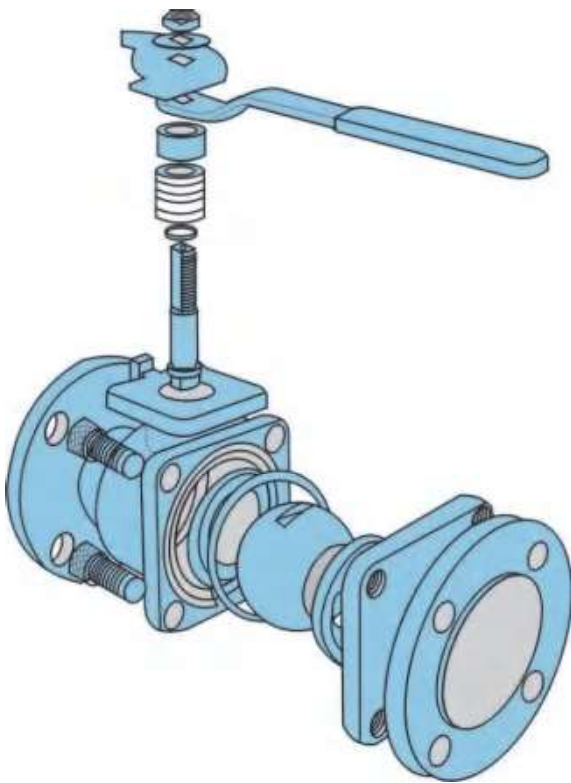


API Floating Ball Valve

TEK VALVE

Floating Ball Valve

TEK VALVE



Standards

Design and Manufacture: API 6D, BS5351, ASME B16.34

API 608, MSS-SP-72

Face To Face Dimension: ASME B16.10

Flange Connection Dimension: ASME B16.5

BW Connection Dimension: ASME B16.25

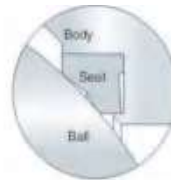
Test And Inspection: API 598

Fire-safe Design: API 607

Anti-static Design&Anti Blow-out Stem

Application

Floating ball valves are suitable for various kinds of pipelines of Class 150 to Class 600, to turn on or off the pipeline medium, of which the operation types include manual, worm gear and pneumatic or electric actuators.



At lower medium pressure



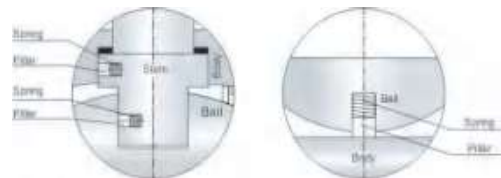
At higher medium pressure

Reliable seat seal

The structure design of elastic sealing ring has been adopted for floating ball valves. This seat design features a bigger sealing pressure ratio between the ring surface and the ball when medium pressure gets lower, where the contacting area is smaller. Thus, the reliable seal is ensured. When the medium pressure gets higher, the contacting area between seat ring and ball becomes bigger as the sealing ring transforms elastically to undertake the bigger force pushed by the medium without any damage.

Anti-static feature

The traditional packing flange design has been improved to be of two piece structure, i.e., being as a packing flange plate and a follower, the latter contacts the flange plate with spherical surface. Thus, the follower remains vertical always, and is lined internally with a PTFE bush to prevent the galling against and friction between the stem, which can also reduce the operation torque of the valve.



Anti-Static design for ball valve $\geq 32\text{mm}$ Anti-Static design for ball valve $\leq 25\text{mm}$

API SERIES

DIN SERIES

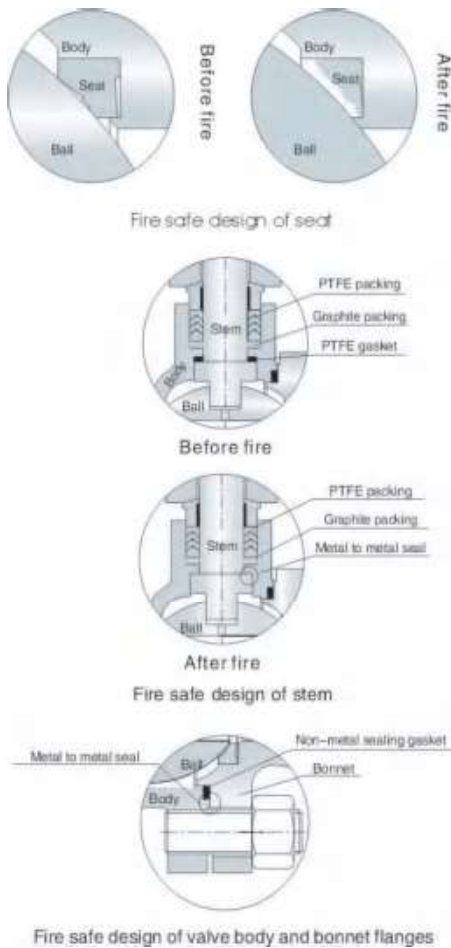
JIS SERIES

API Floating Ball Valve

TEK VALVE

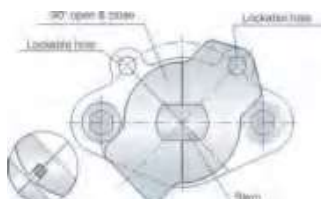
◎ Fire safe design

With the valve heated in a fire application, 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 disintegrate or be damaged due to high temperature. Our company specially designed structure of auxiliary metal to metal seal is provided to effectively prevent both internal and external leakage of the valve. As required by customers, Our company floating ball valves with design can meet the requirement of API 607.



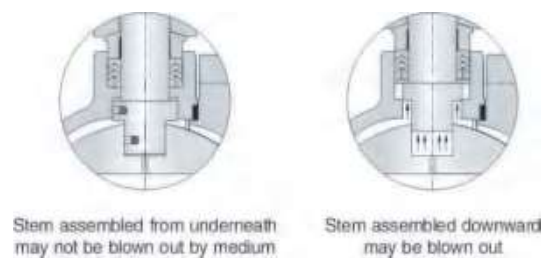
◎ Mounting pad provided

Our company has provided for floating ball valve with a mounting pad, through which it is easy to fix the actuators, such as worm gear, pneumatic and electric actuators.

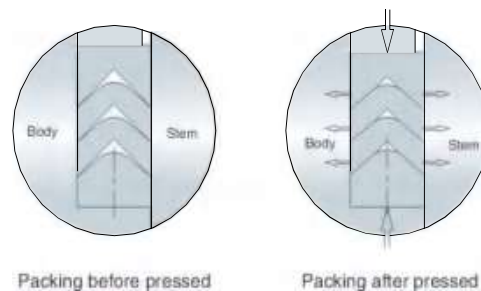


◎ Reliable stem seal

The blow-out proof design has been adopted for the stem to ensure that even if the pressure in the body cavity is risen accidentally and the packing flange becomes invalid, the stem may not be blown out by medium. The stem features the design with a backseat, being assembled from underneath. The sealing force against the backseat gets higher as the medium pressure becomes higher. So the reliable seal of the stem can be assured under variable medium pressure.



V type packing structure has been employed to effectively transform the pushing force of the gland flange and the medium pressure into the sealing force against the stem.



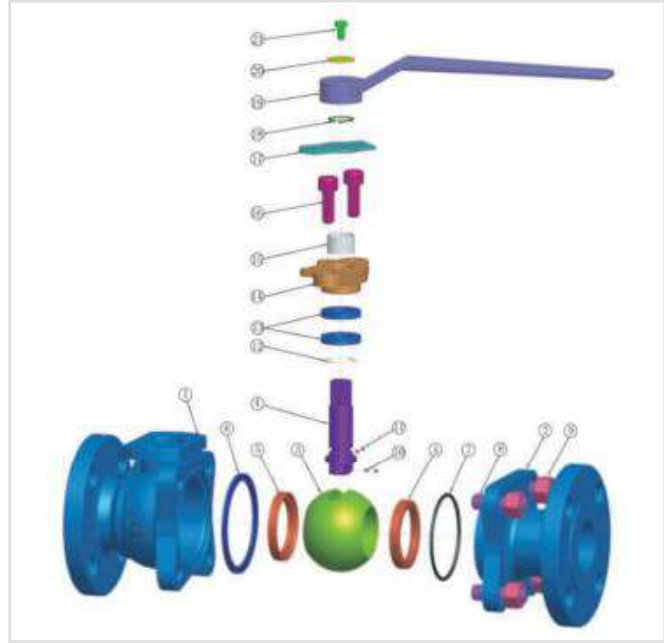
◎ Wrong operation prevention

To prevent the ball valve from wrong operation, the keylock with 90° of open and close positioning pad has been provided, which can be lockable as required. At the stem head, where the lever fixes, a flat is designed so that the valve opens with the lever in parallel to piping, and with the lever right-angled to the piping, the valve is closed. So, it is ensured that the valve indicator of open and close can never make mistake.



API Floating Ball Valve

TEK VALVE



API SERIES

DIN SERIES

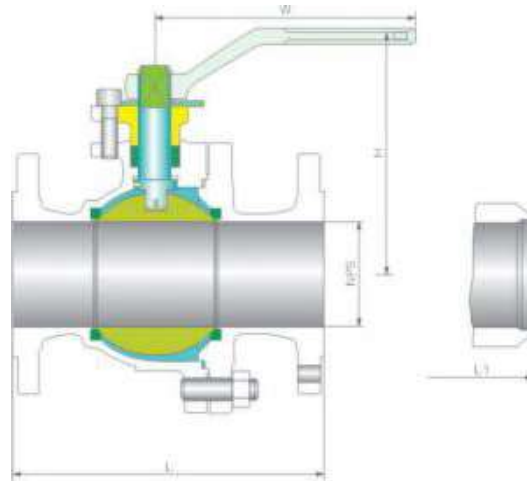
JIS SERIES

ASTM Material list of floating ball valve

No	Part Name	Carbon Steel to ASTM		Stainless Steel to ASTM			
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Bonnet	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
3	Ball	A351 CF8	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
4	Stem	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L
5	Seat ring	PTFE, RTFE, PEEK, DELRIN					
6	Gasket	Graphite+SS304, PTFE					
7	O–ring	Fluororubber					
8	Bolt	A193 B7/B7M	A193 L7/L7M	A193 B8/B8M			
9	Nut	A194 2H/2HM	A194 4/4M	194 8/8M			
10	Small spring	SS304					
11	Small ball	SS304					
12	Thrust washer	PTFE					
13	Stem packing	Flexible Graphite/PTFE					
14	Packing gland	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF8M
15	Shaft sleeve	PTFE					
16	Screw	A193 B7	A320 L7	A193 B8/B8M			
17	Positioning plate	Galvanized Steel					
18	Rataining ring	Carbon Steel					
19	Lever	Carbon Steel					
20	Gasket	Carbon Steel					
21	Screw	Carbon Steel					

API Floating Ball Valve

TEK VALVE



API SERIES

DIN SERIES

JIS SERIES

Main size of outside & weight

150Lb

Size	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
	mm	15	20	25	40	50	65	80	100	150	200	250	300
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	394	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
WT (Kg)	RF	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

Main size of outside & weight

300Lb

Size	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12
	mm	15	20	25	40	50	65	80	100	150	200	250	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	2.75	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	206	255	280	345	420
WT (Kg)	RF	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

Main size of outside & weight

600Lb

Size	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4
	mm	15	20	25	40	50	65	80	100
L/L1 (RF/BW)	in	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00
	mm	165	190	216	241	292	330	356	432
L2 (RTJ)	in	—	—	—	—	11.62	13.12	14.12	17.12
	mm	—	—	—	—	295	333	359	435
H	in	2.38	2.38	3.00	4.00	4.75	6.88	8.38	9.25
	mm	61.5	61.5	78	101	120	174	212	234
WT (Kg)	RF/RTJ	3.3	4.5	7.2	13.5	19	31	39	71
	BW	2.6	3.1	4.8	8	13	22	27	53