



VALVE SERIES

## JIANGRUI VALVE

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## About Us

WENZHOU JIANGRUI VALVE is located in Pump&Valve industry center-Oubei town of China. As a youngly promising ball valve manufacturer,we devoted overall our effort to design and manufaturing to make sure our valves higher quality with most competitive price. With the assistance of CNC,CN vertical lathe, cn horizontal lathe,automatic welding device,our technicians can produce top quality products with precise dimension to our clients for assembly by themself easily.We product valves as per API,DIN,ISO,GOST,JIS,WARS etc..We work hard for quality china always,untill now our products gained high reputation in china domestic

market and international market. Our producing management system and quality control system sets out strict producing and inspection procedure to make sure 5S management can be implemented smoothly. At this period, human-source is the key point to most of enterprises,our stable and experienced team let us get more advantages such as:• superior quality,shorter delivery time, better sales service and technical support; • Wenzhou Jiangrui Valve Technology Co., Ltd. is your best cooperation partner.



## Energy Engineering Technology Development

[www.jiangrui-valve.com](http://www.jiangrui-valve.com)



Wenzhou Jiangrui Valve Technology Co., Ltd.

## Production Application



### Break Through Firstly In The Industry And Reach To Be The Leading On Speciality

We will constantly insist on the tenet of "Credit first and customer supreme" and "Reasonable price and value-added service" keep to the management conception of "Quality creates brand, credit weaves future" be practical and truth seeking, aggressive and enterprising, and continue to maintain vigorous development energy.

We will consider every small chain from the view of customers, and make sure that the customer requirements are satisfied at maximum limit without any worry for cost, which can realize the value-added service in real sense.

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## Trunnion Mounted Ball Valve Series



### Applicable standards

Design STD: API 608, API 6D, BS 5351  
Steel ball valves: ISO 14313  
Fire durable: API 607  
Anti static: API 608  
Steel valves: ASME B16.34  
Face to face: ASME B16.10, API 6D  
End connection: ASME B16.5/B16.47/B16.25  
Buttwelding ends: ASME B16.25  
Inspection and test: API 598/API 6D, BS 6755



### Design description

Size 2"-36"  
ANSI Class 150-2500  
Working temperature: -46°C-550°C  
Pressure class(lb): 150, 300, 600, 900, 1500, 2500  
Medium: water, oil, acid medium, etc.  
Full port design  
Bolted bonnet, split body  
Three piece body for 12" and above  
Trunnion mounted ball type  
Blow-out proof stem  
Fire durable construction  
Anti static device  
Stopper device  
Lifting lugs & supporting feet (8" & above)  
ISO 5211 mounting pad  
Flanged or buttwelding ends connection  
Available with worm gear, handwheel, motor, pneumatic actuator



### Materials

Part Name	Carbon Steel		Stainless Steel			
	WCB	LCB	Cf8	CF8M	Cf3	CF3M
Body	A216, WCB A105	A352 Lf2	A351 Cf8	A351 CF8M	A351 Cf3	A351 CF3M
L-body	A216, WCB A105	A352 LCB A350 Lf2	A351 Cf8	A351 CF8M	A351 Cf3	A351 CF3M
R-body	A216, WCB A105	A352 LCB A350 Lf2	A351 Cf8	A351 CF8M	A351 Cf3	A351 CF3M
Ball	A105/Ep.Cr	A182 F304	A351 Cf8	A351 CF8M	A351 Cf3	A351 CF3M
Stem	A182 F6	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Seat	A182 F6	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Seat Ring	PTFE,POM or HF(Co-CrA)					
Gasket	PTFE or Flexible Graphite and stainless Steel					
O-Ring	VITON	VITON	VITON	VITON	VITON	VITON
Trunnion	A182 F6	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Spring	AISI 6160 17-17PH(Inconel for NACE)Ni-Cr Alloy					
Drain plug	A182 F6	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Bolt	A193 B7 A320 L7 A193 B8 A193 B8M					
Stem bearing	PTFE or Stainless Steel and Graphite					
Stem seat	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Stem spring	17-17PH(Inconel for NACE)Ni-Cr Alloy					
Small ball	A182 F304 A182 F316					
Trunnion bearing	PTFE or Stainless Steel and Graphite					
Plug	A105	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Spring seat	A105	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Bonnet bolt	A193 B7 A320 L7 A320 B8 A193 B8M					
Bonnet nut	A194 2H A194 4 A194 8					
Pin	Carbon Steel or Alloy Steel					
Gland	A182 F6	A182 F6	A182 F304	A182 F316	A182 F304L	A182 F316L
Gland flange	A216 WCB	A352 LCB	A351 Cf8	A351 CF8M	A351 Cf3	A351 CF3M
Stem packing	PTFE or Flexible Graphite					
Bonnet	A216, WCB A105	A352 F6 A350 Lf2	A351 Cf8	A351 CF8M	A351 Cf3	A351 CF3M

### Dimension & Weight (mm&Kg)

		CLASS 150Lb													
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700
NPS	In	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	28
L(RF)	mm	178	191	203	229	394	457	533	610	686	762	864	914	1067	1245
	in	7	7.5	8	9	15.5	18	21	24	27	30	34	36	42	49
L1(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1346
	in	8.5	9.5	11.13	12	18	20.5	22	25	30	33	36	39	45.5	53
L2(RTJ)	mm	191	203	216	241	406	470	546	622	699	775	876	927	1080	
	in	7.5	8	8.5	9.5	16	18.5	21.5	24.5	27.5	30.5	34.5	36.5	42.5	
H	mm	153	165	195	213	272	342	495	580	625	720	790	840	1050	1150
	in	6.05	6.5	7.68	8.39	10.7	13.5	19.5	22.85	24.6	28.35	31	33.1	41.34	45.3
Do(W)	mm	400	400	600	850	1100	1500	*350	*350	*600	*600	*800	*800	*800	*800
	in	15.74	15.74	23.62	33.46	43.3	59	13.8	13.8	23.6	23.6	31.5	31.5	31.5	31.5
RF	Kg	15	19	38	65	97	160	240	390	510	750	895	1190	2100	3000
BW	Kg	13	17	35	55	92.8	154	227	365	478	711	868	1138	2015	2900
		CLASS 300Lb													
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700
NPS	In	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	28
L(RF)	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1346
	in	8.5	9.5	11.13	12	15.88	19.75	22.38	25.5	30	33	36	39	45	53
L1(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1346
	in	8.5	9.5	11.13	12	18	20.5	22	25	30	33	36	39	45	53
L2(RTJ)	mm	232	257	298	321	419	518	584	664	778	854	930	1010	1165	1372
	in	9.13	10.13	11.75	12.63	16.5	20.38	23	26.13	30.63	33.63	36.63	39.75	45.89	54
H	mm	153	165	195	213	272	342	495	580	625	720	790	840	1050	1150
	in	6.02	6.5	7.68	8.39	10.7	13.5	19.5	22.85	24.6	28.35	31	33.1	41.34	45.3
Do(W)	mm	400	400	600	850	1100	1500	*350	*350	*600	*600	*800	*800	*800	*800
	in	15.74	15.74	23.62	33.46	43.3	59	13.8	13.8	23.6	23.6	31.5	31.5	31.5	31.5
RF	Kg	18	27	47	80	118	200	365	530	740	1030	1320	1540	2600	3900
BW	Kg	14	22	38	65	105	185	342	503	713	1000	1285	1498	2540	3825
		CLASS 600Lb													
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	-	-
NPS	In	2	2 1/2	3	4	6	8	10	12	14	16	18	20	-	-
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	-	-
	in	11.5	13	14	17	22	26	31	33	35	39	43	47	-	-
L1(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	-	-
	in	11.5	13	14	17	22	26	31	33	35	39	43	47	-	-
L2(RTJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	-	-
	in	11.63	13.13	14.13	17.13	22.13	26.13	31.13	33.13	35	39.5	43.1	47.3	-	-
H	mm	153	165	195	213	272	342	495	580	630	725	800	850	-	-
	in	6.02	6.5	7.68	8.39	10.7	13.5	19.5	22.85	24.8	28.5	31.5	33.5	-	-
Do(W)	mm	600	850	1250	1300	1500	*350	*350	*600	*600	*800	*800	*800	-	-
	in	23.62	33.46	49.25	51.22	59	13.8	13.8	23.6	23.6	31.5	31.5	31.5	-	-
RF	Kg	38	56	66	122	217	350	660	820	830	1160	1420	1650	-	-
BW	Kg	31	51	58	117	200	327	605	790	800	1030	1305	1505	-	-

### Dimension & Weight (mm&Kg)

CLASS 900Lb															
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	-	-
NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	-	-
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	-	-
	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5	48	52	-	-
L1(BW)	mm	368	419	381	457	610	737	838	968	1029	1130	1219	1321	-	-
	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5	48	52	-	-
L2(RTJ)	mm	371	422	384	460	613	740	841	968	1032	1133	1222	1327	-	-
	in	14.63	16.63	15.13	18.13	24.13	29.13	33.13	38.13	40.6	44.6	48.1	52.3	-	-
H	mm	162	195	205	239	290	355	510	595	650	750	835	900	-	-
	in	6.36	7.7	80.5	9.41	11.4	14	20	23.4	25.6	29.5	32.9	35.4	-	-
Do(W)	mm	600	850	1250	1300	1500	*350	*350	*600	*600	*800	*800	*800	-	-
	in	23.62	33.46	49.25	51.22	59	13.8	13.8	23.6	23.6	31.5	31.5	31.5	-	-
RF	Kg	48	60	78	138	250	375	710	890	910	1200	1480	1760	-	-
BW	Kg	44.5	52.5	75.2	131	232	355	690	827	870	1100	1210	1620	-	-

CLASS 1500Lb															
DN	mm	50	65	80	100	150	200	250	300	350	400	-	-	-	-
NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	-	-	-	-
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	-	-	-	-
	in	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5	-	-	-	-
L1(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384	-	-	-	-
	in	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5	-	-	-	-
L2(RTJ)	mm	371	422	473	549	711	842	1000.5	1146	1276	1406	-	-	-	-
	in	14.63	16.63	18.63	21.63	28	33.13	39.38	45.13	50.2	55.4	-	-	-	-
H	mm	197	220	254	290	355	510	595	655	680	780	-	-	-	-
	in	7.74	8.7	10	11.44	14	20	23.5	25.8	26.8	30.7	-	-	-	-
Do(W)	mm	600	*350	*350	*600	*600	*800	*800	*800	*800	*800	-	-	-	-
	in	23.6	13.8	13.8	23.6	23.6	31.5	31.5	31.5	31.5	31.5	-	-	-	-
RF	Kg	55	80	97	162	290	390	745	935	1000	1305	-	-	-	-
BW	Kg	51	71	92.8	157.5	227	335	697	885	915	1200	-	-	-	-

CLASS 2500Lb															
DN	mm	40	50	65	80	100	125	150	200	250	-	-	-	-	-
NPS	in	1-1/2	2	2-1/2	3	4	5	6	8	10	-	-	-	-	-
L(RF)	mm	384	451	508	578	673	794	914	1022	1270	-	-	-	-	-
L1(BW)	mm	384	451	508	578	673	794	914	1022	1270	-	-	-	-	-
L2(RTJ)	mm	387	454	514	584	683	807	927	1038	1292	-	-	-	-	-
d	mm	38	42	52	62	87	100	131	179	223	-	-	-	-	-
H	mm	290	320	350	400	425	500	590	610	660	-	-	-	-	-
H1	mm	105	120	130	150	180	210	230	290	350	-	-	-	-	-
W	mm	300	300	300	300	400	400	500	500	600	-	-	-	-	-
Weight	Kg	70	104	140	202	305	530	760	1200	2080	-	-	-	-	-

### Design description

Size 2"-36"  
ANSI Class 150-1500Lb  
Working temperature: -46°C-550°C  
Pressure class(lb): 150,300,600,900,1500  
Medium: water, oil, acid medium, etc.  
Full port design  
Bolted bonnet, split body  
Three piece body for 12" and above  
Trunnion mounted ball type  
Blow-out proof stem  
Fire durable construction  
Anti static device  
Stopper device  
Lifting lugs & supporting feet (8" & above)  
ISO 5211 mounting pad  
Flanged or buttwelding ends connection  
Available with worm gear, handwheel, motor, pneumatic actuator



### Applicable standards

Design STD: API 608, API 6D  
Steel ball valves: ISO 14313  
Fire durable : API 607  
Anti static : API 608  
Steel valves : ASME B16.34

Face to face : ASME B16.10  
End connection: ASME B16.5  
Buttwelding ends : ASME B16.25  
Inspection and test : API 598/API 6D

### Materials

Part Name	Carbon Steel		Stainless Steel	
	WCB	LCB	CF8	CF8M
L-body	A216 Gr WCB	A352 Gr LCB	A315 Gr CF8	A315 Gr CF8M
R-body	A216 Gr WCB	A352 Gr LCB	A315 Gr CF8	A315 Gr CF8M
Ball	A182 F6a	A182 F304	A315 Gr CF8	A315 Gr CF8M
Seat ring	A182 F304	A182 F304	A182 F304	A182 F316
Ball guide	A105N+Nip	A182 F304	A315 Gr CF8	A315 Gr CF8M
Stem retainer	A216 Gr WCB	A352 Gr LCB	A315 Gr CF8	A315 Gr CF8M
Sealing plate	A216 Gr WCB	A352 Gr LCB	A315 Gr CF8	A315 Gr CF8M
Ball seat	PTFE/RPTFE	PTFE/RPTFE	PTFE/RPTFE	PTFE/RPTFE
Packing	PTFE/Graphite	Graphite/PTFE	GRAFOIL	GRAFOIL
Gasket	PTFE/SPIRAL WOUND	PTFE/SPIRAL WOUND	PTFE/SPIRAL WOUND	PTFE/SPIRAL WOUND
Stud and nut	A193 Gr B7/A194 Gr 2H	A320 Gr L7/A194 Gr 4	A193 B8/A194 B	A320 B8M/A194 B8
Socket head screw	A193 Gr B7	A320 Gr L7	A193 Gr B8	A193 Gr B8
Stem	CS+Plated/stainless steel			
Thrust washer	Graphite PTFE/NYLON			
Cover washer	PTFE/NYLON			
Ball guide bush	Carbon steel/SS			
O-ring	Viton			
Constact spring	17-7PH/inconel-Alloy			
Antistatic device	Stainless steel			
Worm gear/actuator	Manufacture's standard			
Drain plug	Carbon steel/stainless steel			

### Dimension & Weight (mm&Kg)

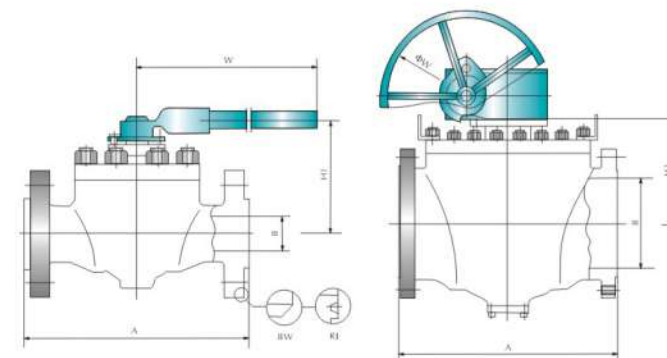
		Class 150LB								
Size	inch	6	8	10	12	14	16	18	20	24
L-RF	mm	394	457	533	610	686	762	864	914	1067
L1-BW	mm	457	521	559	635	762	838	914	991	1143
L2-RTJ	mm	406	470	546	622	698	725	876	927	1079
B	mm	152	203	254	305	337	687	438	489	591
H	mm	270	315	360	410	425	475	525	590	695
K	mm	300	300	400	400	600	600	600	600	750
WT	Kg	110	160	320	448	567	850	1050	1350	1750

		Class 300LB								
Size	inch	6	8	10	12	14	16	18	20	24
L,L-RF-BW	mm	403	502	568	648	762	838	914	991	1143
L2-RTJ	mm	419	518	584	664	778	854	930	1010	1165
B	mm	152	203	254	305	337	387	438	489	591
H	mm	285	345	380	345	450	495	570	615	710
K	mm	300	300	400	400	600	600	600	750	750
WT	Kg	128	210	345	560	780	1020	1200	1625	2285

		Class 600LB												
Size	inch	2	2½	3	4	6	8	10	12	14	16	18	20	24
L,L-RF-BW	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L2-RTJ	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407
B	mm	51	64	76	102	152	203	254	305	337	387	438	489	591
H	mm	190	230	265	295	300	355	415	455	505	515	600	640	735
K	mm	250	250	300	300	400	400	400	600	600	600	750	750	750
WT	Kg	34	40	45	98	200	395	555	840	1015	1220	1350	2080	2745

		Class 900LB											
Size	inch	2	2½	3	4	6	8	10	12	14	16	18	20
L,L-RF-BW	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321
L2-RTJ	mm	371	422	384	460	613	740	841	968	1038	1140	1323	1334
B	mm	51	64	76	102	152	203	254	305	324	375	425	473
H	mm	210	250	285	280	360	455	510	525	595	650	685	695
K	mm	250	300	300	400	400	600	600	600	750	750	750	800
WT	Kg	45	50	72	130	235	495	690	1050	1350	1750	2300	2850

		Class 1500LB							
Size	inch	2	2½	3	4	6	8	10	
L,L-RF-BW	mm	368	419	470	546	706	832	991	
L2-RTJ	mm	371	422	473	549	711	841	1000	
B	mm	51	64	76	102	146	184	241	
H	mm	230	260	290	305	370	470	520	
K	mm	300	300	400	400	600	600	750	
WT	Kg	52	74	98	144	320	695	960	



### Applicable standards

Design STD: API 6D, ISO 14313, API 608

Steel ball valves : ISO 14313

Fire durable : API 607, ISO 10497

Anti static : API 608

Face to face : ASME B16.10-2000(R2003) API 6D-2002

End connection: ASME B16.5

Buttwelding ends : ASME B16.25

Inspection and test : API 6D, ISO 5208, API 598

### Design description

Size 2"-30"

ANSI Class 150-1500Lb

Working temperature: -46°C-550°C

Medium: water, oil, acid medium, etc.

Top entry

Full port design

One piece body

Bolted bonnet, split body

Three piece body for 12" and above

Trunnion mounted ball type

Blow-out proof stem

Fire durable construction

Anti static device

Stopper device

Lifting lugs & supporting feet (8" & above)

ISO 5211 mounting pad

Flanged or buttwelding ends connection

Available with worm gear, handwheel, motor,

pneumatic actuator

### Materials

Part name	ASTM Material		
	Carbon steel	18Cr-9Ni-2Mo	Carbon steel
Body	A216 WCB	A351 CF8M	A352 LCB
Bonnet	A216 WCB	A351 CF8M	A352 LCB
Ball	A105+ENP	A182 F316	A350 LF2+ENP
Stem	182 F6a	A276 F316	A276 304
Seat	A105+ENP	A182 F316	A350 LF2+ENP
Stem insert	PTFE		
Seat spring	17-7PH	Inconel X 750	A313 304
Seat O-ring	VITON		
Stem O-ring	VITON		
Bonnet gasket	Graphite+SS304	Graphite+SS316	Graphite+SS304
Bonnet O-ring	VITON		
Antistatic spring	A313 304	A313 316	A313 304
Grounding plunger	A216 WCB	A182 F316	A182 304
Bonnet stud	A193 B7	A193 B8	A193 L7
Bonnet stud nut	A194 2H	A194 8	A194 4
Trunnion	A182 F6a	A182 316	A182 304
Trunnion bearing	304+PTFE	316+PTFE	304+PTFE
Gland flange	A216 WCB	A351 CF8M	A352 LCB
Gland bolt	A193 B7	A193 B8	A193 B7
Stop plate	Carbon steel+Zn		

Note: 1)A105+ENP optional; 2)Spiral wound construction

### Dimensional datas

ANSI Class 150Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	292	51	207	300	30	50
3	80	356	76	223	400	57	65
4	100	432	100	280	450	100	151
★6	150	559	150	275	460	215	320
★8	200	660	201	321	460	407	1020
★10	250	787	252	355	600	560	1085
★12	300	838	303	470	600	710	1562
★14	350	889	334	455	600	760	2426
★16	400	991	385	480	600	1100	3016
★18	450	1092	436	503	600	1512	4574
★20	500	1194	487	560	700	1960	6016
★24	600	1397	589	610	700	3200	9750
★28	700	1549	684	730	700	4600	14540
★30	750	1651	735	800	760	5630	18005

### Dimensional datas

ANSI Class 600Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	292	51	215	500	41	148
3	80	356	76	232	600	67	200
4	100	432	100	294	600	110	460
★6	150	559	150	287	600	226	908
★8	200	660	201	324	600	417	2560
★10	250	787	252	365	600	570	3048
★12	300	838	303	480	700	720	4300
★14	350	889	334	465	700	770	7255
★16	400	991	385	470	700	1112	9174
★18	450	1092	436	512	760	1523	13520
★20	500	1194	487	570	760	1940	18034
★24	600	1397	589	622	760	3213	29512
★28	700	1549	684	742	760	4612	42264
★30	750	1651	735	817	850	5640	58864

### Dimensional datas

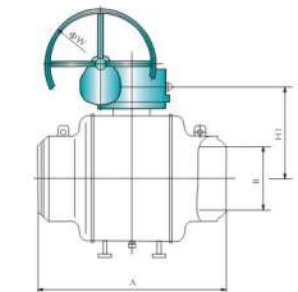
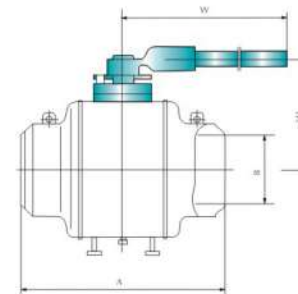
ANSI Class 300Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	292	51	211	300	36	86
3	80	356	76	226	500	63	110
4	100	432	100	286	550	106	170
★6	150	559	150	282	460	221	500
★8	200	660	201	325	460	412	1620
★10	250	787	252	360	600	566	1824
★12	300	838	303	420	600	715	2632
★14	350	889	334	460	600	766	3800
★16	400	991	385	480	600	1106	5376
★18	450	1092	436	508	600	1519	8000
★20	500	1194	487	565	600	2010	10610
★24	600	1397	589	617	760	3208	17280
★28	700	1549	684	678	760	4607	25102
★30	750	1651	735	738	760	5638	31664

### Dimensional datas

ANSI Class900Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	368	49	212	650	52	206
3	80	381	74	227	700	110	280
4	100	457	100	277	800	200	650
★6	150	610	150	283	600	430	1298
★8	200	737	201	334	600	800	3596
★10	250	838	252	380	600	1000	4306
★12	300	965	303	507	700	1300	6000
★14	350	1029	322	520	700	1695	10220
★16	400	1130	373	538	760	2560	12968
★18	450	1219	423	580	760	3400	19054
★20	500	1321	471	625	760	4400	25452
★24	600	1549	589	690	850	7200	38655

### Dimensional datas

ANSI Class1500Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	368	49	212	600	56	330
3	80	470	74	236	930	153	440
4	100	546	100	295	460	278	1034
★6	150	705	144	303	600	600	2084
★8	200	832	192	354	600	1100	5496
★10	250	991	239	398	700	1438	6720
★12	300	1130	287	520	700	2017	14520
★14	350	1257	315	560	760	2612	32600
★16	400	1384	360	570	760	3890	49650
★18	450	1477	405	592	760	5100	66350



### Applicable standards

Steel ball valves: API 608/API 6D  
 Steel ball valves: ISO 14313  
 Fire durable: API 607  
 Anti static: API 608  
 Steel valves: ASME B16.34

Face to face: ASME B16.10  
 End flanges: ASME B16.5  
 Buttwelding ends: ASME B16.25  
 Inspection and test: API 598/API 6D

### Design description

Size 2"-30"  
 ANSI Class 150-1500Lb  
 Working temperature: -46°C~550°C  
 Medium: water, oil, acid medium, etc.  
 Top entry  
 Full port design  
 One piece body  
 Bolted bonnet, split body  
 Double block and Bleed  
 Stem extensions

Trunnion mounted ball type  
 Blow-out proof stem  
 Fire durable construction  
 Anti static device  
 Stopper device  
 Lifting lugs & supporting feet (8" & above)  
 ISO 5211 mounting pad  
 Flanged or buttwelding ends connection  
 Available with worm gear, handwheel, motor, pneumatic actuator

### Materials

Part Name	Carbon steel	Low temp. steel	Stainless steel
Body	ASTM A105	ASTM A350 LF2	ASTM A182 F316
Bonnet	ASTM A105	ASTM A350 LF2	ASTM A182 F316
Spring	INCONELX-750		
Seat	ANSI A105	ASTM A350 LF2+ENP	ASTM A182 F316
O-ring	VITON		
Ring	RPTFE		
Ball	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182 F316
Sliding bearing	304+PTFE		
Backing	ASTM A105	ASTM A350 LF2+ENP	ASTM A182-F316
Backing pin	ANS 1045	ASTM A350 LF2+ENP	ASTM A182-F316
Stem	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F316
Bush	ASTM A182 F316		
Screw	ASTM A193-B7/B7M	ASTM A193-7M	ASTM A193-B8
Pin	ANS 1045	ANS 1045	A276-316
Coping	ASTM A105	ASTM A350 LF2+ENP	ASTM A182-F316
Gasket	304+GRAPHITE		



### Dimensional datas

ANSI Class 150Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	216	51	146	300	12	50
3	80	283	76	170	400	28	65
4	100	305	100	204	450	42	151
★6	150	457	150	260	460	425	320
★8	200	521	201	300	460	220	1020
★10	250	559	252	340	600	340	1085
★12	300	635	303	385	600	520	1562
★14	350	762	334	410	600	860	2426
★16	400	838	385	460	600	980	3016
★18	450	914	436	520	600	1210	4574
★20	500	991	487	560	700	1760	6016
★24	600	1143	589	600	700	2010	9750
★28	700	1346	684	730	700	3200	14540
★30	750	1397	735	840	760	4120	18005

### Dimensional datas

ANSI Class 300Lb							
NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm
2	50	216	51	170	300	16	86
3	80	283	76	185	500	35	110
4	100	305	100	210	550	60	170
★6	150	457	150	260	460	150	500
★8	200	521	201	310	460	250	1620
★10	250	559	252	345	600	350	1824
★12	300	635	303	390	600	580	2632
★14	350	762	334	420	600	980	3800
★16	400	838	385	470	600	1210	5376
★18	450	914	436	530	600	1520	8000
★20	500	991	487	590	600	2010	10610
★24	600	1143	589	600	760	2520	17280
★28	700	1346	684	750	760	3600	25102
★30	750	1397	735	850	760	4620	31664

### Dimensional datas

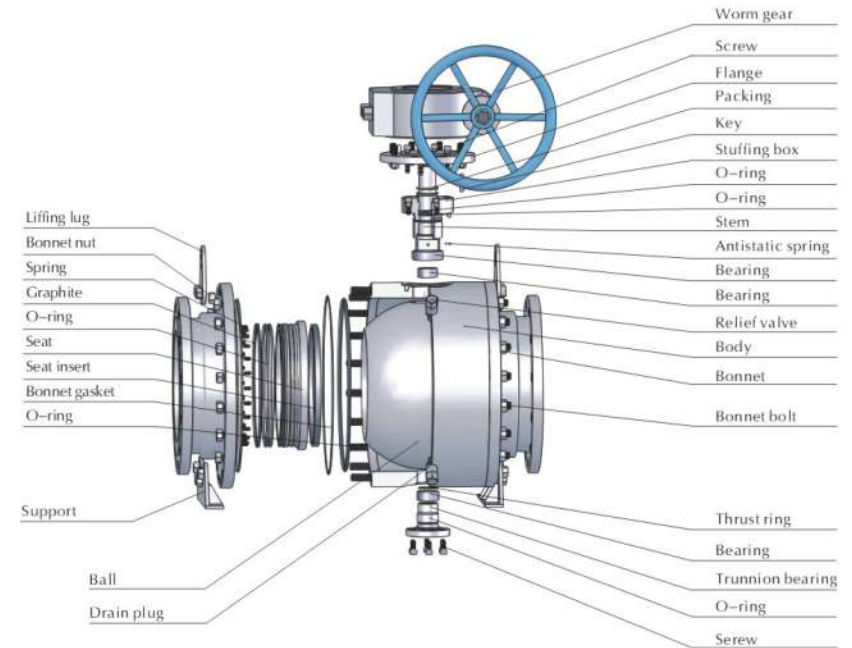
ANSI Class 600Lb															
NPS	DN	A	B	H1	W	WT	T	NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm	inch		mm	mm	mm	mm	mm	mm
2	50	292	51	185	500	27	148	★14	350	889	334	450	700	1228	7255
3	80	356	76	190	600	48	200	★16	400	991	385	500	700	1705	9174
4	100	432	100	220	600	95	460	★18	450	1092	436	560	760	2380	13520
★6	150	559	150	270	600	210	908	★20	500	1194	487	620	760	2875	18034
★8	200	660	201	320	600	405	2560	★24	600	1397	589	750	760	4830	29512
★10	250	787	252	350	600	655	3048	★28	700	1549	684	880	760	5900	42264
★12	300	838	303	400	700	915	4300	★30	750	1651	735	960	850	7200	58864

### Dimensional datas

ANSI Class 900Lb															
NPS	DN	A	B	H1	W	WT	T	NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm	inch		mm	mm	mm	mm	mm	mm
2	50	368	49	180	650	40	208	★12	300	965	303	450	700	1270	6000
3	80	381	74	28	700	70	280	★14	350	1029	322	550	700	1515	10220
4	100	457	100	222	800	110	650	★16	400	1130	373	650	760	2420	12968
★6	150	610	150	270	600	255	1298	★18	450	1219	423	750	760	2740	19054
★8	200	737	201	325	600	525	3596	★20	500	1321	471	830	760	3325	25452
★10	250	838	252	360	600	810	4306	★24	600	1549	589	950	850	4800	38655

### Dimensional datas

ANSI Class 1500Lb															
NPS	DN	A	B	H1	W	WT	T	NPS	DN	A	B	H1	W	WT	T
inch		mm	mm	mm	mm	mm	mm	inch		mm	mm	mm	mm	mm	mm
2	50	368	49	175	600	50	330	★8	200	832	192	360	600	580	5496
3	80	470	74	232	930	115	440	★10	250	991	239	410	700	1120	6720
4	100	546	100	395	460	170	1034	★12	300	1130	287	500	700	1492	14520
★6	150	705	144	300	600	402	2084	★14	350	1257	315	560	760	2140	32600



### Applicable standards

Steel ball valves: API 608/API 6D  
 Steel ball valves: ISO 14313  
 Fire durable: API 607  
 Anti static: API 608  
 Steel valves: ASME B16.34  
 Face to face: ASME B16.10  
 End flanges: ASME B16.5  
 Buttwelding ends: ASME B16.25  
 Inspection and test: API 598/API 6D

### Design description

Size 1/2"-56"  
 Working temperature: -46°C-550°C  
 Pressure class(lb): 150,300,600,900,1500,2500  
 Medium: water, oil, acid medium, etc.  
 Full and reduced port design  
 Bolted bonnet, split body  
 Three piece body for 12" and above  
 Trunnion mounted ball type  
 Blow-out proof stem  
 Fire durable construction  
 Anti static device  
 Stopper device  
 Lifting lugs & supporting feet (8" & above)  
 ISO 5211 mounting pad  
 Flanged or buttwelding ends connection  
 Available with worm gear, handwheel, motor, pneumatic actuator



**Material**  
Carbon steel, S.S., Alloy Steel (A216-WCB, A351-CF8, A105, A350-LF2, A182-F316, etc.); Forge or cast is available;

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.

**Body**



**Material**  
Carbon steel, S.S., Brass, ASTM A182-F3041, A182-F316, A105, A350-LF2, A182-F6A, A182-F51, A182-F53, A564 630(17-4PH) etc. Coatings: ENP, Chrome plating, Tungsten carbide, Chrome carbide, Stellite, Inconel, Special;

**Specification**  
Class: 150LB-2500LB;  
DN: DN50-DN900;  
Type: hollow, solid type;  
Pressure rating: Class 150-2500 (PN16-420)  
Design: trunnion type;  
Support type: Axle Sleeve;  
Drive: Rectangle Socket;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.

**Ball**



**Material**  
Carbon steel, S.S., Alloy Steel (A276-304, A105+ENP, A276-316, etc.); Forged or cast is available;

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.;

**Trunnion**



**Material**  
Carbon Steel, SS, Alloy Steel

**Specification**  
PN16-ANSI150: DN10 DN600;  
Pn10: DN10 DN600  
According to the requirement  
Flange ID: 50-840  
Bolt pitch: 60-770;  
Bolt ID.: 14-36  
Bolt holes Nos.: 4-20  
Flange wall thickness: 14-52

**Flange**



**Material**  
Carbon steel, S.S., Alloy Steel (A216-WCB, A351-CF8, A105, A350-LF2, A182-F316, etc.); Forge or cast is available;

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.

**Bonnet**



**Material**  
Carbon steel, S.S., (A276-304, A276-316, A276-410, etc.)

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.

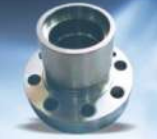
**Stem**



**Material**  
Carbon steel, S.S., (A105+ENP, A350-LF2+ENP, A182-F316, etc.)

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.

**Seat**



**Material**  
A105+ENP

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.;

**Packing Gland**



**Material**

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.;

**Safe Relief Valve**



**Material**  
A105+ENP

**Specification**  
Class: 150LB-2500LB;  
DN: DN15-DN900;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.;

**Grease Valve and Check Valve**



**Material**  
A105+ENP

**Specification**  
DN: DN25-DN200 (1"-8"),  
Pressure: 2-42MPa,  
Throat diameter D-T (9.5-146mm)

**Vent/Relief Valve**



**Material**  
PTFE

**Specification**  
Temperature: -200°C-+260°C;  
Pressure: 0-35MPa  
PH: 0-14

**Thrust Ring**



**Material**  
NBR, Viton, PTFE, EPDM

**Specification**  
Operating temperature: -35°C-+200°C  
Working pressure: less than or equal to 32MPa

**O-ring**



**Material**  
Carbon steel A193-B7, A320-L7, A193-B8

**Specification**


**Bonnet Stud**



**Material**  
Q235+A.F.

**Specification**

**Lifting Lug**



**Material**  
Carbon steel; Cast Iron; ABS, PVC, PP, PC, NILOY, PEEK

**Specification**  
DN: DN50-DN400  
Certification: ISO9001:2008  
Weight: 0.1g-6g

**Umbrella-type Handwheel**



**Material**  
A313-304, Inconel X-750, etc. 62Si2MnA, 65Mn, SUS301, 304

**Specification**  
Wire diameter: 0.18mm-50mm  
Style: coil  
Certification: ISO9001:2008, CE, etc

**Seat Spring**



**Material**  
Graphite+304, PTFE

**Specification**  
Operating temperature: -196°C-+870°C  
Pressure: ≤300Mpa  
Medium: oil, water, gas

**Bonnet Gasket**




**Material**  
Carbon steel A194-2H, A194-4, A194-8

**Specification**  
Standard: ASTM A193 B7  
DN: DN10-DN80  
Length: 20mm-6000mm

**Bonnet Stud Nut**

	<b>Material</b> 304+PTFE, 316+PTFE
	<b>Specification</b>
<b>Trunnion Bearing</b>	

	<b>Material</b> Carbon steel A193-B7, A193-B8
	<b>Specification</b>
<b>Plug Screw</b>	

	<b>Material</b> PTFE
	<b>Specification</b> Apparent density: 2.10-2.30 g/cm <sup>3</sup> Tensile strength(min): 14.0 MPa Ultimate elongation(min): 140%
<b>Seat Sealing Gasket</b>	

	<b>Material</b> Q235-A.F
	<b>Specification</b>
<b>Support</b>	

	<b>Material</b> PTFE
	<b>Specification</b>
<b>Adjusting Shim</b>	

	<b>Material</b>
	<b>Specification</b>
<b>WG Actuator</b>	

	<b>Material</b> Asbestos
	<b>Specification</b> Apparent density: 2.10-2.30 g/cm <sup>3</sup> Tensile strength(min): 7.0 MPa Ultimate elongation(min): 120%
<b>Asbestos Packing</b>	

	<b>Material</b> PTFE
	<b>Specification</b> Operating temperature: -250~+500°C PH range :0-14 Density:1.1-1.4 g/cm <sup>3</sup> ID.: φ6-φ560mm OD.: φ12~φ610mm
<b>Packing</b>	

Note: 1) A105+ENP optional.

- 2) Spiral wound construction.
- 3) Above valve parts offering OEM service according to customized drawings and samples.
- 4) Other valve accessories for ball valves, check valves, gate valves, globe valves and butterfly valves.
- 5) Other materials are available.
- 6) Certificate and 12 months Guarantee by offered.

## Floating Ball Valve Series





### Design description

Size: 1/2"-12"  
 Working temperature: -46°C-121°C  
 Pressure class(lb): 150,300,600  
 Medium: water, oil, acid medium, etc.  
 Full port design  
 Bolted bonnet, split body  
 Floating ball type  
 Blow-out proof stem  
 Fire durable construction  
 Anti static device  
 Stopper device  
 ISO 5211 mounting pad  
 Flanged or buttwelding ends connection  
 Available with worm gear, handwheel, motor, pneumatic actuator

### Applicable standards

Steel ball valves: API 608/API 6D  
 Steel ball valves: ISO 14313  
 Fire durable : API 607  
 Anti static : API 608

Steel valves : ASME B16.34  
 Face to face : ASME B16.10  
 End flanges : ASME B16.5  
 Butt welding ends : ASME B16.25  
 Inspection and test : API 598/API 6D

### Materials

Part Name	Carbon Steel	Stainless Steel
Body	ASTM A105 A350-LF2	ASTM A182-F316
Gasket	304+GRAPHITE	316+ GRAPHITE
Bonnet	ASTM A105 A350-LF2	ASTM A182-F316
Nut	ASTM A194-2H/2HM A194-7M	ASTM A194-2HM/8
Stud	ASTM A193-B7/B7M A320-7M	ASTM A193-B7M/B8
Valve seat	RPTFE	
Ball	ASTM A105+ENP A350-LF2+ENP	ASTM A182-F316
Stem	ASTM A182-F6a	ASTM A182-F316
Gasket	304+PTFE	316+PTFE
Antistatic device	ASTM A182-F304	ASTM A182-F304/F316
Packing	PTFE/GRAPHITE	
Packing gland	CARBON STEEL	STAINLESS STEEL
Screw	ASTM A193-B7/B7M A193-7M	ASTM A193-B8
Lever	SATM A216-WCB	ASTM A216-WCB
Back stop	CARBON STEEL	CARBON STEEL
Stopper plate	CARBON STEEL	STAINLESS STEEL

### Dimensional datas

NPS	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
AMSI Class 150													
L (RF)	in	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00
	mm	108	117	127	165	178	190	203	229	391	457	533	610
L1 (BW)	in	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00
	mm	140	152	165	190	216	241	283	305	457	521	559	635
H	in	2.12	2.12	2.50	3.38	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38
	mm	55	55	65	85	100	150	180	235	250	280	320	390
W	in	8	8	12	12	16	16	24	24	24	24	32	32
	mm	200	200	300	300	400	400	600	600	600	600	800	800
WT (kg)	RW	3.1	4.1	6	9.5	12.8	20	26	45	126	216	270	378
	BW	2.6	3.9	5.2	8.7	11.8	19	28	47	131	226	295	393

### Dimensional datas

NPS	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
AMSI Class 300													
L (RF)	in	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50
	mm	140	152	165	190	216	241	283	305	403	502	568	648
L1 (BW)	in	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00
	mm	140	152	165	190	216	241	283	305	457	521	559	635
H	in	2.12	2.12	2.50	3.38	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38
	mm	55	55	65	85	100	150	180	235	250	280	320	390
W	in	8	8	12	12	16	16	24	24	24	24	32	32
	mm	200	200	300	300	400	400	600	600	600	600	800	800
WT (kg)	RW	3.5	4.6	6.7	10.5	14.5	22	29	50	141	242	302	423
	BW	2.8	3.1	4.4	5.5	8.7	13.5	17	31	108	194	234	325

### Dimensional datas

NPS	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
AMSI Class 600													
L (RF)	in	6.50	7.50	8.5	9.50	11.50	13.00	14.00	17.00	22.00	-	-	-
	mm	165	190	216	241	292	330	356	432	559	-	-	-
L1 (BW)	in	-	-	-	-	11.62	13.12	14.12	17.12	22.12	-	-	-
	mm	-	-	-	-	295	333	359	435	562	-	-	-
H	in	2.25	2.25	2.62	3.50	4.12	6.25	7.50	9.75	10.38	-	-	-
	mm	58	58	68	89	105	158	190	247	262	-	-	-
W	in	8	12	12	16	16	24	24	24	32	-	-	-
	mm	200	300	300	400	400	600	600	600	800	-	-	-
WT (kg)	RW	4.5	5.5	8	12.5	18	27	35	61	172	-	-	-
	BW	3.8	4.1	5.6	7	12	18	23	43	139	-	-	-



### Design description

Size: 1/2"-12"  
 Working temperature: -46°C-121°C  
 Pressure class(lb): 150,300,600  
 Medium: water, oil, acid medium, etc.  
 Full port design  
 Bolted bonnet, split body  
 Floating ball type  
 Blow-out proof stem  
 Fire durable construction  
 Anti static device  
 Stopper device  
 ISO 5211 mounting pad  
 Flanged or buttwelding ends connection  
 Available with worm gear, handwheel, motor, pneumatic actuator.

### Applicable standards

Steel ball valves : API 608/API 6D  
 Steel ball valves: ISO 14313  
 Fire durable: API 607  
 Anti static: API 608

Steel valves : ASME B16.34  
 Face to face : ASME B16.10  
 End flanges : ASME B16.5  
 Butt welding ends : ASME B16.25  
 Inspection and test : API 598/API 6D

### Materials

Part Name	Carbon Steel	Stainless Steel
Body	ASTM A216-WCB A352-LCB/LCC	ASTM A351-CFB/CF8M
Gasket	304+GRAPHITE	
Bonnet	ASTM A216-WCB A352-LCB/LCC	ASTM A351-CFB/CF8M
Nut	ASTM A194-2H/2HM A194-4	ASTM A194-2HM/8
Stud	ASTM A193-B7/B7M A320-L7	ASTM A193-B7M/B8
Valve seat	RPTFE	
Ball	ASTM A182-F304	ASTM A182-F316/F304
Stem	ASTM A182-F304	ASTM A182-F316/F304
Gasket	304+PTFE	316+PTFE
Antistatic device	ASTM A182-F304	ASTM A182-F304/F316
Packing	PTFE/GRAPHITE	
Packing gland	SATM A216-WCB A352-LCB/LCC	ASTM A351-CFB/CF8M
Screw	ASTM A193-B7/B7M A193-7M	ASTM A193-B8
Lever	SATM A216-WCB A352-LCB/LCC	ASTM A351-CFB/CF8M
Back stop	CARBON STEEL	CARBON STEEL
Stopper plate	CARBON STEEL	CARBON STEEL

### Dimensional datas

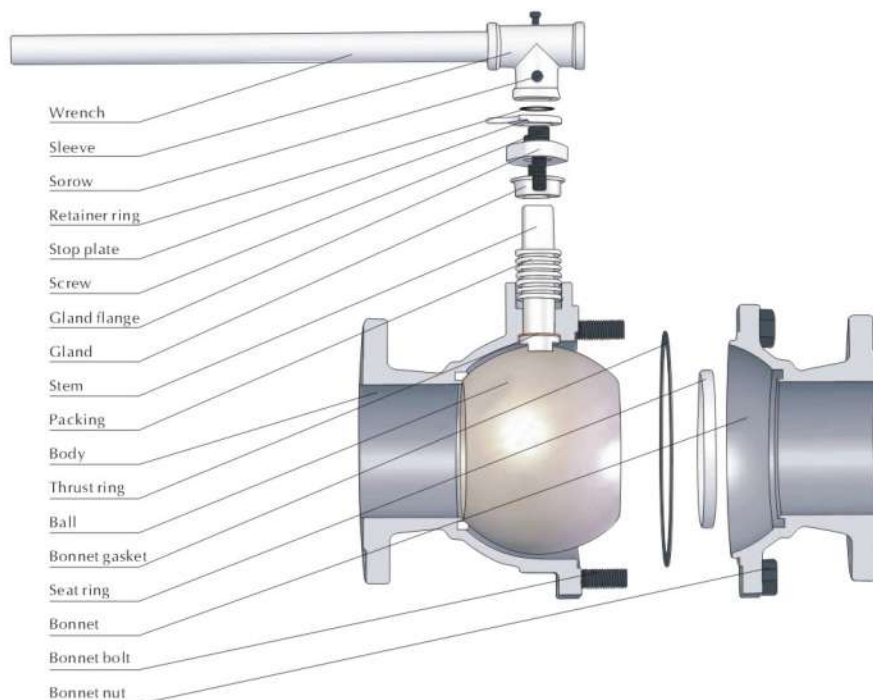
NPS	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
AMSI Class 150													
L (RF)	in	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00
	mm	108	117	127	165	178	190	203	229	391	457	533	610
L1 (BW)	in	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00
	mm	140	152	165	190	216	241	283	305	457	521	559	635
H	in	2.12	2.12	2.75	3.50	4.12	6.12	7.25	8.00	10.00	11.00	13.50	16.50
	mm	55	55	70	90	105	155	185	205	255	280	345	420
W	in	5	5	6	8	14	16	20	20	24	32	32	32
	mm	130	130	160	200	350	400	500	500	600	800	800	800
WT (kg)	RW	2.3	3	4.5	7	9.5	15	19	33	93	160	200	280
	BW	1.8	2.8	3.7	6.2	8.5	14	21	35	98	170	225	295

### Dimensional datas

NPS	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
AMSI Class 300													
L (RF)	in	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50
	mm	140	152	165	190	216	241	283	305	400	502	568	648
L1 (BW)	in	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00
	mm	140	152	165	190	216	241	283	305	457	521	559	635
H	in	2.12	2.12	2.75	3.50	4.12	6.12	7.25	8.00	10.00	11.00	13.50	16.50
	mm	55	55	70	90	105	153	187	208	255	280	345	420
W	in	5	5	6	8	14	16	20	20	24	32	32	32
	mm	130	130	160	200	350	400	500	500	600	800	800	800
WT (kg)	RW	2.5	3.5	5.5	10.5	14.5	23.5	30	55	118	200	250	330
	BW	1.8	2	3.2	5.5	8.7	15	18	36	85	152	182	232

### Dimensional datas

NPS	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
DN	mm	15	20	25	40	50	65	80	100	150	200	250	300
AMSI Class 600													
L (RF)	in	6.50	7.50	8.5	9.50	11.50	13.00	14.00	17.00	22.00	-	-	-
	mm	165	190	216	241	292	330	356	432	559	-	-	-
L1 (BW)	in	-	-	-	-	11.62	13.12	14.12	17.12	22.12	-	-	-
	mm	-	-	-	-	295	333	359	435	562	-	-	-
H	in	2.38	2.38	3.00	4.00	4.75	6.88	8.38	9.25	11.38	-	-	-
	mm	61.5	61.5	78	101	120	174	212	234	289	-	-	-
W	in	5	6	8	11	16	20	24	24	32	-	-	-
	mm	130	160	200	350	400	500	600	600	800	-	-	-
WT (kg)	RW	3.3	4.5	7.2	13.5	19	31	39	71	153	-	-	-
	BW	2.6	3.1	4.8	8	13	22	27	53	120	-	-	-



### Applicable standards

Steel ball valves : API 608/API 6D  
Steel ball valves : ISO 14313  
Fire durable : API 607  
Anti static : API 608  
Steel valves : ASME B16.34  
Face to face : ASME B16.10  
End flanges : ASME B16.5  
Buttwelding ends : ASME B16.25  
Inspection and test : API 598/API 6D

### Design description

Size: 1/2"-12"  
Working temperature: -46°C-121°C  
Pressure class(lb): 150,300,600,900,1500,2500  
Medium: water, oil, acid medium, etc.  
Full and reduced port design  
Bolted bonnet, split body  
Three piece body for 12" and above  
Trunnion mounted ball type  
Blow-out proof stem  
Fire durable construction  
Anti static device  
Stopper device  
Lifting lugs & supporting feet (8" & above)  
ISO 5211 mounting pad  
Flanged or buttwelding ends connection  
Available with worm gear, handwheel, motor, pneumatic actuator



**Material**  
Carbon steel, S.S., Alloy Steel (A216-WCB, A351-CF8, A105, A350-LF2, A182-F316, etc.); Forge or cast is available;

**Specification**  
Class: 150LB-2500LB;  
Size: 1/2"-12";  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.



**Material**  
Carbon steel, S.S., Alloy Steel (A216-WCB, A351-CF8, A105, A350-LF2, A182-F316, etc.); Forge or cast is available;

**Specification**  
Class: 150LB-2500LB;  
Size: 1/2"-12";  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.



**Material**  
Carbon steel, S.S., Brass, ASTM A182-F3041, A182-F316, A105, A350-LF2, A182-F6A, A182-F51, A182-F53, A564 630(17-4PH) etc. Coatings: ENP, Chrome Plating, Tungsten Carbide, Chrome Carbide, Stellite, Inconel, Special;

**Specification**  
Class: 150LB-2500LB;  
Size: 1/2"-12";  
Type: hollow, solid type;  
Pressure rating: Class 150-2500 (PN16-420)  
Design: trunnion type;  
Support type: Axle Sleeve;  
Drive: Rectangle Socket;  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.



**Material**  
Carbon steel, S.S., (A276-304, A276-316, A276-410, etc.)

**Specification**  
Class: 150LB-2500LB;  
Size: 1/2"-12";  
Certification: ISO9001:2008;  
Standard: ASTM, JIS, DIN, ANSI, BS, etc.



**Material**  
A105, A182-F316, A350-LF2

**Specification**

	<b>Material</b> A193-B7, A193-B8
	<b>Specification</b>
<b>Gland Bolt</b>	

	<b>Material</b> Carbon steel
	<b>Specification</b>
<b>Handle</b>	

	<b>Material</b> R.PTFE
	<b>Specification</b>
<b>Seat Ring</b>	

	<b>Material</b> Graphit+304°, PTFE
	<b>Specification</b> Temperature: -196°C-870°C Pressure: ≤ 300Mpa Medium: oil, water, gas
<b>Bonnet Gasket</b>	

	<b>Material</b> A193-B7, A193-B8, A320-L7
	<b>Specification</b>
<b>Bonnet Stud</b>	

	<b>Material</b> A194-2H, A194-8, A194-4
	<b>Specification</b> Standard: ASTM A193 B7 Size: 1/2"-3" Length: 20mm-6000mm
<b>Bonnet Stud Nut</b>	

	<b>Material</b> PTFE
	<b>Specification</b>
<b>Packing</b>	

	<b>Material</b> 65Mn(zinc coat), stainless steel, brass, aluminum
	<b>Specification</b> Technical condition as the rule GB 959.1-86
<b>Retainer Ring</b>	

	<b>Material</b> Q235+ zinc coat
	<b>Specification</b>
<b>Locating Plate</b>	

- Note: 1) A105+ENP optional.  
 2) Spiral wound construction.  
 3) Above valve parts offering OEM service according to customized drawings and samples.  
 4) Other valve accessories for ball valves, check valves, gate valves, globe valves and butterfly valves.  
 5) Other materials are available.  
 6) Certificate and 12 months guarantee by offered.



**1-PC Ball Valve**

### Design description

Size: 1/4"-4".  
 Pressure: Class150LB-900LB  
 Structure type: one-piece, reduced bore  
 Operated way: lever  
 Connect form: thread.  
 Suitable medium: water, oil, steam, nitric acid, acetate, etc.  
 Suitable temperature: -40°C-+150°C  
 Seat: PTFE  
 Working pressure: 1000WOG.  
 Thread standard: PT, NPT, BS21standard, surface is flat, allow over the range 0.5-0.8mm.  
 Main material: 304 and 316.  
 Design and manufacture adoption: ISO, API, GB, BS



**2-PC Full Bore Class Steel Ball Valve**

### Design description

Size: 1/4"-4".  
 Pressure: Class150LB-1500LB  
 Structure type: two-piece floating type, full bore  
 Operated way: lever  
 Connect form: thread  
 Suitable medium: water, oil, steam, nitric acid, acetate, etc.  
 Suitable temperature: -40°C-+150°C  
 Seat: PTFE.  
 Working pressure: 1000WOG  
 Thread standard: PT, NPT, BS21standard, surface is flat, allow over the range 0.5-0.8mm.  
 Main material: 304 and 316.  
 Design and manufacture adoption: ISO, API, GB, BS



**3-PC Threaded Ball Valve**

### Design description

Size range: NPS 1/2"-3"  
 Pressure: Class150LB-1500LB  
 Pressure range: 1000WOG  
 Material: A105, CF8, CF8M, SS304, SS316, F11, F22, etc.  
 Design & manufacture std.: API6D, API602, ANSI B16.34, Face to face std.: ASME B16.10.  
 End connection std.: ASME B16.11, ASME B1.20.1, ASME B16.5, ASME B16.47, DIN2543-2551.  
 Test standard: ISO5208, API 598, BS 6755.  
 Structure type: quick-detach type, 3PCS, NPT, BW, SW  
 Operation: handle



**3 Way Threaded Ball Valve**

### Design description

Size: 1/4" - 2"  
 Pressure: Class 150LB-2500LB  
 Technology: casting  
 Connect form: female threaded  
 Main material: CF8, CF8M, CF3, CF3M, WCB  
 Working pressure: 1000 PSI WOG  
 Temperature range: -40°C - +180°C  
 Suitable medium: water, oil, steam, nitric acid, acetate, etc.  
 Design standard: ANSI, DIN, JIS, GB etc.  
 Structure type: bolted, welded, reduced bore, full bore  
 Operated way: lever



**1-PC Wafer Flanged Ball Valve**

### Design description

1-PC Body type (2-PC body for DN125 and over)  
 DN15-DN100 for Forged body and 1-PC body type;  
 DN125-DN200 for cast body  
 DN125 and over for 2-PC Body type  
 Full bore  
 Size: 1/2" - 10"  
 Pressure: Class 150LB-600LB  
 Materials: WCB, CF8, CF8M  
 Working temperature < 200°C  
 Suitable medium: water, oil, gas, acid, etc.  
 Face to face: GB/T 9113 Q/SYF012-96  
 Flanged standard: ANSI B 16.5  
 Inspection and test: API 598  
 Handle or pneumatic actuated  
 Available for ISO 5211 mounted pad



**Stem Ball**

Spec.: NPS 6-56  
 Class: 150LB-2500LB  
 Base material: ASTM, A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, A564 630(17-4PH), Monel, etc.  
 Coatings: ENP, Chrome plating, Tungsten carbide, Chrome carbide, Stellite, Inconel, etc.  
 Support plate type  
 Drive: Pin hole



**Trunnion Ball**

Spec.: NPS 6-56  
 Class: 150LB-2500LB  
 Base material: ASTM, A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, A564 630(17-4PH), Monel, etc.  
 Coatings: ENP, Chrome plating, Tungsten carbide, Chrome carbide, Stellite, Inconel, etc.  
 Support plate type  
 Drive: Rectangle socket



**Trunnion Ball**

Spec.: NPS 2-36  
 Class: 150LB-2500LB  
 Base material: ASTM, A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, A564 630(17-4PH), Monel, etc.  
 Coatings: ENP, Chrome plating, Tungsten carbide, Chrome carbide, Stellite, Inconel, etc.  
 Axle sleeve type  
 Drive: Rectangle socket



**Three-way Ball**

Spec.: NPS 1-12  
 Class: 150LB-600LB  
 Base material: ASTM, A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, A564 630(17-4PH), Monel, etc.  
 Coatings: ENP, Chrome plating, Tungsten carbide, Chrome carbide, Stellite, Inconel, etc.  
 Support type: Stem  
 Drive: Curve slot



**Three-way Ball**

Spec.: NPS 2-16  
 Class: 150LB-600LB  
 Base material: ASTM, A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, A564 630(17-4PH), Monel, etc.  
 Coatings: ENP, Chrome plating, Tungsten carbide, Chrome carbide, Stellite, Inconel, etc.  
 Support type: Stem  
 Drive: Key hole



**Body for C.S. Ball Valves**

Material: Carbon steel, S.S., Alloy steel (A216-WCB, A105, A351-CF8, A350-LF2, A182-F316, etc.);  
 Class: 150LB-2500LB;  
 Spec.: NPS 1/2"-36";  
 Certification: ISO9001;  
 Standard: ASTM, JIS, DIN, ANSI, BS, etc.  
 Cast steel apply to ball valve





**Bonnet**

Material: Carbon steel, S.S., Alloy steel (A216-WCB, A351-CF8, A105, A350-LF2, A182-F316, etc.);  
 Class: 150LB-2500LB;  
 Spec.: NPS1/2"-36";  
 Standard: ASTM, JIS, DIN, ANSI, BS, etc.  
 Certification: ISO9001;  
 Forge/cast is available;  
 Apply to gate valve, ball valve, check valve, butterfly valve, ect.



**Bonnet**

Material: Carbon steel, S.S., (A105+ENP, A350-LF2+ENP, A182-F316, etc.)  
 Class: 150LB-2500LB;  
 Spec.: NPS1/2"-36";  
 Certification: ISO9001;  
 Standard: ASTM, JIS, DIN, ANSI, BS, etc.  
 Apply to gate valve, ball valve, check valve, butterfly valve, etc



**Asbestos Packing**

Material: Asbestos  
 Apparent density: 2.10-2.30 g/cm<sup>3</sup>  
 Tensile strength(min): 7.0MPa  
 Ultimate elongation(min): 120%



**PTFE Packing**

Material: PTFE  
 Apparent density: 2.10-2.30 g/cm<sup>3</sup>  
 Tensile strength(min): 14.0 MPa  
 Ultimate elongation (min): 140%



**Seat Insert**

Material: PTFE  
 Apparent density: 2.10-2.30 g/cm<sup>3</sup>  
 Tensile strength(min): 14.0 MPa  
 Ultimate elongation (min): 140%  
 1) PTFE packing used for sealing valves  
 2) Min size: 4x4mm  
 3) Max size: 24x24mm  
 4) with carbon fiber, aramid fiber, etc.  
 5) High chemical properties, acid and alkali resistant  
 6) Wide working temperature range  
 7) Self lubricate  
 8) Nonstick, Non-aging



**Locating Plate**

Material: Q235+zinc coat  
 Size: 12X8, 14X9, 16X10.5, 18X12, 20X13.5, 22X15, 24X16, 26X17, 28X18, 30X20, 32X21, 36X24, 40X27, 45X30, etc.

## JIANGRUI VALVE

### Gate Valve Series





### Applicable standards

Design STD.: API600 / API 6D  
 Steel gate valves: ISO10434/ISO 14313  
 Steel valves: ASTM B16.34

Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Butt welding ends: ASME/ANSI B16.25  
 Inspection and test: API598/API 6D

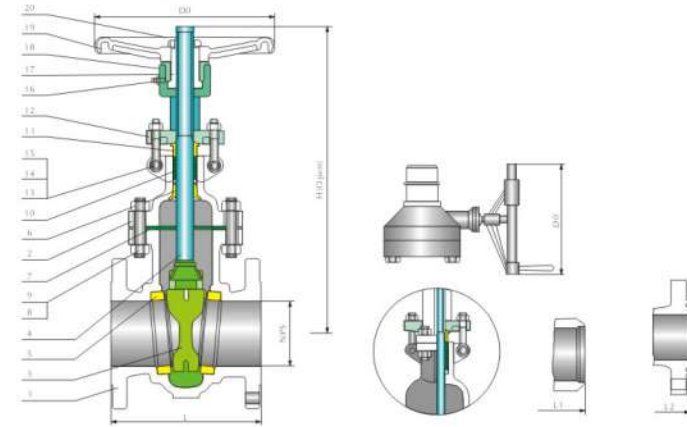
### Design description

Full port design  
 Rising stem and non-rising handwheel  
 OS & Y, outside screw and yoke  
 BB, bolted bonnet  
 Flexible wedge, fully guided

Forged T-head stem  
 Choice of solid or split wedge  
 Renewable seat rings  
 Flanged or butt welding ends  
 Available with bevel gear operator

### Materials

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Wedge	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem backseat	A276-420	A276-304	A276-420
7	Bonnet gasket	Spiral Wound (Graphite+304)		
8	Bonnet stud	A193-B7	A193-B16	A320-L7
9	Bonnet stud nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt pin	Carbon steel	A217-420	Carbon steel
14	Eyebolt	Carbon steel	A193-B7	Carbon steel
15	Eyebolt nut	Carbon steel	A194-2H	Carbon steel
16	Grease fitting	Brass + Steel		
17	Yoke sleeve	Aluminum-Bronze		
18	Yoke sleeve jam nut	Carbon steel		
19	Handwheel	Malleable steel		



### Dimensions data

NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
ANSI Class 150Lb																			
L	in	7.00	7.50	8.00	9.00	10.50	11.50	13.00	14.00	15.00	16.00	17.00	18.00	20.00	22.00	24.00	24.00	28.00	28.00
(RF)	mm	178	191	203	229	267	292	330	356	381	406	432	457	508	559	610	610	711	711
L1	in	8.5	9.50	11.12	12.00	15.88	16.50	18.00	19.75	22.50	24.00	26.00	28.00	32.00	34.00	36.00	36.00	38.00	40.00
(BW)	mm	216	241	283	305	403	419	457	502	572	610	660	711	813	864	914	914	965	1016
H	in	15.25	17.00	18.88	23.00	30.50	37.62	45.50	53.12	59.38	67.00	74.50	83.50	98.25	110.50	116.50	124.00	129.00	146.50
(Open)	mm	368	434	480	584	765	956	1149	1350	1508	1703	1892	2119	2500	2806	2960	3150	3280	3720
D0	in	8	8	10	12	12	14	16	18	20	22	24	26	29	29	32	32	38	40
	mm	200	200	250	300	300	350	400	450	500	550	600	640	720	720	800	800	950	1000
WT	R F	18	25	32	50	77	121	178	265	363	463	621	792	1190	1521	1838	2261	2490	3310
(Kg)	BW	15	18	26	41	69	108	156	248	330	424	587	752	1144	1570	1900	3310	2540	3380

### Dimensions data

NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
ANSI Class 300Lb																			
L	in	8.50	9.50	11.12	12.00	15.88	16.50	18.00	19.75	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00
(RF)	mm	216	241	283	305	403	419	457	502	762	838	914	991	1143	1245	1346	1397	1524	1727
L1	in	9.12	10.12	11.75	12.62	16.50	17.12	18.62	20.38	30.62	33.62	36.62	39.75	45.88	50.00	54.00	56.00	61.12	69.12
(BW)	mm	232	257	298	321	419	435	473	518	778	854	930	1010	1165	1270	1372	1422	1553	1756
H	in	16.12	17.88	20.00	24.00	31.75	39.38	47.62	55.75	62.25	67.88	77.12	86.38	102.00	117.00	122.00	126.00	130.00	152.00
(Open)	mm	410	453	509	612	805	1000	1210	1415	1580	1725	1960	2195	2590	2975	3100	3200	3300	3860
D0	in	8	8	10	12	14	16	18	20	22	22	24	26	29	29	32	32	38	40
	mm	200	200	250	300	350	400	450	500	550	550	600	640	720	720	800	800	950	1000
WT	R F	23	35	50	71	144	209	322	482	683	950	1145	1635	2660	3090	3310	3595	3720	3985
(Kg)	BW	17	26	39	53	113	164	256	390	565	805	965	1410	2305	2540	2725	3055	3360	3630

### Dimensions data

NPS	in	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
<b>ANSI Class 600Lb</b>																			
L/L1	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00	57.00	61.00	65.00	70.00	82.00
(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2083
L2	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38	57.50	61.50	65.50	70.62	82.62
(BW)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	1664	1794	2099
H	in	16.50	18.75	20.38	25.50	33.00	40.38	48.38	57.00	62.00	70.62	76.00	87.00	101.50	105.00	109.50	114.00	124.00	140.00
(Open)	mm	418	476	518	646	840	1025	1230	1450	1575	1795	1930	2210	2580	2665	2780	2895	3150	3560
D0	in	8	10	10	12	18	20	24	24	24	24	26	26	29	29	32	32	38	40
	mm	200	250	250	300	450	500	600	600	600	600	640	640	720	720	800	800	950	1000
WT	R F	36	52	67	112	170	393	610	890	1245	1530	1965	2450	2995	3475	3725	2045	4185	4480
(Kg)	BW	29	42	53	83	125	310	472	730	1055	1240	1625	2030	2590	2855	3065	3440	3780	4085

### Dimensions data

NPS	in	2	2½	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
<b>ANSI Class 900Lb</b>														
L/L1	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.00
(RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L2	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.50	61.75
(BW)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568
H	in	19.62	21.50	22.50	26.62	35.50	43.50	53.00	60.00	74.88	81.00	87.00	101.00	104.00
(Open)	mm	498	547	573	678	900	1103	1345	1525	1900	2055	2215	2565	2640
D0	in	10	10	12	18	20	24	26	29	32	32	38	38	40
	mm	250	250	300	450	500	600	640	720	800	800	950	950	1000
WT	R F	74	131	101	172	335	640	1100	1600	2250	2850	3060	3935	4900
(Kg)	BW	54	105	78	135	260	515	920	1380	2010	2565	2485	3250	4065

### Dimensions data

NPS	in	2	2½	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
<b>ANSI Class 1500Lb</b>														
L/L1	in	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	60.50	65.50	76.50
(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L2	in	15.50	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38	61.38	66.38	77.62
(BW)	mm	371	422	473	549	711	841	1000	1146	1276	1407	1559	1686	1972
H	in	24.25	26.00	30.00	34.12	39.50	45.00	54.00	61.00	74.88	80.50	93.75	101.50	114.75
(Open)	mm	615	658	760	868	1005	1145	1370	1550	1900	2050	2380	2580	2915
D0	in	10	12	18	20	24	18	18	24	24	24	24	24	24
	mm	250	300	450	500	600	460	460	600	600	600	600	600	600
WT	R F	116	166	209	296	510	920	1910	3145	4100	6200	8965	13100	15860
(Kg)	BW	105	150	188	265	412	760	1640	2755	3200	5300	8070	11790	14275

### Dimensions data

NPS	in	2	2½	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
<b>ANSI Class 2500Lb</b>														
L/L1	in	17.75	20.00	22.75	26.50	36.00	40.25	50.00	56.00	-	-	-	-	-
(RF)	mm	451	508	578	673	914	1022	1270	1422	-	-	-	-	-
L2	in	17.88	20.50	23.00	26.88	36.50	40.88	50.88	56.88	-	-	-	-	-
(BW)	mm	454	514	584	683	927	1038	1292	1445	-	-	-	-	-
H	in	21.88	29.00	35.00	41.50	57.00	63.38	81.75	89.75	-	-	-	-	-
(Open)	mm	631	736	890	1055	1450	1610	2075	2280	-	-	-	-	-
D0	in	12	18	20	20	24	24	24	24	-	-	-	-	-
	mm	300	450	500	500	600	600	600	600	-	-	-	-	-
WT	R F	155	210	310	580	1600	2450	4570	7150	-	-	-	-	-
(Kg)	BW	124	160	245	460	1310	2010	3800	6000	-	-	-	-	-



### Applicable standards

Design STD.: API600 / API 6D  
 Steel gate valves :ISO10434  
 Steel valves :ASTM B16.34  
 Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Butt welding ends: ASME/ANSI B16.25  
 Inspection and test: API598 / API 6D

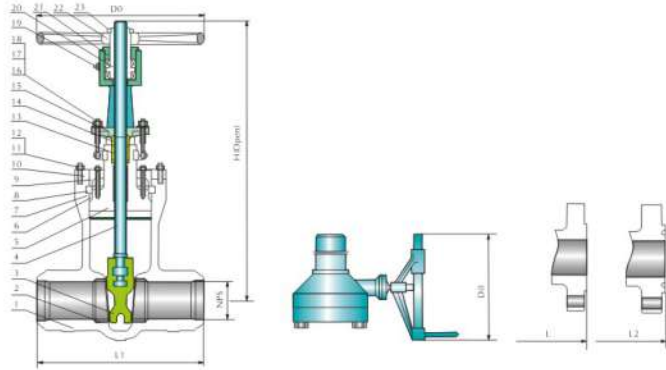
### Design description

Full port design  
 Rising stem and non-rising handwheel  
 OS & Y, outside screw and yoke  
 BB, bolted bonnet  
 Flexible wedge, fully guided

Forged T-head stem  
 Renewable seat rings  
 Pressure seal bonnet  
 Flanged or butt welding ends  
 Available with bevel gear operator

### Materials of parts

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Wedge	A216-WCB+HF	A217-WC6+HF	A352-CF8M+HF
4	Stem	A182-F6a	CR-MO-V	A182-316
5	Seat ring	A105+HF	A182-F11+HF	A240-316+HF
6	Bonnet	A105	A182-F11	A240-316
7	Bonnet gasket	STEEL RING	304SS RING	316SS RING
8	Adapter ring	Carbon steel	A276-420	A276-16
9	Bonnet stud	A193-B7	A193-B16	A193-B8M
10	Bonnet stud nut	A194-2H	A194-7	A194-BM
11	Packing	Graphite		
12	Gland	A276-420	A276-304	A276-316L
13	Gland flange	A216-WCB	A217-WC6	A351-CF8M
14	Eyebolt pin	Carbon steel	A217-420	A276-316
15	Eyebolt	Carbon steel	A193-B7	A193-B8
16	Eyebolt nut	Carbon steel	A194-2H	A194-B
17	Grease fitting	Brass + Steel		
18	Yoke sleeve	Aluminum-Bronze		
19	Yoke sleeve jam nut	Carbon steel		Stainless steel
20	Handwheel	Malleable steel		



### Dimensions data

NPS	in	2	2½	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
<b>ANSI Class 900Lb</b>											
L1 (BW)	in	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00
	mm	216	254	305	356	508	660	787	914	991	1092
L (RF)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50
	mm	368	419	381	457	610	737	838	935	1029	1130
L2 (RTJ)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88
	mm	371	422	384	460	613	740	841	968	1038	1140
H (Open)	in	17.62	17.62	19.5	22.88	32.62	67.62	45.5	53.12	59	70.5
	mm	448	448	495	580	830	955	1155	1350	1500	1790
D0	in	14	14	14	14	18	24	28	34	34	34
	mm	350	350	350	350	450	600	700	850	850	850
WT (Kg)	BW	39	39	48	69	158	289	482	710	998	1390
	RF/RTJ	69	69	72	110	253	430	710	1025	1452	1960

### Dimensions data

NPS	in	2	2½	3	4	6	8	10	12	14	16	2	2½	3	4	6	8	10	12
DN	mm	50	65	80	100	150	200	250	300	350	400	50	65	80	100	150	200	250	300
<b>ANSI Class 1500Lb</b>												<b>ANSI Class 2500Lb</b>							
L1 (BW)	in	8.50	10.00	12.00	16.00	22.00	28.00	34.00	39.00	42.00	47.00	11.00	13.00	14.50	18.00	24.00	30.00	36.00	41.00
	mm	216	254	305	406	559	711	864	991	1067	1194	279	330	368	457	610	762	914	1041
L (RF)	in	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50	17.75	20.00	22.75	26.50	36.00	40.25	50.00	56.00
	mm	368	419	470	546	705	832	991	1130	1257	1384	451	508	578	673	914	1022	1270	1422
L2 (RTJ)	in	15.50	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38	17.88	20.50	23.00	26.88	36.50	40.88	50.88	56.88
	mm	371	422	473	549	711	841	1000	1146	1276	1407	454	514	584	683	927	1038	1292	1445
H (Open)	in	17.62	17.62	21.62	25.25	33.5	38.62	46.5	62.25	70.5	78	22.5	22.5	25.62	30	36.62	41.38	44.88	60.25
	mm	448	448	550	640	840	980	1180	1580	1790	1980	570	570	650	760	930	1050	1140	1530
D0	in	14	14	14	18	24	28	34	34	34	34	14	14	18	24	28	34	34	34
	mm	350	350	350	450	600	700	850	850	850	850	350	350	450	600	700	850	850	850
WT (Kg)	BW	45	45	55	77	175	323	540	795	1115	1556	110	110	150	176	380	575	980	1570
	RF/RTJ	80	80	95	123	283	481	795	1148	1626	2195	165	195	235	316	635	910	1780	2680

## Globe Valve Series





### Applicable standards

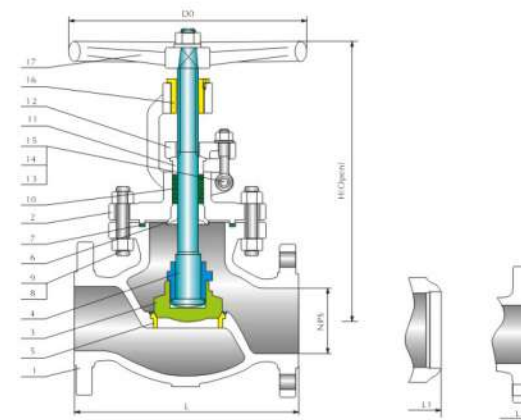
Design STD.: API600 / BS EN 13709  
 Steel globe valves :ISO10434/ISO 14313  
 Steel valves: ASTM B16.34  
 Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Buttwelding ends: ASME/ANSI B16.25  
 Inspection and test: API598

### Design description

Straight pattern body design  
 Rising stem and handwheel  
 OS & Y, outside screw and yoke  
 BB, bolted bonnet  
 Yoke internal with bonnet  
 Loose disc, choice of plug or ball  
 Renewable seat rings  
 Impact handwheel for 10" and above  
 Horizontal service  
 Flanged or buttwelding ends  
 Available with bevel gear operator

### Materials of parts

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet	A216-WCB	A217-WC6	A352-LCB
3	Disc	A105+CR13	A182-F11+HF	A350-LF2+CR13
4	Stem	A182-F6a	CR-MO-V	A182-F6a
5	Seat ring	A105+CR13	A182-F11+HF	A350-LF2+CR13
6	Stem backseat	A276-420	A276-304	A276-420
7	Bonnet gasket	Spiral Wound (Graphite+304)		
8	Bonnet stud	A193-B7	A193-B16	A320-L7
9	Bonnet stud nut	A194-2H	A194-7	A194-4
10	Packing	Graphite		
11	Gland	A276-420	A276-304	A276-420
12	Gland flange	A216-WCB	A217-WC6	A352-LCB
13	Eyebolt pin	Carbon steel	A217-420	Carbon steel
14	Eyebolt	Carbon steel	A193-B7	Carbon steel
15	Eyebolt nut	Carbon steel	A194-2H	Carbon steel
16	Yoke sleeve	Aluminum-Bronze		
17	Handwheel	Malleable steel		



### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
ANSI Class150Lb											
L/L1 (RF/BW)	in	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50	31.00	36.00
	mm	203	216	241	292	406	495	622	698	787	914
L2 (RTJ)	in	8.00	8.50	9.50	11.50	16.00	19.50	24.50	27.50	31.00	36.00
	mm	203	216	241	292	406	495	622	698	787	914
H (Open)	in	15.00	21.00	17.50	20.25	22.00	24.25	32.00	35.88	48.38	57.00
	mm	380	535	445	515	560	615	815	910	1230	1450
D0	in	7	10	11	11	13	13	16	18	20	24
	mm	180	240	280	280	320	320	400	450	500	600
WT (Kg)	R F	18	30	41	64	86	110	280	380	510	740
	BW	14	22	33	43	72	88	245	345	450	665

### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
ANSI Class300Lb											
L/L1 (RF/BW)	in	10.50	11.50	12.50	14.00	17.50	22.00	24.50	28.00	-	-
	mm	267	292	318	356	444	559	622	711	-	-
L2 (RTJ)	in	11.12	12.12	13.12	14.62	18.12	22.62	25.12	28.62	-	-
	mm	282	308	333	371	460	575	638	727	-	-
H (Open)	in	16.75	19.00	19.88	22.50	25.25	33.25	35.50	38.62	-	-
	mm	425	485	505	570	640	845	900	980	-	-
D0	in	8	10	11	13	16	18	20	24	-	-
	mm	200	240	280	320	400	450	500	600	-	-
WT (Kg)	R F	25	32	38	56	96	150	360	550	-	-
	BW	20	22	27	41	75	117	310	492	-	-

### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	10	12
	mm	50	65	80	100	150	200	250	300
<b>ANSI Class600Lb</b>									
L/L1 (RF/BW)	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00
	mm	292	330	356	432	559	660	787	838
L2 (RTJ)	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12
	mm	295	33	359	435	562	663	790	841
H (Open)	in	17.50	19.75	21.00	24.50	29.50	36.50	44.88	53.12
	mm	445	502	533	622	750	927	1140	1350
D0	in	10	11	13	16	18	20	24	24
	mm	240	280	320	400	450	500	600	600
WT (Kg)	RF	35	50	60	110	230	410	770	1140
	BW	27	34	42	84	192	350	680	1030

### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	10	12
	mm	50	65	80	100	150	200	250	300
<b>ANSI Class900Lb</b>									
L/L1 (RF/BW)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	-
	mm	368	419	381	457	610	737	838	-
L2 (RTJ)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	-
	mm	371	422	384	460	613	740	841	-
H (Open)	in	22.00	23.25	25.25	31.88	41.38	53.50	61.88	-
	mm	560	590	640	810	1050	1360	1570	-
D0	in	11	13	16	18	20	24	24	-
	mm	280	320	400	450	500	600	600	-
WT (Kg)	RF	57	82	92	168	365	665	1250	-
	BW	41	53	58	117	238	538	1060	-

### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	2	2 1/2	3	4	6	8
	mm	50	65	80	100	150	200	50	65	80	100	150	200
<b>ANSI Class1500Lb</b>						<b>ANSI Class2500Lb</b>							
L/L1 (RF/BW)	in	14.50	16.50	18.50	21.50	27.75	32.75	17.75	20.00	22.75	26.50	36.00	-
	mm	368	419	470	546	705	832	451	508	578	673	914	-
L2 (RTJ)	in	14.62	16.62	18.62	21.62	28.00	33.12	17.88	20.50	23.00	26.88	36.50	-
	mm	371	422	473	549	711	841	454	514	584	683	927	-
H (Open)	in	22.00	23.25	29.50	36.00	48.62	65.00	25.50	28.12	32.50	47.00	70.50	-
	mm	560	590	750	915	1235	1650	650	715	825	1195	1790	-
D0	in	13	16	18	20	24	28	16	18	20	24	28	-
	mm	320	400	450	500	600	700	400	450	500	600	700	-
WT (Kg)	RF	68	97	116	215	445	795	97	138	167	305	633	-
	BW	57	81	95	184	347	635	72	95	108	196	351	-



### Applicable standards

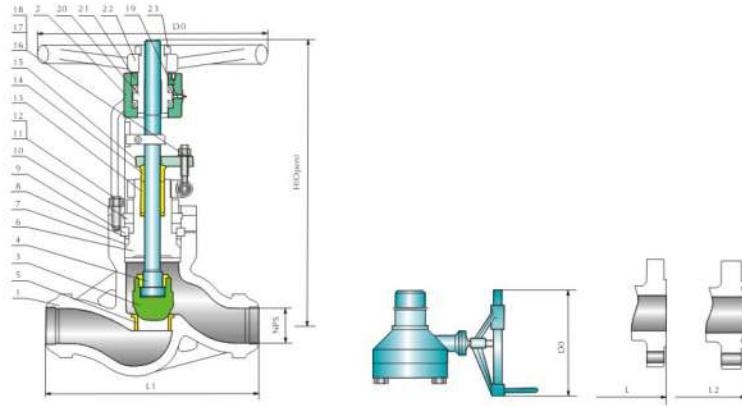
Design STD.: API600 / BS EN 13709  
 Steel valves: ASTM B16.34  
 Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Butt welding ends: ASME/ANSI B16.25  
 Inspection and test: API598

### Design description

PSB, Pressure seal bonnet  
 Flexible wedge, fully guided  
 Choice of solid or split wedge  
 Forged T-head stem  
 Renewable seat rings  
 Rising stem and non-rising handwheel  
 Flanged or butt welding ends  
 Available with bevel gear operator

### Materials of parts

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Yoke	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A216-WCB+HF	A217-WC6+HF	A351-CF8M+HF
4	Stem	A182-F6a	CR-MO-V	A182-316
5	Seat ring	A105+HF	A182-F11+HF	A240-316+HF
6	Bonnet	A105	A182-F11	A240-316
7	Bonnet gasket	STEEL RING	304SS RING	316SS RING
8	Adapter ring	Carbon steel	A276-420	A276-16
9	Retainer	Carbon steel	A276-420	A276-316
10	Yoke cap	Carbon steel	Alloy steel	Stainless steel
11	Bonnet stud	A193-B7	A193-B16	A193-B8M
12	Bonnet stud nut	A194-2H	A194-7	A194-8M
13	Packing	Graphite		
14	Gland	A276-420	A276-304	A276-316L
15	Gland flange	A216-WCB	A217-WC6	A351-CF8M
16	Eyebolt pin	Carbon steel	A217-420	A276-316
17	Eyebolt	Carbon steel	A193-B7	A193-B8
18	Eyebolt nut	Carbon steel	A194-2H	A194-8
19	Grease fitting	Brass + Steel		
20	Yoke sleeve	Aluminum-Bronze		
21	Yoke sleeve jam nut	Carbon steel		Stainless steel
22	Handwheel	Malleable steel		



### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12
	mm	50	65	80	100	150	200	250	300
<b>ANSI Class900Lb</b>									
L1 (BW)	in	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00
	mm	216	254	305	356	508	660	787	914
L (RF)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00
	mm	368	419	381	457	610	737	838	965
L2 (RTJ)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12
	mm	371	422	384	460	613	740	841	968
H (Open)	in	22	22	22	27	36.38	43.38	50.62	57
	mm	557	557	557	685	925	1100	1285	1450
D0	in	16	16	16	16	28	28	36	36
	mm	400	400	400	400	700	700	900	900
WT (Kg)	BW	46	53	68	100	270	450	740	1150
	RF/RTJ	75	82	95	135	355	680	1050	1480

### Dimensions data

NPS DN	in	2	2½	3	4	6	8	2	2½	3	4	6
	mm	50	65	80	100	150	200	50	65	80	100	150
<b>ANSI Class1500Lb</b>												
L1 (BW)	in	8.50	10.00	12.00	16.00	22.00	28.00	11.00	13.00	14.50	18.00	24.00
	mm	216	254	305	406	559	711	279	330	368	457	610
L (RF)	in	14.50	16.50	18.50	21.50	27.75	32.75	17.75	20.00	22.75	26.50	36.00
	mm	368	419	470	546	705	832	451	508	578	673	914
L2 (RTJ)	in	14.62	16.62	18.62	21.62	28.00	33.12	17.88	20.50	23.00	26.88	36.50
	mm	371	422	473	549	711	842	454	514	584	683	927
H (Open)	in	22	22	24.38	30	44.62	54.75	23.38	23.38	28	32.25	49.62
	mm	557	557	620	760	1135	1390	595	595	710	820	1260
D0	in	16	18	20	24	28	36	16	20	24	28	36
	mm	400	400	500	600	700	900	400	500	600	700	900
WT (Kg)	BW	57	65	90	190	450	730	65	78	125	155	480
	RF/RTJ	86	112	162	240	580	950	115	136	205	275	860





### Applicable standards

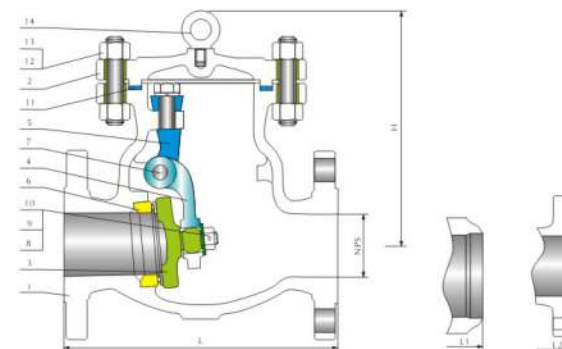
Design STD.: API 6D  
 Steel check valves: ISO 14313  
 Steel valves: ASTM B16.34  
 Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Butt welding ends: ASME/ANSI B16.25  
 Inspection and test: API 598 / API 6D

### Design description

BB, bolted bonnet  
 Swing type, Anti-rotation disc  
 Renewable seat rings  
 Non-penetrate disc shaft  
 Horizontal or vertical service  
 Flanged or butt welding ends

### Materials of parts

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A217-WC6	A352-LCB
2	Bonnet cap	A216-WCB	A217-WC6	A352-LCB
3	Disc	A216-WCB+CR13	A217-WC6+HF	A352-LCB+CR13
4	Hinge	A216-WCB	A217-WC6	A352-LCB
5	Support	A216-WCB	A217-WC6	A352-LCB
6	Seat ring	A105+HF	A182-F11+HF	A350-LF2+HF
7	Hinge pin	A276-420	A276-304	A276-420
8	Disc washer	Carbon steel	A276-304	Carbon steel
9	Disc nut	Carbon steel	A276-304	Carbon steel
10	Disc nut pin	Carbon steel	A276-420	Carbon steel
11	Bonnet gasket	Steel ring	304SS ring	Steel ring
12	Bonnet stud	A193-B7	A193-B16	A320-L7
13	Bonnet stud nut	A194-2H	A194-7	A194-4
14	Eyebolt	Carbon steel		



### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900
ANSI Class1 50Lb																		
L/L1 (RF/BW)	in	8.00	8.50	9.50	11.50	14.00	19.50	24.50	27.50	31.00	34.00	38.50	38.50	51.00	51.00	57.00	60.00	77.00
	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1295	1448	1524	1956
L2 (RTJ)	in	8.50	9.00	10.00	12.00	14.50	20.00	25.00	28.00	31.50	34.50	39.00	39.00	51.50	-	-	-	-
	mm	216	229	254	305	368	508	635	711	800	876	991	991	1308	-	-	-	-
H	in	6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00
	mm	152	165	175	204	293	353	390	432	475	525	582	627	883	910	940	980	1220
WT (kg)	RF/RTJ	14	20	25	40	71	118	177	263	353	542	632	855	970	1275	1600	1990	2760
	BW	10	12	17	29	57	96	143	227	295	468	552	755	831	1120	1420	1760	2230

### Dimensions data

NPS DN	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	36
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	900
ANSI Class300Lb																		
L/L1 (RF/BW)	in	10.50	11.50	12.50	14.00	17.50	21.00	24.50	28.00	33.00	34.00	38.50	40.00	53.00	53.00	59.00	62.75	82.00
	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1346	1499	1594	2083
L2 (RTJ)	in	11.12	12.12	13.12	14.62	18.12	21.62	25.12	28.62	33.62	34.62	39.12	40.75	53.88	54.00	60.00	63.75	-
	mm	283	308	333	371	460	549	638	727	854	879	994	1035	1368	1372	1524	1619	-
H	in	6.00	6.50	6.88	8.00	11.50	13.88	15.38	17.00	18.75	20.62	22.88	24.62	34.75	35.88	37.00	38.62	48.00
	mm	152	165	175	204	292	353	390	432	475	525	582	627	883	910	940	980	1220
WT (kg)	RF/RTJ	16	23	29	46	82	136	204	302	405	625	730	985	1115	1465	1840	2290	3180
	BW	11	13	28	31	61	103	155	245	315	503	593	812	895	1205	1525	1895	2395



### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
<b>ANSI Class600Lb</b>														
LL1 (RF/BW)	in	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
	mm	292	333	356	432	559	660	787	838	889	991	1092	1194	1397
L2 (RTJ)	in	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38
	mm	195	333	359	435	562	664	791	841	892	994	1095	1200	1407
H	in	7.50	8.00	8.75	10.00	14.50	17.50	19.25	21.38	23.38	25.75	28.75	31.00	43.50
	mm	190	205	222	255	368	445	490	540	595	655	730	785	1105
WT (kg)	RF/RTJ	24	35	44	70	125	207	310	460	615	945	1105	14.95	1695
	BW	16	19	26	44	87	147	220	350	452	720	845	1160	1280

### Dimensions data

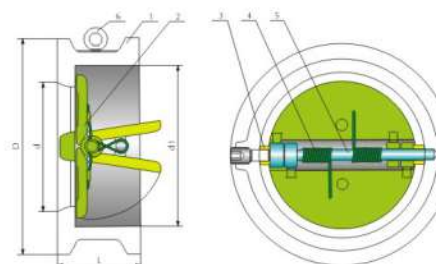
NPS DN	in	2	2½	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
<b>ANSI Class900Lb</b>														
LL1 (RF/BW)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	-
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	-
L2 (RTJ)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.50	-
	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	-
H	in	9.50	10.00	11.00	12.50	18.12	22.00	24.00	26.50	29.38	32.00	33.50	38.75	-
	mm	240	256	278	320	460	560	610	675	745	815	850	985	-
WT (kg)	RF/RTJ	37	54	68	109	195	321	481	711	956	1468	1870	2316	-
	BW	21	25	34	58	115	194	290	461	597	950	1210	1533	-

### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
<b>ANSI Class1500Lb</b>											
LL1 (RF/BW)	in	14.50	16.50	18.50	21.50	27.75	32.75	39.00	44.50	49.50	54.50
	mm	368	419	470	540	705	832	991	1130	1257	1384
L2 (RTJ)	in	14.62	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	55.38
	mm	371	422	473	549	711	841	1000	1146	1276	1407
H	in	9.50	10.00	13.00	14.75	18.88	23.50	26.00	29.12	30.88	32.88
	mm	240	256	330	375	480	595	660	740	785	835
WT (kg)	RF/RTJ	40	63	70	115	250	470	740	1100	1410	1600
	BW	29	47	49	84	152	310	470	710	910	1100

### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
<b>ANSI Class2500Lb</b>											
LL1 (RF/BW)	in	17.75	20.00	22.75	26.50	36.00	40.25	50.00	56.00	-	-
	mm	451	508	578	673	914	1022	1270	1422	-	-
L2 (RTJ)	in	17.88	20.25	23.00	26.88	36.50	40.88	50.88	56.88	-	-
	mm	454	514	584	683	927	1038	1292	1445	-	-
H	in	10.75	13.25	13.75	15.12	19.50	24.62	28.00	35.62	-	-
	mm	275	335	350	385	495	625	712	905	-	-
WT (kg)	RF/RTJ	50	75	85	165	460	900	1300	1800	-	-
	BW	35	55	68	115	225	580	860	1150	-	-



### Applicable standards

Design STD.: API 6D / API 594  
 Steel check valves: ISO 14313  
 Steel valves: ASTM B16.34  
 Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Inspection and test: API 598 / API 6D



### Design description

One piece body  
 Butterfly swing type  
 Dual-plate disc, long-pattern  
 Renewable split disc  
 Horizontal or vertical service  
 Wafer ends  
 Available with flanged ends

### Materials of parts

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A351-CF8M	A352-LCB
2	Plate	A216-WCB+CR13	A351-CF8M+HF	A352-LCB+CR13
3	Stop pin	A276-420	A276-304	A276-420
4	Back spring	A313-304	A313-316	A313-304
5	Hinge pin	A276-420	A276-304	A276-420
6	Eyebolt	Carbon steel		

## Dimensions data

		ANSI Class 150Lb												
NPS DN	in	2	2½	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L	in	2.38	2.62	2.88	2.88	3.88	5.00	5.75	7.12	7.25	7.50	8.00	8.62	8.75
	mm	60	67	73	73	98	127	146	181	184	191	203	219	222
D	in	4.00	4.88	5.38	6.75	8.62	10.88	13.25	16.00	19.62	20.12	21.50	23.75	28.12
	mm	103	122	135	173	220	277	337	407	448	512	547	604	715
d	in	2.00	2.50	3.25	4.00	6.00	8.00	10.00	12.00	13.75	15.75	17.75	19.75	23.62
	mm	51	65	80	102	152	203	254	305	350	400	450	500	600
d1	in	2.25	2.88	3.50	4.25	6.25	8.26	10.50	12.12	14.00	16.00	18.00	19.88	23.75
	mm	56	73	88	108	160	210	266	310	356	405	455	505	605
WT	Kg	2	3	4	6	13	25	39	54	80	117	138	163	331

		ANSI Class 300Lb												
L	in	2.38	2.62	2.88	2.88	3.88	5.00	5.75	7.12	8.75	9.12	10.38	11.50	12.50
	mm	60	67	73	73	98	127	146	181	222	232	264	292	318
D	in	4.25	5.00	5.75	7.00	9.88	12.00	14.12	16.50	19.00	21.12	23.38	25.62	30.38
	mm	110	128	147	179	249	305	359	420	483	537	594	652	772
d	in	2.00	2.50	3.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
	mm	51	65	80	102	152	203	254	305	350	400	450	500	600
d1	in	2.25	2.88	3.50	4.25	6.38	8.25	10.50	12.25	14.00	16.00	18.00	20.00	24.00
	mm	58	73	88	108	160	210	266	310	355	405	455	505	608
WT	Kg	3	4	6	8	18	31	51	77	117	190	200	265	410

## Dimensions data

		ANSI Class 600Lb										
Size	in	2	2½	3	4	6	8	10	12	14	16	
	mm	50	65	80	100	150	200	250	300	350	400	
L	in	2.38	2.62	2.88	3.12	5.38	6.50	8.38	9.00	10.75	12.00	
	mm	60	67	73	79	137	165	213	229	273	305	
D	in	4.38	5.00	5.75	7.50	10.38	12.50	15.62	17.88	19.25	22.12	
	mm	110	128	147	191	264	318	398	455	490	562	
d	in	2.00	2.50	3.00	4.00	6.00	7.88	9.88	12.00	13.25	15.25	
	mm	51	65	80	102	152	200	250	305	337	387	
d1	in	2.25	2.88	3.50	4.25	6.38	8.38	10.50	12.25	14.00	15.75	
	mm	58	73	88	108	162	212	266	312	355	400	
WT	Kg	4	5	8	11	26	55	95	140	223	360	

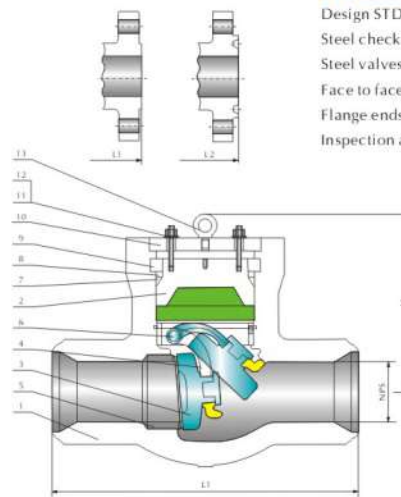
		ANSI Class 900Lb										
L	in	2.75	3.25	3.25	4.00	6.25	8.12	9.50	11.50	-	-	
	mm	70	83	83	102	159	206	241	292	-	-	
D	in	5.50	6.38	6.50	8.00	11.25	14.00	17.00	19.50	-	-	
	mm	140	162	165	204	286	356	432	495	-	-	
d	in	2.00	2.50	3.00	4.00	6.00	7.88	9.88	12.00	-	-	
	mm	51	65	80	102	152	200	250	305	-	-	
d1	in	2.25	2.88	3.50	4.25	6.38	8.38	10.50	12.25	-	-	
	mm	58	73	88	108	162	212	266	312	-	-	
WT	Kg	8	11	14	20	42	84	145	220	-	-	

## Applicable standards

Design STD.: API 6D / API 594  
 Steel check valves: ISO 14313  
 Steel valves: ASTM B16.34  
 Face to face: ASME/ANSI B16.10  
 Flange ends: ASME/ANSI B16.5  
 Inspection and test: API 598 / API 6D

## Design description

PSB, pressure seal bonnet  
 Flexible wedge, fully guided  
 Forged T-head stem  
 Choice of solid or split wedge  
 Renewable seat rings  
 Rising stem and non-rising handwheel  
 Flanged or butt welding ends  
 Available with bevel gear operator



## Materials of parts

No	Part Name	ASTM Material		
		Carbon steel	1-1/4Cr-1/2Mo	Carbon steel
1	Body	A216-WCB	A217-WC6	A351-CF8M
2	Bonnet Cap	A216-WCB	A217-WC6	A351-CF8M
3	Disc	A105-HF	A182-F11+HF	A351-CF8M+HF
4	Hinge	A216-WCB	A217-WC6	A351-CF8M
5	Seat ring	A105+HF	A182-F11+HF	A240-316+HF
6	Hinge pin	A276-420	A276-304	A276-316
7	Adapter ring	Carbon steel	A276-420	A276-316
8	Retainer	Carbon steel	A276-420	A276-316
9	Bonnet gasket	Steel ring	304SS ring	316SS ring
10	Bonnet clamp	Carbon steel	Alloy steel	Stainless steel
11	Bonnet stud	A193-B7	A193-B7	A193-B8M
12	Bonnet stud nut	A194-2H	A194-2H	A194-8M
13	Eyebolt	Carbon steel		

### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
<b>ANSI Class900Lb</b>											
L1 (BW)	in	8.50	10.00	12.00	14.00	20.00	26.00	31.00	36.00	39.00	43.00
	mm	216	254	305	356	508	660	787	914	991	1092
L (RF)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.5	44.5
	mm	368	419	381	457	610	737	838	965	1029	1130
L2 (RTJ)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.38	44.88
	mm	371	422	384	460	613	740	841	968	1038	1140
H	in	9.50	9.50	10.00	13.38	15.75	18.12	21.62	24.00	27.00	29.50
	mm	240	240	255	340	400	460	550	610	685	750
WT (kg)	BW	22	34	38	71	176	485	761	1125	1345	1490
	RF/RTJ	44	55	61	116	255	630	940	1433	1710	1820

### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
<b>ANSI Class1 500Lb</b>											
L1 (BW)	in	8.50	10.00	12.00	16.00	22.00	28.00	34.00	39.00	42.00	-
	mm	216	254	305	406	559	711	864	991	1067	-
L (RF)	in	14.50	16.50	18.50	21.50	27.75	32.75	39	44.5	49.5	-
	mm	368	419	470	546	705	832	991	1130	1257	-
L2 (RTJ)	in	14.62	16.62	18.62	21.62	28.00	33.12	39.38	45.12	50.25	-
	mm	371	422	473	549	711	842	1000	1146	1276	-
H	in	9.50	9.50	11.88	15.38	18.00	20.62	24.00	27.00	30.00	-
	mm	240	240	300	390	455	525	610	685	760	-
WT (kg)	BW	22	37	45	78	245	530	815	1213	1555	-
	RF/RTJ	44	61	110	155	378	675	1160	1710	2315	-

### Dimensions data

NPS DN	in	2	2½	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
<b>ANSI Class2500Lb</b>											
L1 (BW)	in	11.00	13.00	14.50	18.00	24.00	30.00	36.00	41.00	-	-
	mm	279	330	368	457	610	762	914	1041	-	-
L (RF)	in	17.75	20.00	22.75	26.50	36.00	40.25	50	56	-	-
	mm	451	508	578	673	914	1022	1270	1422	-	-
L2 (RTJ)	in	17.88	20.50	23.00	26.88	36.50	40.88	50.88	56.88	-	-
	mm	454	514	584	683	927	1038	1292	1445	-	-
H	in	10.25	10.25	13.75	16.12	18.88	22.38	25.25	32.00	-	-
	mm	260	260	350	410	480	570	640	815	-	-
WT (kg)	BW	55	78	95	182	300	630	825	1580	-	-
	RF/RTJ	93	130	170	315	618	1125	1760	2910	-	-