

# Door Controls



Hager Companies offers a comprehensive line of door control products designed and manufactured to meet a wide range of applications and uses. From humble beginnings in 1849 as a forger of wheel rims and hardware for Conestoga wagons, today Hager offers surface mounted and commercial grade closers, electromagnetic holders and overhead door holders and stops in our door controls product line. Hager door closers provide architects, contractors, and building owners a superior product with proven reliability. That makes them a no-risk choice for virtually any building type. Because these heavy duty, Grade 1 door closers are ideal for schools, hospitals, and other high use environments they have been installed in these locations all over the globe.

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, self-drilling screws and thru-bolts at no extra charge, and adjustable for various door sizes.

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.

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## GENERAL INFORMATION

Surface door closers are easy to install, with only a few holes for the body, the arm and the bracket, requiring a minimum amount of preparation of the door and frame.

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 on the door

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 door closers are supplied standard with a tri-pack for mounting any of the three types of applications. The package includes regular, parallel, and top jamb arm mounts.

### 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 height dimension of the top rail is an important consideration when using this application. The closer body is mounted on the top rail of the push side of the door. The forearm is mounted by a parallel arm bracket to the soffit of the frame. The arm is parallel to the door, which makes it less likely to be damaged and aids in the overall aesthetics. The efficiency of the closer may be reduced by the mounting applications.

### 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 push side of the door. 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"<br>(610 mm) | 30"<br>(762 mm) | 36"<br>(914 mm) | 42"<br>(1067 mm) | 48"<br>(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"<br>(610 mm) | 30"<br>(762 mm) | 34"<br>(865 mm) | 38"<br>(965 mm) | 48"<br>(1219 mm) | 54"<br>(1372 mm) | 60"<br>(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           | -                |                  |



## GENERAL INFORMATION

### 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 to the same standards. The door closer sizing chart on page 4 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. To maximize hinge life and assist in achieving ADA compliance, Hager recommends the use of anti-friction or ball bearing hinges with our door closer products.

### Fire Doors

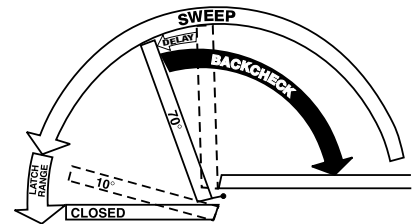
Fire doors shall have the minimum opening force allowable by the appropriate authority having jurisdiction.

### 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 2° to 10° of the closed position. The latching speed valve controls the speed of the door from approximately 2° to 10° 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 the 5100, 5200 and 5300 Series closers. 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 5100, 5200 and 5300 Series closers offer an adjustable spring feature for sizes 1-6. 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 closer with backcheck is used.

### How to Select the Proper Closer

- Size and Weight of Door:** 5100, 5200 and 5300 Series closers are non-sized so that closing force can be adjusted in the field to accommodate various door sizes, weights, and applications.
- Interior Application:** Where possible, the standard regular arm application should be used as it is the most efficient in terms of power and control.
- 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.
- 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.
- 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.
- Abusive Environment:** Closers can be equipped with extra heavy duty arms that can withstand vandalism and extreme use.

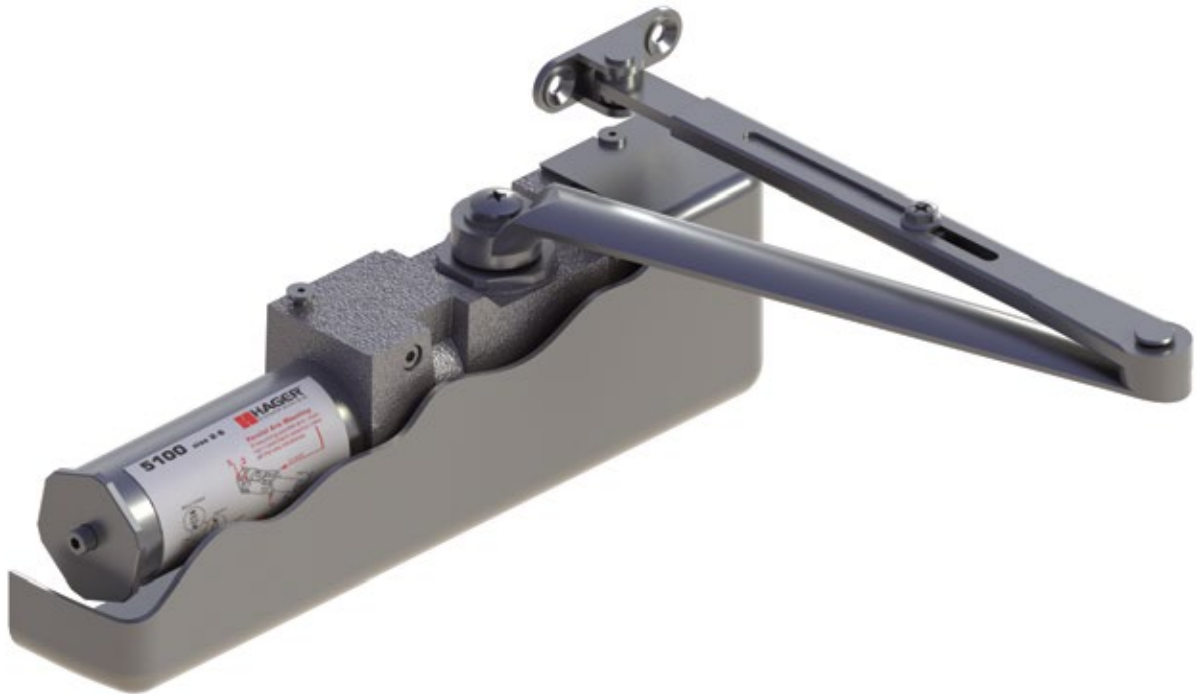


# 5100 Series

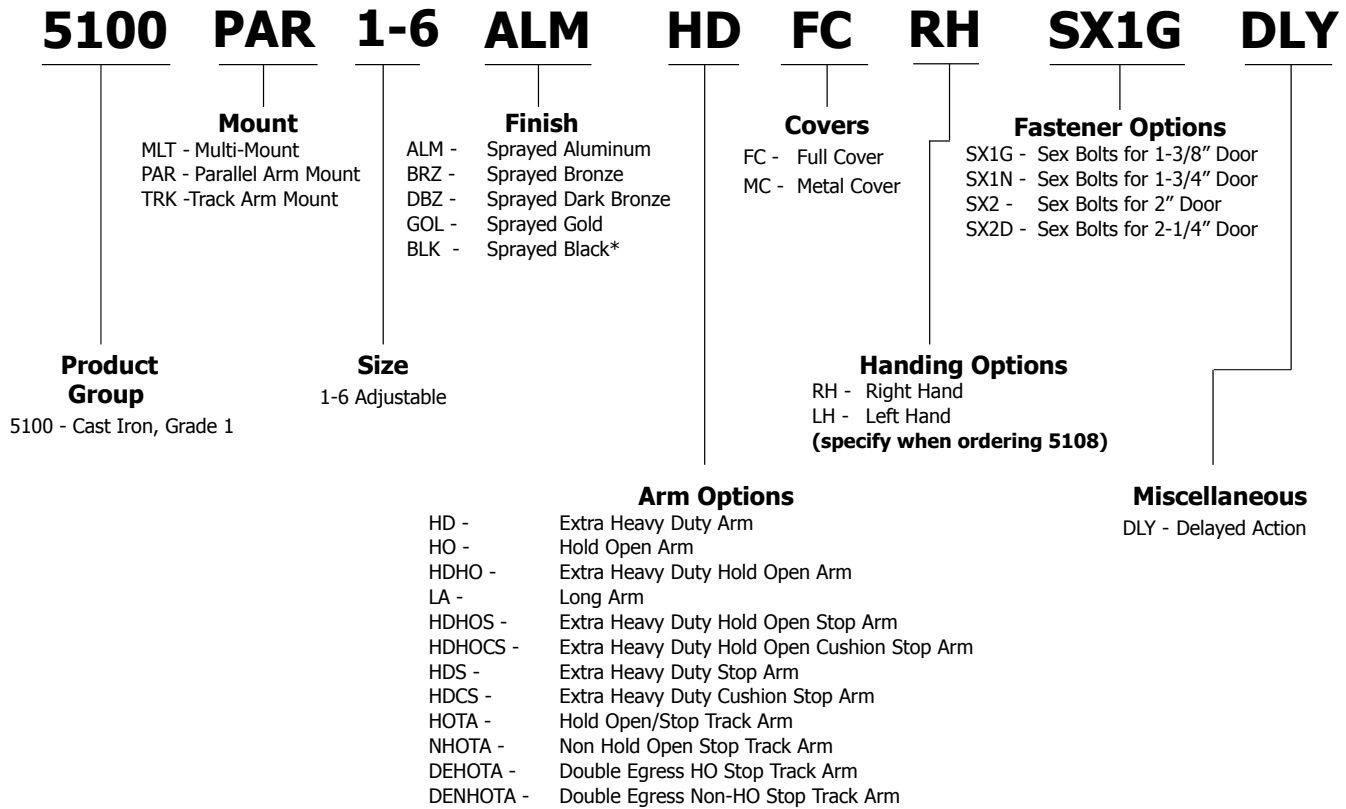


5100 Series Closers are heavy duty door closers constructed of cast iron to be installed on exterior and interior doors that are subject to high use and potential abuse. They are designed and engineered for reliability and superior performance. The commercial applications ideal for these closers include schools, medical facilities, institutions and hospitals as well as office buildings and any entrance door with high foot traffic.

5100 Series Closers have a full rack and pinion operation, with a heat treated steel piston and triple heat treated steel spindle. The closers are non-handed to permit installation on doors of either hand. The sizing is adjustable from size 1 through size 6. These design features make this closer the ideal choice for doors with a maximum weight of 330 lbs.



## 5100 SERIES - HOW TO ORDER



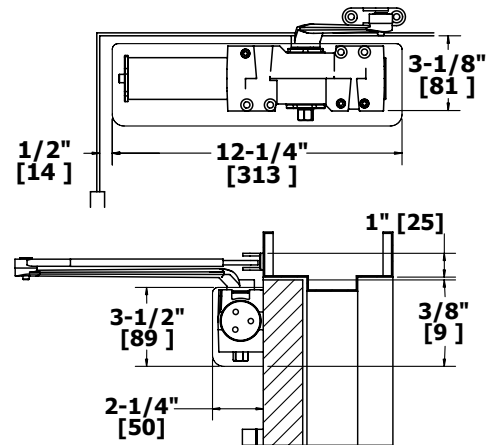
Example of how to order: 5100P14ALMHDHOCS

\*Extended lead times for flat black finish and minimum order quantities may apply.

## 5100 SERIES - APPLICATIONS

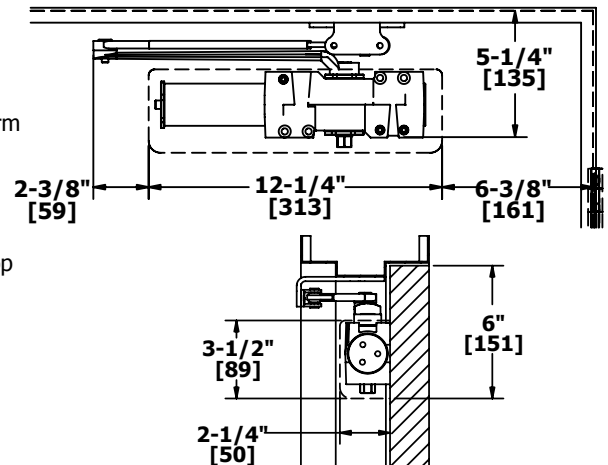
### REGULAR ARM MOUNT (PULL SIDE)

|                     |  |
|---------------------|--|
| Opening:            | Templating allows up to 120°   |
| Hold Open:          | Hold open points from 90° up to 120° with hold open arm  |
| Frame Face:         | 1-1/4" (32 mm) minimum   |
| Ceiling Clearance:  | 1-1/4" (32 mm) minimum   |
| Top Rail:           | <ul style="list-style-type: none"> <li>• Less than 3-3/4" (95 mm) requires drop plate, 5109</li> <li>• Drop plate requires 2" (51 mm) minimum</li> </ul> |
| Top Rail Clearance: | 4" (102 mm) from the top of door   |



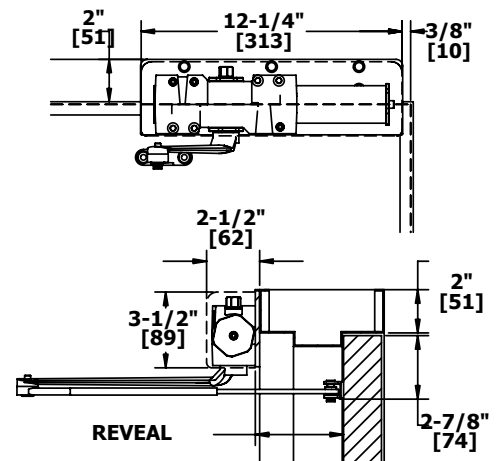
### PARALLEL ARM MOUNT (PUSH SIDE)

|                     |  |
|---------------------|--|
| Opening:            | Templating allows up to 180°   |
| Hold Open:          | Hold open points from 90° up to 180° with hold open arm  |
| Top Rail:           | <ul style="list-style-type: none"> <li>• Standard hollow metal 5/8" frame stop</li> <li>• Less than 5-1/2" (140 mm) from the stop requires drop plate, 5110</li> <li>• Drop plate requires 2" (51 mm) minimum from the stop</li> </ul> |
| Top Rail Clearance: | 6-1/4" (159 mm) from the top of door   |



### TOP JAMB MOUNT (PUSH SIDE)

|                     |  |
|---------------------|--|
| Opening:            | Templating allows up to 120°                       |
| Hold Open:          | Hold open points 85° up to 120° with hold open arm |
| Frame Face:         | Less than 3-1/2" (89 mm) requires drop plate, 5115 |
| Ceiling Clearance:  | Drop plate requires 4" (102 mm) minimum            |
| Top Rail:           | Requires 1-3/8" (35 mm) minimum                    |
| Top Rail Clearance: | 1-1/2" (38 mm) from the top of the door            |





## 5100 SERIES - GRADE 1 HEAVY DUTY SURFACE DOOR CLOSER

### WARRANTY

Lifetime warranty - 330 lbs. maximum door weight

### FEATURES

- Ideal for schools, hospitals, and other high-use environments
- Standard package contains 5101 closer body, 5102 closer cover, 5103 main arm assembly, 5104 standard screw pack, 5909 parallel arm bracket, and 5940 SNB screw pack for 1-3/4" (44 mm) doors

### Certification:

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



### Covers:

- Full plastic cover - Standard
- Plated metal cover - Optional

### Closer Body:

- Cast iron
- The recommended temperature for prolonged use is between -40° F (-42° C) & 150° F (66° C)

### Springs:

- One piece seamless steel spring tube
- 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, Top Jamb Mount - Standard

### SPECIFICATIONS

#### Door Thickness:

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

#### Fasteners:

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

#### Notes:

- Full rack and pinion operation
- Precision machined, heat treated steel piston
- Triple heat treated steel spindle
- Special templates available upon request by contacting Hager Companies Customer Service

### FINISHES

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





## 5100 SERIES - ARMS



### 5103

#### Main Arm

- Non-handed
- Forged steel
- Mounts regular, parallel arm, or top jamb mount
- Add 5909 bracket for parallel arm mount



### 5106

#### Extra Heavy Duty Arm

- Non-handed parallel arm
- Forged steel



### 5107

#### Hold Open Arm

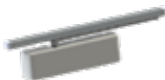
- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction hold open function
- Add 5909 bracket for parallel arm mount



### 5108

#### Extra Heavy Duty Hold Open

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides friction hold open function
- Adjustable at the shoe
- Not for use on fire rated doors



#### Track Arm

- Non-handed
- Extruded aluminum track
- Steel arm

Functions:

#### Non Hold Open Stop Arms

- 2-659-0145 - ALM
- 2-659-0324 - BLK
- 2-659-0144 - BRZ
- 2-659-0143 - DBZ
- 2-659-0142 - GOL

#### Hold Open Stop Arms

- 2-659-0137 - ALM
- 2-659-0325 - BLK
- 2-659-0136 - BRZ
- 2-659-0135 - DBZ
- 2-659-0134 - GOL



### 5125

#### Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe



### 5954

#### Extra Heavy Duty Hold Open Cushion Stop Arm

- Non-handed parallel arm
- Forged steel
- Screw-type hold open function
- Contains 5961 arm and 5950 spring cushion
- Not for use on fire-rated doors



### 5955

#### Extra Heavy Duty Cushion Stop Arm

- Non-handed parallel arm
- Forged steel
- Contains 5125 arm and 5950 spring cushion



### 5961

#### Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe
- Screw-type hold open function
- Not for use on fire-rated doors

#### Double Egress Non Hold Open Stop Arms

- 2-659-0203 - ALM
- 2-659-0326 - BLK
- 2-659-0204 - BRZ
- 2-659-0205 - DBZ
- 2-659-0206 - GOL

#### Double Egress Hold Open Stop Arms

- 2-659-0207 - ALM
- 2-659-0327 - BLK
- 2-659-0208 - BRZ
- 2-659-0209 - DBZ
- 2-659-0210 - GOL

## 5100 SERIES - ACCESSORIES



### 5101 Closer Body Only

- Cast iron
- Heat treated steel spindle and piston
- Full rack and pinion operation



### 5102 Plastic Cover

- Cover projects 2-1/4" (57 mm) from door face
- High impact non-corrosive full cover
- Secured by two machine screws



### 5109 Drop Plate - Regular Arm Mount

- Required for pull side mount when top rail is less than 3-3/4" (95 mm)
- Plate requires 2" (51 mm) minimum top rail
- Includes screw pack



### 5110 Drop Plate - Parallel Arm Mount

- Required for parallel arm mount when top rail is less than 5-1/2" (140 mm), measured from the stop to the reveal
- Plate requires 2-1/2" (64 mm) minimum top rail
- Includes screw pack



### 5111 Extra Heavy Duty Parallel Arm Support Bracket

- For use with stop arms when reveal is less than 3-1/16" (78 mm)
- Provides anchor for fifth screw



### 5112 Long Rod and Shoe

- Non-handed
- Use for door reveals greater than 3" (76 mm) and up to 5" (127 mm)
- Cast steel
- Use for top jamb application



### 5113 Blade Stop Spacer

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



### 5114 Drop Plate - Low Clearance

- For use when ceiling clearance prevents normal top jamb mounting
- For use when overhead door holder prevents normal top jamb mounting
- Includes screw pack



### 5115 Drop Plate - Top Jamb Mount

- Plate requires 1-3/4" (44 mm) minimum frame face
- Required for top jamb when frame face is less than 3-1/2" (89 mm)
- For use with plastic cover
- Includes screw pack



### 5909 Parallel Arm Bracket

- Can be used to convert regular or top jamb arm to parallel arm application
- Includes screw pack



### 5935 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 standard soffit plate
- Includes screw pack



### 5950 Spring Cushion

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



### 5962 Metal Cover

- Cover projects 2-1/4" (56 mm) from door face
- Cast zinc
- Secured by two machine screws

## 5100 SERIES - SCREW PACKS FOR 5100 SERIES ONLY



### 5104

#### Screw Pack - Standard

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



### 5940

#### SNB Screw Pack - Standard

- Sex nuts and bolts for 1-3/4" (44 mm) doors
- Machine screws



### 5941

#### SNB Screw Pack - Optional

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws



### 5942

#### SNB Screw Pack - Optional

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws



### 5943

#### SNB Screw Pack - Optional

- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws



### 5946

#### Tork Security Screw Pack - Optional

- Tamper resistant torx screws with pins
- Sex nuts and bolts for 1-3/4" (44 mm) doors

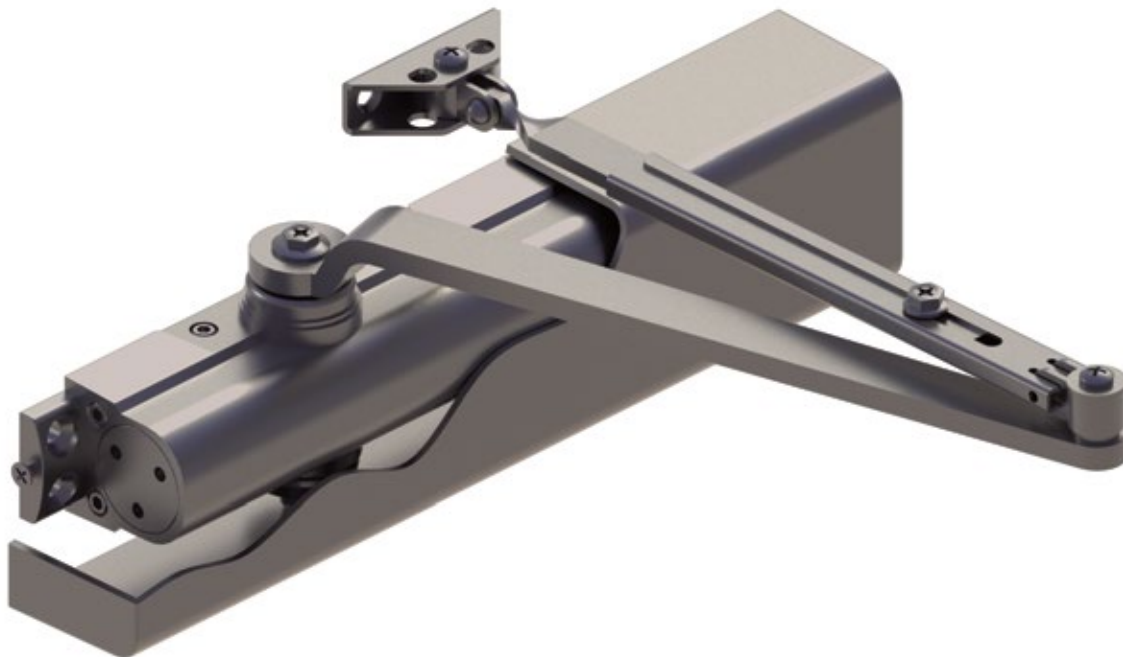


# 5200 Series

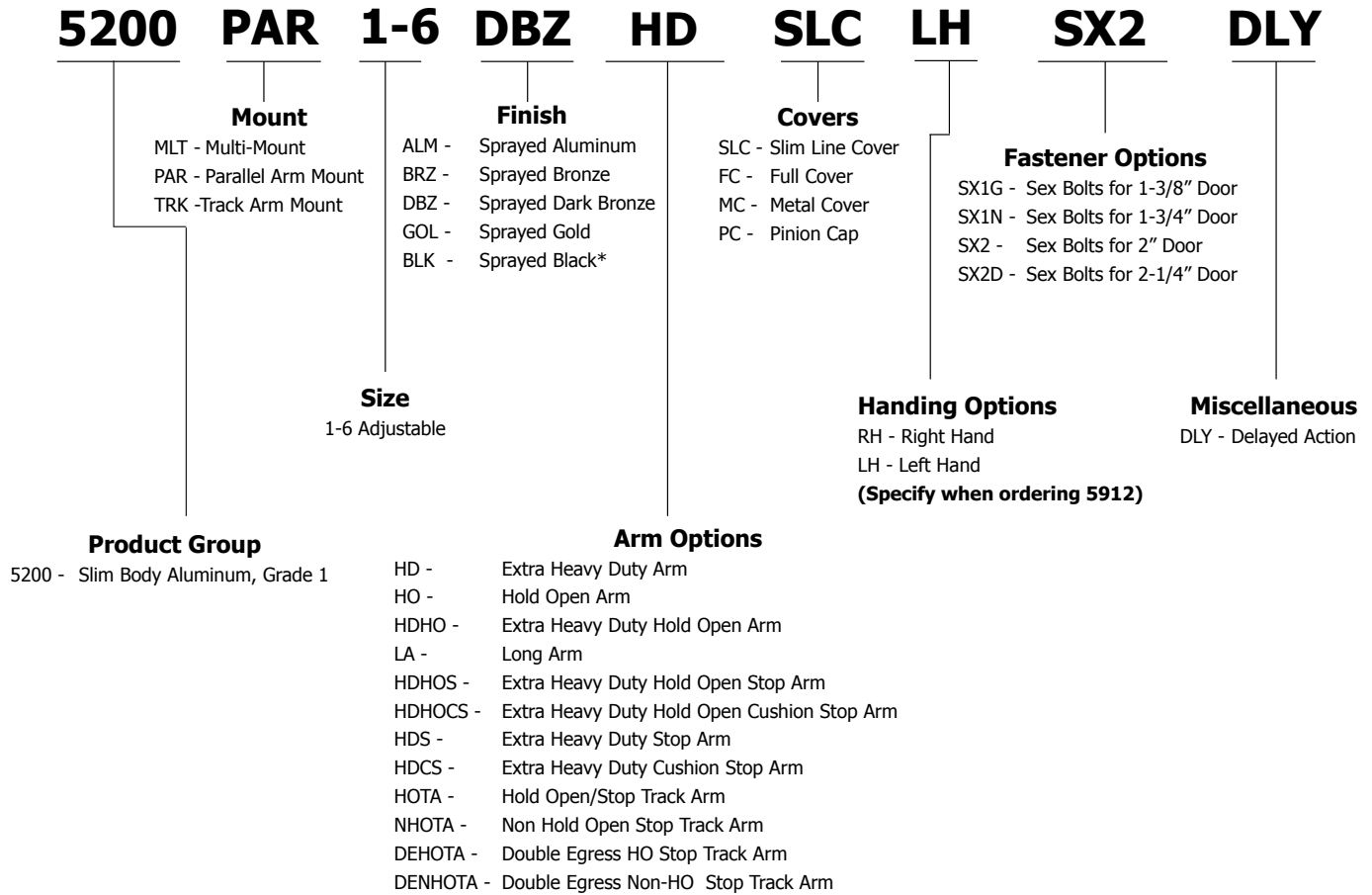


5200 Series Closers are engineered and designed to offer the ideal combination of appearance and reliability. The 5200 Series Closers are constructed of aluminum alloy to be installed on exterior and interior doors. They are designed and engineered for reliability and superior performance. The commercial applications ideal for these closers include schools, medical facilities, institutions and hospitals as well as office buildings and any entrance door with high foot traffic.

5200 Series Closers have a full rack and pinion operation, with a heat treated steel piston and triple heat treated steel spindle. The closers are non-handed to permit installation on doors of either hand. The sizing is adjustable from size 1 through size 6. These design features make this closer the ideal choice for doors with a maximum weight of 250 lbs.



## 5200 SERIES - HOW TO ORDER



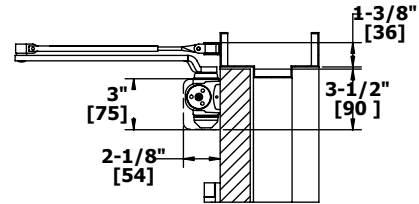
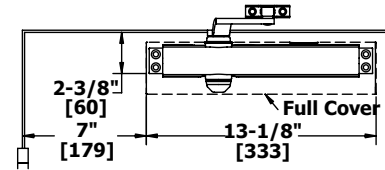
Example of how to order: 5200P25ALMHDHOCS

\*Extended lead times for flat black finish and minimum order quantities may apply.

## 5200 SERIES - APPLICATIONS

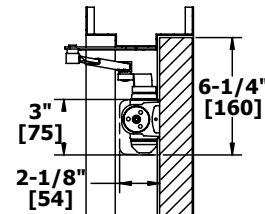
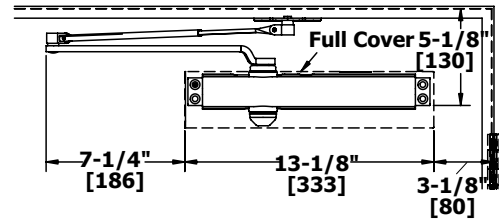
### REGULAR ARM MOUNT (PULL SIDE)

|                     |   |
|---------------------|---|
| Opening:            | Templating allows up to 180°  |
| Hold Open:          | Hold open points 90° up to 180° with hold open arm  |
| Frame Face:         | 1-3/8" (35 mm)  |
| Ceiling Clearance:  | <ul style="list-style-type: none"> <li>• 1-3/4" (45 mm) minimum</li> <li>• 1-5/8" (41 mm) minimum for hold open arm</li> </ul>                        |
| Top Rail:           | <ul style="list-style-type: none"> <li>• 2-1/2" (64 mm) minimum without drop plate</li> <li>• 1-5/8" (38 mm) minimum with drop plate, 5918</li> </ul> |
| Top Rail Clearance: | 3-1/2" (89 mm) minimum  |



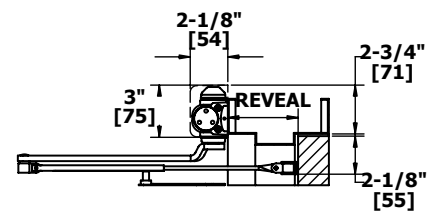
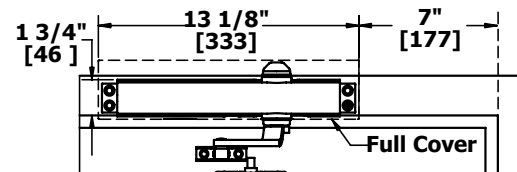
### PARALLEL ARM MOUNT (PUSH SIDE)

|                     |  |
|---------------------|--|
| Opening:            | Templating allows up to 180°   |
| Hold Open:          | Hold open points 90° up to 180° with hold open   |
| Top Rail:           | <ul style="list-style-type: none"> <li>• Standard hollow metal 5/8" frame stop</li> <li>• 5-3/8" (137 mm) minimum</li> </ul> |
| 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:         | <ul style="list-style-type: none"> <li>• 1-7/8" (48 mm) minimum</li> <li>• 1-1/8" (29 mm) minimum with drop plate, 5918</li> </ul>   |
| Ceiling Clearance:  | <ul style="list-style-type: none"> <li>• 2-3/4" (70 mm) minimum</li> <li>• 1-5/8" (41 mm) minimum with drop plate, 5918</li> </ul>   |
| Top Rail:           | 2" (51 mm) minimum   |
| Top Rail Clearance: | <ul style="list-style-type: none"> <li>• 2-1/4" (57 mm) minimum</li> <li>• 2-1/2" (64 mm) minimum for hold-open</li> <li>• 3-3/8" (86 mm) minimum with drop plate, 5918</li> <li>• 3-5/8" (92 mm) minimum for hold open with drop plate</li> </ul> |





## 5200 SERIES - GRADE 1 HEAVY DUTY SURFACE DOOR CLOSER

### WARRANTY

Lifetime warranty - 250 lbs. maximum door weight

### FEATURES

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

### Certification:

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

### Covers:

- Full plastic cover - Standard
- Full size plated metal cover - Optional

### Closer Body:

- Aluminum alloy
- The recommended temperature for prolonged use is between -40° F (-42° C) & 150° F (66° C)

### Springs:

Double heat treated steel, tempered springs

### Valves:

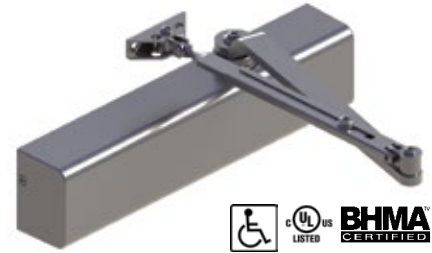
- Adjustable latching and sweep speed valves
- Adjustable backcheck valve - Standard
- Delayed action valve - Optional
- Staked valves - Standard

### 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



### SPECIFICATIONS

#### Door Thickness:

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

#### Fasteners:

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

#### Notes:

- Full rack and pinion operation
- Precision machined, heat treated steel piston
- Triple heat treated steel spindle
- Special templates available upon request by contacting Hager Companies Customer Service

### FINISHES

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

## 5200 SERIES - ARMS



### 5203

#### Main Arm

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



### 5910

#### Hold Open Arm

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction hold open function
- Add 5914 Rev1 bracket for parallel arm mount



### 5906

#### Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Plunger hold open function
- Auxiliary stop in soffit shoe
- For use with 5200 and 5300 Series closers



### 5907

#### Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- Forged steel
- Auxiliary stop in soffit shoe
- For use with 5200 and 5300 Series closers



### Track Arm

- Non-handed
- Extruded aluminum track
- Steel arm

#### Functions:

#### Non Hold Open Stop Arms

- 2-659-0141 - ALM
- 2-659-0328 - BLK
- 2-659-0140 - BRZ
- 2-659-0139 - DBZ
- 2-659-0138 - GOL

#### Hold Open Stop Arms

- 2-659-0350 - ALM
- 2-659-0329 - BLK
- 2-659-0351 - BRZ
- 2-659-0352 - DBZ
- 2-659-0353 - GOL



### 5911

#### Extra Heavy Duty Arm

- Non-handed parallel arm
- Forged steel



### 5912

#### Extra Heavy Duty Hold Open

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides friction hold open function
- Adjustable at the shoe
- For use with 5200 and 5300 Series closers
- Not for use on fire-rated doors



### 5956

#### Extra Heavy Duty Hold Open Cushion Stop Arm

- Non-handed parallel arm
- Forged steel
- Plunger hold open function
- Contains 5906 arm and 5950 spring cushion arm
- For use with 5200 and 5300 Series closers



### 5957

#### Extra Heavy Duty Cushion Stop Arm

- Non-handed parallel arm
- Forged steel
- Contains 5907 arm and 5950 spring cushion
- For use with 5200 and 5300 Series closers

#### Double Egress Non Hold Open Stop Arms

- 2-659-0211 - ALM
- 2-659-0330 - BLK
- 2-659-0212 - BRZ
- 2-659-0213 - DBZ
- 2-659-0214 - GOL

#### Double Egress Hold Open Stop Arms

- 2-659-0215- ALM
- 2-659-0331 - BLK
- 2-659-0216 - BRZ
- 2-659-0217 - DBZ
- 2-659-0218 - GOL

## 5200 SERIES - ACCESSORIES



### 5201 Closer Body Only

- Aluminum alloy
- Heat treated steel spindle and piston
- Full rack and pinion operation



### 5202 Full Plastic Cover

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



### 5900 Parallel Arm Bracket

- Can be used to convert regular or top jamb arms to parallel arm application
- For use with 5200, 5300 and 5400 Series arms



### 5908 Long Rod and Shoe

- Use for reveals greater than 4" (102 mm) and up to 8" (203 mm)
- Non-handed
- Cast steel
- Use for top jamb application
- For use with 5200, 5300 and 5400 Series arms
- Includes screw pack



### 5913 Blade Stop Spacer

- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop of aluminum frames
- For use with 5200, 5300 and 5400 Series arms
- Includes screw pack



### 5914 Hold Open Parallel Arm Bracket

- Supplied with all standard hold open arms
- For use with 5200 and 5300 Series arms
- Includes screw pack



### 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
- Includes screw pack



### 5919 Pinion Cap

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



### 5920 Slim Line Plastic Cover

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



### 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
- Includes screw pack



### 5922 Drop Plate - Top Jamb, Parallel Arm

- For use with 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
- Includes screw pack
- Plate requires 3" (76mm) minimum top rail



### 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
- Includes screw pack
- Plate requires 3" (76mm) minimum top rail.

## 5200 SERIES - ACCESSORIES

## SCREW PACKS



### 5932

#### Metal Cover

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



### 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 and 5907 arms
- For use with extra heavy duty hold open and stop arms for abusive applications



### 5204

#### Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws
- For 5200 Series closer



### 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

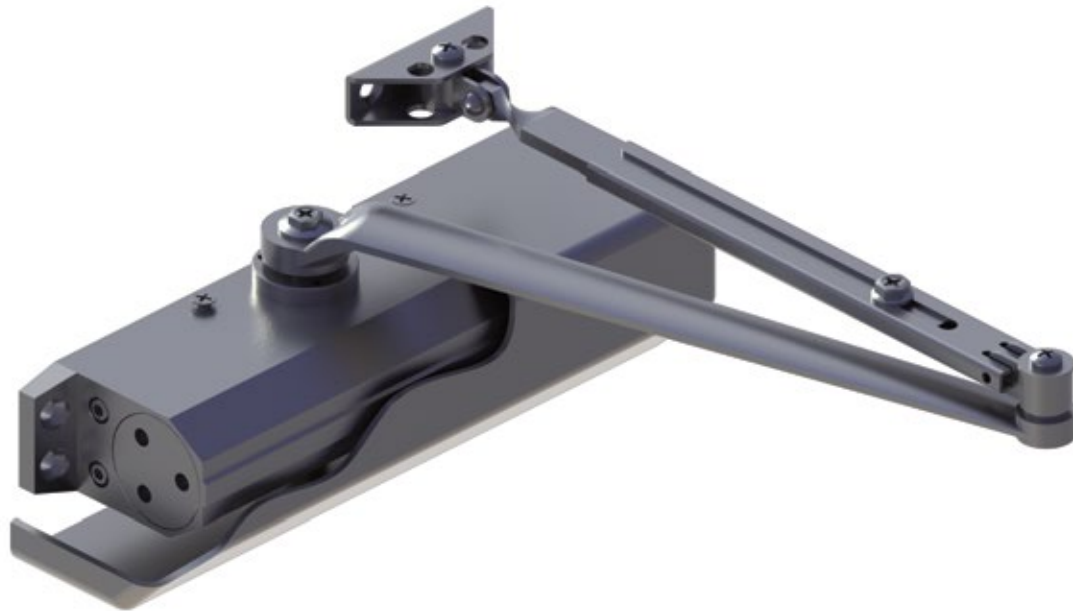
- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



# 5300 Series

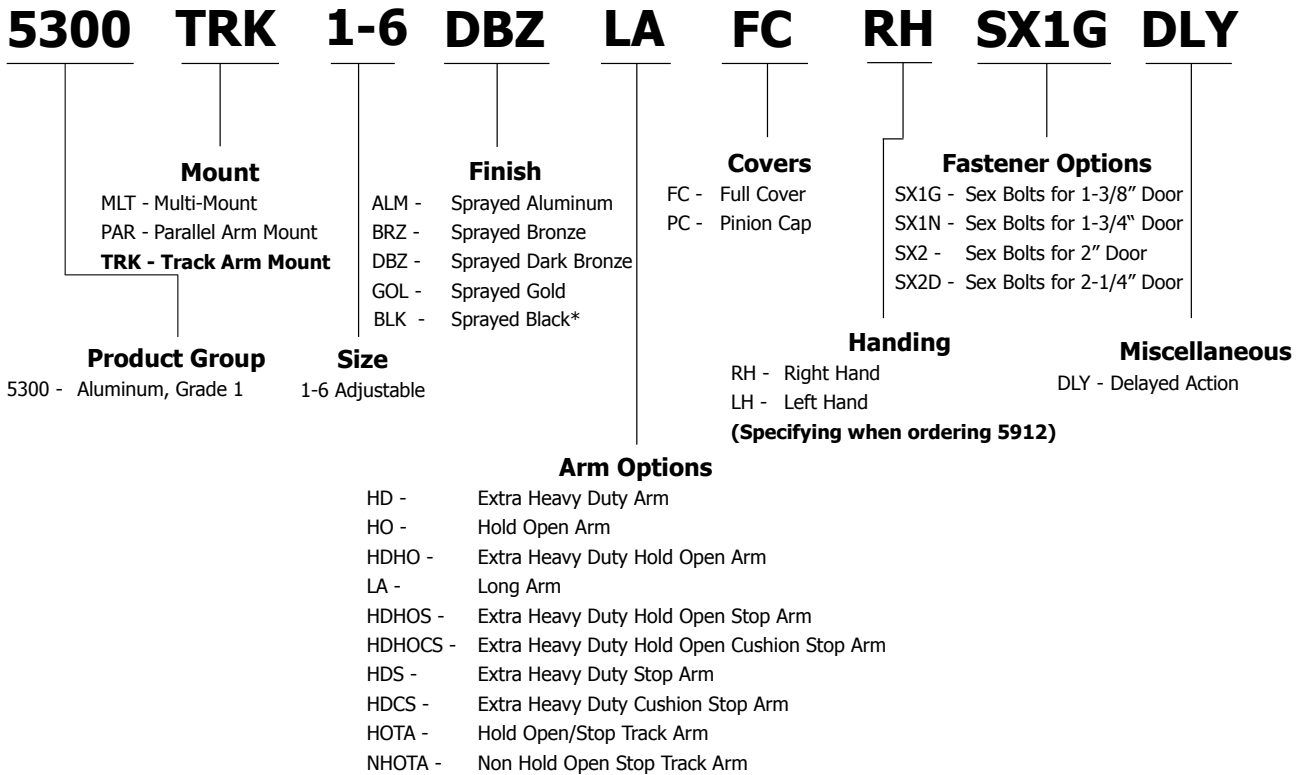


The 5300 Series Closers offer a compact design for a variety of applications. They are constructed of aluminum alloy to withstand the use and abuse you come to expect of Hager Companies Grade 1 products. The 5300 Series closers provide the flexibility needed to meet the many demands of both commercial and institutional applications, including the ADA barrier-free accessibility requirements. The sizing is adjustable from size 1 through size 6. These design features make this closer the ideal choice for doors with a maximum weight of 250 lbs.





## 5300 SERIES - HOW TO ORDER



Example of how to order: 5300P14ALMHDHOCS

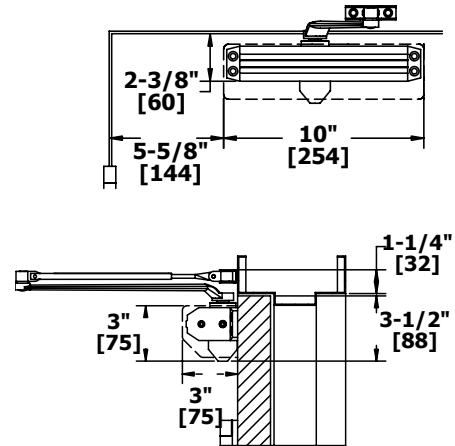
\*Extended lead times for flat black finish and minimum order quantities may apply.



## 5300 SERIES - APPLICATIONS

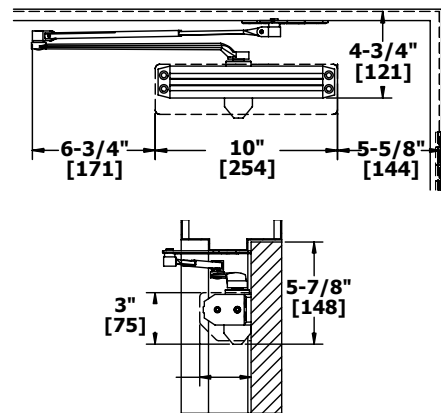
### REGULAR ARM MOUNT (PULL SIDE)

|                     |  |
|---------------------|--|
| 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:  | <ul style="list-style-type: none"> <li>• 1-5/8" (41 mm) minimum</li> <li>• 1-5/8" (41 mm) minimum for hold open arm</li> </ul> |
| 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   |



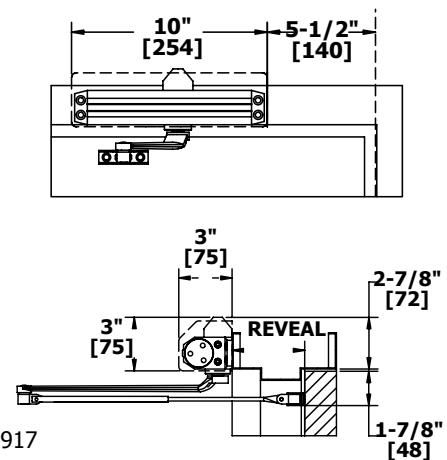
### PARALLEL ARM MOUNT (PUSH SIDE)

|                     |  |
|---------------------|--|
| Opening:            | Templating allows up to 180°   |
| Hold Open:          | Hold open points 90° up to 180° with hold open   |
| Top Rail:           | <ul style="list-style-type: none"> <li>• Standard hollow metal 5/8" frame stop</li> <li>• 4-3/4" (121 mm) minimum</li> <li>• 4" (102 mm) minimum with hold open</li> <li>• 3-1/8" (79 mm) minimum with plate</li> <li>• 2-1/8" (54 mm) minimum with hold open and plate</li> </ul> |
| 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:  | <ul style="list-style-type: none"> <li>• 2-3/4" (70 mm) minimum</li> <li>• 1-3/4" (44 mm) minimum with drop plate, 5918</li> </ul>   |
| Top Rail:           | 1-7/8" (48 mm) minimum   |
| Top Rail Clearance: | <ul style="list-style-type: none"> <li>• 2-1/8" (54 mm) minimum</li> <li>• 2-3/4" (70 mm) minimum with drop plate, 5917</li> <li>• 2-1/4" (57 mm) minimum for hold open with drop plate, 5917</li> <li>• 3-5/8" (92 mm) minimum with drop plate, 5915</li> </ul> |



## 5300 SERIES - GRADE 1 HEAVY DUTY SURFACE DOOR CLOSER

### WARRANTY

Lifetime warranty - 250 lbs. maximum door weight

### FEATURES

- Ideal for schools, hospitals, and other high-use environments
- Standard package contains 5301 closer body, 5302 closer cover, 5902 pinion cap, 5303 main arm assembly, 5304 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door

### Certification:

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

### Covers:

Full plastic cover and pinion cap - Standard

### Closer Body:

- Aluminum alloy
- The recommended temperature for prolonged use is between -40° F (-42° C) & 150° F (66° C)

### 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

### SPECIFICATIONS

#### Door Thickness:

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

#### Fasteners:

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

#### Notes:

- Full rack and pinion operation
- Precision machined, heat treated steel piston
- Triple heat treated steel spindle
- Special templates available upon request by contacting Hager Companies Customer Service

### FINISHES

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



## 5300 SERIES - ARMS



### 5303

#### Main Arm

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



### 5906

#### Extra Heavy Duty Hold Open Stop Arm

- Non-handed parallel arm
- Forged steel
- Plunger hold open function
- Auxiliary stop in soffit shoe
- For use with 5200 and 5300 Series closers
- Not for use on fire-rated doors



### 5907

#### Extra Heavy Duty Stop Arm

- Non-handed parallel arm
- For use in abusive environments
- Auxiliary stop in soffit shoe
- For use with 5200 and 5300 Series closers



### 5910

#### Hold Open Arm

- Non-handed
- Forged steel
- Mounts pull side or top jamb with shallow reveal
- Friction hold open function
- Add 5914 Rev1 bracket for parallel arm mount



#### Track Arm

- Non-handed
- Extruded aluminum track
- Steel arm

Functions:

#### Non Hold Open Stop Arms

- 2-659-0141 - ALM
- 2-659-0328 - BLK
- 2-659-0140 - BRZ
- 2-659-0139 - DBZ
- 2-659-0138 - GOL



### 5911

#### Extra Heavy Duty Arm Assembly

- Non-handed parallel arm
- Forged steel
- For use with 5200 and 5300 Series closers



### 5912

#### Extra Heavy Duty Hold Open Arm Assembly

- Handed parallel arm (specify handing when ordering)
- Forged steel
- Provides friction hold open function
- Adjustable at the shoe
- For use with 5200 and 5300 Series closers
- Not for use on fire-rated doors



### 5956

#### Extra Heavy Duty Hold Open Cushion Stop Arm

- Non-handed parallel arm
- Forged steel
- Contains 5906 arm and 5950 spring cushion arm
- Plunger hold open
- For use with 5200 and 5300 Series closers
- Not for use on fire-rated doors



### 5957

#### Extra Heavy Duty Cushion Stop Arm

- Non-handed parallel arm
- Forged steel
- Contains 5907 arm and 5950 spring cushion
- For use with 5200 and 5300 Series closers

#### Hold Open Stop Arms

- 2-659-0350 - ALM
- 2-659-0329 - BLK
- 2-659-0351 - BRZ
- 2-659-0352 - DBZ
- 2-659-0353 - GOL

## 5300 SERIES - ACCESSORIES



### 5301

#### Closer Body Only

- Aluminum alloy
- Heat treated steel spindle and piston
- Full rack and pinion operation



### 5302

#### Full Plastic Cover

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



### 5900

#### Parallel Arm Bracket

- Used to convert regular or top jamb arms to parallel arm application
- For use with 5300 and 5400 Series closer arms
- Includes screw pack



### 5901

#### Pinion Cap

- High-impact, non-corrosive
- Supplied standard in 5300 and 5400 Series closers
- Fits over the pinion and extends 1" (25 mm)



### 5908

#### Long Rod and Shoe

- Use for reveals greater than 4" (102 mm) and up to 8" (203 mm)
- Non-handed
- Cast steel
- Use for top jamb application
- For use with 5300 and 5400 Series closer arms



### 5913

#### Blade Stop Spacer

- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop of aluminum frames
- For use with 5300 and 5400 Series closer arms
- Includes screw pack



### 5936

#### Extra Clearance Parallel Arm Bracket

- Allows for up to 2" (13 mm) of clearance to mount additional hardware such as overhead door stops and holders
- Provides needed clearance not achieved with a standard soffit plate
- Includes screw pack



### 5950

#### Spring Cushion

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



### 5914

#### Hold Open Parallel Arm Bracket

- Supplied with all standard hold open arms
- For use with 5200 and 5300 Series closers only
- Includes screw pack



### 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 no cover
- For use when low ceiling clearance prevents normal top jamb mounting
- Includes screw pack
- Plate requires 3" (76mm) minimum top rail



### 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
- Plate requires 3" (76mm) minimum top rail

## 5300 SERIES - ACCESSORIES

## SCREW PACKS



### **5917** **Drop Plate - Top Jamb, Low Clearance**

- For use with no cover
- 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
- Includes screw pack



### **5304** **Screw Pack - Standard**

- Self-drilling wood screws
- Self-drilling machine screws
- For 5300 Series closer only



### **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**

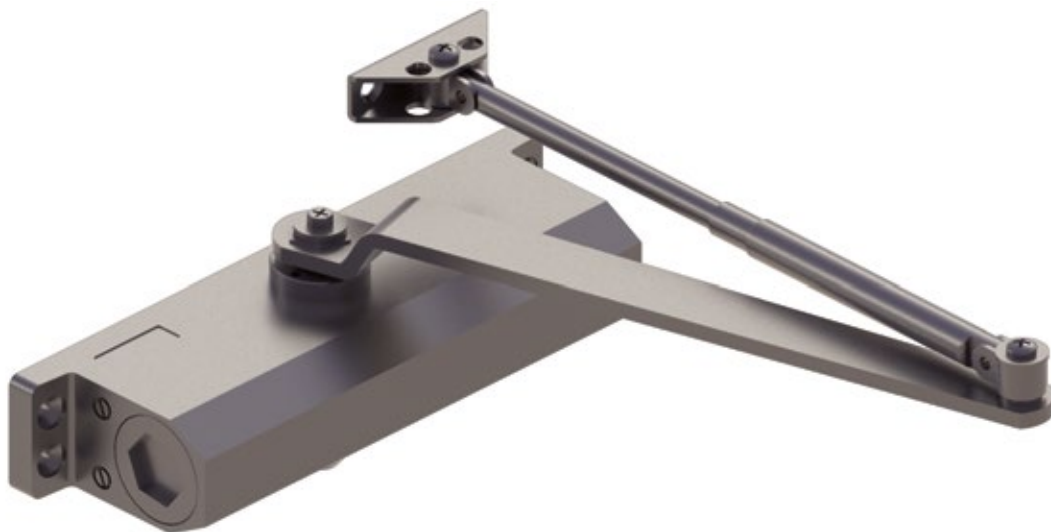
- Sex nuts and bolts for 2-1/4" (56 mm) doors
- Machine screws
- For use with 5200, 5300, 5400 Series closers only



# 5400 Series

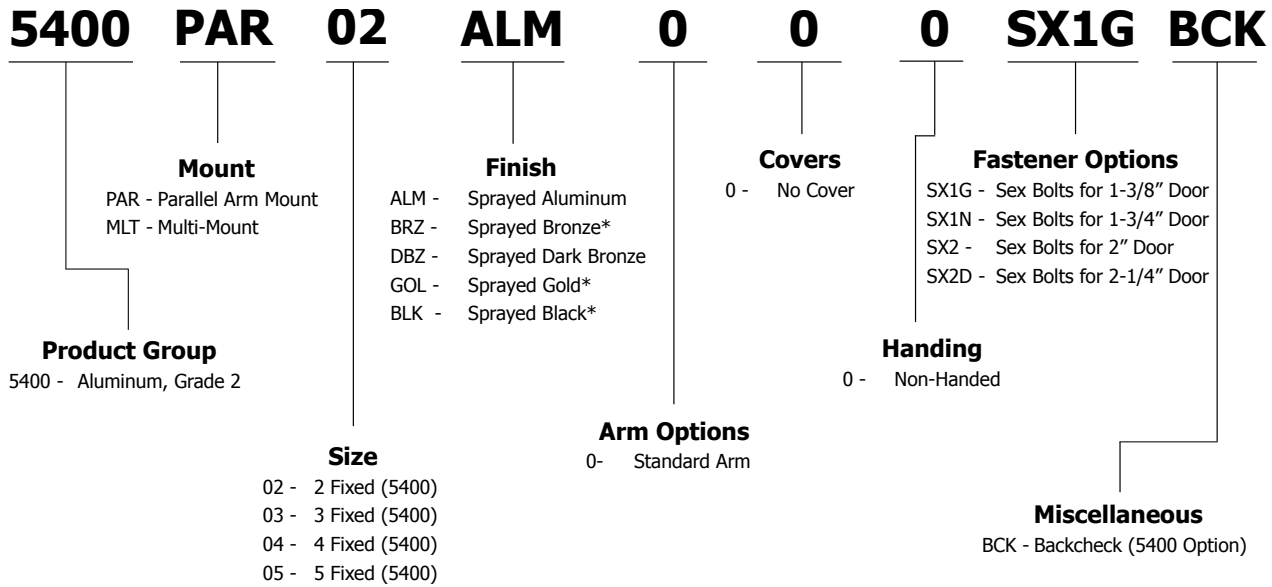


5400 Series Closers are ideal for light duty commercial applications. 5400 Series Closers have a heat treated steel piston and triple heat treated steel spindle. The closers are non-handed to permit installation on doors of either hand. These closers have fixed spring sizes. The maximum door weight for each of these closers is dependent on the size selected. Size 2 - 80 lbs, Size 3 - 135 lbs, Size 4 - 175 lbs and Size 5 - 200 lbs.





## 5400 SERIES - HOW TO ORDER



Example of how to order: 5400M02ALM0PC

\*Extended lead times for BRZ, GOL, and BLK finishes and minimum order quantities may apply.

**5400 Series closers are sized 2, 3, 4 & 5.  
Must know size when placing order.**

### DOOR CLOSER SIZING CHART

#### Exterior (and Vestibule) Door Width

##### Minimum Door Width (24")

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

#### Interior Door Width

##### Minimum Door Width (24")

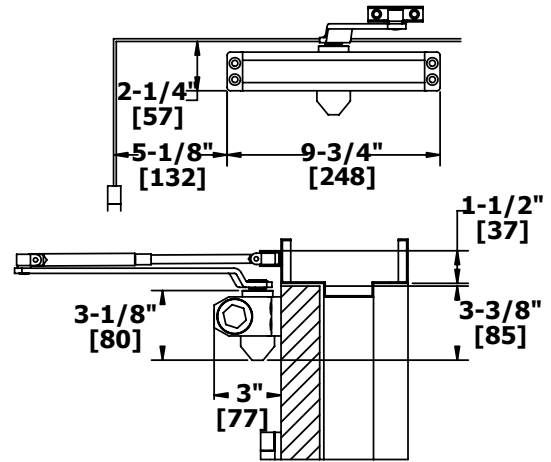
|                        | 24"<br>(610 mm) | 30"<br>(762 mm) | 34"<br>(865 mm) | 38"<br>(965 mm) | 48"<br>(1219 mm) | 54"<br>(1372 mm) | 60"<br>(1524 mm) |
|------------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|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



## 5400 SERIES - APPLICATIONS

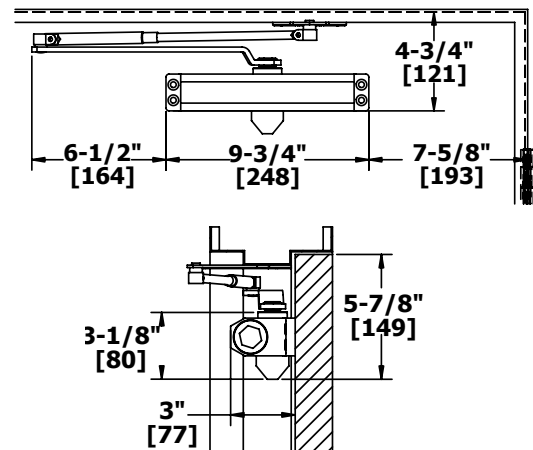
### REGULAR ARM MOUNT

|                     |                              |
|---------------------|------------------------------|
| Opening:            | Templating allows up to 180° |
| Frame Face:         | 1-1/2" (38 mm) minimum       |
| Ceiling Clearance:  | 1-3/4" (44 mm) minimum       |
| Top Rail:           | 2-1/4" (57 mm) minimum       |
| Top Rail Clearance: | 3-1/2" (89 mm) minimum       |



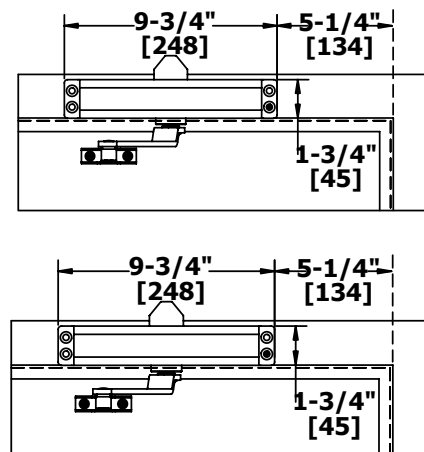
### PARALLEL ARM MOUNT

|                     |  |
|---------------------|--|
| Opening:            | Templating allows up to 180°   |
| Top Rail:           | <ul style="list-style-type: none"> <li>• 5/8" (16 mm) frame stop</li> <li>• 4-3/4" (121 mm) minimum</li> </ul> |
| Top Rail Clearance: | 5-3/4" (146 mm) minimum  |



### TOP JAMB MOUNT

|                     |                              |
|---------------------|------------------------------|
| Opening:            | Templating allows up to 180° |
| Frame Face:         | 1-3/4" (45 mm) minimum       |
| Ceiling Clearance:  | 2-3/4" (70 mm) minimum       |
| Top Rail:           | 1-7/8" (48 mm) minimum       |
| Top Rail Clearance: | 2-1/8" (54 mm) minimum       |



## 5400 SERIES - GRADE 2 STANDARD DUTY SURFACE DOOR CLOSER

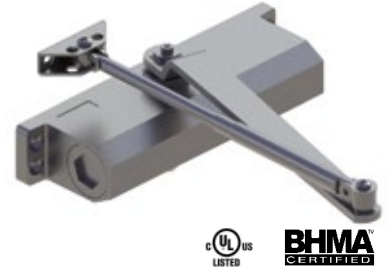
### WARRANTY

Five-year warranty - maximum door weight size:

- 2 - 80 lbs
- 3 - 135 lbs
- 4 - 175 lbs
- 5 - 200 lbs

### FEATURES

- Ideal for light duty commercial applications
- Standard package contains 5401 closer body, 5901 pinion cap, 5403 main arm assembly, 5404 standard screw pack, 5900 parallel arm bracket, and 5902 SNB screw pack for 1-3/4" (44 mm) door



### Certification:

- BHMA Certified ANSI A156.4, Sizes 2, 3, 4, 5 - Must specify
- UL/cUL Listed for up to 3 hours
- UL10C Positive Pressure Rated
- UL10B Neutral Pressure Rated

### Covers:

No Cover - Standard

### Closer Body:

- Aluminum alloy
- The recommended temperature for prolonged use is between -40° F (-42° C) & 150° F (66° C)

### Springs:

Double heat treated steel, tempered springs

### Valves:

- Adjustable latching and sweep speed valves
- Adjustable backcheck 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

### SPECIFICATIONS

#### Door Thickness:

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

#### Fasteners:

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

#### Notes:

- Precision machined, heat treated steel piston
- Triple heat treated steel spindle
- Special templates available upon request by contacting Hager Companies Customer Service

### FINISHES

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



## 5400 SERIES - ARMS & ACCESSORIES

## SCREW PACKS



### 5403

#### Main Arm

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



### 5401

#### Closer Body Only

- Aluminum alloy
- Full rack and pinion operation
- Triple heat treated steel spindle
- Sizes 2, 3, 4, and 5 available



### 5900

#### Parallel Arm Bracket

- Used to convert regular or top jamb arms to parallel arm application
- Supplied standard closers
- For use with 5200, 5300 and 5400 Series closer arms
- Includes screw pack



### 5901

#### Pinion Cap

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



### 5913

#### Blade Stop Spacer

- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop of aluminum frames
- For use with 5300 and 5400 Series arms
- Includes screw pack



### 5404

#### Screw Pack - Standard

- Self-drilling wood screws
- Self-drilling machine screws
- For 5400 Series closer only



### 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



# Electromagnetic Holders



Hager Companies offers a line of electromagnetic door holders with built-in protection and low residual magnetism so they release easily even in applications meeting ADA requirements with minimal spring force door closers. These features make the electromagnetic holders a great solution for both safety and convenience and are ideal solutions for applications in hotels, hospitals and nursing homes.

Hager electromagnetic holders are designed for virtually any remote door release application and are ideal for holding doors open until released by a fire alarm or switching device. When deactivated the electromagnetic holders help to control the spread of fire and smoke by the simultaneous release of doors from an open to a closed position. The electromagnetic holders can be utilized independently or with the smoke detector systems.

The electromagnetic holders include a door mounted armature and a floor or wall mounted electromagnet. The features of this hardware include: dual voltage capability, very low current draw for energy efficiency, silent operation and an adjustable catch plate.



## ELECTROMAGNETIC DOOR HOLDERS - PERFORMANCE DATA

| MODEL | VOLTAGE | DC/mA | AC/mA | TERMINALS | LB. | KG.  |
|-------|---------|-------|-------|-----------|-----|------|
| 1224  | 12V     | 40    | 38    | C&L       | 30  | 13.6 |
|       | 24V     | 40    | 36    | C&H       | 30  | 13.6 |
| 24120 | 24V     | 20    | 19    | C&L       | 40  | 18.1 |
|       | 120V    |       | 20    | C&H       | 35  | 15.8 |
| 24220 | 24V     | 20    | 19    | C&L       | 20  | 9.0  |
|       | 220V    |       | 15    | C&H       | 22  | 9.8  |

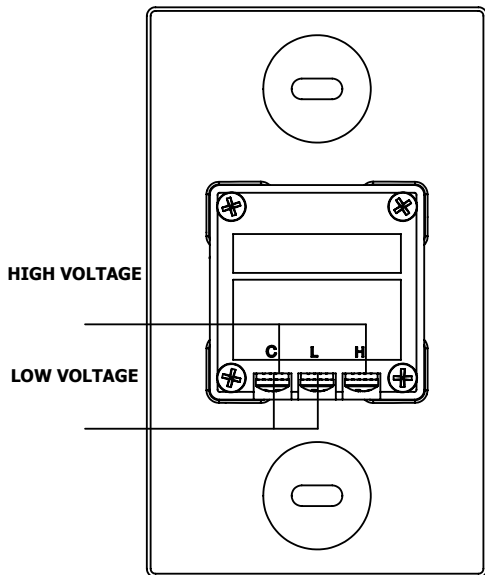
| MODEL | VOLTAGE | DC/mA | AC/mA | TERMINALS | LB. | KG.  |
|-------|---------|-------|-------|-----------|-----|------|
| 1224  | 24V     | 85    | 81    | C&L       | 75  | 34.0 |
| 24120 | 120V    |       | 100   | C&L       | 110 | 49.8 |

**\*High Holding Force/Special Applications:**

To obtain the performance values in the above table, apply high listed voltage to low voltage terminals (C&L).

NOTE: This configuration can only be applied to models 1224 and 24120.

### DUAL VOLTAGE (REAR VIEW SHOWN)



### EXTENSION ROD/ADJUSTABLE EXTENSION ROD

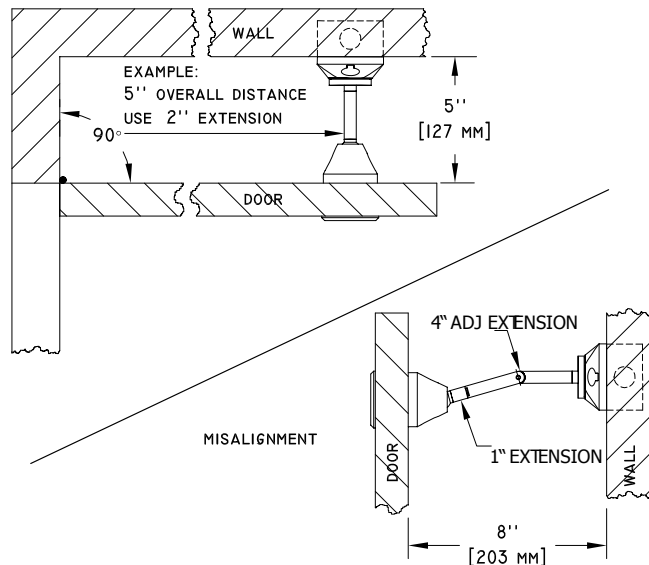
To calculate extension rod length needed, use the formula below based on style holder being used.

**Flush mount:** Measure distance from door to wall when held at desired opening. Subtract 3" (76 mm) to obtain extension rod length needed.

**Recessed mount:** Measure distance from door to wall when held at desired opening. Subtract 2-3/8" (60 mm) to obtain extension rod length needed.

**Surface mount:** Measure distance from door to wall when held at desired opening. Subtract 4-5/8" (117 mm) to obtain extension rod length needed.

See example below using flush mount.







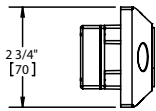
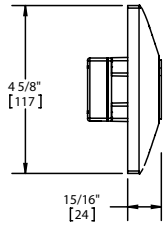
## ELECTROMAGNETIC DOOR HOLDERS - GRADE 1 HEAVY DUTY COMMERCIAL

|                       |  |
|-----------------------|--|
| <b>WARRANTY</b>       | One-year warranty  |
| <b>FEATURES</b>       | <ul style="list-style-type: none"> <li>• Ideal for hospitals, hotels, schools, and other commercial buildings</li> <li>• Designed for use with self-closing fire and smoke barrier doors</li> <li>• Low current draw</li> <li>• Fail safe: when electrical current is interrupted, doors release to close automatically</li> </ul> |
| Certification:        | <ul style="list-style-type: none"> <li>• UL/ULC listed</li> <li>• Meets ANSI 156.15 for C00011</li> <li>• California State Fire Marshall listed (CSFM)</li> <li>• City of New York MEA approved</li> <li>• Factory Mutual</li> </ul>   |
| Body:                 | Zinc alloy   |
| Voltages:             | Standard dual voltage AC or DC inputs of 12 & 24V, 24 & 120V, 24 & 220V models   |
| Holding Force:        | Typical holding force of 25-40 pounds; performance value can be increased to 110 pounds on special applications  |
| Mount:                | Single or double coil floor, surface, flush, and recessed mount  |
| <b>SPECIFICATIONS</b> |  |
| Total Projection:     | <ul style="list-style-type: none"> <li>• Recessed mount: 2-11/32" (60 mm)</li> <li>• Flush mount: 3-1/16" (78 mm)</li> <li>• Surface mount: 4-5/8" (117 mm)</li> <li>• Floor mount (single door): 5" (127 mm)</li> <li>• Floor mount (double door): 9-5/8" (244 mm)</li> </ul>   |
| Fasteners:            | Hardware package, mounting bracket   |
| Notes:                | <ul style="list-style-type: none"> <li>• Optional aluminum extension and misalignment rods available</li> <li>• Drill fixture available</li> <li>• Replacement armature disc and armature plate assemblies available</li> <li>• Adhesive template included</li> </ul>  |
| <b>FINISHES</b>       | US3, LS, L2  |

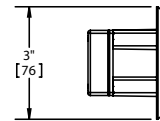
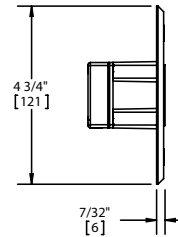


# ELECTROMAGNETIC DOOR HOLDERS - 380 SERIES HOLDERS

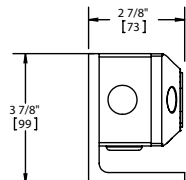
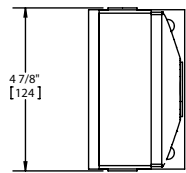
**380F**  
Flush Mount



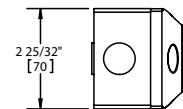
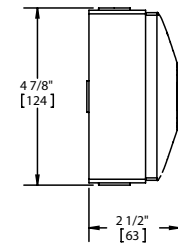
**380R**  
Recessed Mount



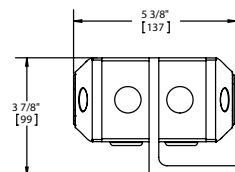
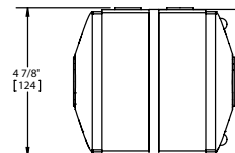
**380G**  
Floor Mount (Single Door)



**380S**  
Surface Mount



**380H**  
Floor Mount (Double Door)



## ELECTROMAGNETIC DOOR HOLDERS - ACCESSORIES



**381A**  
**Adjustable Extension Rod**  
Available extension lengths 1-1/2"  
(38 mm), 2" (51 mm), 4" (102 mm)



**381E**  
**Extension Rod**  
Available extension lengths 1/2"  
(13 mm), 1" (25 mm), 1-1/2"  
(38 mm), 2" (51 mm), 3" (76 mm),  
4" (102 mm)



**381B**  
**Surface Back Box**  
2-25/32" x 4-7/8" x 1-1/2"  
(71 mm x 124 mm x 38 mm)  
Supplied with 380G, 380H, 380S



**381H**  
**Mounting Hardware Package**  
Includes screws, nuts, concrete anchors,  
and drill bit



**381C**  
**Armature Plate**  
Replacement for the 381S armature  
plate assembly



**381S**  
**Armature Plate Assembly**  
Swivel design allows armature plate to  
move in all directions to assist with slight  
misalignment issues



**381D**  
**Drilling Fixture**  
Attach to the door for quick and accurate  
hole locations



**381W**  
**Extension Wrenches**  
Used to tighten extension rods to catch  
plate assembly



# Overhead Door Holders & Stops



Because Hager Companies is committed to providing our customers with a full line of door hardware, we offer both a heavy duty and standard duty option in our overhead door holders and stops product line. They are mounted at the top of the door to eliminate tripping hazards and vandalism that are typical of floor or wall mounted stops. The purpose of the overhead door holders is to absorb the abusive shock with a heavy duty spring. They evenly distribute the load and impact along the entire track of the unit. Overhead door holders and stops are compatible with a variety of door closers and are ideal for meeting the demands of high traffic areas.

Hager Companies overhead door holders and stops have been engineered and designed to meet the requirements of many door applications. The streamlined channel design along with the adjustment arm accommodates various door sizes and applications. The adjustable arms simplify the selection by combining door width ranges into only two sizes of overhead door holders and stops. This feature makes installation simple and minimally impacts a customer's inventory.



## OVERHEAD DOOR HOLDERS AND STOPS - METHODS OF INSTALLATION

### Concealed Mounted

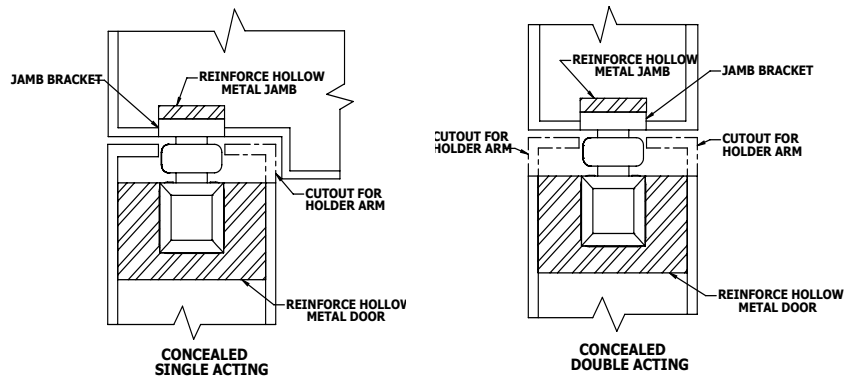
The installation of concealed overhead door holders and stops requires that the jamb bracket be mortised flush with the bottom of the jamb. The arm and channel must be mortised into the door so the arm is flush with the top of the door. Concealing the overhead door holders and stops in the top of the door creates a more attractive architectural look.

#### Single Acting Door

A cutout made for the arm on the stop side of the single acting door.

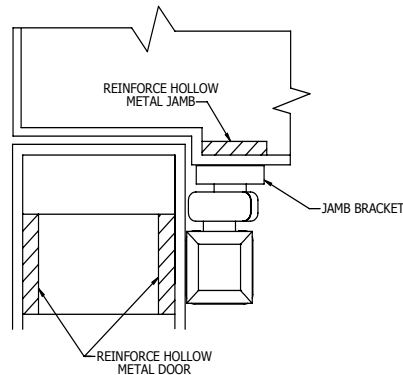
#### Double Acting Door

Double acting doors require a cutout for the arm on both sides of the door.



### Surface Mounted

Surface mounted overhead door holder and stop installation requires the jamb bracket be surface mounted on the stop of the frame. The channel is also surface mounted on the face of the door. Hollow metal doors and jambs must be reinforced to provide necessary strength for the holder specified.



### Door and Frame Reinforcement

Hollow metal frames must be properly reinforced with 3/16" (5 mm) thick plates/channels that are at least 12" (305 mm) long. Hollow metal doors must be properly reinforced with 3/16" (5 mm) plates that are at least 2-1/2" (64 mm) wide over the length of the device. Templates and installation instructions are available online at [www.hagerco.com](http://www.hagerco.com).

### Selecting Degree of Hold Open or Stop

Overhead door holders and stops are designed to function effectively from 85° to 110°. The recommended minimum degree of hold open would be set at 95° to put the door lever, pull, and panic hardware beyond the flow of traffic.


When selecting the degree of hold open for doors opening against a wall or back to back, there is approximately 5° to 7° of spring engagement beyond the hold open or initial stop point, this is the dead stop.

For dead stop templating, the degree of opening should be set 5° to 7° less than the point of required dead stop to accommodate the full compression of the shock absorber.

## OVERHEAD DOOR HOLDERS AND STOPS - HOW TO ORDER

### Selection Steps:

1. Determine the required grade needed

| Function       | Description   |
|----------------|---|
| 16 - Stop Only | Shock absorbing spring stops the door  |
| 17 - Hold Open | Select hold open with easy to adjust tension - may be turned on or off, and includes the stop function                  |
| 15 - Friction  | Multi-point friction hold open adjustable for resistance to door movement   |

2. Determine the required function
3. Determine if a surface or concealed mount is required
4. Finally select one of two sizes to fit the opening

### 7000 Series: Grade 1- Heavy Duty Overhead Holders and Stops

#### Available Functions

- Stop
- Hold Open
- Friction

#### Mounting Types

- Concealed
- Surface

#### Size Options

- Size 1 - 24" to 40"
- Size 2 - 41" to 55"



### 6000 Series: Grade 2- Standard Duty Overhead Holders and Stops

#### Available Functions

- Stop
- Hold Open
- Friction

#### Mounting Types

- Concealed
- Surface

#### Size Options

- Size 1 - 18" to 33" (Concealed Mounted) 20" to 33" (Surface Mounted)
- Size 2 - 33" to 51"



Note: It is recommended to utilize overhead door holders and stops on doors furnished with door closers, they are not intended to stop the door and should not be expected to perform the functions of a door stop.



## OVERHEAD DOOR HOLDERS AND STOPS - HOW TO ORDER

### 60

### 15

### CON

### SZ1

### US32D

### SX1G

#### Component Type

- 15 - Friction
- 16 - Stop Only
- 17 - Hold Open

#### Size

- SZ1 - Size 1
- SZ2 - Size 2

#### Fastener Options

- SX1G - Sexbolts for 1-3/8" ( mm) door
- SX1N - Sexbolts for 1-3/4" ( mm) door
- SX2 - Sexbolts for 2" ( mm) door
- SX2D - Sexbolts for 2-1/4" ( mm) door

#### Mount

- CON - Concealed
- SRF - Surface

#### Product Group

- 60 - Standard Duty Overhead Door Holders and Stops
- 70 - Heavy Duty Overhead Door Holders and Stops

#### Finish

- US3 - Bright Brass
- US10B - Satin Bronze
- US32D - Satin Stainless

## Functions

### 16 - Stop Only

- Concealed Mounted: ANSI CO1541
- Surface Mounted: ANSI CO2541

The stop only function provides a reliable method of door control. A shock absorbing spring stops the door. It is UL Listed for fire-rated components.

#### UL Classification

The **stop-only** models are classified by Underwriters Laboratories (UL) as Miscellaneous Fire Door Accessories. This classification applies to the use on either hollow metal fire doors or wood fire doors of any rating. The accessories have been investigated to determine that when properly installed with accordance to the manufacturer's instructions, they do not adversely affect the fire-rating of the fire door or fire door frames.

### 17 - Hold Open

- Concealed Mounted: ANSI CO1511
- Surface Mounted: ANSI CO2511

The hold open function provides a selective hold open function with easy to adjust tension. It may be turned on or off and includes the stop only function. It is not for use on fire-rated openings.

### 15 - Friction

- Concealed Mounted: ANSI CO4531
- Surface Mounted: ANSI CO5531

The multi-point friction hold open function mechanism is adjustable for resistance to door movement. It is not for use on fire-rated openings.





## OVERHEAD DOOR HOLDERS AND STOPS - 6000 SERIES GRADE 2 STANDARD DUTY

|                 |  |
|-----------------|--|
| <b>WARRANTY</b> | Five-year warranty   |
| <b>FEATURES</b> | <ul style="list-style-type: none"> <li>• Standard screw pack</li> <li>• For use on exterior and interior doors</li> <li>• Ideal for office buildings and other standard duty commercial applications</li> </ul>                                |
| Certification:  | <ul style="list-style-type: none"> <li>• BHMA Certified ANSI A156.8</li> <li>• UL/cUL Listed for up to 3 hours (stop only)</li> <li>• UL10C Positive Pressure Rated (stop only)</li> <li>• UL10B Neutral Pressure Rated (stop only)</li> </ul> |
| Materials:      | <ul style="list-style-type: none"> <li>• Steel</li> <li>• Stainless steel</li> </ul>   |
| Mounting Style: | <ul style="list-style-type: none"> <li>• Concealed</li> <li>• Surface</li> </ul>   |
| Doors:          | <ul style="list-style-type: none"> <li>• Single acting doors for concealed and surface mounted</li> <li>• Double acting doors for concealed mounted only</li> </ul>  |
| Functions:      | <ul style="list-style-type: none"> <li>• Stop Only</li> <li>• Hold Open</li> <li>• Friction</li> </ul>   |
| Handing:        | Non-handed   |
| Openings:       | Degree of opening is fully adjustable and can be adapted to changing needs between 85° to 110°   |



### SPECIFICATIONS

|                 |  |
|-----------------|--|
| Door Thickness: | <ul style="list-style-type: none"> <li>• 1-3/4" (44 mm) thick door - Standard</li> <li>• 1- 3/8"- 2-1/4" (36-57 mm) thick door - Optional</li> </ul>   |
| Fasteners:      | Standard screw packet included for wood or metal door and frame applications   |
| Notes:          | <ul style="list-style-type: none"> <li>• Adjustable arms provide easy installation</li> <li>• Slide track design</li> <li>• Adjustable in the field</li> <li>• Heavy shock absorber spring provides 5° to 7° compression before deadstop</li> <li>• Special templating upon request</li> </ul> |

|                 |  |
|-----------------|--|
| <b>FINISHES</b> | <ul style="list-style-type: none"> <li>• US10B and US3 (For steel)</li> <li>• US32D (For stainless steel)</li> </ul> |
|-----------------|--|

### SIZE SELECTION

| Door Sizes |   |
|------------|---|
| Size       | Door Width  |
| 6000 SZ1   | 18"- 33" (Concealed Mounted) 20"- 33" (Surface Mounted) |
| 6000 SZ2   | 33"- 51"  |

## OVERHEAD DOOR HOLDERS AND STOPS - 6000 SERIES

### ACCESSORIES



**2-659-0101 | 2-659-0102 | 2-659-0103**

**Surface Mounted End Cap and Spring Replacement Kit**

- Channel end caps
- Replacement spring
- 2-659-0101 is US26D, 2-659-0102 is US10B, 2-659-0103 is US3



**2-659-0104**  
**Concealed Mounted End Cap and Spring Replacement Kit**

- Channel end caps
- Replacement spring



**2-659-0105**  
**Hold Open Replacement Kit**

- Hold open assembly



**2-659-0106**  
**Friction Replacement Kit**

- Friction assembly

### SCREWPACKS



**2-659-0098 | 2-659-0099 | 2-659-0100**

**Screwpack - Standard**

- Machine screws
- Wood screws
- Sex nuts and bolts for 1-3/4" (44 mm)
- Arm sets screws
- Allen wrench
- 2-659-0098 is US26D, 2-659-0099 is US10B, 2-659-0100 is US3



**2-659-0107 | 2-659-0108 | 2-659-0109**

**SNB Screw Pack - Optional**

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with surface mounted overhead door holders and stops
- 2-659-0107 is US26D, 2-659-0108 is US10B, 2-659-0109 is US3



**2-659-0110 | 2-659-0111 | 2-659-0112**

**SNB Screw Pack - Optional**

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with surface mounted overhead door holders and stops
- 2-659-0110 is US26D, 2-659-0111 is US10B, 2-659-0112 is US3



**2-659-0113 | 2-659-0114 | 2-659-0115**

**SNB Screw Pack - Optional**

- Sex nuts and bolts for 2-1/4" (57 mm) doors
- Machine screws
- For use with surface mounted overhead door holders and stops
- 2-659-0113 is US26D, 2-659-0114 is US10B, 2-659-0115 is US3



## OVERHEAD DOOR HOLDERS AND STOPS - 7000 SERIES GRADE 1 HEAVY DUTY

### WARRANTY

Five-year warranty

### FEATURES

- Standard screw pack
- For use on exterior and interior doors
- Ideal for hospitals, schools, and other high traffic environments

### Certification:

- BHMA Certified ANSI A156.8
- UL/cUL Listed for up to 3 hours (stop only)
- UL10C Positive Pressure Rated (stop only)
- UL10B Neutral Pressure Rated (stop only)

### Materials:

- Steel
- Stainless steel

### Mounting Style:

- Concealed
- Surface

### Doors:

- Single acting doors for concealed and surface mounted
- Double acting doors for concealed mounted only

### Functions:

- Stop Only
- Hold Open
- Friction

### Handing:

Non-handed

### Openings:

Degree of opening is fully adjustable and can be adapted to changing needs between 85° to 110°



### SPECIFICATIONS

#### Door Thickness:

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

#### Fasteners:

Standard screw packet included for wood or metal door and frame applications

#### Notes:

- Adjustable arms provide easy installation
- Slide track design
- Adjustable in the field
- Heavy shock absorber spring provides 5° to 7° compression before deadstop
- Special templating upon request

### FINISHES

- US10B and US3 (For steel)
- US32D (For stainless steel)

### SIZE SELECTION

| Door Sizes |            |
|------------|------------|
| Size       | Door Width |
| 7000 SZ1   | 24"- 40"   |
| 7000 SZ2   | 41"- 55"   |

## OVERHEAD DOOR HOLDERS AND STOPS - 7000 SERIES

### ACCESSORIES



**2-659-0119 | 2-659-0120 | 2-659-0121**  
**Surface Mounted End Cap and Spring Replacement Kit**

- Channel end caps
- Replacement spring
- 2-659-0119 is US26D, 2-659-0120 is US10B, 2-659-0121 is US3



**2-659-0122**  
**Concealed Mounted End Cap and Spring Replacement Kit**

- Channel end caps
- Replacement spring



**2-659-0123**  
**Hold Open Replacement Kit**

- Hold open assembly



**2-659-0124**  
**Friction Replacement Kit**

- Friction assembly

### SCREWPACKS



**2-659-0116 | 2-659-0117 | 2-659-0118**

**Screwpack - Standard**

- Machine screws
- Wood screws
- Sex nuts and bolts for 1-3/4" (44 mm)
- Arm set screws
- Allen wrench
- 2-659-0116 is US26D, 2-659-0117 is US10B, 2-659-0118 is US3



**2-659-0125 | 2-659-0126 | 2-659-0127**

**SNB Screw Pack - Optional**

- Sex nuts and bolts for 1-3/8" (35 mm) doors
- Machine screws
- For use with surface mounted overhead door holders and stops
- 2-659-0125 is US26D, 2-659-0126 is US10B, 2-659-0127 is US3



**2-659-0128 | 2-659-0129 | 2-659-0130**

**SNB Screw Pack - Optional**

- Sex nuts and bolts for 2" (51 mm) doors
- Machine screws
- For use with surface mounted overhead door holders and stops
- 2-659-0128 is US26D, 2-659-0129 is US10B, 2-659-0130 is US3



**2-659-0131 | 2-659-0132 | 2-659-0133**

**SNB Screw Pack - Optional**

- Sex nuts and bolts for 2-1/4" (57 mm) doors
- Machine screws
- For use with surface mounted overhead door holders and stops
- 2-659-0132 is US10B, 2-659-0133 is US3