5400 Series

Hager 5400 Series Grade 2 door closer is ideal for light duty, commercial applications such as store fronts, churches, and hotels. It is constructed of an aluminum alloy and has been tested for strength and abuse. The 5400 Series door closer is ideal for low frequency openings and has a five-year warranty.

Made of aluminum alloy - the proven choice for office buildings and store fronts

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. Standard duty Grade 2 door closers are ideal for less abusive commercial applications such as office buildings and store fronts.

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	-	
Parallel Arm	Size 3	Size 4	Size 5	-	

Interior Door Width

Minimum Door Width (24")

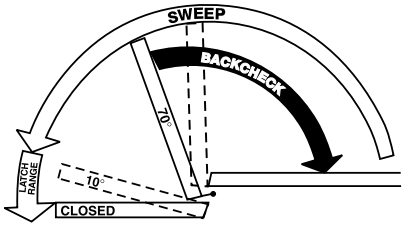
	24" (610 mm)	30" (762 mm)	34" (865 mm)	38" (965 mm)	48" (1219 mm)	54" (1372 mm)	60" (1524 mm)
Regular Arm & Top Jamb	-	Size 2	Size 3	Size 4	Size 5	Size 6	
Parallel Arm	-	Size 2	Size 3	Size 4	Size 5	-	

DOOR HANDLING
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.

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: OPTIONAL FOR 5400 SERIES
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.

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 ORDER

5400 PAR 02 ALM 0 0 0 SX1G BCK

Product Group
5400 - Aluminum, Grade 2

Mount
PAR - Parallel Arm Mount
MLT - Multi-Mount

Size
02 - 2 Fixed (5400)
03 - 3 Fixed (5400)
04 - 4 Fixed (5400)
05 - 5 Fixed (5400)

Finish
ALM - Sprayed Aluminum
BRZ - Sprayed Bronze
DBZ - Sprayed Dark Bronze
GOL - Sprayed Gold

Arm Options
0- Standard Arm

Covers
0 - No Cover

Handing
0 - Non-Handed

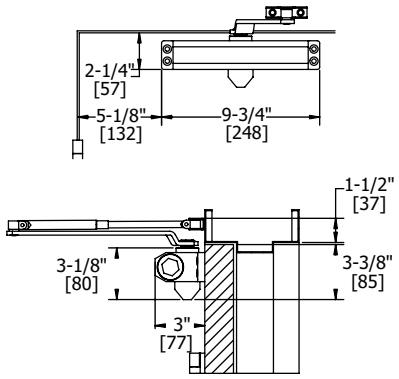
Fastener Options
SX1G - Sex Bolts for 1-3/8" Door
SX1N - Sex Bolts for 1-3/4" Door
SX2 - Sex Bolts for 2" Door
SX2D - Sex Bolts for 2-1/4" Door

Miscellaneous
BCK - Backcheck (5400 Option)

5400 SERIES APPLICATIONS

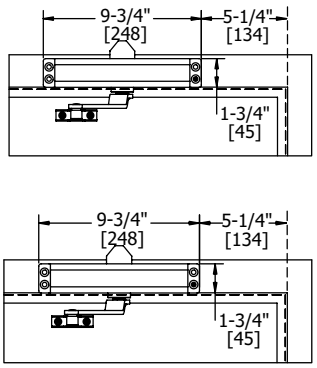
Regular Arm Mount

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



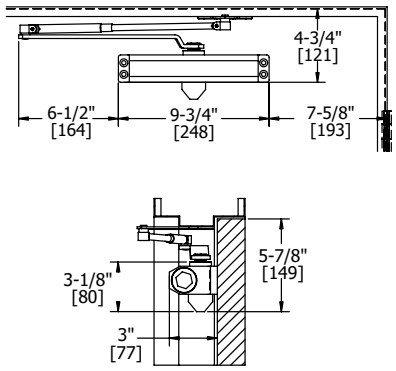
Top Jamb Mount

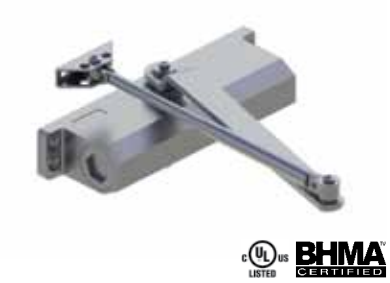
Opening:	Templating allows up to 180°
Frame Face:	1-3/4″ (45 mm) minimum
Ceiling Clearance:	2-3/4″ (70 mm) minimum
Top Rail:	1-7/8″ (48 mm) minimum
Top Rail Clearance:	2-1/8″ (54 mm) minimum



Parallel Arm Mount

Opening:	Templating allows up to 180°
Top Rail:	• 5/8″ (16 mm) frame stop • 4-3/4″ (121 mm) minimum
Top Rail Clearance:	5-3/4″ (146 mm) minimum





5400 Series

Grade 2
Standard Duty Surface Door Closer
Ideal for light duty commercial applications

- **Five-year warranty**
- **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**

Certifications:	• 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
Materials:	Aluminum alloy
Cover:	Pinion cap
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, and Top Jamb Arm Mount - Standard • 15% power adjustment in standard arm for regular and top jamb mount
Door Thickness:	• 1-3/4" (44 mm) - Standard • 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:	• Precision machined, heat treated steel piston • Triple heat treated steel spindle

5400 SERIES ARMS

5403
Main Arm
- Non-handed
- Punched steel
- Mounts regular, parallel arm, or top jam mount
- For use with 5900 bracket for parallel arm mount

5400 SERIES ACCESSORIES

5401
Closer Body Only
- Full rack and pinion operation
- Triple heat treated steel spindle

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)

5913
Blade Stop Spacer
- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop for aluminum frames

5400 SERIES SCREW PACKS

5404
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