ZHRCLY J4V220-08

ZHRCLY JELPC Solenoid Valve J4V220-08 AC220V Instruction Manual

Model: J4V220-08 AC220V

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the ZHRCLY JELPC Solenoid Valve, model J4V220-08 AC220V. Please read this manual thoroughly before attempting any procedures to ensure proper function and to prevent damage or injury.

1.1 Product Overview

The JELPC J4V220-08 AC220V is a high-quality solenoid valve designed for controlling the flow of pneumatic systems. It operates by converting electrical energy into mechanical motion to open or close the valve, thereby regulating air pressure or flow in various industrial and scientific applications.

An image showing the JELPC J4V220-08 AC220V solenoid valve. It features a black electrical coil housing connected to a white valve body with two threaded ports visible on the side. The valve body also has markings indicating 'JELPC' and pressure specifications.

1.2 Safety Information

Always observe the following safety precautions:

- Ensure all power is disconnected before installation, maintenance, or troubleshooting.
- Depressurize pneumatic lines before working on the valve.
- Verify the voltage and pressure ratings of the valve match your system requirements.
- Installation and repairs should only be performed by qualified personnel.
- Avoid exposing the valve to extreme temperatures, corrosive environments, or excessive vibration.

2. Specifications

The following table details the technical specifications for the JELPC J4V220-08 AC220V Solenoid Valve:

Feature	Specification
Model Number	J4V220-08 AC220V
Brand	ZHRCLY (JELPC Valve)
Type	Solenoid Valve
Operating Voltage	AC220V
Item Weight	Approximately 1 pound (0.45 kg)
Product Dimensions (L x W x H)	Approximately 1 x 1 x 1 inches (2.54 x 2.54 x 2.54 cm)
Origin	Mainland China
Manufacturer	Original factory

3. Setup and Installation

Proper installation is crucial for the reliable operation of the solenoid valve. Follow these steps carefully:

3.1 Tools Required

- Wrenches (appropriate size for pneumatic fittings)
- Screwdriver (for electrical terminals)
- Thread sealant tape (PTFE tape)
- Multimeter (for electrical verification)

3.2 Mounting the Valve

1. Select a stable, vibration-free location for mounting.
2. Ensure adequate space for wiring, pneumatic connections, and future maintenance.
3. Mount the valve securely using appropriate fasteners (not included) through the designated mounting holes.

3.3 Pneumatic Connections

1. Identify the inlet (P), outlet (A, B), and exhaust (R, S) ports on the valve body. Refer to any markings on the valve.
2. Apply thread sealant tape to all pneumatic fitting threads.
3. Connect the air supply line to the inlet port.
4. Connect the actuator or system lines to the outlet ports (A and B).
5. Connect exhaust lines or silencers to the exhaust ports (R and S).
6. Tighten all connections firmly but avoid over-tightening, which can damage threads.

3.4 Electrical Connections

WARNING: Ensure power is OFF before making any electrical connections.

1. Locate the electrical terminal block or connector on the solenoid coil.
2. Connect the AC220V power supply wires to the designated terminals. Observe proper polarity if indicated, though AC circuits typically do not have strict polarity for simple solenoids.
3. Ensure all connections are secure and free from loose strands.
4. Replace any protective covers or enclosures after wiring.

4. Operating Instructions

The JELPC J4V220-08 AC220V solenoid valve controls pneumatic flow based on the electrical signal applied to its coil.

4.1 Basic Operation

- When the solenoid coil receives AC220V power, it energizes, creating a magnetic field that actuates the valve's internal mechanism.
- This actuation changes the flow path of the compressed air, directing it to the appropriate outlet port(s).
- When power is removed from the coil, the valve typically returns to its default (de-energized) position, often via a spring return mechanism, redirecting air flow accordingly.

4.2 Initial Power-Up and Testing

1. After completing all connections, slowly introduce pneumatic pressure to the system. Check for any leaks using a soapy water solution.
2. Apply electrical power to the solenoid coil. Observe the valve's actuation and the corresponding change in pneumatic flow.
3. De-energize the coil and confirm the valve returns to its default state.
4. Repeat the energize/de-energize cycle a few times to ensure consistent operation.

5. Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your solenoid valve.

5.1 Routine Inspection

- Periodically check for air leaks around fittings and the valve body.
- Inspect electrical wiring for signs of wear, damage, or loose connections.
- Ensure the valve is free from excessive dirt, dust, or debris.

- Listen for unusual noises during operation, which may indicate internal issues.

5.2 Cleaning

- Disconnect power and depressurize the system before cleaning.
- Wipe the exterior of the valve with a clean, damp cloth. Avoid using harsh chemicals or solvents.
- If internal cleaning is required, it is recommended to consult a qualified technician or the manufacturer's guidelines for disassembly and reassembly.

5.3 Replacement Parts

If any components of the valve, such as the coil or seals, require replacement, use only genuine or approved replacement parts to maintain performance and warranty validity. Contact your supplier for assistance in identifying correct parts.

6. Troubleshooting

This section provides solutions to common issues encountered with the JELPC J4V220-08 AC220V solenoid valve.

Problem	Possible Cause	Solution
Valve does not actuate when energized.	◦ No power to coil. ◦ Incorrect voltage. ◦ Damaged coil. ◦ Internal mechanical obstruction.	◦ Check power supply and wiring connections. ◦ Verify supply voltage matches valve rating (AC220V). ◦ Test coil resistance with a multimeter; replace if open circuit or incorrect resistance. ◦ Disassemble and inspect internal components (qualified personnel only).
Air leaks from ports or valve body.	◦ Loose fittings. ◦ Damaged seals or O-rings. ◦ Cracked valve body.	◦ Tighten fittings, apply new thread sealant. ◦ Replace worn or damaged seals/O-rings. ◦ Replace the valve if the body is cracked.
Valve does not return to default position.	◦ Coil remains energized. ◦ Sticking internal components. ◦ Weak or broken return spring.	◦ Check control circuit to ensure power is removed from coil. ◦ Clean or replace internal components. ◦ Replace the valve or internal spring assembly.

If the problem persists after attempting these solutions, contact technical support.

7. Warranty and Support

For specific warranty terms and conditions, please refer to the documentation provided at the time of purchase or contact your vendor directly. ZHRCLY and JELPC are committed to providing reliable products.

For technical assistance, replacement parts, or further inquiries, please contact your authorized distributor or

the manufacturer's customer service department. Ensure you have your model number (J4V220-08 AC220V) and purchase details available when seeking support.