

Belimo BELI B249

Belimo 2" 2-way Ball Valve CV 46 User Manual

BRAND: BELIMO

Model: BELI B249

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Belimo 2" 2-way Ball Valve CV 46. Please read this manual thoroughly before installation and operation to ensure safe and efficient use of the product. This valve is designed for reliable flow control in various industrial and commercial applications.

SAFETY INFORMATION

Adhering to safety guidelines is crucial for preventing injury and equipment damage. Always follow these precautions:

- Always disconnect power to the system before attempting any installation, maintenance, or troubleshooting procedures.
- Ensure the valve's pressure and temperature ratings are compatible with the system's operating conditions.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, during installation and maintenance.
- Refer to local codes and regulations for proper installation and wiring practices.
- Do not attempt to disassemble the valve beyond what is described in this manual.

SETUP

Proper setup ensures optimal performance and longevity of the valve.

1. **Inspection:** Before installation, visually inspect the valve for any signs of damage during shipping.
2. **System Preparation:** Ensure the piping system is clean and free of debris, scale, or foreign objects that could impede valve operation or cause damage.
3. **Mounting:** The Belimo 2" 2-way Ball Valve CV 46 is designed for inline installation. Install the valve in the correct flow direction as indicated by any arrows on the valve body.

- Connections:** Use appropriate tools to tighten the National Pipe Tapered (NPT) connections. Apply suitable thread sealant (e.g., PTFE tape or pipe dope) to ensure a leak-free seal. Do not overtighten, as this can damage the threads or valve body.
- Actuator Installation (if applicable):** If an actuator is to be installed, follow the specific instructions provided with the actuator for mounting and wiring.



This image shows the Belimo 2" 2-way ball valve, highlighting its compact design and connection points. The valve features a robust construction suitable for various industrial and commercial applications. Note the threaded ends for secure inline installation.

OPERATING INSTRUCTIONS

The Belimo 2" 2-way Ball Valve CV 46 controls fluid flow by rotating a spherical ball with a bore through its center. It is designed for on/off control or throttling applications, depending on the actuator and control system.

- Automated Operation:** If equipped with an actuator, the valve's operation will be controlled by the building management system (BMS) or other control logic. Ensure the actuator is correctly wired and calibrated according to its specific manual and system requirements.
- Manual Operation:** For valves with a manual handle, the valve can be opened or closed by rotating the handle. A quarter-turn (90 degrees) typically moves the valve from a fully open to a fully closed position, or vice versa. Ensure the handle is fully engaged in the desired position (open or closed) for proper flow control.
- Flow Direction:** The valve is designed for bi-directional flow, but always observe any flow direction indicators on the valve body or system piping.

MAINTENANCE

The Belimo 2" 2-way Ball Valve CV 46 is designed for minimal maintenance. However, periodic checks can help ensure long-term reliable operation.

- Visual Inspection:** Regularly inspect the valve and its connections for any signs of leaks, corrosion, or external damage. Address any issues promptly.
- Connection Tightness:** Periodically check the tightness of the pipe connections. Re-tighten if necessary, but avoid overtightening.
- Cleaning:** Keep the exterior of the valve clean and free of dust or debris. Do not use harsh chemicals that could damage the valve materials.

- **Lubrication:** The internal components of this ball valve typically do not require lubrication.
- **Actuator Maintenance:** If an actuator is installed, refer to its specific manual for any required maintenance procedures.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter.

Issue	Possible Cause	Solution
Valve not opening/closing fully	Obstruction in pipeline; Actuator not calibrated; Manual handle not fully engaged.	Check for debris in the line; Verify actuator calibration and wiring; Ensure manual handle is turned to its full stop.
Leakage from connections	Improperly tightened connections; Damaged threads; Insufficient thread sealant.	Inspect pipe threads; Re-tighten connections using appropriate torque; Reapply thread sealant.
Reduced flow through valve	Valve not fully open; Partial blockage in pipeline.	Ensure valve is in the fully open position; Check for blockages upstream or downstream of the valve.

SPECIFICATIONS

Key technical specifications for the Belimo 2" 2-way Ball Valve CV 46:

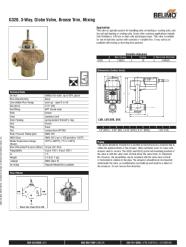
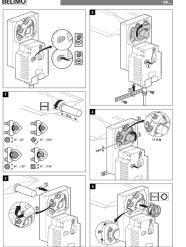
Specification	Value
Manufacturer	Belimo
Part Number	B249
Item Weight	6 pounds
Item Model Number	BELI B249
Shape	Inline
Item Package Quantity	1
Certification	ccv
Inlet Connection Type	National Pipe Tapered
Valve Type	Ball Valve
UPC	791617213302

WARRANTY AND SUPPORT

For detailed warranty information, technical support, or service inquiries regarding your Belimo 2" 2-way Ball Valve CV 46, please contact Belimo customer service directly. It is recommended to keep your purchase receipt and product model number readily available when contacting support for faster assistance. You can find contact information on the official Belimo website or through your authorized distributor.

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Related Documents

	<p><u>Belimo G320 3-Way Globe Valve with LVKX24-MFT Actuator: Technical Specifications and Installation Guide</u></p> <p>Detailed technical specifications, dimensions, application information, and wiring diagrams for the Belimo G320 3-way globe valve and LVKX24-MFT modulating fail-safe actuator. Includes installation notes and product data.</p>
	<p><u>Belimo GK Damper Actuator Installation and Operation Guide</u></p> <p>Comprehensive guide for installing and operating Belimo GK series damper actuators, covering wiring, fail-safe settings, and typical pre-charging times.</p>
	<p><u>Belimo Retrofit Solutions Technical Documentation</u></p> <p>Comprehensive technical documentation from Belimo detailing retrofit solutions for HVAC actuators, including damper and valve replacements, fire and smoke actuator compatibility, and selection guides for various manufacturers.</p>
	<p><u>BELIMO SFA-S2 Rotary Actuator Technical Data Sheet</u></p> <p>Comprehensive technical data, features, safety information, and accessories for the BELIMO SFA-S2 fail-safe rotary actuator used in HVAC and building automation systems.</p>

