

***BAF BALL VALVES
CATALOGUE***

BAF

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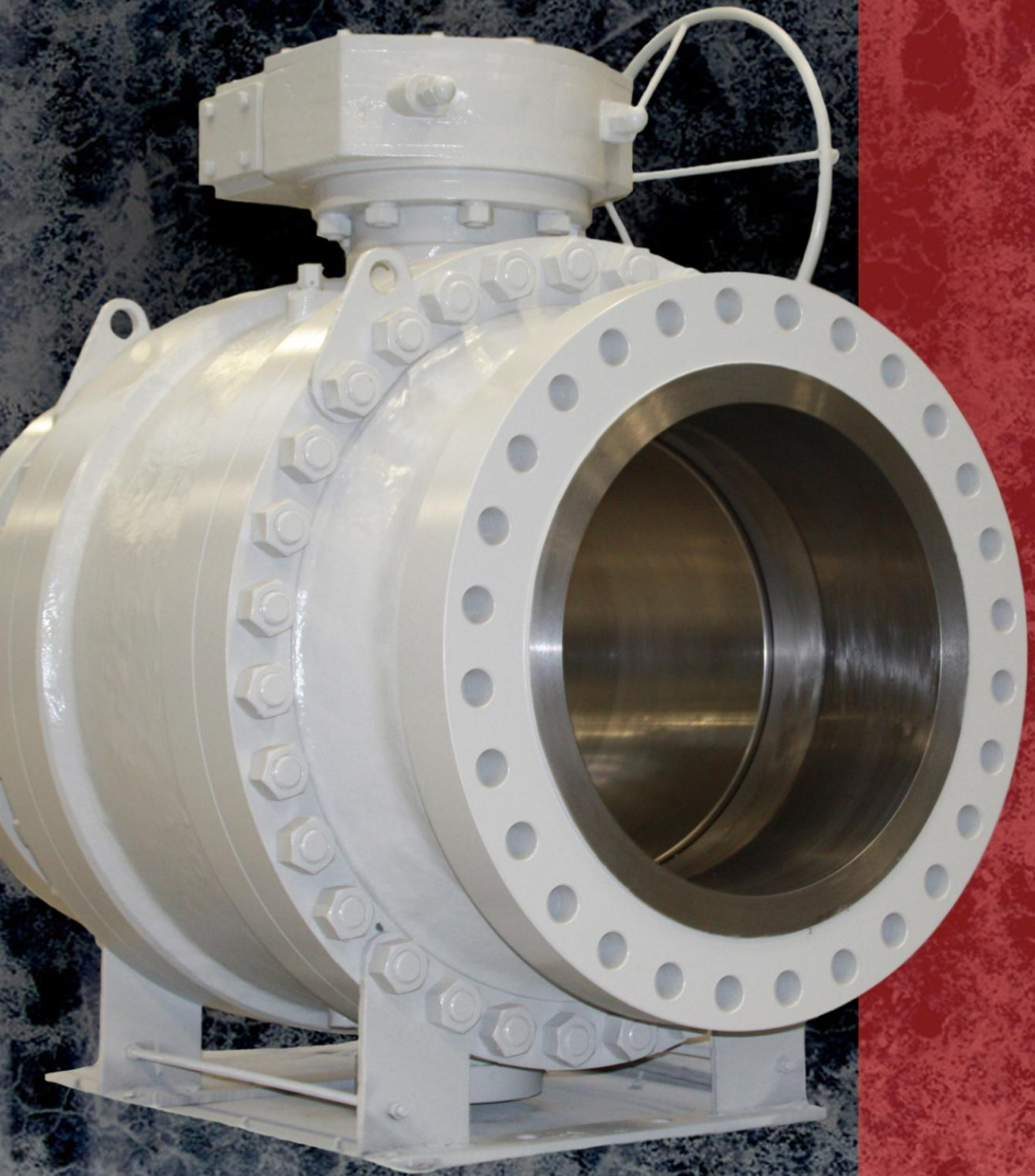
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BAF VALVES



for best *invalvement*

Index

About BAF Valves	3
Certificates	4
BAF Companies	5
Features	6
Applications	6
BAF Floating Ball Valves	7
Part list	8
Pressure test	8
Bill of material	8
BAF Floating Ball Valves Design Features	9
BAF Floating Ball Valve, One Piece Body, Class 150-300 (Cast Steel)	10
BAF Floating Ball Valve, Two Piece Body, Class 150 (Cast Steel)	11
BAF Floating Ball Valve, Two Piece Body, Class 300 & 600 (Cast Steel)	12
BAF Floating Ball Valve, Two Piece Body, Class 150 & 300 (Forged Steel)	13
BAF Floating Ball Valve, Two Piece Body, Class, CLASS 600 ~ 900 (Forged Steel)	14
BAF Floating Ball Valve, Three-Way, Class 150 (Cast Steel)	15
BAF Floating Ball Valve, Three-Way, Class 300 (Cast Steel)	16
BAF TRUNNION MOUNTED BALL VALVE	17
Part list	18
Pressure test	18
Bill of material	18
BAF TRUNNION MOUNTED BALL VALVES DESIGN FEATURES	19
BAF Trunnion Mounted Ball Valves, Two Piece Body, Class 150 & 300, (Cast Steel)	21
BAF Trunnion Mounted Ball Valves, Two Piece Body, Class 600, (Cast Steel)	22
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 150 & 300, (Cast Steel)	23
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 600, (Cast Steel)	24
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 150 & 300 (Forged Steel)	25
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 150 (Forged Steel)	26
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 300 (Forged Steel)	27
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 600 & 900 (Forged Steel)	28
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 600 (Forged Steel)	29
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 900 (Forged Steel)	30
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 1500 & 2500 (Forged Steel)	31
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 1500 & 2500 (Forged Steel)	32
BAF Trunnion Mounted Ball Valves, Top Entry, Class 600, 900 & 1500 (Cast Steel)	33
BAF Trunnion Mounted Ball Valves, Fully Welded, Class 600 (Cast Steel)	34
BAF Trunnion Mounted Ball Valves, Fully Welded, Class 900 (Cast Steel)	35
BAF Trunnion Mounted Ball Valves, Fully Welded, Class 1500 (Cast Steel)	36
Torque Figures BAF High Performance Valves	37
BAF floating ball valves soft seated	37
BAF trunnion mounted ball valves soft seated	37

Over the last 35 years BAF Valves has established high engineering and manufacturing standards. The reputation for quality first without compromise has been truly earned and is still highly valued by our organization to secure customer satisfaction. Our facilities are equipped with up to date and professional machinery and our operations are using fully integrated and modern supporting ERP systems. This securing a high level of control over all our process and services. It is our honor and pleasure to serve you as our valued customer.

About BAF Valves

BAF VALVES was established in 1972 and is one of the leading manufacturers in Europe producing standard and non-standard butterfly valves, valve spare parts and valve accessories. Our products can be supplied fully custom made to your requirements or just in accordance to international design standards. BAF butterfly valves are exported throughout the world for all kinds of piping applications such as On- and Offshore, Refineries, (Petrol) Chemical Industries, Power Plants, Waterworks, Ships, etc. In case required, we can submit our valve reference list accordingly. It is our aim to be your 'best' partner in solving valve problems.

BAF VALVES manufactures valve sizes up to DN2500/100" to any design standard or flange alignment such as DIN / ANSI / BS / JIS / AWWA, etc. Pressure ratings up till PN25. * (larger size/rates available upon request). Furthermore, we have our own design department, machine-shop and test- and repair facilities, which includes the reconditioning and/or modification of any type or brand of butterfly valves. BAF VALVES is also your partner for the world wide supply of valve spare parts or engineering services at job sites, when required.

All our butterfly valves, accessories and relevant products are manufactured fully in accordance to our certified Quality Assurance System ISO9001:2000/LRQA certificate nr. 650834.



Certificates

- Achilles Certificate
- Fire safe cert DN100 till DN200
- Fire safe cert DN200 and larger
- ISO 9001 BAF Valves
- Lloyds type approval Double flanged
- Lloyds type approval Wafer
- PED BAF
- Stoomwezen
- WRAS
- KIWA

All these certificates can be downloaded from our website: www.bafvalves.com





BAF VALVES

BAF Companies

Head office and production facility:

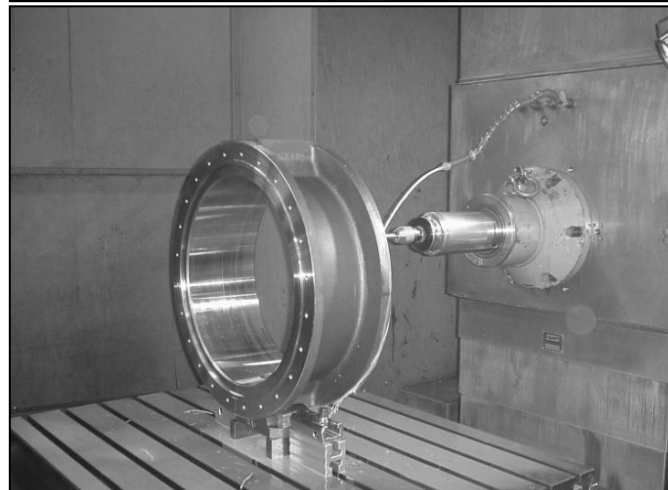
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Production facility

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No. 26 Qiangshen Road
Xingcheng Town, Xiuzhou
District, Jiaxing Zhejiang
Province 314015,
China
Email info@bafvalves.com

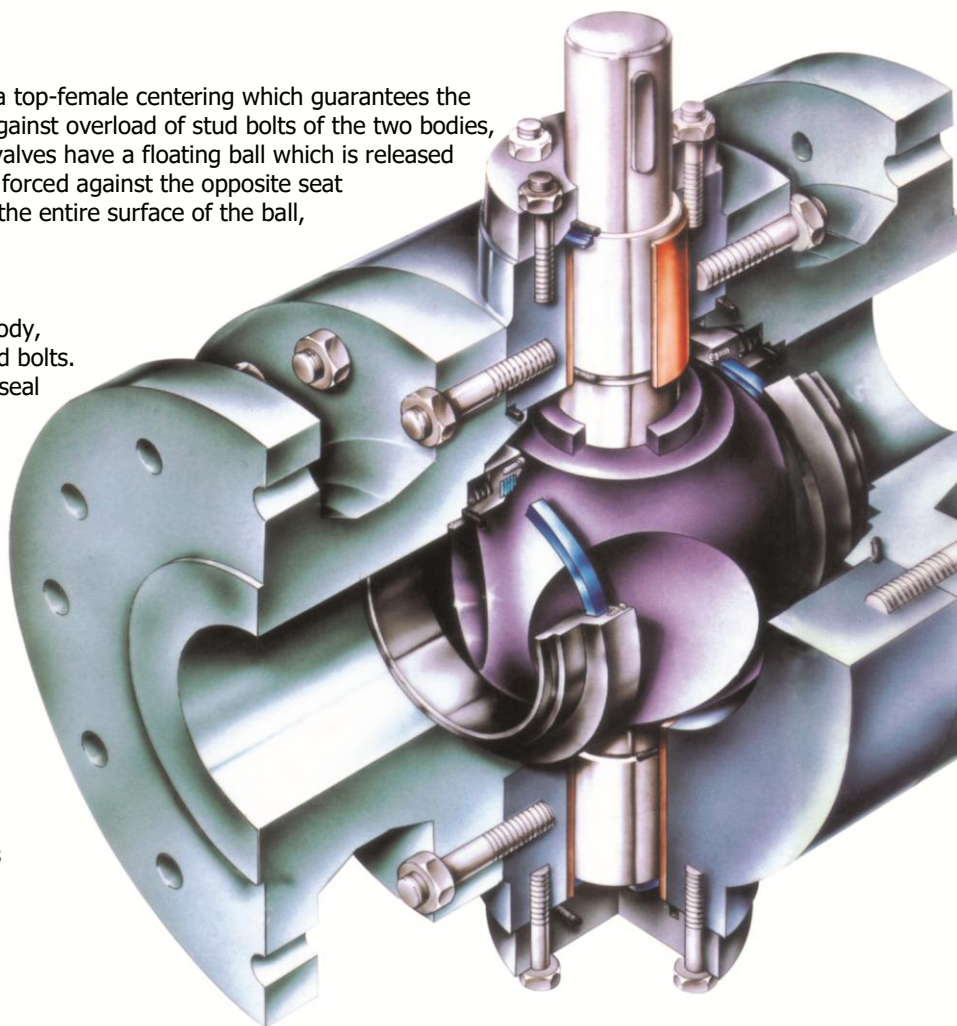


Features

Ball valves are particularly used when it is necessary to guarantee a perfect seal of the fluid to be intercepted every kind of gas, liquid, semisolid and viscous substances, acids and corrosives. These valves, due to the identical manufacture of their seal seat, guarantee a perfect sealing both directions: for this reason, no loss takes place when a flow inversion occurs in the pipeline. For full bore valves, it is not necessary to take into account the flow direction during the installation on the pipe. The ball is self-cleaning as it turns on the seats every time the valve is operated. No pressure drop takes place as the valve, when open, can be considered as a pipeline extension. Since all moving parts are mounted on self-lubricating materials, no lubrication is required. Ball valves need a lower handling torque than any other type of valve at the same operating pressure. Moreover, opening and closing operations can be carried out very quickly, as only a quarter of a turn is necessary. One of the main characteristics of these valves is the FIRE SAFE design, i.e. the metal to metal seal, in case the seal seats are destroyed by the fire.

SPLIT-BODY type executed in two pieces, has a top-female centering which guarantees the alignment between the seats and protection against overload of stud bolts of the two bodies, in case of deformations in the pipeline. These valves have a floating ball which is released from the drive stem, for this reason, the ball is forced against the opposite seat under the force of the fluid pressure acting on the entire surface of the ball, resulting in a perfect sealing.

TRUNNION type executed with a three-piece body, a central body and two side bodies joint by stud bolts. The ball is fixed by stems and the two floating seal seats are spring loaded to grant the required tightness even at very low pressures; these two seal seats assure the bi-directional tightness at any valve pressure.



Applications

BAF Valves are used in the following :

- Oil-refineries
- Chemical- and petro-chemical plants
- Pharmaceutical plants
- Food and allied processing plants
- Gas-lines
- Power plants
- Water and sewage stations
- Marine and off-shore services
- Steel plants and foundries
- Ventilation and central-heating systems
- Breweries
- Industrial control of engines
- Pulp and Paper industry

BAF Floating Ball Valves

BAF Ball valves FB are designed to meet various applications in the chemical, petrochemical, upstream storage and power industries. BAF design covers soft and metal seated Floating ball valves in reduced and full port towards the latest international standards and can be supplied in a large variety to body and trim materials.

Packing seal arrangements meet the latest standards for fugitive emission making our valves suitable for the most severe applications. As standard BAF offers a blow out proof and anti static stem design.

Design standards :

- BS5351
- ASME B16.34
- API607 fire safe design
- API6D

Face to Face and end to end dimension conform to :

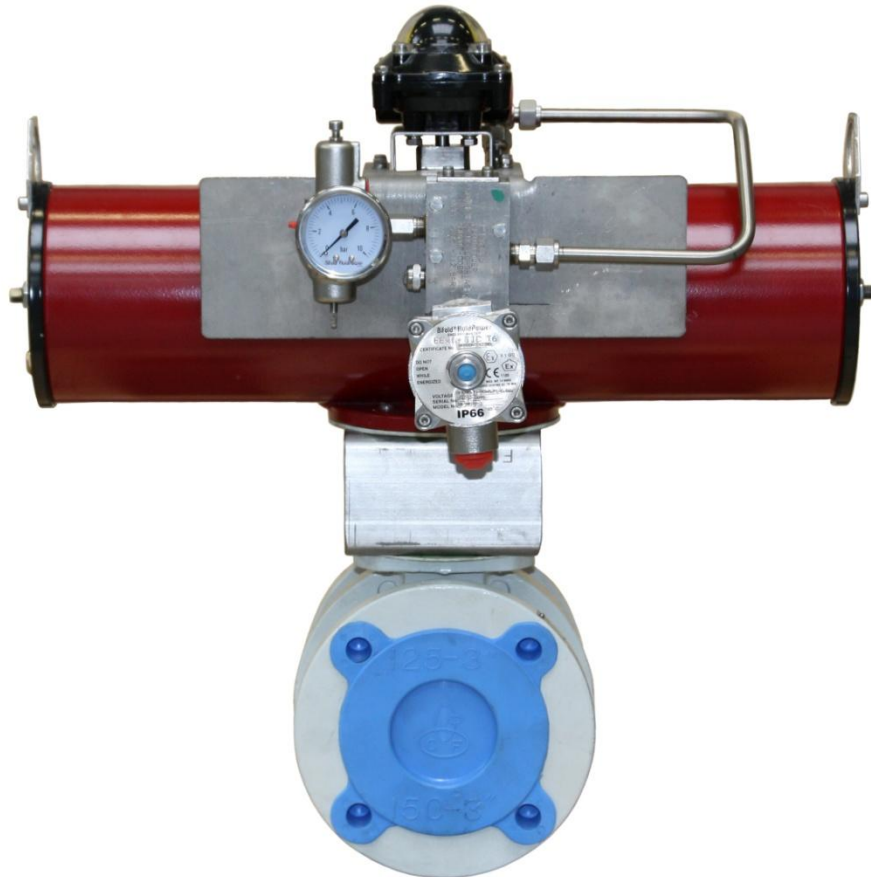
- ASME B16.10

Connections :

- End flange dimensions conform to ASME B16.5
- BW end dimensions conform to ASME B16.25

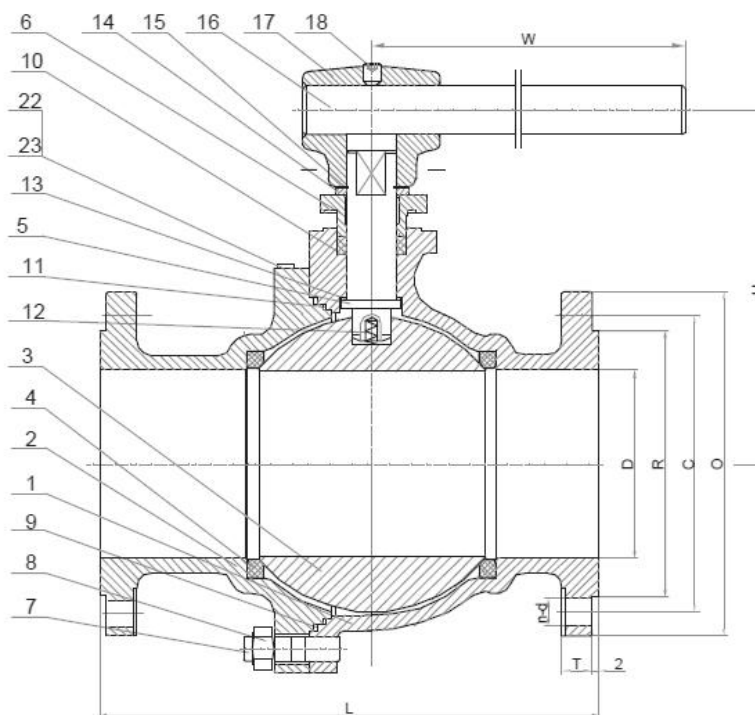
Inspection and test in accordance with :

- API 598
- BS EN 12266-1
- API6D



Part list

Valve Part Name	
1	Body
2	Bonnet
3	Ball
4	Seat
5	Stem
6	Gland
7	Stud
8	Nut
9	Firesafe ring
10	Packing
11	Gasket
12	Spring
13	Top retaining bearing
14	Limited block
15	Block
16	Lever
17	Joint
18	Screw
19	Screw
20	Screw
21	Locking screw
22	Rivet
23	nameplate



Pressure test

CLASS	Rating	Body test	High Pressure Seal Test	Air seat test
	bar	bar	bar	bar
150	19	28,5	20,9	6
300	5	75	55	6
600	99	148,5	108,9	6
900	149	223,5	163,9	6
1500	248	372	272,8	6
2500	413	619,5	454,3	6

Bill of material

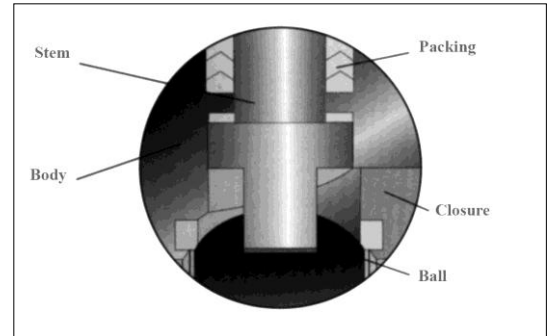
Valve Part Name	Carbon Steel			Stainless Steel	
	WCB / 13Cr	WCB / 304	WCB / 316	CF8	CF8M
Body	WCB A 216 WCB	WCB A 216 WCB	WCB A 216 WCB	ASTM A 351CF8	ASTM A 351CF8M
Packing	PTFE	PTFE	PTFE	PTFE	PTFE
Stem Bearing	PTFE	PTFE	PTFE	PTFE	PTFE
Gland	ASTM A 182 F6a	ASTM A 182 F304	ASTM A 182 F316	ASTM A 182 F304	ASTM A 182 F316
Gland Flange	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 216 WCB	CF8	CF8M
Gland bolt	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7
Stop Collar	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel	Stainless Steel
Circlip	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel	Stainless Steel
Lever	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel	Stainless Steel
Nut or wrench head	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel	Stainless Steel
Trust washer	PTFE	PTFE	PTFE	PTFE	PTFE
Stem Bearing	ASTM A 182 F6a	ASTM A 182 F304	ASTM A 182 F316	ASTM A 182 F304	ASTM A 182 F316
Ball	ASTM A 182 F6a	ASTM A 182 F304	ASTM A 182 F316	ASTM A 182 F304	ASTM A 182 F316
Seat	Reinforced PTFE	Reinforced PTFE	Reinforced PTFE	Reinforced PTFE	Reinforced PTFE
Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
Body nut	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H
Body bolting	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7
Closure	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 351CF8	ASTM A 351CF8M

Other material combinations are possible upon request

BAF Floating Ball Valves Design Features

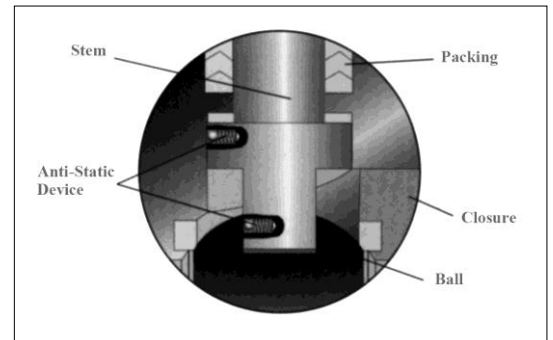
Blow-out proof stem

Stem lower end is integral T shaped designed to be blow-out proof. It is internally inserted and functions as the backseat for assured stem sealing at all pressures.



Anti-Static device

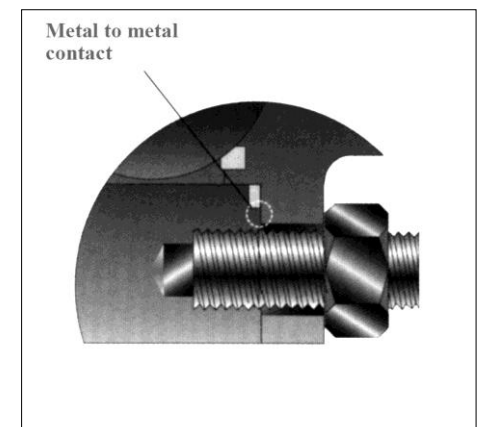
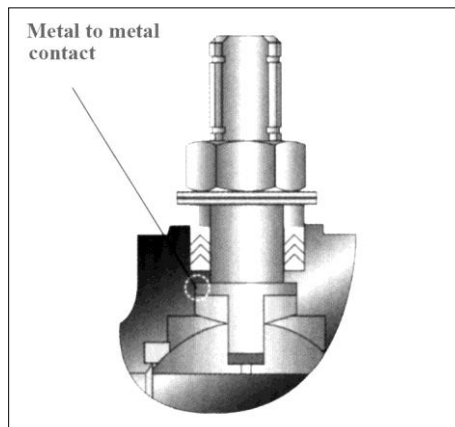
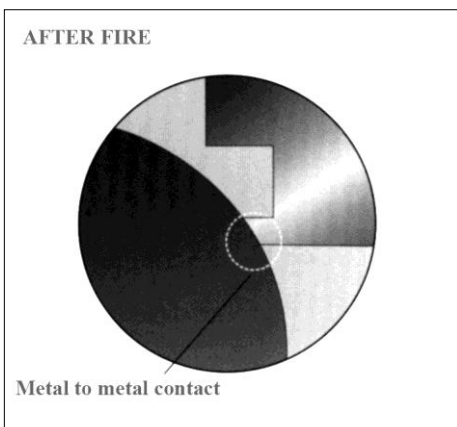
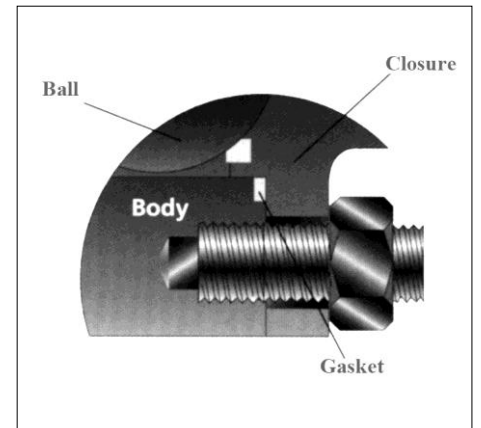
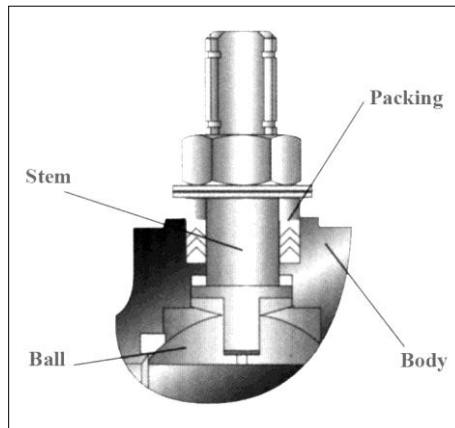
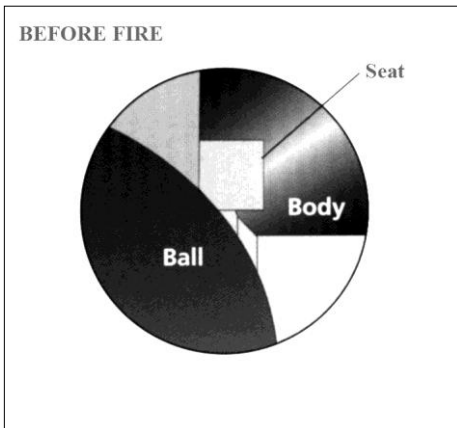
When static is generated and concentrated on the ball, the spring-loaded pins installed on the ball and stem are provided to ensure electrical continuity throughout the valve.



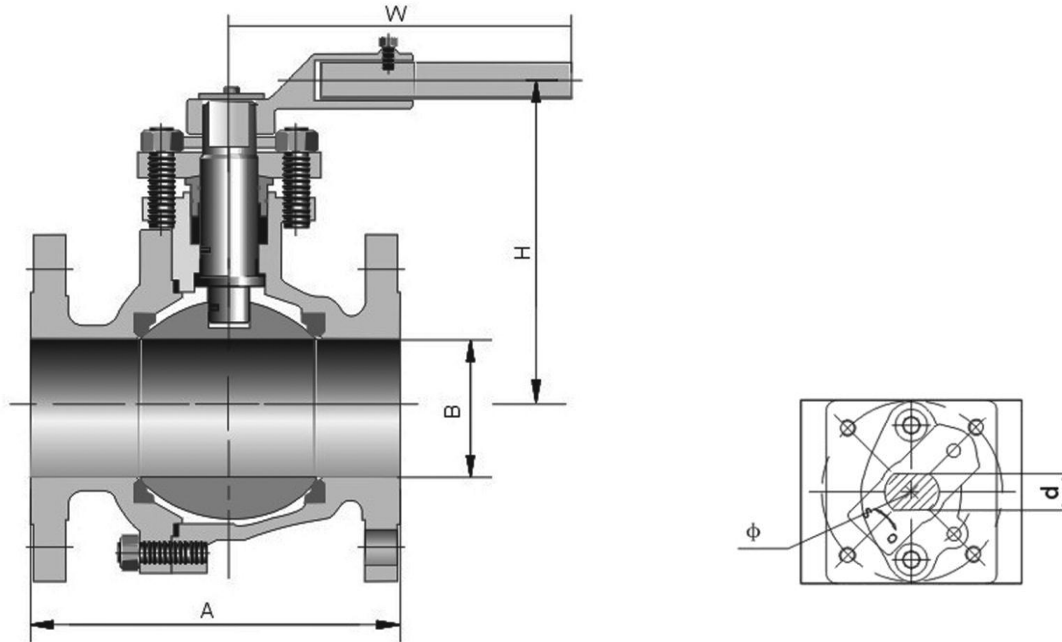
Fire safe seat sealing

When non-metal sealing material is decomposed or deteriorated by a plant fire, the upstream line pressure pulls the ball into contact with the metal seat lip beneath the soft seat to shut off the line fluid to minimize the internal leakage.

Additionally, the fire safe metal seat can prevent the line pressure erosion on soft seat and minimize soft seat creep deformation. All floating valves are fire safe and designed, tested and certified in accordance to API 607.



BAF Floating Ball Valve, One Piece Body, Class 150-300 (Cast Steel)



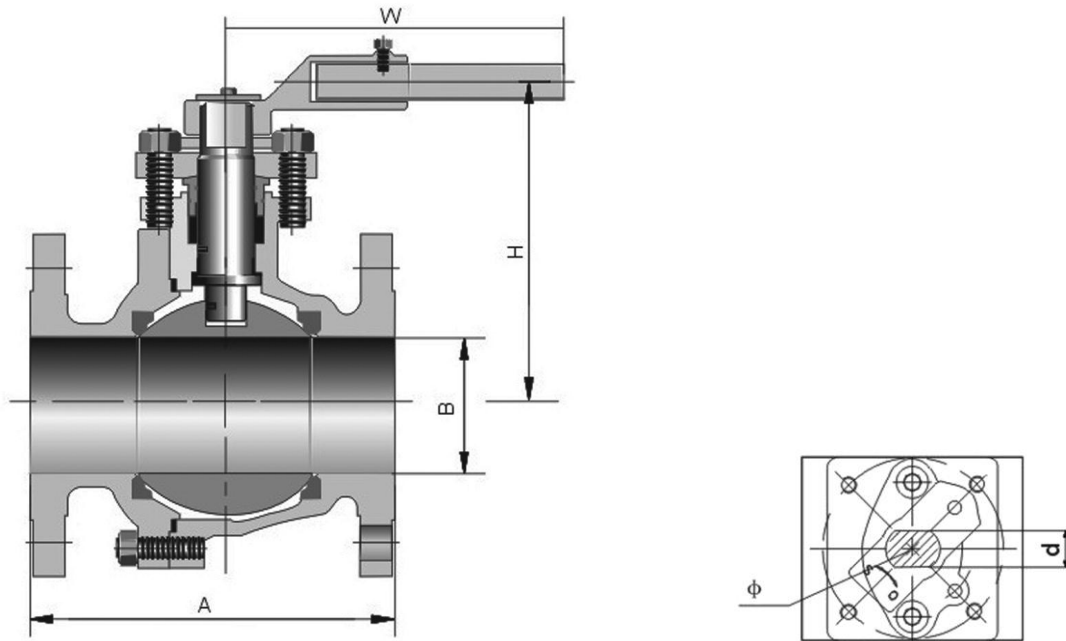
CLASS 150

NP Sinch	A mm	B mm	W mm	H mm	W KgT	T N.m
3/4x1/2	117	13	180	84	2,9	8
1x3/4	127	19	180	87	4	10
1x1/2 1/4	165	32	220	102	6,8	32
2x1 1/2	178	38	242	137	9,2	40
3x2 1/2	203	60	242	167	15,8	80
4x3	229	76	350	205	30	90
6x4	267	100	460	220	53,5	130
8x6	292	144	550	813	82	550

CLASS 300

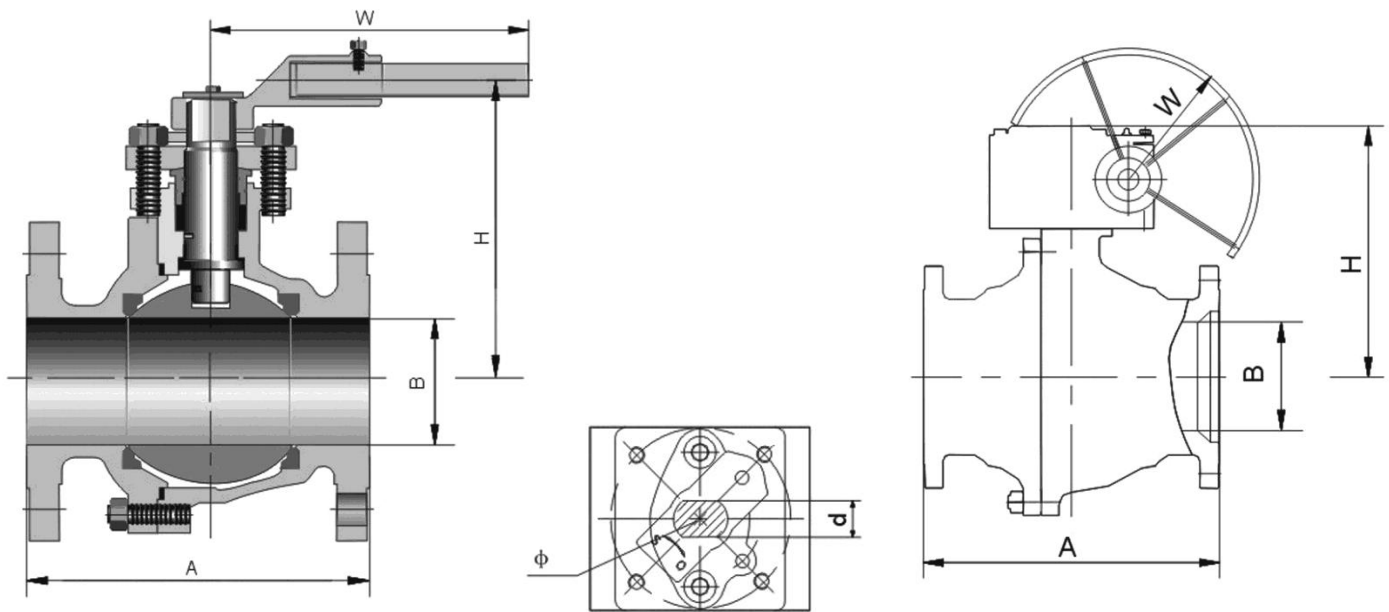
NP Sinch	A mm	B mm	W mm	H mm	W KgT	T N.m
3/4x1/2	152	13	180	84	4	12
1x3/4	165	19	180	87	5	18
1x1/2 1/4	191	32	220	102	10	35
2x1 1/2	216	38	242	137	11,2	65
3x2 1/2	283	60	242	167	23	92
4x3	305	76	350	205	40	120
6x4	403	100	460	220	82	240
8x6	419	144	550	313	125	930

BAF Floating Ball Valve, Two Piece Body, Class 150 (Cast Steel)



CLASS 150										
NPS	A	B	W	H	ϕ	d	W	T	ISO	
inch	mm	mm	mm	mm	mm	mm	TKg	N.m	Flange	
1/2	108	15	150	90	12	8	2,5	6	F03	
3/4x1/2	117	15	150	90	12	8	3,1	6	F03	
3/4	117	19	150	90	12	8	3,2	9	F03	
1x3/4	127	19	150	90	12	8	4,8	9	F03	
1	127	25	150	100	12	8	536	20	F04	
1 1/2x1	165	25	150	100	12	8	7	20	F04	
1 1/2	165	38	242	140	20	14	7	55	F07	
2x1 1x2	178	38	242	140	20	14	9,7	55	F07	
2	178	50	242	160	20	14	9,8	60	F07	
2 1/2	191	64	242	170	20	14	16	100	F07	
3x2	203	50	242	160	20	14	18	60	F07	
3	203	76	350	205	30	20	20	110	F10	
4x3	229	76	350	205	30	20	35	110	F10	
4	229	100	460	225	30	20	35,2	140	F10	
6x4	394	100	460	225	30	20	60	140	F10	
6	394	152	750	320	40	30	96	600	F12	
8x6	457	152	750	320	40	30	120	600	F12	
8	457	204	900	370	50	36	165	1100	F14	

BAF Floating Ball Valve, Two Piece Body, Class 300 & 600 (Cast Steel)

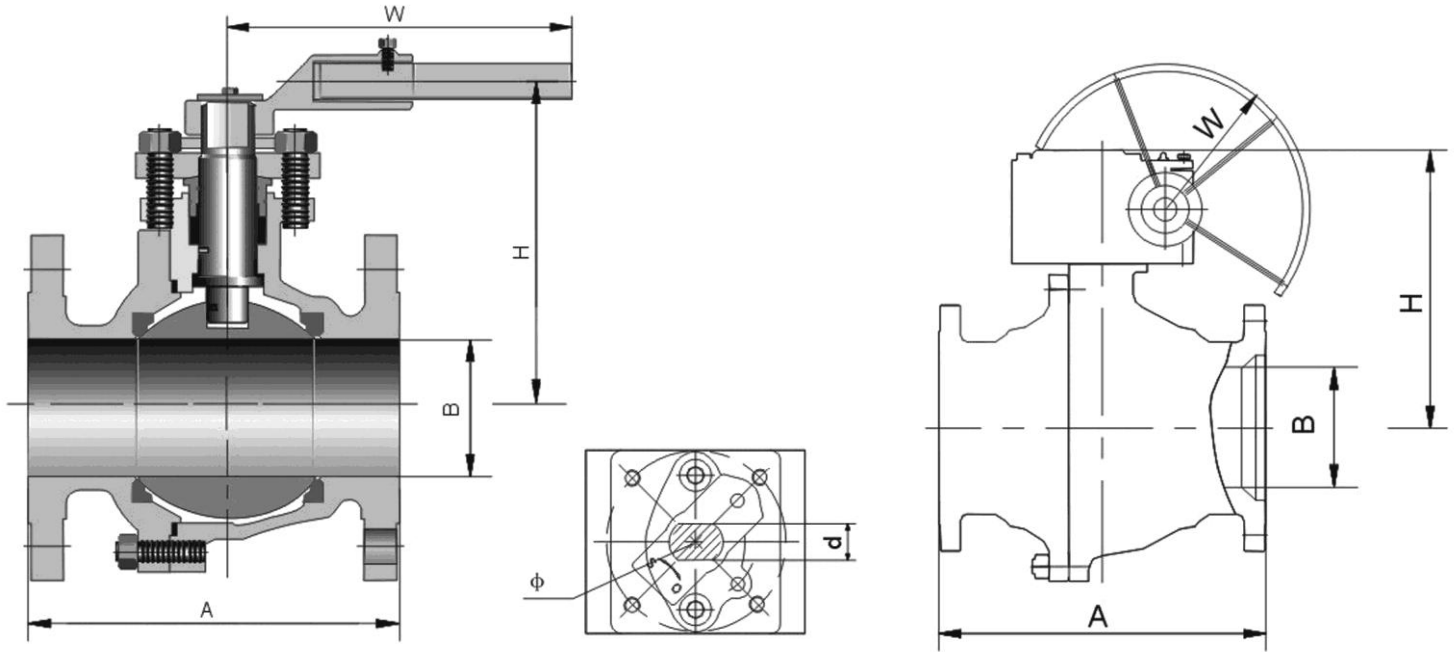


CLASS 300										
NPS inch	A	B	W	H	φ	d	W	T	ISO	
	mm	mm	mm	mm	mm	mm	TKg	N.m	Flange	
1/2	140	15	150	90	12	8	2,6	9	F03	
3/4x1/2	152	15	150	90	12	8	3,5	9	F03	
3/4	152	19	150	90	12	8	3,8	14	F03	
1x3/4	165	19	150	90	12	8	5,6	14	F03	
1	165	25	150	100	12	8	6	27	F04	
1 1/2x1	191	25	150	100	12	8	10,2	27	F04	
1 1/2	191	38	242	140	20	14	10,5	70	F07	
2x1 1x2	216	38	242	140	20	14	15	70	F07	
2	216	50	242	160	20	14	16	80	F07	
2 1/2	241	64	242	170	20	14	28	95	F07	
3x2	283	50	242	165	20	14	31,2	80	F07	
3	283	76	350	205	30	20	36	120	F10	
4x3	305	76	350	205	30	20	57	120	F10	
4	305	100	460	225	30	20	60	240	F10	
6x4	403	100	460	225	30	20	83	240	F10	
6	403	152	750	320	40	30	118	950	F12	
8x6	502	152	750	320	40	30	191	950	F12	
*8	502	204	900	415	50	36	236	2100	F12	

CLASS 600										
NPS inch	A	B	W	H	φ	d	W	T	ISO	
	mm	mm	mm	mm	mm	mm	TKg	N.m	Flange	
1/2	165	13	150	90	12	8	2,8	16	F03	
3/4 1/2	191	13	150	90	12	8	4	16	F03	
3/4	191	19	150	90	12	8	5,3	21	F03	
1 3/4	216	19	150	90	12	8	6,2	21	F03	
1	216	25	150	100	12	8	7	45	F04	
1 1/2x1	241	25	150	100	12	8	12,5	45	F04	
1 1/2	241	38	242	140	20	14	13,6	96	F07	
2x1 1/2	292	38	242	140	20	14	18,2	96	F07	
2	292	50	242	160	20	14	19	130	F07	
2 1/2	330	64	350	195	20	14	32	150	F10	
3x2	356	50	242	160	20	14	35	130	F07	
3	356	76	350	210	30	20	45	200	F07	
4	432	100	850	280	40	30	76	370	F12	
6x4	559	100	850	280	40	30	106	370	F12	



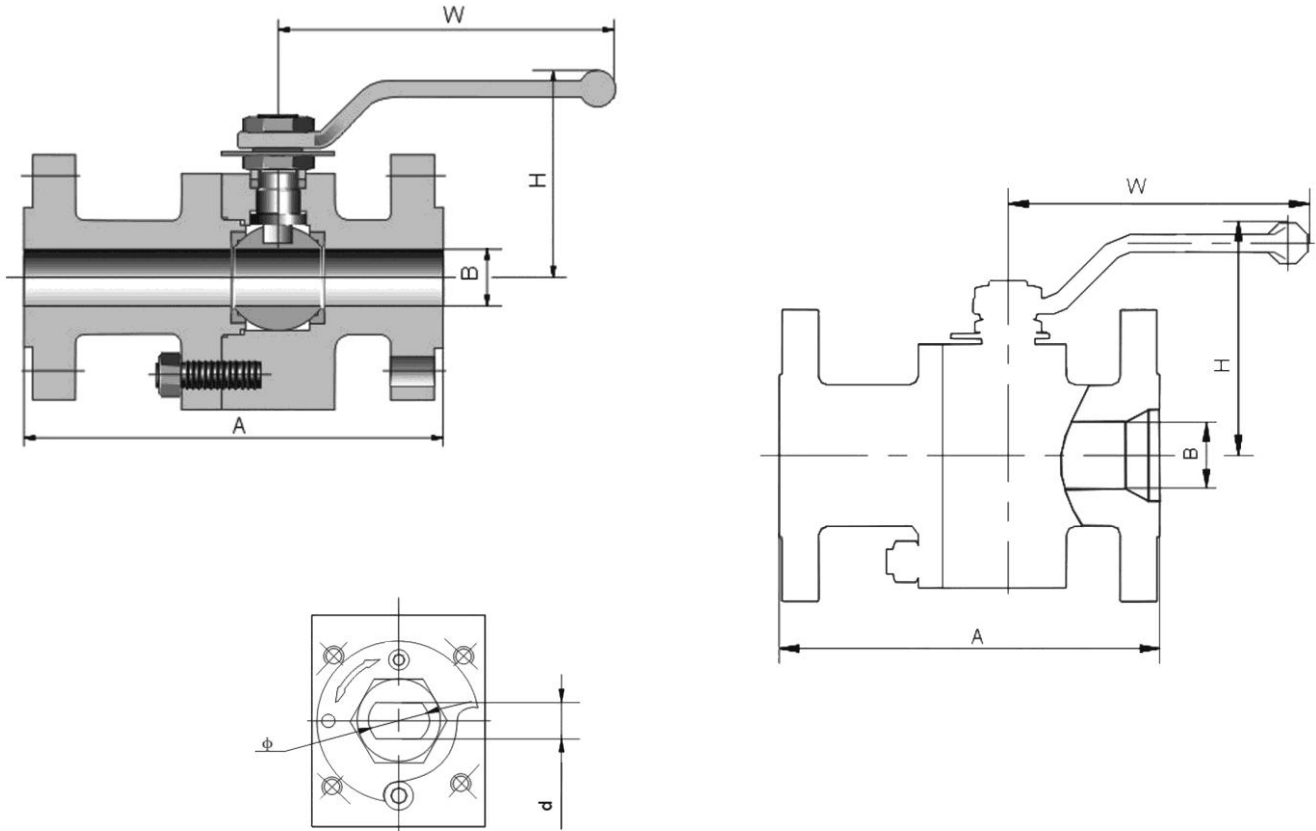
BAF Floating Ball Valve, Two Piece Body, Class 150 & 300 (Forged Steel)



CLASS 150									
NPS	A	B	W	H	d	φ	W	T	ISO
inch	mm	mm	mm	mm	mm	mm	TKg	N.m	Flange
1/2	127	25	260	110	11	16	6	20	F03
1 1/4x1	140	25	260	110	11	16	8	20	F03
1 1/2	165	38	330	160	14	22	12	55	F07
2x1 1/2	178	35	330	160	14	22	13	55	F07
2	178	50	330	170	14	22	15	60	F07
2 1/2x2	191	50	330	170	14	22	17	60	F07
2 1/2	191	62	330	180	16	26	19	100	F07
3x2	203	50	330	170	14	22	20	60	F07
3	203	76	400	190	18	27	22	120	F07
4x3	229	76	400	190	18	27	42	120	F07
4	229	100	400	224	28	36	46	140	F10
6x4	394	100	400	224	28	36	80	140	F10
6	394	150	500	260	30	40	110	600	F12
8	457	201	600	320	34	50	175	1200	F14

CLASS 300									
NPS	A	B	W	H	d	φ	W	T	ISO
inch	mm	mm	mm	mm	mm	mm	TKg	N.m	Flange
1/2 3/8	140	13	160	62	7	10	5	10	/
1 3/4	165	19	160	90	8	12	8	16	/
1	165	25	250	120	11	16	10	27	F03
1 1/4x1	178	25	250	120	11	16	11	27	F03
1 1/2	191	38	330	160	14	22	18	70	F07
2 x 1/2	216	35	330	160	14	22	19	70	F07
2	216	50	330	170	14	22	22	80	F07
2 1/2x2	241	50	330	170	14	22	23	80	F07
2 1/2	241	62	330	180	16	26	28	95	F07
3x2	283	50	330	170	14	22	30	80	F07
3	283	76	400	190	18	27	38	120	F07
4x3	305	76	400	190	18	27	52	120	F07
4	305	100	400	224	28	36	78	240	F10
6x4	403	100	400	224	28	36	100	240	F10
6	403	150	500	260	30	40	150	700	F12
8x6	502	150	600	260	30	40	150	700	F12

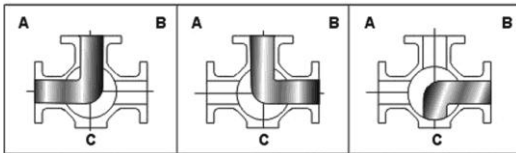
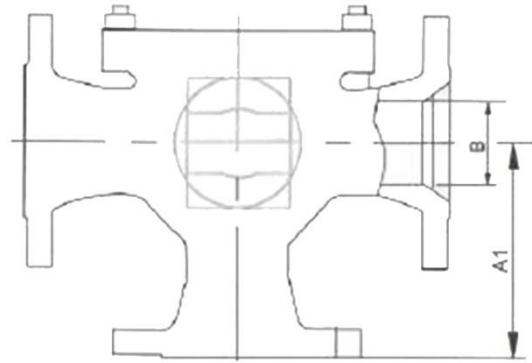
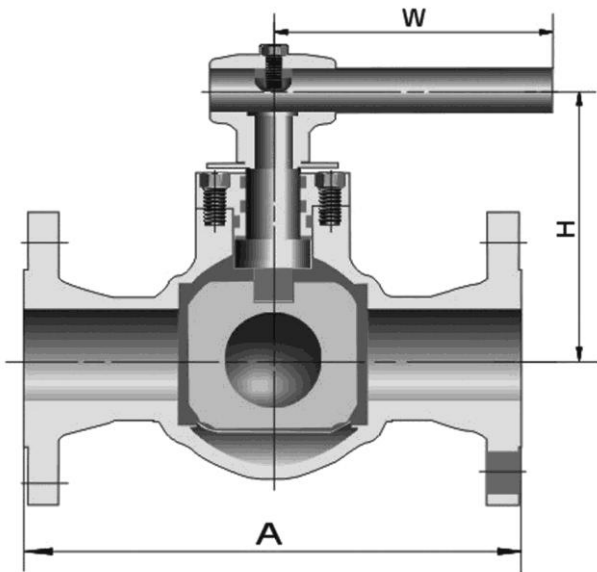
BAF Floating Ball Valve, Two Piece Body, Class, CLASS 600 ~ 900 (Forged Steel)



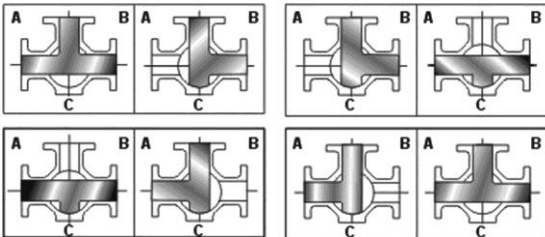
CLASS 600										
NPS	A	B	W	H	d	φ	WT	T	ISO	
inch	mm	mm	mm	mm	mm	mm	Kg	N.m	Flange	
1/2	216	25	330	187	12	18	10	45	F04	
1 1/4 1	229	25	330	137	12	18	14	45	F04	
1 1/2	241	38	330	150	16	24	18	96	F07	
2x1 1/2	292	38	330	150	16	24	20	96	F07	
2	292	50	400	175	18	27	22	130	F07	
2 1/2x2	330	50	400	175	18	27	27	130	F07	
2 1/2	330	62	400	195	20	32	28	150	F07	
3x2	356	50	400	175	18	27	33	130	F07	
3	356	76	600	208	28	36	40	200	F10	
4x3	432	76	600	208	28	36	75	200	F10	
4	432	100	600	254	32	48	80	360	F12	
6x4	559	100	600	254	32	48	155	360	F12	

CLASS 900										
NPS	A	B	W	H	d	φ	WT	T	ISO	
inch	mm	mm	mm	mm	mm	mm	Kg	N.m	Flange	
3/4	229	19	275	110	14	20	14	35	/	
1	254	25	300	120	16	22	17	70	F05	
1 1/4	280	32	330	130	18	24	23	90	F05	
1 1/2	305	38	350	140	18	26	28	140	F07	
2x1 1/2	368	38	350	140	18	26	32	140	F07	
2	368	50	400	175	18	27	40	200	F07	

BAF Floating Ball Valve, Three-Way, Class 150 (Cast Steel)



Three-way ball valves have two directions in open condition. Rotating ball ¼ turn can block or circulate the medium



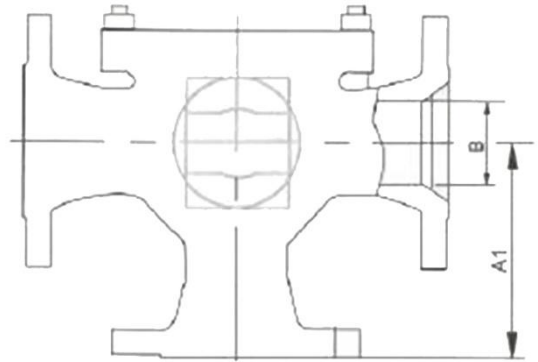
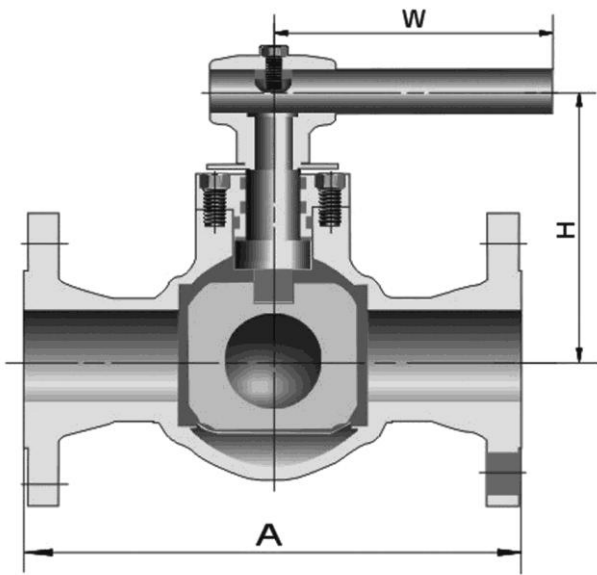
It is available to have two or three directions in the through status at the same time. The ball rotates ½ turn to block or circulate.

CLASS 150						
NPS(inch)	1/2	3/4	1	1 1/2	2	2 1/2
A(mm)	140	165	165	250	260	320
A1(mm)	70	83	83	125	130	160
B(mm)	13	19	25	38	49	62
H(mm)	64	84	84	145	150	185
W(mm)	160	230	230	300	350	400
T(N.m)	18	20	20	48	50	85

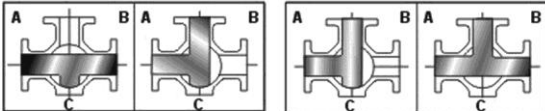
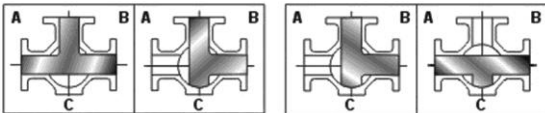
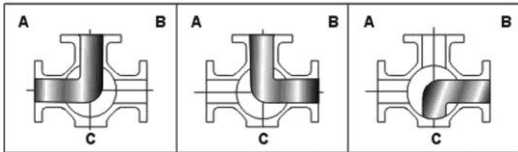
CLASS 150						
NPS(inch)	3	4	*6	*8	*10	*12
A(mm)	320	370	510	580	670	720
A1(mm)	160	185	255	290	335	360
B(mm)	74	100	150	201	252	303
H(mm)	190	220	390	460	498	540
W(mm)	400	650	460	600	600	600
T(N.m)	96	155	580	980	2080	3500



BAF Floating Ball Valve, Three-Way, Class 300 (Cast Steel)



Three-way ball valves have two directions in open condition. Rotating ball 1/4 turn can block or circulate the medium



It is available to have two or three directions in the through status at the same time. The ball rotates 1/2 turn to block or circulate.

CLASS 300						
NPS(inch)	1/2	3/4	1	1 1/2	2	2 1/2
A(mm)	140	165	165	250	260	320
A1(mm)	70	83	83	125	130	160
B(mm)	13	19	25	38	49	62
H(mm)	64	84	84	145	150	185
W(mm)	160	230	230	300	350	400
T(N.m)	20	28	33	60	70	90

CLASS 300						
NPS(inch)	3	4	*6	*8	*10	*12
A(mm)	320	370	510	580	670	720
A1(mm)	160	185	255	290	335	360
B(mm)	70	100	150	201	252	303
H(mm)	190	220	390	460	498	540
W(mm)	400	650	460	600	600	600
T(N.m)	120	250	1084	2244	4500	6000

BAF TRUNNION MOUNTED BALL VALVE

BAF Ball valves TM are designed to meet various applications in the chemical, petrochemical, upstream storage and power industries. BAF design covers plate as well as pin trunnion valves of top entry or side entry construction towards the latest international standards and can be supplied in a large variety to body and trim materials.

Packing seal arrangements meet the latest standards for fugitive emission making our valves suitable for the most severe applications. As standard BAF offers a blow out proof and anti static stem design.

Design standards :

- API6D
- ASME B16.34
- API607 fire safe design

Face to Face and end to end dimension conform to :

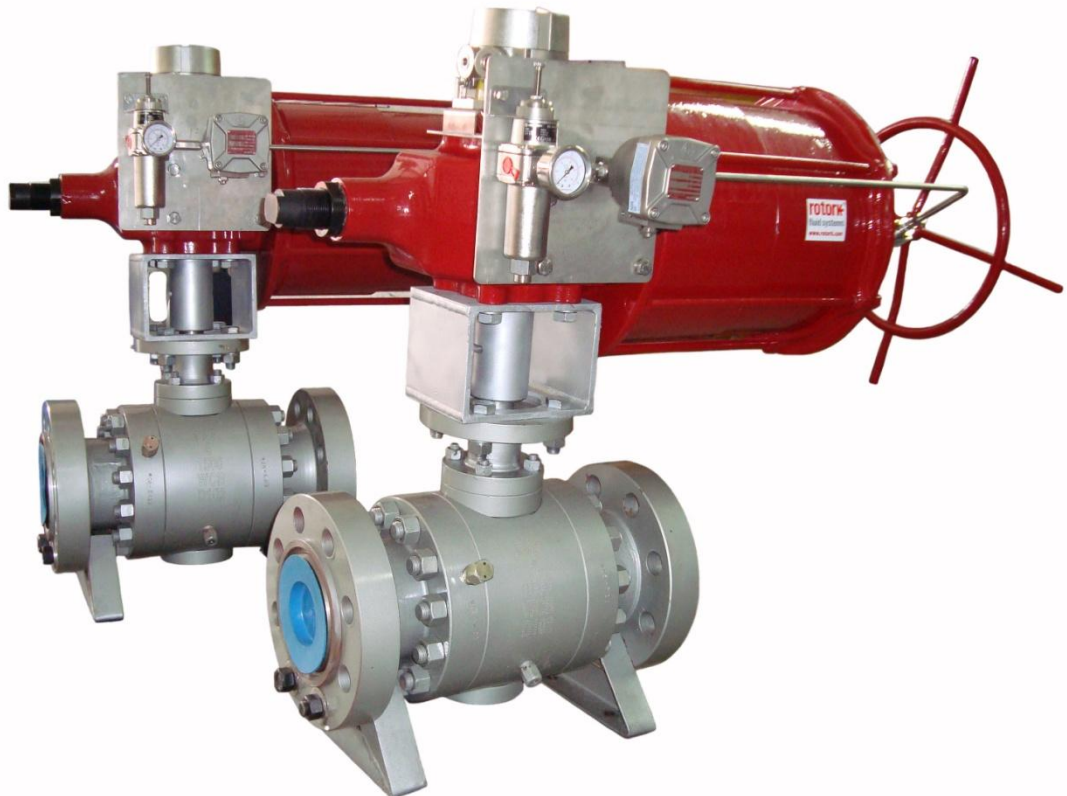
- ASME B16.10

Connections :

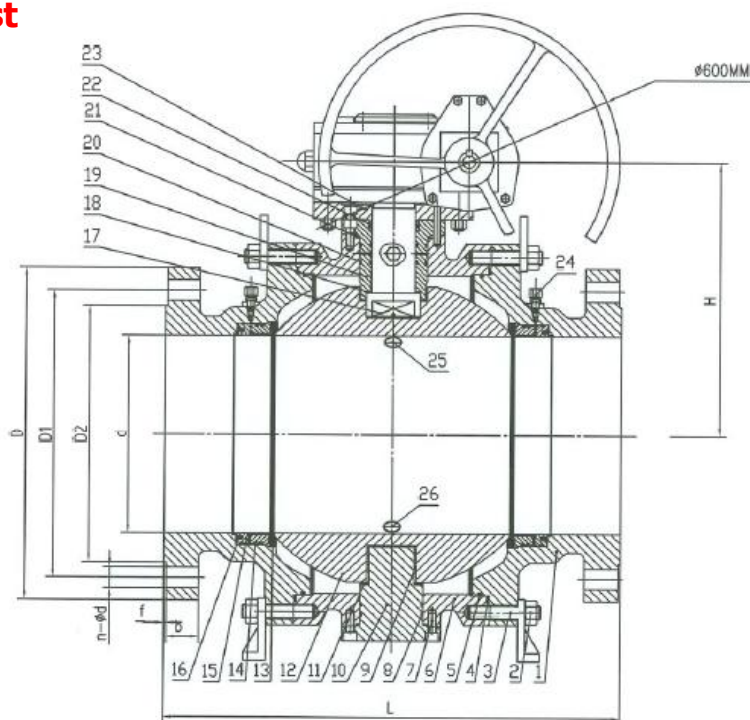
- End flange dimensions conform to ASME B16.5
-
- BW end dimensions conform to ASME B16.25

Inspection and test in accordance with :

- API 598
- BS EN 12266-1
- API6D



Part list



Valve Part Name	
1	Bonnet
2	Bonnet nut
3	Bonnet bolt
4	Gasket
5	O-ring
6	Body
7	Socket head screw
8	O-ring
9	Stem Bearing
10	Bottom cover
11	Gasket
12	Ball
13	Seat ring
14	O ring
15	Seat
16	Spring
17	Stern
18	Gasket
19	Stuffing box seal
20	O-ring
21	Stuffing box seal
22	Yoke
23	Worm-wheel
24	Injection fitting
25	Block
26	Bleed

Pressure test

CLASS	Rating	Body test	High Pressure Seal Test	Air seat test
	bar	bar	bar	bar
150	19	28,5	20,9	6
300	5	75	55	6
600	99	148,5	108,9	6
900	149	223,5	163,9	6
1500	248	372	272,8	6
2500	413	619,5	454,3	6

Bill of material

Valve Part Name	Carbon Steel			Stainless Steel	
	WCB / 13Cr	WCB / 304	WCB / 316	CF8	CF8M
Body	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M
Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H
Bolting	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7
O ring	Viton	Viton	Viton	Viton	Viton
Stem Bearing	Metal backed PTFE	Metal backed PTFE	Metal backed PTFE	Metal backed PTFE	Metal backed PTFE
Gasket	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
Stem Bearing	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
Key	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
Key	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
O ring	Viton	Viton	Viton	Viton	Viton
Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
Cover	ASTM A105	ASTM A105	ASTM A105	ASTM A182 F304	ASTM A182 F316
Capscrew	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7
O ring	Viton	Viton	Viton	Viton	Viton
Gear	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
Ball	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
Seat	Reinforced PTFE	Reinforced PTFE	Reinforced PTFE	Reinforced PTFE	Reinforced PTFE
O ring	Viton	Viton	Viton	Viton	Viton
Seat retainer	ASTM A105	ASTM A105	ASTM A105	ASTM A182 F304	ASTM A182 F316
Spring	SS304 or inconel 750	SS304 or inconel 750	SS3316 or inconel 750	SS304 or inconel 750	SS3316 or inconel 750
Gasket	Viton, PTFE or Graphite	Viton, PTFE or Graphite	Viton, PTFE or Graphite	Viton, PTFE or Graphite	Viton, PTFE or Graphite
Body Bolting	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7
Body Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H
Closure	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	CF8	CF8M
Lower trunnion	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
O ring	Viton	Viton	Viton	Viton	Viton
Gasket	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
Lower cover	ASTM A105	ASTM A105	ASTM A105	ASTM A182 F304	ASTM A182 F316
Capscrew	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7

Other material combinations are possible upon request

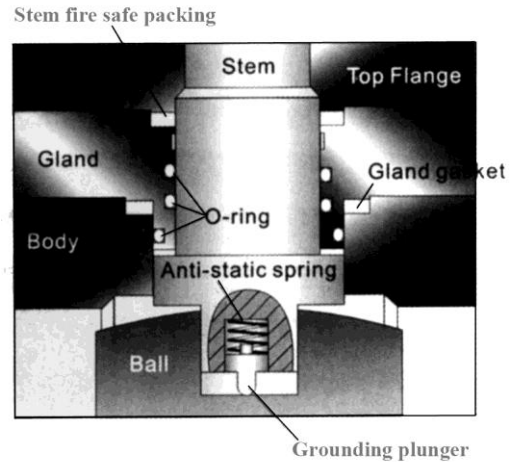
BAF TRUNNION MOUNTED BALL VALVES DESIGN FEATURES

Anti blow-out stem

The stem is made separately from the ball, the lower end of the stem is designed with an integral collar to be blow-out proof

Anti static device

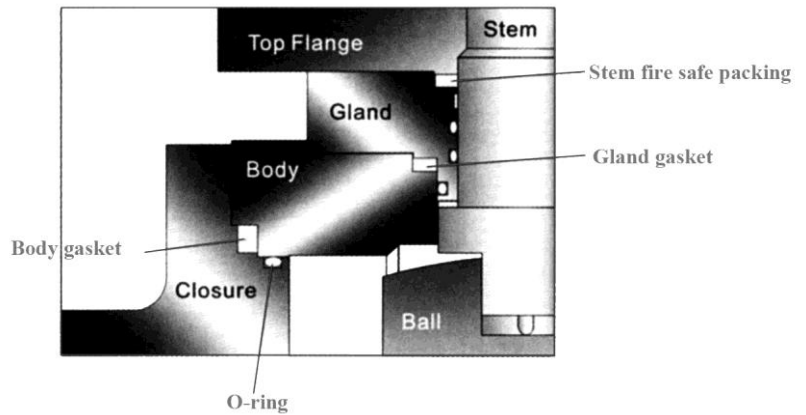
An antistatic device is standard feature of the ball valve. A spring-loaded pin assures the electrical continuity between ball, stem and body, so as to avoid spark during turning of the stem to open and close the valve, which could be dangerous in case of hazardous area installation.



Super fire safe design

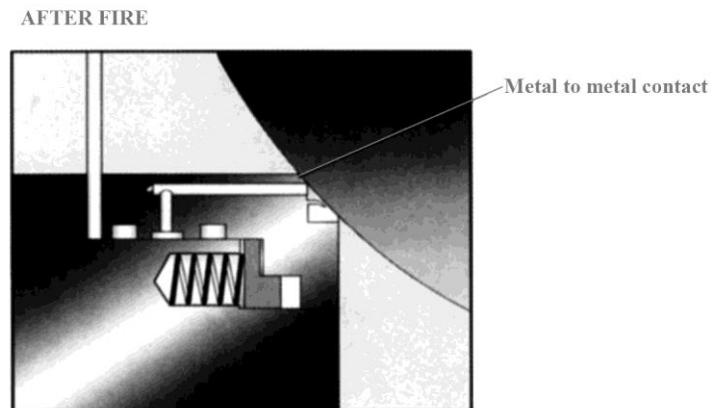
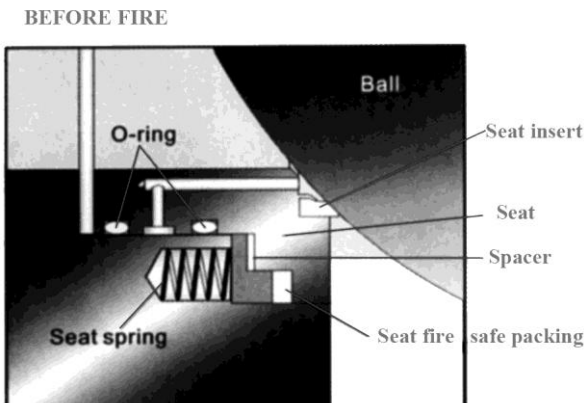
External leakage prevention

Leakage from the valve stem area is prevented by double sealing with 2 O-rings and a gland packing gasket. Leakage through the valve body joint is also blocked by double sealing with O-ring and a body gasket. After a fire has deteriorated O-rings, gland gasket, body gasket and stem fire safe packing are the measures that prevent external fluid leakage.



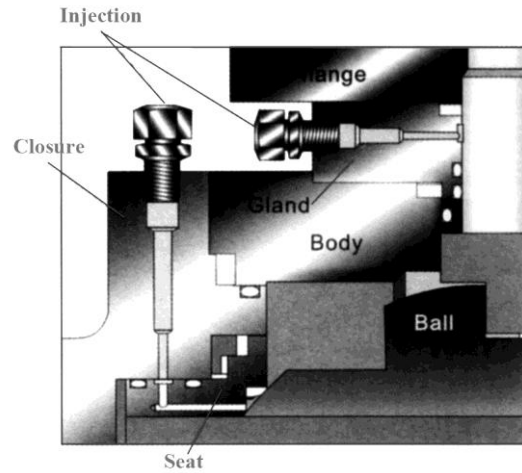
Internal leakage prevention

When non-metal materials such as O-rings, seat insert and spacer are decomposed or deteriorated by fire, the edge of the metal seat preloaded by seatspring comes into contact with the ball to shut off the line fluid to minimize internal leakage through the valve bore. Also the fire safe flexible graphite seat packing will be compressed by the seat spring to prevent leakage between the valve body and seat.



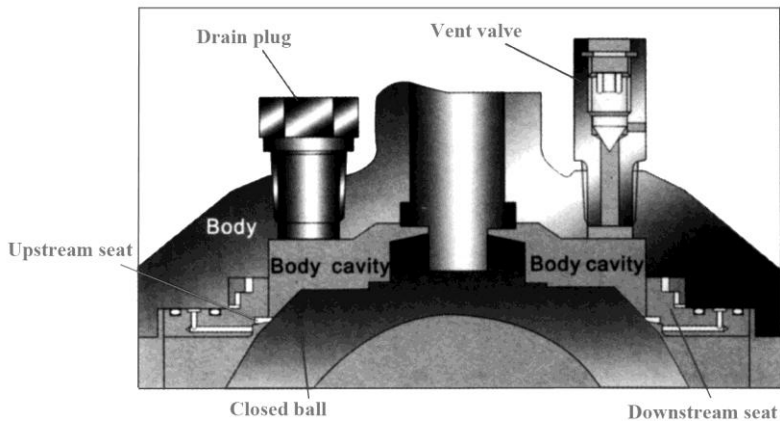
Emergency sealant injection system

6 inch and larger trunnion mounted ball valves will be installed with sealant injection fittings on both stem and seats. When the sealing materials (seat sealing or stem o-ring) are damaged or decomposed by fire or other accidental causes. Leakage from the seat and stem can be prevented by injection of sealant into these fittings. Fitting is also internally installed with a second check valve to provide back-up sealing.



Double block and bleed

Both ball seats shut off the lining fluid independently on the upstream and downstream side, allowing double block operation. When the pressure is simultaneously applied to both sides of the ball in the closed position, the valve bore and the body cavity will be isolated from each other, and residue within the body cavity can be released through the drain plug.



Cavity pressure relief

When cavity pressure (P_c) is lower than seat spring and line pressure (P_l) i.e. $P \cdot D_1 < F_s$, then contact between ball and seat ring is assured to provide a tight seal. When cavity pressure is higher than seat spring and line pressure, i.e.

$P \cdot D_1 > F_s$, the self relieving action allows the valve seat to move slightly away from the ball surface, therefore and over pressure acting in the body cavity is discharged into the line to restore the balance between the body cavity and line (either upstream or downstream).

Fig a. $\Delta P \cdot D_1 < F_s$

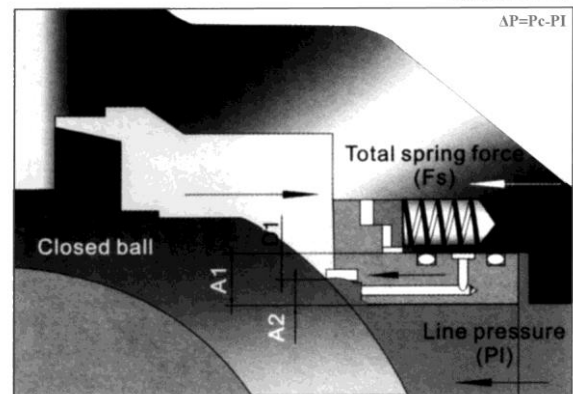
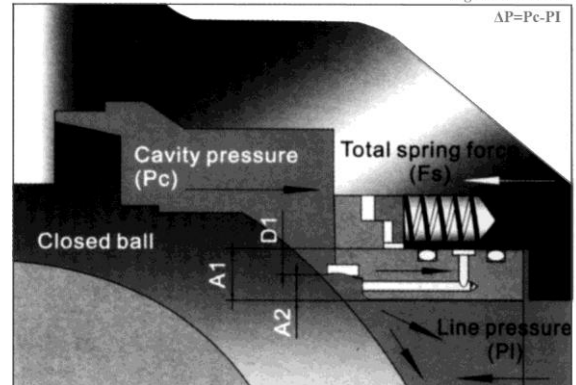
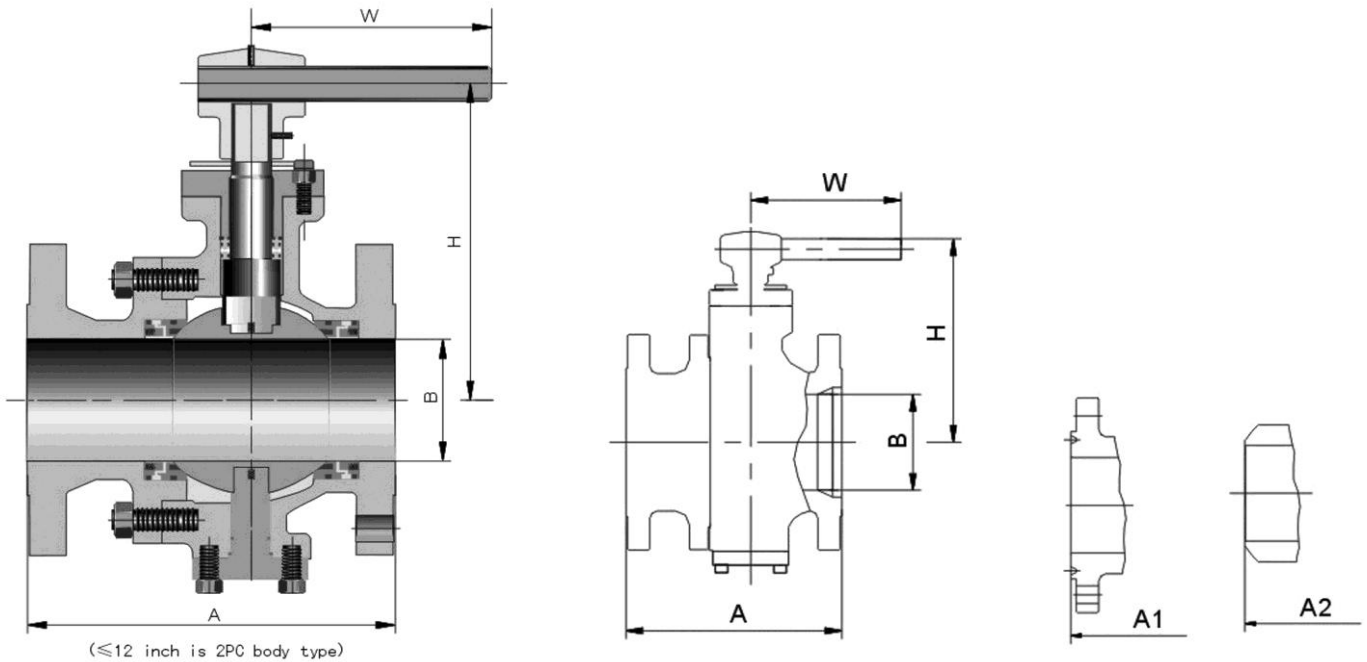


Fig b. $\Delta P \cdot D_1 > F_s$



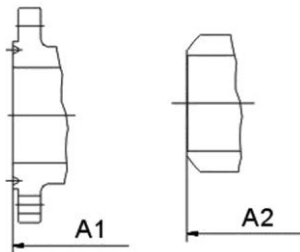
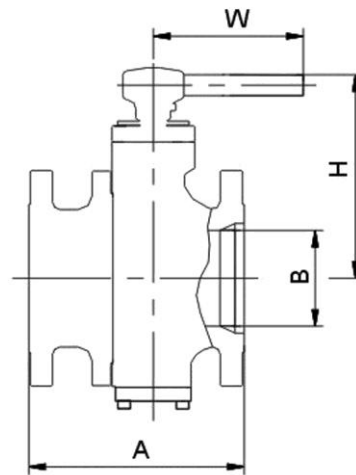
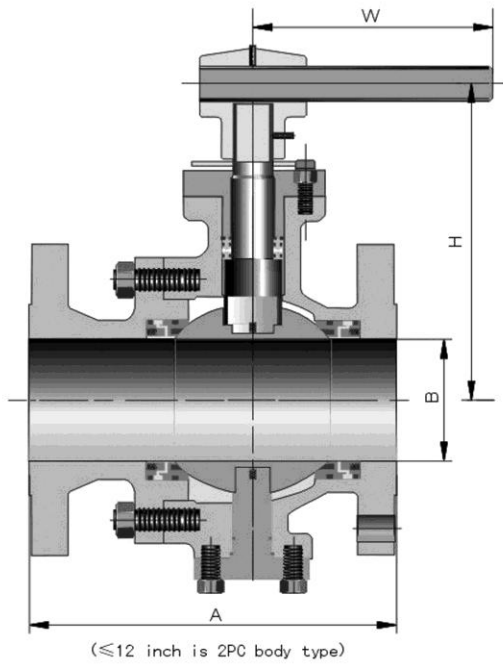
BAF Trunnion Mounted Ball Valves, Two Piece Body, Class 150 & 300, (Cast Steel)



CLASS 150								
NPS	A	A1	A2	T	B	WT	H	W
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	178	191	216	49	152	300	19	50
3x2	203	216	283	49	152	300	32	50
3	203	216	283	74	176	450	36	65
4x3	229	241	305	74	176	450	50	65
4	229	241	305	100	205	650	53	151
6x4	394	406	457	100	205	650	96	151
6	394	406	457	150	300	460	100	320
8	457	470	521	201	360	600	172	1020
10x8	533	546	559	201	360	600	275	1020
10	533	546	559	252	374	600	284	1085
12x10	610	622	635	252	374	600	482	1085
12	610	622	635	303	415	600	494	1562
14x12	686	699	762	303	415	600	600	1562

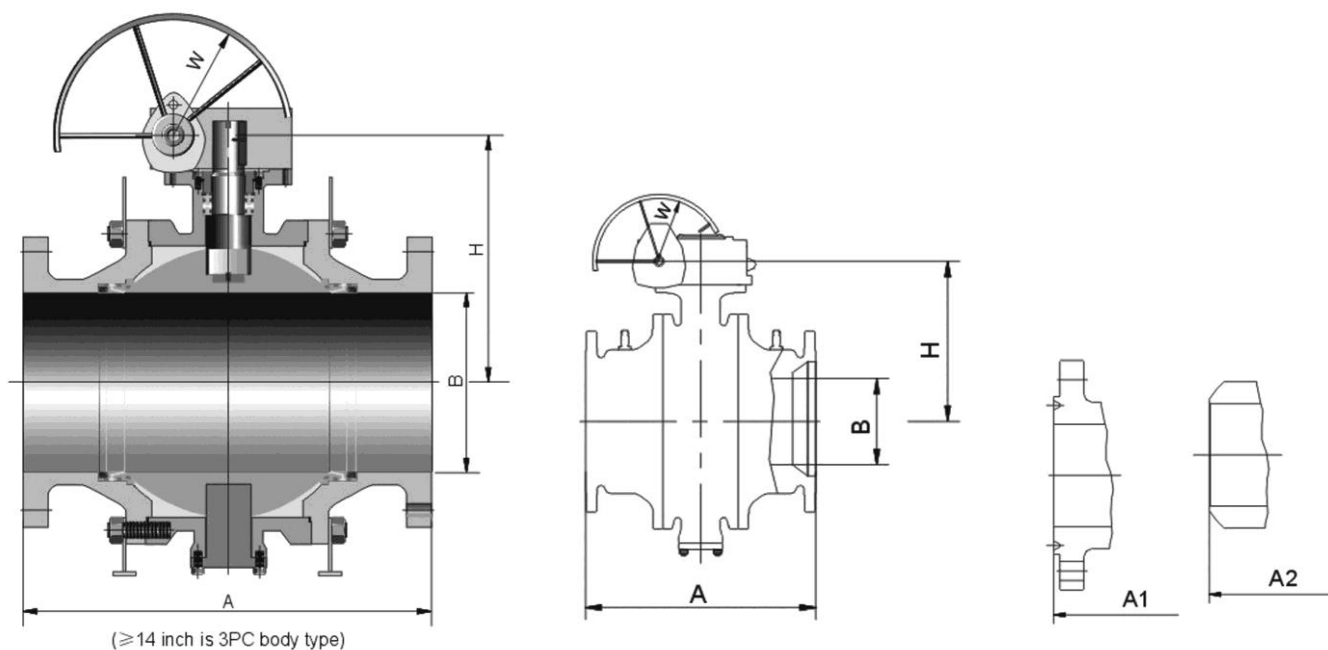
CLASS 300								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	216	232	216	49	138	400	18	86
3x2	283	298	283	49	138	400	25	86
3	283	298	283	74	215	400	30	110
4x3	305	321	305	74	215	400	62	110
4	305	321	305	100	250	650	95	270
6x4	403	419	457	100	250	650	154	270
6	403	419	457	150	310	460	200	544
8	502	518	521	201	343	600	246	1620
10x8	568	584	559	201	343	600	300	1620
10	568	584	559	252	396	600	308	1824
12x10	648	664	635	252	396	600	496	1824
12	648	664	635	303	423	600	512	2632
14x12	762	778	762	303	423	600	650	2632

BAF Trunnion Mounted Ball Valves, Two Piece Body, Class 600, (Cast Steel)



CLASS 600								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	292	295	292	49	157	400	30	148
3x2	356	359	356	49	157	400	42	148
3	356	359	356	74	181	600	55	200
4x3	432	435	432	74	181	600	72	200
4	432	435	432	100	22	650	86	460
6x4	559	562	559	100	222	650	128	460
6	559	562	559	150	325	460	225	908
8	660	664	660	201	355	600	354	2560
10x8	787	791	787	201	355	600	447	2560
10	787	791	787	252	400	600	604	3048
12x10	838	841	838	252	400	600	740	3048
12	838	841	838	303	440	600	830	4300

BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 150 & 300, (Cast Steel)



CLASS 150

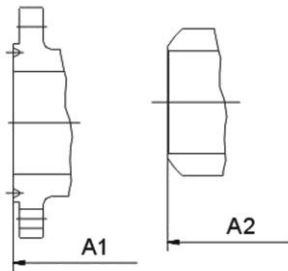
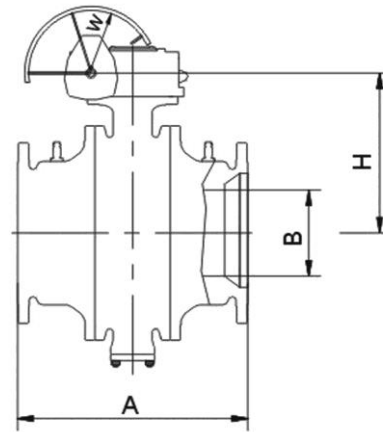
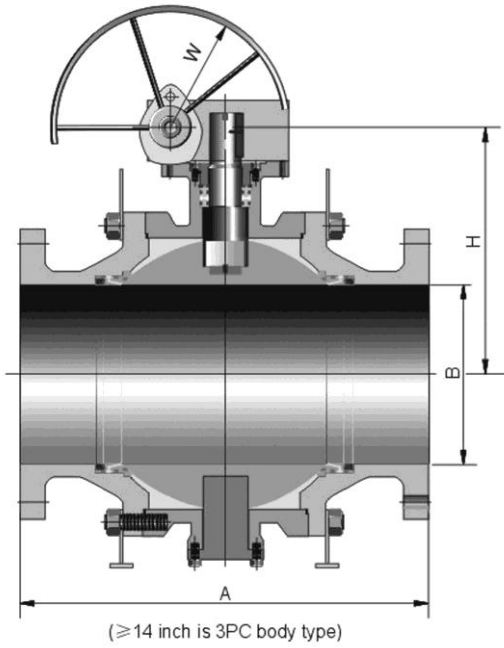
NPS inch	A	A1	A2	B	W	H	WT	T
	mm	mm	mm	mm	mm	mm	Kg	N.m
14	686	699	762	334	600	460	592	2426
16 x 12	762	775	838	303	600	440	564	1526
16 x 14	762	775	838	334	600	460	655	2426
16	762	775	838	385	700	500	805	3018
18 x 6	864	876	914	385	700	500	905	3018
18	864	876	914	436	700	540	954	4574
20 x 18	914	927	991	436	700	540	1141	4574
20	914	927	991	487	700	570	1308	6016
24 x 20	1067	1080	1143	487	700	570	1525	6016
24	1067	1080	1143	589	700	660	1656	9750
28 x 24	1245	/	1346	589	700	660	1989	9750
28	1245	/	1346	684	762	810	2409	14540
30 x 28	1295	/	1397	684	762	810	2520	14540
32 x 28	1372	/	1524	684	762	810	2830	14540
30	1295	/	1397	735	762	930	2686	18005
32	1371	/	1524	779	762	965	3096	12350

CLASS 300

NPS inch	A	A1	A2	B	W	H	WT	T
	mm	mm	mm	mm	mm	mm	Kg	N.m
14	762	778	762	334	700	420	612	4280
16 x 12	838	854	838	303	600	386	592	2632
16 x 14	838	854	838	334	700	420	925	4280
16	838	854	838	385	700	530	1018	5376
18 x 6	914	930	914	385	700	530	1110	5376
18	914	930	914	436	700	580	1181	8000
20 x 18	991	1010	991	436	700	580	1280	8000
20	991	1010	991	487	762	640	1352	10610
24 x 20	1143	1165	1143	487	762	640	1710	10610
24	1143	1165	1143	589	762	720	1906	17280
28 x 24	1346	1372	1346	589	762	720	2008	17280
28	1346	1372	1346	684	762	918	2114	25102
30 x 28	1397	1422	1397	684	762	918	2312	25102
32 x 28	1524	1553	1524	684	762	918	2419	25102
30	1394	1422	1397	735	762	1100	2355	31664
32	1524	1553	1524	779	762	1360	2586	37586

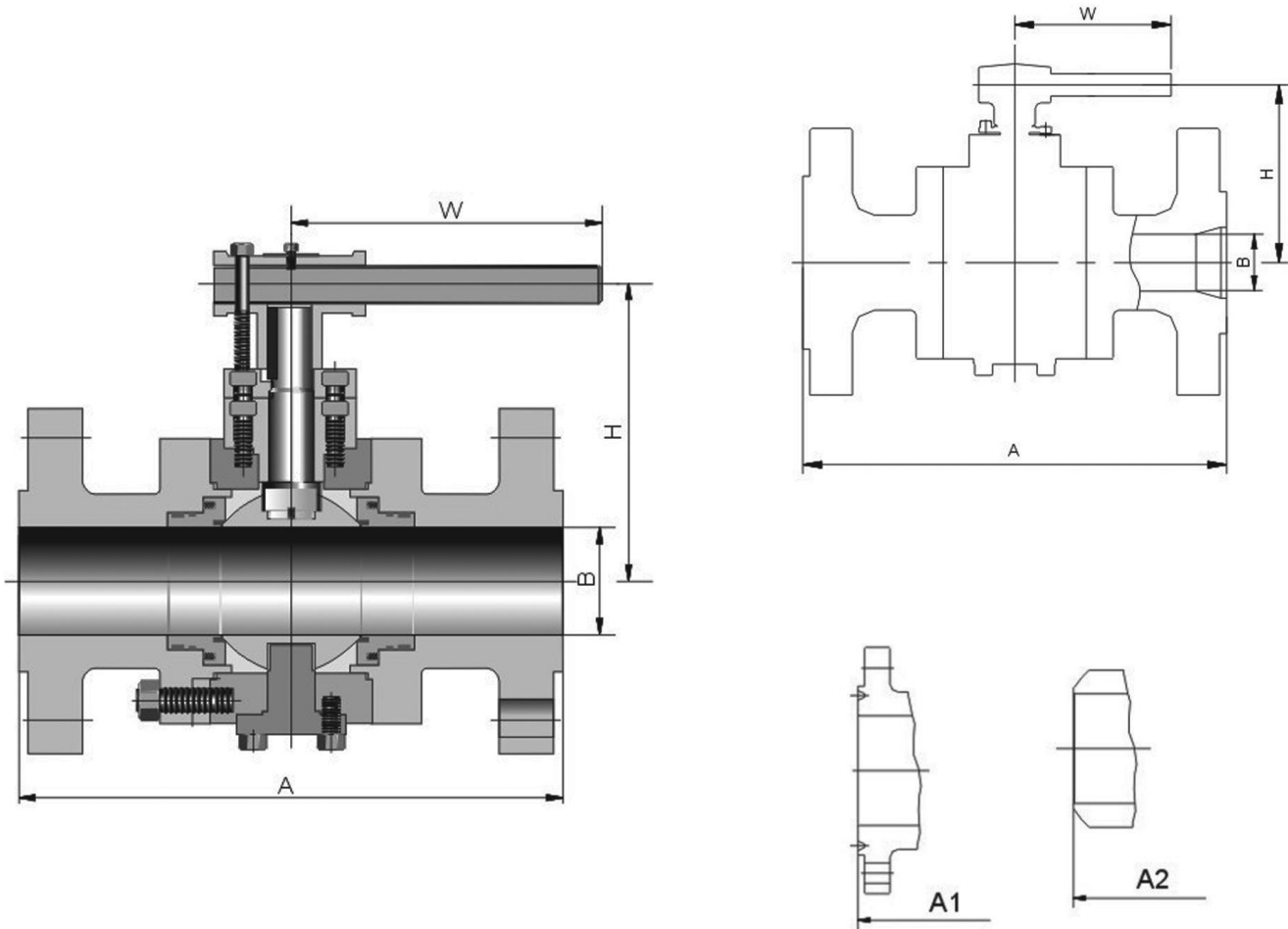


BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 600, (Cast Steel)



CLASS 600								
NPS	A	A1	A2	B	W	H	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
14	889	892	889	334	700	450	1150	7255
16 x 12	991	994	991	303	700	440	1016	4300
16 x 14	991	994	991	334	700	450	1218	7255
16	991	994	991	385	700	500	1550	9174
18 x 6	1092	1095	1092	385	700	500	1640	9174
18	1092	1095	1092	436	700	560	2145	13520
20 x 18	1194	1200	1194	436	700	560	2296	13520
20	1194	1200	1194	487	762	620	2864	18034
24 x 20	1397	1407	1397	487	762	620	3018	18034
24	1397	1407	1397	589	762	700	3696	29512
28 x 24	1549	1562	1549	589	762	700	3998	29512
28	1549	1562	1549	684	762	840	4060	42264
30 x 28	1651	1664	1651	684	762	840	4290	42264
32 x 28	1778	1794	1778	684	762	840	4584	42264

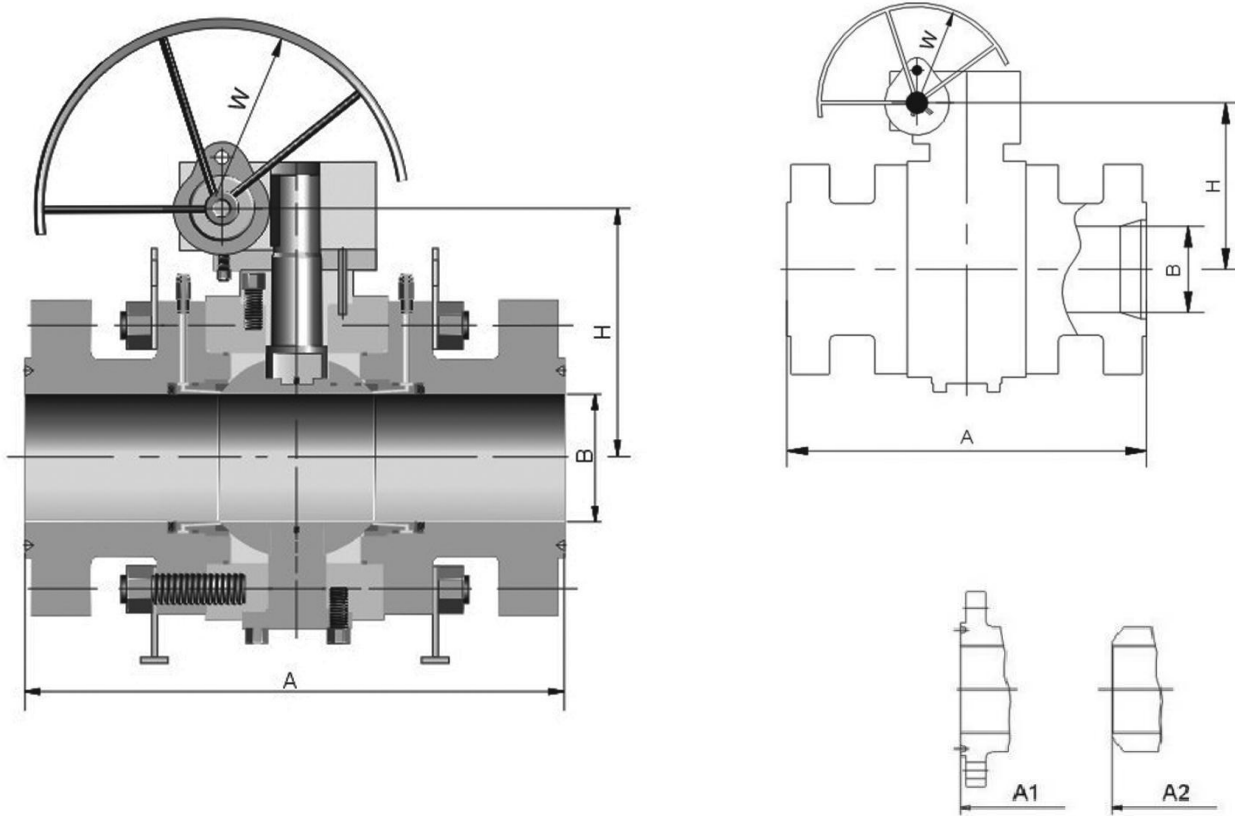
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 150 & 300 (Forged Steel)



CLASS 150								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	178	191	216	49	146	300	17	50
3 x 2	203	216	283	49	146	300	30	50
3	203	216	283	74	200	400	37	65
4 x 3	229	241	305	74	200	400	42	65
4	229	241	305	100	204	450	49	151
6 x 4	394	406	457	100	204	450	100	151

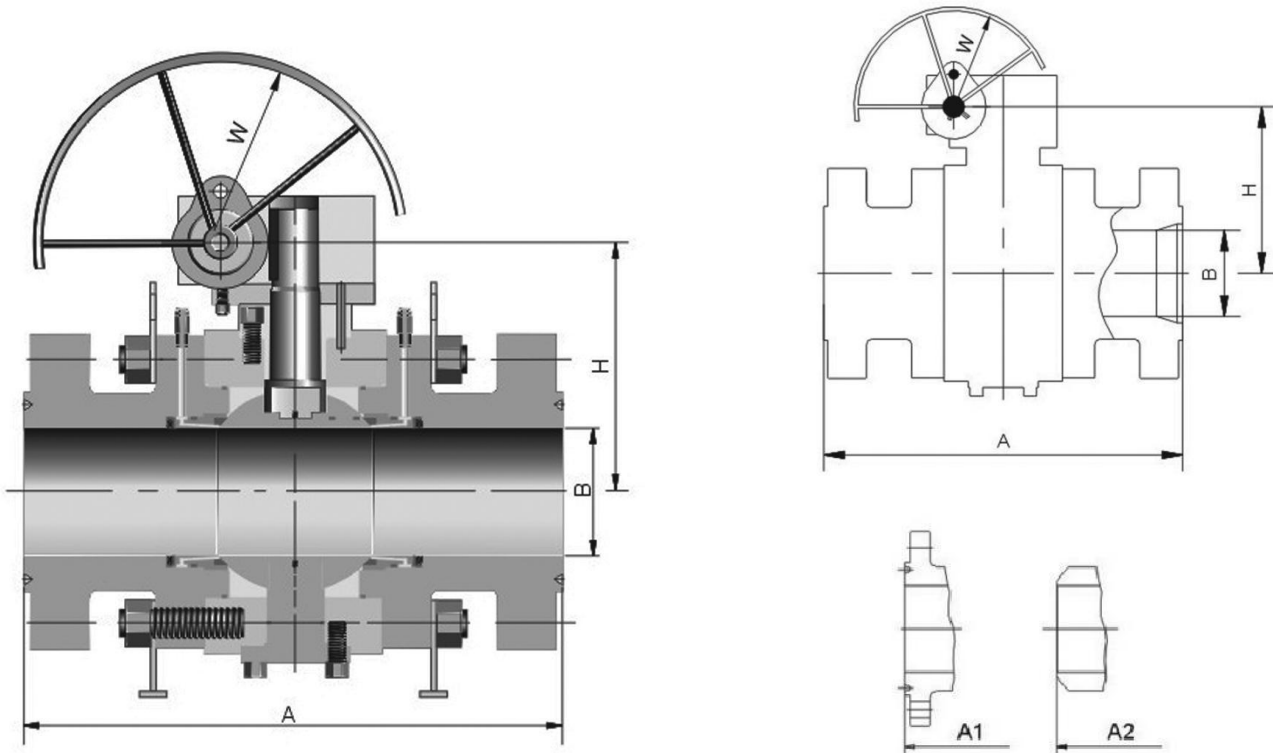
CLASS 300								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	216	232	216	49	143	300	22	86
3 x 2	283	298	283	49	143	300	40	86
3	283	298	283	74	185	500	45	110
4 x 3	305	321	305	74	185	500	60	110
4	305	321	305	100	204	600	70	270
6 x 4	403	419	457	100	204	600	150	270

BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 150 (Forged Steel)



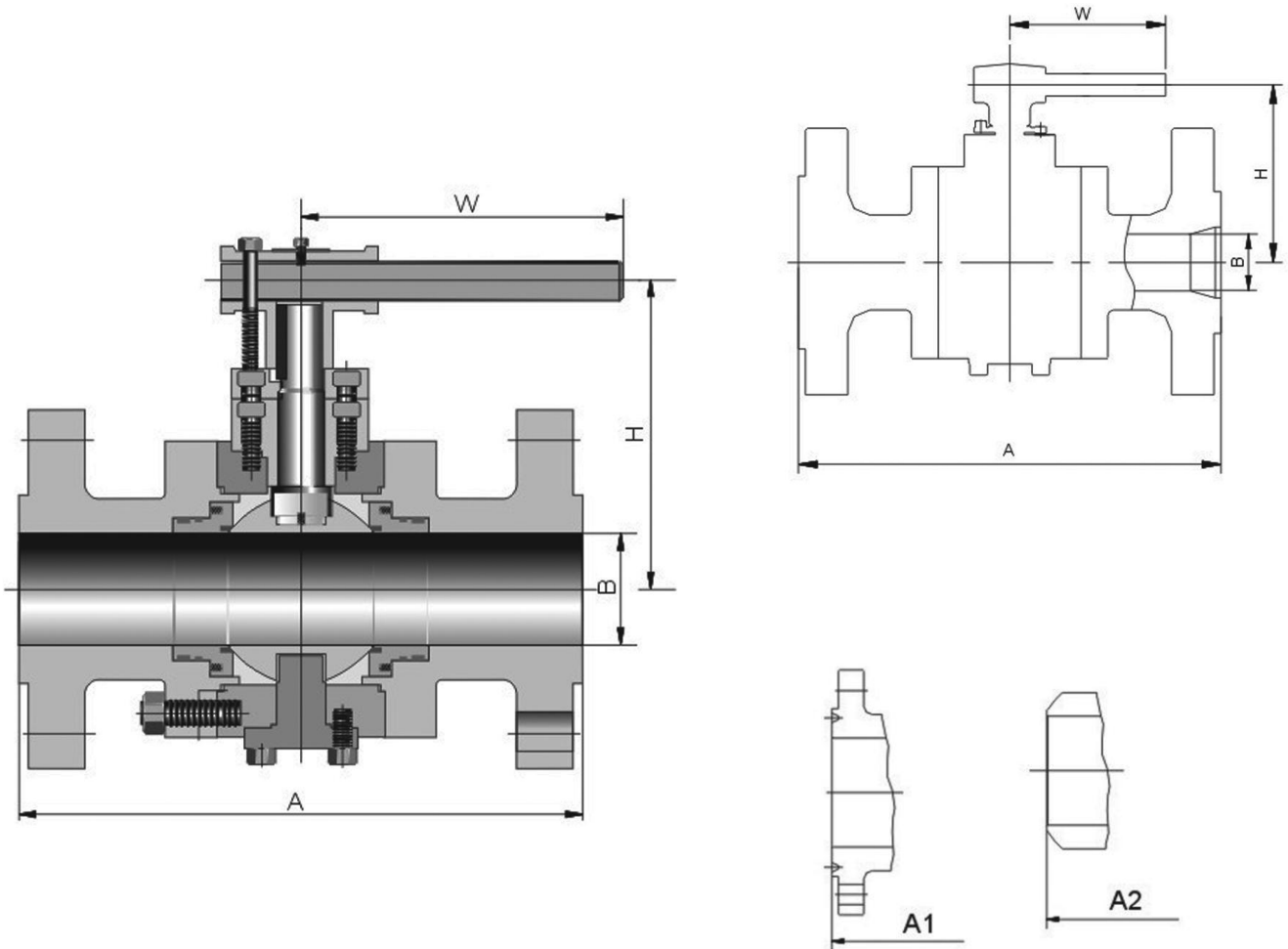
CLASS 150								
NPS	A	A1	A2	B	W	H	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
6	394	406	457	150	600	280	154	320
8 x 6	457	470	521	150	600	280	240	320
8	457	470	521	201	600	320	270	1020
10 x 8	533	546	559	201	600	320	370	1020
10	533	546	559	252	600	360	462	1085
12 x 10	610	622	635	252	600	360	535	1085
12	610	622	635	303	600	400	646	1562
14 x 12	686	699	762	303	600	400	845	1562
14	686	699	762	334	600	460	958	2426
16 x 12	762	775	838	303	600	400	1120	1562
16 x 14	762	775	838	334	600	460	1160	2426
16	762	775	838	385	700	500	1248	3018
18 x 16	864	876	914	385	700	500	1350	3018
18	864	876	914	436	700	540	1440	4574
20 x 18	914	927	991	436	700	540	1850	4574
20	914	927	991	487	700	570	1960	6016
24 x 20	1067	1080	1143	487	700	570	2540	6016
24	1067	1080	1143	589	700	660	2810	9750
28 x 24	1245	/	1346	589	700	660	3750	9750
28	1245	/	1346	684	762	810	4045	14540
30 x 28	1295	/	1397	684	762	810	4520	14540
32 x 28	1372	/	1524	684	762	810	4540	14540
30	1295	/	1397	735	762	930	4850	18005
32	1372	/	1524	779	762	965	5490	21350

BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 300 (Forged Steel)



CLASS 300								
NPS	A	A1	A2	B	W	H	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
6	403	419	457	150	600	300	175	544
8 x 6	502	518	521	150	600	300	215	544
8	502	518	521	201	600	323	327	1620
10 x 8	568	584	559	201	600	323	382	1606
10	568	584	559	252	600	365	408	1824
12 x 10	648	664	635	252	600	365	570	1824
12	648	664	635	303	600	386	735	2632
14 x 12	762	778	762	303	600	386	980	2632
14	762	778	762	334	700	420	1162	4280
16 x 12	838	854	838	303	600	386	1080	2332
16 x 14	838	854	838	334	700	420	1250	4280
16	838	854	838	385	700	530	1492	5376
18 x 16	914	930	914	385	700	530	1620	5376
18	914	930	914	436	700	580	1752	8000
20 x 18	991	1010	991	436	700	580	1910	8000
20	991	1010	991	487	762	640	2695	10610
24 x 20	1143	1165	1143	487	762	640	2860	10610
24	1143	1165	1143	589	762	720	3210	17280
28 x 24	1346	1372	1346	589	762	720	4050	17280
28	1346	1372	1346	684	762	918	4575	25102
30 x 28	1397	1422	1397	684	762	918	4970	25102
32 x 28	1524	1553	1524	684	762	918	5010	25102
30	1397	1422	1397	735	762	1100	5590	31664
32	1524	1553	1524	779	762	1360	6240	37580

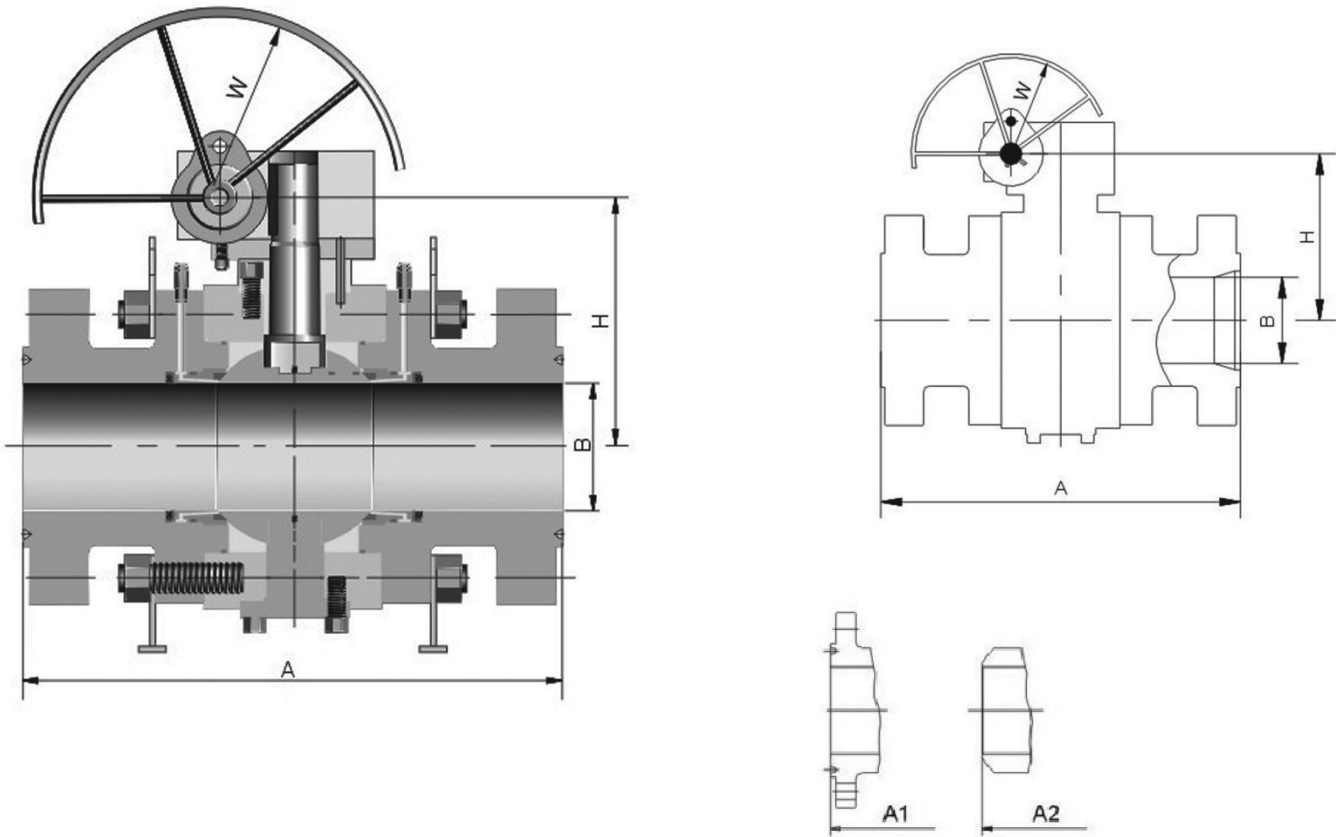
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 600 & 900 (Forged Steel)



CLASS 600								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	292	295	216	49	185	500	32	148
3 x 2	356	359	283	49	185	500	48	148
3	356	359	283	74	190	600	56	200
4 x 3	432	435	305	74	190	600	80	200
4	432	435	305	100	210	650	105	460
6 x 4	559	562	457	100	210	650	210	460

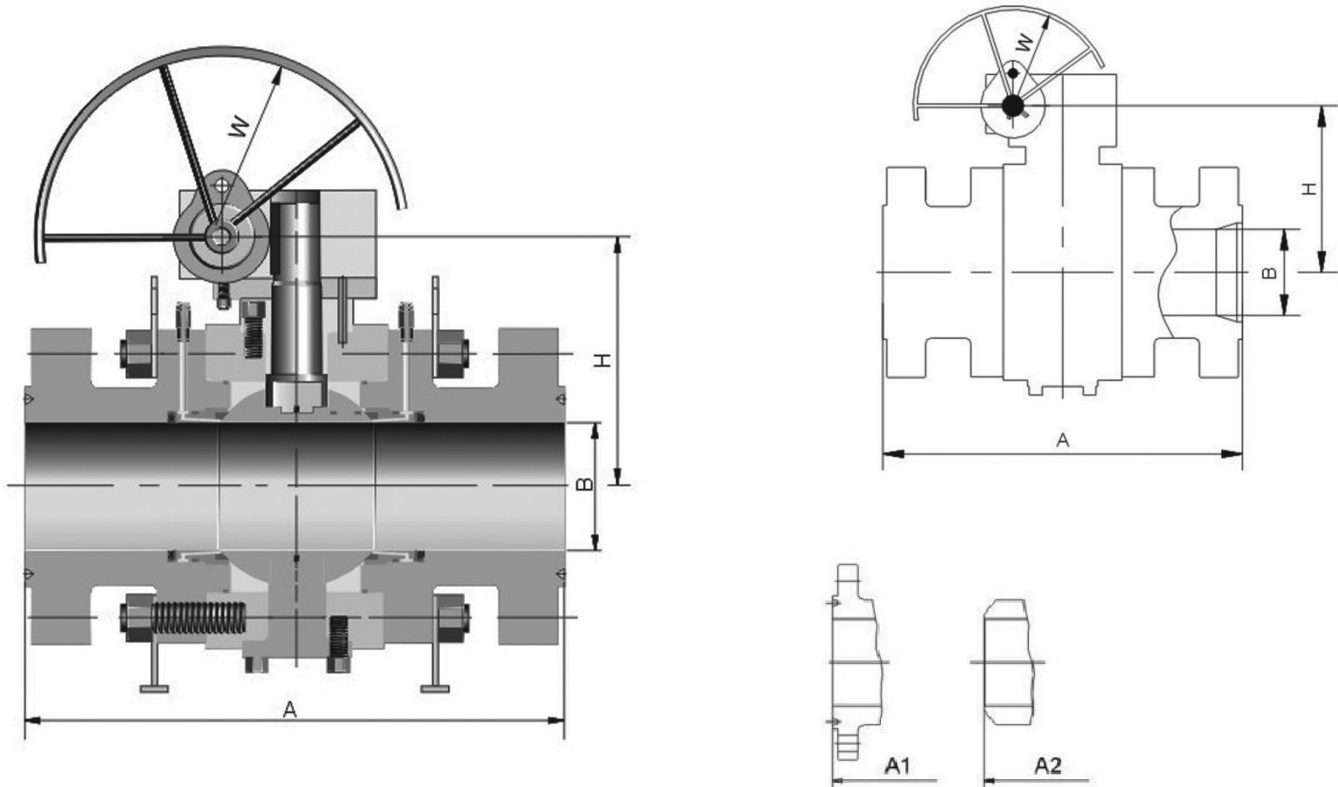
CLASS 900								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	368	371	368	49	480	650	32	148
3 x 2	381	384	381	49	480	650	48	148
3	381	384	381	74	208	700	56	200
4 x 3	457	460	457	74	208	700	80	200
4	457	460	457	100	222	800	105	460
6 x 4	610	613	610	100	222	800	210	460

BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 600 (Forged Steel)



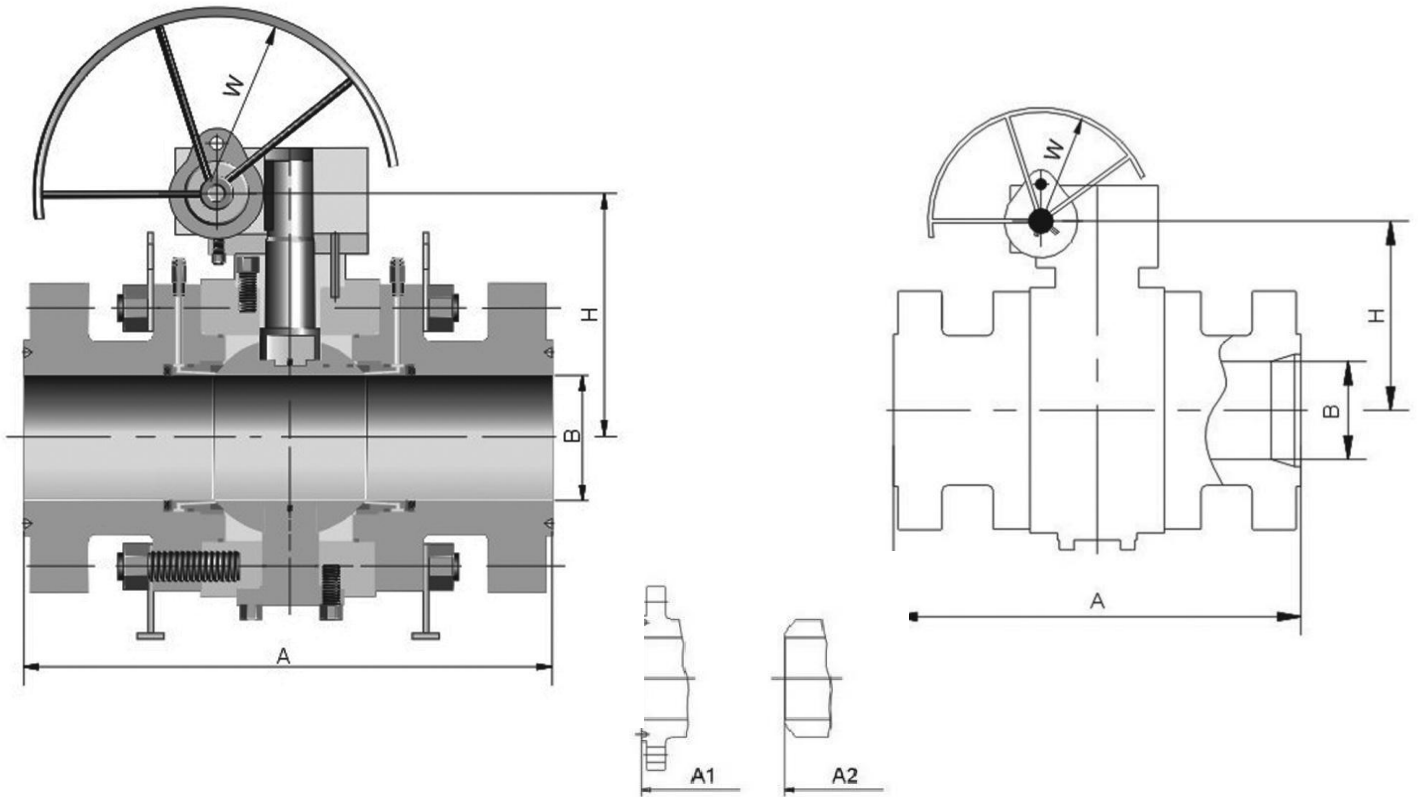
CLASS 600								
NPS	A	A1	A2	B	W	H	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
6	559	562	559	150	600	270	260	908
8 x 6	660	664	660	150	600	270	382	908
8	660	664	660	201	600	320	465	2560
10 x 8	787	791	787	201	600	320	591	2560
10	787	791	787	252	600	350	750	3048
12 x 10	838	841	838	252	600	350	856	3048
12	838	841	838	303	700	400	1090	4300
14 x 12	889	892	889	303	700	450	1150	4300
14	889	892	889	334	700	450	1335	7255
16 x 12	991	994	991	303	700	400	1450	4300
16 x 14	991	994	991	334	700	450	1560	7255
16	991	994	991	385	700	500	1810	9174
18 x 16	1092	1095	1092	385	700	500	2300	9174
18	1092	1095	1092	436	762	560	2500	13520
20 x 18	1194	1200	1194	436	762	560	2750	13520
20	1194	1200	1194	487	762	620	3000	18034
24 x 20	1397	1407	1397	487	762	620	4150	18034
24	1397	1407	1397	589	762	700	5000	29512
28 x 24	1549	1562	1549	589	762	700	5500	29512
28	1549	1562	1549	684	762	840	6100	42264
30 x 28	1651	1664	1651	684	762	840	6800	42264
32 x 28	1778	1794	1778	684	762	840	7200	42264

BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 900 (Forged Steel)



CLASS 900								
NPS	A	A1	A2	B	W	H	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
6	610	613	610	150	600	270	305	1298
8x6	737	740	737	150	600	270	480	1298
8	737	740	737	201	600	325	560	3596
10x8	838	841	838	201	600	325	750	3596
10	838	841	838	252	600	360	858	4306
12x10	965	958	956	252	600	360	1050	4306
12	965	968	956	303	700	450	1343	6000
14x12	1029	1038	1029	303	700	450	1520	6000
14	1029	1038	1029	322	700	550	1610	10220
16x14	1130	1140	1130	322	700	550	1850	10220
16	1130	1140	1130	373	762	650	2525	12968
18x16	1219	1232	1219	373	762	650	2699	12968
18	1219	1232	1219	423	762	750	2870	19054
20x18	1321	1334	1321	423	762	750	2950	19054
20	1321	1334	1321	471	762	830	3480	25452
24x20	1549	1568	1549	471	762	830	3600	25452

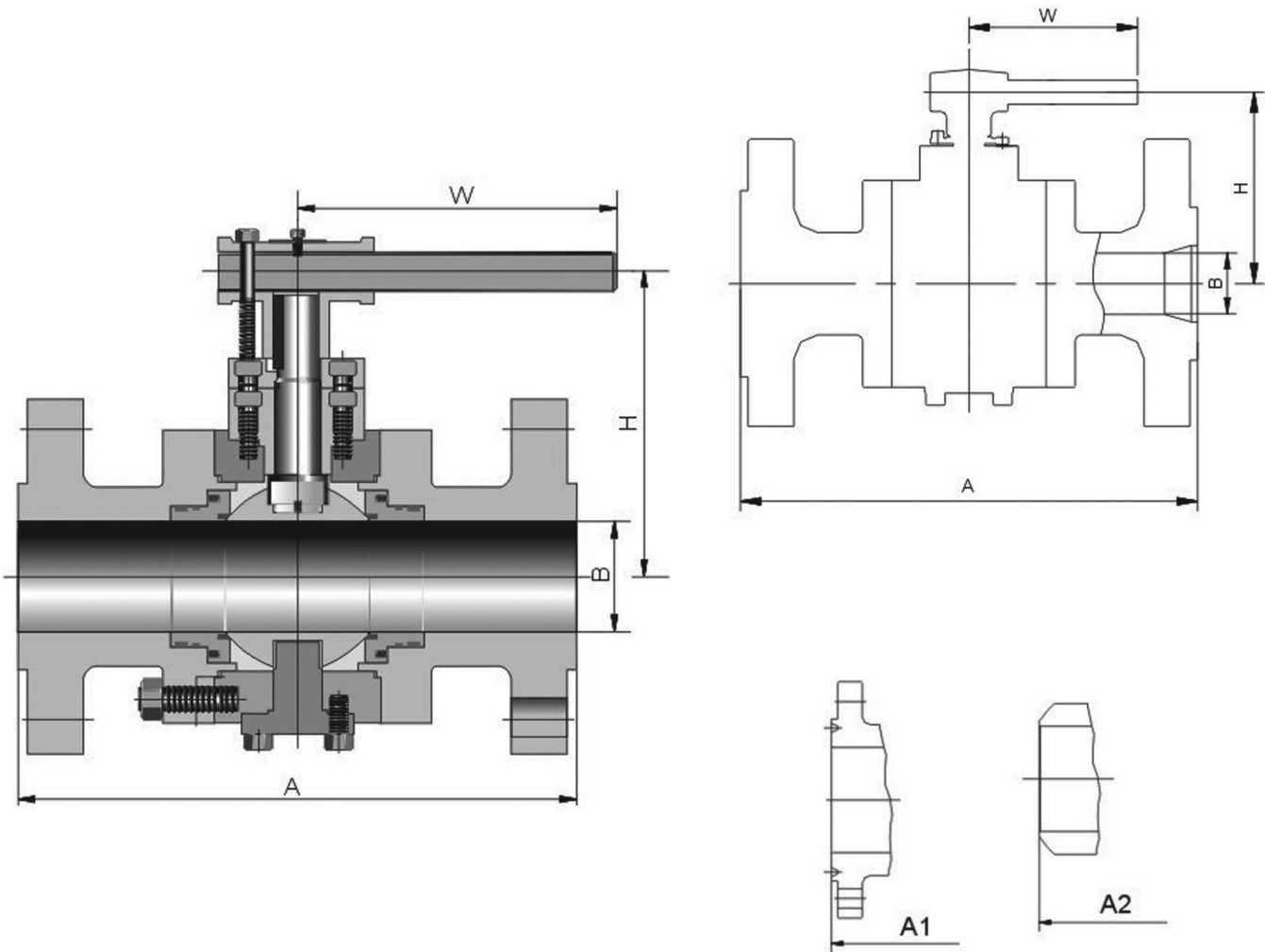
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 1500 & 2500 (Forged Steel)



CLASS 1500								
NPS	A	A1	A2	B	W	H	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
6	705	711	705	144	600	300	461	2084
8x6	832	841	832	144	600	300	560	2084
8	832	841	832	192	600	360	640	5496
10x8	991	1000	991	192	600	360	930	5496
10	991	1000	991	239	700	410	1210	6720
12x10	1130	1146	1130	239	700	410	1356	6720
12	1130	1146	1130	287	700	500	1592	14520
14x12	1257	1276	1257	287	700	500	1830	14520
14	1257	1276	1257	315	762	460	2260	32600
16x12	1384	1407	1384	287	700	500	1956	14520
16x14	1384	1407	1384	315	762	560	2560	64000
16	1384	1407	1384	360	762	640	3760	64000

CLASS 2500								
NPS	A	A1	A2	B	W	H	WT	
inch	mm	mm	mm	mm	mm	mm	Kg	
6	914	927	914	131	700	480	1524	
8x6	1022	1038	1022	131	700	480	1623	
8	1022	1038	1022	179	762	520	1880	
10x8	1270	1292	1270	179	762	520	2421	
10	1270	1292	1270	223	762	575	3140	
12x10	1422	1445	1422	223	762	575	3536	
12	1422	1445	1422	265	762	655	4260	

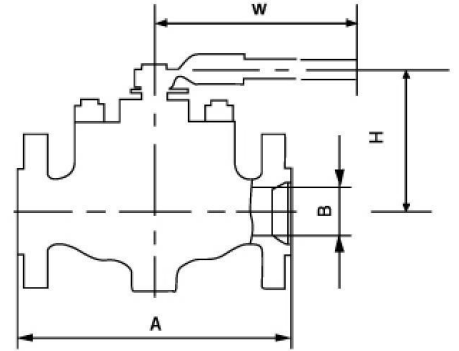
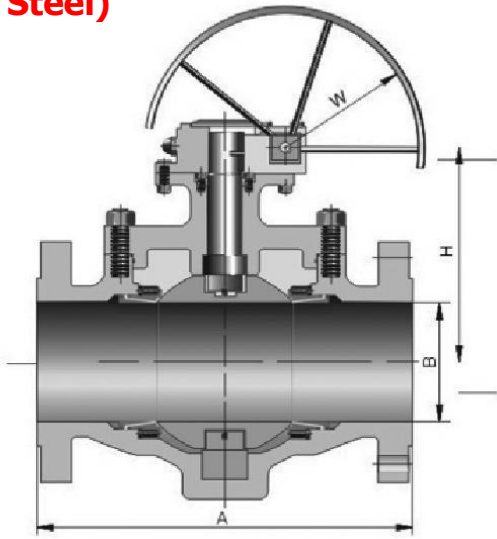
BAF Trunnion Mounted Ball Valves, Three Piece Body, Class 1500 & 2500 (Forged Steel)



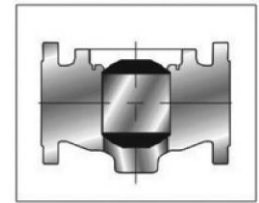
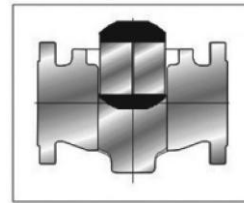
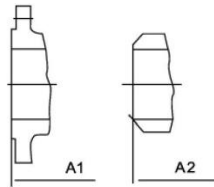
CLASS 1500								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	368	371	368	49	175	600	62	330
3 x 2	470	473	470	49	175	600	110	330
3	470	473	470	74	232	930	135	440
4 x 3	546	549	546	74	232	930	150	440
4	546	549	546	100	295	1000	195	1034
6 x 4	705	711	705	100	295	1000	350	1034

CLASS 2500								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	Kg	N.m
2	451	454	451	42	273	900	120	1000
3 x 2	578	584	578	42	273	900	182	1000
3	578	584	578	62	350	1200	300	2500
4 x 3	673	683	673	62	350	1200	510	2500
4	673	683	673	87	410	1300	620	6540
6 x 4	914	927	914	87	410	1300	730	6540

BAF Trunnion Mounted Ball Valves, Top Entry, Class 600, 900 & 1500 (Cast Steel)



Ball is placed from top so that it can be removed conveniently, also can be repaired on pipeline directly



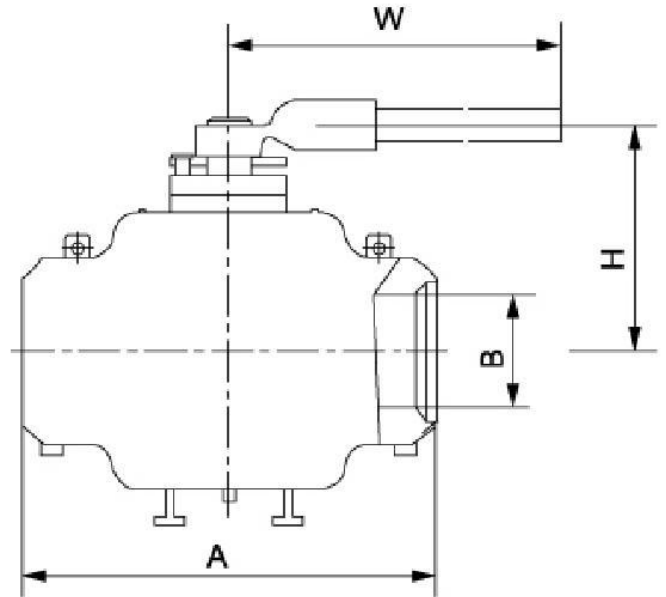
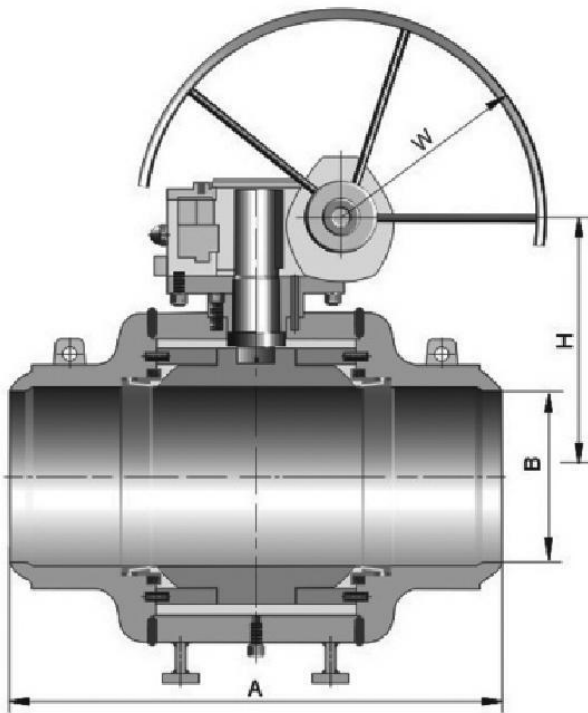
CLASS 600								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	kg	N.m
2	292	295	292	49	200	500	25	148
3	356	359	356	74	210	600	44	200
4	432	435	432	100	230	650	90	460
6	559	562	559	150	290	600	220	908
8	660	664	660	201	365	600	392	2560
10	787	791	787	252	400	600	640	3048
12	838	841	838	303	460	700	895	4300

CLASS 900								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	kg	N.m
2	368	371	368	36	190	650	48	208
3	381	384	381	62	215	700	83	280
4	457	460	457	100	240	800	155	650
6	610	613	610	252	300	600	297	1298
8	737	740	737	201	375	600	505	3596
10	838	841	838	252	415	600	882	4306
12	965	968	965	303	512	700	1248	6000

CLASS 1500								
NPS	A	A1	A2	B	H	W	WT	T
inch	mm	mm	mm	mm	mm	mm	kg	N.m
2	368	371	368	49	175	600	45	330
3	470	473	470	74	232	930	108	440
4	546	549	546	100	295	1000	150	1034
6	705	711	705	144	300	600	378	2084
8	832	841	832	192	360	600	550	5496
10	991	1000	991	239	410	700	1078	6720
12	1130	1146	1130	287	500	700	1450	14520



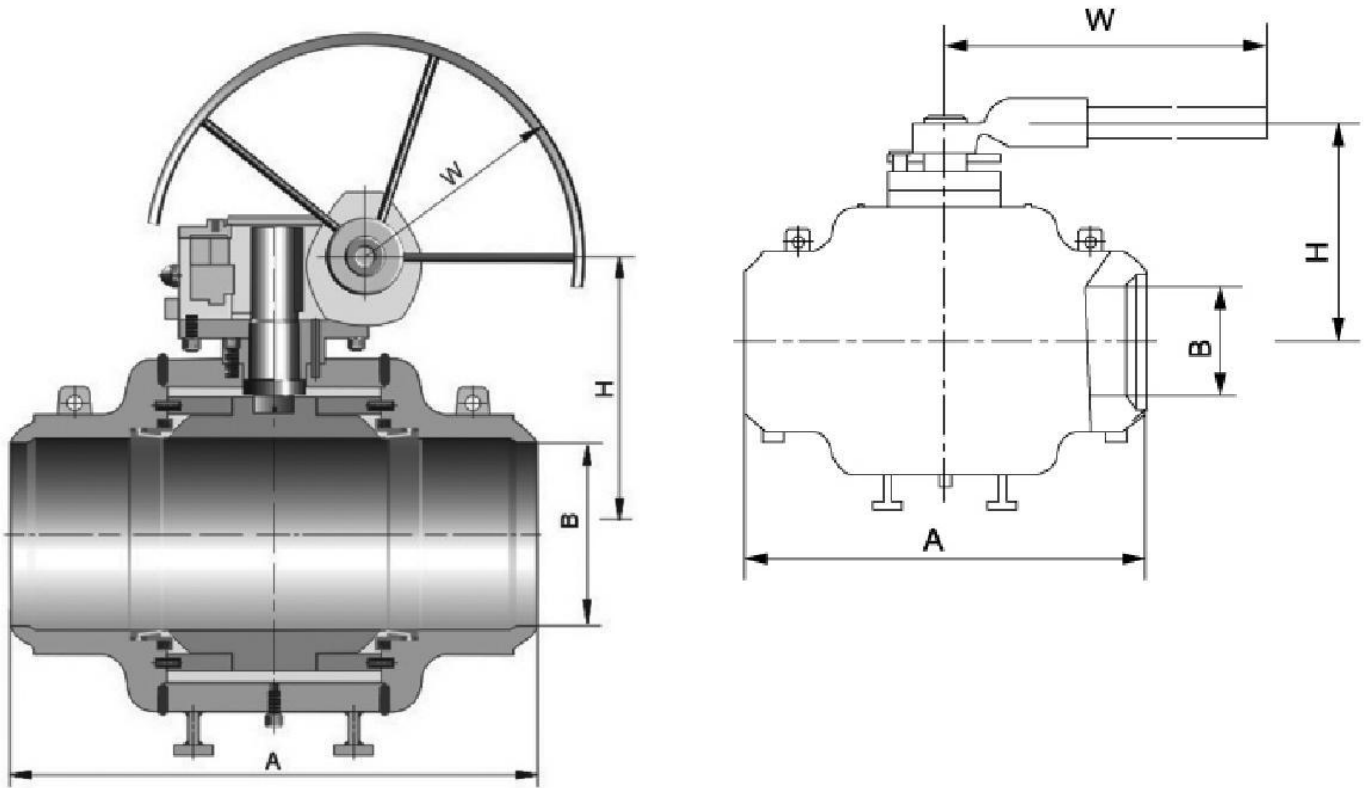
BAF Trunnion Mounted Ball Valves, Fully Welded, Class 600 (Cast Steel)



CLASS 600						
NPS inch	A	B	H	W	WT	T
	mm	mm	mm	mm	K.g	N.m
2	292	49	185	500	27	148
3x2	356	49	185	500	40	148
3	356	74	190	600	48	200
4x3	432	74	210	600	74	200
4	432	100	220	650	95	460
6x4	559	100	220	650	180	460
* 6	559	150	270	600	210	908
* 8x6	660	150	270	600	325	908
* 8	660	201	320	600	405	2560
* 10x8	787	201	320	600	510	2560
* 10	787	252	350	600	655	3048
* 12x10	838	252	350	600	805	3048
* 12	838	303	400	700	915	4300
* 14x12	889	303	400	700	1035	4300
* 14	889	334	450	700	1228	7255
* 16x12	991	303	400	700	1345	4300
* 16x14	991	334	450	700	1450	7255
* 16	991	385	500	700	1705	9174
* 18x16	1092	385	500	700	2190	9174
* 18	1092	436	560	762	2380	13520
* 20x18	1194	436	560	762	2625	13520
* 20	1194	487	620	762	2875	18034
* 24x20	1397	487	620	762	3600	18034
* 24	1397	589	700	762	4830	29512
* 28x24	1649	589	700	762	5310	29512
* 28	1549	684	840	762	5900	42264
* 30x28	1651	684	840	762	6530	42264
* 32x28	1778	684	840	762	6950	42264

* Gear operated

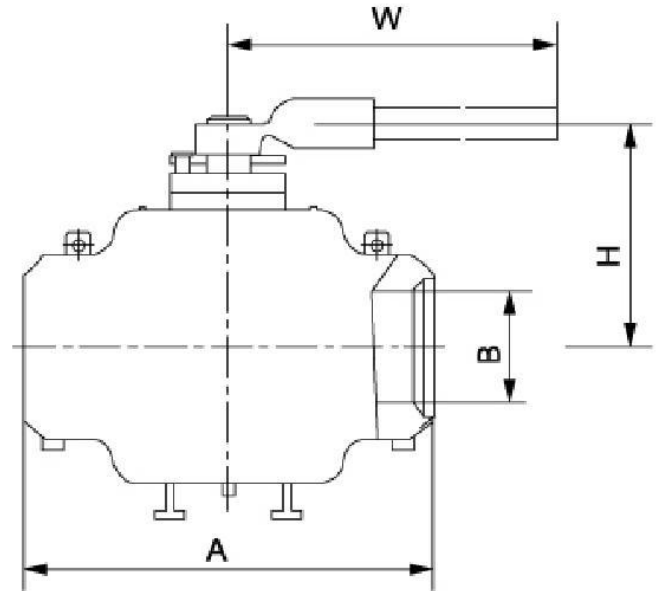
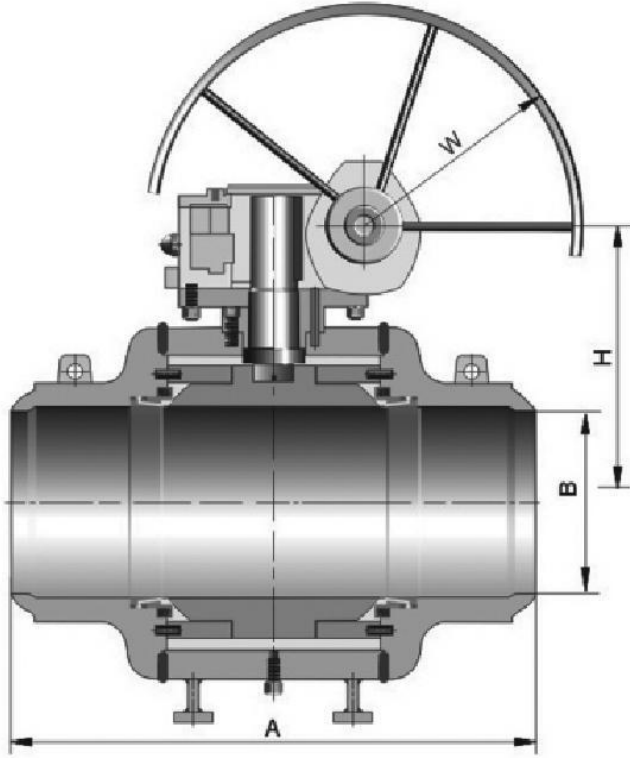
BAF Trunnion Mounted Ball Valves, Fully Welded, Class 900 (Cast Steel)



CLASS 900						
NPS	A	B	H	W	WT	T
inch	mm	mm	mm	mm	K.g	N.m
2	368	49	180	650	40	208
3x2	381	49	180	650	45	208
3	381	74	208	700	70	280
4x3	457	74	208	700	85	280
4	457	100	222	800	110	650
6x4	610	100	222	800	215	650
* 6	610	150	600	270	255	1298
* 8x6	737	150	600	270	450	1298
* 8	737	201	600	325	525	3596
* 10x8	838	201	600	325	720	3596
* 10	838	252	600	360	810	4306
* 12x10	965	252	600	360	1000	4306
* 12	965	303	700	450	1270	6000
* 14x12	1029	303	700	450	1435	6000
* 14	1029	322	700	550	1515	10220
* 16x14	1130	322	700	550	1750	10220
* 16	1130	373	762	650	2420	12968
* 18x16	1219	373	762	650	2565	12968
* 18	1219	423	762	750	2740	19054
* 20x18	1321	423	762	750	2900	19054
* 20	1321	471	762	830	3325	25452
* 24x20	1549	471	762	830	3410	25452

* Gear operated

BAF Trunnion Mounted Ball Valves, Fully Welded, Class 1500 (Cast Steel)



CLASS 1500						
NPS	A	B	W	H	WT	T
inch	mm	mm	mm	mm	K.g	N.m
2	368	49	175	600	50	330
3x2	470	49	175	600	93	330
3	470	74	232	930	115	440
4x3	546	74	232	930	130	440
4	546	100	295	1000	170	1034
* 6x4	705	100	295	1000	305	1034
* 6	705	144	600	300	402	2084
* 8x6	832	144	600	300	498	2084
* 8	832	192	600	360	580	5496
* 10x8	991	192	600	360	845	5496
* 10	991	239	700	410	1120	6720
* 12x10	1130	239	700	410	1245	6720
* 12	1130	287	700	500	1492	14520
* 14x12	1257	287	700	500	1715	14520
* 14	1257	315	762	560	2140	32600
* 16x12	1384	287	700	500	1842	14520
* 16x14	1384	315	762	560	3100	32600
* 16	1384	360	762	640	3636	64000

* Gear operated

Torque Figures BAF High Performance Valves

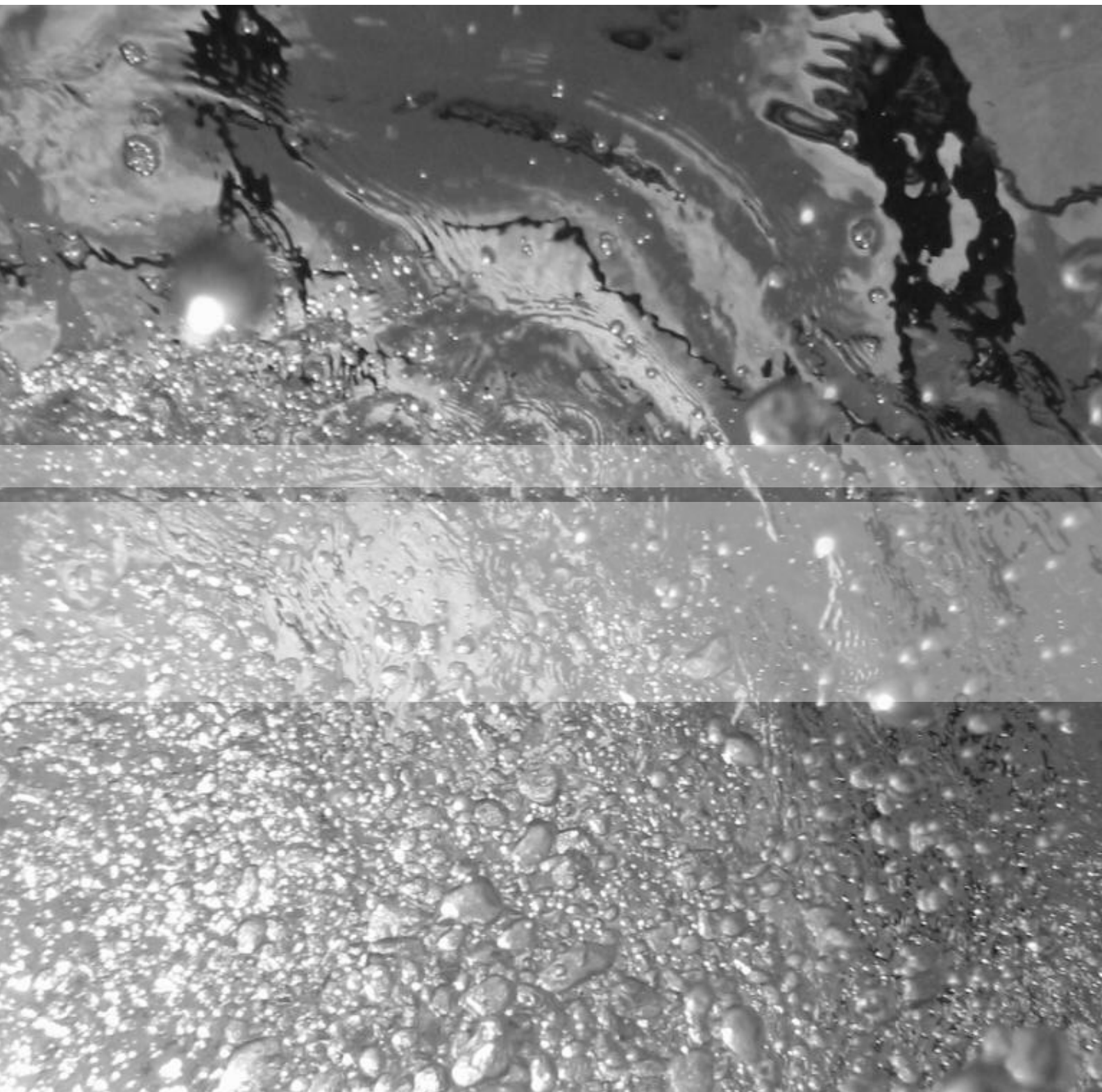
BAF floating ball valves soft seated

DN		Torque in Nm at given ΔP				
mm		150		600		1500
15	1/2	8,5	12	19	24	39
20	3/4	12	19	27	47	59
25	1	19,2	25	46	77	126
32	1 1/4	29	43	55	86	104
40	1 1/2	45	67	86	136	198
20	2	61	86	136	209	306
65	2,5	94	106	152	324	442
80	3	105	139	198	424	588
100	4	153	271	368		
125	5	411	685			
150	6	661	1101			
200	8	1169	2623			
250	10	2395	5389			

BAF trunnion mounted ball valves soft seated

DN		Torque in Nm at given ΔP				
mm		150		600		1500
150	6	315	541	948	1789	2948
200	8	830	982	2168	4148	7228
250	10	1192	1728	3038	5896	11125
300	12	1799	2335	4289	10142	16194
350	14	2595	3289	7489	14189	24519
400	16	3805	5142	9325	18936	29643
450	18	4790	5133	12001	22298	55638
500	20	6385	8982	16795	28546	68682
550	22	6645	10846	19998	42498	83121
600	24	7995	13389	22993	53199	98899
700	28	10764	20248	38042	69642	134625
750	30	12361	23442	44300	92298	154550
800	32	14059	26342	49598	105502	175838
900	36	17799	44523	88999	133532	222543
1000	40	21975	54938	109899	164848	274746

Above given torque values are included 15% safety factor, given torques may changes due to trim materials or changes in our design.



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