

Yale 4000-0001-00-50

Yale 4000 Series Door Closer Instruction Manual

Model: 4000-0001-00-50

1. INTRODUCTION

Thank you for choosing the Yale 4000 Series Door Closer. This manual provides essential information for the correct installation, operation, and maintenance of your door closer. Designed for controlled closing of various door types, including wood, aluminum, steel, and glass, this model is also CE certified EN 1154 for fire doors. Please read these instructions carefully before installation and retain them for future reference.

2. SAFETY INFORMATION

- Always wear appropriate personal protective equipment (PPE) such as safety glasses and gloves during installation.
- Ensure the door closer is installed by a competent individual.
- Do not attempt to modify the door closer or its components, as this may compromise its safety and functionality.
- Keep children and pets away from the installation area.
- Verify that the door and frame are structurally sound and capable of supporting the door closer's weight and operating forces.
- For fire door applications, ensure installation complies with local fire safety regulations and the EN 1154 standard.

3. PACKAGE CONTENTS

Please check that all components are present before beginning installation:

- Yale 4000 Series Door Closer unit
- Standard arm assembly
- Fasteners (screws)
- Assembly instructions (this manual)

4. SETUP AND INSTALLATION

The Yale 4000 series door closer is designed for doors with a maximum width of 1100 mm and suitable for door weights of 40, 60, or 80 kg, depending on the force setting. It features a compact, lightweight body made of die-cast aluminum and a robust arm. The closer is fully reversible for left or right-hand door applications.

4.1. Determine Door Handing and Mounting Position

Identify whether your door is left-handed or right-handed. The closer can be mounted on the pull side of the door or the push side of the door frame. Refer to the provided templates for precise drilling locations.



Figure 4.1: Installation template for left-hand door mounting. This diagram shows the precise drilling measurements and positions for mounting the door closer body and arm bracket on a left-hand door, including dimensions for EN2, EN3, and EN4 force settings.



Figure 4.2: Installation template for right-hand door mounting. This diagram illustrates the precise drilling measurements and positions for mounting the door closer body and arm bracket on a right-hand door, with dimensions specific to EN2, EN3, and EN4 force settings.

4.2. Mounting the Closer Body

1. Using the appropriate template (Figure 4.1 or 4.2), mark the drilling points on the door or door frame.
2. Drill pilot holes at the marked locations.
3. Secure the door closer body to the door or frame using the provided fasteners. Ensure it is firmly attached and level.

4.3. Attaching the Arm Assembly

1. Attach the main arm to the closer spindle.
2. Attach the forearm to the main arm.
3. Mount the arm bracket to the door frame (if closer is on the door) or door (if closer is on the frame) using the marked drilling points and fasteners.
4. Connect the forearm to the arm bracket. Ensure all connections are secure.



Figure 4.3: Door closer arm assembly and mounting. This image shows a close-up view of the door closer body (1) and the arm assembly (2) being attached, illustrating the connection points and general orientation during installation.

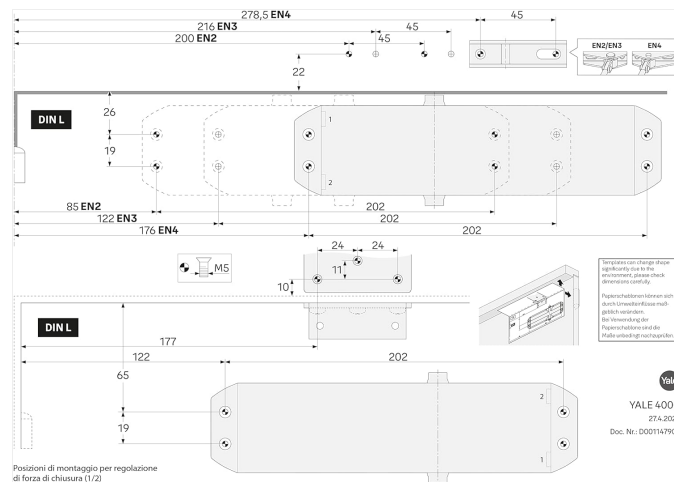


Figure 4.4: Yale 4000 door closer installed on a door. This image provides a visual reference of the door closer mounted

on the top corner of a door, with the arm extending to the door frame, demonstrating a typical installation setup.

5. OPERATING AND ADJUSTMENT

The Yale 4000 series door closer offers double adjustment for closing speed and latching speed (stroke end) via two accessible screws. It allows for control of door openings up to 180 degrees, depending on the EN class setting.

5.1. Adjusting Closing Speed and Latching Speed

The door closer features two adjustment screws, typically located on the front face of the closer body. These screws control the hydraulic fluid flow, which in turn regulates the closing speed and the final latching speed of the door.

- **Closing Speed:** Adjusts the speed of the door from its fully open position until approximately 15 degrees from closed. Turning the screw clockwise will decrease the speed (slower closing), and counter-clockwise will increase the speed (faster closing).
- **Latching Speed (Stroke End):** Adjusts the speed of the door for the final 10-15 degrees of closing, ensuring the door latches properly without slamming. Turning this screw clockwise will decrease the latching speed, and counter-clockwise will increase it.

Make small adjustments (quarter turns) and test the door's closing action after each adjustment until the desired speed is achieved. Do not overtighten or loosen the screws excessively.

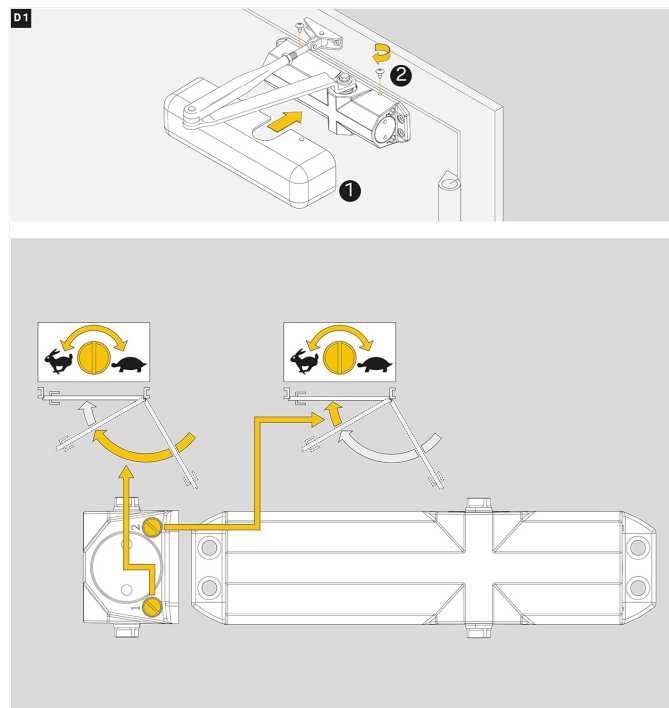


Figure 5.1: Door closer adjustment screws for speed and latching. This diagram clearly shows the two adjustment screws on the door closer body, often marked with symbols (e.g., rabbit for fast, turtle for slow) to indicate their function in controlling the closing and latching speeds.

5.2. Door Opening Angle

The maximum door opening angle is dependent on the EN class setting and installation type.

- **EN2:** Maximum opening angle up to 180 degrees.
- **EN4:** Maximum opening angle up to 105 degrees.

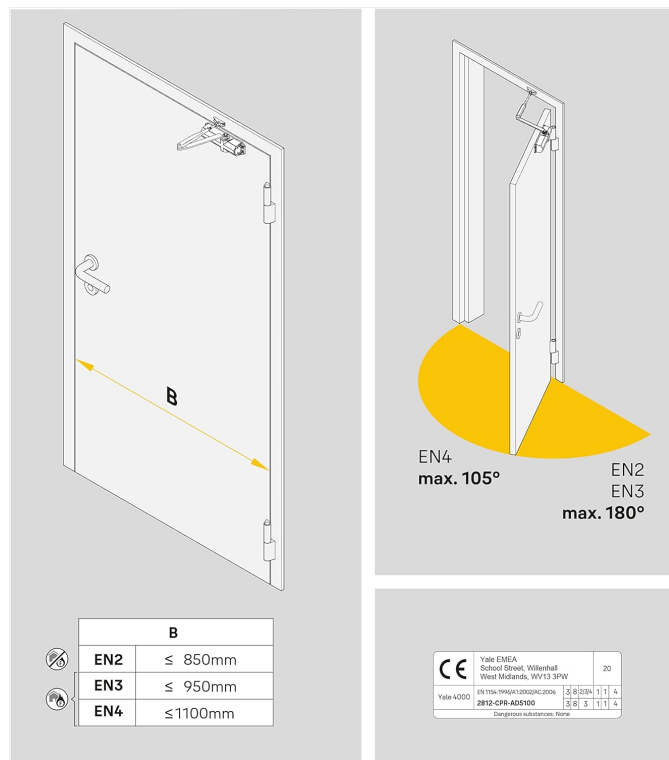


Figure 5.2: Door opening angles for EN2 and EN4 settings. This diagram illustrates the maximum permissible door opening angles for different EN force classifications, showing EN2 allowing up to 180 degrees and EN4 up to 105 degrees.

6. MAINTENANCE

The Yale 4000 series door closer is designed for minimal maintenance. Regular checks will ensure its longevity and proper function.

- **Periodic Inspection:** Annually inspect the door closer and arm assembly for any signs of wear, damage, or loose fasteners. Tighten any loose screws.
- **Cleaning:** Wipe the closer body and arm with a soft, damp cloth to remove dust and dirt. Avoid using abrasive cleaners or solvents.
- **Hydraulic Fluid:** The closer uses a sealed hydraulic system with constant viscosity fluid. Do not attempt to open the closer body or add/remove fluid, as this will void the warranty and may damage the unit. Check for any signs of fluid leakage. If leakage is observed, the unit may need replacement.
- **Functionality Check:** Periodically test the door's closing and latching action to ensure it operates smoothly and at the desired speed. Re-adjust if necessary (refer to Section 5).

7. TROUBLESHOOTING

If you encounter issues with your Yale 4000 series door closer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Door closes too fast/slow	Incorrect speed adjustment	Adjust the closing and/or latching speed screws (refer to Section 5.1).
Door does not close fully or latch	Latching speed too slow; obstruction; incorrect arm setup	Increase latching speed; check for door/frame obstructions; verify arm installation (Section 4.3).

Problem	Possible Cause	Solution
Door slams shut	Latching speed too fast	Decrease latching speed (refer to Section 5.1).
Noisy operation (squeaking, grinding)	Loose fasteners; worn arm components	Check and tighten all fasteners; inspect arm for wear and replace if necessary.
Hydraulic fluid leakage	Internal seal failure	The unit is sealed and not user-serviceable. Contact Yale support for replacement.

8. SPECIFICATIONS

Feature	Specification
Model	4000-0001-00-50
Brand	Yale
Material	Aluminum
Color	White
Product Dimensions (L x W x H)	11.81" x 2.76" x 2.76" (300mm x 70mm x 70mm)
Item Weight	1.5 Kilograms
Installation Type	Screw-In
Recommended Uses	Doors
Door Weight Capacity	40, 60, or 80 kg (adjustable force)
Maximum Door Width	1100 mm
Opening Angle Control	Up to 180° (EN2), Up to 105° (EN4)
Certification	CE certified EN 1154 for fire doors

9. WARRANTY AND SUPPORT

For warranty information, technical support, or to inquire about replacement parts, please contact Yale customer service. Refer to the product packaging or the official Yale website for the most current contact details in your region.