



# Mag Lock Portfolio

## March 2011



# Agenda



- M400 Series Overview
- M400 Design Highlights
- M400 Configurability
- M400 Options
- Cross Reference List
- Top 5 Things to Know
- FAQ's
- Resources



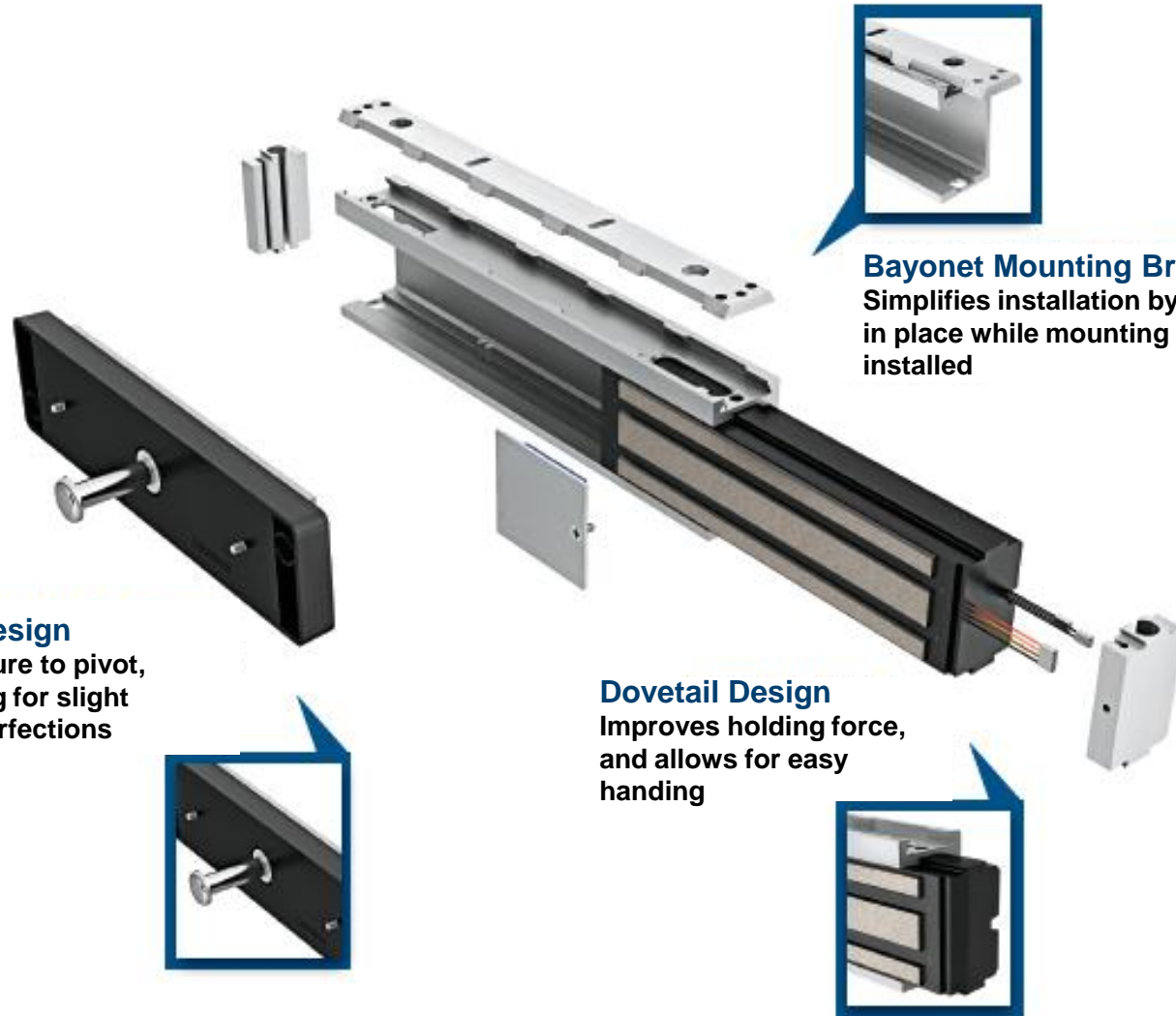
# M400 Series Overview



- Enhanced Feature Set:
  - Easier to install – Bayonet mounting bracket
  - Easy to stock – Basic or Plus feature bundles, common PCB's
  - Non-Handed – Right or Left hand installation, field configurable
  - Single mag locks can be easily converted to double mag locks
  - TJ brackets & Herculite (glass) Door Kits available
  - Superior Dove tail design for max hold force (prior VDI design)
  - Improved MBS (magnetic bond sensor) performance
- Designed from bottoms-up to exacting SCHLAGE standards

**Redesigned to Reduce Complexity, improve performance, and Simplify Installation**

# M400 Design Highlights



**Bayonet Mounting Bracket**  
Simplifies installation by holding lock in place while mounting screws are installed

**Armature Design**  
Allows armature to pivot, compensating for slight opening imperfections



**Dovetail Design**  
Improves holding force, and allows for easy handling



# M400 Configurability



1 Two single M400 Series electromagnetic locks



2 Add the connector block



3 Double electromagnetic lock



**Less  
Inventory  
to Stock**

**Easy to  
Configure**

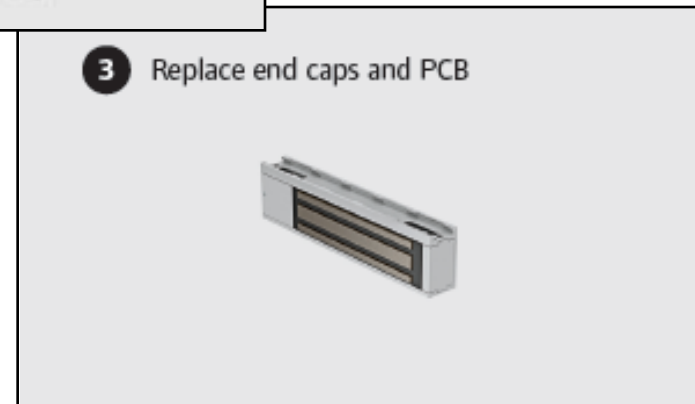
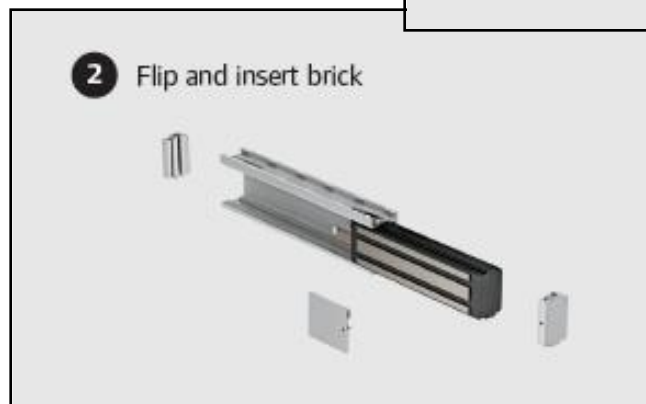
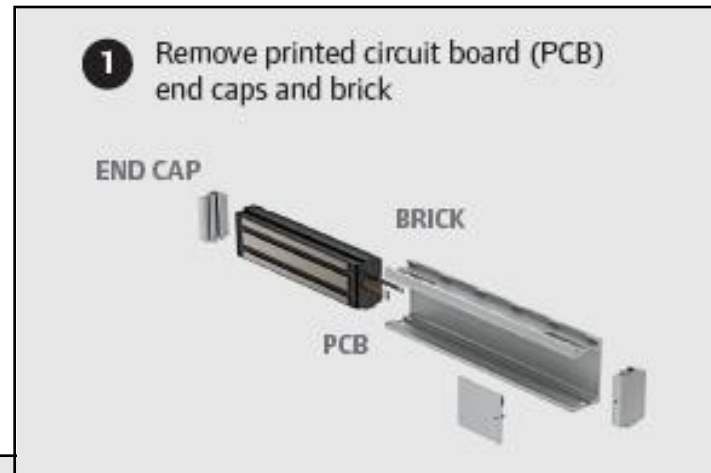
Double Mag Locks (example M492, M492P) shipped as overpack consisting of 2 single maglocks + 1 connector kit (joiner block, installation tool, instructions).

# M400 Field Reversible Handing



**Less  
Inventory  
to Stock**

**Easy to  
Configure**



**Dove tail design simplifies re-handing**

# Simplified Pre-packaged Options

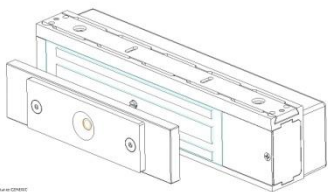


M420/M450/M490	Standard Configuration	Option Package ("P" suffix)
Auto Voltage Select	✓	✓
Door Status Monitor, Magnetic Bond Sensor, Relocking Time Delay	N/A	✓
Anti-Tamper Switch, MBS Indicator (LED)	N/A	Orderable option (field installed)
Herculite Door Bracket	Orderable Option (field installed)	Orderable Option (field installed)
Top Jamb Kit	Orderable Option for Direct Pull (field installed)	Orderable Option for Direct Pull (field installed)

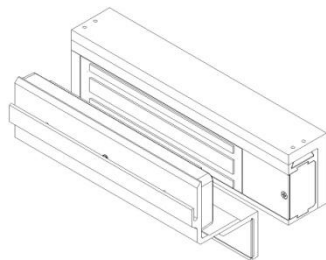
# Mag Lock Cross Reference List



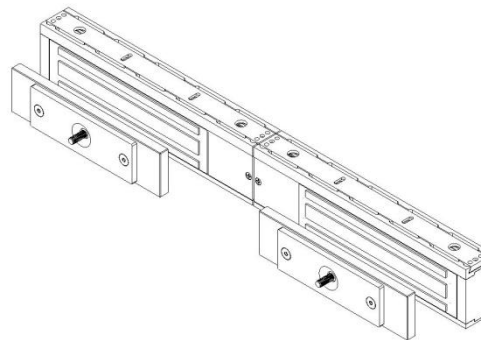
New Portfolio		Old Portfolio
<b>M420/M422</b> Meets or exceeds 500lb BHMA hold force rating	<b>Standard Configuration– AVS</b>  <b>“P” Option Package – DSM, MBS, RTD</b>	<b>320+</b> RTD, ATS, LED, DSM, MBS Options
<b>M450/M452</b> Meets or exceeds 1000lb BHMA hold force rating		<b>350+</b> RTD, ATS, LED, DSM, MBS Options
<b>M490/M492</b> Meets or exceeds 1500lb BHMA hold force rating		<b>390+</b> RTD, ATS, LED, DSM, MBS Options
<b>M490DE</b> Meets or exceeds 1500lb BHMA hold force rating		<b>390DEL/ 101+</b> RTD, ATS, LED, DSM, MBS Options



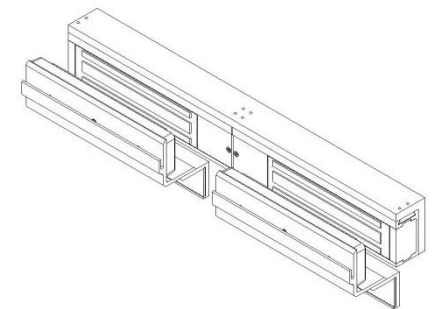
400-series single



400-series single TJ



400-series double



400-series double TJ

# Mag Lock Cross Reference List



New Portfolio		Old Portfolio
<b>M490G</b> Meets or exceeds 1500lb BHMA hold force rating	DSM, MBS Standard	<b>390G</b> DSM, MBS Options
<b>GF3000 continues</b> Simplified Option Packages	Basic Option – AVS Plus Option – DSM, MBS, RTD	<b>GF3000/ 280+</b> RTD, DSM, MBS Options Meets or exceeds 1500lb BHMA hold force rating
<b>320M</b> <b>Remains Unchanged</b> Single Option Package	DSM, MBS Standard	<b>320M</b> DSM, MBS Options Meets or exceeds 500lb BHMA hold force rating
40 Series Remains Unchanged	DSM, MBS Standard	40 Series Meets or exceeds 500lb BHMA hold force rating
70 Series Remains Unchanged	DSM, MBS Standard	70 Series Meets or exceeds 1000lb BHMA hold force rating

# Top 5 Things To Know



- Improved Design and Improved Performance
- Configurable Options Means Fewer SKUs to Stock
- Simplified Feature Sets
- Bayonet Mounting Bracket Makes It Easier to Install
- Field Configured Handing Options enabled by Dove Tail Design

# FAQ's

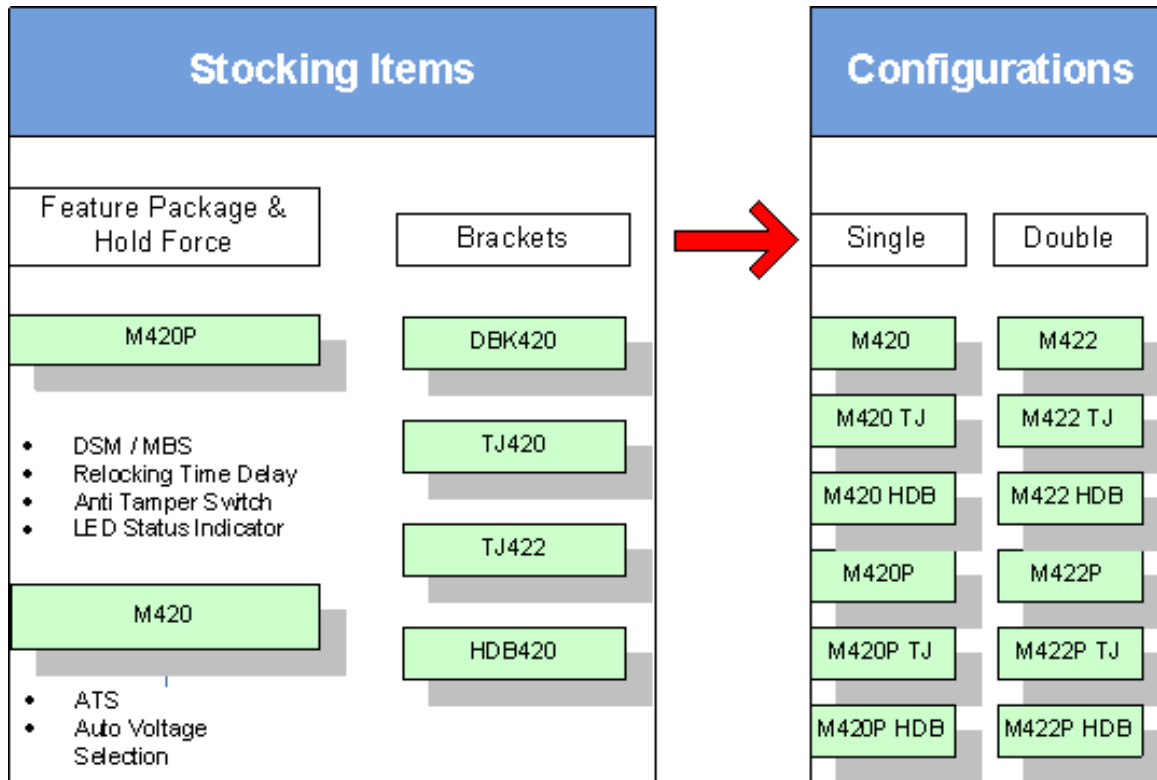


- Q: State that new maglocks have improved performance, but the hold force seems to have been lowered.

A: New hold force ratings are according to BHMA / ANSI standards. We state that we exceed these standards and this is illustrated in table below:

Model	BHMA Rated Hold Force	Internally Tested Mean Hold Force
M420	500lbs	711lbs
M450	1000lbs	1232lbs
M490	1500lbs	1738lbs

# Distributors Stocking items



\* *Example uses M420, same would apply for M450 & M490*

- **Reduced number of SKU's to carry and manage**
- **Lower cost of inventory**

# Mag Lock Support Materials



- New Web Pages
- New Mini Brochure (ES-5917)
- [www.schlage.com/support](http://www.schlage.com/support)
  - Data Sheets (ES-5904, ES-5905, ES-5906, ES-6012, ES-6016)
  - Templates
  - Install Manuals

**Flexible**  
Field configurable handing gives you more options

- 1 Remove printed circuit board (PCB) end caps and brick
- 2 Flip and insert brick
- 3 Replace end caps and PCB

**ARMATURE DESIGN**  
Allows armature to pivot, compensating for slight opening imperfection

**DOVETAIL DESIGN**  
Improves holding force, and allows for easy handling

**BAYONET MOUNTING BRACK**  
Simplifies installation by holding lock in place while mounting arm are installed

**M400 Electromagnetic Locks**

The M400 Series from Schlage was designed to be robust, easy to install, and secure. There is no need to consider door handing as all the M400 Series electromagnetic locks are non-handed and symmetrical, allowing for optimum placement of the magnet no matter the application. The new bayonet mounting bracket makes installation easier, allowing the installer to have their hands free during the mounting process. Two single electromagnetic locks can be joined together to easily become a double with the new innovative connector block.

Visit [schlage.com](http://schlage.com) for more information.

**SCHLAGE**

**Electromagnetic Locks**

**IR Ingersoll Rand**  
Security Technologies

**SCHLAGE**

**M450/M457**  
High Security Series  
Electromagnetic Lock

**Features:**

- Symmetrical design for non-handed application
- 120VAC or 24VDC operation
- 1000 lbs. holding force
- 1000 lbs. pull force
- 1000 lbs. push force
- 1000 lbs. shear force
- 1000 lbs. impact force
- 1000 lbs. impact force
- 1000 lbs. impact force

**IR Ingersoll Rand**  
Security Technologies

**SCHLAGE**

**M400 Series**  
Electromagnetic Locks

Installation Instructions for Single Locks  
M400, M450, M457

**FEATURES**

- Automatic Voltage Selection (AVS)**  
Maglock immediately detects 120VAC or 24VDC when power is connected.
- Anti-Tamper Switch (ATS)**  
An indication is provided should the magnet cover become tampered from lock.
- Magnetic Bond Sensor (MBS)**  
Detects proper bond between magnet and armature. It can be monitored remotely and locally with an LED.
- LED**  
Provides local indication of MBS status.
- Door Position Switch (DPS)**  
Indicates whether door is open or closed. This feature is used in conjunction with the MBS.
- Retract Time Delay (RTD)**  
Retract time can be changed. Range is 1 - 30 seconds.

**MODELS**

- M400 (Traffic Control)**  
UL104 and VCS/5000 and 5th rating
- M450 (High Security)**  
UL104 and VCS/5000 and 5th rating
- M457 (Max Security)**  
UL104 and VCS/5000 and 5th rating

**TRIMS**

**Blank**  
Blank Voltage Selection (AVS) for 12 or 24VDC

**Plus**  
Blank Features + Door Position Switch (DPS), Magnetic Bond Sensor (MBS), Retract Time Delay (RTD), LED Status Indicator (LED) and Anti-Tamper Switch (ATS)

**IR Ingersoll Rand**  
Security Technologies

# Contact Us



- Contact Us for Customer Care & Technical Support
  - 877-671-7011
- Visit us 24/7 on the Web
  - [www.schlage.com](http://www.schlage.com)
    - Technical Library
    - FAQ's
    - Product Details Pages
    - Installation Instructions



**Thank You!**

[www.schlage.com/ad-series](http://www.schlage.com/ad-series)