uxcell JCF63R

uxcell DC24V 80W 160RPM Reversible Worm Gear Motor JCF63R Instruction Manual

Model: JCF63R | Brand: uxcell

1. Product Overview

The uxcell DC24V 80W 160RPM 4N.M Reversible Worm Gear Motor is an electric gear motor designed for applications requiring high torque and speed reduction. Its cylindrical shape features a 10mm diameter shaft with a threaded end, suitable for a 5mm tightening nut. This motor serves as an effective replacement for damaged or corroded DC geared motors in various machinery.

Key Features:

- **Voltage:** DC 24V
- **Speed:** 160 RPM
- **Power:** 80W
- **Torque:** 4N.M
- **Design:** Right Angle, Reversible
- **Shaft Diameter:** 10mm (0.39")
- **Mounting:** M6 screw holes

2. Safety Information

Please read and understand all safety instructions before installing, operating, or maintaining this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Ensure the power supply is disconnected before any installation or maintenance work.
- Verify that the voltage and current ratings of your power supply match the motor's specifications (DC 24V, 80W).
- Avoid touching the motor surface during or immediately after operation, as its temperature may rise significantly.
- Install the motor in a well-ventilated area, free from excessive dust, moisture, or corrosive substances.

- Ensure all wiring connections are secure and properly insulated to prevent short circuits.
- Do not overload the motor beyond its rated torque and power specifications.

3. Package Contents

Upon opening the package, please verify that all components are present and undamaged:

- 1 x Electric Gear Motor (Model: JCF63R)

4. Specifications

Specification	Value
Rated Voltage	DC 24V
Rated Speed	160 RPM
Rated Load Power	80 Watts
Rated Torque	4N.M
Motor Size	63mm x 100mm (2.5" x 3.9")
Shaft Diameter	10mm (0.39")
Cable Length	30cm (11.8")
Mounting	M6 screw holes
Special Features	Reversible
Main Color	Black, Gray
Material	Plastic, Metal
Certification	CE, RoHS

5. Setup and Installation

Follow these steps for proper installation of the worm gear motor:

1. **Mounting:** Secure the motor using the M6 screw holes on the gearbox. Ensure the mounting surface is stable and can support the motor's weight and operational forces.
2. **Shaft Connection:** Connect the 10mm diameter output shaft to your application's mechanism. If a 5mm tightening nut is required, ensure it is securely fastened.
3. **Wiring:** Connect the motor's power cables to a DC 24V power source. Observe correct polarity for desired rotation direction. Reversing the polarity will reverse the motor's direction.

4. **Testing:** Before full operation, perform a brief test run to confirm correct installation and functionality.

6. Operating Instructions

This motor is designed for continuous operation within its specified parameters. It is reversible, allowing for bidirectional movement of the connected mechanism.

- **Power On:** Apply DC 24V power to the motor. The motor will begin rotating at its rated speed of 160 RPM.
- **Direction Control:** To reverse the direction of rotation, reverse the polarity of the DC power supply connected to the motor.
- **Load Management:** Ensure the load applied to the motor does not exceed its rated torque of 4N.M to prevent damage and ensure longevity.
- **Typical Applications:** This motor is suitable for various applications such as garage doors, label printers, auto shutters, automatic stabilized voltage supplies, grills, ovens, cleaning machines, garbage disposers, household appliances, slot machinery, money detectors, automatic actuators, coin refund devices, and peristaltic pumps.

7. Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your motor:

- **Cleaning:** Keep the motor and gearbox free from dust and debris. Use a soft, dry cloth for cleaning.
- **Inspection:** Periodically inspect the motor for any signs of wear, loose connections, or unusual noise during operation.
- **Lubrication:** The gearbox is typically pre-lubricated. Consult a professional if lubrication is suspected to be necessary.
- **Temperature:** Monitor the motor's operating temperature. Excessive heat can indicate an overload or a fault.

8. Troubleshooting

If you encounter issues with your motor, refer to the following common troubleshooting steps:

- **Motor Not Running:**
  - Check power supply connections and ensure correct voltage (DC 24V).
  - Verify that the power switch (if applicable) is in the 'ON' position.
  - Inspect wiring for any breaks or loose connections.
- **Motor Running Slowly or Weakly:**
  - Ensure the power supply is providing stable DC 24V.
  - Reduce the load on the motor if it exceeds the rated torque.
  - Check for any obstructions preventing smooth rotation of the shaft.
- **Unusual Noise or Vibration:**

- Inspect for loose mounting screws or components.
- Check for foreign objects in the gearbox or around the shaft.
- If the noise persists, discontinue use and consult a qualified technician.

- **Overheating:**
  - Ensure the motor is not overloaded.
  - Verify adequate ventilation around the motor.
  - If overheating continues, there may be an internal fault; discontinue use.

9. Product Views and Diagrams

Figure 1: Overall view of the uxcell JCF63R Worm Gear Motor.

Figure 2: Top-down view of the motor, showing the gearbox and shaft.

Figure 3: Side view of the motor, highlighting the motor body and gearbox.

Figure 4: Rear view of the motor, showing the electrical connections.

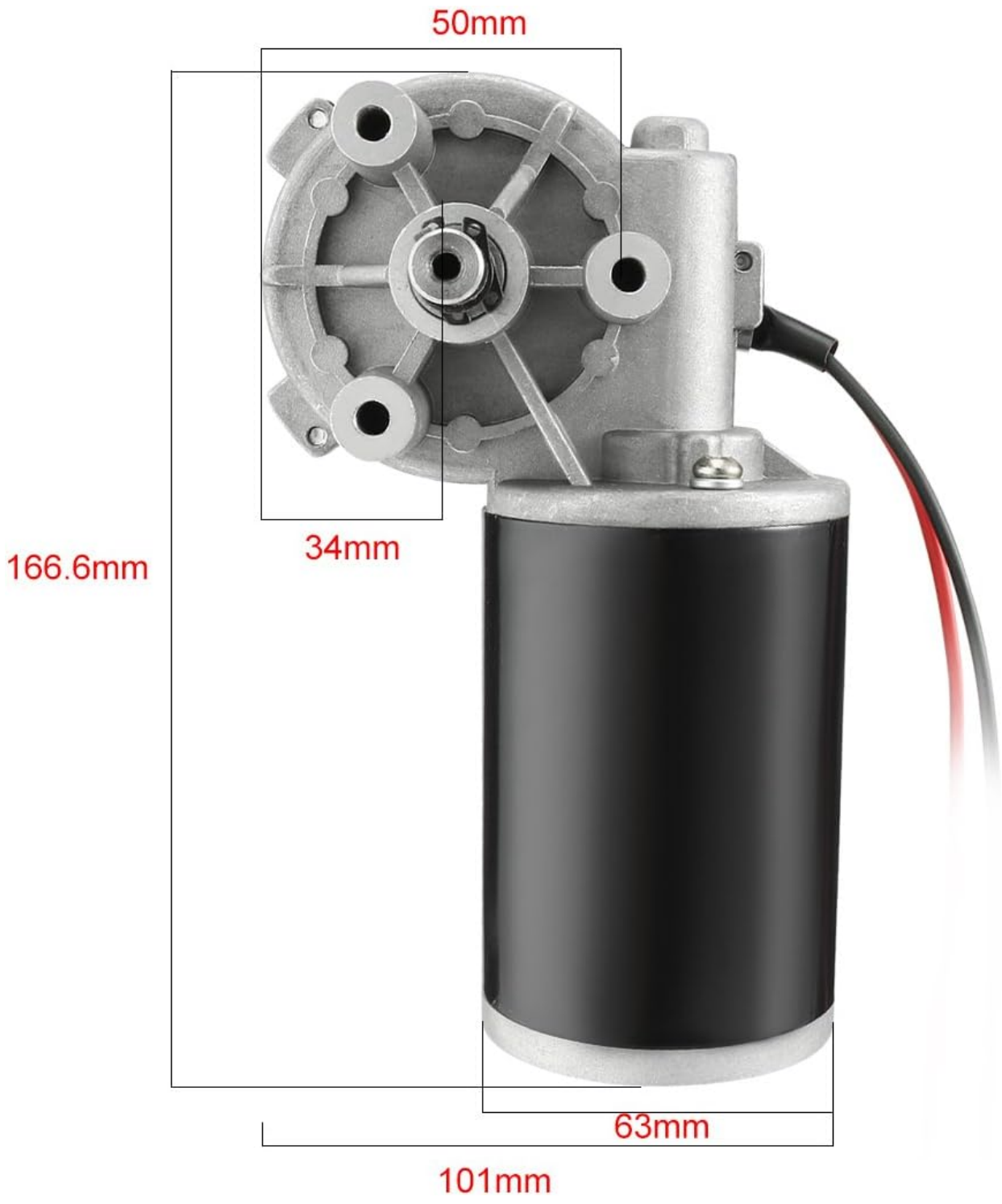

Figure 5: Dimensional drawing showing top and side measurements.

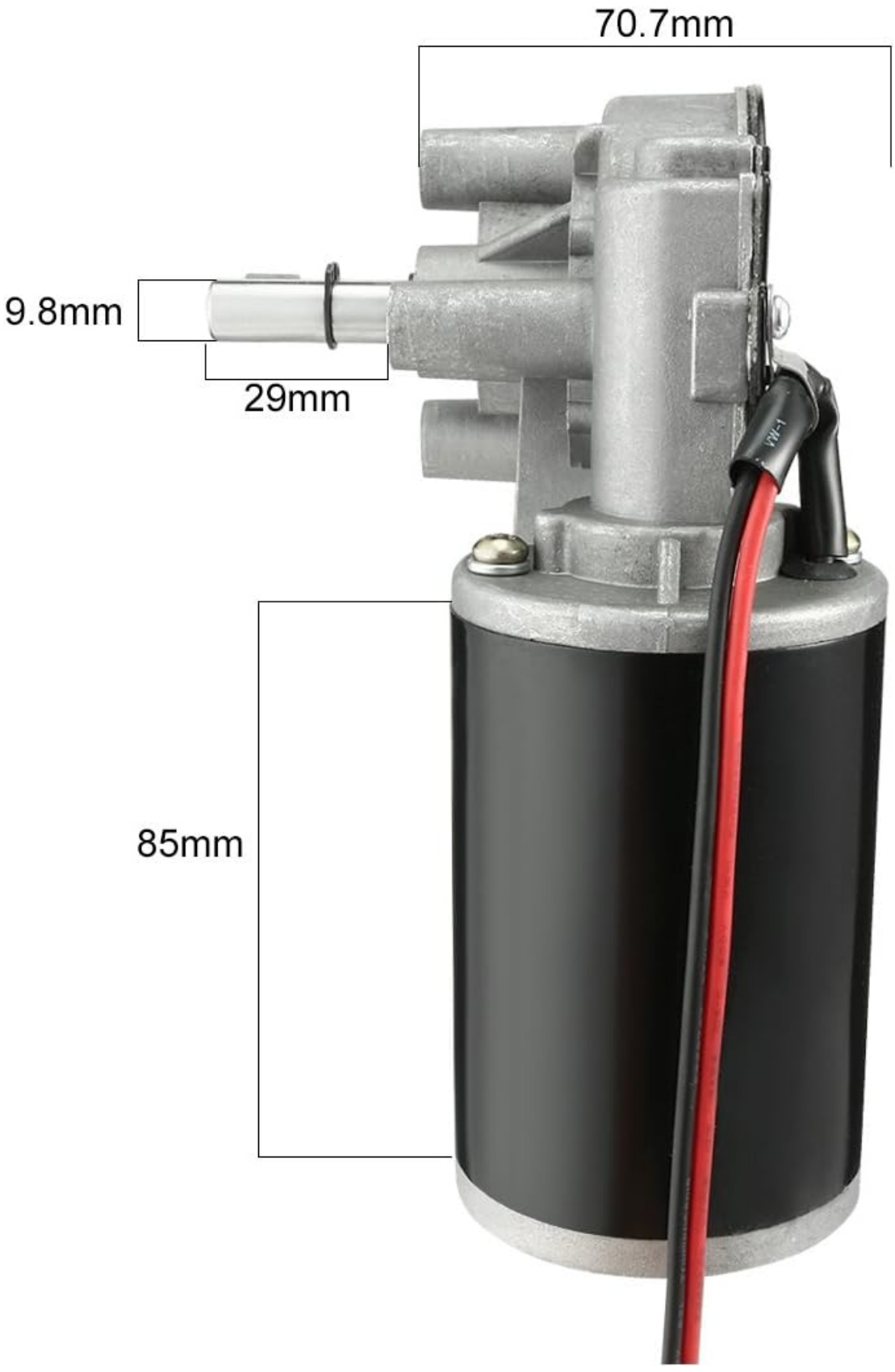

Figure 6: Detailed side dimensional drawing.

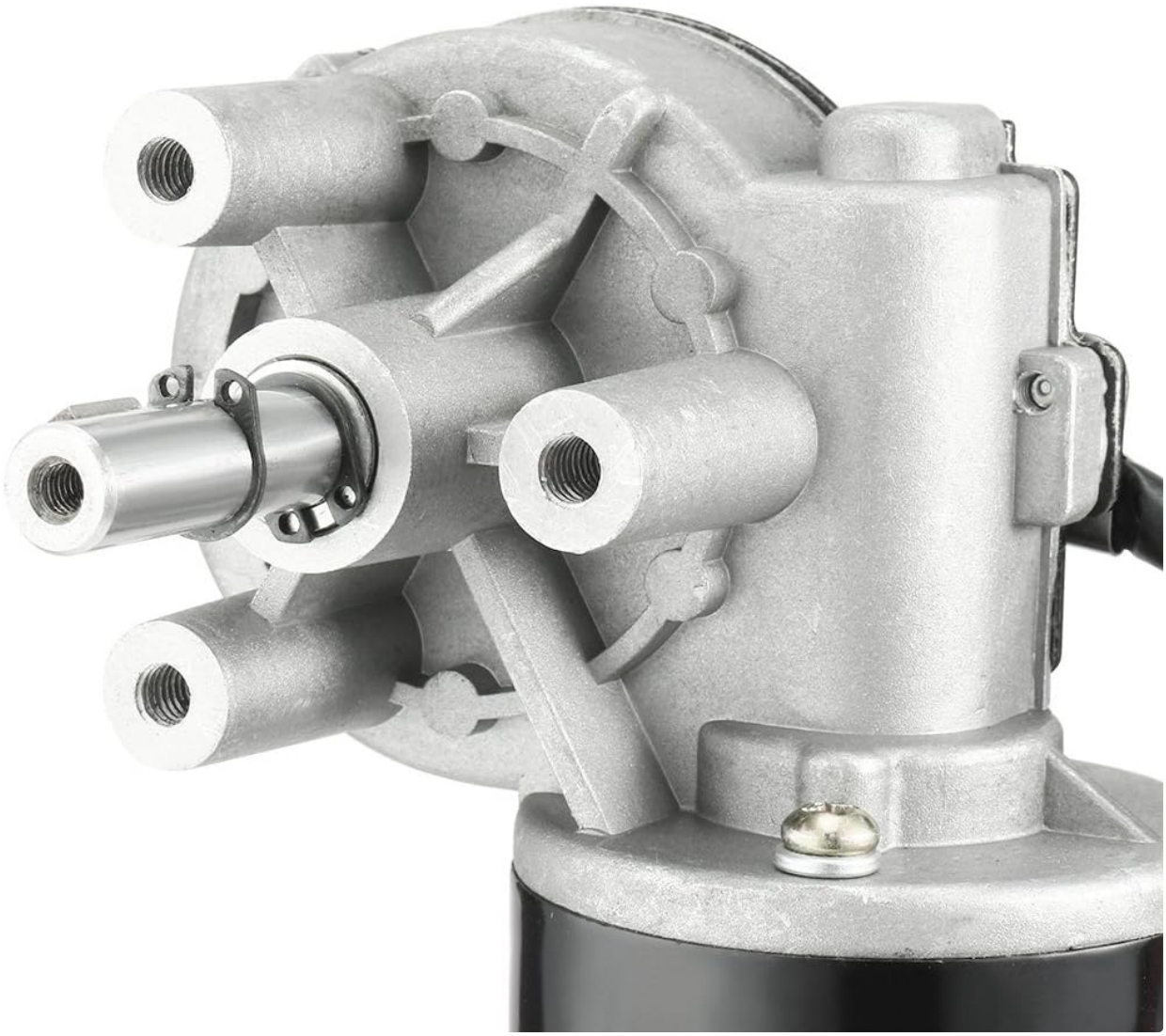

Figure 7: Close-up view of the gearbox output shaft.

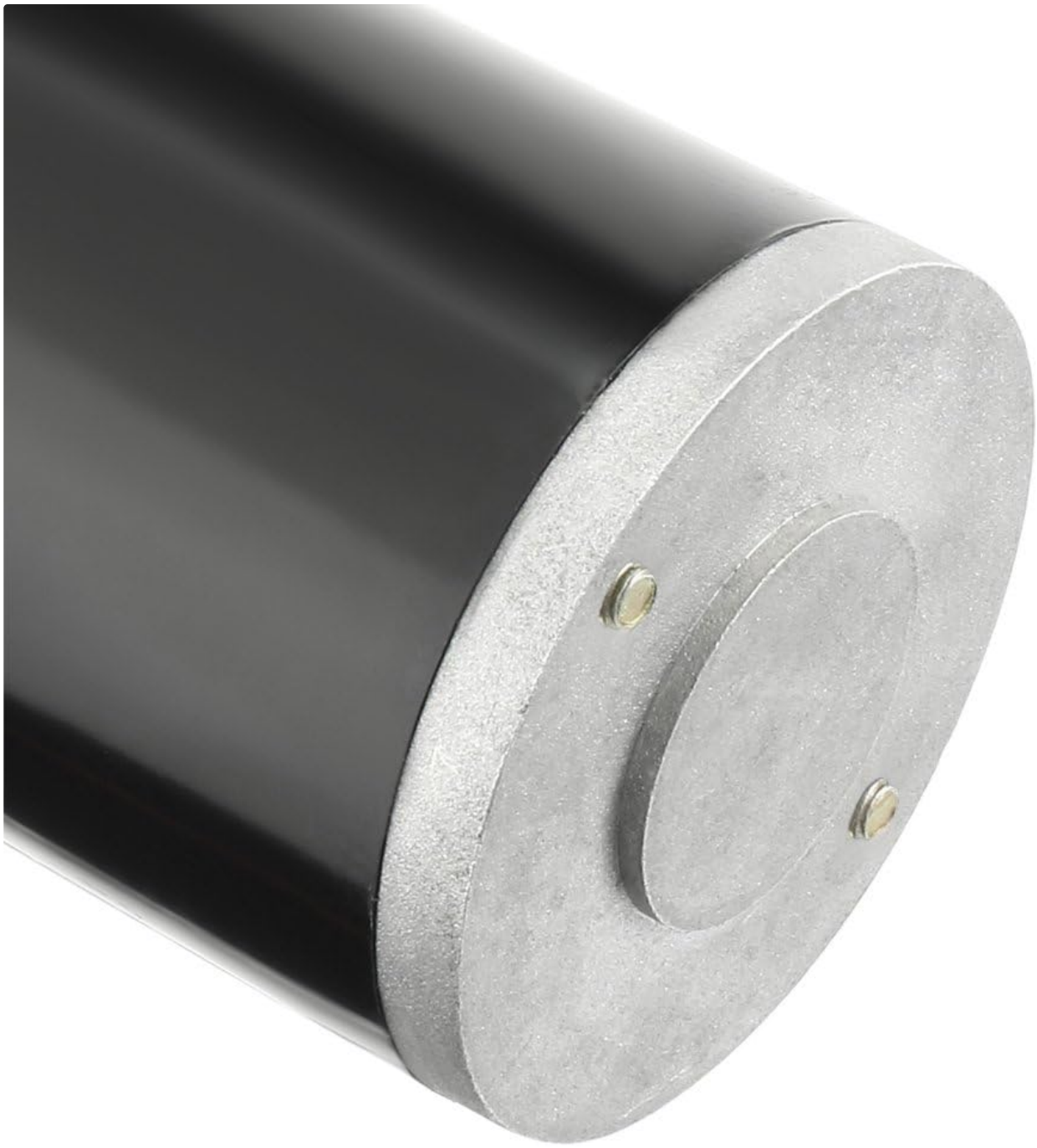

Figure 8: Close-up view of the motor's rear end.

10. Related Videos

Worm Gear Motor Overview

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This video provides a general overview of a worm gear motor, demonstrating its basic appearance and function.

Worm Gear Motor Demonstration

Your browser does not support the video tag.

A short demonstration of a worm gear motor in operation, showcasing its rotational movement.

DC Worm Gear Motor Functionality

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This video illustrates the functionality of a DC worm gear motor, providing visual context for its application.

11. Warranty and Support

For warranty information or technical support, please refer to the product packaging or contact uxcell customer service through their official website or the retailer where the product was purchased. Please have your product model number (JCF63R) and purchase details ready when contacting support.