

CATALOG



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ELECTROMAGNETIC DOOR HOLDER/ RELEASES

DESIGNED FOR REMOTE DOOR
RELEASE APPLICATIONS



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ELECTROMAGNETIC DOOR HOLDER/RELEASES

INTRODUCTION

Norton 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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HOW TO SELECT A PRODUCT

ELECTROMAGNETIC DOOR HOLDER/RELEASES

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

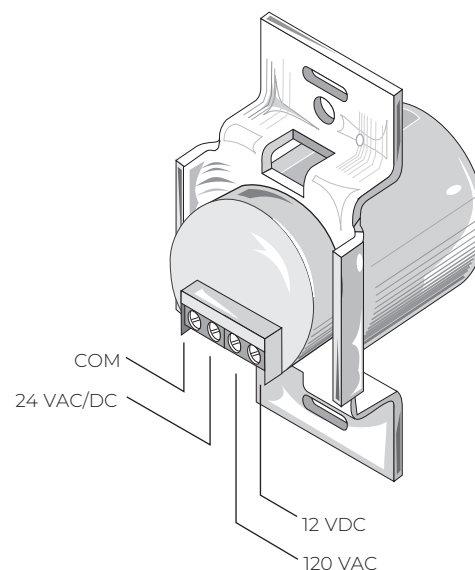
- 25-40lbs. holding force, except where noted
- Fail-safe operation; power failure releases door to close
- Positive release button initiates closing motion
- Tri-Volt (120VAC, 24VAC/DC, 12VDC) is standard on models: 980M, 981M, 989, 990M, 994M, 996M, 997M, 998M and 999M - see [2000](#)
- Spotting template included
- For 50-55lbs. of holding force on models 980M, 981M, 989, 990M, 994M, 996M, 997M, 998M and 999M, specify model number x 120VAC, 24VAC, 24VDC or 12VDC when ordering. 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.



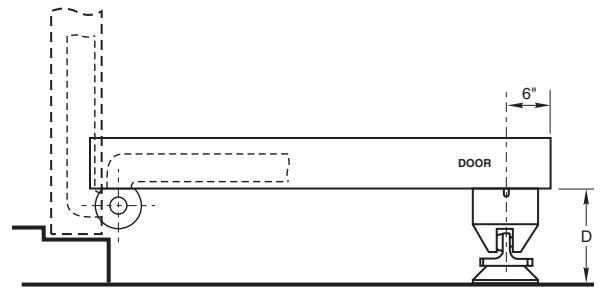
HOW TO SELECT PRODUCT ELECTROMAGNETIC DOOR HOLDER/RELEASES

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.

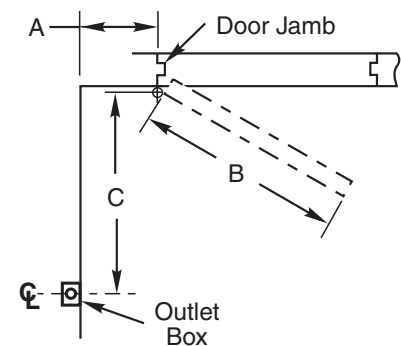
Maximum: 10" using combination of spacers [1/2" (13mm), 3/4" (19mm), etc.] Longer armature projections may encourage abuse and/or the weight of the extended rods will pull off the face of the door.

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

FLOOR MOUNTED

ELECTROMAGNETIC DOOR HOLDER/RELEASES

MODEL 980M

Application

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

Features

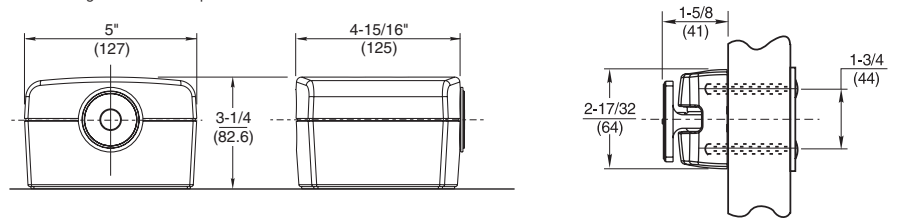
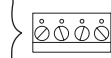
- Concealed wiring
- Total floor space required: 6-5/8" (168mm)
- Mounting requirements: conduit connects directly to floor plate
- 2 year limited warranty

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



MODEL 981M

Application

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

Features

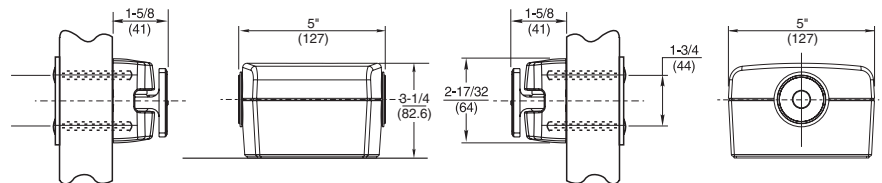
- Concealed wiring
- Floor space required: 8-1/4" (210mm)
- Mounting requirements: conduit connects directly to floor plate
- 2 year limited warranty

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



WALL MOUNTED ELECTROMAGNETIC DOOR HOLDER/RELEASES

MODEL 989

Application

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

Features

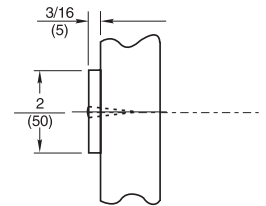
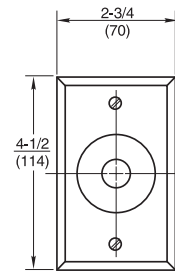
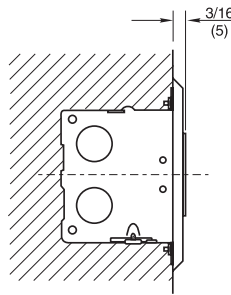
- Total projection: 7/16" (11mm)
- Mounting requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

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



MODEL 990M

Application

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

Features

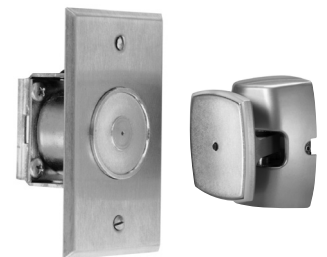
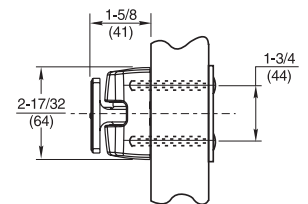
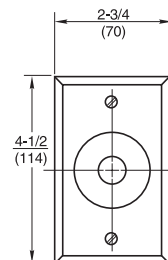
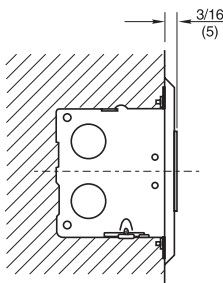
- Total projection: 1-13/16" (46mm)
- Mounting requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

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



SPECIAL PURPOSE WALL MOUNTED ELECTROMAGNETIC DOOR HOLDER/RELEASES

MODEL 991M

Application

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

Features

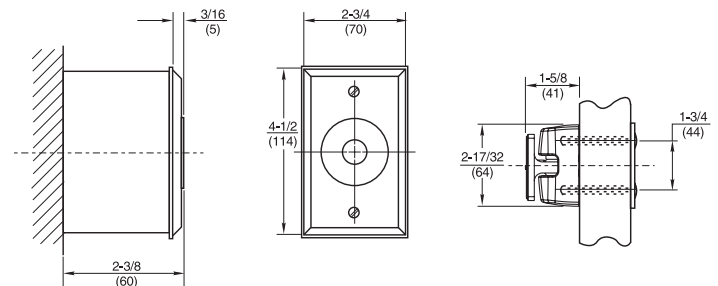
- Total projection: 4" (101mm)
- Approved for class I division 2, class II division 2, groups F and G and class III locations
- Unit includes a sealed surface-mounted junction box
- 2 year limited warranty

Compliance

- ANSI/C00011

Electrical Data

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



MODEL 993M

Application

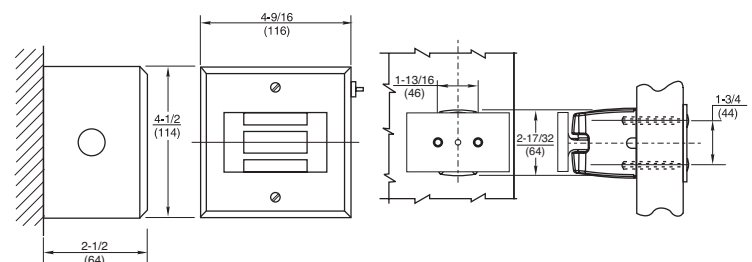
- High hold
- Surface or concealed mounting
- Floor or wall application
- Shipping weight: 3 lbs. (1.4 kg)

Features

- 275 lb. holding force
- Total projection: 5-1/4" (133mm)
- Switch box included 4-1/2" x 4-9/16" x 2-1/2" (114 x 116 x 64mm) 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



WALL MOUNTED ELECTROMAGNETIC DOOR HOLDER/RELEASES

MODEL 994M

Application

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

Features

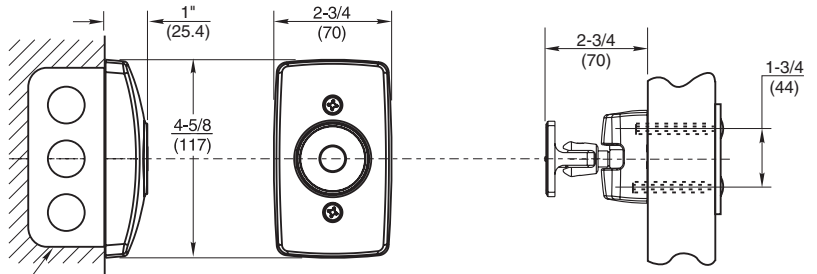
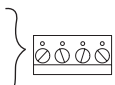
- Total projection: 3-3/4" (95mm)
- Adjustable armature rotation up and down, back and forth for better alignment.
- Cannot be use with 900 base or spacers.
- Can be used without adjustment piece making it a model 997
- Mounting requirements: 2" x 4" x 2-1/2" (51 x 102 x 64mm) outlet box
- Wall must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



MODEL 996M

Application

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

Features

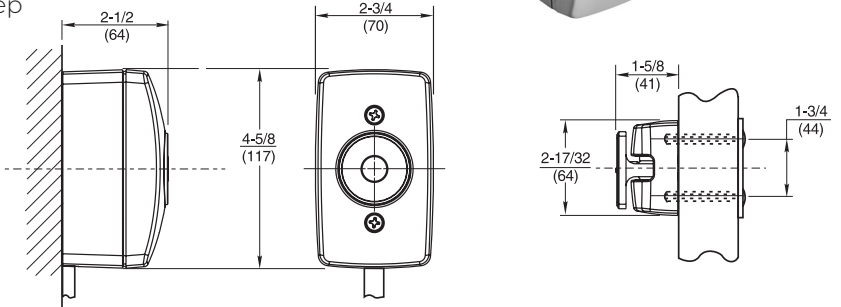
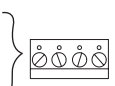
- Total projection: 4-1/8" (105mm)
- Mounting requirements: 1-1/2" (38mm) deep adapter housing
- Wall must be properly reinforced
- 2 year limited warranty

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



WALL MOUNTED

ELECTROMAGNETIC DOOR HOLDER/RELEASES

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

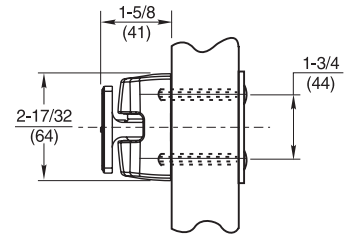
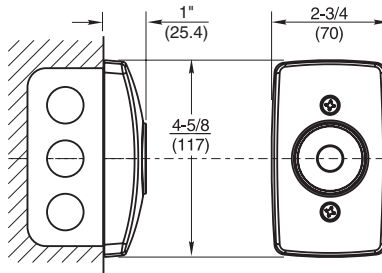
Compliance

- 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		



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

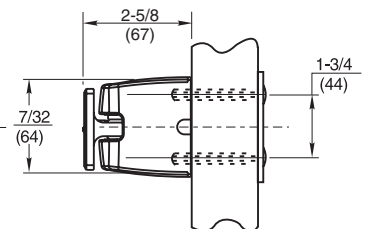
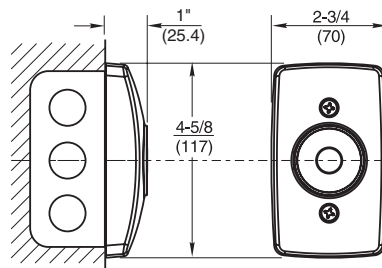
Compliance

- 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		



WALL MOUNTED ELECTROMAGNETIC DOOR HOLDER/RELEASES

MODEL 999M

Application

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

Features

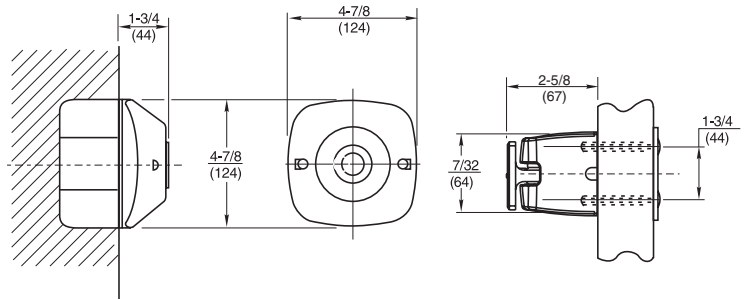
- Base plate; concealed wiring
- Total projection: 4-3/8" (111mm)
- Mounting requirements: 2" x 4" (51 x 102mm) outlet box; 4" (102mm) square box; 4" (102mm) octagonal box
- Wall must be properly reinforced and outlet box adequately fastened
- 2 year limited warranty

Compliance

- ANSI/C00011

Electrical Data

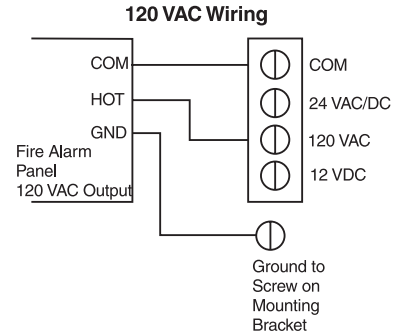
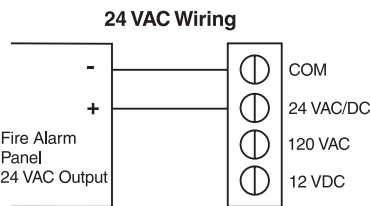
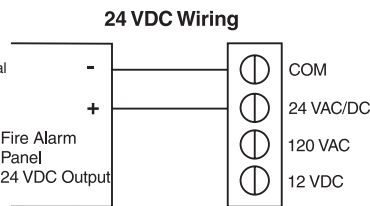
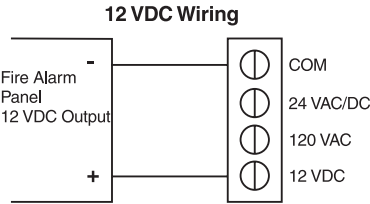
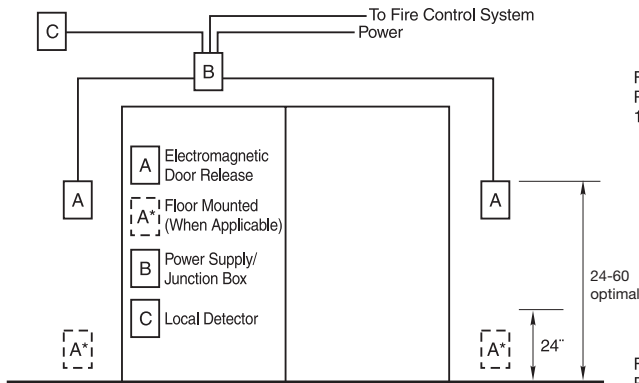
- Voltage and current:
 - 120 VAC, 60 Hz., .020 amp
 - 24 VAC/DC, 60 Hz., .020 amp
 - 12 VDC, .040 amp
- For 50-55 lbs. of holding force, specify voltage
 - 120VAC, 60Hz .017 amp
 - 24VAC, 60Hz .080 amp
 - 24VDC, .068amp
 - 12VDC, .180amp



SCHEMATICS

ELECTROMAGNETIC DOOR HOLDER/RELEASES

SCHEMATICS



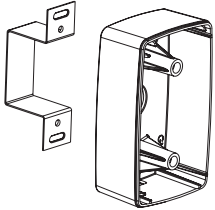
Electrical Specifications:
 12 VDC @ .040 AMPS
 24 VAC/DC @ .020 AMPS
 120 VAC @ .020 AMPS
 (or see specific model)

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.

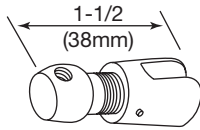
Operation Narrative

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.

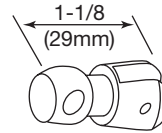
ACCESSORIES



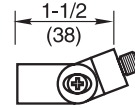
1-1/2" (38mm) Extension
(for use only with
Models 997M, 998M &
994M) Mounts behind
wall cover.
XK996M
Part# 996631M-*



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

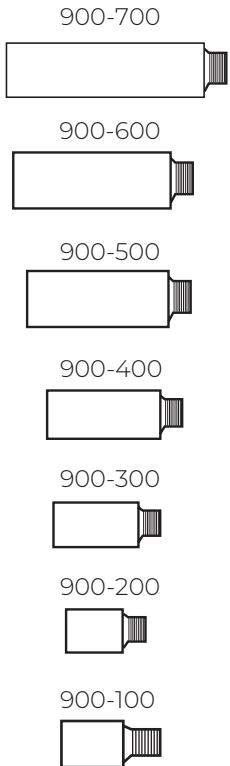


994M Swivel Armature
(cannot be used with
extension spacers)
Part# 900-3



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.**

Spacer lengths – must be used with 900 base



For dimensions,
see chart below



Extension pieces must
be used in conjunction
with 900 Base Unit

Part	Length
900-700	7"
900-600	6"
900-500	5"
900-400	4"
900-300	3"
900-200	2"
900-100	1"
900-75	3/4"
900-50	1/2"

*specify finish

INDUSTRIAL USE

ELECTROMAGNETIC DOOR HOLDER/RELEASES

MODEL 972

The Norton 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

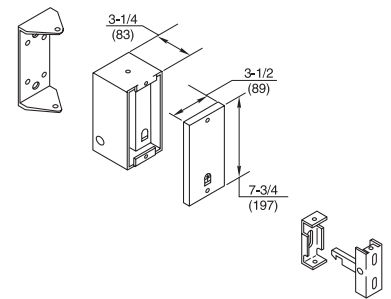
Electrical Data

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

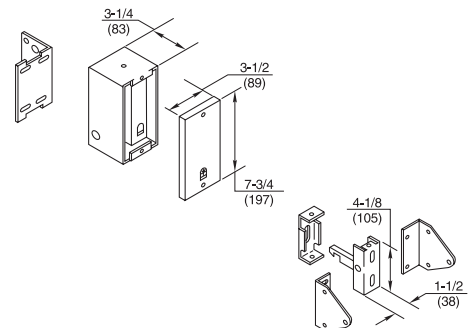
Code Listings:

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

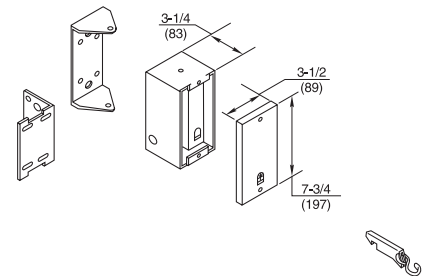
972H for Swinging Doors



972S for Sliding Doors



972U for Overhead Doors



HOW TO ORDER

ELECTROMAGNETIC DOOR HOLDER/RELEASES

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

- 120VAC
- 24VAC/DC
- 12VDC

*Note:
Tri-Volt (120VAC, 24VAC/DC, 12VDC) is standard on models: 980M, 981M, 989, 990M, 994M, 996M, 997M, 998M and 999M. For 50-55 lbs of holding force on these models, specify model x 120VAC, 24VAC, 24VDC or 12VDC when ordering.*

689

FINISHES

ANSI/BHMA (US)	Description
689 (US28)	Aluminum, painted
690 (US20)	Dark bronze, painted
691 (US10)	Light bronze, painted
693	Black, painted
696 (US4)	Gold, painted

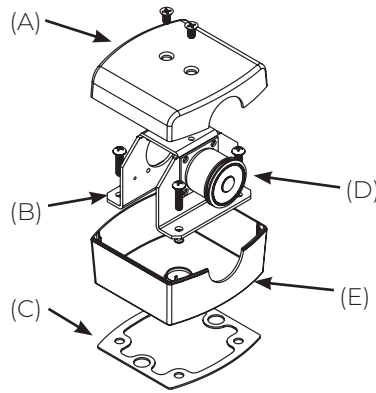
PARTS DRAWINGS

ELECTROMAGNETIC DOOR HOLDER/RELEASES

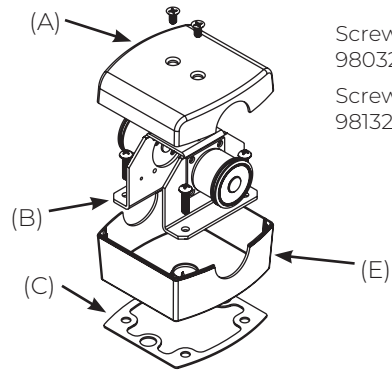
USED WITH MODELS 980M, 981M

Floor Portion

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



980M



981M

Screw Kits

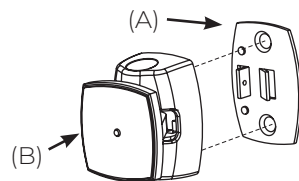
Screw Kit for 980M
980328-*

Screw Kit for 981M
981328-*

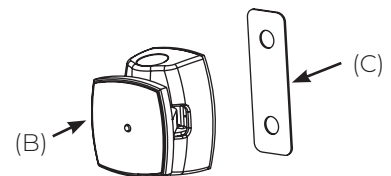
USED WITH MODELS 980M, 981M, 990M, 991M, 996M, 997M

Door Portion

- (A) Backup Plate
- (B) Door Armature Assembly
997510M-*
- (C) Door Plate



Surface Applied Concealed Mounting
Recommended for Solid Wood Doors Only



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

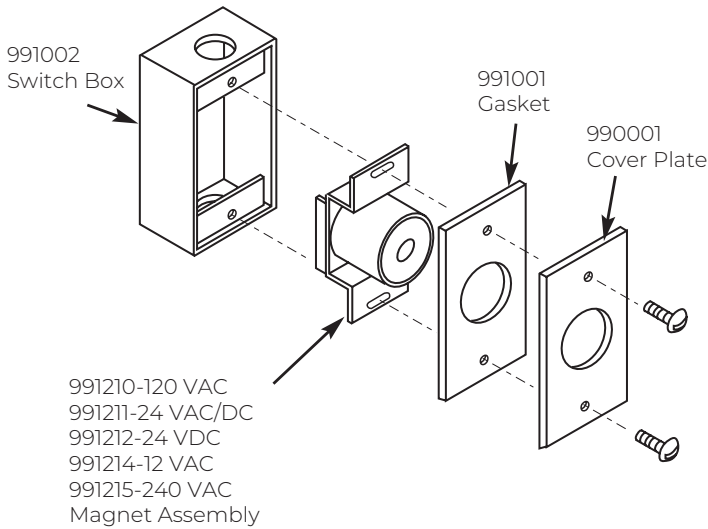
Note: backup plate and door plate are included in magnet screw kit

^ For voltages other than Tri-Volt, contact factory
*Specify finish

USED WITH MODEL 991M

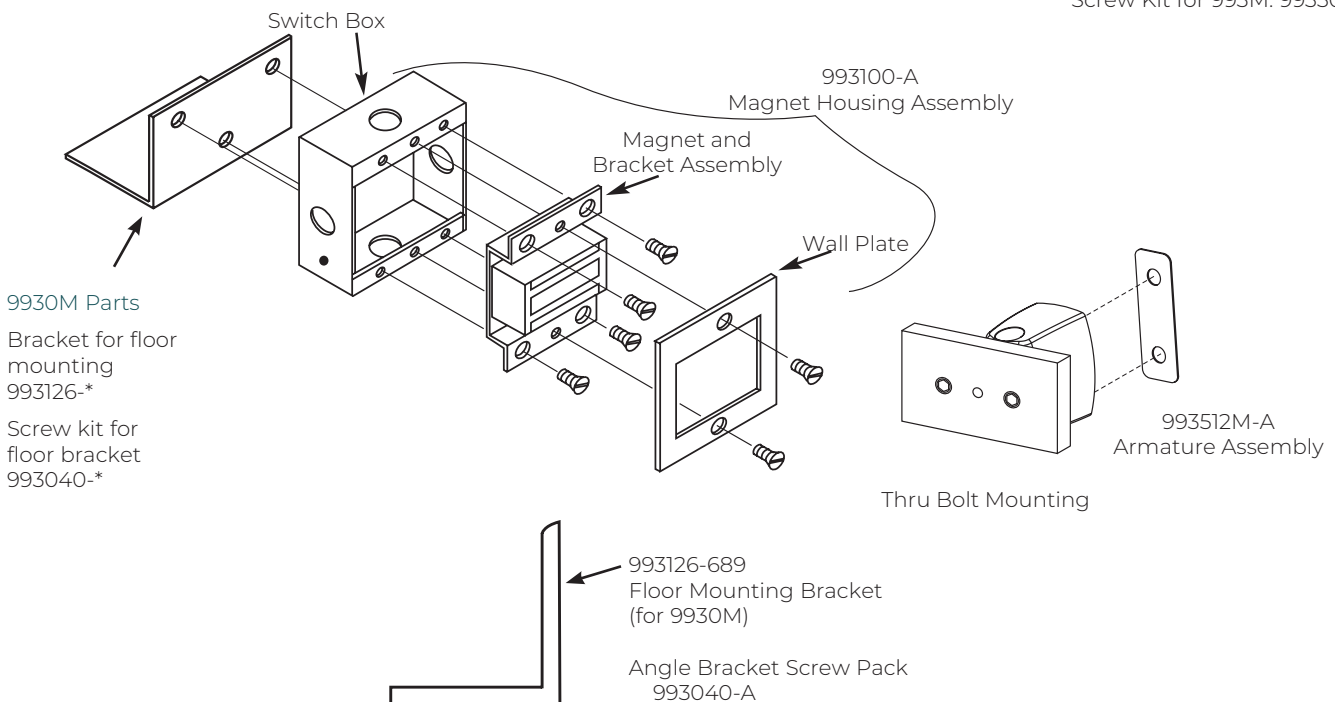
Wall Portion

Screw Kit for 991M: 990300-*



USED WITH MODEL 993M/9930M

Screw Kit for 993M: 993300-A



* Specify finish

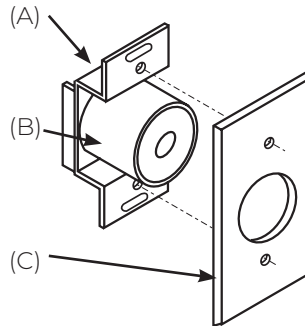
PARTS DRAWINGS

ELECTROMAGNETIC DOOR HOLDER/RELEASES

USED WITH MODELS 990M, 989

Wall Portion

- (A) Magnet Bracket
990002
- (B) Tri-Volt Magnet Assembly
^996219-3V
- (C) Cover Plate
990001



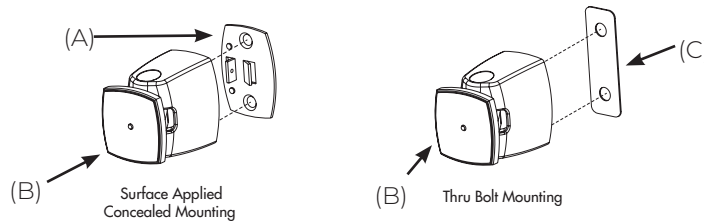
Screw Kits

Screw Kit for 990M
990300-*

USED WITH MODELS 998M, 999M

Door Portion

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



Screw Kits

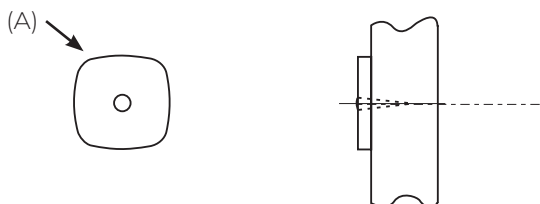
See Screw Kit for 998M
998303-*

Note: backup plate and door plate are included in magnet screw kit

USED WITH MODEL 989

Door Portion

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



^ For voltages other than Tri-Volt, contact factory

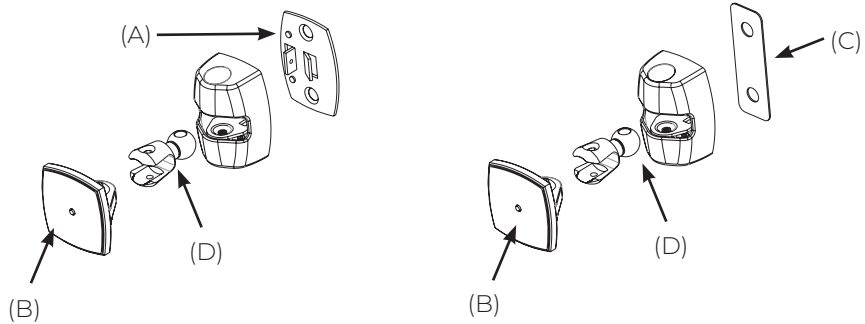
** Specify finish*

USED WITH MODEL 994M

Door Portion

- (A) Backup Plate
- (B) Door Armature Assembly
994510M-*
- (C) Door Plate
- (D) Swivel Armature
900-3*

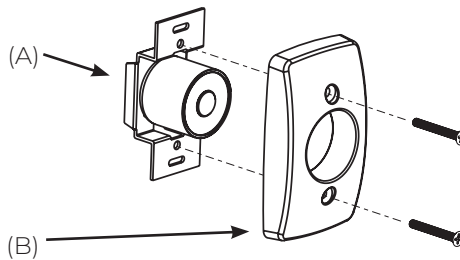
Note: backup plate and door plate are included in magnet screw kit



USED WITH MODELS 994M, 997M, 998M

Wall Portion

- (A) Tri-Volt Magnet Assembly
998369-3V
- (B) Wall Cover
998315M-*



Screw Kits

Screw Kit for
994M/997M
998300-*

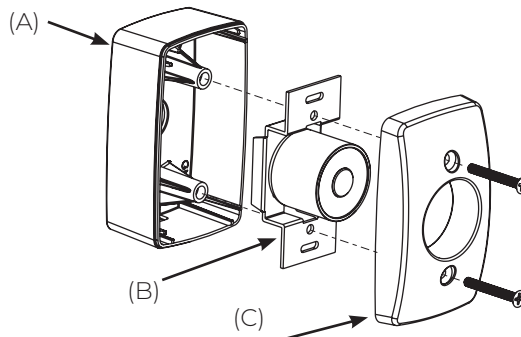
Screw Kits

Screw Kit for
998M
998303-*

USED WITH MODEL 996M

Wall Portion

- (A) Surface Mounting Box
996501M-*
- (B) Tri-Volt Magnet Assembly
996369-3V
- (C) Wall Cover
998315M-*



Screw Kits

Screw Kit for 996M
996325-*

^ For voltages other than Tri-Volt, contact factory
* Specify finish

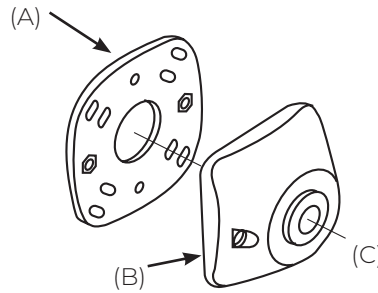
PARTS DRAWINGS

ELECTROMAGNETIC DOOR HOLDER/RELEASES

USED WITH MODEL 999M

Wall Portion

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

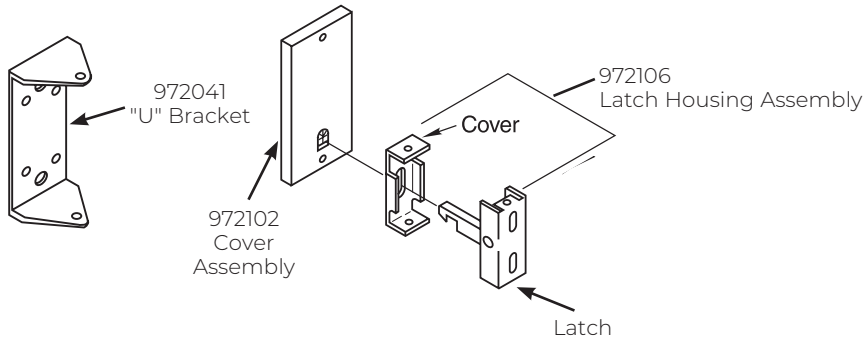


Screw Kits

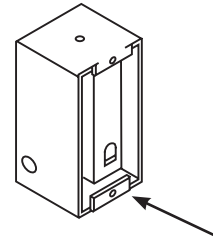
Screw Kit for 999M
999318-*

[^] For voltages other than Tri-Volt, contact factory
^{*} Specify finish

USED WITH MODEL 972H

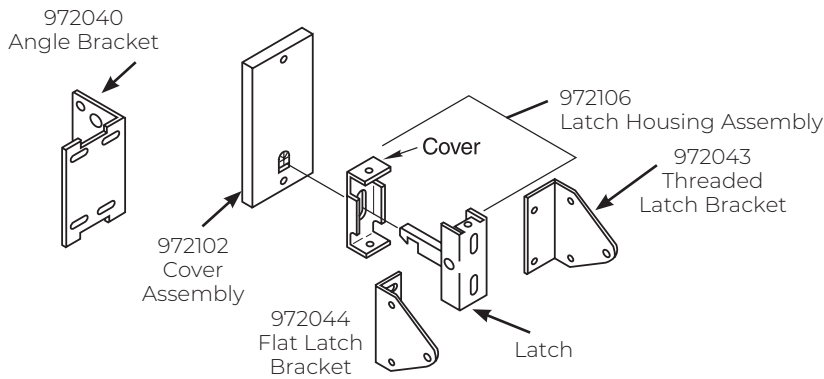


Screw Kit for 972H:
972190



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

USED WITH MODEL 972S

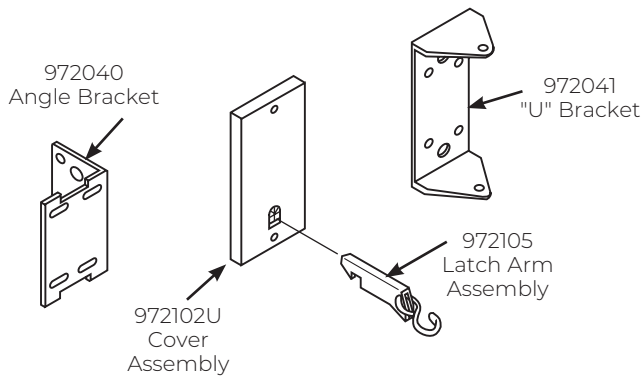


Screw Kit for 972S:
972290

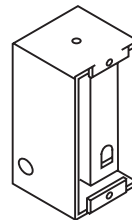


Box Assembly
972100-12 VDC
972112-24 VAC
972118-120 VAC
972120-24 VDC

USED WITH MODEL 972U



Screw Kit for 972U:
972390



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

*specify finish

NOTES

ELECTROMAGNETIC DOOR HOLDER/RELEASES

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