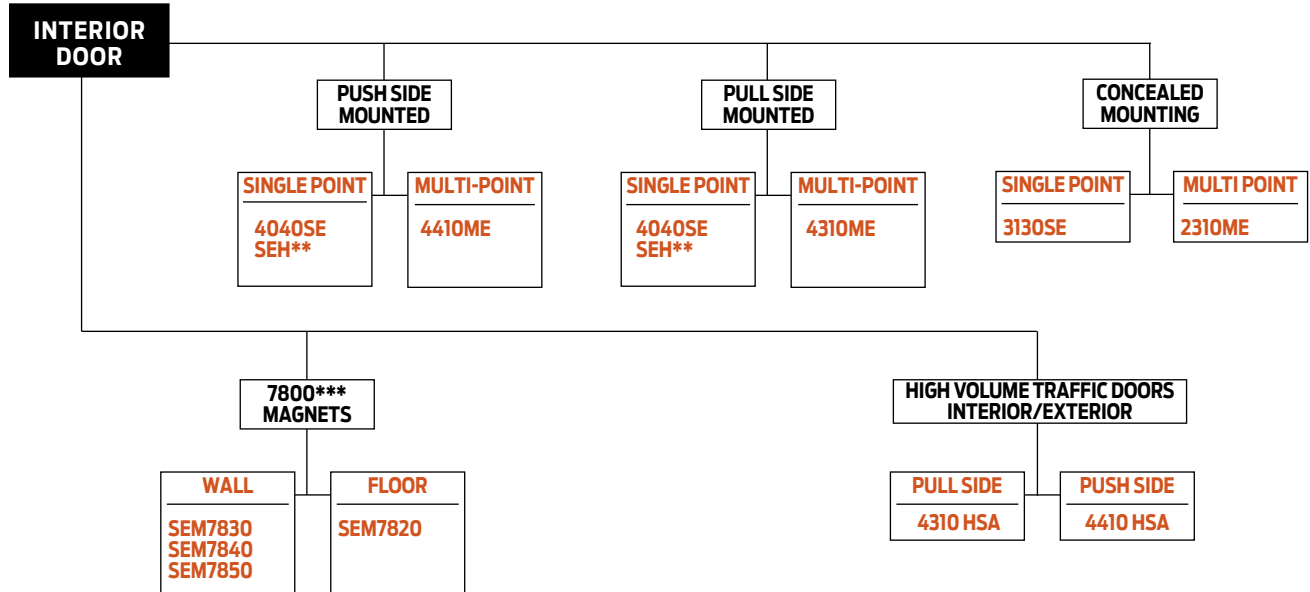


Product selection guide

SENTRONIC® 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.



** See SEH section (cylinder not included).

*** 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..

CLOSER SERIES	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	BYPASS 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
○ NOT AVAILABLE

* Maximum hold-open with standard template. See individual closer series for degrees of opening and hold-open per installation.

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 infinitely 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. Best suited for high traffic emergency exit doors.

MAGNETS (SEM) - ELECTROMAGNETIC DOOR HOLDERS

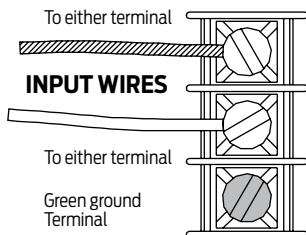
SEM Series magnets work with manual door closers to provide single point hold-open. Now available in new **tri-voltage** with 35 lbs. of holding force.

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 unusual conditions.

GENERAL NOTES

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



SE WIRING DIAGRAM

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

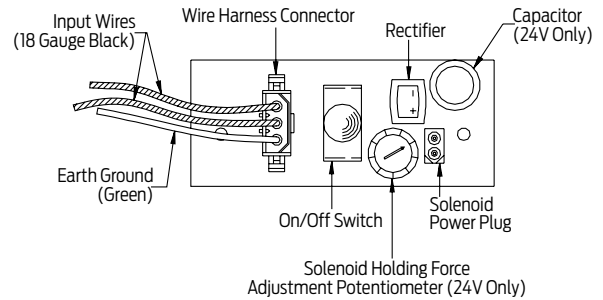
24V AC/DC (+10% -15%) @ 120 mA max.

TRANSFORMER DATA

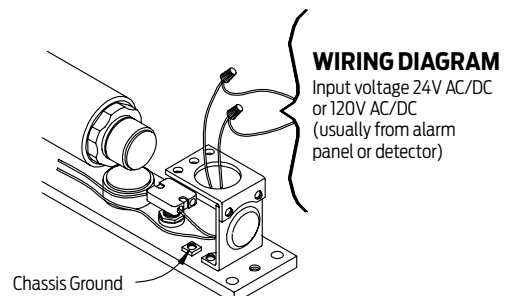
120V AC 50-60 Hz (primary); 24V AC @ 400 mA max. (secondary)
An LCN supplied transformer will power (recommended) 2 SE, 3 SE/ME, and 15 SEM.

ME WIRING

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



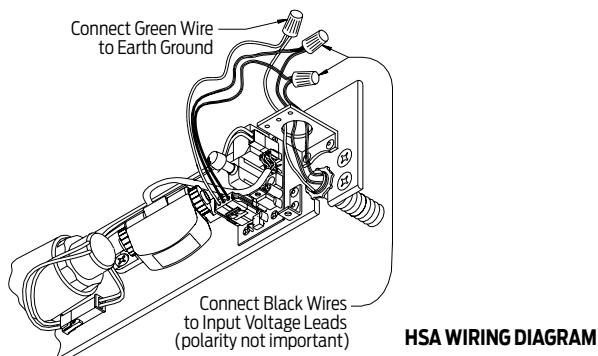
ME (4310, 4410) WIRING DIAGRAM (24V only)



ME (2310) WIRING DIAGRAM

HSA WIRING

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



FEATURES COMMON TO FIRE/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 backcheck 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).

WARRANTY

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

SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

DESIGN ASSISTANCE

LCN has been providing reliable solutions to unique door control problems since 1925.

MATERIALS

- High strength **cast iron** cylinder.
- **Forged steel** main arm.
- One piece **forged steel** piston.
- **All weather fluid** eliminates 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.

MAINTENANCE

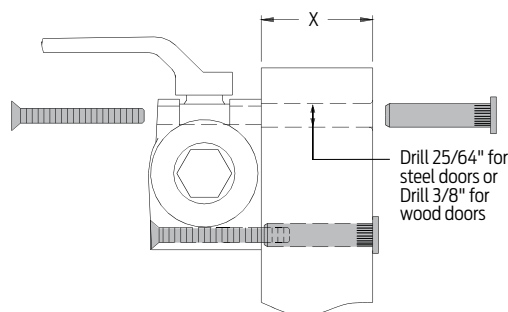
Closers mounted according to LCN installation instructions require no periodic adjustments. Quarterly inspections are recommended. Refer to the installation instructions for complete, product specific details.

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.

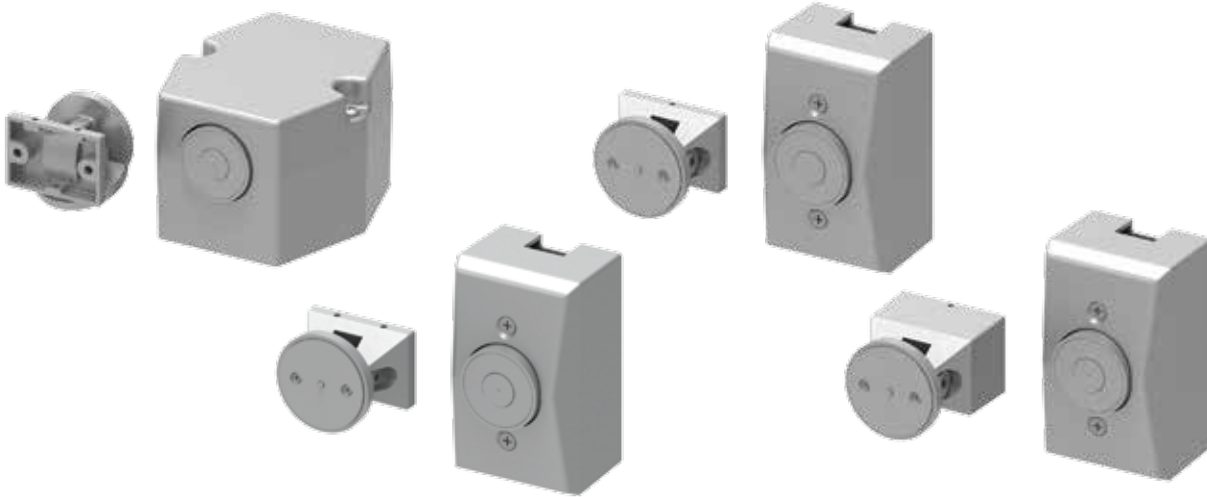
FASTENERS

Standard WOOD and MACHINE SCREW (WMS) pack contains phillips head wood and machine screws to install the closer. Thru Bolts and/or TORX® machine screws are available for most closers. LCN thru 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.



NOTE 1: For Thru Bolts, specify door thickness if other than 1-3/4" (44 mm).

NOTE 2: Phillips head, metric machine screws are available on special order.



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.

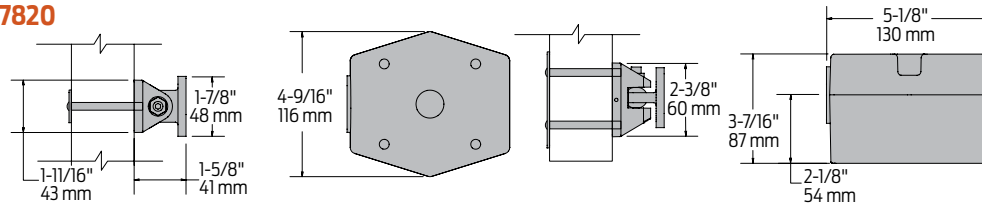
Certifications	Grade 1 - ANSI A156.15, UL 10C for metal smoke barrier or labeled door, ADA, Life Safety Code, NFPA 101, 100 Hour Salt Spray, Meets BAA - Buy American Act
Voltage	Tri-voltage design with 35 lbs. of holding force
Housing	Die cast
Fasteners	Wood and machine screw pack
Finishes/Colors/ Powder Coat	Available in Aluminum and Dark Bronze only
Options	Now available with armature extensions (see page 11)

SEM7800 Series

Magnets

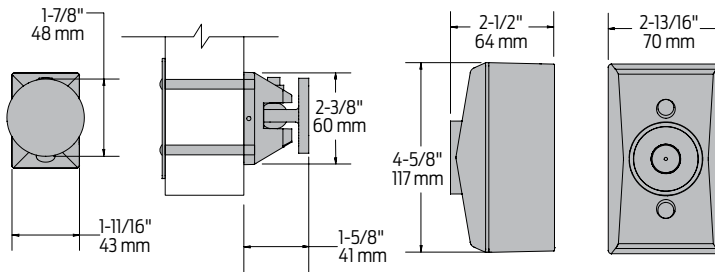
Features and mounting details

7820



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

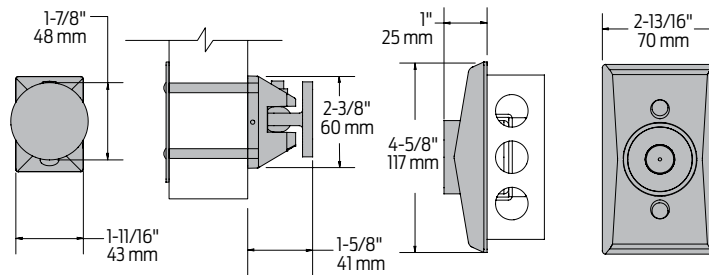
7830



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

- Suitable for use in pocket door installations

7840



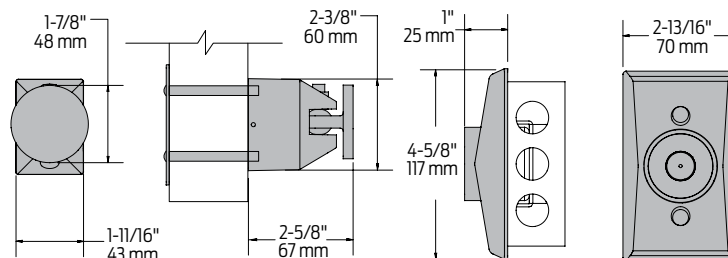
Mounting	<ul style="list-style-type: none"> ■ Low profile recessed wall mount ■ 2" (51 mm) x 4" (102 mm) x 1-1/2" (38 mm)
Total Projection	2-5/8" (67 mm)

- Suitable for use in pocket door installations

Note:

Outlet box not included.

7850



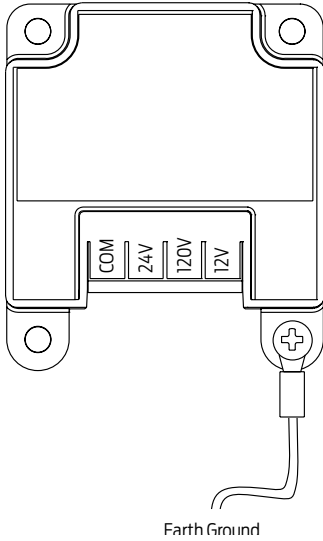
Mounting	<ul style="list-style-type: none"> ■ Standard profile recessed wall mount ■ 2" (51 mm) x 4" (102 mm) x 1-1/2" (38 mm)
Total Projection	3-5/8" (92 mm)

- Suitable for use in pocket door installations

Note:

Outlet box not included.

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.

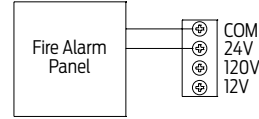


Fig. 1 24V AC/DC Wiring
Polarity is inimportant

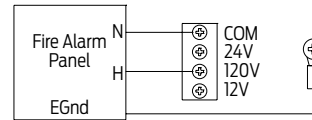


Fig. 2 120V AC Wiring

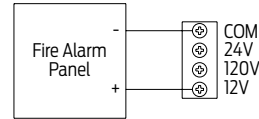


Fig. 3 12V DC Wiring
Polarity as shown

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"> ■ .020A @ 24VAC/DC, 120VAC ■ .030A @ 12VDC

Magnets



SEM7820-516
Floor Magnet

- Magnet coil
- Standard



SEM7830-516
SEM7840-516
SEM7850-516
Wall Magnet

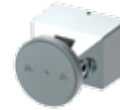
- Magnet coil
- Standard

Armatures



SEM7820-825
SEM7830-825
SEM7840-825
Door Armature

- Die cast low profile armature
- Standard



SEM7850-828
Door Armature

- Die cast armature
- Standard

Cover



SEM7830-72
SEM7840-72
SEM7850-72
Standard Cover

- Die cast cover
- Standard

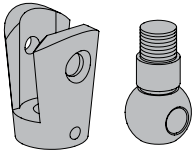
Box



SEM7830-268
Wall Box

- Die cast surface wall mount box
- Standard

Extensions



SEM7810-514
Coupler Assembly Kit

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



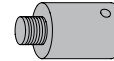
SEM7810-E050
Extension - 1/2"

- Metal
- Standard



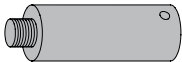
SEM7810-E075
Extension - 3/4"

- Metal
- Standard



Extension, SEM7810-E100
Extension - 1"

- Metal
- Standard



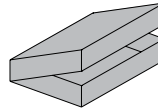
SEM7810-E200
Extension - 2"

- Metal
- Standard



Extension, SEM7810-E400
Extension - 4"

- Metal
- Standard



SEM7810-517
Extension kit

- Extension kit includes:
- 107810SEM-E050
 - 107810SEM-E075
 - 107810SEM-E100
 - 57810SEM-E200
 - 207810SEM-514

*Note: Using just the Coupler Assembly Kit (SEM7810-514) will create a 1-1/2" link.
Extension Links are available in different lengths and can be combined together to achieve the desired length. Max. recommended length = 12"*

SEM7800 Series

Ordering Information

How-to-order SEM 7800 series magnets

Select magnet series

- SEM7820
- SEM7830
- SEM7840
- SEM7850

Specify finish

- Standard Powder Coat _____
Aluminum, Dark Bronze

Magnets will be shipped with:

- Die cast housing
- Cover
- Armatures
- WMS screw pack

How-to-order SEM 7810 extensions

Select magnet series

- SEM7810-514 (qty.) _____
- SEM7810-E050 (qty.) _____
- SEM7810-E075 (qty.) _____
- SEM7810-E100 (qty.) _____
- SEM7810-E200 (qty.) _____
- SEM7810-E400 (qty.) _____
- SEM7810-517 (qty.) _____