

5300 Series



Hager 5300 Series Grade 1 door closer is ideal for schools, hospitals, and other high abuse and high traffic environments. It is constructed of an aluminum alloy and provides smooth door control. The 5300 Series door closer is easy to install and maintain--keeping your building safe and secure.

The closer covers (furnished standard) add the finishing touch to the concealment of the closer

Standard tri-pack of parallel, regular, and top jamb arm offered for versatility



Adjustment values are staked to prevent accidental removal



DOOR CONTROLS

Hager Companies offers a variety of surface door closers to meet a wide range of applications and uses. Heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high-use environments.

Surface door closers are easy to install, with only a few holes for the body and the arm, requiring a minimum amount of preparation of the door and frame. Not only are surface mounted door closers easier to install, they offer advantages with regard to adjustments that may need to be made because of variations in usage or environmental conditions.

There are a number of factors to consider when choosing how to mount your closer. These factors can be influenced by aesthetics, environment, or application. The main things to consider when defining how to mount a surface door closer include:

- Architectural appearance
- Accessibility to the closer arm
- Space limitations of the frame above the door
- Space limitations on the top rail of the door
- Closer position

There are three basic methods of mounting surface door closers to the door and frame: regular arm, parallel arm, and top jamb mounts. All Hager Companies' door closers are supplied standard with a tri-pack for mounting any of the three types of applications.

REGULAR ARM

The regular arm application is used when there is ample room on the top rail of the door and you are not concerned about the arm extending out away from the door. The closer body is mounted on the hinge side of the top rail of the door. The forearm is then mounted to the frame face by a mounting shoe. The arm projects at approximately a 90° angle away from the door. The regular arm mount will make the closer more power-efficient than the parallel arm or top jamb mount.

PARALLEL ARM

The depth of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the door opposite the hinge side of the door. The forearm is mounted by a parallel arm bracket to the underside of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. This mounting application will, however, reduce the power-efficiency of the closer.

TOP JAMB

This is the preferred method of mounting a closer if you are faced with a narrow rail on a door. The closer body is mounted to the frame face above the door, opposite the door hinge side. The forearm is then mounted to the top rail of the door. The top jamb mount is more power-efficient than the parallel arm application.

DOOR CLOSER SIZING CHART

Exterior (and Vestibule) Door Width

Minimum Door Width (24")

	24" (610 mm)	30" (762 mm)	36" (914 mm)	42" (1067 mm)	48" (1219 mm)
Regular Arm & Top Jamb	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width

Minimum Door Width (24")

	24" (610 mm)	30" (762 mm)	34" (865 mm)	38" (965 mm)	48" (1219 mm)	54" (1372 mm)	60" (1524 mm)
Regular Arm & Top Jamb	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	Size 1	Size 2	Size 3	Size 4	Size 5	-	





DOOR HANDING

Hager Companies' surface door closers are all non-handed, meaning they can be placed on a door so that they will operate a left-opening or a right-opening door. Some of the accessories that can be ordered with these closers are handed and the hand of the door should be specified when ordering a closer with these components.

CLOSER SIZING

The American National Standards Institute (ANSI) has set the standard for sizing and has ensured that each manufacturer's closers are tested on the same basis. The chart on the previous page shows the closer size required to fit your door size and application.

MEETING ADA REQUIREMENTS

Doors and doorways that are non-labeled and part of an accessible route shall comply with Section 404 of the ANSI 117.1 standard.

Door closers shall be adjusted so that from the open position of 90°, the time required to move the door to an open position of 12° shall be 5 seconds minimum.

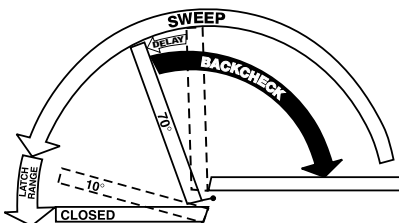
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

FIRE DOORS

Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

CLOSER ADJUSTMENT

All Hager Companies' door closers are equipped with key control valves that allow for easy adjustments while decreasing the chances for tampering.



SWEEP AND LATCHING SPEEDS

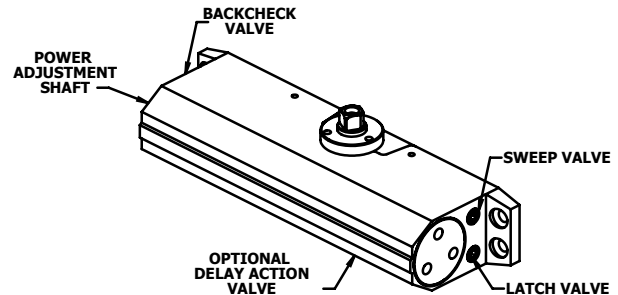
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately 10° to 2° of the closed position. The latching speed valve controls the speed of the door from approximately 10° to 2° to full closing.

BACKCHECK

Backcheck starts at approximately 70° door opening and slows the door as it opens. This feature is not to be used as a positive stop. An auxiliary stop must be used.

DELAYED ACTION

The delayed action feature is available for all 5300 Series applications. The closing time between 90° and 70° shall be a minimum of 20 seconds, but is adjustable to be even slower.



ADJUSTABLE SPRING FEATURE

The 5300 Series closer offers an adjustable spring feature for sizing. Spring power of the closer can be increased or decreased by turning the power adjustment shaft clockwise.

USE OF DOOR STOPS

It is important to use an auxiliary door stop in order to protect the wall, trim, door, and closer. A stop should be used even when a holder arm or closer with backcheck is used.

HOW TO SELECT THE PROPER CLOSER

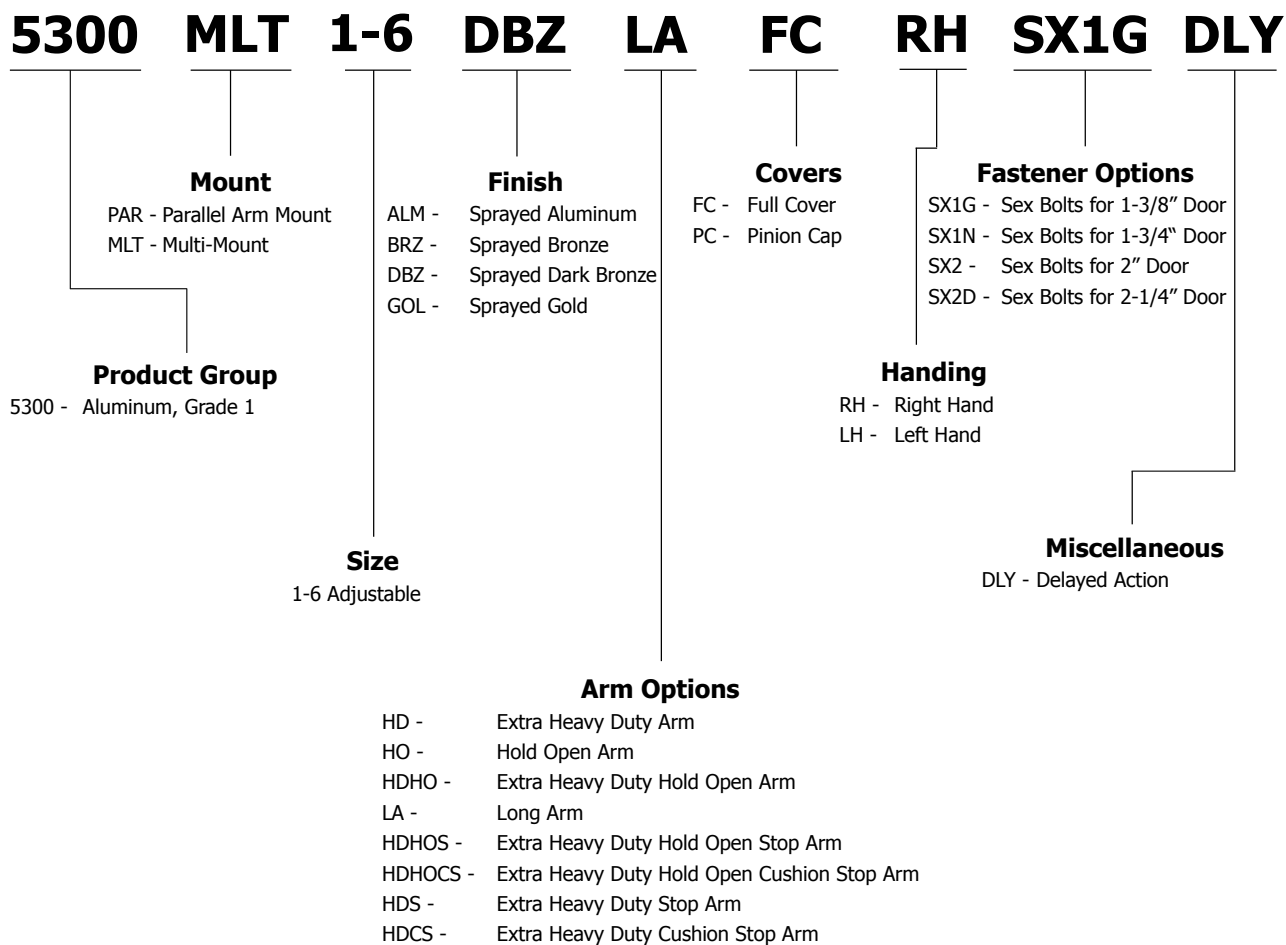
- 1. Size and Weight of Door**
5300 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.
- 2. Interior Application**
Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.
- 3. Exterior Application**
Exterior doors require greater closing forces because of draft and wind conditions. Therefore, where possible, use an extra heavy duty arm for these applications.
- 4. Degree of Opening**
The closer should permit the door to open far enough to allow for easy traffic flow. The selection of the proper arm and position on the door are very important.
- 5. Function**
Closers can be equipped with special arms that can serve many functions such as hold open, positive stop, or hold open stop when necessary.
- 6. Abusive Environment**
Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.





DOOR CONTROLS

HOW TO ORDER

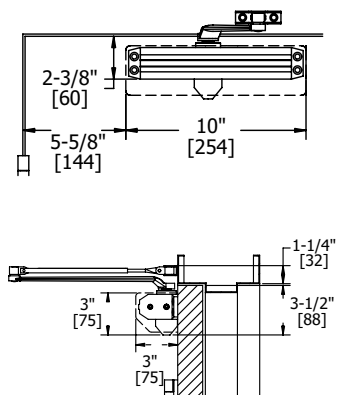




5300 SERIES APPLICATIONS

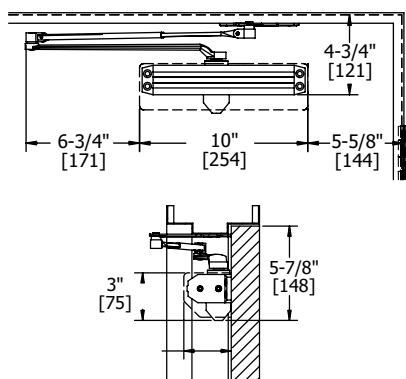
Regular Arm Mount (Pull Side)

- Opening: Templating allows up to 180°
 Hold Open: Hold Open points 90° up to 180° with Hold Open arm
 Frame Face: 1-3/8" (35 mm) minimum
 Ceiling Clearance: • 1-5/8" (41 mm) minimum
 • 1-5/8" (41 mm) minimum for Hold Open arm
 Top Rail: 2-1/2" (64 mm) minimum with drop plate, 5915
 Top Rail Clearance: 4-1/4" (108 mm) minimum from the top of the door



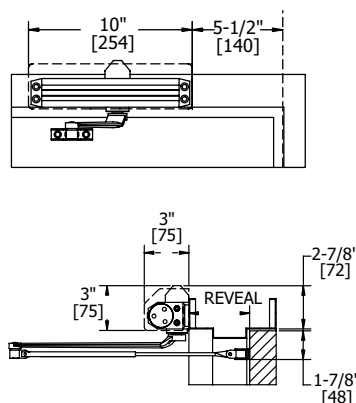
Parallel Arm Mount (Push Side)

- Opening: Templating allows up to 180°
 Hold Open: Hold Open points 90° up to 180° with Hold Open
 Top Rail: • Standard hollow metal 5/8" frame stop
 • 4-3/4" (121 mm) minimum
 • 4" (102 mm) minimum with Hold Open
 • 3-1/8" (79 mm) minimum with plate
 • 2-1/8" (54 mm) minimum with Hold Open and plate
 Top Rail Clearance: 5-3/4" (146 mm) minimum from the top of the door



Top Jamb Mount (Push Side)

- Opening: Templating allows up to 180°
 Hold Open: Hold Open points 90° up to 180° with Hold Open
 Frame Face: 1-3/4" (45 mm) minimum
 Ceiling Clearance: • 2-3/4" (70 mm) minimum
 • 1-3/4" (44 mm) minimum with drop plate, 5918
 Top Rail: 1-7/8" (48 mm) minimum
 Top Rail Clearance: • 2-1/8" (54 mm) minimum
 • 2-3/4" (70 mm) minimum with drop plate, 5917
 • 2-1/4" (57 mm) minimum for Hold Open with drop plate, 5917
 • 3-5/8" (92 mm) minimum with drop plate, 5915





DOOR CONTROLS



5300 Series

Grade 1

Heavy Duty Surface Door Closer

Ideal for schools, hospitals, and other high-use environments

- Lifetime warranty
- Standard package contains 5301 closer body, 5302 closer cover, 5303 main arm assembly, 5304 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door and 5901 pinion cap



Certifications:

- BHMA Certified ANSI A156.4, adjustable sizes 1-6
- ADA Compliant ANSI A117.1 Accessibility Code
- UL/cUL Listed for up to 3 hours
- UL10C Positive Pressure Rated
- UL10B Neutral Pressure Rated

Materials:

Aluminum alloy

Cover:

Full plastic cover and pinion cap

Springs:

Double heat treated steel, tempered springs

Valves:

- Adjustable latching and sweep speed valves
- Adjustable backcheck valve - Standard
- Delayed action valve - Optional
- Staked valves - Standard

Handing:

Non-handed

Arms & Brackets:

- Tri-Pack: Regular, Parallel Arm, and Top Jamb Mount - Standard
- 15% power adjustment in standard arm for regular and top jamb mount

Door Thickness:

- 1-3/4" (44 mm)
- 1-3/8" - 2-1/4" (36 mm - 57 mm) Optional

Fasteners:

- Self-reaming, self-tapping wood and machine screws
- Sex nuts and bolts

Finishes:

- ALM, BRZ, DBZ, GOL
- Rust inhibiting primer - Standard

Notes:

- Full rack and pinion operation
- Precision machined, heat treated steel piston
- Triple heat treated steel spindle





5300 SERIES ARMS



5303

Main Arm

- Non-handed
- Forged steel
- Mounts regular, top jamb, or parallel arm mount
- For use with 5900 bracket for parallel arm mount



5307

Hold Open Arm

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction Hold Open
- For use with 5914 bracket for parallel arm mount



5906

Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Hold Open function
- Auxiliary stop in soffit shoe
- Plunger Hold Open



5907

Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- For use in abusive environments
- Auxiliary stop in soffit shoe



5911

Extra Heavy Duty Arm

- Non-handed parallel arm
- Forged steel
- For use in abusive environments



5912

Extra Heavy Duty Hold Open Arm

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides Hold Open function
- Adjustable at the shoe
- Friction Hold Open



5956

Extra Heavy Duty Hold Open Cushion Stop Arm

- Contains 5906 arm and 5950 spring cushion arm
- Non-handed parallel arm
- Forged steel
- Plunger Hold Open
- Hold Open function
- Auxiliary stop in soffit shoe



5957

Extra Heavy Duty Cushion Stop Arm

- Contains 5907 arm and 5950 spring cushion
- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



DOOR CONTROLS

5300 SERIES ACCESSORIES



5301

Closer Body Only

- Full rack and pinion operation
- Precision machined, heat treated steel pistons
- Triple heat treated steel spindle



5302

Full Plastic Cover

- High impact non-corrosive full cover - Standard
- Cover projects 2-3/16" (56 mm) from door face
- Secured by 2 machine screws
- Available in plastic only



5900

Parallel Arm Bracket

- Supplied standard with multimount closers
- Can be used to convert regular or top jamb arms to parallel arm application



5901

Pinion Cap

- Supplied standard
- High-impact, non-corrosive
- Fits over the pinion and extends 1" (25 mm)



5908

Long Rod and Shoe

- Non-handed
- Cast steel
- Use for top jamb application
- Use for reveals greater than 4" (102 mm) and up to 8" (203 mm)



5913

Blade Stop Spacer

- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames



5936

Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (51 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with a standard soffit plate



5950

Spring Cushion

- Non-handed
- Mounts to soffit shoe of 5125, 5961, 5906, 5907
- For use with extra heavy duty hold open and stop arms for abusive applications





5300 SERIES ACCESSORIES (CONTINUED)



5914

Hold Open Parallel Arm Bracket

- Supplied with all standard Hold Open closers
- Used to convert 5307 Hold Open arms to parallel arm



5915

Drop Plate – Narrow Rail Overhead Holder

- For use when an overhead door holder prevents normal top jamb mounting
- For use when a narrow rail prevents the closer from being mounted directly to the door
- For use with parallel arm and cover
- For use when low ceiling clearance prevents normal top jamb mounting
- Includes screw pack



5916

Drop Plate – Narrow Rail Parallel Arm

- For use when a narrow rail prevents the closer from being mounted directly to the door
- For use with parallel arm and full plastic cover
- Includes screw pack



5917

Drop Plate – Top Jamb, Low Clearance

- For use when ceiling clearance is between 1-3/4" (44 mm) and 2-5/8" (67 mm)
- For use when an overhead door holder prevents normal top jamb mounting
- For use with no cover

5300 SERIES SCREW PACKS



5304

Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws



5902

SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5903

SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5904

SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



5905

SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only

