

INDUSTRIAL VALVES



**GOLDEN HIGHPE INDUSTRIAL INC.
EVERBEST VALVES & FITTINGS MFG. CO., LTD (For China's Shipment)**

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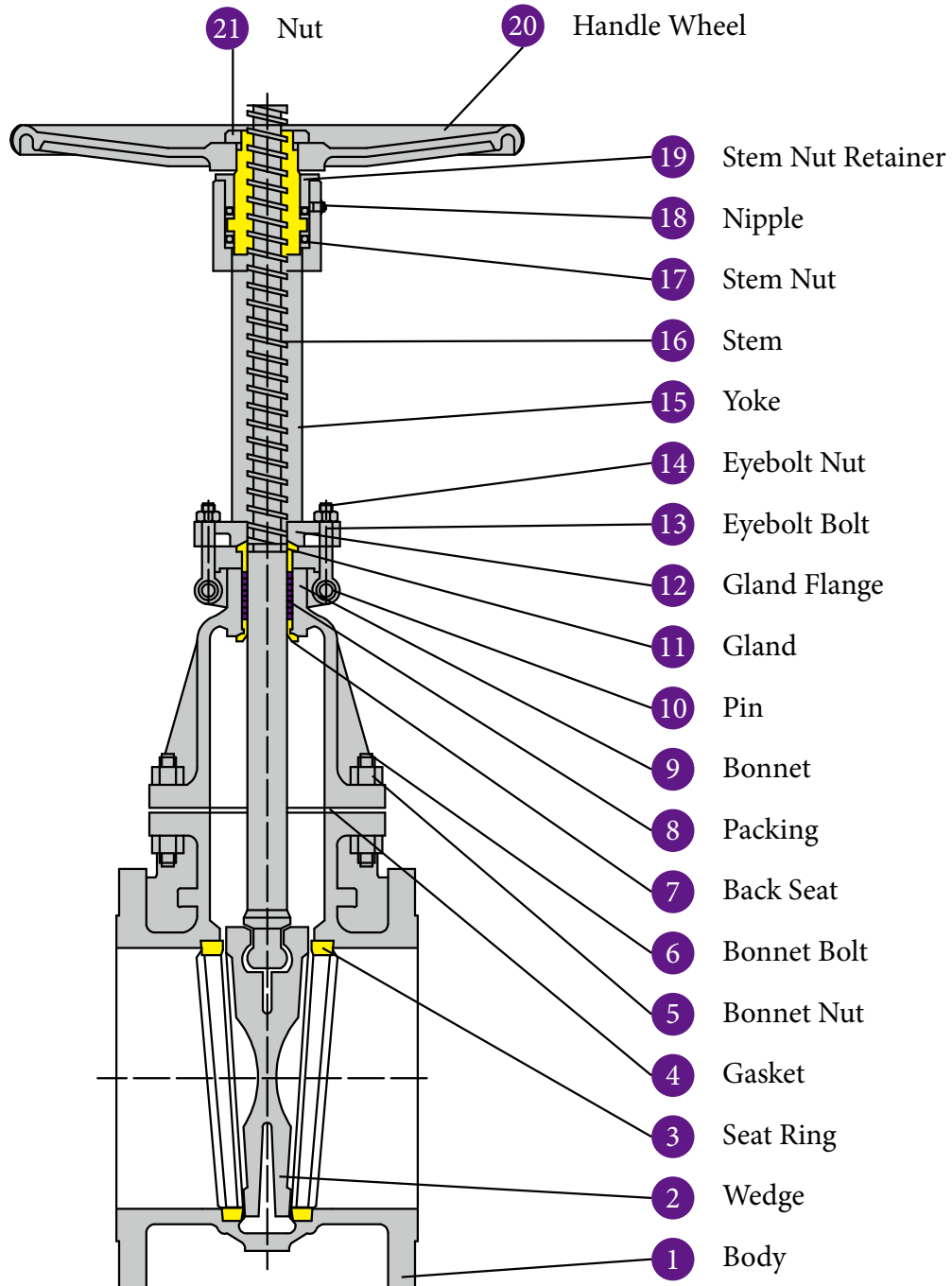
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API600 Cast Steel Gate Valve With Fixed Handlewheel and Rising Stem



Design Standard

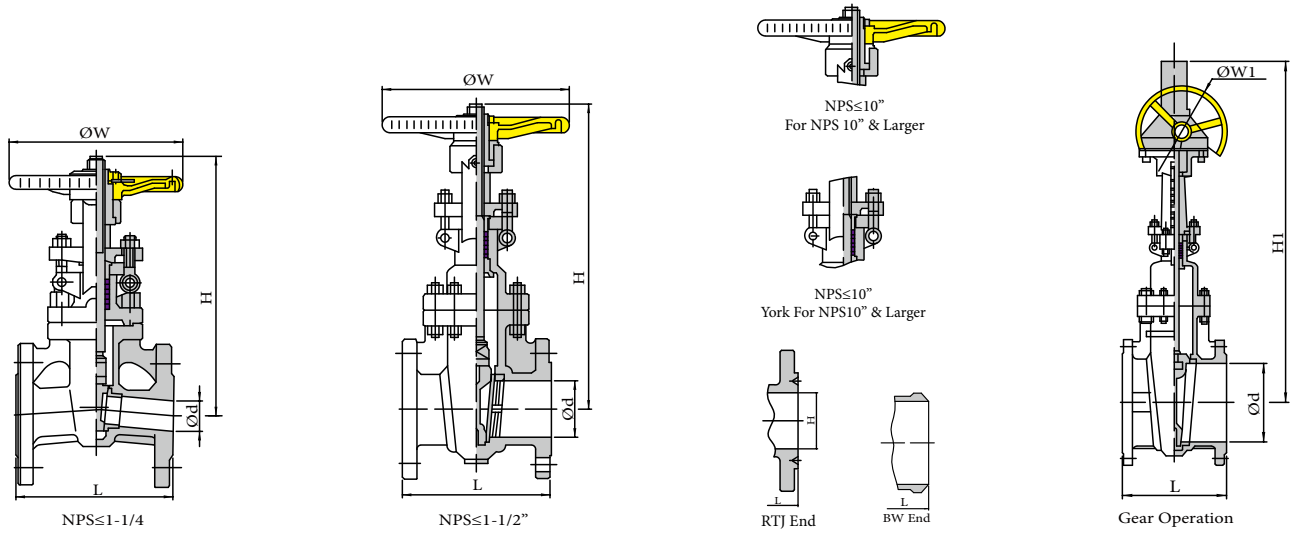
- 1.Design and manufacture:API600(ISO 10434)or API 6D
- 2.Inspection and testing:API 598,ISO 5208,API 600 or API 6D
- 3.Flange ends dimension:ASME B16.5(for NPS 24),ASME B16.47 series B, API 605 or ASME B16.47 series A,MSS SP-44(for NPS>24)
- 4.Butt-welded ends dimension:ASMEB16.25
- 5.Face to face and end to end:ASME B16.10
- 6.Pressure-temperature ratings:ASME B16.34

Trim material according to API600/ISO 10434

Trim No.	Disc Surfaces	Seat Surfaces	Stem & Back Seat Material
1	13Cr	13Cr	F6a
2	18Cr-8Ni	18Cr-8Ni	F304
3	25Cr-20Ni	25Cr-20Ni	25Cr-20Ni
5	Stellite	Stellite	F6a
6	13Cr	CuNi	F6a
8	13Cr	Stellite	F6a
9	NiCu alloy	NiCu alloy	NiCu alloy
10	18Cr-8Ni-Mo	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	NiCu alloy	Stellite	NiCu alloy
12	18Cr-8Ni-Mo	Stellite	18Cr-8Ni-Mo
13	19Cr-29Ni	19Cr-29Ni	19Cr-29Ni
14	19Cr-29Ni	Stellite	19Cr-29Ni

No.	Part Name	Carbon Steel		Alloy Steel		Stainless Steel	
		WCB	LCB	WC6	WC9	CF8	CF8M
1	Body	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A351 CF8	A351 CF8M
2	Wedge	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A351 CF8	A351 CF8M
3	Seat Ring	A105+13Cr	A350 LF2	A182 F11	A182 F22	A182 F304	A182 F316
4	Gasket	Soft Graphite+SS304					
5	Bonnet Nut	A194 2H	A194 4	A194 7	A194 7	A194 8	A194 8M
6	Bonnet Bolt	A193 B7	A193 L7	A193 B16	A193 B16	A193 B8	A193 B8M
7	Back Seat	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F316
8	Packing	Soft Graphite or PTFE					
9	Bonnet	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A351 CF8	A351 CF8M
10	Pin	A276 TYPE 410					
11	Gland	A182 F6	A182 F6	A182 F6	A182 F6	A182 F304	A182 F316
12	Gland Flange	A216 WCB	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8
13	Eyebolt Bolt	A193 B7	A193 B7	A193 B7	A193 B7	A193 B8	A193 B8
14	Eyebolt Nut	A194 2H	A194 2H	A194 2H	A194 2H	A194 8	A194 8
15	York	A216 WCB	A216 WCB	A217 WC6	A217 WC9	A351 CF8	A351 CF8M
16	Stem	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F316
17	Stem Nut	A536,Bronze,A439 D2					
18	Nipple	Brass+Steel					
19	Stem Nut Retainer	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
20	Handwheel	Ductile Iron or Steel	Ductile Iron or Steel	Ductile Iron or Steel	Ductile Iron or Steel	Ductile Iron or Steel	Ductile Iron or Steel
21	Handwheel Nut	Cast Steel	Cast Steel	Cast Steel	Cast Steel	Cast Steel	Cast Steel

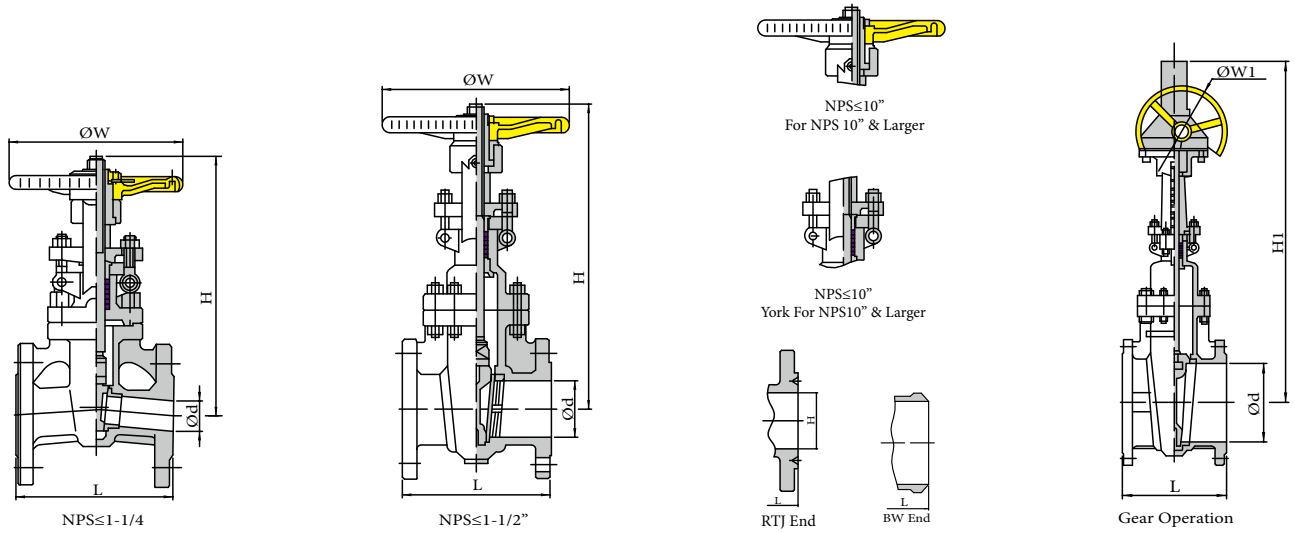
API Cast Steel Gate Valve Class 150



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)		Toqure (N.M)
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated	
			RF	RTJ	BW								
150	1/2"	15	108	119	108	14	195	-	120	-	4	-	
	3/4"	20	117	130	117	19	210	-	120	-	5	-	
	1"	25	127	140	127	25	240	-	140	-	7	-	
	1-1/4"	32	140	153	140	32	300	-	180	-	10	-	
	1-1/2"	40	165	178	165	38	395	-	200	-	14	-	12
	2"	50	178	191	216	51	400	-	200	-	19	-	13
	2-1/2"	65	191	203	241	64	435	-	200	-	25	-	13
	3"	80	203	216	283	76	515	-	250	-	33	-	15
	4"	100	229	241	305	102	595	-	280	-	49	-	27
	5"	125	254	267	381	127	725	-	280	-	62	-	
	6"	150	267	279	403	152	780	820	300	310	77	104	36
	8"	200	292	305	419	203	975	1020	350	310	123	150	63
	10"	250	330	343	457	254	1150	1200	400	310	188	215	84
	12"	300	356	368	502	305	1380	1430	450	310	288	315	131
	14"	350	381	394	572	337	1545	1580	500	310	385	435	151
	16"	400	406	419	610	387	1733	1780	500	460	500	552	235
	18"	450	432	445	660	438	1915	1990	500	460	601	653	285
	20"	500	457	470	711	489	2122	2220	600	460	764	816	341
24"	600	508	521	813	591	2520	2600	600	460	1007	1185	602	
26"	650	559	-	864	633	-	2800	-	600	-	1550	-	
28"	700	610	-	914	684	-	3050	-	600	-	1880	-	
30"	750	610	-	914	735	-	3130	-	600	-	2300	1079	
32"	800	711	-	965	779	-	3280	-	600	-	2550	-	
34"	850	762	-	1016	830	-	3500	-	600	-	2950	-	
36"	900	711	-	1016	874	-	3720	-	600	-	3390	1497	

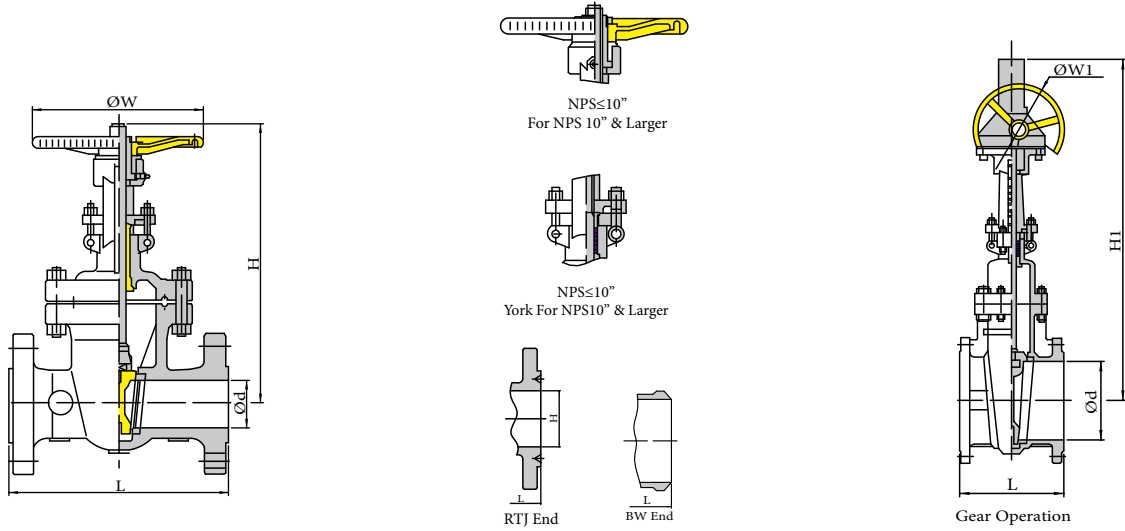
API Cast Steel Gate Valve Class 300



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)		Toqure (N.M)
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated	
			RF	RTJ	BW								
300	1/2"	15	140	151	140	14	198	-	120	-	6	-	-
	3/4"	20	152	165	152	19	215	-	140	-	7	-	-
	1"	25	165	178	165	25	245	-	160	-	10	-	-
	1-1/4"	32	178	191	178	32	306	-	180	-	15	-	-
	1-1/2"	40	190	203	190	38	400	-	200	-	21	-	15
	2"	50	216	232	216	51	420	-	200	-	25	-	16
	2-1/2"	65	241	257	241	64	446	-	200	-	30	-	18
	3"	80	283	298	283	76	537	-	250	-	48	-	21
	4"	100	305	321	305	102	619	650	280	310	73	100	42
	5"	125	381	397	381	127	722	750	300	310	99	126	-
	6"	150	403	419	403	152	806	835	350	310	130	186	86
	8"	200	419	435	419	203	1000	1030	400	310	208	235	128
	10"	250	457	473	457	254	1240	1280	450	310	334	386	215
	12"	300	502	518	502	305	1425	1460	500	310	450	502	289
	14"	350	762	778	762	337	1585	1620	600	460	704	756	423
	16"	400	838	854	838	387	1790	1830	500	460	923	965	537
	18"	450	914	930	914	438	1960	2000	650	460	1131	1224	649
	20"	500	991	1010	991	489	2158	2220	750	460	1345	1400	1009
24"	600	1143	1165	1143	591	2576	2620	900	600	2122	2385	1451	
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	3140	
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	4293	

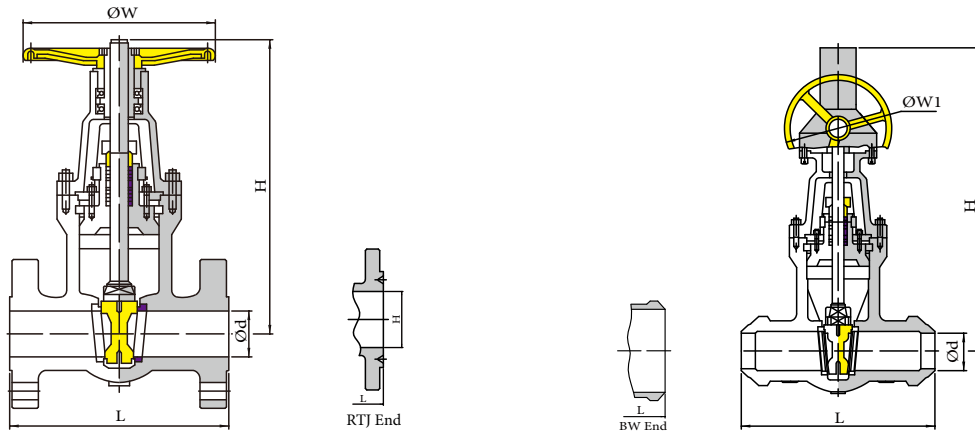
API Cast Steel Gate Valve Class 600 & 900



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)		Toqure (N.M)
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated	
			RF	RTJ	BW								
600	2"	50	292	295	292	51	444	-	200	-	32	-	23
	2-1/2"	65	330	333	330	64	500	-	250	-	52	-	-
	3"	80	356	359	356	76	558	585	280	310	60	87	50
	4"	100	432	435	432	102	665	695	300	310	107	134	68
	5"	125	508	511	508	127	760	790	350	310	175	227	-
	6"	150	559	562	559	152	868	900	450	310	216	268	183
	8"	200	660	664	660	203	1073	1110	500	310	399	451	270
	10"	250	787	791	787	254	1263	1300	650	460	605	657	479
	12"	300	838	841	838	305	1600	1650	700	460	851	893	650
	14"	350	889	892	889	337	1705	1750	900	460	1177	1232	988
	16"	400	991	994	991	387	1835	1900	900	460	1513	1568	1243
	18"	450	1092	1095	1092	438	-	2020	-	600	-	1980	1512
	20"	500	1194	1200	1194	489	-	2172	-	600	-	2460	2185
24"	600	1397	1407	1397	591	-	2650	-	600	-	3650	3503	
900	2"	50	368	371	368	51	500	-	280	-	70	-	39
	2-1/2"	65	419	422	419	64	550	-	280	-	110	-	56
	3"	80	381	384	381	76	610	660	300	310	140	167	64
	4"	100	457	460	457	102	702	750	350	310	200	227	118
	5"	125	559	562	559	127	850	900	400	310	258	285	-
	6"	150	610	613	610	152	980	1060	500	460	358	410	243
	8"	200	737	740	737	203	1100	1140	650	460	550	600	427
	10"	250	838	841	838	254	1320	1370	700	460	1000	1100	783
	12"	300	965	968	965	305	1500	1560	900	460	1215	1310	1163
	14"	350	1029	1038	1029	322	1900	1950	900	600	1600	1700	1131
16"	400	1130	1140	1130	373	2050	2100	900	600	2150	2330	-	

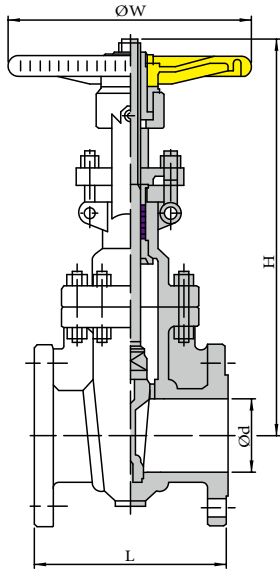
API Cast Steel Gate Valve Class 1500 & 2500



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)		Toqure (N.M)
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated	
			RF	RTJ	BW								
1500	2"	50	368	371	368	51	510	-	280	-	70	-	54
	2-1/2"	65	419	422	419	64	560	-	300	-	110	-	76
	3"	80	470	473	470	76	620	670	350	310	175	202	108
	4"	100	546	549	546	102	728	770	400	310	270	300	167
	5"	125	673	676	673	127	870	920	450	310	378	405	-
	6"	150	705	711	705	144	1000	1070	500	460	520	575	426
	8"	200	832	841	832	192	1130	1180	750	460	820	915	801
	10"	250	991	1000	991	239	1360	1410	900	600	1560	1750	1268
	12"	300	1130	1146	1130	287	-	1620	-	600	-	2120	2087
	14"	350	1257	1276	1257	315	-	2020	-	600	-	2600	2392
16"	400	1384	1407	1384	360	-	2180	-	600	-	3450	-	
2500	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	-	

API Cast Steel Gate Valve Class 150 & 300



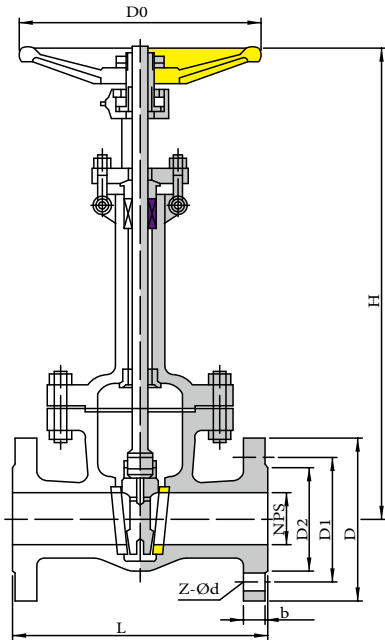
- 1.Design and manufacture:API603
- 2.Inspection and testing:API 598
- 3.Flange ends dimension:ASME B16.5
- 5.Face to face and end to end:ASME B16.10
- 6.Pressure-temperature ratings:ASME B16.34

Size		Class 150					Class 300				
NPS	DN	Dimension(mm)				Weight (kg)	Dimension(mm)				Weight (kg)
		L	d	H	W		L	d	H	W	
1/2"	15	108	14	195	120	3	140	14	198	120	5
3/4"	20	117	19	210	120	4	152	19	215	140	6
1"	25	127	25	240	140	6	165	25	245	160	9
1-1/4"	32	140	32	300	180	8	178	32	306	180	12
1-1/2"	40	165	38	395	200	12	190	38	400	200	18
2"	50	178	51	400	160	16	216	51	400	200	22
2-1/2"	65	191	64	420	160	22	241	64	435	200	26
3"	80	203	76	485	200	28	283	76	515	250	41
4"	100	229	102	580	250	42	305	102	600	280	62
5"	125	254	127	710	250	53	381	127	715	300	84
6"	150	267	152	741	280	65	403	152	780	350	110
8"	200	292	203	960	300	105	419	203	980	400	177
10"	250	330	254	1055	350	160	457	254	1200	400	284
12"	300	356	305	1352	400	245	502	305	1400	400	382
14"	350	381	337	1520	400	328	762	337	1560	500	598
16"	400	406	387	1734	500	425	838	387	1760	500	785

API Cryogenic Gate Valve

Products Specification

Products Specification	Design Spec	Face to Face	Flange End	Test & Check	Pressure-Temp.	Marking	Supply
	API 600	ANSI B16.10	ANSI B16.5	API 598	ANSI B16.34	MSS SP-25	API 600



Chief Features

1. Full Port, Outside Screw And Yoke (Os&Y)
2. Bolted Bonnet
3. Flexible Wedge, Full Guided
4. Structure Improve On Api
5. Extension Holding Neck
6. Available With Gear Operator
7. Flange Ends

Major Parts Material Form

Part Name	Part Material						
Body	A352-LCB	A352-LC1	A352-LC2	A352-LC3	A352-LC4	A351-CF8	A351-CF3
Bonnet	A352-LCB	A352-LC1	A352-LC2	A352-LC3	A352-LC4	A351-CF8	A351-CF3
Wedge	A352-LCB	A352-LC1	A352-LC2	A352-LC3	A352-LC4	A351-CF8	A351-CF3
Stem	A182-F431			A182-F304			A182-F304
Hard Trim	STL+STL			STL+STL			STL+STL
Packing	Flexible Graphite/PTFE						
Gasket	18-8 Flexible Graphite						
Bolt	A193-B7M			A193-B8		A193-B8M	
Suitable Temp.	-46° C	-60° C	-73° C	-101° C	-115° C	-196° C	-196° C
Suitable Medium	Propane, Propylene, Methanol, Ethanol, Coal-Gas, Liquid Ammonia						

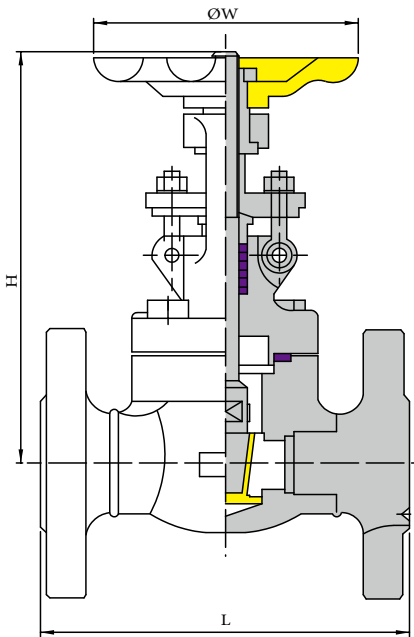
Main Size of Outside & Weight

DN		150LB RF							
mm	in	L	D	D1	D2	b	n-Ød	H	D0
25	1"	127	108	79.2	51	14.2	4-Ø16	350	120
32	1-1/4"	140	117	89.0	63	16.0	4-Ø16	385	120
40	1-1/2"	165	127	98.6	73	17.5	4-Ø16	420	150
50	2"	178	152	120.7	92	19.0	4-Ø19	540	150
65	2-1/2"	190	178	139.7	105	22.4	4-Ø19	610	180
80	3"	203	190	152.4	127	24.0	4-Ø19	690	200
100	4"	229	229	190.5	157	24.0	8-Ø19	780	200
125	5"	254	254	216.0	186	24.0	8-Ø22.5	930	250
150	6"	267	279	241.3	216	25.4	8-Ø22.5	980	250
200	8"	292	343	298.5	270	28.4	8-Ø22.5	1180	280
250	10"	330	406	362.0	324	30.2	12-Ø25.4	1390	300
300	12"	356	483	431.8	381	32.0	12-Ø25.4	1620	350
350	14"	381	533	476.3	413	35.0	12-Ø29	1810	350
400	16"	406	597	539.8	470	36.6	16-Ø29	1970	400
300LB RF									
50	2"	216	165	127.0	92	22.4	8-Ø19	575	200
65	2-1/2"	241	190	149.4	105	25.4	8-Ø22.5	635	240
80	3"	283	210	168.1	127	28.4	8-Ø22.5	715	280
100	4"	305	254	200.2	157	31.8	8-Ø22.5	815	300
125	5"	381	279	235.0	186	35	8-Ø22.5	965	350
150	6"	403	318	269.7	216	36.6	12-Ø22.5	1025	400
200	8"	419	381	330.2	270	41.2	12-Ø25.4	1225	400
250	10"	457	444	387.4	324	47.8	16-Ø28.5	1440	450
300	12"	502	521	450.8	381	50.8	16-Ø32	1665	500
350	14"	762	584	514.4	413	54	20-Ø32	1880	600
400	16"	838	648	571.5	470	57.2	20-Ø35	2050	650
600LB RF									
50	2"	292	165	127.0	92	33	8-Ø19	630	280
65	2-1/2"	330	190	149.4	105	36	8-Ø22.5	700	300
80	3"	356	210	168.1	127	39	8-Ø22.5	760	300
100	4"	432	273	216.0	157	45	8-Ø25.4	900	400
125	5"	508	330	266.7	186	52	8-Ø28.5	990	450
150	6"	559	356	292.1	216	55	12-Ø28.5	1070	500
200	8"	660	419	349.3	270	63	12-Ø32	1280	600
250	10"	787	508	431.8	324	71	16-Ø35	1500	650
300	12"	838	559	489.0	381	74	20-Ø35	1740	700

Forged Steel Gate Valve

Design Construction

1. Structural Formation: Bolt(Weld)-Jointed Bonnet Outside Stem York Structure
2. Driving Manner: Hand-Operated
3. Design Standard: API 602, BS5352
4. Face to Face: ASME B16.10
5. Flange Ends: ASME B16.5
6. Test & Inspection: API598



Major Parts Material Form		
Part Name	Part Material	
1	Flange	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
2	Body	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
3	Seat	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
4	Gate disc	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
5	Stem	ASTM A182Gr.F6a,ASTM A182F22 ASTM A182-F304,F316,F321,F304L,F316L
6	Gasket	Graphite & Stainless steel
7	Bonnet	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
8	Bolt	ASTM A193-B7,A320-B8,F321,F304L,F316L
9	Packing	Graphite
10	Press-sleeve	ASTM A182Gr.F6a,ASTM A182F22 ASTM A182-F304,F316,F321,F304L,F316L
11	Packing gland	ASTM A216-WCB ASTM A351-CF8,CF8M,CF8C,CF3,CF3M
12	Stem nut	Copper alloy
13	Handwheel	ASTM A47-32510

Main Size of Outside & Weight

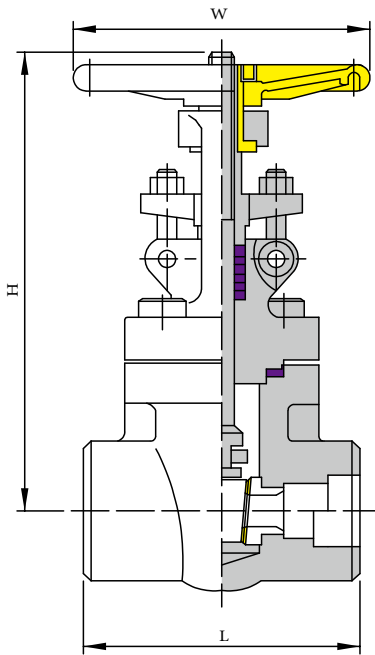
Class		150					300					600				
DN		L		H ^①	W	Weight (kg)	L		H ^①	W	Weight (kg)	L		H ^①	W	Weight (kg)
mm	in	RF	RTJ				RF	RTJ				RF	RTJ			
15	1/2	108	119	160	100	4.5	140	151	160	100	4.8	165	163.5	160	100	5.8
20	3/4	117.5	130	165	100	5.1	152.5	165	165	100	6.2	190.5	190.5	165	100	7.5
25	1	127	140	192	125	8.5	165	178	192	125	9.4	216	216	192	125	10.3
32	1-1/4	140	153	220	160	11.5	178	191	220	160	14.2	229	229	220	160	16.3
40	1-1/2	165	178	245	160	11.2	190.5	203	245	160	15.5	241	241	245	160	17.5
50	2	178	216	285	180	20	216	232	285	180	23.5	292	295	285	180	28.4

Notes: H represents the height in full opening condition of valve.

Forged Steel Gate Valve

Design Construction

1. Structural Formation: Bolt(Weld)-Jointed Bonnet Outside Stem York Structure
2. Driving Manner: Hand-Operated
3. Design Standard: API 602, BS5352
4. Threaded Ends: ASME B1.20.1
5. Socket welded Ends: ASME B16.11
6. Test & Inspection: API598

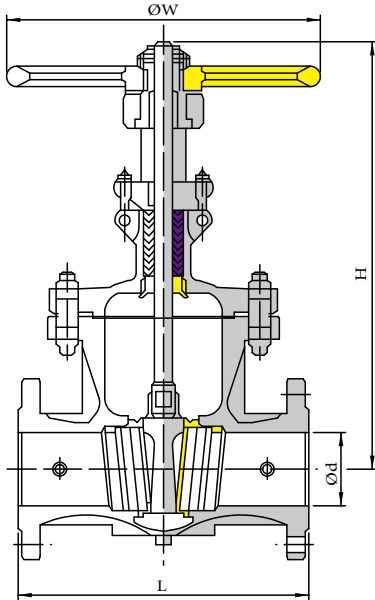


Major Parts Material Form		
Part Name	Part Material	
1	Body	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
2	Seat	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
3	Gate Disc	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
4	Stem	ASTM A182Gr.F6a,ASTM A182F22 ASTM A182-F304,F316,F321,F304L,F316L
5	Gasket	Graphite & Stainless steel
6	Bonnet	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
7	Bolt	ASTM A193-B7,A320-B8,F321,F304L,F316L
8	Packing	Graphite
9	Packing Gland	ASTM A216-WCB ASTM A351-CF8,CF8M,CF8C,CF3M
10	Valve Stem Nut	Copper alloy
11	Handwheel	ASTM A47-32510

Main Size of Outside & Weight											
Class				800				1500			
DN				Dimension				Dimension			
Reduce bore		Full bore		L	H ①	W	Weight (kg)	L	H ①	W	Weight (kg)
mm	in	mm	in								
15	1/2	10	3/8	80	160	100	1.9	111	203	125	4.2
20	3/4	15	1/2	92	165	100	2.1	111	203	125	4.6
25	1	20	3/4	111	192	125	3.2	115	216	160	6.2
32	1-1/4	25	1	120	220	160	6.9	120	235	160	8.2
40	1-1/2	32	1-1/4	120	245	160	6.9	140	275	180	11.0
50	2	40	1-1/2	140	285	180	10.4	162	320	200	15.8
		50	2	172	392	200	15.8	180	368	250	24.5

Notes: H represents the height in full opening condition of valve.

Jacket Insulation Gate Valve PN1.6/2.5/4.0



Design Construction

- 1.Design Manufacture According:GB12234-89
- 2.Face to Face According:GB12221-89
- 3.Flange Dimension According:JB/T79-94
- 4.Valve Check and Test According:GB13927

Parts Material

Item	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1CR18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	WCB
Body/Cap	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1CR18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	WCB
Wedge	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1CR18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	1Cr13
Stem	1Cr18Ni9Ti	00Cr18Ni10	1Cr18Ni12MO ₂ Ti	00Cr17Ni14MO ₂	1Cr13
Packing	PTFE	PTFE	PTFE	PTFE	Graphite
Gasket	304L+PTFE	304+PTFE	304L+PTFE	316+PTFE	Graphite+304
Gland Flange	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1CR18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	WCB
Stuffing Ring	1Cr18Ni9Ti	00Cr18Ni10	1Cr18Ni12MO ₂ Ti	00Cr17Ni14MO ₂	1Cr13
Bolt	1Cr17Ni2	1Cr17Ni2	1Cr17Ni2	1Cr17Ni2	35CrMoA
Nut	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	45

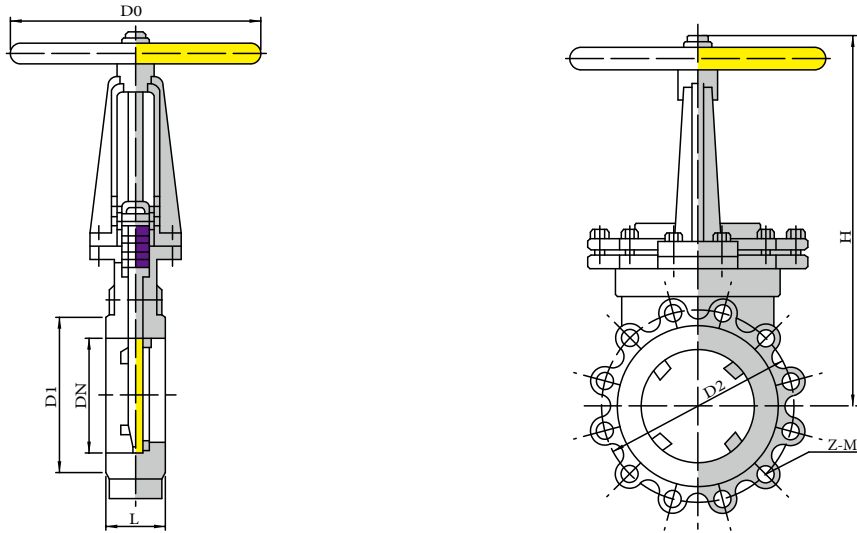
Main Connection Dimension

PN(Mpa)	Dimension	DN	40	50	65	80	100	125	150	200	250	300
1.6	L	mm	200	250	265	280	300	325	350	400	450	500
	H	mm	310	358	373	435	500	614	674	818	969	1145
	W	mm	200	240	240	280	300	320	360	400	450	560

PN(Mpa)	Dimension	DN	40	50	65	80	100	125	150	200	250	300
2.5	L	mm	200	250	265	280	300	325	350	400	450	500
	H	mm	358	373	435	500	614	674	818	969	1145	1145
	W	mm	240	240	280	300	320	360	400	450	560	640

PN(Mpa)	Dimension	DN	40	50	65	80	100	125	150	200	250	300
4.0	L	mm	200	250	280	310	350	400	450	550	650	750
	H	mm	358	373	435	500	614	674	818	969	1145	1145
	W	mm	240	240	280	300	320	360	400	450	560	640

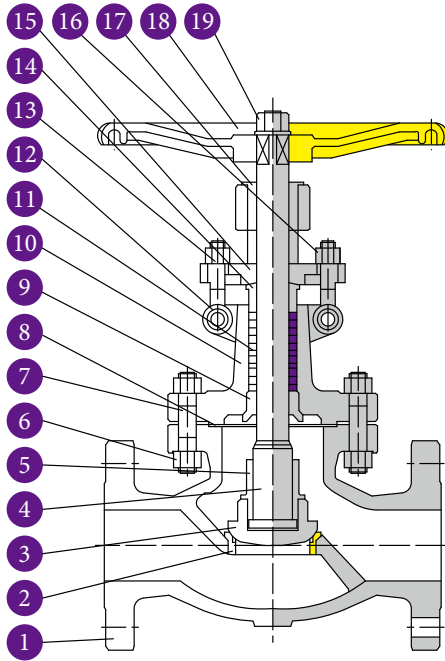
Knife Gate Valve PN1.0/1.6



Main Size of Outside & Weight

PN(Mpa)	DN	L	D	D1	D2	Z-M	H	D0	W
1.0	50	48	160	125	100	4-M16	285	180	8
	65	48	180	145	120	4-M16	298	180	10
	80	50	195	160	135	4-M16	315	220	12
	100	50	215	180	155	8-M16	365	220	14
	150	57	280	240	210	8-M20	475	280	29
	200	70	335	295	265	8-M20	540	360	38
	250	70	390	350	320	12-M20	630	360	66
	300	76	440	400	368	12-M20	780	400	100
	350	76	500	460	428	16-M20	885	400	119
	400	89	565	515	482	16-M22	990	400	195
	450	89	615	565	532	20-M22	1100	530	285
	500	114	670	620	585	20-M22	1200	530	389
1.6	50	48	165	125	99	4-M16	285	180	8.5
	65	48	185	145	118	4-M16	298	180	10.7
	80	50	200	160	132	8-M15	315	220	13
	100	50	220	180	156	8-M16	365	220	15
	150	57	285	240	211	8-M20	475	280	31
	200	70	340	295	266	12-M20	540	360	40.7
	250	70	405	355	319	12-M24	630	360	70
	300	76	460	410	370	12-M24	780	400	107
	350	76	520	470	429	16-M24	885	400	129
	400	89	580	525	480	16-M27	990	400	215
	450	89	640	585	548	20-M27	1100	530	305
	500	114	715	650	609	20-M30	1200	530	410
600	114	840	775	720	20-M33	1450	600	550	

API Cast Steel Globe Valve

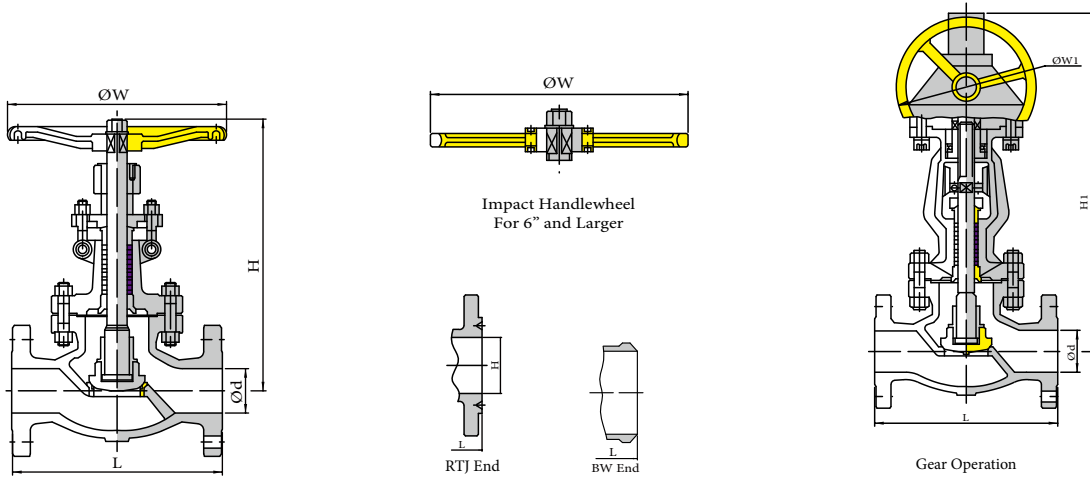


Design Construction

- 1.Design and Manufacture:BS 1873
- 2.Inspection and Test:API598,ISO5208
- 3.Flange ends Dimension:ASME B16.5
- 4.Butt-welded ends Dimension:ASME B16.25
- 5.Face to Face and End to End:ASME B16.10
- 6.Pressure-Temperature ratings:ASME B16.34

No.	Part Name	WCB/Trim1	WCB/Trim5	WCB/Trim8	CF8/304	CF8M/316
1	Body	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
2	Seat Ring	A105+13Cr	A105+STL	A105+STL	A351 CF8	A351 CF8M
3	Disc	A216 WCB+13Cr	A216 WCB+STL	A216 WCB+13Cr	A351 CF8	A351 CF8M
4	Stem	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316
5	Disc Nut	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
6	Bonnet Nut	A194 2H	A194 2H	A194 2H	A194 8	A194 8M
7	Bonnet Bolt	A193 B7	A193 B7	A193 B7	A193 B8	A193 B8M
8	Gasket	304 Sheet+Graphite	304 Sheet+Graphite	304 Sheet+Graphite	304+Graphite	316+Graphite
9	Backseat Bushing	A182 F6a	A182 F6a	A182 F6a	A351 CF8	A351 CF8M
10	Bonnet	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
11	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
12	Eyebolt Pin	ASTM A36	ASTM A36	ASTM A36	SS304	SS316
13	Gland Eyebolt	A193 B7	A193 B7	A193 B7	A193 B8	A193 B8M
14	Gland	A182 F6a	A182 F6a	A182 F6a	A182 F304	A351 F316
15	Gland Flange	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
16	Eyebolt Nut	A194 2H	A194 2H	A194 2H	A194 8	A194 8M
17	Stem Nut	A439 D2	A439 D2	A439 D2	A439 D2	A439 D2
18	Handwheel	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron
19	Handwheel Nut	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel

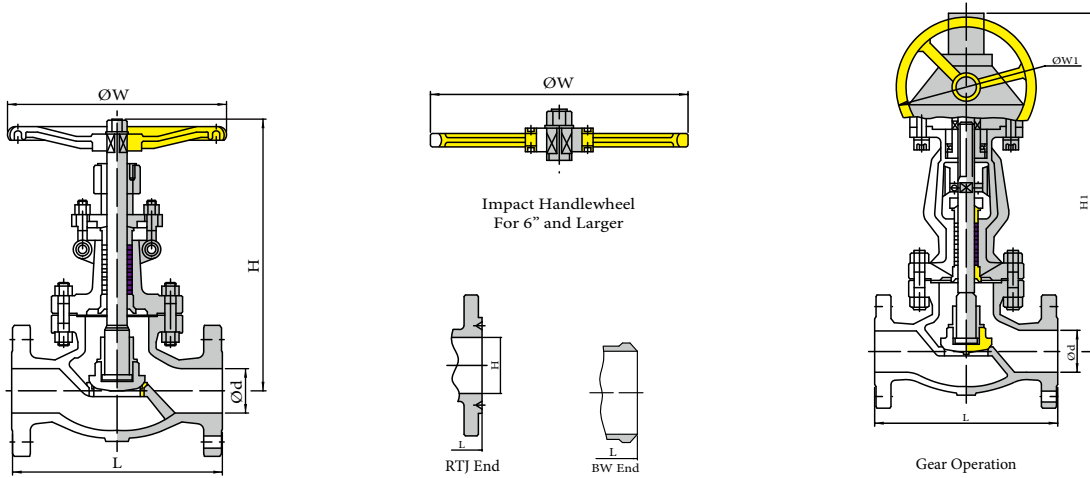
API Cast Steel Globe Valve Class 150



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated
			RF	RTJ	BW							
150	1/2"	15	108	119	108	13	182	-	100	-	4	-
	3/4"	20	117	130	117	19	193	-	100	-	6	-
	1"	25	127	140	127	25	217	-	100	-	8	-
	1-1/4"	32	140	153	140	32	235	-	135	-	12	-
	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	

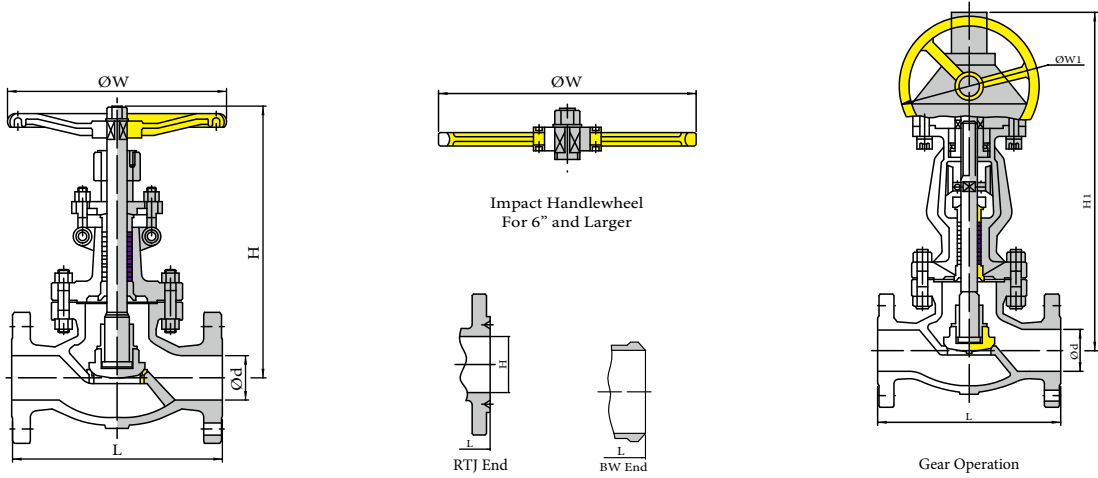
API Cast Steel Globe Valve Class 300



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated
			RF	RTJ	BW							
300	1/2"	15	152	164	152	14	185	-	100	-	5	-
	3/4"	20	178	191	178	19	195	-	100	-	7	-
	1"	25	203	216	203	25	220	-	135	-	10	-
	1-1/4"	32	216	229	216	32	240	-	135	-	14	-
	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	

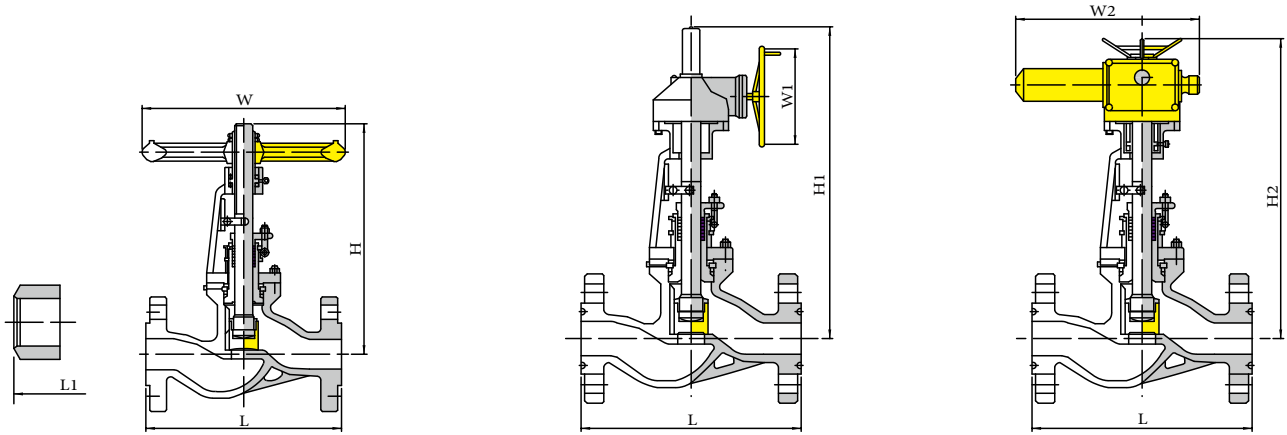
API Cast Steel Globe Valve Class 600 & 900



Main Size of Outside & Weight

Class	Size		Dimension(mm)								Weight(kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand Wheel	Gear Operated
			RF	RTJ	BW							
600	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
900	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

API Cast Steel Globe Valve Class 900/1500/2500



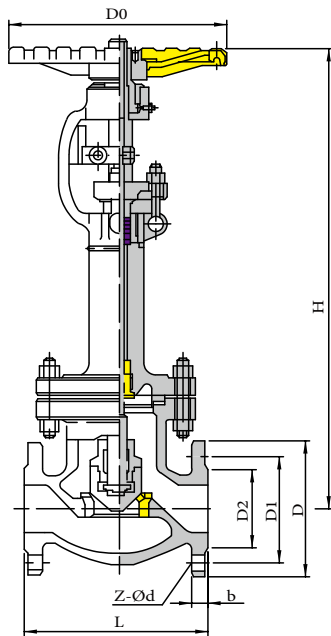
Main Size of Outside & Weight

Class	Driving				Hand Operated			Gear Operated				Electric Operated			
	NPS	DN	Flanged	Butt-Welded	H	W	Weight (kg)	H1	W1	Gear Device	Weight (kg)	H2	W2	Torque (NM)	Weight (kg)
			L	L1											
900	2"	50	371	368	470	350	110	-	-	-	-	-	-	-	-
	2-1/2"	65	422	419	560	400	130	-	-	-	-	-	-	-	-
	3"	80	384	381	685	400	140	-	-	-	-	-	-	-	-
	4"	100	460	457	830	500	230	880	460	BA-1	250	880	809	900	382
	6"	150	613	610	-	-	-	1135	460	BA-1	500	1135	809	1200	635
	8"	200	740	737	-	-	-	1495	610	BA-2	900	1495	863	1800	1155
	10"	250	841	838	-	-	-	1960	610	BA-2	1200	1960	863	2000	1455
1500	2"	50	371	368	535	400	130	-	-	-	-	-	-	-	-
	2-1/2"	65	422	419	670	500	175	-	-	-	-	-	-	-	-
	3"	80	473	470	838	500	245	-	-	-	-	-	-	-	-
	4"	100	549	546	1193	560	350	990	460	BA-1	370	880	809	1200	505
	6"	150	711	704	-	-	-	1280	610	BA-2	720	1135	863	1800	855
	8"	200	841	831	-	-	-	1615	610	BA-2	1370	1495	863	2500	1628
	10"	250	1000	990	-	-	-	2170	610	BA-2	1675	1960	863	2500	1933
2500	2"	50	454	451	650	500	180	-	-	-	-	-	-	-	-
	2-1/2"	65	514	508	840	560	250	-	-	-	-	-	-	-	-
	3"	80	584	578	990	600	350	-	-	-	-	-	-	-	-
	4"	100	683	673	1210	680	580	1090	610	BA-2	615	1090	863	1800	870
	6"	150	927	814	-	-	-	1470	610	BA-2	990	1470	863	2500	1248
	8"	200	1038	1022	-	-	-	1735	610	BA-2	1620	1735	960	3000	2050

API Cryogenic Globe Valve

Products Specification

PN Nominal Pressure	1.6	2.5	4.0
Shell Test	2.4	3.8	6.0
Water Seal Test	1.8	2.8	4.4
Back Seal Test	1.8	2.8	4.4
Air Seal Test	0.4~0.7		



Design Construction

- 1.Design and Manufacture:JIS/T7749
- 2.Face to Face:API/T 12221
- 3.Flange Ends Dimension:JIS/T79
- 4.Pressure-Temperature ratings:API/T 9131
- 5.Inspection and Test:JIS/T 9092

Major Parts Material Form

Body Cover Disc	Stem	Sealing face	Shim	Packing	Working Temperature	Suitable Medium
LCB	1Cr17Ni12	STL/STL	1CR13 1CR13/Flexible Graphite SUB-Zero Asbestos	PTFE Asbestos String With PTFE Soaked Fletible Graphite	-46	Propane Propylene Methanol Coal-Gas Liquid Ammonia
LC1					-60	
LC2					-73	
LC3	1Cr18Ni9Ti				-101	
LC4					-115	
CF8					-196	

Main Size of Outside & Weight

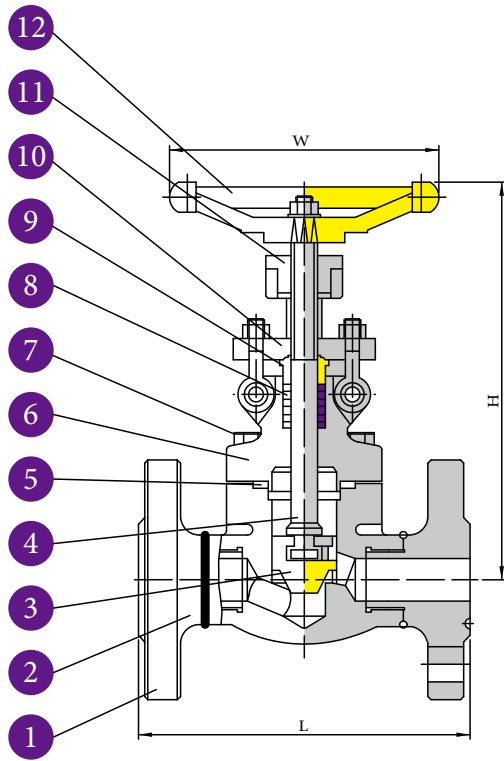
Type	NPS	DN							D0	H			Weight (kg)
	in	mm	L	D	D1	D2	b	Z-Ød		-46°C	-101°C	-196°C	
DJ41Y 150LB	2"	50	203	152	120.5	92	16	4-Ø19	224	460	480	520	15
	3"	80	241	190	152.5	127	19	4-Ø19	250	520	550	590	28
	4"	100	292	229	190.5	157	24	8-Ø19	350	545	575	615	32
	5"	125	356	254	216	186	24	8-Ø22	350	590	620	660	88
	6"	150	406	279	241.5	216	26	8-Ø22	355	650	680	730	96
	8"	200	495	343	298.6	270	29	8-Ø22	400	850	880	930	155
	10"	250	611	406	362	324	31	12-Ø25	500	956	986	1036	425
	12"	300	698	483	432	381	32	12-Ø25	560	1095	1125	1175	641
DJ41Y 300LB	2"	50	267	165	127	92	23	8-Ø19	224	460	480	520	16
	3"	80	318	210	168.5	127	29	8-Ø22	300	520	550	590	29
	4"	100	356	254	200	157	32	8-Ø22	355	545	575	615	32
	5"	125	400	279	235	186	35	8-Ø22	355	590	620	660	90
	6"	150	444	318	270	216	37	12-Ø22	450	650	680	730	98
	8"	200	559	381	330	270	42	12-Ø25	560	850	880	930	159
	10"	250	622	445	387.5	324	48	16-Ø29	560	956	986	1036	436
	12"	300	711	521	451	381	51	16-Ø32	630	1095	1125	1175	657
DJ41Y 600LB	2"	50	292	165	127	92	26	8-Ø19	250	483	504	546	16
	3"	80	356	210	168	127	32	8-Ø22	400	546	578	620	30
	4"	100	432	273	216	157	38	8-Ø25	400	572	604	646	33
	5"	125	508	330	266.5	186	45	8-Ø29	400	620	651	693	93
	6"	150	559	356	292	216	48	12-Ø29	560	683	741	767	100
	8"	200	660	419	349	270	56	12-Ø32	630	893	924	977	163
	10"	250	787	508	432	324	64	16-Ø35	630	1004	1035	1088	447
	12"	300	838	559	489	381	67	20-Ø35	700	1150	1181	1234	673

Forged Steel Globe Valve

Design Construction

1. Structural Formation: Bolt(Weld)-Jointed Bonnet Outside Stem York Structure
2. Driving Manner: Hand-Operated
3. Design Standard: ASME B16.34, BS 5352
4. Face To Face: ASME B16.10
5. Flange Ends: ASME B16.5
6. Test & Inspection: API 598

Notes: The size of valve connecting flange and butt-welding terminas can be designed according to customer's requirement



Major Parts Material Form		
Part Name	Part Material	
1	Flange	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
2	Body	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
3	Disc	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
4	Stem	ASTM A182Gr.F6a,ASTM A182F22 ASTM A182-F304,F316,F321,F304L,F316L
5	Gasket	Graphite & Stainless steel
6	Bonnet	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
7	Bolt	ASTM A193-B7,A320-B8,A193-B8M
8	Packing	Graphite
9	Stuffing Cover	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
10	Gland	ASTM A216-WCB ASTM A351-CF8,CF8M,CF8C,CF3,CF3M
11	Stem nut	Copper alloy
12	Handwheel	ASTM A47-32510

Main Size of Outside & Weight

Class		150					300					600				
DN		Dimension(mm)				Weight(kg)	Dimension(mm)				Weight(kg)	Dimension(mm)				Weight(kg)
mm	in	L(RF)	L(RTJ)	H ^①	W		L(RF)	L(RTJ)	H ^①	W		L(RF)	L(RTJ)	H ^①	W	
15	1/2"	108	119	170	100	3.5	152.5	163.5	170	100	4.2	165	163.5	170	100	5.5
20	3/4"	117	130	170	100	4.8	178	191	170	100	5.3	190.5	190.5	170	100	7.0
25	1"	127	140	205	125	6.5	203	216	205	125	7.5	216	216	205	125	9.7
32	1-1/4"	140	153	225	160	9.8	216	229	225	160	11.3	229	229	225	160	12.5
40	1-1/2"	165	178	254	160	12	228.5	241	254	160	16.5	241	241	254	160	18.4
50	2"	203	216	292	180	15	266.5	282	292	180	18.2	292	295	292	180	20

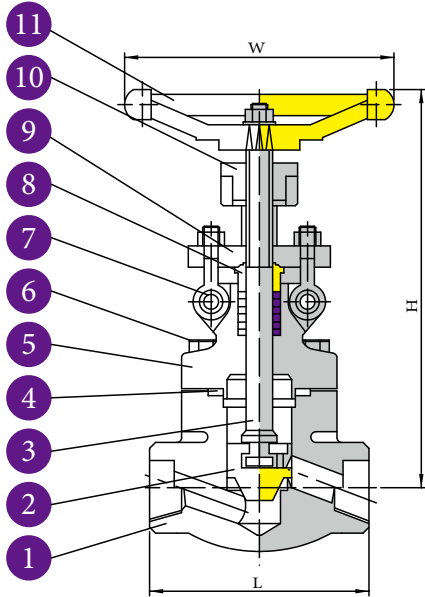
Notes: H represents the height in full opening condition of valve.

Forged Steel Globe Valve

Design Construction

1. Structural Formation: Bolt-Jointed Bonnet Outside Stem York Structure (Pressure Sealed)
2. Driving Manner: Hand-Operated
3. Design Standard: ASME B16.34, BS5352
4. Face to Face: ASME B1.20.1
5. End to End: ASME B16.11
6. Test & Inspection: API598

Notes: The size of valve connecting flange and butt-welding terminas can be designed according to customer's requirement

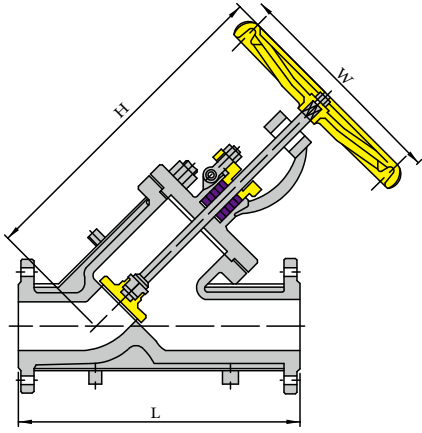


Major Parts Material Form		
Part Name	Part Material	
1	Body	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
2	Disc	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
3	Stem	ASTM A182Gr.F6a,ASTM A182F22 ASTM A182-F304,F316,F321,F304L,F316L
4	Gasket	Graphite & Stainless steel
5	Bonnet	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
6	Bolt	ASTM A193-B7,A320-B8,A193-B8M
7	Packing	Graphite
8	Stuffing Cover	ASTM A105 ASTM A182-F11,F22,F5,F9 ASTM A182-F304,F316,F321,F304L,F316L
9	Gland	ASTM A216-WCB ASTM A351-CF8,CF8M,CF8C,CF3,CF3M
10	Stem nut	Copper alloy
11	Handwheel	ASTM A47-32510

Main Size of Outside & Weight																
Class				900				1500				2500				
DN(mm)		NPS(in)		Dimension(mm)			Weight (kg)	Dimension(mm)			Weight (kg)	Dimension(mm)			Weight (kg)	
Reduce Bore	Full Bore	Reduce Bore	Full Bore	L	H ^①	W		L	H ^①	W		L	H ^①	W		
15	10	1/2"	3/8"	80	170	100	1.9	111	205	125	4.5	111	190	125	4.5	
20	15	3/4"	1/2"	92	170	100	2.1	111	205	125	4.3	127	225	140	5.5	
25	20	1"	3/4"	111	205	125	3.2	130	240	160	6.8	127	246	160	8.0	
32	25	1-1/4"	1"	120	225	160	6.9	150	258	160	8.5	180	287	160	13.2	
40	32	1-1/2"	1-1/4"	120	254	160	6.9	172	290	160	12.6	180	290	180	12.8	
50	40	2"	1-1/2"	140	292	180	10.4	220	336	180	19.2	210	362	200	19.8	
	50		2"	178	330	240	15.8	230	428	234	30	230	420	240	30	

Notes: H represents the height in full opening condition of valve.

Jacket Insulation Globe Valve PN1.6/2.5/4.0



BJ45

Design Construction

- 1.Design Manufacture According:GB12235-59
- 2.Face to Face According:GB12221-89
- 3.Flange Dimension According:JB/T79-94
- 4.Valve Check and Test According:GB13927

Structure

B.B;OS&Y

Characteristic:B.B;OS&Y

Parts Material

Item	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1Cr18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	WCB
Body/Cap	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1Cr18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	WCB
Disc	1Cr18Ni9Ti	00Cr18Ni10	1Cr18Ni12MO ₂ Ti	00Cr17Ni14MO ₂	1Cr13
Stem	1Cr18Ni9Ti	00Cr18Ni10	1Cr18Ni12MO ₂ Ti	00Cr17Ni14MO ₂	1Cr13
Packing	PTFE	PTFE	PTFE	PTFE	Graphite
Gasket	304+PTFE	304L+PTFE	316+PTFE	316L+PTFE	Graphite+304
Gland Flange	ZG1Cr18Ni9Ti	ZG00Cr18Ni10	ZG1Cr18Ni12MO ₂ Ti	ZG00Cr17Ni14MO ₂	WCB
Stuffing Ring	1Cr18Ni9Ti	00Cr18Ni10	1Cr18Ni12MO ₂ Ti	00Cr17Ni14MO ₂	1Cr13
Bolt	1Cr17Ni2	1Cr17Ni2	1Cr17Ni2	1Cr17Ni2	35CrMoA
Nut	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	45

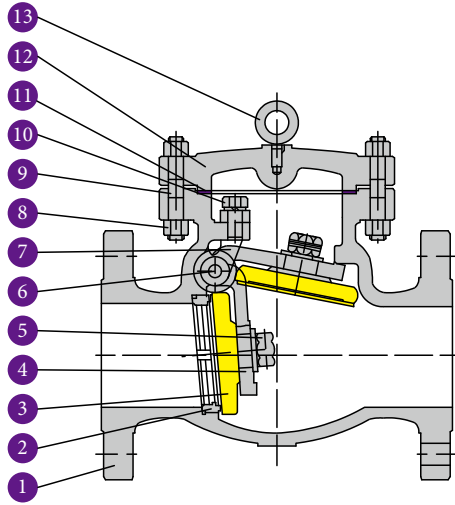
Main Connection Dimension

PN(Mpa)	Dimension	DN	15	20	25	32	40	50	65	80	100	125	150
1.6	L	mm	170	190	210	230	260	300	340	380	430	490	550
	H	mm	250	292	340	348	360	410	440	540	560	625	720
	W	mm	120	140	160	160	160	240	240	280	320	360	360

Main Connection Dimension

PN(Mpa)	Dimension	DN	15	20	25	32	40	50	65	80	100	125	150
2.5 4.0	L	mm	170	190	210	230	260	300	340	380	430	490	550
	H	mm	250	292	340	348	360	410	440	540	560	625	720
	W	mm	120	140	160	160	160	240	240	280	320	360	360

API Cast Steel Swing Check Valve

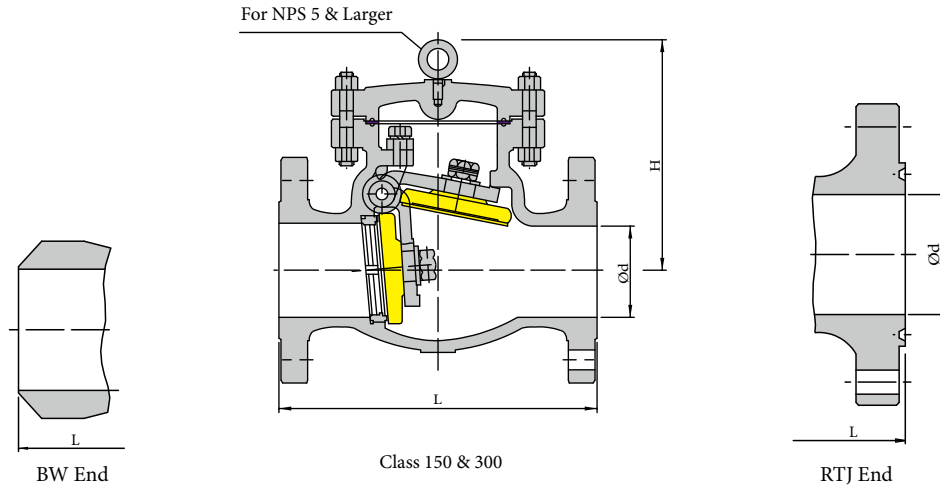


Design Construction

- 1.Design and Manufacture:BS 1868,API 6D
- 2.Inspection and Test:API598,ISO5208
- 3.Flange Ends Dimension:ASME B16.5,ASME B16.47
- 4.Butt-Welded ends Dimension:ASME B16.25
- 5.Face to Face and End to End:ASME B16.10
- 6.Pressure-Temperature Ratings:ASME B16.34

No.	Part Name	WCB/Trim1	WCB/Trim5	WCB/Trim8	CF8/304	CF8M/316
1	Body	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
2	Seat Ring	A105+13Cr	A105+STL	A105+STL	A351 CF8	A351 CF8M
3	Disc	A216 WCB+13Cr	A216 WCB+STL	A216 WCB+13Cr	A351 CF8	A351 CF8M
4	Arm	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
5	Nut	A194 2H	A194 2H	A194 2H	A194 8	A194 8M
6	Arm Pin	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316
7	Yoke	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
8	Bonnet Nut	A194 2H	A194 2H	A194 2H	A194 8	A194 8M
9	Bonnet Bolt	A193 B7	A193 B7	A193 B7	A193 B8	A193 B8M
10	Bolt	A193 B7	A193 B7	A193 B7	A193 B8	A193 B8M
11	Gasket	304 Sheet+Graphite	304 Sheet+Graphite	304 Sheet+Graphite	304+Graphite	316+Graphite
12	Bonnet	A216 WCB	A216 WCB	A216 WCB	A351 CF8	A351 CF8M
13	Eye Bolt	A181	A181	A181	A181	A181

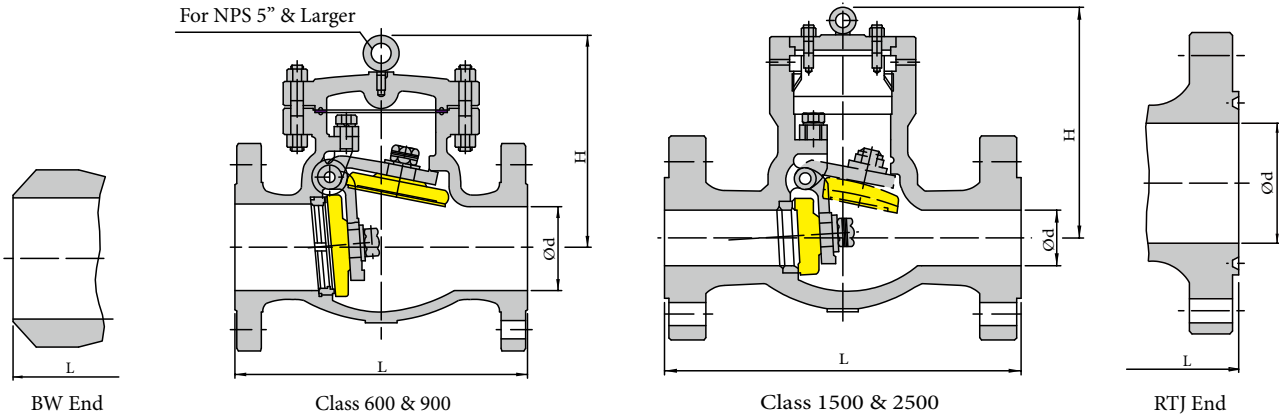
API Cast Steel Swing Check Valve Class 150 & 300



Main Size of Outside & Weight

Size		Class 150						Class 300					
NPS	DN	L			d	H	Weight (kg)	L			d	H	Weight (kg)
		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	670	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

API Cast Steel Swing Check Valve Class 600~2500



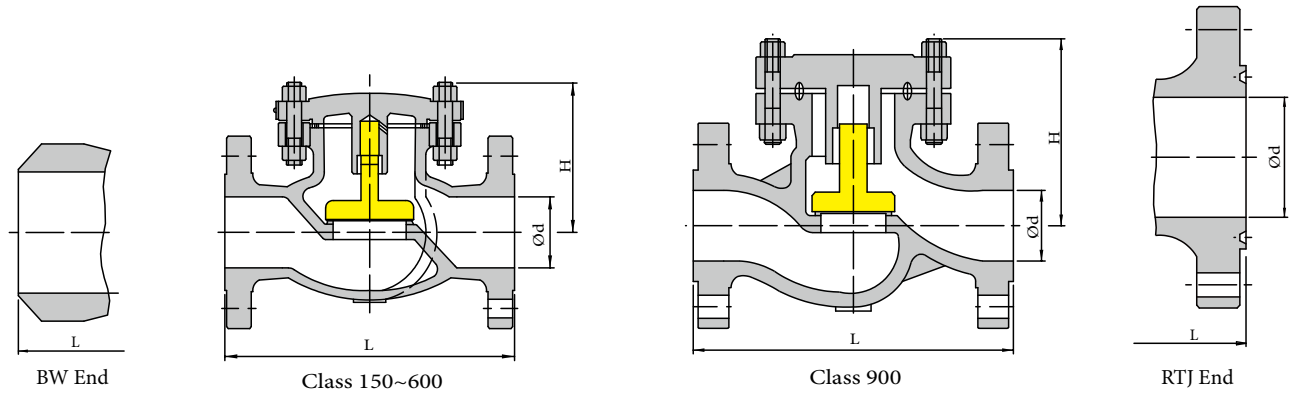
Main Size of Outside & Weight

Size		Class 600						Class 900					
NPS	DN	L			d	H	Weight (kg)	L			d	H	Weight (kg)
		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	135
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

Main Size of Outside & Weight

Size		Class 1500						Class 2500					
NPS	DN	L			d	H	Weight (kg)	L			d	H	Weight (kg)
		RF	RTJ	BW				RF	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	-	-	-	-	-	-

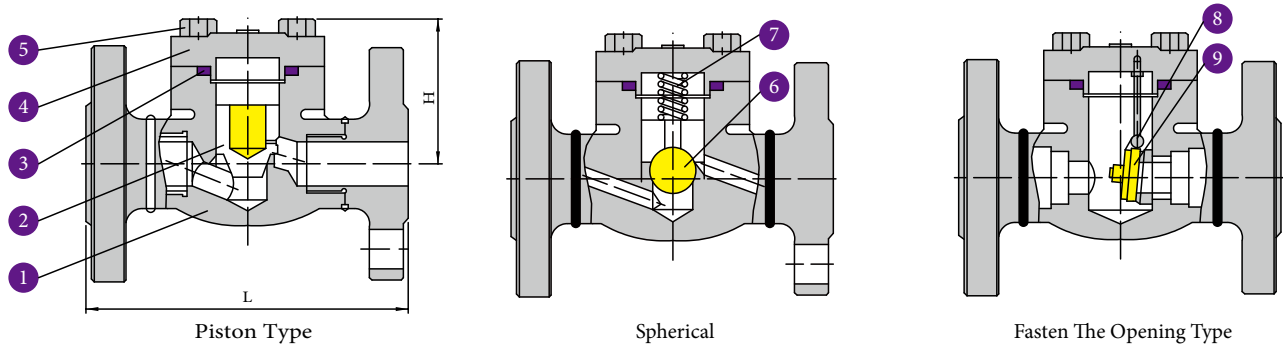
API Cast Steel Vertical Check Valve Class 150~900



Main Size of Outside & Weight													
Size		Class 150						Class 300					
NPS	DN	L			d	H	Weight (kg)	L			d	H	Weight (kg)
		RF	RTJ	BW				RF	RTJ	BW			
1/2"	15	108	119	108	13	76	3	152	162	152	13	78	5
3/4"	20	117	130	117	19	76	4	178	191	178	19	82	6
1"	25	127	140	127	25	98	5	203	216	203	25	102	8
1-1/4"	32	140	153	140	32	102	7	216	229	216	32	106	11
1-1/2"	40	165	178	165	38	115	8	229	242	229	38	118	13
2"	50	203	216	203	51	140	15	267	283	267	51	140	26
2-1/2"	65	216	229	216	64	162	22	292	308	292	64	164	33
3"	80	241	254	241	76	168	28	318	333	318	76	178	50
4"	100	292	305	292	102	194	42	356	371	356	102	195	86
5"	125	356	368	356	127	210	60	400	416	400	127	223	120
6"	150	406	419	406	152	226	75	445	460	445	152	245	180
8"	200	495	508	495	203	250	118	533	549	533	203	280	220
10"	250	622	635	622	254	275	194	622	638	622	254	336	310
12"	300	699	711	699	305	332	320	711	727	711	305	380	510

Main Size of Outside & Weight													
Size		Class 600						Class 900					
NPS	DN	L			d	H	Weight (kg)	L			d	H	Weight (kg)
		RF	RTJ	BW				RF	RTJ	BW			
2"	50	292	295	292	51	152	32	368	371	368	50	180	50
2-1/2"	65	330	333	330	64	167	45	419	422	419	64	200	65
3"	80	356	359	356	76	178	68	381	384	381	74	235	88
4"	100	432	435	432	102	215	98	457	460	457	100	270	140
5"	125	508	511	508	125	240	155	559	562	559	125	300	210
6"	150	559	562	559	152	279	230	610	613	610	150	350	300
8"	200	660	664	660	200	328	300	737	740	737	200	400	390

API Forged Steel Check Valve



Design Construction

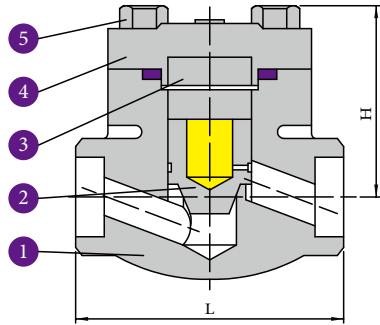
1. Structural Formation: Bolt Jointed Bonnet Lifting Type, Bolt-Jointed Bonnet Swing Type Check Valve
2. Design Standard: ASME B16.34, BS5352
3. Face to Face: ASME B16.10
4. End to End: AMSE B16.5
5. Thread Ends: ASME B 1.20.1
6. Test & Inspection: API598

Notes: The size of valve connecting flange and butt-welding terminas can be designed according to customer's requirement

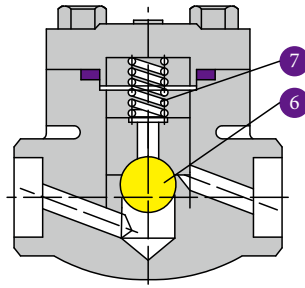
Parts Material		
No.	Part Name	Material
1	Body	ASTM A105, ASTM A182-F11, F22, F5, F9, ASTM A182-F304, F316, F321, F304L, F316L
2	Disc	ASTM A105, ASTM A182-F11, F22, F5, F9, ASTM A182-F304, F316, F321, F304L, F316L
3	Spring	Graphite+SS
4	Bonnet	ASTM A105, ASTM A182-F11, F22, F5, F9, ASTM A182-F304, F316, F321, F304L, F316L
5	Bolt	ASTM A193-B7, A320-B8, A193-B8M
6	Ball	ASTM A105, ASTM A182-F11, F22, F5, F9, ASTM A182-F304, F316, F321, F304L, F316L
7	Spring	ANSI9260, ANSI6150, ASTM A182-F304, F316, F321, F304L, F316L
8	Rocker	ASTM A182 Gr. G6a, ASTM A182 F22, ASTM A182-F304, F316, F321, F304L, F316L
9	Pivot	ASTM A105, ASTM A182-F11, F22, F5, F9, ASTM A182-F304, F316, F321, F304L, F316L
10	Seat	ASTM A105, ASTM A182-F11, F22, F5, F9, ASTM A182-F304, F316, F321, F304L, F316L

Main Size of Outside & Weight													
Class		150				300				600			
DN		Dimension(mm)			Weight (kg)	Dimension(mm)			Weight (kg)	Dimension(mm)			Weight (kg)
mm	in	L(RF)	L(RT)	H		L(RF)	L(RT)	H		L(RF)	L(RT)	H	
15	1/2"	108	119	60	2.5(2.5)	152.5	163.5	60	2.5(2.7)	165	163.5	60	2.8(3.0)
20	3/4"	117.5	130	60	3.3(3.4)	178	191	60	3.5(3.5)	191	190.5	60	4.2(4.1)
25	1"	127	140	76	4.8(4.4)	203	216	76	5.0(4.8)	216	216	76	5.2(5.8)
32	1-1/4"	140	153	85	7.0(8.2)	216	229	85	7.5(8.8)	229	229	85	7.7(9.5)
40	1-1/2"	165	178	103	7.5(8.9)	228.5	241	103	7.9(9.8)	241	241	103	9.3(10.0)
50	2"	203	216	118	11.0(12.5)	266.5	282	118	11.6(13.5)	292	295	118	13.2(15.5)

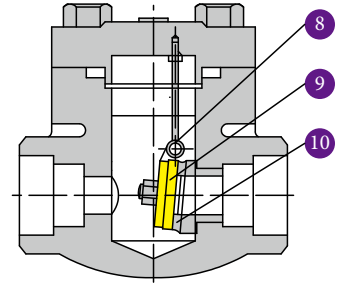
API Forged Steel Check Valve Class 800~1500



Piston Type



Spherical

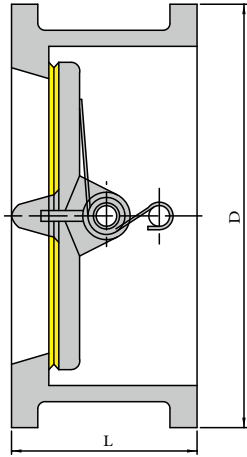


Fasten The Opening Type

Main Size of Outside & Weight

Class	DN(mm)		NPS(in)		Dimensions(mm)		Weight (kg)
	Reduce Bore	Full Bore	Reduce Bore	Full Bore	L	H	
800 Piston Type	15	10	1/2	3/8	80	61	1.0
	20	15	3/4	1/2	92	61	1.1
	25	20	1	3/4	111	78	1.8
	32	25	1-1/4	1	120	85	3.2
	40	32	1-1/2	1-1/4	120	103	4.5
	50	40	2	1-1/2	140	119	7.3
		50		2	170	132	9.8
800 Piston Type & Spherical	15	10	1/2	3/8	80	61	1.2
	20	15	3/4	1/2	92	61	1.4
	25	20	1	3/4	111	78	2.5
	32	25	1-1/4	1	120	85	3.9
	40	32	1-1/2	1-1/4	152	103	5.5
	50	40	2	1-1/2	172	119	8.9
		50		2	200	132	12.5
1500 Fasten the Opening Type	15	10	1/2	3/8	111	79	3.3
	20	15	3/4	1/2	111	79	3.6
	25	20	1	3/4	120	96	4.3
	32	25	1-1/4	1	140	105	6.0
	40	32	1-1/2	1-1/4	140	120	8.7
	50	40	2	1-1/2	160	140	12.5
		50		2	220	160	16.0
1500 Piston Type & Spherical	15	10	1/2	3/8	111	79	3.0
	20	15	3/4	1/2	111	79	3.5
	25	20	1	3/4	130	96	4.7
	32	25	1-1/4	1	150	105	7.0
	40	32	1-1/2	1-1/4	172	120	10.5
	50	40	2	1-1/2	220	140	14.5
		50		2	230	160	16.5

Wafer Type Double Disc Swing Check Valve


Design Construction

1. Structural Formation: Dual-Disc Swing Type Check Valve
2. Design Standard: GB/T 12224, API 594
3. Face to Face: GB/T 15188.2, ASME 16.10
4. Flange End: JB/T 79, GB/T 9113, HG20592, ASME B16.5
5. Test & Inspection: JB/T 9092, API 598

Notes: The size of valve connecting flange and butt-welding terminas can be designed according to customer's requirement

Parts Material

No.	Part Name	Material
1	Body	WCB,CF8,CF8M,CF8C,CF3,CF3M
2	Disc	WCB,CF8,CF8M,CF8C,CF3,CF3M
3	Pivot	1Cr13,2Cr13,1Cr18Ni9Ti,0Cr18Ni12Mo2Ti
4	Spring	4Cr13,60Si2Mn,1Cr18Ni9Ti,0Cr18Ni12Mo2Ti

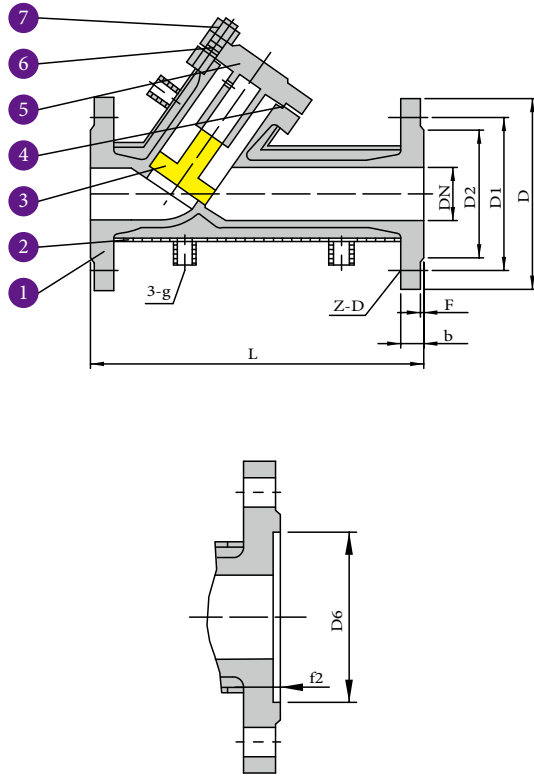
Main Size of Outside & Weight

Class	DN	NPS	Dimension		Weight (kg)	Class	DN	NPS	Dimension		Weight (kg)	Class	DN	NPS	Dimension		Weight (kg)
			L	D					L	D					L	D	
150	50	2"	60	103	2	300	50	2"	60	110	3.5	600	50	2"	60	110	3.5
	65	2-1/2"	67	122	3.2		65	2-1/2"	67	148	5		65	2-1/2"	67	129	5
	80	3"	73	135	4		80	3"	73	248	7		80	3"	73	148	7
	100	4"	73	173	6		100	4"	73	180	10		100	4"	79	192	12
	125	5"	86	196	9		125	5"	86	215	18.5		125	5"	105	240	22.5
	150	6"	98	222	12		150	6"	98	250	19		150	6"	136	265	35
	200	8"	127	279	22		200	8"	127	307	33		200	8"	165	319	45
	250	10"	146	339	38		250	10"	146	361	54		250	10"	213	399	77
	300	12"	181	409	54		300	12"	181	422	88		300	12"	229	456	110
	350	14"	184	450	80		350	14"	222	485	128		350	14"	273	489	135
	400	16"	191	514	118		400	16"	232	539	169		400	16"	305	562	163
	150	50	2"	70	142		6.5	900	50	2"	70		142	6.5	900	50	2"
65		2-1/2"	83	164	9	65	2-1/2"		83	164	9	65	2-1/2"	83		164	9
80		3"	83	167	14	80	3"		83	167	14	80	3"	83		167	14
100		4"	102	205	24	100	4"		102	205	24	100	4"	102		205	24
150		6"	159	288	43	150	6"		159	288	43	150	6"	159		288	43
200		8"	206	358	56	200	8"		206	358	56	200	8"	206		358	56

Main Size of Outside & Weight

PN (Mpa)	DN (mm)	Dimension		Weight (kg)	PN (Mpa)	DN (mm)	Dimension		Weight (kg)	PN (Mpa)	DN (mm)	Dimension		Weight (kg)
		L	D				L	D				L	D	
1.0	50	60	109	2	1.6	50	60	109	2	2.5	50	60	109	2
	65	67	129	3		65	67	129	3		65	67	129	3
	80	73	144	4.2		80	73	144	4.2		80	73	144	4.2
	100	73	164	6.2		100	73	164	6.2		100	73	170	6.2
	125	86	194	7.5		125	86	194	7.5		125	86	197	9
	150	98	220	11.5		150	98	220	11.5		150	98	227	12.5
	200	127	275	20.2		200	127	275	20.2		200	127	287	23
	250	146	330	31		250	146	332	32		250	146	343	40
	300	181	380	48.2		300	181	387	51		300	181	403	55
	350	184	440	72.5		350	184	447	73		350	184	460	82
	400	191	492	104.5		400	191	498	108		400	191	518	118
	450	203	542	151		450	203	558	160		450	203	568	212
500	219	597	180	500	219	620	200	500	219	624	240			
600	222	698	300	600	222	734	320	600	222	734	412			
4.0	50	60	109	3.5	6.4	50	60	115	3.5	10.0	50	60	122	4
	65	67	129	5		65	67	140	5		65	67	147	6
	80	73	144	7.2		80	73	150	7.2		80	73	157	8
	100	73	170	9.3		100	79	177	12		100	73	183	12
	125	86	197	16		125	105	213	22		125	105	220	21
	150	98	227	18		150	136	250	34		150	136	260	34
	200	127	293	30		200	165	313	48		200	165	324	48
	250	146	355	52		250	213	364	77		250	213	394	77
	300	181	420	87		300	229	424	112		300	229	458	112
	350	222	478	121							350	229	458	112
	400	232	549	162							400	229	458	112
												16.0	50	70
									65	83	163		10	
									80	83	178		15	
									100	102	210		25	
									125	110	249		30	
									150	159	282		43	
									200	206	358		55	

Jacket Insulation Check Valve



Design Construction

- 1.Design Standard:GB/T 12235
- 2.Face To Face:GB/T 12221
- 3.Flange Ends:GB/T 9113,JB/T 79,HG 20596
- 4.Test & Inspection:GB/T 13927,JB/T 9092

Notes:The size of serial valve connecting flange can be designed according to customer's requirement

Major Parts Material Form

Part Name	Part Material	
1	Body	WCB,WC6,WC9,C5 CF8,CF8M,CF3,CF3M
2	Jacketed	25,304
3	Disc	25,1Cr13,2Cr13,1Cr18Ni9Ti 0Cr18Ni12Mo ₂ Ti,20CrMo1V,25Cr2MoV
4	Gasket	Graphite,SS,PTFE
5	Bonnet	WCB,WC6,WC9,C5 CF8,CF8M,CF3,CF3M
6	Stud	35CrMoA,0Cr18Ni9 0Cr17Ni12Mo ₂ ,25Cr2MoV
7	Nut	45,35CrMoA,0Cr18Ni9 0Cr17Ni12Mo ₂ ,25Cr2MoV

Main Size of Outside & Weight

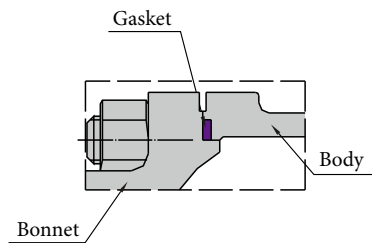
Model	BH45H(W,Y)-25/40P(R,RL,I,H,V)																			
	PN2.5Mpa										PN4.0Mpa									
	DN(mm)	L	D	D1	D2	D6	B	F	F2	Z-d	3-g"	L	D	D1	D2	D6	B	F	F2	Z-d
15	200	105	75	55	-	16	2	-	4-14	1/2"	200	105	75	55	51	16	2	4	4-14	1/2"
20	220	115	85	65	-	16	2	-	4-14	1/2"	220	115	85	65	58	16	2	4	4-14	1/2"
25	220	135	100	78	-	18	2	-	4-18	1/2"	220	135	100	78	66	18	2	4	4-18	1/2"
32	250	145	110	85	-	18	3	-	4-18	1/2"	250	145	110	85	76	18	3	4	4-18	1/2"
40	270	160	125	100	-	20	3	-	4-18	1/2"	270	160	125	100	88	20	3	4	4-18	1/2"
50	300	180	145	120	-	22	3	-	8-18	3/4"	300	180	145	120	110	22	3	4	8-18	3/4"
65	350	195	160	135	-	22	3	-	8-18	3/4"	350	195	160	135	121	22	3	4.5	8-18	3/4"
80	380	230	190	160	-	24	3	-	8-23	3/4"	380	230	190	160	150	24	3	4.5	8-23	3/4"
100	430	270	220	188	-	28	3	-	8-25	1"	430	270	220	188	176	28	3	4.5	8-25	1"
125	490	300	250	218	-	30	3	-	8-25	1"	490	300	250	218	204	30	3	4.5	8-25	1"
150	570	330	280	248	-	32	3	-	12-25	1"	570	350	295	258	234	34	3	4.5	12-30	1"
200	590	395	340	302	-	36	3	-	12-30	1"	590	415	355	315	287	40	4	4.5	12-34	1"

Floating Ball Valve Feature

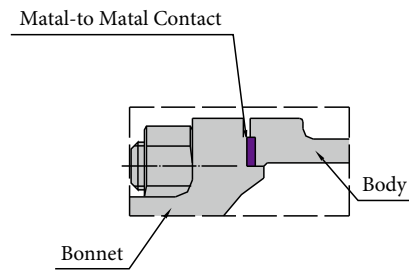
Floating ball valve are manufactured to BA 5351 specification, tested to BS 6755/API 598. the construction is the side entry type full port and end entry/side entry type reduced port, All valves are lever operated. The gear operator or the actuator are supplied at demand. The following are some of major design features:

1. Fire Safe:

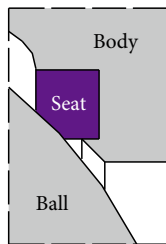
Designed and tested to BS 5416/API 607 to grant their operation suitability in cause of fire.



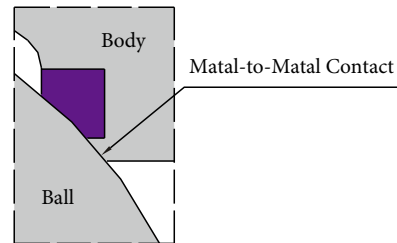
Before Fire



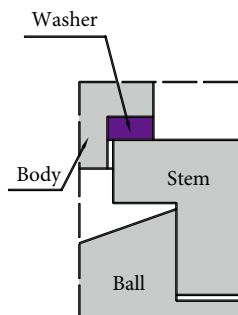
After Fire



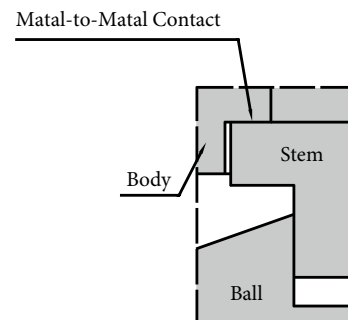
Before Fire



After Fire



Before Fire

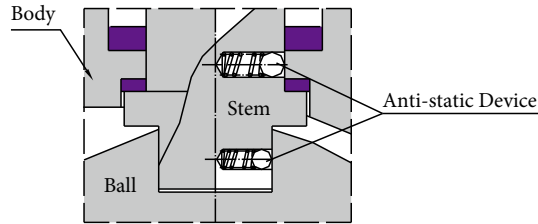


After Fire

Floating Ball Valve Feature

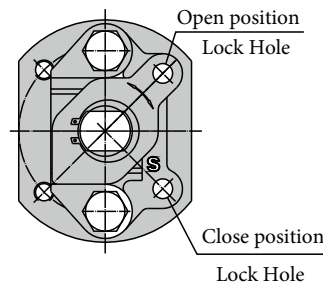
2. Antistatic:

A metallic contact is always granted between ball and stem/body to discharge eventual statics build-up during service.



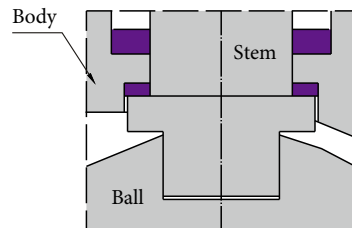
3. Locking Device:

To avoid misoperation, the valve may be locked by open or closed position locking device with popular padlock design. It's very important to lock the valve to prevent the valve from being operated by error, especially when the valve is installed in field or valves should not be opened or closed during technical process.



4. Blowout Resistance of Stem:

To prevent stem from being blow out by the pressure entrapped in valve cavity when the fluid flows through the valve. The lower part of stem is incorporated with a raised collar. In this case, should the stem packing, thrust-washer be destroyed by fire or much damages cause by any other reason, the fluid pressure in valve body pushes stem's raised collar closely against the upper sealing surface of the body to avoid fluid leakage.



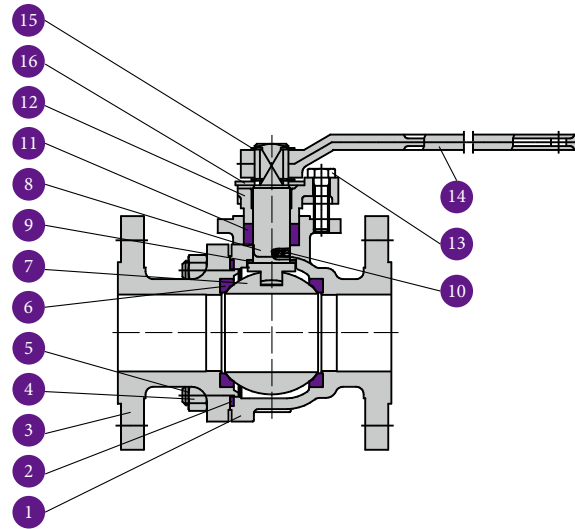
5. easy maintenance:

A very limited number of components and easily accessible.

6. low torque:

although the seats are preloaded against the ball producing a friction between ball and seats with no pressure in the valve, as soon as the valve pressurised such a friction decreases in a remarkable way since the ball is floated against the downstream seat freeing the upstream one.

Cast Steel Floating Ball Valve Class 150/300

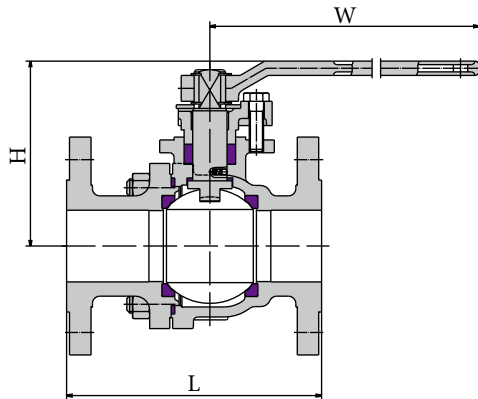


Technical Specification

- ☑Temp.& Pressure:AMSE B16.34,BS5351
- ☑Wall Thickness:ASME B16.34,BS5351
- ☑Bore Dimension:API 6D,BS5351
- ☑Face to Face:ASME B16.10,BS2080
- ☑Flange Dimension:ASME B16.5,BS1560
- ☑Test & Inspection:API598,API 6D,BS5146
- ☑Body Material:WCB,LCB,LCC,CF8,CF8M,CF3,CF3M

Form of Major Part Material				
Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351-CF8/CF8M
2	Gasket	304+Graphite	304+Graphite	304+Graphite
3	Bonnet	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351-CF8/CF8M
4	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
5	Stud	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
6	Seat	PTFE	PTFE	PTFE
7	Ball	ASTM A 182-F304	ASTM A182-F304	ASTM A182-F304/F316
8	Stem	ASTM A 182-F304	ASTM A182-F304	ASTM A182-F304/F316
9	Gasket	304+PTFE	304+PTFE	304+PTFE
10	Antistatic Device	ASTM A182-F304	ASTM A182-F304	ASTM A182-F304/F316
11	Packing	PTFE/Graphite	PTFE/Graphite	PTFE/Graphite
12	Packing Gland	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351-CF8/CF8M
13	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
14	Lever	ASTM A216-WCB	ASTM A216-WCB	ASTM A216-WCB
15	Back Stop	CARBON STEEL	CARBON STEEL	CARBON STEEL
16	Stopper Plate	CARBON STEEL	CARBON STEEL	CARBON STEEL

Cast Steel Floating Ball Valve Class 150/300



Class150

Class 150 Dimension

Norm. Dia	in	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"
Ball Bore		15	20	25	40	50	65	80	100	125	150	200	250
L		108	117	127	165	178	190	203	229	356	394	457	533
H		84	88	95	120	130	160	185	210	220	295	335	
W		130	130	140	250	250	400	400	450	450	1050	1500	

1/2"~4":Lever Operation

6"~8":Optional Gear Operation

10:Gear Operation

Test Pressure

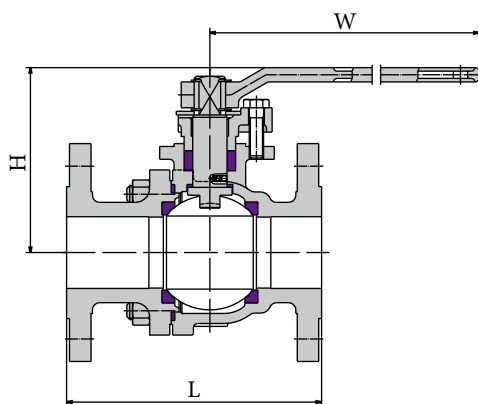
Shell:hydrostatic 3.10Mpa(450Psi)

Seat:air 0.55Mpa(80Psi)

Options

Packing And Gasket

Cf8m(316Ss)Ball And Stem



Class300

Class 300 Dimension

Norm. Dia	in	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
Ball Bore		15	20	25	40	50	65	80	100	125	150	200
L		140	152	165	191	216	241	283	305	381	403	502
H		84	88	95	120	140	160	180	208	220	335	
W		130	130	140	250	250	400	400	450	450	1050	

1/2"~4":Lever Operation

6"~8":Optional Gear Operation

10:Gear Operation

Test Pressure

Shell:hydrostatic 7.76Mpa(1125Psi)

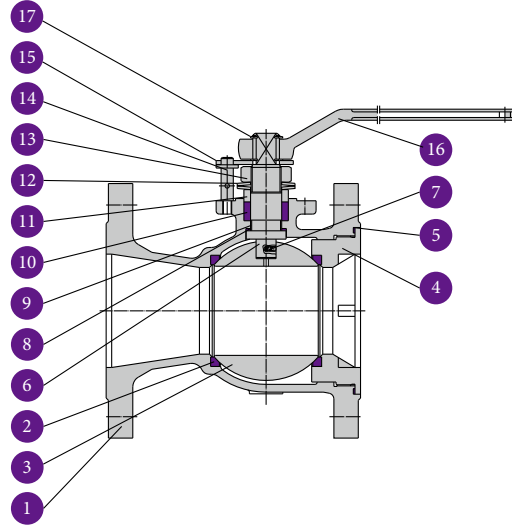
Seat:air 0.55Mpa(80Psi)

Options

Packing And Gasket

Cf8m(316Ss)Ball And Stem

Uni-Body Floating Ball Valve Class 150/300

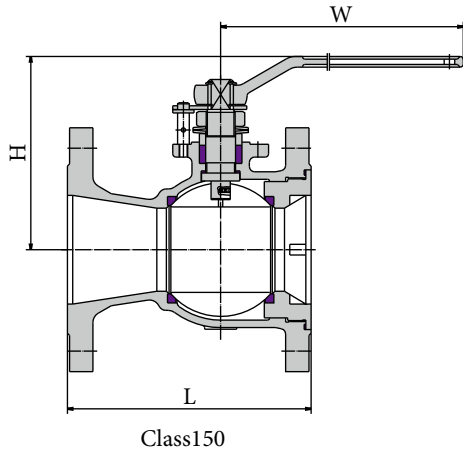


Technical Specification

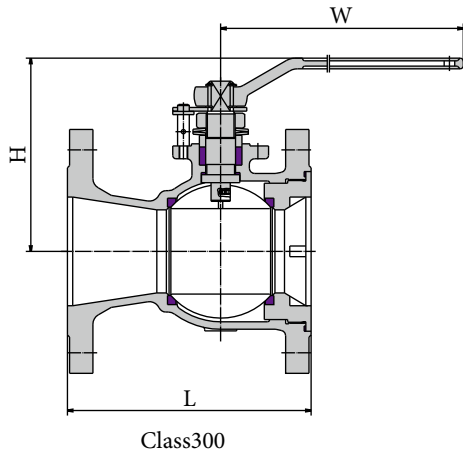
- ☑Temp.& Pressure:AMSE B16.34,BS5351
- ☑Wall Thickness:ASME B16.34,BS5351
- ☑Bore Dimension:API 6D,BS5351
- ☑Face to Face:ASME B16.10,BS2080
- ☑Flange Dimension:ASME B16.5,BS1560
- ☑Test & Inspection:API598,API 6D,BS5146
- ☑Body Material:WCB,LCB,LCC,CF8,CF8M,CF3,CF3M

Form of Major Part Material				
Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351-CF8/CF8M
2	Seat	PTFE	PTFE	PTFE
3	Ball	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304/F316
4	Bonnet	ASTM A105	ASTM A105	ASTM A182-F304/F316
5	Gasket	304+Graphite	304+Graphite	304+Graphite
6	Stem	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304/F316
7	Antistatic Device	ASTM A182-F304	ASTM A182-F304	ASTM A182-F304/F316
8	Gasket	304+PTFE	304+PTFE	304+PTFE
9	Stem Bearing	304+PTFE	304+PTFE	304+PTFE
10	Packing	ptfe/Graphite	ptfe/Graphite	ptfe/Graphite
11	Gland Ring	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304/F316
12	Spring Washer	Stainless Steel	Stainless Steel	Stainless Steel
13	Gland Nut	ASTM A194-2H/2HM	ASTM A194-2H/2HM	ASTM A194-2H/2HM
14	Stopper Pin	Stainless Steel	Stainless Steel	Stainless Steel
15	Stopper Plate	Stainless Steel	Stainless Steel	Stainless Steel
16	Lever	ASTM A216-WCB	ASTM A216-WCB	ASTM A216-WCB
17	Back Stop	CARBON STEEL	CARBON STEEL	CARBON STEEL

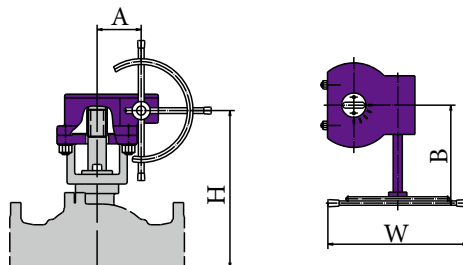
Uni-Body Floating Ball Valve Class 150/300



Class 150 Dimension											
Norm. Dia	in	1/2"	3/4"	1"	1-1/2"	2"	3"	4"	6"	8"	10"
	mm	15	20	25	40	50	80	100	150	200	250
Ball Bore		10	12.5	17	30	38	58	76	114	144	187
L		108	117	127	165	178	203	229	267	292	330
H		103	106	115	135	120	155	170	260	300	355
W		130	130	130	140	250	250	400	750	1050	1500
Valve Operator											
1/2"~10":Lever Operation											
8"~10":Optional Gear Operation											
Test Pressure											
Shell:hydrostatic 3.10Mpa(450Psi)											
Seat:air 0.55Mpa(80Psi)											
Options											
Packing And Gasket											
CF8M(316SS)Ball And Stem											

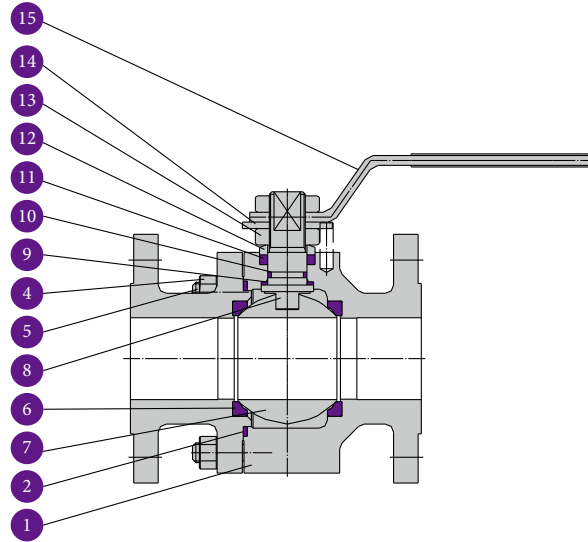


Class 300 Dimension												
Norm. Dia	in	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
	mm	15	20	25	40	50	65	80	100	125	150	200
Ball Bore		15	20	25	40	50	65	80	100	125	150	200
L		108	117	127	165	178	190	203	229	356	394	457
H		84	88	95	120	140	160	180	208	220	335	
W		130	130	140	250	250	400	400	450	450	1050	
Valve Operator												
1/2"~10":Lever Operation												
8"~10":Optional Gear Operation												
Test Pressure												
Shell:hydrostatic 7.76Mpa(1125Psi)												
Seat:air 0.55Mpa(80Psi)												
Options												
Packing And Gasket												
CF8M(316SS)Ball And Stem												



Gear Operation Dimension						
Class	150	300	Gear Operator			
			H	W	B	A
Size	6"	6"	257	350	205	125
	8"	8"	306	350	320	185
	10"	10"	365	400	320	185

Forged Steel Floating Ball Valve Class 150/300



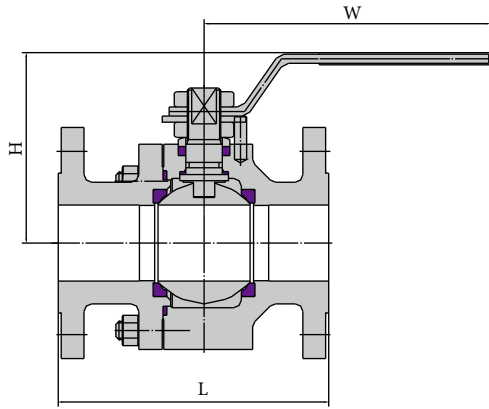
Technical Specification

- ☑Temp.& Pressure:AMSE B16.34,BS5351
- ☑Wall Thickness:ASME B16.34,BS5351
- ☑Bore Dimension:API 6D,BS5351
- ☑Face to Face:ASME B16.10,API 6D
- ☑Flange Dimension:ASME B16.5,BS1560
- ☑Test & Inspection:API598,API 6D,BS5146
- ☑Body Material:A105,LF2,F304,F316,F304L,F316L

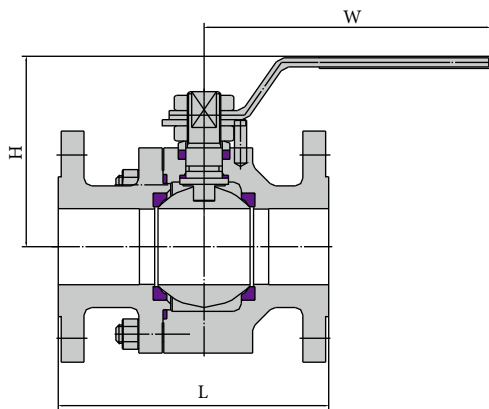
Form of Major Part Material

Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A105	ASTM A350 LF2	ASTM A182 F316
2	O-Ring	VITON	VITON	VITON
3	Bonnet	ASTM A105	ASTM A350 LF2	ASTM A182 F316
4	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
5	Stud	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
6	Seat	R-PTFE	R-PTFE	R-PTFE
7	Ball	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182-F316
8	Stem	ASTM A182-F6A	ASTM A182-F6A	ASTM A182-F316
9	Stem Washer	304+PTFE	304+PTFE	304+PTFE
10	O-Ring	VITON	VITON	VITON
11	Packing	PTFE/Graphite	PTFE/Graphite	PTFE/Graphite
12	Packing Gland	Carbon Steel	Carbon Steel	Stainless Steel
13	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
14	Stopper	Carbon Steel	Carbon Steel	Stainless Steel
15	Lever	Carbon Steel	Carbon Steel	Stainless Steel

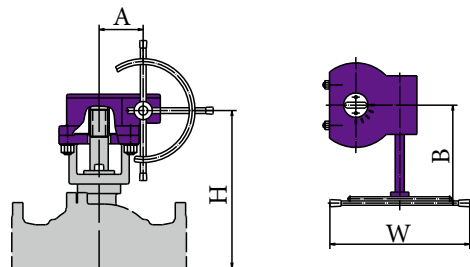
Forged Steel Floating Ball Valve Class 150/300



Class150



Class300



Class 150 Dimension													
Norm.	in	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"
Dia	mm	15	20	25	40	50	65	80	100	125	150	200	250
Ball Bore		15	20	25	40	50	65	80	100	125	150	200	250
L		108	117	127	165	178	190	203	229	356	394	457	533
H		84	88	95	120	130	160	185	210	220	295		
W		130	130	140	250	250	400	400	450	450	1050		
1/2"~4":Lever Operation													
6"~8":Optional Gear Operation													
10:Gear Operation													
Test Pressure													
Shell:hydrostatic 3.10Mpa(450Psi)													
Seat:air 0.55Mpa(80Psi)													
Options													
Packing And Gasket													
Cf8m(316Ss)Ball And Stem													

Class 300 Dimension												
Norm.	in	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
Dia	mm	15	20	25	40	50	65	80	100	125	150	200
Ball Bore		15	20	25	40	50	65	80	100	125	150	200
L		140	152	165	191	216	241	283	305	381	403	502
H		84	88	95	120	140	160	180	208	220	335	
W		130	130	140	250	250	400	400	450	450	1050	
1/2"~4":Lever Operation												
6"~8":Optional Gear Operation												
10:Gear Operation												
Test Pressure												
Shell:hydrostatic 7.76Mpa(1125Psi)												
Seat:air 0.55Mpa(80Psi)												
Options												
Packing And Gasket												
Cf8m(316Ss)Ball And Stem												

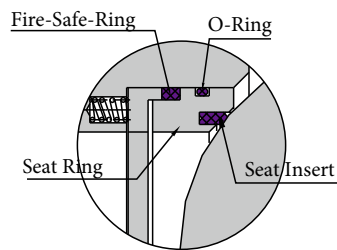
Gear Operation Dimension						
Class	150	300	Gear Operator			
			H	W	B	A
Size	6"	6"	257	350	205	125
	8"	8"	306	350	320	185
	10"	10"	365	400	320	185

Trunnion Mounted Ball Valve Feature

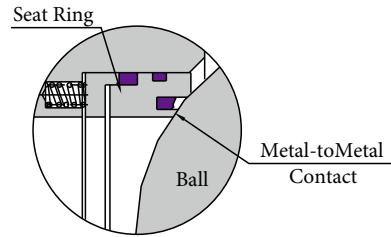
Trunnion mounted ball valve are manufactured to API 6D specification, tested to API 598/API 607. The construction is the side entry 3 pieces full and reduce port. The valves are lever operated and where recommended or when required are gear operated or actuated. The following are some of major design features:

1. Fire Safe:

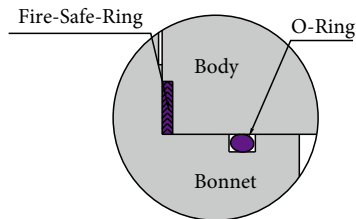
All size and pressure classes have been successfully fire-safetested according to API and BS specifications. Test certification are available on request.



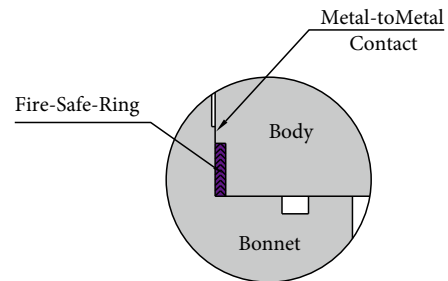
Before Fire



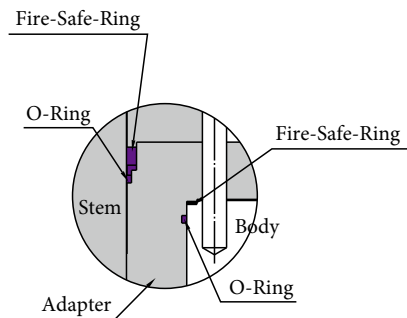
After Fire



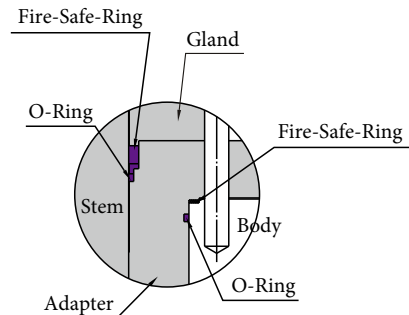
Before Fire



After Fire



Before Fire



Before Fire

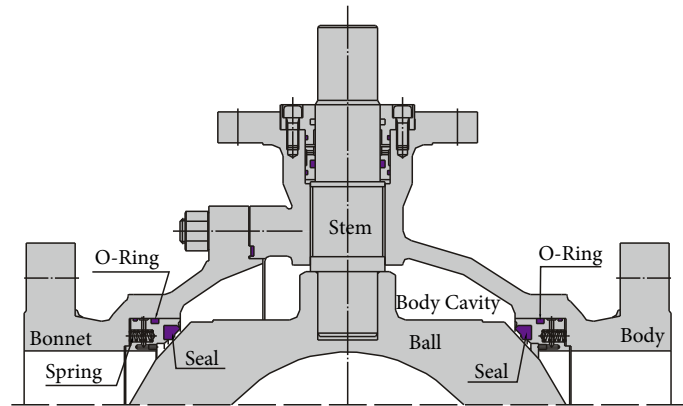
Trunnion Mounted Ball Valve Feature

2. Antistatic:

Electrical continuity of all valve components, prevent statics build-up.

3. Double Block & Bleed:

The body cavity is isolated when the ball is in either fully closed or fully opened position, the medium entrapped in it can easily be bled to avoid overpressure

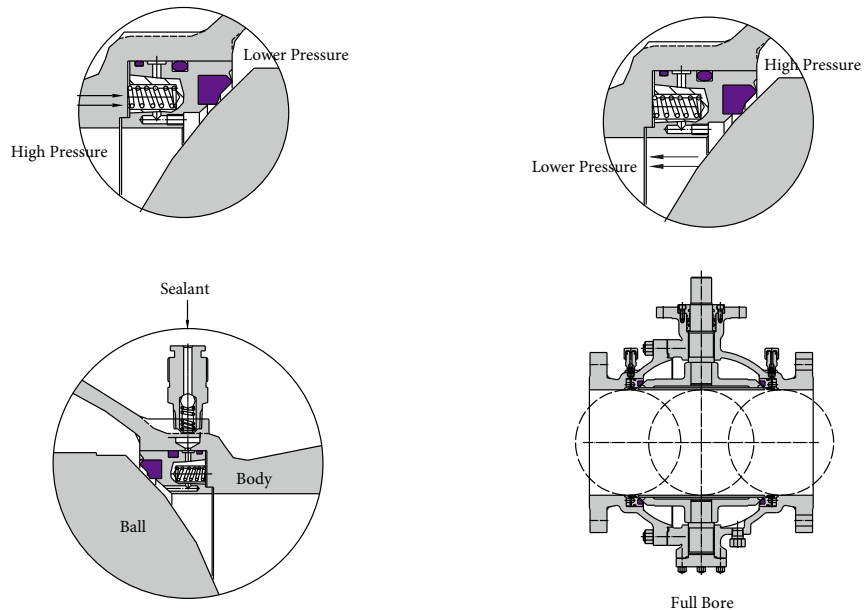


4. Seat Ring Sealing:

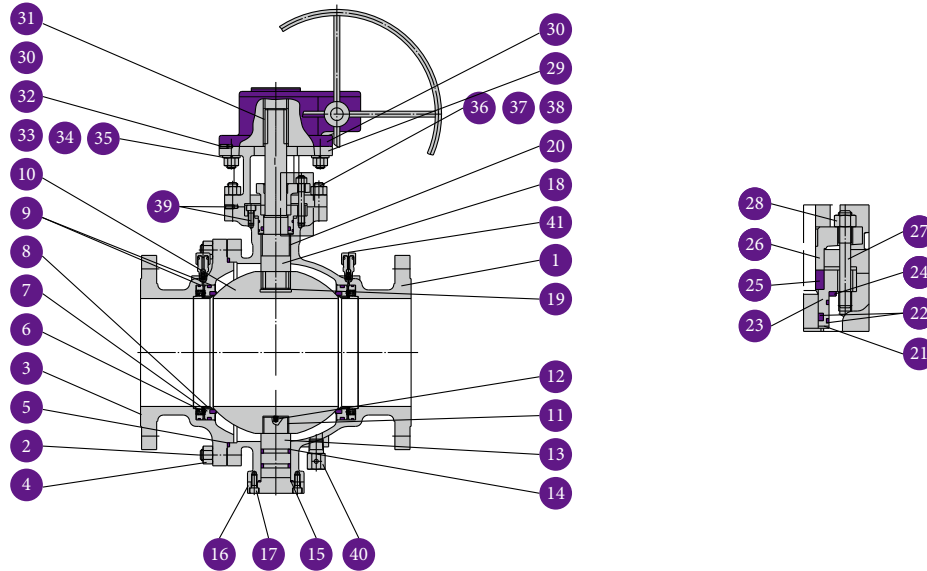
As line pressure increases, our seat design originates a piston effect forcing the sealing resilient insert against the ball. In absence of the pressure or with low pressure, the seats are forced against the ball by the set of preloaded springs.

5. Pressure Relieving:

If excessive pressure builds up in the body cavity exceeding the seats spring pressure, the seat automatically relieves.



Trunnion Mounted Ball Valve Class



Technical Specification

- ☑Temp.& Pressure:AMSE B16.34,BS5351
- ☑Wall Thickness:ASME B16.34,BS5351
- ☑Bore Dimension:API 6D,BS5351
- ☑Face to Face:ASME B16.10,API 6D
- ☑Flange Dimension:ASME B16.5,BS1560
- ☑Test & Inspection:API598,API 6D,BS5146
- ☑Body Material:WCB,LCB,LCC,CF8,CF8M,CF3,CF3M

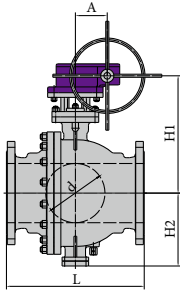
Form of Major Part Material

Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351 CF8/CF8M
2	Bonnet	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351 CF8/CF8M
3	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
4	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
5	O-Ring	VITON	VITON	VITON
6	Spring	INCONELX-750	INCONELX-750	INCONELX-750
7	Seat Ring	ASTM A105	ASTM A182 F304	ASTM A182-F304
8	Seat Insert	R-PTFE	R-PTFE	R-PTFE
9	O-Ring	VITON	VITON	VITON
10	Ball	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304
11	Stem Bearing	304+PTFE	304+PTFE	304+PTFE
12	Spring	ASTM A276-316	ASTM A276-316	ASTM A276-316
13	Lower Stem	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304/F316

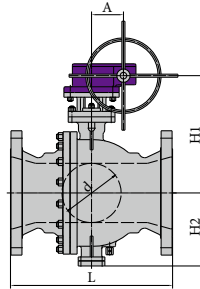
Trunnion Mounted Ball Valve Class

Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
14	O-Ring	VITON	VITON	VITON
15	Gasket	304+Graphite	304+Graphite	304+Graphite
16	Buttom Cover	ASTM A105	ASTM A182 F304	ASTM A182 F304/F316
17	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
18	Upper Stem	ASTM A182-F6A	ASTM A182 F304	ASTM A182 F304/F316
19	Key	ANSI 1045	ASTM A182 F304	ASTM A182 F304/F316
20	Radial Bearing	304+PTFE	304+PTFE	304+PTFE
21	Axial Bearing	304+PTFE	304+PTFE	304+PTFE
22	O-Ring	VITON	VITON	VITON
23	Gland	ASTM A105	ASTM A182 F304	ASTM A182 F304/F316
24	Gasket	304+Graphite	304+Graphite	304+Graphite
25	Packing	Graphite	Graphite	Graphite
26	Packing Gland	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A351 CF8/CF8M
27	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
28	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
29	Yoke	ASTM A216-WCB	ASTM A352-LCB/LCC	ASTM A182 F304/F316
30	Gear Box	CAST IRON	CAST IRON	CAST IRON
31	Key	ANSI 1045	ASTM A182 F304	ASTM A182 F304/F316
32	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
33	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
34	Spring Gasket	65MN	65MN	65MN
35	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
36	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
37	Gasket	65MN	65MN	65MN
38	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
39	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
40	Drain Plug	ANSI 1045	ASTM A182 F304	ASTM A182 F304/F316
41	Sealant Injection	ANSI 1045	ANSI 1045	ASTM A182 F316

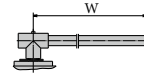
Trunnion Mounted Ball Valve Class 150



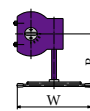
Q347F-150lb



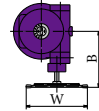
RQ347F-150lb



2"~6" Full Bore Ball valve
3"~8" Reduce Bore Ball valve



Up to 8" Full Bore Valve
Up to 10" Reduce Bore Valve

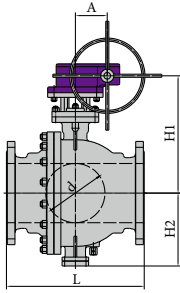


Up to 20" Ball Valve

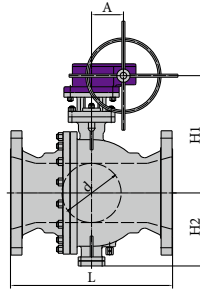
Dimension Chart							
NPS	d	L	H1	H2	W	A	B
2	2	7	6.94	3.74	13.78	-	-
3x2x3	2	8	6.94	3.74	13.78	-	-
3	3	8	8.46	4.72	15.75	-	-
4x3x4	3	9	8.46	4.72	15.75	-	-
4	4	9	10	5.59	19.69	-	-
6x4x6	4	15.5	10	5.59	19.69	-	-
6	6	15.5	13	8.66	41.34	-	-
8x6x8	6	18	13	8.66	41.34	-	-
8	8	18	17.63	10.20	11.81	4.13	7.48
10x8x10	8	21	17.63	10.20	11.81	4.13	7.48
10	10	21	19.88	12	13.78	4.92	8.07
12x10x12	10	24	19.88	12	13.78	4.92	8.07
12	12	24	21.89	13.70	15.75	7.28	12.59
14x12x14	12	27	21.89	13.70	15.75	7.28	12.59
14	13.25	27	24.40	15.55	19.69	7.68	13.78
16x14x16	13.25	30	24.40	15.55	19.69	7.68	13.78
16	15.25	30	27.55	17.71	19.69	7.68	13.78
18x16x18	15.25	34	27.55	17.71	19.69	7.68	13.78
18	17.25	34	29.52	19.09	19.69	8.46	14.96
20x18x20	17.25	36	29.52	19.09	19.69	8.46	14.96
20	19.25	36	31.69	20.67	19.69	8.46	14.96
22x18x22	17.25	40	29.52	19.09	19.69	8.46	14.96
22	21.25	40	35.04	24.21	19.69	8.46	14.96
24x22x24	19.25	42	31.69	20.67	19.69	8.46	14.96
24	23.25	42	43.70	26.77	19.69	11.02	18.11
26x24x26	21.25	45	35.04	24.21	19.69	8.46	14.96
26	25	45	44.88	28.15	19.69	11.02	18.11
28x26x28	23.25	49	43.70	26.77	19.69	11.02	18.11
28	27	49	46.45	29.52	19.69	11.02	18.11
30x28x30	23.25	51	43.70	26.77	19.69	11.02	18.11
30	29	51	48.03	33.46	19.69	11.02	18.11
32x30x32	25	54	44.88	28.15	19.69	11.02	18.11
32	30.75	54	49.21	36.22	19.69	11.02	18.11
34x32x34	27	58	46.45	29.52	19.69	11.02	18.11
34	32.75	58	51.18	38.78	19.69	11.02	18.11
36x34x36	29	60	48.03	33.46	19.69	11.02	18.11
36	34.5	60	53.15	43.34	25.59	7.87	25.20

DN	d	L	H1	H2	W	A	B
50	51	178	176	95	350	-	-
80x50x80	51	203	176	95	350	-	-
80	76	203	215	120	400	-	-
100x80x100	76	229	215	120	400	-	-
100	102	229	252	142	500	-	-
150x100x150	102	394	252	142	500	-	-
150	152	394	330	220	1050	-	-
200x150x200	152	457	330	220	1050	-	-
200	203	457	448	259	300	105	190
250x200x250	203	533	448	259	300	105	190
250	254	533	505	305	350	125	205
300x250x300	254	610	505	305	350	125	205
300	305	610	556	348	400	185	320
350x300x300	305	686	556	348	400	185	320
350	337	686	620	395	500	195	350
400x350x400	337	762	620	395	500	195	350
400	387	762	700	450	500	195	350
450x400x450	387	864	700	450	500	195	350
450	438	864	750	485	500	215	380
500x450x500	438	914	750	485	500	215	380
500	489	914	805	525	500	215	380
550x500x550	438	1016	750	485	500	215	380
550	540	1016	890	615	500	215	380
600x550x600	489	1067	805	525	500	215	380
600	591	1067	1110	680	500	280	460
650x600x650	540	1143	890	615	500	215	460
650	635	1143	1140	715	500	280	460
700x650x700	591	1245	1110	680	500	280	460
700	686	1245	1180	750	500	280	460
750x600x750	591	1295	1110	680	500	280	460
750	737	1295	1220	850	500	280	460
800x650x800	635	1372	1140	715	500	280	460
800	787	1372	1250	920	500	280	460
850x700x850	686	1473	1180	750	500	280	460
850	832	1473	1300	985	500	280	460
900x750x900	737	1524	1220	850	500	280	460
900	876	1524	1350	1050	650	200	640

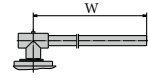
Trunnion Mounted Ball Valve Class 300



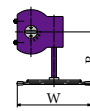
Q347F-150lb



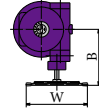
RQ347F-150lb



2"~6" Full Bore Ball valve
3"~8" Reduce Bore Ball valve



Up to 8" Full Bore Valve



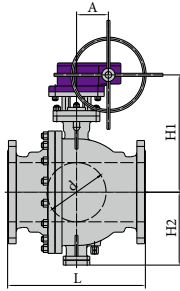
Up to 20" Ball Valve

Up to 10" Reduce Bore Valve

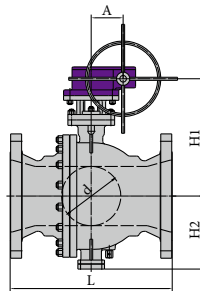
Dimension Chart							
NPS	d	L	H1	H2	W	A	B
2	2	7	6.94	3.74	13.78	-	-
3x2x3	2	8	6.94	3.74	13.78	-	-
3	3	8	8.46	4.72	15.75	-	-
4x3x4	3	9	8.46	4.72	15.75	-	-
4	4	9	10	5.59	19.69	-	-
6x4x6	4	15.5	10	5.59	19.69	-	-
6	6	15.5	13	8.66	41.34	-	-
8x6x8	6	18	13	8.66	41.34	-	-
8	8	18	17.63	10.20	11.81	4.13	7.48
10x8x10	8	21	17.63	10.20	11.81	4.13	7.48
10	10	21	19.88	12	13.78	4.92	8.07
12x10x12	10	24	19.88	12	13.78	4.92	8.07
12	12	24	21.89	13.70	15.75	7.28	12.59
14x12x14	12	27	21.89	13.70	15.75	7.28	12.59
14	13.25	27	24.40	15.55	19.69	7.68	13.78
16x14x16	13.25	30	24.40	15.55	19.69	7.68	13.78
16	15.25	30	27.55	17.71	19.69	7.68	13.78
18x16x18	15.25	34	27.55	17.71	19.69	7.68	13.78
18	17.25	34	29.52	19.09	19.69	8.46	14.96
20x18x20	17.25	36	29.52	19.09	19.69	8.46	14.96
20	19.25	36	31.69	20.67	19.69	8.46	14.96
22x18x22	17.25	40	29.52	19.09	19.69	8.46	14.96
22	21.25	40	35.04	24.21	19.69	8.46	14.96
24x22x24	19.25	42	31.69	20.67	19.69	8.46	14.96
24	23.25	42	43.70	26.77	19.69	11.02	18.11
26x24x26	21.25	45	35.04	24.21	19.69	8.46	14.96
26	25	45	44.88	28.15	19.69	11.02	18.11
28x26x28	23.25	49	43.70	26.77	19.69	11.02	18.11
28	27	49	46.45	29.52	19.69	11.02	18.11
30x28x30	23.25	51	43.70	26.77	19.69	11.02	18.11
30	29	51	48.03	33.46	19.69	11.02	18.11
32x30x32	25	54	44.88	28.15	19.69	11.02	18.11
32	30.75	54	49.21	36.22	19.69	11.02	18.11
34x32x34	27	58	46.45	29.52	19.69	11.02	18.11
34	32.75	58	51.18	38.78	19.69	11.02	18.11
36x34x36	29	60	48.03	33.46	19.69	11.02	18.11
36	34.5	60	53.15	43.34	25.59	7.87	25.20

DN	d	L	H1	H2	W	A	B
50	51	216	176	95	350	-	-
80x50x80	51	283	176	95	350	-	-
80	76	283	215	120	400	-	-
100x80x100	76	305	215	120	400	-	-
100	102	305	252	142	500	-	-
150x100x150	102	403	252	142	500	-	-
150	152	403	330	220	1050	-	-
200x150x200	152	502	330	220	1050	-	-
200	203	502	448	259	300	105	190
250x200x250	203	568	448	259	300	105	190
250	254	568	505	305	350	125	205
300x250x300	254	648	505	305	350	125	205
300	305	648	556	348	400	185	320
350x300x300	305	762	556	348	400	185	320
350	337	762	620	395	500	195	350
400x350x400	337	838	620	395	500	195	350
400	387	838	700	450	500	195	350
450x400x450	387	914	700	450	500	195	350
450	438	914	750	485	500	215	380
500x450x500	438	991	750	485	500	215	380
500	489	991	805	525	500	215	380
550x500x550	438	1092	750	485	500	215	380
550	540	1092	890	615	500	215	380
600x550x600	489	1143	805	525	500	215	380
600	591	1143	1110	680	500	280	460
650x600x650	540	1245	890	615	500	215	460
650	635	1245	1140	715	500	280	460
700x650x700	591	1346	1110	680	500	280	460
700	686	1346	1180	750	500	280	460
750x600x750	591	1397	1110	680	500	280	460
750	737	1397	1220	850	500	280	460
800x650x800	635	1524	1140	715	500	280	460
800	787	1524	1250	920	500	280	460
850x700x850	686	1626	1180	750	500	280	460
850	832	1626	1300	985	500	280	460
900x750x900	737	1727	1220	850	500	280	460
900	876	1727	1350	1050	650	200	640

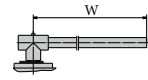
Trunnion Mounted Ball Valve Class 600



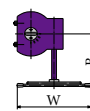
Q347F-600lb



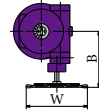
RQ347F-600lb



2"~6" Full Bore Ball valve
3"~8" Reduce Bore Ball valve



Up to 8" Full Bore Valve
Up to 10" Reduce Bore Valve

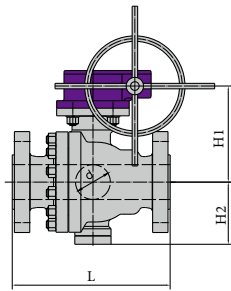


Up to 20" Ball Valve

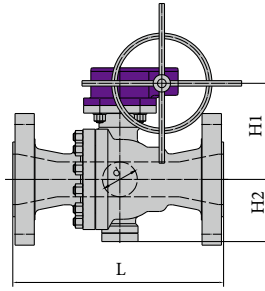
Dimension Chart							
NPS	d	L	H1	H2	W	A	B
2	2	11.5	7.56	5.59	23.6	-	-
3x2x3	2	14	7.56	5.59	23.6	-	-
3	3	14	10.98	6.77	39.37	-	-
4x3x4	3	17	10.98	6.77	39.37	-	-
4	4	17	12.40	8.07	59.06	-	-
6x4x6	4	22	12.40	8.07	59.06	-	-
6	6	22	12.72	10.71	19.69	-	-
8x6x8	6	26	12.72	10.71	19.69	-	-
8	8	26	15.00	13.19	19.69	7.28	12.60
10x8x10	8	31	15.00	13.19	19.69	7.28	12.60
10	10	31	20.39	15.98	19.69	7.28	12.60
12x10x12	10	33	20.39	15.98	19.69	7.28	12.60
12	12	33	22.36	18.15	19.69	8.46	14.96
14x12x14	12	35	22.36	18.15	19.69	8.46	14.96
14	13.25	35	26.18	20.20	19.69	8.46	14.96
16x14x16	13.25	39	26.18	20.20	19.69	8.46	14.96
16	15.25	39	28.74	22.95	19.69	8.46	14.96
18x16x18	15.25	43	28.74	22.95	19.69	8.46	14.96
18	17.25	43	31.30	25.43	19.69	8.46	14.96
20x18x20	17.25	47	31.30	25.43	19.69	8.46	14.96
20	19.25	47	32.48	27.80	24.02	8.46	14.96
24x18x24	17.25	55	32.48	27.80	24.02	8.46	14.96
24	23.25	55	38.31	32.72	24.02	11.02	18.11
26x22x26	21.25	57	34.06	27.99	19.69	8.46	14.96
26	25	57	37.20	32.48	24.02	11.81	19.69
28x24x28	23.25	61	36.22	30.16	19.69	11.02	18.11
28	27	61	40.78	35.04	24.02	11.81	19.69
30x24x30	23.25	65	38.31	32.72	19.69	11.02	18.11
30	29	65	42.83	36.93	24.02	11.81	19.69

DN	d	L	H1	H2	W	A	B
50	51	292	192	142	600	-	-
80x50x80	51	356	192	142	600	-	-
80	76	356	279	172	1000	-	-
100x80x100	76	432	279	172	1000	-	-
100	102	432	315	205	1500	-	-
150x100x150	102	559	315	205	1500	-	-
150	152	559	323	272	500	185	320
200x150x200	152	660	323	272	500	185	320
200	203	660	381	335	500	185	320
250x200x250	203	787	381	335	500	185	320
250	254	787	518	406	500	215	380
300x250x300	254	838	518	406	500	215	380
300	305	838	568	461	500	215	380
350x300x300	305	899	568	461	500	215	380
350	337	899	665	513	500	215	380
400x350x400	337	991	665	513	500	215	380
400	387	991	730	583	500	215	380
450x400x450	387	1092	730	583	500	215	380
450	438	1092	795	646	500	215	380
500x450x500	438	1194	795	646	500	215	380
500	489	1194	825	706	500	215	380
550x500x550	438	1397	825	706	500	215	380
600	591	1397	973	831	500	280	460
650x550x650	540	1448	865	711	500	215	380
650	635	1448	945	825	500	300	500
700x600x700	591	1549	920	766	500	280	460
700	686	1549	1038	890	500	300	500
750x600x750	591	1651	920	766	500	280	460
750	737	1651	1088	938	500	300	500

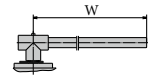
Trunnion Mounted Ball Valve Class 900



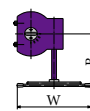
Q347F-900lb



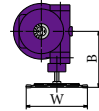
RQ347F-900lb



2"~6" Full Bore Ball valve
3"~8" Reduce Bore Ball valve



Up to 8" Full Bore Valve
Up to 10" Reduce Bore Valve

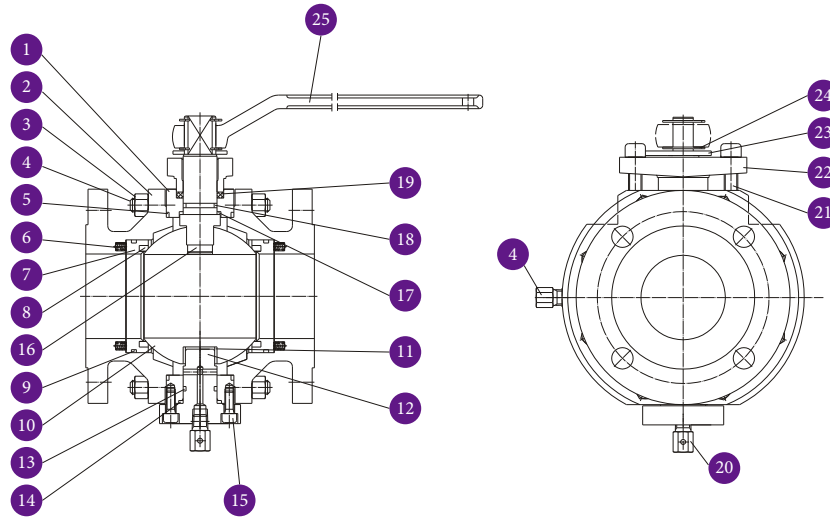


Up to 20" Ball Valve

Dimension Chart							
NPS	d	L	H1	H2	W	A	B
2	2	14.5	7.56	5.59	23.6	-	-
3x2x3	2	15	7.56	5.59	23.6	-	-
3	3	15	10.98	6.77	39.37	-	-
4x3x4	3	18	10.98	6.77	39.37	-	-
4	4	18	12.40	8.07	59.06	-	-
6x4x6	4	24	12.40	8.07	59.06	-	-
6	6	24	12.72	10.71	19.69	-	-
8x6x8	6	29	12.72	10.71	19.69	-	-
8	8	29	15.00	13.19	19.69	7.28	12.60
10x8x10	8	33	15.00	13.19	19.69	7.28	12.60
10	10	33	20.39	15.98	19.69	7.28	12.60
12x10x12	10	38	20.39	15.98	19.69	7.28	12.60
12	12	38	22.36	18.15	19.69	8.46	14.96
14x12x14	12	40.5	22.36	18.15	19.69	8.46	14.96
14	13.25	40.5	26.18	20.20	19.69	8.46	14.96
16x14x16	13.25	44.5	26.18	20.20	19.69	8.46	14.96
16	15.25	44.5	28.74	22.95	19.69	8.46	14.96
18x16x18	15.25	48	28.74	22.95	19.69	8.46	14.96
18	17.25	48	31.30	25.43	19.69	8.46	14.96
20x18x20	17.25	52	31.30	25.43	19.69	8.46	14.96
20	19.25	52	32.48	27.80	24.02	8.46	14.96
24x22x24	19.25	61	32.48	27.80	24.02	8.46	14.96
24	23.25	61	38.31	32.72	24.02	11.02	18.11

DN	d	L	H1	H2	W	A	B
50	51	368	192	142	600	-	-
80x50x80	51	381	192	142	600	-	-
80	76	381	279	172	1000	-	-
100x80x100	76	457	279	172	1000	-	-
100	102	457	315	205	1500	-	-
150x100x150	102	610	315	205	1500	-	-
150	152	610	323	272	500	185	320
200x150x200	152	737	323	272	500	185	320
200	203	737	381	335	500	185	320
250x200x250	203	838	381	335	500	185	320
250	254	838	518	406	500	215	380
300x250x300	254	965	518	406	500	215	380
300	305	965	568	461	500	215	380
350x300x300	305	1029	568	461	500	215	380
350	324	1029	665	513	500	215	380
400x350x400	324	1130	665	513	500	215	380
400	375	1130	730	583	500	215	380
450x400x450	375	1219	730	583	500	215	380
450	426	1219	795	646	500	215	380
500x450x500	426	1321	795	646	500	215	380
500	473	1321	825	706	500	215	380
550x450x550	473	1549	825	706	500	215	380
600	572	1549	973	831	500	280	460

Forged Trunnion Mounted Ball Valve



Technical Specification

☑Temp.& Pressure:AMSE B16.34

☑Wall Thickness:ASME B16.34

☑Bore Dimension:API 6D

☑Face to Face:ASME B16.10,API 6D

☑Flange Dimension:ASME B16.5

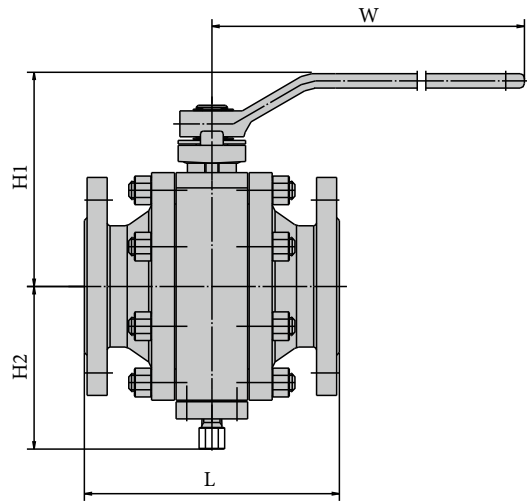
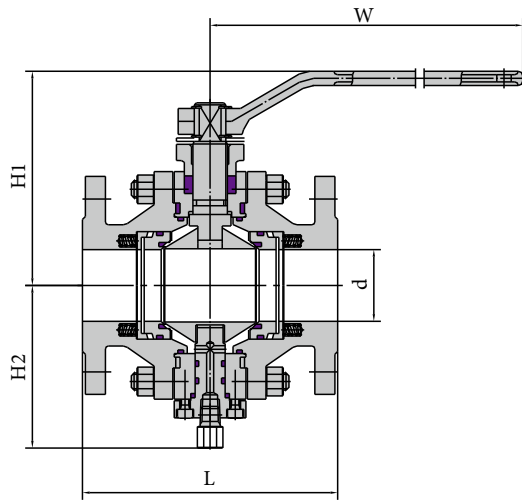
☑Test & Inspection:API 6D

☑Body Material:A105,LF2,F304,F316,F304L,F316L

Form of Major Part Material

Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
2	Bonnet	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
3	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
4	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
5	O-Ring	VITON	VITON	VITON
6	Spring	INCONELX-750	INCONELX-750	INCONELX-750
7	Seat Ring	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
8	Seat Insert	R-PTFE	R-PTFE	R-PTFE
9	O-Ring	VITON	VITON	VITON
10	Ball	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
11	Stem Bearing	304+PTFE	304+PTFE	304+PTFE
12	Lower Stem	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
13	O-Ring	VITON	VITON	VITON
14	Gasket	304+Graphite	304+Graphite	304+Graphite
15	Screw	ASTM A193-B7/B7M	Carbon Steel	Stainless Steel
16	Stem	ASTM A182-F6A	ASTM A182-F304	ASTM A193-B7M/B8
17	Stem Washer	304+PTFE	304+PTFE	304+PTFE
18	O-Ring	VITON	VITON	VITON
19	Packing	Graphite	Graphite	Graphite
20	Drain Valve	Carbon Steel	Carbon Steel	Carbon Steel
21	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
22	Gland Flange	Carbon Steel	Carbon Steel	Carbon Steel
23	Stopper	Carbon Steel	Carbon Steel	Carbon Steel
24	Snap Ring	Carbon Steel	Carbon Steel	Carbon Steel
25	Lever	Carbon Steel	Carbon Steel	Carbon Steel

Forged Steel Floating Ball Valve Class 150/300



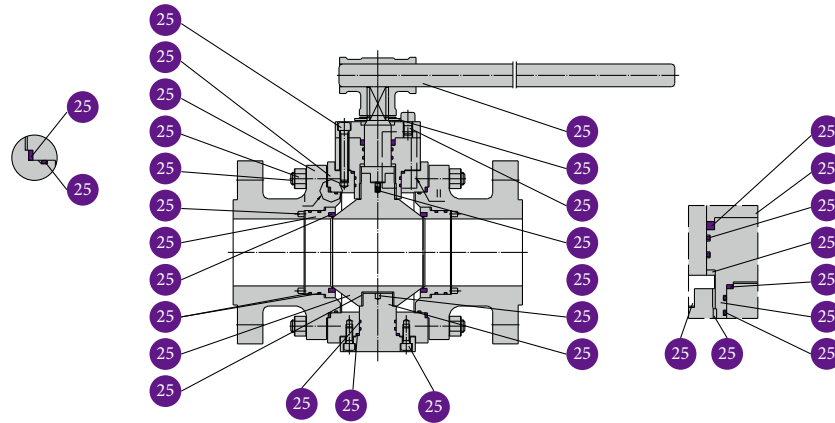
Class 150/300 Diemnsion & Weight

Class	NPS	d	L	H1	H2	W	Weight (kg)
		150	2	2	7	6.02	
	3	3	8	7.68	8.03	23.63	55
	4	4	9	8.39	8.54	33.46	80
300	2	2	8.5	6.02	6.5	15.74	30
	3	3	11.125	7.68	8.03	23.63	60
	4	4	12	8.39	8.54	33.46	100

PN2.0/PN5.0 Diemnsion & Weight

PN	NPS	d	L	H1	H2	W	Weight (kg)
		2.0Mpa	50	50	177.8	153	
80	76.2		203.2	195	205	600	55
100	101.6		228.6	215	220	850	80
5.0Mpa	50	50	215.9	153	165	400	30
	80	76.2	282.6	195	205	600	60
	100	101.6	304.8	215	220	850	100

Forged Trunnion Mounted Ball Valve Class



Technical Specification

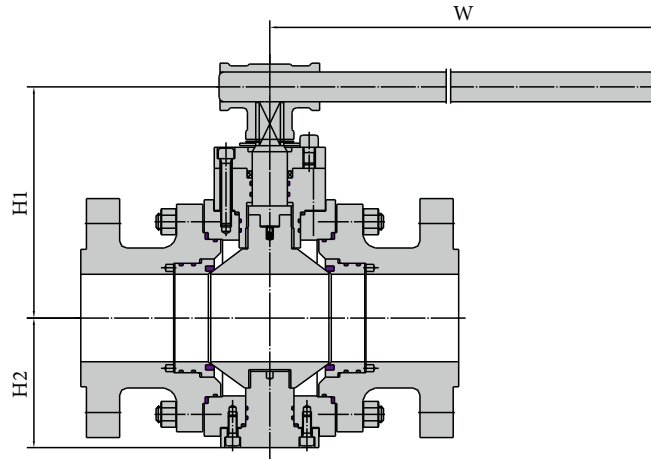
- ☑Temp.& Pressure:AMSE B16.34
- ☑Wall Thickness:ASME B16.34
- ☑Bore Dimension:API 6D
- ☑Face to Face:ASME B16.10,API 6D

- ☑Flange Dimension:ASME B16.5
- ☑Test & Inspection:API 6D
- ☑Body Material:A105,LF2,F304,F316,F304L,F316L

Form of Major Part Material

Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
2	Bonnet	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
3	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
4	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
5	O-Ring	VITON	VITON	VITON
6	Spring	INCONELX-750	INCONELX-750	INCONELX-750
7	Seat Ring	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
8	Seat Insert	R-PTFE	R-PTFE	R-PTFE
9	O-Ring	VITON	VITON	VITON
10	Ball	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
11	Stem Bearing	304+PTFE	304+PTFE	304+PTFE
12	Spring	ASTM A276-316	ASTM A276-316	ASTM A182-/F316
13	Lower Stem	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
14	O-Ring	VITON	VITON	VITON
15	Gasket	304+Graphite	304+Graphite	304+Graphite
16	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
17	Stem	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304/F316
18	Ball Bearing	304+PTFE	304+PTFE	304+PTFE
19	Stem Washer	304+PTFE	304+PTFE	304+PTFE
20	O-Ring	VITON	VITON	VITON
21	Packing	Graphite	Graphite	Graphite
22	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
23	O-Ring	VITON	VITON	VITON
24	Flange Adapter	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
25	Gasket	304+Graphite	304+Graphite	304+Graphite
26	O-Ring	VITON	VITON	VITON
27	Gland	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
28	Drain Valve	Carbon Steel	Carbon Steel	Stainless Steel
29	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
30	Stopper	Carbon Steel	Carbon Steel	Carbon Steel
31	Lever	Carbon Steel	Carbon Steel	Carbon Steel

Forged Trunnion Mounted Ball Valve



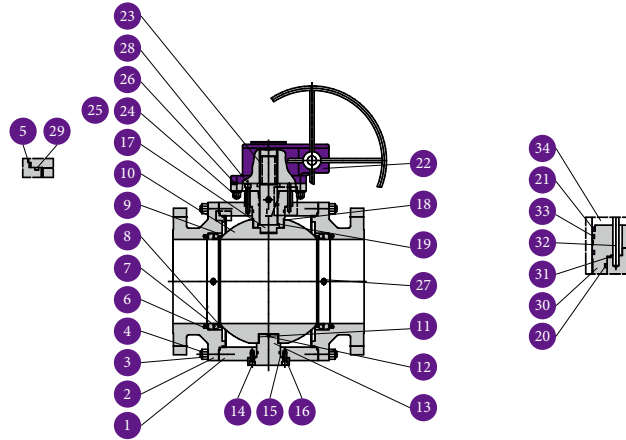
Class 600~900 Diemnsion & Weight

Class	NPS	d	L	H1	H2	W	Weight (kg)
600	2	2	11.5	6.59	5.55	23.15	32
	3	3	14	8.21	6.57	49.25	64
	4	4	17	9.61	7.97	51.22	122
900	2	2	14.5	6.59	5.55	23.15	48
	3	3	15	8.21	6.57	49.25	78
	4	4	18	-	7.97	-	138
1500	2	2	14.5	6.59	5.55	45.7	55
	3	3	18.5	8.21	6.57	49.25	97
	4	4	21.5	-	7.97	-	162

PN10.0~PN25.0 Diemnsion & Weight

PN	NPS	d	L	H1	H2	W	Weight (kg)
10.0Mpa	50	50	292	167.5	141	588	32
	80	76.2	355.6	208.5	167	1251	64
	100	101.6	431.8	244	212.5	1300	122
15.0Mpa	50	50	368.3	167.5	141	588	48
	80	76.2	381	208.5	167	1251	78
	100	101.6	457.2	-	202.5	-	138
25.0Mpa	50	50	368.3	167.5	141	1160	55
	80	76.2	469.9	208.5	167	1251	97
	100	101.6	546.1	-	202.5	-	162

Forged Trunnion Mounted Ball Valve Class



Technical Specification

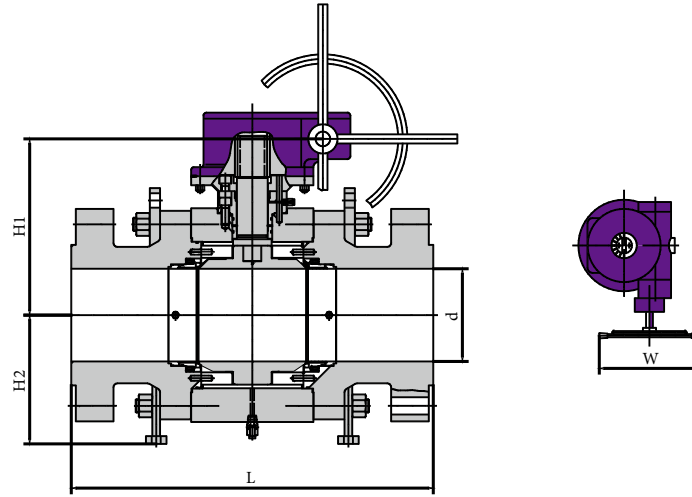
- ☑Temp.& Pressure:AMSE B16.34
- ☑Wall Thickness:ASME B16.34
- ☑Bore Dimension:API 6D
- ☑Face to Face:ASME B16.10,API 6D

- ☑Flange Dimension:ASME B16.5(MSS SP-44),BS1560
- ☑Test & Inspection:API 6D,BS1560
- ☑Body Material:A105,LF2,F304,F316,F304L,F316L

Form of Major Part Material

Part No.	Part Name	Material		
		Carbon Steel	Low Temp.Steel	Stainless Steel
1	Body	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
2	Bonnet	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
3	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
4	Bolt	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
5	O-Ring	VITON	VITON	VITON
6	Spring	INCONELX-750	INCONELX-750	INCONELX-750
7	Seat Ring	ASTM A105	ASTM A350 LF2/LF3	ASTM A182-F304/F316
8	Seat Insert	R-PTFE	R-PTFE	R-PTFE
9	O-Ring	VITON	VITON	VITON
10	Ball	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
11	Stem Bearing	304+PTFE	304+PTFE	304+PTFE
12	Spring	ASTM A276-316	ASTM A276-316	ASTM A182-/F316
13	Lower Stem	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
14	O-Ring	VITON	VITON	VITON
15	Gasket	304+Graphite	304+Graphite	304+Graphite
16	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
17	Upper Stem	ASTM A182-F6A	ASTM A182-F304	ASTM A182-F304/F316
18	Ball Bearing	304+PTFE	304+PTFE	304+PTFE
19	Axial bearing	304+PTFE	304+PTFE	304+PTFE
20	O-Ring	VITON	VITON	VITON
21	Packing	Graphite	Graphite	Graphite
22	Gear Box	Cast Iron	ASTM A320 L7	ASTM A193-B7M/B8
23	Key	ASTM 1045	ASTM A182-F304	ASTM A182-F304/F316
24	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
25	Nut	ASTM A194-2H/2HM	ASTM A194 4	ASTM A194-2HM/8
26	Spring Gasket	65Mn	65Mn	65Mn
27	Injection Valve	Carbon Steel	Carbon Steel	Stainless Steel
28	Screw	ASTM A193-B7/B7M	ASTM A320 L7	ASTM A193-B7M/B8
29	O-ring	VITON	VITON	VITON
30	Flange Adapter	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
31	Gasket	304+Graphite	304+Graphite	304+Graphite
32	Pin	Carbon Steel	Carbon Steel	Stainless Steel
33	O-Ring	VITON	VITON	VITON
34	Gland	ASTM A105	ASTM A182-F304	ASTM A182-F304/F316
35	Drain Valve	Carbon Steel	Carbon Steel	Stainless Steel

Forged Trunnion Mounted Ball Valve



Class 1500 Diemnsion & Weight

Class	NPS	d	L	H1	H2	W	Weight (kg)
		6	5.75	27.75	14.96	9.85	
1500	8	7.625	32.75	19.29	13.78	31.5	935
	10	9.5	39	20.07	14.96	31.5	1900
	12	11.375	44.5	22.05	16.14	31.5	2285
	14	12.5	49.5	25	16.69	31.5	3940
	16	14.25	54.5	26.97	22.44	31.5	5430

PN2.0/PN5.0 Diemnsion & Weight

PN	NPS	d	L	H1	H2	W	Weight (kg)
		150	146	704.9	380	250	
25.0Mpa	200	194	931.9	490	350	800	935
	250	241	990.6	510	380	800	1900
	300	289	1130.3	560	410	800	2285
	350	317.5	1257.3	635	500	800	3940
	400	362	1384.3	685	570	800	5430