

LCN®

Fire and life safety series

Hold open solutions for fire rated doors





Combining proven technology with high-quality standards

LCN was formed on the belief that quality sets us apart. Built from the inside out, the portfolio combines tougher, bolder construction with proven technology – setting the standards of reliability, longevity and value in high-use applications.

LCN fire and life safety series are heavy duty closers/holders with electrically controlled hold open functions to control fire and smoke barrier doors. These closers feature a wide portfolio with single point, multi-point and tri-volt magnet offerings still incorporating trusted LCN design elements like cast iron cylinders.

Allegion's LCN door control portfolio is at the top of its class because of its high-quality construction and reliable performance. Our Sales and Technical Services teams provide support throughout every step of our process, whether consulting on code, advising a door specification or answering installation questions. We are focused on making your LCN experience positive.

Fire/life safety Series features

- Hold open solutions for fire rated doors
- Designed to integrate with existing fire and life safety systems
- Incorporates the same trusted LCN proven reliability as cast iron closers
- Features broad portfolio with single point, multi-point and tri-volt magnet offerings

Information and customer care



us.allegion.com



US 877.671.7011
Canada 800.900.4734



support@allegion.com
Closers_TechProdSupport@allegion.com



www.youtube.com/LCNHardware

Ordering



Allegion_Orders@allegion.com

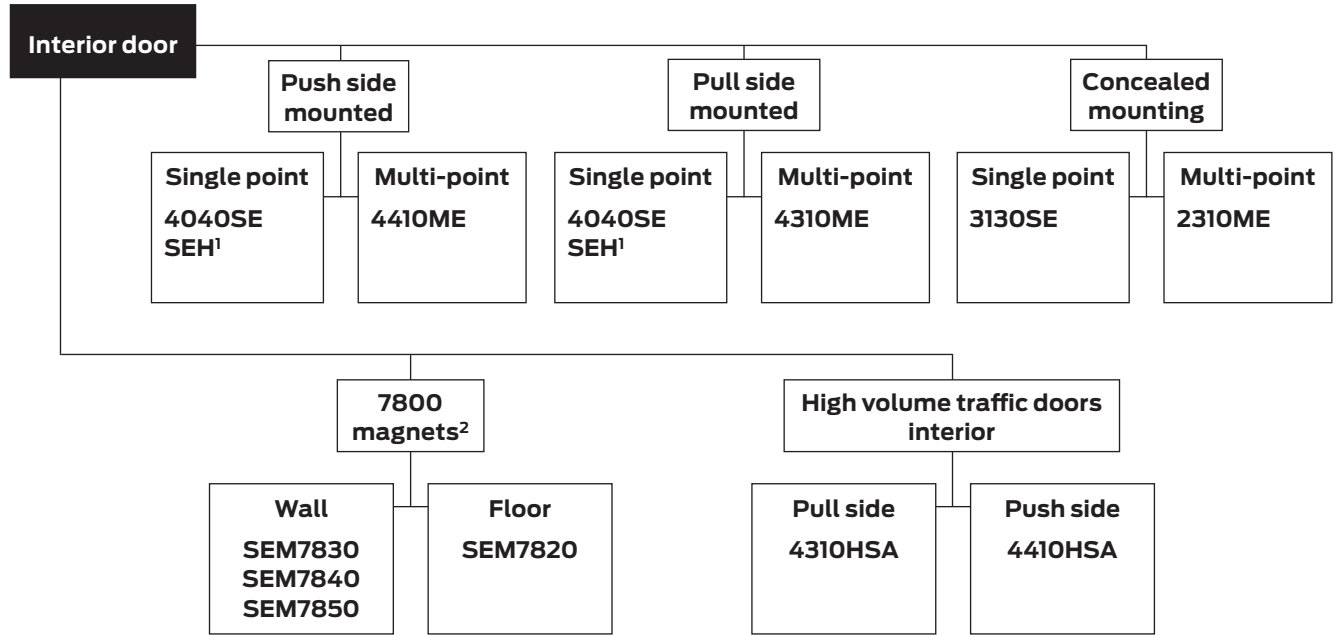


eFax: 1.800.248.1460

Fire and Life Safety Series closers and holders

Product selection guide

SETRONIC® Series LCN closer/holders combine heavy duty closers with electrically controlled hold open functions to control fire and smoke barrier doors. This guide is based on the desired mounting of the unit.



1. See SEH section (cylinder not included).
 2. SEM 7800 Series are die cast.

Product comparison

This chart shows a basic comparison of Sentronic closer/holders. Refer to the specific product chapter for complete details.

	Mounting				Finish		Cover		Cylinder			Arm function*							
	Hinge (pull) side	Top jamb (push)	Stop face (push)	Concealed (frame)	Concealed (door)	Powder coat	Plated	Plastic	Metal	Handed	Non-sized	Sized	Single Point Hold Open	Multi-point Hold Open	Pass 80/140	Standard (single)	Regular (double)	Swing Free	Double Egress
3130SE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	110°	■	■	■
4040SE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	110°	■	■	95°
2310ME	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	160°	■	■	■
4310ME	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	160°	95°	■
4410ME	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	150°	■	■
4310HSA	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	160°	■	■	95°
4410HSA	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	150°	■	■

■ Available * Maximum opening/hold open point with standard template. See individual closer series for degrees of opening per installation.
 ■ Not available

Sentronic closer/holders

Automatic detection and containment of fire and smoke are the best ways to minimize danger to life and property. Patented Sentronic door closer/holders are designed to hold swinging doors open in normal use and release and automatically close the doors under fire conditions. Conforms to major building codes, life safety codes (eg. NFPA 101) and ANSI A156.15.

Single Point Hold Open (SE)

SE Series offers adjustable single point hold open function controlled by solenoid assembly located in the SE track.

Multi-point Hold Open (ME)

ME Series offers adjustable, multi-point hold open function controlled by solenoid on the cylinder assembly.

Holder Scanner Activated (HSA)

Electronically controlled closer/holder designed to provide easy passage for groups of pedestrians through high traffic doors.

Magnets (SEM) - Electromagnetic door holders

SEM Series magnets work with manual door closers to provide single point hold open. Now available in new tri-voltage with 35 lbs. of holding force.

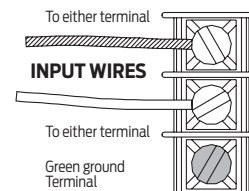
Applications

- For fire and smoke barrier doors
- Integrated into larger system
- Surface and concealed mountings
- Remote control hold open function of executive and conference area doors
- Adapter plates and other installation accessories available for non-standard conditions

General notes

1. For installations where 120V AC input voltage is supplied, 120V/24V transformer, 4040SE-3210, is required to reduce line voltage for 24V holding solenoid. Units are available in either 24V or 120V input, please specify.
2. Transformer 4040SE-3210 mounted on cover plate to fit 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others).

3. SE track quick-connector is required for 1/2" conduit.
4. SE test switch assembly includes fuse to protect solenoid. Works with ionization, photoelectric and heat sensing detectors (by others).



SE wiring diagram

Features common to Fire and Life Safety closers

- 24V AC/DC or 120V AC input, please specify for SE or ME
- When current is interrupted, hold open releases and door closes
- Adjustable hydraulic back check cushions opening swing prior to 90°
- Separate regulation of general closing speed and latching speed
- Available in a wide range of powder coated finishes to blend with door and frame (SEM magnets available in Aluminum and Dark Bronze only)
- Circuit automatically handles AC or DC input
- Can be pushed safely and easily out of hold open
- Functions as a full rack and pinion door closer when hold open is not engaged or current is interrupted
- Works with ionization, photoelectric and heat sensing detectors (by others)

Design assistance

LCN has been providing reliable solutions to unique door control problems since 1925. Contact LCN for assistance or technical information at 877-671-7011 or fax 800-248-1460 (Order Entry), Fax 815-879-1495 for Product Support.

Warranty

2 year limited warranty. See General Information catalog for complete warranty details.

Specifications

Refer to specifications section for suggested architectural specifications.

Materials

- High strength cast iron cylinder
- Forged steel main arm
- One piece forged steel piston
- All weather fluid reduces seasonal adjustments
- High efficiency, full complement, low friction bearings
- Tamper resistant regulating screws
- Quiet, low friction track and roller combination for all single lever arm closers

Finishes

- Available in six standard or a wide selection of optional custom powder coat finishes to blend with door and frame
- LCN's powder coat finishes surpass 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance
- Plated finishes are available as an option to accent door and frame

Listings and approvals

Sentronic closer/holders are listed by Underwriters Laboratories, Inc. in the following product categories under Fire Doors (GSNV), Combination Door Closers and Holders (GTIS) file R7050. SEM 7800 Series magnets are listed under Door Holders (GTPR) file R8327.

Consult the factory for other listings, such as; cUL, Department of Labor and Industry of the Commonwealth of Pennsylvania, The Board of Standards and Appeals of the City of New York, Fire and Panic Safety Standards of the California State Fire Marshal.

Holding solenoids current draw

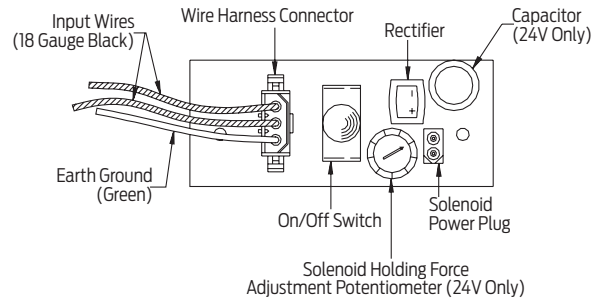
- **SE/ME**
 - 24V AC/DC (+10% -15%) @ 90 mA max
 - 120V AC/DC (+10% -15%) @ 30 mA max
- **SEM (tri-volt)**
 - 12V DC (+10% -15%) @ 30 mA max
 - 24V AC/DC (+10% -15%) @ 20 mA max
 - 120V AC (+10% -15%) @ 20 mA max
- **HSA**
 - 24V AC/DC (+10% -15%) @ 120 mA max

Transformer data

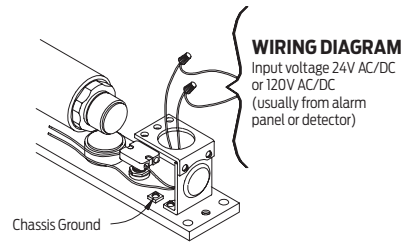
120V AC 50-60 Hz (primary); 24V AC @ 400 mA max (secondary). An LCN supplied transformer will power (recommended) 2 SE, 3 SE/ME and 15 SEM.

ME wiring

ME "ON/OFF" switch assembly includes trim pot to adjust pull out force and fuse to protect solenoid.



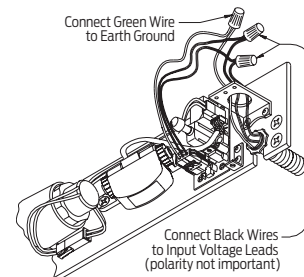
ME (4310, 4410) wiring diagram (24V only)



ME (2310) wiring diagram

HSA wiring

HSA "On/Off" switch assembly includes trim pot to adjust hold open time and fuse to protect solenoid.



HSA wiring diagram

Maintenance

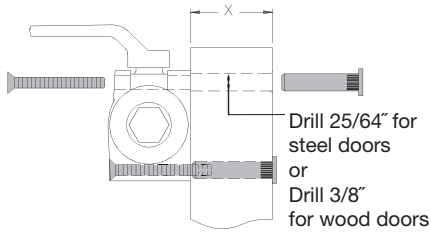
Closers mounted according to LCN installation instructions requires reduced periodic adjustments. Quarterly inspections are recommended. Refer to the installation instructions for complete, product specific details.

Positive pressure 🔥

LCN closers have been certified for three hours by UL to be in compliance with UL 10 C. Contact LCN for specific details on door closer fire ratings.

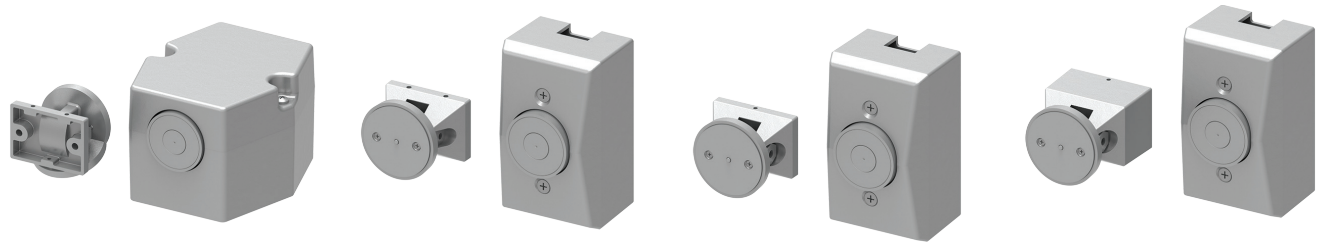
Fasteners

Standard Wood and Machine Screw (WMS) pack contains Phillips head wood and machine screws to install the closer. Through Bolts and/or Torx Machine Screws are available for most closers. LCN Through Bolts (TB) can be installed on 1 3/4" thick doors with either the 1/4"-20 machine screws or optional Torx screws supplied with the closer. Optional sizes are available for 1 5/8" or 1 3/8" door thicknesses, but this must be specified when ordering.



- Notes:
- 1. For Through Bolts, specify door thickness if other than 1 3/4" (44mm), represented in diagram as dimension "X".
 - 2. Phillips head, metric machine screws are available, please specify.
 - 3. LCN recommends the use of wood screws for wood door applications.

SEM7800 Series



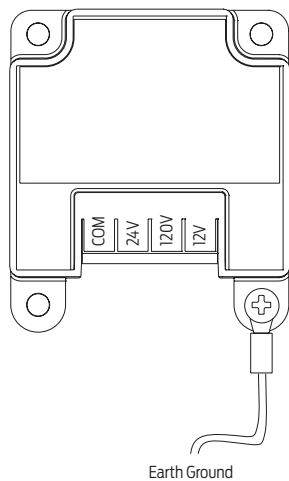
The Sentronic® SEM 7800 Series are heavy duty, electrically controlled door holding magnets. Magnets are fail safe and hold until the current is interrupted. A manual door closer is used to control and close the door. A choice of floor, recessed wall, or surface mounted wall magnets are available.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C for metal smoke barrier or labeled door, Life Safety Code, NFPA 101, 100 Hour Salt Spray, Meets BAA - Buy American Act
Voltage	Tri-voltage design with 35 lbs. of holding force
Housing	Die cast
Fasteners	Wood and Machine Screws (WMS)
Finishes/colors/powder coat	<ul style="list-style-type: none"> ■ 689 Aluminum paint ■ 695 Dark Bronze paint
Options	Available with armature extensions (see page 10)

Electrical data

Voltage input



Electrical schematic

Operation:
Electromagnets are typically used with fire alarm systems. Doors are held open in the non-alarm condition. When the fire alarm panel enters the alarm condition, power to the electromagnets is removed, the doors close under door closer control, and function as a manual door. When the fire alarm panel returns to the non-alarm condition, power is reapplied to the electromagnets and the doors can be held open again.

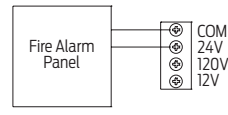


Fig. 1 24V AC/DC Wiring
Polarity is inimportant

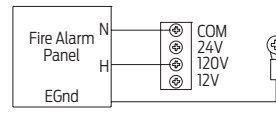


Fig. 2 120V AC Wiring

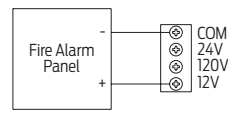


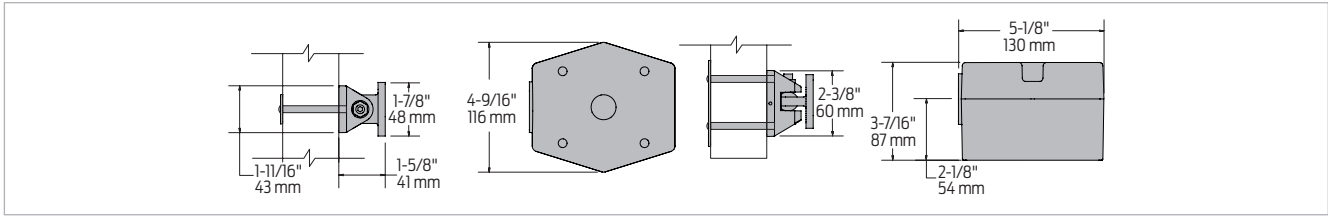
Fig. 3 12V DC Wiring
Polarity as shown

Electrical Specifications
Max. Current Draw
.030A @ 12VDC
.020A @ 24VAC/DC
.020A @ 120VAC

Holding force	35 lbs. @ nominal input voltage
Maximum current draw	<ul style="list-style-type: none"> ■ Standard profile recessed wall mount ■ 2" (51 mm) x 4" (102 mm) x 1 1/2" (38 mm)

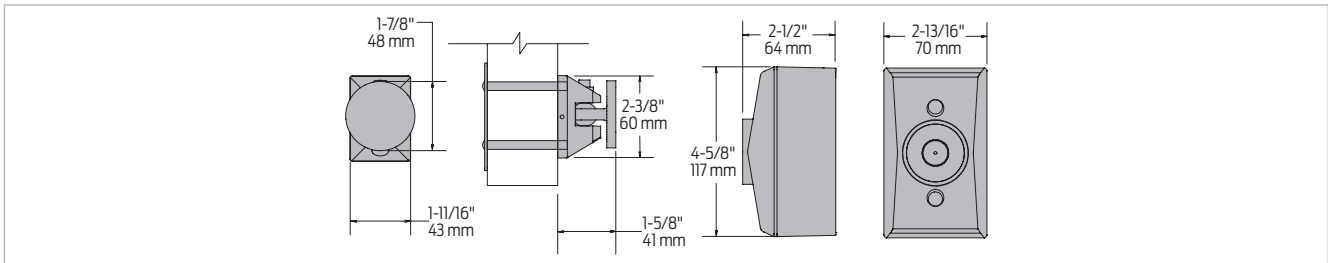
Mounting details

7820



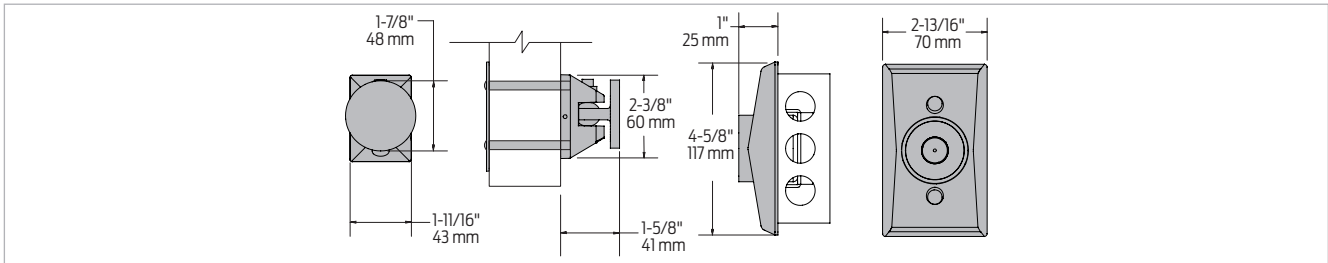
Mounting	Floor mounted
Total projection	6 3/4" (171 mm)

7830¹



Mounting	Surface wall mounted
Total projection	4 1/8" (105 mm)

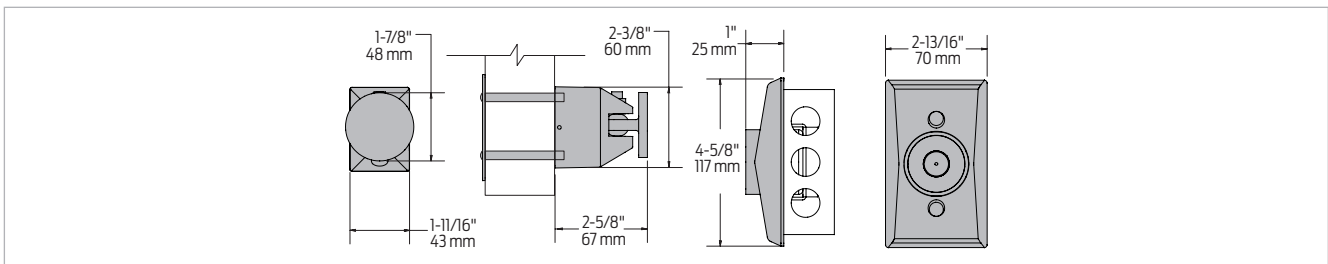
7840¹



Mounting	<ul style="list-style-type: none"> ■ Low profile recessed wall mount ■ 2" (51 mm) x 4" (102 mm) x 1 1/2" (38 mm)
Total projection	2 5/8" (67 mm)

Note: Outlet box not included.

7850¹



Mounting	<ul style="list-style-type: none"> ■ Standard profile recessed wall mount ■ 2" (51 mm) x 4" (102 mm) x 1 1/2" (38 mm)
Total projection	3 5/8" (92 mm)

Note: Outlet box not included.

1. Suitable for use in pocket door installations.

Accessories

Magnets



SEM7820-516
Magnet core assembly

- Magnet coil
- Standard



SEM7830(40)(50)-516
Magnet core assembly

- Magnet coil
- Standard

Armatures



SEM7820(30)(40)-825
Door armature

- Die cast low profile armature
- Standard



SEM7850-828
Door armature

- Die cast armature
- Standard

Note: Fastener kits for mounting must be ordered separately using part numbers ending in-515.

Fasteners

SEM7820-515
Fastener kit

- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood and machine screws

SEM7830-515
Fastener kit

- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood, machine and PHND screws

SEM7840-515
Fastener kit

- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood, machine and PHND screws

SEM7850-515
Fastener kit

- Hex key wrench
- Armature thru hole plate and surface mount clip
- Cement anchor
- Wood, machine and PHND screws

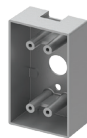
Cover



SEM7830(40)(50)-72
Standard cover

- Die cast cover
- Standard

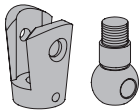
Box



SEM7830-268
Surface mount box

- Die cast surface wall mount box
- Standard

Extensions



SEM7810-514
Ball pivot/connection link

- Required for each door needing extension(s)
- Kit includes coupler link and ball pivot (alone serves as a 1 1/2" extension)



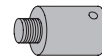
SEM7810-E050
Magnet extension 1/2"

- Metal
- Standard



SEM7810-E075
Magnet extension 3/4"

- Metal
- Standard



SEM7810-E100
Magnet extension 1"

- Metal
- Standard



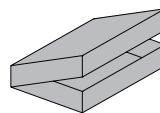
SEM7810-E200
Magnet extension 2"

- Metal
- Standard



Extension, SEM7810-E400
Magnet extension 4"

- Metal
- Standard



SEM7810-517
Magnet SEM extension kit

- Extension kit includes:
 - 107810SEM-E100
 - 57810SEM-E200
 - 107810SEM-E050
 - 207810SEM-514

Ordering information

How-to-order SEM7800 Series magnets

1. Select magnet series

- SEM7820
- SEM7830
- SEM7840
- SEM7850

2. Select finish

- Standard powder coat _____
- Aluminum (689), Dark Bronze (695) paint

Magnets will be shipped with:

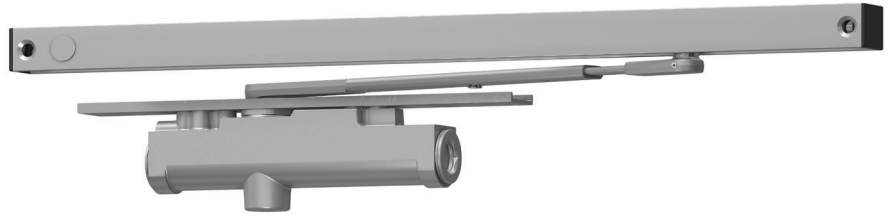
- Die cast housing
- Cover
- Armatures
- Wood and machine screws

SEM 7810 extensions

Magnet series

- Ball Pivot/Connection Link (SEM7810-514) (qty.)
- Magnet Extension 1/2" (SEM7810-E050) (qty.)
- Magnet Extension 3/4" (SEM7810-E075) (qty.)
- Magnet Extension 1" (SEM7810-E100) (qty.)
- Magnet Extension 2" (SEM7810-E200) (qty.)
- Magnet Extension 4" (SEM7810-E400) (qty.)
- Magnet SEM Extension Kit (SEM7810-517) (qty.)

3130SE Series



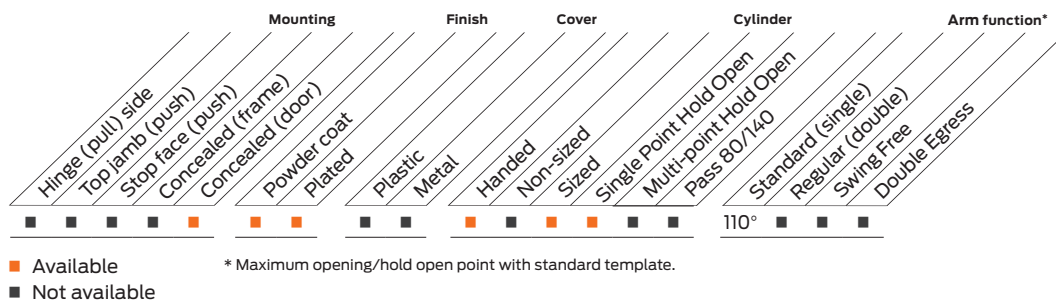
The 3130SE SENTRONIC® is a concealed in the door, closer/holder designed to provide single point hold open for fire and smoke barrier doors. Door is held open until current interruption releases the holding mechanism and the door closes.

Features

Certifications	Grade 1 - ANSI A156.15, UL/for metal smoke barrier or labeled door, Life Safety Code, NFPA 101, 100 Hour Salt Spray, meets BAA - Buy American Act	Fasteners	Wood and Machine Screws (WMS)
Body construction	<ul style="list-style-type: none"> ■ Cast iron body ■ Full complement bearing ■ 1 1/8" Diameter piston ■ 9/16" diameter double heat treated pinion journal 	Mounting	Concealed (in door) for interior smoke barrier and labeled doors
Handing	Handed	Arms	Standard, handed arm and non-handed track
Size	Size 3 or 4, non-adjustable	Finishes/colors/ powder coat	<ul style="list-style-type: none"> ■ 689 Aluminum paint ■ 690 Statuary Bronze paint ■ 691 Light Bronze paint ■ 693 Black paint ■ 695 Dark Bronze paint ■ 696 Brass paint ■ Custom colors optional ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	2 years		

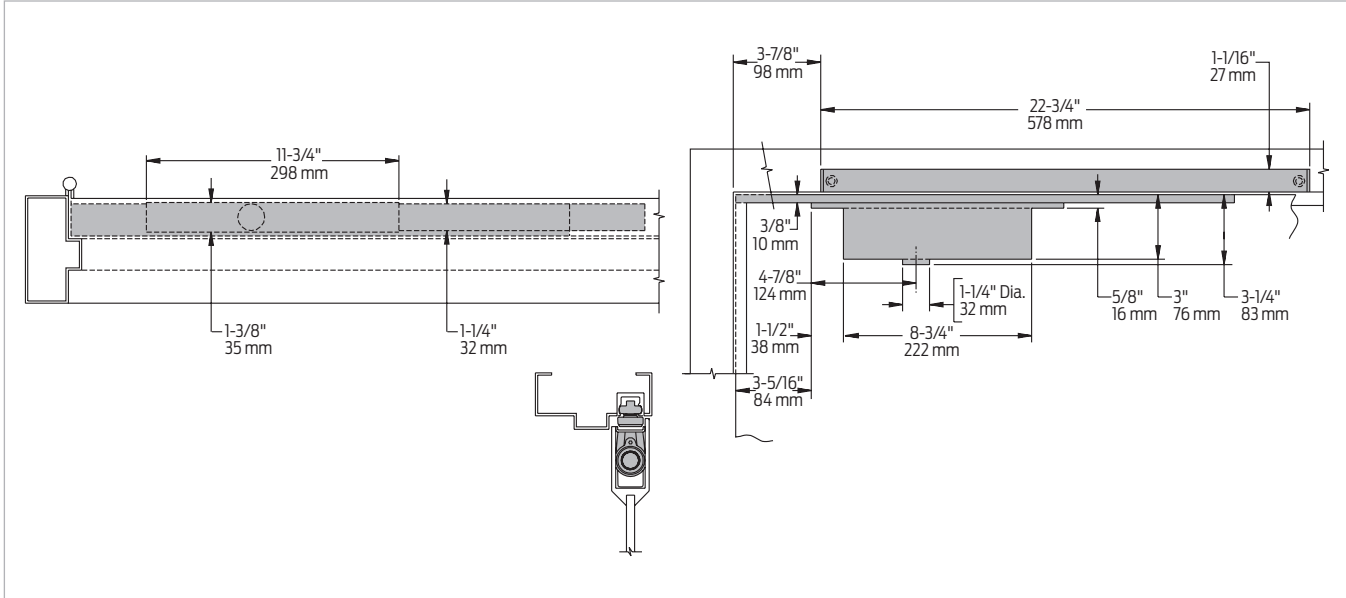
Special templates

Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



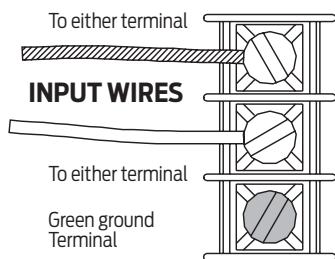
Mounting details

Concealed mounting



Butt hinges	<ul style="list-style-type: none"> Should not exceed 5" (127 mm) in width Consult factory for pivot hung installations
Auxiliary stop	Recommended at hold open point
Top rail	Minimum 4" (102 mm)
Door thickness	<ul style="list-style-type: none"> 1 3/4" (44 mm) minimum Please consult the door manufacturer to assure that the door integrity and warranty is maintained after installing the 3130SE Series door closer in 1 3/4" (44 mm) thickness wood doors
Door width	<ul style="list-style-type: none"> 2'4" (711 mm) minimum for single door with SE 2'8" (813 mm) minimum for door with SEL
Maximum opening	<ul style="list-style-type: none"> Templating allows 110° Hold open points between 85° and 110° in approximately 3° increments SEL arm and track locate hold open at 110°, 120° and 130°
SE, SEL electrical options	<ul style="list-style-type: none"> These track assemblies require a single power circuit for the holding solenoid SE or SEL holding solenoid is either 24V or 120V input, please specify An optional 4040SE-3210 or 8310-824 transformer reduces 120V AC line voltage to 24V AC Circuitry accepts either AC or DC input
Options	<ul style="list-style-type: none"> Long (SEL) Track and Arm 24V or 120V input, please specify

SE wiring diagram



- For interior smoke barrier and labeled fire doors
- Functions as full rack and pinion door closer when hold open is not engaged or current is interrupted
- Interfaces with fire alarm system

Accessories

Cylinder



- 3130SE-3071**
Cast iron cylinder assembly (CYL)
- Handed
 - Cast iron
 - Standard

Arms



- 3130SE-3077T**
Standard Arm (STDTRKARM)
- Handed
 - Adjustable to select hold open point
 - Standard



- 3130SEL-3077T**
Long Arm (LONG)
- Handed
 - Provides hold open point from 110° to 130°, determined by track templating
 - Used with SEL TRACK 3130SEL-3038 only
 - Option

Tracks

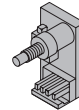


- 3130SE-3038**
Standard Track (STDTRK)
- Non-handed
 - Circuitry accepts either AC or DC input
 - 24V holding solenoid (24) or 120V holding solenoid (120), please specify
 - Standard



- 3130SEL-3038**
Long Track (LONG)
- Non-handed
 - Used with Long Arm, 3130SEL-3077T, only
 - Provides hold open point from 110° to 130°, determined by templating. Circuitry accepts either AC or DC input
 - 24V holding solenoid (24) or 120V holding solenoid (120), please specify
 - Optional

Switch



- 3130SE-3436**
Test Switch

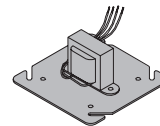
Installation accessories



- 3130SE-81**
Conduit Quick-Connector
- Two piece connector for use with 1/2" conduit



- 3130SE-3034SE**
Track Roller and Track Slider
- Quiet, low friction roller assembly
 - Shoulder dimension "X" = 1/8" (3 mm)
 - Alloy metal slider for use in SE Series tracks only



- 4040SE-3210**
Transformer
- Reduces line voltage from 120V to 24V AC
 - Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 3130SE Series closers

1. Select cylinder size

- 3133SE
- 3134SE

2. Select hand

- Right Hand (RH)
- Left Hand (LH)

3. Select voltage

- 24V AC/DC
- 120V AC/DC

4. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint.

Closer will be shipped with:

- Standard arm
 - Track roller and slider
 - Standard track
 - Wood and machine screws
- (unless options listed below are selected)

Closer options

Arm

- Long Arm (LONG)*

* Use with SEL track only

Finish

- Custom Powder Coat (RAL) _____
- Plated finish _____

Installation accessories

- Transformer, 4040SE-3210

Screw pack

- Torx Machine Screws (TORX)

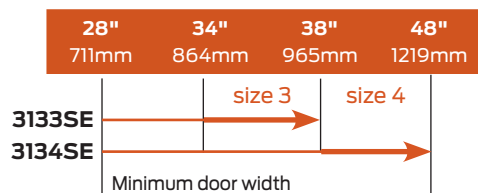
Special template

- ST- _____

Table of sizes

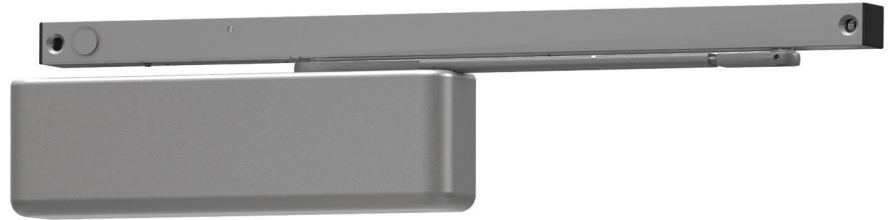
- Select closer based on width of door
- Sized 3130SE Series cylinders available in size 3 or 4
- Closing power of all 3130SE Series closers is not adjustable

Interior door width



➔ Indicates recommended range of door width for closer size.
Note: For SE, minimum door width 28" (711mm) For SEL, minimum door width 32" (813mm)

4040SE Series

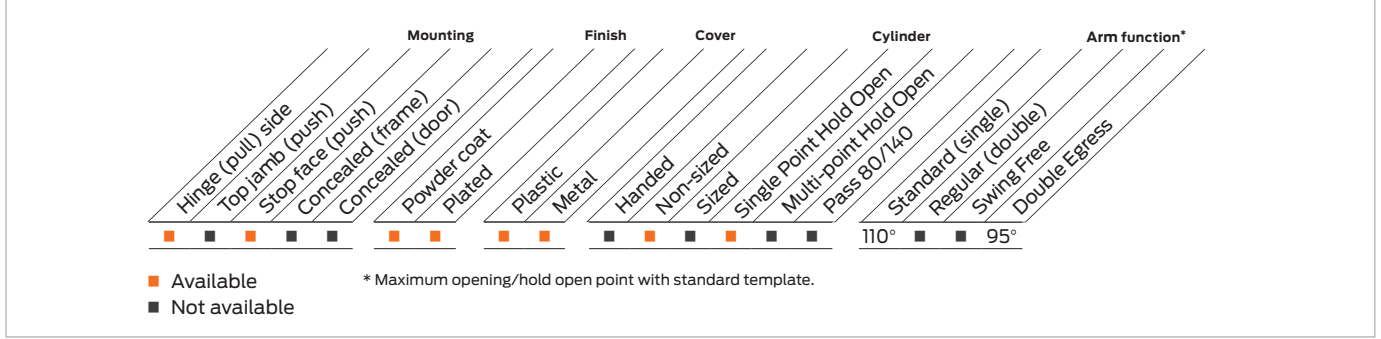


The 4040SE SENTRONIC® is a heavy duty, non-handed, nonsized closer/holder designed to provide single point hold open for fire and smoke barrier doors. Single lever (track) arm closer is specifically designed for interior doors.

Features

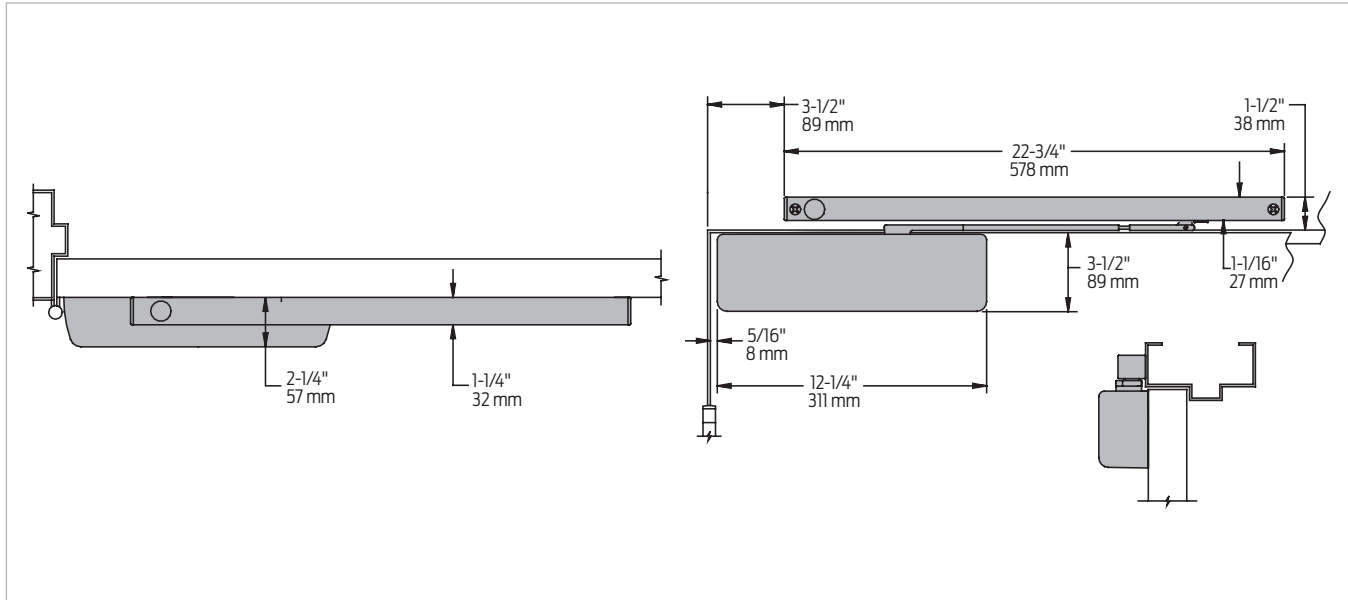
Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 hour salt spray, meets BAA - Buy American Act, NFPA 101	Fasteners	Wood and Machine Screws (WMS)
Body construction	<ul style="list-style-type: none"> Cast iron body Full complement bearing 1 1/2" diameter piston 3/4" diameter double heat treated pinion journal 	Mounting	Hinge (pull side), stop face (push side)
Fluid	All weather fluid	Arms	Standard Arm and SE track, standard Double Egress Arm and SEL track, optional
Handing	Non-handed	Finishes/colors/ powder coat	<ul style="list-style-type: none"> 689 Aluminum paint 690 Statuary Bronze paint 691 Light Bronze paint 693 Black paint 695 Dark Bronze paint 696 Brass paint Custom colors optional Optional SRI primer - powder coat only
Size	Adjustable spring size, up to 4	Wiring	Concealed or surface, interfaces with fire alarm systems
Warranty	2 years		
Cover	<ul style="list-style-type: none"> Plastic, standard Metal, optional 		

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



Mounting details

Hinge (pull side) mounting



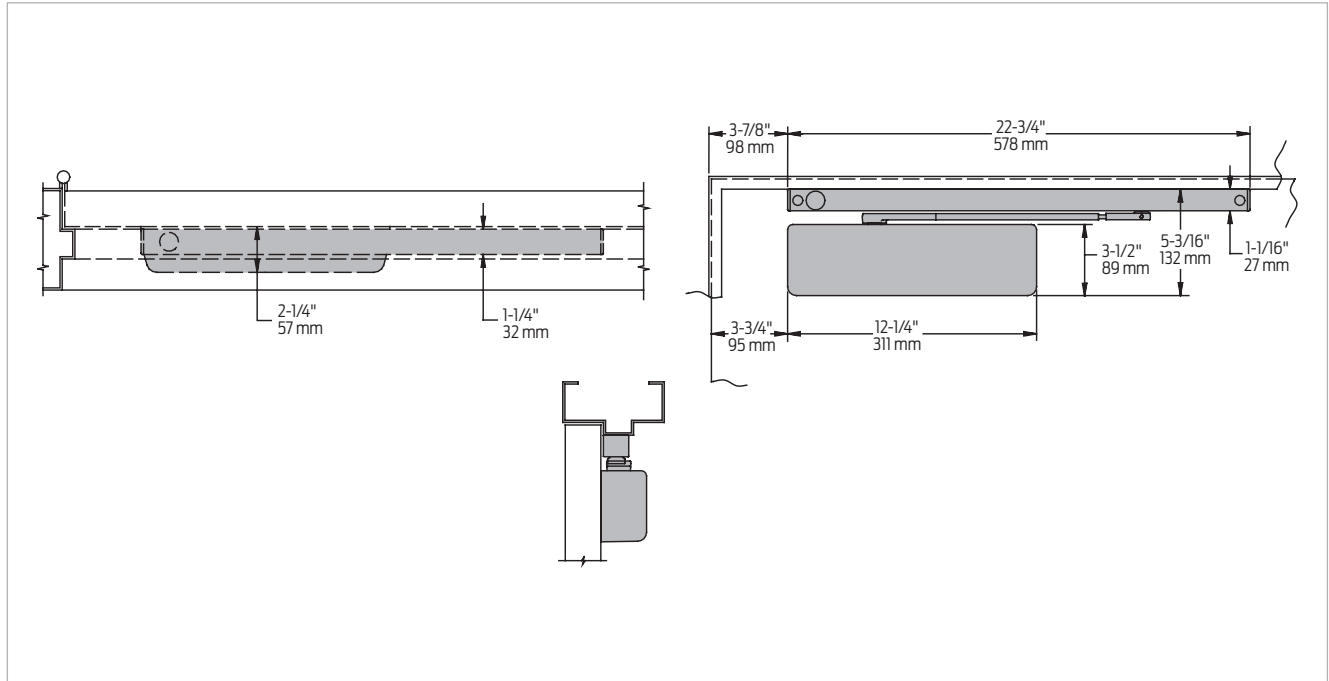
Butt hinges	Should not exceed 5" (127 mm) in width
Swing clear hinges	Consult factory
Auxiliary stop	Recommended at hold open point
Reveal	<ul style="list-style-type: none"> Should not exceed 1/8" (3 mm) for Standard Arm Should not exceed 2 11/16" (68 mm) for Double Egress Arm
Top rail	<ul style="list-style-type: none"> Minimum 3 1/2" (89 mm) Installation with plate, 4040SE-18 requires special template and 1 3/4" (44 mm) minimum top rail
Head frame	Requires 2" (51 mm) minimum
Flush ceiling	2" (51 mm) head frame does not require special templating
Door width	<ul style="list-style-type: none"> 2' 4" (711 mm) minimum for single door with SE 4' 8" (1422 mm) minimum for paired doors with SE
Clearance	2 3/8" (60 mm) behind door required for 90° installation
Maximum opening	<ul style="list-style-type: none"> Templating allows 110° Hold open points between 85° and 110° in approximately 3° increments Pull side mounting on a Double Egress frame requires a handed Double Egress Arm Maximum Hold Open to 95° 2 11/16" (67 mm) maximum reveal on pull side SEL track provides hold open points between 90° and 120°, in approximately 3° increments
SE, SEL electrical options	<ul style="list-style-type: none"> These track assemblies require a single power circuit for the holding solenoid SE or SEL holding solenoid is either 24V or 120V input, please specify An optional 4040SE-3210 or 8310-824 transformer reduces 120V AC line voltage to 24V AC Circuitry accepts either AC or DC input
Options	<ul style="list-style-type: none"> Long Track (SEL) Handed Double Egress Arm for reveal under 2 11/16" (67 mm)
SE wiring diagram	See page 13 for typical wiring and electrical diagram

Notes:

- Information applies to 4040 SE unless otherwise specified
- Hold open force is adjustable
- Momentary on/off switch board assembly for testing door release also provides over-voltage protection (field replaceable)
- Functions as a full rack and pinion closer when hold open is not engaged or current is interrupted

Mounting details

Stop face (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended at hold open point
Top rail	<ul style="list-style-type: none"> Minimum 5 3/4" (146 mm) Installation with plate, 4040SE-18PA requires special template and 2" (51 mm) minimum top rail
Stop width	1 1/4" (32 mm) minimum
Door width	<ul style="list-style-type: none"> 2'4" (711 mm) minimum for single door with SE 4'8" (1422 mm) minimum for paired doors with SE
Maximum opening	<ul style="list-style-type: none"> Templating allows 110° Hold open points between 85° and 110° in approximately 3° increments SEL track provides hold open points between 90° and 120°, in approximately 3° increments
SE, SEL electrical options	<ul style="list-style-type: none"> These track assemblies require a single power circuit for the holding solenoid SE or SEL holding solenoid is either 24V or 120V input, please specify An optional 4040SE-3210 or 8310-824 transformer reduces 120V AC line voltage to 24V AC Circuitry accepts either AC or DC input
Options	<ul style="list-style-type: none"> Long Track (SEL)
SE wiring diagram	See page 13 for typical wiring and electrical diagram

Notes:

- Information applies to 4040 SE closers unless otherwise specified
- Momentary on/off switch board assembly for testing door release also provides over-voltage protection (field replaceable)
- Functions as a full rack and pinion closer when hold open is not engaged or current is interrupted

Accessories

Cylinders



**4040SE-3071
Cast iron cylinder
assembly (CYL)**

- Non-handed
- Cast iron
- Standard

Covers



**4040SE-72
Plastic Cover (PC)**

- Non-handed
- Clip-on
- Standard



**4040SE-72MC
Metal Cover (MC)**

- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms



**4040SE-3077T
Standard Arm (STDTRKARM)**

- Non-handed
- Adjustable to select hold open point



**4040SE-3077DE
Double Egress Arm (DE)**

- Handed
- For pull side installations on double egress doors and frames
- Not required for push side mounting on double egress frames
- Optional

Tracks



**4040SE-3038
Standard Track (STDTRK)**

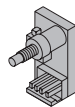
- Non-handed
- For SE closers. Mounts on either head frame or stop
- 24V or 120V AC/DC input for holding solenoid, please specify
- Includes test switch assembly with fuse
- Standard



**4040SEL-3038
Long Track (LONG)**

- Non-handed
- Mounts on either head frame or stop
- 24V or 120V AC/DC input standard for holding solenoid, please specify
- Includes test switch assembly with fuse
- Optional

Switch



**4040SE-3436
Test Switch**

- Non-handed
- Standard

Accessories

Installation accessories



**4040SE-18
Plate**

- Required where top rail is less than 3 1/2" (89 mm)
- Requires minimum 2" (51 mm) top rail
- Installations require a special template



**4040SE-18PA
Plate**

- Required where top rail is less than 5 3/4" (146 mm)
- Requires minimum 2" (51 mm) top rail
- Installations require a special template



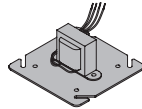
**4040SE-81
Conduit Quick-Connector**

- Two piece connector for use with 1/2" conduit



**4040SE-3034SE
Track Roller and Track Slider**

- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3 mm)
- Alloy metal slider for use in SE series tracks only



**4040SE-3210
Transformer**

- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 4040SE Series closers

1. Select cylinder size

- SE
- SEL

2. Select voltage

- 24V AC/DC
- 120V AC/DC

3. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint

Closer will be shipped with:

- Standard cylinder
- Standard clip-on cover
- Standard arm
- Standard track
- Wood and machine screws
(unless options listed below are selected)

Closer options

Cover

- Metal Cover (MC) (please specify right or left hand)

Finish

- Custom Powder Coat (RAL) (handed metal cover required)
- Plated Finish, US _____ (handed metal cover required)

Arm

- Double Egress Arm (DE) (please specify right or left hand)

Screw pack

- Through Bolt*, Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt* and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 3/4".

Installation accessories

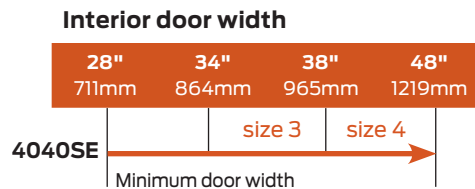
- Plate, 4040SE-18
- Plate, 4040SE-18PA
- Transformer, 4040SE-3210

Special template

- ST- _____

Table of sizes

- 4040SE series cylinders accommodate interior doors up to 48" (1219 mm) wide
- Closing power of 4040SE Series closers is adjustable through a range of sizes up to size 4



Indicates recommended range of door width for closer size.

Notes: For SE on paired door, minimum width 60" (1524 mm)
For SE, minimum door width 28" (711 mm)
For SEL, minimum door width 30" (762 mm)
Details are listed on the MOUNTING DETAILS pages.

2310ME Series

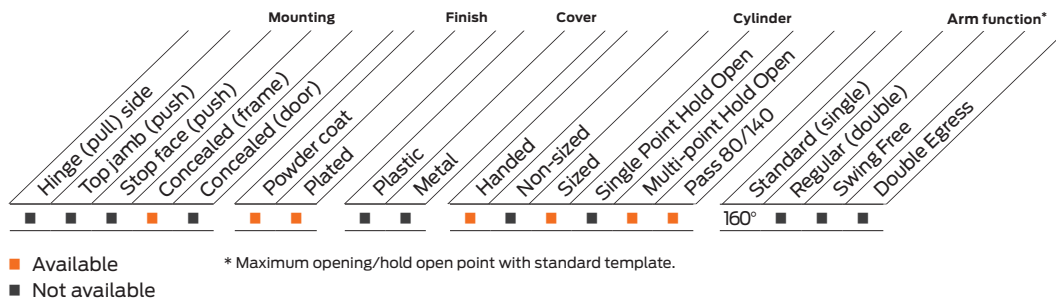


The 2310ME SENTRONIC® is a concealed heavy duty, electrically controlled closer/holder designed to provide infinitely adjustable hold open for fire and smoke barrier doors. Door is held open until current interruption releases mechanism and the door closes.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101	Fasteners	Wood and Machine Screws (WMS)
Body construction	<ul style="list-style-type: none"> Cast iron body Full complement bearing 1 1/2" diameter piston 11/16" diameter double heat treated pinion journal 	Mounting	Concealed (in frame)
Fluid	All weather fluid	Arms	Standard handed arm and non-handed track (two piece metal finish plate)
Handing	Handed	Finishes/ colors/ powder coat	<ul style="list-style-type: none"> 689 Aluminum paint 690 Statuary Bronze paint 691 Light Bronze paint 693 Black paint 695 Dark Bronze paint 696 Brass paint Custom colors optional Optional SRI primer - powder coat only Optional plated finishes
Size	Sized, 4 only	Wiring	<ul style="list-style-type: none"> Concealed or exposed Built in on/off switch controls hold open function Interfaces with fire alarm system
Warranty	2 years		

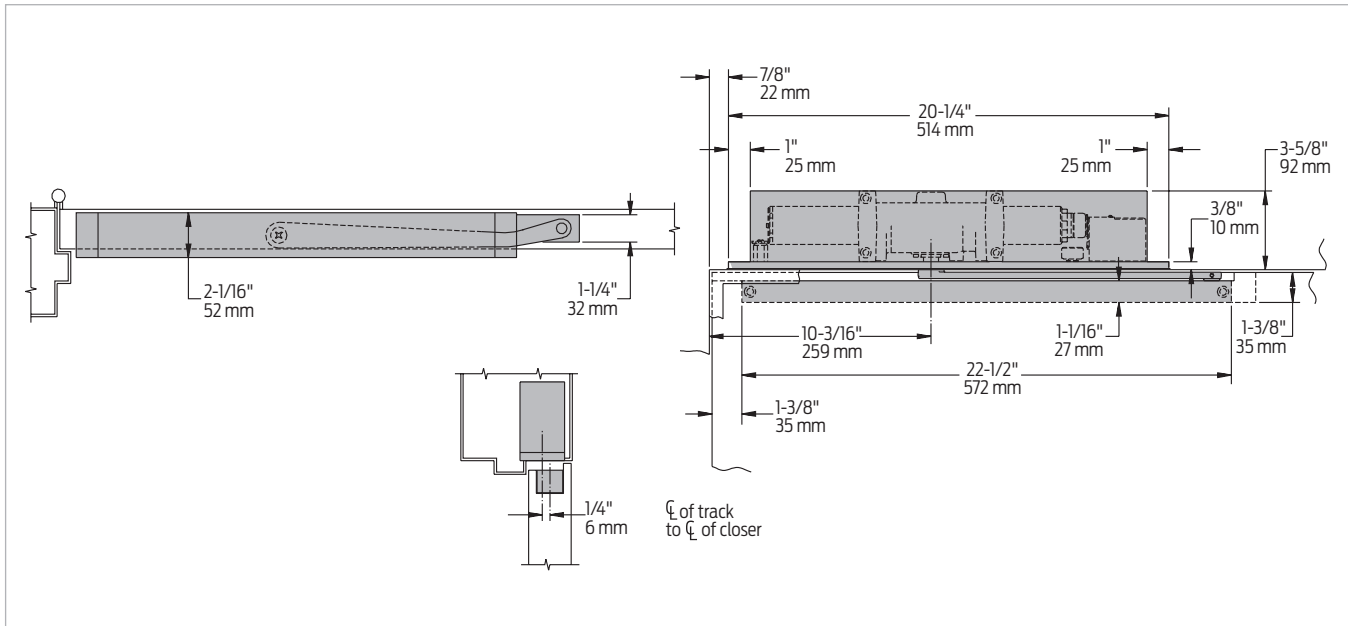
Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



Introduction
Product selection guide
SEM Series
3130SE Series
4040SE Series
2310ME Series
4310ME Series
4410ME Series
4310HSA Series
4410HSA Series
SEH Series

Mounting details

Concealed mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Top rail	<ul style="list-style-type: none"> 1 3/4" (35 mm) mortise required 5/16" (8 mm) cutout required at top of door, stop face only
Door thickness	1 3/4" (44 mm) minimum
Door width	2' 4" (711 mm) minimum
Hollow metal frame	<ul style="list-style-type: none"> Requires minimum 4" (102 mm) x 4" frame Consult factory or template for preparation details
Bypass	<ul style="list-style-type: none"> CYLB80 or CYLB140 - eliminates hold open function up to a specified point of door swing CYLB80 cylinder from 0° to 80° CYLB140 cylinder from 0° to 140°
Maximum opening	Templating allows 180° with hold open points up to 160°
Options	<ul style="list-style-type: none"> Hold open bypass 24V or 120V input, please specify

ME (2310) wiring diagram

WIRING DIAGRAM
 Input voltage 24V AC/DC or 120V AC/DC (usually from alarm panel or detector)

- For interior smoke barrier and labeled fire doors
- Functions as full rack and pinion door closer when hold open is not engaged or current is interrupted

Accessories

Cylinders



- 2310ME-3971**
Cast iron cylinder assembly (CYL)
- Handed
 - Cast iron



- 2310ME-3071**
Cast iron cylinder assembly (CYL)
- Handed
 - "On/Off" switch assembly controls the hold open function.
 - Circuitry accepts either AC or DC input. Specify 24V or 120V
 - Standard

Arm



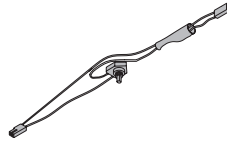
- 2310ME-3077T**
Standard Arm (STDTRKARM)
- Handed

Track



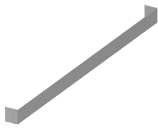
- 2310ME-3038**
Standard Track (STDTRK)
- Non-handed
 - Standard

Switch

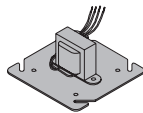


- 2310ME-3351**
Switch
- "On/Off" switch assembly provides continuous hold open function
 - 24V or 120V, please specify

Installation accessories



- 2310ME-420**
Fire Shield
- 22 gauge steel liner mounts in the track mortise of the door's top rail for 20 minute labeled wood doors with hollow metal frames



- 2310ME-3210**
Transformer
- Reduces line voltage from 120V to 24V AC
 - Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)



- 2310ME-3034**
Track Roller
- Quiet, low friction roller assembly
 - Shoulder dimension "X" = 1/16" (2 mm)

2310ME Series

Ordering information

How-to-order 2310ME Series closers

1. Select hand

- Right Hand (RH)
- Left Hand (LH)

2. Select voltage

- 24V AC/DC
- 120V AC/DC

3. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint

Closer will be shipped with:

- Finish plates
- Standard arm
- Standard track
- Track roller
- Wood and machine screws
(unless options listed below are selected)

Closer options

Cylinder function

- Bypass hold open up to 80° (CYLB80)
- Bypass hold open up to 140° (CYLB140)

Finish

- Custom powder coat (RAL) _____
- Plated finish _____

Screw pack

- Torx Machine Screws (TORX)

Installation accessories

- Fire shield, 2310ME-420
- Transformer, 2310ME-3210

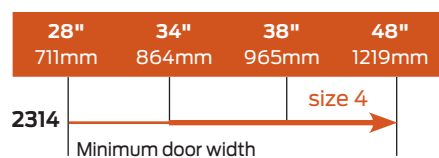
Special template

- ST- _____

Table of sizes

- Closing power of 2314ME Series closers may be increased 15%

Interior door width



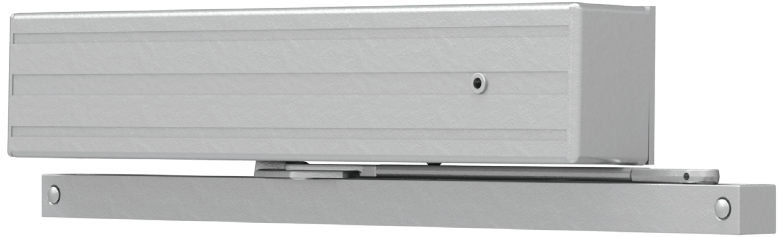
Indicates recommended range of door width for closer size.

Notes:

- For SE, minimum door width 28" (711mm)
- For SEL, minimum door width 32" (813mm)

4310ME Series

4310ME Series



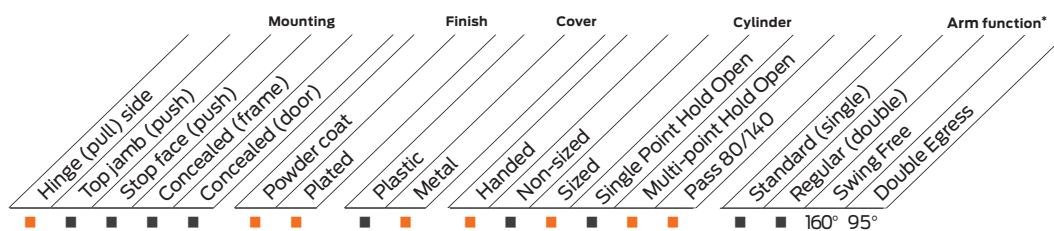
The 4310ME SENTRONIC® is a heavy duty, electrically controlled closer/holder designed to provide infinitely adjustable hold open for fire and smoke barrier doors. Door is held open until current interruption releases mechanism and the door closes. Single lever (track) arm closer is specifically designed for interior doors. Choice of finishes, cylinder functions, and installation accessories meet virtually all life safety requirements. An ME provides only the closer / holder function.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101	Cover	Metal, Standard
Body construction	<ul style="list-style-type: none"> Cast iron body Full complement bearing 1 1/2" diameter piston 11/16" diameter double heat treated pinion journal 	Fasteners	Wood and Machine Screws (WMS)
Fluid	All weather fluid	Mounting	Hinge (Pull Side)
Handing	Handed	Arms	<ul style="list-style-type: none"> Swing Free Arm, standard Double Egress, optional
Size	Sized, 4 only	Finishes/ colors/ powder coat	<ul style="list-style-type: none"> 689 Aluminum paint 690 Statuary Bronze paint 691 Light Bronze paint 693 Black paint 695 Dark Bronze paint 696 Brass paint Custom colors optional
Warranty	2 years		<ul style="list-style-type: none"> Optional SRI primer - powder coat only Optional plated finishes
Wiring	<ul style="list-style-type: none"> Concealed or exposed electrical connectors Built in "On/Off" switch controls hold open function Interfaces with fire alarm systems 		

Special templates

Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

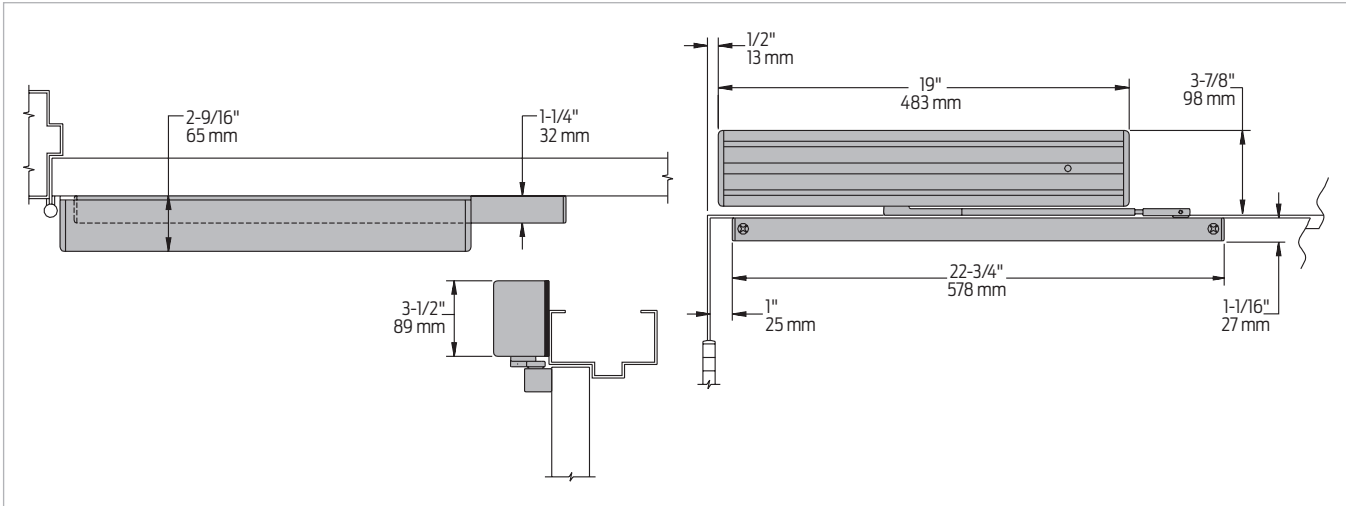


■ Available
■ Not available

* Maximum opening/hold open point with standard template.

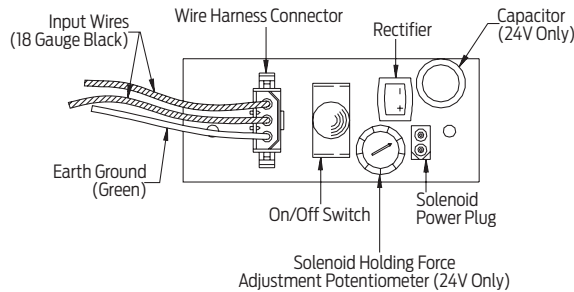
Mounting details

Hinge (pull side) mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Top Rail	1 1/16" (27 mm) minimum
Reveal	<ul style="list-style-type: none"> Should not exceed 1/8" (3 mm) for Swing Free Arm Should not exceed 2 11/16" (68 mm) for Double Egress Arm
Head frame	Requires 2" (51 mm) minimum
Clearance	1 1/4" (32 mm) behind door required for installation
Bypass	<ul style="list-style-type: none"> CYLB80 or CYLB140 - eliminates hold open function up to a specified point of the doors swing CYLB80 cylinder from 0° to 80° CYLB140 cylinder from 0° to 140°
Maximum opening	<ul style="list-style-type: none"> Templating allows 180° with hold open points up to 160° Optional Double Egress Arm limited to 95° Please note that many track style door closers are capable of allowing 180° of door swing Be aware that the majority of track style closers are at their weakest closing force in the 180° – 130° range Consult factory for applications where exterior or large/heavy door must swing 180°
ME electrical options	<ul style="list-style-type: none"> These assemblies have a single electrical circuit with a choice of voltages A separate transformer, 4040SE-3210, can be used to reduce line voltage to 24V AC Circuitry accepts either AC or DC input Please specify 24V or 120V
Options	<ul style="list-style-type: none"> Hold open bypass 24V or 120V volt input, please specify

ME (4310, 4410) wiring diagram



Notes:

- Information applies to ME closer
- Functions as full rack and pinion door closer when hold open is not engaged or when current is interrupted with Swing Free Arm engaged
- Swing Free Arm allows door to be moved without door closer resistance

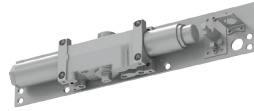
Accessories

Cylinder



4310ME-3971
Cast iron cylinder assembly (CYL)

- Handed
- Cast iron
- Specify 24V or 120V
- Standard



4310ME-3071
Cast iron cylinder assembly (CYL)

- Handed
- "On/Off" switch assembly controls hold open function
- Circuitry accepts either AC or DC input
- 24V or 120V, please specify
- Standard

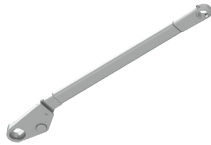
Cover



4310ME-72MC
Metal Cover (MC)

- Handed
- Standard

Arms



4310ME-3077SF
Swing Free Arm (SF)

- Handed
- After door is placed in hold open, secondary pivot point allows up to 160° swing without door closer resistance



4310ME-3077DE
Double Egress Arm (DE)

- Handed
- For double egress doors and frames
- 2 1/16" (68 mm) maximum reveal
- Optional

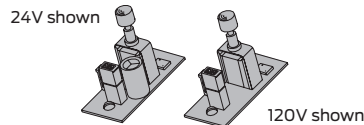
Track



4310ME-3038
Standard Track (STDTRK)

- Non-handed
- Standard

Switch



4310ME-3351
Switch Assembly

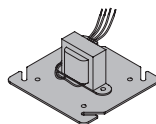
- Provides continuous hold open function
- 24V or 120V, please specify

Installation accessories



4310ME-3034
Track Roller

- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3mm)



4310-3210
Transformer

- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54mm) junction box (by others)



4310ME-3354
ME Wiring Harness

- Three wire harness with 6" (152 mm) leads for field wiring connections

Ordering information

How-to-order 4310ME Series closers

1. Select hand

- Right Hand (RH)
- Left Hand (LH)

2. Select voltage

- 24V AC/DC
- 120V AC/DC

3. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint.

Closer will be shipped with:

- Standard cover
- Swing Free Arm
- Standard track
- Track roller
- Wood and machine screws
(unless options listed below are selected)

Closer options

Cylinder function

- Bypass hold open up to 80° (CYLB80)
- Bypass hold open up to 140° (CYLB140)

Arm

- Double Egress Arm (DE)

Finish

- Custom powder coat (RAL) _____
- Plated finish _____

Screw pack

- Through Bolt¹, Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt¹ and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 3/4".

Installation accessories

- Transformer, 4310ME-3210

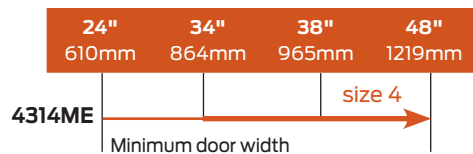
Special template

- ST- _____

Table of sizes

- Closing power of 4314ME Series closers may be increased 15%

Interior door width



Indicates recommended range of door width for closer size.

4410ME Series



The 4410ME SENTRONIC® is a heavy duty, electrically controlled closer/holder designed to provide infinitely adjustable hold open for fire and smoke barrier doors. Double lever arm closer is specifically designed for interior doors.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101	Cover	Metal, standard
Body construction	<ul style="list-style-type: none"> ■ Cast iron body ■ Full complement bearing ■ 1 1/2" diameter piston ■ 11/16" diameter double heat treated pinion journal 	Fasteners	Wood and Machine Screws (WMS)
Fluid	All weather fluid	Mounting	Top jamb (push side)
Handing	Handed	Arms	Regular Arm
Size	Sized, 4 only	Finishes/colors/ powder coat	<ul style="list-style-type: none"> ■ 689 Aluminum paint ■ 690 Statuary Bronze paint ■ 691 Light Bronze paint ■ 693 Black paint ■ 695 Dark Bronze paint ■ 696 Brass paint ■ Custom colors optional ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Warranty	2 years	Wiring	<ul style="list-style-type: none"> ■ Concealed or surface wiring ■ Interfaces with fire alarm system

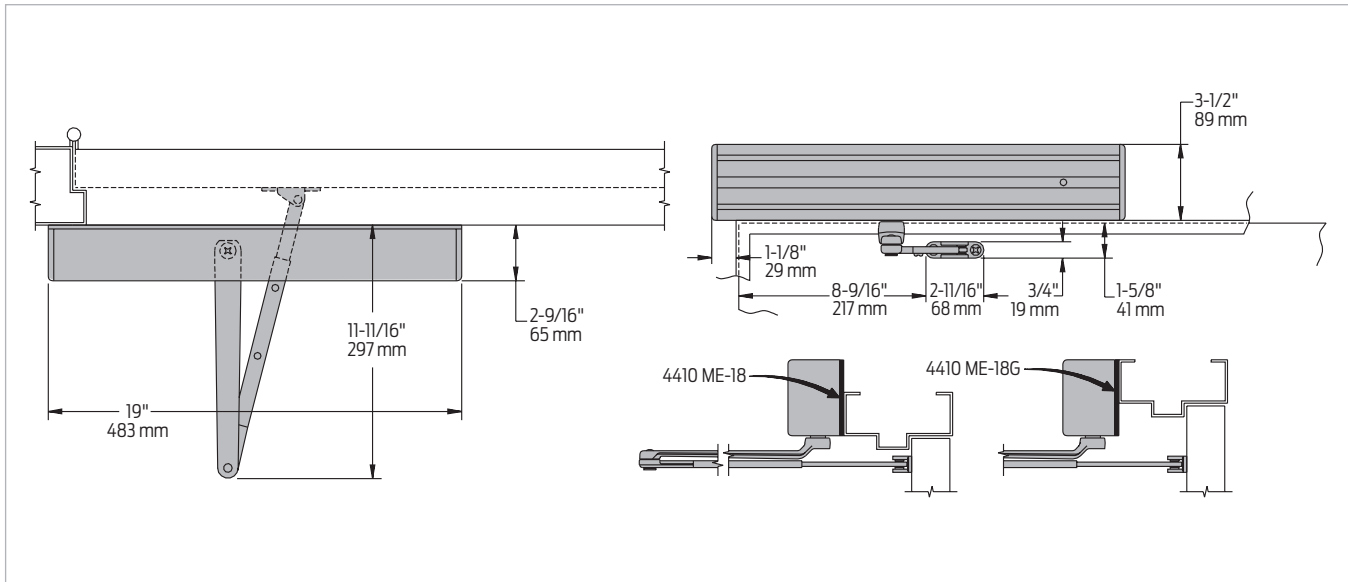
Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

Hinge	Mounting	Finish	Cover	Cylinder	Arm function*
Hinge (pull) side	Top jamb (push)	Plastic	Handed	Single Point Hold Open	Standard (single)
Top jamb (push)	Stop face (push)	Metal	Non-sized	Multi-point Hold Open	Regular (double)
Concealed (frame)	Concealed (door)		Sized	Pass 80/140	Swing Free
Powder coat					Double Egress
Plated					
				150°	

■ Available * Maximum opening/hold open point with standard template.
■ Not available

Mounting details

Top jamb (push side) mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Top rail	<ul style="list-style-type: none"> 1 3/4" (44 mm) minimum 3 3/4" (95mm) minimum with flush ceiling
Reveal	<ul style="list-style-type: none"> 3 7/8" (98 mm) maximum Regular or Long Arm For reveals greater than 3 7/8" consult factory
Head frame	<ul style="list-style-type: none"> Requires 1 1/2" (38 mm) minimum 2" (51 mm) minimum with flush ceiling
Flush ceiling	Requires plate, 4410ME-18G substituted for standard mounting plate
Bypass	<ul style="list-style-type: none"> (Suffix "CYLB80" or "CYLB140") eliminates hold open function up to a specified point of door swing CYLB80 cylinder from 0° to 80° CYLB140 cylinder from 0° to 140°
Maximum opening	<ul style="list-style-type: none"> Templating allows 160°, with hold open points up to 150° Optional Long Arm allows 180°, hold open points up to 170°
ME electrical options	<ul style="list-style-type: none"> These assemblies have a single electrical circuit with a choice of voltages A separate transformer, 4040SE-3210, can be used to reduce line voltage to 24V AC Circuitry accepts either AC or DC input Please specify 24V or 120V
Options	<ul style="list-style-type: none"> Hold open bypass Optional Long Arm allows 180° with hold open points up to 170° Optional -18G plate accommodates flush ceiling conditions 24V or 120V volt input, please specify
ME wiring diagram	See page 27 for typical wiring and electrical diagram

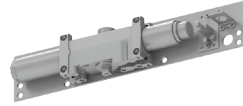
Accessories

Cylinders



**4414ME-3971
Cast iron cylinder
assembly (CYL)**

- Handed
- Cast iron
- Specify 24V or 120V
- Standard



**4414ME-3071
Cast iron cylinder assembly (CYL)**

- Handed
- "On/Off" switch assembly controls hold open function
- Circuitry accepts either AC or DC input
- Please specify 24V or 120V
- Standard

Cover



**4410ME-72MC
Metal Cover (MC)**

- Handed

Arms



**4410ME-3077
Regular Arm (REGARM)**

- Non-handed
- 3 7/8" (98 mm) maximum reveal

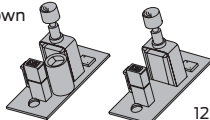


**4410ME-3077L
Long Arm (LONG)**

- For increasing opening to 180°
- 3 7/8" (98 mm) maximum reveal
- Optional

Switch

24V shown



120V shown

**4410ME-3351
ME Switch Assembly**

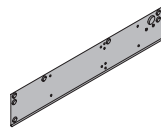
- Provides continuous hold open function
- Available as 24V or 120V, please specify

Installation accessories



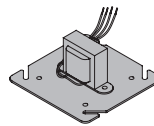
**4410ME-18
Mounting Plate**

- Standard



**4410ME-18G
Mounting Plate**

- Substituted for standard plate on flush ceiling installations
- Optional



**4410ME - 3210
Transformer**

- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)



**4410ME-3354
ME Wiring Harness**

- Three wire harness with 6" (152 mm) leads for field wiring connections

Ordering information

How-to-order 4410ME Series closers

1. Select hand

- Right Hand (RH)
- Left Hand (LH)

2. Select voltage

- 24V AC/DC
- 120V AC/DC

3. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint.

Closer will be shipped with:

- Standard cover
- Regular arm
- Wood and machine screws
(unless options listed below are selected)

Closer options

Cylinder function

- Bypass hold open up to 80° (CYLB80)
- Bypass hold open up to 140°v (CYLB140)

Arm

- Long Arm (LONG)

Finish

- Custom powder coat (RAL) _____
- Plated finish _____

Screw pack

- Through Bolt¹, Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt¹ and Torx Machine Screws (TBTRX)

¹Specify door thickness if other than 1-3/4"

Installation accessories

- Plate, 4410ME-18G
(substituted for standard mounting plate)
- Transformer, 4410ME-3210

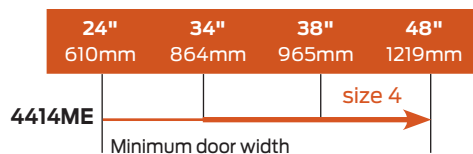
Special template

- ST- _____

Table of sizes

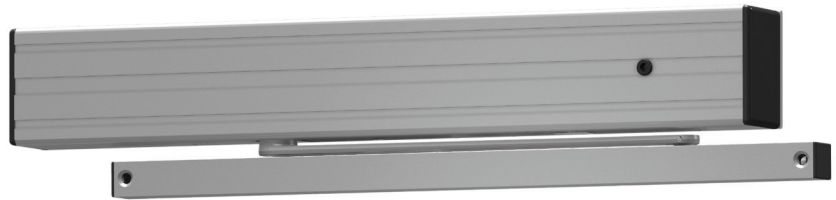
- Closing power of 4414ME Series closers may be increased 15%

Interior door width



Indicates recommended range of door width for closer size.

4310HSA Series

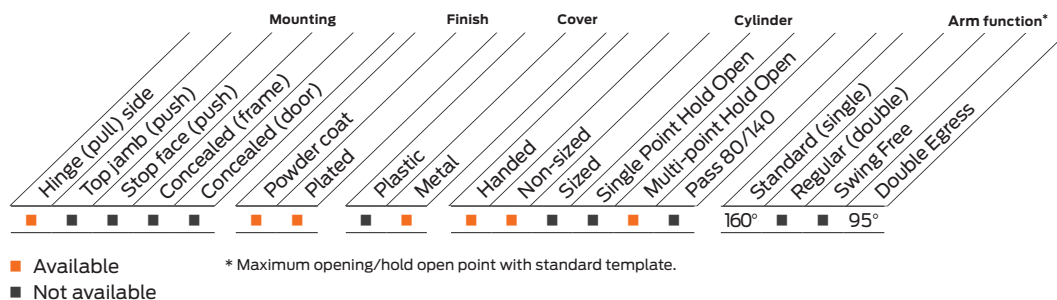


The 4310HSA SENTRONIC® is an electrically controlled closer/holder designed to provide easy passage for groups of pedestrians through high traffic doors. Pedestrians, moving through the doorway, trigger the built-in scanner. When the door is opened to 80° or more, the door is electrically held open to minimize wear and tear on applied door hardware. After the last pedestrian in a group passes through the doorway, the system timer releases the hold open, closing the door.

Features

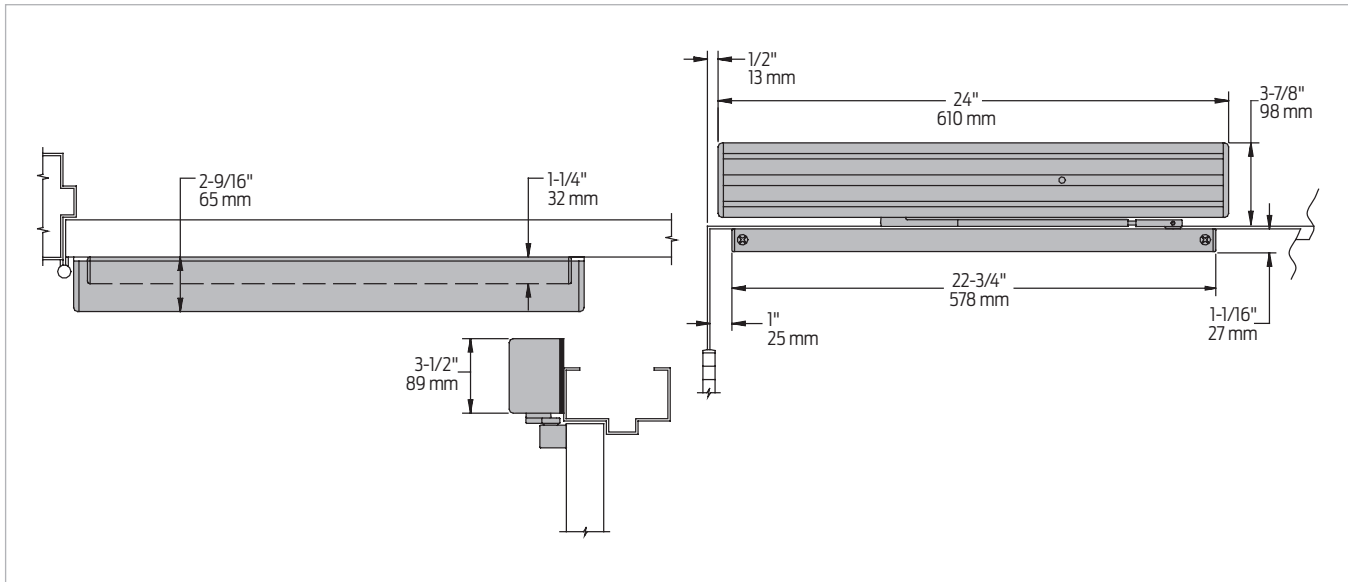
Certifications	Grade 1 - ANSI A156.15, NFPA 101, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act	Cover	Metal, Standard
Body construction	<ul style="list-style-type: none"> Cast iron body Full complement bearing 1 1/2" diameter piston 1 1/16" diameter double heat treated pinion journal 	Arms	<ul style="list-style-type: none"> Standard Arm (with track) Double Egress Arm, optional
Fluid	All weather fluid	Finishes/colors/ powder coat	<ul style="list-style-type: none"> 689 Aluminum paint 690 Statuary Bronze paint 691 Light Bronze paint 693 Black paint 695 Dark Bronze paint 696 Brass paint Custom colors optional
Handing	Handed		<ul style="list-style-type: none"> Optional SRI primer - powder coat only Optional plated finishes
Size	Field adjustable, shipped at size 3	Wiring	<ul style="list-style-type: none"> Concealed or surface wiring 24V AC/DC input only 120V requires 4310HSA-3210 transformer HSA features a scanner activated hold open function, fixed 15 seconds or 30 seconds
Warranty	2 years		
Fasteners	Wood and Machine Screws (WMS)		
Mounting	Hinge (pull side), interior doors		

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



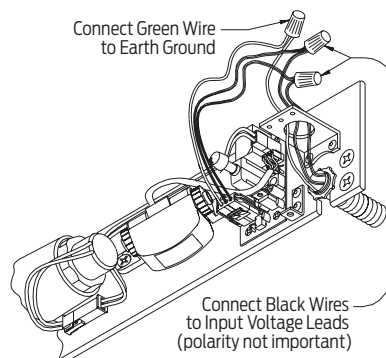
Mounting details

Hinge (pull side) mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Reveal	<ul style="list-style-type: none"> Should not exceed 1/8" (3 mm) for Standard Arm Should not exceed 2 1/16" (68 mm) for Double Egress Arm
Top rail	1 1/16" (27 mm) minimum
Head frame	Requires 2" (51 mm) minimum
Clearance	1 1/4" (32 mm) minimum
Maximum opening	<ul style="list-style-type: none"> Templating allows 180° Optional Double Egress Arm limited to 95° Infinite hold open points from 80° up to 160°
Options	120 volt input requires 4310HSA-3210 transformer to change 120V AC to 24V AC

HSA wiring diagram



Note: If used on fire door, must be wired into fire alarm system.

Notes:

- Functions as full rack and pinion door closer when current is interrupted or continuous hold open is not engaged
- Built-in "On/Off" switch provides continuous hold open function

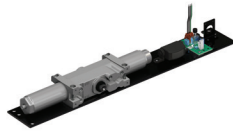
Accessories

Cylinders



4311HSA-3971
Cast iron cylinder assembly (CYL)

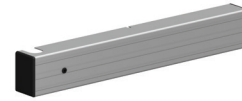
- Handed
- Cast iron
- 24V AC/DC input only for holding solenoid
- Standard



4311HSA-3071
Cast iron cylinder assembly (CYL)

- Handed
- Includes scanner module and system timer module
- "On/Off" switch assembly provides continuous hold open function
- 24V AC/DC input only for holding solenoid and electronics modules
- Standard

Cover



4310HSA-72MC
Metal Cover (MC)

- Handed
- Standard

Arms



4310HSA-3077T
Standard Arm (STDTRKARM)

- Handed



4310HSA-3077DE
Double Egress Arm (DE)

- Handed
- For double egress doors and frames
- 2 11/16" (67 mm) maximum reveal
- Optional

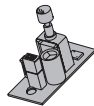
Track



4310HSA-3038
Track

- Non-handed
- Standard

Switch



4310HSA-3448
Switch Assembly

- Provides continuous hold open function
- Available in 24V only

Scanner



4310HSA-3428
Scanner Module

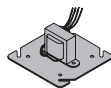
- Includes wire harness to connect scanner module to the switch assembly

Installation accessories



4310HSA-3034
Track Roller

- Quiet, low friction roller assembly
- Shoulder dimension "X" = 1/8" (3 mm)



4310HSA-3210
Transformer

- Reduces line voltage from 120V to 24V AC
- Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 4310HSA Series closers

1. Select hand

- Right Hand (RH)
- Left Hand (LH)

2. Select voltage

- 24V AC/DC

3. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint

Closer will be shipped with:

- 24 AC/DC HSA cylinders
- Metal cover
- Standard arm
- Standard track
- Track roller
- Wood and machine screws
(unless options listed below are selected)

Closer options

Arm

- Double Egress Arm (DE)

Finish

- Custom powder coat (RAL) _____
- Plated finish _____

Screw packs

- Through Bolt¹, Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt* and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 3/4".

Installation accessories

- Transformer, 4310HSA-3210

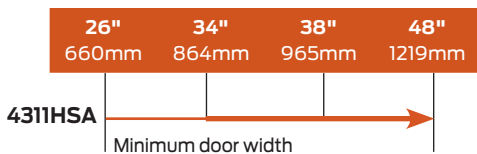
Special template

- ST- _____

Table of sizes

- Closing power of 4310HSA Series closers is field adjustable, shipped at size 3

Interior door width



➔ Indicates recommended range of door width for closer size.

4410HSA Series



The 4410HSA SENTRONIC® is an electrically controlled closer/holder designed to provide easy passage for groups of pedestrians through high traffic doors. Pedestrians, moving through the doorway, trigger the built-in scanner. Double lever arm closer is specifically designed for push side mounting. Choice of finishes and accessories meet virtually all high traffic installation requirements.

Features

Certifications	Grade 1 - ANSI 156.15, NFPA 101, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act	Arms	<ul style="list-style-type: none"> Regular Arm Long Arm, optional
Body construction	<ul style="list-style-type: none"> Cast iron body Full complement bearing 1 1/2" diameter piston 1/16" diameter double heat treated pinion journal 	Finishes/ colors/ powder coat	<ul style="list-style-type: none"> 689 Aluminum paint 690 Statuary Bronze paint 691 Light Bronze paint 693 Black paint 695 Dark Bronze paint 696 Brass paint Custom colors optional Optional SRI primer - powder coat only Optional plated finishes
Fluid	All weather fluid	Wiring	<ul style="list-style-type: none"> Concealed or surface wiring 24V AC/DC input only 120V AC input requires 4410HSA-3210 transformer HSA features a scanner activated hold open function, adjustable 15 or 30 seconds Built-in "On/Off" switch provides continuous hold open feature
Handing	Handed		
Size	Field adjustable, shipped at size 3		
Warranty	2 years		
Fasteners	Wood and Machine Screws (WMS)		
Mounting	Top jamb (push side)		
Cover	Metal, Standard		

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

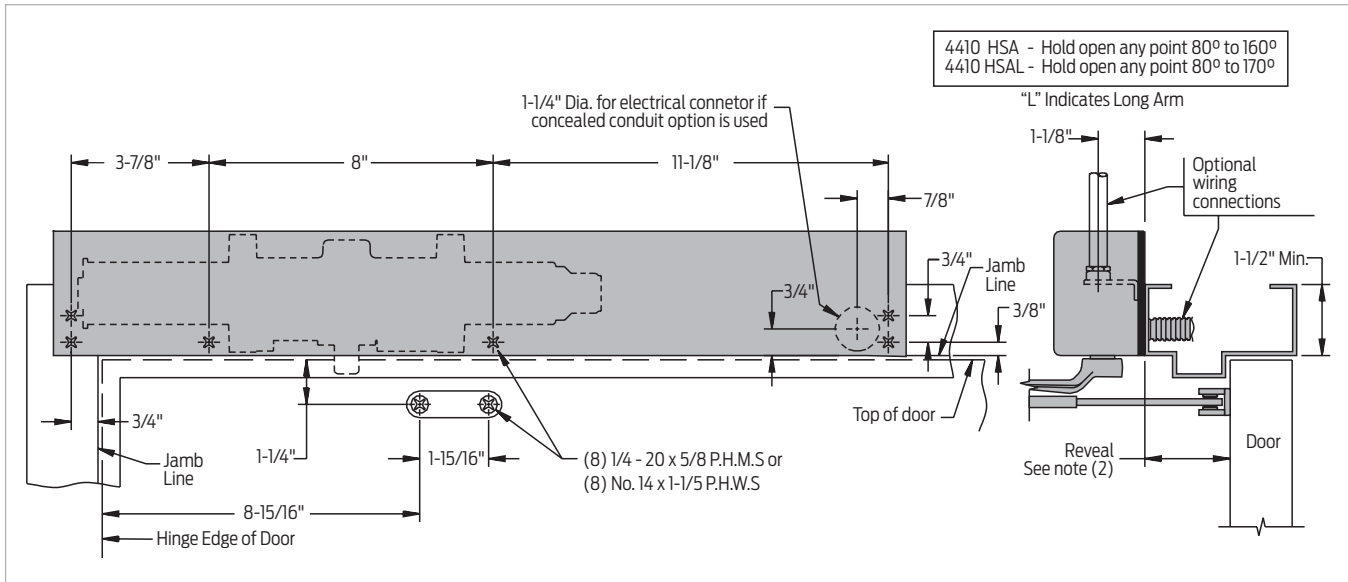
Mounting	Finish	Cover	Cylinder	Arm function*
Hinge (pull) side	Plastic	Handed	Standard (single)	Standard (single)
Top jamb (push)	Metal	Non-sized	Regular (double)	Regular (double)
Stop face (push)		Sized	Swing Free	Swing Free
Concealed (frame)		Single Point Hold Open	Double Egress	Double Egress
Concealed (door)		Multi-point Hold Open		
Powder coat		Pass 80/140		
Plated				

■ Available * Maximum opening/hold open point with standard template.
■ Not available

Introduction
 Product selection guide
 SEM Series
 3130SE Series
 4040SE Series
 2310ME Series
 4310ME Series
 4410ME Series
 4310HSA Series
 4410HSA Series
 SEH Series

Mounting details

Top jamb (push side) mounting



Butt hinges	Should not exceed 4 1/2" (114 mm) in width
Top rail	<ul style="list-style-type: none"> 1 3/4" (44 mm) minimum 3 3/4" (95 mm) minimum with flush ceiling
Head frame	<ul style="list-style-type: none"> Requires 1 1/2" (38mm) minimum 2" (51 mm) minimum with flush ceiling
Reveal	<ul style="list-style-type: none"> 3 7/8" (98 mm) maximum for Regular or Long Arm For reveals greater than 3 7/8" consult factory
Maximum opening	<ul style="list-style-type: none"> Templating allows 160° Infinite hold open points from 80° up to 150° Optional Long Arm allows 180°, hold open points up to 170°
Options	<ul style="list-style-type: none"> Optional Long Arm allows 180° with hold open points up to 170° Optional-18G plate accommodates flush ceiling conditions 120 volt input requires 4410HSA-3210 transformer to change 120V AC to 24V AC

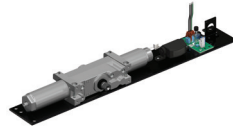
HSA wiring diagram

Accessories

Cylinders

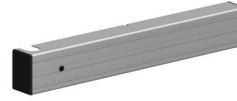


- 4412HSA-3971**
Cast iron cylinder assembly (CYL)
- Handed
 - Cast iron
 - 24V AC/DC input only for holding solenoid
 - Standard



- 4412HSA-3071**
Cast iron cylinder assembly (CYL)
- Handed
 - Includes scanner module and system timer module
 - "On/Off" switch assembly provides continuous hold open function
 - 24V AC/DC input only for holding solenoid and electronics modules
 - Standard

Cover



- 4410HSA-72MC**
Metal Cover (MC)
- Handed
 - Standard

Arms

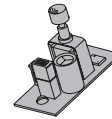


- 4410HSA-3077**
Regular Arm (REGARM)
- Non-handed
 - 3 7/8" (98 mm) maximum reveal



- 4410HSA-3077L**
Long Arm (LONG)
- For increased opening
 - 3 7/8" (98 mm) maximum reveal
 - Optional

Switch



- 4410HSA-3448**
Switch Assembly
- Provides continuous hold open function
 - Available in 24V only

Scanner

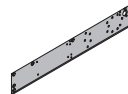


- 4410HSA-3428**
Scanner Module
- Includes wire harness to connect scanner module to the switch assembly

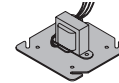
Installation accessories



- 4410HSA-18**
Mounting Plate
- Standard



- 4410HSA-18G Transformer**
Mounting Plate
- Substituted on flush ceiling installations
 - Optional



- 4410HSA-3210**
Transformer
- Reduces line voltage from 120V to 24V AC
 - Mounted on plate for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order 4410HSA Series closers

1. Select hand

- Right Hand (RH)
- Left Hand (LH)

2. Select voltage

- 24V AC/DC

3. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint

Closer will be shipped with:

- 24 AC/DC HSA cylinders
- Metal cover
- Regular arm
- Wood and machine screws
(unless options listed below are selected)

Closer options

Arm

- Long Arm (LONG)

Finishes

- Custom powder coat (RAL) _____
- Plated finish _____

Screw pack

- Through Bolt¹, Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt* and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 3/4".

Installation accessories

- Plate, 4410HSA-18
- Plate, 4410HSA-18G
(substituted for standard mounting plate)
- Transformer, 4410HSA-3210

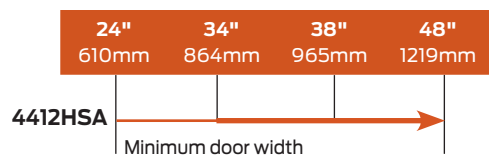
Special template

- ST- _____ (if required)

Table of sizes

- Closing power of 4410HSA Series closers is field adjustable, shipped at size 3

Interior door width



➔ Indicates recommended range of door width for closer size.

SEH Series



The SEH SENTRONIC® is a holder designed to provide single point hold open for fire and smoke barrier doors that must be used with an opposite side mounted UL listed door closer. The door is held open until current interruption releases the holding mechanism and the door closes. Single lever (track) arm is specifically designed for interior doors.

Features

Certifications	Grade 1 - ANSI A156.15, UL 10C, 100 Hour Salt Spray, Meets BAA - Buy American Act, NFPA 101	Finishes/ colors/ powder coat	<ul style="list-style-type: none"> ■ 689 Aluminum paint ■ 690 Statuary Bronze paint ■ 691 Light Bronze paint ■ 693 Black paint ■ 695 Dark Bronze paint ■ 696 Brass paint ■ Custom colors optional
Handing	Non-handed	Wiring	<ul style="list-style-type: none"> ■ Optional SRI primer - powder coat only ■ Optional plated finishes
Templating	22 3/4" x 1 1/4"		
Warranty	2 years		
Fasteners	Wood and Machine Screws (WMS)		
Mounting	Hinge (pull side)		
Arms	<ul style="list-style-type: none"> ■ Standard, non-handed arm for any 4040SE Series ■ Standard, non-handed track for SEH ■ Specify 24V or 120V AC/DC input for holding solenoid ■ Includes test switch assembly with fuse 		

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

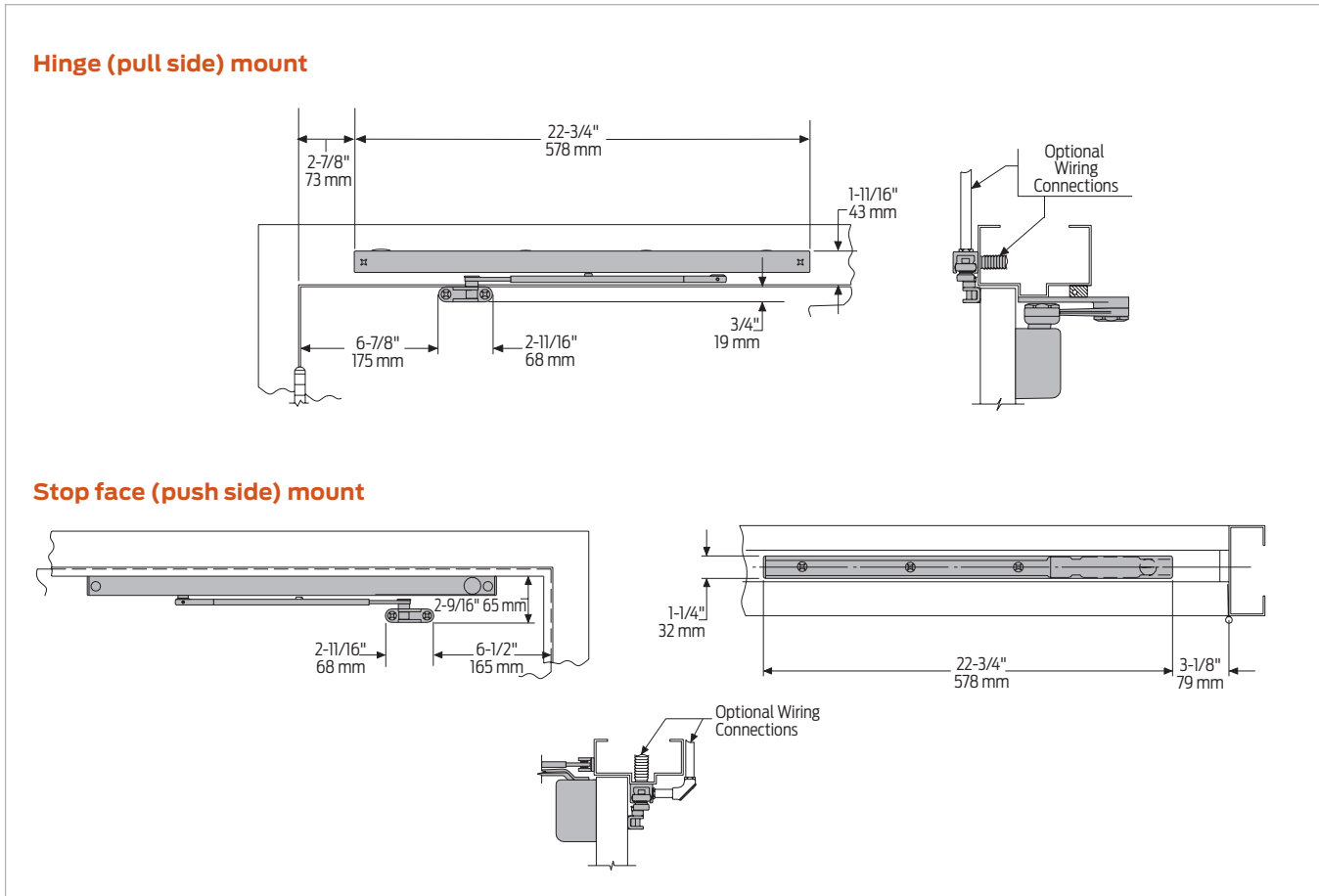
Mounting	Finish	Cover	Cylinder**	Arm function*
<ul style="list-style-type: none"> ■ Hinge (pull) side ■ Top jamb (push) ■ Stop face (push) ■ Concealed (frame) ■ Concealed (door) ■ Powder coat ■ Plated 	<ul style="list-style-type: none"> ■ Plastic ■ Metal 	<ul style="list-style-type: none"> ■ Handed ■ Non-Sized ■ Sized ■ Single Point Hold Open ■ Multi-point Hold Open ■ Pass 80/140 	<ul style="list-style-type: none"> ■ 100° 	<ul style="list-style-type: none"> ■ Standard (single) ■ Regular (double) ■ Swing Free ■ Double Egress

■ Available * Maximum opening/hold open point with standard template.
 ■ Not available ** Cylinder sold separately.

Introduction
 Product selection guide
 SEM Series
 3130SE Series
 4040SE Series
 2310ME Series
 4310ME Series
 4410ME Series
 4310HSA Series
 4410HSA Series
 SEH Series

Mounting details

Hinge (pull side) and stop face (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Swing clear hinges	Consult factory
Auxiliary stop	Recommended at hold open point
Reveal	Should not exceed 1/8" (3 mm) for Standard Arm
Head frame	Should not exceed 5" (127 mm) in width
Stop width	1 1/4" (32 mm) minimum
Flush ceiling	2" (51 mm) head frame does not require special templating
Door width	<ul style="list-style-type: none"> ■ 2'4" (711 mm) minimum for single door with SEH ■ 4'8" (1422 mm) minimum for paired doors with SEH
Maximum opening	<ul style="list-style-type: none"> ■ Templating allows 100° ■ Hold open points between 80° and 100° in approximately 3° increments
SEH electrical options	<ul style="list-style-type: none"> ■ These track assemblies require a single power circuit for the holding solenoid ■ SEH holding solenoid is either 24V or 120V input, please specify ■ An optional 4040SE-3210 transformer or 8310-824 reduces 120V AC line voltage to 24V AC ■ Circuitry accepts either AC or DC input
Options	24V or 120V volt input for SEH, please specify
Wiring diagram	See page 13 for typical wiring and electrical diagram

Notes:

- Information applies to SEH unless otherwise specified
- Standard SEH Series is a door holder that must be installed in conjunction with an opposite side mounted, UL listed door closer
- Hold open force is adjustable
- Momentary on/off switch board assembly for testing door release also provides over-voltage protection (field replaceable)
- All SEH type holders require a separate closer for fire or smoke barrier door applications

Accessories

Arm



**SEH-3077T
Standard Arm (STDTRKARM)**

- Non-handed
- Can be combined with any 4040SE Series track to provide an electrically controlled hold open function on either side of the door
- All SEH type holders require a separate closer for fire or smoke barrier door applications

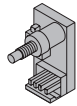
Track



**SEH-3038
Standard Track (STDTRK)**

- Non-handed
- Mounts on either head frame or stop
- 24V or 120V AC/DC input for holding solenoid, please specify
- Includes test switch assembly with fuse
- Standard

Switch



**SEH-3436
Test Switch**

Installation accessories



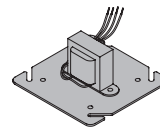
**SEH-81
Conduit Quick-Connector**

- Two piece connector for use with 1/2" conduit



**SEH-3034SE
Track Roller and Track Slider**

- Quiet, low friction roller assembly
- Shoulder dimension
- "X" = 1/4" (6 mm)
- Alloy metal slider for use in SE series tracks only



**4040SEH-3210
Transformer**

- Reduces line voltage from 120V to 24V AC
- Mounted on cover for 4" (102 mm) x 4" x 2 1/8" (54 mm) junction box (by others)

Ordering information

How-to-order SEH Series closers

1. Select voltage

- 24V AC/DC
- 120V AC/DC

2. Select finish

- Standard powder coat _____
Aluminum (689), Dark Bronze (695),
Statuary Bronze (690), Light Bronze
(691), Black (693), Brass (696) paint.

Closer will be shipped with:

- Standard arm- Standard track
- Regular arm
- Wood and machine screws
(unless options listed below are selected)

Closer options

Finish

- Custom powder coat (RAL) _____

Screw pack

- Through Bolt¹, Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt* and Torx Machine Screws (TBTRX)

*Specify door thickness if other than 1 3/4".

Installation accessories

- Transformer, 4040SE-3210

Special template

- ST- _____ (if required)

Notes

About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions. Allegion had \$2.7 billion in revenue in 2020, and its security products are sold around the world.

For more, visit www.allegion.com

KRYPTONITE ■ LCN ■  ■ STEELCRAFT ■ VON DUPRIN