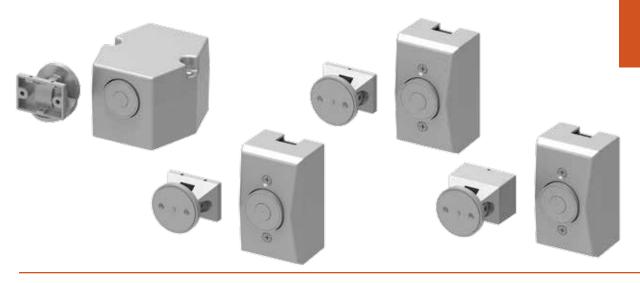
Magnets



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)

**E5** 

### Magnets

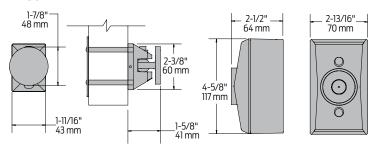
Features and mounting details

# 7820 1-7/8" 4-9/16" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8" 1-5/8"

 Mounting
 Floor mounted

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

### 7830

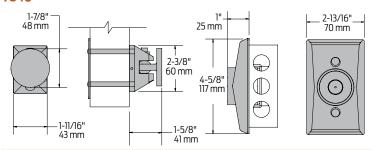


Mounting Surface wall mounted

Total Projection 4-1/8" (105 mm)

Suitable for use in pocket door installations

### 7840



Mounting

- Low profile recessed wall mount
- 2" (51 mm) x 4" (102 mm) x 1-1/2" (38 mm)

**Total Projection** 

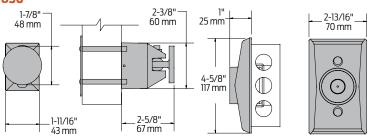
2-5/8" (67 mm)

Suitable for use in pocket door installations

Note:

Outlet box not included.

# 7850



Mounting

- 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

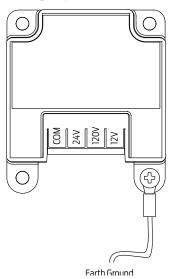
Note:

Outlet box not included.



### 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.

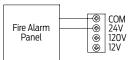
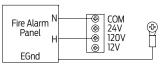


Fig. 1 24V AC/DC Wiring Polarity is inimportant



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

**Electrical Specifications** 

Fig. 2 120V AC Wiring

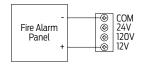


Fig. 3 12V DC Wiring Polarity as shown

Holding Force	35 lbs. @ nominal input voltage
Maximum Current Draw	<ul><li>.020A @ 24VAC/DC, 120VAC</li><li>.030A @ 12VDC</li></ul>

### Accessories

# **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

Accessories

### **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:

- 10......7810SEM-E050 ■ 10.....7810SEM-E075
- 10.....7810SEM-E100
- 20......7810SEM-514

■ 5.....7810SEM-E200

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"

# Ordering Information

# How-to-order SEM 7800 series magnets

# Select magnet series □SEM7820 □SEM7830 □SEM7840 □SEM7850 Specify finish

☐ Standard Powder Coat \_ Aluminum, Dark Bronze

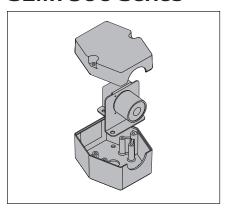
# Magnets will be shipped with:

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

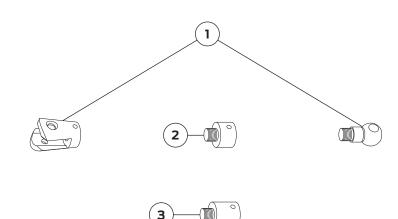
# How-to-order SEM 7810 extensions

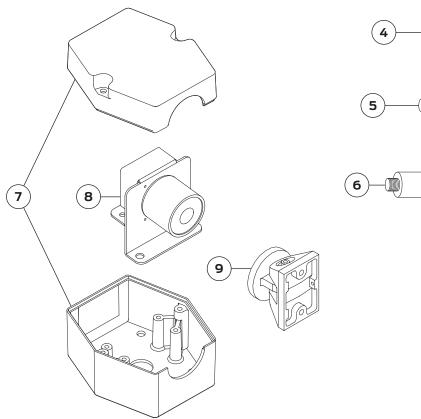
### Select magnet series ☐ SEM7810-514 (qty.) ☐ SEM7810-E050 (qty.) ☐ SEM7810-E075 (qty.) □ SEM7810-E100 (qty.) \_ □ SEM7810-E200 (qty.) \_ □ SEM7810-E400 (qty.) \_ ☐ SEM7810-517 (qty.)





SEM7810 & Extensions





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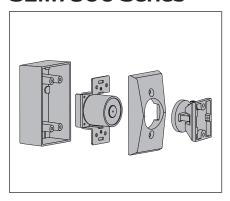




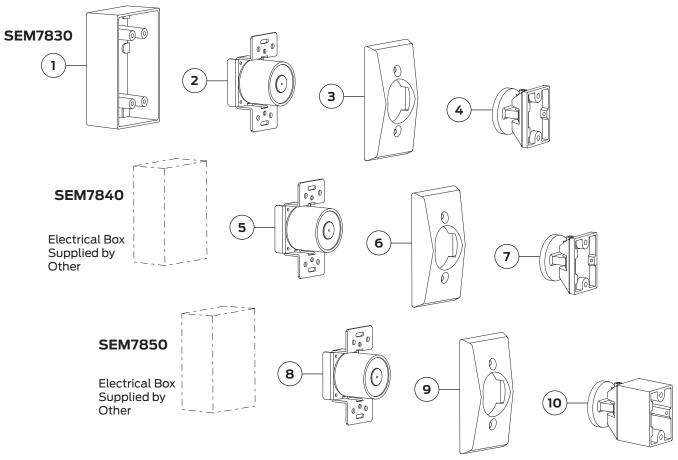
No.	Description	Part number
1	Ball Pivot / Connection Link (F)	SEM7810-514
2	Extension 1/2" (F)	SEM7810-E050
3	Extension 3/4" (F)	SEM7810-E075
4	Extension 1" (F)	SEM7810-E100
5	Extension 2" (F)	SEM7810-E200

No.	Description	Part number
6	Extension 4" (F)	SEM7810-E400
7	Standard Cover & Base (F)	SEM7820-72
8	Magnet Core Assembly	SEM7820-516
9	Door Armature (F)	SEM7820-825
10	Fastener Kit (Not Shown)	SEM7820-515

Please specify finish (F) & voltage (V) where indicated. See the latest edition of the LCN catalog for part descriptions and specifications on many of the items shown above. List prices for items shown above can be located in the current LCN price book.



SEM7830, SEM7850, & SEM7850



No.	Description	Part number
1	Surface Mount Box (F)	SEM7830-268
2	Magnet Core Assembly	SEM7830-516
3	Standard Cover (F)	SEM7830-72
4	Door Armature (F)	SEM7830-825
5	Magnet Core Assembly	SEM7840-516
6	Standard Cover (F)	SEM7840-72
7	Door Armature (F)	SEM7840-825

	Part number
Magnet Core Assembly	SEM7850-516
Standard Cover (F)	SEM7850-72
Door Armature (F)	SEM7850-828
Fastener Kit (Not Shown)	SEM7830-515
Fastener Kit (Not Shown)	SEM7840-515
Fastener Kit (Not Shown)	SEM7850-515
F	Standard Cover (F)  Door Armature (F)  Fastener Kit (Not Shown)  Fastener Kit (Not Shown)

Please specify finish (F) & voltage (V) where indicated. See the latest edition of the LCN catalog for part descriptions and specifications on many of the items shown above. List prices for items shown above can be located in the current LCN price book.