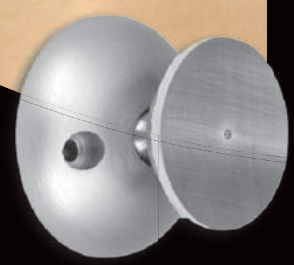




Manufacturing, Inc.



- Overhead Holders & Stops
- Hospital Push/Pull Latches
- Electrical Power Transfer Products
- Aluminum Continuous Geared Hinges
- Stainless Steel Continuous Pin & Barrel Hinges
- Stainless Steel Edge Guards
- Pivots & Pivot Sets
- Rescue Hardware
- Coordinators, Flush Bolts, & Roller Latches
- Slide Bolts, Surface Bolts, & Miscellaneous Products

Electro-Magnetic Door Holders

Electro-Magnetic Door Holders Cross Reference Chart

| Type | ABH* | ASSA Abloy* | | LCN* | Dorma* |
|---------------------------------------|--------|-------------------------|----------|--|------------------|
| | | Rixson* | Sargent* | | |
| Recessed Mount | 2100 | FM998 FM997 FM994 | 1561 | SEM7850 SEM7840 SEM1980 SEM1970 | EM-504 EM-505 |
| Surface Mount | 2300 | FM996 | 1560 | SEM7830 SEM1960 | EM-508 |
| Flush Mount | 2400 | FM990 | - | - | EM-509 |
| Low Profile - Flush Mount | 2400L | - | - | - | - |
| Extra Low Profile - Flush Mount | 2400LS | FM989 | - | - | - |
| 300 lb. Heavy Duty - Surface Mount | 2510 | FM993 | - | - | - |
| Floor Mount - Single | 2600 | FM980 | 1562 | SEM7820 | EM-501 |
| Floor Mount - Double | 2700 | FM981 | 1563 | - | EM-502 |

*Brand names are trademarks or registered trademarks of their respective companies.

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Electrical Schematics & Technical Data

D-3

Wall Mount

| | |
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Floor Mount

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|---------------------|-----|
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Parts

| | |
|----------------------|-----|
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General Info

Where would I use it?

Electromagnetic door holders can be used in any application needing remote door release.

- Fire rated openings
 - Door is released when magnet is tripped by a smoke alarm or detector
- Private offices
 - Door releases when prompted from remote switch

The ABH Advantage

- Magnets are tri-voltage for installation and stocking ease
- Door armature has two pivot points which each have **360°** mobility
- Magnetic coil is **tri-voltage** and can be wired for 12VDC, 24 VAC, 24 VDC or 120 VAC.
- **All metal components** - do not contain any plastic components.
- Most models come with a **1" extension for FREE** and do not require an extension adapter piece
- Extension rods thread together easily allowing installers to mix and match standard sizes to achieve desired length (see D-8 for details)
- Positive release button on door armature alleviates residual magnetism
- UL and ULC listed for use on fire doors
- California State Fire Marshall approved

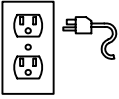
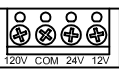
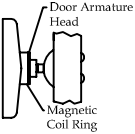

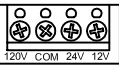
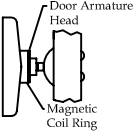
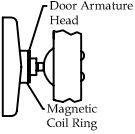
Warranty

ABH provides a two-year limited warranty for all its electromagnetic door holders from date of shipment.

Certifications

- UL and ULC listed for use on fire doors
- California State Fire Marshall approved
- Meets or exceeds ANSI/BHMA A156.15 Grade 1

Troubleshooting

| Problem | Possible Cause | |
|----------------------|--|---|
| Magnet Does Not Hold |  | Power not on or not plugged in. |
| |  | Ground wire not connected to "COM" on terminal strip. Power wire not connected to correct power slot on terminal strip. |
| |  | Door Armature head is not sitting completely flat across magnetic coil ring. Swivel door armature head (360° mobility) to make complete contact. |
| Holding Force Weak |  | Dirt or cleaning solvent on armature head or magnetic coil. Turn power off and wipe with very fine emery cloth. |
| |  | Power wire not connected to correct power slot on terminal strip. 12VAC input instead of 12VDC. For DC Coils reverse polarity. Switch position of wires on terminal strip. |
| |  | Door Armature head is not sitting completely flat across magnetic coil ring. Swivel door armature head (360° mobility) to make complete contact. |
| Humming Sound |  | Door Armature head is not sitting completely flat across magnetic coil ring. Swivel door armature head (360° mobility) to make complete contact. |

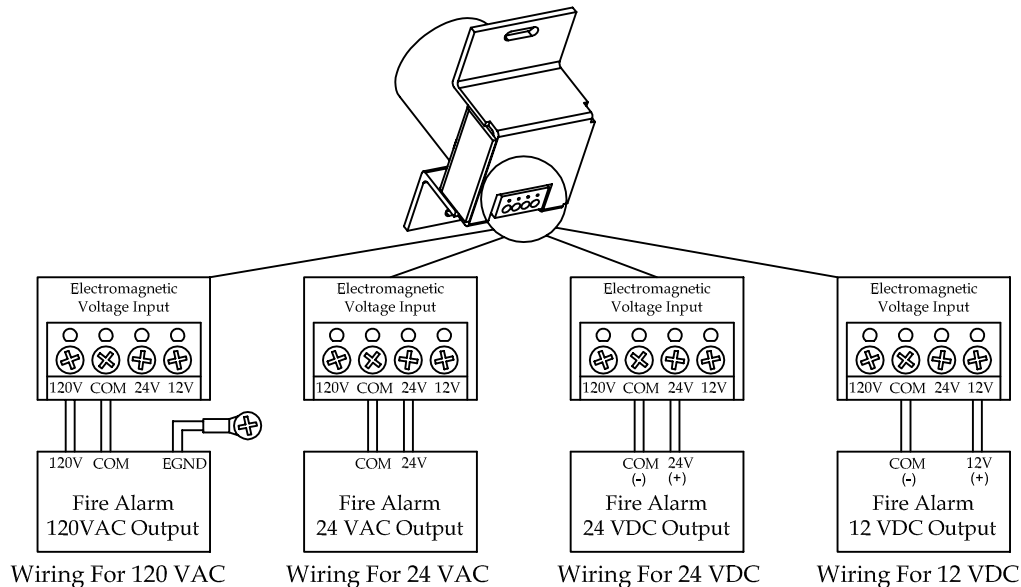


Technical Data

- Magnets are tri-voltage for installation and stocking ease
- Low current draw provides savings in power and battery back-ups
- 35 lb. holding force
 - Door can be manually pulled closed with enough force
 - Individually tested for voltage and holding power prior to shipping
- Circuit normally closed
- Power failure automatically releases the door
- Door armature supplied with sex bolts

Operation

Electromagnets are typically used with fire alarm system. Doors are held open in the non-alarm condition. When the fire alarm control system enters the alarm condition, power to the electromagnets is cut off, causing the doors to be released and allowing the door closer to close the door. When the fire alarm control system returns to the non-alarm condition, power is restored to the electromagnet and the door can be manually returned to the open position.



Technical Data

| Model | Voltage | DC/mA | DC/VA | AC/mA | AC/VA | Terminals |
|---|----------|-------|-------|-------|-------|------------|
| 2100, 2300, 2400, 2400L, 2400LS, 2600, 2700 | 12 DC | 60 | .72 | - | - | COM & 12V |
| | 24 AC/DC | 30 | .72 | 30 | .72 | COM & 24V |
| | 120 AC | - | - | 30 | 3.6 | COM & 120V |

| Model | Voltage | mA | VA | Terminals |
|-------|----------|-----|------|-----------|
| 2510 | 24 AC/DC | 105 | 1.26 | COM & 24V |

NOTE: All wiring must be installed in compliance with the National Electrical Code and the local codes having jurisdiction. Proper wire gauge should be used.

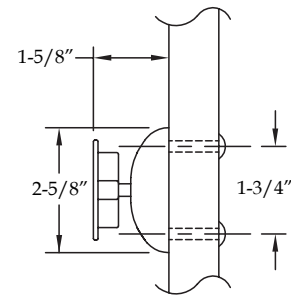
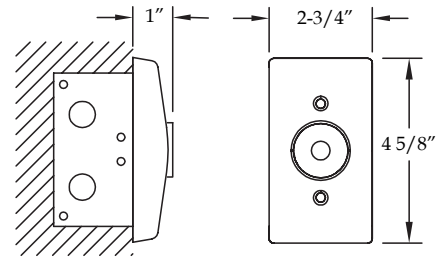


Wall Mount

2100 – Recessed Wall Mount

Standard Features

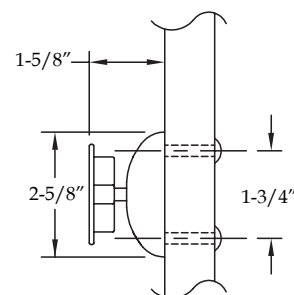
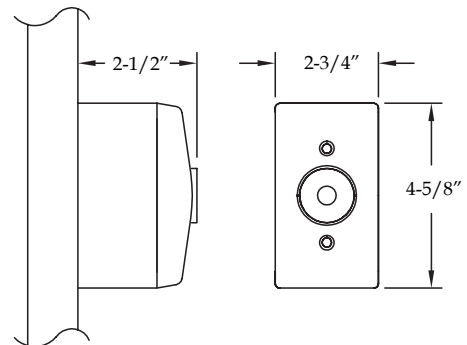
- 2- $\frac{5}{8}$ " total projection from wall to face of door (3- $\frac{5}{8}$ " if using complimentary 1" extension)
- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- Provided with one complimentary 1" extension – **No charge**
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**
- 35 lb. holding force
- All metal components – **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Outlet box required (not provided)
- Armature features two pivot points which each have 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 2.5 lbs.



2300 – Surface Wall Mount

Standard Features

- 4- $\frac{1}{8}$ " total projection from wall to face of door (5- $\frac{1}{8}$ " if using complimentary 1" extension)
- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- Provided with one complimentary 1" extension – **No charge**
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**
- 35 lb. holding force
- All metal components – **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Armature features two pivot points which each have 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 3 lbs.

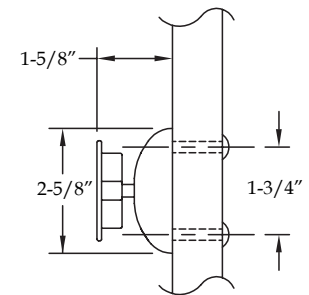
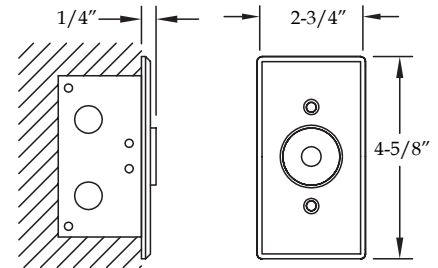


Wall Mount

2400 – Flush Wall Mount

Standard Features

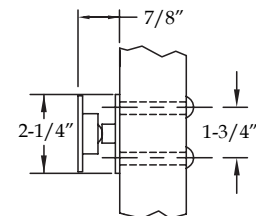
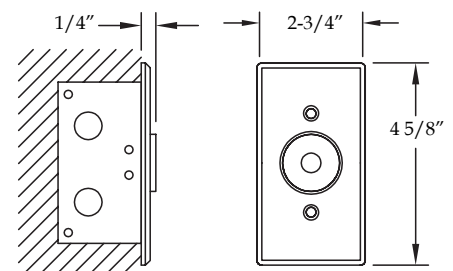
- 1-7/8" total projection from wall to face of door (2-7/8" if using complimentary 1" extension)
- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- Provided with one complimentary 1" extension – **No charge**
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**
- 35 lb. holding force
- All metal components – **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Outlet box required (not provided)
- Armature features two pivot points which each have 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 2 lbs.



2400L – Flush Wall Mount with Low Profile Armature

Standard Features

- 1-1/8" total projection from wall to face of door
- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**
- 35 lb. holding force
- All metal components – **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Armature's pivot point has 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 2 lbs.

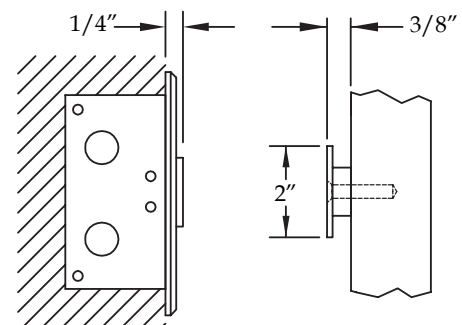
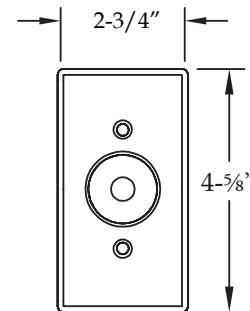


Wall Mount

2400LS - Flush Wall Mount with Flush Mount Armature

Standard Features

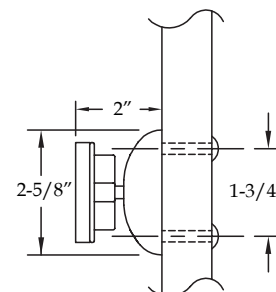
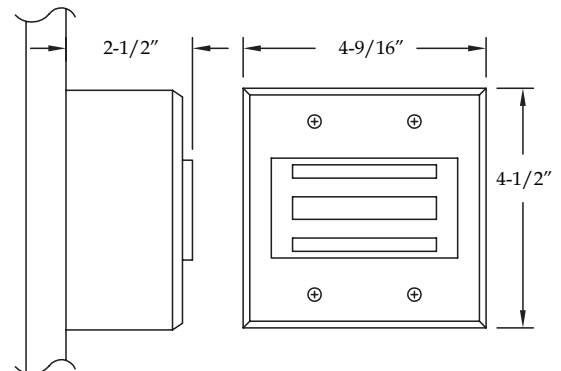
- $\frac{5}{8}$ " total projection from wall to face of door
- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- 35 lb. holding force
- All metal components - **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Outlet box required (not provided)
- Armature features two pivot points which each have 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 2 lbs.



2510 - Heavy Duty Surface Wall Mount

Standard Features

- 4-1/2" total projection from wall to face of door (5-1/2" if using complimentary 1" extension)
- 24V AC/DC magnetic coil
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**
- 300 lb. holding force
- All metal components - **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Armature's pivot point has 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 6 lbs.

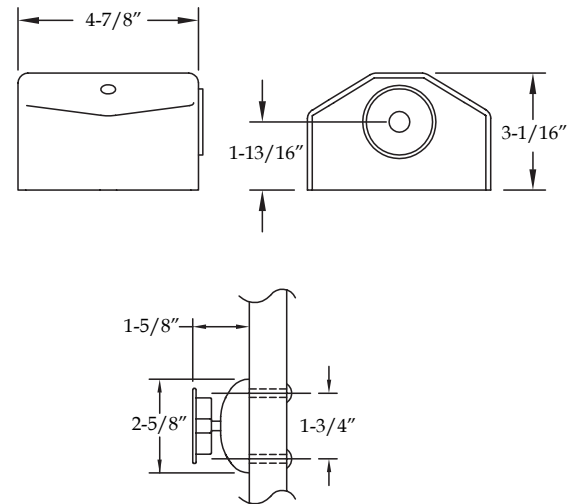


Floor Mount

2600 – Single Floor Mount

Standard Features

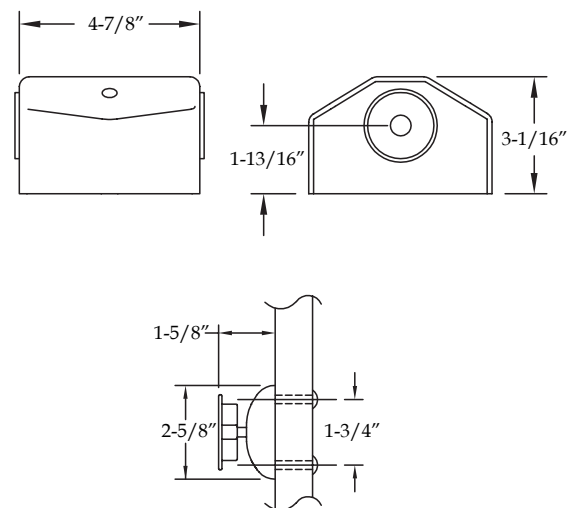
- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- Provided with one complimentary 1" extension - **No charge**
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**.
- 35 lb. holding force
- All metal components - **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Outlet box required (not provided)
- Armature features two pivot points which each have 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 6 lbs.



2700 – Double Floor Mount

Standard Features

- Tri-voltage units for easy stocking and installation 12V DC, 24V AC/DC or 120V AC
- Provided with two complimentary 1" extensions - **No charge**
- Optional extension rods fill the gap between the magnet and door armature with **no special adapter piece required (see page D-8)**
- 35 lb. holding force
- All metal components - **No plastic parts**
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Armature features two pivot points which each have 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 8 lbs.



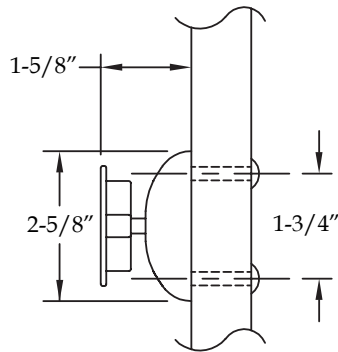
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Parts

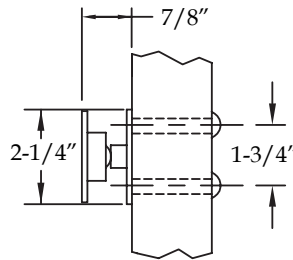
Door Armatures

- Available in US28, S1, S2, S3, S4, S5, US32D or US32 finishes



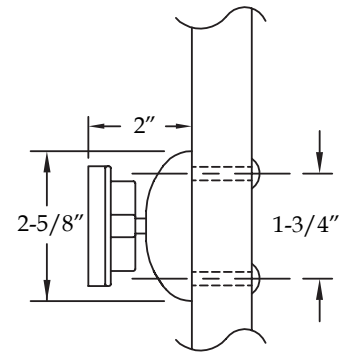
20020

(2100, 2300, 2400, 2600 & 2700 models)



24020

(2400L model)

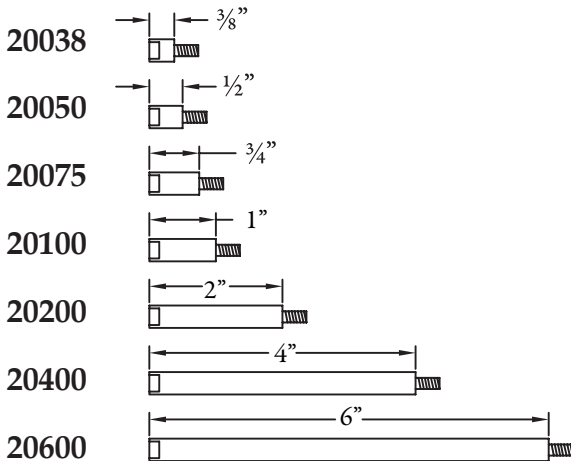


25020

(2510 model)

Extensions

- Available in zinc plated finishes only



Electrical Boxes

- Available in US28, S1, S2, S3, S4 or S5 finishes

23005 - 2300 model

25005 - 2510 model

Wall Covers

- Available in US28, S1, S2, S3, S4, S5, US32D or US32 finishes

20012 - 2100 & 2300 models

20014 - 2400, 2400L & 2400LS models

20015 - 2510 model

Wall Portions with Covers

- Available in US28, S1, S2, S3, S4, S5, US32D or US32 finishes

21030 - 2100 model

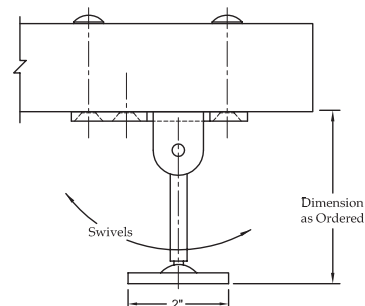
23030 - 2300 model

24030 - 2400, 2400L & 2400LS models

25030 - 2510 model

S20020

- Custom Armature with Extension for lengths greater than 10"
- Specify overall length required from face of door to face of magnet
- Available in US28, S1, S2, S3, S4, S5, US32D or US32 finishes (extension red portion always provided in US32D)





Overhead Holders



Hospital Latches



Mag Holders



Pivots



Aluminum Continuous Hinges



Stainless Steel Hinges



Power Transfer



Edge Guards



Rescue Hardware

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