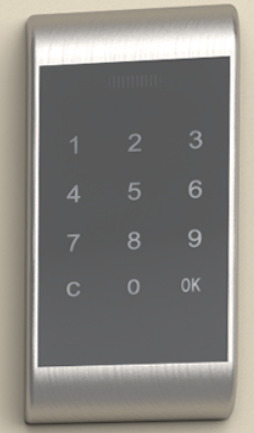
ACCURATE

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

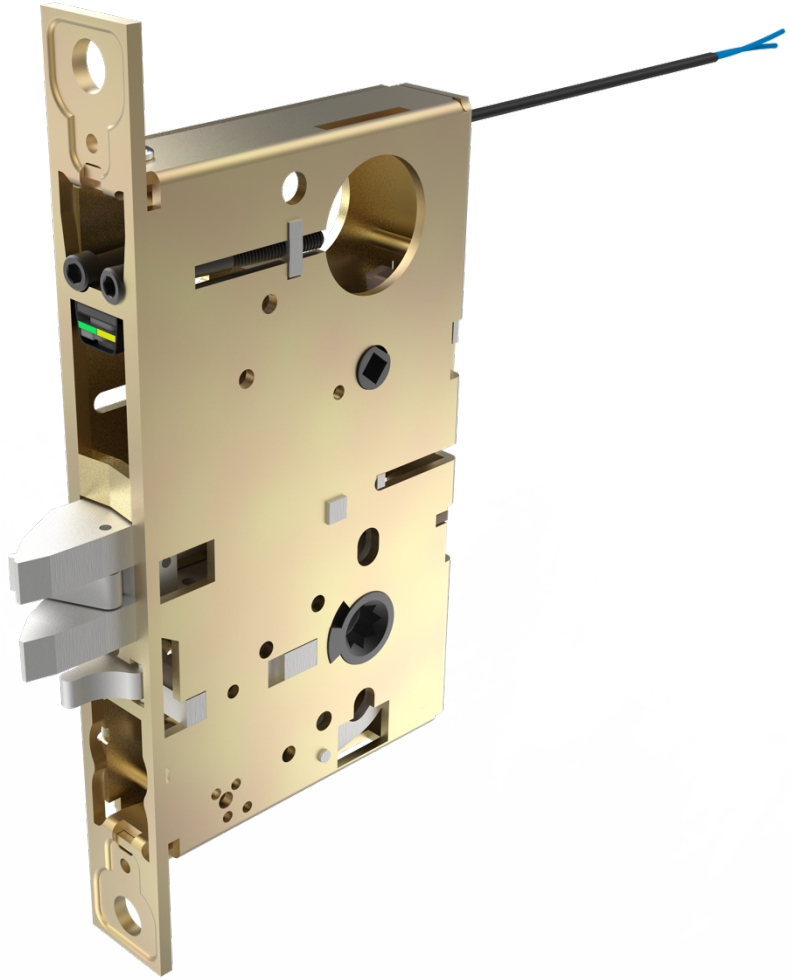
- Low current draw produces minimal heat eliminated “hot levers”

BE GREEN

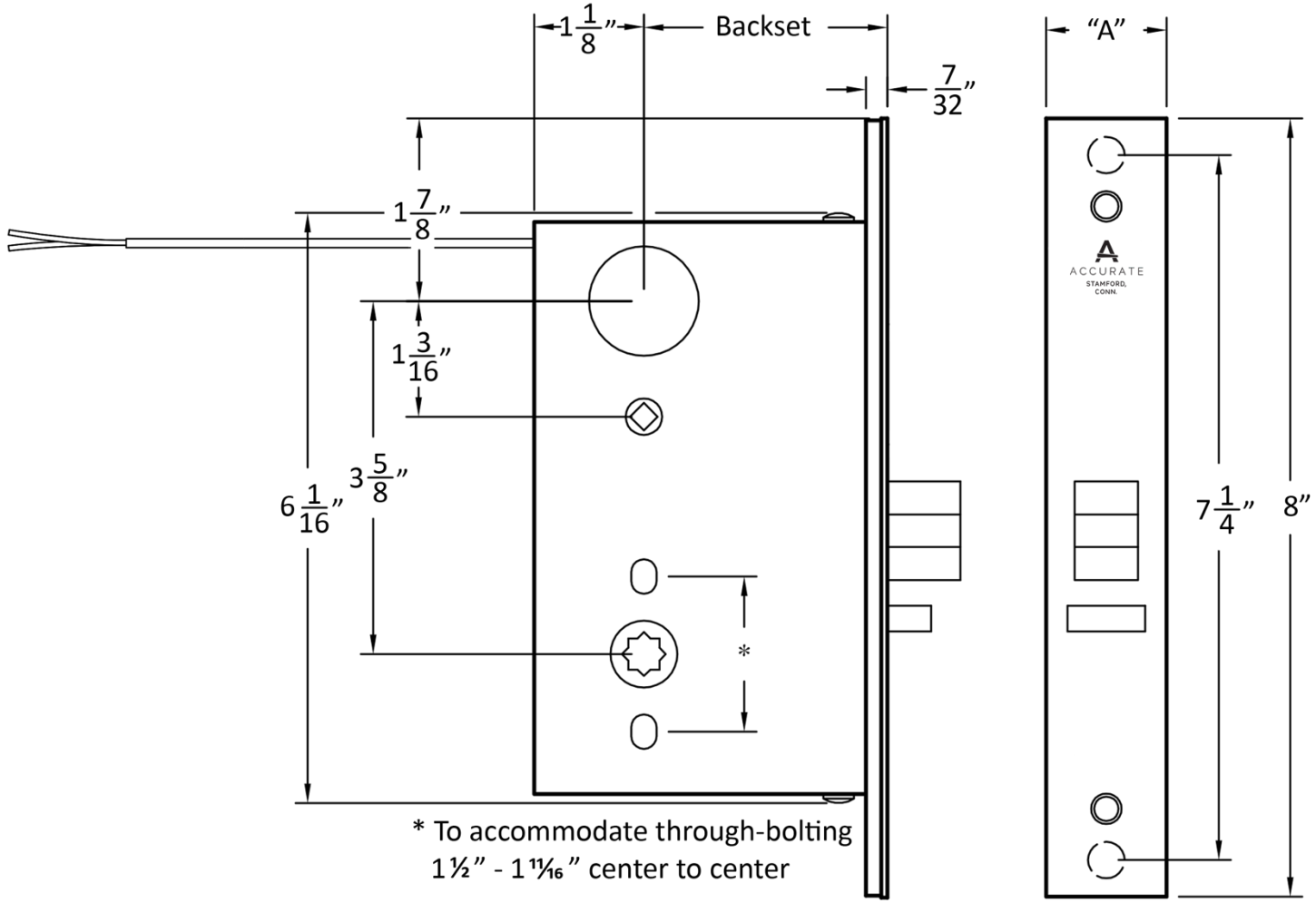
- Low power requirement is ideal for environmentally friendly access control systems

IN GOOD COMPANY

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

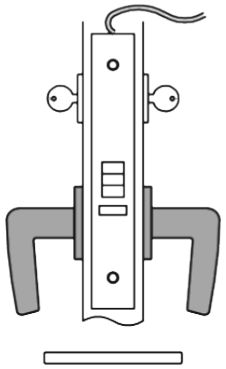


M9100E Dimensions



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

M9100E Technical Details



M9158E

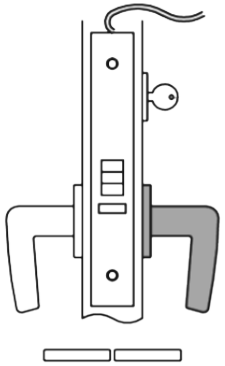
Latch bolt by key either side.

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

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 ($1\ ^1/_4$" armor front)

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

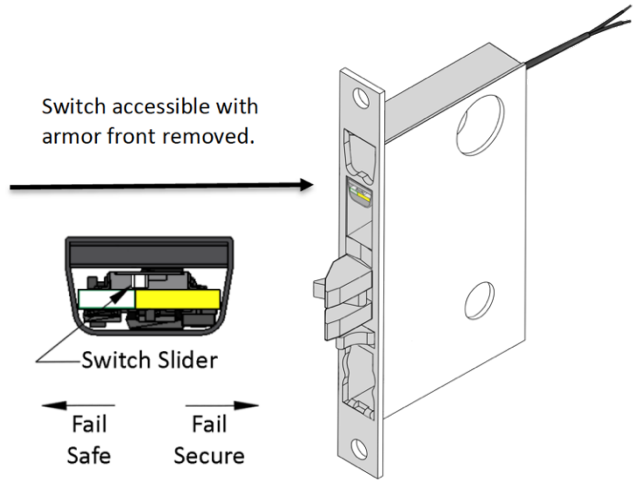
Grade 1 Certified to ANSI/BHMA A156.13.2005 Standard

BACKSETS: $2^1/_2$", $2^3/_4$", $3^3/_4$", 5" or 6"

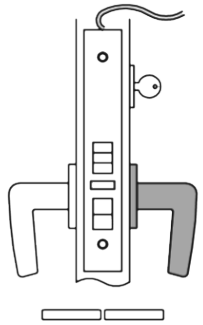
OPERATION: Key Cylinder (by others) will override electronics to retract latch bolt

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



M9156E

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.

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)

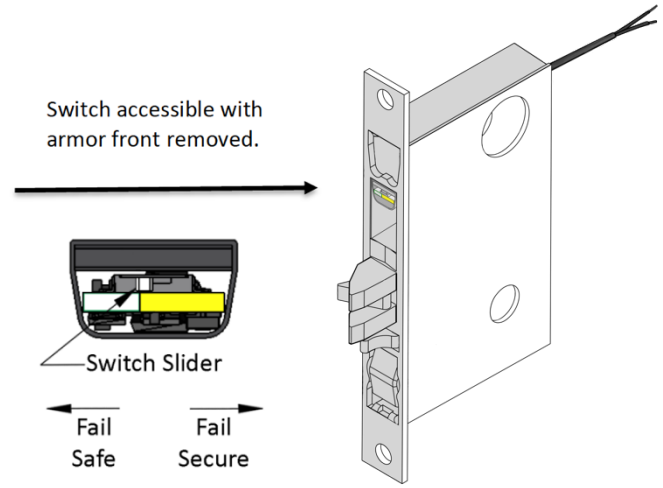
UL Listed 3 Hour (Mechanics R13846/R27504 and Electronics R10121)

Grade 1 Certified to ANSI/BHMA A156.13.2005 Standard

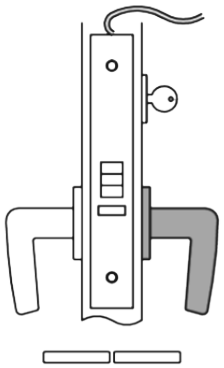
BACKSETS: $2^1/_2$ ", $2^3/_4$ ", $3^3/_4$ ", 5" or 6"

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.*



M9100E Technical Details



M9145E

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)

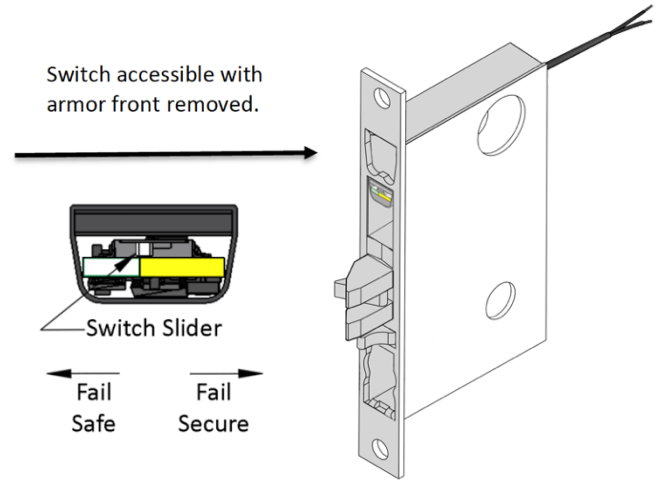
UL Listed 3 Hour (Mechanics R13846/R27504 and Electronics R10121)

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
30 VDC	0.5 AMP

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

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

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

M9100E Monitoring Functions

LPF – LOCK OUT PRIVACY MONITORING*

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

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).

**** FOR M9059E/M9159E ONLY***

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	X			X	X	
X			X		X	X	
X				X	X	X	
X					X	X	X

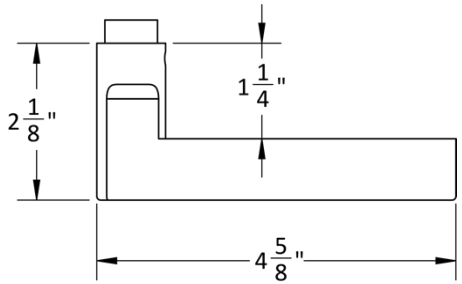
M9100E Monitoring Function Matrix

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

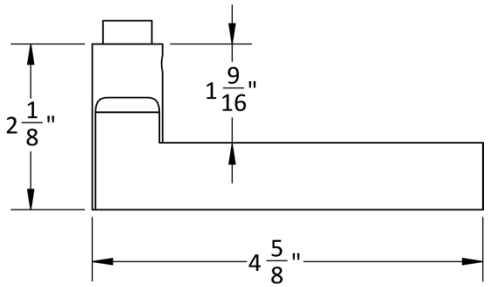
Applies to: M9145E | All Backsets Standard and Upside Down (USD) Configurations		
AE Authorized Egress Inside Hub	**LM** Latch Bolt Monitoring	**DPS** Door Position Monitoring
X	X	X

Accurate Lever Trim

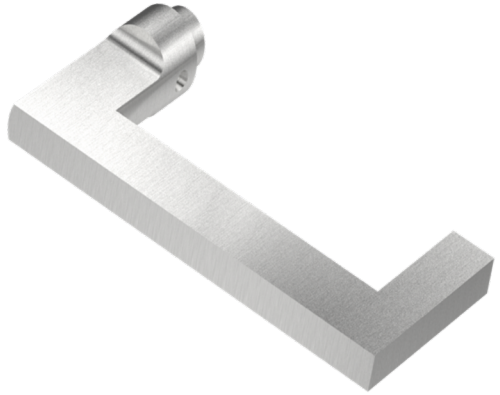
18L LEVER

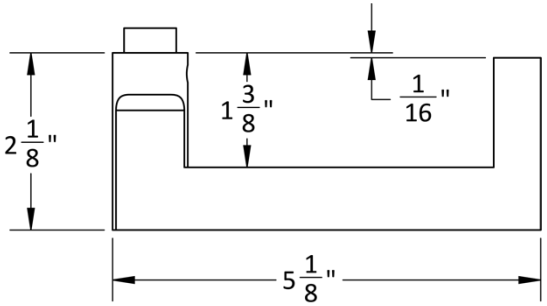


19L LEVER



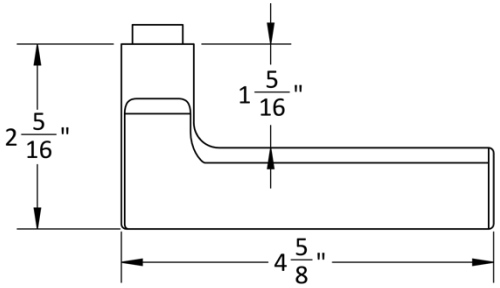
20L LEVER



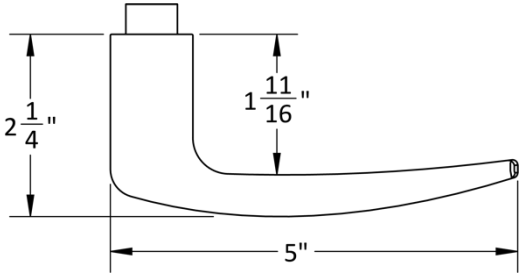


Accurate Lever Trim

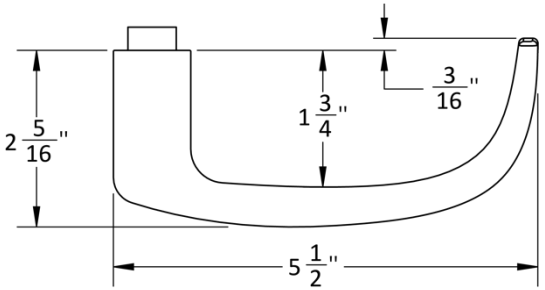
21L LEVER



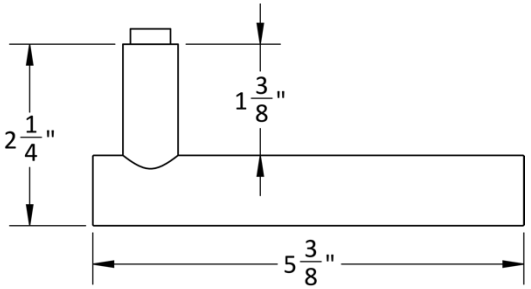
29L LEVER



39L LEVER



72L LEVER

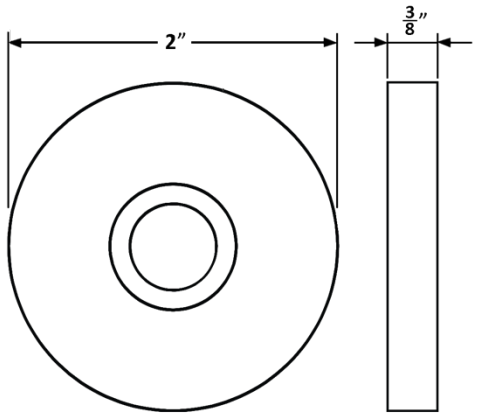


Accurate Rose Options

1R ROSE

Front

Side



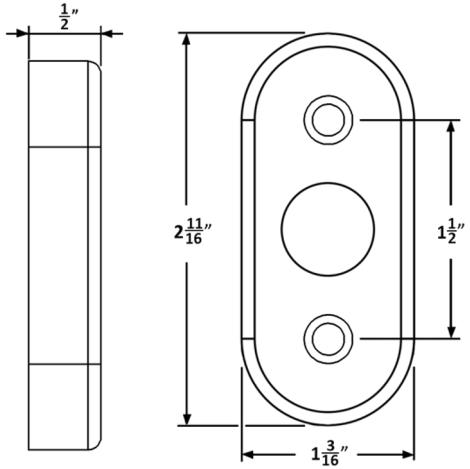
SILENTPAC™ LEVER DAMPENING DISC CAN BE SPECIFIED WITH THE 1R ROSE
VISIT SILENTPACSOLUTIONS.COM

2R ROSE

Side

Inside

Outside

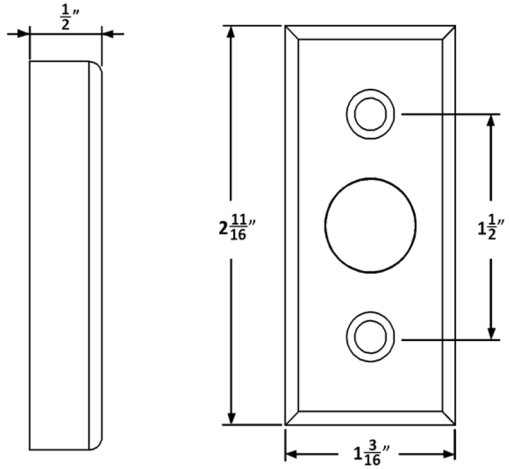


4R ROSE

Side

Inside

Outside

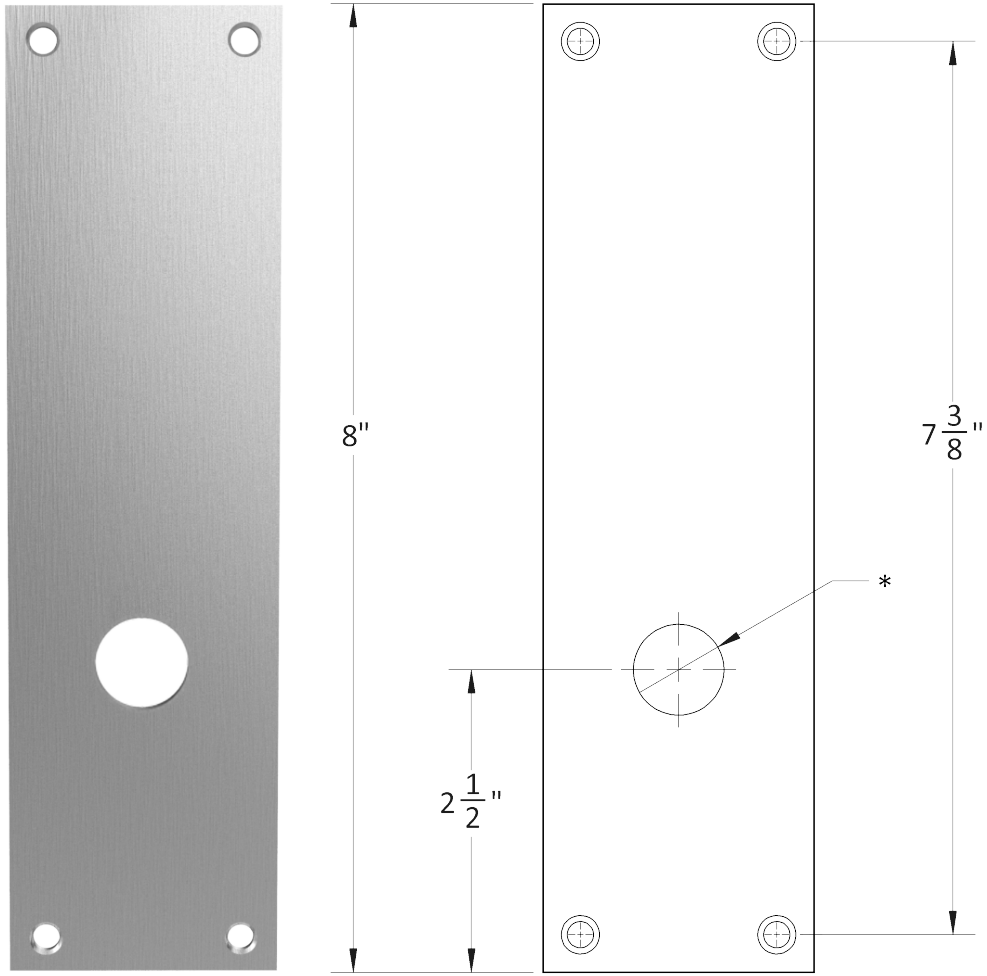


Accurate Escutcheon Options

POSSIBLE ESCUTCHEON COMBINATIONS*:

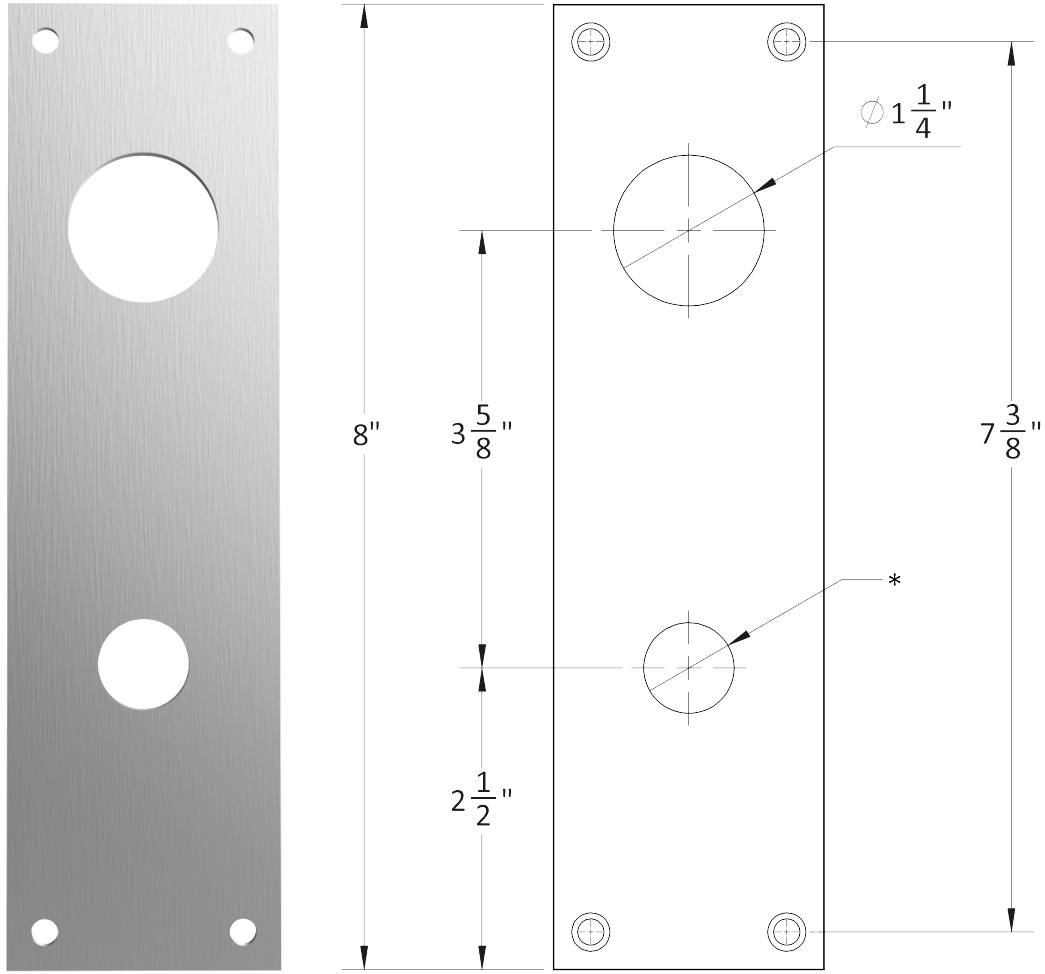
1E-B x 1E-C Blank x Cylinder Cutout

1E-C x 1E-C Cylinder Cutout x Cylinder Cutout



1E-B
Blank

* Dimensions may vary depending on trim



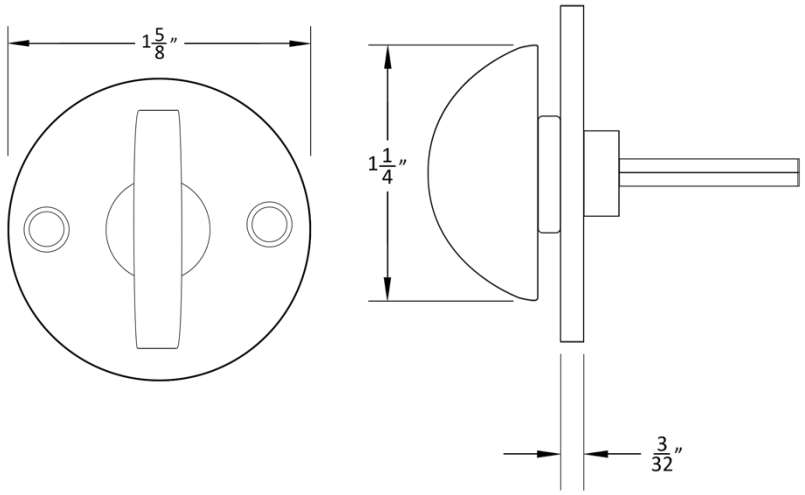
1E-C
Cylinder Cutout

* Dimensions may vary depending on trim

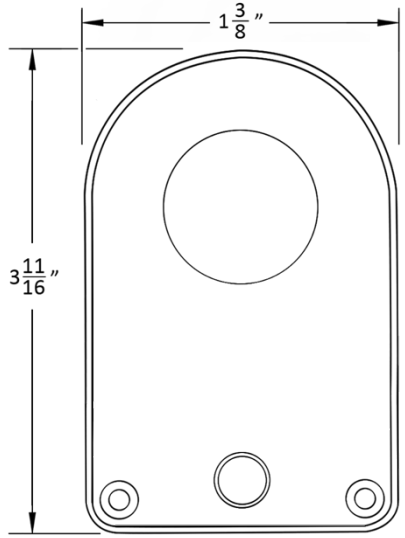
*Additional trim options available for LPF Monitoring (see pg. 17-18)

Trim Options for LPF Lock Out Privacy Function

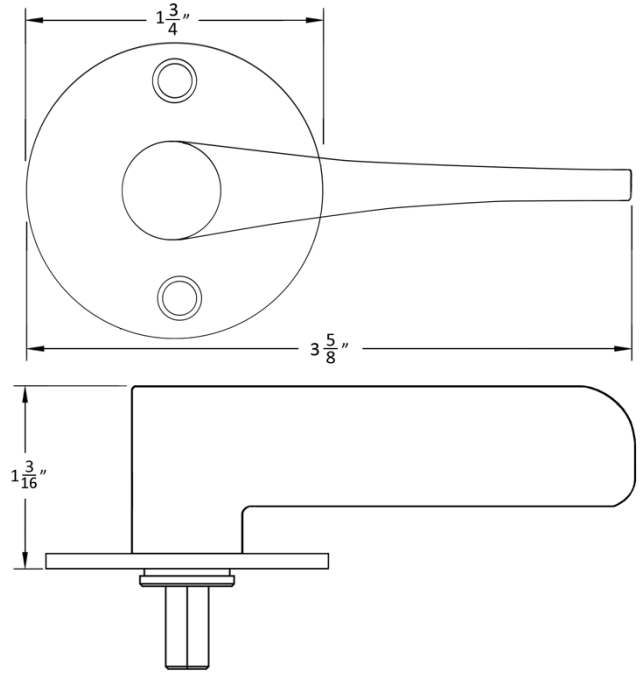
GF1106



7200SCi



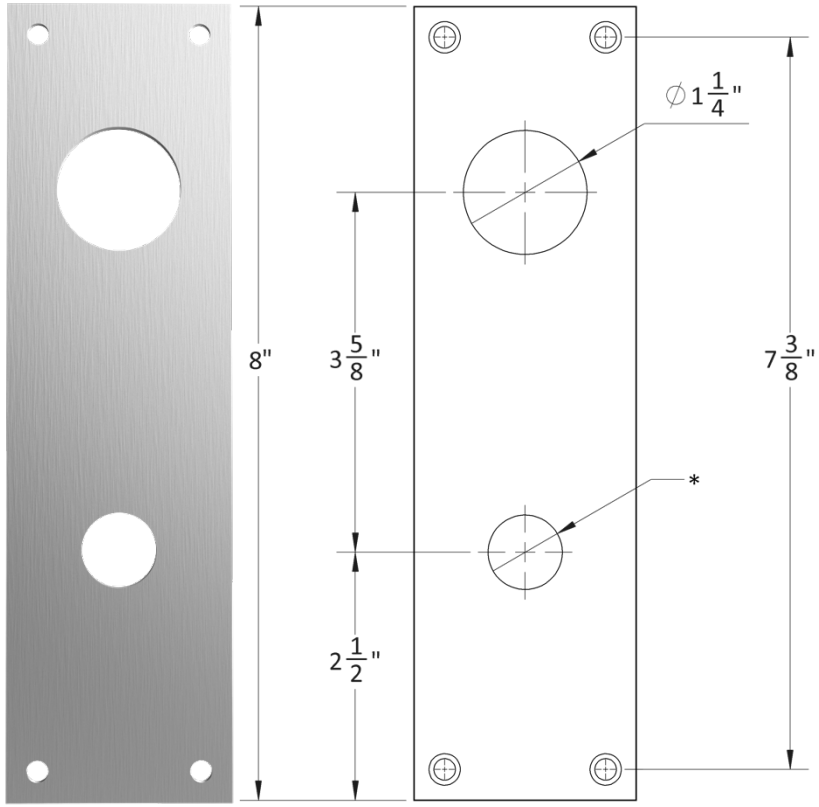
7200ADA



Trim Options for LPF Lock Out Privacy Function

POSSIBLE ESCUTCHEON COMBINATIONS*:

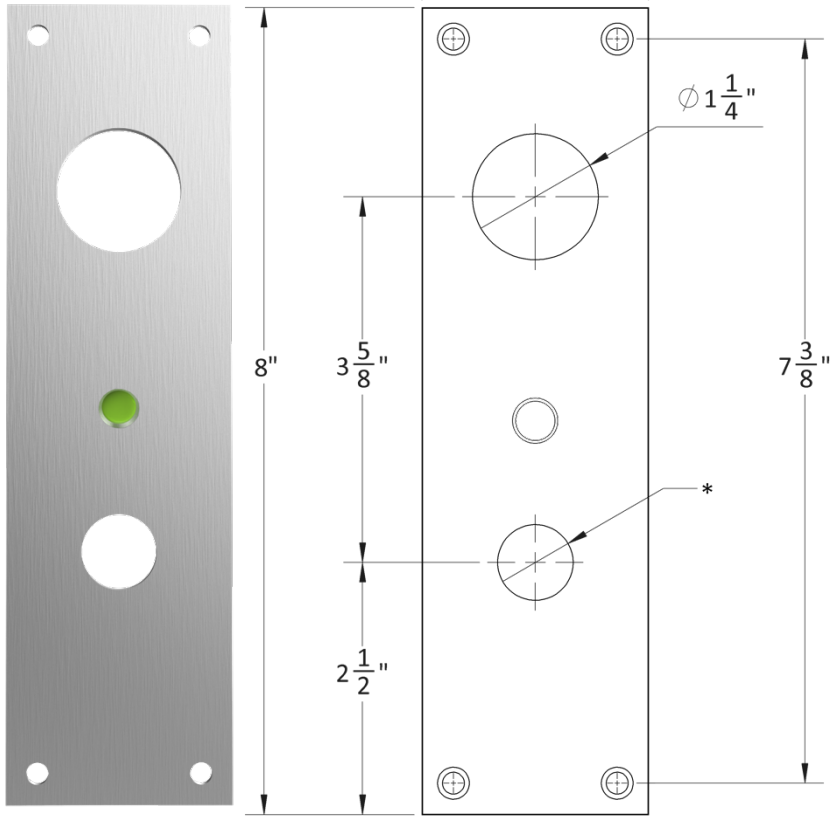
1E-C x 1E-T Cylinder Cutout x Thumb Turn
1E-Ci x 1E-T Cylinder Cutout with Indicator x Thumb Turn



* Dimensions may vary depending on trim

1E-B

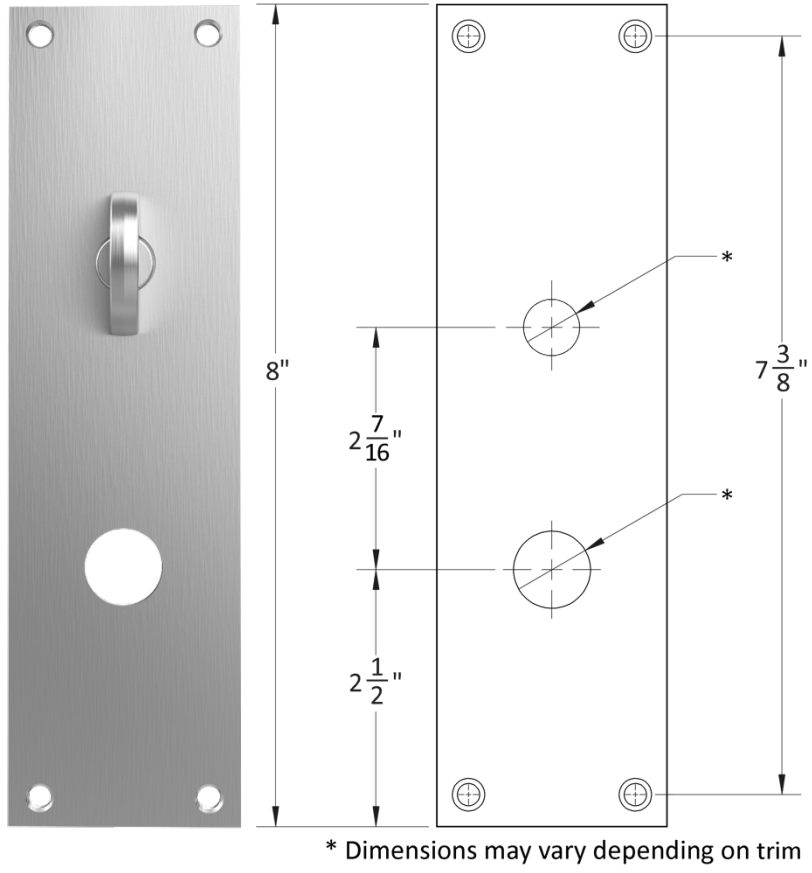
Cylinder Cutout



* Dimensions may vary depending on trim

1E-Ci

Cylinder Cutout with Indicator



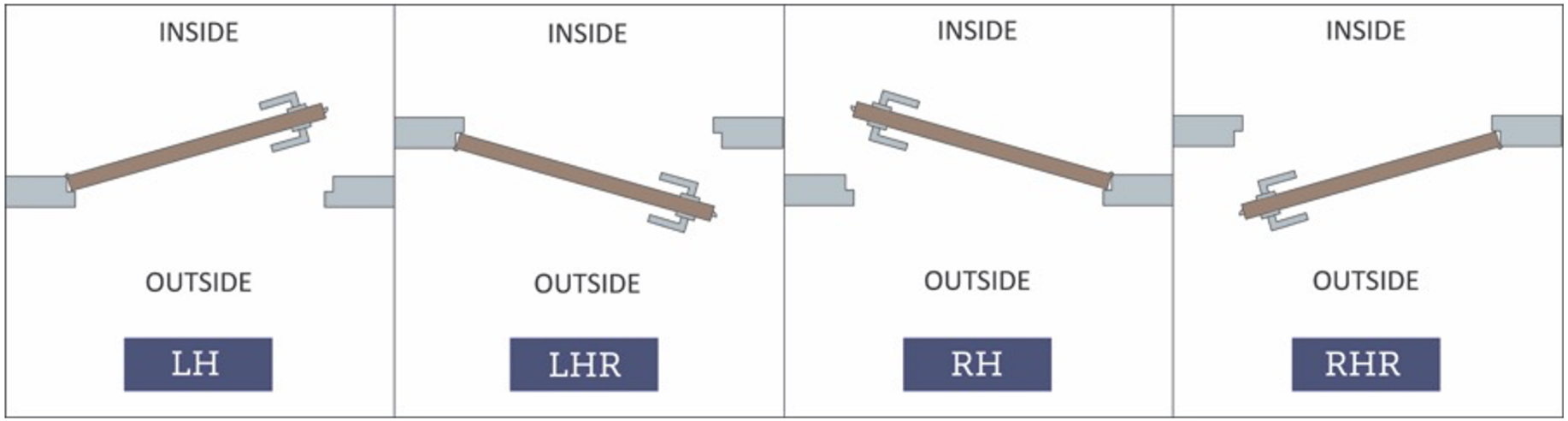
* Dimensions may vary depending on trim

1E-T

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

HOW TO SPECIFY

HANDING



FINISHES

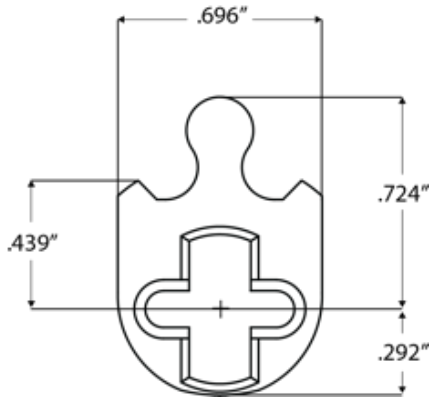
GROUP 1: US4, US4NL, US32D*, US26D

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.



CYLINDERS & KEYING

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

HOW TO SPECIFY

FUNCTION-MONITOR.BACKSET.TRIM.FINISH.HAND.DOORTHICKNESS

Functions
See available functions (pg. 5-10)

Backset
$2^1/_2$", $2^3/_4$" $3^3/_4$", 5", 6"

Trim
Accurate trim (see pg. 13-18)
Specify other trim manufacturers or spindle size

Finishes
See available finishes (pg. 19)

EXAMPLES

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

**Note: For compatibility with other manufacturers' trim please call for assistance.*

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
- Compatible with the following add-ons: SilentPac™ Quiet Lock, SilentPac™ Lever Dampening Disc, High Security Solutions

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

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