

Electromagnetic Door Holder/Releases

RIXSON[®]
ASSA ABLOY

Door Control for Fire and Smoke
Barrier Doors and Other Remote
Door Release Applications

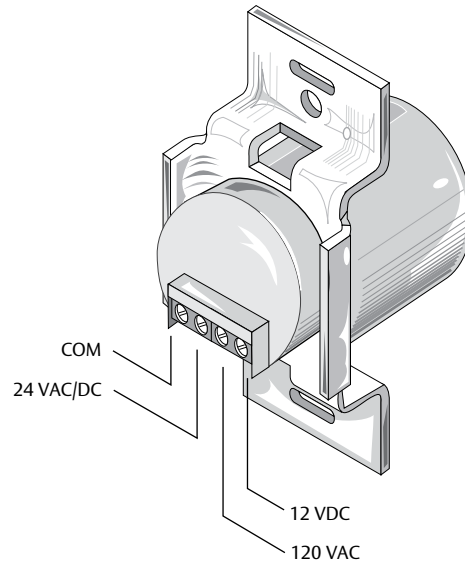


ASSA ABLOY, the global leader in door opening solutions

Introduction

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



Contents

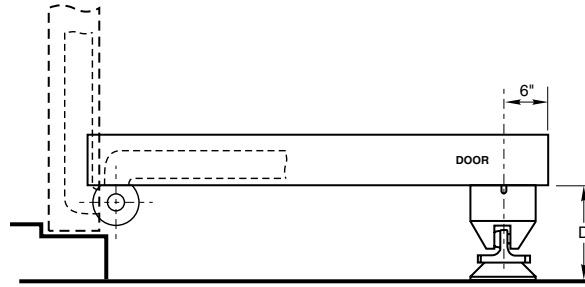
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Prior to determining the product you will need to use, begin by looking at the door and perpendicular wall relationship.

- How far is the face of the door to the wall surface? "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)	990
2-5/8 (67)	997
3-5/8 (92)	998
3-3/4 (95)	994
4-1/8 (105)	996
4-3/8 (111)	999
5-1/8 (130)	998 x XK996
6-5/8 (168) min. distance from wall	980
6-3/4 distance between doors	981

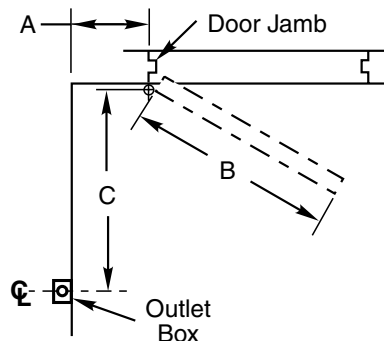


900 base has a minimum: 1-1/2"(38mm) extension. Maximum: 10" using combination of spacers [1/2"(13mm), 3/4"(19mm), etc.] Longer armature projections may encourage abuse and/or the weight of the extended rods will pull off the face of the door.

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

Diagram 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.

Electromagnetic Door Holder/Releases Features, Certifications Limited Warranty, Specifications

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

All Rixson® electromagnetic door holder/releases are in compliance with ANSI/BHMA 156.15 Standards. See individual products for sub sections.



- All units UL/ULC listed 
- All units listed by California State Fire Marshal

Limited Warranty

Rixson® electromagnetic door holder/releases are warranted for 2 years for defect. See Rixson® Price Book for specific details of the limited warranty.

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.

Electromagnetic Door Holder/Releases Floor Mounted Model 980 & 981

Model 980

Application


Floor Mount
Single Door
ANSI/C00021

Product Description & Features

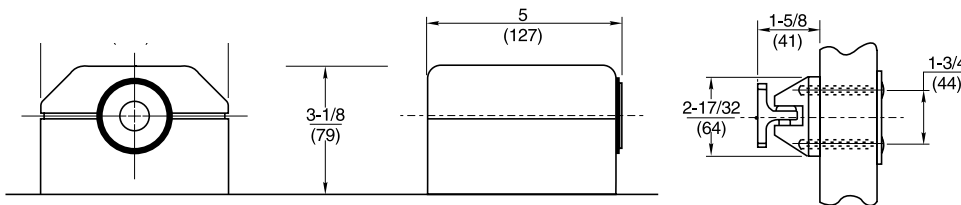
- Concealed Wiring
- Total Floor Space Required:
6-5/8" (168mm)
- Mounting Requirements: Conduit
connects directly to floor plate

Technical Information

- 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
- Shipping Weight: 4 lbs. (1.8 kg)



Model 981

Application


Floor Mount
2 Back-to-Back Doors
ANSI/C00031

Product Description & Features

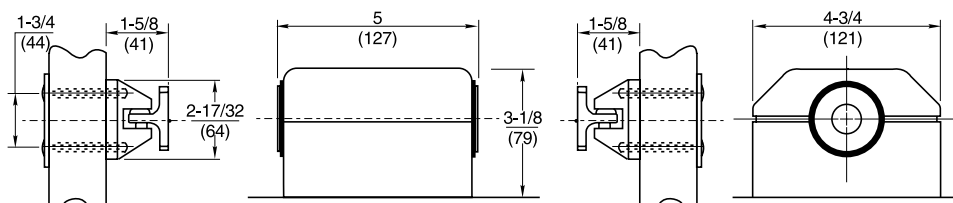
- Concealed Wiring
- Floor Space Required: 8-1/4" (210mm)
- Mounting Requirements: Conduit
connects directly to floor plate

Technical Information

- 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
- Shipping Weight: 4-3/4 lbs. (2.2 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 989 & 990

Model 989

Application

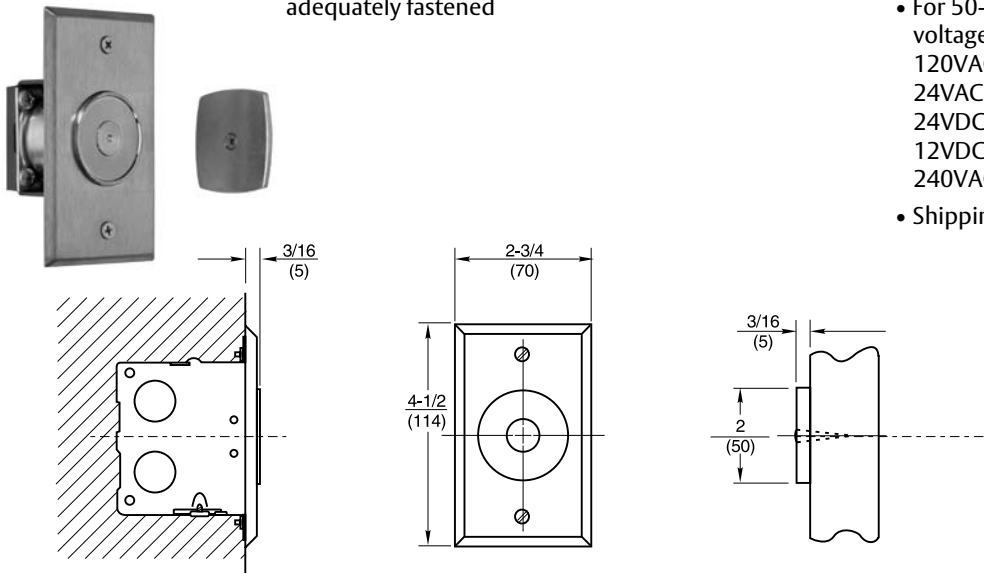
Wall Mount
Low Profile
Concealed Wiring
ANSI/C00011

Product Description & 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

Technical Information

- 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
- Shipping Weight: 2 lbs. (0.9 kg)



Model 990

Application

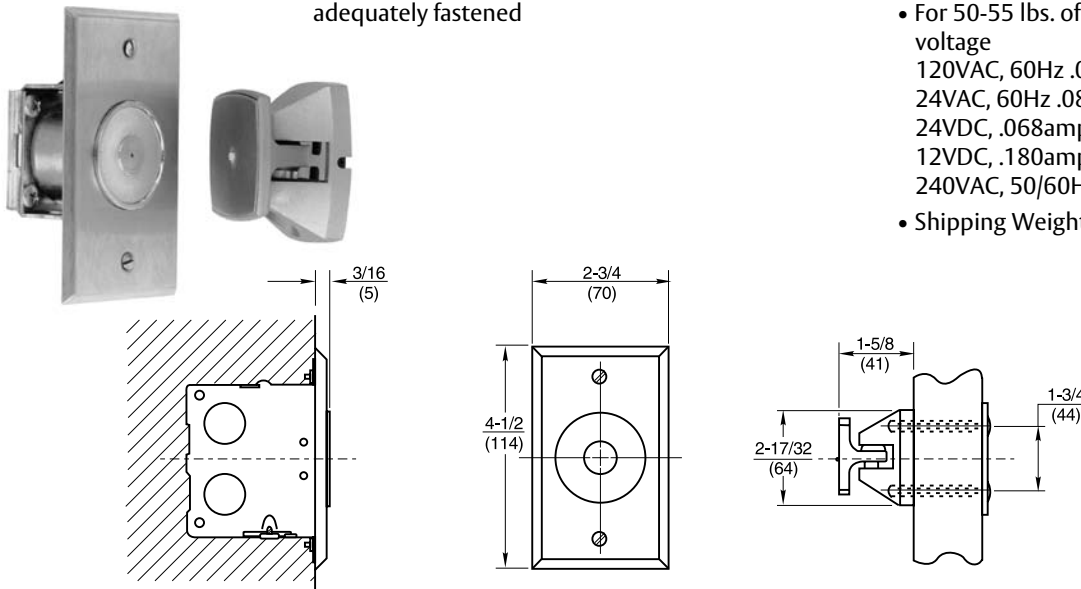
Wall Mount
Low Profile
Concealed Wiring
ANSI/C00011

Product Description & 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

Technical Information

- 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
- Shipping Weight: 2 lbs. (0.9 kg)



Electromagnetic Door Holder/Releases Special Purpose Wall Mounted Magnets Model 991 & 993

Model 991

Application

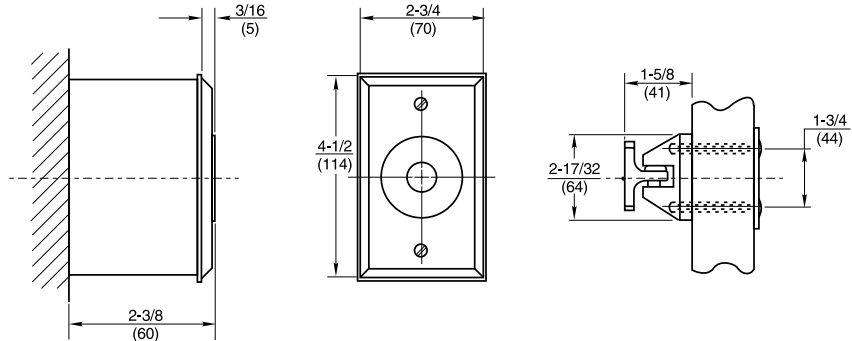
Wall Mount
Surface Wiring
Hazardous Locations
ANSI/C00011

Product Description & 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

Technical Information

- Voltage and Current:
120VAC, 60Hz., .017 amp
24VAC, .080 amp
12VDC, .180 amp
24VDC, .068 amp
240VAC, 50/60Hz., .009 amp
- Shipping Weight: 3 lbs. (1.4 kg)



Model 993

Application

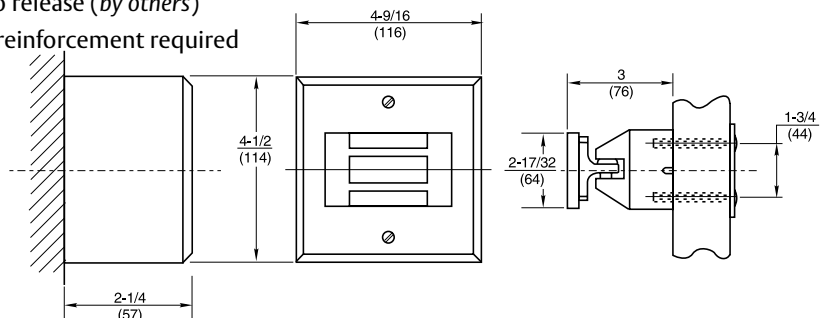
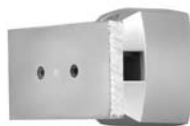
High Hold
Surface or Concealed
Mounting
Floor or Wall Application

Product Description & 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
- 9930 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

Technical Information

- Voltage and Current: 24VAC/DC .25 amp
- Shipping Weight: 3 lbs. (1.4 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 994 & 996

Model 994

Application

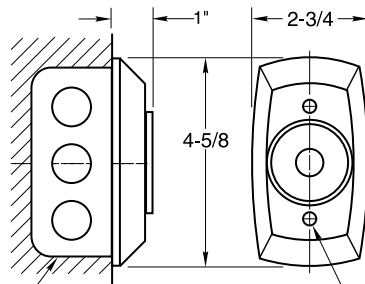
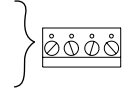
Wall Mount
Adjustable Armature
Concealed Wiring
ANSI/C00011

Product Description & Features

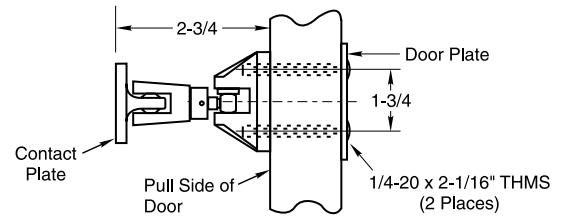
- Total Projection: 3-3/4" (95mm)
- Adjustable armature rotation up and down, back and forth for better alignment.
- Cannot be use with 900 base or spacers.
- Can be used without adjustment piece making it a model 997
- Mounting Requirements:
2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must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

Technical Information

- 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
- Shipping Weight: 2 lbs. (0.9 kg)



10-32 x 1-1/2" Flat Head Self-Tapping Screws (2 Places)



Model 996

Application

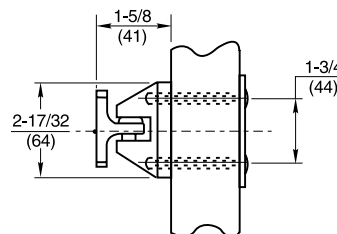
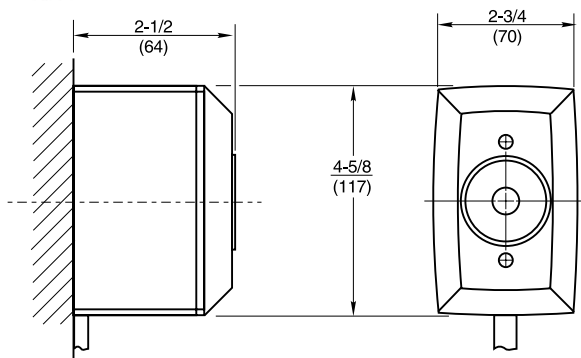
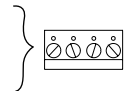
Wall Mount
Surface Wiring
ANSI/C00011

Product Description & Features

- Total Projection: 4-1/8" (105mm)
- Mounting Requirements:
1-1/2" (38mm) deep adapter housing
- Wall must be properly reinforced

Technical Information

- 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
- Shipping Weight: 3 lbs. (1.4 kg)



Electromagnetic Door Holder/Releases Wall Mounted Model 997 & 998

Model 997

Application


Wall Mount
Concealed Wiring
ANSI/C00011

Product Description & Features

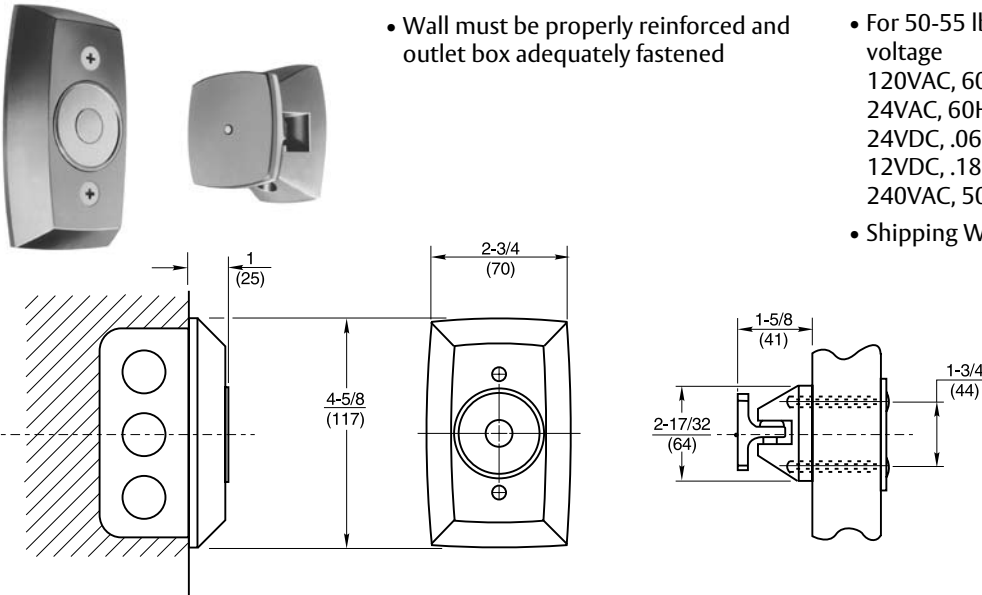
- Total Projection: 2-5/8" (67mm)
- Mounting Requirements:
2" x 4" x 1-3/4" (51 x 102 x 45mm)
outlet box
- Wall must be properly reinforced and
outlet box adequately fastened

Technical Information

- 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
- Shipping Weight: 2 lbs. (0.9 kg)



Model 998

Application


Wall Mount
Concealed Wiring
ANSI/C00011

Product Description & Features

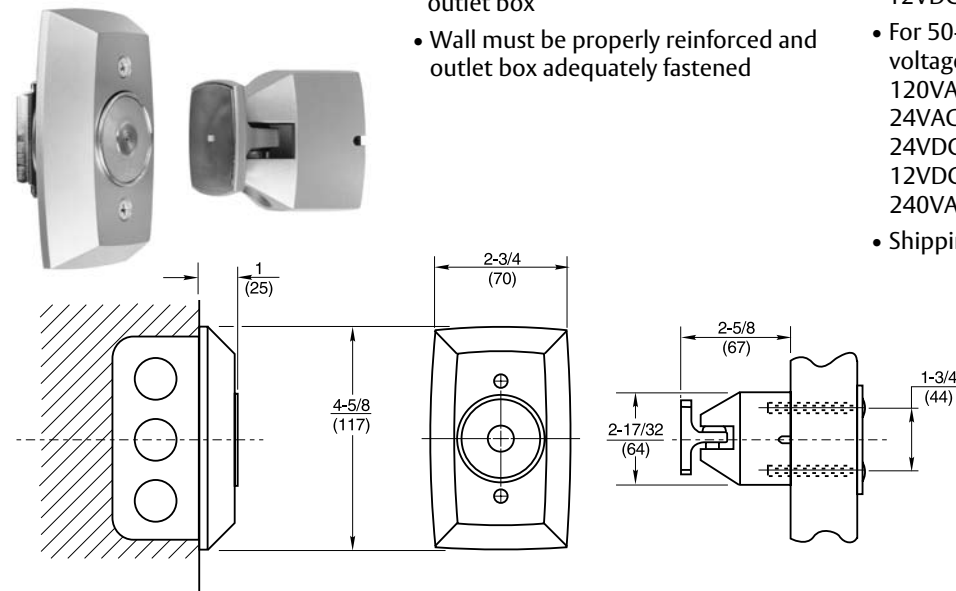
- Total Projection: 3-5/8" (92mm)
- Mounting Requirements:
2" x 4" x 1-3/4" (51 x 102 x 45mm)
outlet box
- Wall must be properly reinforced and
outlet box adequately fastened

Technical Information

- 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
- Shipping Weight: 2-1/2 lbs. (1.1 kg)



Model 999

Application

Universal Mounting
ANSI/C00011

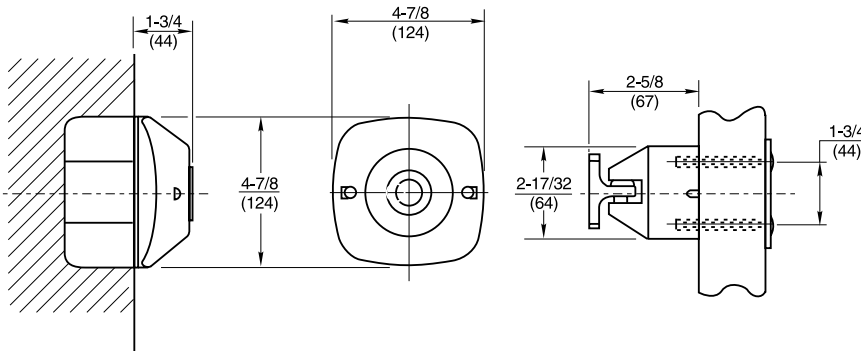
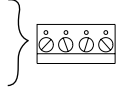


Product Description & Features

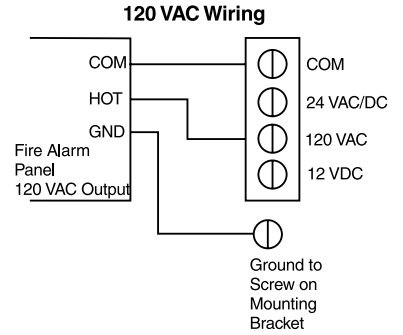
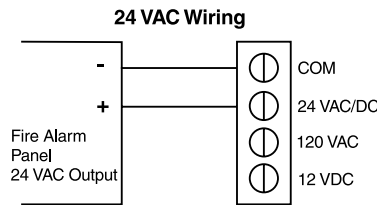
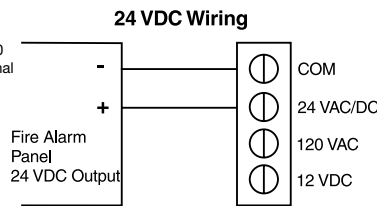
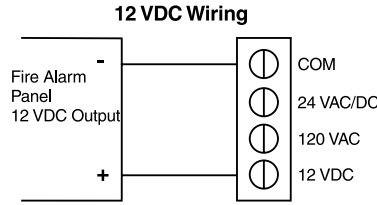
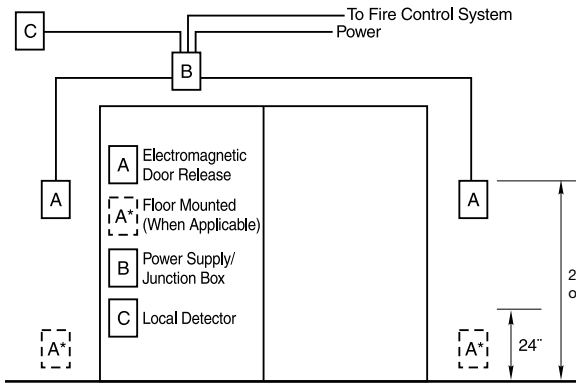
- Base Plate; Concealed Wiring
- Total Projection: 4-3/8" (111mm)
- Mounting Requirements:
2" x 4" (51 x 102mm) outlet box;
4" (102mm) square box; 4" (102mm)
octagonal box
- Wall must be properly reinforced and
outlet box adequately fastened

Technical Information

- 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
- Shipping Weight: 2-3/4 lbs. (1.2 kg)



Schematics



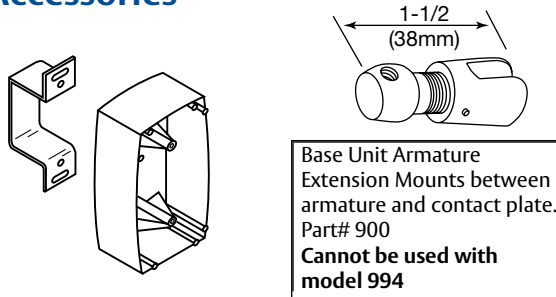
Electrical Specifications:
 12 DC @ .040AMPS
 24 VAC/DC @ .020 AMPS
 120 VAC @ .020 AMPS
 (or see specific model)

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.

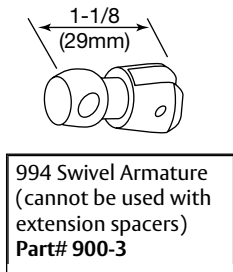
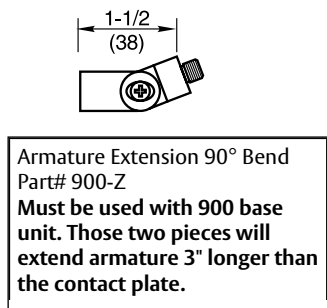
Operation Narrative

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.

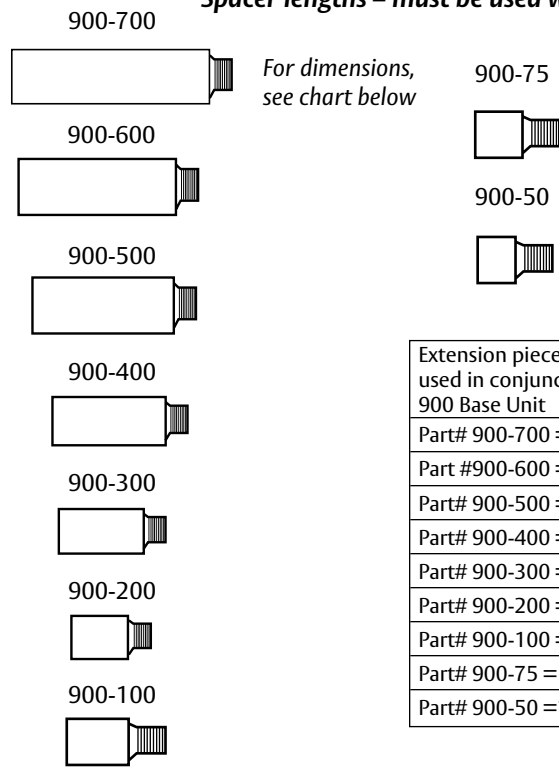
Accessories



1-1/2" (38mm) Extension (for use only with Models 997, 998 & 994) Mounts behind wall cover.
 XK996
 Part# 996631-*



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"

Electromagnetic Door/Holder Releases

Model 972

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

Product Description & Features

Technical Information

- Voltage and Current:
120VAC, 60Hz., .150 amp
24VAC, 60Hz., .150 amp
24VDC, .08 amp
12VDC, .08 amp
- Holding force 75#
- Shipping Weight: 5 lbs. (2.3 kg)
ANSI/C00041

Code Listings:

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

How to Order:

Specify model number and voltage.



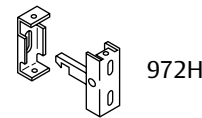
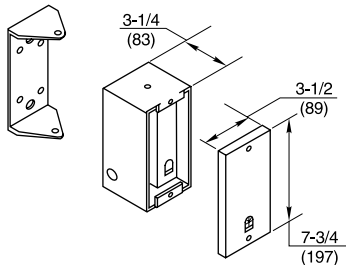
972H for Swinging Doors



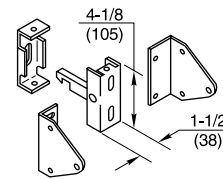
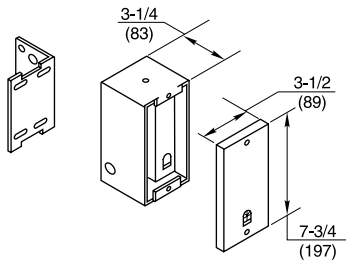
972S for Sliding Doors



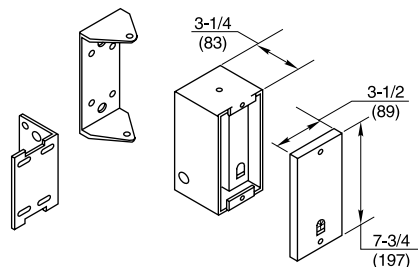
972U for Overhead Doors



972H



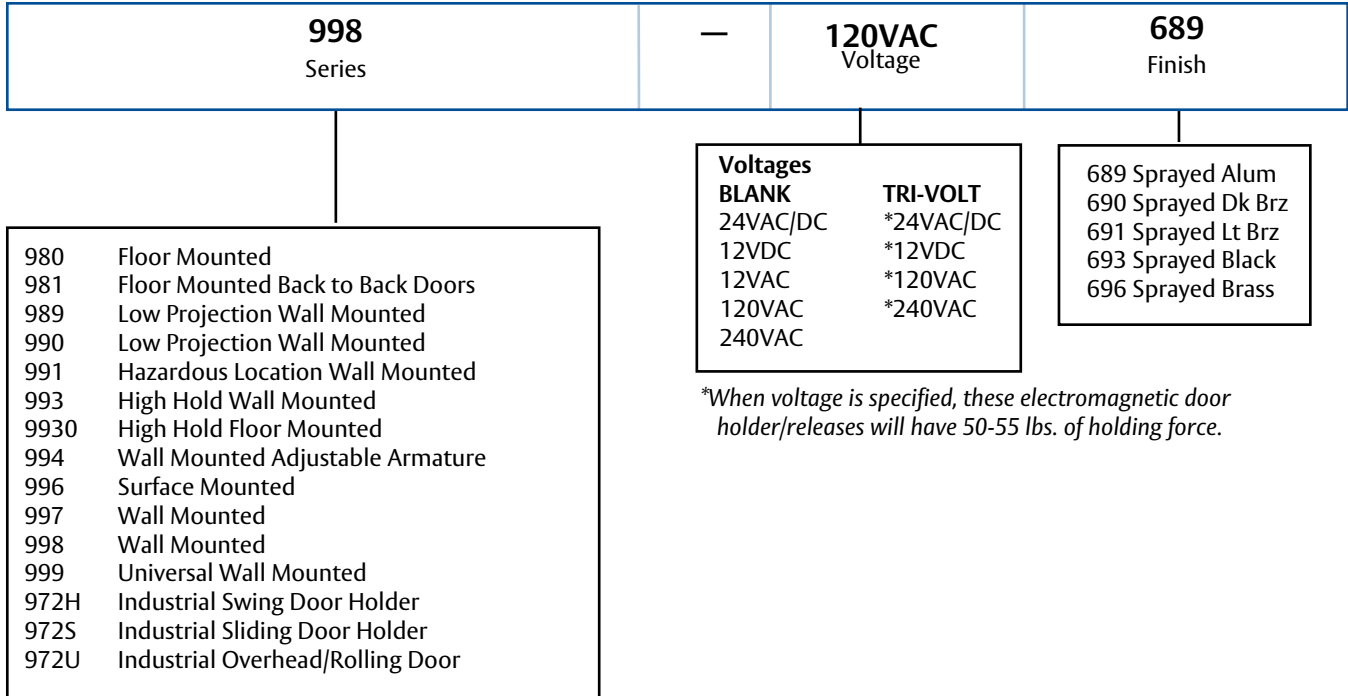
972S



972U



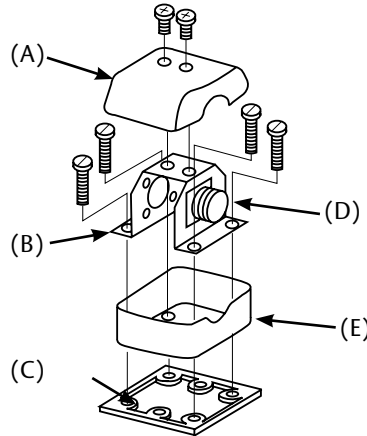
How To Order



Used with Model 980/981

Floor Portion

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



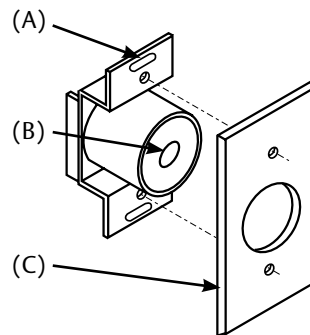
Screw Kits
Screw Kit for 980 980328-*
Screw Kit for 981 981328-*

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

Used with Model 990, 989

Wall Portion

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



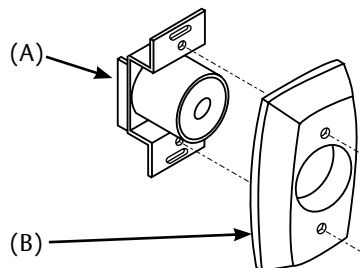
Screw Kits
Screw Kit for 990 990300-*

**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 994, 997, 998

Wall Portion

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



Screw Kits
Screw Kit for 994/997/998 998300-*

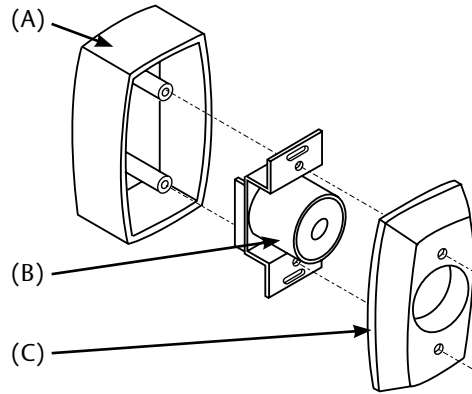
**For voltages other than (tri-volt 12 VDC, 24 VAC, 24 VDC, and 120 VAC), contact factory for magnet mounting bracket assembly part number.

*specify finish

Used with Model 996

Wall Portion

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



Screw Kits
Screw Kit for 996 996325-*

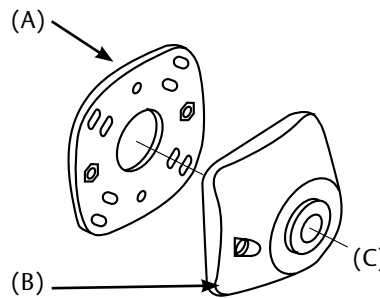
**specify finish*

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

Used with Model 999

Wall Portion

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



Screw Kits
Screw Kit for 999 999318-*

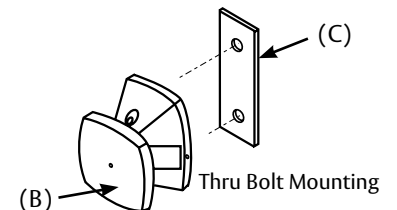
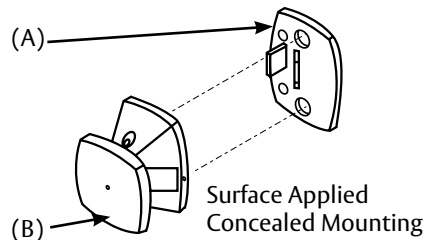
**specify finish*

***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 980/981, 990, 991, 996, 997

Door Portion

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



***Not Sold Separately – See Screw Kit*

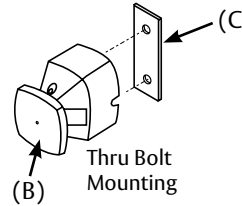
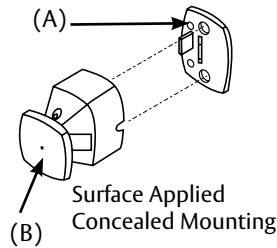
**specify finish*

**Door portion screws included with
Wall/Floor parts.**

Used with Model 998, 999

Door Portion

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



**Not Sold Separately –
See Screw Kit

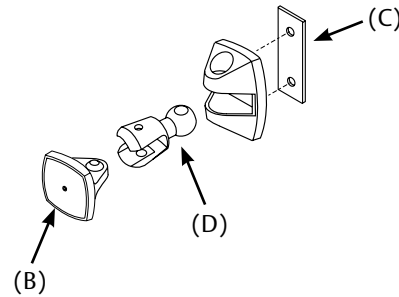
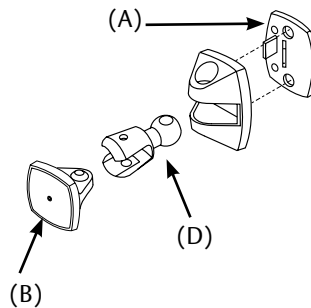
*specify finish

**Door portion screws included with
Wall/Floor parts.**

Used with Model 994

Door Portion

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



**Not Sold Separately – See Screw Kit

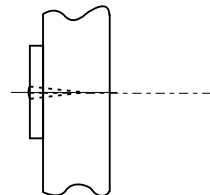
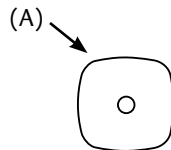
*specify finish

**Door portion screws included with
Wall/Floor parts.**

Used with Model 989

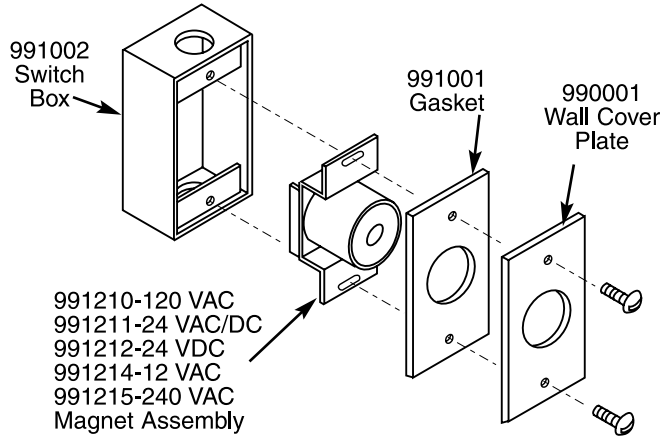
Door Portion

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



Used With Model 991

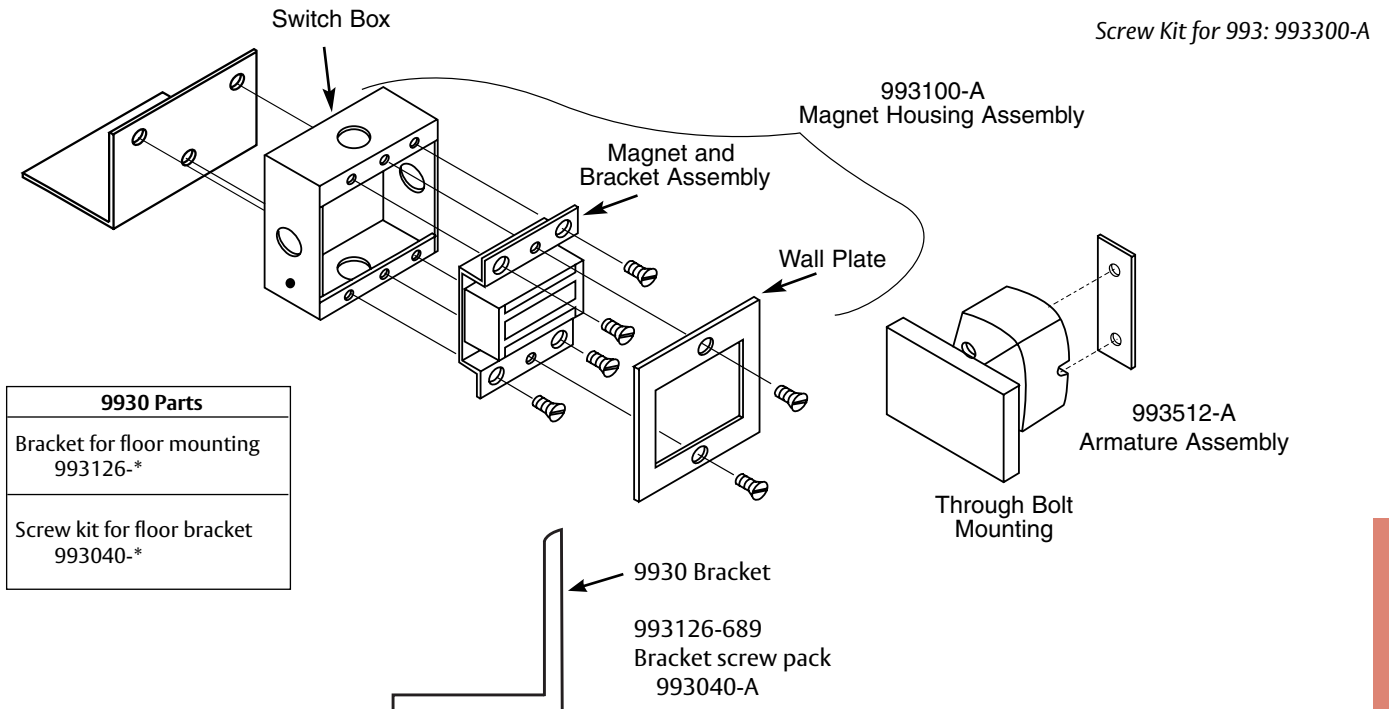
Wall Portion



Screw Kit for 991: 990300-*

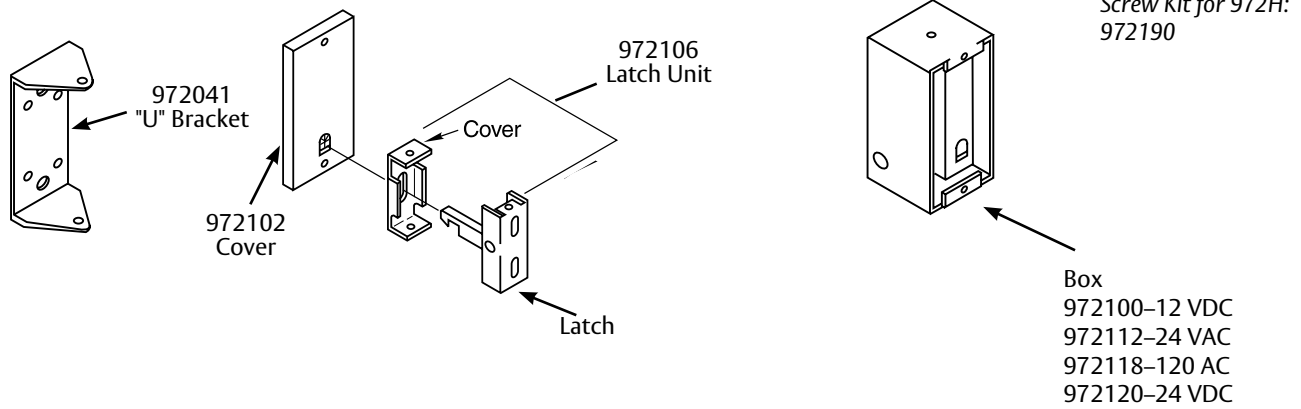
*specify finish

Used With Model 993/9930

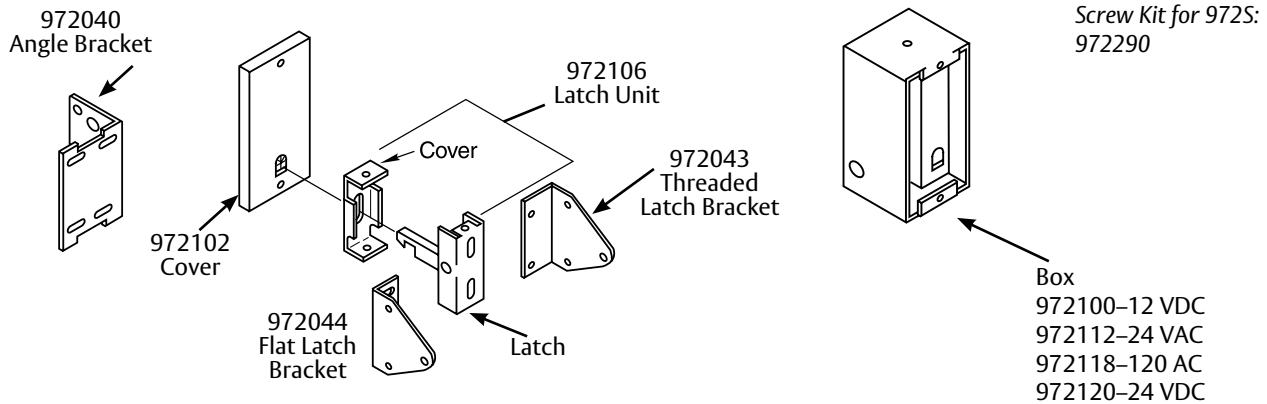


Screw Kit for 993: 993300-A

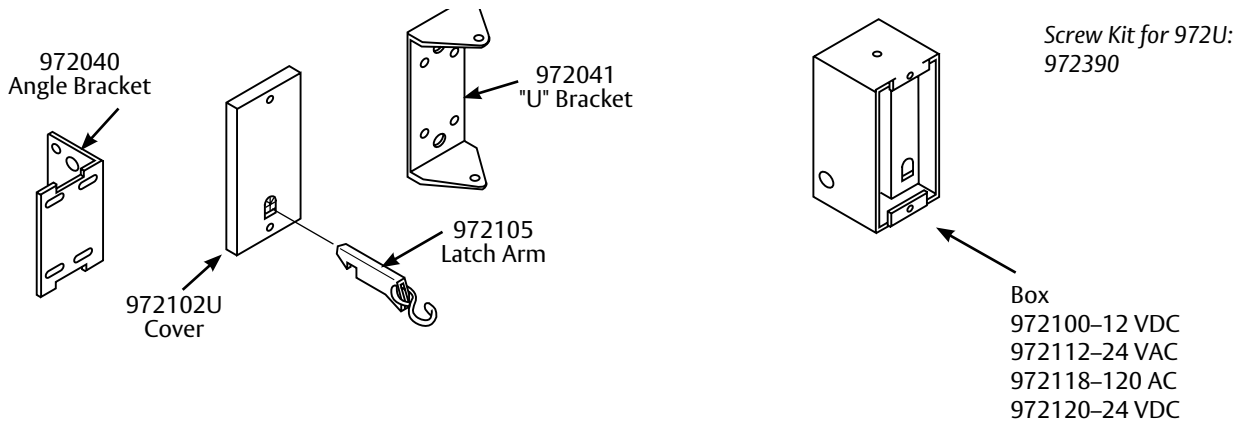
Used With Model 972H



Used With Model 972S



Used With Model 972U



*specify finish