

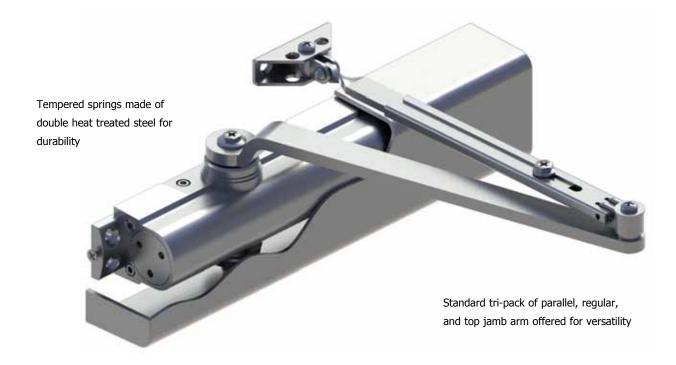
Hager door closers offer architects, contractors, and building owners a superior product with proven reliability. In fact, our 5100, 5200, and 5300 Series Grade 1 models are the only closers in the industry that are both BHMA certified and backed by a lifetime warranty. That makes them a no-risk choice for virtually any building type.

With Hager, you get a door closer that's packaged with everything needed for quick installation, regardless of the application. Hager door closers are tri-packed for mounting three ways: parallel arm, regular arm, and top jamb. They are non-handed, packaged with a parallel arm bracket and thru-bolts at no extra charge, and adjustable for various door sizes.



Hager 5200 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 5200 Series door closer is easy to install and maintain-keeping your building safe and secure.

Slim line design provides a smaller footprint





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 abuse and high traffic 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)		n" 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	1	Size	: 5	-		

# Interior Door Width

## Minimum Door Width (24")

2	4" 3	0" 3	4" 3	8″ 4	<del>1</del> 8″	54"	60"
(610	mm) (762	mm) (865	mm) (965	mm) (121	9 mm) (13	72 mm) (15	24 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.

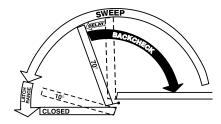
The maximum force for pushing open or pulling open an interior hinged door (other than a fire door) is five pounds.

#### **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**

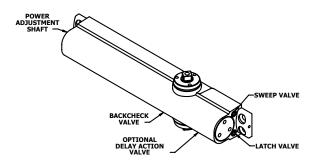
Two separate valves control the closing speed of the door. The sweep speed controls the speed of the door from full opening to within approximately  $10^{\circ}$  to  $2^{\circ}$  of the closed position. The latching speed valve controls the speed of the door from approximately  $10^{\circ}$  to  $2^{\circ}$  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 5200 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 5200 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

5200 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.



#### **HOW TO ORDER**



# **Arm Options**

HD - Extra Heavy Duty Arm HO - Hold Open Arm

HDHO - Extra Heavy Duty Hold Open Arm

LA - Long Arm

HDHOS - Extra Heavy Duty Hold Open Stop Arm

HDHOCS - Extra Heavy Duty Hold Open Cushion Stop Arm

HDS - Extra Heavy Duty Stop Arm
HDCS - Extra Heavy Duty Cushion Stop Arm



#### **5200 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:

Ceiling Clearance:

1-3/8" (35 mm)
• 1-3/4" (45 mm) minimum
• 1-5/8" (41 mm) minimum for Hold

Open arm

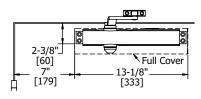
Top Rail: • 2-1/2" (64 mm) minimum without

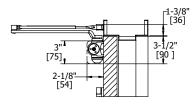
drop plate

• 1-5/8" (38 mm) minimum with drop

plate, 5918

Top Rail Clearance: 3-1/2" (89 mm) minimum





#### Parallel Arm Mount (Push Side)

Opening: Templating allows up to 180°

Hold Open: Hold Open points 90° up to 180° with

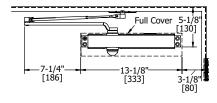
Hold Open

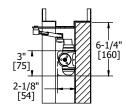
• Standard hollow metal 5/8" frame Top Rail:

stop

• 5-3/8" (137 mm) minimum

Top Rail Clearance: 6-1/4" (159 mm) minimum





#### **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:

• 1-7/8" (48 mm) minimum • 1-1/8" (29 mm) minimum with drop

plate, 5918

Ceiling Clearance: • 2-3/4" (70 mm) minimum

• 1-5/8" (41 mm) minimum with drop

plate, 5918

2" (51 mm) minimum Top Rail:

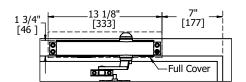
• 2-1/4" (57 mm) minimum Top Rail Clearance:

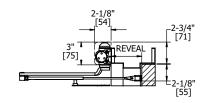
• 2-1/2" (64 mm) minimum for hold-

• 3-3/8" (86 mm) minimum with drop

plate, 5918

• 3-5/8" (92 mm) minimum for Hold Open with drop plate





Valves:



# DOOR CONTROLS



#### 5200 Series

Grade 1

Heavy Duty Surface Door Closer Ideal for schools, hospitals, and other high-use environments

Lifetime warranty

 Standard package contains 5201 closer body, 5202 closer cover, 5203 main arm assembly, 5204 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door and 5919 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 - Standard

Full size plated metal cover - OptionalSlim line plastic cover - Optional

Springs: Double heat treated steel, tempered springs

Adjustable latching and sweep speed valvesAdjustable 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)

• 1-3/4" (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, US3, US26, US26D

• Rust inhibiting primer - Standard

Notes: • Full rack and pinion operation

• Precision machined, heat treated steel piston

• Triple heat treated steel spindle



#### **5200 SERIES ARMS**



#### **5203**

#### **Main Arm**

- Non-handed
- Forged steel
- Mounts regular, parallel arm, or top jamb mount



## **5207**

# **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
- Forged steel
- Auxiliary stop in soffit shoe



#### **5911**

# **Extra Heavy Duty Arm**

- Non-handed parallel arm
- Forged steel



#### **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



#### **5200 SERIES ACCESSORIES**



# **5201**

#### **Closer Body Only**

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



#### 5918

#### Drop Plate – Top Jamb, Narrow Top Rail

- For use with slim line cover
- For use when a narrow top rail prevents mounting directly to door surface
- For use when low ceiling clearance prevents normal top jamb mounting



## **5202**

## **Full Plastic Cover**

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



#### **5919**

# **Pinion Cap**

- High-impact, non-corrosive
- Fits over the pinion and extends 9/16" (14 mm)
- For use with slim line cover



# **5900**

#### **Parallel Arm Bracket**

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



#### **5920**

#### Slim Line Plastic Cover

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



# **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)



# **5921**

# **Drop Plate – Narrow Top Rail**

- For use with a full cover
- For use when a narrow top rail prevents mounting directly to door surface



# **5913**

# **Blade Stop Spacer**

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



# **5922**

# **Drop Plate - Top Jamb, Parallel Arm**

- For use with parallel arm mount and no cover or slim line cover
- For use when low ceiling clearance prevents normal top jamb mounting; with full cover
- For use when an overhead door holder prevents normal top jamb mounting



#### 5914

# **Hold Open Parallel Arm Bracket**

- Supplied with all standard hold open closers
- Can be used to convert regular arm or top jamb arm hold open arms to parallel arm



# **5200 SERIES ACCESSORIES (CONTINUED)**



#### **5923**

#### **Drop Plate - Parallel Arm**

- For use with a full cover
- For use with a parallel arm when narrow top rail prevents mounting directly to the door surface

# **5200 SERIES SCREW PACKS**



# **5204**

#### **Screw Pack - Standard**

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



#### **5932**

#### **Metal Cover**

- Cast zinc
- Cover projects 2-1/4" (57 mm) from door face
- Secured by two machine screws
- Not offered as slim line



### **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



### **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



#### **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



# **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



#### **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