API FLOATING BALL VALVE





Construction and features of floating ball valve

RELIABLE SEAT SEAL

The structure desing of elastic sealing ring has been adopted for floating ball valves. When the pressure of medium is low, the contact area between valve seat insert and ball is relatively small, thus providing high sealing load to ansure dependable seating seal. When the pressure of medium is high, the contact area between valve seat insert and ball is relatively large, so that valve seat insert can endure the considerable medium thrust and without any damage.



At lower medium pressure



At higher medium pressure

FIRE SAFE DESING

In case of fire, the non-metal material parts such as seat sealing ring of PTFE, stem back seat gasket, gland packing and the sealing gasket between body and bonnet might be damaged due to the high temperature. As show in the figure, our specially designed structure of secondary metal seal is provided to effectively prevent both internal and external leakage of the valve. This desing can meet requirement of AP1607.

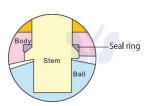


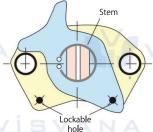
Before fire



ANTI BLOWOUT STEM

The Anti-blowout desing has been adopted fort he stem to ensure that even if the pressure in the body cavity risen accidently and the packing flange becomes invalid, the stem may not be blown out by medium. To prevent these possibilities, the stem is designed with a backseat, being assembled from underneath. The sealing force against the back seats higher as the medium pressure becomes higher. So the stem can be assured under variable medium pressure.





WRONG OPERATION PREVENTION

To prevent the ball valve from wrong operation. The fully opened or closed position of valve can be locked up, especially when are mounted outdoors or when valves are not allowed to be opened or closed by technical process.

ANTI STATIC DEVICE

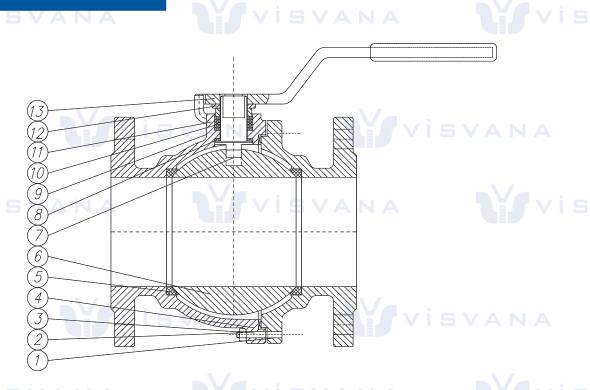
As required by customers, an anti static device can be placed on the valve to derive the electic charge is accumulated on the ball from the static channel between the ball and stem, or between the stem and valve body.







API FLOATING BALL VALVE



Floating ball valve

Bolted bonnet, Two-pieces Body, floating Ball Full or Reduced bore, Anti Blowout stem. Fire safe and Anti Static. Stainless steel ball ASTM A216 WCB, A351 CF8, A351 CF8M, A351 CF3, A351 CF3M, A351 CN7M

Standards compliance

Design and Manufacture: API 608, API6D, BS5351 Face to face(end to end):ANSI B 16.10, API6D, JIS B 2002 Flanged connection: ANSI B16.5, JISB2212-2214 Fire-safe: API607, API6 FA Butt welded end:ANSI B16.25 Test and inspection: API598, API6D, JIS B2003

Parts and material list

Parts and material list									
Parts No.	Parts Name		Mate						
raits NO	rarts Ivallie	WCB/13Cr	WCB/304	WCB/316	WCB/304	CF8M/316			
1	Body	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M			
10	Packing	PTFE	PTFE	PTFE	PTFE	PTFE			
11	Gland flange	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M			
12	Stop collar	Carbon steel							
13	Lever	Carbon steel							
8	Thrust washer	PTFE	PTFE	PTFE	PTFE	PTFE			
7	Stem = V	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316			
6	Ball	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316			
5	Seat	Reinforced PTFE							
9	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE			
2	Body nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A1948	ASTM A1948M			
3	Body bolting	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M			
V A4 N	Closure	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M			

Noted: the chart above only lists out some common composition of steel ball valve parts, we may provide other different parts material composition according to the customer's request or the actual valve working condition.

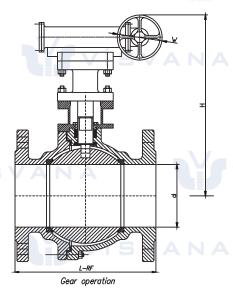


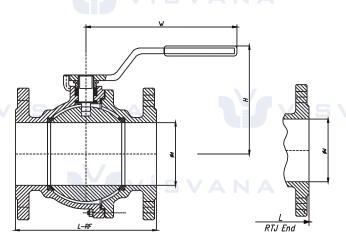


API FLOATING BALL VALVE NA

VFTBV-C150 / VFTBV-C300 VFTBV-C600 / VFTBV-C900 VFTBV-C1500







Main size and weight

	Si	Size		Dimensions (mm)							Weight (Kg)	
Class		NPS	L		Hand Gear		Hand	Gear	Hand	Gear		
	DN		d	RF	RTJ	wheel	box	wheel	box	wheel	box	
	15	1/2	13	108	119	140		85		3		
150 10K	20	3/4	19	117	130	140		90		3,2		
	25	1	25	127	140	150		99		3,5		
	32	1 1/4	32	140	153	180		105		5		
	40	1 1/2	38	165	178	300	VI	165	NZ	6		
	50	2	49	178	191	350		140		11		
	65	2 1/2	62	190	203	350		180		13,5		
	80	3	75	203	216	500		235		19		
	100	4	100	229	242	500	305	250	380	29	53	
	125	5	127	356	369	800	305	280	405	49	79	
	150	6	150	394	407	800	305	310	460	65	102	
	200	8	201	457	470	1000	305	350	550	115	185	
	250	10	252	533	546	A N.	400		706	177 i	280	
/ 1	15	1/2	13	140	151	140		85		3	- V	
	20	3/4	19	152	165	140		90		5		
300 20K	25	1	25	165	178	150		99		6		
	32	1 1/4	32	178	191	180		105		8		
	40	1 1/2	38	190	203	200		126		11		
	50	2	49	A 216	232	250	7/10	142	N Z	16		
	65	2 1/2	62	241	257	300		165		23		
,01C	80	3	74	283	299	350		178		30	52	
	100	4	100	305	321	500	305	230	330	47	76	
	125	5	127	381	397	800	305	280	380	74	124	
	150	6	150	403	419	800	305	310	420	107	163	
	200	8	201	502	518	1000	305	350	480	153	267	
	15	1/2	13	165	164	140		79	560	5		
	_ 20	3/4	19	190	190	140		83		7		
	25	1	25	216	216	200	A	114		9	3 V A	
600	32	1 1/4	32	229	229	200		120		13		
	40	1 1/2	38	241	241	250		125		17		
	50	2	49	292	295	300		156		25		
	65	2 1/2	62	330	333	350		172		42		
	80	3	74	356	359	500	305	220	370	56	76	
	100	4	100	432	435	650	305	250	400	85	123	
900	15	1/2	13	216	216	150		98		9		
	20	3/4	19	229	229	150		105		13		
	25	1	25	254	254	200		110		16		
	32	1 1/4	32	279	279	250		120		24		
	40	1 1/2	38	305	305	250		125		31		
	50	2	49	368	371	350		160		45		
1500	15	1/2	13	216	216	182		98		10		
	20	3/4	19	229	229	250	A	125	IT	14	5 V A	
	25	1	25	254	254	250		130		17		
	32	1 1/4	32	279	279	300		155		25		
	40	1 1/2	38	305	305	350		180		33		
	50	2	49	368	371	450		225		48		