

Q14F Q15F 3-Way Female Thread Ball Valve

● Working Principle

A ball valve operates by rotating 90°; its plug is in the form of a sphere with a circular opening or passage running through its axis. In piping systems, ball valves are used to shut off flow, distribute fluid, and change the direction of flow. They can be closed tightly with just a 90° rotation and a small amount of torque. Ball valves are most suitable for use as on/off valves or shut-off valves, but recent developments have led to designs that enable them to also regulate flow rates, such as V-type ball valves.

● Features

Ball valves feature a compact structure, reliable sealing, and simplicity; they are easy to maintain. The sealing surface and the ball itself remain in a closed state, which prevents them from being eroded by the medium flowing through them. They are easy to operate and service. They are suitable for use with various media such as water, solvents, acids, and natural gas, as well as for harsh working conditions involving gases like oxygen, hydrogen peroxide, methane, and ethylene. Ball valves are widely used in various industries. Their valve bodies can be either monolithic or modular in design.

● Advantages

1. It has low fluid resistance; ball valves with a full bore virtually have no flow resistance at all.
2. They feature a simple structure, are small size, and light weight.
3. They are reliable and tight-fitting. They have two sealing surfaces, and various plastics are commonly used as materials for these sealing surfaces, ensuring good sealing performance and complete isolation. They are also widely used in vacuum systems.
4. They are easy to operate; it takes only 90° of rotation to switch them from fully open to fully closed, which facilitates remote control.
5. Maintenance is straightforward due to the simple structure of the ball valve, and the sealing rings are usually removable, making it easy to replace them.
6. When the valve is fully open or fully closed, the sealing surfaces of the ball and the valve seat are separated from the medium, so the medium does not cause erosion of these sealing surfaces as it passes through.
7. They have a wide range of applications, with diameters ranging from a few millimeters to several meters, and they can be used in conditions ranging from high vacuum to high pressure.
8. Because the ball valve has a wiping action during opening and closing, it can be used with media that contain suspended solid particles.



● Order Selection Table

Q15F - 40 - P - DN25

3-Way Female Thread Ball Valve

Q14F: L Type
Q15F: T Type

Nominal Pressure

16: 1.6 MPa
40: 4.0 MPa

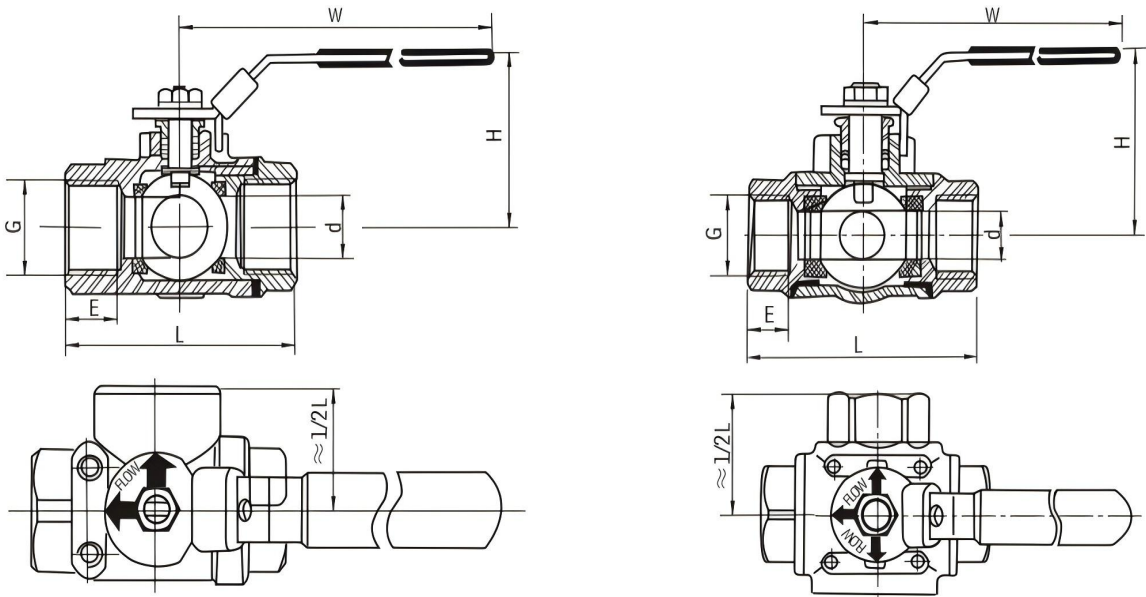
Body Material

P: Stainless Steel

Nominal Diameter

DN15、DN20、DN25、DN32、DN40、DN50

● Overall Dimensions



Nominal Diameter	G	d	L	H	W	E
DN15	G1/2	9.5	75	55	105	13.2
DN20	G3/4	15	82	63	115	14.5
DN25	G1	19	89	70	140	16.8
DN32	G1 1/4	24.5	112	85	148	19.1
DN40	G1 1/2	32	128	89	167	19.1
DN50	G2	38.1	146	98	170	23.4

Thread Type: Pipe Thread G BSPP