



KPC

THREE PIECE TRUNNION MOUNTED BALL



KPC

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Global Challenger KPC

KPC Corporation was formed in 1977 as a special material manufacturer in Daegu city, southern part of South Korea and has so far served our clients engaged in the key industries such as oil & gas, mining, petrochemical, power generation, aerospace, defense, and other fields of industries with the most up-to-date and advanced industrial technologies.

This commitment to on-going research and development for more than 30 years of experience in this field, combined with our emphasis on high quality services, has had our company to earn a name **KPC** Corporation deserving not only one of the world leading valve manufacturers but also a leading manufacturer of special materials in wide range indispensable for valve components.

With 4 manufacturing plants, **KPC** Corporation is firmly standing toward a vision to the “Global Best” via daily innovation and improvement using state-of-the art in-house facilities such as Vacuum Arc Remelting (VAR) furnaces, AOD refining vessel together with vacuum induction melting(VIM) furnaces and a testing and control laboratory to guarantee that each one of our valves meets the most demanding quality, functionality and safety criteria.

All activities at **KPC** are controlled under the detailed quality assurance system registered to ISO 9001 and certified by TUV and API.

KPC values Confidence, Service and Pride, and our dedication to quality and customer service will never be compromised.



Trunnion mounted split body ball valves, double block and bleed function, for oil and gas standard and severe applications

Features

- Ball valves, trunnion mounted, split body, type 3T
- All valves designed to API 6D and ASME VIII.
- Body wall thickness complies with ASME B16.34 (forged and/or cast).
- Full and reduced bore valves are available.
- Bi-directional valves and double block and bleed allowing venting and draining of the body cavity in both open and closed position.
- Two seat designs are available:
 - Single piston effect providing self relieving of the body cavity overpressure.
 - Double piston effect providing double barrier (Safety valve requested for relieving cavity pressure on liquid applications)
- Soft seat (PTFE, PCTFE, PEEK, Polyamide,etc.) and metal seat (TCC, CCC,etc.) are available.
- Blowout proof shouldered stem,(retained by the valve body)
- Antistatic device to BS 5351 (10 Ω under 12 Volt) between body and seats and ball and stem,
- Stem (bearings) to minimize the operating torques.
- Fire tested to API 607 and API 6FA.
- Emergency sealant injection provision,(all seats and stem)
 - standard for size 4" and above, smaller sizes on request.
- Testing to API 6D: hydrostatic body shell test, hydrostatic seats test, DBB test, pneumatic seat test and torque measurement.
- Marking to API 6D.
- Available with electric, pneumatic and hydraulic actuators.



General application

The KPC split body trunnion mounted ball valves have been designed for severe oil and gas applications, including production, upstream processing, transportation and distribution, refining and petrochemical, as well as power plants, water transportation, sea water desalination and chemical applications.

Technical data

Sizes : 2" to 60", FB and RB
 Pressure rating : ANSI Class 150 to Class 2500
 Body materials : Carbon steel, Stainless steel, Duplex and Super Duplex, Special alloys, Carbon steel with Inconel overlay
 Temperature range : -321°F to +842°F (-160°C to +450°C)
 Connections : End to end dimensions to API 6D and ASME B16.10
 Flanged to ASME B16.5 (2" to 24") and ASME B16.47(26" and above)
 Butt-weld ends to ASME B16.25, Mechanical joint on request

Special Applications and Options

Emergency Shut Down Valves (ESDV)

Valves specified ESD valves are with actuators that ensure their positive and rapid operation in an emergency. In case of such critical equipment, full details of the application conditions should be provided at the enquiry stage. KPC valves are available with SIL approval to ISO 61508 Standard for ESD service.

HIPS/HIPPS

KPC have developed procedures conforming to the High Integrity Protection System and High Integrity Pressure Protection System to provide the highest level of safety risk analysis for gas process and pipeline installations.

Special Coatings

The wear resistance and corrosion resistance of seat and ball materials may be enhanced by employing of weld overlays, electroless nickel plating, cobalt alloy deposition or other surface preparations, on seat ring, stem, ball or body sealing areas.

Operating Packages

KPC has wide experience in the provision of total control packages including the fitting and testing of all types of actuation and a complete range of control accessories. Fully functional test facilities enable KPC to assume engineering responsibility for the entire package.

Seat Pressure / Temperature Ratings

Size	Material	Class150~300~600	900	1500	2500
2"~12"	PTFE	392 °F(200°C)	-	-	-
14"~60"	PCTFE	212 °F(100°C)	176 °F	122 °F	122 °F
2"~60"	PEEK	392 °F(200°C)	320 °F	320 °F	320 °F
14"~60"	Polyamide	212 °F(100°C)	176 °F	104 °F	-
2"~60"	FKM	356 °F(180°C)	-	-	-
2"~60"	Metallic	1022 °F(550°C)	842 °F	842 °F	842 °F

Size / Pressure Ratings

Pressure rating	Size range (full bore)																									
	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	40"	42"	46"	48"	54"	56"
ANSI 150	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ANSI 300	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ANSI 600	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ANSI 900	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ANSI 1500	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ANSI 2500	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Color key

■	External Trunnion mount, Shaft type
■	Internal Trunnion mount, Plate type

KPC produces

the following ball valves



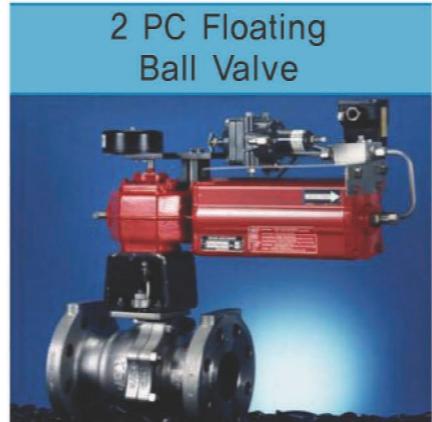
Top Entry
Trunnion Ball Valve



Wedge Seal
Top Entry Ball Valve



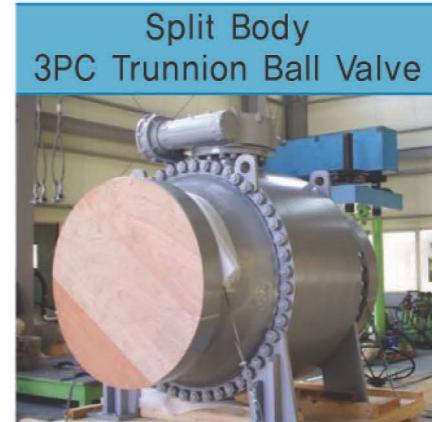
Top Entry
Forged Ball Valve



2 PC Floating
Ball Valve



Split Body
2PC Trunnion Ball Valve



Split Body
3PC Trunnion Ball Valve

One piece body design for inline maintenance. Mainly installed on offshore applications.

- Bolted or pressure sealed bonnet
- Fire safe approved design
- End connections: butt weld, clamped, flanged or transition/pup pieces
- Built-in antistatic feature
- Face to face according to API 6D
- Double block & bleed (SPE, DPE)
- Design to ANSI B16.34
- Soft, Metal/Soft or Metal/Metal Seating
- Wide range of sizes, materials and body design option providing a suitable model for any application.
- ISO mounting models which are quick and easy to automate.

Pressure Class:
ANSI 150, 300, 600, 900, 1500, 2500
Size Range : 2" ~ 60"

Two piece (cast or forged) trunnion mounted design for tight shut-off on gas and liquid services.

- Full or reduced bore
- End connections: butt weld, flanged, clamped, flanged or transition/pup pieces
- Materials: Stainless Steel, Hastelloy, Monel, Alloy-20, Nickel, Tantalum, Titanium, others.
- Design to ANSI B16.34
- Mechanical indicator
- Pressure activated seating
- Built-in antistatic feature
- Simplified inline service
- Minimal potential leak paths
- Wide selection of materials & options
- Soft, Metal/Soft or Metal/Metal seating
- Manual or powered operation

Pressure Class:
ANSI 150, 300, 600, 900, 1500
Size Range : Full bore : 1/2" ~ 10"
Reduced : 2" ~ 12"

Severe-Service valves for the Power and Process Industries.

- Full or reduced bore
- End connections: butt weld, clamped, flanged or transition/pup pieces
- Materials: Stainless Steel, Hastelloy, Monel, Alloy-20, Nickel, Tantalum, Titanium, others.
- Design to ANSI B16.34
- Mechanical indicator
- Pressure activated seating
- Built-in antistatic feature
- Simplified inline service
- Minimal potential leak paths
- Wide selection of materials & options
- Soft, Metal/Soft or Metal/Metal seating
- Manual or powered operation

Pressure Class:
ANSI 600, 900, 1500, 2500, 4500
Size Range : 1" ~ 24"

Two piece (cast or forged) floating design for tight shut-off on gas and liquid services.

- Full or reduced bore
- Fire safe approved design
- End connections: butt weld, flanged or pup pieces
- Design to ANSI B16.34
- Mechanical indicator
- Live loaded packing(Standard)
- Metal/Metal seating(Standard)
- Manual or powered operation

Pressure Class:
ANSI 150, 300, 600
Size Range : Full bore : 1/2" ~ 10"
Reduced : 2" ~ 12"

Two piece (cast or forged) trunnion mounted design for tight shut-off on gas and liquid services.

- Full or reduced bore
- Fire safe approved design
- End connections: butt weld, clamped, flanged or transition/pup pieces
- Built-in antistatic feature
- Face to face according to API 6D
- Double Block & Bleed (SPE, DPE)
- Design to ANSI B16.34
- Soft, Metal/Soft or Metal/Metal seating
- Manual or powered operation
- Wide range of sizes, materials and body design option providing a suitable model for any application.
- ISO mounting models which are quick and easy to automate.

Pressure Class:
ANSI 150, 300, 600, 900, 1500, 2500
Size Range : 2" ~ 30"

Three piece (forged) trunnion mounted design for tight shut-off on gas and liquid services.

- Full or reduced bore
- Fire safe approved design
- End connections: butt weld, clamped, flanged or transition/pup pieces
- Built-in antistatic feature
- Face to face according to API 6D
- Double Block & Bleed (SPE, DPE)
- Design to ANSI B16.34
- Soft, Metal/Soft or Metal/Metal seating
- Manual or powered operation
- Wide range of sizes, materials and body design option providing a suitable model for any application.
- ISO mounting models which are quick and easy to automate.

Pressure Class:
ANSI 150, 300, 600, 900, 1500, 2500
Size Range : 2" ~ 60"



HOW TO SPECIFY KPC BALL VALVES

① ① - ② ② ③ - ⑤ ⑥ - ⑦ ⑧ - ⑨ ⑨
3 T - 0 8 1 - S 2 - R 2 - G A

3T BALL VALVE 8" ANSI 150# FULL BORE, CARBON STEEL BODY, STAINLESS STEEL TRIM
GLASS REINFORCED PTFE SEAT, RAISED FACE, GEAR OPERATED, FIRE SAFE, ANTISTATIC

① VALVE MODEL	
CODE	DESCRIPTION
FM	FLO-MAX (2Pc FLOATING)
3T	3PCS TRUNNION SIDE ENTRY
2T	2PC TRUNNION
WT	WEDGE SEAL TOP ENTRY
WS	WEDGE SEAL SIDE ENTRY
TT	TOP ENTRY TRUNNION
2F	2PCS FLOATING
3F	3PCS FLOATING
SP	SPECIAL

② SIZE			
CODE	SIZE	CODE	SIZE
OA	1/4	20	20"
OB	1/2	22	22"
OC	3/4	24	24"
01	1"	26	26"
1A	1 1/4	28	28"
1B	1 1/2	30	30"
02	2"	32	32"
2B	2 1/2	34	34"
03	3"	36	36"
04	4"	40	40"
05	5"	42	42"
06	6"	44	44"
08	8"	46	46"
10	10"	48	48"
12	12"	54	54"
14	14"	56	56"
16	16"	60	60"
18	18"		

③ ANSI CLASS & PORT	
CODE	CLASS
1	150# FB
2	150# RB
3	300# FB
4	300# RB
5	600# FB
6	600# RB
7	900# FB
8	900# RB
9	1500# FB
0	1500# RB
A	2500# FB
B	2500# RB
C	4500# FB

④ BODY & ⑤ TRIM MAT'L	
CODE	DESCRIPTION
C	C/STEEL
S	S/STEEL
A	ALLOY 20
H	HASTELLOY
D	DUPLEX SS
M	MONEL
T	TITANIUM
X	SPECIAL

⑥ SEAT MATERIAL	
CODE	DESCRIPTION
1	VIRGIN PTFE
2	GLASS RPTFE
3	CARBON RPTFE
4	PCTFE
5	PEEK
6	METAL SEAT
7	POLYAMIDE
8	CARBON GRAPHITE
9	CERAMIC
X	SPECIAL

⑦ END CONFIGURATION	
CODE	DESCRIPTION
F	FLAT FACE
R	RAISED FACE
J	RING JOINT
B	BUTT WELD
S	SOCKET WELD
C	SCREWED
X	SPECIAL

⑧ OPERATING	
CODE	DESCRIPTION
0	BARE STEM
1	WRENCH HANDLE
2	ENCLOSED GEAR
3	PNEUMATIC
4	ELECTRIC MOTOR
5	HYDRAULIC
6	OVER HANDLE
X	SPECIAL

⑨ OPTIONAL FEATURES	
CODE	DESCRIPTION
S	STANDARD
G	GRAPHITE PACKING / GASKET (API-607FIRESAFE)
L	DOUBLE LIVE LOADED PTFE CHEVRON PACKING
E	EXTENDED STEM
C	CHLORINE SERVICE CLEANING (CL2 CLEANING)
N	NACE CERTIFIED TRIM
V	VENTED BALL
X	SPECIAL

in compliance with the following standards

Applicable Standards

KPC ball valves are in accordance with API, ANSI, ASME and BS requirements.

The following list contains the most important applicable standards for ball valves.

KPC valves may be designed, manufactured and tested in accordance with other international standards on request.

API – American Petroleum Institute

Spec. 6A	Specification for wellhead and christmas tree equipment
Spec. 6D	Specification for pipeline valves.
Spec. 6FA	Specification for fire testing of valves
Spec. RP6F	Recommended practice for fire testing of valves
Std. 598	Valve inspection and test.
Std. 605	Large diameter carbon steel flanges.
Std. 607	Fire test for soft seated quarter-trun valves.

BSI – British Standard Institute

BS 1503	Specification for steel forgings for pressure purposes.
BS 1504	Specification for steel castings for pressure purposes.
BS 1560	Steel pipe flanges and flanged fittings.
BS 2080	Face-to-face, centre-to-end, end-to-end and centre-to-end dimensions of flanged and butt-welding end steel valves for the petroleum, petrochemical and allied industries.
BS 4504	Flanges and boltings for pipes valves and fittings.
BS 5146	Inspection and test of steel valves for the petroleum, petrochemical and allied industries.
BS 5351	Steel ball valves for the petroleum, petrochemical and allied industries
BS 5750	Quality system
BS 6755	Testing of valves.

MSS-Manufactures Standardization Society

SP 6	Standards for contact faces of pipe flanges and connecting-end flanges and unions.
SP 25	Standard marking system for valves, fittings flanges and unions.
SP 44	Steel pipe line flanges.
SP 45	By-pass and drain connection standard.
SP 55	Quality standard for steel castings visual method.
SP 61	Hydrostatic testing of steel valves.
SP 72	Ball valves with flanged or butt-welding general service.

ASME-American Society of Mechanical Engineers

ASTM-American Society for Testing Materials

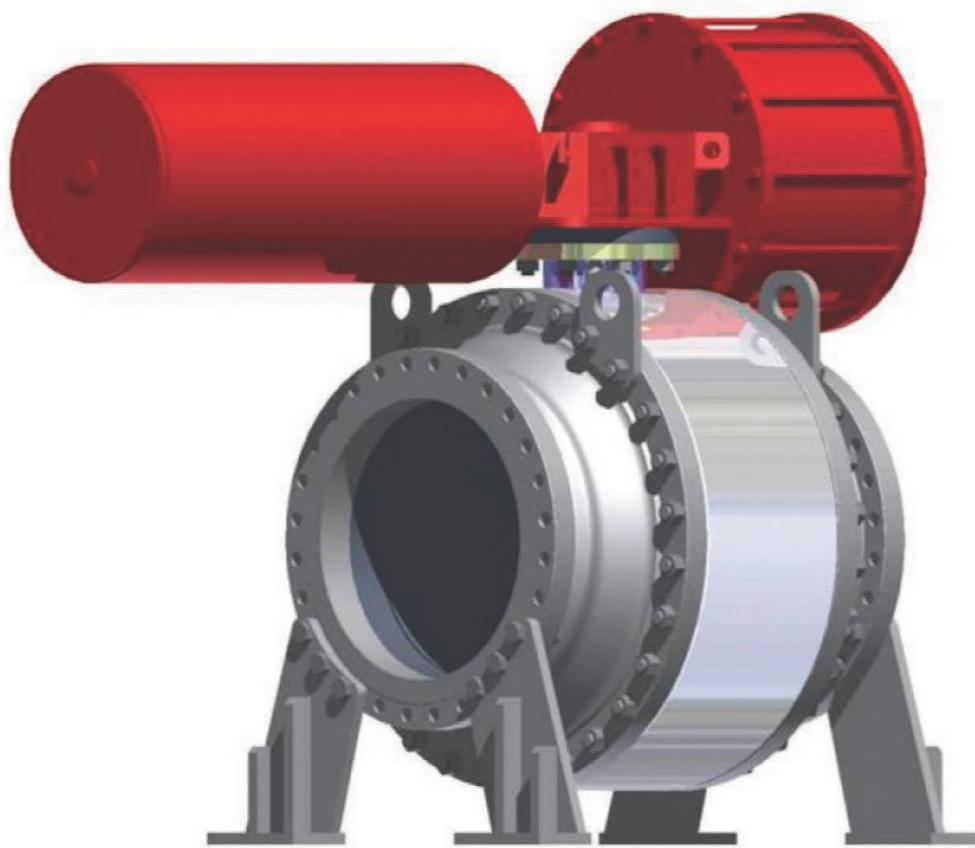
ISO-International Standard Organization

ISO 9001	Quality system-Model for quality assurance in design/development, production, installation and servicing
X	SPECIAL

NACE-National Association of Corrosion Engineers

MR0175	Sulfide stress cracking resistant metallic materials for oil field equipment
MR0103	Standard material requirements

KPC BALL VALVES, TRUNNION MOUNTED BALL DESIGN



DESIGN AND TESTING STANDARDS

Design : ASME B16.34, API 6D, BS EN ISO 17292

Face to face : API 6D, ASME B16.10

Flange dimension : ASME B16.5 SMOOTH FINISH Ra3.2~6.3μm

Bore dimension : API 6D

Actuator mounting pad on the valve as per ISO 5211

Pressure test & inspection : API 598, API 6D

Fugitive emission qualification as per ISO 15848 & EPA 40

Actuator mounting pad on the valve as per ISO 5211

NACE MR 01-75 Compliant

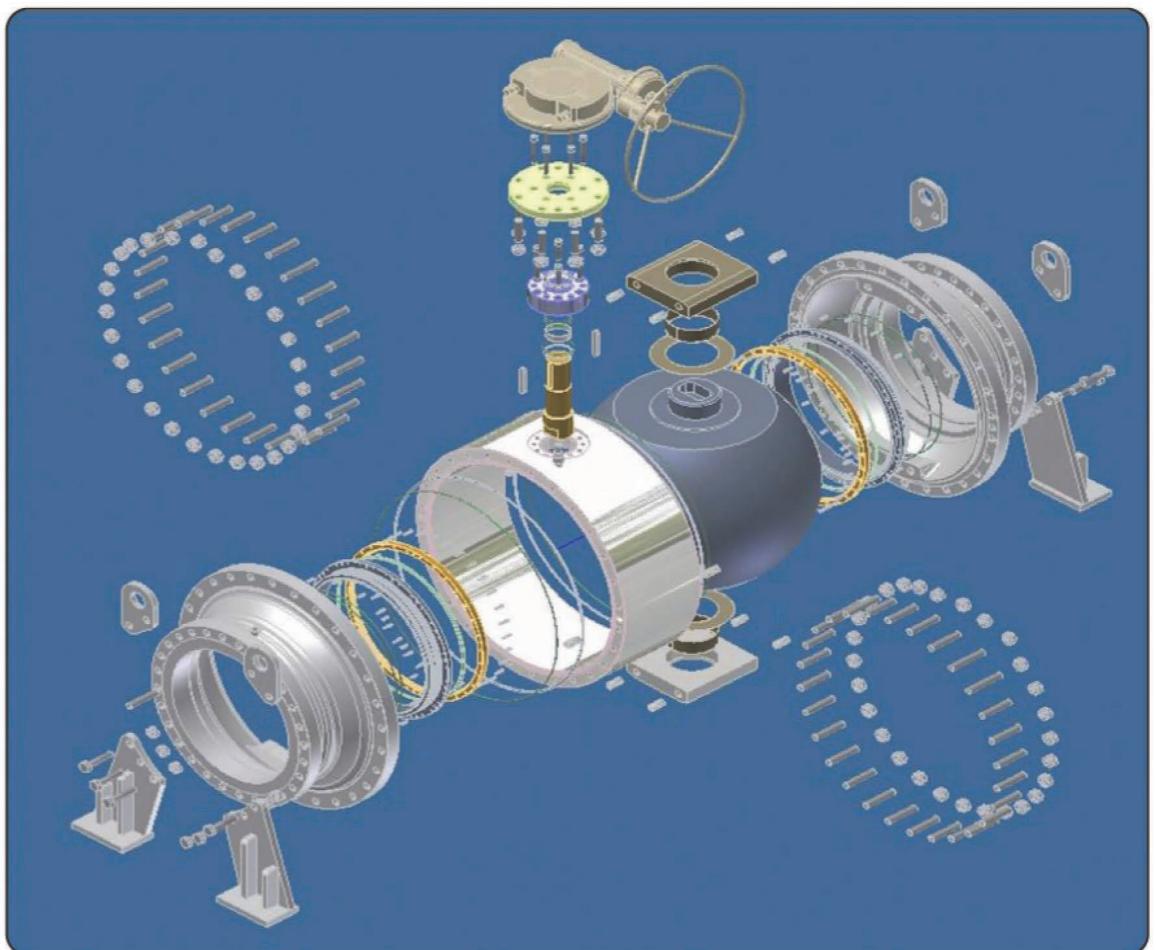
Fire-Safe : API 607, API 6FA

ANTI-STATIC : BS 5351

Drain, Vent, Bypass : API 6D, MSS SP 45

KPC BALL VALVES, TRUNNION MOUNTED BALL DESIGN

Construction and Material



Standard Feature

Trunnion Mounted Ball Design

Built-In Antistatic

Blow-out Proof Stem

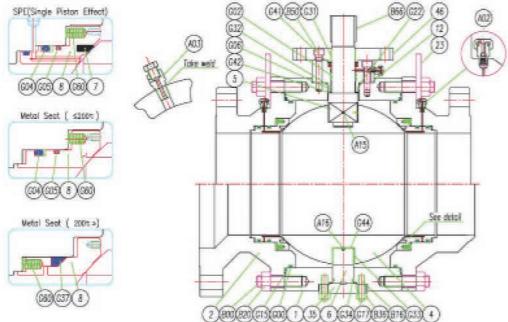
Fire Safe Design

Emergency Sealant Injection

Double Block & Bleed

Drain & Vent Fittings

Support Leg & Lifting lugs



Valve size range:
4" to 8" FB
3" to 10" RB
Pressure rating:
ANSI 150 to ANSI 600

The selection of the material depends upon the corrosion resistance, pressure rating and temperature.

Valve part list with BOM – 3T Model, Soft & Metal Seated Ball valves

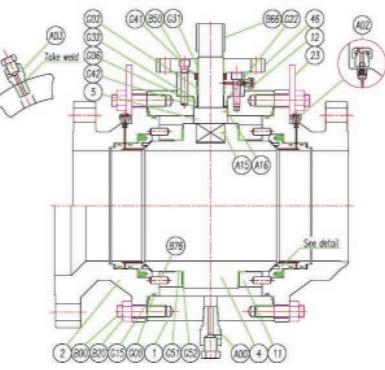
Item	Designation	Carbon Steel Standard Material	Carbon Steel Body with Stainless Steel trim	Stainless Steel body Standard Material
1	Body	ASTM A 105	ASTM A 105	ASTM A 182 Gr F316
2	Cap	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 182 Gr F316
4	Ball	A 216 WCB+75µm ENP/AISI 410	ASTM A 182 Gr F316	ASTM A 182 Gr F316
5	Stem	A 276 Gr UNS S41000 (AISI 410)	A 276 Gr UNS S41000 (AISI 410)	ASTM A 182 Gr F316
6	Low stem	A 276 Gr UNS S41000 (AISI 410)	A 276 Gr UNS S41000 (AISI 410)	ASTM A 182 Gr F316
7	Seat insert	RTFE/PCTFE/NYLON/PEEK	RTFE/PCTFE/NYLON/PEEK	RTFE/PCTFE/NYLON/PEEK
8	Seat ring	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M
11	Bearing plate	ASTM A216 WCB	ASTM A216 WCB	A351 Gr. CF8M
12	Cover	AISI 1020	AISI 1020	ASTM A 182 Gr F316
23	Lifting lug	AISI 1020	AISI 1020	ASTM A 182 Gr F304
35	Low Cover	AISI 1020	AISI 1020	ASTM A 182 Gr F316
46	Adapter flange	AISI 1020	AISI 1020	ASTM A 182 Gr F316
B00	Stud bolt	ASTM A193 Gr B7M	ASTM A193 Gr B7M	ASTM A 320 Gr B8M
B16	Stud bolt	ASTM A193 Gr B7M	ASTM A193 Gr B7M	ASTM A 320 Gr B8M
B20	Nut	ASTM A194 Gr 2HM	ASTM A194 Gr 2HM	ASTM A 194 Gr 8M
B36	Nut	ASTM A194 Gr 2HM	ASTM A194 Gr 2HM	ASTM A 194 Gr 8M
B50	Screw	ASTM A193 Gr B7M	ASTM A193 Gr B7M	ASTM A 320 Gr B8M
B66	Stem key	AISI 4140	AISI 4140	AISI 4140
G00	O-Ring seal	FKM	FKM	FKM
G02	Stem O-Ring	FKM	FKM	FKM
G04	O-Ring seal	FKM	FKM	FKM
G05	Fire seal	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G06	O-Ring seal	FKM	FKM	FKM
G15	Fire safe gasket	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G17	Fire safe gasket	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G22	Fire safe gasket	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G31	Gland bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G32	Stem bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G33	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G34	O-Ring seal	FKM	FKM	FKM
G41	Fire seal	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G42	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G44	Thrust washe	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G51	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G52	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G60	Seal spring	INCONEL X750	INCONEL X750	INCONEL X750
A00	Drain plug	AISI 1020 + Cr.plated	AISI 1020 + Cr.plated	ASTM A 182 Gr F316L
A02	Sealant injection	AISI 1020 + Cr.plated	AISI 1020 + Cr.plated	ASTM A 182 Gr F316L
A03	Vent plug	AISI 1020 + Cr.plated	AISI 1020 + Cr.plated	ASTM A 182 Gr F316L
A15	Anti-static spring	ANSI 316	ANSI 316	ANSI 316
A16	Anti-static spring	INCONEL X750	INCONEL X750	ANSI 316

Valve size range:
2" to 3"
Pressure rating:
ANSI 900 to 2500

Valve size range:
10" to 60"
Pressure rating:
ANSI 150 to ANSI 600

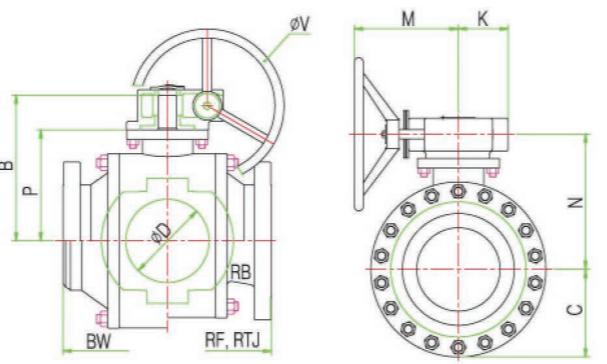
Valve size range:
4" to 36"
Pressure rating:
ANSI 1500

Valve size range:
4" to 42"
Pressure rating:
ANSI 900



Valve part list with BOM – 3T Model, Soft & Metal Seated Ball valves

Item	Designation	Carbon Steel Standard Material	Carbon Steel Body with Stainless Steel trim	Stainless Steel body Standard Material
1	Body	ASTM A 105	ASTM A 105	ASTM A 182 Gr F316
2	Cap	ASTM A 216 WCB	ASTM A 216 WCB	ASTM A 182 Gr F316
4	Ball	A 216 WCB+75µm ENP/AISI 410	ASTM A 182 Gr F316	ASTM A 182 Gr F316
5	Stem	A 276 Gr UNS S41000 (AISI 410)	A 276 Gr UNS S41000 (AISI 410)	A 276 Gr UNS S41000 (AISI 410)
7	Seat insert	RTFE/PCTFE/NYLON/PEEK	RTFE/PCTFE/NYLON/PEEK	RTFE/PCTFE/NYLON/PEEK
8	Seat ring	A351 Gr. CF8M	A351 Gr. CF8M	A351 Gr. CF8M
11	Bearing plate	ASTM A216 WCB	ASTM A216 WCB	A351 Gr. CF8M
12	Cover	AISI 1020	AISI 1020	AISI 1020
23	Lifting lug	AISI 1020	AISI 1020	ASTM A 182 Gr F304
46	Adapter flange	AISI 1020	AISI 1020	ASTM A 182 Gr F316
B00	Stud bolt	ASTM A193 Gr B7M	ASTM A193 Gr B7M	ASTM A 320 Gr B8M
B20	Nut	ASTM A194 Gr 2HM	ASTM A194 Gr 2HM	ASTM A 194 Gr 8M
B50	Screw	ASTM A193 Gr B7M	ASTM A193 Gr B7M	ASTM A 320 Gr B8M
B66	Stem key	AISI 4140	AISI 4140	AISI 4140
G00	O-Ring seal	FKM	FKM	FKM
G02	Stem O-Ring	FKM	FKM	FKM
G04	O-Ring seal	FKM	FKM	FKM
G05	Fire seal	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G06	O-Ring seal	FKM	FKM	FKM
G15	Fire safe gasket	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G17	Fire safe gasket	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G22	Fire safe gasket	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G31	Gland bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G32	Stem bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G33	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G34	O-Ring seal	FKM	FKM	FKM
G41	Fire seal	EXPANDED GRAPHITE	EXPANDED GRAPHITE	EXPANDED GRAPHITE
G42	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G44	Thrust washe	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G51	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G52	Bearing	C.S+PTFE LINING	C.S+PTFE LINING	316 SS+PTFE LINING
G60	Seal spring	INCONEL X750	INCONEL X750	INCONEL X750
A00	Drain plug	AISI 1020 + Cr.plated	AISI 1020 + Cr.plated	ASTM A 182 Gr F316L
A02	Sealant injection	AISI 1020 + Cr.plated	AISI 1020 + Cr.plated	ASTM A 182 Gr F316L
A03	Vent plug	AISI 1020 + Cr.plated	AISI 1020 + Cr.plated	ASTM A 182 Gr F316L
A15	Anti-static spring	ANSI 316	ANSI 316	ANSI 316
A16	Anti-static spring	INCONEL X750	INCONEL X750	ANSI 316



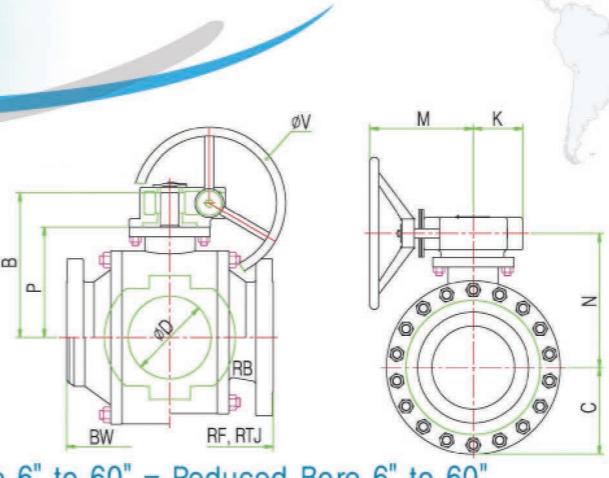
Dimensions ANSI 150 – Full Bore 6" to 60" – Reduced Bore 6" to 60"

Nominal Diameter

ins (mm)	Bore	Weight (Kg)													
		RF	RJ	BW	B	C	D	K	M	N	P	V	RF- RTJ	BW	Gear Operator
6"	RB	394	406	457	184	128	100	(1)	(1)	182	150	(1)	88	68	(1)
(150)	FB	394	406	457	241	185	150	(1)	(1)	236	201	(1)	180	161	(1)
8"	RB	457	470	521	241	185	150	(1)	(1)	236	201	(1)	210	180	(1)
(200)	FB	457	470	521	350	282	201	250	102	326	268	370	348	324	15
10"	RB	533	546	559	350	282	201	250	102	326	268	370	396	354	15
(250)	FB	533	546	559	430	318	252	405	142	395	330	600	456	414	40
12"	RB	610	622	635	430	318	252	405	142	395	330	600	528	466	40
(300)	FB	610	622	635	475	340	303	405	142	440	376	600	696	634	54
14"	RB	686	699	762	475	340	303	405	142	440	376	600	774	690	54
(350)	FB	686	699	762	504	395	334	520	190	480	405	600	936	852	54
16"	RB	762	775	762	504	395	334	520	190	480	405	600	1,056	952	54
(400)	FB	762	775	838	540	440	385	520	190	510	440	600	1,236	1,132	84
18"	RB	864	876	914	540	440	385	520	190	510	440	600	1,368	1,254	84
(450)	FB	864	876	914	595	480	438	520	190	565	495	600	1,740	1,626	84
20"	RB	914	927	991	595	480	438	520	190	565	495	600	1,872	1,727	84
(500)	FB	914	927	991	630	520	489	520	190	600	530	600	2,160	2,015	84
22"	RB	1,041	1,054	1,092	630	520	489	520	190	600	530	600	2,292	2,118	84
(550)	FB	1,041	1,054	1,092	695	570	540	670	225	665	580	800	2,760	2,586	170
24"	RB	1,067	1,080	1,143	695	570	540	670	225	665	580	800	3,000	2,797	170
(600)	FB	1,067	1,080	1,143	775	590	591	760	225	720	625	800	3,384	3,000	170
26"	RB	1,143	1,168	1,245	775	590	591	760	225	720	625	800	3,540	3,212	170
(650)	FB	1,143	1,168	1,245	774	585	635	467	155	705	639	457	4,020	3,692	220
28"	RB	1,245	1,270	1,346	774	585	635	467	155	705	639	457	4,248	3,874	220
(700)	FB	1,245	1,270	1,346	865	680	685	760	225	810	715	800	5,076	4,702	220
30"	RB	1,295	1,321	1,397	865	680	685	760	225	810	715	800	5,400	4,968	220
(750)	FB	1,295	1,321	1,397	905	725	737	760	225	860	765	800	6,326	5,894	349
32"	RB	1,372	1,400	1,524	905	725	737	760	225	860	765	800	6,600	6,042	349
(800)	FB	1,372	1,400	1,524	1,000	760	782	815	260	930	820	1000	7,380	6,822	349
34"	RB	1,473	1,502	1,626	1,000	760	782	815	260	930	820	1,000	6,600	7,324	349
(850)	FB	1,473	1,502	1,626	1,025	820	832	815	260	950	845	1,000	8,640	8,044	440
36"	RB	1,524	1,552	1,727	1,025	820	832	815	260	950	845	1,000	9,240	8,514	440
(900)	FB	1,524	1,552	1,727	1,065	855	877	815	365	990	885	1,000	9,912	9,186	440
40"	RB	1,702		1,950	1,065	855	877	815	365	990	885	1,000	10,824	9,964	440
(1,000)	FB	1,702		1,950	1,135	920	978	920	365	1,075	965	1,000	12,852	11,992	440
42"	RB	1,860		2,015	1,135	920	978	920	365	1,075	965	1,000	14,280	13,270	440
(1,050)	FB	1,860		2,015	1,190	955	1,022	920	365	1,130	1,022	1,000	15,120	14,110	440
48"	RB	2,235		2,220	1,190	955	1,022	920	365	1,130	1,022	1,000	16,164	14,815	440
(1,200)	FB	2,235		2,220	1,345	1,065	1,168	650	250	1,230	1,140	1,000	20,280	18,931	440
56"	RB	2,250		2,500	1,345	1,065	1,168	650	250	1,230	1,140	1,000	22,800	20,827	660
(1,400)	FB	2,250		2,500	1,510	1,210	1,362	650	250	1,400	1,305	1,000	24,978	23,005	660
60"	RB	2,400		2,640	1,510	1,210	1,362	650	250	1,400	1,305	1,000	28,800	26,491	660
(1,500)	FB	2,400		2,640	1,570	1,300	1,460	650	250	1,455	1,365	1,000	32,658	30,349	

For the standards that are not available in these dimensions, please consult our commercial department.

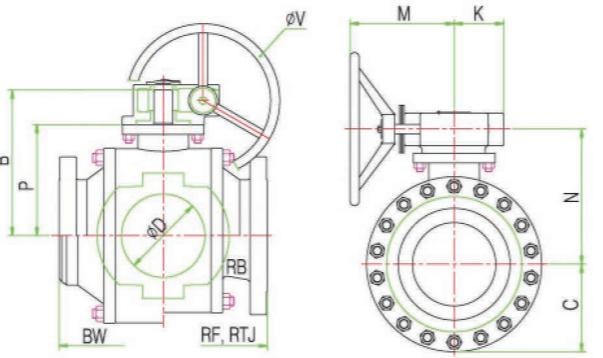
(1) – Lever operated valves RB = Reduced bore FB = Full bore All dimensions in mm



Dimensions ANSI 300 – Full Bore 6" to 60" – Reduced Bore 6" to 60"

Nominal Diameter

ins (mm)	Bore	Weight (Kg)												
		RF	RJ	BW	B	C	D	K	M	N	P	V	RF- RTJ	BW
6"	RB	4												

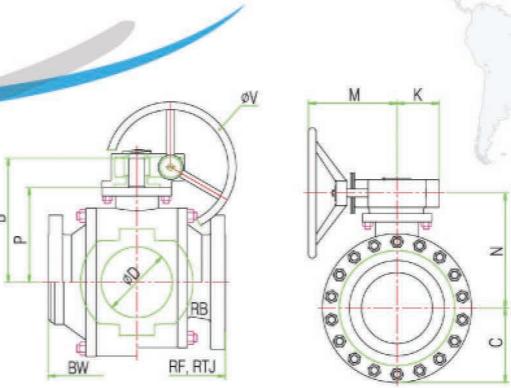


Dimensions ANSI 600 – Full Bore 6" to 60" – Reduced Bore 6" to 60"

Nominal Diameter													Weight (Kg)		
ins (mm)	Bore	RF	RJ	BW	B	C	D	K	M	N	P	V	RF-RTJ	BW	Gear Operator
6" (150)	RB 559	562	559	195	146	102	(1)	(1)	197	162	(1)	190	124	58	
6" (150)	FB 559	562	559	380	260	152	405	145	345	280	600	300	234	58	
8" (200)	RB 660	664	660	380	260	152	405	145	345	280	600	372	271	84	
8" (200)	FB 660	664	660	410	300	203	505	145	370	305	600	516	415	84	
10" (250)	RB 787	791	787	410	300	203	505	145	370	305	600	636	473	84	
10" (250)	FB 787	791	787	440	310	254	520	190	445	375	600	780	617	84	
12" (300)	RB 838	841	838	440	310	254	520	190	445	375	600	852	660	84	
12" (300)	FB 838	841	838	480	345	305	520	190	445	375	600	1,122	930	84	
14" (350)	RB 889	892	889	480	345	305	520	190	445	375	600	1,200	971	84	
14" (350)	FB 889	892	889	575	435	337	520	190	445	375	800	1,536	1,307	170	
16" (400)	RB 991	994	991	480	345	337	520	190	445	375	800	1,812	1,489	170	
16" (400)	FB 991	994	991	575	465	387	670	225	530	445	800	1,992	1,669	170	
18" (450)	RB 1,092	1,095	1,092	575	435	387	520	190	445	375	800	2,256	1,865	170	
18" (450)	FB 1,092	1,095	1,092	670	500	438	760	225	615	520	800	2,760	2,369	220	
20" (500)	RB 1,194	1,200	1,194	670	500	438	760	225	615	520	800	3,144	2,652	220	
20" (500)	FB 1,194	1,200	1,194	710	530	489	760	225	655	560	1,000	3,600	3,108	349	
22" (550)	RB 1,295	1,305	1,295	710	530	489	760	225	655	560	1,000	3,840	3,228	349	
22" (550)	FB 1,295	1,305	1,295	750	565	540	616	232	682	570	1,000	4,524	3,912	349	
24" (600)	RB 1,397	1,407	1,397	750	565	540	616	232	682	570	1,000	4,824	4,093	440	
24" (600)	FB 1,397	1,407	1,397	830	625	591	815	260	770	670	1,000	5,520	4,789	440	
26" (650)	RB 1,448	1,461	1,448	830	625	591	815	260	770	670	1,000	5,904	5,016	440	
26" (650)	FB 1,448	1,461	1,448	865	636	635	621	232	764	694	1,000	6,576	5,688	440	
28" (700)	RB 1,549	1,562	1,549	865	636	635	621	232	764	694	1,000	6,912	5,926	440	
28" (700)	FB 1,549	1,562	1,549	920	676	686	689	232	804	734	1,000	7,938	6,952	440	
30" (750)	RB 1,651	1,664	1,651	920	676	686	689	232	804	734	1,000	8,196	7,092	440	
30" (750)	FB 1,651	1,664	1,651	970	750	737	920	365	920	810	1,000	9,708	8,604	440	
32" (800)	RB 1,778	1,794	1,778	970	750	737	920	365	920	810	1,000	9,840	8,604	440	
32" (800)	FB 1,778	1,794	1,778	972	748	781	–	–	–	806	–	10,692	9,456	–	
34" (850)	RB 1,930	1,946	1,930	972	748	781	–	–	–	806	–	11,988	10,643	–	
34" (850)	FB 1,930	1,946	1,930	1,084	845	832	–	–	–	838	–	13,320	11,975	–	
36" (900)	RB 2,083	2,099	2,083	1,084	845	832	–	–	–	838	–	14,280	12,749	–	
36" (900)	FB 2,083	2,099	2,083	1,058	880	876	–	–	–	872	–	15,600	14,069	–	
40" (1,000)	RB 2,337	–	1,950	1,058	880	876	–	–	–	872	–	16,680	15,106	–	
40" (1,000)	FB 2,337	–	1,950	1,205	980	1,022	–	–	–	1,000	–	19,896	18,322	–	
42" (1,050)	RB 2,387	–	2,015	1,205	980	1,022	–	–	–	1,000	–	21,600	19,610	–	
42" (1,050)	FB 2,387	–	2,015	1,250	1,000	1,022	–	–	–	990	–	28,800	21,530	–	
48" (1,200)	RB 2,667	–	2,220	1,250	1,000	1,022	–	–	–	990	–	25,392	22,585	–	
48" (1,200)	FB 2,667	–	2,220	1,345	1,080	1,168	–	–	–	1,140	–	31,266	27,697	–	
56" (1,400)	RB 2,667	–	2,500	1,345	10,080	1,168	–	–	–	1,140	–	31,344	27,042	–	
56" (1,400)	FB 2,667	–	2,500	1,580	1,250	1,365	–	–	–	1,230	–	37,668	33,366	–	
60" (1,500)	RB 2,950	–	2,640	1,580	1,250	1,365	–	–	–	1,230	–	44,832	39,298	–	
60" (1,500)	FB 2,950	–	2,640	1,690	1,450	1,461	–	–	–	1,330	–	47,916	24,382	–	

For the standards that are not available in these dimensions, please consult our commercial department.

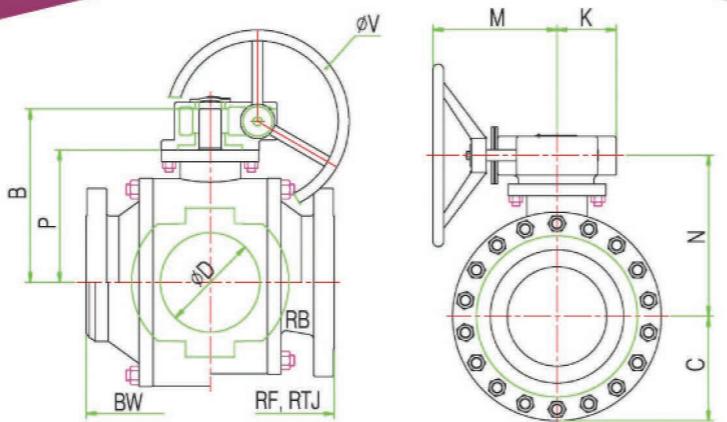
(1) – Lever operated valves RB = Reduced bore FB = Full bore All dimensions in mm



Dimensions ANSI 900 – Full Bore 4" to 60" – Reduced Bore 4" to 60"

Nominal Diameter

ins (mm)	Bore	RF	RJ	BW	B	C	D	K	M	N	P	V	RF-RTJ	BW	Gear Operator
4" (100)	RB 457	460	457	247	150	102	420	143	202	167	600	137	92	58	
6" (150)	RB 610	613	610	260	204	152	420	143	263	213	600	168	124	58	
8" (200)	RB 737	740	737	260	204	152	420	143	263	213	800	492	340	84	
10" (250)	RB 838	841	838	375	255	203									

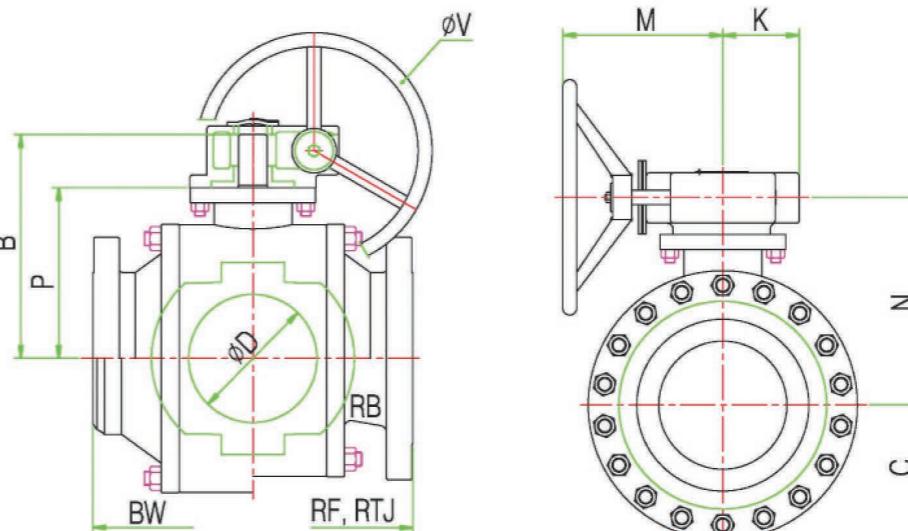


Dimensions ANSI 1500 – Full Bore 2" to 42" – Reduced Bore 3" to 42"

Nominal Diameter

ins (mm)	Bore	RF	RJ	BW	B	C	D	K	M	N	P	V	Weight (Kg)		
													RF- RTJ	BW	Gear Operator
2"(50)	FB	368	371	368	204	95	51	420	143	165	160	600	84	48	58
3"	RB	470	473	470	204	95	51	420	143	165	160	600	112	53	58
(80)	FB	470	473	470	237	127	76	420	143	182	180	600	158	91	58
4"	RB	546	549	546	237	127	76	420	143	182	180	600	194	102	58
(100)	FB	546	549	546	267	158	102	420	143	209	215	600	274	165	58
6"	RB	705	711	705	267	158	102	420	143	209	215	600	418	205	58
(150)	FB	705	711	705	334	222	146	520	190	287	237	600	720	455	84
8"	RB	832	841	832	334	222	146	520	190	287	237	600	893	510	84
(200)	FB	832	841	832	394	277	194	520	190	332	294	600	1,166	740	84
10"	RB	991	1,000	991	394	277	194	520	190	332	294	600	1,483	830	84
(250)	FB	991	1,000	991	502	343	241	520	190	426	402	600	2,016	1,275	84
12"	RB	1,130	1,146	1,130	502	343	241	520	190	426	402	600	2,419	1,420	84
(300)	FB	1,130	1,146	1,130	562	383	289	670	225	468	447	800	3,096	1,280	170
14"	RB	1,257	1,276	1,257	562	383	289	670	225	468	447	800	3,528	2,145	170
(350)	FB	1,257	1,276	1,257	611	410	318	670	225	496	496	800	4,493	2,955	170
16"	RB	1,384	1,407	1,384	611	410	318	670	225	496	496	800	5,299	3,380	170
(400)	FB	1,384	1,407	1,384	651	450	362	760	225	536	501	1,000	6,422	4,318	220
18"	RB	1,537	1,559	1,537	651	450	362	760	225	536	501	1,000	6,941	5,552	220
(450)	FB	1,537	1,559	1,537	816	590	371	760	225	688	666	1,000	8,424	5,550	220
20"	RB	1,664	1,686	1,664	816	590	371	760	225	688	231	1,000	9,562	6,140	349
(500)	FB	1,664	1,686	1,664	855	629	416	815	260	727	675	1,000	11,232	7,532	440
22"	RB	1,801	1,829	1,801	855	629	416	815	260	727	675	1,000	12,024	7,745	440
(550)	FB	1,801	1,829	1,801	890	690	457	815	260	763	710	1,000	13,766	9,190	440
24"	RB	1,943	1,972	1,943	890	690	457	815	260	763	710	1,000	15,984	10,370	440
(600)	FB	1,943	1,972	1,943	911	705	498	815	260	803	731	1,000	17,395	11,542	440
26"	RB	2,048	2,077	2,048	911	705	498	815	260	803	731	1,000	18,864	12,350	440
(650)	FB	2,048	2,077	2,048	980	790	540	—	—	—	770	—	20,016	13,356	—
28"	RB	2,148	2,176	2,148	980	790	540	—	—	—	770	—	20,592	12,503	—
(700)	FB	2,148	2,176	2,148	1,030	878	584	—	—	—	820	—	22,464	14,063	—
30"	RB	2,251	2,281	2,251	1,030	878	584	—	—	—	820	—	24,768	14,785	—
(750)	FB	2,251	2,281	2,251	1,240	965	625	—	—	—	1,040	—	27,000	16,640	—
32"	RB	2,346	2,380	2,346	1,240	965	625	—	—	—	1,040	—	33,336	20,898	—
(800)	FB	2,346	2,380	2,346	1,397	1,030	670	—	—	—	1,197	—	36,000	23,115	—
34"	RB	2,450	2,454	2,450	1,397	1,030	670	—	—	—	1,197	—	38,678	24,250	—
(850)	FB	2,450	2,454	2,450	1,550	1,095	720	—	—	—	1,350	—	44,208	28,850	—
36"	RB	2,556	2,590	2,556	1,550	1,095	720	—	—	—	1,350	—	46,454	29,293	—
(900)	FB	2,556	2,590	2,556	1,730	1,170	762	—	—	—	1,530	—	54,144	35,755	—
40"	RB	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(1,000)	FB	—	—	—	—	—	—	—	—	—	—	—	—	—	—
42"	RB	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(1,050)	FB	—	—	—	—	—	—	—	—	—	—	—	—	—	—

For the standards that are not available in these dimensions, please consult our commercial department.
(1) – Lever operated valves RB = Reduced bore FB = Full bore All dimensions in mm



Dimensions ANSI 2500 – Full Bore 2" to 30" – Reduced Bore 3" to 30"

Nominal Diameter

ins (mm)	Bore	RF	RJ	BW	B	C	D	K	M	N	P	V	Weight (Kg)		
													RF- RTJ	BW	Gear Operator
2"(50)	FB	451	454	451	214	170									



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KHRAIS PROJECT
24"-300# RTFE SEATED BALL VALVE



KOC PROJECT 24"-300#
RTFE SEATED TOP ENTRY BALL VALVE



KPPC(SKEC) PROJECT 54" & 48"-150#
TOP ENTRY BALL VALVE



AI-SHUWEIHAT S2 IWPP PROJECT
28"-150# BW TOP ENTRY BALL VALVE



KOC GC-24(SKEC) PROJECT
42"-300# TOP ENTRY BALL VALVE



KOC GC-24(SKEC) PROJECT
16"-1500# TOP ENTRY BALL VALVE

KPC ball valves are recognized worldwide for its more than 30 years of manufacturing excellence. Our goal is to give our customers the best product at the best competitive price with in-time delivery and the backing of a full service program.

