



# Ball Valves

A photograph of a large industrial ball valve on an offshore oil or gas platform. The valve is white with a large handwheel and is connected to a thick pipe. The background shows the ocean and a clear sky.

XIAO VALVE is well established  
company manufacturing  
BALL VALVES

“

We are looking for a global stockholder, and to be your stock supplier.

”



# What We Do

WENZHOU XIAO VALVE CO.,LTD. is devoted to offering the quality industrial BALL VALVES all over the world. With years of accumulation and development, we have formed a complete system of valve selection ,design, production, quality control, application and maintenance. Our valves are widely used in petroleum, gas, chemical, power, metallurgy, mining,food, medical,water system,heating and urban construction industries. Thanks to the trust and recognition of our clients, we are becoming one of the most important industrial valve suppliers.



## Technical Features

01

## Material Details

07

## Valve Specification

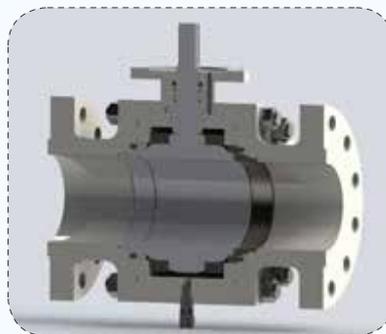
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## Quality Assurance

25

# Technical Features – Trunnion Mounted Ball Valve

Size range	1 1/2" FB up to 6" RB	6" FB up to 60"	Special sizes
Pressure	ANSI 150~2500	ANSI 150~2500	
Three piece split body	YES	YES	
Anti-static device	YES	YES	
Self relieving seats	YES	NO	
Double Piston Effect seats	NO	YES	
Lubricated stem	YES	YES	
Lubricated seat	NO	YES	
Double block and bleed	YES	YES	
Metal to metal seats	YES	YES	
Trunnion mounted ball	YES	YES	
Full or Reduced bore	YES	YES	
Bi-directional	YES	YES	
Minimum thickness ASME B16.34	YES	YES	
RF or RTJ flanges to ASME B16.5	YES	YES	Other flange design
BW (butt-weld) ends to ASME B16.25	YES	YES	Other code for BW design
Bore and end-to-end	YES	YES	Dimensions other than API 6D
Manufacture in accordance with API spec. 6D	YES	YES	ASME B 16.34 design available on request
Materials certification to EN10204 type 3.1.B for pressure containing parts, ball, stem and seats	YES	YES	Type 3.1.C materials certification level
Fire safe design to API 6FA (BS 6755 Pt. 2)	YES	YES	Other fire safe code (e.g. API 607)
Bolting ASME VIII div. I	YES	YES	ASME 16.34 available
Operation by lever, gear w/ handwheel or actuator	YES	YES	





## Body and Bonnet design

The material shall conform to the requirements of the ASTM standard.

XIAO trunnion mounted valves have a compact and streamlined body for maximum strength and minimum weight. Uniform fine grain and structure and toughness is assured by forged steel.

In acid service condition, the material not only conforms to ASTM but also NACE MR 0175. Hardness is less than 248HV(22HRC). HIC, SSC TEST.

## Double Barrier on Body Joints

XIAO valve design assures double barriers for all leakpaths. In this way, when one fails, the other seals.



## Ball

Use forging solid sphere. Soft sealing ball valve plating ENP and hard sealing ball valve sphere spraying TCC, NI6O, and STL.

# Technical Features

## Stem

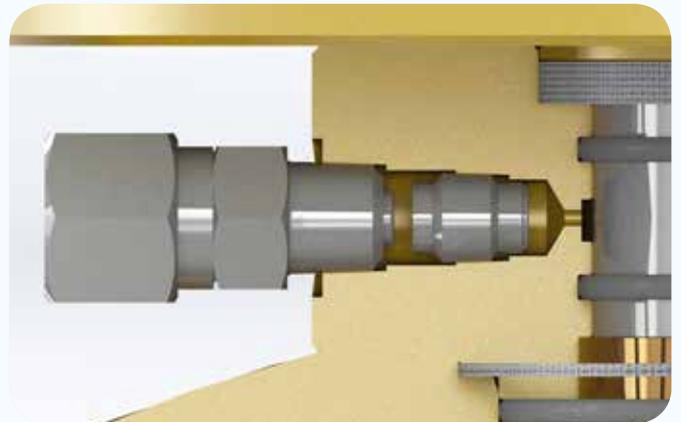
The stem is made separately from the ball. It is blow-out proof, properly obtained with an integral collar in the bottom of the stem.

## Stem seal

Sealing system can be defined triple: two static o-rings seal the stem, plus a third graphite retained by the adaptor flange. This ultimate seal can be replaced when the valve is in line and in closed position.

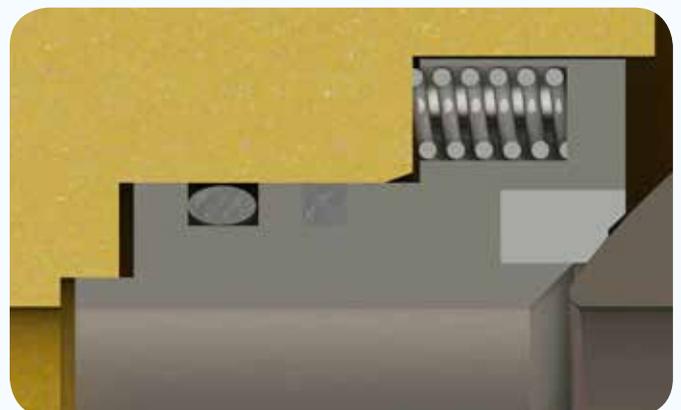
## Emergency stem and seat sealant injection

In case of emergency, when sealing materials (seat sealing and stem o-ring) are damaged or decomposed by fire or other accidental causes, a sealant injection into fittings on both stem and seat prevents leakage until the primary seal is restored.



## Sealing Principle of valves less than 6"

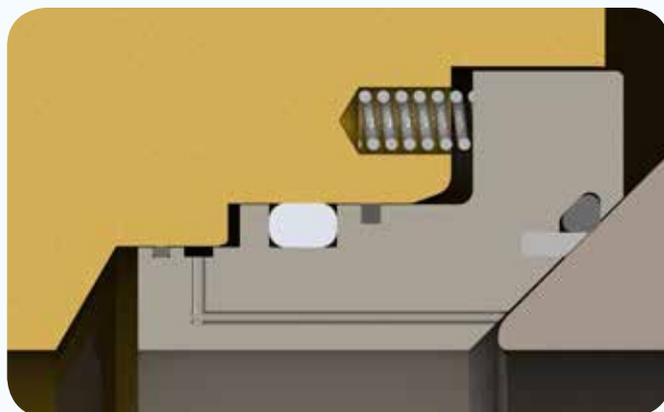
The sealing between the seat and the ball is performed by a plastic polymer insert. The choice of this soft sealing is depending on the service conditions. The initial seal, at low differential pressure, is obtained by the spring loaded floating seats (spring energized) which achieve independent sealing. Increasing the line pressure behind the upstream seat ring helps the seat spring load to force the Seat design upstream seat tightly against the ball.



## Sealing Principle of valves more than 6"

The valve sealing use the soft seal with VITON. The plastic material is using to sustain the ball to decrease the friction. The choice of this soft sealing is depending on the service conditions.

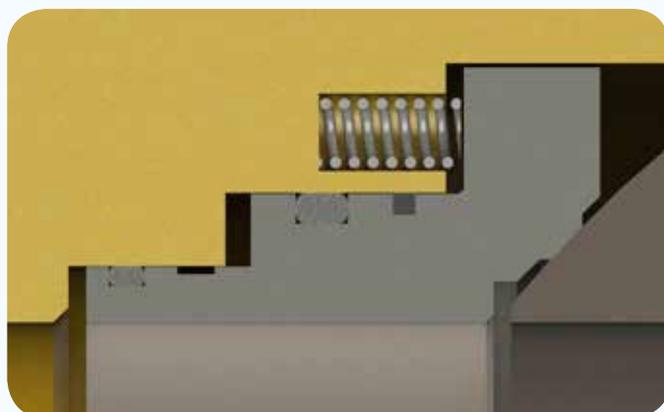
The initial seal, at low differential pressure, is obtained by the spring loaded floating seats (spring energized) which achieve independent sealing.



## Sealing Principle of valves With hard sealing

For metal to metal seated valve, the ball and the seat surface coated with STL, TCC, NI60 to increase hardness and erosion.

In low differential pressure, it is obtained by the spring loaded floating seats (spring energized) which achieve independent sealing.



## Fire safe design and test

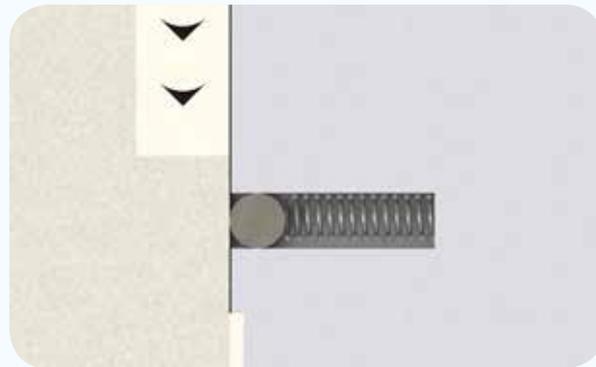
Fire safe is standard design of XIAO ball valve. Two o-ring and gland gasket prevent leak paths from the valve stem area. If fire deteriorate o-ring, gland gasket, the stem fire safe packing prevent fluid or gas leakage. Soft seat ball valve fire safe test (shown in the image) was witnessed and certified according to API 607 and API6FA – BS 6755 PT.2



# Technical Features

## Anti-static device

This device is a standard feature of XIAO ball valves. A coil spring thrusts a little sphere, providing earthed continuity between stem and other metallic components of valve (ball and body) in order to avoid sparks during turning of the stem for opening and closing the valve and prevent problems in case of use with flammable fluids and gas.



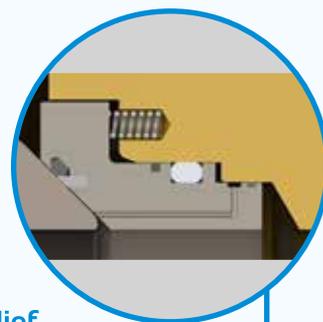
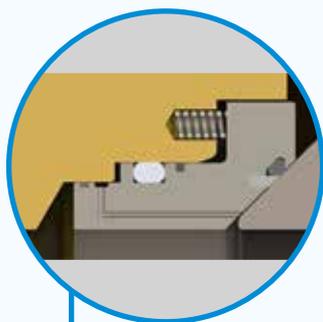
antistatic device detail

## Body vent and drain

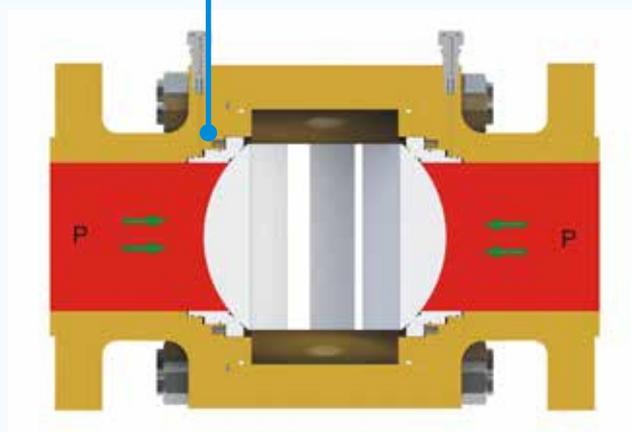
The drain and vent plug of the valve body enable to check the integrity of the seat ring. A bleed valve may replace the drain plug.

## dBB

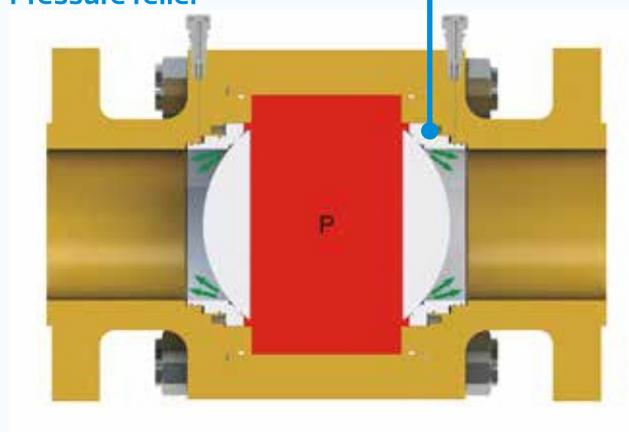
XIAO design of a valve with two seating surfaces between which the cavity can be vented through a bleed connection and thus confirm the tightness of the valve, as well in closed position as open position, when pressure is applied to any side or both sides of the valve.



Pressure relief



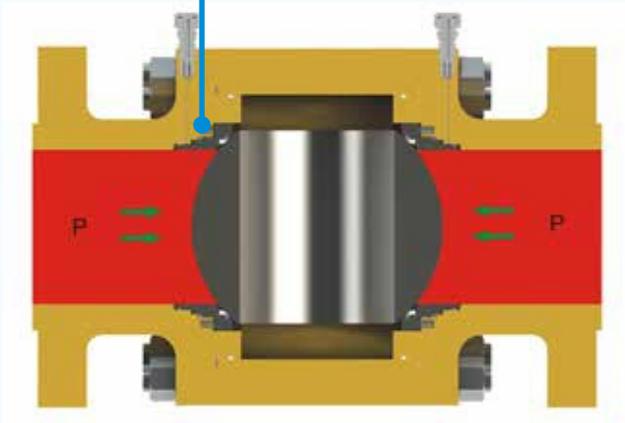
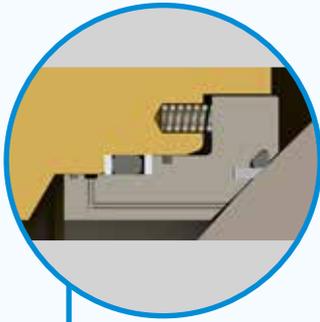
UPSTREAM SPE SEAT



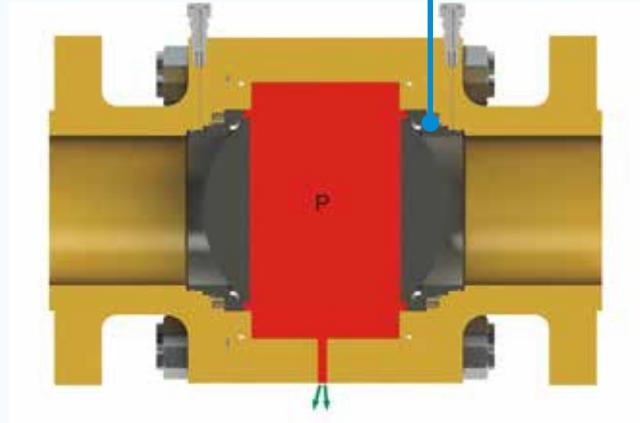
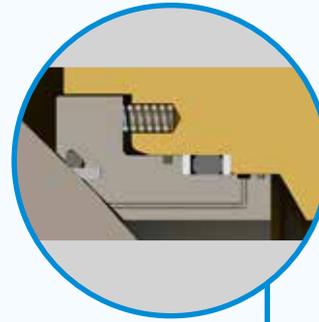
DOWNSTREAM SPE SEAT

## diB-1

With the DPE seat configuration when there is a leakage in the upstream seat, the pressure entering into the body cavity pushes the downstream seat against the ball and the valve seals. This effect is a sealing principle involved in utilizing line pressure to effect a seal across the floating seat.



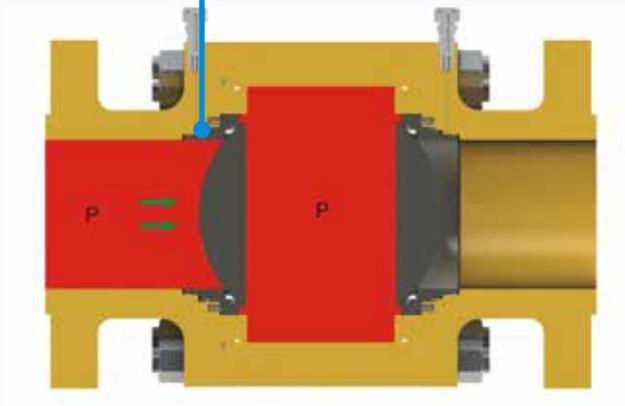
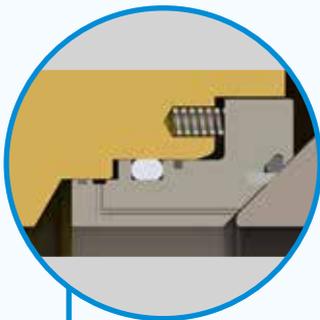
UPSTREAM DPE SEAT



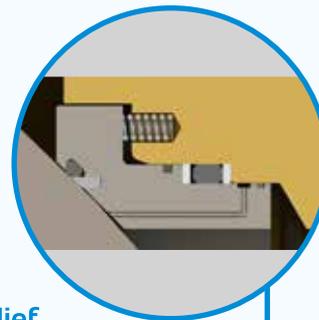
DOWNSTREAM DPE SEAT

## diB-2

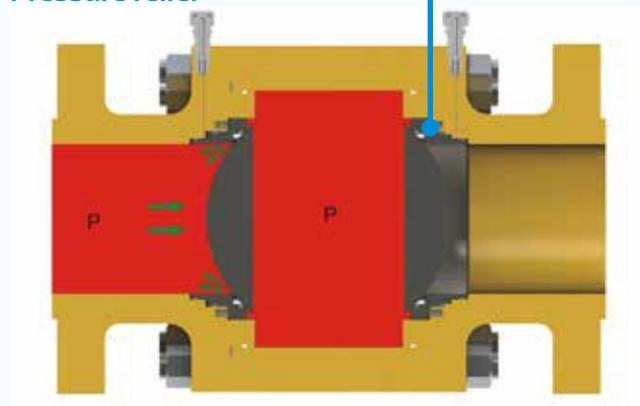
In self relieving condition, excessive internal body pressure is automatically relieved both in upstream and down stream line by forcing the seats away from the closure element.



UPSTREAM SPE SEAT

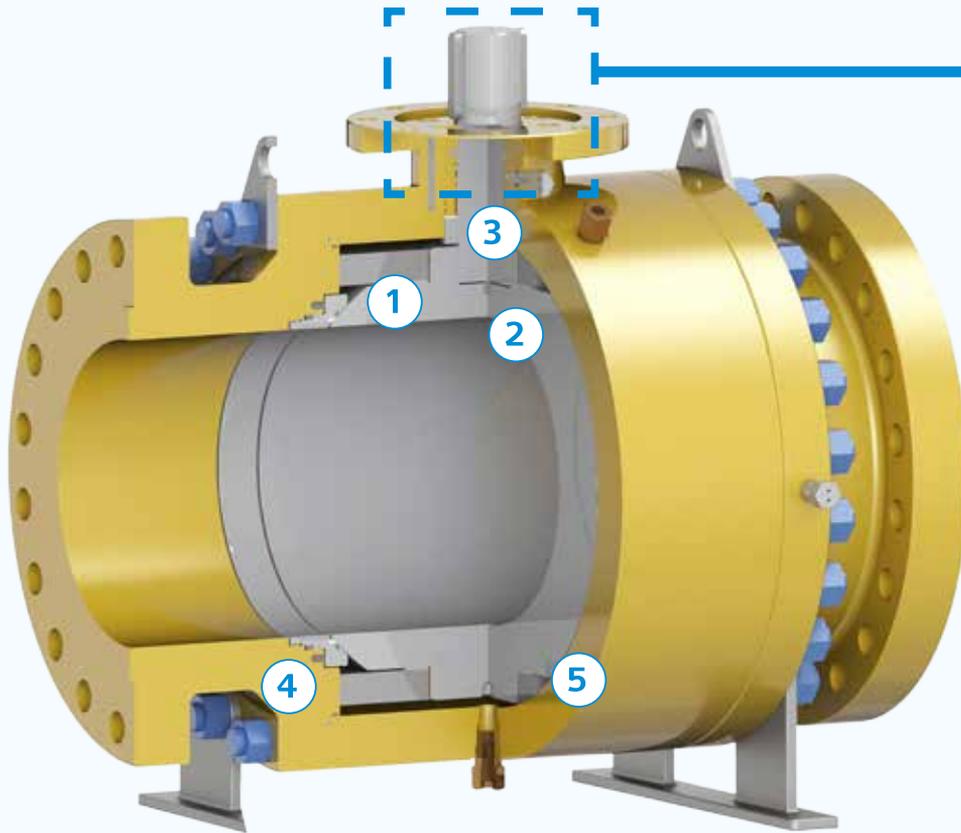


Pressure relief



DOWNSTREAM DPE SEAT

# Design Features - Forged Steel Ball Valves



1

## TRUNNION-MOUNTED BALL

The ball is fixed and the seat rings are floating, free to move along the valve axis. Side load generated by the pressure acting on the ball is absorbed by bearings. At low pressure the seat sealing action is achieved by the thrust of the springs acting on the seat rings. As the pressure increases the fluid pressure pushes the seat rings against the ball.

2

## INDEPENDENT BALL AND STEM

The ball and stem are independent to minimize the effect of the side thrust generated by the pressure acting on the ball.

3

## ANTI-STATIC DESIGN

The electrical conductance continuity between all the metallic components is guaranteed and certified.

4

## FLOATING SELF-RELIEVING SEAT RINGS

Two independent floating seat rings assure the bi-directional tightness of the valve. The seats are carefully designed to minimize the torque required to operate the valves without losing sealing power, which is assured from zero differential pressure to the valves maximum rated pressure.

5

## DOUBLE BLOCK & BLEED

The double block and bleed feature, both with the ball in the fully closed or fully open position, is a standard feature. The configuration of DBB, DIB-1, DIB-2 depends on requirements.

# Actuator Options



Motor



Gas-over-Oil

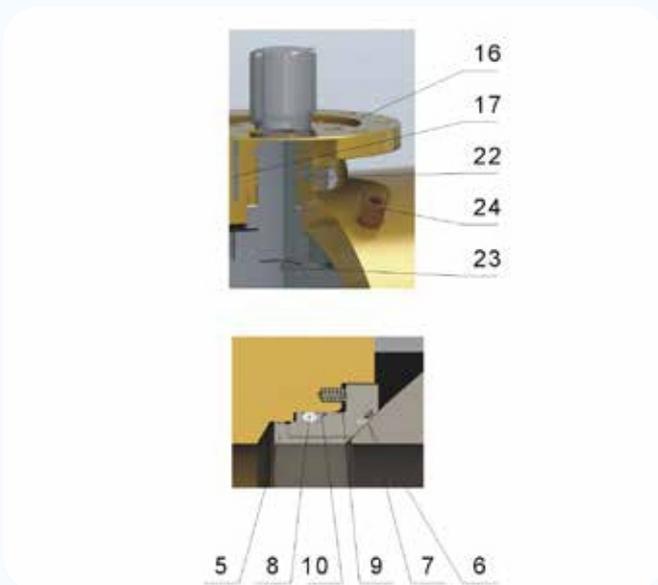
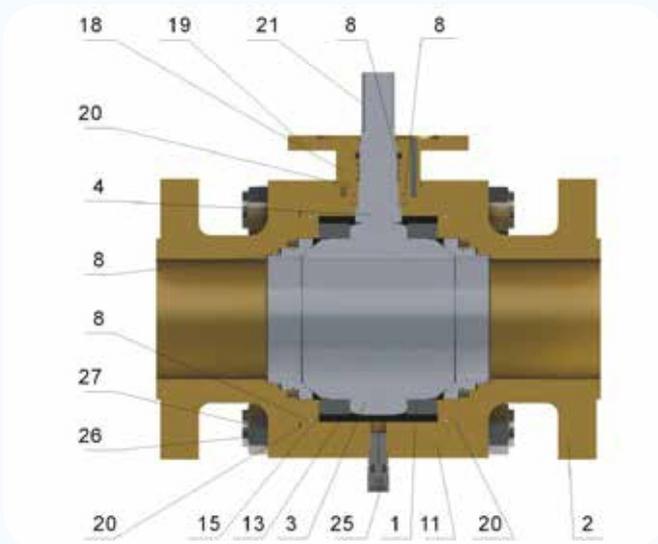


Gear Box



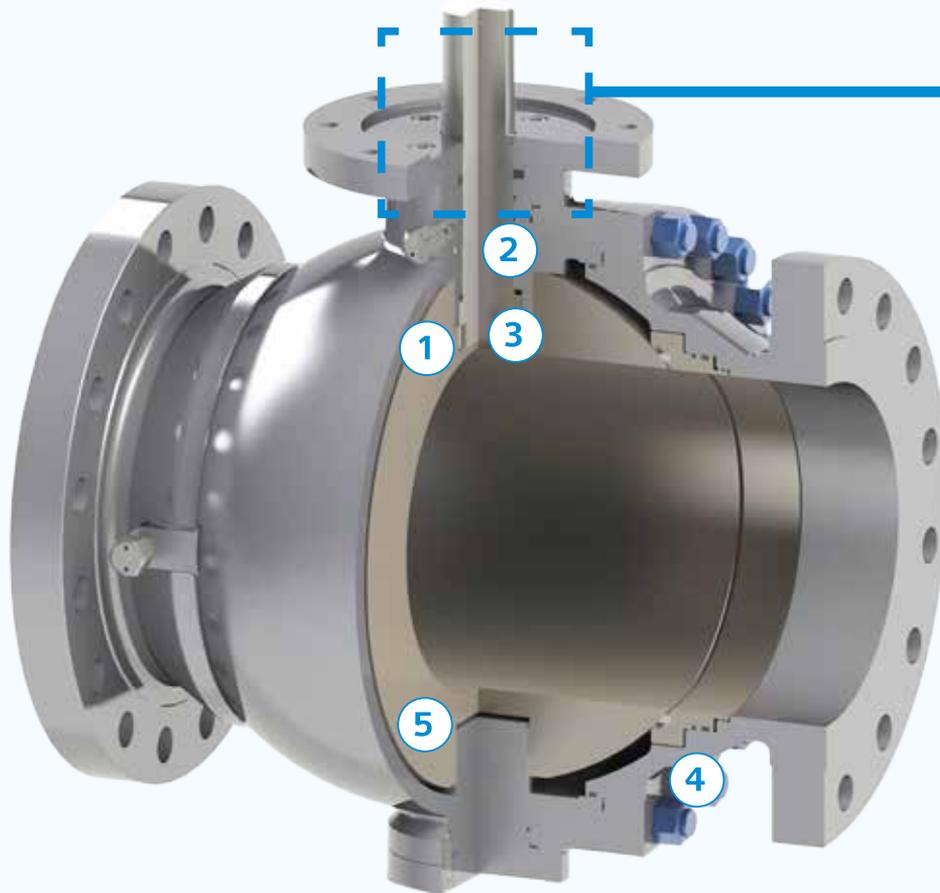
Pneumatic

## Materials - Forged Steel Ball Valves



Pos.	Description	Material			
1	BODY	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F51
2	BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F51
3	BALL	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182 F304	ASTM A182 F51
4	STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A276 304	ASTM A182 F51
5	SEAT	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182 F304	ASTM A182 F51
6	SEAT INSERT	RPTFE	RPTFE	RPTFE	RPTFE
7	SEAT INSERT	VITON	VITON	VITON	VITON
8	O-RING	VITON	VITON	VITON	VITON
9	SEAT SPRING	INCONEL X750	INCONEL X750	INCONEL X750	INCONEL X750
10	FIRE SAFE RING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
11	THRUST BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
12	PLANE BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
13	RADIAL BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
14	BEARING RETAINER	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A240 304	ASTM A182 F51
15	BEARING RETAINER PIN	ASTM A276 410	ASTM A276 410	ASTM A276 304	ASTM A182 F51
16	SCREW	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B7M+PTFE
17	PIN	AISI 1566	AISI 1566	AISI 1566	AISI 1566
18	TOP COVER	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F51
19	COUPLING FLANGE	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F51
20	GASKET	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE
21	KEY	AISI 1045	AISI 1045	AISI 1045	AISI 1045
22	INJECTION	SS	SS	SS	SS
23	ANTISTATIC DEVICE	SS	SS	SS	SS
24	VENT PLUG	ASTM A276 304	ASTM A276 304	ASTM A276 304	ASTM A182 F51
25	DRAIN PLUG	ASTM A276 304	ASTM A276 304	ASTM A276 304	ASTM A182 F51
26	NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 2H	ASTM A194 2HM+PTFE
27	STUD	ASTM A193 B7	ASTM A320 L7	ASTM A193 B7	ASTM A193 B7M+PTFE

# Design Features - Cast Steel Ball Valves



1

## TRUNNION-MOUNTED BALL

The ball is fixed and the seat rings are floating, free to move along the valve axis. Side load generated by the pressure acting on the ball is absorbed by bearings. At low pressure the seat sealing action is achieved by the thrust of the springs acting on the seat rings. As the pressure increases the fluid pressure pushes the seat rings against the ball.

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The ball and stem are independent to minimize the effect of the side thrust generated by the pressure acting on the ball.

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## ANTI-STATIC DESIGN

The electrical conductance continuity between all the metallic components is guaranteed and certified.

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Two independent floating seat rings assure the bi-directional tightness of the valve. The seats are carefully designed to minimize the torque required to operate the valves without losing sealing power, which is assured from zero differential pressure to the valves maximum rated pressure.

5

## DOUBLE BLOCK & BLEED

The double block and bleed feature, both with the ball in the fully closed or fully open position, is a standard Feature. The configuration of DBB, DIB-1, DIB-2 depends on requirements.

# Actuator Options



Motor Actuator

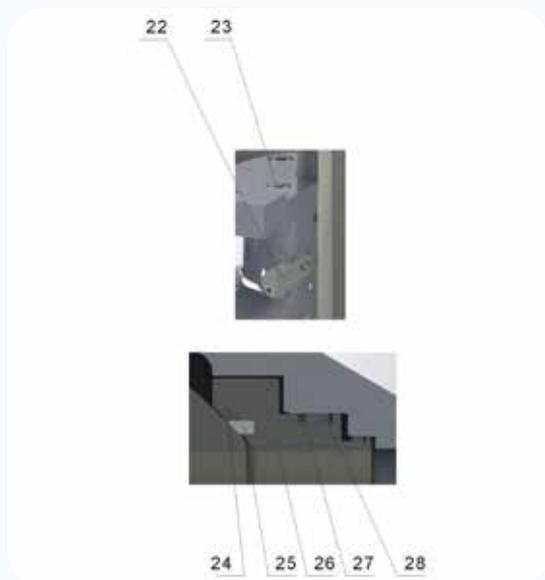
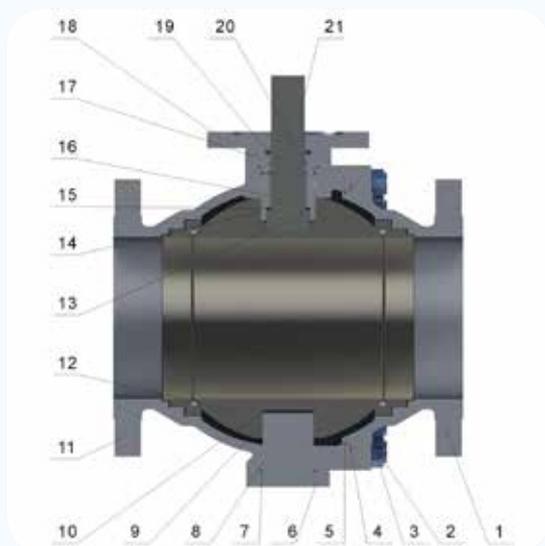


Gear Box



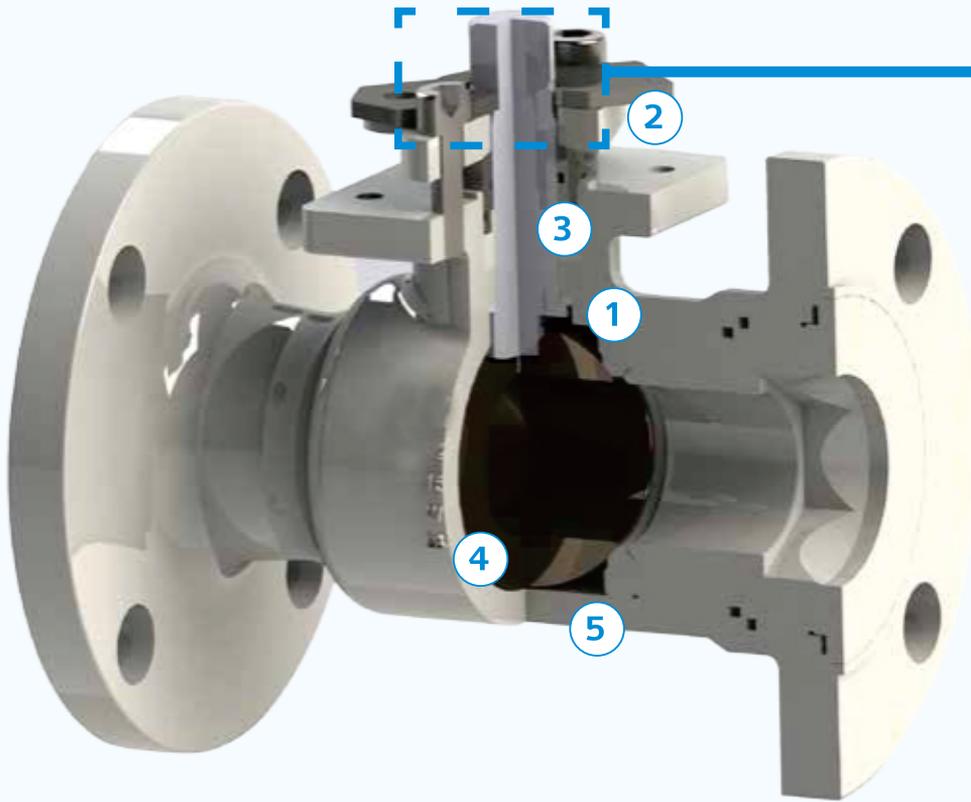
Pneumatic Actuator

## Materials - Cast Steel Ball Valves



Pos.	Description	Material				
1	BONNET	A216 WCB	A216 WCB	A351 CF8	A351 CF8M	A350 LCB
2	NUT	A194 2H	A194 2H	A194 8	A194 8M	A194 7
3	STUD	A193 B7	A193 B7	A193 B8	A193 B8M	A320 L7
4	GASKET	304SS+GRAPHITE	304SS+GRAPHITE	304SS+GRAPHITE	316SS+GRAPHITE	304SS+GRAPHITE
5	O-RING	VITON	VITON	VITON	VITON	VITON
6	LOW COVER	A105	A105	A182 F304	A182 F316	A182 F304
7	GASKET	304SS+GRAPHITE	304SS+GRAPHITE	304SS+GRAPHITE	316SS+GRAPHITE	304SS+GRAPHITE
8	O-RING	VITON	VITON	VITON	VITON	VITON
9	RADIAL BEARING	CS+PTFE	CS+PTFE	304SS+PTFE	316SS+PTFE	304SS+PTFE
10	THRUST BEARING	CS+PTFE	CS+PTFE	304SS+PTFE	316SS+PTFE	304SS+PTFE
11	BODY	A216 WCB	A216 WCB	A351 CF8	A351 CF8m	A350 LCB
12	BALL	A105+ENP	A182 F304	A182 F304	A182 F316	A352 LF2+ENP
13	STEM	A182 F6a	A182 F304	A182 F304	A182 F316	A182 F6a
14	RADIAL BEARING	CS+PTFE	CS+PTFE	304ss+PTFE	316SS+PTFE	304ss+PTFE
15	THRUST BEARING	CS+PTFE	CS+PTFE	304SS+PTFE	316SS+PTFE	304SS+PTFE
16	RADIAL BEARING	CS+PTFE	CS+PTFE	304SS+PTFE	316SS+PTFE	304SS+PTFE
17	TOP COVER	A105	A105	A182 F304	A182 F316	A352 LF2
18	COUPLING FLANGE	A105	A105	A182 F304	A182 F316	A352 LF2
19	PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
20	O-RING	VITON	VITON	VITON	VITON	VITON
21	KEY	AISI 1045				
22	INJECTION	304SS	304SS	304SS	316SS	304SS
23	SCREW	A193 B7	A193 B7	A193 B8	A193 B8M	A320 L7
24	SEAT INSERT	VITON	VITON	VITON	VITON	VITON
25	SEAT INSERT	RPTFE/NYLON	RPTFE/NYLON	RPTFE/NYLON	RPTFE/NYLON	RPTFE/NYLON
26	SEAT	A105+ENP	A182 F304	A182 F304	A182 F316	A352 LF2+ENP
27	FIRE PROOF	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
28	O-RING	VITON	VITON	VITON	VITON	VITON

# Design Features - Float Ball Valves



1

## BLOWOUT-PROOF STEM AND PRIMARY STEM SEAL

Stem shoulder is an integral part of stem, retained internally to prevent stem blowout from pressure in body cavity. Primary stem seal prevents leakage to atmosphere, also serves as low-torque bearing.

2

## ISO5211 ACTUATOR MOUNTING

Machined "automation pad" allows precise mounting of actuator; mounting bolts independent from stem-packing gland bolts. Exact alignment reduces torque requirements and prevents out-of-line wear.

3

## FUGITIVE EMISSIONS CONTROL

Multiple layers of adjustable PTFE Chevron packing rings for non-flammable service, and Soft Carbon braided and die-formed for flammable service.

4

## PRECISE, SMOOTH BALL

Ball sphericity and surface finish are key factors in valve life, pressure-holding capability, and operating torque.

5

## RIGID SPLIT BODY

Designed with extra bolts to assure positive alignment and maximum protection against bending stresses in the piping and forces produced by thermal distortion; seal is fire-safe metal-to-metal.

## CAST BLEED-PORT BOSS (NOT SHOWN)

Provisions for drain bleed port if desired.

## ANTI-STATIC GROUNDING (NOT SHOWN)

Retained wire-ring provides positive ground for use with volatile or flammable liquids.

# Actuator Options



**Gear Box**

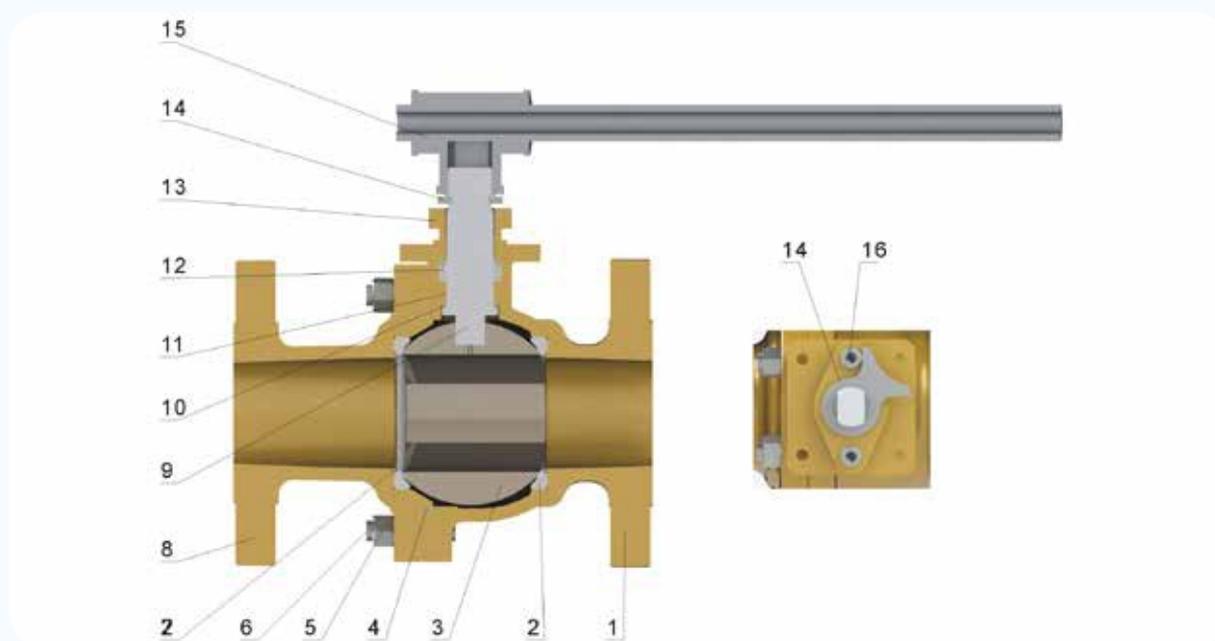


**Pneumatic Actuator**



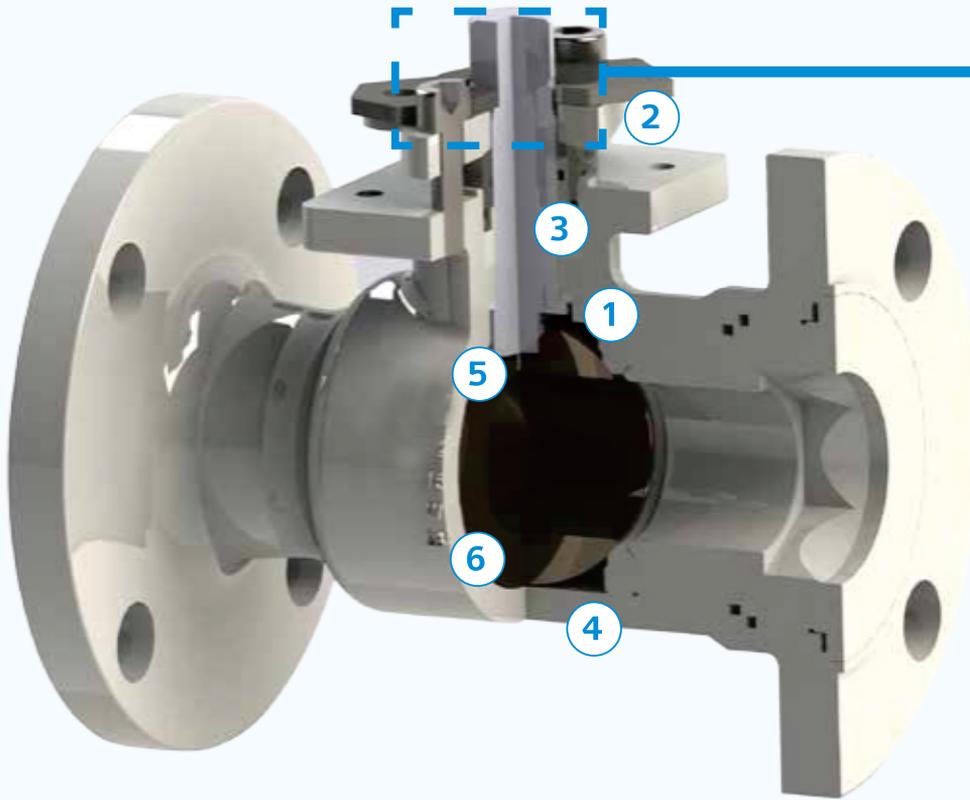
**Handle**

## Materials - Float Ball Valves



Pos.	Description	Material				
1	BODY	A216 WCB	A216 WCB	A351 CF8	A351 CF8M	A350 LCB
2	SEAT	PTFE	PTFE	PTFE	PTFE	PTFE
3	BALL	A105+ENP	A182 F304	A182 F304	A182 F316	A350 LF2+ENP
4	GASKET	304SS+GRAPHITE	PTFE	304SS+GRAPHITE	316SS+GRAPHITE	PTFE
5	NUT	A193 B7	A193 B7	A193 B8	A193 B8M	A320 L7
6	STUD	A194 2H	A194 2H	A194 8	A194 8M	A194 7
7	FIRE PROOF SURFACE	304SS+GRAPHITE	304SS+GRAPHITE	304SS+GRAPHITE	316SS+GRAPHITE	304SS+GRAPHITE
8	BONNET	A216 WCB	A216 WCB	A315 CF8	A315 CF8M	A350 LCB
9	STEM	A182 F6a	A182 F304	A182 304	A182 316	A182 F6a
10	STEM WASHER	CS+PTFE	CS+PTFE	304SS+PTFE	316SS+PTFE	CS+PTFE
11	ANTISTATIC DEVICE	304SS	304SS	304SS	316SS	304SS
12	PACKING	GRAPHITE	PTFE	GRAPHITE	GRAPHITE	PTFE
13	GLAND	A216 WCB	A216 WCB	A351 CF8	A351 CF8M	A350 LCB
14	RETAINER	A36	A36	A36	A36	A36
15	HANDLE	A36	A36	A36	A36	A36
16	SCREW	A193 B7	A193 B7	A193 B8	A193 B8M	A320 L7

# Design Features - One Piece Float Ball Valves



1

## BLOWOUT-PROOF STEM AND PRIMARY STEM SEAL

Stem shoulder is an integral part of stem, retained internally to prevent stem blowout from pressure in body cavity. Primary stem seal prevents leakage to atmosphere, also serves as low-torque bearing.

2

## ISO5211 ACTUATOR MOUNTING

Machined "automation pad" allows precise mounting of actuator; mounting bolts independent from stem-packing gland bolts. Exact alignment reduces torque requirements and prevents out-of-line wear.

3

## FUGITIVE EMISSIONS CONTROL

Multiple layers of adjustable PTFE Chevron packing rings for non-flammable service, and Soft Carbon braided and die-formed for flammable service.

4

## ONE PIECE BODY

Designed with one piece body and maximum protection against bending stresses in the piping and forces produced by thermal distortion; seal is fire-safe metal-to-metal.

5

## ANTI-STATIC GROUNDING

Retained wire-ring provides positive ground for use with volatile or flammable liquids.

6

## PRECISE, SMOOTH BALL

Ball sphericity and surface finish are key factors in valve life, pressure-holding capability, and operating torque.

# Actuator Options



**Gear Box**

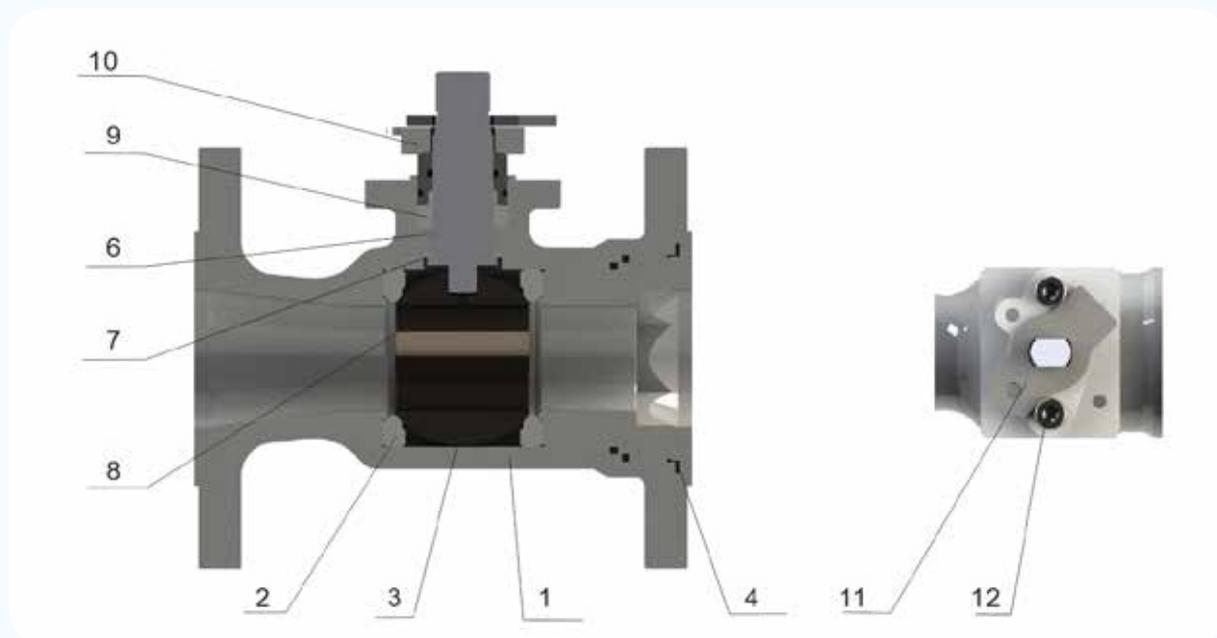


**Pneumatic Actuator**



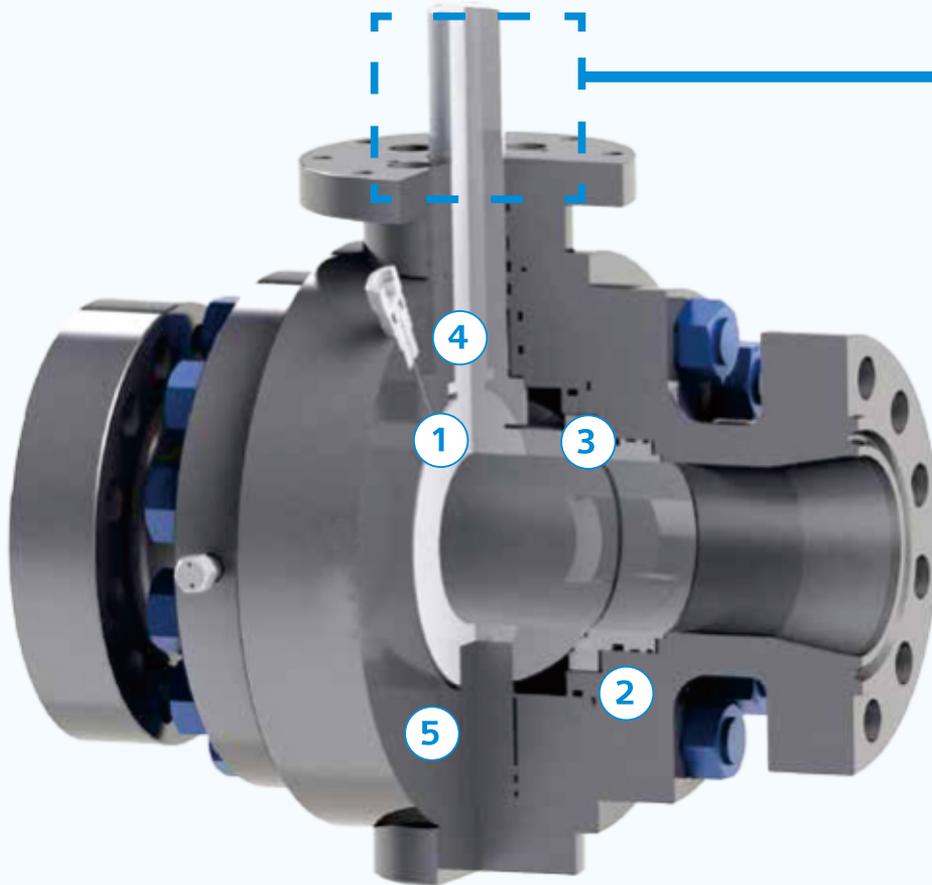
**Handle**

## Materials - One Piece Float Ball Valves



Pos.	Description	Material				
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2	SEAT	PTFE	PTFE	PTFE	PTFE	PTFE
3	BALL	A105+ENP	A182 F304	A182 F304	A182 F316	A350 LF2+ENP
4	GASKET	304SS+GRAPHITE	PTFE	304SS+GRAPHITE	316SS+GRAPHITE	PTFE
5	BONNET	A216 WCB	A216 WCB	A315 CF8	A315 CF8M	A350 LCB
6	STEM	A182 F6a	A182 F304	A182 304	A182 316	A182 F6a
7	STEM WASHER	CS+PTFE	CS+PTFE	304SS+PTFE	316SS+PTFE	CS+PTFE
8	ANTISTATIC DEVICE	304SS	304SS	304SS	316SS	304SS
9	PACKING	GRAPHITE	PTFE	GRAPHITE	GRAPHITE	PTFE
10	GLAND	A216 WCB	A216 WCB	A351 CF8	A351 CF8M	A350 LCB
11	RETAINER	A36	A36	A36	A36	A36
12	SCREW	A193 B7	A193 B7	A193 B8	A193 B8M	A320 L7

# Design Features - API 6D Ball Valves



1

## TRUNNION-MOUNTED BALL

The ball is fixed and the seat rings are floating, free to move along the valve axis. Side load generated by the pressure acting on the ball is absorbed by bearings. At low pressure the seat sealing action is achieved by the thrust of the springs acting on the seat rings. As the pressure increases the fluid pressure pushes the seat rings against the ball.

2

## FLOATING SELF-RELIEVING SEAT RINGS

Two independent floating seat rings assure the bi-directional tightness of the valve. The seats are carefully designed to minimize the torque required to operate the valves without losing sealing power, which is assured from zero differential pressure to the valves maximum rated pressure.

3

## INDEPENDENT BALL AND STEM

The ball and stem are independent to minimize the effect of the side thrust generated by the pressure acting on the ball.

4

## ANTI-STATIC DESIGN

The electrical conductance continuity between all the metallic components is guaranteed and certified.

5

## NACE MR 0175

# Actuator Options

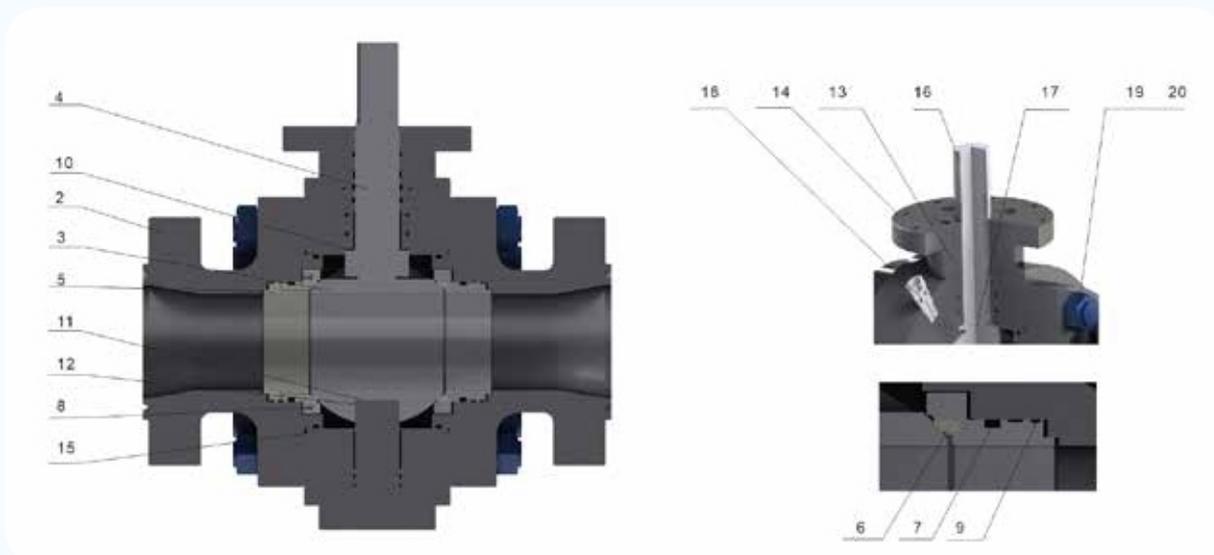


Motor Actuator

Gear Box

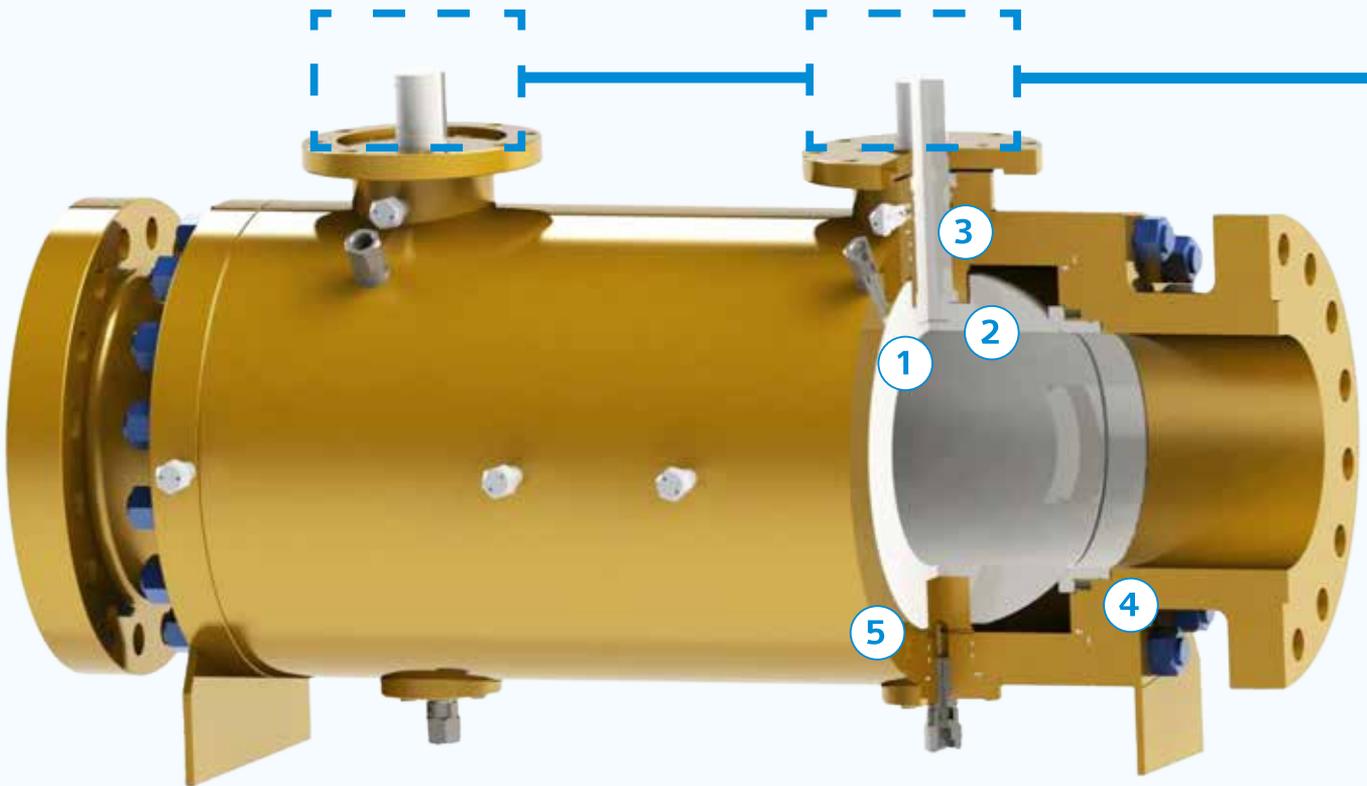
Pneumatic Actuator

## Materials - API 6D Ball Valves



Pos.	Description	Material			
1	BODY	ASTM A105	ASTM A182 F51	ASTM A182 F53	ASTM A182 F316
2	BONNET	ASTM A105	ASTM A182 F51	ASTM A182 F53	ASTM A182 F316
3	BALL	ASTM A105+ENP	ASTM A182 F51	ASTM A182 F53	ASTM A182 F316
4	STEM	ASTM A182 F6a	UNS 31803	UNS 32750	ASTM A276 316
5	SEAT	ASTM A105+ENP	ASTM A182 F51	ASTM A182 F53	ASTM A182 F316
6	SEAT INSERT	RPTFE	RPTFE	RPTFE	RPTFE
7	O-RING	VITON	VITON	VITON	VITON
8	SEAT SPRING	INCONEL X750	INCONEL X750	INCONEL X750	INCONEL X750
9	FIRE SAFE RING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
10	THRUST BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
11	PLANE BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
12	RADIAL BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
13	TOP COVER	ASTM A105	ASTM A182 F51	ASTM A182 F53	ASTM A182 F316
14	COUPLING FLANGE	ASTM A105	ASTM A182 F51	ASTM A182 F53	ASTM A182 F316
15	GASKET	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE
16	KEY	AISI 1045	AISI 1045	AISI 1045	AISI 1045
17	ANTISTATIC DEVICE	SS	SS	SS	SS
18	VENT PLUG	ASTM A276 304	ASTM A182 F51	ASTM A182 F53	ASTM A276 316
19	NUT	ASTM A194 2H	ASTM A194 2HM+PTFE	ASTM A194 2HM+PTFE	ASTM A194 2H+PTFE
20	STUD	ASTM A193 B7	ASTM A193 B7M+PTFE	ASTM A193 B7M+PTFE	ASTM A193 B7+PTFE

# Design Features - DBB Ball Valves



1

## TRUNNION-MOUNTED BALL

The ball is fixed and the seat rings are floating, free to move along the valve axis. Side load generated by the pressure acting on the ball is absorbed by bearings. At low pressure the seat sealing action is achieved by the thrust of the springs acting on the seat rings. As the pressure increases the fluid pressure pushes the seat rings against the ball.

2

## INDEPENDENT BALL AND STEM

The ball and stem are independent to minimize the effect of the side thrust generated by the pressure acting on the ball.

3

## ANTI-STATIC DESIGN

The electrical conductance continuity between all the metallic components is guaranteed and certified.

4

## FLOATING SELF-RELIEVING SEAT RINGS

Two independent floating seat rings assure the bi-directional tightness of the valve. The seats are carefully designed to minimize the torque required to operate the valves without losing sealing power, which is assured from zero differential pressure to the valves maximum rated pressure.

5

## DOUBLE BLOCK & BLEED

The double block and bleed feature, both with the ball in the fully closed or fully open position, is a standard feature.

# Actuator Options

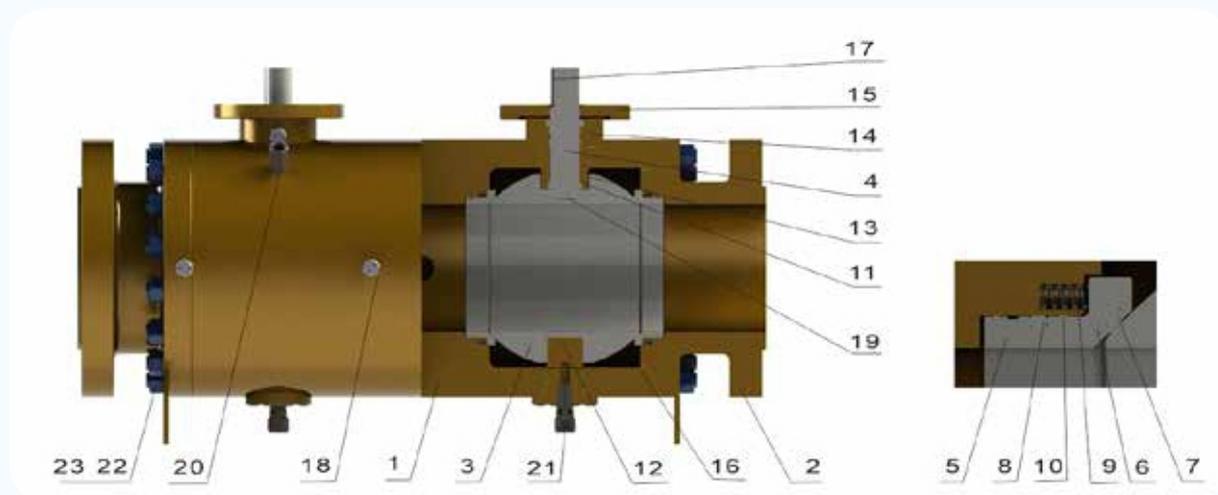


Motor Actuator

Gear Box

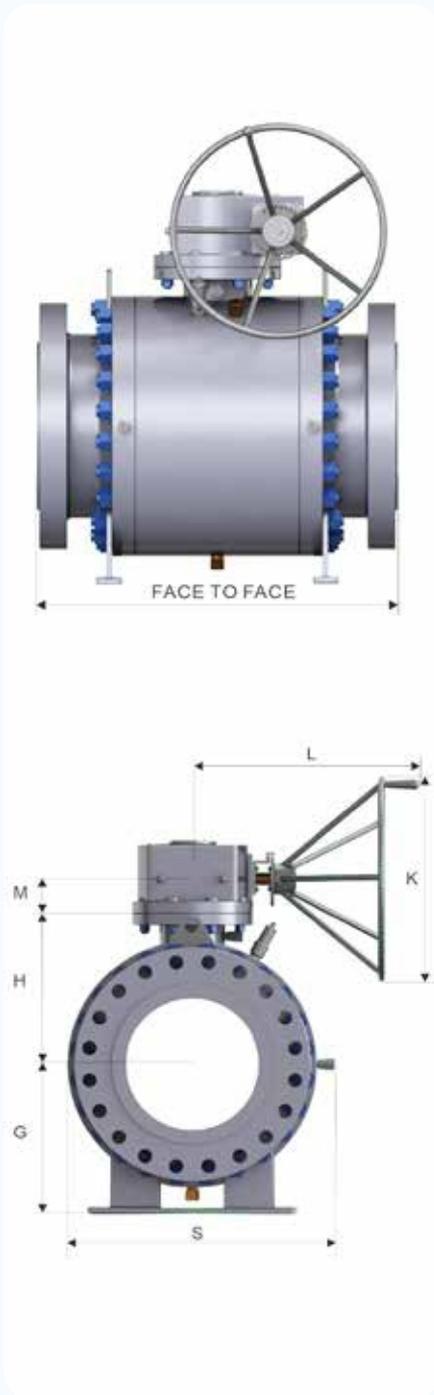
Pneumatic Actuator

## Materials - DBB Ball Valves



Pos.	Description	Material				
1	BODY	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F316	ASTM A182 F51
2	BONNET	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F316	ASTM A182 F51
3	BALL	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182 F304	ASTM A182 F316	ASTM A182 F51
4	STEM	ASTM A182 F6a	ASTM A182 F6a	ASTM A276 304	ASTM A276 316	ASTM A182 F51
5	SEAT	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182 F304	ASTM A182 F316	ASTM A182 F51
6	SEAT INSERT	RPTFE	RPTFE	RPTFE	RPTFE	RPTFE
7	SEAT INSERT	VITON	VITON	VITON	VITON	VITON
8	O-RING	VITON	VITON	VITON	VITON	VITON
9	SEAT SPRING	INCONEL X750	INCONEL X750	INCONEL X750	INCONEL X750	INCONEL X750
10	FIRE SAFE RING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
11	THRUST BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
12	PLANE BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
13	RADIAL BEARING	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE	SS+PTFE
14	TOP COVER	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F316	ASTM A182 F51
15	COUPLING FLANGE	ASTM A105	ASTM A350 LF2	ASTM A182 F304	ASTM A182 F316	ASTM A182 F51
16	GASKET	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE	SS+GRAPHITE
17	KEY	AISI 1045	AISI 1045	AISI 1045	AISI 1045	AISI 1045
18	INJECTION	SS	SS	SS	SS	SS
19	ANTISTATIC DEVICE	SS	SS	SS	SS	SS
20	VENT PLUG	ASTM A276 304	ASTM A276 304	ASTM A276 304	ASTM A276 316	ASTM A182 F51
21	DRAIN PLUG	ASTM A276 304	ASTM A276 304	ASTM A276 304	ASTM A276 316	ASTM A182 F51
22	NUT	ASTM A194 2H	ASTM A194 7	ASTM A194 8	ASTM A194 8M	ASTM A194 2HM+PTFE
23	STUD	ASTM A193 B7	ASTM A320 L7	ASTM A193 B8	ASTM A193 B8M	ASTM A193 B7M+PTFE

# Specification – Forged Steel Ball Valves (UNDER 6’')



## ANSI CLASS 150 (PN 20)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	38	191	165	178	100	110	120	27	125	130	270	3	10	12
2"x1.5"x2"	38	216	178	191	100	110	120	27	125	130	270	3	12	15
2"	51	216	178	191	105	120	120	27	125	145	320	3	15	20
3"x2"x3"	51	283	203	216	105	120	120	27	125	145	320	3	22	25
3"	76	283	203	216	130	145	120	27	125	200	420	3	35	40
4"x3"x4"	76	305	229	241	130	145	120	27	125	200	420	3	37	44
4"	102	305	229	241	155	170	135	27	125	200	520	3	52	63
6"x4"x6"	102	457	394	406	155	170	135	27	125	200	520	3	67	70

## ANSI CLASS 300 (PN 50)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	38	191	191	203	100	110	120	27	125	130	270	3	10	16
2"x1.5"x2"	38	216	216	203	100	110	120	27	125	130	270	3	12	18
2"	51	216	216	232	105	120	120	27	125	145	370	3	15	21
3"x2"x3"	51	283	283	298	105	120	120	27	125	145	370	3	22	32
3"	76	283	283	298	130	145	120	27	125	200	570	3	38	51
4"x3"x4"	76	305	305	321	130	145	120	27	125	200	570	3	39	54
4"	102	305	305	321	155	170	120	27	125	240	660	3	56	75
6"x4"x6"	102	457	404	419	155	170	120	27	125	240	660	3	73	99

## ANSI CLASS 400 (PN 64)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	38	241	241	241	100	110	120	27	125	130	270	3	12	19
2"x1.5"x2"	38	292	292	295	100	110	120	27	125	130	270	3	14	22
2"	51	292	292	295	105	120	120	27	125	145	370	3	17	25
3"x2"x3"	51	356	356	359	105	120	120	27	125	145	370	3	24	35
3"	76	356	356	359	130	145	120	27	125	200	570	3	40	55
4"x3"x4"	76	406	406	410	130	145	120	27	125	200	570	3	45	63
4"	102	406	406	410	155	170	135	35	125	240	660	5	77	85
6"x4"x6"	102	495	495	498	155	170	135	35	125	240	660	5	80	125



## ANSI CLASS 600 (PN 100)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	38	241	241	241	100	110	120	27	125	130	300	3	12	19
2"x1.5"x2"	38	292	292	295	100	110	120	27	125	130	300	3	14	22
2"	51	292	292	295	105	120	120	27	125	145	430	3	18	26
3"x2"x3"	51	356	356	359	105	120	120	27	125	145	430	3	25	37
3"	76	356	356	359	130	145	120	27	125	200	670	3	42	57
4"x3"x4"	76	432	432	435	130	145	120	27	125	200	670	3	50	74
4"	102	432	432	435	155	170	135	35	125	240	760	5	72	101
6"x4"x6"	102	559	559	562	155	170	135	35	125	240	760	5	85	150

## ANSI CLASS 900 (PN 150)

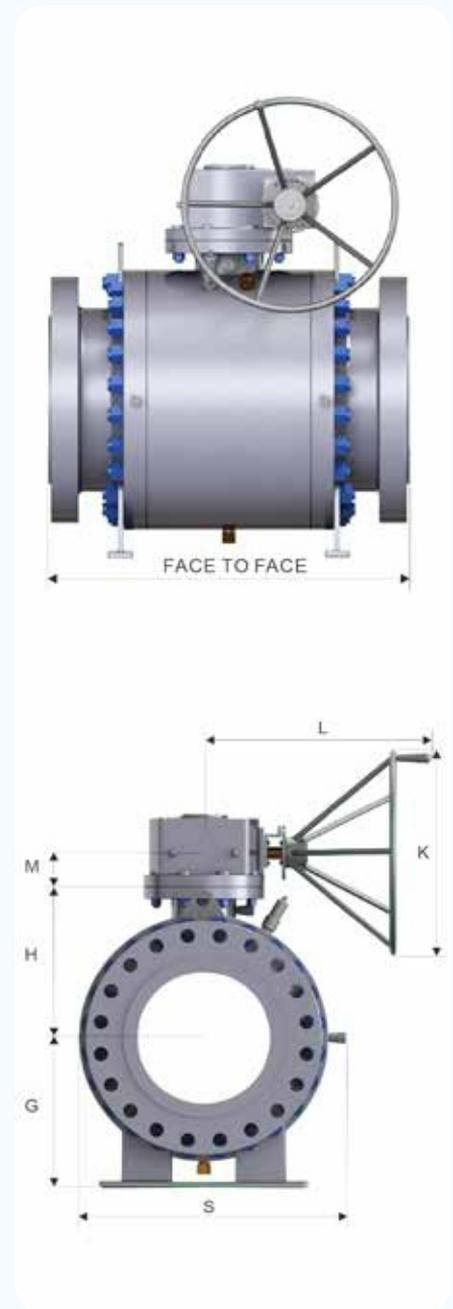
SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	38	305	305	305	100	115	120	27	125	130	400	3	20	31
2"x1.5"x2"	38	369	369	372	100	115	120	27	125	130	400	3	22	43
2"	51	369	369	372	115	125	120	27	125	160	600	3	34	58
3"x2"x3"	51	381	381	384	115	125	120	27	125	160	600	3	48	64
3"	76	381	381	384	145	155	135	35	125	210	900	5	69	83
4"x3"x4"	76	457	457	460	145	155	135	35	125	210	900	5	70	107
4"	102	457	457	460	175	195	168	42	250	260	-	9	145	162
6"x4"x6"	102	610	610	613	175	195	168	42	250	260	-	9	147	207

## ANSI CLASS 1500 (PN 250)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	38	305	305	305	100	115	120	27	125	130	400	3	20	31
2"x1.5"x2"	38	369	369	372	100	115	120	27	125	130	400	3	22	43
2"	51	369	369	372	115	125	120	27	125	160	600	3	34	58
3"x2"x3"	51	470	470	473	115	125	120	27	125	160	600	3	48	75
3"	76	470	470	473	145	155	135	35	125	210	900	5	69	97
4"x3"x4"	76	546	546	549	145	155	135	35	125	210	900	5	72	129
4"	102	546	546	549	175	195	168	42	250	260	-	9	146	166
6"x4"x6"	102	705	705	711	175	195	168	42	250	260	-	9	151	270

## ANSI CLASS 2500 (PN 420)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	X lever	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ									WE	RF/RTJ
1.5"	32	384	384	387	100	140	120	27	125	204	-	3	40	62
2"x1.5"x2"	32	451	451	454	100	140	120	27	125	235	-	3	44	86
2"	44	451	451	454	110	160	135	35	125	235	-	5	70	118
3"x2"x3"	44	578	578	584	110	160	135	35	125	305	-	5	98	152
3"	64	578	578	584	140	185	168	42	250	305	-	9	162	218
4"x3"x4"	64	673	673	683	140	185	168	42	250	356	-	9	168	282
4"	89	673	673	683	250	200	185	50	300	370	-	15	322	362
6"x4"x6"	89	914	914	927	250	200	185	50	300	483	-	15	332	570
6"	133	914	914	927	290	235	250	50	500	483	-	28	675	750
8"x6"x8"	133	1022	1022	1038	290	235	250	50	500	553	-	28	860	990



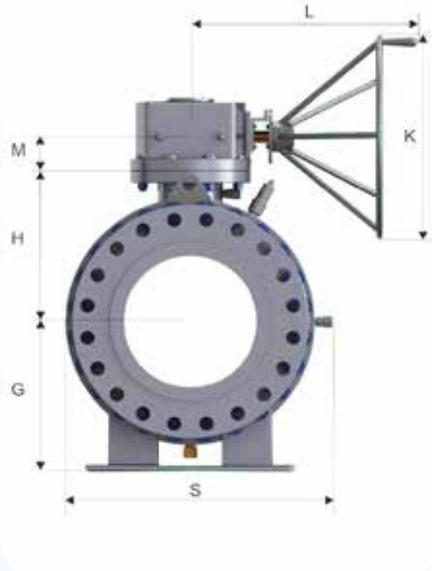
# Specification – Forged Steel Ball Valves (6" AND ABOVE)

## ANSI CLASS 150 (PN 20)

SIZE inches	DN	FACE TO FACE		G	H	L	M	K	S	GEAR Weight	BARE STEM VALVE WEIGHT	
		WE	RF								WE	RF/RTJ
6"	152	457	394	305	215	135	35	125	305	5	165	175
8"X6"X8"	152	521	457	305	215	135	35	125	400	5	185	195
8"	203	521	457	340	255	168	42	250	400	9	285	310
10"X8"X10"	203	559	533	340	255	168	42	250	465	9	305	325
10"	254	559	533	380	295	185	50	300	465	15	365	395
12"X10"X12"	254	635	610	380	295	185	50	300	550	15	385	415
12"	305	635	610	420	345	185	50	300	550	15	595	635
16"X12"X16"	305	838	762	420	345	185	50	300	675	15	705	745
14"	337	762	686	470	375	250	50	500	585	28	696	746
16"	387	838	762	510	415	250	50	500	675	28	896	946
20"X16"X20"	387	991	914	510	415	250	50	500	835	28	1001	1096
18"	438	914	864	545	460	275	50	500	760	42	1342	1422
20"	489	991	914	590	495	310	66	600	835	67	1752	1832
24"X20"X24"	489	1143	1067	590	495	310	66	600	990	67	1832	1912
22"	540	1143	1067	635	540	310	66	600	920	67	2165	2235
24"	591	1143	1067	670	575	355	65	600	990	104	3018	3598
30"X24"X30"	591	1397	1295	670	575	355	65	600	1235	104	3548	3638
26"	635	1245	1143	720	625	415	86	600	1060	170	3568	3648
28"	686	1346	1245	755	660	415	86	600	1140	170	4278	4378
30"	737	1397	1295	805	700	415	75	600	1235	178	5268	5378
36"X30"X36"	737	1727	1524	805	700	415	75	600	1445	178	5958	6058
32"	781	1524	1372	845	740	415	75	600	1295	178	5930	6050
34"	832	1626	1473	875	785	415	75	600	1360	178	6400	6600
36"	876	1727	1524	910	825	500	96	600	1445	273	8200	8400
40"	978	1956	1753	1000	905	500	96	600	1625	273	9470	9970
42"	1022	2083	1790	1035	970	500	96	600	1715	273	11200	11800
48"	1168	2388	1995	1180	1130	500	96	600	1970	273	18360	21900
56"	1384	2489	2489	1340	1280	518	118	700	2285	710	32600	34100
60"	1461	2627	2627	1435	1400	518	118	700	2450	710	36500	39100

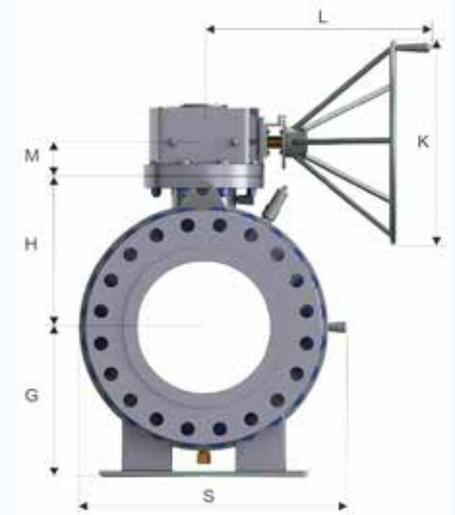
## ANSI CLASS 300 (PN50)

SIZE inches	DN	FACE TO FACE		G	H	L	M	K	S	GEAR Weight	BARE STEM VALVE WEIGHT	
		WE	RF								WE	RF/RTJ
6"	152	457	403	305	215	168	42	250	318	9	185	195
8"X6"X8"	152	457	403	305	215	168	42	250	405	9	195	205
8"	203	521	502	340	255	185	50	300	405	15	325	335
10"X8"X10"	203	521	502	340	255	185	50	300	470	15	345	365
10"	254	559	568	380	295	250	50	500	470	28	475	495
12"X10"X12"	254	559	568	380	295	250	50	500	555	28	505	545
12"	305	635	648	420	345	250	50	500	555	28	606	646
16"X12"X16"	305	635	648	420	345	250	50	500	680	28	716	806
14"	337	762	762	470	375	250	50	500	595	28	812	902
16"	387	838	838	510	415	275	50	500	680	42	937	1172
20"X16"X20"	387	838	838	510	415	275	50	500	845	42	1192	1392
18"	438	914	914	545	460	310	66	600	770	67	1430	1620
20"	489	991	991	590	430	355	65	600	845	104	1958	2208
24"X20"X24"	489	991	991	590	430	355	65	600	1000	104	2248	2448
22"	540	1092	1092	635	540	415	86	600	930	170	2548	2798
24"	591	1143	1143	670	575	415	86	600	1000	170	3058	3508
30"X24"X30"	591	1143	1143	670	575	415	86	600	1250	170	3948	4198
26"	635	1245	1245	720	625	415	75	600	1070	178	4050	4450
28"	686	1346	1346	755	660	415	75	600	1150	178	4900	5250
30"	737	1397	1397	805	700	500	96	600	1250	273	5700	6050
36"X30"X36"	737	1397	1397	805	700	500	96	600	1460	273	6000	6350
32"	781	1524	1524	845	740	500	96	600	1310	273	6680	7020
34"	832	1626	1626	875	785	500	96	600	1370	273	7350	7700
36"	876	1727	1727	910	825	500	96	600	1460	273	7550	8010
40"	978	1956	1956	1000	905	500	96	600	1640	273	9360	10590
42"	1022	2083	2083	1035	970	500	96	600	1730	273	11090	12545
48"	1168	2170	2170	1180	1130	500	118	700	1990	710	21380	24060
56"	1384	2543	2543	1340	1280	518	118	700	2305	710	36500	38155
60"	1461	2627	2627	1435	1400	518	118	700	2475	710	36500	39100



## ANSI CLASS 400 (PN 64)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ								WE	RF/RTJ
6"	153	496	496	310	215	168	42	250	318	9	180	210	
8"X6"X8"	153	597	597	310	215	168	42	250	410	9	235	260	
8"	204	597	597	350	255	185	50	300	410	15	295	340	
10"X8"X10"	204	674	674	350	255	185	50	300	475	15	260	450	
10"	254	674	674	390	295	250	50	500	475	28	480	570	
12"X10"X12"	254	762	762	390	295	250	50	500	560	28	605	700	
12"	305	762	762	430	345	250	50	500	560	28	685	776	
16"X12"X16"	305	902	902	430	345	250	50	500	685	28	946	1037	
14"	337	826	826	475	375	275	50	500	600	30	902	997	
16"	388	902	902	520	415	310	66	600	685	67	1097	1277	
20"X16"X20"	388	1055	1055	520	415	310	66	600	855	67	1462	1642	
18"	439	978	978	560	460	355	65	600	780	104	1485	1723	
20"	489	1055	1055	600	495	415	86	600	855	170	1905	2223	
24"X20"X24"	489	1232	1232	600	495	415	86	600	1010	170	2314	2632	
22"	540	1143	1143	645	540	415	86	600	940	170	2587	2894	
24"	591	1232	1232	685	575	415	86	600	1010	170	2859	3246	
30"X24"X30"	591	1524	1524	685	575	415	86	600	1260	170	3850	4100	
26"	635	1309	1309	735	625	415	75	600	1085	178	4200	4550	
28"	686	1397	1397	770	660	500	96	600	1160	273	5000	5400	
30"	737	1524	1524	825	700	500	96	600	1260	273	5712	6371	
36"X30"X36"	737	1880	1880	825	700	500	96	600	1475	273	6462	7053	
32"	782	1651	1651	865	740	500	96	600	1325	273	6511	6954	
34"	832	1778	1778	895	785	500	96	600	1385	273	6727	7659	
36"	877	1880	1880	930	825	500	96	600	1475	273	7590	8545	
40"	978	2170	2170	1020	905	518	118	700	1655	710	12650	14700	
42"	1023	2175	2175	1055	970	518	118	700	1750	710	14380	16410	
48"	1169	2435	2435	1205	1130	518	118	700	2010	710	21530	24200	
56"	1384	2710	2710	1370	1280	518	118	700	2330	710	33890	36500	
60"	1461	2794	2794	1460	1400	660	150	700	2500	1160	39950	42100	

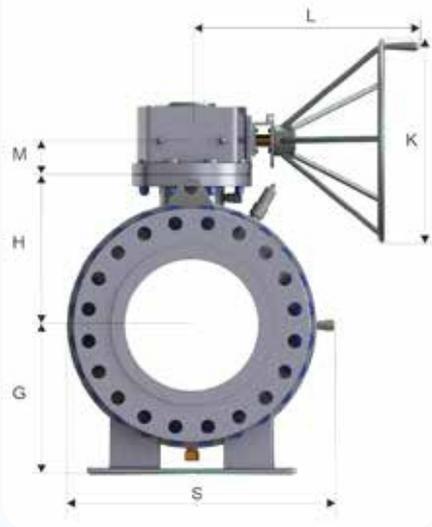


## ANSI CLASS 600 (PN 100)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ								WE	RF/RTJ
6"	152	559	559	562	310	215	168	42	250	356	9	190	245
8"X6"X8"	152	660	660	664	310	215	168	42	250	420	9	240	290
8"	203	660	660	664	350	255	250	50	500	420	28	385	455
10"X8"X10"	203	787	787	791	350	255	250	50	500	508	28	395	485
10"	254	787	787	791	390	295	250	50	600	508	28	431	571
12"X10"X12"	254	838	838	841	390	295	250	50	600	565	28	496	666
12"	305	838	838	841	430	345	275	50	600	565	42	719	867
16"X12"X16"	305	991	991	994	430	345	275	50	600	695	42	996	1146
14"	337	889	889	892	480	375	310	66	600	605	57	922	1092
16"	387	991	991	994	525	415	355	65	600	695	104	1180	1450
20"X16"X20"	387	1194	1194	1200	525	415	355	65	600	860	104	2380	2560
18"	438	1092	1092	1095	565	460	415	86	600	785	170	1718	2548
20"	489	1194	1194	1200	605	495	415	86	600	860	170	2468	2648
24"X20"X24"	489	1397	1397	1407	605	495	415	86	600	1020	170	2798	3048
22"	540	1295	1295	1305	650	540	415	75	600	950	178	2760	3070
24"	591	1397	1397	1407	690	575	415	75	600	1020	178	3650	4000
30"X24"X30"	591	1651	1651	1664	690	575	415	75	600	1275	178	4200	4950
26"	635	1448	1448	1461	740	625	500	96	600	1095	273	4190	5090
28"	686	1549	1549	1562	775	660	500	96	600	1175	273	4990	6190
30"	737	1651	1651	1664	830	700	500	96	600	1275	273	5740	6990
36"X30"X36"	737	2083	2083	2099	830	700	500	96	600	1490	273	7940	9090
32"	781	1778	1778	1794	870	740	500	96	600	1335	273	8590	9940
34"	832	1930	1930	1946	900	785	500	96	600	1400	273	9590	10790
36"	876	2083	2083	2099	940	825	518	118	700	1490	710	11650	13290
40"	978	2170	2170	2170	1030	905	518	118	700	1675	710	16900	18350
42"	1022	2175	2175	2175	1070	970	518	118	700	1765	710	19650	21500
48"	1168	2435	2435	2435	1215	1130	518	118	700	2030	710	28950	31900
56"	1384	2710	2710	2710	1380	1280	660	150	700	2355	1160	45100	47480
60"	1461	2794	2794	2794	1475	1400	660	150	700	2525	1160	55710	58530



# Specification - Forged Steel Ball Valves (6" AND ABOVE)



## ANSI CLASS 900 (PN 150)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ								WE	RF/RTJ
6"	152	610	610	613	250	245	185	50	300	381	15	235	325
8"X6"X8"	152	737	737	740	250	245	185	50	300	470	15	280	405
8"	203	737	737	740	290	275	250	50	500	470	28	351	476
10"X8"X10"	203	838	838	841	290	275	250	50	500	547	28	451	546
10"	254	838	838	841	345	320	275	50	500	547	42	742	892
12"X10"X12"	254	965	965	968	345	320	275	50	500	610	42	867	1042
12"	305	965	965	968	390	365	310	66	600	610	57	992	1142
16"X12"X16"	305	1130	1130	1140	390	365	310	66	600	770	57	1252	1422
14"	324	1029	1029	1038	450	390	355	65	600	680	104	1144	1489
16"	375	1130	1130	1140	500	430	415	86	600	770	170	1438	1858
20"X16"X20"	375	1321	1321	1334	500	430	415	86	600	920	170	1703	2423
18"	425	1219	1219	1232	550	490	415	86	600	850	170	2063	2653
20"	473	1321	1321	1334	595	530	415	75	600	920	178	2435	3160
24"X20"X24"	473	1549	1549	1568	595	530	415	75	600	1110	178	2855	4200
24"	572	1549	1549	1568	700	620	500	96	600	1110	273	3745	5090
30"X24"X30"	572	1880	1880	1902	700	620	500	96	600	1360	273	4370	6180
28"	667	1753	1753	1775	810	710	500	96	600	1290	273	7405	8730
30"	714	1880	1880	1902	835	755	518	118	700	1360	710	9570	10990
36"X30"X36"	714	2286	2286	2315	835	755	518	118	700	1635	710	13120	15350
32"	762	2032	2032	2054	910	815	518	118	700	1460	710	98620	11820
34"	810	2159	2159	2188	960	850	518	118	700	1550	710	15900	17200
36"	857	2286	2286	2315	1020	885	518	118	700	1635	710	16350	18900
40"	956	-	-	-	1120	970	518	118	700	1810	710	-	-
42"	1006	-	-	-	1200	1060	518	118	700	1900	710	-	-
46"	1102	-	-	-	1280	1110	660	150	700	2070	1160	-	-
48"	1149	2200	-	-	1330	1150	660	150	700	2160	1160	39470	-

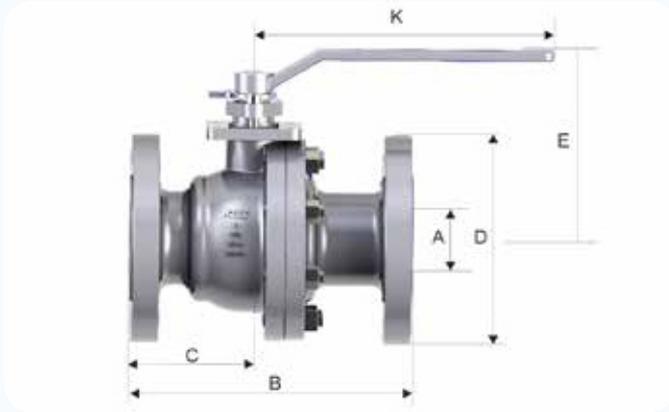
## ANSI CLASS 1500 (PN 250)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ								WE	RF/RTJ
6"	146	705	705	711	320	280	250	50	500	430	28	376	466
8"X6"X8"	146	832	832	841	320	280	250	50	500	540	28	406	596
8"	194	832	832	841	375	330	250	50	500	540	28	437	672
10"X8"X10"	194	991	991	1000	375	330	250	50	500	655	28	487	837
10"	241	991	991	1000	445	395	310	66	600	655	57	737	1092
12"X10"X12"	241	1130	1130	1146	445	395	310	66	600	770	57	792	1232
12"	289	1130	1130	1146	500	425	355	65	600	770	104	1089	1535
16"X12"X16"	289	1384	1384	1407	500	425	355	65	600	990	104	1144	2053
14"	318	1257	1257	1276	580	500	355	65	600	680	104	2338	3071
16"	362	1384	1384	1407	640	560	415	86	600	990	170	3558	4498
20"X16"X20"	362	1664	1664	1686	640	560	415	86	600	1180	170	4248	5548
18"	407	1537	1537	1559	705	590	415	75	600	1090	178	4800	6000
20"	451	1664	1664	1686	760	725	500	96	600	1180	273	7250	8500
24"X20"X24"	451	1943	1943	1971	760	725	500	96	600	1425	273	9200	10400
24"	534	1943	1943	1971	895	815	500	96	600	1425	273	12800	14282

## ANSI CLASS 2500 (PN 420)

SIZE inches	DN	FACE TO FACE			G	H	L	M	K	S	GEAR weight	BARE STEM VALVE WEIGHT	
		WE	RF	RTJ								WE	RF/RTJ
8"	181	1022	1038	711	385	395	310	66	600	660	67	1660	1970
10"	225	1270	1292	841	435	465	355	65	600	790	104	2490	2990
12"	267	1422	1445	841	500	525	415	86	600	870	170	3450	4130
14"	311	1575	1597	1000	580	630	415	75	600	990	178	4260	5090
16"	352	1683	1702	1000	670	720	641	96	600	1100	273	5140	6160

# Specification - Float Ball Valve



## 1~10" ANSI 150 FLOAT BALL VALVE

Size	A	B	C	D	E	K	BB	Y	W
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
1 "	25	127	58.8	108	68.3	150	-	-	7.7
1 1/2 "	38	165	75.2	127	93.7	250	-	-	9.4
2x1 1/2 "	38	178	80	152	93.7	250	-	-	10.8
2 "	51	178	76.7	152	115	250	-	-	13.7
3x2 "	51	203	102	191	115	250	-	-	18.8
3 "	76	203	89	191	154	400	-	-	25.6
4x3 "	76	229	108	229	154	400	-	-	38.9
4 "	102	229	102	229	184	400	-	-	44.2
6X4"	102	394	197	279	184	400	-	-	61
6 "	152	394	196.9	279	274.6	762	320.8	460	99
8X6"	152	457	229	343	274.6	762	320.8	610	122
8 "	203	457	229	343	362	-	320.8	610	180
10X8"	203	533	267	406	362	-	320.8	610	213

## 1~10" ANSI 300 FLOAT BALL VALVE

Size	A	B	C	D	E	K	BB	Y	W
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
1 "	25	165	89	124	68	150	-	-	10
1 1/2 "	38	191	89.7	155.7	93.7	250	-	-	11.7
2x1 1/2 "	38	216	108	165	93.7	250	-	-	12.8
2 "	51	216	108	165	114.6	250	-	-	15.8
3x2 "	51	282.7	141.2	209.6	114.6	250	-	-	23.8
3 "	76	282.7	147.8	209.6	153.9	400	-	-	35.7
4x3 "	76	305	152	254	153.9	400	-	-	47.5
4 "	102	305	152	254	183.9	400	-	-	58.7
6X4"	102	403	202	318	183.9	400	-	-	73.7
6 "	152	403.4	201.7	318	323.9	-	320.8	610	115
8X6"	152	502	251	381	323.9	-	320.8	610	152
8 "	203	502	251	381	406	-	371.6	610	237
10X8"	203	569	284	445	406	-	371.6	610	278

## 1~6" ANSI 600 FLOAT BALL VALVE

Size	A	B	D	E	G	W
inch	mm	mm	mm	mm	mm	kg
2x1 1/2 "	38	292	165	150	450	21
2 "	50	292	165	165	450	25
3x2 "	50	356	210	165	450	35
3 "	76	356	210	190	700	41
4x3 "	76	432	273	190	700	79
4 "	102	432	273	215	900	81
6X4"	102	559	356	215	900	158
6 "	150	559	356	275	1200	223

# Quality Assurance



PT



MT



UT

## A Commitment to Quality

Continuous improvement and zero defects are our eternal quality policy and objective. Based on international and domestic industrial standards and customer requirements, we set up higher internal quality assurance

Standards to implement comprehensive and full quality management, **XIAO VALVE** has a world-class testing center that enables us to independently complete all tests by ourselves, from product prototype tests to final inspection.

The inspection and tests include:

- NDE (RT, PT, MT, UT )
- Chemical analysis test
- Physical test (Impact test, Tensile test, Bending test)
- Fire test
- Cryogenic test
- High temperature test
- Vacuum test
- Fugitive emission test
- Pressure test (Shell test, Hydraulic test, Air test )
- Visual inspection
- Dimensional inspection
- Painting test

From raw materials to finished products, **XIAO VALVE** effectively controls each process. In addition, we actively employ 6 Sigma within the whole company to implement our "zero defects" program. Through advanced statistical analysis we continue to improve process control and management capability. -



4

RT



5

SANDBLASTING  
CHECKING



6

MACHINING  
CHECKING



7

SPARE PART  
CHECKING



8

TEST  
CHECKING



9

PAINING  
CHECKING



## Wide Range of Applications

XIAO VALVE supplies a wide range of BALL VALVES for petroleum, chemical, metallurgy, chemical fiber, infrastructure construction, electricity, water plants and other industrial fields. Please contact us to find out more specific solutions for your project.







**WENZHOU XIAO VALVE CO.,LTD.**

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