

FESTO QH-3/8

FESTO QH-3/8 9542 Ball Valve User Manual

Model: QH-3/8 | Part Number: 9542

1. PRODUCT OVERVIEW

The FESTO QH-3/8 9542 Ball Valve is a high-quality, manually actuated 2/2 bistable valve designed for controlling the flow of water and compressed air in industrial and pneumatic systems. Its robust brass housing and soft sealing principle ensure reliable performance across a wide range of temperatures and pressures.



Figure 1: FESTO QH-3/8 9542 Ball Valve. This image displays the FESTO QH-3/8 9542 Ball Valve, featuring a metallic body with threaded connections and a blue manual lever handle for operation.

2. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of the FESTO QH-3/8 Ball Valve. This valve is designed for line installation.

2.1 Safety Precautions

- Ensure the system is depressurized and drained before installation.
- Wear appropriate personal protective equipment (PPE).
- Verify that the valve's specifications (pressure, temperature, medium) match your system requirements.

2.2 Installation Steps

1. Identify the correct flow direction if applicable (though ball valves are generally bi-directional, check system requirements).
2. Clean the pipe threads and apply appropriate thread sealant (e.g., PTFE tape or pipe dope) to the G3/8 pneumatic connections.
3. Thread the valve onto the pipe connections, ensuring a tight, leak-free seal. Do not overtighten.
4. Ensure the valve handle has sufficient clearance for full rotation (90 degrees) to open and close the valve.
5. After installation, slowly pressurize the system and check for any leaks around the connections.

3. OPERATING INSTRUCTIONS

The FESTO QH-3/8 Ball Valve is manually actuated, providing simple and direct control over fluid flow.

3.1 Valve Positions

- **Open Position:** When the handle is aligned with the direction of flow (parallel to the pipe), the valve is fully open, allowing maximum flow.
- **Closed Position:** When the handle is perpendicular to the direction of flow, the valve is fully closed, stopping flow.

3.2 Actuation

To change the valve's state, simply rotate the blue lever handle 90 degrees. The 2/2 bistable function means the valve has two stable positions: fully open or fully closed.

4. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your FESTO QH-3/8 Ball Valve.

- **Periodic Inspection:** Regularly inspect the valve for any signs of external damage, corrosion, or leaks around the stem and connections.
- **Cleaning:** Keep the exterior of the valve clean. Avoid using harsh chemicals that could damage the brass housing or seals.
- **Lubrication:** For systems operating with compressed air, operation with oil lubrication is possible and may be required for further use to maintain optimal performance of the valve's internal components. Refer to system-specific lubrication guidelines.
- **Leak Detection:** If a leak is detected, depressurize the system immediately and investigate the cause. Leaks often occur at threaded connections and may require re-sealing.

5. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your ball valve.

Problem	Possible Cause	Solution
Valve Leaking at Connections	Improperly sealed threads; damaged threads.	Depressurize system, re-apply thread sealant, and re-tighten connections. Inspect threads for damage.
Valve Leaking Around Stem	Worn stem packing/seals.	This valve is not designed for user-serviceable stem packing. If leaking persists, valve replacement may be necessary.
Restricted Flow When Open	Partial obstruction in the pipe or valve; valve not fully open.	Ensure handle is fully parallel to the pipe. Check for debris in the system.

Problem	Possible Cause	Solution
Difficulty Turning Handle	Lack of lubrication; internal debris; excessive pressure.	Ensure system pressure is within limits. If operating with compressed air, consider if oil lubrication is needed. Do not force the handle.

6. SPECIFICATIONS

The following table details the technical specifications for the FESTO QH-3/8 9542 Ball Valve.

Type code	QH
Nominal pressure of fitting PN	30
Valve function	2/2 bistable
Pneumatic connection 1	G3/8
Pneumatic connection 2	G3/8
Actuation type	Manual
Type of mounting	Line installation
Standard nominal flow rate	7500 l/min
Nominal width	10 mm
Ambient temperature	-20 °C ... 180 °C
Housing material	Brass
Operating medium	Water Compressed air as per ISO 8573-1:2010 [7:::]
Sealing principle	Soft
Design	Ball valve
Symbol	00991458
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)

Figure 2: Technical Specifications. This image shows a detailed table outlining the technical specifications of the FESTO QH-3/8 Ball Valve, including type code, nominal pressure, valve function, connection types, and operating conditions.

Attribute	Value
Type code	QH
Nominal pressure of fitting PN	30 bar
Valve function	2/2 bistable
Pneumatic connection 1	G3/8
Pneumatic connection 2	G3/8
Actuation type	Manual
Type of mounting	Line installation
Standard nominal flow rate	7500 l/min
Nominal width	10 mm
Ambient temperature	-20 °C ... 180 °C

Attribute	Value
Housing material	Brass
Operating medium	Water, Compressed air as per ISO 8573-1:2010 [7:-:-]
Sealing principle	Soft
Design	Ball valve
Symbol	00991458
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Manufacturer	FESTO
Part Number	9542
Country of Origin	Germany
Item model number	QH-3/8
ASIN	B0CD1XRLS3
Date First Available	July 28, 2023
UPC	789537986338

7. WARRANTY INFORMATION

This FESTO product is covered by the manufacturer's standard warranty. For specific details regarding warranty terms, duration, and claims procedures, please refer to the official FESTO warranty documentation provided with your purchase or visit the official FESTO website. Keep your proof of purchase for warranty validation.

8. CUSTOMER SUPPORT

For technical assistance, product inquiries, or support, please contact FESTO customer service. You can typically find contact information on the official FESTO website or through your authorized distributor. When contacting support, please have your product model number (QH-3/8) and part number (9542) ready.

Note: As this product is listed under a "Generic" brand on Amazon, direct support may be through the original manufacturer, FESTO, or the seller "Sruik Tool".