

# ACCURATE

LOCK & HARDWARE

AMERICAN CRAFTED SINCE 1972

M9100E Motor Drive Electrified Mortise Locks

FOR EFFICIENT + FLEXIBLE ACCESS CONTROL SYSTEM DESIGN





## M9100E MOTOR DRIVE ELECTRIC MORTISE LOCKS

#### **GET IT RIGHT ALL THE TIME**

The alternative to the previous generation solenoid version has more flexibility, monitoring features and options.

Now offering additional functions to easily change to passage mode (M9156E via toggle action or M9145E via cylinder)

### M9100E Product Benefits

#### **IMPROVED FLEXIBILITY**

- Universal output voltage (accepts between 11V 30V, versus solenoid versions that are 12V, 24V, VAC, and VDC specific)
- Can easily be changed from FAIL SECURE to FAIL SAFE to adapt to design variations

#### **MORE FUNCTIONALITY**

State-of-the-art monitor functions starting at a 2-1/2" backset include: AE (Authorized Egress/Request to Exit), AM
 (Auxiliary Latch Monitor), LM (Latch Bolt Monitor), LB (Locking Bar Monitor), SM (Combined AM + LB Monitoring) DPS
 (Door Position Monitoring), and LPF (Lock-out privacy)

#### **LONGER LIFE**

Adaptable to new technology

#### **SAVE POWER, SAVE MONEY**

A motor drive lock costs significantly less per year to operate at \$0.25, compared to a solenoid lock that costs \$8.33\*

#### **STAY COOL**

· Low current draw produces minimal heat eliminated "hot levers"

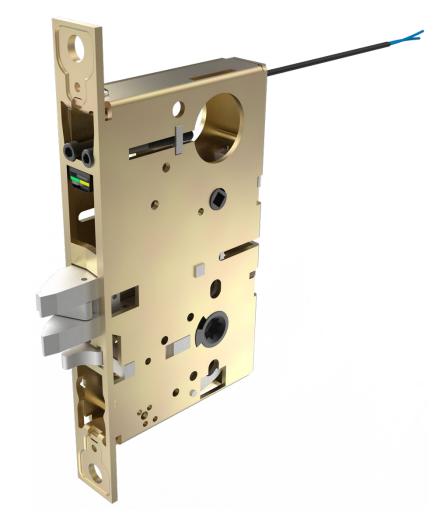
#### **BE GREEN**

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• Low power requirement is ideal for environmentally friendly access control systems

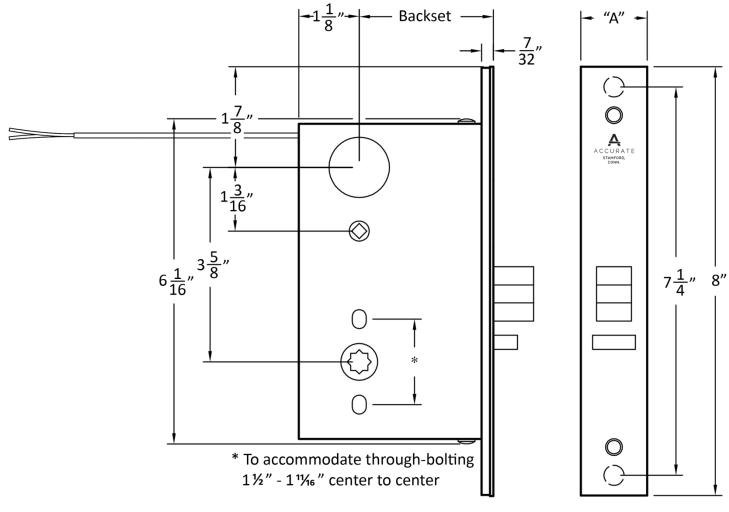
#### **IN GOOD COMPANY**

• The same motor functionality is used by other trusted manufacturers including: Schlage, Sargent, Corbin Russwin, Hager, etc.



#### 1

### M9100E Dimensions

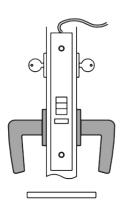


"A" M9100E SERIES - 1¼" M9000E SERIES - 1"

11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 |

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### M9100E Technical Details



### M9158E **INSTITUTION / ASYLLUM**

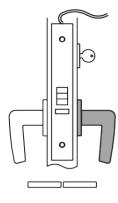
Latch bolt by key either side.

Auxiliary latch deadlocks

latch bolt.

FAIL SECURE OPERATION\*: Inside and outside trim unlocked when power is applied and locked when power is removed.

FAIL SAFE OPERATION: Inside and outside trim locked when power is applied and unlocked when power is removed. Lockset will unlock in the event of power failure.



#### M9159E **STOREROOM**

Inside trim always free.

Latch bolt by key outside.

Auxiliary latch deadlocks latch bolt.

FAIL SECURE OPERATION\*: Outside trim unlocked when power is applied and locked when power is removed.

FAIL SAFE OPERATION: Outside trim locked when power is applied and unlocked when power is removed. Lockset will unlock in the event of power failure.

M9058E/M9059E for doors  $1^3/_8$  minimum (1" armor front) **M9158E/M9159E** for doors  $1^3/_4$  minimum (1  $1^4/_4$ " armor front)

UL Listed 3 Hour (Mechanics R13846/R27504 and Electronics R10121)

Grade 1 Certified to ANSI/BHMA A156.13.2005 Standard

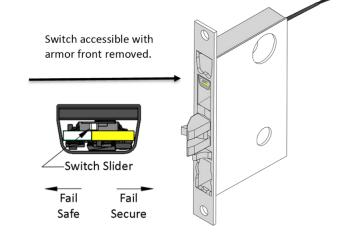
**BACKSETS:** 2<sup>1</sup>/<sub>2</sub>", 2<sup>3</sup>/<sub>4</sub>", 3<sup>3</sup>/<sub>4</sub>", 5" or 6"

**OPERATION:** Key Cylinder (by others) will override electronics to retract

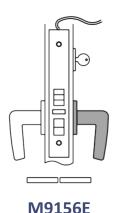
latch bolt

12-24V AC/DC (11V-30V Operating Range) 250mA MAX Inrush 10mA MAX Holding Non-polarized Leads

\*Lock is furnished as FAIL SECURE and can easily be changed to FAIL SAFE via the switch on the front.



### M9100E Technical Details



Inside trim always free.

**ENTRANCE** 

Latch bolt by key outside.

Key cylinder (by others) will override electronics to retract latch bolt.

Auxiliary latch deadlocks latch bolt.

For passage mode, toggle can be set to keep outside lever unlocked. After unlocking lever with toggle, lever can only be re-locked by toggle, not by electronics

FAIL SECURE OPERATION\*: Outside trim unlocked when power is applied and locked when power is removed.

**FAIL SAFE OPERATION:** Outside trim locked when power is applied and unlocked when power is removed. Lockset will unlock in the event of power failure.

**M9056E** for doors  $1^3/_8$  minimum (1" armor front) **M9156E** for doors  $1^3/_4$  minimum ( $1^1/_4$ " armor front)

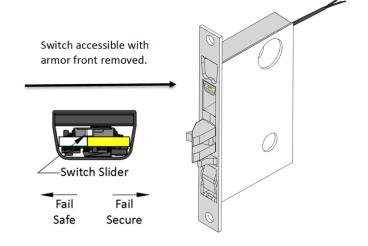
UL Listed 3 Hour (Mechanics R13846/R27504 and Electronics R10121)

Grade 1 Certified to ANSI/BHMA A156.13.2005 Standard

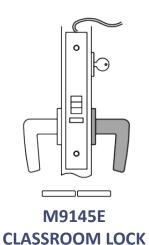
**BACKSETS:**  $2^{1}/_{2}$  ",  $2^{3}/_{4}$  ",  $3^{3}/_{4}$  ", 5" or 6"

12-24V AC/DC (11V-30V Operating Range) 250mA MAX Inrush 10mA MAX Holding Non-polarized Leads

\*Lock is furnished as FAIL SECURE and can easily be changed to FAIL SAFE via the switch on the front.



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Inside trim always free.

Latch bolt by key outside.

Key cylinder (by others) will override electronics to retract latch bolt.

Auxiliary latch deadlocks latch bolt.

Rotating the key in one direction would place the lock in "unlocked" state (passage), blocking the electrified function

Rotating the key in the opposite direction would return the lock to standard electrified operation

FAIL SECURE OPERATION\*: Outside trim unlocked when power is applied and locked when power is removed.

FAIL SAFE OPERATION: Outside trim locked when power is applied and unlocked when power is removed. Lockset will unlock in the event of power failure.

**M9045E** for doors  $1^3/_8$  minimum (1" armor front) **M9145E** for doors  $1^3/_4$  minimum ( $1^1/_4$ " armor front)

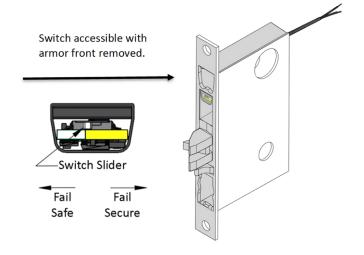
UL Listed 3 Hour (Mechanics R13846/R27504 and Electronics R10121)

Grade 1 Certified to ANSI/BHMA A156.13.2005 Standard

**BACKSETS:**  $2^{1}/_{2}$  ",  $2^{3}/_{4}$  ",  $3^{3}/_{4}$  ", 5" or 6"

12-24V AC/DC (11V-30V Operating Range) 250mA MAX Inrush 10mA MAX Holding Non-polarized Leads

\*Lock is furnished as FAIL SECURE and can easily be changed to FAIL SAFE via the switch on the front.



## M9100E Monitoring Functions

#### **AE - AUTHORIZED EGRESS**

Also referred to as REQUEST TO EXIT (or REX switch), monitors the use of the INSIDE trim when the OUTSIDE trim is locked.

#### **ELECTRICAL SPECIFICATIONS:**

SPDT Mechanical switch

Voltage **Current** 125 VAC 1 AMP

30 VDC 0.5 AMP

#### **AM - DEAD LATCH MONITORING**

Monitors the position of the dead latch. To activate switch, the lockset must be in the closed position with the auxiliary latch depressed and main latch extended.

#### **ELECTRICAL SPECIFICATIONS:**

SPDT Mechanical switch

Voltage Current

125 VAC 1 AMP

30 VDC 0.5 AMP

#### LM – LATCH BOLT MONITORING

Monitors the full extension of the main latch.

#### **ELECTRICAL SPECIFICATIONS:**

SPDT Mechanical switch

Voltage Current 125 VAC 1 AMP 30 VDC 0.5 AMP

#### LB – LOCKING BAR MONITORING

Monitors the position of the locking bar.

#### **ELECTRICAL SPECIFICATIONS:**

SPDT Mechanical switch

Voltage Current 125 VAC 1 AMP 0.5 AMP 30 VDC

### M9100E Monitoring Functions

#### **SM – SECURITY MONITORING**

A combination of AM and LB, SM monitors IN SERIES\* the status of the locking bar (locked or unlocked position) and the status of the auxiliary latch (dead latch position).

Lockset must be locked with the main latch extended and the auxiliary latch depressed to get a secure signal. If any of the conditions are not met, lockset goes into an unsecure mode.

#### **ELECTRICAL SPECIFICATIONS:**

2 each SPDT Mechanical switches wired in series

Voltage Current

125 VAC 1 AMP

30 VDC 0.5 AMP

#### **DPS – DOOR POSITION SENSOR**

Monitors the door position. A magnetic sensor mounted in the mortise lock reacts to the proximity of a magnet mounted behind the ASA strike.

#### **ELECTRICAL SPECIFICATIONS:**

SPDT Magnetic Reed switch

Voltage Current

28 VDC 0.3 A

<sup>\*</sup> If independent monitoring is required (not in series), please specify as SM2 (this is a combination of AM and LB)

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### M9100E Monitoring Functions

#### FOR M9059E/M9159E ONLY

#### LPF - LOCK OUT PRIVACY MONITORING

For **FAIL SECURE** locks only: Engaging safe side turn piece disables remote access control unlocking (keypad or card reader) or scheduled unlock.

#### **LPF OPTIONS:**

- 1. **LPF-Manual:** When LPF is engaged via thumb turn, it remains in this position until manually undone. Turning the inside lever does not reset the hub. After egress and closing the door, the card reader will not allow access and a key must be used.
  - Allows the user to first engage LPF while the door is closed, then egress without having a to then use a key to re-engage.
- 2. **LPF-Reset Mode:** Turning the inside lever resets the LPF to off position. Similar to simultaneous deadbolt and latch retraction, the LPF hub goes back to home position (off) when inside lever is rotated.
  - This mode is better for bedrooms or residences where the user will not get locked out

#### **APPLICATIONS:**

Enhanced security in office buildings after hours, SCIF/rooms housing sensitive information and opening subject to authorized access on a temporary basis.

Enhanced privacy in commercial buildings (for shared staff showers, restrooms, office, etc.) or for private residences with multiple service provider access (e.g. lock-out during vacation or need to immediately lock out specific user until system updates).

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## M9100E Monitoring Function Matrix

Applies to: M9158E/M9159E   All Backsets  Standard and Upside Down (USD) Configurations							
AE Authorized Egress Inside Hub	AM Dead Latch Monitoring	LB Locking Bar Monitoring	SM2 Security Monitoring AM + LB (6 Wires)	SM Security Monitoring AM + LB In Series (3 wires)	LM Latch Bolt Monitoring	DPS  Door Position  Monitoring	LPF Lock Out Privacy Monitoring (M9159E fail secure locks only
X	X	Х			x	x	
X			X		x	x	
X				X	x	x	
X					X	X	X

### M9100E Monitoring Function Matrix

# Applies to: M9156E | All Backsets Standard and Upside Down (USD) Configurations

AE Authorized Egress Inside Hub	AM Dead Latch Monitoring	LB Locking Bar Monitoring	SM2 Security Monitoring AM + LB (6 Wires)	SM Security Monitoring AM + LB In Series (3 wires)	LM Latch Bolt Monitoring	DPS  Door Position  Monitoring
X	X	X			x	X
X			X		x	X
X				X	X	X

## Applies to: M9145E | All Backsets Standard and Upside Down (USD) Configurations

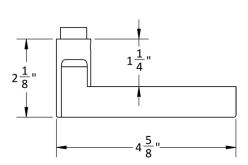
AE Authorized Egress Inside Hub	<b>LM</b> Latch Bolt Monitoring	DPS  Door Position Monitoring
Х	Х	X

11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

### **Accurate Lever Trim**

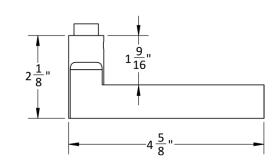






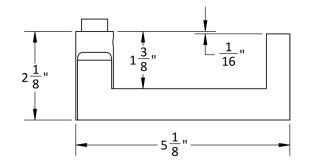
19L LEVER



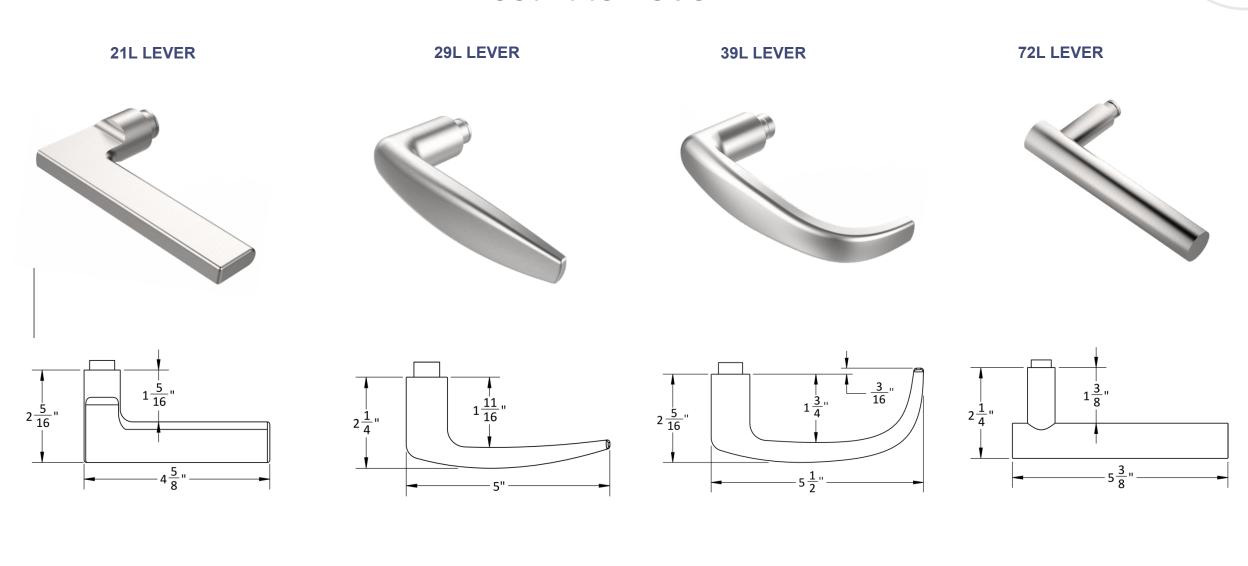


### **20L LEVER**

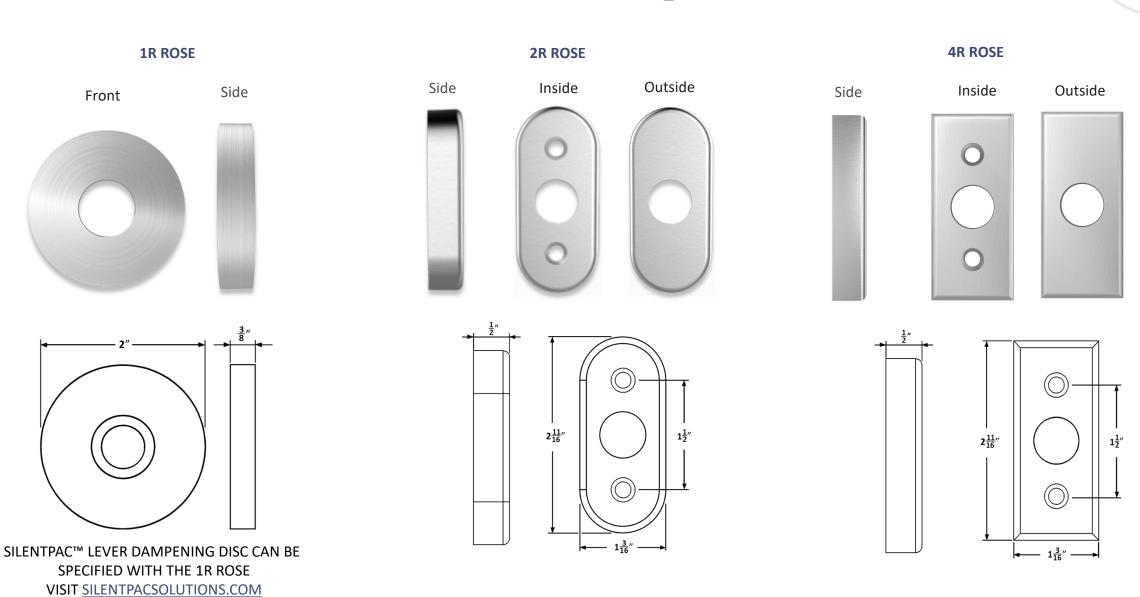




### **Accurate Lever Trim**



### Accurate Rose Options



TO

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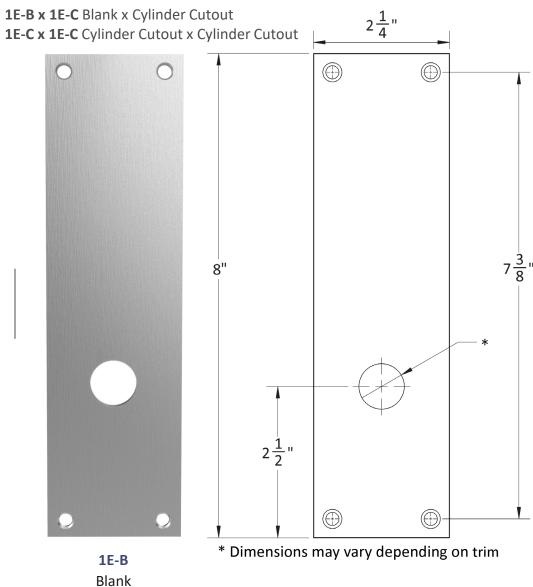
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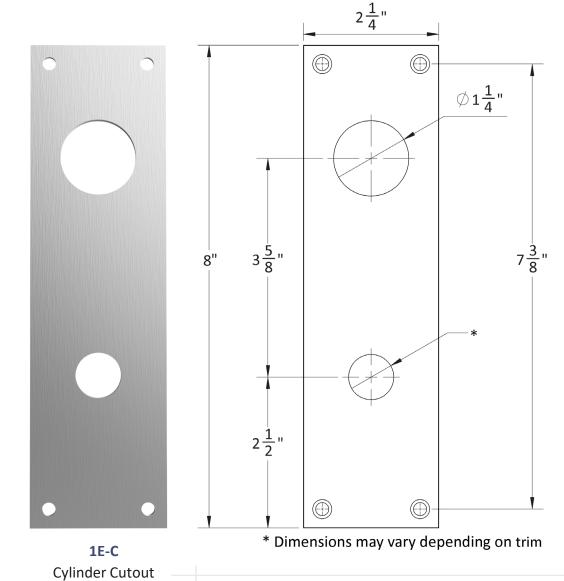
### **Accurate Escutcheon Options**

#### **POSSIBLE ESCUTCHEON COMBINATIONS\*:**

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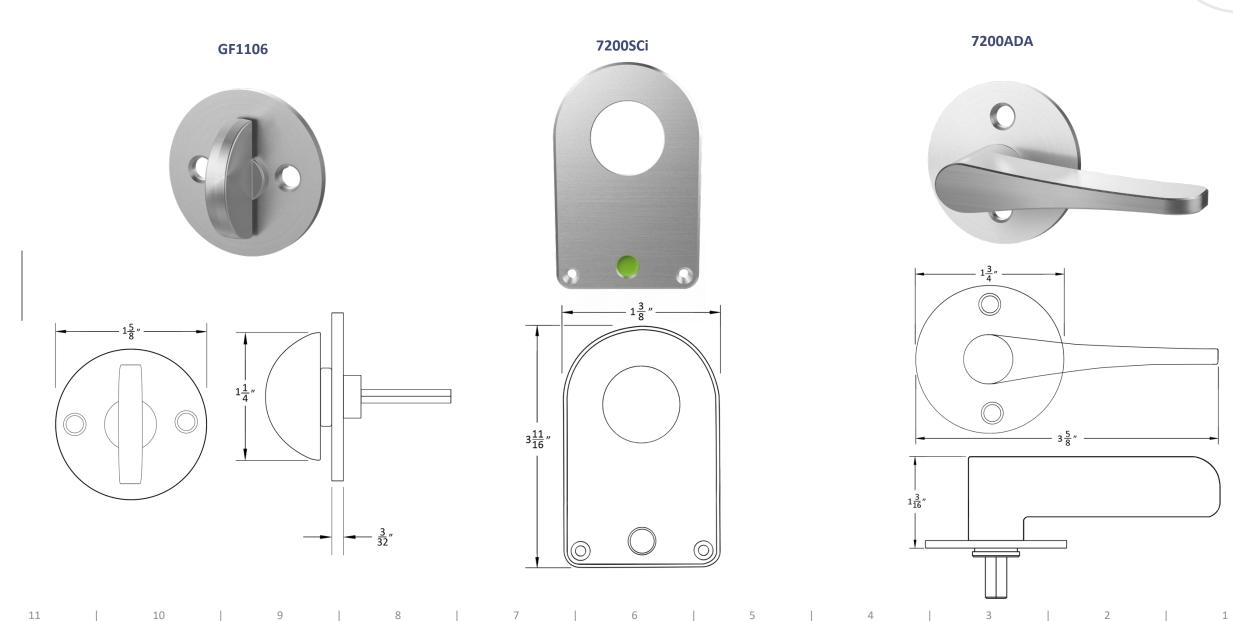
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\*Additional trim options available for LPF Monitoring (see pg. 17-18)

## Trim Options for LPF Lock Out Privacy Function



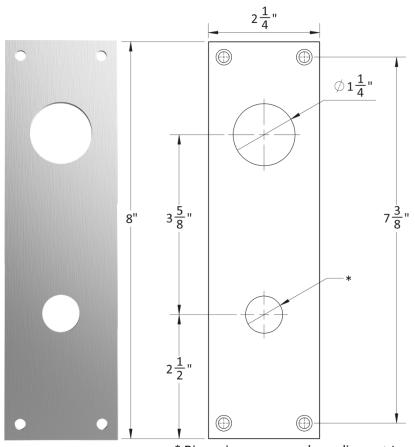
### Trim Options for LPF Lock Out Privacy Function

#### **POSSIBLE ESCUTCHEON COMBINATIONS\*:**

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**1E-C x 1E-T** Cylinder Cutout x Thumb Turn **1E-Ci x 1E-T** Cylinder Cutout with Indicator x Thumb Turn

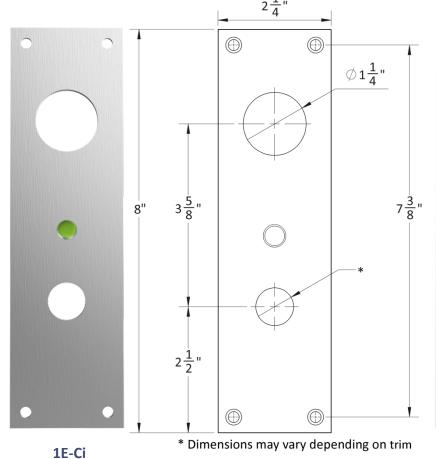


\* Dimensions may vary depending on trim

1E-B

Cylinder

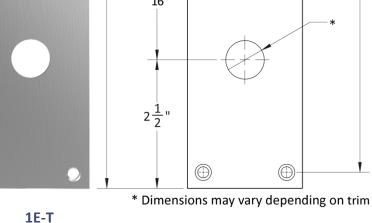
Cutout



Cylinder Cutout

with Indicator

1E-T
With GF1106 Thumb Turn
(for ADA thumb turn,
please specify 1E-T-ADA)

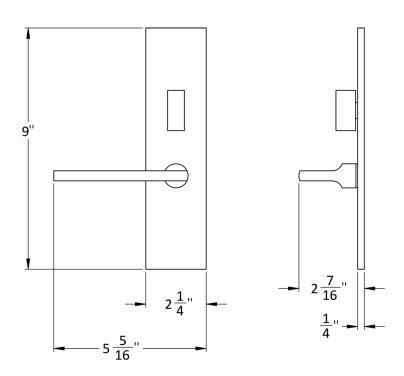


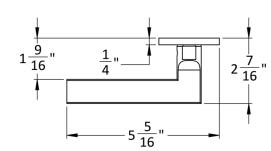
8"

### 5000TG Thumb Grip Entry Set Trim

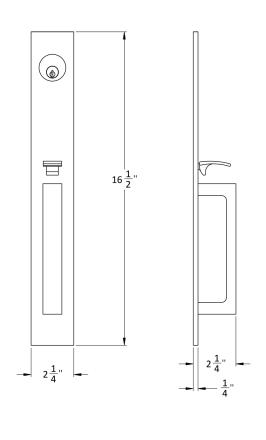
#### **INTERIOR TRIM**

Shown with 19L Lever





#### **EXTERIOR TRIM**

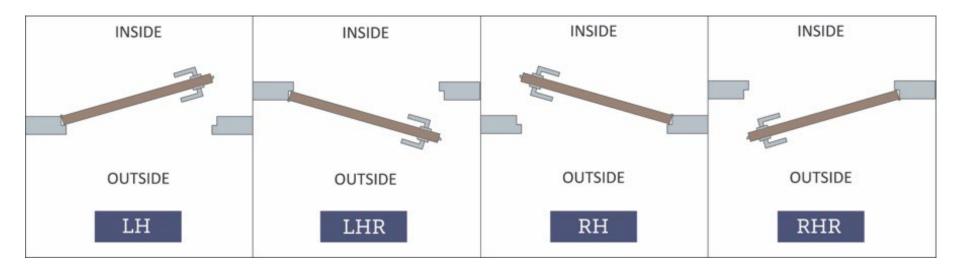




**SCAN TO LEARN MORE** 

### **HOW TO SPECIFY**

#### **HANDING**



#### **FINISHES**

GROUP 1: US4, US4NL, US32D\*, US26D

**GROUP 2:** US3, US3NL, US26, US32\*, US9\*, US10\*, US10B, US14, US15, US19

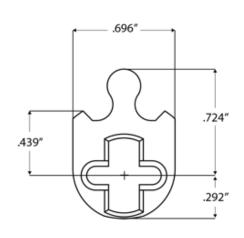
GROUP 3: BN, BB, TN, TB, DURO, ESN, US15A, US5

\* Trim options (including Accurate Levers) may not be available in US32D, US32, US9, or US10 finish. Please call for assistance.

To view example of finishes visit: Accurate Finishes.

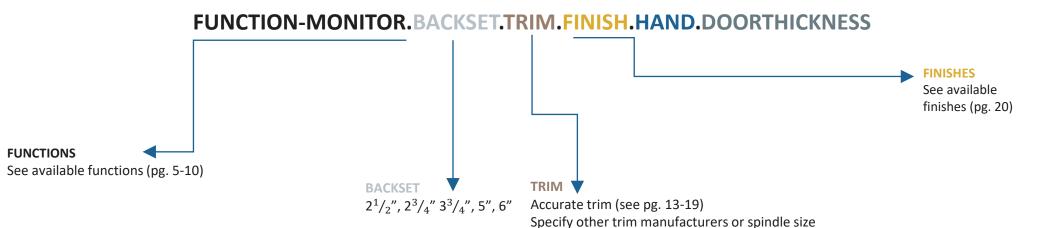


M9100E Series locks accept any standard American mortise cylinder. For details on required cams and compatibility with other manufacturers' cylinders, please visit: Accurate Support.



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### HOW TO SPECIFY



#### **EXAMPLES**

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Electrified Lock for use with Double Cylinder | Authorized Egress | Accurate Trim E.g.: M9158E-AE.212.29L/2R.US26D.RH.134

**Electrified Lock | Dead Latch Monitoring | Accurate Trim** 

E.g.: M9159E-AM.234.19L/1R.US4.LH.134

Electrified Lock | Passage Mode by Authorized Personnel Only | Accurate Trim E.g.: M9145E.234.20L/1E.US26D.RH.134

Electrified Lock with Party Function (leave in passage mode for periods of time) and Request to Exit | Other Manufacturers' Trim\*

E.g.: M9156E-AE.212.7mm.US3NL.RH.134

#### **SPECIAL OPTIONS AVAILABLE**

- SS-Security Strikes
- USD K x K Upside Down (cylinder/thumb turn below knobs)
- USD L x L Upside Down (cylinder/thumb turn below levers)
- SLB Solid Latch Bolt (not available for SilentPac™ Quiet Lock)
- K x L Knob Outside, Lever Inside
- L x K Lever Outside, Knob Inside
- TP x L Thumbpress Outside, Lever Inside
- TP x K Thumbpress Outside, Knob Inside
- TP x TP Thumbpress Outside, Thumbpress Inside
- Compatible with the following add-ons: SilentPac™ Quiet Lock, SilentPac™ Lever Dampening Disc, High Security Solutions

| 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 |

<sup>\*</sup>Note: For compatibility with other manufacturers' trim please call for assistance.

### **ACCURATE LOCK & HARDWARE MANUFACTURERS OF LOCKS AND CUSTOM ARCHITECTURAL HARDWARE**

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