

Atyhao Atyhaom18w5c02ny

Atyhao Linear Actuator Electric Motor User Manual

Model: Atyhaom18w5c02ny

Brand: Atyhao

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the safe and effective use of your Atyhao Linear Actuator Electric Motor. This device is designed to provide reliable push and pull motion, primarily used as a replacement part for electric recliners, sofa lifters, and similar furniture applications. It features a telescopic rod design for smooth and controlled movement.



Figure 1: Atyhao Linear Actuator Electric Motor.

This image displays the linear actuator, a compact device with a black motor housing on one end and a silver telescopic rod extending to a white plastic attachment point on the other. A power cable extends from the motor housing.

2. PRODUCT FEATURES

- **Durable Construction:** Made with an aluminum alloy housing and ABS+aluminum material, ensuring wear resistance and a long service life.
- **Weather Resistance:** IPX4 rated, providing protection against dust and water splashes, making it suitable for various environments.
- **Integrated Limit Switch:** Features a built-in limit switch that automatically stops the motor when the actuator reaches its full extension or retraction, preventing idling and potential damage.
- **Smooth Operation:** The telescopic rod and flat push line utilize DC technology for smooth and precise movement,

contributing to an elegant and functional design.

- **Easy Installation:** Designed with a straight 5-pin socket and a 01 male header for straightforward and convenient installation, suitable for home use.
- **High Load Capacity:** Capable of handling a load of up to 1000N (approximately 225 lbs), providing robust performance for recliner mechanisms.
- **Optimal Stroke Length:** Offers a 333MM stroke length, providing ample range of motion for recliner adjustments.



Figure 2: Linear Actuator with Power Cord.

This image shows the linear actuator with its attached power cord, highlighting the simple connection for ease of installation.

3. SAFETY INFORMATION

Important Safety Precautions:

- **Continuous Operation Limit:** Do not use the linear actuator continuously for more than 2 minutes. Exceeding this limit can lead to overheating and potential damage to the motor. Allow sufficient cool-down time between operations.
- **Installation Orientation:** Be cautious when installing the actuator in different orientations. Ensure proper support and alignment to prevent undue stress on the unit or the furniture mechanism.
- **Electrical Safety:** Always disconnect power before performing any installation, maintenance, or troubleshooting. Ensure all electrical connections are secure and comply with local electrical codes.
- **Pinch Points:** Keep hands, clothing, and other objects clear of moving parts during operation to avoid pinch injuries.
- **Environmental Conditions:** Use the product within the specified environmental temperature range (0 - +40°C). Avoid exposure to extreme temperatures or excessive moisture beyond its IPX4 rating.

4. SETUP AND INSTALLATION

Before installation, ensure the new linear actuator is compatible with your existing recliner or sofa system, paying attention to dimensions, voltage, and connector type.

1. **Preparation:** Disconnect the power supply to the recliner or sofa. Carefully position the furniture to access the existing linear actuator.
2. **Removal of Old Actuator:** Identify and disconnect the electrical connections (typically a 5-pin socket and a 01 male header). Unbolt or unclip the old actuator from its mounting points on the furniture frame. Note the orientation and attachment method for reinstallation.
3. **Mounting the New Actuator:** Align the new Atyhao linear actuator with the mounting points. Secure it using appropriate fasteners (e.g., screws provided or existing hardware). Ensure the actuator is firmly attached and moves freely without obstruction.
4. **Electrical Connection:** Connect the 5-pin socket and the 01 male header from the recliner's control system to the corresponding ports on the new actuator. Ensure connections are snug and secure.
5. **Testing:** Once installed, carefully reconnect the power supply. Test the recliner's functions (extension and retraction) to ensure the actuator operates smoothly and correctly. Observe for any unusual noises or movements.

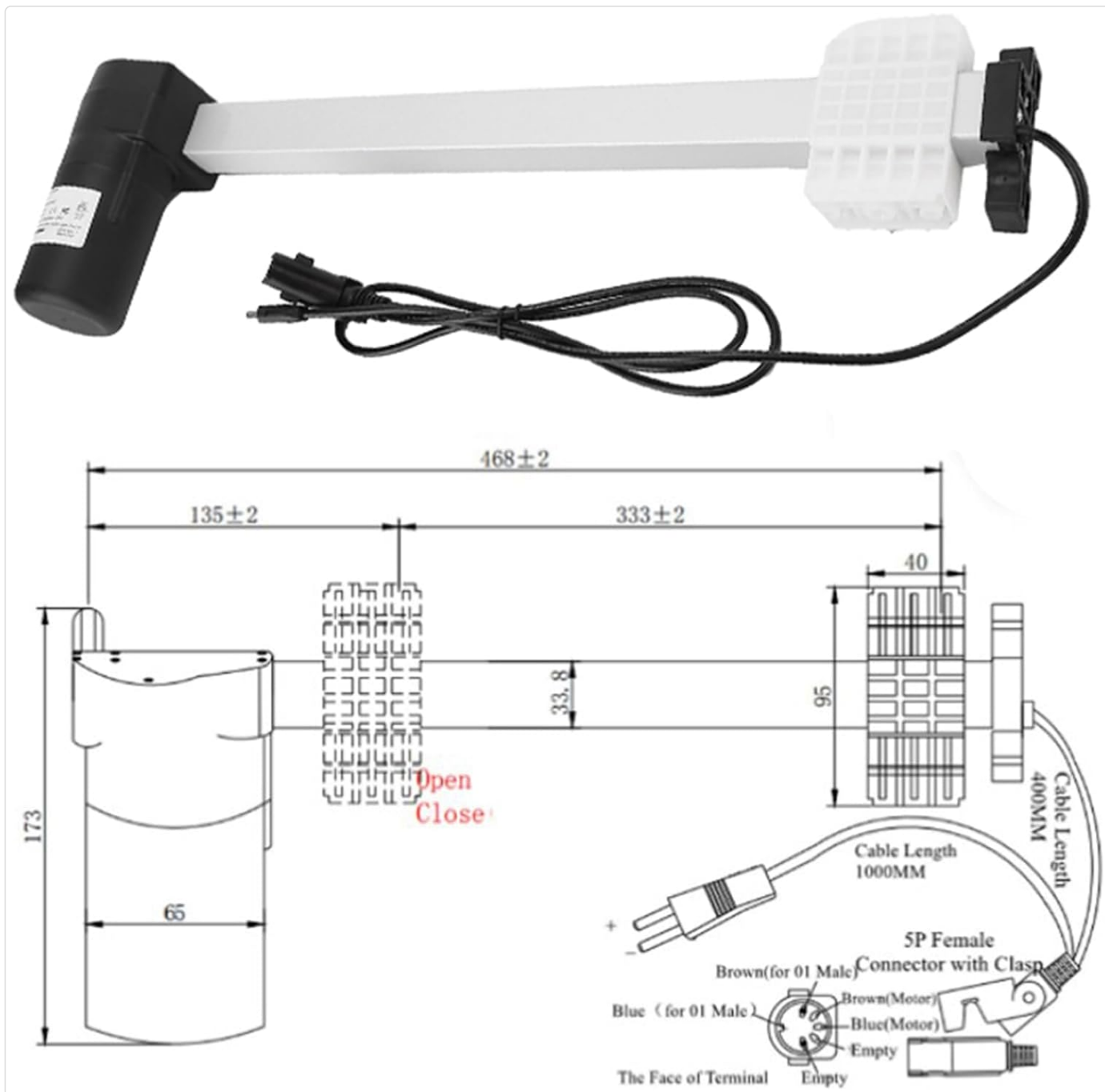


Figure 3: Linear Actuator with Technical Drawing and Screws.

This image provides a detailed technical drawing with dimensions (in millimeters) of the linear actuator, showing its overall length, stroke, and motor housing dimensions. It also displays the included mounting screws, indicating the type of fasteners used for installation.



Figure 4: Linear Actuator in a Recliner Application.

This image illustrates the linear actuator positioned beneath a recliner, demonstrating its typical installation location and how it facilitates the reclining mechanism.

5. OPERATION

The Atyhao Linear Actuator operates in conjunction with your recliner's existing control system (e.g., hand remote or integrated buttons). When activated, the motor drives the telescopic rod, causing it to extend or retract, thereby moving the recliner mechanism.

- **Extension:** Pressing the appropriate button on your recliner's controller will cause the actuator rod to extend, typically moving the footrest up and/or the backrest down.
- **Retraction:** Pressing the opposite button will cause the actuator rod to retract, bringing the footrest down and/or the backrest up to the upright position.
- **Automatic Stop:** The built-in limit switch ensures the actuator automatically stops when it reaches its fully extended or fully retracted position, preventing over-extension or over-retraction.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your linear actuator.

- **Cleaning:** Periodically wipe down the exterior of the actuator with a dry or slightly damp cloth to remove dust and

debris. Avoid using harsh chemicals or abrasive cleaners.

- **Inspection:** Regularly inspect the actuator for any signs of wear, damage, or loose connections. Check the mounting points and electrical cables for integrity.
- **Obstruction Check:** Ensure that there are no obstructions around the moving parts of the actuator or the recliner mechanism that could impede its operation.
- **Lubrication:** The internal components are typically pre-lubricated and sealed. External lubrication is generally not required. If any moving parts of the recliner frame itself require lubrication, use a silicone-based lubricant sparingly.

7. TROUBLESHOOTING

If you encounter issues with your linear actuator, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Actuator does not move.	No power, loose electrical connection, faulty controller, internal motor issue.	Check power outlet and recliner's power supply. Ensure all cables are securely connected. Test the controller if possible. If issues persist, contact support.
Actuator moves partially or erratically.	Low power, partial connection, obstruction, worn internal components.	Verify stable power supply. Check for any physical obstructions. Inspect connections for damage.
Unusual noise during operation.	Friction, worn gears, foreign object, motor issue.	Ensure no parts are rubbing. Check for foreign objects. If noise persists and performance is affected, contact support.
Actuator overheats.	Continuous operation beyond recommended limit, excessive load.	Allow the unit to cool down. Adhere to the 2-minute continuous operation limit. Reduce load if possible.

If troubleshooting steps do not resolve the issue, please contact Atyhao customer support for further assistance.

8. SPECIFICATIONS

Parameter	Value
Model Name	Atyhaom18w5c02ny
Brand	Atyhao
Material	ABS + Aluminum Tube
Voltage	29V DC
Load Capacity	1000N (Newtons)
Stroke Length	333MM / 11.8in (Test Distance)
Frequency of Use	10%, up to 2 minutes of continuous work
Noise Level	≤55dB(A)
Protection Level	IPX4

Parameter	Value
Use Environment Temperature	0 - +40°C
Product Size (Approx.)	53x17x9cm / 20.9x6.7x3.5in
Shortest Installation Distance	135mm / 5.3in
Item Weight	Approx. 2678g / 5.9 lbs
Installation Connector	Plastic (5-pin socket + 01 male header)
Internal Limit Switch	Built-in

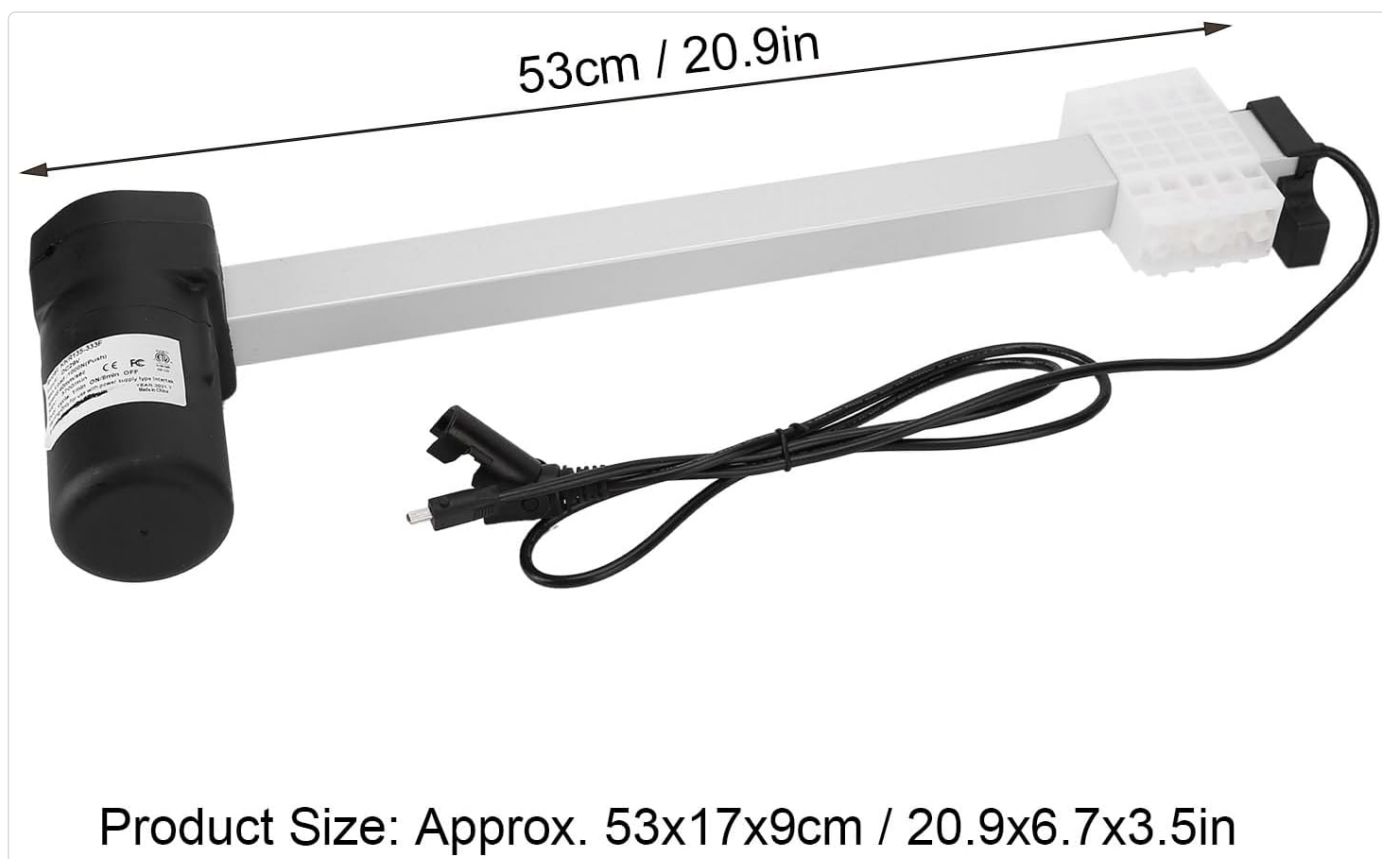


Figure 5: Linear Actuator with approximate overall length indicated.

This image shows the linear actuator with an overlay indicating its approximate overall length of 53cm / 20.9in, providing a visual reference for its size.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your Atyhao Linear Actuator Electric Motor, please contact the manufacturer directly. Refer to the product packaging or the Atyhao official website for contact details.

When contacting support, please have your product model number (Atyhaom18w5c02ny) and purchase details readily available.

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