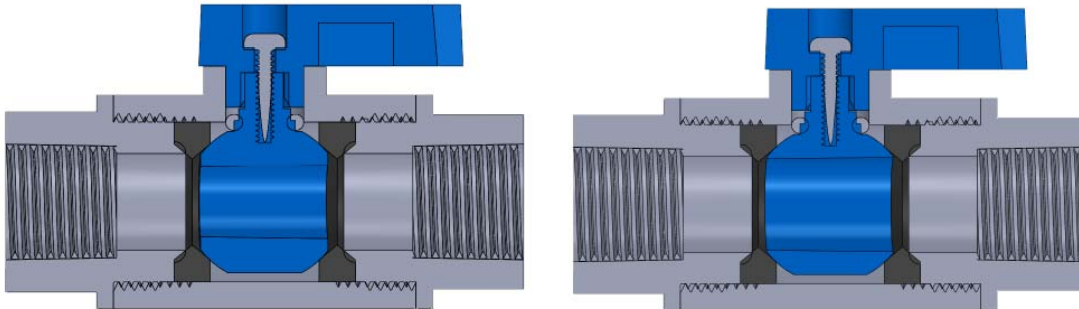




Standard Port vs. Full Port



Standard Port

Full Port

Bore Size

- The difference between a standard ball valve and a full-port ball valve is in the size of the ball and bore in relation to the nominal pipe size of the valve. For example, the bore size in a 3/4-inch full-port ball valve is 3/4-inch in diameter, while the bore diameter in a standard ball valve is 1/2-inch in diameter. Ball sizes are in proportion to bore sizes. The 1/2-inch diameter is the nominal size of the next smaller pipe. This is typical. Full-port bore size equals pipe size; standard-port bore size is the next smaller pipe size.

Flow Coefficient

- The flow coefficient is a measure of the resistance to flow of a given part of a fluid system. It is used to calculate the length of straight pipe equivalent to an elbow or valve or anything else that affects the flow. The flow coefficient for a full-port ball valve is almost as low as that of straight pipe so it provides minimal resistance to flow and thus creates only a small pressure drop. The standard-port ball valve has a higher flow coefficient and thus causes a larger pressure drop for a given flow.