

**RIXSON**

**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions



# ELECTROMAGNETIC DOOR HOLDER/RELEASES

Designed for remote door  
release applications

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Introduction

Rixson offers a wide range of electromagnetic door holders/releases. Designed for virtually any remote door release application, electromagnetic door holders/releases primarily hold fire doors open until released by an alarm or smoke detector.

Floor mounted units are available for single or back-to-back doors. Wall mounted units feature concealed or surface wiring, low profile projection or high hold force.



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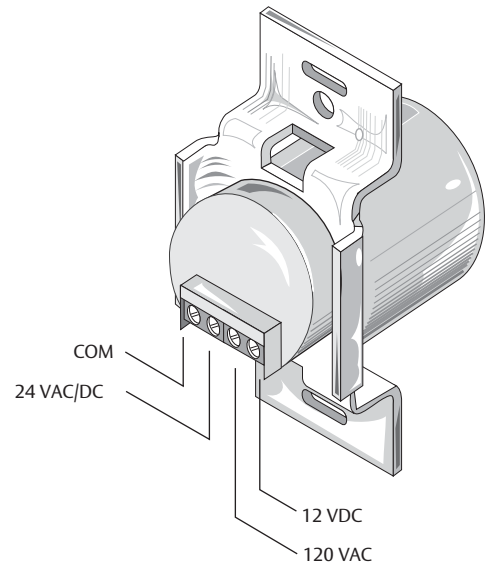
## General Information

Electromagnetic door holder/releases are designed for virtually any remote door release applications. They must be used in conjunction with closing devices.

- Fire/smoke barrier doors
  - Door releases when tripped by an alarm or smoke detector
- Private offices
  - Door releases when triggered by a remote switch
- All devices come with a wall/floor portion and a door portion (armature)
- Circuit normally closed
- Door portions have screws and plates to accommodate surface and concealed mounting

## Features

- 25 to 40 pounds holding power, except where noted
- Fail-safe operation; power failure releases door to close
- Positive release button initiates closing motion
- Tri-volt coils on most models see [☰☰☰](#)
- Spotting template included
- For stronger holding forces (50-55 lbs.) specify model and voltage. Not available in tri-volt coils



## Certifications

- Compliant with ANSI/BHMA A156.15 Standards. See individual products for sub sections
- UL/ULC listed
- Listed by California State Fire Marshal

## Specifications

All electromagnetic door holder/releases shall be supplied by architectural hardware supplier. All units shall have a single coil to accommodate 12VDC, 24VAC, 24VDC and 120VAC. The coils shall be independently wound, employing a fuse. Armatures will have positive release button.



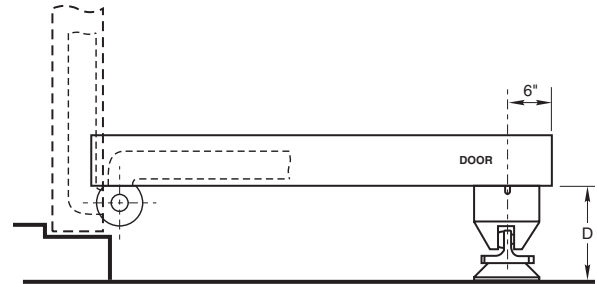
## HOW TO SELECT PRODUCT

Prior to determining the product you will need to use, begin by looking at the door and perpendicular wall relationship.

- Measure the distance. That will give you the "D" dimension. Select from chart A.

## Chart A

If the distance from wall to door is: "D"	Use
7/16" (11)	989
1-13/16" (46)	990M
2-5/8" (67)	997M
3-5/8" (92)	998M
3-3/4" (95)	994M
4-1/8" (105)	996M
4-3/8" (111)	999M
5-1/8" (130)	998M x XK996M
6-5/8" (168) min. distance from wall	980M
6-3/4" distance between doors	981M



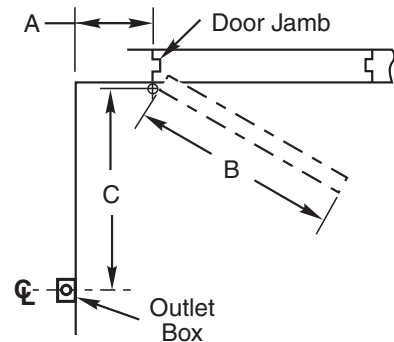
900 base has a minimum: 1-1/2" (38mm) extension. Maximum: 10" using combination of spacers [1/2" (13mm), 3/4" (19mm), etc.] Longer armature projections may encourage abuse and/or the weight of the extended rods will pull off the face of the door.

## Chart B

Junction box location should always be as close as possible to the door pull/lever/knob.

A position horizontally farther toward the hinge edge will dramatically lessen the hold open force of the magnet.

A mounting too high on the vertical plane (top of door) will make it more difficult to pull out of hold open.



## Refer to Diagram B

- How far is the centerline of the pivot/hinge from the wall? "A" dimension
  - What is width of door? "B" dimension
  - At what degree is the door opening? If this dimension is more than 100° consult template.
- The armature has a few degrees of adjustment but, before proceeding verify with the product template
- Dimension "C" is from pivot point to junction box centerline

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# Model 980M

## Application

- Floor mount
- Single door
- Shipping weight: 4 lbs. (1.8 kg)

## Features

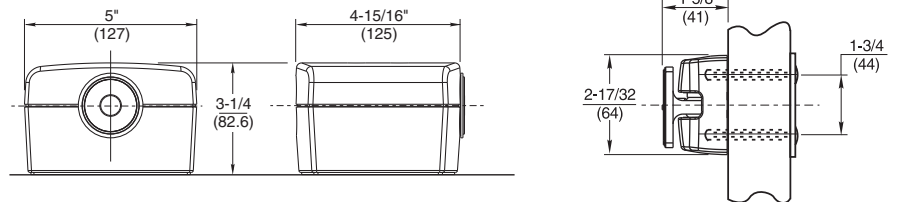
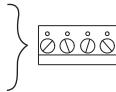
- Concealed wiring
- Total floor space required: 6-5/8" (168mm)
- Mounting requirements: conduit connects directly to floor plate
- 2 year limited warranty

## Compliance

- ANSI/C00021

## Electrical Data

- Voltage and current:
  - 120VAC, 60 Hz., .020 amp
  - 24VAC/DC, 60 Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp



# Model 981M

## Application

- Floor mount
- 2 back-to-back doors
- Shipping weight: 4-3/4 lbs. (2.2 kg)

## Features

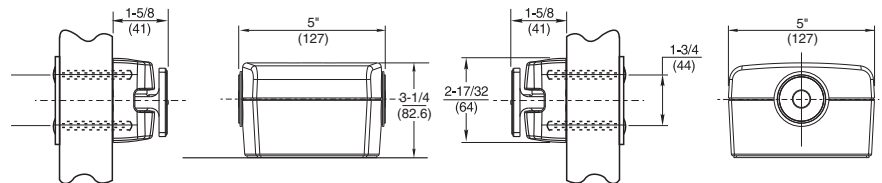
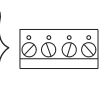
- Concealed wiring
- Floor space required: 8-1/4" (210mm)
- Mounting requirements: conduit connects directly to floor plate
- 2 year limited warranty

## Compliance

- ANSI/C00031

## Electrical Data

- Voltage and current:
  - 120VAC, 60Hz., .040 amp
  - 24VAC/DC, .040 amp
  - 12VDC, .080 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .034 amp
  - 24VAC, 60Hz .016 amp
  - 24VDC, .036 amp
  - 12VDC, .360 amp
  - 240VAC, 50/60Hz. .018 amp



## WALL MOUNTED

## Application

- Wall mount
- Low profile
- Concealed wiring
- Shipping weight: 2 lbs. (0.9 kg)

## Features

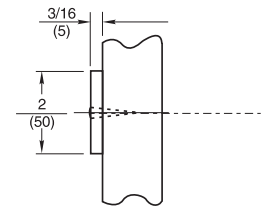
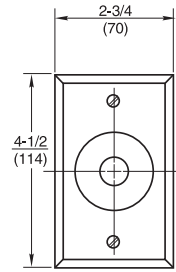
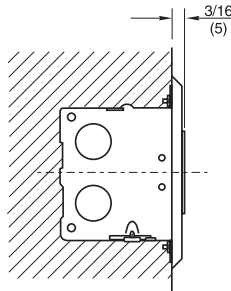
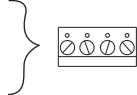
- Total projection: 7/16" (11mm)
- Mounting requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

## Compliance

- ANSI/C00011

## Electrical Data

- Voltage and current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp



## Application

- Wall mount
- Low profile
- Concealed wiring
- Shipping weight: 2 lbs. (0.9 kg)

## Features

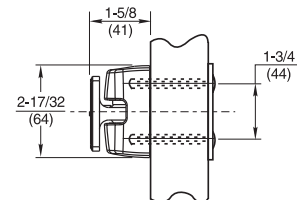
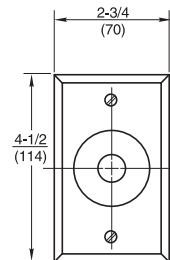
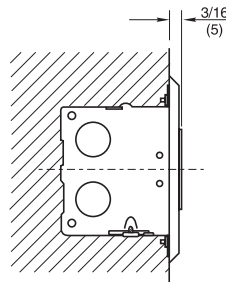
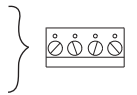
- Total projection: 1-13/16" (46mm)
- Mounting requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

## Compliance

- ANSI/C00011

## Electrical Data

- Voltage and current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp



## Model 990M

## Model 991M

## ELECTROMAGNETIC DOOR HOLDER/RELEASES SPECIAL PURPOSE WALL MOUNTED

### Application

- Wall mount
- Surface wiring
- Hazardous locations
- Shipping weight: 3 lbs. (1.4 kg)

### Features

- Total projection: 4" (101mm)
- Approved for class I division 2, class II division 2, groups F and G and class III locations
- Unit includes a sealed surface-mounted junction box
- 2 year limited warranty

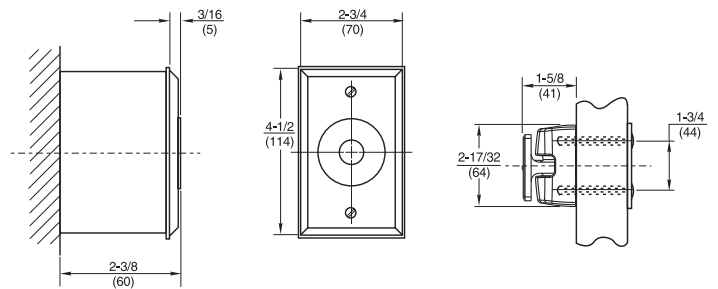


### Compliance

- ANSI/C00011

### Electrical Data

- Voltage and current:
  - 120VAC, 60Hz., .017 amp
  - 24VAC, .080 amp
  - 12VAC, .180 amp
  - 24VDC, .068 amp
  - 240VAC, 50/60Hz., .009 amp



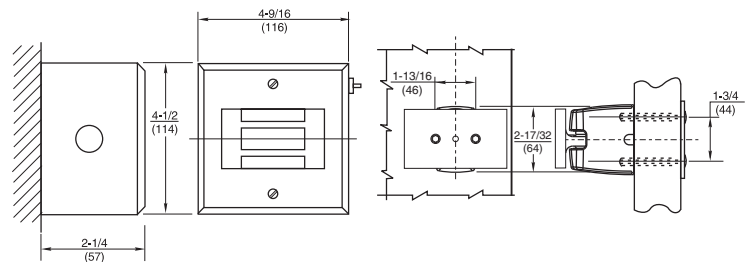
## Model 993M

### Application

- High hold
- Surface or concealed mounting
- Floor or wall application
- Shipping weight: 3 lbs. (1.4 kg)

### Features

- 300 lb. holding force
- Total projection: 5-1/4" (133mm)
- Switch box included 4-1/2" x 4-9/16" x 2-5/16" (114 x 116 x 59mm) deep
- Armature plate thru-bolted to maintain consistent contact with magnet
- Adjusting screw on special heavy-duty armature allows for alignment of contact plate
- 9930M Floor mount available
- Unit has test switch – may be ordered without switch if door will be pulled out of hold open very often
- Use key switch to release (by others)
- Substantial wall reinforcement required
- 2 year limited warranty



### Electrical Data

- Voltage and current: 24VAC/DC .25 amp

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### Application

- Wall mount
- Adjustable armature
- Concealed wiring
- Shipping weight: 2 lbs. (0.9 kg)

### Features


- Total projection: 3-3/4" (95mm)
- Adjustable armature rotation up and down, back and forth for better alignment.
- Cannot be use with 900 base or spacers.
- Can be used without adjustment piece making it a model 997
- Mounting requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

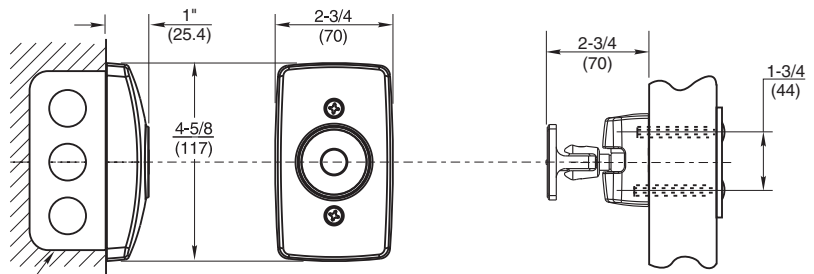
### Compliance

- ANSI/C00011

### Electrical Data

- Voltage and current:
 

120VAC, 60Hz., .020 amp	} 
24VAC/DC, 60Hz., .020 amp	
12VDC, .040 amp	
For 50-55 lbs. of holding force, specify voltage	
120VAC, 60Hz .017 amp	
24VAC, 60Hz .080 amp	
24VDC, .068amp	
12VDC, .180amp	
240VAC, 50/60Hz. .009 amp	



### Application

- Wall mount
- Surface wiring
- Shipping weight: 3 lbs. (1.4 kg)

### Features


- Total projection: 4-1/8" (105mm)
- Mounting requirements: 1-1/2" (38mm) deep adapter housing
- Wall must be properly reinforced
- 2 year limited warranty

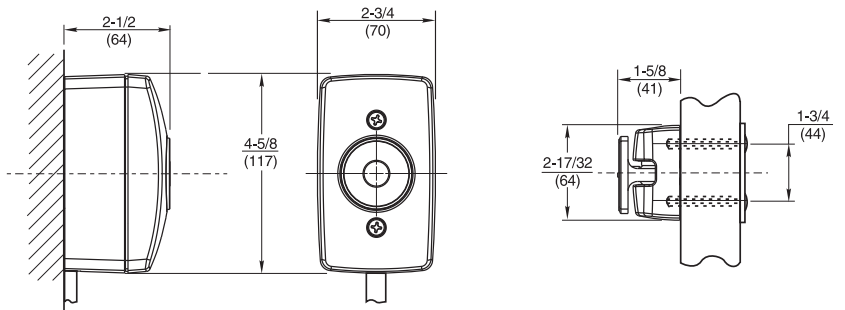
### Compliance

- ANSI/C00011

### Electrical Data

- Voltage and current:
 

120VAC, 60Hz., .020 amp	} 
24VAC/DC, 60Hz., .020 amp	
12VDC, .040 amp	
For 50-55 lbs. of holding force, specify voltage	
120VAC, 60Hz .017 amp	
24VAC, 60Hz .080 amp	
24VDC, .068amp	
12VDC, .180amp	
240VAC, 50/60Hz. .009 amp	



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# Model 997M

### Application

- Wall mount
- Concealed wiring
- Shipping weight: 2 lbs. (0.9 kg)

### Features

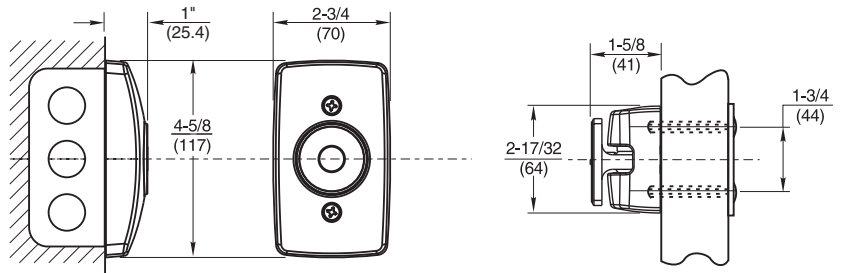
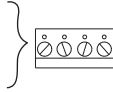
- Total projection: 2-5/8" (67mm)
- Mounting requirements: 2" x 4" x 1-3/4" (51 x 102 x 45mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

### Compliance

- ANSI/C00011

### Electrical Data

- Voltage and current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp



# Model 998M

### Application

- Wall mount
- Concealed wiring
- Shipping weight: 2-1/2 lbs. (1.1 kg)

### Features

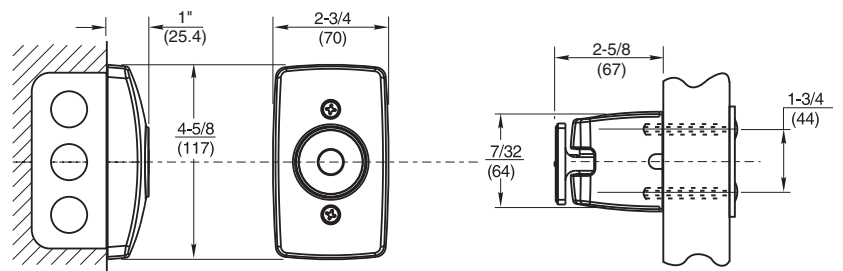
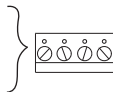
- Total projection: 3-5/8" (92mm)
- Mounting requirements: 2" x 4" x 1-3/4" (51 x 102 x 45mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

### Compliance

- ANSI/C00011

### Electrical Data

- Voltage and current:
  - 120VAC, 60Hz., .020 amp
  - 24VAC/DC, 60Hz., .020 amp
  - 12VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp



## Application

- Universal mounting
- Shipping weight: 2-3/4 lbs. (1.2 kg)

## Features

- Base plate; concealed wiring
- Total projection: 4-3/8" (111mm)
- Mounting requirements: 2" x 4" (51 x 102mm) outlet box; 4" (102mm) square box; 4" (102mm) octagonal box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

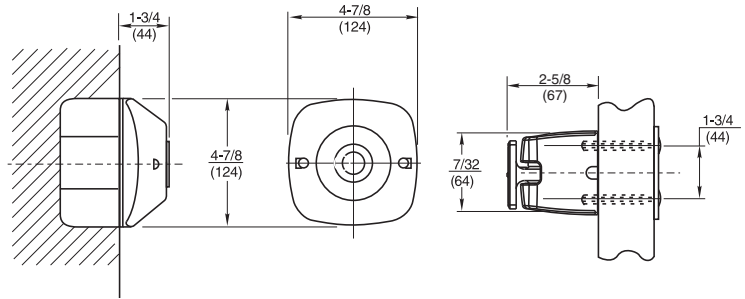
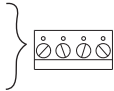


## Compliance

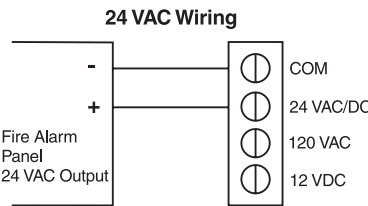
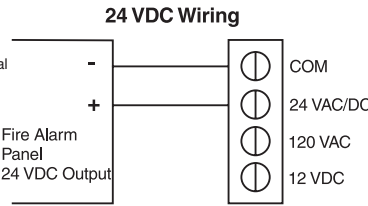
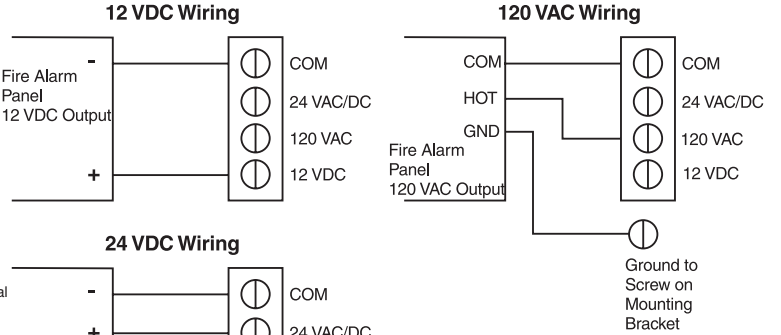
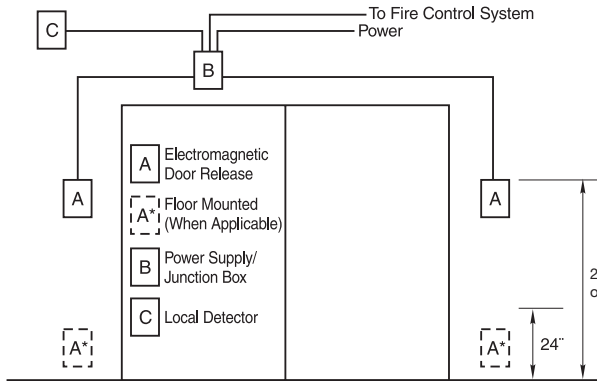
- ANSI/C00011

## Electrical Data

- Voltage and current:
  - 120 VAC, 60 Hz., .020 amp
  - 24 VAC/DC, 60 Hz., .020 amp
  - 12 VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
  - 120VAC, 60Hz .017 amp
  - 24VAC, 60Hz .080 amp
  - 24VDC, .068amp
  - 12VDC, .180amp
  - 240VAC, 50/60Hz. .009 amp



Schematics



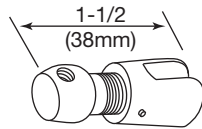
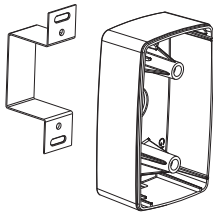
Electrical Specifications:  
12VDC @ .040AMPS  
24 VAC/DC @ .020 AMPS  
120 VAC @ .020 AMPS  
(or see specific model)

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.

Operation Narrative

Doors are to be normally held open. The electromagnetic door releases will be energized with the voltage shown (at right) in the hardware set for this opening. Power shall be controlled by the fire control system. It will interrupt the power if alarmed, causing the doors to be released, thus allowing the door closers to close the doors. When power is restored the magnets will re-energize, permitting the doors to be manually returned to their held open position.

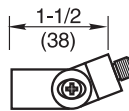
Accessories



Base Unit Armature  
Extension Mounts between armature and contact plate.  
Part# 900  
**Cannot be used with model 994M**

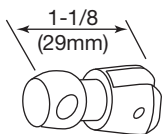
1-1/2" (38mm) Extension (for use only with Models 997M, 998M & 994M) Mounts behind wall cover.

XK996M  
Part# 996631M-\*



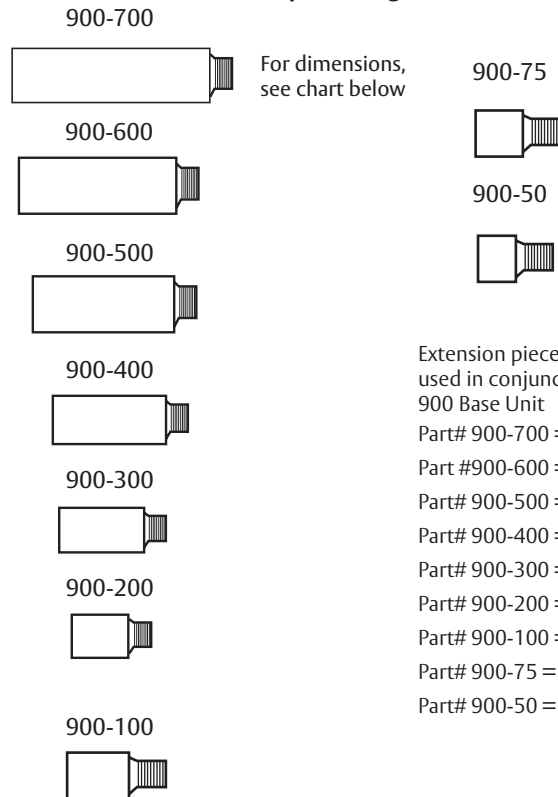
Armature Extension 90° Bend  
Part# 900-Z  
**Must be used with 900 base unit. Those two pieces will extend armature 3" longer than the contact plate.**

994M Swivel Armature (cannot be used with extension spacers)  
Part# 900-3



\*specify finish

Spacer lengths – must be used with 900 base



Extension pieces must be used in conjunction with 900 Base Unit  
Part# 900-700 = 7"  
Part #900-600 = 6"  
Part# 900-500 = 5"  
Part# 900-400 = 4"  
Part# 900-300 = 3"  
Part# 900-200 = 2"  
Part# 900-100 = 1"  
Part# 900-75 = 3/4"  
Part# 900-50 = 1/2"



The Rixson® 972 Industrial Door Release is listed by Underwriters' Laboratories as a substitute for fusible links in such applications as overhead rolling doors, guillotine doors, fire dampers and self-closing windows. These heavy-duty units provide automatic release when triggered by a smoke detector, manual pull station, test button on unit, or other electrically operated switch.

**Application**

- 972H for swinging doors
- 972S for sliding doors
- 972U for overhead doors
- Specify model number and voltage

**Features**

- Shipping weight: 5 lbs. (2.3 kg)
- 2 year limited warranty

**Compliance**

- ANSI/C00041

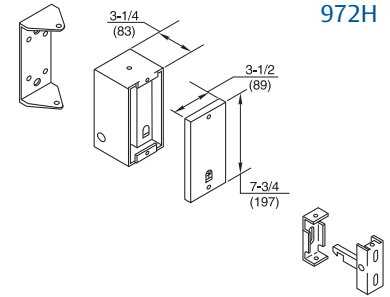
**Electrical Data**

- Voltage and current:
  - 120VAC, 60Hz., .150 amp
  - 24VAC, 60Hz., .150 amp
  - 24VDC, .08 amp
  - 12VDC, .08 amp
- Holding force 75 lbs

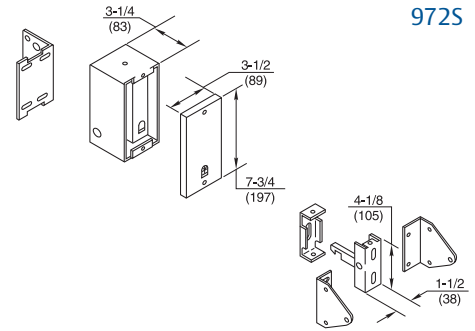
**Code Listings:**

- Underwriters' Laboratories, Inc.
- Underwriters' Laboratories of Canada
- State of California (3550-047:13)

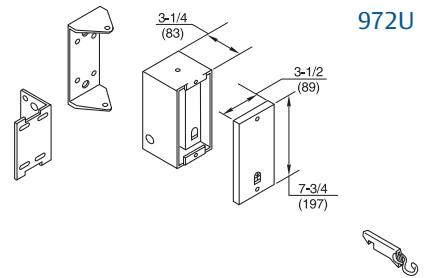
972H for Swinging Doors



972S for Sliding Doors



972U for Overhead Doors



**998M**  
Series

980M	Floor Mounted
981M	Floor Mounted Back to Back Doors
989	Low Projection Wall Mounted
990M	Low Projection Wall Mounted
991M	Hazardous Location Wall Mounted
993M	High Hold Wall Mounted
9930M	High Hold Floor Mounted
994M	Wall Mounted Adjustable Armature
996M	Surface Mounted
997M	Wall Mounted
998M	Wall Mounted
999M	Universal Wall Mounted
972H	Industrial Swing Door Holder
972S	Industrial Sliding Door Holder
972U	Industrial Overhead/Rolling Door

**120VAC**  
Voltage

<b>BLANK</b>	<b>TRI-VOLT</b>
24VAC/DC	*24VAC/DC
12VDC	*12VDC
12VAC	*120VAC 120VAC
*240VAC	
240VAC	

**689**  
Finish

689	Sprayed Alum
690	Sprayed Dk Brz
691	Sprayed Lt Brz
693	Sprayed Black
696	Sprayed Brss
BSP	Black Suede Powder

\* When voltage is specified, these electromagnetic door holder/releases will have 50-55 lbs. of holding force.

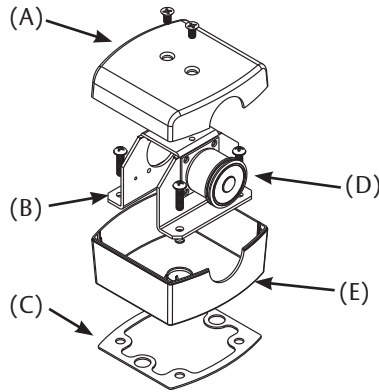
**RIXSON**<sup>®</sup>  
**ASSA ABLOY**

ASSA ABLOY, the global leader  
in door opening solutions

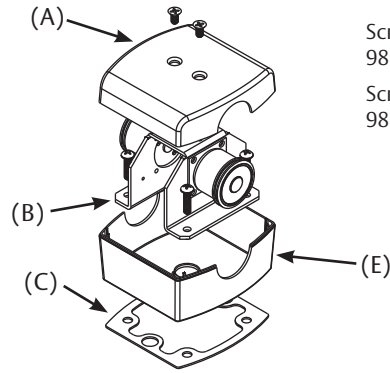
Floor Portion

- (A) Magnet Housing Cover  
980311M-\* / 981311M-\*
- (B) Magnet Support Bracket  
981309
- (C) Gasket  
980095M
- (D) Magnet  
\*\*996219-3V
- (E) Magnet Housing Base  
980312M-\* / 981312M-\*

\*\*For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for electromagnet assembly part number.



980M



981M

SCREW KITS

Screw Kit for 980M  
980328-\*

Screw Kit for 981M  
981328-\*

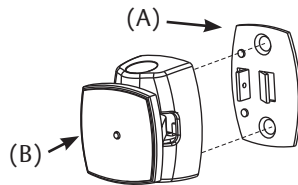
Door Portion

- (A) \*\*Backup Plate  
900314
- (B) Door Armature  
997510M-\*
- (C) \*\*Door Plate\*  
998009

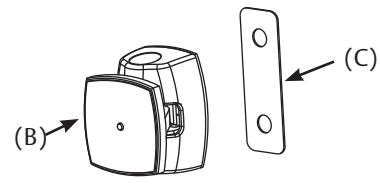
\*\*Not Sold Separately – See Screw Kit

\*specify finish

Door portion screws included with  
Wall/Floor parts.



Surface Applied Concealed Mounting  
Recommended for Solid Wood Doors Only

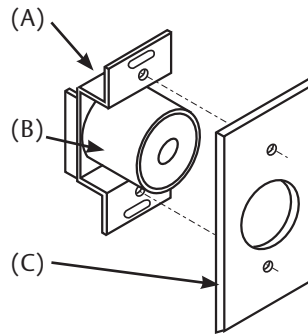


Thru Bolt Mounting  
Recommended for Hollow Metal, Hollow  
Core or Composite Type Wood Doors

# Used With Model 990M, 989

## Wall Portion

- (A) Magnet Bracket  
990002
- (B) Magnet  
\*\*996219-3V
- (C) Wall Cover Plate  
990001



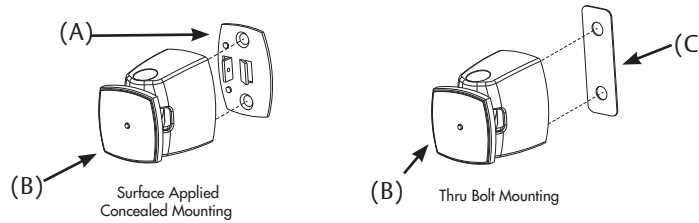
**SCREW KITS**  
Screw Kit for 990M  
990300-\*

\*\*For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.

# Used With Model 998M, 999M

## Door Portion

- (A) Backup Plate  
900314
- (B) Door Armature  
998512M-\*
- (C) Door Plate  
998009



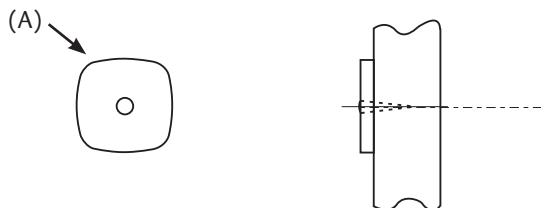
**SCREW KITS**  
See Screw Kit for 998M  
998303-\*

\*specify finish  
Door portion screws included with Wall/Floor parts.

# Used With Model 989

## Door Portion

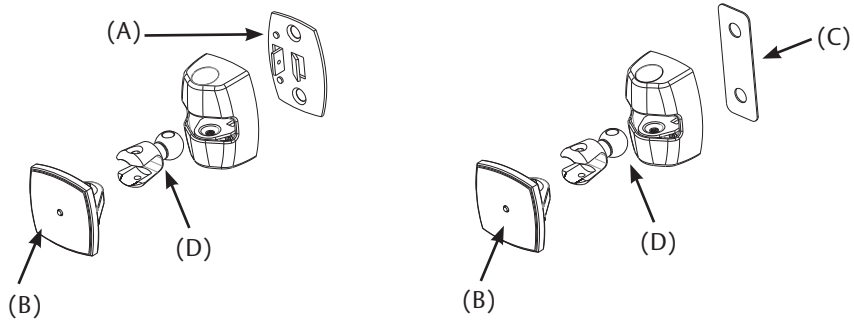
- (A) Door Armature  
Attachment screw  
included in Kit.  
444FM



Used With Model 994M

Door Portion

- (A) \*\*Backup Plate  
900314
- (B) Adjustable Armature  
994510M-\*
- (C) \*\*Door Plate  
998009
- (D) Adjustment Piece  
900-3\*

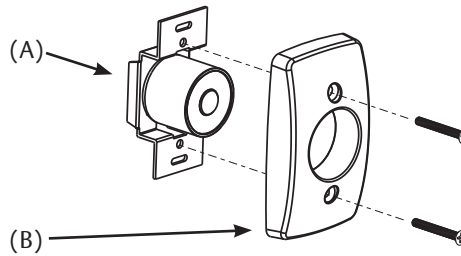


\*\*Not Sold Separately – See Screw Kit  
\*specify finish  
Door portion screws included with Wall/Floor parts.

Used With Model 994M, 997M, 998M

Wall Portion

- (A) Magnet Assembly and Bracket  
\*\*998369-3V
- (B) Cover  
998315M-\*



\*\*For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.

SCREW KITS  
Screw Kit for  
994M/997M  
998300-\*

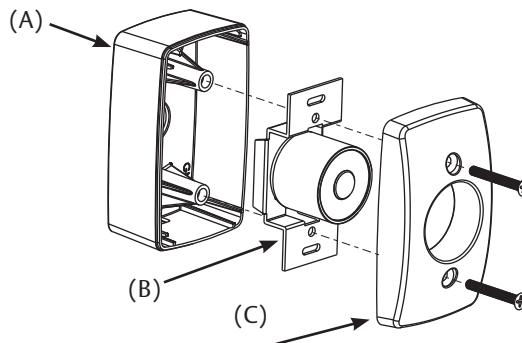
SCREW KITS  
Screw Kit for  
998M  
998303-\*

\*specify finish

Used With Model 996M

Wall Portion

- (A) Surface Mounting Box Housing  
996501M-\*
- (B) Magnet Assembly and Bracket  
\*\*996369-3V
- (C) Cover  
998315M-\*



SCREW KITS  
Screw Kit for 996M  
996325-\*

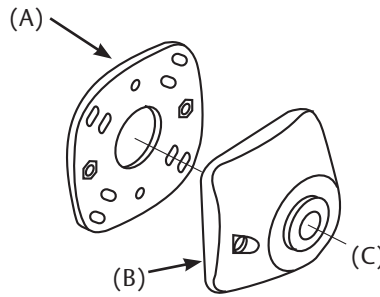
\*specify finish  
\*\*For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.





Wall Portion

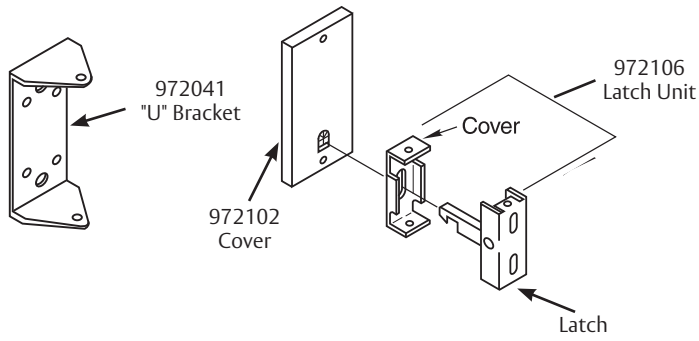
- (A) Base Plate  
999105
- (B) Cover  
999055-\*
- (C) Magnet  
\*\*996219-3V



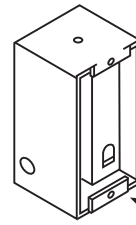
SCREW KITS  
Screw Kit for 999M  
999318-\*

\*specify finish

\*\*For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.

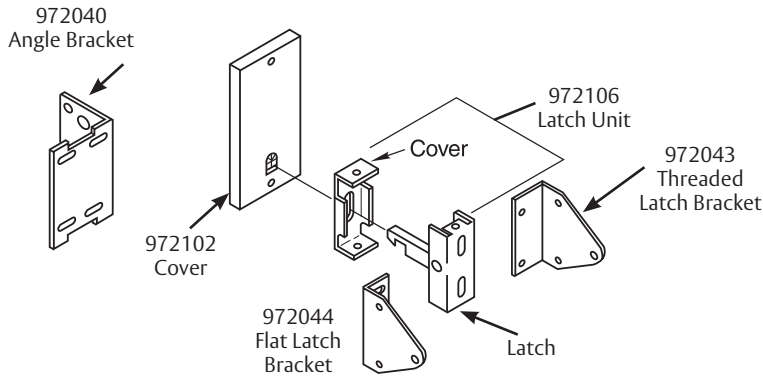


Used With Model 972H

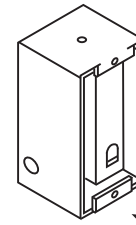


Screw Kit for 972H:  
972190

Box  
972100-12 VDC  
972112-24 VAC  
972118-120 VAC  
972120-24 VDC

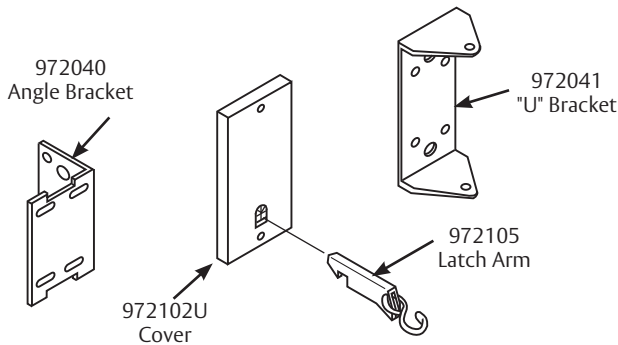


Used With Model 972S

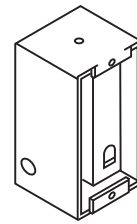


Screw Kit for 972S:  
972290

Box  
972100-12 VDC  
972112-24 VAC  
972118-120 VAC  
972120-24 VDC



Used With Model 972U



Screw Kit for 972U:  
972390

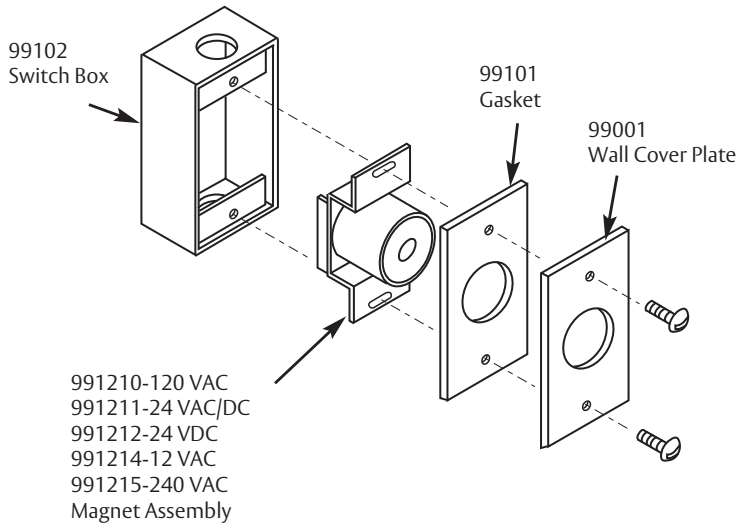
Box  
972100-12 VDC  
972112-24 VAC  
972118-120 VAC  
972120-24 VDC

\*specify finish

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**ASSA ABLOY**

# Used With Model 991M

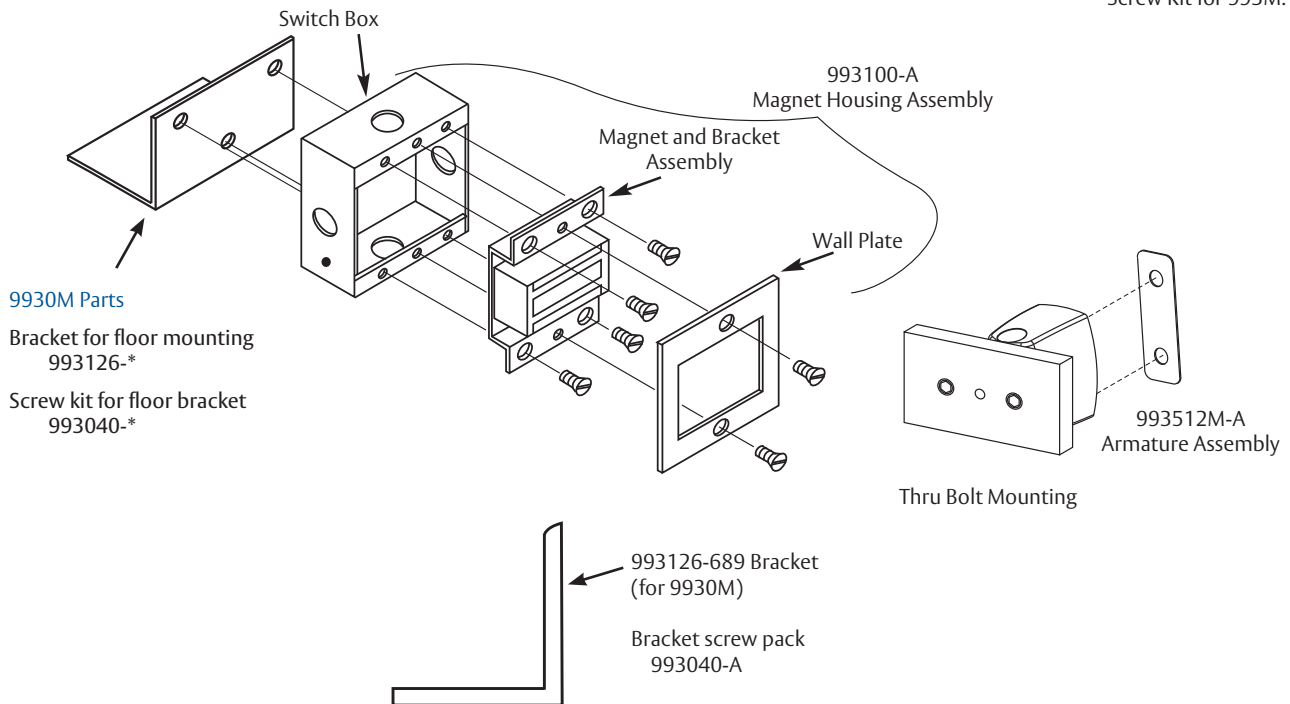
## Wall Portion



Screw Kit for 991M: 990300-\*

\*specify finish

# Used With Model 993M/9930M



Screw Kit for 993M: 993300-A



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