

Crouzet 81516200

Crouzet 81516200 Pneumatic Miniature Control Valve User Manual

Model: 81516200

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Crouzet 81516200 Pneumatic Miniature Control Valve. Please read this manual thoroughly before using the product.

2. SAFETY INFORMATION

- Always depressurize the pneumatic system before installation, maintenance, or removal of the valve.
- Ensure all connections are secure and leak-free to prevent unexpected operation or system failure.
- Use appropriate personal protective equipment (PPE) when working with pneumatic systems.
- Do not exceed the specified operating pressure range for the valve.
- Only qualified personnel should perform installation and maintenance.

3. PRODUCT DESCRIPTION

The Crouzet 81516200 is a miniature pneumatic control valve designed for precise control in various industrial applications. It features a 4/2 (four-port, two-position) configuration with a pressure spring return mechanism, ensuring reliable operation. This valve is suitable for systems requiring control within a 200 to 300 NI/mm range.



4. SETUP AND INSTALLATION

- Preparation:** Ensure the pneumatic system is completely depressurized and locked out before beginning installation.
- Mounting:** Securely mount the valve in the desired location using appropriate fasteners. Ensure the mounting surface is stable and free from vibrations.
- Port Connections:** Connect the pneumatic lines to the valve's ports according to your system's schematic. The 4/2 valve typically has one pressure inlet, two cylinder ports, and one exhaust port. Refer to the valve body markings for port identification.
- Leak Check:** After all connections are made, slowly re-pressurize the system and check for any leaks using a leak detection solution. Tighten connections as necessary.
- Functional Test:** Perform a functional test to ensure the valve operates correctly and the spring return mechanism functions as expected.

5. OPERATING INSTRUCTIONS

The Crouzet 81516200 is a 4/2 pressure spring return valve. This means it has two stable positions, with one position maintained by a spring and the other actuated by pneumatic pressure.

- Default Position:** In its unactuated state, the valve is held in its default position by the internal spring. Air flows through specific ports as per the valve's design (e.g., pressure to port A, port B to exhaust).
- Actuation:** Applying pneumatic pressure to the control port shifts the valve to its actuated position. This changes the flow path (e.g., pressure to port B, port A to exhaust).
- Return:** When the control pressure is removed, the spring automatically returns the valve to its default position.

Ensure the control pressure is within the specified operating range for reliable switching.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Crouzet 81516200 valve.

- Inspection:** Periodically inspect the valve and connections for signs of wear, damage, or leaks.
- Cleaning:** Keep the valve free from dust, dirt, and debris. Use a clean, dry cloth for external cleaning. Do not use harsh chemicals that may damage seals.
- Air Quality:** Ensure the compressed air supply is clean, dry, and filtered to prevent contamination and premature wear of internal components.
- Seal Replacement:** If leaks are detected from the valve body, internal seals may need replacement. This should be performed by qualified personnel using genuine Crouzet spare parts.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No air flow or restricted flow	• Insufficient supply pressure • Blocked air lines or ports • Valve stuck in one position	• Check system pressure • Inspect and clear air lines/ports • Inspect valve for internal damage or debris
Valve does not switch positions	• No control pressure • Low control pressure • Internal spring failure • Valve jammed	• Verify control signal and pressure • Check for correct operating pressure • Replace valve if spring is faulty • Inspect for foreign objects
Air leakage from valve	• Loose connections • Damaged seals or O-rings • Cracked valve body	• Tighten all pneumatic connections • Replace worn or damaged seals • Replace the valve if body is cracked

8. SPECIFICATIONS

- **Manufacturer:** Crouzet Control
- **Part Number:** 81516200
- **Item Model Number:** 81516200
- **Item Weight:** 0.16 ounces
- **Item Package Quantity:** 1
- **Batteries Required:** No
- **ASIN:** B00DJUH2RM
- **Date First Available:** February 22, 2016

9. WARRANTY AND SUPPORT

For warranty information or technical support, please contact your authorized Crouzet distributor or visit the official Crouzet website. Keep your purchase receipt for warranty claims.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question