

Ball Valve

Metal-Seated Ball Valve

Characteristic of Metal Seated Ball Valve

1. High sealing performance: Metal seated ball valve can reach ANSI B16.104 Class V.
2. Reliable operation performance: The spring assembled on seat push the ball and seat closely contact under low pressure, to assure the reliable sealing at high pressure, the spring and hydro-pressure would both assure the ball and seat tightly close so as to achieve reliable sealing under high pressure.
3. Fire-safe performance: The seal parts art is composed of metal seat and flexible graphite to assure fire-safe.
4. Different configure could meet the user's different service requirements (pressure, temperature, NACE requirements, etc.).
5. Product construction characteristics: It can indicate open/close and prevent a wrongly assembled handle, the coupling design of lock mechanism ISO5211 could prevent wrongly operating, it's conveniently to assemble automatic driving device, spay-proof (prevent blowing out) stem anti-static design, body directly contact construction, and trim design of wearing resistance and washing resistance.



Different Configure of Metal Seated Ball Valve

Three Types of Treating Method for Ball Surface		
Surface Treatment	Hardness	Applicable Temperature
Plating Hard Chrome	≥HRC 60	≤350°C
Spray Welding Ni-base Alloy	≥HRC 55	≤500°C
Spray Welding Carbonize Tungsten Alloy	≥HRC 62	≤500°C

Materials

Seat	304, 304L, 316, 316L, F51 Overlay Welding CoCrW Alloy
Stem	F6A, 17-4PH, F316, F316L and Hastelloy etc.
Spring	316 and Inconel X750
Seat Gasket	RPTFE and flexible graphite

Type of Metals Seated Ball Valve

Floating Ball Valve (Bidirectional seated, unidirectional seated), Trunnion Ball Valve, Duplicate Eccentricity Ball Valve.

Characteristic of Duplicate Eccentricity Ball Valve

1. The seals is removed as open, it can dispel the abrasion of contact surface.
2. Medium of inner body deposited would n't affect the ball round running.
3. Ball channel interface can clean out plugging and coking of medium during round running.
4. Adopting Duplicate Eccentricity construction, could reach nicer seal.
5. Unidirectional seating could reduce the torque of open/close operation.
6. The sealing of body connect surface has groove protect, to assure no out leakage.
7. Stem packing tight press adopt split construction, to assure packing uniformly forced.

Metal-Seated Ball Valve in High Temperature & High Pressure

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic
Nominal Diameter	2" ~ 24"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	A216-WCB, A217-WC6, WC9, C5, C12, A351-CF8, CF8M, CF3, CF3M, CF8C, CN7M, A105, A182-F11, F22, F9, F5, F304, F316, F304L, F316L, F321, ALLOY-20
Anti-Static Design	Fire Safe Design as per API607/6FA



4-Ways Metal-Seated Ball Valve in High Temperature & High Pressure

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic
Nominal Diameter	2" ~ 24"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	A216-WCB, A217-WC6, WC9, C5, C12, A351-CF8, CF8M, CF3, CF3M, CF8C, CN7M, A105, A182-F11, F22, F9, F5, F304, F316, F304L, F316L, F321, ALLOY-20
Anti-Static Design	Fire Safe Design as per API607/6FA



3PC Forged Steel Metal-Seated Trunnion Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic
Nominal Diameter	2" ~ 24"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	A216-WCB, A217-WC6, WC9, C5, C12, A351-CF8, CF8M, CF3, CF3M, CF8C, CN7M, A105, A182-F11, F22, F9, F5, F304, F316, F304L, F316L, F321, ALLOY-20
Anti-Static Design	Fire Safe Design as per API607/6FA



Coal Slurry High Temperature Steam Grain Oil Slurry Ball Valves

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic
Nominal Diameter	2" ~ 24"
Nominal Pressure (Class)	150Lb ~ 2500Lb
Main Materials	A216-WCB, A217-WC6, WC9, C5, C12, A351-CF8, CF8M, CF3, CF3M, CF8C, CN7M, A105, A182-F11, F22, F9, F5, F304, F316, F304L, F316L, F321, ALLOY-20
Anti-Static Design	Fire Safe Design as per API607/6FA



V-Type Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic
Nominal Diameter	2" ~ 24"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	A216-WCB, A217-WC6, WC9, C5, C12, A351-CF8, CF8M, CF3, CF3M, CF8C, CN7M, A105, A182-F11, F22, F9, F5, F304, F316, F304L, F316L, F321, ALLOY-20
Anti-Static Design	Fire Safe Design as per API607/6FA



Cast Steel 2PC Soft Seated Floating Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic
Nominal Diameter	1/2" ~ 10"
Nominal Pressure (Class)	150Lb ~ 600Lb
Main Materials	WCB, WCC, LCB, LCC, CF8, CF8M, CF3, CF3M, CF8C, CN7M
Anti-Static Design	Fire Safe Design as per API607/6FA



Cast Steel 2PC Soft Seated Trunnion Ball Valve



Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	2" ~ 14"
Nominal Pressure (Class)	150Lb ~ 2500Lb
Main Materials	WCB, WCC, LCB, LCC, CF8, CF8M, CF3, CF3M, CF8C, CN7M
Anti-Static Design	Fire Safe Design as per API607/6FA

Cast Steel 2PC Soft Seated Trunnion Ball Valve



Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, ASME B16.47, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	16" ~ 56"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	WCB, WCC, LCB, LCC, CF8, CF8M, CF3, CF3M, CF8C, CN7M
Anti-Static Design	Fire Safe Design as per API607/6FA

Forged Steel Soft Seated Floating Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	1/2" ~ 10"
Nominal Pressure (Class)	150Lb ~ 600Lb
Main Materials	A105, LF2, F304, F304L, F316, F316L, F321, F51, F5
Anti-Static Design	Fire Safe Design as per API607/6FA



Forged Steel 3PC Soft Seated Trunnion Ball Valve



Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, ASME 16.47, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	2" ~ 56"
Nominal Pressure (Class)	150Lb ~ 2500Lb
Main Materials	A105, LF2, F304, F304L, F316, F316L, F321, F51, F53
Anti-Static Design	Fire Safe Design as per API607/6FA

Ball Valve for District Heating

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	As per Client Request & Manufacturer Specification
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	6" ~ 16"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	A537, PPS, ST37, 1020, A53
Anti-Static Design	Fire Safe Design as per API607/6FA



Full Welded Ball Valve



Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, ASME 16.47, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	2" ~ 40"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	1020, A105, LF2, F304, F304L, F316, F316L, F321, F51, F53, A537
Anti-Static Design	Fire Safe Design as per API607/6FA

Top-Entry Trunnion Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	As per Client Requirement & Manufacturer Specification
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	6" ~ 16"
Nominal Pressure (Class)	150Lb ~ 1500Lb
Main Materials	A537, PPS, ST37, 1020, A53
Anti-Static Design	Fire Safe Design as per API607/6FA



Top-Entry Floating Ball Valve



Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	As per Client Requirement & Manufacturer Specification
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Manual-Air-Hydraulic)
Nominal Diameter	2" ~ 10"
Nominal Pressure (Class)	150Lb ~ 600Lb
Main Materials	WCB, WCC, LCB, LCC, CF8, CF8M, CF3, CF3M, CN7M, CF8C
Anti-Static Design	Fire Safe Design as per API607/6FA

Threaded & Socket Welded Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	As per Client Requirement & Manufacturer Specification
Threaded Ends Dimension	ASME B1.20.1
Socket Welded Ends Dimension	ASME B16.11
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic)
Nominal Diameter	1/4" ~ 4"
Nominal Pressure (Class)	150Lb ~ 2500Lb
Main Materials	WCB, WCC, LCC, CF8, CF8M, CF3, CF3M, CN7M, CF8C
Anti-Static Design	Fire Safe Design as per API607/6FA



1-PC Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	As per Client Requirement & Manufacturer Specification
Flange Connection Dimension	ASME B16.5
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic)
Nominal Diameter	1/2" ~ 8"
Nominal Pressure (Class)	150Lb ~ 300Lb
Main Materials	WCB, WCC, LCC, CF8, CF8M, CF3, CF3M, CN7M
Anti-Static Design	Fire Safe Design as per API607/6FA



Jacket Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic)
Nominal Diameter	1/2" ~ 8"
Nominal Pressure (Class)	150Lb ~ 300Lb
Main Materials	WCB, WCC, LCC, CF8, CF8M, CF3, CF3M, CN7M, CF8C
Anti-Static Design	Fire Safe Design as per API607/6FA



3-Way Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	As per Client Requirement & Manufacturer Specification
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic)
Nominal Diameter	1/2" ~ 12"
Nominal Pressure (Class)	150Lb ~ 300Lb
Main Materials	WCB, WCC, LCC, CF8, CF8M, CF3, CF3M, CN7M, CF8C
Anti-Static Design	Fire Safe Design as per API607/6FA



Cryogenic Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic)
Nominal Diameter	1/2" ~ 10"
Nominal Pressure (Class)	150Lb ~ 600Lb
Main Materials	WCB, WCC, LCC, CF8, CF8M, CF3, CF3M, CN7M, CF8C
Anti-Static Design	Fire Safe Design as per API607/6FA



Rising-Stem Ball Valve

Main Technical specifications

Design and Manufacture	API 6D, ASME B16.34, API 608, MSS SP-72, BS 5351
Face to Face Dimension	ASME B16.10, API 6D, EN 558
Flange Connection Dimension	ASME B16.5, DIN 2501
BW Connection Dimension	ASME B16.25
Pressure-Temperature Ratings	ASME B16.34
Test and Inspection	API 598, API 6D
Type of Operation	Manual, Gear, Electric, Pneumatic, Hydraulic)
Nominal Diameter	2" ~ 16"
Nominal Pressure (Class)	150Lb ~ 900Lb
Main Materials	WCB, WCC, LCC, CF8, CF8M, CF3, CF3M, CN7M, CF8C
Anti-Static Design	Fire Safe Design as per API607/6FA

