

Product: Forged Steel Trunnion Ball Valves



Size: 2" - 30" (DN50 - DN750)

Pressure rating: 150LB, 300LB, 600LB, 900LB, 1500LB, and 2500LB (PN1.6 - PN42)

Body Material: A105, A350 LF2, A182 F304 (M)/ F316(M)/ F51

Trim Material: A105+ENP, 13CR, SS304/ SS316, F304/ F316

Seat & Seals: PTFE, R-PTFE, NYLON, DEVLON, PEEK or Metal Sealing

Operation: Lever, Gear, Pneumatic Actuator, Electric Actuator

Standard Information

Design Basis: API 6D/ BS 5351(ISO 17292)/ ASME B16.34/ API 608

Face-to-Face Dimension: ASME B16.10

Flanged End: ASME B16.5

Butt-Welding End: ASME B16.25

Socket Welding End: ASME B16.11

Wall Thickness: ASME B16.34

Fire safe: API607, API 6FA

Inspection and Test: API 6D/ API 598/ BS 6755

Product Details

1. Forged ball valve feature

Forged ball valve, the forging material can ensure sufficient rigidity and strength under maximum rated operation pressure without inherent flaw of cast. Enough wall thickness of separate body and adaptation of high strength tie bolts are convenient for valve maintenance and sufficient to bear the stress of pipe. The internal parts of valve are carefully designed and selected to ensure reliability under all kinds of work condition.

2. Anti-fire safe design

When the trunnion ball valve be used normally, its sealed by seat and ball surface, seat retainer sealed by O-ring and body, this is soft sealed and reliable sealing. When the seat and O-ring are burnt, the seat retainer and body will be sealed by expanded graphite. Thus act anti-fire safe purpose.

3. Anti-static device

In order to prevent friction among ball, stem and PTFE that generates static electricity, which may light the combustibles, and explosives that cause an accident, in this ball valve, static-conduction spring is set between the stem and the ball, the stem and the body. Thus static electricity is conducted to ground and system safety is secured.

4. Free leakage of body Sealed construction

The connective position of valve body and bonnet is double sealed by gasket and O-ring, on this base, such factors as fire, high temperature, shock and uneven opening or closing of the torque all can't induce external leakage.

5. Low torque in operation

The self-lubricated bearings are installed at the friction of stem, resulting in wear resistance, flexibility of operation and low torque.

6. Double block & bleed (DBB)

When ball is full open or close position, drainage and emptying devices can release the transmitter substance in center cavity of body. In addition, the over loaded pressure in the center cavity of valve can be released to low-pressure end by self-relief seat.

7. Emergency sealing

Compound injection holes are designed and compound injection valves are installed at locations of stem/cap and body support of side valve. When sealing of stem or seat is damaged to induce leakage, the compound can be used to do the second time sealing. A concealed check valve is installed in side of each compound injection valve to prevent compound from out flowing due to the action of transmitter substance. The top of the compound injection valve is the connector for fast connection with compound injection gun.

8. Extension stem

For the underground installed valve, the stem can be lengthened and for the convenience of operation the corresponding compound injection nozzle and drainage valve can be extended to the top of valve.

9. Automatic body cavity relief

When the body pressure going up un-normally as the unstable factor, the trunnion ball valve downstream seat will be pushed by un-normal pressure, and the release the un-normally pressure automatically, it doesn't damage to the sealing of upstream seat.

10. Various driving types

The top pad of valve designed according to ISO 5211, which is convenient for connection and exchange of various drivers. The common driving types are manual, electrical, pneumatic and pneumatic hydraulic.