

# M Series Mortise Locks

Heavy Duty

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## Mortise Locks – M Series

ANSI 156.13 Grade 1, Extra Heavy Duty

### Mechanical Type M Series



- Extra heavy duty mortise locks
- ANSI 156.13-2017 Grade 1
- UL/cUL listed

### Wired Electrified Type No. 2081 & 2082



- Security control
- Restricted access use

### Mortise Lock with push-pull trim No. HL22



- Meets ADA compliance
- UL listed for all fire doors
- Wide selection of functions
- Available to use with Schlage L Series Heavy Duty Mortise Locks

### Mortise Deadlock SM Series

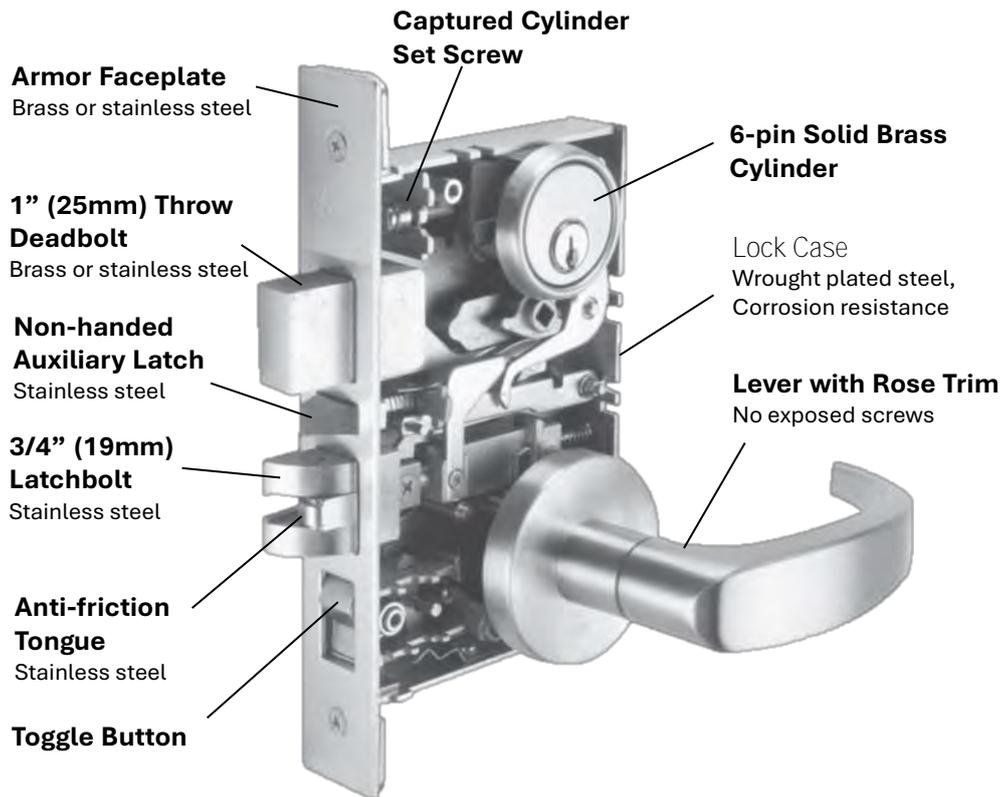


- Heavy duty small lockcase
- Higher security
- UL/cUL listed to Canadian safety standard for A label (3-hour fire door)

## Mortise Locks – M Series

ANSI 156.13 Grade 1, Extra Heavy Duty

The M Series mortise locks comply with American National Standard Institute requirement (ANSI A156.13 – 2017 Grade 1) and provide a full range of multiple models to meet different demand for commercial, institutional, and industrial applications.



### Features

- Full reversible design.
- No exposed mounting screws on outside and inside trims.
- It can retrofit American Schlage L9000 Series mortise lock bodies.
- Outside lever is *clutch freewheeling* design. The lever rotates when the lever is locked preventing excessive force from being applied to the horizontal level. This design can decrease the lever to be broken or damaged.

### Certifications

- Meet ANSI A156.13 Series 1000 Grade 1 requirement
- UL/cUL listed to Canadian safety standard for A label (3-hour fire door), stamped letter F and UL symbol on armor faceplate
- Meet positive pressure requirements UL 10C and UBC 7-2 (1997)

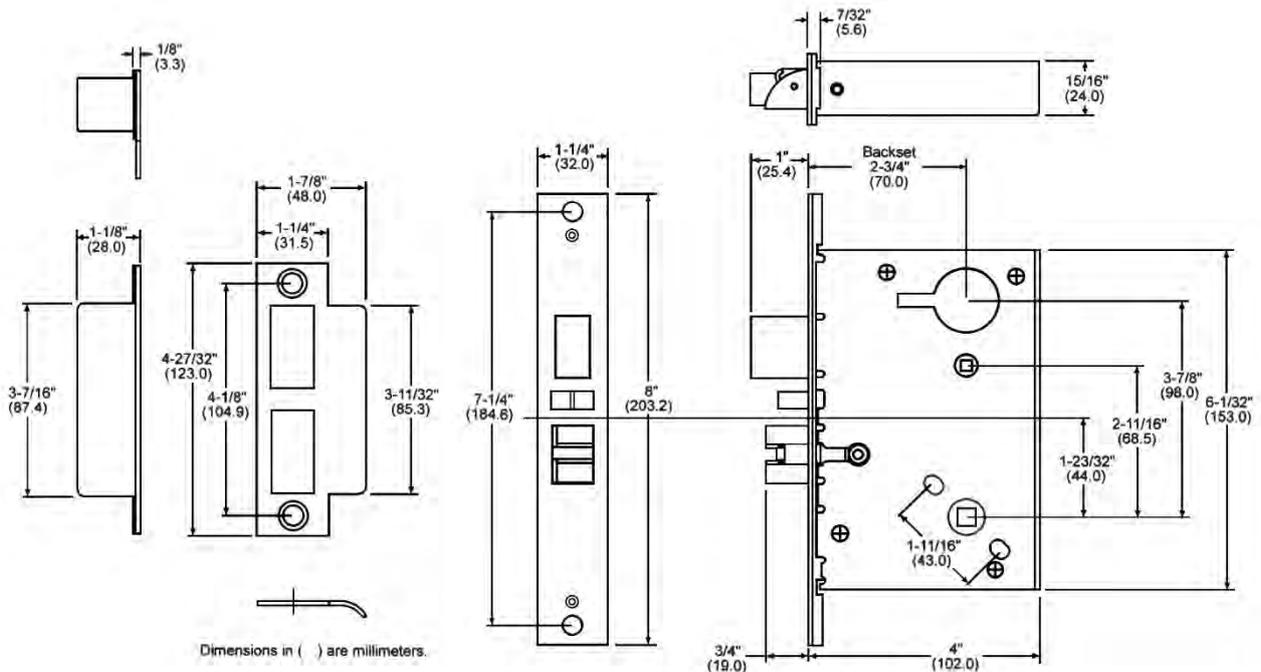
# Mortise Locks – M Series

ANSI 156.13 Grade 1, Extra Heavy Duty

## Specifications

For Doors	1-3/4" (44.5mm) thick standard For doors over 1-3/4" (44.5mm), specify door thickness
Lock Hand	Lock bodies are easily filed reversible, no need to specify hand when ordering
Backset	2-3/4" (70mm) only
Lock case	Heavy duty wrought steel; zinc dichromate plated
C to C	⌀ lever to ⌀ cylinder is 3-7/8" (98mm)
Armor Faceplate	Stainless steel; 8" x 1-1/4" (203.2mm x 32.0mm); ANSI Standard A115.1
Deadbolt	1" (25.4mm) throw; hardened stainless steel
Latchbolt	3/4" (19mm) throw; one-piece stainless steel with anti-friction reversible tongue
Auxiliary Latch	Stainless steel, non-handed
Toggle button	High rust-resistant chrome plated zinc alloy
Trims	As specified, see page 15~17.
Strike	Stainless steel; ANSI Standard A115.1; curve lip with dust box
Cylinders	Our lockcase can receive cylinders from other manufacturers. For details and Cam type, please see page 19.
Masterkeying	Can be masterkeyed or grand masterkeyed, construction keying available
Finishes	US3, US4, US10, US10B, US26, US26D, US32, US32D

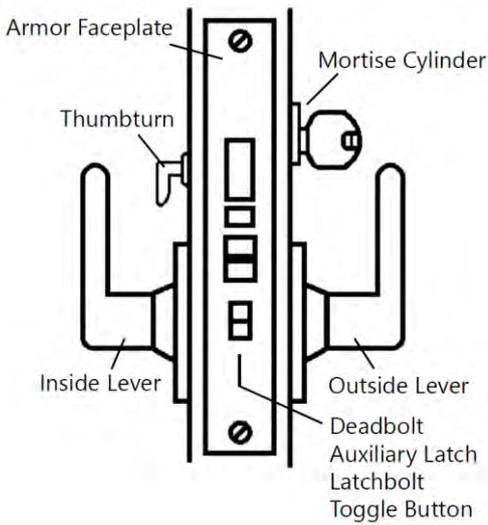
## Dimensions



# Mortise Locks – M Series

ANSI 156.13 Grade 1, Extra Heavy Duty

## ANSI Function Diagram



## Production Identification

**M 3 4 1 5**

### Function Number

01~ 34 ANSI Numbers  
Others Function Number

### Deadbolt Function Number

4 = With Deadbolt  
0 = No Deadbolt

### Number of bolt hole on the Faceplate

0 = Faceplate has no hole (i.e. Dummy Trim)  
1 = One hole for the deadbolt or latchbolt  
2 = One for the deadbolt and one for the latchbolt or one for the auxiliary latch and one for the latchbolt  
3 = One for the deadbolt, one for the latchbolt and the other one for the auxiliary latch or toggle button  
4 = Four holes for all function model

### Mortise Lock Series



M4486



M3415, M3434  
M3486, M3488



M3411, M3420



M3004



M3004A, M2005  
M2007, M2009  
M2026, M2030



M2402, M2419



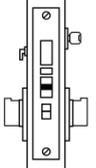
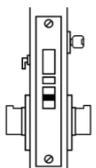
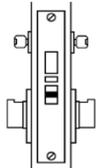
M2413, M2414  
M2421, M2033  
M2465



M1001, M1022

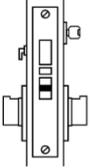
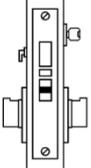
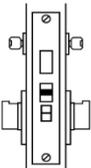
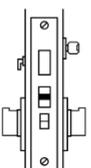
## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description
Deadbolt, Latchbolt, Auxiliary Latch & Toggle Button	
	<p><b>M4486</b> All Purpose Lock</p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked (made inoperative) by operating toggle button</li> <li>• Deadbolt projected or retracted by key outside or thumbturn inside</li> <li>• Key outside operates both deadbolt and latchbolt</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously</li> <li>• Locking toggle button makes outside lever inoperative; unlocking toggle button makes outside lever operative</li> <li>• Latchbolt is deadlocked when outside lever is locked (inoperative) or when deadbolt is projected</li> <li>• Outside lever is unlocked by toggle button only when deadbolt is retracted</li> <li>• Inside lever is always free from immediate exit</li> <li>• Auxiliary latch deadlocks latch bolt when door is closed</li> </ul>
Deadbolt, Latchbolt & Auxiliary Latch	
	<p><b>M3415</b> Hotel Guest Lock</p> <p>ANSI Function <b>F15</b></p> <ul style="list-style-type: none"> <li>• Hotel cylinder required with two types of keys (standard and emergency key)</li> <li>• Standard key outside retracts latchbolt only, will not retract or project deadbolt</li> <li>• Emergency key outside retracts latchbolt and deadbolt; it also projects deadbolt</li> <li>• Latchbolt retracted by key outside or lever inside</li> <li>• Outside lever is always inoperative</li> <li>• Deadbolt projected or retracted by inside thumbturn</li> <li>• When deadbolt is projected, key outside becomes inoperative except emergency key</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> <li>• Inside lever is always free for immediate egress</li> </ul>
	<p><b>M3434</b> Classroom Security Intruder Deadbolt Lock</p> <p>ANSI Function <b>F34</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked from inside or outside</li> <li>• Deadbolt projected or retracted by key from both sides</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously, and unlock outside lever</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed, or latchbolt is deadlocked when deadbolt is projected</li> <li>• Inside lever is always free for immediate egress</li> </ul>

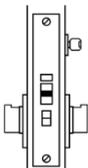
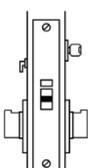
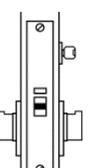
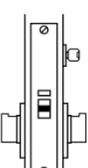
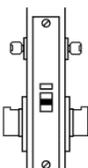
## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description
Deadbolt, Latchbolt & Auxiliary Latch	
	<p><b>M3486</b> Entrance Lock</p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked by key from outside</li> <li>• Deadbolt projected or retracted by key outside</li> <li>• Latchbolt retracted by key outside</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously</li> <li>• Deadbolt projected or retracted by inside thumbturn</li> <li>• When deadbolt projected by inside thumbturn, outside lever becomes inoperative automatically</li> <li>• Inside lever is always free for immediate egress</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> </ul>
	<p><b>M3488</b> Faculty Rest Room Lock</p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by key outside or by lever inside</li> <li>• Outside lever is always inoperative. Deadbolt projected or retracted by inside thumbturn</li> <li>• When deadbolt projected (locked), all keys become inoperative except emergency or display keys</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously</li> <li>• Inside lever is always free for immediate egress</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> </ul> <p>➤ <i>This function operates with a special cylinder</i></p>
Deadbolt, Latchbolt & Toggle Button	
	<p><b>M3411</b> Dormitory or Exit Lock</p> <p>ANSI Function <b>F11</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked (made inoperative) by operating toggle button</li> <li>• Deadbolt projected by key from either side</li> <li>• Deadbolt retracted by key outside</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously and outside lever remains locked</li> </ul>
	<p><b>M3420</b> Apartment Corridor Door Lock</p> <p>ANSI Function <b>F20</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked (made inoperative) by operating toggle button</li> <li>• Deadbolt projected and retracted by key outside or thumbturn inside</li> <li>• Key outside operates deadbolt and latchbolt, and outside lever remains locked</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously, and outside lever remains locked</li> <li>• Latchbolt is deadlocked when outside lever is locked (made inoperative) or when deadbolt is projected</li> <li>• Outside lever is unlocked by toggle button if deadbolt is retracted.</li> <li>• Inside lever is always free for immediate egress</li> </ul>

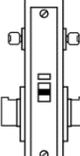
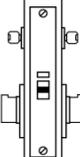
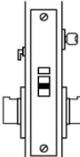
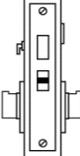
## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description
Latchbolt, Auxiliary Latch & Toggle Button	
	<p><b>M3004</b> ANSI Function <b>F04</b></p> <p><b>Office or Entry Lock</b></p> <ul style="list-style-type: none"> <li>• Outside lever retracts latchbolt unless outside lever is locked (made inoperative) by operating toggle button</li> <li>• Latchbolt retracted by key outside and inside lever when outside lever is locked</li> <li>• Outside lever is locked and unlocked by toggle button</li> <li>• Key outside locks outside lever only</li> <li>• When latchbolt is retracted by inside lever, outside lever remains locked</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> <li>• Inside lever is always free for immediate egress</li> </ul>
Latchbolt & Auxiliary Latch	
	<p><b>M3004A</b> ANSI Function <b>F04</b></p> <p><b>Office or Entry Lock</b></p> <ul style="list-style-type: none"> <li>• Outside lever retracts latchbolt unless outside lever is locked (made inoperative) by operating thumbturn</li> <li>• Latchbolt retracted by key outside and inside lever when outside lever is locked</li> <li>• Outside lever is locked and unlocked by thumbturn</li> <li>• Key outside locks outside lever only</li> <li>• When latchbolt is retracted by inside lever, outside lever remains locked</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> <li>• Inside lever is always free for immediate egress</li> </ul>
	<p><b>M2005</b> ANSI Function <b>F05</b></p> <p><b>Classroom Lock</b></p> <ul style="list-style-type: none"> <li>• Key outside locks and unlocks outside lever</li> <li>• Outside lever retracts latchbolt unless outside lever is locked by key</li> <li>• When outside lever is locked, unlocked from outside by key or by inside lever</li> <li>• Inside lever is always free for immediate egress</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> </ul>
	<p><b>M2007</b> ANSI Function <b>F07</b></p> <p><b>Storeroom or Closet Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by key outside or by lever inside</li> <li>• Outside lever is always inoperative</li> <li>• Inside lever is always free for immediate egress</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> </ul>
	<p><b>M2009</b> ANSI Function <b>F09</b></p> <p><b>Apartment, Exit or Public Restroom Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked by key from inside</li> <li>• Key inside locks and unlocks outside lever</li> <li>• When outside lever is locked, latchbolt retracted by key outside or by lever inside</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> <li>• Inside lever is always free for immediate egress</li> </ul>

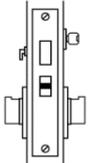
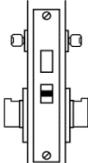
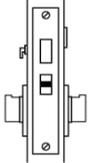
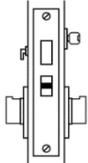
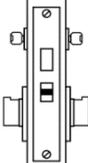
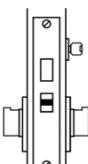
## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description	
Latchbolt & Auxiliary Latch		
	<p><b>M2026</b> ANSI Function <b>F26</b></p>	<p><b>Institutional Privacy Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked by thumbturn inside</li> <li>• Latchbolt retracted by key outside even when thumbturn is in locked position</li> <li>• Outside lever is unlocked by operating inside lever or closing door</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> </ul>
	<p><b>M2030</b> ANSI Function <b>F30</b></p>	<p><b>Asylum or Institutional Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by key from either side</li> <li>• Levers on both sides are always inoperative</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> </ul>
	<p><b>M2032</b> ANSI Function <b>F32</b></p>	<p><b>Intruder Latchbolt Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked by key from either side</li> <li>• When outside lever is locked, latchbolt is retracted by key outside or lever inside</li> <li>• Turning key from either side locks and unlocks outside lever</li> <li>• Auxiliary latch deadlocks latchbolt when door is closed</li> <li>• Inside lever is always free for immediate egress</li> </ul>
	<p><b>M2037</b></p>	<p><b>Office with Auto Unlock Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side unless outside lever is locked (made inoperative) by outside key or operating thumbturn inside</li> <li>• Outside lever is unlocked by outside key, operating thumbturn, or closing door</li> <li>• Operating inside lever retracts latchbolt and unlocks outside lever simultaneously</li> <li>• Inside lever is always free for immediate egress</li> </ul>
Deadbolt & Latchbolt		
	<p><b>M2402</b> ANSI Function <b>F02</b></p>	<p><b>Privacy, Bedroom or Bath Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side</li> <li>• Unlocking deadbolt by operating thumbturn inside</li> <li>• When deadbolt is projected, outside lever becomes inoperative</li> <li>• Removing outside emergency release retracts deadbolt (i.e., removing a round plate from outside, then insert a Philips tip screwdriver into access hold and rotate to unlock door)</li> </ul> <p>➤ <i>Deadbolt cannot be unlocked by operating inside lever</i></p>

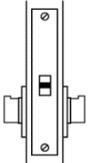
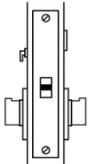
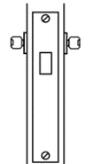
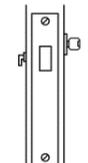
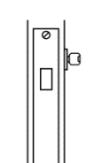
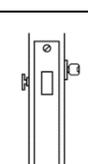
## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description
Deadbolt & Latchbolt	
	<p><b>M2413</b> ANSI Function <b>F13</b></p> <p><b>Dormitory or Exit Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side when deadbolt is in retracted position</li> <li>• Deadbolt projected or retracted by key outside or thumbturn inside</li> <li>• Projecting deadbolt locks outside lever</li> <li>• When deadbolt projected, operating inside lever retracts both deadbolt and latchbolt simultaneously</li> </ul>
	<p><b>M2414</b> ANSI Function <b>F14</b></p> <p><b>Store Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side</li> <li>• Deadbolt projected or retracted by key from either side</li> <li>• Latchbolt and deadbolt are independent of each other</li> </ul>
	<p><b>M2419</b> ANSI Function <b>F19</b></p> <p><b>Privacy, Bedroom or Bath Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side</li> <li>• Deadbolt projected or retracted by inside thumbturn</li> <li>• Projecting deadbolt locks outside lever</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously, and unlock outside lever</li> <li>• Removing outside emergency release retracts deadbolt (i.e., removing a round plate from outside, then insert a Philips tip screwdriver into access hold and rotate to unlock door)</li> <li>• Inside lever is always free for immediate egress</li> </ul>
	<p><b>M2421</b> ANSI Function <b>F21</b></p> <p><b>Room Door Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side</li> <li>• Deadbolt projected or retracted by key outside or thumbturn inside</li> <li>• Latchbolt and deadbolt are independent of each other</li> </ul>
	<p><b>M2433</b> ANSI Function <b>F33</b></p> <p><b>Classroom Security Intruder Deadbolt Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by outside lever unless outside lever is locked by key from inside or outside</li> <li>• Deadbolt projected or retracted by key from both sides</li> <li>• Operating inside lever retracts both deadbolt and latchbolt simultaneously and unlock outside lever</li> <li>• Inside lever is always free for immediate egress</li> </ul>
	<p><b>M2465</b></p> <p><b>Closet or Storeroom Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from either side</li> <li>• Deadbolt projected or retracted by key outside</li> </ul>

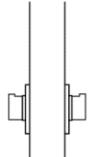
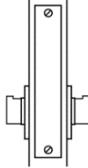
## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description	
Latchbolt Only		
	<p><b>M1001</b> ANSI Function <b>F01</b></p>	<p><b>Passage Latch</b></p> <ul style="list-style-type: none"> <li>• Latchbolt always retracted by lever from either side</li> <li>• Inside lever is always free for immediate egress</li> </ul>
	<p><b>M1022</b> ANSI Function <b>F22</b></p>	<p><b>Privacy, Bedroom or Bath Lock</b></p> <ul style="list-style-type: none"> <li>• Latchbolt retracted by lever from outside unless outside lever is locked by inside thumbturn</li> <li>• Operating inside lever retracts latchbolt and unlocks outside lever</li> <li>• Removing outside emergency release unlocks outside lever</li> <li>• Turning inside thumbturn locks and unlocks outside lever</li> <li>• Inside lever is always free for immediate egress</li> </ul>
Deadbolt Only		
	<p><b>M1416</b> ANSI Function <b>F16</b></p>	<p><b>Dead Lock: Double Cylinder</b></p> <ul style="list-style-type: none"> <li>• Deadbolt projected or retracted by key from either side</li> </ul>
	<p><b>M1417</b> ANSI Function <b>F17</b></p>	<p><b>Dead Lock: Inside Thumbturn &amp; Outside Cylinder</b></p> <ul style="list-style-type: none"> <li>• Deadbolt projected or retracted by key outside or thumbturn inside</li> </ul>
	<p><b>M1418</b> ANSI Function <b>F18</b></p>	<p><b>Dead Lock: Single Cylinder</b></p> <ul style="list-style-type: none"> <li>• Deadbolt projected or retracted by key outside</li> <li>• No trim on opposite side</li> </ul>
	<p><b>M1429</b> ANSI Function <b>F29</b></p>	<p><b>Dead Lock: Inside Thumbturn &amp; Outside Cylinder</b></p> <ul style="list-style-type: none"> <li>• Deadbolt projected or retracted by key from outside</li> <li>• Inside <i>thumbturn cylinder</i> retracts deadbolt but cannot project it</li> </ul>

## Mortise Locks – M Series

### Function & Description

Function & Model No.	Description
Dummy Trims	
	<p><b>M0071</b> Single Dummy Trim</p> <ul style="list-style-type: none"> <li>• Lever on one side fixed by mounting bar, it is always rigid</li> <li>• Lever only used as door pull</li> </ul>
	<p><b>M0072</b> Double Dummy Trim</p> <ul style="list-style-type: none"> <li>• Lever on both sides fixed by mounting bar and are always rigid</li> <li>• Lever only used as door pull</li> </ul>
	<p><b>M0075</b> Single Dummy Trim with Lock Case</p> <ul style="list-style-type: none"> <li>• Lever on one side fixed on door surface, it is always rigid</li> <li>• Includes lock case and armor faceplate</li> </ul>
	<p><b>M0076</b> Double Dummy Trim with Lock Case</p> <ul style="list-style-type: none"> <li>• Lever on both sides fixed on door surface and are always rigid</li> <li>• Includes lock case and armor faceplate</li> </ul>



**M 1 4 1 6 , M 1 4 1 7  
M 1 4 1 8 , M 1 4 2 9**



**M 0 0 7 1 , M 0 0 7 2**



**M 0 0 7 5 , M 0 0 7 6**

# Electrified Mortise Locks – M Series

Solenoid Type

## Applications

Maintain security and restricted access for sensitive areas including: engineering rooms, computer facilities, hospital equipment storage, cashier offices, laboratories, radar control rooms, telephone equipment rooms, narcotics storage areas, and security control centers.

## Regulating Device

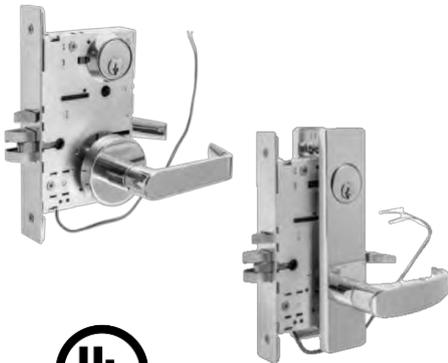
- This lock is compatible with multiple access control systems, including keypads, card readers, security consoles, automatic timers, and computerized controls.
- All installations must comply with local electrical codes or, in the USA, the National Electrical code (NFPA 70).

## Electrified Functions

**EL: Electrically Locked (Fail Safe)** - The outside trim (or both outside and inside trim, depending on the lock function) is locked when power is applied and unlocks when power is removed. In the event of a power failure, the lockset automatically unlocks for safety.

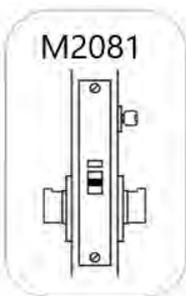
**EU: Electrically Unlocked (Fail Secure)** - The outside trim (or both outside and inside trim, depending on the lock function) is unlocked when power is applied and locks when power is removed. In the event of a power failure, the lockset automatically locks for security.

## MODEL M2081 & M2082



Specification	Value
<b>Voltage</b>	12VAC/12VDC or 24VAC/24VDC
<b>Current</b>	.612mA @12VAC/12VDC; .330mA @24VAC/24VDC
<b>Power Consumption</b>	8 Watts
<b>Solenoid</b>	The solenoid for this exit hardware is typically installed in temperature-controlled indoor environments (approximately 23°C/73°F)

*\*Caution: Double cylinder locks are not recommended for use on any door in any building, as they may impede safe egress during emergencies.*

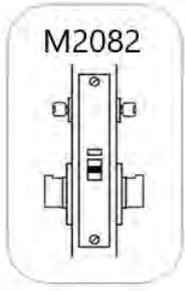


### Model No. M2081

- Key outside retracts latchbolt except when outside lever is locked.
- Outside lever retracts latchbolt except when outside lever is locked.
- Inside lever is always free for immediate egress
- Auxiliary latch deadlocks latchbolt when door is closed.

No. **M2081EL** - Power ON, outside lever is locked by solenoid.

No. **M2081EU** - Power ON, outside lever is unlocked by solenoid.



### Model No. M2082

- Key on either side retracts latchbolt unless both levers are locked.
- Levers on either side retracts latchbolt unless both levers are locked.
- Lever must be locked together; cannot be locked independently.
- Auxiliary latch deadlocks latchbolt when door is closed.

No. **M2082EL** - Power ON, both levers are locked by solenoid simultaneously.

No. **M2082EU** - Power ON, both levers are unlocked by solenoid simultaneously.

## MODEL M9007S & M9007D



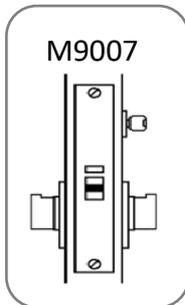
Specification	M9007S	M9007D
Voltage	12 VDC±5%	12~24 VDC±5%
Current	0.3A at 12 VDC	
Operating Temp.	Max. 167°F (75°C), Min. 32°F (0°C)	

*\*Note: EU & EL functions can be converted by changing the solenoid position. For more information, please contact your representative.*



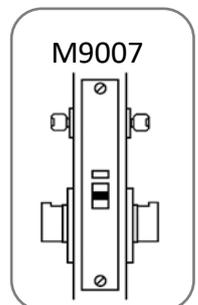
### Single Cylinder

- External key operates latchbolt unless outside lever is locked.
- Outside lever retracts latchbolt except when in locked position.
- Inside lever is always free for immediate egress.
- Auxiliary latch deadlocks latchbolt when door is closed.



### Double Cylinder

- Key on either side retracts latchbolt unless both levers are locked.
- Levers on either side retracts latchbolt unless both levers are locked.
- Lever must be locked together; cannot be locked independently.
- Auxiliary latch deadlocks latchbolt when door is closed.



### Monitoring options

- REX (RX) – Monitors lever rotation and triggers alerts when activated.
- LM (Latchbolt monitor) – Monitors main latch extension status.
- AM (Auxiliary latch monitor) – Monitors the auxiliary latch position.

### Certifications

- ANSI A156.13-2017 & A156.25-2018 Standards
- UL/cUL listed to Canadian safety standard for A label (3-hour fire door)
- Meet UL 10C and UBC 7-2(1997) requirements

*\*Caution: Double cylinder locks are not recommended for use on any door in any building, as they may impede safe egress during emergencies.*

## MODEL M9485S & M9485D



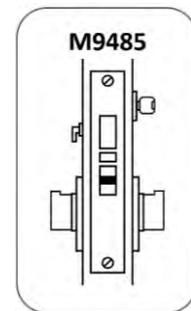
Specification	M9485S	M9485D
<b>Voltage</b>	12 VDC±5%	12~24 VDC±5%
<b>Current</b>	0.3A at 12 VDC	
<b>Operating Temp.</b>	Max. 167° F (75° C), Min. 32° F (0° C)	

**\*Note:** EU & EL functions can be converted by changing the solenoid position. For more information, please contact your representative.



### Model No. M9485S & M9485D

- Latchbolt can be retracted by lever from either side unless outside lever is locked by key from outside.
- Deadbolt can be projected or retracted by key from outside.
- Latchbolt can be retracted by key from outside.
- Operating the inside lever retracts both deadbolt and latchbolt simultaneously.
- Deadbolt can be projected or retracted by inside thumbturn.
- When deadbolt is projected by inside thumbturn, outside lever automatically becomes inoperative.
- Inside lever is always free for immediate egress.
- Auxiliary latch deadlocks the latchbolt when door is closed.



### Monitoring options

- REX (RX) – Monitors lever rotation and triggers alerts when activated.
- LM (Latchbolt monitor) – Monitors main latch extension status.
- DM (Deadbolt monitor) – Monitors deadbolt position.

### Certifications

- ANSI A156.13-2017 & A156.25-2018 Standards
- UL/cUL listed to Canadian safety standard for A label (3-hour fire door)
- Meet UL 10C and UBC 7-2(1997) requirements

**\*Caution:** Double cylinder locks are not recommended for use on any door in any building, as they may impede safe egress during emergencies.

## Electrified Mortise Locks – M Series

Motor Type



Specification	Value
<b>Voltage</b>	12 - 24V AC/DC (11V - 30V) (Voltage switch accessible with armor front removed)
<b>Current</b>	250mA MAX Inrush, 10mA MAX Holding
<b>Polarized Leads</b>	None
<b>Switch Slider Settings</b>	Yellow – Fail Secure (EU) Green – Fail Safe (EL)

### Model No. M2081M

- Key outside retracts latchbolt except when outside lever is locked.
- Outside lever retracts latchbolt except when outside lever is locked.
- Inside lever is always free for immediate egress
- Auxiliary latch deadlocks latchbolt when door is closed.

No. **M2081MEL** - Outside lever is locked when power is applied.

No. **M2081MEU** - Outside lever is unlocked when power is applied.

### Model No. M2082M

- Key on either side retracts latchbolt unless both levers are locked.
- Levers on either side retracts latchbolt unless both levers are locked.
- Lever must be locked together; cannot be locked independently.
- Auxiliary latch deadlocks latchbolt when door is closed.

No. **M2082MEL** - Both levers are locked when power is applied.

No. **M2082MEU** - Both levers are unlocked when power is applied.

### Key Function

The latchbolt may be momentarily retracted with a key even though the lockset is electrically locked.

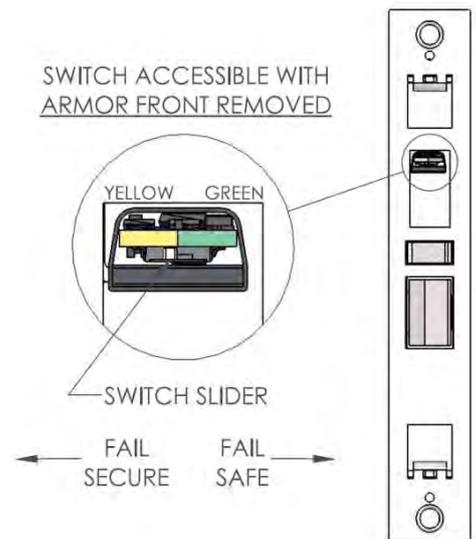
### Monitoring options

- REX (RX) – Monitors lever rotation and triggers alerts when activated.
- LM (Latchbolt monitor) – Monitors main latch extension status.

### Certifications

- UL/cUL listed to Canadian safety standard for A label (3-hour fire door)
- Meet UL 10C and UBC 7-2(1997) requirements

**\*Note:** Power must be applied to the lock after a switch slider setting change.



## Mortise Locks – M Series

### Lever Trim

All M Series are available with the sectional or escutcheon trim.



#### Mortise Lock with Rose & Lever Trim

- Trim Type No.: **LR01**
- Model No.: **M3485-LR01**. The entrance mortise lock features a round rose trim and lever type 01.



#### Mortise Lock with Escutcheon & Lever Trim

- Trim Type No.: **LE02**
- Model No.: **M4486-LE02**. This all-purpose lock features a wide escutcheon trim and lever type 02.



#### Mortise Lock with Escutcheon & Lever Trim

- Trim Type No.: **NE05**
- Model No.: **M2413-NE05**. The dormitory or exit lock (F13) features a narrow escutcheon trim and lever type 05.

### Trim Feature

- The M Series mortise lock features clutch freewheeling trim, designed for areas that are susceptible to vandalism, including schools, universities, multi-tenant buildings, apartments, athlete's locker rooms in indoor stadiums and gymnasiums, and other public buildings.
- The clutch freewheeling design allows the outside lever to turn freely up to 45°. When the door is locked, the outside lever can rotate freely, preventing excessive or abusive force from being applied to the trim. This feature eliminates the need to reset the trim after vandalism attempts since the lever automatically returns to its original position, and it reduces the risk of the lever handle being broken or damaged.

### Trim Material

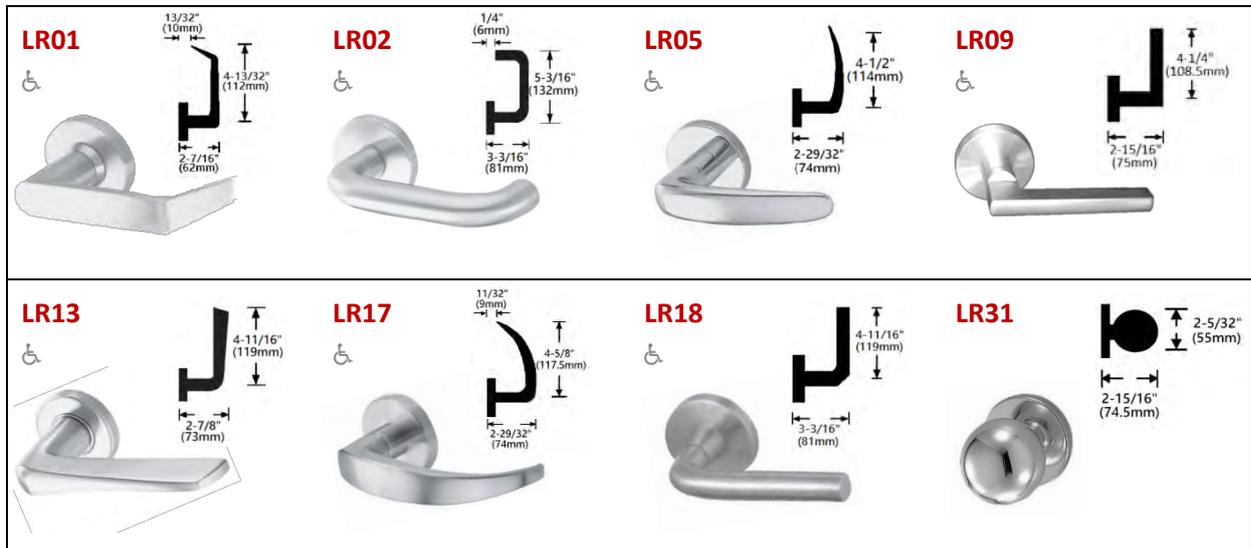
L Escutcheon Type	Stainless steel through wrought forming
N Escutcheon Type	Cold forged brass or bronze through cast forming
Round-Rose Type	Stainless steel through wrought forming
Knob Type	Stainless steel formed by deep drawing press

### Finishes

- US3, US4, US10, US10B, US15, US26, US26D, US32, US32D

## Mortise Locks – M Series

### Lever Trim – Rose Designs (LR)



#### Dimension

- Diameter: 2-7/16" (62mm)
- Projection: 13/32" (10mm)

#### Lever Material

Lever	Material Options
No.01	Cast stainless steel, or cast zinc alloy
No.02	Hollow/solid tube, extruded or cast stainless steel
No.05	Cast stainless steel, or cast zinc alloy
No.09	Cast zinc alloy
No.13	Cast stainless steel, or cast zinc alloy
No.17	Cast stainless steel, or cast zinc alloy
No.18	Hollow tube, extruded stainless steel
No.31	Stainless steel

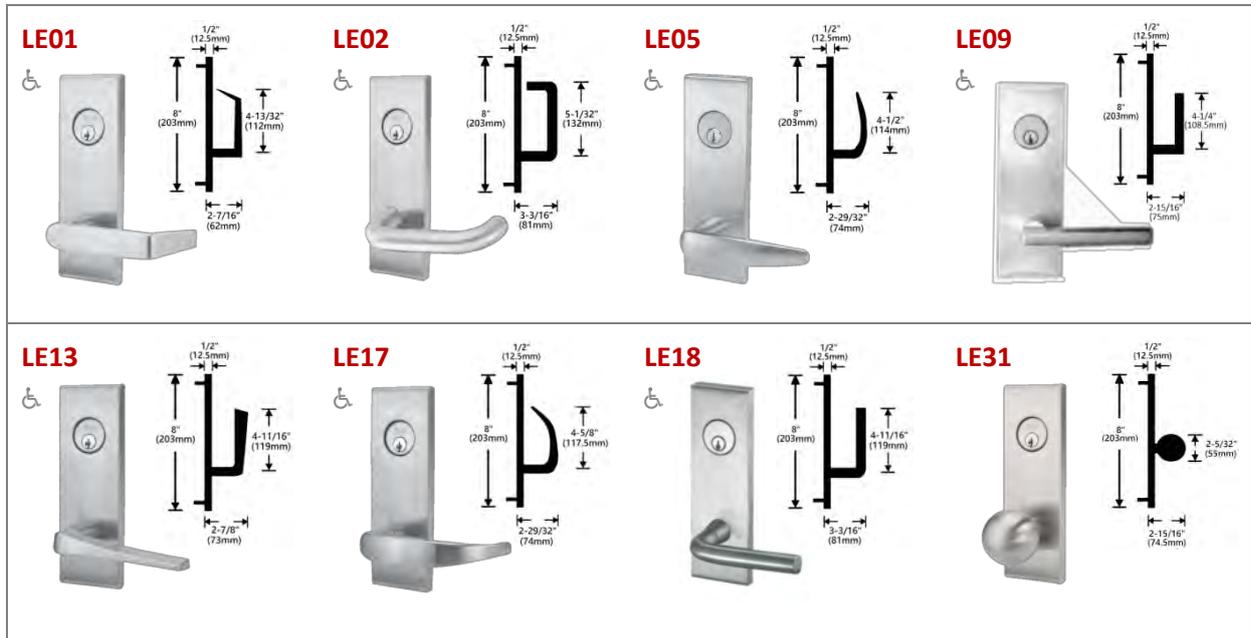
- Lever type No. 01, 02, and 17 meet California State Fire Marshall Standard.
- Lever costs vary depending on the material used. When requesting a quote, please indicate your material choice: Cast Stainless Steel (SS), or Cast Zinc Alloy (ZA)
- For complete mortise lock units, the escutcheon design of both lever and knob trims does not include a cylinder guard, as the cylinder is protected by the escutcheon. The cylinder guard is only used for rose design trims (both lever and knob), but is not included as standard furnishing.

#### Finishes

- US3, US4, US10, US10B, US15, US26, US26D, US32, US32D

## Mortise Locks – M Series

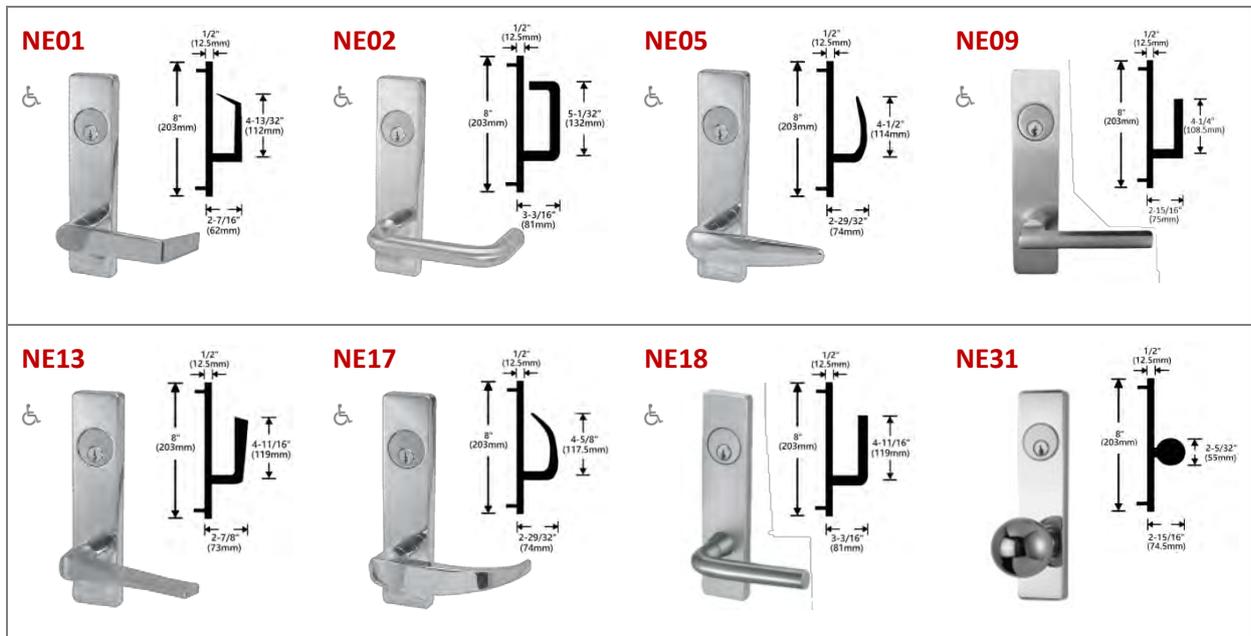
### Lever Trim – Escutcheon Designs – Wide Style (LE)



#### Dimension

- Size: 8" x 2-9/16" x 12" (203mm x 65mm x 12.5mm)

### Escutcheon Designs / Narrow Style (NE)



#### Dimension

- Size: 8" x 1-27/32" x 12" (203mm x 46.5mm x 12.5mm)

## Mortise Locks – M Series

### Accessories



#### 120 Round Rose

2-7/16" (62mm) diameter,  
13/32" (10mm) projection.  
Material: Stainless steel.  
Specify finish when ordering.



#### 211 Spring Cage

Round design.  
For sectional trim.  
Cast zinc housing.  
Finish: Zinc plated.



#### 132 Thumbturn

Base: 1-23/32" (43.7mm) diameter.  
Turn-piece: 1-9/16" (39.8mm) long.  
Material: Stainless steel (Plate);  
Cast zinc (Turn-piece).  
Specify finish when ordering.



#### 212 Spring Cage

Square design.  
For escutcheon trim.  
Cast zinc housing.  
Finish: Zinc plated.



#### 146 Emergency Release

Base: 1-3/4" (44mm) diameter.  
Material: Stainless steel.  
Specify finish when ordering.



#### 250 Cylinder Guard

1-23/32" (44mm) diameter,  
9/32" (7.3mm) projection.  
Standard for 1-1/8" (28mm)  
mortise cylinder use.  
Material: Stainless steel.



#### 147 Coin Turn

Base: 1-3/4" (44mm) diameter.  
Material: Stainless steel (Plate);  
Cast zinc (Coin turn).  
Specify finish when ordering.



#### 252 Cylinder Guard

1-11/16" (43mm) diameter,  
7/16" (10.9mm) projection.  
Available for use with 1-3/8"  
(35mm) mortise cylinder.  
Material: Cast zinc.  
Order separately.



#### 148 Coin Turn Indicator

Base: 2-1/4" (57.5mm) diameter.  
Material: Cast zinc alloy.  
Specify finish when ordering.



#### 255 Cylinder Guard

1-25/32" (45mm) diameter,  
21/32" (17mm) projection.  
Available for much longer mortise  
cylinder use.  
Material: Cast zinc.  
Order separately.



#### 210 Spindle

Material: Steel.  
Finish: Rust-resistant zinc  
dichromate plated.



#### 258 Wave Spring

Used with cylinder guard as spacer;  
included with cylinder guards when  
ordering.

#### Note:

- When ordering ancillary parts such as cylinder guards, round rose, thumbturns, emergency release plates, and escutcheons, please specify the finish.
- All these parts are available in US3, US4, US10, US10B, US15, US26, US26D, US32, US32D

# Mortise Locks – M Series

Accessories – Cylinders, Armor Faceplate & Strike

## Standard Mortise Cylinder



No. 526 1-1/8" (29mm)

No. 527 1-1/4" (32mm)

Face finishes:

US3, 4, 10, 10B, 26, 26D, 32, 32D

Material:

Cylinder body - Solid brass

Cylinder face - Brass or stainless steel

Cylinder cam is comparable with

Schlage L583-254



## Interchangeable Core (IC) Cylinder



No.206 6-pin 1-1/4" (32mm)

No.208 7-pin 1-3/8" (35mm)

Face finishes:

US3, 4, 10, 10B, 26, 26D, 32, 32D

This interchangeable core (IC) cylinder enables immediate rekeying at the door by using a "control key" to replace the core within seconds. There is no need to remove the entire cylinder from the door.



To order an IC cylinder without core, add the suffix NIC to the item number (e.g., 208NIC).

*\*Note: IC cylinders are non-stock items with MOQ 300 pcs and lead time >60 days. Contact our sales representative for details.*

## Interchangeable Core Only



No. 106 6-pin

No. 108 7-pin

Available in US4 and US26D finish only.

This core is compatible with cylinders from manufacturers such as Falcon, Best Arrow, and Schlage. Cams can be easily changed.

## Thumbturn Cylinder



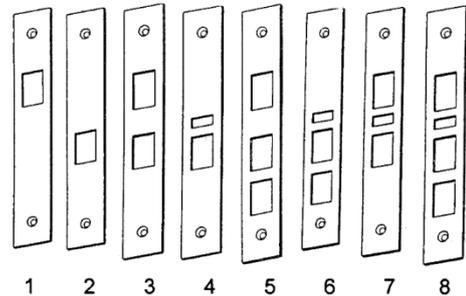
No. 522 RH (Right hand)

No. 523 LH (Left hand)

This cylinder is for classroom and deadlock functions. It is handed and furnished with a Schlage cam #L583-254. The standard length is 1-1/8". Specify finish when ordering.

## Armor Faceplate

Material: Stainless steel



## Strikes

Material: Stainless steel

Finishes: US3, 4, 10, 10B, 26, 26D, 32, 32D

No. 617

Curved lip strikes are not compatible with double doors with overlapping astragal. Use #700 strike instead.

No. 618

Plain strikes are designed for deadlocks (F16, F17, F18) and classroom function locks (F29), or for double doors with overlapping astragals.

No. 617

Curved Lip Strike



(Standard)

No. 618

Plain Strike



## Strike Box

No. 215

Plastic material with black finish  
Mounting face: 4-3/4" x 1-3/16"  
(121 x 30.5mm)



# Push-Pull Trim with Mortise Lock

Model No. HL22; Patented in USA and UL Listed

## Model No. HL22

This push-pull trim is designed for easy operation of hospital room doors to protect patients in case of fire. The wide handle integrated with a mortise lockcase provides excellent versatility. It is widely used in hospitals and healthcare centers. It is now also commonly used in accessible restrooms, laboratories, operating rooms, and other buildings requiring enhanced convenience, durability, or security.

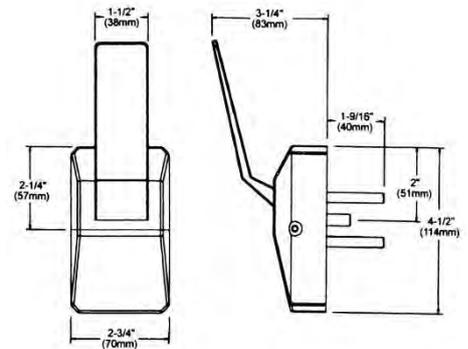
### Features

- Non-handed with easy installation.
- Can be mounted vertically or horizontally in field.
- Through-bolted trim design ensures stability with lockcase.
- Cast stainless steel handles with corrosion protection.
- US patented and UL listed.
- ADA compliant.



### Specifications

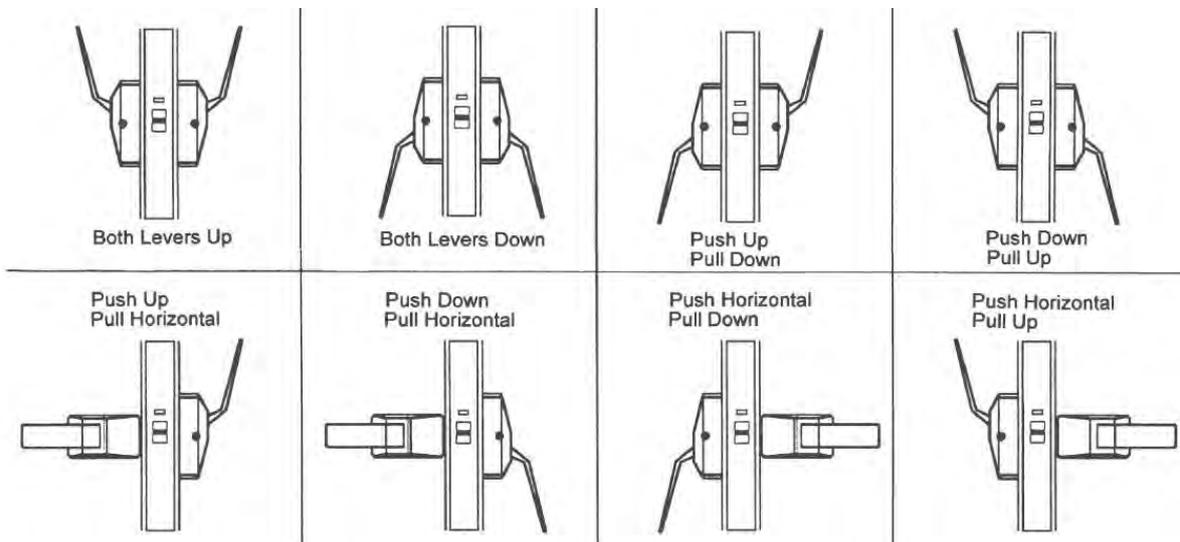
- Fits 1-3/4" (44mm) thick standard RHR or LHR hollow metal and wood doors. Non-standard sizes available upon request.
- Available mortise lock functions: F01, F04, F05, F09, F11, F13, F14, F19, F20, F22, F30 (Recommended).
- Cast stainless steel handles with corrosion protection.
- Available in BHMA finishes.



### Note:

- ◆ When installing cylinders, handles must be mounted downward or horizontally on the cylinder side. This mounting requirement also applies when using interior thumbturns.
- ◆ Specify door hand and handle mounting direction: PUSH down from interior side, PULL up from exterior side.

### Multiple Mounting Hands



# Push-Pull Trim with Mortise Lock

## Operation & Model Numbers

### Handle Handing

### Cylinder Operation

The handle on the cylinder side must be mounted in the down or horizontal position. The mounting method is the same as required when using the thumbturn inside.

### Thumbturn Operation

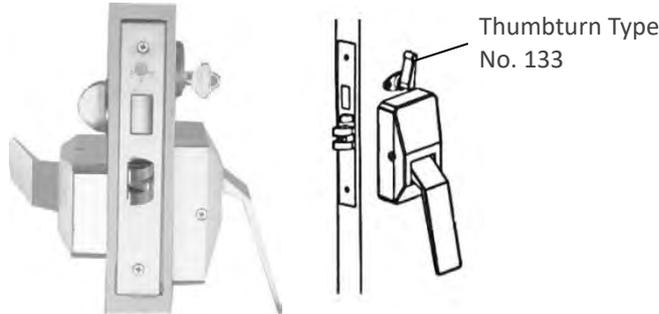
For standard thumbturn (Type No. 132), the inside handle must be mounted horizontally. For special thumbturn (Type No. 133), the inside handle can be mounted in the down position. Please specify the thumbturn type when ordering.



Push - Up  
Pull - Horizontal

Push - Horizontal  
Pull - Up

*This Push-Pull Trim with heavy-duty mortise lock, model no. M2413-HL22 (ANSI function no. 13, Dormitory or Exit Lock), features a standard thumbturn type no. 132 and an inside wider handle in horizontal position.*



Thumbturn Type No. 133

### Model Numbers

The HL22 Push-Pull Trim can be used with Schlage L Series Heavy Duty Mortise Locks. Customers may order the HL22 Push-Pull Trim only to use with Schlage mortise locks or to retrofit their exiting installations. For other brand mortise locks such as Arrow, Best, Falcon, Sargent, Yale etc., these are also available, but it is recommended to discuss the requirements before ordering.

The model numbers of Push-Pull Trim with the M Series heavy-duty mortise locks are listed below.

ANSI No.	THASE Model No.	Function
F01	M1001-HL22	Passage Latch
F04	M3004-HL22	Office or Entry Lock
F05	M2005-HL22	Classroom Lock
F09	M2009-HL22	Apartment Entrance Lock, Public Toilet Lock
F11	M3411-HL22	Dormitory or Exit Lock
F13	M2413-HL22	Dormitory or Exit Lock
F14	M2414-HL22	Store Door Lock
F19	M2419-HL22	Privacy Bedroom, Bath Lock
F20	M3420-HL22	Apartment Corridor Door Lock
F22	M1022-HL22	Privacy Bedroom, Bath Lock
F30	M2030-HL22	Asylum or Institution Lock

# Mortise Deadlock

SM Series; Heavy Duty Small Lockcase



The SM series Mortise Deadlocks are ideal for use in restrooms and small doors in public utilities, such as electric meter cabinets or gas meter cabinets in commercial buildings. The locks offer higher security when used as auxiliary deadbolt in other applications.

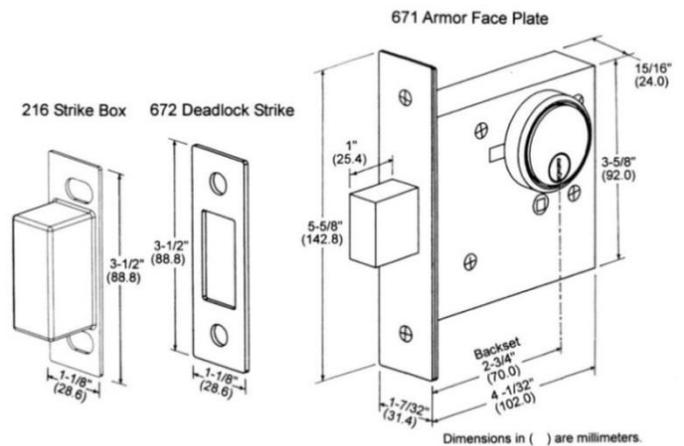
### Certification

- UL/cUL listed to Canadian safety standard for A label (3-hour fire door)
- Stamped letter F and UL symbol on armor faceplate
- Meet positive pressure requirements UL 10C and UBC 7-2 (1997)

### Specifications

- Installation for 1-3/8" (35mm) or 1-3/4" (44.5mm) doors. Specify door thickness if other than standard 1-3/4"
- Backset: 2-3/4" (70mm)
- Hand: Universal; adjustable front to accommodate beveled or flat-edged doors
- Lock case: Heavy wrought steel, zinc plated
- Faceplate: Stainless steel, 5-5/8" x 1-7/32" (142.8mm x 29mm)
- Strike: Stainless steel, 3-1/2" x 1-1/8" (89mm x 31.4mm)
- Deadbolt: 1" (25mm) throw
- Cylinder: Not included. When keying is required, buyers may use any brand mortise cylinder, lock case compatible with cylinders from other manufacturers.
- Finishes: US3, US4, US9, US10, US10B, US15, US26, US26D, US32, US32D

### Dimensions



Function	Model No. and Description	Function	Model No. and Description
 Outside    Inside	<b>SM140 Cylinder &amp; Thumbturn</b> Deadbolt thrown or retracted by key outside or thumbturn inside.	 Outside    Inside	<b>SM143 Double Cylinder</b> Deadbolt operated by key from either side.
 Outside    Inside	<b>SM141 Classroom Lock</b> Deadbolt thrown or retracted by key from outside. Inside thumbturn cylinder retracts deadbolt but cannot project it.	 Outside    Inside	<b>SM145 Door Bolt</b> Deadbolt thrown or retracted by thumbturn inside. No trim on opposite side.
 Outside    Inside	<b>SM142 Single Cylinder</b> Deadbolt thrown or retracted by key from outside. No trim on opposite side.	 Outside    Inside	<b>SM146 Deadbolt with "Occupied" indicator</b> Deadbolt thrown or retracted by thumbturn inside. When deadbolt is thrown, "OCCUPIED" plate is displayed on outside.

\*The original UL listed model numbers are QML 180, 182, 184 and 186.

# Mortise Locks – M Series

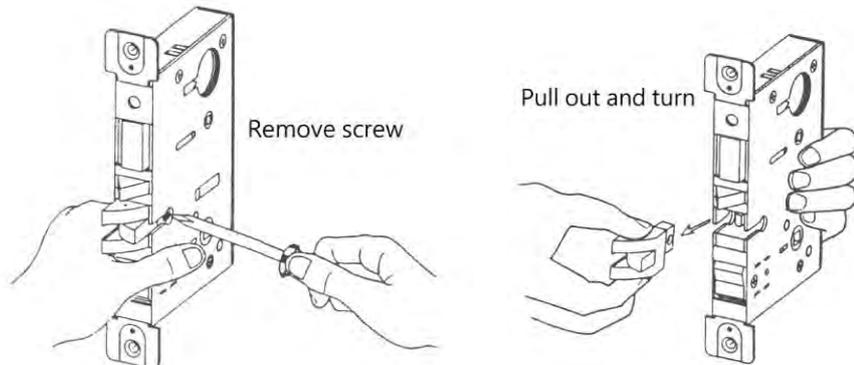
## Door Handing & Lock Handing

### Door Handing

The heavy-duty mortise lock can be re-handed by the seller or installer quickly and easily without opening the lock body. Only two simple steps are required to change the hand of the mortise lock as follows. This feature allows distributors to stock the product and customize handing according to order requirements.

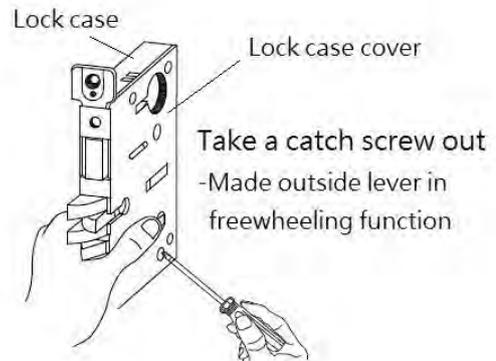
#### 1. Change Latchbolt Hand

If the latchbolt's handing does not match the door hand, remove the fixing screw and pull the latchbolt out from the lock case. Then rotate the complete unit to reverse the latchbolt bevel direction. Reposition the latchbolt and tighten the fixing screw.



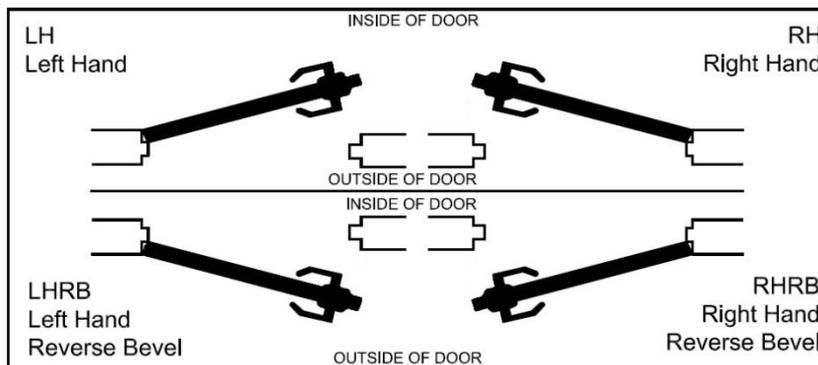
#### 2. Setting the Outside Hand of Lock Case Set

There are catch screws for lock handing on both sides of the chassis. Remove the catch screw from the side of the chassis that will face the outside of the door. The other catch screw must remain on the inside of the chassis.



### Lock Handing Determination

Door hand is determined by the door swing direction when viewed from the outside or corridor side of the door.

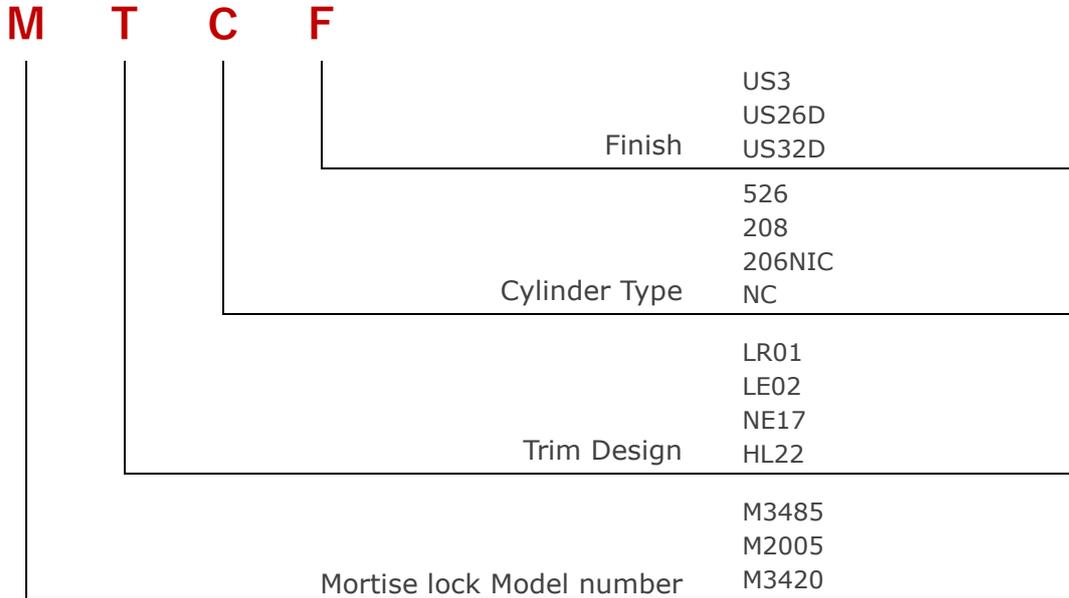


# Mortise Locks – M Series

## How to Order

### How to Order

1. To place an order for mortise locks, please specify the desired model numbers as indicated.



Example Model Numbers:

M3485-LR01-206-US3 (or 605)

M2005-LE02-526-US26D (or 626)

M3420-NE17-NC-US32D (or 630)

M2413-HL22-526-US32D (or 630)

2. For non-standard door thickness (other than 1-3/4" [44.5mm]), specify required thickness. Extended spindle and mounting screws will be provided.
3. Each lock's armor faceplate includes "F" letter and UL symbol. Custom logo options available via laser engraving or stamping die. Contact sales representative for associated costs.

## Finish Classification

The finishes described in this catalog conform to U.S. Standard specifications. Featured are the most common finishes with their corresponding BHMA designations. For detailed specifications, please refer to American National Standard ANSI/BHMA A156.18-2020.

US Number	Finish Description	BHMA Code Base Material				
		Brass	Bronze	Stainless	Steel	Zinc
US3	Bright Brass	605	-	-	632	677
US4	Satin Brass	606	-	-	633	678
US10	Satin Bronze	725	612	-	639	680
US10B	Satin Bronze, Oil Rubbed	-	613	-	640	704
US15	Satin Nickel	619	619	-	646	754
US19	Flat Black	622	622	-	631	676
US20A	Dark Bronze (Duranodic)	690	690	-	690	690
US26	Bright Chromium	625	625	-	651	681
US26D	Satin Chromium	626	626	-	652	682
US32	Bright Stainless Steel	-	-	629/653	-	-
US32D	Satin Stainless Steel	-	-	630/654	-	-