

Brass Ball Valve Full Bore



Application

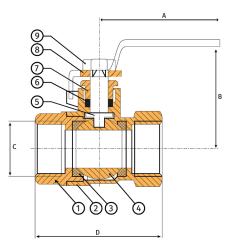
The Brass Ball Valve Full Bore is designed to ensure low-pressure loss through the valve with minimum turbulence and no obstructions. The Ball of the valve has a bore equal to the inside diameter of the pipe. This enables the same amount of flow through the valve as you get in the pipe, resulting in a very low pressure drop. Unlike traditional valves that restrict the flow by reducing the diameter of the passage, the full bore valve maintains a consistent diameter throughout, allowing for maximum flow efficiency. This feature makes it ideal for applications that require high flow rates or minimal pressure drop.

The Brass Ball Valve Full Bore is constructed from high-quality brass, which offers excellent corrosion resistance and mechanical strength. Brass is a popular choice for valve manufacturing due to its reliability and longevity in demanding environments. It can withstand high temperatures and pressures, making it suitable for a wide range of applications, and its simple design and fewer moving parts reduce the likelihood of malfunctions, resulting in increased operational efficiency and reduced downtime.

Dimensions

| NPS | DN | | | | | Grams |
|-------|-----|-----|-----|--------|--------|-------|
| 1/4" | 8 | 70 | 37 | G 1/4 | 39.00 | 110 |
| 3/8" | 10 | 86 | 37 | G 3/8 | 41.50 | 120 |
| 1/2" | 15 | 86 | 41 | G 1/2 | 48.50 | 175 |
| 3/4" | 20 | 86 | 44 | G 3/4 | 56.00 | 250 |
| 1" | 25 | 104 | 50 | G 1 | 66.50 | 405 |
| 11/4" | 32 | 122 | 61 | G 11/4 | 74.70 | 635 |
| 11/2" | 40 | 122 | 66 | G 11/2 | 85.50 | 890 |
| 2" | 50 | 152 | 85 | G 2 | 102.50 | 1,535 |
| 21/2" | 65 | 225 | 106 | G 21/2 | 126.00 | 3,101 |
| 3" | 80 | 232 | 122 | G 3 | 148.00 | 4,070 |
| 4" | 100 | 304 | 140 | G 4 | 169.00 | 6,100 |

Diagram



| # | Part | Material | | |
|---|-----------------|---------------|--|--|
| 1 | Body | Brass Hpb57-3 | | |
| 2 | Bonnet | Brass Hpb57-3 | | |
| 3 | Seat | PTFE | | |
| 4 | Ball | Brass Hpb57-3 | | |
| 5 | Stem | Brass Hpb57-3 | | |
| 6 | Packing | PTFE | | |
| 7 | Compression Nut | Brass Hpb57-3 | | |
| 8 | Lever | Steel Q235A | | |
| 9 | Nut | Steel O235A | | |

Specifications

Models

105N

Body Material

Brass Hpb57-3, Nickel Plated

Handle Operation

¼ or 90° Turn

Threading

Female / Female BSP-G Screwed

Services

Water, Oil, Gas

Industries

Mining, Agriculture, Irrigation, Water Services

Priority Media

Air, Butylene, Caster and Linseed Oil, Diesel Oil, Gasoline, Hydro and Natural Gas, Methane, Nitrogen, Oxygen

Inventory Code and Description

BRASS BALL VALVE FULL BORE SCR BSP Brass Ball Valve Full Bore Screwed Ends British Standard Pipe

Also Known As:

Isolation Valve, Shut-Off Valve, Spherical Valve, Quarter-Turn Valve

Ball Valves

Models: 102N; 105N

Threading: Female / Female BSP-G Screwed

Sizes: DN 8 - 100 **Pressure:** PN40; PN20

Body Material: Brass Hpb57-3, Nickel Plated

Temperatures: -2°C to 120°C

Weights: 120g - 4.5kg; 110g - 6.1kg





Specifications

Services

Petrochemicals and Petroleum, Refineries, Primary Energy, Agriculture, Water Works, HVAC

Industries

Water, Oil, Gas, Steam

Priority Media

Air, Butylene, Caster and Linseed Oil, Diesel Oil, Gasoline, Hydro and Natural Gas, Methane, Nitrogen, Oxygen

Also Known As:

Isolation Valve Shut-Off Valve Spherical Valve Quarter-Turn Valve

Ball Valve Details

The Ball Valve provides an on/off function in its simplest form. Made from highquality brass (Hpb57-3), they offer excellent corrosion resistance and mechanical strength and are a valuable option to a range of applications including isolation of industrial and domestic processes, heating, hot water, cold water, oil, fuel, gas and air.

Application

The epoxy-coated handle is easily operated via a 1/4 turn of the lever handle, which also indicates whether the valve is open or closed. The ball valve screwed BSP connection accepts media up and down the line, and because the bored rotary ball controls the flow of the media, there is minimal pressure loss, less turbulence, and unobstructed bi-directional flow.

The Ball Valves highly effective wear and temperature resistant seal with a chrome plated ball, and PTFE seating, ensures long lasting durability and reduces maintenance costs while extending the lifetime of the system. Its simple design and fewer moving parts reduces malfunctions, resulting in increased operational efficiency and less downtime.

Typical applications of Ball Valves include:

- Isolation and Shutoff where a tight seal is essential to stop the flow of fluids or gases completely. Their design, featuring a spherical closure element (the ball), allows for a quick and tight shutoff
- Quick and Easy Operation making them suitable for applications where fast response times are essential. This is due to the 90-degree turn of the lever or handle which allows for rapid opening or closing of the valve and is advantageous in emergency shutdown situations or in processes where precise control is needed
- High-Pressure and High-Temperature for extreme conditions due to a robust design and the ability to provide a tight seal, making them suitable for use in demanding environments such as power plants and steam systems.

Advantages:

- Bi-directional flow allows for fluid in either direction, without causing damage or significant pressure drop
- Quick shut-off for critical situations that require immediate flow control or emergency shut-of
- Low friction allows for unobstructed flow, reducing energy consumption and preserving system efficiency
- Durable due to the design and materials and the ability to withstand high pressures and temperatures
- Versatile range of applications that satisfy the needs of domestic, commercial, and industrial specifications

Common Industry Uses:

- Oil and Gas Industries for vital shut-off applications and control of fluid flow in pipelines
- Water treatment for regulating and controlling the flow of wastewater, effluent, and desalination
- Chemical Processing to control the flow of various corrosive chemicals and fluids
- HVAC systems for precise control and regulating the flow of water or refrigerants in heating and cooling applications
- Power Generation, including thermal and nuclear power plants, for controlling the flow of steam, water, and other fluids in critical processes