

FALCON

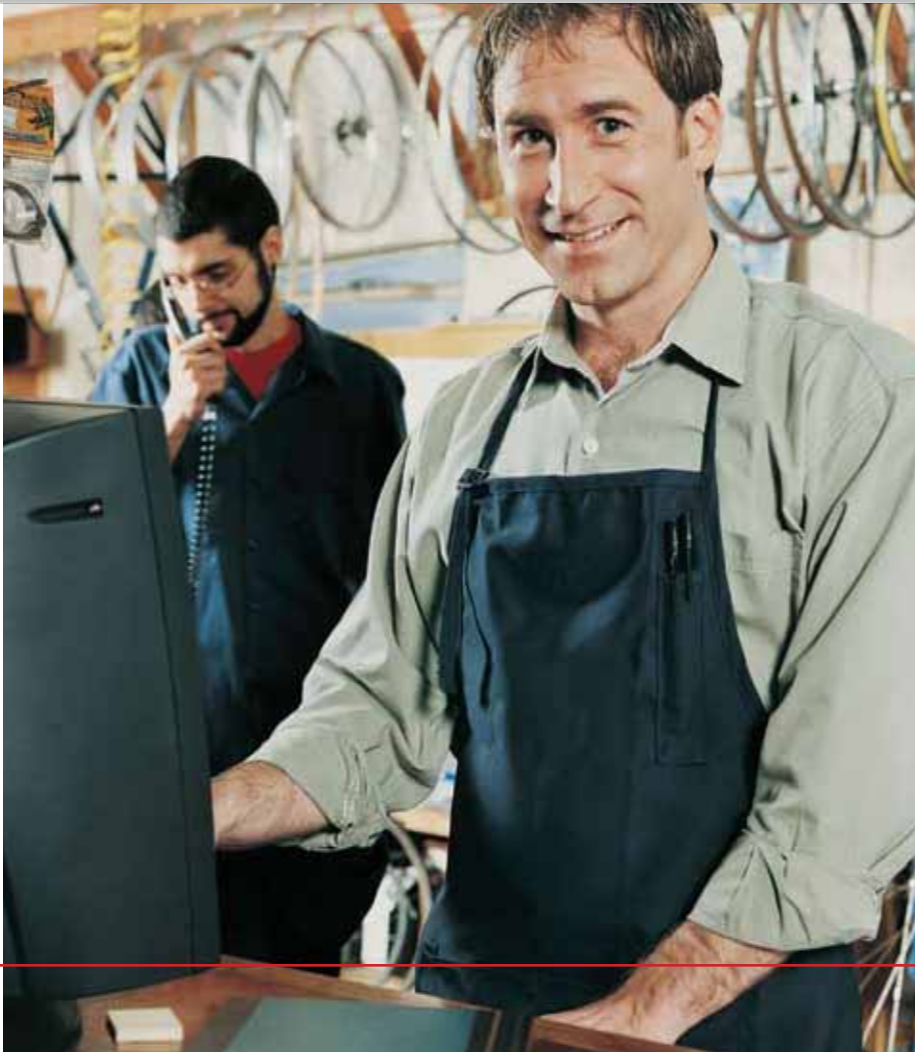
Door Controls



THE FALCON DIFFERENCE

S A F E T Y , S E C U R I T Y A N D U N C O M P R O M I S I N G V A L U E

At Falcon, we know that every product you sell not only has to meet local building codes, but also your expectations for performance and quality. We take your expectations seriously, and that's why we build our products to deliver durability, convenience and unmatched value. After all, we've built our reputation on the same standards that you have – providing quality products at a reasonable price delivered on time. It's the way we do business and it's what makes Falcon a powerful choice no matter what your project.



FALCON DOOR CONTROLS



From restaurants and cafes, to busy storefronts and light commercial office spaces, you need mechanical door closers that deliver safety, reliability and unbeatable value. Falcon closers fill the bill with closers built for a wide range of applications. Our closers are tested under strict guidelines to meet industry standards, whether it's 500,000 or 1.5 million cycles. And because they're easy to install and maintain, you get a solid return on your investment.

FEATURES

- Aesthetically pleasing design for diverse range of applications
- Common hole patterns for fast installation
- UL Listed designs available
- All surface-mount closers certified by UL 10C and UBC 7-2 (1997) fire test
- Ideal for commercial use

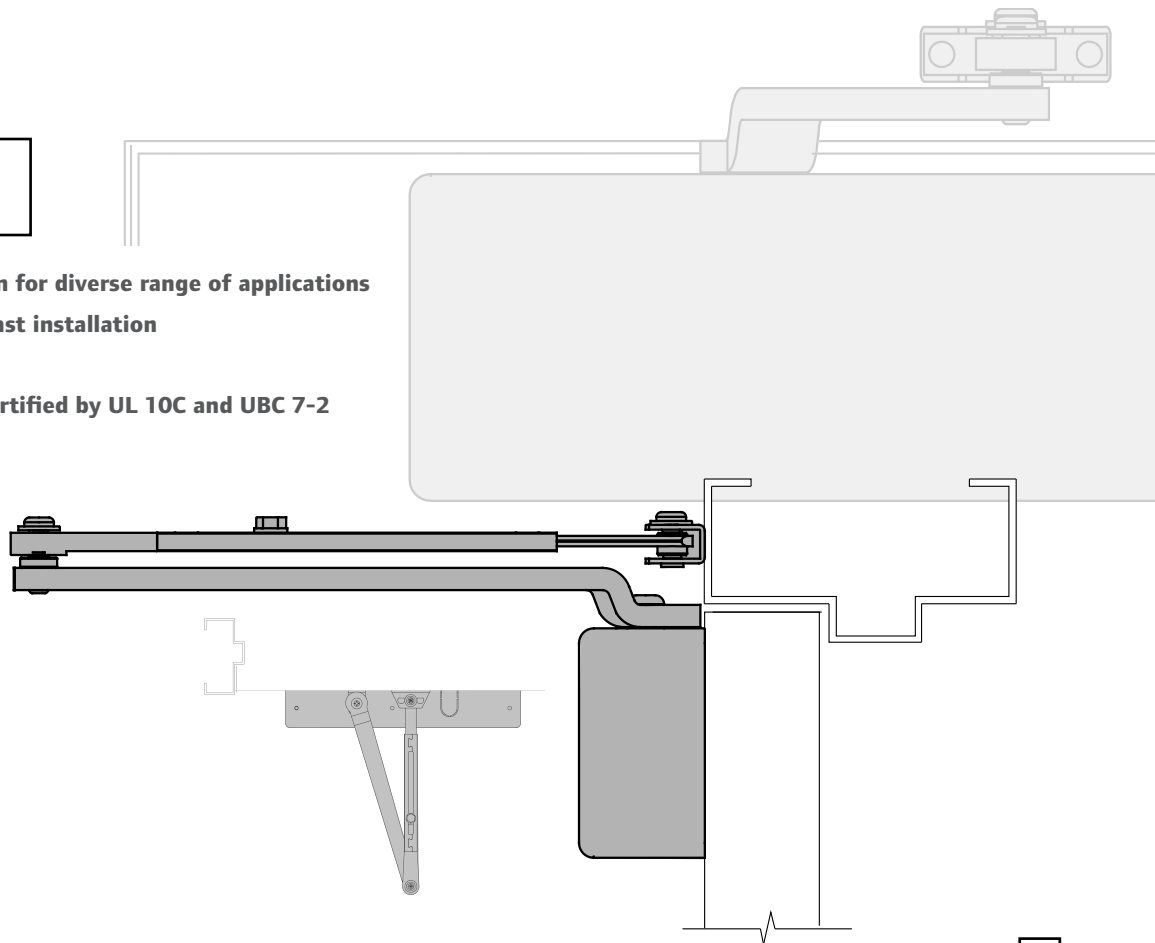
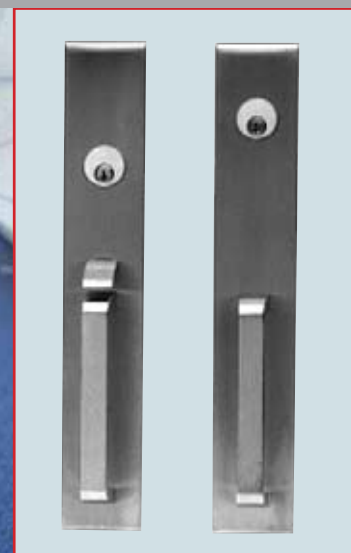


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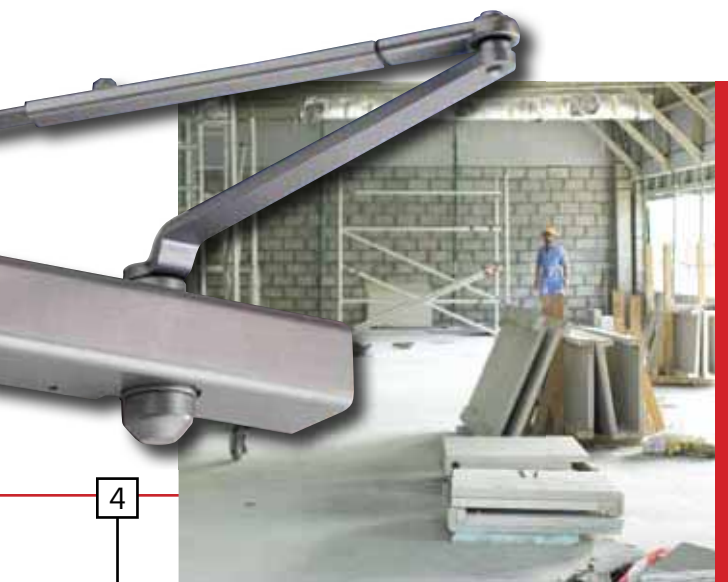
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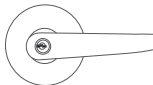
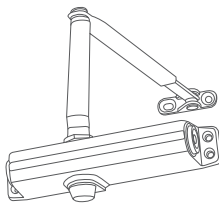
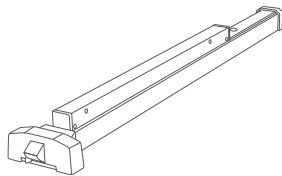


Falcon fits where you need it to.

Not every project has the budget for top-of-the-line hardware. Regardless of the job, Falcon delivers reliable performance and great looks at an affordable price. Falcon products are ideal for all applications and architectural needs.

- New Construction/Remodel
- Multifamily
- Retail and Restaurant
- Office
- Schools
- Hospitality
- Assisted Living





ADDITION MADE EASY

Falcon, Monarch and Dor-O-Matic are now consolidated under the Falcon name - with every lock, door closer and exit device backed by world-class service and support from Ingersoll Rand.

Putting three great brands on one door is elementary. Putting them under one name? That's simplicity.



For a free Falcon Architectural Guide or to speak with a security consultant near you, please call 800-266-4456.

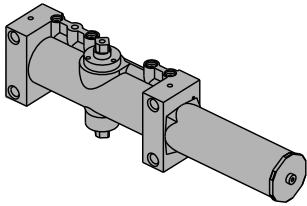
FALCON

www.falcon.ingersollrand.com

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SC70 SERIES

FEATURES AND SPECIFICATIONS



SC70 Series

Falcon SC70 Series heavy duty closers are built for busy commercial applications that demand reliable door control and easy maintenance. Designed for use with aluminum storefronts, SC70 Series closers are ANSI Grade 1, ADA compliant and deliver tough performance. Choose the SC70 for interior or exterior doors in retail shops, restaurants and small offices.

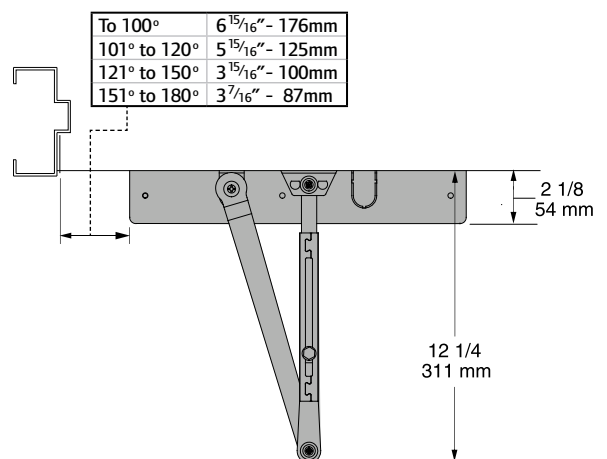
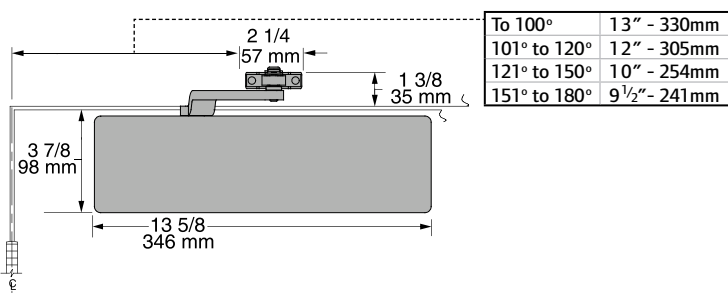
Standard Features

- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 1
- UL Listed
- 1 1/2" diameter piston
- Closer mounts hinge side, top jamb or parallel arm when either the Rw/PA or Hw/PA arm is specified.
- Adjustable sizes 1-6
- Single piece cast aluminum body
- Staked valves
- Non-handed for left or right swinging doors
- Fast and easy installation
- Separate adjustable general speed, latch speed and backcheck
- Heat-treated forged steel piston
- Double heat-treated pinion
- Cover is high-impact UL Listed fire retardant plastic that meets UL 10C and UBC 7-2 (1997) fire test
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications

The Falcon SC71 is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally, the SC71 is rated ANSI/BHMA A156.4, Grade 1 and designed to meet the American Disabilities Act (ADA) and ANSI A117.1

SC70 Series Hinge (Pull Side)



Butt Hinges should not exceed 5" (127mm) in width.

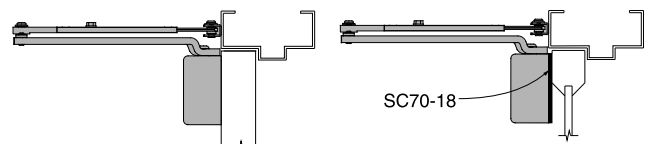
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Reveal should not exceed 3/4" (19mm) for regular arm or hold-open arm.

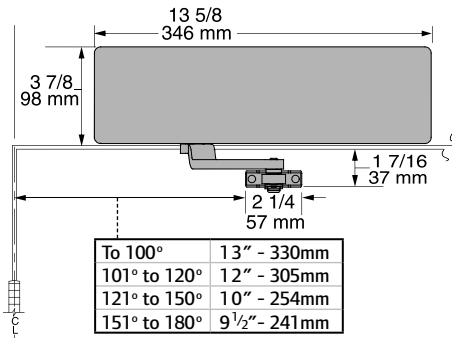
Top Rail less than 3 7/8" (98mm) requires plate SC70-18.

Clearance of 2 1/8" (54mm) behind door required for 90° installation.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC70 DEL). Delays closing from maximum opening to approx. 70°, with adjustable delay time.



SC70 Series Top Jamb (Push Side)



Butt Hinges should not exceed 5" (127mm) in width.

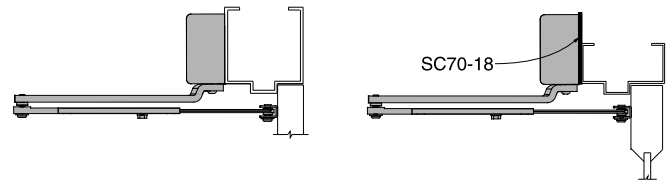
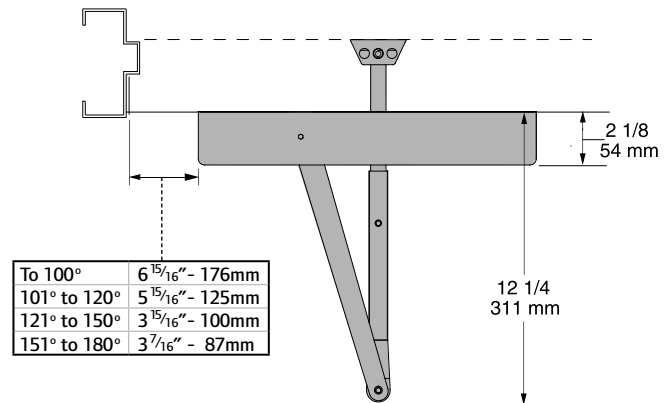
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Reveal should not exceed 3 1/4" (83mm) for regular arm or hold-open arm.

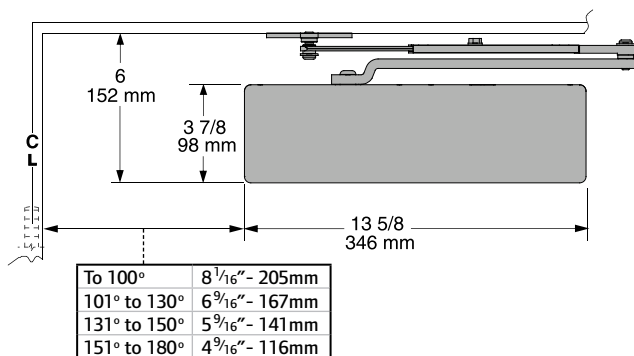
Top Rail of 1 1/2" (38mm) required.

Head Frame less than 3 7/8" (98mm) requires plate SC70-18.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC70 DEL). Delays closing from maximum opening to approx. 70°, with adjustable delay time.



SC70 Series Parallel (Push Side)

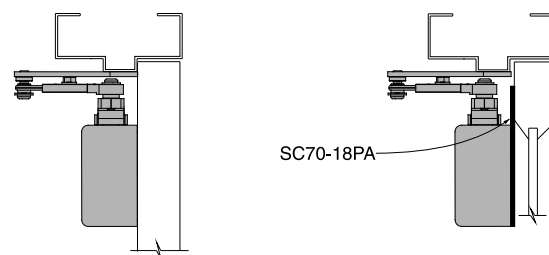
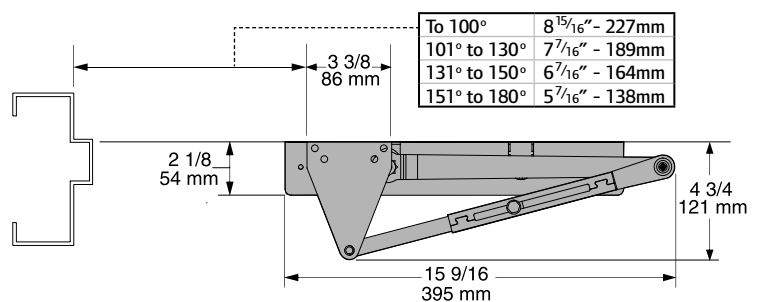


Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

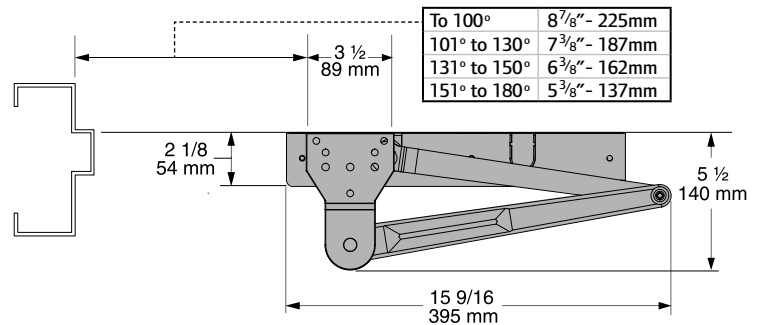
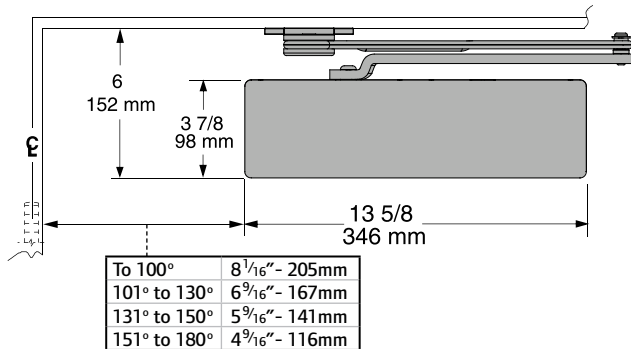
Top Rail less than 6" (152mm) measured from stop requires plate SC70-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC70 DEL). Delays closing from maximum opening to approx. 70°, with adjustable delay time.



SC70 SERIES ARCHITECTURAL DIAGRAMS

SC70 Series Heavy Duty (Parallel)

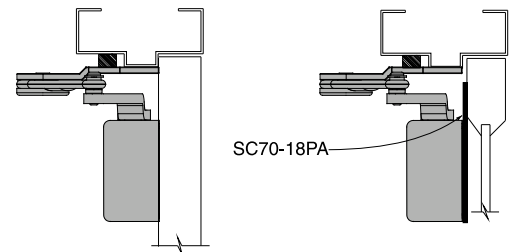


Butt Hinges should not exceed 5" (127mm) in width.

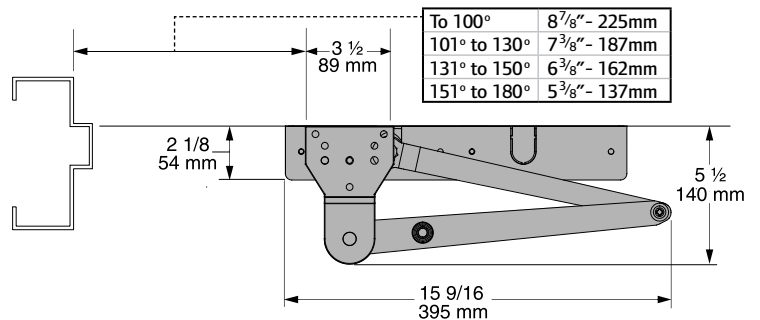
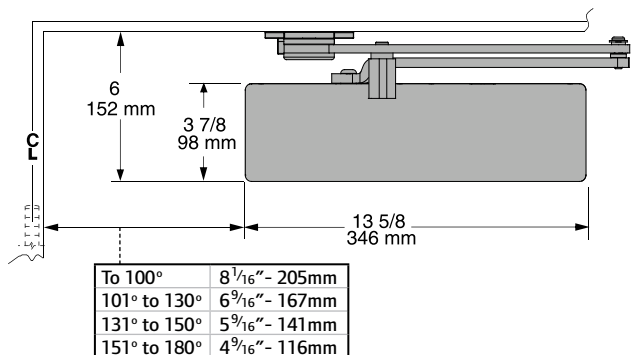
Auxiliary Stop is recommended at hold-open point, where a door cannot swing 180°, or where Dead Stop or Spring-n-Stop arm is not used.

Top Rail less than 6" (152mm) measured from stop requires plate SC70-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC70 DEL). Delays closing from maximum opening to approx. 70°, with adjustable delay time.



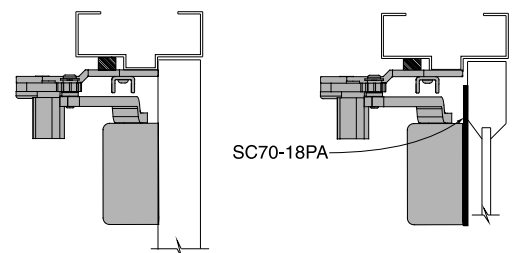
SC70 Series Dead Stop HO (Parallel)



Butt Hinges should not exceed 5" (127mm) in width.

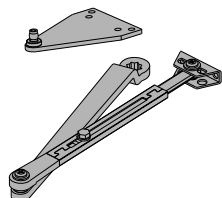
Top Rail less than 6" (152mm) measured from stop requires plate SC70-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC70 DEL). Delays closing from maximum opening to approx. 70°, with adjustable delay time.



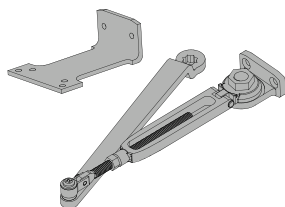
All SC70 Series closers come with full cover, standard arm and screw pack.

Arm Types



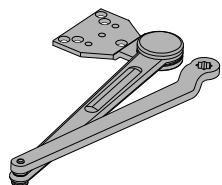
Regular Arm, SC70-3077PA

Non-handed arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.



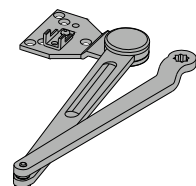
Hold-Open Arm, SC70-3049PA

Optional, non-handed, hold open arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.



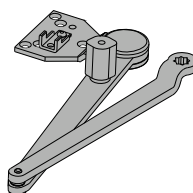
Heavy Duty Regular Arm, SC70-3077HD

Optional, non-handed, stamped, heavy duty, parallel arm for use in high-traffic applications.



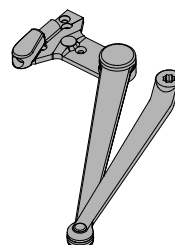
Dead Stop Arm, SC70-3077DS

Optional, non-handed, stamped, heavy duty, parallel arm includes a positive mechanical stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions.



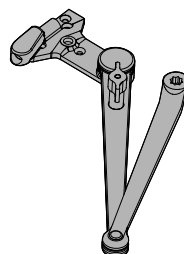
Dead Stop Hold-Open Arm, SC70-3049DS

Optional, non-handed, stamped, heavy duty, hold-open parallel arm includes a positive mechanical stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions. Also includes a manually selective hold-open function.



Spring-n-Stop Arm, SC70-3077SS

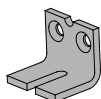
Optional, non-handed, extra heavy-duty, forged parallel arm includes an integral spring stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions.



Spring-n-Stop Hold-Open Arm, SC70-3049SS

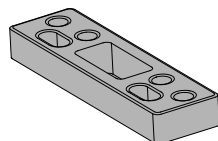
Optional, non-handed, extra heavy-duty, forged parallel arm includes an integral spring stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions. Also includes a manually selective hold-open function.

Installation Accessories



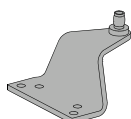
Soffit Shoe Support, SC70-30

Provides anchorage for fifth screw used with soffit shoe, where reveal is less than 3 1/16" (78mm).



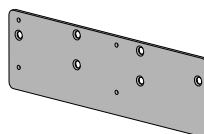
Blade Stop Spacer, SC70-61

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



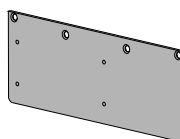
Auxiliary Shoe, SC70-62A

Requires a top rail of 7" (178mm). Optional shoe replaces PA shoe for parallel arm mounting of regular arm with overhead holder/stop.



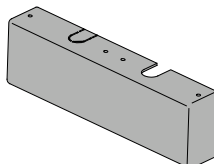
Plate, SC70-18

Required for hinge side mount where top rail is less than 3 7/8" (98mm). Required for top jamb mounting where head frame is less than 3 7/8" (98mm).



Plate, SC70-18PA

Required for parallel arm mounting where top rail is less than 6" (152 mm), measured from the stop. Plate requires 1 3/4" (44mm) minimum top rail measured from stop.

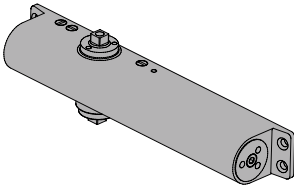


Cover, SC70-72

Standard, non-handed, full plastic cover encloses the closer body.

SC80 SERIES

ARCHITECTURAL DIAGRAMS



SC80 Series

Medium-duty applications like retail storefronts, cafes and clinics that need a closer that makes door operation smooth and secure. The Falcon SC80 Series brings ANSI Grade 1 durability and reliable performance to interior and exterior aluminum storefronts. An adjustable design ensures flexible installation and ADA compliance.

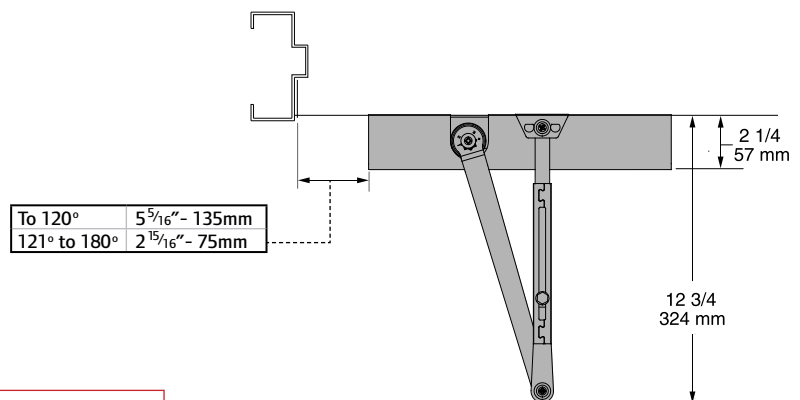
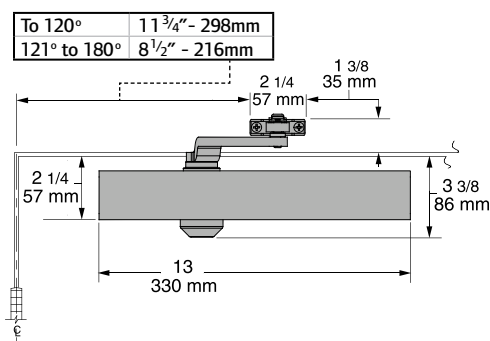
Standard Features

- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 1
- UL Listed
- 1 1/4" diameter piston
- Closer mounts hinge side, top jamb or parallel arm when either the Rw/PA or Hw/PA arm is specified.
- **New for 2009** - adjustable sizes 1-6
- Single piece cast aluminum body
- Non-handed for left or right swinging doors
- Separate adjustable general speed, latch speed and backcheck
- Heat-treated steel piston
- Heat-treated pinion
- Cover is high-impact UL Listed fire retardant plastic that meets UL 10C and UBC 7-2 (1997) fire test
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications

The Falcon SC81 is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally, the SC81 is designed to meet the American Disabilities Act (ADA) and ANSI A117.1. The SC81 is ANSI/BHMA A156.4, Grade 1 certified.

SC80 Series Hinge (Pull Side)



Butt Hinges should not exceed 5" (127mm) in width.

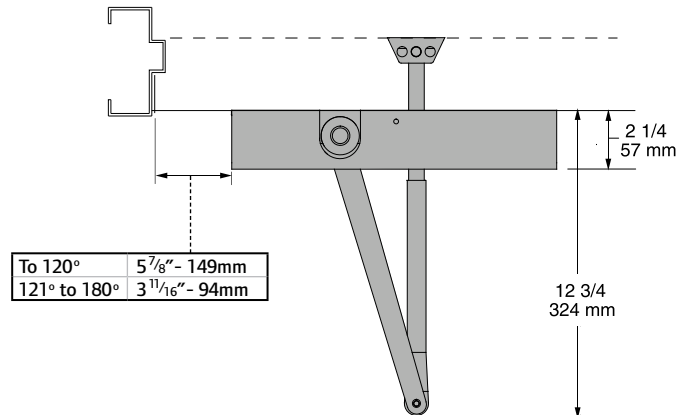
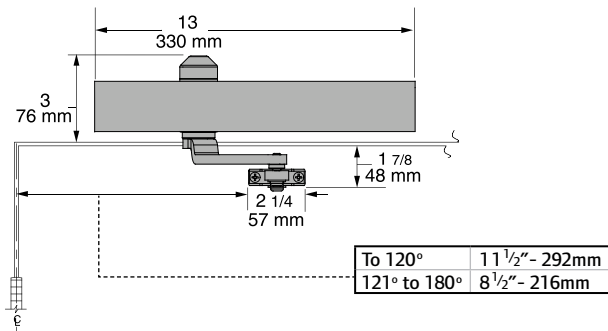
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Reveal should not exceed 3/4" (19mm) for regular arm or hold-open arm.

Clearance of 2 1/4" (57mm) behind door required for 90° installation.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC80 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.

SC80 Series Top Jamb (Push Side)



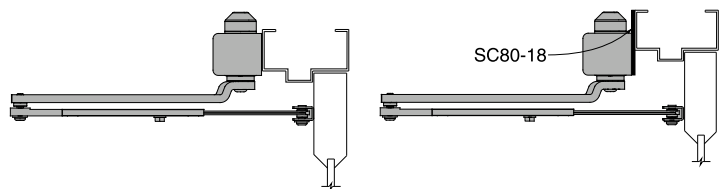
Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

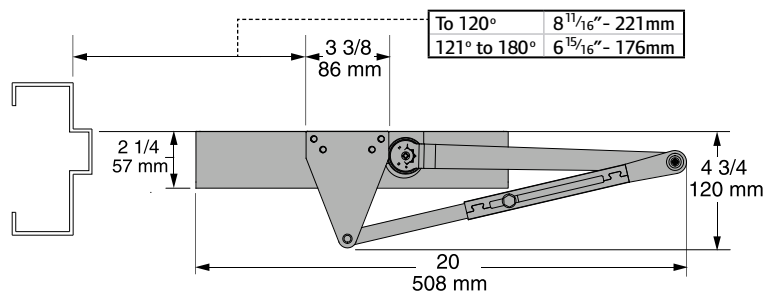
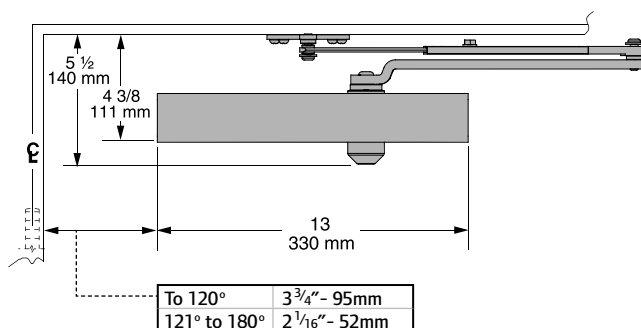
Reveal should not exceed 3 1/4" (83mm) for regular arm or hold-open arm.

Head Frame less than 1 3/4" (44mm) requires plate SC80-18.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC80 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



SC80 Series Parallel (Push Side)

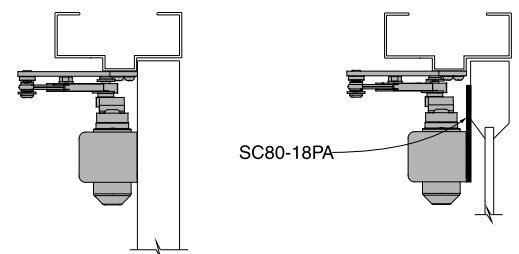


Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

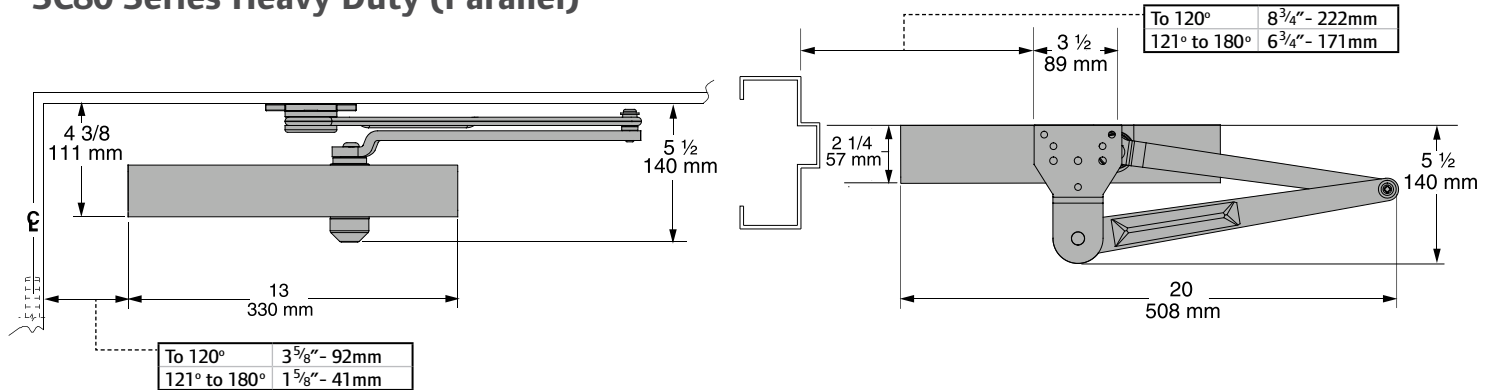
Top Rail less than 4 3/8" (111mm) measured from stop requires plate SC80-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC80 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



SC80 SERIES ARCHITECTURAL DIAGRAMS

SC80 Series Heavy Duty (Parallel)

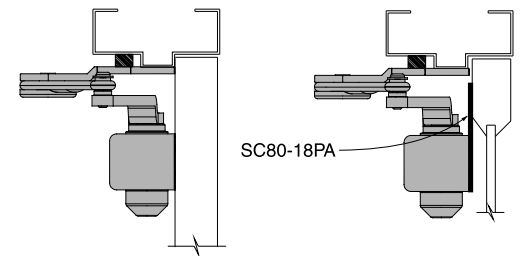


Butt Hinges should not exceed 5" (127mm) in width.

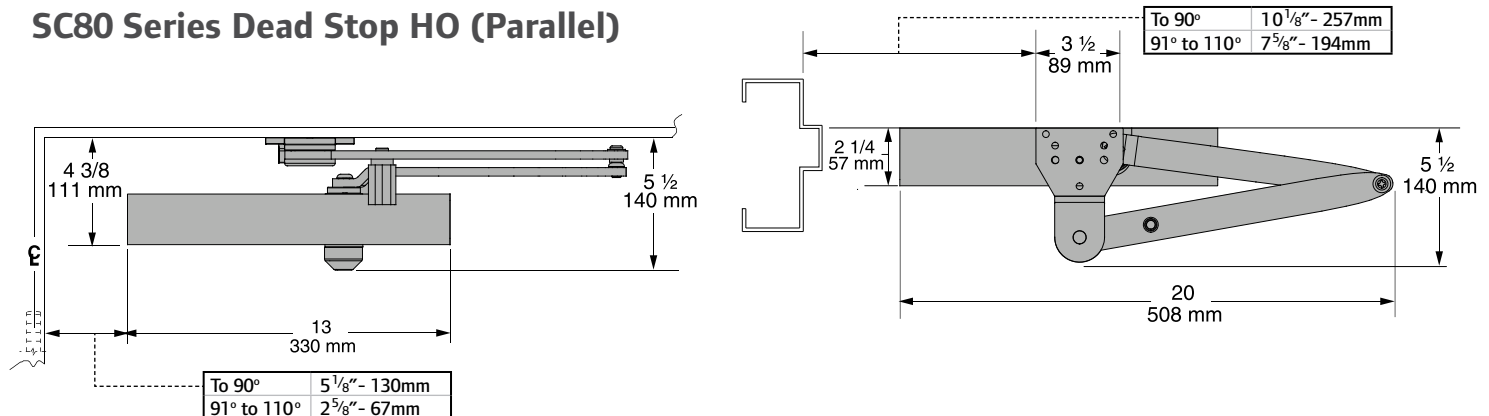
Auxiliary Stop is recommended at hold-open point, where a door cannot swing 180°, or where Dead Stop or Spring-n-Stop arm is not used.

Top Rail less than 4 3/8" (111mm) measured from stop requires plate SC80-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC80 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



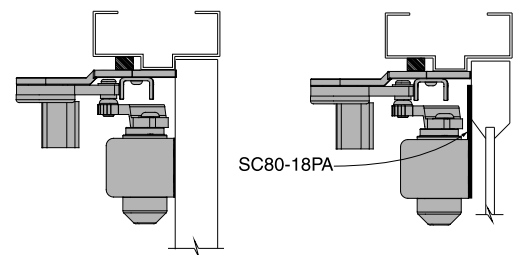
SC80 Series Dead Stop HO (Parallel)



Butt Hinges should not exceed 5" (127mm) in width.

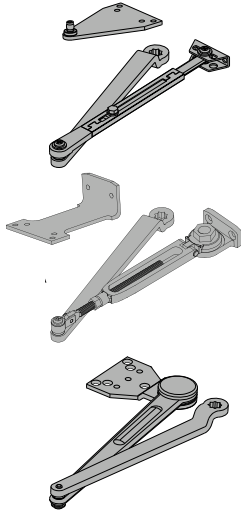
Top Rail less than 4 3/8" (111mm) measured from stop requires plate SC80-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC80 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



All SC80 Series closers come with slim cover, standard arm and screw pack.

Arm Types



Regular Arm, SC80-3077PA

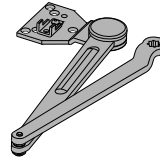
Non-handed arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.

Hold-Open Regular Arm, SC80-3049PA

Optional, non-handed, hold open arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.

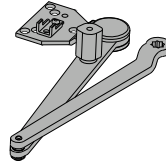
Heavy Duty Arm, SC80-3077HD

Optional, non-handed, stamped, heavy duty, parallel arm for use in high-traffic applications.



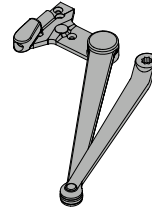
Dead Stop Arm, SC80-3077DS

Optional, non-handed, stamped, heavy duty, parallel arm includes a positive mechanical stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions.



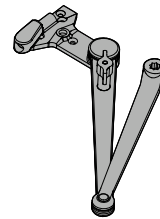
Dead Stop Hold-Open Arm, SC80-3049DS

Optional, non-handed, stamped, heavy duty, hold-open parallel arm includes a positive mechanical stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions. Also includes a manually selective hold-open function.



Spring-n-Stop Arm, SC80-3077SS

Optional, non-handed, extra heavy-duty, forged parallel arm includes an integral spring stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions.



Spring-n-Stop Hold-Open Arm, SC80-3049SS

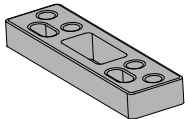
Optional, non-handed, extra heavy-duty, forged parallel arm includes an integral spring stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions. Also includes a manually selective hold-open function.

Installation Accessories



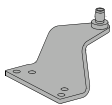
Soffit Shoe Support, SC80-30

Provides anchorage for fifth screw used with soffit shoe, where reveal is less than 3 1/16" (78mm).



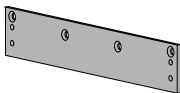
Blade Stop Spacer, SC80-61

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



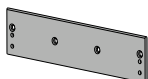
Auxiliary Shoe, SC80-62A

Requires a top rail of 7" (178mm). Optional shoe replaces PA shoe for parallel arm mounting of regular arm with overhead holder/stop.



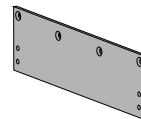
Plate, SC80-18

Required for top jamb mounting where head frame is less than 1 3/4" (44mm) or flush ceiling conditions exist.



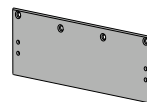
Plate, SC80-18FC

Required for top jamb mounting where head frame is less than 1 3/4" (44mm) or flush ceiling conditions exist. To be used with a full cover SC80-72FC.



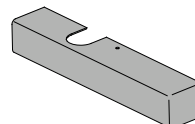
Plate, SC80-18PA

Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop. Plate requires 1 7/8" (48mm) minimum top rail measured from stop.



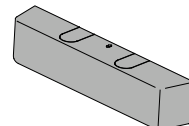
Plate, SC80-18PAFC

Required for parallel arm mounting where top rail is less than 4 3/8" (111mm), measured from the stop. Plate requires 1 7/8" (48mm) minimum top rail measured from stop. To be used with a full cover SC80-72FC.



Cover, SC80-72

Standard, non-handed, slim line plastic cover encloses the closer body with a cap on the unused pinion shaft.

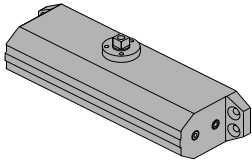


Cover, SC80-72FC

Optional non-handed, full plastic cover encloses the closer body.

SC60 SERIES

ARCHITECTURAL DIAGRAMS



SC60 Series

When you need a dependable closer for a light to medium-duty application, the Falcon SC60 Series gets the job done. Designed for interior use with an aluminum storefront, the SC60 Series offers ANSI Grade 1 durability backed by a ten-year warranty. Most common hole pattern in the industry for versatile use and easy retrofit.

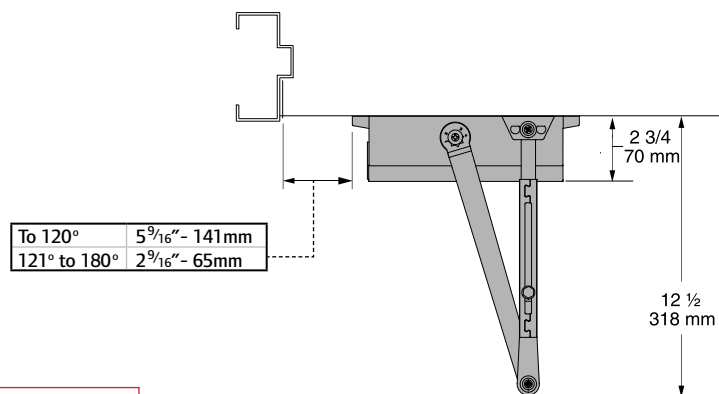
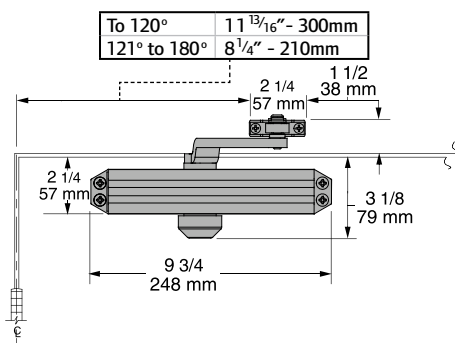
Standard Features

- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 1
- UL Listed
- 1³/₈" diameter piston
- Closer mounts hinge side, top jamb or parallel arm when either the Rw/PA or Hw/PA arm is specified.
- Adjustable sizes 1-4 (SC61), 2-5 (SC60), and fixed sizes 4 & 5.
- Single piece cast aluminum body
- Staked valves
- Non-handed for left or right swinging doors
- Separate adjustable general speed, latch speed and backcheck
- Heat-treated steel piston
- Heat-treated pinion
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications

The Falcon SC60 Series is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally, the SC61 is designed to meet the American Disabilities Act (ADA) and ANSI A117.1. The SC60 Series is ANSI/BHMA A156.4, Grade 1 certified.

SC60 Series Hinge (Pull Side)



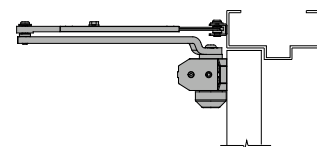
Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

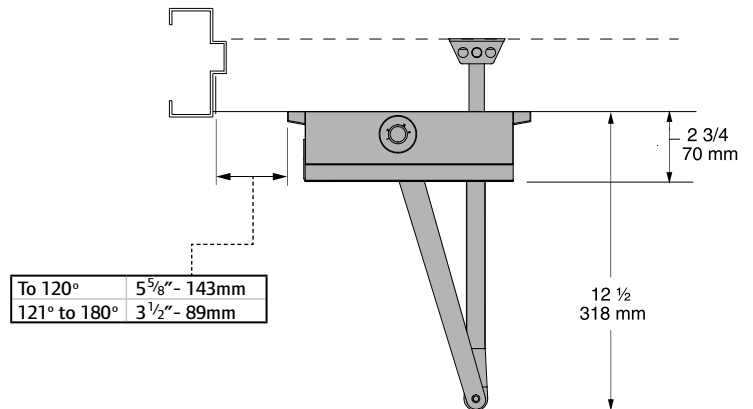
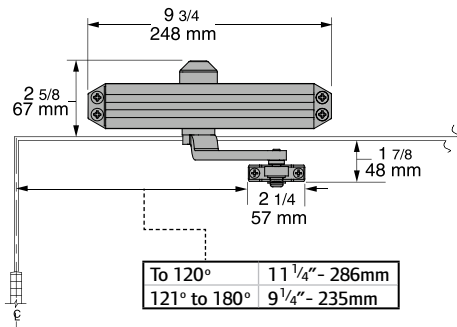
Reveal should not exceed 3/4" (19mm) for regular arm or hold-open arm.

Clearance of 2 3/4" (70mm) behind door required for 90° installation.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC60 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



SC60 Series Top Jamb (Push Side)



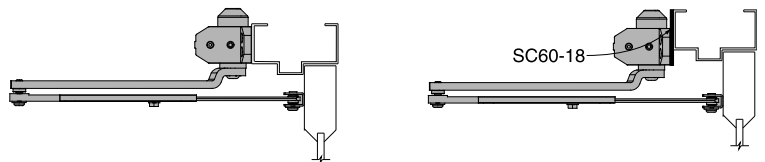
Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

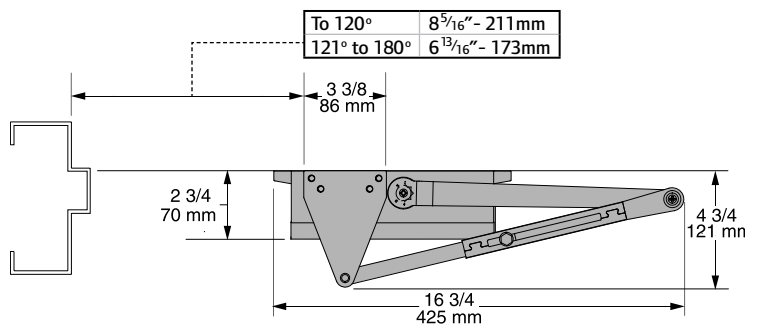
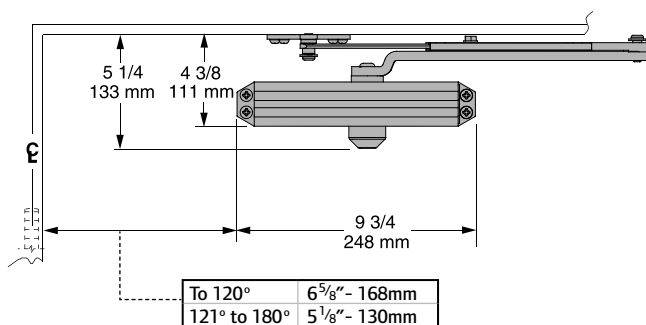
Reveal should not exceed 3 1/4" (83mm) for regular arm or hold-open arm.

Head Frame less than 1 3/4" (44mm) requires plate SC60-18.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC60 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



SC60 Series Parallel (Push Side)

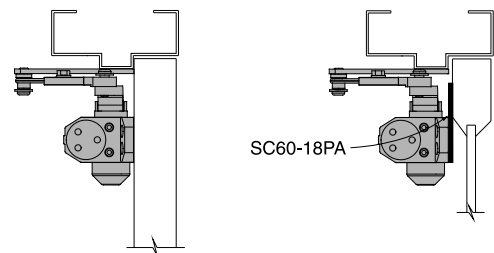


Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

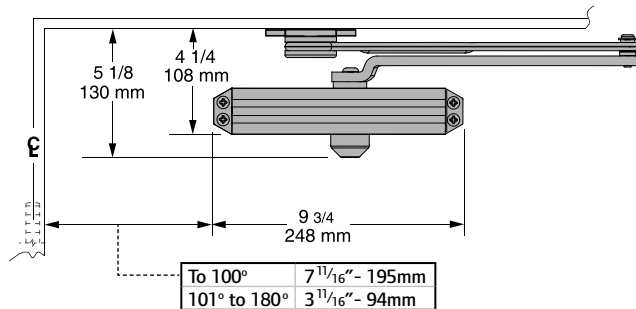
Top Rail less than 4 3/8" (111mm) measured from stop requires plate SC60-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC60 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



SC60 SERIES ARCHITECTURAL DIAGRAMS

SC60 Series Heavy Duty (Parallel)

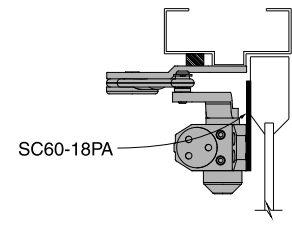
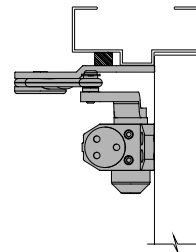
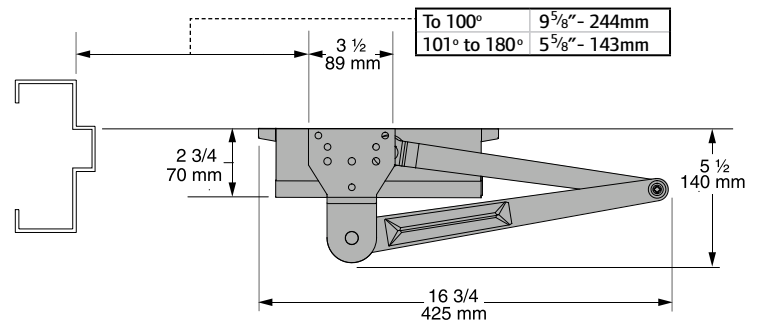


Butt Hinges should not exceed 5" (127mm) in width.

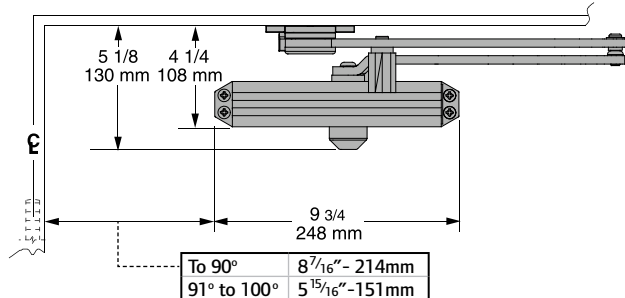
Auxiliary Stop is recommended at hold-open point, where a door cannot swing 180°, or where Dead Stop or Spring-n-Stop arm is not used.

Top Rail less than 4 1/4" (108mm) measured from stop requires plate SC60-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC60 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



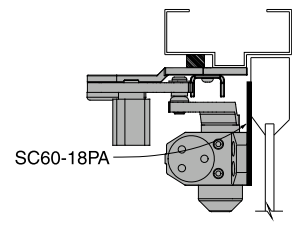
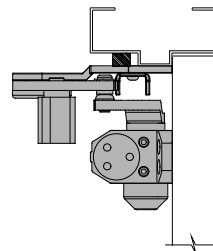
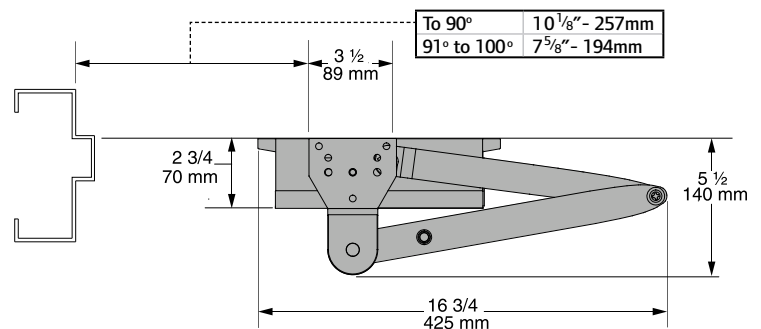
SC60 Series Dead Stop HO (Parallel)



Butt Hinges should not exceed 5" (127mm) in width.

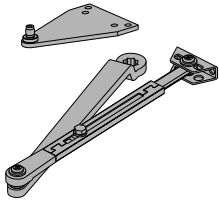
Top Rail less than 4 1/4" (108mm) measured from stop requires plate SC60-18PA.

Delayed Action add suffix "DEL" to selected cylinder (ex. SC60 DEL). Delays closing from maximum opening to approximately 70°, with adjustable delay time.



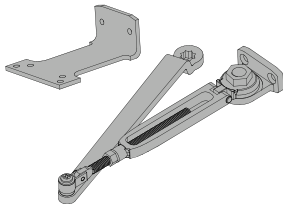
All SC60 Series closers come with standard arm and screw pack.

Arm Types



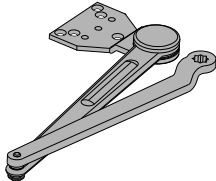
Regular Arm, SC60-3077PA

Non-handed arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.



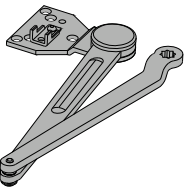
Hold-Open Arm, SC60-3049PA

Optional, non-handed, hold open arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.



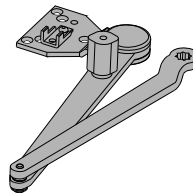
Heavy Duty Regular Arm, SC60-3077HD

Optional, non-handed, stamped, heavy duty, parallel arm for use in high-traffic applications.



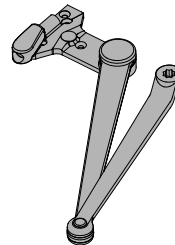
Dead Stop Arm, SC60-3077DS

Optional, non-handed, stamped, heavy duty, parallel arm includes a positive mechanical stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions.



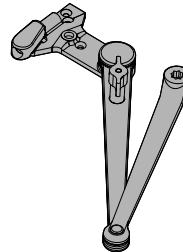
Dead Stop Hold-Open Arm, SC60-3049DS

Optional, non-handed, stamped, heavy duty, hold-open parallel arm includes a positive mechanical stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions. Also includes a manually selective hold-open function.



Spring-n-Stop Arm, SC60-3077SS

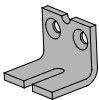
Optional, non-handed, extra heavy-duty, forged parallel arm includes an integral spring stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions.



Spring-n-Stop Hold-Open Arm, SC60-3049SS

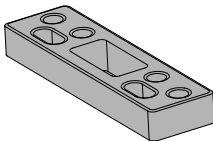
Optional, non-handed, extra heavy-duty, forged parallel arm includes an integral spring stop and non-adjustable forearm assembly for high volume traffic or potentially abusive installation conditions. Also includes a manually selective hold-open function.

Installation Accessories



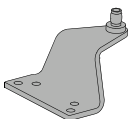
Soffit Shoe Support, SC60-30

Provides anchorage for fifth screw used with soffit shoe, where reveal is less than $3\frac{1}{16}$ " (78mm).



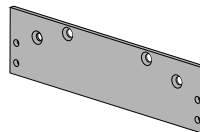
Blade Stop Spacer, SC60-61

Required to lower parallel arm shoe to clear $\frac{1}{2}$ " (13mm) blade stop.



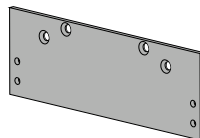
Auxiliary Shoe, SC60-62A

Requires a top rail of 7" (178mm). Optional shoe replaces PA shoe for parallel arm mounting of regular arm with overhead holder/stop.



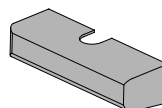
Plate, SC60-18

Required for top jamb mounting where head frame is less than $1\frac{3}{4}$ " (44mm).



Plate, SC60-18PA

Required for parallel arm mounting where top rail is less than $4\frac{3}{8}$ " (111mm) for PA, $4\frac{1}{4}$ " (108mm) for HD and DS, measured from the stop. Plate requires $2\frac{3}{8}$ " (60mm) minimum top rail measured from stop.

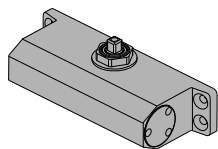


Cover, SC60-72

Optional, non-handed, slim line plastic cover. Available on SC60 and SC61 only.

SC90 SERIES

ARCHITECTURAL DIAGRAMS



SC90 Series

Designed for light-duty interior applications the Falcon SC90 closer ensures smooth, reliable operation, while meeting ADA accessibility requirements. The SC90 is backed by a ten-year warranty and is preset for easy installation.

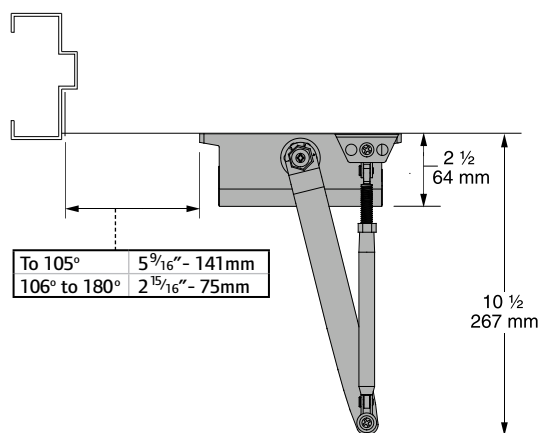
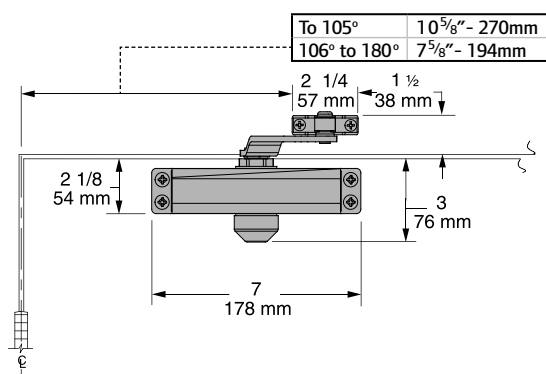
Standard Features

- Meets ANSI A117.1
- ANSI/BHMA A156.4, Grade 3
- UL Listed
- Closer mounts hinge side, top jamb or parallel arm when either the Rw/PA or Hw/PA arm is specified.
- Fixed sizes 1, 3 & 4
- Single piece cast aluminum body
- Non-handed for left or right swinging doors
- Separate adjustable general speed and latch speed
- Heat-treated steel piston
- Heat-treated pinion
- UL 10C approved fluid
- Universal screw pack
- 10-year warranty

Listings and Certifications

The Falcon SC90 Series is UL approved and compliant with the UL 10C and UBC 7-2 (1997) fire test. Additionally the SC90 Series is designed to meet the American Disabilities Act (ADA) and ANSI A117.1. The SC90 Series is ANSI/BHMA A156.4, Grade 3 certified.

SC91 Hinge (Pull Side)

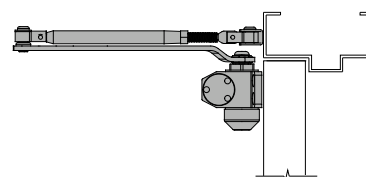


Butt Hinges should not exceed 5" (127mm) in width.

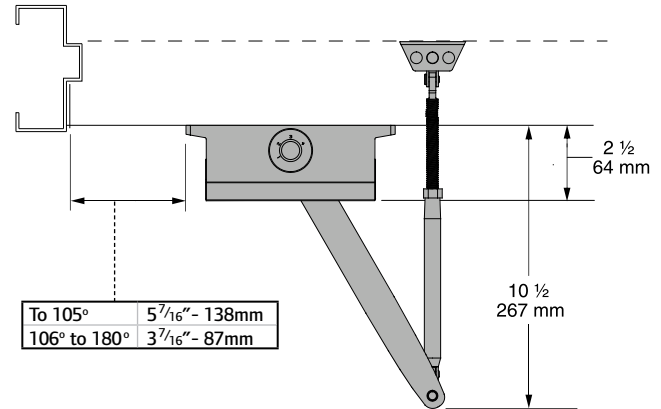
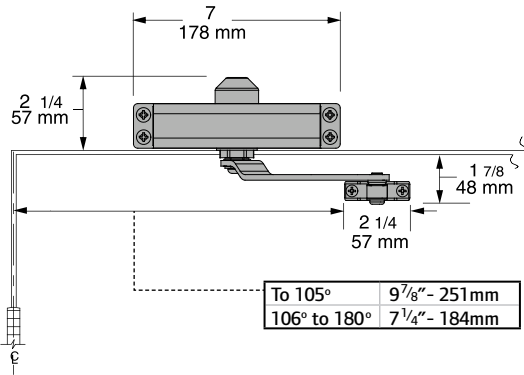
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Reveal should not exceed 3/4" (19mm) for regular arm or hold-open arm.

Clearance of 2 1/2" (64mm) behind door required for 90° installation.



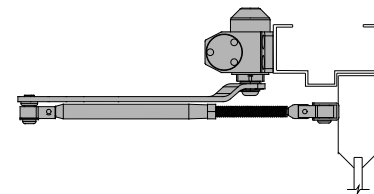
SC91 Top Jamb (Push Side)



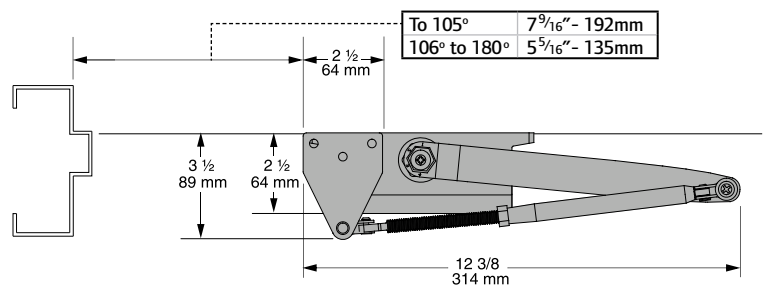
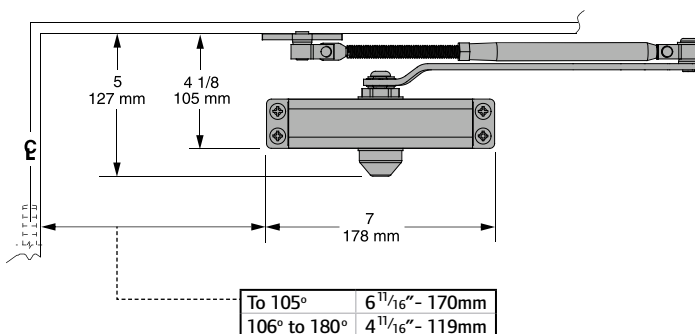
Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Reveal should not exceed 3 1/4" (83mm) for regular arm or hold-open arm.

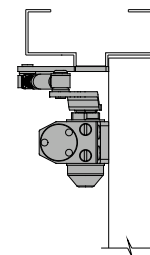


SC91 Parallel (Push Side)



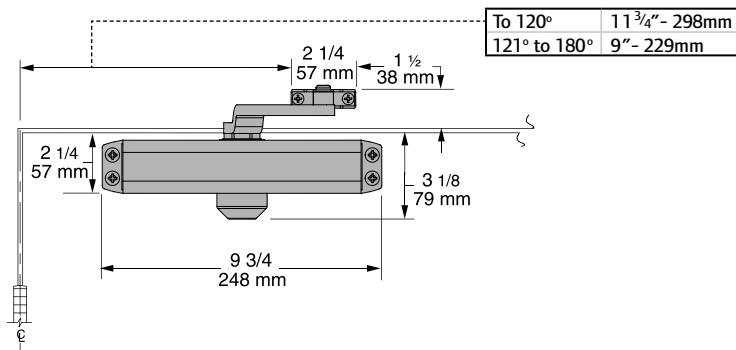
Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.



SC90 SERIES ARCHITECTURAL DIAGRAMS

SC93/94 Hinge (Pull Side)



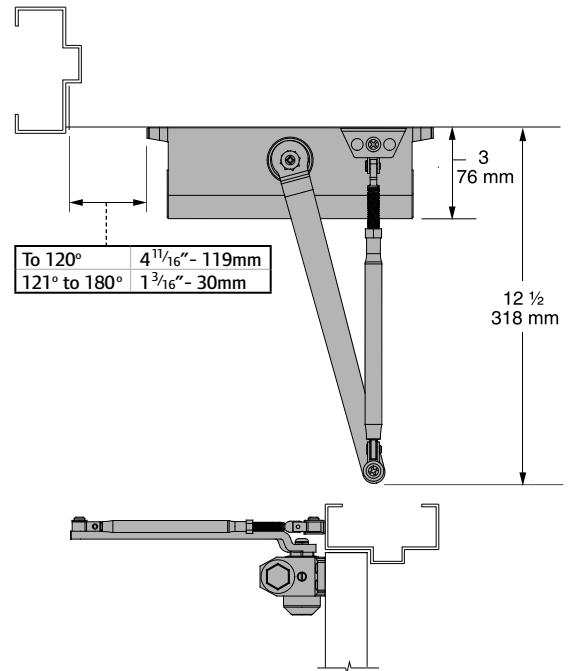
Butt Hinges should not exceed 5" (127mm) in width.

Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

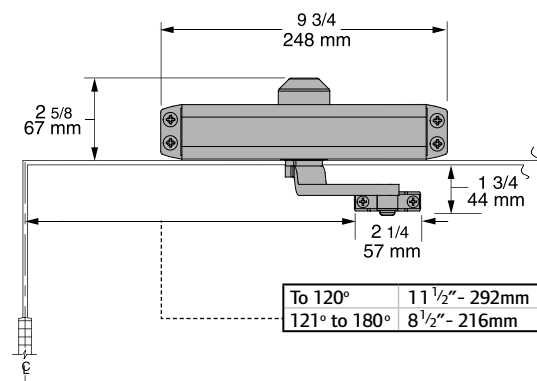
Reveal should not exceed 3/4" (19mm) for regular arm or hold-open arm.

Clearance of 3" (76mm) behind door required for 90° installation.

Backcheck closer with the backcheck option requires 105° mounting.



SC93/94 Top Jamb (Push Side)

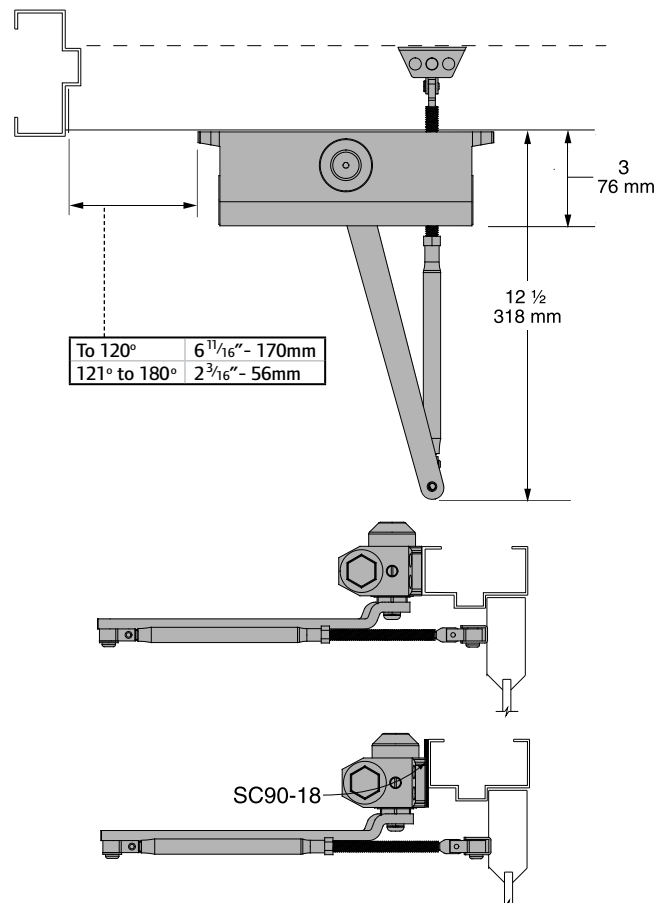


Butt Hinges should not exceed 5" (127mm) in width.

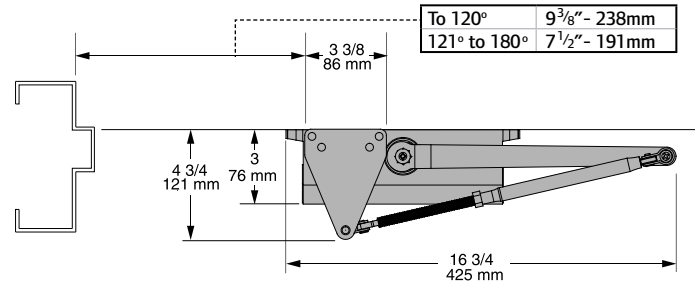
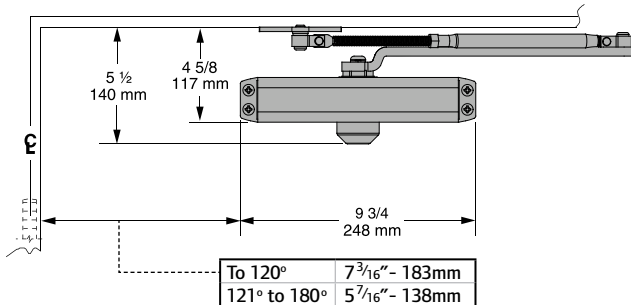
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Reveal should not exceed 3 1/4" (83mm) for regular arm or hold-open arm.

Backcheck closer with the backcheck option requires 105° mounting.



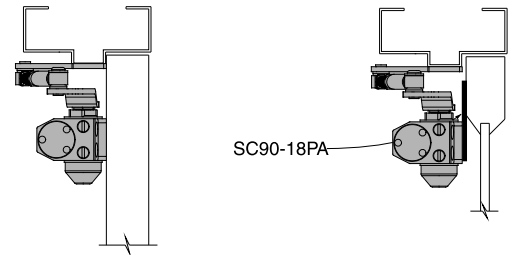
SC93/94 Parallel (Push Side)



Butt Hinges should not exceed 5" (127mm) in width.

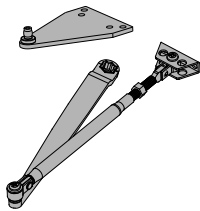
Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.

Backcheck closer with the backcheck option requires 105° mounting.



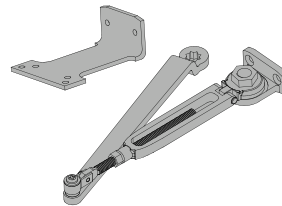
All SC90 Series closers come with standard arm and screw pack.

Arm Types



Regular Arm, SC90-3077PA

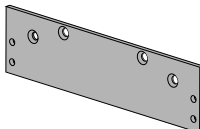
Non-handed arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.



Hold-Open Arm, SC90-3049PA

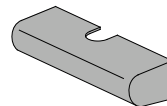
Optional, non-handed, hold open arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. Mounts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.

Installation Accessories



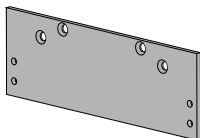
Plate, SC90-18

Required for top jamb mounting where head frame is less than 1 3/4" (44mm) or flush ceiling conditions exists. Available only with SC93/94.



Cover, SC90-72

Optional non-handed, slim plastic cover. Available only with SC93/94.



Plate, SC90-18PA

Required for parallel arm mounting where top rail is less than 4 5/8" (117 mm), measured from the stop. Plate requires 2 1/8" (54mm) minimum top rail measured from stop. Available only with SC93/94.

OHC100 SERIES

ARCHITECTURAL DIAGRAMS

OHC100 Series

Overhead concealed closers control door opening and closing, while providing an aesthetically pleasing design option for both interior and exterior use. The Falcon OHC100 Series is used with aluminum doors and frames, providing years of maintenance-free performance.

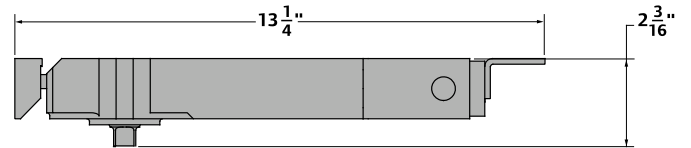
Standard Features

- Cast iron construction ensures lasting durability
- Fits inside standard aluminum frame header for improved aesthetics and increased security.
- 90° and 105° standard opening with optional hold-open
- Two size options available:
 - Fixed size 3 (OHC100 only)
 - Adjustable sizes 2-4 (OHC100A only)
- 5-year warranty

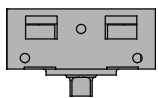
Top View



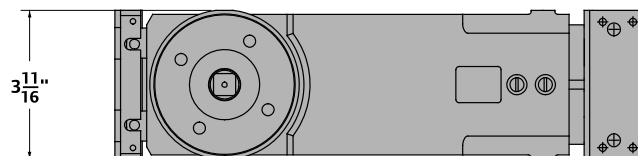
Side View



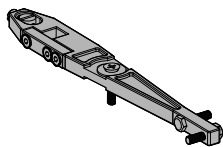
End View



Bottom View

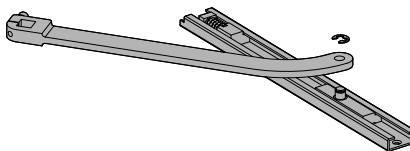


Installation Accessories



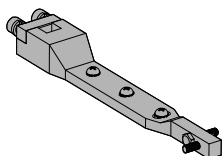
"S" Arm, OHC100-SL, OHC100A-SL

Non-handed arm, side load, center hung, steel forge.



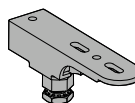
"VO" Arm, OHC100-VO, OHC100A-VO

Non-handed arm, offset arm w/ slide channel, steel forge.



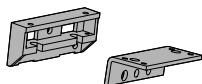
"A" Arm, OHC100-EL, OHC100A-EL

Non-handed arm, end load, center hung, steel forge.



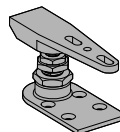
"GE" Pivots, OHC100-GE, OHC100A-GE

Non-handed, adjustable height, center hung, used with side load arm.



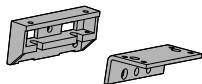
"FK" Mounting Brackets, OHC100-FK

Provides anchorage for fixed size cylinder to the door frame.



"DP" Pivots, OHC100-DP, OHC100A-DP

Non-handed, adjustable height, center hung, used with end load arm.



"AFK" Mounting Brackets, OHC100A-FK

Provides anchorage for adjustable size cylinder to the door frame.



Introducing the automatic operator that changes everything.



Beauty, value and versatility are now automatic.

When you need a smart solution to improve accessibility the new Falcon 8200 Series fits perfectly. Designed for applications like assisted living and ambulatory care, where ease of use is critical, the Falcon automatic operator provides dependable performance at an affordable price point. Everything you need is right in the box, making installation quick and simple. All necessary features are built right in, so configuring the closer is simple and you can easily make more openings more accessible than ever.



Designed to fit perfectly.

The small footprint and elegant design of the Falcon 8200 Series make it a perfect solution for a range of applications.

- Assisted living
- Hospitality
- Retail
- Small office
- Restaurants
- Ambulatory care



Steel aluminum finished cover makes the 8200 Series aesthetically pleasing for any application.

One-piece mounting bracket eliminates the need for end caps, reducing parts and installation time.

Intelligent control box provides the most precise door operation and includes adjustable features for all commercial applications.








Non-handed motor gearbox uses mechanical controls to act as a size 3 door closer in manual operation.

Mounting bracket contains fastening notches to reduce parts and allow for faster and easier installation.

8200 SERIES AUTOMATIC OPERATOR

8200 Series

The new Falcon 8200 Series automatic operator ensures smooth, convenient door opening for areas requiring easy accessibility and ADA compliance. This versatile device can also be easily integrated into electrified openings with our wireless accessory offering. Choose the 8231 for pull side or the 8242 for push side installation.

-  **SmartLatch** – Senses and overcomes external pressure conditions with a graduated energy assist for secure latching.
-  **Push ‘n’ Go** – Selectable feature allows door to open automatically as soon as it feels pressure.
-  **Open Position Learning** – Automatically sets the opening position to eliminate wall and door damage.
-  **Obstacle Obstruction Detection** – Safety feature stops and reverses door direction when distress or an obstruction is sensed.
-  **Pre-Load Strike Assist** – Removes load on strike lip with a one second delay allowing the door to release and automatically open.
-  **LED Light Illumination** – Light illumination on control box signals accurate installation and helps with connection diagnostics.
-  **On Board Power Supply (12 VAC)** – Powers the accessories without the need to install an external power supply.

Specifications

Header Length	26"
Mounting	Surface Mount
Handing	Non-handed
Cycle Tested	1 million gear box
Door weight	200 pounds

Consult technical services for use on doors over 200 lbs.

Adjustable features:

Hold-open time delay	Backcheck speed
Backcheck/latch position	Opening/closing speed

Actuators & Accessories



6" Round – Text with Logo

8310-852T	Push Plate, Wall Mount
8310-869F	Mounting Box, Flush
8310-869S	Mounting Box, Surface
8310-802	Weather Ring

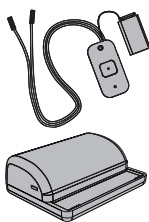
8310-852T shown



1 1/2" x 4 3/4" Jamb – Text with Logo

8310-818T	Push Plate, Jamb Mount
8310-819F	Mounting Box, Flush
8310-819S	Mounting Box, Surface

8310-818T shown



Wireless Transmitters & Receiver

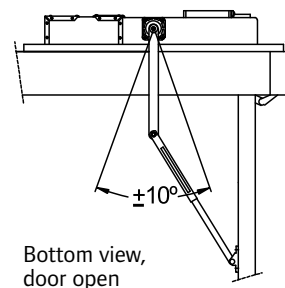
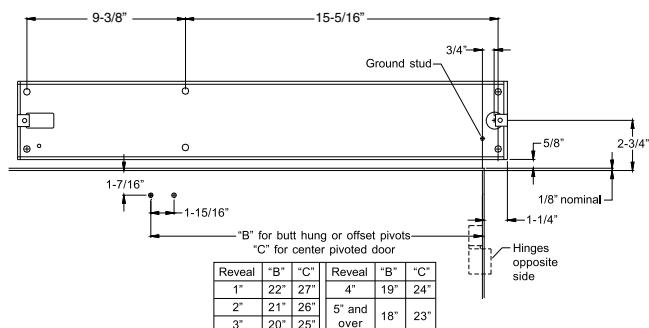
8310-844 Transmitter, Wall Mount (To be used with 6" round wall mounted actuator)
8310-844J Transmitter, Jamb Mount (To be used with 1 1/2" x 4 3/4" jamb actuator)
8310-861 Transmitter, Handheld (Single button wireless handheld transmitter)
8310-865 Receiver (Wireless receiver with sequencing function)

8310-844J and 8310-865 shown

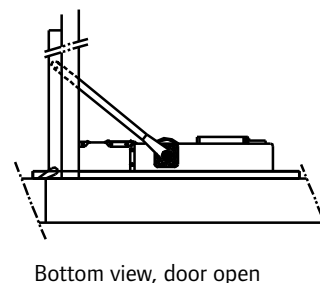
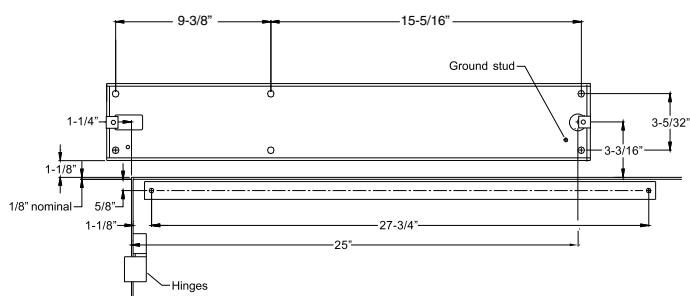
8200 SERIES AUTOMATIC OPERATOR

FALCON

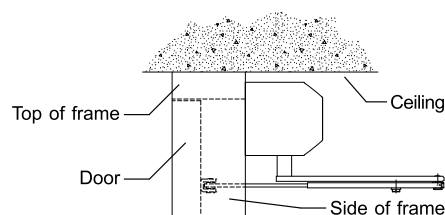
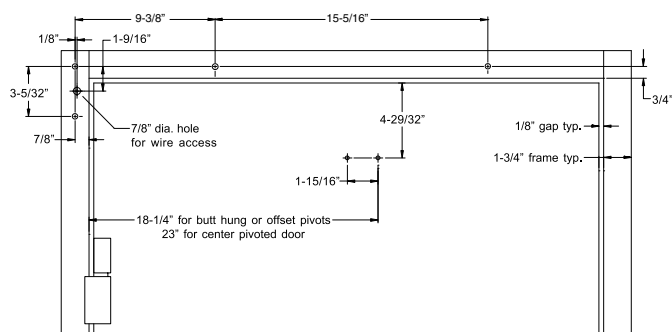
26" Push System



26" Pull System



26" Drop System (Push System only)



HOW TO ORDER

How to Order 8200 Series

STD Standard

3

Full 26"

Aluminum

Push 8242
Pull 8231

Order Separate 8310-XXX

Cylinder Size Cover Finish Arm Accessories

HOW TO ORDER

How to Order SC60 Series

How to Order SC60 Series		Cylinder	Size	Cover	Finish	Arm	Accessories
STD	Standard						
DEL	Delay (optional, available with SC60/61 only, please specify)						
1-4	SC61						
2-5	SC60						
4	SC64						
5	SC65						
Slim	SC60-72 (optional, available with SC60/61 only, please specify)						
Aluminum							
Dark Bronze							
Brass (Available as an option only. Contact Customer Service at 1-800-266-4456 for more information.)							
Rw/PA	Regular with Parallel Arm Shoe						
Hw/PA	Hold Open with Parallel Arm Shoe						
HD	Heavy Duty Arm						
DS	Dead Stop Arm						
DS/HO	Dead Stop Hold Open Arm						
SS	Spring Stop Arm						
SS/HO	Spring Stop Hold Open Arm						
Soffit Shoe Support	SC60-30						
Blade Stop Spacer	SC60-61						
Auxiliary Shoe	SC60-62A						
Plate	SC60-18						
Plate PA	SC60-18PA						

How to Order SC70 Series

How to Order SC70 Series		Cylinder	Size	Cover	Finish	Arm	Accessories
STD	Standard						
DEL	Delay						
1-6	SC71						
Full	SC70-72						
Aluminum							
Dark Bronze							
Brass (Available as an option only. Contact Customer Service at 1-800-266-4456 for more information.)							
Rw/PA	Regular with Parallel Arm Shoe						
Hw/PA	Hold Open with Parallel Arm Shoe						
HD	Heavy Duty Arm						
DS	Dead Stop Arm						
DS/HO	Dead Stop Hold Open Arm						
SS	Spring Stop Arm						
SS/HO	Spring Stop Hold Open Arm						
Soffit Shoe Support	SC70-30						
Blade Stop Spacer	SC70-61						
Auxiliary Shoe	SC70-62A						
Plate	SC70-18						
Plate PA	SC70-18PA						

How to Order SC80 Series

		Cylinder	Size	Cover	Finish	Arm	Accessories
STD	Standard						
DEL	Delay						
1-6	SC81						
Slim	SC80-72						
Full	SC80-72FC (optional, please specify)						
Aluminum							
Dark Bronze							
Brass	(Available as an option only. Contact Customer Service at 1-800-266-4456 for more information.)						
Rw/PA	Regular with Parallel Arm Shoe						
Hw/PA	Hold Open with Parallel Arm Shoe						
HD	Heavy Duty Arm						
DS	Dead Stop Arm						
DS/HO	Dead Stop Hold Open Arm						
SS	Spring Stop Arm						
SS/HO	Spring Stop Hold Open Arm						
Soffit Shoe Support	SC80-30						
Blade Stop Spacer	SC80-61						
Auxiliary Shoe	SC80-62A						
Plate	SC80-18						
Plate - Full Cover	SC80-18FC						
Plate PA	SC80-18PA						
Plate PA - Full Cover	SC80-18PAFC						

How to Order SC90 Series

		Cylinder	Size	Cover	Finish	Arm	Accessories
STD	Standard						
1	SC91						
3	SC93						
4	SC94						
Full	SC90-72 (optional, available with SC93/94 only, please specify)						
Aluminum							
Dark Bronze							
Brass	(Available as an option only. Contact Customer Service at 1-800-266-4456 for more information.)						
Rw/PA	Regular with Parallel Arm Shoe						
Hw/PA	Hold Open with Parallel Arm Shoe						
Plate	SC90-18 (available with SC93/94 only)						
Plate PA	SC90-18PA (available with SC93/94 only)						

How to Order OHC100 Series

				Cylinder	Size	Arm Finish	Arm	Accessories
STD 90°	Standard	STD 105°	Standard					
HO 90°	Hold Open	HO 105°	Hold Open					
3	OHC100	Fixed						
2-4	OHC100A	Adjustable						
Aluminum								
Dark Bronze								
S	Side Load Arm							
A	End Load Arm							
VO	Offset Arm and Track							
FK Bracket								
AFK Bracket								
GE Pivot	(not available with VO arm type)							
DP Pivot	(not available with VO arm type)							

COMPETITIVE CROSS REFERENCE AND SAMPLE SPECIFICATIONS

Competitive Cross Reference

Surface Closer Cross Reference				
Dor-O-Matic	SC71 ¹	SC80 ² , SC81 ²	SC60 ³ , SC61 ³	SC94 ⁴ , SC91
Corbin	DC6000	3210M76 (3210)		4604M70
Dorma	8916	86162 ²	640BCPA ³ /7302 ³	644BCPA ⁴ /7203
Norton	7500 ¹ /7700	P8300 (P8500) ²	P1600BC ³	P9304BC ⁴
Sargent	351	1430/1330 ²	11303 ³	
Stanley	D-4550	D-3550	1650	
Yale	P400	P3300 (P3500) ²	P51BC ³	P2304BC ⁴

¹Indicates identical footprint, ²Indicates identical footprint, ³Indicates identical footprint,

⁴Indicates identical footprint

Concealed Closer Cross Reference	
Dor-O-Matic	OHC100 Series
Dorma	RTS88
Global	TC7000
International	Series 100 and Series 200
Jackson	20-330
Kawneer	Husky II
Rixson	608, 0608, 700, 0700, 800
Sentinel	30 Series
Stanley	30 Series

Sample Specifications

Large Cylinder Closer

2.01 Closers and Door Control Devices

- A. Where manual closers are indicated for doors required to be accessible to the physically challenged, provide adjustable units complying with ANSI A117.1 provisions for door opening force and delayed action closing.
- B. Shall conform to ANSI A156.4, Grade 1, NFPA 80, NFPA 101 and UL10C.
- C. Closers shall be aluminum construction with steel lever arms, independent adjusting valves for closing, latching and back check. Hydraulic regulation controlled by tamper-proof, non-critical screw valves. All closer adjustments shall be shielded by plastic cover after installation. Pressure relief valve, PRV, doors closers will not be permitted.
- D. Full rack-and-pinion type closer, single-piece forged piston, chrome silicon steel spring, non-critical screw valves; backcheck, main speed and latch.
- E. Closers to be non-sized, field adjustable from size 1 to 6.
- F. Furnish all large cylinder non-sized closers with minimum 1 ½" diameter piston.
- G. Install closers to allow maximum degree of opening, position backcheck to activate well in advance of the stop position to cushion the swing and prevent door and frame damage. Do not use door closer to stop door travel. Unless specified, install closers with thru-bolt mounting method on metal and wood doors. Do not thru bolt if there has been special blocking specified in the wood door specification. Coordinate with the wood door specification.
- H. Available manufacturers: Subject to compliance with requirements. See competitive cross reference above.

Cylinder Options

Standard Cylinder (STD) – Standard cylinder provides a main speed function to control the motion of the door from maximum opening angle until the door is a few inches from the latch where latch function controls the final closing motion. The opening swing is controlled by the hydraulic backcheck function from about 70° to maximum opening angle.

Delayed Action Cylinder – Special cylinder provides a separate adjustable delayed closing motion from maximum opening angle to approximately 70°. Then the main speed function controls the door motion until the door is a few inches from the latch where latch function controls the final closing motion. During the opening swing the door is controlled by the hydraulic backcheck function from about 70° to maximum opening angle.

WARRANTY

Falcon Door Hardware warrants its mechanical offering of locks, exit devices and door controls products manufactured to be free from defects in materials and workmanship for a period of **TEN (10) YEARS** from the date of manufacture with the exception of the products detailed in the table below. The terms and conditions of this new warranty apply to Falcon Door Hardware shipments made on or after November 1st, 2008.

This limited warranty does not cover products that (i) are not the proper size for the application; (ii) are not installed in accordance with Falcon's published installation instructions; (iii) are installed with improper or incorrect parts; (iv) have been, in the opinion of Falcon, modified, repaired, or altered in any way without the express written consent of Falcon; (v) are used for purposes which they are not designed or intended; (vi) are subjected to misuse, abuse, negligence, or accident; or (vii) are grade 2 products used in educational facilities. The following costs and expenses are not covered by the provisions of this limited warranty; (i) labor costs for the removal and reinstallation of products; (ii) shipping and freight expenses required to return products to Falcon; (iii) normal maintenance; and (iv) economic losses. **THE PREVISIONS OF THIS WARRANTY DO NOT APPLY TO FINISHES.**

Falcon will replace the products which, in the opinion of Falcon, are found to be defective, provided said products are returned to Falcon.

FALCON SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES FOR ANY CLAIM WHETHER BASED ON CONTRACT; WARRANTY, TORT (INCLUDING, BUT NOT LIMITED TO, STRICT LIABILITY OR NEGLIGENCE), PATENT INFRINGEMENT, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This limited warranty is in place of all other warranties, expressed or implied, and excludes any warranties of fitness for a particular purpose or merchantability. No agent, representative, dealer, or employee of Falcon has the authority to increase or alter the obligations of this limited warranty.

Note: Should the Product be considered a "consumer product" as may be covered by the Magnuson-Moss Federal Warranty Act, please be advised that: (1) Some states do not allow limitations on incidental or consequential damages or how long an implied warranty lasts, so that the above limitations may not fully apply; and (2) This warranty gives specific legal rights and a user may have rights which may vary from state to state.

Falcon, Ingersoll Rand Security Technologies, 121 West Railroad Avenue, Princeton, IL 61356

PRODUCT EXCEPTION	WARRANTY
OHC100A CONCEALED CLOSERS	5 YEARS
ELECTRONICS/ELECTRIFIED	1 YEAR



Ingersoll Rand's Security Technologies Sector is a leading global provider of products and services that make environments safe, secure and productive. The sector's market-leading products include electronic and biometric access-control systems; time-and-attendance and personnel scheduling systems; mechanical locks; portable security; door closers, exit devices, architectural hardware, and steel doors and frames; and other technologies and services for global security markets.

www.falcon.ingersollrand.com

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