

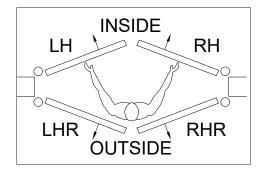


# **Electromagnetic Door Holders**

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## **Standard Finishes**

C - C	andard			Door	Reg	ш						_	-77		_	_	(0.0		-	2.0		ABH PRODUCTS						
C - C	andard			Door Pulls & Custom Pulls	Rescue Hardware	Electrical Power Transfers	Locking Ladder Pulls	Custom Strikes	Electromagnetic Door Holders	Surface Bolts, Slide Bolts, Vertical Rod Protectors & Covers	Roller Latches	Coordinators	Flush Bolts	Wall Stops, Floor Stops, Applied Stops, Pipe Stops	Overhead Holders & Stops	Hospital Push/Pulls	Cam Lift Hinges & Specialty Hinges	Custom Slim Line Pivots	Pivots & Pivot Sets	Stainless Steel Door Edge Guards	Stainless Steel Pin & Barrel Continuous Hinges	Aluminum Geared Hinges						
	ustom	ANSI #	Color Name	olls		sfers			łolders	/ertical				s, tops	itops			vots		Guards	arrel	inges						
S	US3	605/632	BRIGHT BRASS	•	•		•	•	•	•			•	•	•	•	•	•	•	•								
S	US4	606/633	SATIN BRASS	•	•		•	•	•	•			•	•	•	•	•	•	•	•								
С	US5	609/638	BRASS SATIN OXIDIZED	•	•		•	•	•						•	•	•	•	•									
S	US9	611	BRIGHT BRONZE - CLEAR COATED	•	•		•	•	٠						•	•	•	•	•	•								
S	US10	612/639	SATIN BRONZE	•	•		•	•	٠	•			•	•	•	•	•	•	•									
	US10A	641	ANTIQUE BRONZE LACQUERED	•	•		•	•	•						•	•	•	•	•	•								
FINISHES	US10B	613/640	BRONZE OILED	•	•		•	•	•	•			•	•	•	•	•	•	•									
C	US14	618	BRIGHT NICKEL (US32)	•	•		•	•	•						•	•	•	•	•									
$\sim$	US14B	-	BRIGHT BLACK NICKEL	•	•		•	•	•						•	•	•	•	•									
PLATED O	US15	619/646	SATIN NICKEL	•	•		•	•	•						•	•	•	•	•									
<b>Y</b> C	US15A	620/647	SATIN NICKEL ANTIQUE OXIDIZED	•	•		•	•	•						•	•	•	•	•									
	US17A	621	SATIN BLACK NICKEL CLEAR COAT	•	•		•	•	•						•	•	•	•	•									
S	US26	625/651	BRIGHT CHROME (US32)	•	•		•	•	•						•	•	•	•	•									
С	US26D	626/652	SATIN CHROME (US32D)	•	•		•	•	•				•		•	•	•	•	•									
S	US32D	630	SATIN STAINLESS STEEL	•	•		•	•		•			•	•	•	•	•	•	•	•								
S	US32	-	BRIGHT STAINLESS	•	•		•	•		•			•	•	•	•	•	•	•	•								
S	USP	600	PRIME COAT	•	•		•	•							•	•	•	•	•									
S	\$1	-	PAINTED ALUMINUM	•	•	•	•	•	•	•					•		•	•	•	•	•							
T S	S2	695	PAINTED BRASS	•		•	•	•		•					•		•	•	•	•	•							
FINISHES	\$3	694	PAINTED BRONZE	•	•	•	•	•		•					•			•		•	•							
	S4/BSP	693	BLACK SUEDE POWDER COATING	•		•	•	•		•				•	•	•		•		•								
E s	S5	695	PAINTED DARK BRONZE	•		•	•	•		•					•		•	•	•	•	•							
OATED	S8/WSP	-	WHITE SUEDE POWDER COATING			•	•	•		•				•	•			•		•								
S	AM	-	CRYSTAL CLEAR - ANTI-MICROBIAL	•		•		•		•						•		•		•								
S	С	-	CLEAR ANODIZED (US28)			•			•		•											•						
S C	ABH	-	CHAMPAGNE ANODIZED																			•						
#	ABH	-	LIGHT BRONZE ANODIZED																			•						
Z C	ABH	-	MEDIUM BRONZE ANODIZED																			•						
	D	-	DARK BRONZE ANODIZED																			•						
<b>"</b>	ABH	-	STAT BRONZE ANODIZED																			•						
<b>8 9</b>	В	-	BLACK ANODIZED																			•						
N C	ABH	-	GOLD ANODIZED																			•						
	ABH	-	CUSTOM ANODIZED FINISHES																			•						

### \* Custom Finishes Available – Contact Factory

ABH® reserves the right to make changes or improvements in design, material, parts or specifications, and "discontinue" without notice.





## **Electrical Power** – Cross Reference Chart

Туре	АВН	ASSA <b>Rixson*</b>	Abloy* Sargent*	LCN*	Dorma*	Hager
Recessed Mount	2100	998 997 994	1561	SEM7850 SEM7840 SEM1980 SEM1970	EM-504 EM-505	380F
Surface Mount	2300	996	1560	SEM7830 SEM1960	EM-508	380\$
Flush Mount	2400	990	-	-	EM-509	380R
Low Profile Flush Mount	2400L	-	_	_	_	-
Extra Low Profile Flush Mount	2400LS	989	_	-	-	_
300 lb. Heavy Duty Surface Mount	2510	993	_	_	_	_
Floor Mount Single	2600	980	1562	SEM7820	EM-501	380G
Floor Mount Double	2700	981	1563	-	EM-502	380H

 $<sup>^{*}</sup>$  Brand names are trademarks or registered trademarks of their respective companies.





### **General Information**

#### **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 12 VDC, 24 VAC, 24VDC, 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-9 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 5-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 Ca	use				
		Power not on or not plugged in				
Magnet Does Not	20V COM 24V 12V	Ground wire not connected to "COM" on terminal strip. Power wire not connected to correct power slot on terminal strip.				
Hold	Door Armature Head Magnetic Coil Ring	Door Armature head is not sitting completely flat across magnetic coil ring. Swivel door armature head (360° mobility) to make complete contact.				
	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Line voltage from power supply may not be correct (Range+/ –10%)				
Uolding		Dirt or cleaning solvent on armature head or magnetic coil. Turn power off and wipe with very fine emery cloth.				
Holding Force Weak	(2) (2) (3) (4) (2) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	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.				
Humming Sound	Door Armature Head Head Magnetic Coil Ring	Door Armature head is not sitting completely flat across magnetic coil ring. Swivel door armature head (360° mobility) to make complete contact.				



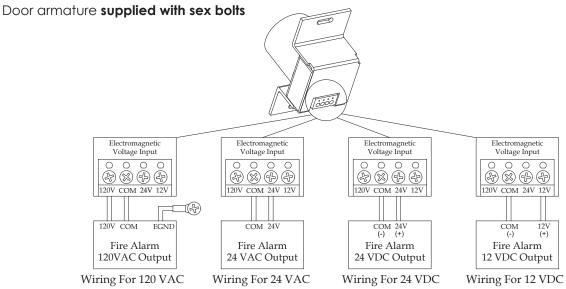
## **Electrical Schematics & Technical Data**

#### Technical Data

- Magnets are tri-voltage for installation and stocking ease
- Low current draw provides savings in power and battery back-ups
- 35lb. 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

#### 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 electromagnet 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,	12 DC	60	.72	-	-	COM & 12V
2400,2400L, 2400LS, 2600,	24 AC/DC	30	.72	30	.72	COM & 24V
2700	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 (NEC) National Electrical Code and the local codes of (AHJ) Authority Having Jurisdiction. Your organization, or individual person is responsible for enforcing the requirements of a code standard, or for approving equipment, materials, and installation, or procedure.



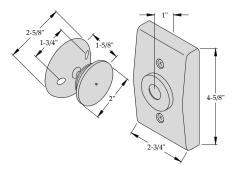
## Wall Mount

## 2100 – Recessed Wall Mount

#### Standard Features

- $2^{-5/8}$ " total projection from wall to face of door (3-5/8" 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 (see page D-10)
- 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's 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.



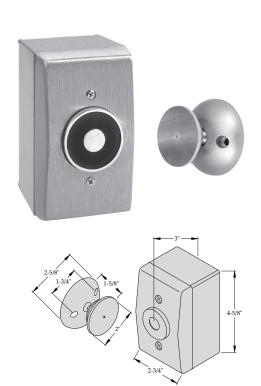


## 2300 - Surface Wall Mount

### Standard Features

- $4^{-5}/8$ " total projection from wall to face of door  $(5^{-5}/8$ " 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-10)
- 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 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.

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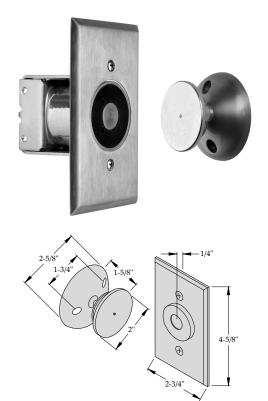


## Wall Mount

### 2400 - Flush Wall Mount

#### Standard Features

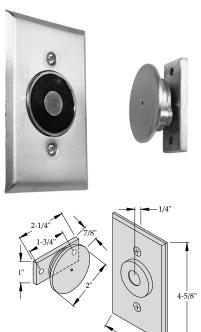
- 1-7/8" total projection from wall to face of door (2-7/8" if using complimentary 1" extension)
- Tri-Voltage units for easy stocking and installation 12V DC, 24V AC/DC OR 120V AC
- Provided with one complimentary 1" extension –
   No charge
- Optional extension rods fill the gap between the magnet and door armature with no special adapter piece required (see page D-10)
- 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's 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-10)
- 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 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.



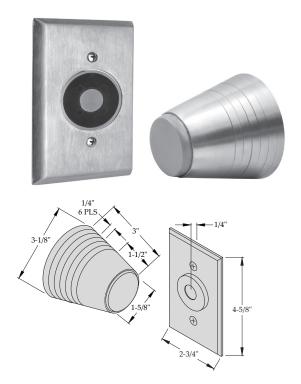


## Wall Mount

### 2400LR – Ligature Resistant Flush Wall Mount Angled Armature Assembly

#### Standard Features

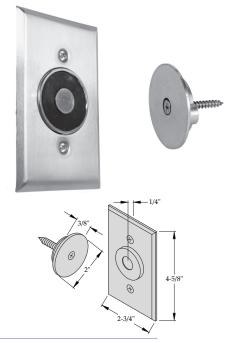
- 3-9/32" total projection from wall to face of door Tri -Voltage units for easy stocking and installation 12V DC, 24V AC/DC OR 120V AC
- (6) 1/4" ring extensions (provided)
- Standard 1-1/2" Door Armature with the option to add extensions(provided)
- Door Armature Head has 6° adjustment built in for maximum flexibility for uneven wall conditions
- Wall Cover and Door Armature sloped to prevent objects from being tied or looped around them
- 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)
- Average weight per unit = 4 lbs.



#### 2400LS – Flush Wall Mount with Flush Mount Armature

#### Standard Features

- 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
- Positive release button alleviates residual magnetism
- Average weight per unit = 2 lbs.



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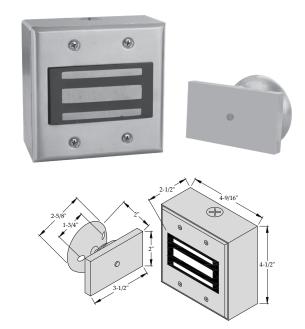


## Wall & Floor Mount

## 2510 - Heavy Duty Surface Wall Mount

#### Standard Features

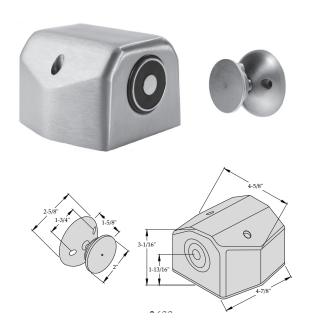
- 4-½" total projection from wall to face of door (5-½" if using complimentary 1" extension)
- 24V AC/DC magnetic coil
- Optional extension rods fill the gap between the magnet and door armature with no special adapter piece required (see page D-10)
- 300 lb. holding force
- All metal components No plastic parts
- UL/ULC listed for smoke barrier or labeled fire doors
- Listed by the California State Fire Marshall
- Armature's pivot points has 360° mobility to help door alignment and reduce installation time
- Positive release button alleviates residual magnetism
- Average weight per unit = 6 lbs.



### 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-10)
- 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's 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.





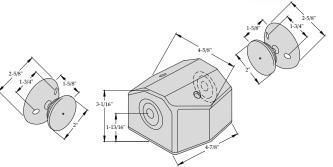
## Floor Mount

#### 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" extension No charge
- Optional extension rods fill the gap between the magnet and door armature with no special adapter piece required (see page 10)
- 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 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.



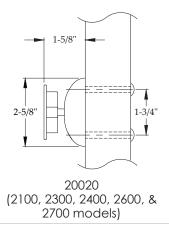


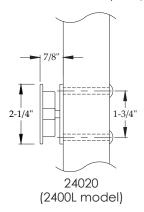


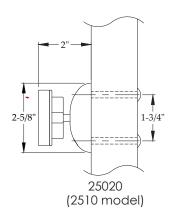
## **Parts & Options**

#### Door Armatures Finishes

• Available in US28, S1,S2, S3,S4, S5, US32D, US32 Finishes. (see page 1)

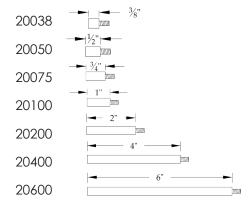






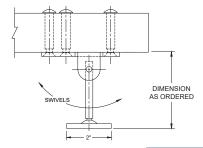
### Extensions

Available in zinc plated finishes only



#### **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, US32 Finishes (see page 1)



#### Electrical Boxes

- Available in US28, \$1,\$2, \$3,\$4, \$5 Finishes (see page 1)
  - 23005 2300 Model
  - 25005 2510 Model

#### Wall Covers

- Available in US28, S1, S2, S3, S4, S5, US32D, US32 Finishes (see page 1)
  - 20012 2100 & FC2300 Model
  - 20014 2400, FC2400L & FC2400LS Model
  - 20015 2510 Model

#### Wall Portions with Covers

- Available in US28, S1, S2, S3, S4, S5, US32D, US32 Finishes (see page 1)
  - 21030 2100 Model
  - 23030 2300 Model
  - 24030 2400 Model
  - 25030 2510 Model

#### **CONTACT US**

#### **ORDERS**

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If you have any other questions regarding ABH products, please call **630-875-9900**.



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