



Door Closer

DC4600 Series



An ASSA ABLOY Group company

ASSA ABLOY

Applications

Ease of use, reliable performance and fire code compliance make the DC4600 Series Door Closer ideal for moderate traffic applications such as:

- Retail/Restaurants
- Dorms/Assisted Living
- Hotels/Motels
- Apartments/Condominiums
- Warehouses
- Offices

Advantages

- Universal mounting
- Valves adjust closing and latching speeds
- Allows full 180° door opening
- Low projection – just 2-7/8" (73mm)
- Non-handed



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This catalog can be found on the Internet at the Corbin Russwin website at: www.corbin-russwin.com

Features

Spring

Sizes 2, 3, 4 and 5 available, non-adjustable.
For recommended sizes, see Sizing, page 7.

Handing

Universal, non-handed.

Body

Cast aluminum.

Arm

Standard: steel main arm and tubular steel turnbuckle frame.
Optional arms available; see Door Closer Arms, page 5, or How to Order, page 8.

Spindle

Precision machined steel.

Piston

Precision machined steel.

Springs

Tempered steel.

Valves

One for closing speed, one for latch speed and one for backcheck. Backcheck valve provides an adjustable hydraulic cushion to the door's opening speed at approximately 70° of the opening cycle; see How to Order, page 8.

Seals

"O" rings.

Fluid

High-lubricity hydraulic fluid standard.

Degree of Opening

Up to full 180° opening standard for regular, top jamb and parallel arm mountings, conditions permitting.

Power Adjustment Arm Bracket

15% ($\pm 7-1/2\%$) adjustment standard.

Mountings

Standard: regular and top jamb.
Optional: parallel arm mounting; see How to Order, page 8.

Fasteners

Standard: machine screws and sheet metal screws are packed with all closers.
Optional: sleeve nuts (SNs); Specify M54.

Warranty

Two-year limited.

Certification/Compliance

UL / ULC / UL10C

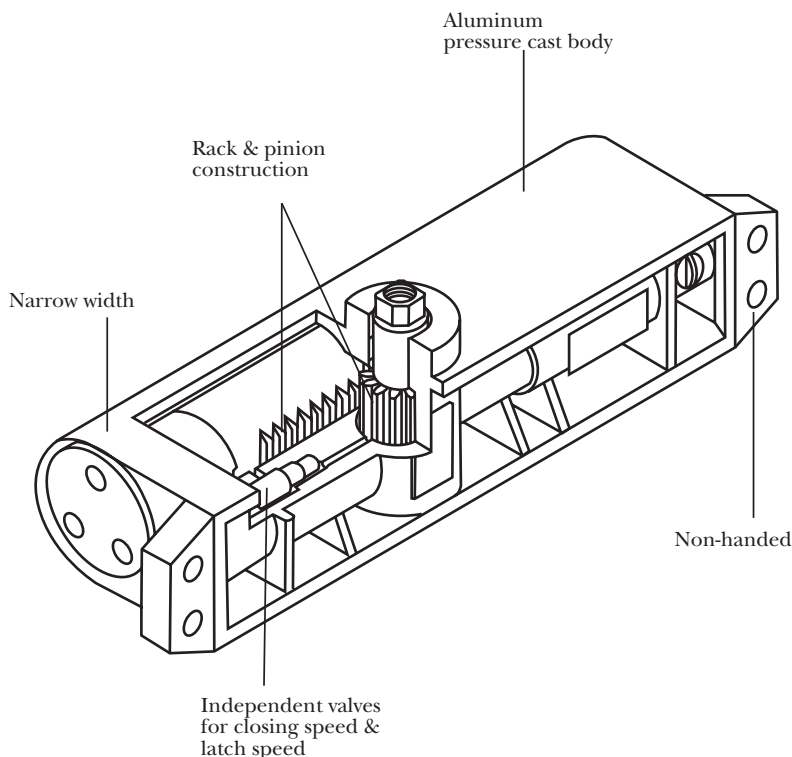
Listed for fire and cycle requirements.

Finishes

| | |
|----------|-------------------------|
| BHMA 600 | Primed for Painting |
| BHMA 689 | Silver Aluminum Painted |
| BHMA 690 | Dark Bronze Painted |
| BHMA 691 | Light Bronze Painted |
| BHMA 693 | Black Painted |
| BHMA 696 | Satin Brass Painted |

ANSI

Meets A156.4 Grade 3.



**Regular Arm Mounting**

Most common mounting, providing the greatest closing efficiency. Closer is mounted on the pull side, with the adjustable arm perpendicular to the face of the door. Arm bracket is attached to the door frame. Requires minimum 2-1/2" (63mm) top rail, maximum 1/8" (3mm) reveal. Order Model No. DC4600.

**Parallel Arm Mounting**

Allows inside application of closer on out-swinging doors. Closer is mounted on the push side, with the arm almost parallel to the face of the door. Arm does not project from the opening. Requires minimum 5" (127mm) top rail without drop plate, 3-1/8" (79mm) top rail when drop plate is used. Order Model No. DC4610.

**Top Jamb Mounting**

Accommodates reveals up to 2-7/8" (73mm) and 180° door opening. Closer is mounted on the push side, with the adjustable arm perpendicular to the face of the door. Arm bracket is mounted on the door. Requires minimum 1-3/8" (35mm) top rail. Maximum reveal 2-7/8" (73mm). Order Model No. DC4620.

435F69**Regular Arm**

- Used with regular arm mounting (pull side) and top jamb mounting, up to 2-7/8" (73mm) frame reveal (push side).
- Standard on all DC4600 closers.

435F70**Regular Arm with Hold-Open***

- Permits door to remain in hold-open position.
- Used with regular arm mounting (pull side) and top jamb mounting (push side).
- Optional on all DC4600 closers; Specify closer x A1.

435F69 x 483F44**Parallel Arm**

- Mounted on push side.
- Combines regular arm with parallel arm mounting bracket.
- Order DC4610

435F70 x 509F49**Parallel Arm with Hold-Open***

- Permits door to remain in hold-open position.
- Mounted on push side
- Combines regular hold-open arm with parallel arm mounting bracket.
- Specify closer x A1.

Specify finish when ordering arms.

* Not allowed by code on fire doors.

483F44**Parallel Arm Bracket**

- Converts regular arm closer to parallel arm closer.
- Standard with parallel arm mounting.

509F49**Parallel Arm Hold-Open Bracket**

- Converts regular arm hold-open to parallel arm hold-open closer.
- Standard with parallel arm hold-open mounting.

446F10**Drop Plate**

Permits top jamb mounting where:

- Ceiling clearance is less than 2-5/8" (67mm).
- Frame face is between 1-5/8" (41mm) and 1-3/8" (35mm).
- Clearance of an overhead stop is required.

Permits parallel arm mounting where:

- Top rail of door is between 3-1/8" (79mm) and 4-7/8" (124mm).

**Maximum
Power****Normal
Power**

← Hinge location

Power Adjustment Arm Bracket

- Standard on all closers without hold-open.
- In regular arm or top jamb mounting, forearm may be relocated to adjust power $\pm 7-1/2\%$.
- This is a limited adjustment to increase or decrease holding power when door is in the closed position.

688F65**Spindle Cap**

- Covers spindle on closer body.

Specify finish when ordering parts.

Factors in Determining Closer Size

1 – Weight and Height of Door

Doors vary in weight from light hollow-core wood doors to heavy metal doors. Door sizes listed in the chart are based on doors of standard weight and height. Extra-light or extra-heavy weight or unusual height must be compensated for.

2 – Draft and Wind Conditions

Draft and wind conditions are perhaps the most important factors to consider in determining the closer size required. Sizes listed in the chart apply to normal conditions. Stairwells, air conditioning, building construction, and door location can cause strong draft and wind conditions; these may necessitate a larger size closer.

3 – Location of Closer

The degree of door opening required determines the location of the closer on the door. Closer sizes listed in the chart are based on 110° opening. Doors opening in excess of 150° will require the next larger size closer.

Recommended Door Closer Sizes

| Mounting | Size of Door | | | Recommended Closer Size |
|---------------------|--------------|-----------------------|--------------------|-------------------------|
| | Interior | Exterior, Regular Arm | Exterior, Top Jamb | |
| Regular or Top Jamb | 3'0" | — | — | 2 |
| | 3'6" | 3'2" | 3'0" | 3 |
| | 4'0" | 3'8" | 3'6" | 4 |
| | 4'6" | 4'2" | 4'0" | 5 |
| Parallel Arm | 2'6" | — | — | 2 |
| | 3'0" | — | 2'6" | 3 |
| | 3'6" | — | 3'0" | 4 |
| | 4'0" | — | 3'6" | 5 |

Ordering Examples

Stock Order*

| Quantity | Series Mounting/Size | Arm | Finish |
|-----------|----------------------|-----------|------------|
| 48 | DC4605 | A1 | 689 |

* Corbin Russwin warehouse inventory is supplied standard with option M54 and M100.

Contract Order

| Quantity | Series Mounting/Size | Door Arm | Finish | Thickness | Misc. Options |
|------------|----------------------|-----------|------------|-------------|---------------|
| 100 | DC4614 | A1 | 689 | D138 | M54 |

Series/Mounting/Size

| Description | Mounting | Size 2 Specify | Size 3 Specify | Size 4 Specify | Size 5 Specify |
|-----------------------|--------------|----------------|----------------|----------------|----------------|
| DC4600 Closers | Regular Arm | DC4602 | DC4603 | DC4604 | DC4605 |
| | Parallel Arm | DC4612 | DC4613 | DC4614 | DC4615 |
| | Top Jamb | DC4622 | DC4623 | DC4624 | DC4625 |
| | Tri Packed | DC4602 x M100 | DC4603 x M100 | DC4604 x M100 | DC4605 x M100 |

Arm

| Arm | Specify |
|-----------|------------|
| Regular | (standard) |
| Hold-open | A1 |

Finish

Standard painted finishes

| Description | Specify |
|-----------------------------|---------|
| USP Primed for Painting | 600 |
| SBL Silver Aluminum Painted | 689 |
| LBL Dark Bronze Painted | 690 |
| DBL Light Bronze Painted | 691 |
| FBL Black Painted | 693 |
| GBL Satin Brass Painted | 696 |

Door Thickness

| Door Thickness | Specify |
|----------------|------------|
| 1-3/4" | (standard) |
| 1-3/8" | D138 |

Miscellaneous Options

| Description | Specify |
|-------------------|---------|
| Sleeve nuts (SNs) | M54 |
| Drop plate | M80 |
| Tri-Style® Pack | M100 |

Handing

DC4600 Closers are reversible and non-handed.

Arm

The part of a closer that connects the body to the door or frame.

Backcheck

Slows a door during the opening cycle, by providing cushioned resistance to a forceful opening. Designed to protect people and objects behind the door and to prevent damage to the closer, hardware, and wall. Intensity can be increased or decreased. Not intended to act as a stop.

Closing Speed

The speed at which a door swings from the open position to within a few degrees of latching. See Latching Speed.

Door Stop

A device to stop the swing of a door.

Hold-Open

Maintains door at a particular degree of opening. A mechanical hold-open may not be used on labeled fire doors, which must be self-closing.

Latching Speed

The speed of the door during the last few degrees of closing. Allows latching and prevents slamming.

Mounting

The method by which a closer is attached to the door and frame.

Sleeve Nuts (SNs)

Throughbolts required for all non-steel-reinforced fire doors, and recommended for non-reinforced wood and mineral core doors. M54 option.

Sized Closer

A closer whose spring design allows for a fixed spring power size 2 through 5 (2 weakest, 5 strongest).

Spring Power

A measurement of closing force, or the ability to overcome draft, air pressure, weight or other resistance to door closing.

Tri-Style® Mounting

The ability of a closer to accommodate regular, top jamb or (using a bracket) parallel arm mounting. M100 option.

Suggested Specification

All door closers shall be DC4600 Series.

Closers shall be of steel rack and pinion construction to ensure durability and effective control of the door throughout the opening and closing cycles. Cases shall be pressure cast aluminum, vacuum and pressure impregnated with resin to reduce the possibility of microporosity.

Closers shall be available in single sizes 2 through 5 to accommodate a complete range of door conditions. Closing and latching speeds shall be controlled by 2 separate non-critical valves. Closers shall have an adjustable backcheck feature. High lubricity hydraulic fluid shall be furnished.

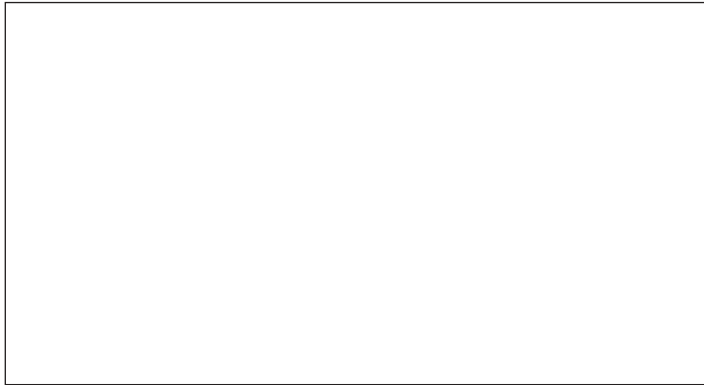
Closers shall not project over 2-7/8" (73mm). Closers shall be capable of mounting on a 2-1/2" (63mm) top rail (or a 1-3/4" (44mm) top jamb for inverted mounting).

Closers shall be universal type, non-handed and shall accommodate a 180° opening in regular, top jamb and parallel arm applications. Closers which cannot be mounted for up to 180° opening shall not be acceptable. Non-hold-open closers shall be furnished with a power adjustment arm bracket to provide 15% ($\pm 1/2\%$) power adjustment.

Non-hold-open closers shall be listed by Underwriters Laboratories.

Closers shall carry a two-year limited warranty.

For more information regarding Corbin Russwin Locksets, Exit Devices, Door Controls and Key Systems, contact your authorized Corbin Russwin Distributor or Sales Representative.



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