

API SERIES DIN SERIES JIS SERIES

TEK VALVE

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API SERIES DIN SERIES JIS SERIES

TEK VALVE

Brief Introduction

Established in 2003 ,TEK Valve, located in Wenzhou City, zhejiang province, China, has distributors in USA, Singapore, Malaysia, Yemen, Kuwait. With TUV ISO9001, TUV CE, API 600, API 607, API 6D, our products sell well in Europe, America , South America , East South Asia, Middle East and Africa.

We are blessed with an excellent technique team engaged in researching, developing and manufacturing high quality products of Gate Valves, Globe Valves, Check Valves ,Ball Valves ,Butterfly Valves and Fluid Pipe fittings, which are made strictly in accordance with standards such as API, ASME, ASTM, EN, BS, DIN, JIS and successfully tested in many large projects.

Quality and satisfaction guaranteed is our philosophy. It is certain that long mutual-trust cooperation with our clients from home and abroad results in mutual benefit bright future.



CONTENTS

API Gate Valve	01-07
API Globe Valve	08-13
API Check Valve	14-18
API Floating Ball Valve	19-22
API Trunnion Ball Valve	23-29
API Forged Steel Metal To Metal Trunnion Ball Valve	30-35
API Butterfly Valve	37-41
API Forged steel gate valves	42-45
API Forged steel globe valves	46-49
API Forged steel check valves	50-52

DIN Gate Valve	53-55
DIN Globe Valve	56-58
DIN Check Valve	59-62
DIN Ball Valve	63-65

JIS Gate Valve	66-69
JIS Globe Valve	70-72
JIS Check Valve	73-75
JIS Ball Valve	76-78
JIS Butterfly Valve	79-80

Flange size	81-85
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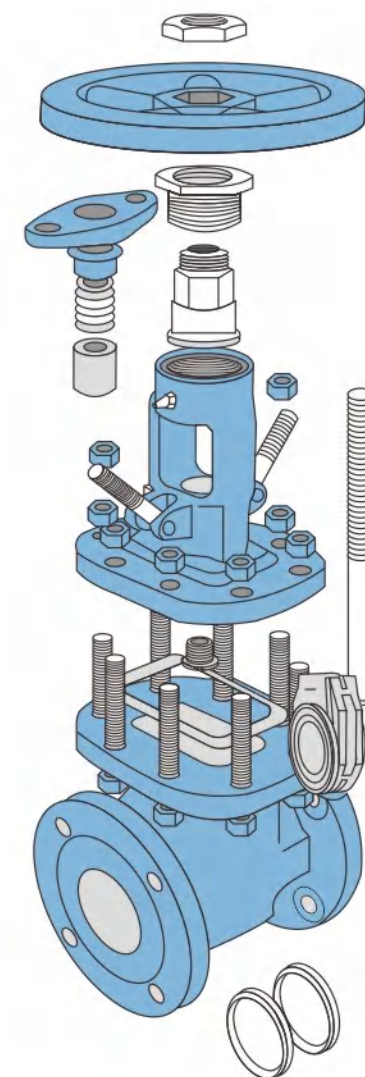
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API Steel Gate Valve

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Steel Gate Valve

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Standards

Design and Manufacture: Cast steel gate valve to API600 (ISO 10434) ; Cast stainless steel gate valve to API 603 or API 600; Forged steel gate valve to API 602.Inspection and Test: API 598.

End flange dimension: ASME B16.5Jfor NPS24J; ASME B16.47 series B, ASME B16.47 series A, MSS SP-44Jfor NPSJ24J.

BW end dimension: ASME B16.25.

Socket-weld dimension: ASME B16.11.

Face to face and end to end: ASME B16.10.

Pressure-temperature ratings: ASME B16.34.

Gasket of Cover Flange

Stainless steel + flexible graphite combined gasket is used for Class150 and Class300 gate valve; Stainless steel + flexible graphite wounded gasket is used for Class600 gate valve and ring joint gasket is also optional for Class600 gate valve; Ring Joint gasket is used for Class 900 gate valve; Pressurized seal design is used for Class1500 YClass2500 gate valve.

Packing Seal

Molded flexible graphite is used for packing material. PTFE or combined packing material can be also used if being requested by the customer. The internal surface of the stuffing box, of which area is contacted with the packing, is of excellent finish (Ra3.2μm). The stem surface, contacting with the packing, should be rolled and pressed after being precisely machined, so as to reach to the high finish and compactness (Ra0.8μm) and ensure the reliable tightness of the stem area.

Back Seating Design

All our gate valves have the back seating design. In most cases, the carbon steel gate valve is fitted with a renewable back seat. For stainless steel gate valve, the back seat is machined directly in the bonnet or is machined after welding. When the gate valve is at fully open position, the sealing of the back seat can be very reliable. However, as per the requirement of API 600, it is not advisable to add or change packing by the mean of back seating when the valve is Pressure containing.

Stem Design

The stem is of integral forged design. The minimum diameter of the stem shall per the standard requirement. The connection of the stem and disc is T type. The strength of the connecting area is bigger than that of the T threaded part of the stem. The strength test of that area conforms to API 591.

TEK VALVE

Body and Bonnet Connection

The body and bonnet of Class150 ~ Class900 gate valves are usually connected with studs and nuts. And the body and bonnet of Class1500 ~ Class2500 gate valves are usually of pressure seal design.

Design of Disc

Gate Valves with NPS ≥ 2 are of wedge flexible gate; Gate valves with NPS < 2 are of wedge solid gate.

Actuation

Hand wheel or gear box is usually used for gate valve actuation. Chain wheel and electric actuator can be also used for gate valve actuation if being requested by the customers.

Stem Nut

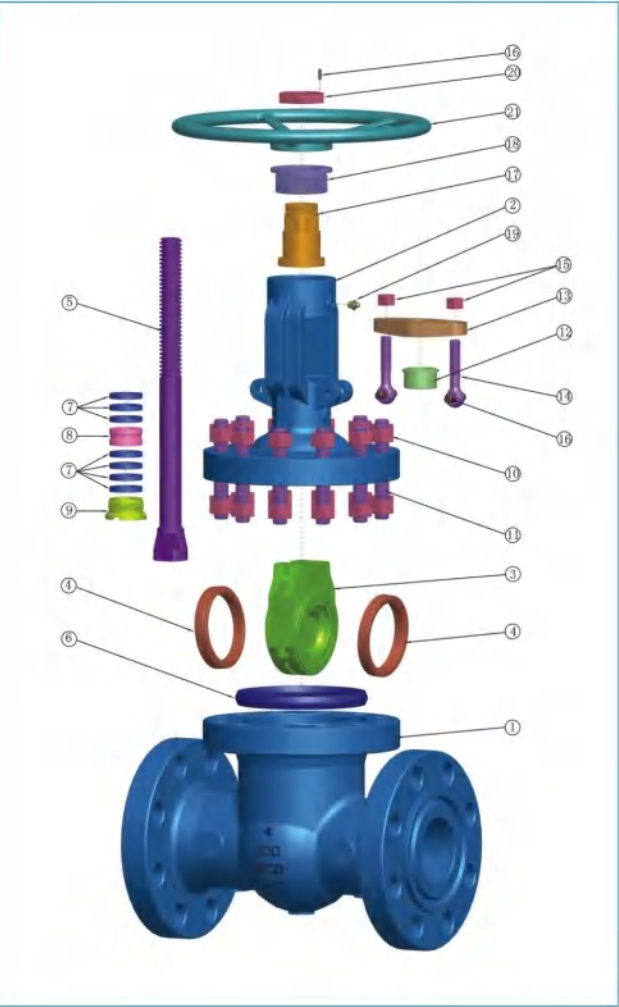
Usually, the stem nut is made of copper alloy. it is also can be made of ASTM A439 D2 if being requested by the customer. For large sized gate valves (NPS 10 for Class 150, NPS 8 for Class 300, NPS 6 for Class 600, NPS 5 for Class 900), rolling bearing is fitted at the two sides of the stem nut in order to minimize the open and close torque of the gate valve.

Seat

For carbon steel gate valve, the seat is usually forged steel. The sealing surface of the seat is spray welded with hard alloy specified by the customer. Renewable threaded seat is used for NPS ≤ 10 gate valves, and welded on seat can be also optional if being requested by the customer. Welded on seat is used for NPS ≥ 10 carbon steel gate valves. For Stainless steel gate valve, integral seat is usually adopted, or to weld hard alloy directly integrally. Threaded or welded on seat is also optional for stainless steel gate valve if being requested by the customer.

Belleville Spring Loaded Packing Impacting System

If being requested by the customer, the Belleville spring loaded packing impacting system can be adopted for enhancing the durability and reliability of the packing seal.



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

TEK VALVE



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

ASTM Material list of API600 Rising Stem Cast Steel Gate Valve										
No	Part Name	Carbon Steel to ASTM		Stainless Steel to ASTM				Alloy Steel to ASTM		
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
2	Bonnet	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
3	Wedge	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
4	Seating Ring	A105N	A350LF2	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A182 F11	A182 F22	A182 F5
5	Stem	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
6	Gasket	Graphite+SS304, PTFE								
7	Stem Packing	Flexible Graphite								
8	Lantern Ring	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
9	Backseat Bushing	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
10	Nut	A194 2H	A194 4	A194 8				A194 7		
11	Bolt	A193 B7	A320 L7	A193 B8				A193 B16		
12	Gland	F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
13	Gland Flange	A216 WCB	A352 LCB	A351 CF8	A351 CF8	A351 CF8	A351 CF8	A217 WC6	217 WC9	A217 C5
14	Gland Eyebolt	A193 B7		A193 B8				A193 B16		
15	Gland Nut	A194 2H		A194 8				A194 7		
16	Pin	ANSI 1045		A182 F304				ANSI 1045		
17	Stem Nut	A439 D2 / B148 952A								
18	Retaining Nut	ANSI 1020								
19	Nipple	Copper Alloy								
20	H.W.Lock Nut	ANSI 1020								
21	Handwheel	A197								

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

API Steel Gate Valve

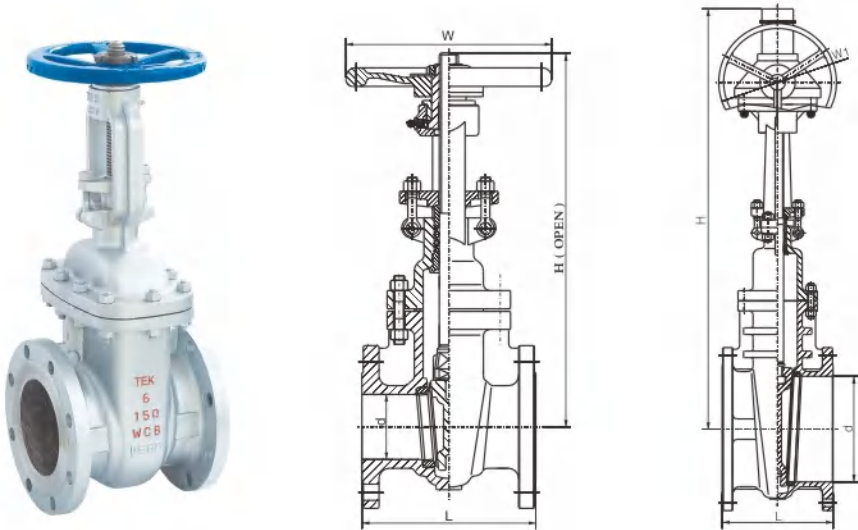
TEK VALVE

Construction feature

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

API598 Pressure Test

- Pressure ratings: Class150
- Hydraulic Shell test: 3.2MPa
- Hydraulic Seat test: 2.2MPa
- Air test: 0.6MPa



Main size of outside & weight

Class	Size		Dimensions (mm)								Weight (Kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand wheel	Gear box
			RF	RTJ	BW							
Class 150	2	50	178	191	216	51	400	-	200	-	19	-
	2 1/2	65	190	203	241	64	435	-	200	-	25	-
	3	80	203	216	283	76	515	-	250	-	33	-
	4	100	229	241	305	102	595	-	280	-	49	-
	5	125	254	267	381	127	725	-	280	-	62	-
	6	150	267	279	403	152	780	820	300	310	77	104
	8	200	292	305	419	203	975	1020	350	310	123	150
	10	250	330	343	457	254	1150	1200	400	310	188	215
	12	300	356	368	502	305	1380	1430	450	310	288	315
	14	350	381	394	572	337	1545	1580	500	310	385	435
	16	400	406	419	610	387	1733	1780	500	460	500	552
	18	450	432	445	660	438	1915	1990	500	460	601	653
	20	500	457	470	711	489	2122	2220	600	460	764	816
	24	600	508	521	813	591	2520	2600	600	460	1007	1185
	28	700	610	623	914	684	-	3050	-	600	-	1880
	30	750	610	623	914	735	-	3130	-	600	-	2300
	32	800	660	673	965	779	-	3280	-	600	-	2550
	36	900	711	724	1016	874	-	3720	-	600	-	3390
	40	1000	762	-	1066	-	-	4100	-	-	-	4880
	42	1050	787	-	1092	-	-	4300	-	-	-	5300
	48	1200	864	-	1168	-	-	5080	-	-	-	7520

API Steel Gate Valve

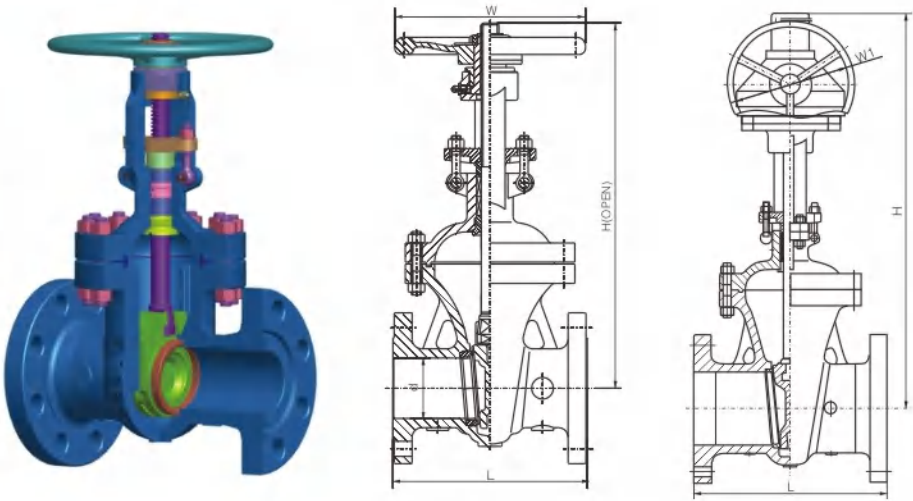
TEK VALVE

Construction feature

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

API598 Pressure Test

- Pressure ratings: Class300
- Hydraulic Shell test: 7.8MPa
- Hydraulic Seat test: 5.7MPa
- Air test: 0.6MPa



Main size of outside & weight

Class	Size		Dimensions (mm)								Weight(Kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand wheel	Gear box
			RF	RTJ	BW							
Class 300	2	50	216	232	216	51	420	-	200	-	25	-
	2 1/2	65	241	257	241	64	446	-	200	-	30	-
	3	80	283	298	283	76	537	-	250	-	48	-
	4	100	305	321	305	102	619	650	280	310	73	100
	5	125	381	397	381	127	722	750	300	310	99	126
	6	150	403	419	403	152	806	835	350	310	130	186
	8	200	419	435	419	203	1000	1030	400	310	208	235
	10	250	457	473	457	254	1240	1280	450	310	334	386
	12	300	502	518	502	305	1425	1460	500	310	450	502
	14	350	762	778	762	337	1585	1620	600	460	704	756
	16	400	838	854	838	387	1790	1830	500	460	923	965
	18	450	914	930	914	438	1960	2000	650	460	1131	1224
	20	500	991	1010	991	489	2158	2220	750	460	1345	1400
	24	600	1143	1165	1143	584	2576	2620	900	600	2122	2385
	28	700	1346	1372	1346	684	-	3080	-	600	-	3300
	30	750	1397	1422	1397	735	-	3180	-	600	-	3550
	32	800	1524	1553	1524	779	-	3300	-	600	-	4400
	36	900	1727	1756	1727	874	-	3760	-	600	-	6050

API Steel Gate Valve

TEK VALVE

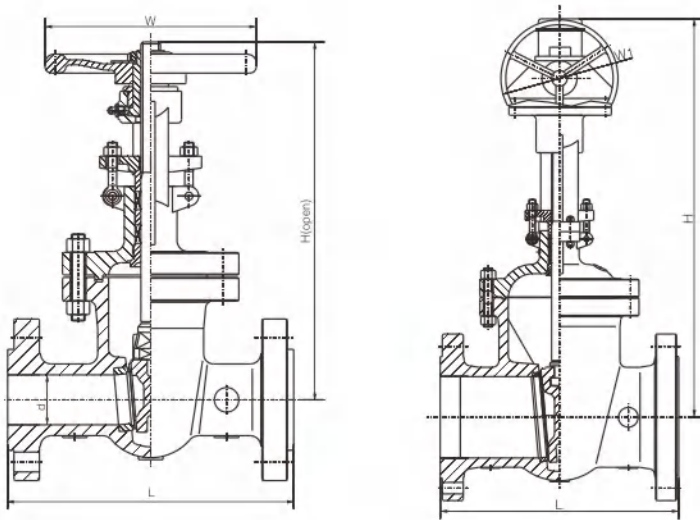
Construction feature

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

API598 Pressure Test

Pressure ratings: Class600
Hydraulic Shell test: 15.6MPa
Hydraulic Seat test: 11.4MPa
Air test: 0.6MPa

Pressure ratings: Class900
Hydraulic Shell test: 23.3MPa
Hydraulic Seat test: 17.1MPa
Air test: 0.6MPa



Main size of outside & weight

Class	Size		Dimensions (mm)								Weight(Kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand wheel	Gear box
			RF	RTJ	BW							
Class 600	2	50	292	295	292	51	444	—	200	—	32	—
	2 1/2	65	330	333	330	64	500	—	250	—	52	—
	3	80	356	359	356	76	558	585	280	310	60	87
	4	100	432	435	432	102	665	695	300	310	107	134
	5	125	508	511	508	127	760	790	350	310	175	227
	6	150	559	562	559	152	868	900	450	310	216	268
	8	200	660	664	660	200	1073	1110	500	310	399	451
	10	250	787	791	787	248	1263	1300	650	460	605	657
	12	300	838	841	838	298	1600	1650	700	460	851	893
	14	350	889	892	889	327	1705	1750	900	460	1177	1232
	16	400	991	994	991	375	1835	1900	900	460	1513	1568
	18	450	1092	1095	1092	419	—	2020	—	600	—	1980
Class 900	20	500	1194	1200	1194	464	—	2172	—	600	—	2460
	24	600	1397	1407	1397	559	—	2650	—	600	—	3650
	2	50	368	371	368	47	500	—	280	—	70	—
	2 1/2	65	419	422	419	57	550	—	280	—	110	—
	3	80	381	384	381	73	610	660	300	310	140	167
	4	100	457	460	457	98	702	750	350	310	200	227
	5	125	559	562	559	121	850	900	400	310	258	285
	6	150	610	613	610	146	980	1060	500	460	358	410
	8	200	737	740	737	190	1100	1140	650	460	550	600
	10	250	838	841	838	234	1320	1370	700	460	1000	1100
	12	300	965	968	965	282	1500	1560	900	460	1215	1310
	14	350	1029	1038	1029	311	1900	1950	900	600	1600	1700
	16	400	1130	1140	1130	354	2050	2100	900	600	2150	2330

API Steel Gate Valve

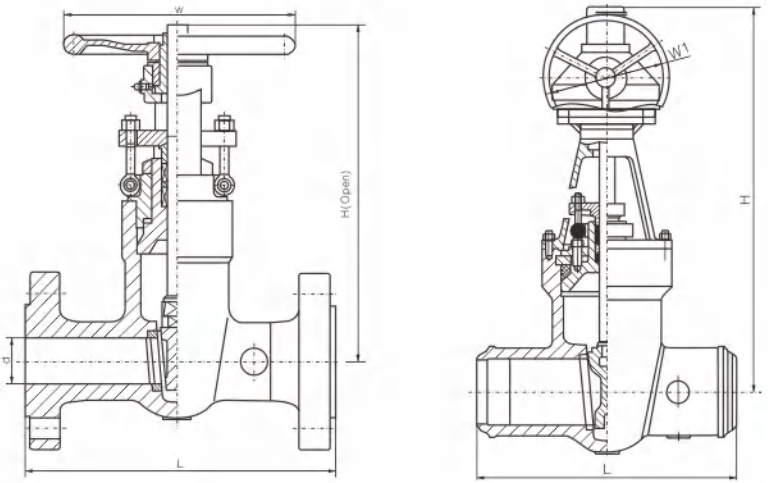
TEK VALVE

Construction feature

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

API598 Pressure Test

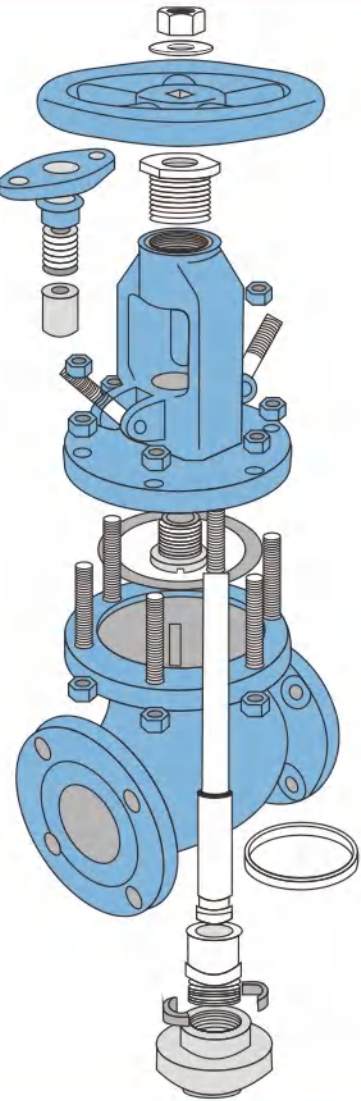
Pressure ratings: Class1500
Hydraulic Shell test: 38.8MPa
Hydraulic Seat test: 28.5MPa
Air test: 0.6MPa



Main size of outside & weight

Class	Size		Dimensions (mm)								Weight(Kg)	
	NPS	DN	L			d	H	H1	W	W1	Hand wheel	Gear box
			RF	RTJ	BW							
Class 1500	2	50	368	371	368	47	510	—	280	—	70	—
	2 1/2	65	419	422	419	57	560	—	300	—	110	—
	3	80	470	473	470	70	620	670	350	310	175	202
	4	100	546	549	546	92	728	770	400	310	270	300
	5	125	673	676	673	111	870	920	450	310	378	405
	6	150	705	711	705	136	1000	1070	500	460	520	575
	8	200	832	841	832	174	1130	1180	750	460	820	915
	10	250	991	1000	991	222	1360	1410	900	600	1560	1750
	12	300	1130	1146	1130	263	—	1620	—	600	—	2120
	14	350	1257	1276	1257	289	—	2020	—	600	—	2600
	16	400	1384	1407	1384	330	—	2180	—	600	—	3450
Class 2500	2	50	451	454	451	35	530	580	280	310	100	130
	2 1/2	65	508	514	508	47	580	630	300	310	150	180
	3	80	578	584	578	57	650	700	350	310	245	275
	4	100	673	683	673	73	750	800	400	310	390	420
	5	125	794	807	794	92	900	960	500	460	550	580
	6	150	914	927	914	111	1040	1100	600	460	780	835
	8	200	1022	1038	1022	146	1150	1200	750	460	1260	1355
	10	250	1270	1292	1270	184	1400	1460	900	600	2380	2565
	12	300	1422	1445	1422	219	—	1660	—	600	—	3250

Steel Globe Valve
TEK VALVE



Standards

Design and Manufacture: Cast steel globe valve to BS 1873 and ASME B16.34; Forged steel globe valve to API 602.
Inspection and Test: API 598.
End flange dimension: ASME B16.5.
BW end dimension: ASME B16.25.
Socket-weld dimension: ASME B16.11.
Face to face and end to end: ASME B16.10.
Pressure-temperature ratings: ASME B16.34.

The features of globe valve

Bolted Bonnet; Outside Screw and Yoke; Rising stems; Metallic seating surfaces.

Body and Bonnet Connection

The body and bonnet of Class150 ~ Class900 globe valves are usually with studs and nuts. And the body and bonnet of Class1500 ~ Class2500 globe valves are usually of pressure seal design.

Gasket of Cover Flange

Stainless steel + flexible graphite wounded gasket is used for Class150 and Class300 globe valve. Stainless steel + flexible graphite wounded gasket is used for Class 600, and ring joint gasket is also optional for Class600. Ring joint gasket is used for Class900 globe valve. Pressurized seal design is used for Class 1500~Class2500 globe valve.

Actuation

Hand wheel, impact hand wheel & gear box is usually used for globe valve actuation. Chain wheel and electric actuator can be also used for globe valve actuation if being requested by the customers.

Packing Seal

Molded flexible graphite is used for packing material. PTFE or combined packing material can be also used if being requested by the customer. The internal surface of the stuffing box, of which area is contacted with the packing, is of excellent finish (Ra 3.2μm). The stem surface, contacting with the packing, should be rolled and pressed after being precisely machined, so as to reach to the high finish and com-pactness (Ra 0.8μm) and ensure the reliable tightness of the stem area.

Belleville Spring Loaded Packing Impacting System

If being requested by the customer, the Belleville spring loaded packing impacting can be adopted for enhancing the durability and reliability of the packing seal.

Back Seating Design

All our globe valves have the back seat design. In most cases, the carbon steel globe valve is fitted with a renewable back seat. For stainless steel globe valve, the back seat is machined directly in the bonnet or is machined after welding. When the globe valve is at fully open position, the sealing of the back seat can be very reliable. However, as per the requirement of API, it is not advisable to add or change packing by the mean of back seating when the valve is pressure containing.

Seat

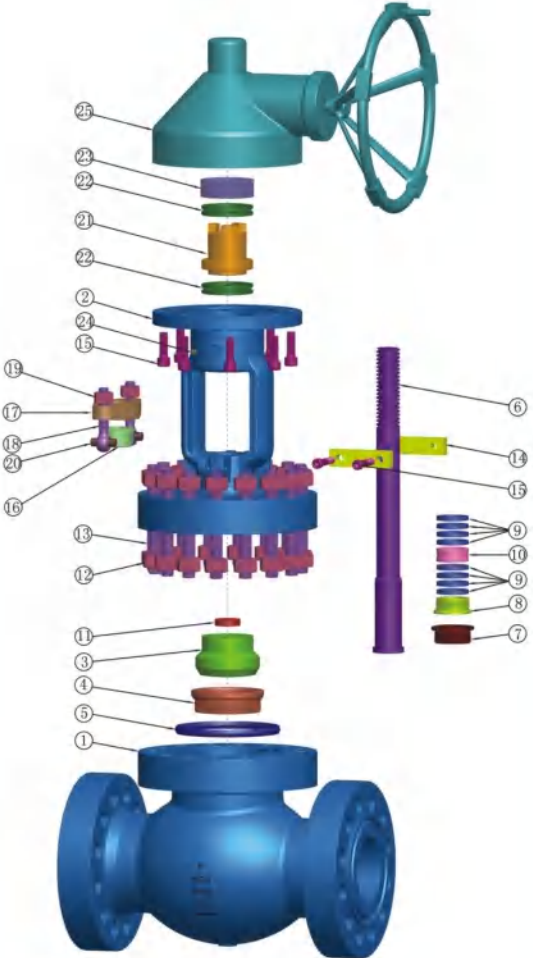
For carbon steel globe valve, the seat is usually forged steel. The sealing surface of the seat is spray welded with hard alloy specified by the customer. Renewable threaded seat is used for NPS" 10 globe valve and welded on seat can be also optional if being requested by the customer. Welded on seat is used for NPS" 12 carbon steel globe valves. For stainless steel globe valve, integral seat is usually adopted, or to weld hard alloy directly integrally. Threaded or welded on seat is also optional for stainless steel globe valve if being requested by the customer.

Stem Design

The stem is of integral forged design. The minimum diameter of the stem shall per the standard requirement.

Stem Nut

Usually, the stem nut is copper alloy. It is also can be made of ASTM A439 D2 if being requested by the customer. For large sized globe valve, rolling bearing is fitted at the two sides of stem nut in order to minimize the open and close torque of the globe valve.



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

API Steel Globe Valve

TEK VALVE



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

ASTM Material list of BS1873 Cast Steel Globe Valve										
No	Part Name	Carbon Steel to ASTM		Stainless Steel to ASTM				Alloy Steel to ASTM		
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
2	Bonnet	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
3	Disc	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
4	Seating Ring	A105N	A350LF2	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A182 F11	A182 F22	A182 F5
5	Gasket	Graphite+SS304, PTFE								
6	Stem	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
7	Disc Nut	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
8	Backseat Bushing	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
9	Stem Packing	Flexible Graphite								
10	Lantern Ring	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
11	Thrust Washer	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
12	Nut	A194 2H	A194 4	A194 8				A194 7		
13	Bolt	A193 B7	A320 L7	A193 B8				A193 B16		
14	Anti-rotating Device	ANSI 1020		A182 F304				ANSI 1020		
15	Gland	A194 2H		A194 8				A194 2H		
16	Screw	F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
17	Gland Flange	A216 WCB	A352 LCB	A351 CF8	A351 CF8	A351 CF8	A351 CF8	A217 WC6	A217 WC9	A217 C5
18	Gland Eyebolt	A193 B7		A193 B8				A193 B16		
19	Gland Nut	A194 2H		A194 8				A194 7		
20	Pin	ANSI 1045		A182 F304				ANSI 1045		
21	Stem Nut	A439 D2/ B148 952A								
22	Bearing	/								
23	Retaining Nut	ANSI 1020								
24	Nipple	Copper Alloy								
25	Bevel gearbox	/								

API Steel Globe Valve

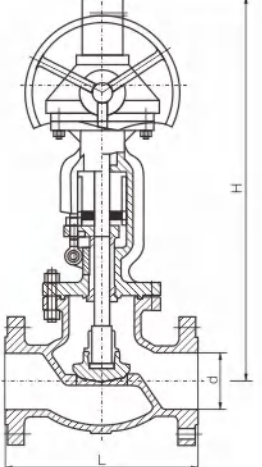
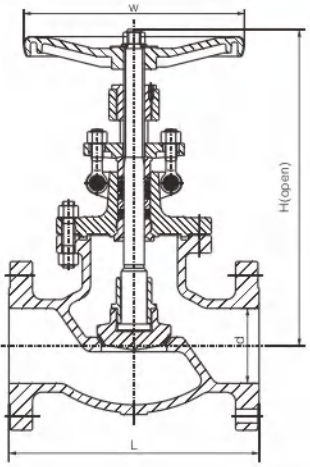
TEK VALVE

Construction feature

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

API598 Pressure Test

Pressure ratings: Class150
Hydraulic Shell test: 3.2MPa
Hydraulic Seat test: 2.2MPa
Air test: 0.6MPa



Class	Size		Dimensions (mm)								Weight (Kg)	
	NPS	DN	L			d	H	H1	W	W1	H.W	G.O
			RF	RTJ	BW							
Class 150	2	50	203	216	203	51	330	-	200	-	19	-
	2 1/2	65	216	229	216	64	360	-	250	-	27	-
	3	80	241	254	241	76	390	-	280	-	36	-
	4	100	292	305	292	102	445	-	300	-	53	-
	5	125	356	369	356	127	480	-	350	-	75	-
	6	150	406	419	406	152	520	556	350	310	94	126
	8	200	495	508	495	203	600	658	400	310	148	180
	10	250	622	635	622	254	773	805	450	460	242	291
	12	300	698	711	698	305	880	955	500	460	438	480
	14	350	787	800	787	337	950	1100	600	460	-	600
	16	400	914	927	914	387	996	1175	600	460	-	850
	20	500	978	991	978	488	-	1450	-	600	-	1650
	24	600	1295	1308	1295	590	-	1690	-	600	-	2200

API Steel Globe Valve

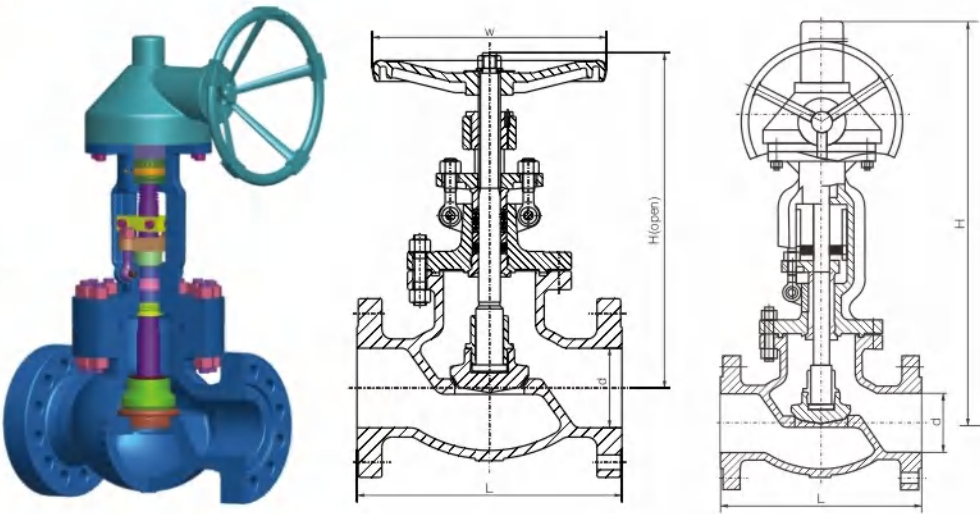
TEK VALVE

Construction feature

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

API598 Pressure Test

Pressure ratings: Class300
Hydraulic Shell test: 7.8MPa
Hydraulic Seat test: 5.7MPa
Air test: 0.6MPa



Main size of outside & weight

Class	Size		Dimensions (mm)								Weight (Kg)	
	NPS	DN	L			d	H	H1	W	W1	H.W	G.O
			RF	RTJ	BW							
Class 300	2	50	267	283	267	51	385	-	200	-	25	-
	2 1/2	65	292	308	292	64	420	-	200	-	42	-
	3	80	318	333	318	76	440	-	280	-	46	-
	4	100	356	371	356	102	515	-	350	-	74	-
	5	125	400	416	400	127	580	-	350	-	111	-
	6	150	444	460	444	152	660	690	400	310	165	195
	8	200	559	575	559	203	900	950	550	460	275	327
	10	250	622	638	622	254	950	990	600	460	400	452
	12	300	711	727	711	305	1030	1080	700	460	624	725
	14	350	762	854	762	337	1130	1155	-	600	-	880
	16	400	864	879	864	387	1310	1325	-	600	-	1300
	18	450	977	-	977	431	-	1473	-	720	-	1600
	20	500	1016	-	1016	482	-	1574	-	720	-	2100

API Steel Globe Valve

TEK VALVE

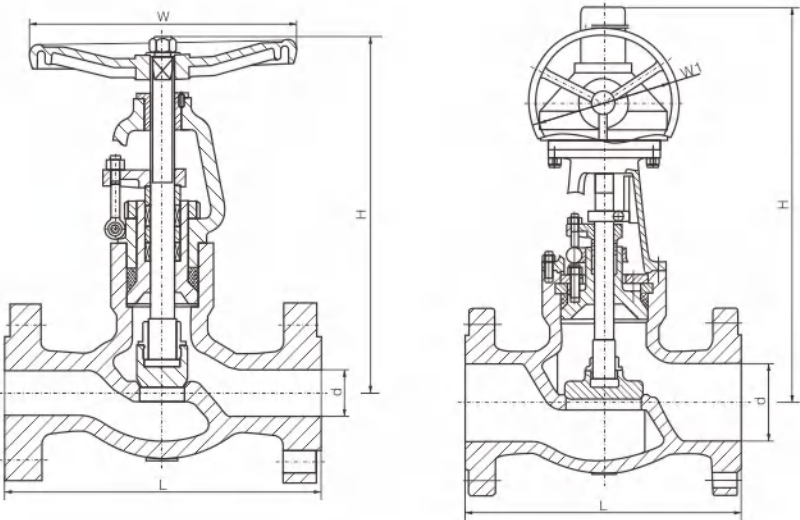
Construction feature

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

API598 Pressure Test

Pressure ratings: Class600
Hydraulic Shell test: 15.6MPa
Hydraulic Seat test: 11.4MPa
Air test: 0.6MPa

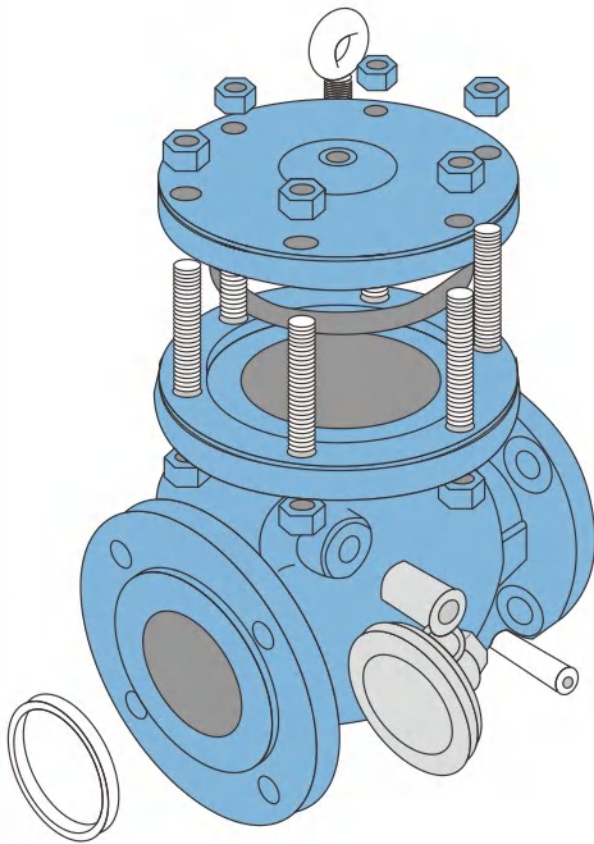
Pressure ratings: Class900
Hydraulic Shell test: 23.3MPa
Hydraulic Seat test: 17.1MPa
Air test: 0.6MPa



Main size of outside & weight

Class	Size		Dimensions (mm)								Weight (Kg)	
	NPS	DN	L			d	H	H1	W	W1	H.W	G.O
			RF	RTJ	BW							
Class 600	2 1/2	65	330	333	330	64	410	-	280	-	42	-
	3	80	356	359	356	76	465	-	300	-	63	-
	4	100	432	435	432	102	545	575	400	310	107	138
	5	125	508	511	508	127	625	660	500	310	185	215
	6	150	559	562	559	152	785	820	550	460	290	342
	8	200	660	664	660	200	930	960	650	460	540	645
Class 900	2 1/2	65	419	422	419	57	520	-	350	-	55	-
	3	80	381	384	381	73	564	630	400	310	95	128
	4	100	457	460	457	98	685	720	450	310	160	210
	5	125	559	562	559	121	780	840	550	460	270	325
	6	150	610	613	610	146	950	1015	650	460	410	480
	8	200	711	714	711	203	1030	1080	700	460	624	725
Class	DN		RTJ									
	mm	in	L	D	D1	D2	b	n-φd	H	DO		
Class 1500	65	2 1/2	422	244	190.5	108.0	49.0	8-φ28.5	461	400		
	80	3	473	267	203.2	136.5	55.7	8-φ32	554	450		
	100	4	549	311	241.3	161.9	61.8	8-φ35	639	500		
	125	5	676	375	292.1	193.7	81.1	8-φ41	780	560		
	150	6	711	394	317.5	211.1	92.1	12-φ38	904	630		
	200	8	841	483	393.7	269.9	103.0	12-φ44.5	1140	680		

Steel Check Valve
TEK VALVE



Reliable seat seal

Design and Manufacture: Cast steel check valve to BS1868, ASME B16.34 and API 6D;
Forged steel check valve to API 602.
Inspection and Test: API 598.
End flange dimension: ASME B16.5Jfor NPSY24JJ
ASME B 16.47 series B, ASME B16.47 series A,
MSS SP-44Jfor NPSJ24J.
BW end dimension: ASME B16.25.
Socket-weld dimension: ASME B16.11.
Face to face and end to end: ASME B16.10.
Pressure-temperature ratings: ASME B16.34.

Seat

For carbon steel check valve, the seat is usually forged Steel. The sealing surface of the seat is spray welded with hard alloy Specified by the customer. Renewable threaded seat is used for NPSi10 check valves, and welded on seat can be also optional if being requested by the customer. Welded on seat is used for NPS i12 carbon steel check valves. For stainless steel check Valve, integral seat is usually adopted, or to weld hard alloy directly integrally. Threaded or welded on seat is also optional for stainless steel check valve if being requested by the customer.

The features of check valve

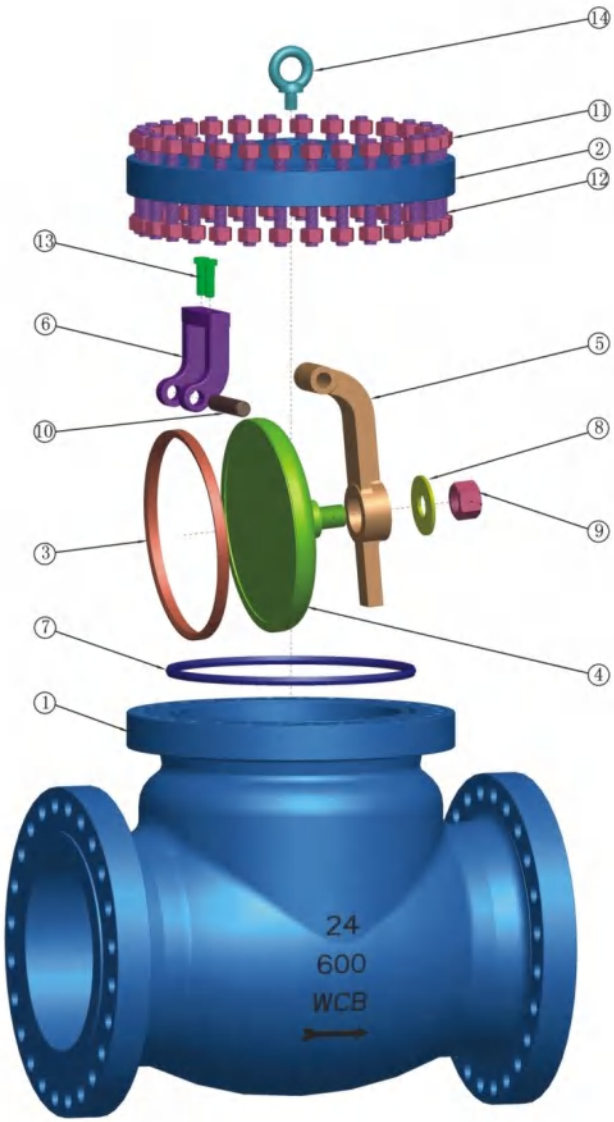
Bolted Bonnet;
Swing and lift disc;
Metallic seating surfaces.

Body-To-Bonnet Joint

Stainless steel + flexible graphite wounded gasket is used for Class150 and Class300 check valve; Stainless steel + flexible graphite wounded gasket is used for Class600 check valve, and joint gasket is also optional for Class600 check valve; Ring joint gasket is used for Class900 check valve; Pressure seal design is used for Class1500;Class2500 check valves.

Body and Bonnet Connection

The body and bonnet of Class150~Class900 check valves are usually with studs and nuts. And the body and bonnet of Class1500~Class2500 check valves are usually of pressure seal design.



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

API Steel Check Valve

TEK VALVE



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

ASTM Material list of BS1868 Swing Check Valve										
No.	Part name	Carbon Steel to ASTM		Stainless Steel to ASTM				Alloy Steel to ASTM		
1	Body	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
2	Cover	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
3	Seat Ring	A105N	A352 LF2	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A182 F11	A182 F22	A182 F5
4	Disc	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
5	Hinge	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
6	Yoke	A216 WCB	A352 LCB	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	A217 WC6	A217 WC9	A217 C5
7	Gasket	Graphite+SS304, PTFE								
8	Disc Washer	A182 F6a	A182 F6a	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
9	Disc Nut	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
10	Pin	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F304		
11	Nut	A194 2H	A194 4	A194 8				A194 7		
12	Bolt	A193 B7	A320 L7	A193 B8				A193 B16		
13	Screw	193 B7	A320 L7	A182 F304	A182 F316	A182 F304L	A182 F316L	A193 B16		
14	Lifting Lug	A194 2H								

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

API Steel Swing Check Valve

TEK VALVE

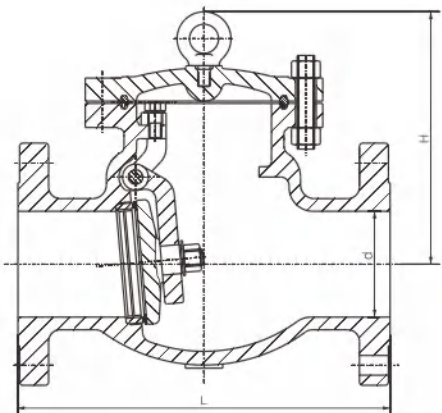
Construction feature

Bolted cover
Renewable seat
(Threaded or welded seat ring)

API598 Pressure Test

Pressure ratings** Class150
Hydraulic Shell test** 3.2MPa
Hydraulic Seat test** 2.2MPa
Air test** 0.6MPa

Pressure ratings** Class300
Hydraulic Shell test** 7.8MPa
Hydraulic Seat test** 5.7MPa
Air test** 0.6MPa



Main size of outside & weight													
Size		Class 150						Class 300					
NPS	DN	L			d	H	Weight (Kg)	L			d	H	Weight (Kg)
		RF	RTJ	BW				RF	RTJ	BW			
2	50	203	216	203	51	132	15	267	283	267	51	144	20
2 1/2	65	216	229	216	64	147	20	292	308	292	64	169	35
3	80	241	254	241	76	176	27	318	333	318	76	210	40
4	100	292	305	292	102	198	45	356	371	356	102	260	61
5	125	330	343	330	127	255	58	400	416	400	127	295	80
6	150	356	368	356	152	320	69	445	460	445	152	326	130
8	200	495	508	495	203	380	131	533	549	533	203	380	190
10	250	622	635	622	254	440	219	622	638	622	254	440	296
12	300	699	711	699	305	480	321	711	727	711	305	520	450
14	350	787	800	787	337	530	380	838	854	838	337	540	640
16	400	864	876	864	387	580	560	864	879	864	387	588	850
18	450	978	991	978	438	618	630	978	994	978	432	670	1030
20	500	978	991	978	489	657	770	1016	1035	1016	483	720	1330
24	600	1295	1308	1295	591	760	960	1346	1368	1346	584	850	1950
26	650	1295	-	1295	633	840	1250	1346	1372	1346	633	920	2300
28	700	1448	-	1448	684	920	1580	1499	1524	1499	684	1150	2600
30	750	1524	1537	1524	735	980	1950	1594	1619	1594	735	1260	3200
32	800	1727	-	1727	779	1016	2800	1727	-	1727	779	1380	3700
36	900	1956	1969	1956	874	1092	3200	2083	-	2083	874	1540	4300

API Steel Swing Check Valve

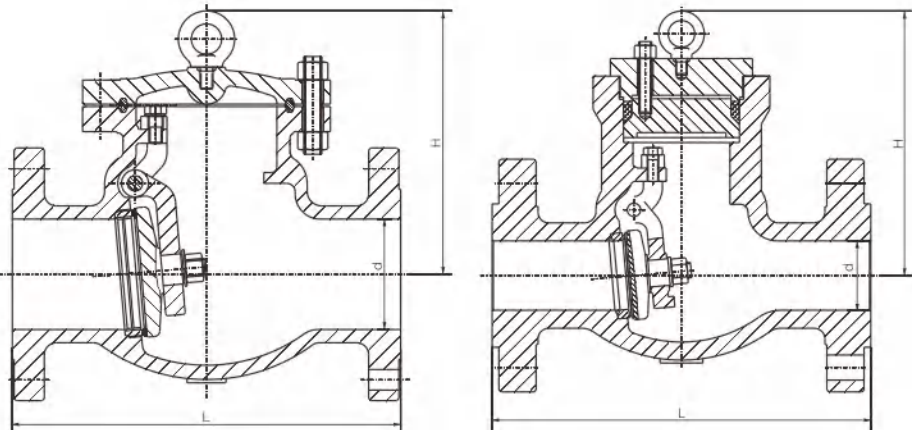
TEK VALVE

Construction feature

Bolted cover
Renewable seat
(Threaded or welded seat ring)

API598 Pressure Test

Pressure ratings: Class600
Hydraulic Shell test: 15.6MPa
Hydraulic Seat test: 11.4MPa
Air test: 0.6MPa
Pressure ratings: Class900
Hydraulic Shell test: 23.3MPa
Hydraulic Seat test: 17.1MPa
Air test: 0.6MPa
Pressure ratings: 1500
Hydraulic Shell test: 38.8MPa
Hydraulic Seat test: 28.5MPa
Air test: 0.6MPa



Main size of outside & weight

Size		Class 600						Class 900					
NPS	DN	L			d	H	Weight (Kg)	L			d	H	Weight (Kg)
		RF	RTJ	BW				RF	RTJ	BW			
2	50	292	295	292	51	170	28	368	371	368	47	200	48
2 1/2	65	330	333	330	64	178	40	419	422	419	57	220	75
3	80	356	359	356	76	246	68	381	384	381	73	280	95
4	100	432	435	432	102	290	117	457	460	457	98	320	135
5	125	508	511	508	127	320	155	559	562	559	121	360	200
6	150	559	562	559	152	360	192	610	613	610	146	400	264
8	200	660	664	660	200	430	340	737	740	737	190	480	424
10	250	787	791	787	248	502	515	838	841	838	234	560	730
12	300	838	841	838	298	554	750	965	968	965	282	632	1070
14	350	889	892	889	327	595	890	1029	1038	1029	311	680	1180
16	400	991	994	991	375	680	1303	1130	1140	1130	354	780	1790
18	450	1092	1095	1092	419	778	1800	1219	1232	1219	400	880	2500
20	500	1194	1200	1194	464	970	2150	1321	1334	1321	444	1050	3080
24	600	1397	1407	1397	559	1100	3200	1549	1568	1549	533	1200	4600

Size		Class 1500						Class 2500					
NPS	DN	L			d	H	Weight (Kg)	L			d	H	Weight (Kg)
		RF	RTJ	BW				RF	RTJ	BW			
2	50	368	371	368	47	210	48	451	454	451	35	230	68
2 1/2	65	419	422	419	57	240	75	508	514	508	47	260	100
3	80	470	473	470	70	303	120	578	584	578	57	330	165
4	100	546	549	546	92	340	180	673	683	673	73	370	260
5	125	673	676	673	111	380	294	794	807	794	92	410	440
6	150	705	711	705	136	430	385	914	927	914	111	460	580
8	200	832	841	832	174	500	634	1022	1038	1022	146	530	970
10	250	991	1000	991	222	590	1140	1270	1292	1270	184	620	1700
12	300	1130	1146	1130	263	660	1650	1422	1445	1422	219	690	2600
14	350	1257	1276	1257	289	710	2000	-	-	-	-	-	-
16	400	1384	1407	1384	330	820	2700	-	-	-	-	-	-

API Floating Ball Valve

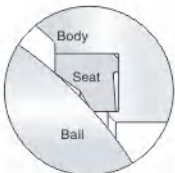
TEK VALVE

Standards

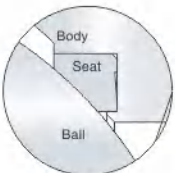
Design and Manufacture: API 6D, BS5351, ASME B16.34
API 608, MSS-SP-72
Face To Face Dimension: ASME B16.10
Flange Connection Dimension: ASME B16.5
BW Connection Dimension: ASME B16.25
Test And Inspection: API 598
Fire-safe Design: API 607
Anti-static Design&Anti Blow-out Stem

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



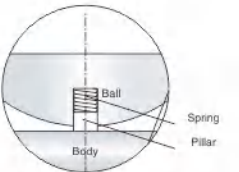
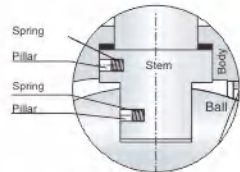
At higher medium pressure

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.

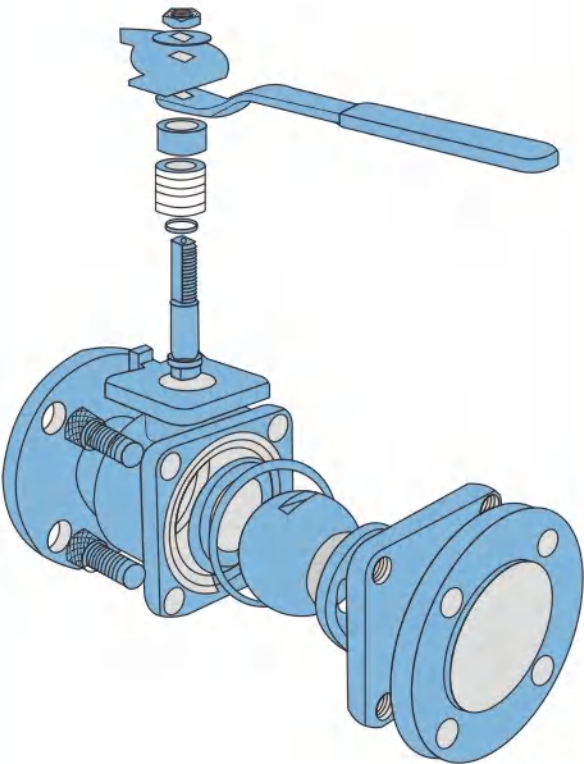
Anti-static feature

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.



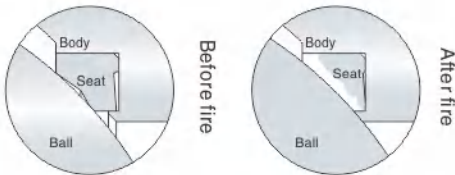
Anti-Static design for ball valve 32mmAnti-Static design for ball valve 25mm

Floating Ball Valve
TEK VALVE

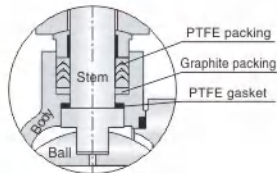


Fire safe design

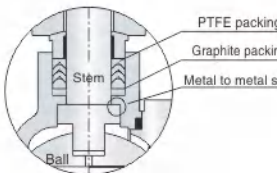
With the valve heated in a fire application, the non-metal material parts such as seat sealing ring of PTFE, stem back seat gasket, gland packing, and the sealing gasket between body and bonnet might disintegrate or be damaged due to high temperature. Our company specially designed structure of auxiliary 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.



Fire safe design of seat

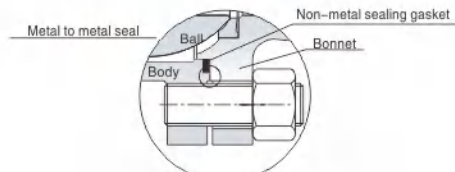


Before fire



After fire

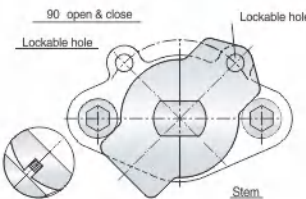
Fire safe design of stem



Fire safe design of valve body and bonnet flanges

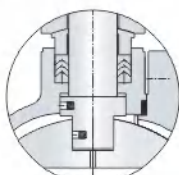
Mounting pad provided

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.

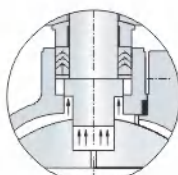


Reliable stem seal

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.

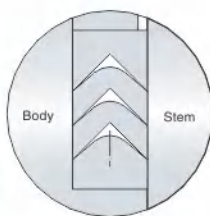


Stem assembled from underneath may not be blown out by medium

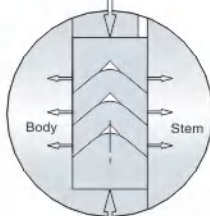


Stem assembled downward may be blown out

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.



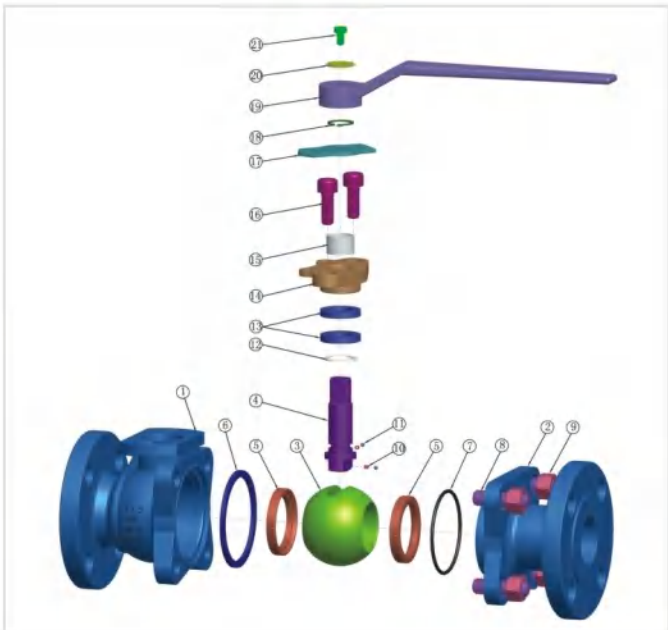
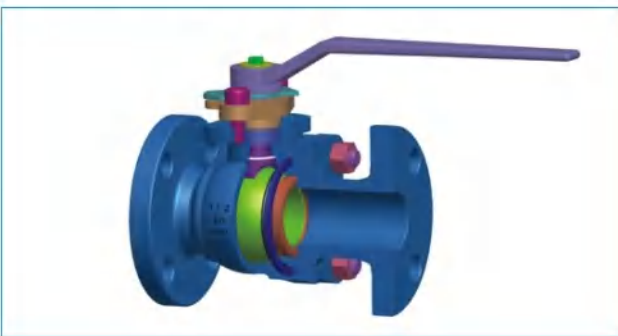
Packing before pressed



Packing after pressed

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.

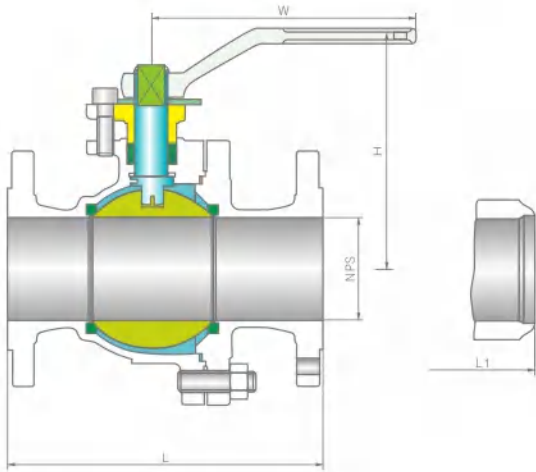


ASTM Material list of floating ball valve

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



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

API Trunnion Ball Valve

TEK VALVE

Trunnion Ball Valve TEK VALVE

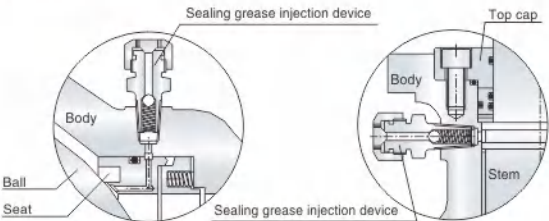


Standards

Design and Manufacture: API 6D, BS5351, ASME B16.34
API 608, MSS-SP-72
Face To Face Dimension: ASME B16.10
End flange dimension: ASME B16.5(for NPS 24); ASME B16.47 series B, ASME B16.47 series A, MSS SP-44(for NPS 24).
BW Connection Dimension: ASME B16.25
Test And Inspection: API 598
Fire-safe Design: API 607
Anti-static Design&Anti Blow-out Stem

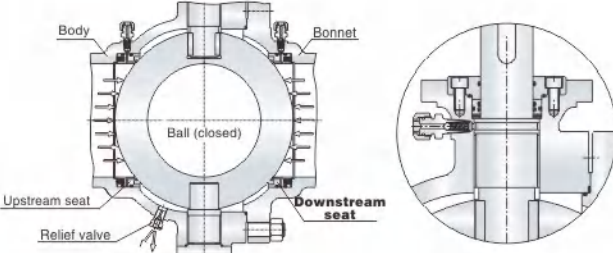
Urgent grease injection device

According to customers' requirement, the trunnion ball valves made by Our company are provided with devices for urgent grease injection, which are on both the stem and seat for the trunnion ball valves of DN>150mm (NPS6), and in the body cavity for the valve of DN<125mm. When the O ring of stem or the body seat ring is damaged due to accident, the medium leakage between body and stem can be prevented by injecting the sealing grease through the device.



Double-block and bleed functions

In TEK valve company, trunnion ball valve features the front ball sealing design structure. Each seat of the ball valve can separately cut off the medium at both inlet and outlet of the valve to realize double-block functions. When the ball valve is closed, body cavity and two of the body ends can be blocked with each other even if both the inlet and outlet are under pressure, when the medium left in the body cavity might be bled through the relief valve.



Blow-out proof stem

Blow-out proof structure is provided with for the stem, which is positioned by the up-end cap and screw, being guaranteed not to be blown-out by the medium even if at abnormal risen pressure in the cavity.

API SERIES

DIN SERIES

JIS SERIES

API SERIES

DIN SERIES

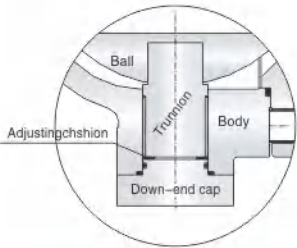
JIS SERIES

API Trunnion Ball Valve

TEK VALVE

Anti-static design

The ball of the trunnion ball valve gets close contact with each other through the trunnion, adjusting cushion, and down-end cap, the passage of static electricity thus forms together with the valve, which may lead the static electricity caused by sparks generated by friction between the ball and seat during on and off performance to the ground to prevent the possible risk of fire or explosion.

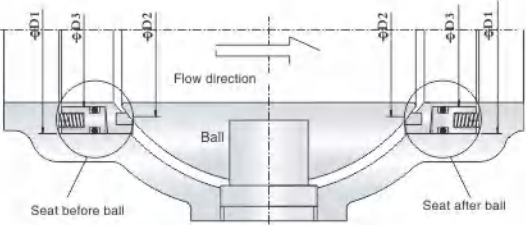


The Bi-sealing design structure, i.e. seat sealing in front of the ball and seat sealing behind the ball

According to some special working conditions and customers' requirement, We has provided the trunnion ball valve with the Bi-sealing design structure, i.e. seat sealing in front of the ball and seat sealing behind the ball, thus the reliable sealing of the valve is ensured because the valve can perform normally even if one of the effective sealing designs becomes lost due to the abnormal condition.

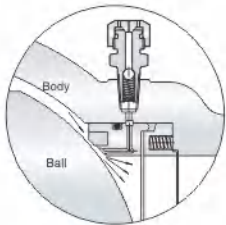
Regarding the seat in front of the ball, the piston effect formed by the area difference between D1 and D2 ,plus the pre-tightened force of a spring would cause the seat in front of the ball by the pressure difference of the medium before and after the valve to touch the ball closely to form the tightness, of which the sealing force will become bigger as the pressure difference gets higher.

Regarding the seat after the ball, the piston effect formed by the area difference between D2 and D3 ,plus the pretig-htened force of a spring would cause the seat behind the ball to touch the ball closely to form the tightness, of which the sealing force will become bigger as the pressure difference gets higher.



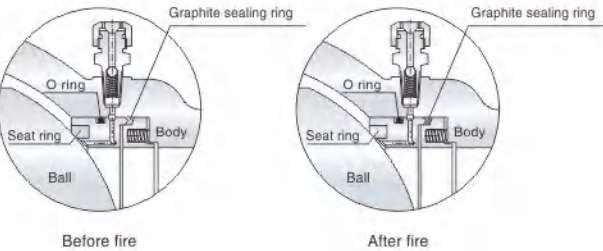
Self-relief in the body cavity

As the liquid medium left in the body cavity gasifies due to increased temperature, the pressure in the body cavity becomes abnormally higher when the medium itself in the cavity would propel the seat and self-relieves the pressure to ensure the safety of valve.

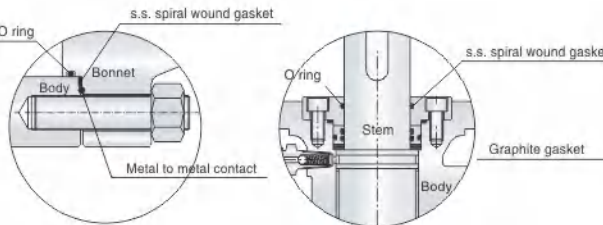


Fire safe design

With the valve heated in a fire application, the non-metal material parts such as seat sealing ring of PTFE, O ring for the stem, and sealing gasket for body and bonnet, might be damaged due to high temperature. Our company special design of auxiliary metal to metal or the graphite seal is provided for the trunnion ball valve to effectively prevent both internal and external leakage of the valve. As required by customers, Our company fire safe design for the trunnion ball valve meets the requirement of API 607, API 6Fa, BS 6755.



Fire safe design of seat



Fire safe design of valve body and bonnet flanges

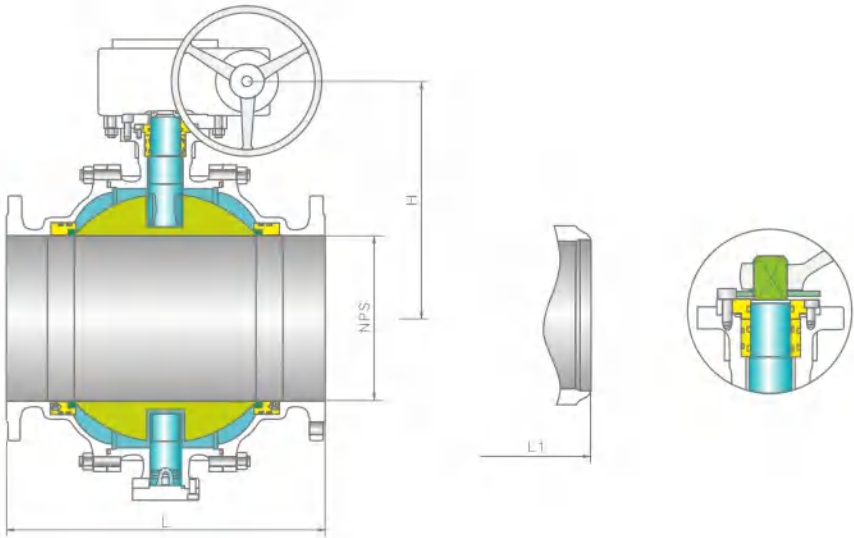
Fire safe design of stem

Mounting pad provided

Our company has provided for trunnion ball valve with a mounting pad for fixing the actuators, such as worm gear, pneumatic, electric, hydraulic, and pneumatic & hydraulic actuators.

API Cast Steel Trunnion Ball Valve

TEK VALVE



Main size of outside & weight																		150LB	
Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L (RF)	in	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	45.00	49.00	51.00	54.00	60.00
	mm	178	190	203	229	394	457	533	610	686	762	864	914	1067	1143	1245	1295	1372	1524
L1 (BW)	in	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00
	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727
H	in	7.00	7.50	8.25	9.25	20.88	24.62	25.62	30.75	31.00	36.25	38.25	43.38	5.25	50.75	55.12	64.12	70.88	80.75
	mm	177	190	210	235	530	625	650	780	790	920	970	1100	1150	1290	1400	1630	1840	2050
W	in	14	16	20	20	24	24	24	24	32	32	32	32	32	32	32	32	32	32
	mm	350	400	500	500	600	600	600	600	800	800	800	800	800	800	800	800	800	800
WT (Kg)	RF	15	19	27	38	81	140	160	205	260	390	510	750	1200	1400	1860	2100	2530	2970
	BW	13.5	15.5	24.5	32.5	76	132	147	182	241	370	495	726	1125	1250	1640	1930	2390	2760

Main size of outside & weight																		300Lb	
Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L (RF)	in	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	—
	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1245	1346	1397	1524	—
L1 (BW)	in	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	—
	mm	216	241	283	305	403	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	—
H	in	7.00	7.50	8.25	9.25	20.88	24.62	25.62	30.75	31.00	36.25	38.25	43.38	45.25	50.75	55.12	64.12	70.88	—
	mm	177	190	210	235	530	625	650	780	790	920	970	1100	1150	1290	1400	1630	1800	—
W	in	14	16	20	20	24	24	24	24	32	32	32	32	32	32	32	32	32	—
	mm	350	400	500	500	600	600	600	600	800	800	800	800	800	800	800	800	800	—
WT (Kg)	RF	19	24	34	48	101	175	200	255	325	485	635	935	1500	1750	2225	2450	2870	—
	BW	14	16	25	34	82	145	155	185	238	375	516	782	1280	1375	1825	2180	2260	—

API Cast Steel Trunnion Ball Valve

TEK VALVE

API SERIES

DIN SERIES

JIS SERIES

Main size of outside & weight														600Lb		
Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700
L/L1 (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	57.00	61.00
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549
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	57.50	61.50
	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562
H	in	7.12	7.62	8.50	9.50	21.52	25.00	26.12	31.12	31.88	36.38	38.75	44.50	46.62	52.50	57.00
	mm	180	193	215	241	540	635	665	790	810	925	985	1130	1185	1335	1450
W	in	14	16	20	20	24	24	24	24	32	32	32	32	32	32	32
	mm	350	400	500	500	600	600	600	600	800	800	800	800	800	800	800
WT (Kg)	RF/RTJ	26	35	58	81	142	287	540	780	1000	1300	1700	2100	3400	3800	4500
	BW	19	25	42	51	82	200	395	610	805	1010	1350	1656	2775	3125	3790

Main size of outside & weight														900Lb
Size	in	2	2 1/2	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/L1 (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	61.00
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
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	61.75
	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568
H	in	8.62	9.25	10.25	15.38	25.75	30.25	31.75	38.00	38.50	45.00	47.00	53.50	56.00
	mm	219	235	260	390	655	770	805	965	980	1145	1195	1360	1425
W	in	20	20	20	24	24	24	24	32	32	32	32	32	32
	mm	500	500	500	600	600	600	600	800	800	800	800	800	800
WT (Kg)	RF/RTJ	31	43	68	98	171	345	650	940	1205	1565	2050	2535	3950
	BW	23	31	51	61	102	240	480	735	965	1215	1625	1995	3335

Main size of outside & weight											1500Lb
Size	in	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
L/L1 (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	546	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	11.25	12.00	13.25	20.00	33.50	39.38	41.12	49.38	50.00	58.50
	mm	285	306	338	506	852	1000	1045	1255	1270	1485
W	in	20	20	24	24	24	32	32	32	32	32
	mm	500	500	600	600	600	800	800	800	800	800
WT (Kg)	RF/RTJ	49	67	106	153	268	540	1020	1475	1885	2455
	BW	33	44	73	87	145	345	685	1050	1385	1735

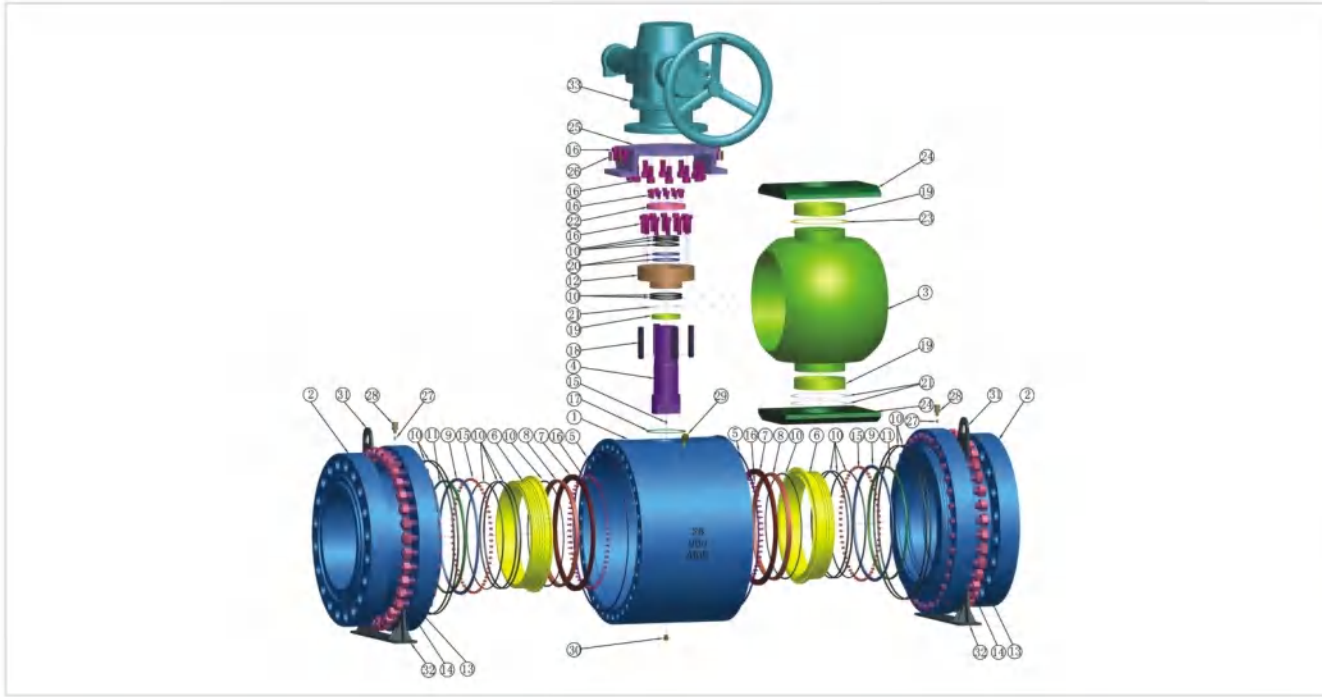
API Forged Steel Trunnion ball valve

TEK VALVE

API SERIES

DIN SERIES

JIS SERIES

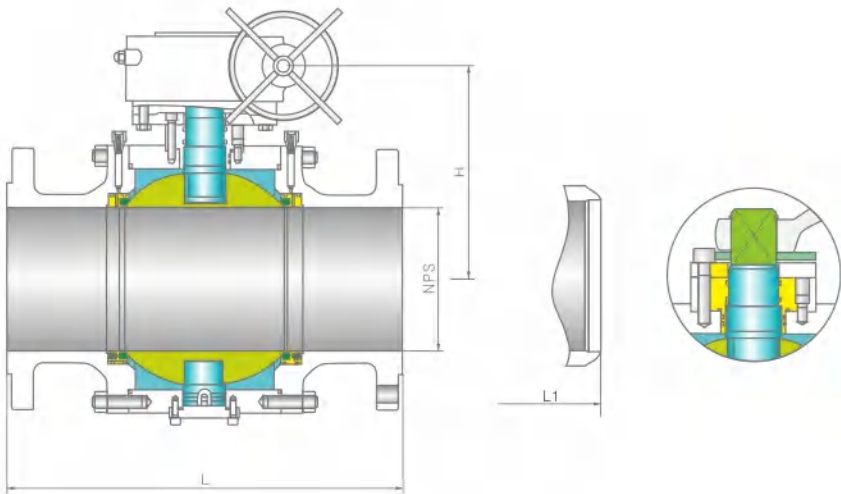


ASTM Material list of cast steel trunnion mounted ball valve								
No	Part Name	Carbon Steel to ASTM		Stainless Steel to ASTM				
1	Body	ASTM A105N	A350 LF2	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
2	Bonnet	ASTM A105N	A350 LF2	A182 F304	A182 F3316	A182 F304L	A182 F316L	A182 F51
3	Ball	A351 CF8	A351 CF8	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	CD4MCU
4	Stem	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
5	Gasket	SS304 +Graphite, PDPE						
6	Seat	A105N+ENP	LF2+ENP	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
7	Clamping ring	A105N+ENP	LF2+ENP	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
8	Seat ring	PTFE, RTFE, PEEK, DELRIN						
9	Seat back	A105N+ENP	LF2+ENP	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
10	O-ring	Fluororubber						
11	Seat gasket	Flexible Graphite						
12	Stuffing box	A105N+ENP	LF2+ENP	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
13	Bolt	A193 B7/B7M	A320 L7/L7M	A193 B8/B8M				
14	Nut	A194 2H/2HM	A194 4/4M	A194 8/8M				
15	Spring	INCONEL X-750						
16	Screw	A193 B7	A320 L7	A193 B8/B8M				
17	Gasket	PTFE						
18	Flat key	Carbon Steel						
19	Shaft sleeve	PTFE						
20	Stem packing	PTFE Flexible Graphite						
21	Thrust washer	PTFE						
22	Packing gland	ASTM A105N	A350 LF2	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
23	Shaft sleeve	PTFE						
24	Support plate	ASTM A105N	A350 LF2	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
25	Yoke	Carbon Steel						
26	Pin	Carbon Steel						
27	Small check valve	ASTM A105N	A350 LF2	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
28	Grease injector	Carbon steel	Carbon steel	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
29	Vent plug	Carbon steel	Carbon steel	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
30	Drain plug	Carbon steel	Carbon steel	A182 F304	A182 F316	A182 F304L	A182 F316L	A182 F51
31	Lifting lug	Carbon Steel						
32	Support feet	Carbon Steel						

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

API Forged Steel Trunnion ball valve

TEK VALVE



Main size of outside & weight

150Lb

Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L (RF)	in	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	45.00	49.00	51.00	54.00	60.00
	mm	178	190	203	229	394	457	533	610	686	762	864	914	1067	1143	1245	1295	1372	1524
L1 (BW)	in	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00
	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727
H	in	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	38.50
	mm	120	150	180	235	250	280	320	390	420	555	600	635	710	750	800	865	915	980
W	in	16	16	24	24	24	24	32	32	32	32	32	32	32	40	40	40	40	40
	mm	400	400	600	600	600	600	800	800	800	800	800	800	800	1000	1000	1000	1000	1000
WT (Kg)	RF/RTJ	28	35	55	80	190	290	445	570	780	1520	2300	2500	3950	4890	6300	7100	8950	13500
	BW	25	28	49	71	182	277	423	553	747	1481	2266	2460	3904	4939	6362	8149	9000	13570

Main size of outside & weight

300Lb

Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L (RF)	in	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-
	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1245	1346	1397	1524	-
L1 (BW)	in	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-
	mm	216	241	283	305	403	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	-
H	in	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	-
	mm	120	150	180	235	250	280	320	390	420	555	600	635	710	750	800	865	915	-
W	in	16	16	24	24	24	24	32	32	32	32	32	32	32	40	40	40	40	-
	mm	400	400	600	600	600	600	800	800	800	800	800	800	800	1000	1000	1000	1000	-
WT (Kg)	RF/RTJ	30	40	60	90	200	325	490	690	990	1810	2620	2860	4430	5430	6810	7655	9590	-
	BW	24	31	49	72	169	280	424	598	872	1665	2440	2635	4075	4880	6225	7115	9230	-

API Forged Steel Trunnion ball valve

TEK VALVE

Main size of outside & weight

600Lb

Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	26	28
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700
L/L1 (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	57.00	61.00
	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549
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	57.50	61.50
	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562
H	in	6.50	7.00	7.88	11.00	12.25	14.00	16.12	18.00	19.25	21.00	24.88	25.62	30.12	31.88	34.62
	mm	165	180	200	280	310	355	410	455	490	535	630	650	765	810	880
W	in	16	24	24	24	32	32	32	32	32	32	40	40	40	40	40
	mm	400	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000	1000
WT (Kg)	RF/RTJ	34	53	65	125	245	505	640	910	1380	2250	3400	3850	4900	6700	8300
	BW	27	43	49	95	188	418	495	740	1185	1960	3050	3406	4275	6025	7590

Main size of outside & weight

900Lb

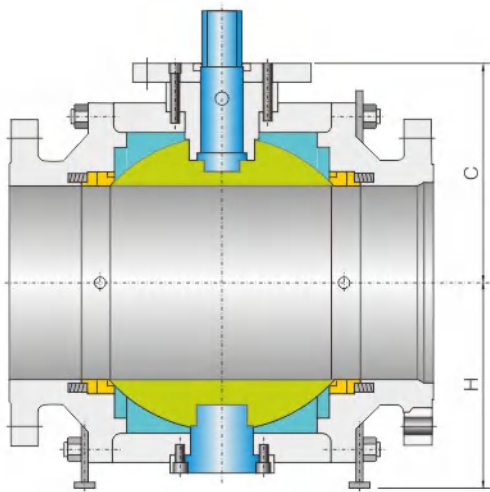
Size	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L/L1 (RF/BW)	in	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.00
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L2 (RTJ)	in	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12	40.88	44.88	48.50	52.50	61.75
	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568
H	in	6.72	7.50	8.25	11.38	12.62	15.38	17.00	18.50	20.88	24.00	26.00	27.50	30.75
	mm	170	190	210	290	320	390	430	470	530	610	660	700	780
W	in	24	24	24	32	32	32	32	32	32	40	40	40	40
	mm	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000
WT (Kg)	RF/RTJ	45	65	73	135	360	650	930	1350	1890	3100	4300	4950	7100
	BW	37	53	56	98	291	545	760	1145	1650	2750	3875	4410	6485

Main size of outside & weight

1500Lb

Size	in	2	2 1/2	3	4	6	8	10	12	14	16
	mm	50	65	80	100	150	200	250	300	350	400
L/L1 (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	546	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	6.75	7.50	8.25	11.38	13.00	15.75	17.38	22.00	25.25	27.12
	mm	170	190	210	290	330	400	440	560	640	690
W	in	24	24	32	32	32	32	32	40	40	40
	mm	600	600	800	800	800	800	800	1000	1000	1000
WT (Kg)	RF/RTJ	55	75	95	150	540	880	1360	1980	3100	4650
	BW	40	55	65	115	420	865	1025	1555	2600	3930

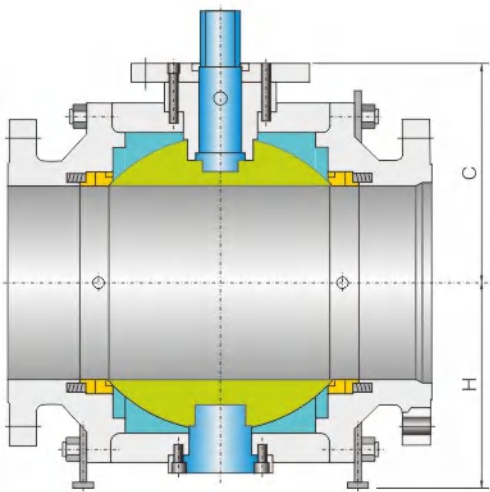
TEK VALVE



Main size of outside & weight 150Lb

DN	NPS	L (RF)	L1 (BW)	MA		GA		C	H	WT(Kg)	Torque (N·M)
				M	M0	G	G0				
50	2	178	216	130	250	--	--	105	100	28	57
65	2 1/2	191	241	142	300	--	--	130	110	39	71
80	3	203	283	191	350	185	280	155	125	49	95
100	4	229	305	200	500	235	280	200	160	88	192
150	6	394	457	226	800	325	300	250	185	160	485
200	8	457	521	242	1000	390	400	278	222	248	832
250	10	533	559	--	--	445	400	323	280	379	1105
300	12	610	635	--	--	520	500	340	303	571	1655
350	14	686	762	--	--	550	500	375	330	759	2695
400	16	762	838	--	--	580	600	410	355	1150	3164
450	18	864	914	--	--	605	600	440	390	1192	3793
500	20	914	991	--	--	610	600	495	430	1769	5500
550	22	991	1092	--	--	670	600	525	475	2367	6650
600	24	1067	1143	--	--	725	700	585	520	3450	7529
650	26	1143	1245	--	--	760	700	630	560	4050	8693
700	28	1245	1346	--	--	790	700	645	650	4830	10770
750	30	1295	1397	--	--	825	700	690	700	5960	12365
800	32	1372	1524	--	--	870	700	740	745	7480	14070
850	34	1473	1626	--	--	910	700	760	775	8032	21148
900	36	1524	1727	--	--	950	700	810	805	9100	22987
1000	40	1753	1956	--	--	1005	700	895	900	14100	26059
1050	42	1790	2083	--	--	1045	800	950	935	15320	28149
1200	48	1995	2388	--	--	1235	800	1095	1070	22000	42776
1400	56	2489	2489	--	--	1450	800	1300	1250	34150	65654
1500	60	2640	2640	--	--	1550	1000	1380	1350	42500	85654
1600	64	--	--	--	--	--	--	--	--	--	--

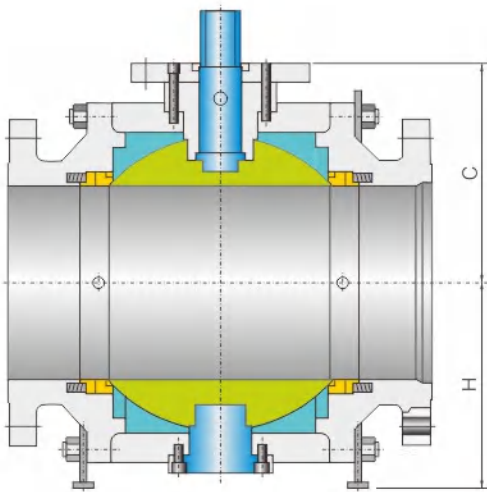
TEK VALVE



Main size of outside & weight 300Lb

DN	NPS	L (RF)	L1 (BW)	MA		GA		C	H	WT(Kg)	Torque (N·M)
				M	M0	G	G0				
50	2	216	216	130	250	--	--	105	100	29	99
65	2 1/2	241	241	142	350	--	--	130	110	40	124
80	3	283	283	191	400	185	280	155	125	57	212
100	4	305	305	200	500	235	280	200	160	97	335
150	6	457	457	226	800	325	300	250	203	185	544
200	8	502	521	242	1000	390	400	278	232	287	1250
250	10	568	559	--	--	445	400	333	298	507	1736
300	12	648	635	--	--	520	500	360	333	740	2388
350	14	762	762	--	--	550	500	395	350	1038	3224
400	16	838	838	--	--	580	600	433	398	1452	5139
450	18	914	914	--	--	605	600	460	410	1648	7970
500	20	991	991	--	--	610	600	505	470	2207	10570
550	22	1092	1092	--	--	670	600	530	485	2797	12140
600	24	1143	1143	--	--	725	700	590	550	3940	17240
650	26	1245	1245	--	--	760	700	635	585	4670	20340
700	28	1346	1346	--	--	790	700	645	670	5780	25069
750	30	1397	1397	--	--	825	700	700	730	6600	27640
800	32	1524	1524	--	--	870	700	750	770	7940	29550
850	34	1626	1626	--	--	910	700	760	800	9100	31558
900	36	1727	1727	--	--	950	700	810	825	10150	35170
1000	40	1956	1956	--	--	1005	700	905	920	13800	39115
1050	42	2083	2083	--	--	1045	800	960	955	16120	42414
1200	48	2170	2170	--	--	1235	800	1100	1105	24070	71868
1400	56	2743	2743	--	--	1450	1000	1300	1275	38200	108550

TEK VALVE



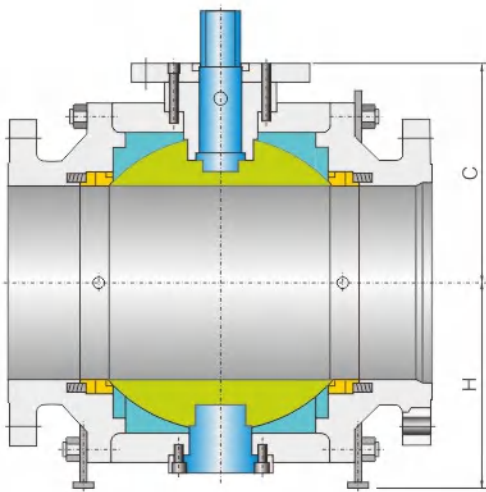
API SERIES

DIN SERIES

JIS SERIES

Main size of outside & weight											600Lb	
DN	NPS	L (RF)	L1 (BW)	L2 (RTJ)	MA		GA		C	H	WT(Kg)	Torque (N·M)
					M	M0	G	G0				
50	2	292	292	295	136	500	--	--	105	100	33	168
65	21/2	330	330	333	164	650	--	--	135	115	43	210
80	3	356	356	359	191	650	220	300	165	130	64	360
100	4	432	432	435	244	800	254	400	210	162	124	572
150	6	559	559	562	--	--	360	400	253	203	255	912
200	8	660	660	664	--	--	390	400	290	257	487	2177
250	10	787	787	791	--	--	450	500	333	310	760	3093
300	12	838	838	841	--	--	500	500	380	350	984	4282
350	14	889	889	892	--	--	520	500	395	360	1266	7458
400	16	991	991	994	--	--	550	500	433	413	1532	9310
450	18	1092	1092	1095	--	--	635	600	470	430	2097	14693
500	20	1194	1194	1200	--	--	675	600	505	490	2640	20011
550	22	1295	1295	1305	--	--	728	600	545	510	3790	24785
600	24	1397	1397	1407	--	--	780	600	595	570	4740	31226
650	26	1448	1448	1461	--	--	810	700	635	620	5650	35184
700	28	1549	1549	1562	--	--	840	700	665	690	6760	38987
750	30	1651	1651	1664	--	--	870	800	710	750	8380	41832
800	32	1778	1778	1794	--	--	915	800	755	780	9740	63865
850	34	1930	1930	1946	--	--	951	800	780	815	11340	71720
900	36	2083	2083	2099	--	--	987	1000	815	840	13300	89020
1000	40	2337	2337	2366	--	--	1212	1000	915	940	18340	109900
1050	42	2439	2439	2467	--	--	1292	1000	970	980	21550	121165
1200	48	2540	2540	2540	--	--	1440	1000	1105	1120	31500	145345
1400	56	2949	2949	2949	--	--	1600	1000	1300	1290	48050	169230

TEK VALVE



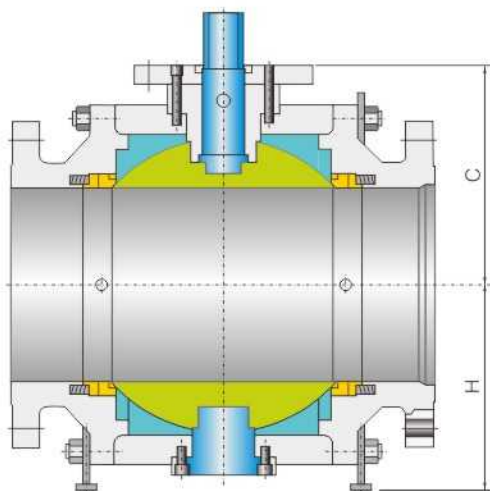
API SERIES

DIN SERIES

JIS SERIES

Main size of outside & weight											900Lb	
DN	NPS	L (RF)	L1 (BW)	L2 (RTJ)	MA		GA		C	H	WT(Kg)	Torque (N·M)
					M	M0	G	G0				
50	2	368	368	371	148	650	--	--	105	110	50	228
65	21/2	419	419	422	191	650	--	--	135	118	61	263
80	3	381	381	384	216	800	255	400	165	130	76	512
100	4	457	457	460	--	--	285	400	210	167	150	946
150	6	610	610	613	--	--	370	400	260	251	367	1784
200	8	737	737	740	--	--	400	500	295	280	600	4116
250	10	838	838	841	--	--	450	500	345	340	1027	5910
300	12	965	965	968	--	--	500	500	384	390	1558	10137
350	14	1029	1029	1038	--	--	520	500	400	442	1765	14141
400	16	1130	1130	1140	--	--	550	600	440	490	2157	18866
450	18	1219	1219	1232	--	--	600	600	482	500	2860	22400
500	20	1321	1321	1334	--	--	630	600	530	500	4220	28544
550	22	--	--	--	--	--	--	--	--	--	--	--
600	24	1549	1549	1568	--	--	810	700	615	630	7150	43276
650	26	1651	1651	1673	--	--	850	700	650	650	8040	48580
700	28	1753	1753	1775	--	--	900	800	670	710	10840	60000
750	30	1880	1880	1902	--	--	980	1000	725	780	12210	76000
800	32	2032	2032	2054	--	--	1240	1000	785	810	14992	90195
850	34	2159	2159	2188	--	--	1275	1000	805	850	17230	100460
900	36	2286	2286	2315	--	--	1310	1000	845	900	19920	131875
1000	40	2283	2100	2311	--	--	1420	1000	955	980	24251	--
1050	42	2438	2200	2461	--	--	1455	1000	986	990	28660	--
1200	48	2769	2300	2797	--	--	1530	1000	1150	1199	36156	--

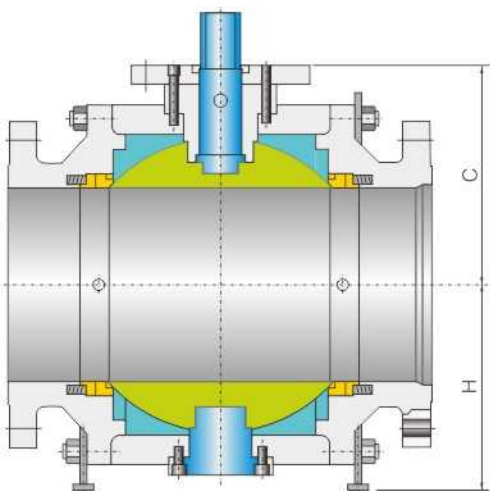
TEK VALVE



Main size of outside & weight 1500Lb

DN	NPS	L (RF)	L1 (BW)	L2 (RTJ)	MA		GA		C	H	WT(Kg)	Torque (N·M)
					M	M0	G	G0				
50	2	368	368	371	175	650	--	--	105	105	53	390
65	2 1/2	419	419	422	191	650	--	--	138	120	63	448
80	3	470	470	473	216	750	255	500	165	130	98	931
100	4	546	546	549	--	--	285	500	215	167	200	1524
150	6	705	705	711	--	--	460	500	260	270	485	2934
200	8	832	832	841	--	--	520	500	300	300	827	7215
250	10	991	991	1000	--	--	640	500	365	360	1507	10990
300	12	1130	1130	1146	--	--	720	500	420	423	2272	16103
350	14	1257	1257	1276	--	--	760	500	440	460	2880	24518
400	16	1384	1384	1407	--	--	820	600	480	510	4120	29630
450	18	1537	1537	1559	--	--	880	600	550	600	6260	34392
500	20	1664	1664	1686	--	--	900	700	620	650	9120	40918
550	22	--	--	--	--	--	--	--	--	--	--	--
600	24	--	--	1972	--	--	920	800	700	720	14320	65351

TEK VALVE



Main size of outside & weight 2500Lb

DN	NPS	L (RF)	L1 (BW)	L2 (RTJ)	MA		GA		C	H	WT(Kg)	Torque (N·M)
					M	M0	G	G0				
50	2	451	451	454	168	800	170	350	120	125	90	589
65	2 1/2	508	508	514	190	1000	210	450	140	160	152	736
80	3	578	578	584	205	1000	250	500	175	200	200	1577
100	4	673	673	683	--	--	290	500	225	230	385	1965
150	6	914	914	927	--	--	340	600	260	250	778	5501
200	8	1022	1022	1038	--	--	470	600	380	340	1352	11786
250	10	1270	1270	1292	--	--	490	700	450	425	2537	13222
300	12	1422	1422	1445	--	--	615	800	515	480	3667	20075

Our butterfly valves are structured to centered seal, single eccentric seal, double eccentric seal, triple eccentric seal and variable eccentric seal. The sealing principles of these structures are stated as following.

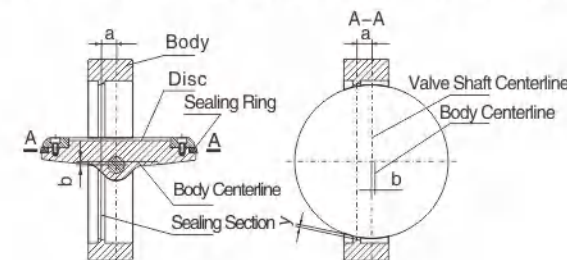
Butterfly Valve TEK VALVE



Sealing Principle of Double Eccentric Seal Butterfly Valve

The rotation center of disc (namely the center of valve shaft) and the centerline of body form up a "b" eccentric on the base of single eccentric butterfly valve. Making the sealing face of disc disengaged from seat sealing face more quickly than single eccentric seal butterfly valves during the process of open and close. Once disc turns to 8°~12°, the disc sealing face will be completely disengaged from the seat sealing face. Once fully opened, a gap "Y" will be formed up between the two sealing faces. This type of butterfly valves are designed to have greatly lowered the mechanical wear and extrusion deformation between the two sealing faces, making the sealing performance of butterfly valve much better.

The characteristic of this structure is to make stem axis not only deviated from the center of disc, but also the center of the body. The effect of double eccentric is that when valve has been opened, disc can be quickly disengaged from seat, thus to greatly eliminate the unnecessary excessive extrusion and scratch between the disc and seat, reduce opening resistance, lower the abrasion and improve the service life of seat. As scratch has been greatly lowered, metal seat can be used for double eccentric butterfly valve, so that butterfly valves are able to be used in high temperature fields. However, as its seal is positioned sealing construction, the sealing faces disc and seat is lineal contact, disc extruding seat to produce elastic deformation, thus to effect the sealing performance has high requirement on close position, especially for those with metal seat and is given poor pressure endurance. This is why butterfly valves are conventional, not resistant to high temperature and leakage.



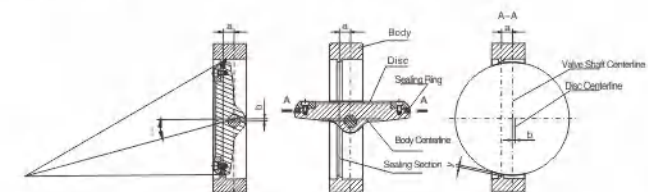
Sealing Structure of Double Eccentric Seal Butterfly Valve

Sealing Principle of Triple Eccentric Seal Butterfly Valve

A B eccentric is formed up between the centerline of seat and the centerline of body on the base of double eccentric butterfly valve, making disc sealing face immediately disengaged from seat sealing face upon the opening of butterfly valve, and in close contact with the seat sealing face upon closing. When fully opened, a gap "Y", which is the same as that in double eccentric seal butterfly valve, is formed up between the two sealing faces. The design of this type of valves has thoroughly eliminated the mechanical wear and scratch between the two sealing faces, making the sealing performance and service life of butterfly valves greatly improved. When valve is closed, with sealing ring under the extrusion of body sealing face and disc, two upward elastic deformations are produced. The sealing face is fallen under outward tension at long shaft and

inward compressive stress at short shaft. The long and short shafts produce elastic deformation of different directions, thus to maximizing the sealing force between the sealing faces of valve.

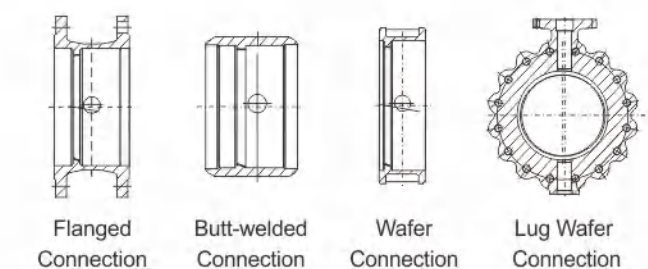
This distinctive eccentric combination not only uses cam effect, but also eliminates friction completely, thus to ensure no friction between seat and sealing ring on disc during the 90° stroke of valve, a perfect solution to clear away the possibilities of abrasion and leakage.



Sealing Principle of Triple Eccentric Seal Butterfly Valve

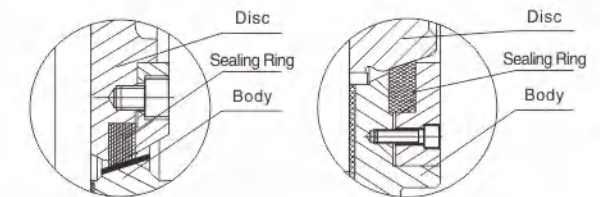
Butterfly valves are used to open and close (seal type) or adjust the medium flow in pipes in the fields of foodstuff, drinks, chemical, industrial water treatment, high-rise constructions, water supply and drainage etc. They are mainly structured as following:

1. Simple structure, small sizes, light weight and low installation dimensions. According to the types of body connection, they are basically classified to wafer type (including lug wafer type), flanged and welded.



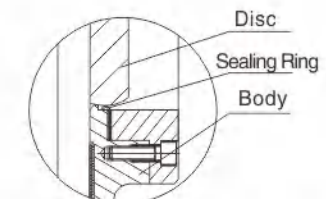
1. Multilayer Hard Seal Structure (See fig. right)

Multilayer hard seal structure is applicable to double and triple eccentric butterfly valves, pressure rating CLASS 600. And triple eccentric butterfly valve can maintain two-way leak-tightness. Multilayer sealing ring is composite of stainless steel and nonmetal material. The nonmetal material can be flexible graphite, PTFE or non-asbestos material etc. according to the actual working conditions.



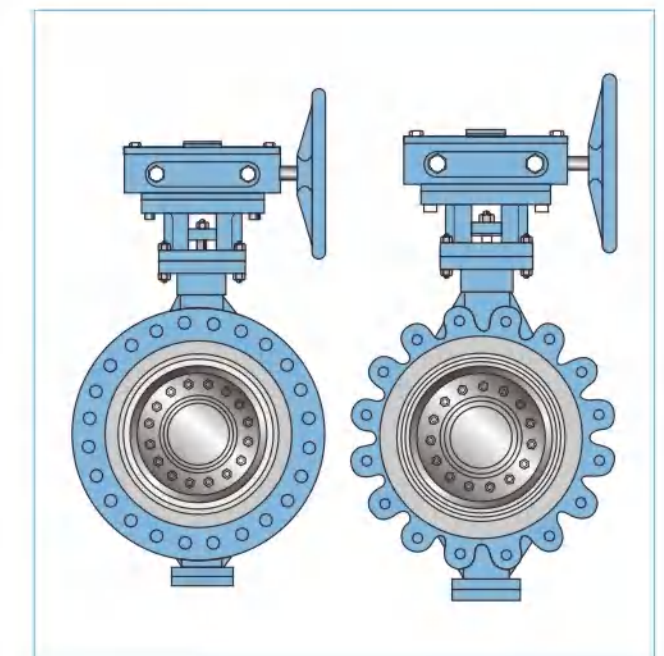
Multilayer Hard Seal Structure

2. Elastic ring hard seal structure (see fig. right) is of the structure of J-type metal sealing ring. It is applicable to double eccentric butterfly valves, pressure rating CLASS 300. Provided with fireproof structure to adapt to conditions with great temperature changes, it is featured by outstanding seal, long service life and easy workmanship.

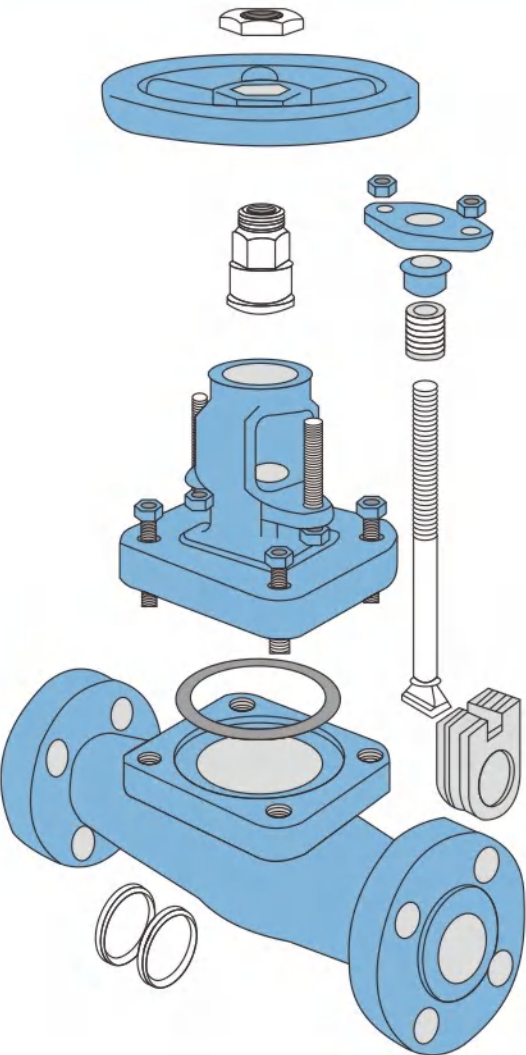


Elastic Ring Hard Seal Structure

- When butterfly valve is fully opened, flow resistance is low. When partially opened, it may carry out sensitive flow control.
- Low driving moment, easy and quick operation.



Forged Steel Gate Valves
TEK VALVE

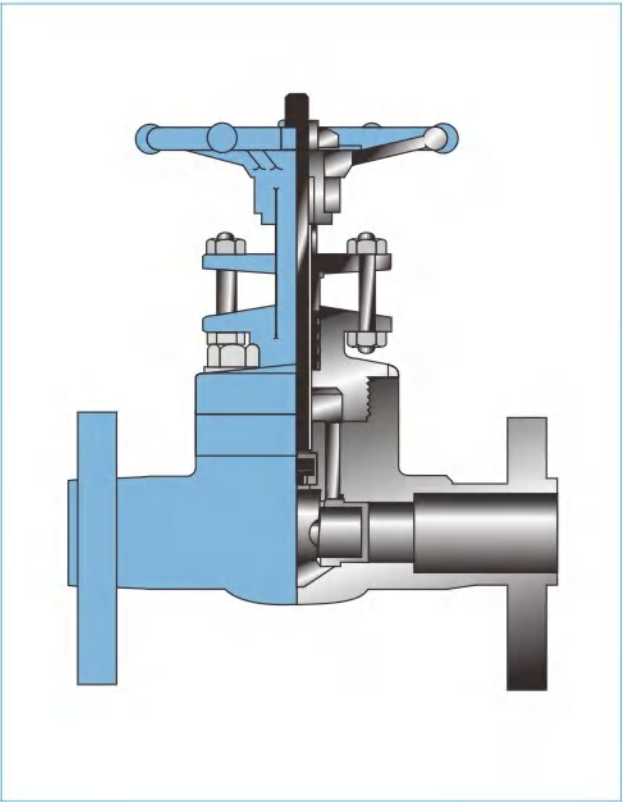


● Forged steel gate valves

Our company are available in three bonnet designs. The first design is the Bolted Bonnet, with male-female joint, spiral wound gasket, made in F304L/graphite, Ring joint gasket are also available on request. The second design is the welded bonnet, with a threaded and seal welded joint. On request a full penetration strength welded joint is available. The third design is the pressure seal bonnet, with a threaded and pressure seal bonnet joint.

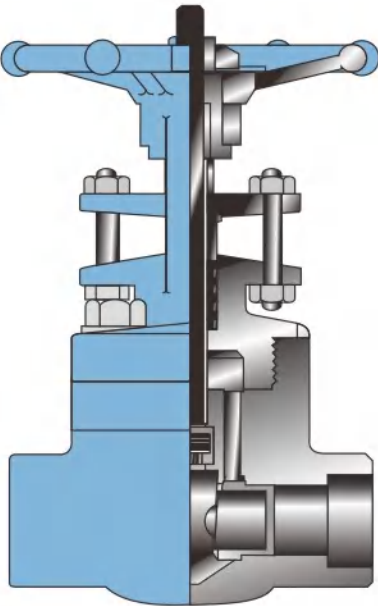
● Construction is as follows

- ✓ Full port or conventional port.
- ✓ Outside screw and yoke (OS & Y).
- ✓ Two piece self-aligning packing gland.
- ✓ Bolted bonnet & spiral wound gasket seal bonnet.
- ✓ Bolted bonnet with spiral-wound gasket, threaded and seal welded bonnet or threaded and pressure seal bonnet.
- ✓ Integral backseat.
- ✓ Socket weld ends to ASME B16.11.
- ✓ Screwed ends (NPT) to ANSI/ASME B1.20.1.

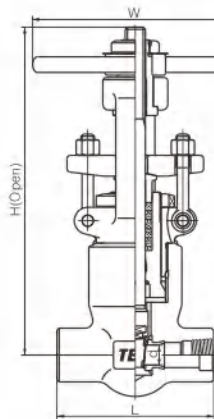
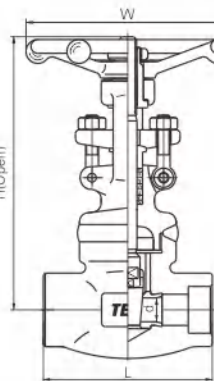
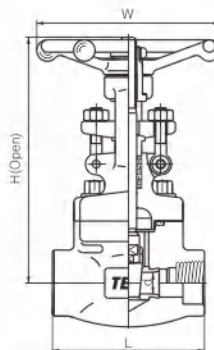
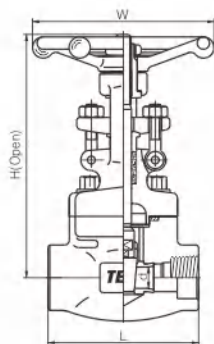


● Application standards

- 1、Design and manufacture conform to API 602、BS5352、ANSI B16.34;
- 2、Connection ends conform to:
 - 1)Socket welded dimension conform to ANSI B16.11
 - 2)Screw ends dimension conform to ANSI B1.20.1
 - 3)Butt-welded conform to ANSI B16.25
 - 4)Flanged ends conform to ANSI B16.5
- 3、Test and inspection conform to: API 598
- 4、Structure features:
 - Bolted bonnet, outside screw and yoke;
 - Welded bonnet, outside screw and yoke.
- 5、Materials conform to ANIS/ASTM.
- 6、Main materials:
 - A105; LF2; F5; F11; F22; F304; F304L; F316; F316L; F321; F51; F53; Monel; Alloy Steel.



Main part materials list								
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat	410	410HF	304	410HF	304(L)	316(L)	F51
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304+graphite	304+graphite	304+graphite	304+graphite	304+graphite	316+graphite	316+graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8M
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite



CL800

Bolted bonnet, full port reduced port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

Specification	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face	L	79	92	111	120	120	140	178	180
Handwheel diameter	W	100	100	125	160	160	180	200	220
Height	H	161	163	196	223	251	290	333	370
Flow port dimension	d	10.5	13.5	18	24	29	36.5	45	51
Weight(Kg)		2.22	2.39	4.24	5.7	7.05	10.9	16.8	24

CL900-CL1500

Bolted bonnet, full port reduced port outside screw and yoke(OS&Y)
Threaded, butt-welded or socket welded ends; design to API 602

Specification	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	111	111	120	120	140	178	180
Handwheel diameter	W	125	125	160	160	180	200	220
Height	H	191	192	219	243	296	316	370
Flow port dimension	d	10.5	13.5	18	24	29	36.5	45
Weight(Kg)		4.4	4.3	6	7.2	11.4	16	23

CL1500-CL2500

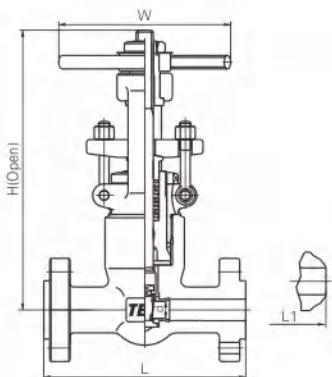
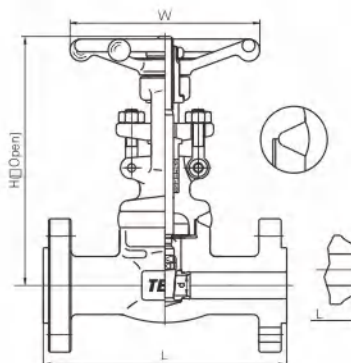
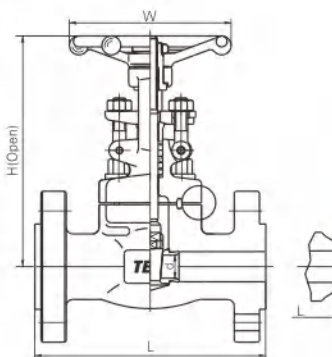
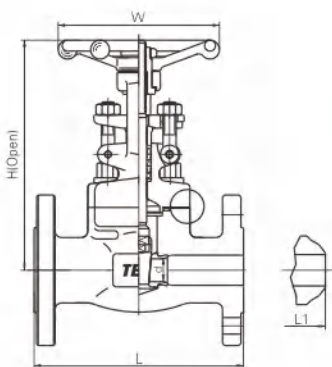
Welded bonnet, full port or red. port, outside screw and yoke(OS&Y)
Threaded, butt-welded or socket welded ends; design to API 602

Specification(NPS)	F.P	Pressure pound level	1/2	3/4	1	1 1/2	2
Face to face	L	CL1500	110	150	150	210	235
Handwheel diameter	W	CL1500	110	130	130	180	250
Height	H	CL1500	277	300	390	400	435
Flow port dimension	d	CL1500	14	17	22	35	37
Weight(Kg)		CL1500	5.1	11	12.1	22	37

CL1500-CL2500

Pressure seal bonnet, full port outside screw and yoke(OS & Y)
Socket welded ends, design conform to ASME B16.34

Specification	F.P	Pressure pound level	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	CL2500	186	186	186	232	232	279
Handwheel diameter	W	CL2500	200	200	200	280	280	300
Height	H	CL2500	325	325	327	467	468	540
Flow port dimension	d	CL2500	14	14	19	25	30	36.5
Weight(Kg)		CL2500	12.3	11.6	10.8	26.0	28.4	60.0



CL150-300-600

Bolted bonnet, red., outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to API602;BS5352

Specification			1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
Face to face (mm)	CL150	L(RF)	108	117	127	140	165	178	190
	CL300	L1(BW)	140	152	165	178	190	216	241
	CL600		165	190	216	229	241	292	330
Handwheel diameter	W		100	100	125	160	160	180	200
Height	CL150	H	176	184	217	226	250	290	357
	CL300,CL600		161	163	196	226	250	290	357
Flow port dimension	d		10	13.5	18	24	29	36.5	45
Weight (Kg)	CL150	RF	3.4	3.98	6.12	7.2	10.4	15.5	24.5
		BW	2.8	3.3	5.4	7.1	8.2	12.5	20
	CL300	RF	3.77	4.89	7.23	9.6	12.65	18	26.2
		BW	3.5	4.4	6.8	8.1	9.2	15.4	22
	CL600	RF	4.2	5.8	8.8	12.1	15.6	19.5	32
		BW	4.5	5.1	8.2	10.5	12.4	20.1	28

CL900-CL1500

Bolted bonnet, red., outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to API602;BS5352

Specification			1/2	3/4	1	1 1/4	1 1/2	2
Face to face (mm)	L(RF) L1(BW)		216	229	254	279	305	368
	L(RTJ)		216	229	254	279	305	371
Handwheel diameter	W		125	125	160	180	200	220
Height	H		191	192	219	257	296	316
Flow port dimension	d		13.5	18	24	29	36.5	45
Weight (Kg)			7.2	11.5	15.6	16.2	22.6	28.2

CL2500

Welded bonnet, red., outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to API602;BS5352

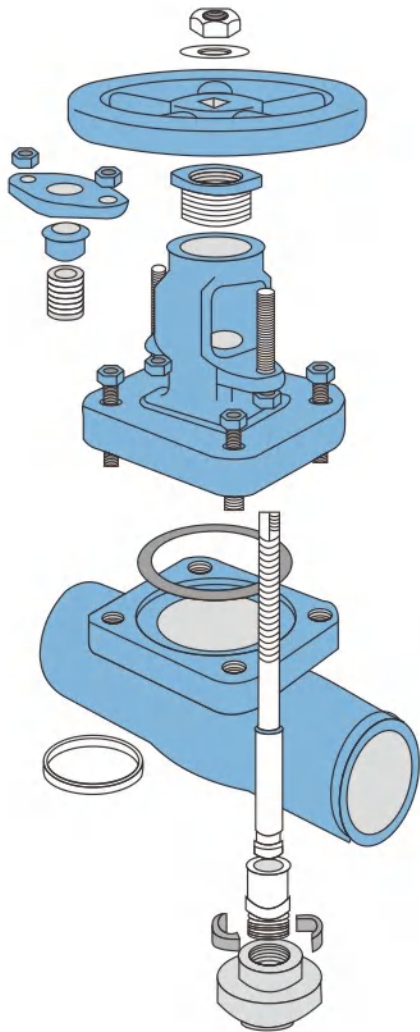
Specification			1/2	3/4	1	1 1/2	2
Face to face (mm)	L(RF) L1(BW)		264	273	308	384	451
	L(RTJ)		264	273	308	387	454
Handwheel diameter	W		125	160	160	200	240
Height	H		207	240	258	355	370
Flow port dimension	d		13.5	13.5	19	30	36.5
Weight (Kg)			19.5	21.5	42	65	95

CL2500

Pressure seal gate valves, red., outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to ASME B16.34

Specification			1/2	3/4	1	1 1/2	2
Face to face (mm)	L(RF) L1(BW)		264	273	308	384	451
	L(RTJ)		264	273	308	387	451
Handwheel diameter	W		200	200	200	280	300
Height	H		325	325	327	478	540
Flow port dimension	d		13.5	13.5	19	30	36.5
Weight (Kg)			4.6	6.8	7.6	15	21.9

Forged Steel Globe Valves
TEK VALVE

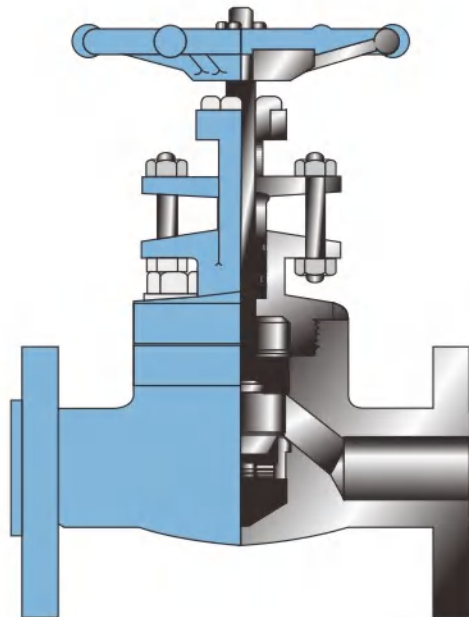


● Forged steel globe valves

Our company are available in three bonnet designs. The first design is the Bolted Bonnet, with male-Female joint, spiral wound gasket, made in F304L/graphite, Ring joint gasket are also available on request. The second design is the welded bonnet, with a threaded and seal welded joint. On request a full penetration strength welded joint is available. The third design is the pressure seal bonnet, with a threaded and pressure seal bonnet joint.

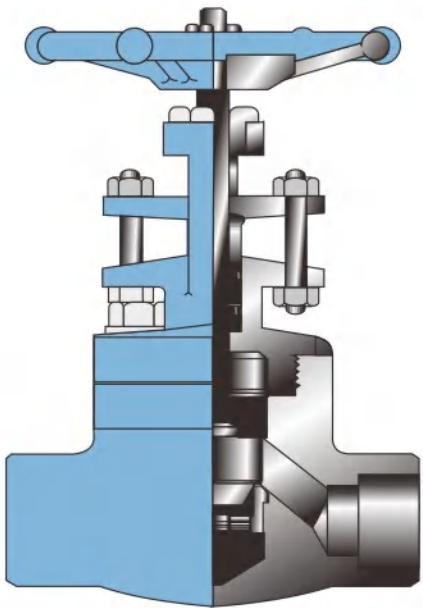
● Construction is as follows

- * Full port or conventional port.
- * Outside screw and yoke (OS&Y).
- * Two piece self-aligning packing gland.
- * Bolted bonnet with spiral-wound gasket, threaded and seal welded bonnet or threaded and pressure seal bonnet.
- * Integral backseat.
- * Socket weld ends to ASME B16.11.
- * Screwed ends(NPT) to ANSI/ASME B1.20.1.
- * Disc can change for throttle type~needle type~ball type and check type.



● Application standards

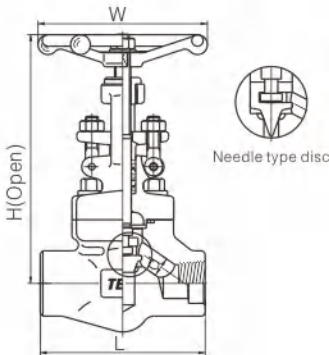
- 1、Design and manufacture conform to BS5352 MSS SP-118;
- 2、Connection ends conform to:
 - 1)Socket welded ends conform to ANSI B16.11
 - 2)Screw ends conform to ANSI B1.20.1
 - 3)Butt-welded ends conform to ANSI B16.25
 - 4)Flanged ends conform to ANSI B16.5
- 3、Test and inspection conform to:
API 598
- 4、Structure features:
Bolted bonnet, outside screw and yoke;
Welded bonnet, outside screw and yoke.
- 5、Materials conform to ANSI/ASTM.
- 6、Main materials:
A105; LF2; F5; F11; F22; F304; F304L; F316; F316L; F321; F51; F53; Monel; Alloy Steel.



Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304+ graphite	304+ graphite	304+ graphite	304+ graphite	304+ graphite	316+ graphite	316+ graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8M
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

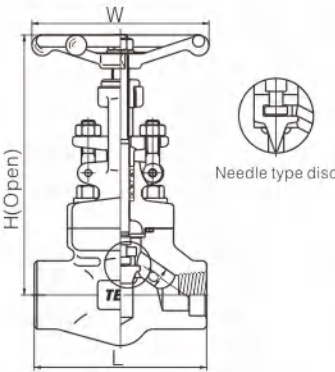
TEK VALVE



CL800

Bolted bonnet, full port or red. port outside screw and yoke(OS & Y)
THD., SW or BW ends, design standard: BS5352

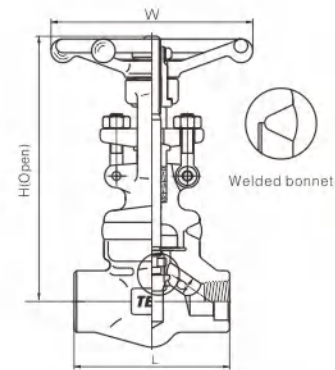
Specification	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	79	92	111	120	152	172	200
Handwheel diameter	W	100	100	125	160	160	180	200
Height	H	164	164	203	224	260	300	355
Flow port dimension	d	9	13	17.5	23	30	35	46
Weight(Kg)		2.28	2.37	4.3	5.75	7.8	12.5	17.5



CL900-CL1500

Bolted bonnet, red. port or full port outside screw and yoke(OS&Y)
THD.,BW or SW ends, design standard: BS5352

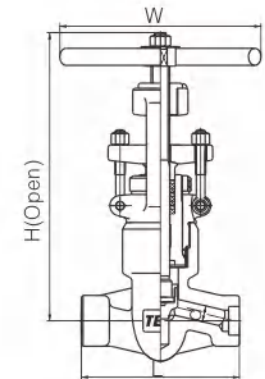
Specification	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	111	111	120	152	172	200	220
Handwheel diameter	W	125	125	160	160	180	200	240
Height	H	207	207	240	258	330	355	370
Flow port dimension	d	12	15	20	28	32	40	45
Weight(Kg)		3.7	3.6	6.8	7.6	11.6	15	21.9



CL2500

Welded bonnet (RJ), red. port, outside screw and yoke(OS & Y)
SW ends, design standard: ASME B16.34

Specification	F.P	1/2	3/4	1	1 1/2	2
Face to face	L	150	150	210	235	235
Handwheel diameter	W	130	130	250	300	300
Height	H	293	300	390	435	435
Flow port dimension	d	11	14	19	28	35
Weight(Kg)		10	10.3	22.4	38	38

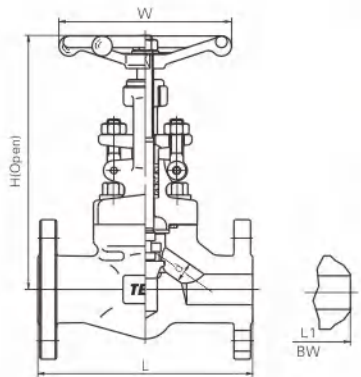


CL2500

Pressure seal bonnet, red. port, outside screw and yoke(OS & Y)
SW ends, design standard:ASME B16.34

Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L	186	186	186	232	232	279
Handwheel diameter	W	200	200	200	280	280	300
Height	H	375	378	380	490	490	540
Flow port dimension	d	11	14	19	25	28	35
Weight(Kg)		12.3	11.6	10.8	26.0	28.4	60

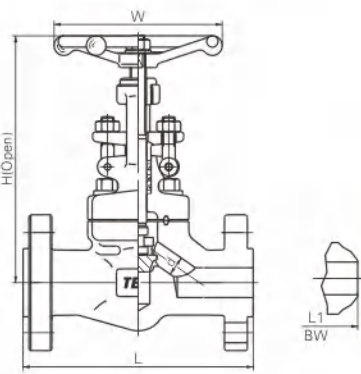
TEK VALVE



CL150-300-600

Bolted bonnet, reducing port, outside screw and yoke(OS & Y)
Flanged or BW ends, design standard: BS5352

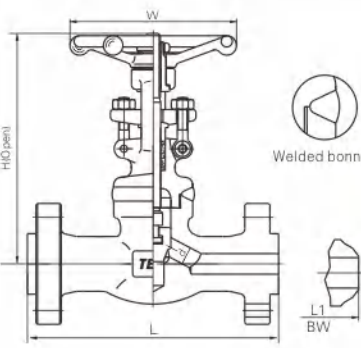
Specification		R.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	CL150	L(RF) L1(BW)	108	117	127	140	165	203
	CL300		152	178	203	216	229	267
	CL600		165	190	216	229	241	292
Handwheel diameter	W		100	100	125	160	160	180
Height	CL150/CL300	H	180	184	217	224	260	300
	CL600		164	164	203	224	260	300
Flow port dimension(mm)	d		9	13	17.5	23	30	35
Weight (Kg)	CL150	R F	3.45	4.00	6.19	9.6	10.5	17
		BW	2.3	3.6	7.8	8.2	12.0	15.0
	CL300	R F	3.8	5.1	7.2	12	13.5	19.7
		BW	2.8	4.0	8.5	9.2	12.6	16.8
	CL600	R F	5.6	7.8	12.5	17	23.5	38.8
		BW	3.4	4.7	9.2	10.5	13.3	18.9



CL900-CL1500

Bolted bonnet, reducing port, outside screw and yoke(OS & Y)
Flanged or BW ends, design standard: BS5352

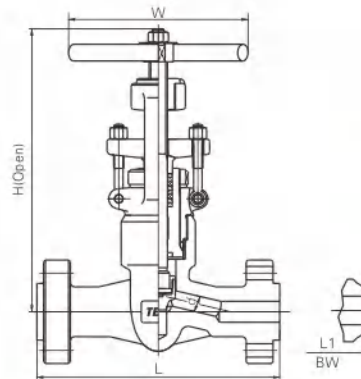
Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face (mm)	L(RF),L1(BW)	216	229	254	279	305	368
	L(RTJ)	216	229	254	279	305	371
Handwheel diameter(mm)	W	125	125	160	160	180	200
Height(mm)	H	207	207	230	160	300	355
Flow port dimension(mm)	d	12	15	20	28	32	40
Weight (Kg)		11	13.2	17.4	19	24.5	31



CL2500

Welded bonnet, reducing port, outside screw and yoke(OS & Y)
Flanged or BW ends, design standard: ASME B16.34

Specification	F.P	1/2	3/4	1	1 1/2	2
Face to face (mm)	L(RF),L1(BW)	264	273	308	384	451
	L(RTJ)	264	273	308	387	454
Handwheel diameter(mm)	W	125	160	200	250	240
Height(mm)	H	207	240	258	355	300
Flow port dimension(mm)	d	11	14	19	28	35
Weight (Kg)		19.5	21.5	42	65	95

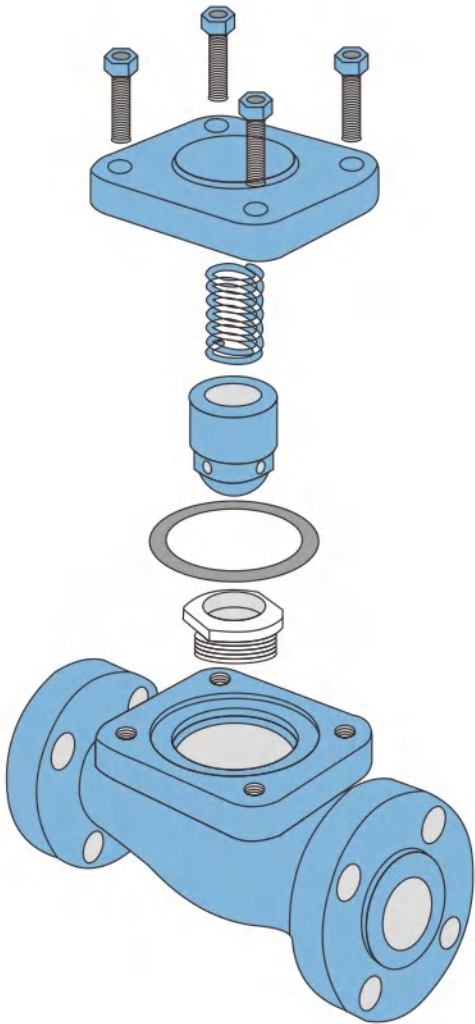


CL2500

Pressure seal bonnet, reducing port, outside screw and yoke(OS & Y)
Flanged or BW ends, design standard: ASME B16.34

Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face (mm)	L(RF),L1(BW)	264	273	308	349	384	451
	L(RTJ)	264	273	308	349	387	454
Handwheel diameter(mm)	W	200	200	280	280	280	300
Height(mm)	H	320	320	320	440	440	490
Flow port dimension(mm)	d	11	14	19	25	28	35
Weight (Kg)		21.5	24.7	30.4	48.1	58.1	130

Forged Steel Check Valves
TEK VALVE

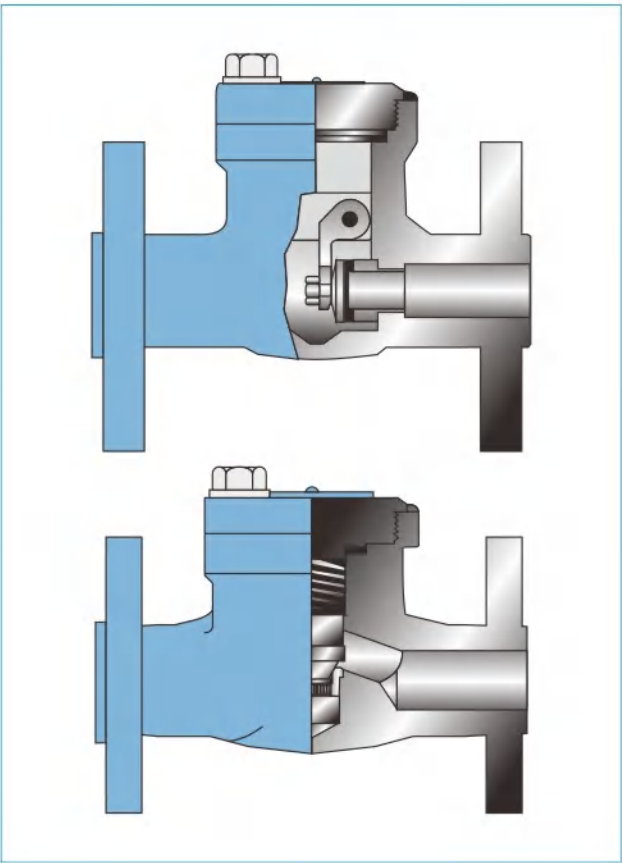


● Forged steel check valves

Our company are available in three bonnet designs. The first design is the Bolted Bonnet, with male-female joint, spiral wound gasket, made in F304L/graphite, Ring joint gasket are also available on request. The second design is the welded bonnet, with a threaded and seal welded joint. On request a full penetration strength welded joint is available. The third design is the pressure seal bonnet, with a threaded and pressure seal bonnet joint. The check valves are also available in three different design configurations. These are piston check, ball check, or swing check designs.

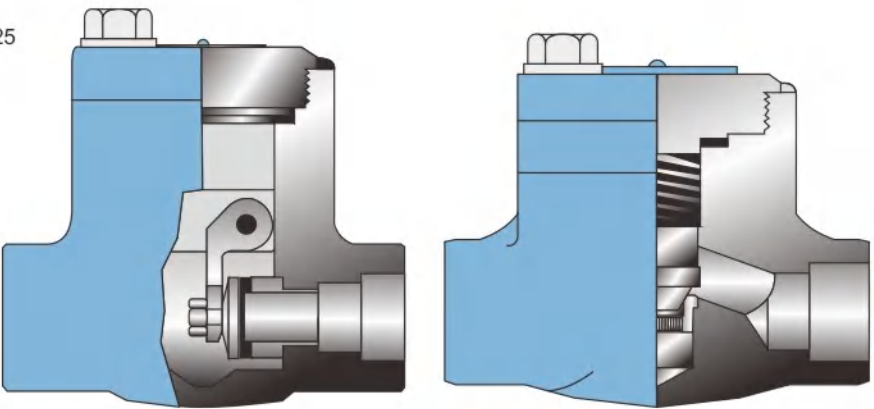
● Construction is as follows

- ✓ Full port or conventional port
- ✓ Lift type check valves
- ✓ Ball type check valves
- ✓ Swing type check valves
- ✓ According to requirement equip inside spring
- ✓ Bolted bonnet with spiral-wound gasket, threaded and seal welded bonnet or threaded and pressure seal bonnet
- ✓ Socket weld ends to ASME B16.11
- ✓ Screwed ends (NPT) to ANSI/ASME B1.20.1
- ✓ Disc can change for soft seal disc and ball disc.



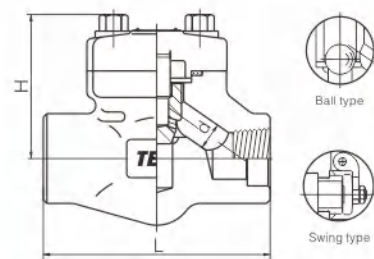
● Application standards

- 1' Design and manufacture conform to BS5352 MSS SP-118
- 2' Connection ends conform to
 - 1)Socket welded ends conform to ANSI B16.11
 - 2)Screw ends conform to ANSI B1.20.1
 - 3)Butt-welded ends conform to ANSI B16.25
 - 4)Flanged ends conform to ANSI B16.5
- 3' Test and inspection conform to API 598
- 4' Structure features
 - Bolted bonnet
- 5' Materials conform to ANSI/ASTM.
- 6' Main materials
 - A105 LF2 F5 F11 F22 F304
 - F304L F316 F316L F321 F51
 - F53 Monel Alloy Steel.

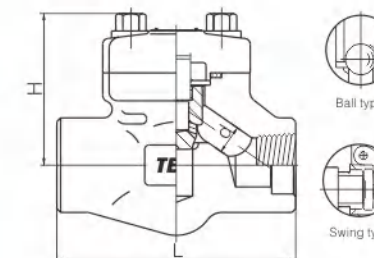


Main part materials list								
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat ring	410	410HF	304	410HF	304(L)	316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
5	Gasket	304+Graphite	304+Graphite	304+Graphite	304+Graphite	304+Graphite	316+Graphite	316+Graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL
34	Disc nut	2H	2H	8	8	8(M)	8(M)	8M
35	Hinge	410	410	304	410	316(L)	316(L)	F51
36	Pin	410	410	304	410	304(L)	316(L)	F51

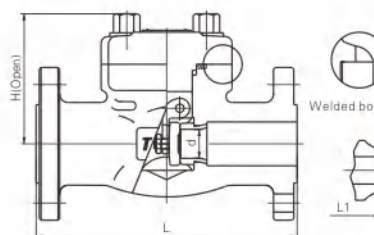
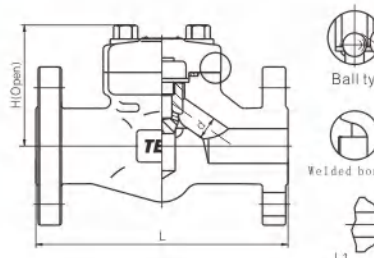
TEK VALVE



Spring-load acc. to client's requirement



Spring-load acc. to client's requirement



CL800

BB, Full Bore or Red. Bore, THD or BW or SW ends, Design Standard: BS5352

Specification	R.P	F.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
				3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L		Lift	79	92	111	120	152	172	200
			Swing	79	92	111	120	120	140	178
Height	H		Lift	61	61	78	84	84	118	132
			Swing	61	61	78	84	84	120	133
Flow port dimension	d		Lift	9	13	17.5	23	30	35	46
			Swing	10.5	13.5	18	24	29	36.5	45
Weight(Kg)			Lift	1.5	1.7	3.3	4.2	4.2	10.5	12.5
			Swing	1.5	1.7	3.3	4.2	4.2	8.5	10.9

CL900-CL1500

BB, Full Bore or Red. Bore, THD or BW or SW ends, Design Standard: BS5352

Specification	R.P	F.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
				3/8	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	L		Lift	92	111	111	120	152	172	200
			Swing	92	111	111	120	120	140	178
Height	H		Lift	61	78	78	84	103	118	132
			Swing	61	78	78	84	101	120	133
Flow port dimension	d		Lift	7	12	15	20	28	32	40
			Swing	8	10.5	13.5	18	24	29	45
Weight(Kg)			Lift	1.5	3.4	3.3	4.2	6.3	10.5	12.5
			Swing	1.5	3.4	3.3	4.2	5.0	8.5	10.9

CL150-300-600

BB, Red. Bore, Flanged or BW ends, Design Standard: BS5352

Specification			R.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	CL150		L(RF) L1(BW)	108	118	127	140	165	203
	CL300			153	178	203	216	229	267
	CL600			165	191	216	229	241	292
Height	CL150		H	77	81	93	95	103	118
	CL300/600			61	78	84	101	120	133
Flow port dimension(mm)			d	10	13	17.5	23	30	35
Weight (Kg)	CL150	RF		3.6	4.6	8.5	9.2	12.5	14.8
		BW		3.0	3.6	7.6	8.5	11.3	13.6
	CL300	RF		3.7	4.8	8.8	9.6	13.7	17.8
		BW		3.2	4.3	8.0	8.6	12.7	16.2
	CL600	RF		4.0	5.8	9.5	10.4	15.6	24.5
		BW		3.4	5.1	8.8	9.2	14.8	22.5

CL150-300-600

BB, Red. Bore, Flanged or BW ends, Design Standard: BS5352

Specification			R.P	1/2	3/4	1	1 1/4	1 1/2	2
Face to face	CL150		L(RF) L1(BW)	108	118	127	140	165	203
	CL300			153	178	203	216	229	267
	CL600			165	191	216	229	241	292
Height	CL150		H	77	81	93	95	103	118
	CL300/600			61	78	84	101	120	133
Flow port dimension(mm)			d	10.5	13.5	18	24	29	36.5
Weight (Kg)	CL150	RF		3.6	4.6	8.5	9.2	12.5	14.8
		BW		3.0	3.6	7.6	8.5	11.3	13.6
	CL300	RF		3.7	4.8	8.8	9.6	13.7	17.8
		BW		3.2	4.3	8.0	8.6	12.7	16.2
	CL600	RF		4.0	5.8	9.5	10.4	15.6	24.5
		BW		3.4	5.1	8.8	9.2	14.8	22.5

TEK VALVE

DIN Gate Valve
TEK VALVE



Product structural features

Gate valve seal acc. to DIN is applicable to the cutting and connection of pipelines medium that are used in various industries such as petroleum, chemical industry, pharmacy, chemical fertilizer, electric power industry, etc under nominal pressure of PN1.6~16MPa and working temperature within industries -110~600℃

Main structural features

1. This product has logical structure, reliable seal, excellent performance and nice design.
2. The seal surface is build-up welding with Wc-Co hard alloy, which is attrition-resistant, corrosion-resistant, has good friction resistant and long life.
3. The stem quenched and tempered, and its surface is treated by nitrating treatment, thus it has good corrosion resistant and friction resistant.
4. It has double seal capability, which is more reliable.
5. The part material, flange and butt weld end dimension may be selected according to current operating condition and users' requirement, so that meeting the requirements of various engineering.

Technical specification

Structural Formation: BB-BG-OS & Y
Driving Manner: Hand-Operated
Driving Manner: Electric-Actuated
Design Standard: DIN3352
Face to Face: DIN3202
Flange Ends: DIN2543-2547
Test & Inspection: DIN3230

Notes: The size of serial, valve connecting flange can be design according to customers' requirement.

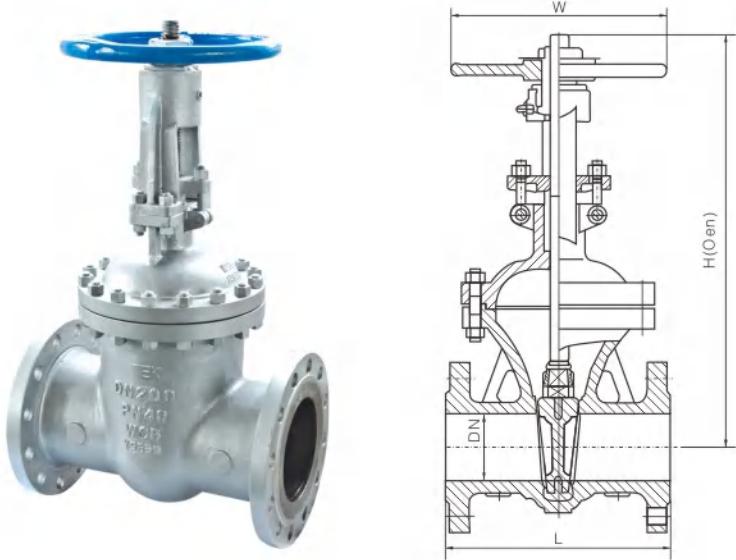
Products performance specification

Nominal Pressure (MPa)	Shell Test (MPa)	Sealing Test (MPa)	Suitable Temp(℃)	Suitable Medium
1.6	2.4	1.76	-110~600℃	Water Oil & Gas
2.5	3.75	2.75		
4.0	6.0	4.4		
6.4	9.6	7.04		

Technical specification

- Structural Formation: BB-BG-OS & Y
- Driving Manner: Hand-Operated
- Driving Manner: Electric-Actuated
- Design Standard: DIN3352
- Face to Face: DIN3202
- Flange Ends: DIN2543-2547
- Test & Inspection: DIN3230

Notes: The size of serial, valve connecting flange can be design according to customers' requirement.



Main part material of Cast steel

Main part material of Cast steel							
Body	GS-C25						
Wedge Disc	GS-C25		1.4308		1.4408		
Stem	13Cr		1.4308		1.4408		
Wedge Disc Sealing Face	13Cr	13Cr	STL	1.4308	STL	1.4408	STL
Seat Ring Sealing Face	13Cr	STL	STL	1.4308	STL	1.4408	STL

Main part material of Stainless steel

Main part material of Stainless steel												
Body	1.4308			1.4408			1.4306			1.4301		
Wedge Disc	1.4308			1.4408			1.4306			1.4301		
Stem	F304			1.4408			1.4306			1.4301		
Wedge Disc Sealing Face	1.4308	1.4308	STL	1.4408	1.4408	STL	1.4306	1.4306	STL	1.4301	1.4301	STL
Seat Ring Sealing Face	1.4308	STL	STL	1.4408	STL	STL	1.4306	STL	STL	1.4301	STL	STL

Size main dimensions of Gate Valve

Pressure (MPa)		PN1.6MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	250	270	280	300	325	350	400	450	500	550	600	650	700	800	
H	417	452	530	607	720	790	885	1014	1190	1350	1460	1630	1800	2200	
W	200	280	280	300	350	350	400	450	500	600	600	650	700	800	
Weight(kg)	16	25	30	55	75	98	150	245	353	490	750	985	1063	1390	

Pressure (MPa)		PN2.5MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	250	270	280	300	325	350	400	450	500	550	600	650	700	800	
H	417	452	530	607	720	790	885	1014	1190	1350	1460	1630	1800	2200	
W	200	280	280	300	350	350	400	450	500	600	600	650	700	800	
Weight(kg)	16	31	43	58	82	103	180	265	385	547	835	1050	1130	1500	

Pressure (MPa)		PN4.0MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	
H	404	456	604	607	720	780	875	1260	1480	1605	1788	1956	2168	2601	
W	200	280	300	350	350	400	450	500	500	600	650	700	700	800	
Weight(kg)	18	32	47	60	95	130	220	290	490	760	900	1250	1450	1700	

Pressure (MPa)		PN6.4MPa													
Size	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	
H	404	456	604	607	720	780	875	1260	1480	1605	1788	1956	2168	2601	
W	200	280	300	350	350	400	450	500	500	600	650	700	700	800	
Weight(kg)	20	35	52	66	103	140	230	300	510	780	940	1300	1600	1850	

DIN Globe Valve
TEK VALVE



Product structural features

Globe valve seal acc. to DIN is applicable to the cutting and connection of pipelines medium that are used in various industries such as petroleum, chemical industry, pharmacy, chemical fertilizer, electric power industry etc under nominal pressure of PN1.6~16MPa and working temperature within -110~600℃

Main structural features

1. This product has logical structure, reliable seal, excellent performance and nice design.
2. The seal surface is build-up welding with Co hard alloy, which is attrition-resistant, corrosion-resistant, has good friction resistant and long life.
3. The stem quenched and tempered, and its surface is treated by nitrating treatment, thus it has good corrosion resistant and friction resistant.
4. The part material, flange and butt weld end dimension may be selected according to current operating condition and users' requirement, so that meeting the requirements of various engineering.

Technical specification

Structural Formation: BB-BG-OS & Y
Driving Manner: Hand-Operated
Driving Manner: Electric-Actuated
Design Standard: DIN3356
Face to Face: DIN3202
Flange Ends: DIN2543-2545
Test & Inspection: DIN3230

Notes: The size of serial, valve connecting flange can be design according to customers' requirement

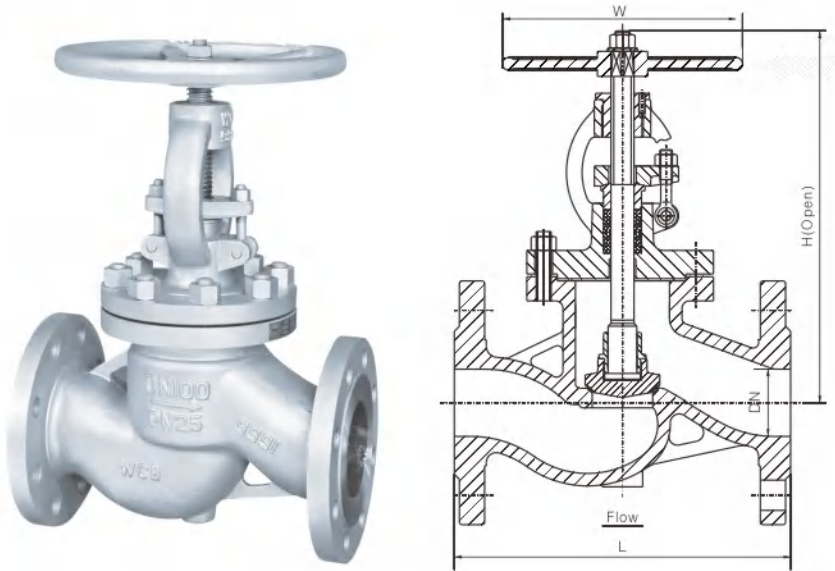
Products performance specification

Nominal Pressure (MPa)	Shell Test (MPa)	Sealing Test (MPa)	Suitable Temp(℃)	Suitable Medium
1.6	2.4	1.76	-110~600℃	Water Oil & Gas
2.5	3.75	2.75		
4.0	6.0	4.4		
6.4	9.6	7.04		

Technical specification

- Structural Formation: BB-BG-OS & Y
- Driving Manner: Hand-Operated
- Driving Manner: Electric-Actuated
- Design Standard: DIN3356
- Face to Face: DIN3202
- Flange Ends: DIN2543-2545
- Test & Inspection: DIN3230

Notes: The size of serial, valve connecting flange can be design according to customers' requirement.



Main part material of Cast steel

Body	GS-C25						
Disc	GS-C25		1.4308		1.4408		
Stem	13Cr		1.4308		1.4408		
Disc Sealing Face	13Cr	13Cr	STL	1.4308	STL	1.4408	STL
Seat Ring Sealing Face	13Cr	STL	STL	1.4308	STL	1.4408	STL

Main part material of Stainless steel

Body	1.4308			1.4408			1.4306			1.4301		
Disc												
Stem	F304			1.4408			1.4306			1.4301		
Wedge Disc Sealing Face	1.4308	1.4308	STL	1.4408	1.4408	STL	1.4306	1.4306	STL	1.4301	1.4301	STL
Ring Sealing Face	1.4308	STL	STL	1.4408	STL	STL	1.4306	STL	STL	1.4301	STL	STL

Size main dimensions of Globe Valve

Pressure(MPa)		PN1.6MPa															
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L		130	150	160	180	200	230	290	310	350	400	480	600	650	750	850	950
H		240	260	276	285	300	305	354	402	437	496	541	699	815	914	1189	1350
W		120	140	160	160	180	200	200	750	250	300	350	400	450	500	550	600
Weight(kg)		5.2	7.1	7.4	8.5	13	20	25	35	50	75	100	210	446	648	805	1050
Pressure(MPa)		PN2.5MPa															
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L		130	150	160	180	200	230	290	310	350	400	480	600	650	750	850	950
H		240	260	276	285	300	325	363	415	453	505	556	744	864	948	1269	1450
W		120	140	160	160	180	200	200	250	300	350	400	450	500	550	600	600
Weight(kg)		6	7.5	8	9	14	22	27	38	55	82	105	220	450	660	810	1100
Pressure(MPa)		PN4.0MPa															
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L		130	150	160	180	200	230	290	310	350	400	480	600	650	750	850	950
H		240	260	276	285	300	325	370	430	480	532	589	783	888	965	1285	1512
W		120	140	160	160	180	200	200	250	300	350	400	450	500	550	600	600
Weight(kg)		6	7.5	8	9	15	24	30	41	60	85	110	225	460	670	830	1120
Pressure(MPa)		PN6.4MPa															
Size	mm	40	50	65	80	100	125	150	200	250	300	350	400				
L		260	300	340	380	430	500	550	650	775	900	1025	1150				
H		300	305	354	402	437	496	541	699	815	914	1189	1350				
W		180	200	200	750	250	300	350	400	450	500	550	600				
Weight(kg)		17	26	33	45	65	90	120	230	470	680	850	1130				
Pressure(MPa)		PN10.0MPa															
Size	mm	40	50	65	80	100	125	150	200	250	300	350	400				
L		260	300	340	380	450	500	550	650	775	900	1025	1150				
H		300	325	363	415	453	505	556	744	864	948	1269	1450				
W		180	200	200	250	300	350	400	450	500	550	600	600				
Weight(kg)		19	27	34	46	67	95	125	235	480	690	860	1150				

DIN Check Valve
TEK VALVE



Product structural features

Check valve seal acc. to DIN is applicable to the cutting and connection of pipelines medium that are used in various industries such as petroleum, chemical industry, pharmacy, chemical fertilizer, electric power industry, etc under nominal pressure of PN1.6~16MPa, and working temperature within -110~600℃

Main structural features

1. This product has logical structure, reliable seal, excellent performance and nice design.
2. The seal surface is build-up welding with Co hard alloy, which is attrition-resistant, corrosion-resistant, has good friction resistant and long life.
3. The part material, flange and butt weld end dimension may be selected according to current operating condition and users' requirement, so that meeting the requirements of various engineering.

Technical specification

Structural Formation: BB-BG-OS & Y
Driving Manner: Hand-Operated
Driving Manner: Electric-Actuated
Design Standard: DIN3356
Face to Face: DIN3202
Flange Ends: DIN2543-2545
Test & Inspection: DIN3230

Notes: The size of serial, valve connecting flange can be design according to customers' requirement

Products performance specification

Nominal Pressure (MPa)	Shell Test (MPa)	Sealing Test (MPa)	Suitable Temp(℃)	Suitable Medium
1.6	2.4	1.76	-110~600℃	Water Oil & Gas
2.5	3.75	2.75		
4.0	6.0	4.4		
6.4	9.6	7.04		

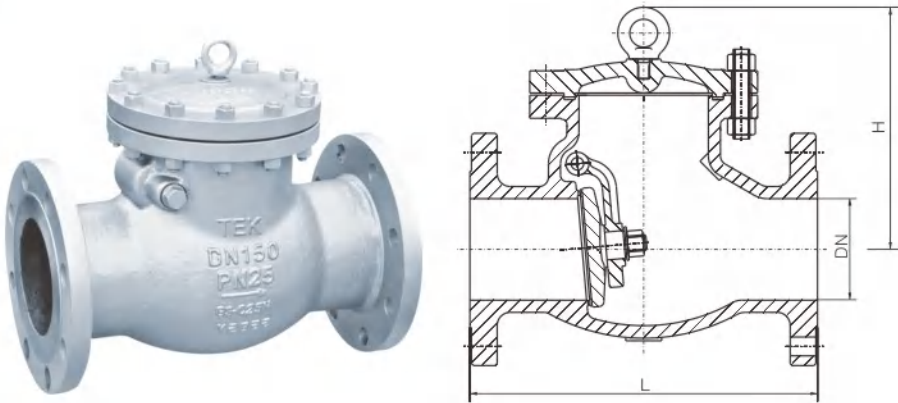
DIN Check Valve

TEK VALVE

Technical specification

- Structural Formation: BB-BG-OS & Y
- Driving Manner: Wc-Co Hand-Operated
- Driving Manner: Electric-Actuated
- Design Standard: DIN3356
- Face to Face: DIN3202
- Flange Ends: DIN2543-2547
- Test & Inspection: DIN3230

Notes: The size of serial, valve connecting flange can be design according to customers' requirement.



Main part material of Cast steel

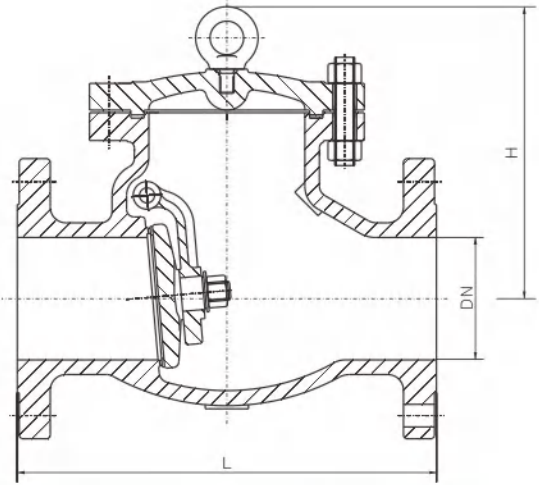
Body	GS-C25						
Cover	GS-C25			1.4308		1.4408	
Disc Sealing Face	13Cr	13Cr	STL	1.4308	STL	1.4408	STL
Seat Ring Sealing Face	13Cr	STL	STL	1.4308	STL	1.4408	STL

Main part material of Stainless steel

Body	1.4308			1.4408			1.4306			1.4301		
Cover	1.4308			1.4408			1.4306			1.4301		
Wedge Disc Sealing Face	1.4308	1.4308	STL	1.4408	1.4408	STL	1.4306	1.4306	STL	1.4301	1.4301	STL
Seat Ring Sealing Face	1.4308	STL	STL	1.4408	STL	STL	1.4306	STL	STL	1.4301	STL	STL

DIN Swing Check Valve

TEK VALVE



Size main dimensions of Swing Check Valve

Pressure(MPa)		PN1.6MPa											
Size	mm	50	65	80	100	125	150	200	250	300	350	400	
L		230	290	310	350	400	480	550	650	750	850	950	
H		305	354	402	437	496	541	699	815	914	1189	1350	
Weight(kg)		21	28	38	58	92	130	210	295	365	410	460	
Pressure(MPa)		PN2.5MPa											
Size	mm	50	65	80	100	125	150	200	250	300	350	400	
L		230	290	310	350	400	480	550	650	750	850	950	
H		325	363	415	453	505	556	744	864	948	1269	1450	
Weight(kg)		22	29	38	61	96	132	213	297	375	415	480	
Pressure(MPa)		PN4.0MPa											
Size	mm	50	65	80	100	125	150	200	250	300	350	400	
L		230	290	310	350	400	480	550	650	750	850	950	
H		325	370	430	480	532	589	783	888	965	1285	1512	
Weight(kg)		22	31	41.5	65	100	136	220	305	400	450	510	
Pressure(MPa)		PN6.4MPa											
Size	mm	50	65	80	100	125	150	200	250	300	350	400	
L		300	340	380	430	500	550	650	775	900	1025	1150	
H		305	354	402	437	496	541	699	815	914	1189	1350	
Weight(kg)		27	37	57	87	135	184	266	396	643	815	1230	
Pressure(MPa)		PN10.0MPa											
Size	mm	50	65	80	100	125	150	200	250	300	350	400	
L		300	340	380	430	500	550	650	775	900	1025	1150	
H		325	363	415	453	505	556	744	864	948	1269	1450	
Weight(kg)		30	40	60	92	140	195	280	406	670	850	1260	