

Tubular Motor

Datasheet



MWB125D-BP.10



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Before using this product, please read this datasheet carefully and keep it properly!

Document Version: C

◆◆ Overview

Tubular motor, applicable to indoor sunshade products such as roller blinds, venetian blinds, Shangri-La blinds, zebra blinds, Roman blinds, honeycomb blinds, etc. It is used to control the opening and closing, percentage adjustment and angle adjustment of blinds.

Its features include:

- High-accuracy position limit
- Internal structure is sealed and lubricated for low noise and vibration
- Overheat and overload protection
- Flame-retardant material for low fire risk
- Remote control supported with internal standard wireless receiving function (Remote controller is optional)

◆◆ Appearance

Small Module Dimension Drawing:

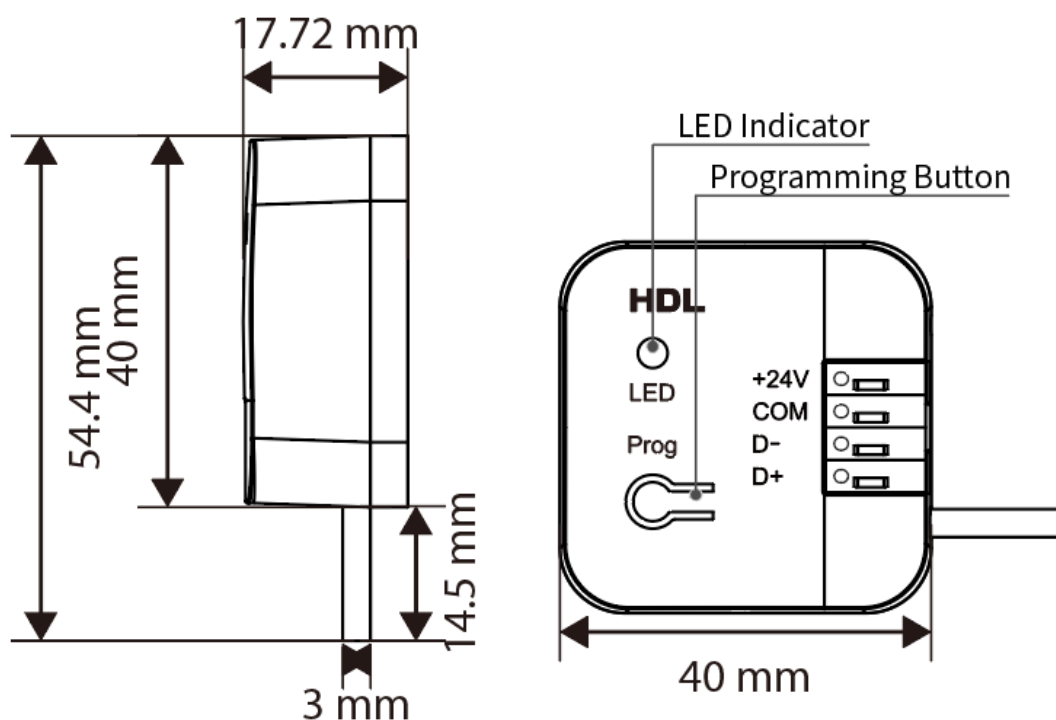


Figure 1

Interface Diagram:

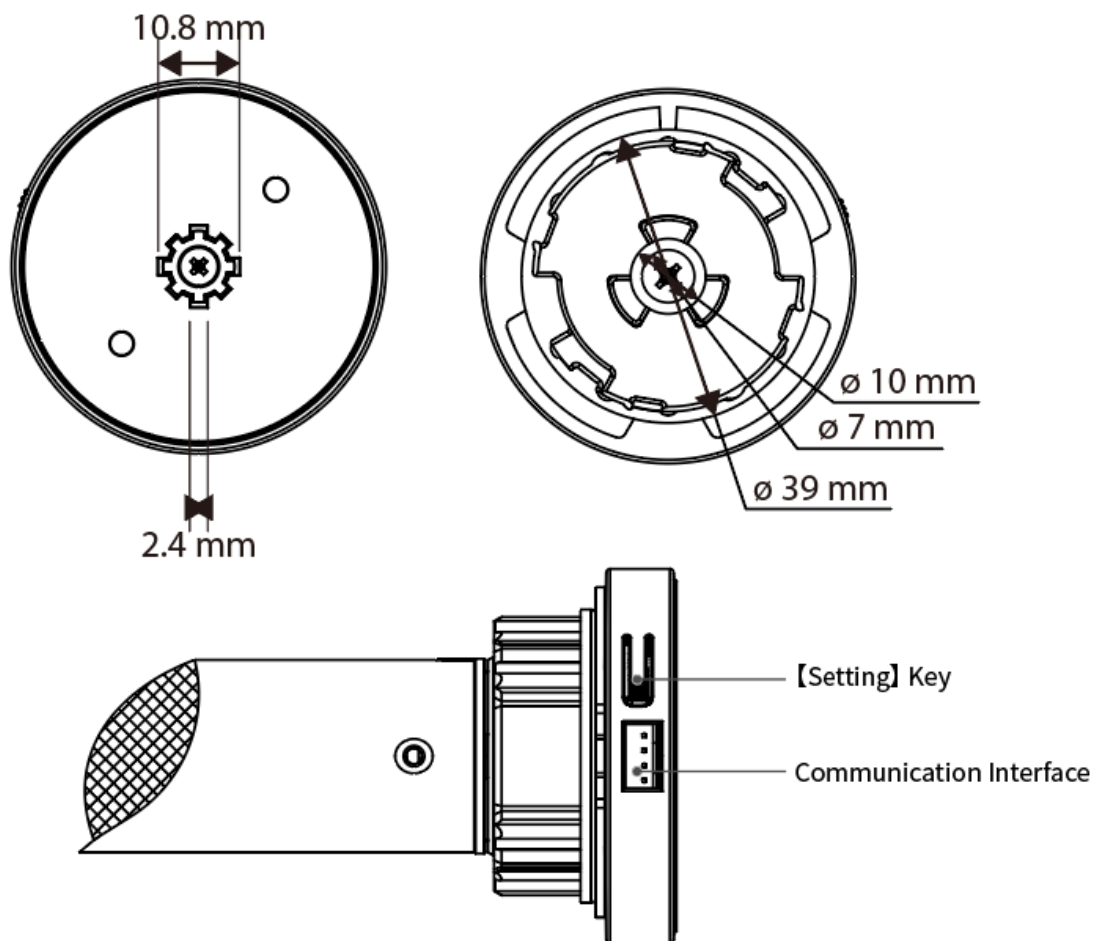


Figure 2

Motor Dimension Drawing:

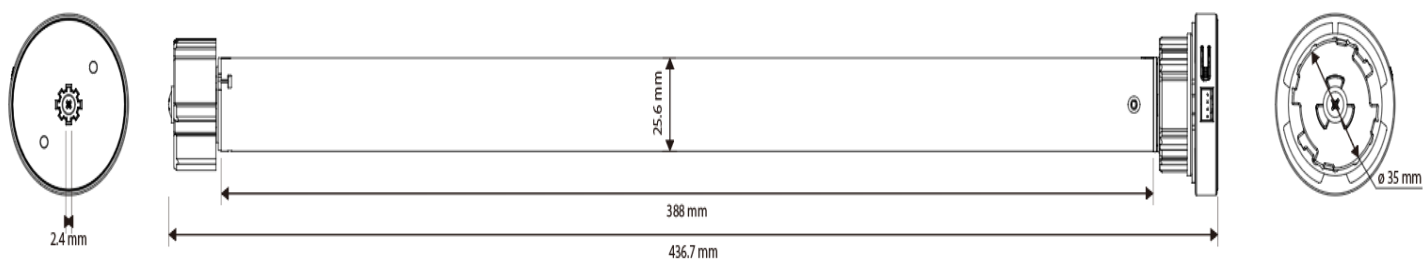


Figure 3

◆◆ Technical Data

Item	Parameter
Motor Rated Input Voltage	110-240V~50/60Hz
Motor Rated Power	120W±10%
Communication Protocol	Buspro
Buspro Rated Voltage	24V DC

Buspro Rated Current	6mA/24V DC
Motor Torque	1.5N·m
Motor Rotate Speed	15rpm±10% (No-load)
Wireless Receiving Frequency	17RPM±10% (Default)
Working Temperature	-5°C~45°C
Working Humidity	≤90%RH, non-condensed
Dimensions	Φ25.6×436 (mm)
Net Weight	390.6g (Motor) + 20g (Communication Module))
Housing Material	Seamless Steel (Motor) + PC (Communication Module)
Thermal Class	B (130°C)
IP Degree (Compliant with EN 60529)	IP40
Duty Cycle	S3 50%
Insulation Class	E
Installation	Wall Hanging

◆◆ Safety Precaution

Note:

- Do NOT add lubricant to the motor.
- Please keep secure of the components, do not crash or drop any part.

Cautions:

- Do NOT apply any additional weight to the curtain track. Do NOT climb on the curtains.
- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. (hereinafter referred to as HDL) or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- HDL will not be responsible for any consequence caused by the inexperienced or faulty installation and wiring methods, which are not in accordance with the instructions contained in this datasheet.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.
- Kindly take note that the installation of the aforementioned device is recommended to be conducted in an indoor environment, with due consideration given to the avoidance of exposure to external factors such as humidity and high temperatures.

- The device is only available for use at an altitude of below 2000 meters.

◆◆ Wiring

Motor Wiring Instructions:

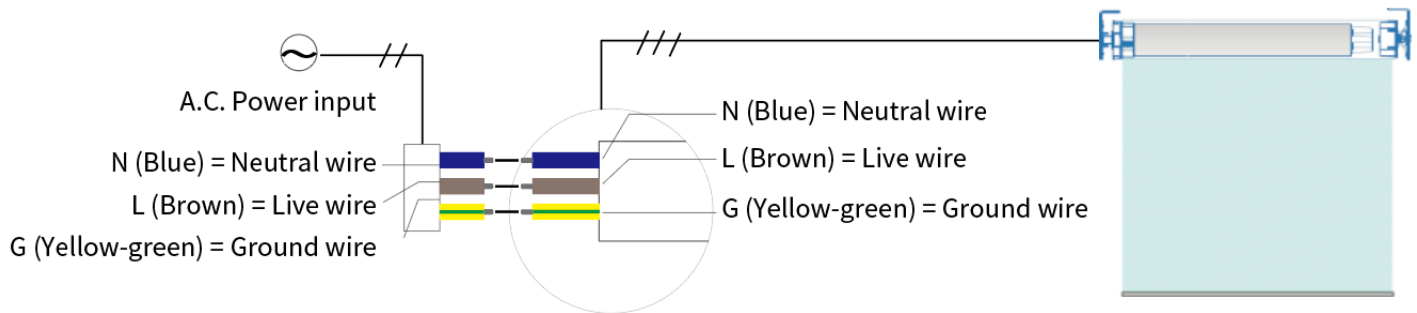


Figure 4

HDL Buspro Cable Guide:

HDL Buspro	HDL Buspro Cable	CAT5/CAT5E
DATA+	Yellow	Blue / Green
DATA-	White	Blue-white / Green-white
COM	Black	Brown-white / Orange-white
24V DC	Red	Brown / Orange

◆◆ Installation

1. Fix the curtain system in the curtain box.
2. Connect the communication module to the motor interface.
3. Connect to the HDL Buspro bus.
4. Connect the motor to the power supply for power input.
5. The communication module is recommended to be fixed nearby with 3M adhesive.

Note: Before installing the motor, please complete the installation of the entire curtain system in advance (including traction objects, blades, fabric curtains, etc.).

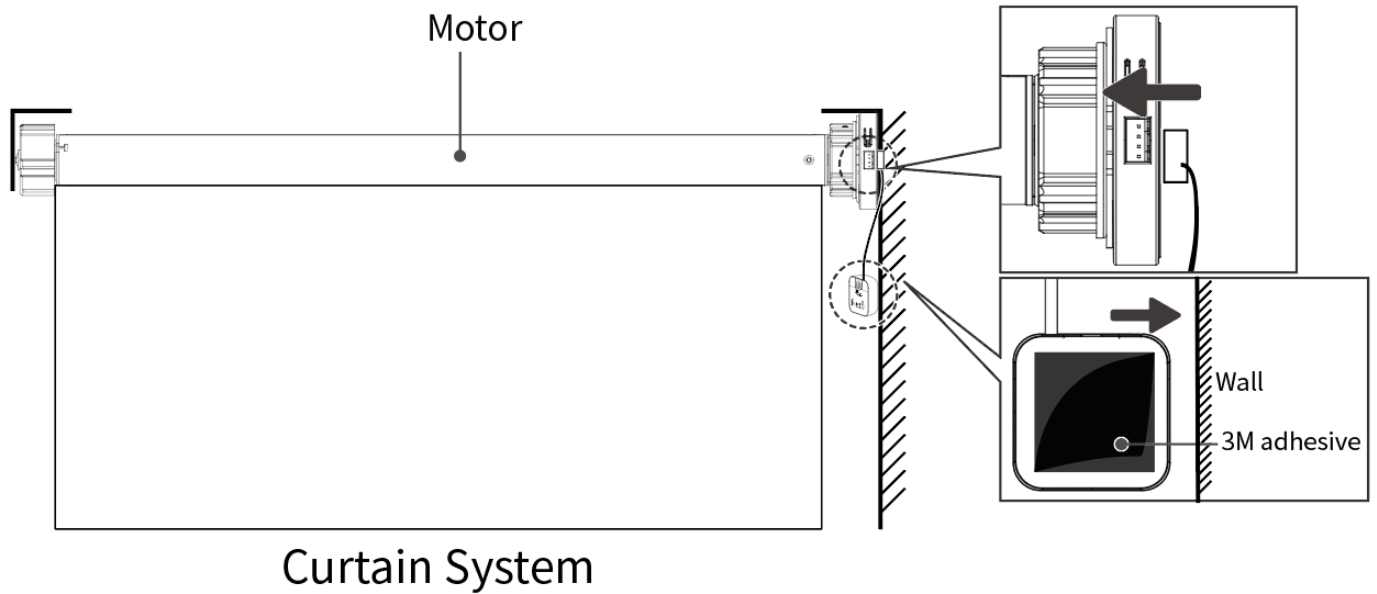


Figure 5

◆◆ Disassembly

To remove the device, please refer to the reverse steps in the section Installation.

◆◆ Operation

Small Module Programming Mode:

- Enter programming mode: long press the programming button on the small module for 3s until the red light stays on.

Travel Setting:

1. The motor is in non-travel state when leaving the factory. It can be controlled point-by-point using the Open and Close keys on the debugging software or remote control, and stops when released. The upper and lower limit travel must be set before entering normal operating state.
2. After clearing the limit travel, the motor will return to non-travel state. The travel must be reset before the motor can return to normal operating state.

(1) Limit Travel Setting Procedure:

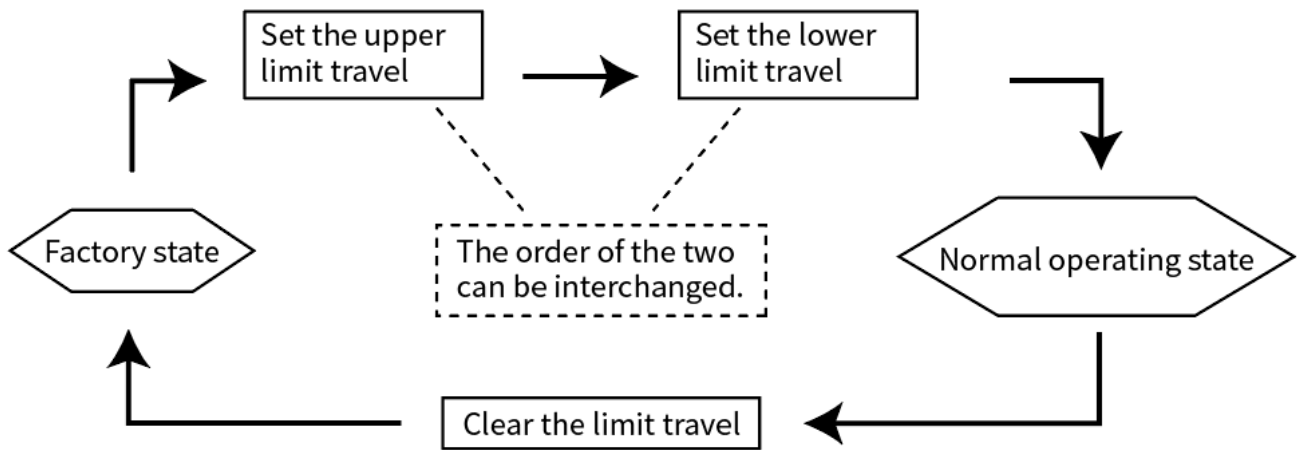


Figure 6

3. Precautions:

- (1) The travel setting must be performed after the entire curtain system (including traction parts, louvers, fabric curtains, etc.) has been completely installed.
- (2) The travel setting shall be carried out using debugging software or a remote control.
- (3) Please set the travel according to the actual length of the curtain system to avoid damaging the louvers or fabric curtains.

Direction Reversal:

1. Press the motor **【Setting】** button twice shortly and once long to enter the direction reversal confirmation state, which lasts for 30 seconds.
2. In the reversal confirmation state, long press the motor **【Setting】** button for 3 seconds to reverse the direction. The motor will jog once, indicating successful reversal.

Code Clearing / Factory Reset:

- Press and hold the motor **【Setting】** button for 3 seconds to enter the code-learning mode. The motor will swing once, and the mode will last for 30 seconds. In code-learning mode, press and hold the motor **【Setting】** button for 7 seconds to restore the motor to factory settings. The motor will swing once.

Note: Restoring factory settings will not affect the motor's rotation direction and operating mode.

Motor-Remote Control Pairing:

1. Press and hold the motor **【Setting】** button for 3 seconds. When the LED stays on and the motor jitters once, the motor enters the code learning state. It will exit automatically after 30 seconds;
2. Select the remote control channel and press the remote control **【Channel Setting】** button. The motor will jog once, indicating successful pairing.

【Channel Setting】 Button

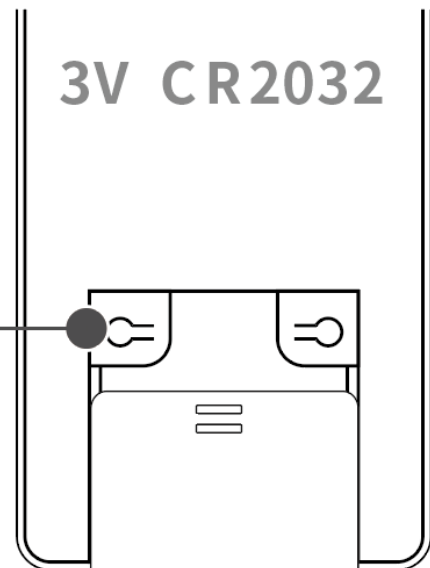


Figure 7

◆◆ Packing List

- Blinds motor * 1
- Communication module * 1
- Connector * 1
- 50mm crown and runner * 1
- 3M adhesive * 1

Note: After unpacking, please check if the product and the parts are complete.

◆◆ Warranty

Warranty period (three years from the date of invoice), if the product fails in normal use, the user can go to the nearest authorized institution with a valid warranty card to obtain free maintenance.

In the following cases, HDL regards the user as giving up the relevant services promised under the warranty and the user shall bear the corresponding responsibility and shall not be entitled to the free warranty:

- Failure of the device caused by force majeure factors.
- The user has placed the device in a transportation or use environment that does not comply with the statements in the product instructions or technical manuals.
- Unauthorized disassembly of the product by the user.
- Promises not made officially by HDL to the user that are beyond the scope of the warranty are the responsibility of the promisor.

HDL reserves the right to update or change the product without prior notice to the user, please visit the HDL website for

answers to your questions and the latest product information.

The final interpretation right of the warranty regulations belongs to HDL.

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Update History:

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	February 25, 2026

◆◆ Technical Support

E-mail: hdltickets@hdlautomation.com

Website: <https://www.hdlautomation.com>