103	122	135	173	195	220	277	337	407	448	512	547	604	715	773	878	983
Cv	/	48	128	150	394	830	900	1589	3300	3926	5418	8256	10452	14251	26511	33600	55200	84000
WT(KG)	/	2	3	4	6	8	13	25	39	54	80	117	138	163	331	380	560	640
Class300																		
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900
L	in	2 1/3	2 2/3	2 7/8	2 7/8	3 2/5	3 6/7	5	5 3/4	7 1/8	8 3/4	9 1/7	10 2/5	11 1/2	12 1/2	/	/	19
	mm	60	67	73	73	86	98	127	146	181	222	232	264	292	318	/	/	483
D	in	2	2 5/9	3 1/7	4	5	6	8	10	12	13 7/9	15 3/4	17 5/7	19 2/3	23 5/8	/	/	34 3/8
	mm	51	65	80	102	127	152	203	254	305	350	400	450	500	600	/	/	873
D ₁	in	4 1/3	5	5 4/5	7	8 3/7	9 4/5	12	14 1/7	16 1/2	19	21 1/7	23 2/5	25 2/3	30 2/5	/	/	41 1/9
	mm	110	128	147	179	214	249	305	359	420	483	537	594	652	772	/	/	1044
Cv	/	48	128	150	394	830	900	1589	3300	3926	5418	8256	10452	14251	26511	/	/	84000
WT(KG)	/	3	4	6	8	15	18	31	51	77	117	190	200	265	410	/	/	1020
Class600																		
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	/	/
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	/	/
L	in	2 1/3	2 2/3	2 7/8	3 1/9	4 1/7	5 1/3	6 1/2	8 2/5	9	10 3/4	12	14 1/4	14 1/2	17 1/4	/	/	/
	mm	60	67	73	79	105	136	165	213	229	273	305	362	368	438	/	/	/
D	in	2	2 5/9	3 1/7	4	5	6	7 7/8	9 5/6	12	13 1/4	15 1/4	17 1/4	19 1/4	23 1/4	/	/	/
	mm	51	65	80	102	127	152	200	250	305	337	387	438	489	591	/	/	/
D ₁	in	4 1/3	5	5 4/5	7 1/2	9 2/5	10 2/5	12 1/2	15 2/3	18	19 2/7	22 1/8	24	26 7/9	31	/	/	/
	mm	110	128	147	191	239	264	318	398	455	490	562	610	680	786	/	/	/
Cv	/	48	128	150	394	830	900	1589	3300	3926	5418	8256	10452	14251	26511	/	/	/
WT(KG)	/	4	5	8	11	20	26	55	95	140	223	360	395	518	836	/	/	/

Wafer Double Disc Check Valve



Construction feature

Wafer or wafer lug type
Spring loaded

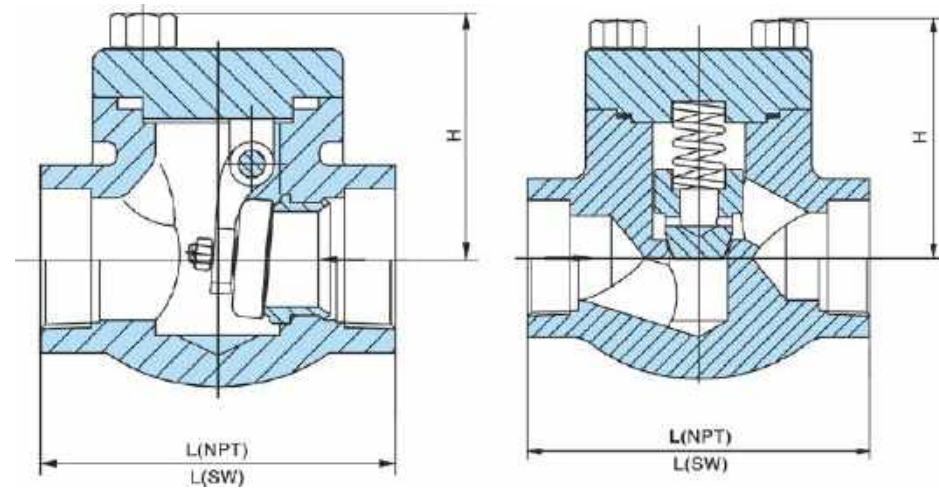
Pressure Test

Pressure ratings	Class900
	Class1500
	Class2500
Shell test	23.3MPa
	38.8MPa
	63.8MPa
Seat test	17.1MPa
	28.5MPa
	46.9MPa
Seat test	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class900																		
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28		
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700		
L	in	2 3/4	3 1/4	3 1/4	4	4 1/3	6 1/4	8 1/9	9 1/2	11 1/2	14	15 1/8	17 3/4	17 3/4	19 1/2	/		
	mm	70	83	83	102	110	159	206	241	292	356	384	451	451	495	/		
D	in	2	2 5/9	3 1/7	4	5	6	7 7/8	9 5/6	12	13 1/4	15 1/4	17 1/4	19 1/6	23 1/4	/		
	mm	51	65	80	102	127	150	200	250	305	337	387	438	487	591	/		
D ₁	in	5 1/2	6 3/8	6 1/2	8	9 2/3	11 1/4	14	17	19 1/2	20 2/5	22 1/2	25	27 1/3	32 7/8	/		
	mm	140	162	165	204	245	286	356	432	495	518	572	635	695	835	/		
Cv	/	48	128	150	394	830	900	1589	3300	3926	5418	8256	10452	14251	26511	/		
WT(KG)	/	8	11	14	20	30	42	84	145	220	350	470	605	820	1050	/		
Class1500																		
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24			
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600			
L	in	2 3/4	3 1/4	3 1/4	4	4 1/3	6 1/4	8 1/9	9 3/4	12	14	15 1/8	/	/	/			
	mm	70	83	83	102	110	159	206	248	305	356	384	/	/	/			
D	in	2	2 5/9	3 1/7	4	5	6	7 7/8	10	12	13 1/4	15 1/4	/	/	/			
	mm	51	65	80	102	127	150	200	254	305	337	387	/	/	/			
D ₁	in	5 1/2	6 3/8	6 7/9	8 1/7	10	11	13 7/9	17	20 2/5	22 2/3	25 1/6	/	/	/			
	mm	140	162	172	207	252	280	350	433	518	576	639	/	/	/			
Cv	/	48	128	150	394	830	900	1589	3300	3926	5418	8256	/	/	/			
WT(KG)	/	8	11	19	26	51	68	130	210	384	550	635	/	/	/			
Class2500																		
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	/	/	/			
DN	mm	50	65	80	100	125	150	200	250	300	350	400	/	/	/			
L	in	2 3/4	3 1/4	3 2/5	4 1/7	4 1/3	6 1/4	8 1/9	10	12	/	/	/	/	/			
	mm	70	83	86	105	110	159	206	254	305	/	/	/	/	/			
D	in	1 2/3	2	2 4/9	3 1/2	4	6	7	8 6/7	10 1/2	/	/	/	/	/			
	mm	42	52	62	88	100	150	180	225	266	/	/	/	/	/			
D ₁	in	5 5/8	6 1/2	7 2/3	9 1/7	11	12 2/5	15 1/6	18 2/3	21 1/2	/	/	/	/	/			
	mm	143	166	194	232	277	315	385	474	547	/	/	/	/	/			
Cv	/	48	128	150	394	830	900	1589	3300	3926	/	/	/	/	/			
WT(KG)	/	10	18	26	40	59	90	150	240	440	/	/	/	/	/			

API602 Forged Steel Check Valve



Construction feature

Bolted or welded cover
Lift or swing type
Renewable seat for swing type only

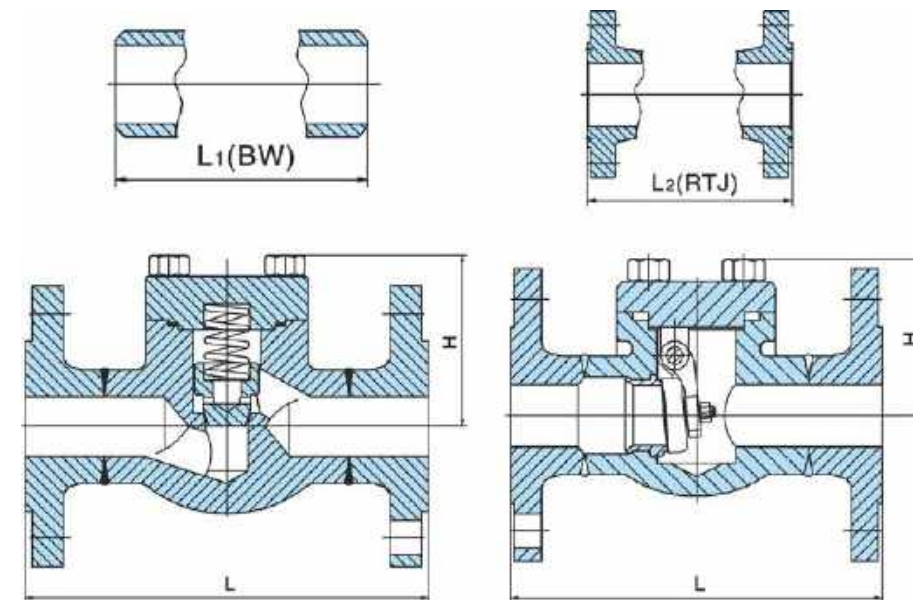
Pressure Test

Pressure ratings	Class800
	Class900
Shell test	Class1500
	19.9MPa
	23.3MPa
	38.8MPa
Seat test	14.6MPa
	17.1MPa
Seat test	28.5MPa
	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class800 RB										Class800 FB							
NPS	in	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN	mm	8	10	15	20	25	32	40	50	8	10	15	20	25	32	40	50
L (SW)	in	3 1/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	6	6 7/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	6	6 7/9	7 7/8
	mm	79	79	79	92	111	120	152	172	79	79	92	111	120	152	172	200
L (NPT)	in	3 1/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	6	6 7/9	3 1/9	3 1/9	3 5/8	4 3/8	4 5/7	6	6 7/9	7 7/8
	mm	79	79	79	92	111	120	152	172	79	79	92	111	120	152	172	200
H	in	2 2/5	2 2/5	2 2/5	2 2/5	3	3 1/3	4	4 2/3	2 2/5	2 2/5	2 2/5	3	3 1/3	4	4 2/3	5 1/5
	mm	61	61	61	61	78	84	103	118	61	61	61	78	84	103	118	132
WT(KG)	/	1.5	1.4	1.2	1.4	2.3	3.9	5.6	8.9	1.4	1.2	1.4	2.3	3.9	5.6	8.9	12.5
Class900/1500																	
NPS	in	1/2	3/4	1	1 1/4	1 1/2	2	/	/	/	/	/	/	/	/	/	/
DN	mm	15	20	25	32	40	50	/	/	/	/	/	/	/	/	/	/
L (SW)	in	3 1/9	3 5/8	4 3/8	4 5/7	6	6 7/9	/	/	/	/	/	/	/	/	/	/
	mm	79	92	111	120	152	172	/	/	/	/	/	/	/	/	/	/
L (NPT)	in	3 1/9	3 5/8	4 3/8	4 5/7	6	6 7/9	/	/	/	/	/	/	/	/	/	/
	mm	79	92	111	120	152	172	/	/	/	/	/	/	/	/	/	/
H	in	2 2/5	2 2/5	3	3 1/3	4	4 2/3	/	/	/	/	/	/	/	/	/	/
	mm	61	61	78	84	103	118	/	/	/	/	/	/	/	/	/	/
WT(KG)	/	1.2	1.4	2.3	3.9	5.6	8.9	/	/	/	/	/	/	/	/	/	/

API602 Forged Steel Check Valve



Construction feature

Bolted or welded cover
Lift or swing type
Renewable seat for swing type only

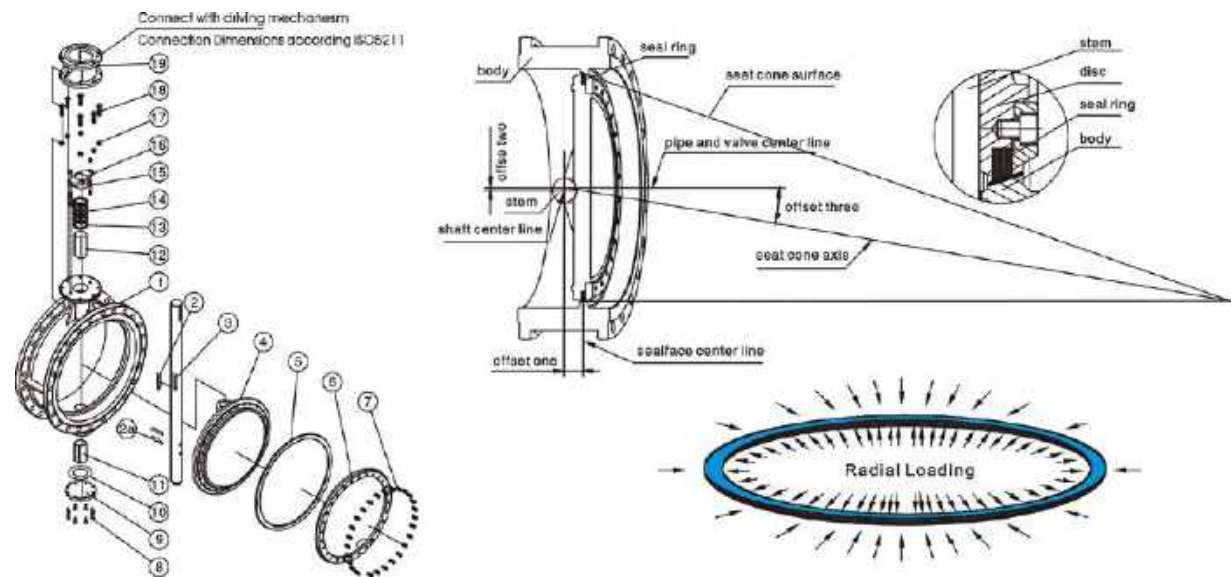
Pressure Test

Pressure ratings	Class150
	Class300
Shell test	Class600
	Class900
	Class1500
	3.2MPa
Seat test	7.8MPa
	15.6MPa
Seat test	23.3MPa
	38.8MPa
	2.2MPa
	5.7MPa
Seat test	11.4MPa
	17.1MPa
Seat test	28.5MPa
	0.6MPa
	0.6MPa
	0.6MPa

Main dimensions and weights

Class150								Class300					
NPS DN	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8	6	7	8	8 1/2	9	10 1/2
	mm	108	117	127	140	165	203	152	178	203	216	229	267
L (RTJ)	in	4 2/3	5 1/8	5 1/2	6	7	8 1/2	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/7
	mm	119	130	140	153	178	216	164	190	216	229	241	283
L (BW)	in	4 1/4	4 3/5	5	5 1/2	6 1/2	8	6	7	8	8 1/2	9	10 1/2
	mm	108	117	127	140	165	203	152	178	203	216	229	267
H	in	2 2/5	3	3 1/3	4	4 2/3	5 1/5	2 2/5	3	3 1/3	4	4 2/3	5 1/5
	mm	61	78	84	103	118	132	61	78	84	103	118	132
WT(KG)	/	3.4	4.4	8.2	8.9	12	14.3	3.7	4.8	8.8	9.6	13.7	17.8
Class600								Class900/1500					
NPS DN	in	1/2	3/4	1	1 1/4	1 1/2	2	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50	15	20	25	32	40	50
L (RF)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	8 1/2	9	10	11	12	14 1/2
	mm	165	190	216	229	241	292	216	229	254	279	305	368
L (RTJ)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 3/5	8 1/2	9	10	11	12	14 3/5
	mm	165	190	216	229	241	295	216	229	254	279	305	371
L (BW)	in	6 1/2	7 1/2	8 1/2	9	9 1/2	11 1/2	8 1/2	9	10	11	12	14 1/2
	mm	165	190	216	229	241	292	216	229	254	279	305	368
H	in	2 2/5	3	3 1/3	4	4 2/3	5 1/5	2 2/5	3	3 1/3	4	4 2/3	5 1/5
	mm	61	78	84	103	118	132	61	78	48	103	118	132
WT(KG)	/	4	5.8	9.5	10.4	15.6	24.5	4	5.8	9.5	10.4	15.6	24.5

Butterfly Valve

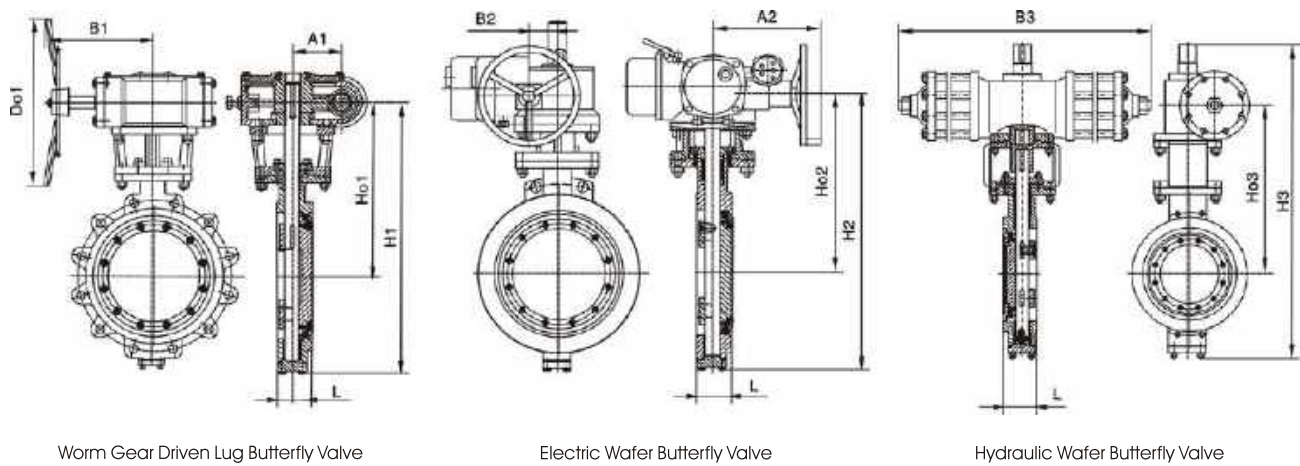


▶ASTM Materials list of Butterfly Valve

No.	Part Name	Carbon Steel to ASTM	Stainless Steel to ASTM	
			A351 CF8	A351 CF8M
1	Body	A216 WCB	A351 CF8	A351 CF8M
2	Key	A182 F6a	SS304	SS316
2a	Pin	A182 F6a	SS304	SS316
3	Stem	A182 F6a	A182 F304	A182F316
4	Disc	A216 WCB	A351 CF8	A351 CF8M
5	Seal Ring	Graphite+304	Graphite+SS304	Graphite+SS316
6	Retainer Flange	A216 WCB	SS304	SS316
7	Bolt	A193 B7	A193 B8	A193 B8M
8	Bolt	A193 B7	A193 B8	A193 B8
9	Cover	A105	A182 F304	A182 F316
10	Gasket	Graphite	PTFE	PTFE
11	Bushing	PTFE+Bronze	PTFE+Bronze	PTFE+Bronze
12	Bushing	PTFE+Bronze	PTFE+Bronze	PTFE+Bronze
13	Packing Seat	SS	SS304	SS316
14	Packing	Graphite	PTFE	PTFE
15	Bolt	-	A193 B8	A193 B8
16	Packing Bushing	SS	-	-
17	Nut	-	-	-
18	Bolt	-	-	-
19	Yoke	Carbon Steel	-	-

※ Type of body connection. The connection between triple eccentric butterfly valve body and pipe can be double flanged, wafer and lug wafer.
※ All above materials are the regular specification of Sawamura Valve. Other materials can be chosen on the request of customers.

Wafer Butterfly Valve



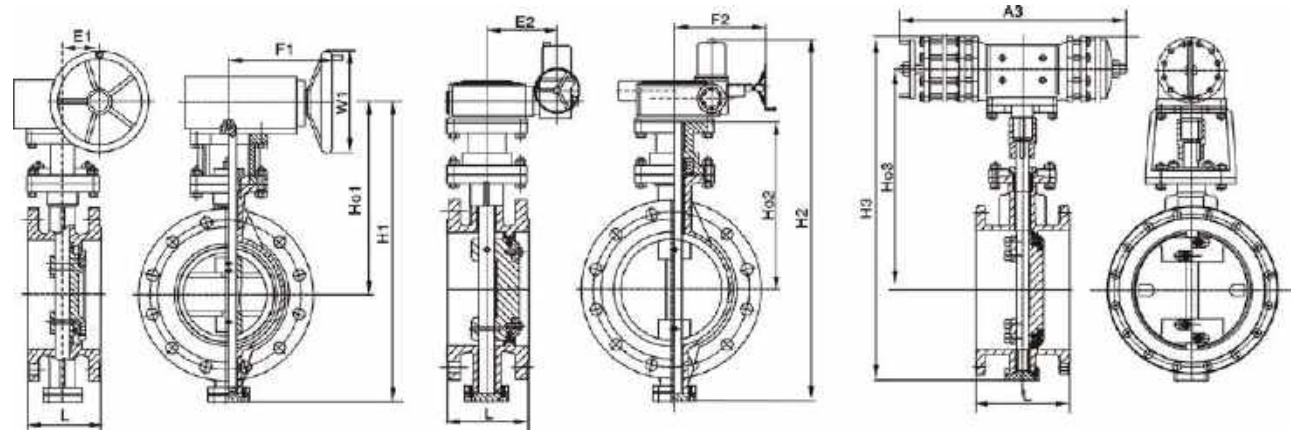
▶ Main size of outside & weight

CLASS 150

NPS	L	Worm gear			Electric actuator					Pneumatic or hydraulic actuator				weight(kg)	
		H3	Ho3	B3	H1	Ho1	B1	A1	Do1	H2	Ho2	B2	A2	Wafer	Lug
3"	49	-	-	-	320	185	140	63	160	513	263	178	180	9	9
4"	54	-	-	-	342	195	140	63	160	535	282	178	180	11	14
5"	57	-	-	-	365	209	140	63	300	563	293	178	180	15	18
6"	58	-	-	-	415	243	140	63	300	602	322	178	180	17	20
8"	64	690	323	275	510	263	150	84	400	745	296	235	370	25	31
10"	71	750	355	275	567	295	150	84	400	805	325	235	370	40	49
12"	81	955	475	378	665	342	200	108	600	883	365	235	370	61	79
14"	92	1032	513	378	739	385	200	108	600	965	408	235	370	82	107
16"	102	1182	598	530	825	430	240	152	600	1033	443	235	370	123	150
18"	114	1265	635	530	910	469	240	152	800	1120	485	235	370	150	182
20"	127	1335	667	530	990	500	300	168	800	1186	518	235	370	204	253
24"	154	1642	830	680	1210	618	320	192	800	1380	625	235	370	300	398
30"	167	1823	1245	680	1453	875	512	279	400	1583	1005	245	515	454	490
36"	184	2145	1329	860	1775	939	512	279	400	1905	1089	245	515	762	771
40"	217	2235	1488	860	1857	1005	512	279	400	2010	1110	360	540	975	1179
42"	222	2360	1456	860	1980	1086	512	279	400	2120	1216	360	540	1234	1338
46	254	2445	1505	1080	2070	1110	570	368	600	2175	1260	360	540	1451	1724
48"	254	2535	1564	1080	2165	1194	570	368	600	2235	1324	360	540	1678	1928
54"	305	-	-	-	2382	1477	630	425	800	2412	1503	445	628	2223	2634
60"	333	-	-	-	2684	1617	630	425	800	2699	1687	445	628	2903	3447

Note:
The weight in the table is that without drive unit. WF is wafer butterfly valve, and WL is lug wafer butterfly valve.
The actual dimensions of pneumatic, hydraulic and electric actuators may be different from the above dimensions, which depend on the sized actuators.

Flanged Butterfly Valve



Worm Gear Driven Flanged Butterfly Valve

Electric Flanged Butterfly Valve

Hydraulic Flanged Butterfly Valve

► Main size of outside & weight

CLASS 150

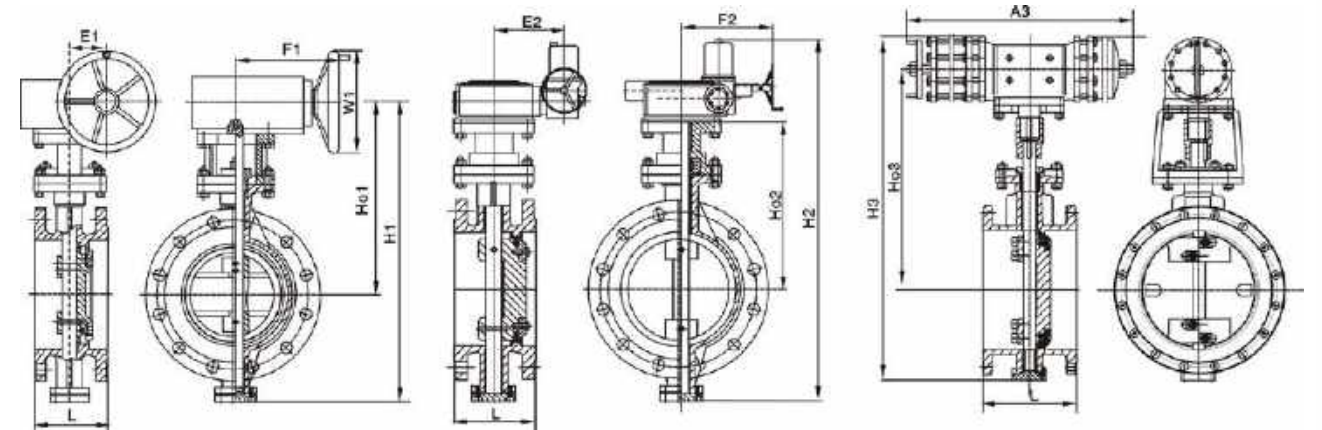
DN	L	Worm gear					Electric actuator				Pneumatic or hydraulic actuator			Weight(kg)	
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm gear	
3"	114	472	350	50	203	203	513	263	180	178	—	—	—	15.4	
4"	127	520	386	60	191	203	535	282	180	178	—	—	—	23	
5"	140	580	395	60	215	250	563	293	180	178	—	—	—	29	
6"	140	653	475	67	289	305	602	322	180	178	—	—	—	33	
8"	152	773	565	67	308	460	745	296	370	235	690	323	275	50	
10"	165	880	640	86	346	460	805	325	370	235	750	355	275	73	
12"	178	989	711	111	403	610	883	365	370	235	955	475	378	108	
14"	190	1044	760	60	601	356	965	408	370	235	1032	513	378	143	
16"	216	1142	826	60	605	457	1033	443	370	235	1182	598	530	186	
18"	222	1228	887	60	652	610	1120	485	370	235	1265	635	530	234	
20"	229	1337	959	60	805	762	1186	518	370	235	1335	667	530	277	
24"	267	1554	1109	103	763	762	1380	625	370	235	1642	830	680	408	
28"	292	1456	956	245	400	315	1587	745	515	245	1711	859	680	653	
30"	308	1541	991	310	460	400	1650	777	515	245	1782	910	680	816	
32"	318	1611	1036	310	460	400	1717	810	515	245	1856	942	680	914	
36"	330	1743	1103	410	480	400	1870	875	540	360	1920	975	680	1157	
40"	410	1868	1173	410	480	400	2030	965	540	360	—	—	—	1610	
44"	450	1968	1223	410	480	400	2078	1022	540	360	—	—	—	2160	
48"	470	2145	1320	520	640	400	2188	1100	540	660	—	—	—	2359	
52"	490	2300	1405	520	640	400	2214	1150	565	385	—	—	—	2720	
56"	530	2440	1475	520	640	400	2328	1325	565	385	—	—	—	3353	
60"	570	2594	1559	450	785	630	2530	1515	565	385	—	—	—	3629	

Note:

The weight in the table is that without drive unit. WF is wafer butterfly valve, and WL is lug wafer butterfly valve.

The actual dimensions of pneumatic, hydraulic and electric actuators may be different from the above dimensions, which depend on the sized actuators.

Flanged Butterfly Valve



Worm Gear Driven Flanged Butterfly Valve

Electric Flanged Butterfly Valve

Hydraulic Flanged Butterfly Valve

► Main size of outside & weight

CLASS 300

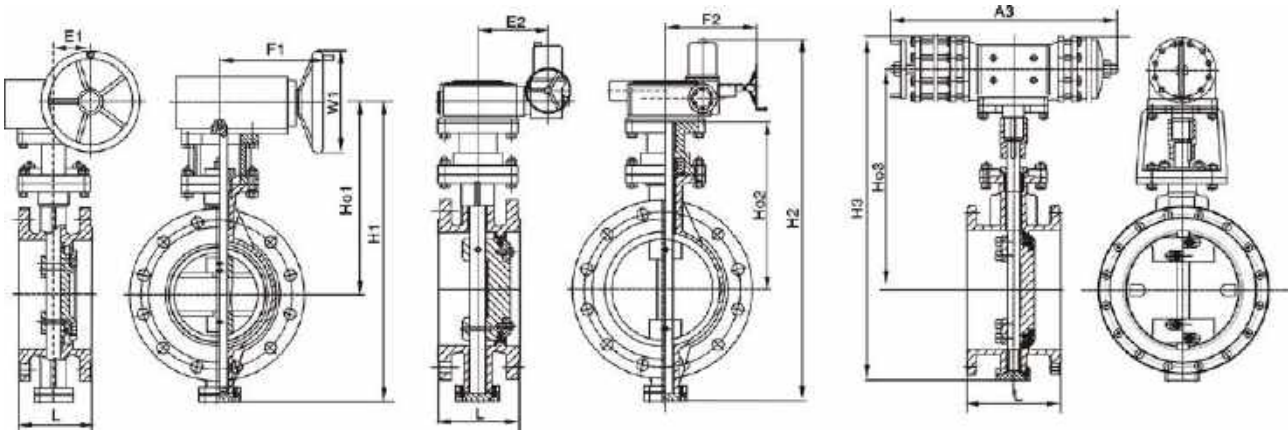
NPS	L	Worm gear					Electric actuator				Pneumatic or hydraulic actuator			Weight(kg)		
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm	Electric	Hydraulic
2"	108	365	237	35	169	152	407	237	180	178	—	—	—	19	27	—
3"	114	378	253	73	229	152	530	253	180	178	—	—	—	29	43	—
4"	127	421	274	73	229	305	552	274	180	178	—	—	—	39	51	—
5"	140	482	312	73	229	305	580	310	180	178	—	—	—	48	58	—
6"	140	543	351	108	254	305	610	351	180	178	—	—	—	54	67	—
8"	152	628	392	108	254	305	755	392	370	235	750	368	275	84	107	—
10"	165	855	480	133	305	610	816	480	370	235	909	442	378	118	150	—
12"	178	812	515	133	305	610	912	515	370	235	1075	535	530	170	225	—
14"	191	885	555	194	356	610	980	555	370	235	1158	572	530	231	266	—
16"	216	951	590	194	356	356	1057	590	370	235	1230	610	530	299	369	—
18"	225	1106	636	194	356	356	1140	636	370	235	1462	736	680	390	429	—
20"	229	1308	685	194	356	356	1243	685	515	245	1328	765	680	499	590	—
24"	267	1445	934	165	686	686	1420	934	817	351	—	—	—	726	766	—
28"	292	1495	1039	165	686	686	1812	1039	817	351	—	—	—	1360	—	—
30"	292	1535	1060	165	686	686	1906	1060	817	351	—	—	—	1429	—	—
32"	318	1575	1120	165	686	686	2021	1120	817	351	—	—	—	1757	—	—
36"	330	1605	1190	165	686	686	2327	1190	973	440	—	—	—	2223	—	—
40"	410	1755	1234	165	686	686	2451	1234	973	440	—	—	—	2531	—	—
42"	430	2100	1385	429	805	903	2515	1385	973	440	—	—	—	2781	—	—
44"	450	2175	1436	429	805	903	2565	1436	973	440	—	—	—	2979	—	—
48"	470	2303	1570	399	965	903	2697	1570	973	440	—	—	—	3602	—	—

Note:

The weight in the table is that without drive unit. WF is wafer butterfly valve, and WL is lug wafer butterfly valve.

The actual dimensions of pneumatic, hydraulic and electric actuators may be different from the above dimensions, which depend on the sized actuators.

Flanged Butterfly Valve



Worm Gear Driven Flanged Butterfly Valve

Electric Flanged Butterfly Valve

Hydraulic Flanged Butterfly Valve

Main size of outside & weight

CLASS 600

NPS	L	Worm gear					Electric actuator				Pneumatic or hydraulic actuator			Weight(kg)		
		H1	Ho1	E1	F1	W1	H2	Ho2	E2	F2	H3	Ho3	A3	Worm	Electric	Hydraulic
3"	180	541	414	63	140	250	606	295	180	178	-	-	-	82	79	-
4"	190	607	447	63	140	250	650	358	180	178	-	-	-	125	96	-
5"	200	680	395	108	200	250	695	371	180	178	-	-	-	165	154	-
6"	210	686	490	152	240	315	743	387	180	178	-	-	-	191	172	-
8"	230	757	536	168	300	315	1055	417	370	235	-	-	-	247	248	-
10"	250	867	641	192	320	315	1172	465	370	235	-	-	-	413	308	-
12"	270	1034	727	237	368	400	1392	546	515	245	-	-	-	576	467	-
14"	290	1087	757	237	368	400	1475	579	515	245	-	-	-	664	585	-
16"	310	1216	825	237	368	400	1557	643	540	360	-	-	-	971	807	-
18"	330	1240	840	269	559	400	1625	673	540	360	-	-	-	1119	1003	-
20"	350	1330	978	350	645	400	1679	701	540	360	-	-	-	1639	1139	-
24"	390	1583	1070	350	645	400	1834	775	540	360	-	-	-	2082	1767	-

Note:
The actual dimensions of pneumatic, hydraulic and electric actuators may be different from the above dimensions, which depend on the sized actuators.

社長あいさつ

Corporate profile



Naoki Sawamura, President

Since our establishment in 1925, We have been supplying our products to various industries, such as shipbuilding, power plant, petro-chemical plant, and etc.

Nature of our company is "Just try it".

During the period, we developed and improved many kind of valves in many applications to meet customers' needs of safe, durable, high performance and cost effectiveness.

Through the above experiences, we built up highly solid manufacturing standard of "Japan Quality" in our company.

Following globalization of the market, we aim to expand our supply and purchase network to Asian countries

We would contribute customers in the area through supplying our original products made with our policy, "Japan Quality with International Price".

with best regards,
Naoki Sawamura, President

会社概要

Corporate profile



Company Name	SAWAMURA VALVE Co.,Ltd.
Head Quarters	1262-2 Kawasebaba-cho Hikone City, Shiga Prefecture, 522-0223, Japan TEL +81-749-25-1101 / FAX +81-749-25-2964
Tokyo Office	C-5 7F New Shimbashi BLDG, 2-16-1, Minato-ku, Tokyo, 105-0004, Japan TEL +81-3-5157-5011 / FAX +81-3-5157-5014
e-mail	s-info@sawamura-valve.co.jp
Start of Business	May 1925
Date of Foundation	May 10, 1943
Capital	10,000,000 Yen
Representative Director, President	Naoki SAWAMURA
Main Financing Banks	Hikone Branch, Shiga Bank, Ltd.

沿革

History



May 1925	Yoshitaro SAWAMURA established Sawamura Iron Works to start
May 1943	Sawamura Valve Manufacturing Co., Ltd. was established, with a cast iron and bronze factory constructed to start integrated production.
December 1953	Accredited by Ministry of Transport with the Japanese Industrial Standards Certificate for the manufacturing process of cast iron and bronze marine valves.
March 1954	Accredited by Minister of Economy, Trade and Industry with the Japanese Industrial Standards Certificate for the manufacturing process of cast iron and bronze land valves.
October 1969	The factory moved to a newly built plant of 3,500m ² u in a site area of 10,946m ² u in Kawasebaba-cho Hikone City, Shiga Prefecture.
May 1975	Celebrated its 50th year in business.
August 1990	Introduced NC lathe and machining center to start the automated production of marine valves.
August 1995	Started the production of ductile iron 20K valves and stainless steel valves.
September 2002	Started the production of cast iron cocks.
August 2004	Started the import of materials from China.
April 2008	Started the production of cast steel valves.
November 2011	Started the production of ship equipment.
April 2013	Company name changed to Sawamura Valve Co., Ltd.