

## Aoleaby PA035-017BC00S

# Aoleaby Servo Encoder PA035-017BC00S User Manual

Model: PA035-017BC00S

## 1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Aoleaby Servo Encoder Model PA035-017BC00S. A servo encoder is a device that converts mechanical motion into electrical signals, providing feedback for precise control of servo motors in various automation equipment. Please read this manual thoroughly before using the product to ensure safe and efficient operation.

## 2. PRODUCT FEATURES

- **Regenerative Braking:** Supports energy recovery during deceleration, enhancing efficiency.
- **Accepts PWM, Analog Voltage:** Versatile input compatibility for various control systems.
- **Smooth and Accurate Motor Movement:** Designed to provide precise feedback for enhanced motor performance.
- **Wide Application:** Suitable for use in diverse automation equipment.
- **Protection Functions:** Includes built-in safeguards against overcurrent, overvoltage, undervoltage, and short circuit conditions.

## 3. SPECIFICATIONS

Model Number	PA035-017BC00S
Item Weight	4000 Grams
Number of Pieces	1
Assembly Required	No

## 4. SETUP

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Proper setup is crucial for the optimal performance and longevity of your servo encoder. Follow these general guidelines:

1. **Unpacking and Inspection:** Carefully unpack the encoder and inspect it for any signs of damage during transit. Report any damage to your supplier immediately.
2. **Mounting:** Securely mount the encoder to the motor or mechanical system according to the system's design specifications. Ensure proper alignment to prevent premature wear or inaccurate readings.
3. **Wiring:** Connect the encoder to the motor driver or control system using appropriate shielded cables. Refer to the wiring diagram provided with your specific system for correct pin assignments. Ensure all connections are secure and properly insulated.
4. **Power Supply:** Connect the encoder to a stable and appropriate power supply as specified by your system's requirements. Verify voltage and current ratings before powering on.
5. **Initial Configuration:** If your control system requires specific encoder parameters, configure them according to the system's manual. This may include resolution, output type, or direction.



Image 1: Aoleaby Servo Encoder PA035-017BC00S. This image displays the main unit of the servo encoder, highlighting its compact design and connection points.

## 5. OPERATING

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Once the Aoleaby Servo Encoder PA035-017BC00S is properly installed and configured, its operation is typically integrated with a motor driver and control system. The encoder provides real-time feedback on the motor's position, speed, and direction, allowing the control system to make precise adjustments.

- **Feedback Loop:** The encoder continuously sends signals to the motor driver, which interprets these signals to maintain the desired motor performance.
- **Precision Control:** The high-resolution feedback from the encoder enables accurate positioning and speed control, crucial for applications requiring high precision.
- **Monitoring:** The encoder's output can be monitored by the control system to detect deviations from the desired motion profile, allowing for immediate correction or error reporting.

*Always refer to the documentation of your specific motor driver and control system for detailed operational procedures and programming instructions.*

## 6. MAINTENANCE

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The Aoleaby Servo Encoder PA035-017BC00S is designed for durability and reliability. Regular maintenance is minimal but important to ensure consistent performance.

- **Cleaning:** Keep the encoder free from dust, dirt, and debris. Use a soft, dry cloth for cleaning. Avoid using harsh chemicals or abrasive materials.
- **Cable Inspection:** Periodically check all connecting cables for signs of wear, fraying, or damage. Ensure connections remain tight and secure.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges to prevent damage to internal components.
- **Mounting Integrity:** Verify that the encoder remains securely mounted and that there is no excessive vibration or misalignment that could affect its performance.

**Warning: Do not attempt to disassemble the encoder. Disassembly will void the warranty and may cause damage to the unit.**

## 7. TROUBLESHOOTING

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If you encounter issues with your Aoleaby Servo Encoder PA035-017BC00S, consider the following troubleshooting steps:

- **No Output Signal:**
  - Check power supply connections and voltage.
  - Verify all signal cables are correctly connected and not damaged.
  - Ensure the encoder is properly mounted and aligned.
- **Inaccurate Readings:**
  - Check for mechanical play or slippage in the coupling between the encoder and the motor shaft.
  - Inspect for excessive vibration or electromagnetic interference (EMI).
  - Verify the configuration settings in your control system match the encoder's specifications.
- **Intermittent Operation:**

- Examine cables for intermittent breaks or loose connections.
- Check for power supply fluctuations.
- Ensure the operating temperature is within the specified range.

If the problem persists after performing these checks, contact technical support for further assistance.

## **8. WARRANTY AND SUPPORT**

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Aoleaby products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the documentation provided at the time of purchase or contact your vendor. Technical support is available to assist with any questions or issues you may encounter during the installation or operation of your PA035-017BC00S Servo Encoder.

For support, please contact your authorized Aoleaby distributor or visit the official Aoleaby website for contact information.